



## **Monument Square Roundabout Safety Improvements (CHP-36-14.88, PID 103793) Public Meeting Follow-up**

The City of Urbana held a public meeting 2/9/2017 to discuss project updates for the Monument Square Roundabout Safety Improvements. In response to the valuable feedback given by members of the public in the 30-day period following this meeting, the City wishes to present these follow-up thoughts in the form of an FAQ.

### **A. CURBING AND OTHER HARDSCAPES**

Question #A1: The proposed design calls for sidewalk bumpouts just before the proposed loading/unloading zones on the exits for the roundabout. Can these be eliminated so delivery trucks have an easier time using the space?

Answer #A1: That is a very good observation. This will be weighed against the benefit the bumpout has for pedestrians being observed by traffic.

Question #A2: With curbing, won't snowplowing and storage be an issue?

Answer #A2: Snowplowing will certainly be an adjustment for our crews. Common design elements such as truck aprons and curbed islands, though, are prevalent throughout most roundabouts in Ohio and across the country.

### **B. PARKING AND LOADING/UNLOADING ZONES**

Question #B1: Why are the parking lots in the corners laid out clockwise? Wouldn't a counterclockwise layout make more sense to easily access the parking lot from the inbound lanes and exit into the outbound lanes?

Answer #B1: The present clockwise situation allows vehicles to enter any corner for parking after they enter the roundabout. In a counterclockwise layout, vehicles would only have access to the parking areas from one leg of the approach.

Question #B2: In what areas might parking be lost due to this project?

Answer #B2: Daytime parking will be lost if the loading/unloading zones are moved to the parallel parking areas at the exits of the roundabout. However, the time restrictions will still allow for evening and overnight parking in these zones. Another loss of parking will be the four parking stalls nearest the entrances to the parking lots. This will help prevent vehicles from backing into the exits of the roundabout. With sidewalk bumpouts at crosswalks, which allow pedestrians to be seen more easily in front of a parked line of cars, parking length may be reduced slightly. The parking loss, ultimately, is to increase the safety in the downtown.

Question #B3: Will large passenger vehicles be able to negotiate the parking areas?

Answer #B3: The layout of the parking areas is not much different than before. If you could make turns and stay within the painted aisles before, you shouldn't have any issues here. Radii on any curbed island will be carefully designed to be as inclusive as possible. Unfortunately, there's just not a lot of space in which to work.

Question #B4: Of the half dozen restaurants in the downtown, many take deliveries anywhere from 7:00 AM to 5:00 PM. Is it really worth having four loading/unloading zones occupy parking spots for that length of time?

Answer #B4: The public meeting intended to garner this information from the local business owners. Since parking is at a premium, the City will weigh its options. One solution may be to restrict a couple loading/unloading zones for a shorter duration.

### **C. LIGHTING**

Question #C1: Will there be lighting upgrades for the project?

Answer #C1: Lighting is very important to assuring the safety of pedestrians and the intersection as a whole at night. Lights will be added and repositioned to light the roundabout and the vehicle-approach side of pedestrians better.

#### **D. LANDSCAPING**

Question #D1: Will the in-road medians include plantings?

Answer #D1: No. For the sake of emergency vehicles and periodic oversized loads/machinery, this would not make sense. However, the current irregular shaped loading/unloading zones will be exchanged for an island with plantings.

Question #D2: If landscaping is added to the downtown, the City needs to maintain it. Are they prepared to do so?

Answer #D2: Low maintenance landscaping will have to be selected carefully by the designer and reviewed by the City to make sure staff can absorb the extra responsibility.

#### **E. CROSSWALKS**

Question #E1: Why aren't the crosswalks for the north and south approach further away from the roundabout like the east and west approaches? Stacking back into the circle will happen since they're so close in the proposed design.

Answer #E1: This is very insightful. Most roundabout designers want pedestrians to be able to cross where vehicle speeds are slowest, which is as close to the roundabout as possible. However, the positioning of the crosswalks will need further consideration.

Question #E2: Won't the loading/unloading zones within the parking lanes at the exit to the roundabout interfere with pedestrian visibility for approaching traffic?

Answer #E2: Yes, this very well could be impacted but hopefully for short durations. The designer will have to mount the pedestrian activated RRFBs (discussed under USER ERROR) appropriately. At the very least the far side RRFB will be visible even if the pedestrian is not yet.

#### **F. SIGNS**

Question #F1: Could the yield signs and pedestrian signs be placed better or installed differently to make replacement easier once damaged?

Answer #F1: Currently, signs have been realigned from their original position making contact less prevalent. However, we feel the addition of curbed islands will reduce the yield sign strikes. Also, the short, pavement-mounted pedestrian signs may be eliminated with the proposed improvements.

Question #F2: There are too many signs competing for attention. Will the plan reduce the number of signs?

Answer #F2: Although some signs are necessary, the statement is true. The aim will be to reduce the approach signage.

#### **G. RIGHT-HAND TURN LANES**

Question #G1: Can the right-hand turn lanes be eliminated or reduced in length to create less confusion?

Answer #G1: Yes, but two studies to date show the right turn lanes are necessary due to the volume of traffic that would otherwise stack in the through/left lane. This would cause lengthy queues and driver frustration. Since multiple engineering studies have supported the two lane approach, the City is unlikely to eliminate the right-hand turn lanes. However, depending on the final positioning of the crosswalks, shrinking the length of the lane could be considered if there is enough added safety benefit.

#### **H. SEMIS, EMERGENCY VEHICLES AND OTHER LARGE MACHINERY**

Question #H1: Will semi-trucks have to mount the curbs? Is that intended? Could these increase rollovers?

Answer #H1: Yes, that is the intention of the center truck apron, to be mountable by the lagging semi-trailer while the cab remains in the circle. On the approaches, mountable curbs/islands will be used that deter and slow the average driver while still being accessible to emergency vehicles and/or oversized loads. Rollover accidents should not occur on low-height, low-speed, mountable curbs.

Question #H2: Many semi-truck and farm machinery drivers are concerned about curbing in the proposed layout.

They are concerned about three things: will the route still be usable, won't curbs just crumble due to the loads, and

won't curbs tear up their equipment? What reassurance could you offer them?

Answer #H2: Curbs are usually understood as vertical, 6" or 8" high, non-mountable obstacles. In this case, we refer to them as mountable because they'll be similar to a roll curb and gutter in that they'll only be 4" above the pavement surface and not have any vertical face. All proposed islands will have this feature, including the center truck apron and any lane dividers. Curbs in this sense are meant to *deter* not prevent the occasional trespass. Traffic calming is the main reason for curbing. With decreased vehicle speeds comes more decision and reaction time for semi and farm machinery drivers.

Question #H3: Emergency vehicles and wide loads will need access to more than just the normal lane of travel to traverse the roundabout. How will they be accommodated?

Answer #H3: The designer is considering these factors in the final design. One thing they have said is that most if not all added islands and bumpouts will need to be mountable.

Question #H4: How will the Fire Department access the corner buildings in case of a fire or other emergency?

Answer #H4: The Fire Department has done test runs with their ladder truck, trying to stay within the proposed curbing. They have a plan going forward but have given the engineer design requirements to abide by, such as truck dimensions and turn radii.

## **I. TRAFFIC ACCIDENTS**

Question #I1: Has the conversion to a roundabout reduced traffic accidents?

Answer #I1: Without having tracked accidents before the roundabout, it's hard to say. A recent safety study for the roundabout concluded there had been 65 crashes in 3 years (20 rear ends, 19 angles, 12 sideswipes, 11 fixed objects, 3 bicyclists). The main reason the City has received federal safety funding is because the number of crashes is still high. Deficiencies exist in the current layout that need addressed.

## **J. USER ERROR**

Question #J1: Aren't turn signals required for use within the roundabout?

Answer #J1: No they aren't, but they are a courtesy to other drivers wishing to enter the roundabout. Drivers are encouraged to use their right signal when approaching the roundabout using the right-hand turn lane. The right signal is also for exiting the roundabout, but in Urbana's roundabout, it may be more appropriate for turning into a corner parking lot rather than exiting. The left signal is useful when a driver's intention is to head left or even U-turn rather than continuing straight while in the circle.

Question #J2: Many still do not know what a yield sign means. Can't Smart Traffic Signals or "Stop for Left Traffic" signs be posted instead?

Answer #J2: Yield signs are a regulatory sign under the Ohio and National Manual of Uniform Traffic Control Devices. Stops are not required, only when the right-of-way must be given to vehicles already within the circle. Supplemental plaques under the yield signs will be reconsidered to inform drivers of their duty to yield to vehicles already within the roundabout. These supplemental plaques were used when Urbana's roundabout was first installed. Smart Traffic Signals are still a traffic signal with reds and greens and aren't meant to mingle with a roundabout or within a network of "non-Smart" signals.

Question #J3: Pedestrians are often ignored or unseen by drivers. How will this be addressed?

Answer #J3: That's where the Rectangular Rapid Flashing Beacons (RRFBs) come into play. They are push-button activated devices proposed for all six, unsignalized crosswalks downtown that a pedestrian can use to warn drivers of their intention to cross. Driver yielding compliance has been proven to increase dramatically with these non-static devices.

## **K. REVERTING TO SIGNALS**

Question #K4: Why not move the monument and return to a signalized intersection?

Answer #K4: The efficiency of a roundabout is much better. Consider the signalized intersection Monument Square used to be. Clearance time (the time when both directions have red lights so cars can clear the intersection before the next direction turns green) amounted to 16 seconds for every 75 second cycle. That's over 5 hours of all red time during one day. Moving the monument would face its own set of obstacles and is outside the scope of this project.

## **L. CONSTRUCTION**

Question #L1: How will traffic be maintained during construction? How long will construction last?

Answer #L1: The proposal will be to close a single approach at a time to work on the roundabout. The other three legs will be open during this span, but a detour will be provided for the fourth. Emergency vehicles will continue to have access to and through all four legs at any given time, though. Construction is predicted to last 6 months with the aforementioned leg closures. Without closures, the project would be estimated at 9 months.

Question #L2: Will owners within the downtown receive notice of the construction closures in order to make alternate arrangements for delivery vehicles?

Answer #L2: Yes, this will be coordinated within the contract stipulations for the contractor. If not there, the City will perform this function.

## **M. COST**

Question #M1: Wouldn't this money be better spent on street repairs?

Answer #M1: The Highway Safety Grant (90% federal, 10% local) and Small Cities Grant (95% federal, 5% local) are only given to competitive, qualifying projects. The City of Urbana realized it had enough of a case to apply and provide the small match needed to return large amounts of grant money to our community. These grants could not be used for street repairs.

*The environmental review, consultation and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ODOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated 12/11/2015, and executed by FHWA and ODOT.*