

**Public Works and Capital Projects
December 13, 2019**

CAPITAL STREET PROJECTS – CITY FUNDED

2019 Selective Slab Replacement A – At its March 4, 2019 meeting, City Council approved a contract with Amcon Municipal Concrete in an amount not to exceed \$1,100,000. The project has been completed, under budget. There were 18,775 square yards of concrete pavement replaced as part of this project. Streets included: Glen Hollow Drive, Spring Valley Drive, Glen Cove Drive, High Valley Drive, Heather Crest Drive, Orchard Hill Drive, Cedarmill Drive, Silver Lake Court, Valley Branch Drive, Century Lake Drive, and Water Ridge Court.



2019 Selective Slab Replacement B – At its March 4, 2019 meeting, City Council approved a contract with J.M. Marschuetz in an amount not to exceed \$1,050,000. This project has been completed, under budget. There were 17,014 square yards of concrete pavement replaced as part of this project. Streets included: Amherst Terrace Way, Amherst Green Court, Conway Oaks Drive, Conway Glen Court, Eldon Ridge Court, Terrimill Terrace, Wheatley Court, Morganfield Court, Woodlet Park Drive, and a trench grate replacement on Whethersfield Terrace Court.

2019 Selective Slab Replacement C – At its March 4, 2019 meeting, City Council approved a contract with J.M. Marshuetz in an amount not to exceed \$300,000. This project has been completed, under budget. There were 3,294 square yards of concrete pavement replaced as part of this project. Selective

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Slab Project C was included in the 2019 Budget in order to address smaller, more isolated sections of concrete in need of repair.



Crack Sealing Project – Bids were opened for the 2019 Crack Sealing Project on October 10, 2019, with Sweetens Concrete submitting the low bid of \$56,869. City Council approved a contract with Sweetens at its October 23, 2019 meeting, in an amount not to exceed \$75,000. This project is expected to commence in late December.

Schoettler Road Improvements (Clayton to Georgetown) – On March 19, 2018, City Council approved a contract with HR Green to design improvements to Schoettler Road from Clayton Road to Georgetown Road. This project will include the design of a center turn lane from Georgetown Road to Schoettler Grove Court and a designated right turn lane near Clayton Road. Preliminary design was completed in January and a utility coordination meeting was held on February 6. It appears that all required utility relocations will be within right of way and will be completed at no cost to the City. All necessary right of

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way and easements have been acquired. HR Green is now completing final plans, including bid documents, project specifications, and final cost estimate.

In order to safely and efficiently construct the project, Schoettler Road from Georgetown Road/Schoettler Manor Court to Clayton Road will be temporarily restricted to one-way southbound traffic during a portion of construction. A signed detour will be established for northbound traffic. The detour will route vehicles from Clayton Road to Baxter Road - Old Baxter Road - Highcroft Drive - Schoettler Road. It is anticipated that the one-way restriction will be in place for six to eight weeks. Prior to the start of construction and the one-way condition being implemented, notifications will be sent to the trustees of those affected subdivisions near Schoettler Road and a public meeting will be held to provide information on the project, including the temporary one-way restriction and detour. The project will be advertised for bid in January of 2020, with construction expected to commence in the Spring of 2020.

2019 Bridge Deck Sealing and Epoxy Overlay Project – The approved 2019 budget included \$140,000 for a bridge maintenance project to seal four bridges: Timberlake Parkway over Creve Coeur Creek, Schoettler Road over Creve Coeur Creek, Ladue Road over Creve Coeur Creek, and the Chesterfield Parkway Pedestrian Bridge over I-64. The project also included an epoxy overlay of the Eagle Bluff Court Bridge over Caulks Creek. This project was successfully completed, under budget, on July 5, 2019 by the low bidder, R.V. Wagner.



Old Chesterfield Road – This project includes replacement of a deficient culvert and an asphalt overlay on Old Chesterfield Road between Wild Horse Creek Road and Baxter Road. The City applied for grants for this project in both 2017 and 2018. Unfortunately, neither grant application was successful

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and the project will need to be funded by the City in order to proceed. In 2017, the City Council approved a contract with Oates Associates for design services to reconstruct the deficient culvert under Old Chesterfield Road. Preliminary design of the culvert was completed in March of 2018, and a utility coordination meeting was held in April of 2018. All utilities are within the existing right-of-way and the required utility relocations will be completed at no cost to the City. All utility relocations will be completed during the project construction phase with the exception of the overhead utilities, which must be relocated in advance of construction. Tree removal for the relocation of overhead utilities has been completed. Relocation of the overhead utilities is currently in progress.

No permanent right of way will be required as part of this project. However, both permanent drainage easements and temporary construction easements are necessary in order to replace the deficient culvert. All easements have been secured. Oates Associates is finalizing the Plans, Specifications and Estimate, which should be completed later this month. Bidding of the project is anticipated in late 2019 or early 2020. Construction of this project is scheduled to commence in the Spring of 2020.



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Schoettler Road Bridge – This project was successfully constructed, under budget, in 2018. A final inspection of the bio-retention plantings was completed in May 2019 and the contractor replaced some plants that did not survive the winter. Final project closeout paperwork was submitted to MoDOT in June and the City received final acceptance for this project from MoDOT on June 26, 2019. The final total project cost including all engineering, right-of-way acquisition, construction, and construction monitoring was approximately

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\$1,804,000. The final federal reimbursement amount was \$1,425,000 resulting in a final cost to the City of about \$379,000.

Wilson Avenue Asphalt Overlay – City Staff has prepared preliminary engineering drawings for an asphalt overlay project on Wilson Avenue. The project is located between Chamfers Farm Drive and Wild Horse Creek Road, but it would exclude the segment of Wilson Avenue that was recently improved during the 2018 culvert replacement project and an existing concrete pavement section.

City Staff is currently preparing a grant application to East-West Gateway to fund this project through the Surface Transportation Program (STP). The application is due to East-West Gateway by February 13, 2020, and notice of award is expected mid-summer.

Schoettler Road Pavement Preservation – City Staff is currently preparing a Surface Transportation Program (STP) grant application to East-West Gateway to fund a pavement preservation project on Schoettler Road from Georgetown Road to South Outer 40. The project scope will include base and curb repairs, asphalt milling and overlay, pavement striping, and upgraded ADA curb ramps, where necessary. The application is due to East-West Gateway by February 13, 2020, and notice of award is expected mid-summer.

SIDEWALKS AND TRAILS

Accessible Ramp Improvements (CDBG-2019) – The City of Chesterfield will once again utilize funds available through the Community Development Block Grant Program to construct ADA compliant sidewalks and curb ramps in 2019. The 2019 project will reconstruct curb ramps within the Westbury Manor Subdivision. This project will be bid once funding becomes available through the CDBG Program which is administered by St. Louis County. Funding was originally anticipated to be available in the fall of this year. However, it now appears that this project will be postponed until 2020, pending an update from St. Louis County.

2019 Sidewalk Replacement Projects – Due to the Emerald Ash Borer (EAB) crisis, City Maintenance Staff has been re-allocated to focus on tree removal. Accordingly, City Council has approved the EAB Action Plan whereby annual contractual sidewalk funding will be \$500,000.

2019 Sidewalk Replacement A – This project corrected sidewalk deficiencies in the Clarkson Woods, Claymont Manor, and the Bluffs of Wildhorse subdivisions. On March 18, 2019, City Council approved a

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contract with the low bidder, Lamke Trenching & Excavation, in an amount not to exceed \$307,100. Construction began on April 1, 2019 and has been completed at a cost of \$306,207. All paperwork has been submitted and final payment has been issued.



2019 Sidewalk Replacement B – This project addresses miscellaneous sidewalk deficiencies throughout the City of Chesterfield, primarily identified through Work Orders and Requests for Action (RFAs). The bid opening for this project was held on April 2, 2019. On April 17, 2019 City Council approved a contract with the low bidder, R.V. Wagner, in an amount not to exceed \$276,500, which included roll-over funding from 2018. Construction began on June 10, 2019. This is anticipated to be a year-long contract.

Monarch Chesterfield Levee Trail Phase V – This project (Baxter to I-64) is complete. Due to concerns about the safety of the section of trail which passes under I-64 in close proximity to Bonhomme Creek, the trail has been closed just south of I-64. This section will remain closed until the next phase (Phase VI - see below) is constructed.

Monarch Chesterfield Levee Trail Phase VI – This section of the Levee Trail extends from just north of I-64 to the northeast corner of Top Golf. The Levee District also had a project planned for 2019 to add fill and improve this section of the Monarch-Chesterfield Levee. Bids were accepted by the Levee District this summer, but all bids were rejected due to the high cost of import fill from all bidders. It is now anticipated that construction of the levee improvement

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project will begin in early 2020. The Levee District is currently stockpiling dirt for this project on property it owns near the western entrance to the CVAC.

KDG, the City's design consultant for the Levee Trail, has incorporated the Levee District grading project design into the design plans for Phase VI of the Levee Trail. Phase VI will also include a complete redesign and reconstruction of the Phase V segment of the existing trail under the I-64 overpass, referenced above. The new design will eliminate the steep grades, improve safety, correct existing erosion problems, and it will involve construction of new retaining walls under the I-64 overpass. The License Agreement between the City and MoDOT, which allows City use of MoDOT right-of-way for the trail, will need to be extended. MoDOT is currently preparing the necessary Agreement documents for City execution.

There have been several delays in the plan preparation due to postponement of the Levee District project and scheduling by KDG. Further complicating matters was that additional geotechnical information was required at the same time that the Missouri River and Bonhomme Creek were above flood levels. These issues have been resolved, and KDG obtained all of the information they needed to finalize the design plans. Final plans were delivered to the City and other review agencies in early October. Initial review of those plans by the Levee District required KDG to make changes to the alignment. Those revised plans were delivered to the City for review in early December. The corresponding easement documents are scheduled to be complete by the end of December.

It is important to note that the Monarch – Chesterfield Levee is located on private property and the City has no right to construct a trail on the Levee without an easement. City Staff has previously held a meeting with the majority property owner to discuss the proposed trail alignment and other concerns. However, easement negotiations could not progress further until the Levee District grading plans were finalized and limits of construction were delineated. Now that the plans are nearing completion we will resume easement negotiations with the majority property owner in the near future.

Schoettler Road Sidewalk – On February 14, 2019, the City of Chesterfield once again submitted a Surface Transportation Program (STP) grant application to East-West Gateway to fund the construction of 1,500 linear feet of five-foot concrete sidewalk on the east side of Schoettler Road from Windsor Valley Court to Greenleaf Valley Drive. This project would fill a sidewalk gap on Schoettler Road and provide a continuous pedestrian route from Clayton Road to Chesterfield Parkway. The grant application included construction of 950 linear feet of retaining walls due to steep existing topography in the project vicinity.

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The estimated total project cost for construction of the sidewalk and retaining walls - including utility relocations, easement acquisition, and construction engineering and inspection - is \$980,000. On May 7, 2019 the City was notified that the East-West Gateway staff did not recommend this project for funding.

City Engineering Staff continues to investigate ways to fund and construct this project. Staff is currently reviewing the feasibility of constructing this sidewalk as part of a future asphalt overlay on Schoettler Road. However, at this time, it does not appear likely that the City will be able to fund this project without a grant.



Riparian Trail – As part of an agreement between St. Louis County and the City of Chesterfield, St. Louis County agreed to leave four / five lanes of traffic on Baxter Road, with no dedicated bike lane. In return, the City agreed to pursue construction of Phases Two and Three of the Riparian Trail. The aforementioned phases of the Riparian Trail begin at August Hill Drive, head north through Central Park, cross Wild Horse Creek Road, and terminate at Old Chesterfield Road. City Staff submitted a grant application for this project through the Transportation Alternatives Program (TAP) on June 19, 2017. In October of 2017, City Staff was notified that the East-West Gateway Board of Directors approved this project for funding. The total project cost is approximately \$1.5 million. With an approved grant funding of nearly \$1 million (maximum allowed), the net project cost will be approximately \$500,000. However, all project costs outside the grant will be funded through the Chesterfield Valley Transportation Development District (TDD). There will be no net cost to the City. Execution of a Program Agreement with MoDOT and execution of a design contract with George Butler and Associates (GBA) were authorized by City Council on March 19, 2018.

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On April 2, 2018, City Council authorized an Amendment to the Contribution of Land Agreement with Chesterfield Village Incorporated (CVI) in order to acquire the land necessary to construct a portion of the Riparian Trail, and the closing documents with CVI were signed by the City on June 20, 2019.

Preliminary Engineering plans have been approved by MoDOT, and Right-of-Way plans have been submitted to the City for review. MoDOT must approve the final Right-of-Way plans which include the CVI property donation and an additional easement from the Aventura property. Once Right-of-Way plans are approved final Plans, Specifications, and Estimate (PS&E) will be submitted to MoDOT for final approval.

It was also determined that the necessary tree clearing in conformance with the City's Section 404 permit will be completed prior to March 31, 2020. Construction of this project is anticipated to commence in the summer of 2020.



Monarch Chesterfield Levee Trail (Pump Station 4 and 6 Backflow Prevention Construction) – The Monarch-Chesterfield Levee District has submitted plans to the City for the replacement of storm water pump discharge pipes and the construction of backflow prevention structures at Pump Station 4 and Pump Station 6. This project will necessitate the closure of the Levee Trail in both locations. City Staff issued floodplain development permits for this project on May 7, 2019. The Levee District held a preconstruction meeting on September 20, 2019 at which time the Levee Trail closures were discussed. The closures were preliminarily planned from October 7, 2019 through January 15, 2020. However, City Staff was informed by the Levee District on October 4, 2019 that the project was on hold due to high water levels on the

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Missouri River and coordination issues with the Army Corps of Engineers, related to Pump Station #4. Accordingly, the project and the associated trail closures have been delayed. Once City Staff is notified of the revised project schedule, and the associated trails closure dates, those updates will be posted on the City's website and distributed to the public via the City's social media.

Los Padres Sidewalk Removal – On March 7, 2019 the Planning and Public Works Committee of City Council voted to approve Staff's recommendation to remove a section of sidewalk on Los Padres Court from Rogue River Drive to 14633 Los Padres Court. This section of sidewalk was in poor condition and would have been extremely expensive and difficult to reconstruct due to steep adjacent grades and nearby private retaining walls.

In-house Street Maintenance personnel completely removed the sidewalk and replaced the driveway aprons within the limits described above. The area was also backfilled, graded, and restored with seed and erosion control matting. The work was completed at the beginning of June.



MISCELLANEOUS PROJECTS

River Valley Drive Closure – City Staff worked from February to September to address mud and sinking pavement on River Valley Drive. After substantial investigation and repair attempts, it was determined that the source of the problem was a storm sewer pipe that was damaged by Charter's subcontractor during an underground bore project. City Staff coordinated repairs with both MSD and ADB (Charter's subcontractor). In June, the storm sewer was repaired by MSD, ADB completed the necessary pavement restoration (including 14 cubic yards of pressurized grout to fill the voids), and site

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cleanup. Additionally, Krupp Construction (the contractor who originally constructed the road closure) repaired a flared end section and removed debris from the culvert underneath the cul-de-sac. In September, there was another minor pavement problem which was addressed by ADB.



Unfortunately, problems persist in this area, and in late November Staff discovered additional mud being deposited on the road near the River Valley Drive cul-de-sac. It does not initially appear that the current problem is related to the previous utility work. However, it does appear that water is continuing to flow under the pavement, transporting mud down the hill where it eventually daylights along the western edge of the River Valley Drive pavement, where it crosses the concrete cul-de-sac. It appears the problem might be caused by fractures in the paved swale along the eastern side of the road and the steep grade. Engineering Staff is investigating the problem and working to determine the source of the water under the pavement. Once the source is determined Staff will determine an appropriate solution.

Public Works Facility Structural Repairs - The roofs on the material storage building and equipment storage building at the Public Works Facility were originally planned to be replaced in 2019. However, as Staff progressed with the design of this project, structural deficiencies were discovered that needed to be addressed prior to the roof replacements. Bids were received on February 5, 2019 to construct the required structural repairs in both the material storage building and the equipment storage building. The structural repair contract for

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this project was approved by City Council on March 4, 2019 in an amount not to exceed \$90,000. Construction began in June and was completed at the end of July on time and under budget. The roof replacement project has included in the 2020 Budget, and will be scheduled in 2020, subject to Council authorization.

Brandywine NID – On January 7, 2019 City Council approved a pre-application petition from the Brandywine subdivision for establishment of a Neighborhood Improvement District (NID). This NID is intended to reconstruct the private streets within the Brandywine subdivision. Staff has completed a detailed estimate and obtained estimates for the legal and bonding costs from the Finance Department. Staff met with representatives of Brandywine in June to confirm their acceptance of the final project scope and to discuss the project schedule. The final petition was provided to Brandywine on August 16. We received the completed final petition submittal from Brandywine on September 17, with an apparent approval level of approximately 87%. The final petitions were reviewed by the City Clerk and the required minimum 66% approval was obtained. City Staff is working to finalize the specifications, bid documents, and plans and the project will be released for bid in early 2020. Once bids have been received, the final petition results and bid recommendation will be submitted to City Council for formal approval.

Sewer Lateral Program – In the month of November, the City received 13 applications for repair, 9 of which were approved. Since January 1, the City has received 147 applications for repair, of which 120 have been approved.



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Street Tree Inspections and Removals – During the month of November, the City of Chesterfield received 34 requests for street tree inspections. These inspections resulted in the approval for removal of 20 trees. Based upon previous inspections, the City of Chesterfield managed the contractual removal of 35 street trees (non-Ash) and the grinding of 99 stumps during the month of November.



Emerald Ash Borer Preparedness Plan and Action Strategy – During the month of November, 95 Ash trees were removed by Public Works maintenance personnel. There are approximately 2,800 Ash trees remaining, which are all scheduled for removal over the next four years.



Residential Street Tree Planting Program – City residents have requested 362 new street trees as part of the Fall Planting. During the month of November, 85 of these trees were planted. The City's contractor (Farinella Nursery) will continue to plant trees in November and December, each of which will be managed by the City Arborist to ensure all specifications are met.

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Flood Insurance Rate Map Updates – The State Emergency Management Agency (SEMA) is in the process of updating the Flood Insurance Rate Maps (FIRMs) and Flood Insurance Study (FIS) for St. Louis County. SEMA and its consultant (Wood Engineering) provided an introductory presentation on the new maps to municipal representatives in August of 2018. Based upon this information, the City sent postcard notifications to all property owners within 200 feet of a proposed floodplain/floodway change in September 2018. This allowed property owners to view the proposed changes and provide additional information and comments on the changes. SEMA held additional meetings in January of 2019, at which time they announced that Preliminary FIRMs are expected to be completed in January 2020. Once the Preliminary FIRMs are issued, there will be a formal comment period of 90 days during which affected residents can appeal details within the maps. New effective FIRMs are expected to be formally issued in two to three years. Details on the new maps and the information from SEMA are located on the City’s website. We will continue to update the website, and this report, as we obtain additional information.

2019 City Hall Exterior Parking Lot Lighting – In response to concerns about low lighting levels in the City Hall parking lot, the City contracted with McClure Engineering to obtain a photometric analysis of the existing parking lot lighting levels. The photometrics confirmed that the existing lighting generally conforms to current City requirements. However, there are areas where lighting could be enhanced. Additionally, the overall parking lot lighting could be improved by upgrading to more energy efficient LED fixtures. City Staff has contracted with McClure Engineering to design enhancements to the existing exterior lighting at City Hall and provide construction drawings and specifications suitable for bidding and construction. A lighting project could potentially be constructed in 2021, subject to City Council approval.