

East Stadium Bridges Replacement Project – 2009

Community Meeting (October 28, 2009)

Q&A SUMMARY: RESPONSES

STATION #1

PROJECT LIMITS

- **How much UM property will become part of the public ROW?**

A total of 0.48 acres of UM property will become part of the public ROW with the currently proposed design. This is broken down as follows:

- Crisler Parking Lot: 0.15 acres
- UM Golf Course: 0.06 acres
- Field Hockey: 0.16 acres
- Red Lot: 0.11 acres

- **Why not extend the project limits to S. Industrial?**

The project limits have been defined based on the need to blend the existing roadway elevations into the proposed roadway profile. Fortunately, we do not need to replace the roadway and curb and gutter to S. Industrial Highway as the roadway profile in this area is favorable for our proposed work. In addition, the section of E. Stadium Boulevard in the vicinity of S. Industrial Highway was reconstructed in 1993 and it does not require any further work at this time. Finally, if we were to replace the pavement all the way to S. Industrial Highway, it would be very difficult to implement our proposed detour and simultaneously maintain traffic.

PROJECT "GIVENS"

Stairways

- **Why are the stairways needed? They are likely to get very little use; two are certainly not needed.**
- **If there will be a handicapped accessible route connecting S. State and E. Stadium, why not eliminate the stairways?**
- **Can ADA accessible ramp access be provided on both the north and south sides from S. State to Stadium, instead of stairways?**
- **How will snow removal be handled on the stairways? Currently the walk under the S. State bridge does not get cleared in winter.**

- **Keep all pedestrians on the north side of E. Stadium when leaving athletic events and have them cross E. Stadium through the existing tunnel. Then install a stairway near the south side of the tunnel for people to get up to E. Stadium before moving east.**

The City's policy is to create "complete streets" that accommodate all users including vehicles, bicycles, and pedestrians. Pedestrian access and convenience are important in a modern, walkable community. The proposed stairways are critical in establishing pedestrian connectivity, allowing pedestrians to travel between S. State Street and E. Stadium Boulevard. Two staircases will allow for pedestrian connections to both sides of E. Stadium Boulevard. We expect them both to be used regularly throughout their lifetime.

The handicap accessible route proposed along Rose Street and White Street is the best available option for an ADA access between S. State Street and E. Stadium Boulevard. Given the elevation differences between S. State Street and E. Stadium Boulevard, it is not possible to place a handicap accessible ramp along the sides of E. Stadium between the two bridges without having "switchbacks" which would require the acquisition of additional right-of-way and be more costly to construct. As a result, we believe that the optimum handicap accessible route between S. State and E. Stadium Boulevard is where it is currently proposed.

The preferred option for handling snow removal along the stairways is to install a snow melting (radiant heat) system that will warm the concrete to a temperature somewhat above freezing to prevent the snow from accumulating or ice from forming.

It is extremely difficult to prevent pedestrians from taking what they believe is the quickest route to their destination. Just look at all the worn footpaths in and around town for confirmation of this fact. We observe that people regularly walk in E. Stadium Boulevard heading easterly after football games. As it is not be possible to force people to follow a pre-determined route, we believe the best way to manage pedestrian traffic is to provide a safe sidewalk on both sides of the street to allow them to travel to their destination.

Bike access (S. State to Stadium)

- **Bike access from S. State to Stadium is also needed. Access ramps may work better than stairs.**

To accommodate bicyclists, we plan to evaluate the possibility of designing the stairways to allow cyclists to walk/wheel their bikes up the stairs (along one of the sides of the staircase).

Given the difference in height between S. State and E. Stadium, it is not possible to construct ramps without multiple "switchbacks". These switchbacks will require more right-of-way and will be more expensive to construct. As a result, we believe that the currently proposed design is the best compromise of convenience, expense, and additional land needs.

Additionally, bicycles operate at higher speeds than pedestrians (especially on ramps.) As a result, it is not desirable to mix pedestrians and bicyclists on facilities unless no other alternatives exist.

Construction materials/methods - durability

- **What consideration is being given to new construction materials and methods to assure the durability of construction?**

In general we are using conventional construction materials and methods for the following reasons:

- Conventional construction methods will allow more contractors to bid on the project, resulting in more competition and more accurate bids.
- It is risky to try new/experimental materials on large and expensive projects like this. If a new material doesn't perform as anticipated it will cost the City considerable time, money, and inconvenience to replace it. Experimental or new materials are generally better tried out on smaller projects with less impact to traffic and/or the public.
- It takes a long time to determine whether a new material or method is beneficial. For example, epoxy coated rebar has been in use for approximately 30 or 40 years and we are just now able to confirm how the epoxy coating is protecting the rebar from corrosion.
- Current "standard" construction materials and methods have improved slowly, but steadily over time.
- We believe one of the most important elements in assuring quality construction and durability of the materials is through proper project administration and inspection during construction. The vast majority of "conventional" materials that are used today will provide more than satisfactory service if they are properly installed. As a result, the City is planning to provide rigorous project management and construction inspection during the implementation phase of this project.

Sidewalks

- **Why is a sidewalk needed on the south side of E. Stadium? Will the sidewalk really end at the entrance to the UM golf course? Why?**

Stadium Boulevard is a major arterial street that crosses the city. As an arterial street, it must serve all users, not only motorists. Since the volume and speed of traffic is relatively high, the roadway cross section must take these factors into account. What may be acceptable and safe on a local cul-de-sac, for example, is not appropriate in the design of a major arterial street. Therefore, we need to separate bike lanes and sidewalks to provide an acceptable level of service for cyclists and pedestrians due to the difference in their operating speeds and characteristics. Since this project has a very long design life (about 75 years), the facility we

build now must be able to accommodate the needs of the community during the life of the project.

Since the project limits have been re-defined, the sidewalk proposed as part of this project will end temporarily at the entrance to the University of Michigan golf course.

- **There should be a barrier between the street and the sidewalks (like Broadway Bridges).**

Given the design speed and type of traffic that uses E. Stadium Boulevard, the standards that govern this work do not require that a barrier be placed between the roadway and sidewalk. It is not our recommendation to add a barrier in this location.

Lighting

- **What is being planned to stop roadway light spill into windows and yards of adjacent homes?**
- **I don't like the proposed street light; it doesn't relate well to the character of the area; they look out of date**
- **Increase street light spacing. The light level on W. Stadium is too bright and not appropriate for a residential area.**
- **Direct street lights downward; don't light up the sky.**

The proposed street lights are the same as those proposed on W. Stadium Boulevard between Pauline and S. Seventh Street, another segment of this major arterial roadway that is edged by residential development. These lights are 20 feet 5 inches tall. Use of the same City pole and light will create visual continuity along the corridor and maximize maintenance cost effectiveness.

In contrast to the commercial segment of W. Stadium Boulevard (west and north of Pauline), the light fixture will be retrofitted to accommodate LED (light-emitting diode) lights which use less energy. The fixture will be designed to include a sharp cut-off on the sidewalk face to reduce light spill towards adjacent properties. A photometric analysis will also be performed to ensure that appropriate lighting levels and positioning are used to prevent "light spill."

Overall light levels will be lower than on the commercial segment of W. Stadium Boulevard, but still sufficient to meet required roadway lighting standards. A warm white color light is proposed which is softer than the blue color used in the commercial area.

Number of travel lanes/ROW width

- **Why not consider 2 travel lanes instead of 4 on E. Stadium? This would calm traffic and be better for the neighborhood. What are the chances of getting a better, safer, more pleasant street beyond the bridges? It looks like E. Stadium east of S. State will have more hard surface and less landscaping. It would be better to have a wider sidewalk and more landscaping.**

This section of Stadium Boulevard carries a significant volume of traffic. Stadium Boulevard belongs to the Principal Arterial category of streets, which is the highest category of city street classification. It connects Washtenaw, which is a State trunk line, to N. Maple and crosses Main Street and Jackson Road which run between the downtown and the freeway. This traffic cannot be diverted to other streets.

The capacity of 2 travel lanes is limited to about 15,000 to 17,000 cars per day, which is much less than the current volume of over 22,000 cars per day measured at the bridges. It is impossible to fit this volume of traffic into two lanes.

Nevertheless, the proposed plan includes a widened sidewalk on the north side of E. Stadium east of the bridge over S. State Street (11'); new landscaping, increasing the size of Rose-White Park, and the planting of street trees.

- **How much more ROW (in feet) than is presently available will be needed when the proposed roadway cross section (travel lanes, sidewalks, bike lanes) is extended westward?**

Planning performed in 2007 suggested that an additional permanent ROW width of 0' to 2.5' would be needed on the south side of E. Stadium (in the vicinity of Ann Arbor Golf & Outing) to allow for the addition of bike lanes and a sidewalk on the south side. An additional ROW width of 0' to 4' would be needed on the north side of E. Stadium (in the vicinity of the "triangle" west of Kipke Drive) to allow for the addition of bike lanes and a wider sidewalk on the north side. Keep in mind that these estimates are still preliminary, as no further planning has been done west of Kipke Drive since 2007.

THE PLAN

Bike lanes

- **Bike lanes aren't needed.**

The City's policy is to create "complete streets" that accommodate all users including vehicles, bicycles, and pedestrians. On-street bike lanes are an integral part of a complete street and have been included as part of all major roadway reconstruction projects for the last several years. We must, and will continue to, recommend them as part of all of our roadway reconstruction projects unless we are directed otherwise by our City Council.

Pedestrian crossings

- **Consider a pedestrian crossing island at White Street.**

In the interest of safety we would prefer to encourage pedestrians to utilize the improved sidewalk facilities on S. State Street to cross E. Stadium Blvd in this area and/or the signalized intersection at E. Stadium Boulevard and S. Industrial Highway. A disadvantage of adding a pedestrian crossing island on E. Stadium at White Street would be the need to make the Stadium Boulevard section wider by about 11'. We are already at the limits of the existing ROW so any widening would require permanent ROW acquisition in this residential area, which we would prefer to avoid.

- **It's hard to cross S. State at Granger (e.g., from the bus stop on the west side of the street). The proposed crosswalk at Rose could help. Can we do even more – like adding curb bump outs?**

Bump outs (curb extensions) do reduce the crossing distance for pedestrians, but are used on streets with on-street parking. Eliminating or reducing the through traffic lane width on S. State Street by adding a curb extension is not being considered.

Existing S. State sidewalk

- **The existing sidewalk under the S. State bridge is dangerous because it is narrow and very high above the road. Slipping off the edge could mean a fall into the road. A wider sidewalk at a normal height would be much better.**

Proposed sidewalks under the new S. State Street Bridge will be vastly improved over the existing condition. They will be located on both sides of the street; they will be much wider; they will be normal height and there will be a several feet of separation (paved "parkway") from the street.

Fencing at Rose/White Park

- **Will the fence at Rose/White Park be extended to the west from the park toward the bridge?**
- **I'm concerned about the lack of a wall or fence between Stadium and what is the new Rose Street and the Rose/White intersection. Kids playing along that boundary need good separation from the roadway.**

The need to modify and/or extend the existing fencing at Rose/White Park will be studied in collaboration with Parks and Recreation staff.

Retaining walls

- **Can we grow vines on the barrier (or retaining walls)?**

Yes, we can, providing the vines adhere to the walls by means that will not harm the wall, the finish or the joints. We will review those types of species that meet these criteria and consider them in our planting plans.

We also propose to plant grasses, native shrubs and trees that can thrive with minimal maintenance and have seasonal interest.

- **Will graffiti be a problem? Can it be prevented?**

With the number and size of retaining walls proposed for this project graffiti is a potential problem. Anti-graffiti coatings will be considered for all the retaining walls and bridge abutments. These coatings prevent the paint from adhering to the underlying surface and the graffiti can be removed without damaging the underlying surface or leaving a film or shadow on the wall. In addition, rough wall surfaces that are not as receptive to painting, and plantings (vines) that will grow on the walls, are being considered to help discourage graffiti.

Retaining wall facing Rose

- **Extend the boulder/rock 'treatment' along Rose Avenue by using rock facing or compatible coloring of concrete on retaining walls.**

Options for extending the more natural looking rock wall treatment along Rose Street, while ensuring durability and maintainability, are currently being explored.

Rose and White Street "closures"

- **Has the city contacted neighbors to get their opinions/input on the revised traffic pattern? This could be a significant change and may not be appreciated. Please contact them.**

We have contacted the neighbors directly abutting the project limits to review and discuss the proposed plan and its elements with them. So far, our conversations with these neighbors have revealed support for the proposed plan.

- **When Rose is closed between S. State and White Street, can the adjacent sections of Rose/White Park be enhanced? Instead of a 10-foot-wide walk, could there be a narrower sidewalk to provide more play space?**

The improvement of Rose-White Park is a project goal. To that end, we will work with Parks and Recreation staff to make sure our plans maximize the opportunities within Rose-White Park.

STATION #2

ALTERNATIVE PROJECT CONCEPTS

- **Why can't the bridge be removed and E. Stadium brought to grade level?**

This option was analyzed early in the design process. We compared the pros and cons of the “no bridge” option (at-grade crossings of the Ann Arbor Railroad and S. State Street) to rebuilding the bridges, using a standard engineering approach in which initial costs and annual costs are calculated over the duration of the facility, in this case 75 years. The results of the analysis are summarized below.

In reviewing the initial costs we took into account buying additional right-of-way; removal of the bridges, embankment, and abutments; adding underground utilities; adding railroad crossing safety features; reconstruction of the bridges; constructing retaining walls; pavements and sidewalks; streetlights and markings.

In reviewing the annual costs we took into account costs that the society will pay in time and gas used by being delayed in traffic by a new signal and crashes that the new intersections would generate, based on standard rates and methodology.

While costs are important, another critical issue is the need to obtain permission from the State of Michigan and Ann Arbor Railroad to convert the bridges to at-grade crossings. Both institutions are opposed to adding new at-grade crossings to the existing roadway system.

In our engineering and cost analysis for the “no bridge” option, we assumed an intersection comparable to Packard and Stadium Boulevard as Packard carries similar, but smaller, traffic volumes (State is 25% higher). A computer model of the area was created to observe potential operational bottlenecks based on morning and evening rush hour volumes. This model revealed that without additional right turn lanes on State Street and Stadium Boulevard to clear traffic quickly after a train has passed, traffic would back up on Stadium Boulevard preventing cars waiting on S. State from moving ahead when the signal turns green. To avoid these back ups, right turn lanes were added to the design, and this new layout was used to assess additional right-of-way that would need to be acquired to create the intersection.

The additional required right-of-way goes deep into University of Michigan property, as well as private properties along both the State and Stadium frontages. We would expect that these properties would have to be condemned, as there is not sufficient room to maintain proper setbacks from a widened street. The condemnation process is costly, time consuming, and has the potential to create community resentment. (In addition, it would preclude the fast track needed to finalize the design and construct the project consistent with the requirements of grant applications for federal stimulus funds. However, we did not take these factors into account as part of our cost/benefit analysis.)

Once these costs were determined and evaluated over the life cycle of the bridges, the result was that the “no bridge” option would cost about four times more than reconstructed bridges. This was our basis to recommend that the bridges be reconstructed.

A variation of the “no bridge” option would be to prohibit turns (i.e., just two lanes on Stadium and one lane on State in each direction). This would change the cost of reconstruction only slightly. Our experience at other signalized intersections with limited movements (for example Eisenhower and State where northbound and southbound left turns are prohibited) shows that there are still some angle crashes generated by illegal movements, and that the majority of crashes (rear-end and side swipe type crashes) would be almost the same. This option would lower the cost/benefit ratio, but not change it in a way that would favor the “no bridge” alternative.

ESTIMATED COSTS

- **What are the bare minimum costs to ensure safe, functional bridges vs. the “Cadillac” version (stairways, trees, etc.)?**

The plans are not, in our opinion, a “Cadillac.” The proposed improvements are consistent with the City’s approach to all major roadway projects. For example, we are replacing a portion of the existing trees removed to allow the project’s construction; we are providing on-street bike lanes and sidewalks consistent with all major roadway projects; we are installing street lighting that will replace the existing lights that are being removed; and, we are installing pedestrian connections (stairways; ramp) where they are needed. The inclusion of stairways is expected to have a minimal impact on total project cost.

Given the needed improvements, we believe that our estimated project cost of \$23M is quite close to the minimum cost needed to replace both bridges and follow the relevant federal, state, and city standards that govern this type of construction project.

- **How much will the (additional?) ROW cost, including UM property?**

The University of Michigan has tentatively indicated that they plan to donate the permanent ROW for this project (that is currently their land) to the City.

Temporary construction easements will also be required. As a result, we are working with the University to define the terms for these temporary easements (the Red Lot adjacent to S. State Street, for example). We are also working with the other neighboring property owners on temporary easements.

FUNDING OPTIONS

- **What is the balance in the street millage fund? How long has it taken to accumulate that balance? How much is collected each year? What is the rationale for allowing the balance to become so high?**

The amount of the revenue collected annually with the Street Reconstruction Millage varies from one year to the next. Considering that there is always a break between the times when the revenues are collected and when the funds are available for new construction projects, it is common to expect a positive carry over fund balance in excess of the newest year revenue at any time. Currently our FY-2009 estimated revenue is at about \$9.55M, and the unobligated fund balance is at about \$13.75M. For FY-2010 the estimated revenue is at about \$9.42M, and the unobligated fund balance is at about \$8.31M.

- **What is the UM financial contribution to the project?**

To date, there has not been any offer from the UM for assistance with the project cost.

- **What is the realistic goal for (grant) funding? When will the money be available?**

It is entirely up to the Federal or the State government to participate in the reconstruction of the E. Stadium bridges. We have completed several applications for Federal and State grants for partial and for full construction cost participation. If any of our current applications are approved, the funds may become available just in time for the construction to begin in Fall 2010.

- **What about a special assessment on AA residents as a funding option?**

That is an option that we have not considered, and do not plan to propose.

- **The UM Athletic Department should pay for the stairways.**

To this date the UM has not shown any interest in participating in this project cost. The stairways are expected to be used throughout the year by the citizens of Ann Arbor and to expect the University to pay for them entirely is not reasonable, in our opinion.

- **Make the bridge a toll bridge.**

We have not studied this option as it is not practical to implement in this area.

PROJECT SCHEDULE

- **What is the estimated completion date of the replacement of the bridges and their approaches in the best case funding scenario?**

The “Best Case” funding scenario is that we receive the TIGER (Transportation Investments Generating Economic Recovery) Grant. The TIGER Grant, if received, would effectively require us to have all funds obligated, expended, and the project substantially completed by February 2012. Given the State’s climate, that means that we must have the project open to traffic by November 2011 (if TIGER funds are used.)

STATION #3

CONSTRUCTION DETOURS

- **How specifically does the city plan to limit traffic through neighborhood streets?**
- **How can we get the city to protect the area north of Stadium, east of State, west of Packard and south of Granger during detours? There will be a huge traffic impact. What about adding speed bumps?**
- **How will you prevent traffic from taking S. industrial to Henry, Golden and Granger?**
- **Can extra stop signs and a police presence be set-up when S. State is closed and traffic is routed through neighborhoods? How can traffic be prevented from driving through Lower Burns Park?**
- **Police presence in neighborhoods (is needed) to prevent through traffic during S. State closures**
- **How will detours impact football traffic through our neighborhoods?**

Police frequently patrol construction project areas when detours are implemented to promote compliance. This will be requested and is expected to occur for this project. Supplemental signage, barricades and public information on the detour routes will also be used to discourage neighborhood traffic increases. In addition, speed trailer or speed feedback signs may also be used during construction.

Stop signs cannot be installed unless Michigan Manual of Uniform Traffic Control Devices (MMUTCD) warranting criteria are met. It is unlikely these conditions would arise. If they did, the decision to add stop signs would not be automatic, as the temporary use of traffic control devices, and their subsequent removal, are likely to create confusion and hazards post-construction.

Permanent speed bumps (for local streets only) are typically constructed as a result of a lengthy community-driven process. The use of temporary traffic calming devices (such as speed bumps or raised crosswalks) has been discussed by City staff. However, the installation and maintenance expense, and uncertainty concerning their effectiveness, have discouraged their use.

Public information on the closures and police presence will be greater during football season. Due to the increase in overall traffic on game days, and the proximity to the stadium, increased traffic is likely. Every reasonable effort will be made to minimize impacts.

- **Are bike and pedestrian detour plans (both east/west and north/south) going to be developed/publicized?**

Yes, we will plan for, and include, bike and pedestrian detours as part of our project plans for both S. State Street and E. Stadium Boulevard.

TEMPORARY WORK (2009)

- **What is the nature of the temporary work?**

The temporary work that is planned for November 15 through the 17th will be to remove five damaged beams from the E. Stadium Boulevard Bridge over S. State Street. This work will be undertaken while we maintain traffic along E. Stadium Boulevard. It will be necessary to close S. State Street, however, in the area of the bridge while the work is performed. A detour route will be posted for traffic to follow.

- **Are temporary repairs to pavement (Stadium, White and elsewhere) planned or possible?**

Temporary repairs to E. Stadium Boulevard are possible; however, they are not planned at this time due to the anticipated construction schedule.

GENERAL/OTHER

- **Is the longer term plan to have bike lanes and sidewalks (of the same width) on both sides of the street in the area to the west of the bridges replacement project? If so, what will the bike lanes and sidewalks connect to?**

Yes. The bike lanes and sidewalks that are being proposed as part of the bridge replacement project, and the subsequent roadway project west of the bridge replacement project, will connect to bike lanes and sidewalks that are being constructed as part of the on-going W. Stadium Boulevard Reconstruction Projects. In fact, by the end of 2010, on-street bike lanes will exist on both sides of W. Stadium Boulevard to a point about 500' east of S. Seventh Street. Sidewalks will exist on both sides of W. Stadium Boulevard to S. Main Street.

- **What improvements proposed in the 2007 plan cannot be completed without tearing up the work that is now planned?**

None.

- **What is being done to reduce road/tire noise to surrounding yards/homes?**

No specific measures are being taken to reduce traffic noise; however it can be expected to be quieter when the project is complete. Currently the pavement is in very poor condition with a lot of patches. These tend to make a lot of tire noise as cars travel over the bumpy surface. A new, smooth surface will cause less tire noise.

- **What will be done to mitigate/control dust during demolition?**
- **What is the plan to protect residents in this heavily populated area from airborne contaminants that could be a threat to health during demolition? Will the city pay our medical bills for health problems related to airborne contaminants?**

The Contract specifications will require the contractor to provide adequate dust control measures so as not to cause detriment to the safety, health, welfare or comfort of any person or property.

The existing bridges will also be tested to determine whether they have any asbestos containing materials. If asbestos is found on the bridges, the contractor will be required to follow appropriate procedures to contain this material during demolition.

- **Will the city reduce our property taxes during construction? It would be most difficult to sell a house in the area during construction.**

There is no prior history where the City has altered the property taxes for a neighborhood to improve their infrastructure system.

- **Why doesn't the city leave the DTE lines underground? It would save money, reduce visual pollution and be safer from the weather.**

We have discussed this option with DTE and they have stated that due to the size and capacity of the power lines (40,000 volts) that they will last longer and operate more efficiently above ground. Also, they are only planning on placing a short section of the power lines underground in order to facilitate the construction of the bridges. As a result, we do not believe that it is prudent and we cannot force Detroit Edison to continue to keep this portion of their lines underground after the construction is completed.

- **I read that the consultants have been working on this plan for more than 18 months? Why did it take until the cement was falling down to move ahead?**

A project that is as complex as this one requires special care and participation from many stakeholders and the public. It is common for this type of project to take several years to design and "fine-tune" before, before construction begins.

- **When did the project first start? Was the first study in 2005? The city has been aware of this problem for a while. So why is big money being spent on a court building when the bridge is falling down?**

The replacement of the bridges on E. Stadium Boulevard has been a part of the City's Capital Improvement Plan for many years. In 2009 we learned about the potential for funding the project construction with the Federal government's stimulus funds, as well as the accelerated deterioration at one of the bridge's beams. That led us to a revised action plan for replacing the bridges as early as the year 2010.

The construction cost for the new 15th District Court and Police Facility is paid for by the proceeds from the bonds that were sold for the project. The City currently leases office space outside City Hall for the 15th District Court and some other City operations. After the new building is completed, and the Courts have moved to their new location, the old rental expenses will be redirected to pay for the new loan's installments.