## Wantoch, Clark

From:

Chrisbaum, Chad T

Sent: Thu 9/3/2009 9:42 AM

5.2 "57.

To:

Chrisbaum, Chad T; Wantoch, Clark; Korban, Ghassan; Rozek, Allison; LaMarca, Salvatore; Casanova, Dan

Cc:

**Subject:** 

RE: South 2nd Street History and Talking Points

**Attachments:** 

Lois asked me to make the following additions/clarifications as noted below in red.

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

PLEASE NOTE NEW EMAIL ADDRESS

Chad Chrisbaum chad.chrisbaum@milwaukee.gov **Project Engineer** City Of Milwaukee 841 N. Broadway, RM 902 Milwaukee, WI 53202 Phone: 414-286-0470

From: Chrisbaum, Chad T Sent: Wed 9/2/2009 3:07 PM

To: Wantoch, Clark; Korban, Ghassan; Rozek, Allison; LaMarca, Salvatore; Casanova, Dan

Subject: South 2nd Street History and Talking Points

The following will be a brief history of the project and talking points for the meeting on the 11th in bullet-point format. Most of these probably won't be used in the meeting, and are primarily given to inform this group of the history of the project. It does give a complete picture. Ali, I can work further with you as needed for the meeting presentation.

- Preliminary engineering first began in late 2001 and the project was scheduled for construction in 2003.
- As is always the case, the Department of Public Works conducted an analysis to determine what sort of improvement would be required based upon the physical condition of the street.
- Pavement cores taken in March of 2002 indicate that 95% of the pavement structure is in sound condition.
- Non-destructive testing of the pavement using a Dynaflect, which applies a 1,000 lb dynamic load to the pavement in a manner that can be correlated to the loading applied by an 18,000 lb moving vehicle, corroborates the pavement core analysis and recommends that milling of the existing asphalt surface and overlaying with a minimum 3.5-inch new asphaltic pavement would be a prudent measure to extend the useful life of the pavement by 20 to 30 years.
- Field investigations by DPW staff indicate that the majority of curb and gutter and sidewalk will need replacement.
- The existence of an old train track with rails and ties in place buried along the center line of the roadway presents a buildability issue for a reconstruction scenario from both a logistical and monetary standpoint.
- An economic and logistical feasibility study (done in the context of the entire City of Milwaukee's street improvement needs vs. budgetary dollars available) results in a resurface project being selected as the City's preferred alternative. No geometric changes are proposed as part of this alternative.
- In late 2002, WISDOT requests that the project be delayed to allow South 2nd Street to function as a mitigative north/south route for the Marquette Interchange reconstruction project.
- The City restarts their preliminary engineering efforts in 2007 and programs the construction of the project for 2009 to coincide with the Marquette Interchange completion.
- DCD receives a letter from Alderman Witkowiak in November of 2007 indicating that neighborhood stakeholders are interested in pursuing a streetscaping plan.
- There is no BID in place, however, DCD makes a commitment to work with the neighborhood to form one.
- A public informational meeting is held on November 28, 2007, at The Hope House of Milwaukee introducing the public to the resurfacing project.

- Alderman Bauman, in January 2008, requests that the railroad crossing just north of the Menomonee River be reconstructed and made a "quiet zone" to reduce the amount of train whistle noise at this location.
- The time needed for railroad coordination and the legislation of a BID force DPW to push the proposed construction date from 2009 to 2010.
- An email from Lori Lutzka, on June 24, 2008, indicates that formation of a BID has not been successful. Streetscape plans
- Several emails from neighborhood stakeholders indicate concern for leaving the traffic configuration as it currently exists because of a perceived "lack of traffic" required for 4 lanes.
- DPW reiterates its need for 4 traffic lanes to accommodate peak hour traffic, indicates that 4 traffic lanes conform to the Southeastern Wisconsin Regional Planning Commission's proposed plan for the year 2035 for this facility, that S. 2nd Street acts as an alternate route in and out of the CBD during large events, construction, emergencies, etc., and that a resurface proposal, replacing curb & gutter, sidewalk, and driveway approaches with no geometric improvements is the preferred alternative given the street's physical condition and the City's monetary constraints in the context of the entire City of Milwaukee's street improvement needs and the standard analytic procedures used to determine project scope and project
- In 2008 DPW investigates the possibility of constructing bump-outs along S. 2nd St. The analysis indicates that they would not be placed at signalized intersections since their purpose is to make a non-protected pedestrian crossing shorter and theoretically safer. Signalized intersections have a protected pedestrian phase, therefore, they are not needed at these locations. It also indicates that bump-outs not be placed at intersections where there is a bus stop since this makes it difficult for the bus to re-enter the traffic flow. Ultimately, this means that only two locations on the project where they would be appropriate is at Oregon and Pierce. Not having a BID in place further reduces the feasibility of placement. A meeting called by the Mayor's Office of Environmental Sustainability was held on October 22, 2008. Neighborhood stakeholders and DPW met to discuss options for greening the corridor. Topics included: not informed or
  - Grant opportunities the long history of trying to establish a BID was discussed. DPW indicated that the project had been held one year to allow a BID to form. The BID was to be formed by fall 2008. DPW indicated that DCD had informed them that formation of a BID had been unsuccessful. DPW indicated that at this point in time, it was too late to go through the legislative process to organize a BID and still make additions to the S. 2nd St. paving plan to be funded by said BID.
  - Streetscaping Decorative benches, trash receptacles, banners, decorative concrete, etc. could only be incorporated via alternative funding source. Since there is no BID, these items could not be incorporated at this time. Os late as 10/22/08 DPW Led -
    - Other Amenities
      - Trees- DPW indicated that new street trees would be incorporated into the street in conjunction with the paving plan
      - Porous Pavements DPW indicated that they would not entertain porous pavement in the roadway because it is susceptible to plow damage, traffic loading, and very costly. Sidewalk areas where more acceptable, but City would have a large problem with it next to buildings in that the added water that would get through to the underlying soils next to the buildings may be impacted and there was no real way to assess the risk and future liability that the City might incur by proceeding with this type of construction.
      - LED Lighting DPW indicated that although they were investigating the possible uses of LEDs, there were still many problems to be worked out and DPW was not ready to commit to any LED usage at this time.
      - Bikes DPW indicated that 4 traffic lanes were necessary to manage peak hour traffic. That being the case, there simply was no room for bike lanes.
    - In early 2009 neighborhood stakeholders increasingly petition the local Alderman, DCD, and DPW regarding the following issues:
      - Narrowing the Street DPW investigates the possibility of narrowing the street while still keeping the resurfacing scope, concerned that the budget does not allow for a full reconstruction project, the WISDOT may not agree to participate monetarily in a alternative traffic configuration scenario, and under a full reconstruction scenario, the removal of the existing track zone will greatly impede access during construction forcing abutting property owners to find alternative means of access for long periods of time.
      - Introducing angle parking- DPW state firmly that the State-Municipal Agreement that it has with the WISDOT indicates that angle parking will be prohibited. This is true of all State/Federally funded street improvement projects in the City of Milwaukee.
      - Bike lanes- DPW indicates that the inclusion of bike lanes hinges on the ability to narrow which is being investigated in the context of the concerns stated above.
    - Alderman Witkowski hosts a public informational meeting at Bradley Tech High School on March 11, 2009. Concerned neighborhood stakeholders reiterate their request for a modified cross section. The City indicates it will formerly inquire with the WISDOT as to their continued monetary participation under an alternative traffic configuration scenario.
    - DPW sends an email to WISDOT inquiring about a narrowed street option on March 20, 2009.
    - After multiple observations from abutting property owners about perceived vibrations in their buildings "greater than normal" as a result of passing traffic on S. 2nd Street, the City hires a consultant to measure vibrations at 524 S. 2nd St. on March 23, 2009.
    - DPW completes its analysis of the alternative to bring the curbs in 4 feet on either side of the roadway while still keeping the

https://webmail.milwaukee.gov/Exchange/cwanto/Inbox/RE:%20South%202nd%20Street%... 9/3/2009

resurface scenario for the bulk of the roadway. It indicates that it is NOT possible since placement of the new curb would be at an elevation higher than the property line match point creating back pitch into the buildings. This the result of the abnormally high crown in the roadway, due in part, to the existence of the buried track zone. DPW considers "effectively" reducing a traffic lane and introducing a bike lane in each direction simply by using pavement marking and keeping the curbs in their existing location.

DPW investigates the possibility of introducing a bio-swale area between the location of the new curb placement and low edge of the proposed new walk. This would alleviate the back pitch problem by catching the water in some form of "green" capture system before it got to the building fronts. It would also have the potential to capture some of the roadway drainage that would otherwise go directly into the storm sewer system.

DPW enlists its environmental section to look at the details.

A draft report from the vibration consultants is received in late April 2009. It indicates the following:

Measured vibrations in the building at 524 S. 2nd St. were, in fact, greater than what established guidelines

The primary cause of the vibrations in excess of what would be considered normal is irregularities in the roadway's surface. These are being caused by the non-uniform materials (track zone, various fill, multiple utility patches, etc) beneath the pavement which all consolidate at disproportionate levels thus creating reflective surface deformations.

 If a smooth running surface is reinstated on South 2nd Street, the primary cause of the vibrations that disturb the tenants will be remedied. However, if the smooth running surface will only remain in place for years to come if the project's scope also addresses the deficiencies (inconsistencies) in the subgrade

MMSD becomes involved with the project in May 2009. They indicate to DPW that they would be supportive of a "green street" approach. They acknowledge, however, that there is no regulatory requirement to undertake these measures in a combined sewer area (since all of this water goes eventually to the waste water treatment plant) and that funding from them to undertake this work is pending, at best. They acknowledge that if, nothing else, reductions of storm water volume into the combined sewer system occur as part of the design, a net benefit is realized.

WISDOT agrees to participate, monetarily, in a narrowing alternative in early June 2009.

On June 12, 2009, DPW meets to discuss how the project has evolved and where it needs to go from here. Given the concerns about the subgrade support (and the subsequent continuation of vibration problems) which would not be improved by a resurfacing project, the WISDOT's willingness to participate monetarily with a narrowing alternative, and the need to incorporate green elements into the design, the decision is made to do a full reconstruct. Utility conflicts and construction staging/access in light of the track zone removal are duly noted. New cross section will include one lane of traffic, one bike lane, and one parking lane in each direction. Question of coloring the bike lanes is referred to the following web site: http://www.bicyclinginfo.org/faqs/answer.cfm?id=18. The WISDOT, in the past, has not allowed pavement markings that are not approved by the MUTCD. Note: A significant amount of green space will be realized under this alternative with a 6-foot grass terrace (total=5,300 S.Y.) and trees incorporated on either side of the

DPW holds a meeting to discuss the details of the design associated with the storm water capture design (bio-swales, etc) on August 17, 2009. Representatives from WISDOT, DPW, and construction experts from the consulting field are in attendance. The results are as follows:

DPW's environmental engineering group presents the detailed design of bio-swales for the area.

The idea behind the bio-swale is that it will capture stormwater runoff that would otherwise run directly into the combined sewer system. Eventually some of this water does go back into the combined sewer system but ideally some of it also infiltrates into the ground, thereby reducing the load on the combined sewer system.

MMSD provides funding for those facilities that reduce the overall volume of water that goes into the combined sewer system. Similarly, if there were a separate storm sewer system in place, greater reductions would be realized.

The environmental engineering group indicated that, unfortunately, the regional conditions associated with S. 2nd St. were less than adequate to allow this reduction to occur. DNR sets the regulations that drive the design of these facilities. There must be separation between the bottom of the swale and the high ground water elevation where the swale is placed, to prevent polluted roadway water from contaminating ground water. In the case of S. 2nd St., this separation does not exist. The bio-swale can still be built, but it must be lined with rubber membrane which is very costly and allows for no infiltration of captured water into the ground. Instead, it all goes back into the sewer system, as it would if the swale was not there. The rate at which it goes into the system is reduced, but the overall volume is not and, therefore, the MMSD funding is not available to offset costs.

Additionally, because the ground underneath the roadway and sidewalks is environmentally contaminated, the DNR does not allow any additional water to be introduced into the subsurface because it has the potential to carry with it the contamination that is in the soil expanding the breadth and width of the existing contamination. Therefore, even if the water table were not a concern, the bio-swales would still have to be lined to prevent the further spread of existing soil contamination by the new water introduced to

Porous sidewalk elements are discussed next.

The close proximity of adjacent buildings, the age of the buildings (over 100 years), the highly variable and

contaminated nature of the soils under the roadway, sidewalks, and adjacent to the buildings, and the introduction of new water into this environment, requires that the City also line the building fronts with rubber membrane from the surface to the foundation footing if porous sidewalks are built adjacent to a building front...a very costly venture (the buildings would also have to be lined if unlined bio-swales were allowed to be constructed adjacent to their location). We obviously would have a similar problem with DNR regarding the introduction of new water to the existing contaminated soils. The City of Chicago has had experience with these situations before.

DPW decides that it cannot incur the future liability of constructing the bio-swales or porous sidewalks next to buildings without the use of rubber membranes. The Environmental engineering group estimates approximately \$100,000 per block to incorporate bio-swales. Cost would be less for porous concrete adjacent to buildings, but still significant. No alternative funding sources are identified to off-set these costs. Therefore, these items are dropped from consideration.

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

## PLEASE NOTE NEW EMAIL ADDRESS

Chad Chrisbaum chad.chrisbaum@milwaukee.gov Project Engineer City Of Milwaukee 841 N. Broadway, RM 902 Milwaukee, WI 53202 Phone: 414-286-0470