

**Department of Transportation** 

# **Parking Division**

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May 28, 2019

#### Dear Plan Commissioners:

Attached you will find our application for demolition of the existing Government East parking structure. This demolition application is being reviewed concurrently with the proposed major alteration to the Block 105 Planned Development. A previous demolition request was approved on April 22, 2017.

The removal of this structure is necessary and contractually obligated as part of the City's cooperation with the Beitler Real Estate Services LLC, associated with the redevelopment of Block 105. In addition, the Government East Parking Garage is aging and in need of continuous repairs. Since the new parking structure on Block 88 will be open and available in October 2019, the public parking amenity served by this structure will be replaced with the opening of the new structure. The demolition of the Government East parking structure will not proceed until the new parking structure is open.

I am requesting re-approval of the demolition of this structure so the Block 105 project can proceed in an efficient, resourceful and flexible manner relative to the timing for future construction on Block 105. To this effect, I request that demolition of the Government East Parking Garage may proceed prior to the recording of the final Planned Development for Block 105.

Regards,

Sabrina Tolley

Assistant Parking Utility Manager

8-11

## **EXECUTIVE SUMMARY**

The 2018 Condition Evaluation is an annual review of the condition of the parking structures operated by the Madison Parking Utility. The 2018 Condition Evaluation is a review of current conditions and an update to the 2017 study and years prior to that. The six (6) City of Madison Parking Garages reviewed for the 2018 Condition Evaluation are located around the Capitol Square and the Central Business District along State Street.

The six (6) structures reviewed include the State Street Campus - Lake and State Street Campus - Frances parking garages (SSCL/SSCF), the Overture Center parking garage (OC), State Street Capitol (SSCo), Capitol Square North (CSN), and Government East (GE) parking garage. The recently opened seventh parking garage, the South Livingston parking Garage, located East of the Capitol Square just off East Washington Street on Livingstone Street, was not part of the study. A below grade replacement ramp for the Government East ramp is currently under construction with a planned late 2019 or early 2020 opening. The Government East ramp, whose replacement is under construction, was added to the originally planned Condition Evaluation study to identify limited restoration life safety issues for the continued use of the parking garage until future demolition.

Information obtained from the Condition Evaluation is used to plan restoration for the upkeep of the structures, both near term and for the future. The projection of future repair needs and preventative protection is used in developing a 10-year plan. This plan provides an Opinion of Probable Cost (OPC) for the future restoration and protection projects as well as the potential replacement for the aging structures.

The elevated structured parking garages located in the downtown area of Madison include the State Street Campus - Lake and State Street Campus - Frances structures (SSCL/SSCF), which are connected by bridges at multiple levels spanning Hawthorne Court, and considered as one parking destination, the Overture Center (OC), State Street Capitol (SSCo), Capitol Square North (CSN), and Government East (GE) ramps.

Age of Existing Parking Garages for 2019		
Government East	Built in 1957 / Horizontal	62 years / 55 years
	Addition 1964	
State Street Capitol	Built in 1963 / Horizontal	56 years / 53 years / 23 years
	Addition 1966 / Vertical	•
	Expansion 1996	
State Street Campus - Lake	Built in 1964	55 years
Capitol Square North	Built in 1970	49 years
Overture Center	Built in 1982	37 years
State Street Campus - Frances	Built in 1982 / Vertical	37 years / 32 years
	Expansion 1987	

JSD Project No. 15-7159

8-11

The field assessment of the six (6) parking garages reviewed was completed in December 2018 and January 2019. The observed restoration needs were used to develop the scope of work for the 2019 restoration phase. The 2019 phase will also include work that had been bid as part of the 2018 phase but because of budget, weather, and other circumstances, was not completed. Among these work items is the repainting of concrete columns at SSCo and painting of steel rails and bumper supports at SSCF.

Restoration needs identified in the 2018 Condition Evaluation included phased work such as placement of the elastomeric membrane at select locations. This is to occur at most of the parking garages studied. Membrane placement will include placing the full buildup of the system at locations of exposed concrete and previously placed heavily worn membrane. It also includes placement of the wear coat and top coat of the membrane system onto areas of worn, previously placed membrane systems. Silane Sealer, which has previously been placed on select parking levels of three (3) parking garages, is scheduled to be re-applied at these locations every eight (8) years.

Restoration to be completed in 2019 includes concrete repairs at the top and underside of the concrete slabs as well as concrete columns and parapets. Aging and failed expansion joints and caulk joints have also been identified for repair or replacement.

An Opinion of Probable Cost (OPC) was developed for the work items identified for the various parking garages reviewed. This projected cost was compared to the repair budget that had been developed by the Parking Utility for each of the parking garages that were planned to be reviewed as part of the 2018 Condition Evaluation. These budgets were established with projections from the 10-year plan.

The Parking Utility has undertaken an electrical upgrade to four (4) of the existing parking garages, CSN, SSCo, SSCF, and OC. Replacement plans for GE and SSCL make their timelines too short to realize payback for the costs associated with the upgrades. To date, CSN and SSCo have been completed. SSCF is currently under construction while OC is slated to be done in 2019. This work has included replacing all lights with LED luminaires, replacing conduits and wiring, and replacing control panels. This work is being completed under separate contract from the restoration.

Another project, to be undertaken by the Parking Utility in 2019, is the replacement of doors and windows and their frames at the Overture Center parking garage.

This report includes a written description of the deterioration observed in the field and recommendations for restoration. This report contains three (3) Appendices:

**Appendix A** - Cost Analysis, identifies observed deficiencies and their estimated quantities, provides an estimated unit cost for repair of the deficiency and provides an Opinion of Probable Construction Costs (OPC) for the 2019 restoration phase. The Total Cost is the summation of the individual repair item costs.

JSD Project No. 15-7159



Appendix B - Provides photos of a representative sampling of observed deficiencies.

**Appendix C** - The plans depict the results of the areas of the observed deficiencies from the visual review.

In providing Opinions of Probable Costs, the Client understands that the Consultant has no control over the cost or availability of labor, equipment or materials, or over conditions or the Contractor's method of pricing, and that the Consultant's Opinions of Probable Construction Costs are made on the basis of the Consultant's professional judgment and experience. The Consultant makes no warranty, expressed or implied that bids, quantities, or negotiated costs of the work will not vary from the Consultant's Opinion of Probable Construction Cost.

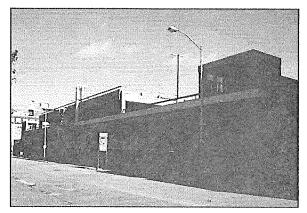
8-11

JSD Project No. 15-7159

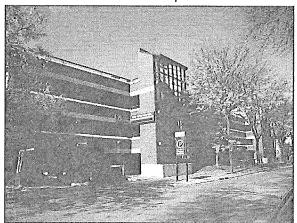
# REPORT EXCERPT RE: COVERNMENT EAST RAMP

# City of Madison Parking Utility 2015 Condition Evaluation

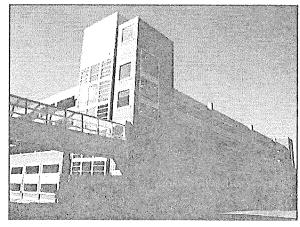
Madison, Wisconsin



State Street Campus - Lake



State Street Campus - Frances

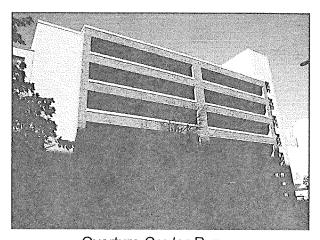


State Street Capitol

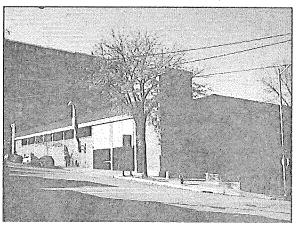


Prepared for: City of Madison Parking Utility Madison, Wisconsin

January 11, 2016



Overture Center Ramp



Capitol Square North

Prepared by:



Building relationships with a commitment to client satisfaction through trust, quality and experience.



#### **GOVERNMENT EAST**

#### INTRODUCTION

Prior to the restoration phase completed in 2012, restoration work on the GE ramp had been on hold with only small budget, crucial repairs made leading up to the 2012 restoration. The 10-year restoration plan had projected the demolition of the GE ramp for 2012. Discussions at the time reviewed the potential redevelopment of Block 105, site of the GE ramp.

Block 105 and Block 88, on the West side of Pinckney Street adjacent to the Madison Municipal Building, continue to be considered for a potential new public/private development. The two block development straddling Pinckney Street, known as Judge Doyle Square, is envisioned to consist of a multi-level below grade parking structure with a potential mixed use of retail, housing, office and hotel constructed above grade over the parking structure. The existing Government East parking garage would be demolished to facilitate the new development.

The concern with ongoing delays in the implementation of the redevelopment for Judge Doyle Square drove the decision to add a restoration phase for the GE ramp in the 2012 City of Madison ramps restoration. The 2012 restoration phase was completed on the entrance level; west parking bay running along Pinckney Street. The cost for the 2012 restoration phase was approximately \$216,000. The repairs were limited to the top side of the concrete parking slabs. The 2013 restoration phase was completed on the entrance level; East parking bay, and some of the North bay running along Doty Street. The cost for the 2013 restoration phase was approximately \$250,000. The 2014 restoration phase was completed on the entrance level; center parking bay. The cost for the 2014 restoration phase was approximately \$165,000. The repairs were limited to the top side of the concrete slabs, with some repair at the full depth. There was no membrane placed on the restored concrete slabs. In 2015, repairs were made to a small area of the GE ramp on the top side of the slab between grids 3 and 5 and E and H, at the South end of Level 1. The 2015 phase also included replacing concrete on the underside of the East bay of Level 1. The concrete in this area was previously knocked down during the 2013 restoration phase. The cost for the 2015 repair phase was \$128,000. Similar to other recent past repair phases, there was no membrane placed onto the replaced concrete areas.

Restoration to be completed in 2016 will be limited as discussion continues regarding a potential public/private development on blocks 88 and 105 and the replacement of the Government East parking ramp. Work planned for 2016 will be limited to the knock down of loose or spalling concrete on the underside of slabs and beams throughout. Budget for this work is \$50,000.

#### DESCRIPTION OF STRUCTURE

The Government East parking structure was constructed in two phases. The first phase was completed in 1958 as an L-shaped structure. Following the acquisition of the corner lot at Pinckney and Doty, the second phase of the parking garage was built in 1965 completing the rectangular shaped structure. This second phase is separated from the original construction with expansion joints at the North and West side of the ramp. The rectangular shaped, 3 bay wide parking garage is approximately 264 feet long by 197 feet wide. This structure, built on the site sloping from Doty Street down to Wilson Street, consists of a concrete slab-on-grade at the lowest level and three plus levels of elevated mild reinforced structural slabs. The three bay wide structure contains 526 parking spaces. The parking bays are inclined with the outer East and West bays sloping opposite the center bay. A speed ramp travels from the third elevated parking level to the slab-on-grade at the lower level. The speed ramp was originally constructed with an



embedded snow melt system which is no longer functional. The GE ramp has three stair towers located at the Northeast, Northwest and Southwest corners of the ramp. Functionally, the parking garage was converted from metered parking to cashier in the mid-1980. Traffic islands and cashier booths were placed at the Pinckney Street and Wilson Street entrances. More recently, pay by foot stations were added.

The GE ramp is a mild reinforced structure with tapered circular columns located approximately 14'-6" inward from the edges of the parking bays. The original plans show that the tapered columns, with a reducing diameter from top to the base, contain a steel pipe column at their core. The pipe columns, along with a cage of reinforcing bars sloping outward from the base were cast into the concrete column. Wide concrete beams span over the columns in a North/ South direction. The column locations result in a long cantilevered slab from the centerline of the wide beams to the outside face of the structure at the parapets located at the front of the parking stalls. This design results in the need for reinforcing top bars to span over the concrete beams extending to the edges of the slab. Top steel, reinforcing placed near the top surface of the slab, is especially vulnerable to corrosion due to its proximity to the corrosive de-icing salt placed on the slabs or the road salt tracked into the structure by automobiles. Photographs contained in Appendix B show examples of the deterioration observed. A budget of \$50,000 has been set for the 2016 restoration phase to remove the threat of falling concrete by chipping out the delaminated areas observed on the underside of slabs and beams.

#### PAST MODIFICATIONS/ REPAIRS

Physical changes to the GE parking structure have been minimal since the original construction. As mentioned earlier, the biggest change has been a functional change with the conversion from a metered facility to a cashiered ramp.

Phased repairs began in the late 1970's with condition studies and phased restoration, coordinated with repairs at other City of Madison ramps, directed by Wiss Janney Elsner (WJE) of Northbrook, Illinois. Restoration at that time included the placement of a concrete overlay over the top surface of the repaired slab. The 2" thick overlay, which was a high cement or latex modified mix, was intended to provide a barrier against further chloride intrusion.

Repairs to the concrete slab have been concentrated at the beam lines and cantilevered slabs for top side delamination and at mid spans between column lines at the underside of the structure. Repairs have also been made to the underside of the wide concrete beams and at columns.

Repair phases in the late 1990's included the placement of an adhered elastomeric membrane to the surface of restored slabs. This was done on the structural slabs of levels one and two. The top level, which is exposed to the natural flushing from rains, was not sealed with a membrane.

#### CONDITION EVALUATION ANALYSIS

The 2015 Condition Evaluation of the Government East (GE) parking structure was limited to a visual survey of the underside of the parking slabs and beams.

No plan has been prepared for the 2016 work. Underside areas to be knocked down will be marked prior to the start of construction. It is assumed that approximately 1400 square feet of knock down can be completed with the established ramp budget.

8-11

City of Madison Parking Utility 2015 Condition Evaluation

As stated earlier, demolition of the existing GE ramp and the construction of a new below grade parking structure are part of the long term plan for the GE ramp site.

### RECOMMENDATIONS

Work on the GE ramp during the 2016 restoration phase will be limited to a knock down of loose or delaminated concrete on the underside of slabs and beams, items that in the short term could become safety issues. With the limited funds designated for the GE ramp it is recommended that the underside knockdown be completed for the safety of users of the ramp as at this time there is no set date for the replacement of the GE ramp. Photos GE1 and GE2 show some of the areas of observed concrete spalling and delamination.

