

Work Plan
Special Experimental Project No. 14 (SEP-14)
Michigan Department of Transportation
Progressive Design Build Contracting

MDOT Job Number: 130035

Control Section: 82111, 82195, 82196, 82251, 82072

Location: I-375 from north of I-75 (Mack Avenue) to south of Jefferson Avenue in the City of Detroit, Wayne County

Contract Cost: \$390,000,000

I. Introduction

This Work Plan is for the I-375 Reconnecting Communities Project, and a request from the Michigan Department of Transportation (MDOT) for a Special Experimental Project Number 14 (SEP-14) Program approval to use a progressive design-build (PDB) contracting method. MDOT has a demonstrated record of success utilizing alternative contracting methods to deliver its projects, including Design-Build, Construction Manager/General Contractor, and Public Private Partnerships. These efforts have been enhanced by MDOT’s Innovative Contracting Unit (ICU), which supports execution of procurements and develops programmatic guidance for alternative delivery approaches. MDOT continues to study and refine its processes to ensure that the public obtains maximum value through the use of alternative delivery methods, and believes that adding PDB to its portfolio of options for use on project such as I-375 will help to achieve this objective.

II. Purpose

The proposed PDB contracting method is an innovative process that is being increasingly utilized by transportation agencies for the delivery of highway projects. PDB delivery places the responsibility for design and construction with a single design-build team (DBT). The DBT is selected based primarily on qualifications before substantial design work is completed. A cost component for preconstruction services will also be part of the selection criteria. The owner and the DBT then progress the design together toward authorization of final design and construction work and a final contract price. This contracting method would allow MDOT to meet project goals and provide for better cost input regarding options under consideration, providing for well-informed decision-making using a collaborative, open-book negotiation approach, and align MDOT and DBT expectations up front before completion of final design and execution of construction work.

Under 23 CFR 636.302(a)(1), the contracting agency “must evaluate price in every source selection where construction is a significant component of the scope of work”. The price of construction is typically required as criteria in the selection of a design-builder after the NEPA process is complete. The Finding of No Significant Impact (FONSI) for the Project was signed March 7, 2022. MDOT is requesting SEP-14 approval for deviating from the ~~23 CFR 636.602(a)(1)~~ **23 CFR 636.302(a)(1)*** requirement.

* *JH - Incorrect citation in original*

III. Project Scope and Background

The I-375 Project will reconnect downtown Detroit and adjacent neighborhoods, including Areas of Persistent Poverty, and create greater access to recreational areas, jobs, and other services. The project will replace a nearly 60-year-old limited-access, depressed, urban one-mile freeway with an at-grade boulevard. In addition, MDOT will reconfigure I-375 at the existing I-75 freeway by addressing the outdated interchange design to improve safety and operations from Mack Avenue to John R Street, including the Gratiot Connector from the I-75/I-375 interchange east to Gratiot Avenue. According to the Environmental Assessment (www.michigan.gov/i375study), this project will require permanent de-designation of the I-375 roadway as a freeway. In addition, the Gratiot Connector would be removed from the National Highway System (NHS). As part of the change in the NHS, I-375 would be renamed to M-375. The Project provides an opportunity to help the city of Detroit meet economic development and land use planning goals for the vicinity through improved accessibility and connectivity. It received an INFRA grant for \$104.6 M in September 2022. The Project purpose and need includes the following:

- Mitigate the negative impacts to the surrounding neighborhoods caused by the original construction of I-375.
- Address the outdated interchange design and deteriorated bridges and roadways.
- Improve connectivity to surrounding areas for both vehicular and nonmotorized users, and enhance connections to existing and planned transit services, improving community health, equity, and safety.
- Enhance access to enable future development and other placemaking opportunities with official land use and long-term economic development plans.
- Strengthen existing and future transportation, multimodal personal mobility choices, and roadway safety conditions for all users.

The Project includes significant community engagement during design with additional planning to develop a community enhancements plan and a framework for land use of large excess property parcels from the

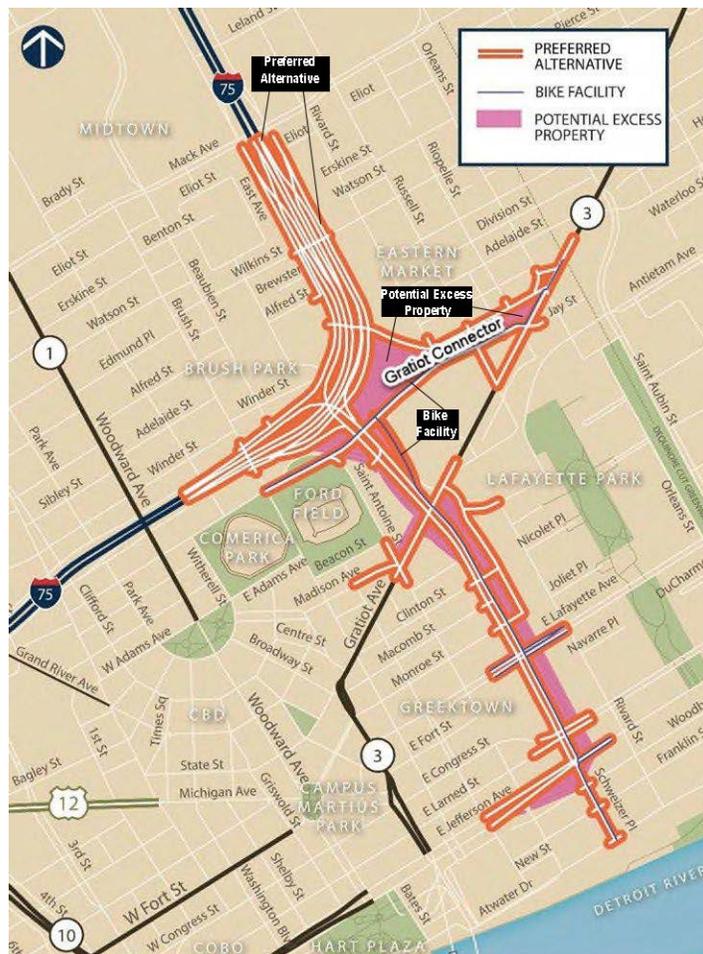


Figure 1: Proposed I-375 Corridor and Interchange

reduced footprint of the boulevard and reconfigured interchange. The progressive design-build model allows the work packages to incorporate these elements and other community feedback received during design of the Project. In particular, PDB contracting will:

- Allow for a collaborative approach to develop maintenance of traffic plans that includes both affected stakeholders and the DBT with focus on minimizing traffic disruption during construction, and maintaining access to critical businesses, employers, and stadiums downtown.
- Development of work packages that take into account DBE participation and workforce development goals for Project construction, while fostering relationships with contractors during the preconstruction phase.
- Manage significant utility relocation designs (requiring third party approvals) to maintain current critical infrastructure and new utility facilities to support future adjacent land use.
- Meet the obligation date for the INFRA grant of 9/30/2025.
- Provide contractor participation in the construction staging, to mitigate risks around the earthwork, stakeholder coordination on the maintenance of traffic during construction, and other technical challenges.
- Manage high inflationary and cost concerns in the post pandemic environment.

In addition to supporting the unique Project specific goals above, PDB was also chosen for other advantages it brings to the Project. PDB would maximize contractor input into both design and construction approach, while preserving the benefits of designer-contractor integration. Given the complex urban context and stakeholder environment, maximizing contractor input into design approach, constructability, packaging and staging, means and methods, etc. may help to mitigate or avoid Project risks early, thereby minimizing needed changes or claims during later design phases or construction. PDB would further support risk management through the collaborative approach to development of commercial terms and risk allocations, supporting fewer changes and/or less opportunity for differing interpretations of the contract.

PDB was selected over other collaborative models such as CM/GC because it would preserve integration of the designer with the builder, supporting design innovation and efficiency. It would also allow MDOT the option to transfer select design risks to the PDB contractor at the appropriate design stage to avoid Spearin risk, constructability, and errors and omissions claim.

The Project team structure includes an Owner's Representative Consultant (ORC), currently developing base plans, that will continue to support MDOT throughout Project completion, including development of the MDOT engineer's estimate. MDOT will separately procure a consultant to develop the independent cost estimates (ICE) for validation of the DBT construction prices based on 23 CFR 635.506(d)(3).

Work packages for construction and any early works will be further developed by MDOT and the DBT during the pre-construction phase of the Project. If MDOT is unwilling or unable to enter into a contract with the DBT, MDOT may initiate a new procurement process, or "off-ramp", based on 23 CFR 635.504(b)(6). Early work packages would be negotiated separately and would progress through final design and construction separate from other phases. Early work packages, if employed and an off-ramp is taken, would function as a segment of the overall

Project. Prior to engaging early work packages, MDOT and the DBT will ensure the work included in them is sufficiently independent so that the off-ramp option is not precluded.

IV. Schedule

The Request for Proposals (RFP) for the PDB is scheduled to be advertised in fall of 2023. MDOT is currently working with its ORC to determine the specifics of the procurement strategy and associated milestone schedule. Contract award would be expected in early to mid-2024, with Design work commencing shortly thereafter and continuing through 2025. Early work packages may commence in 2025, if pursued. Major construction is expected to commence 2026 through 2028 with substantial completion in fall 2028.

The contract phasing will include a preconstruction contract, followed by single or multiple construction contracts at negotiated contract prices. MDOT and the DBT will work together during the preconstruction phase to determine whether construction is single or multiple contracts. MDOT is currently developing a pricing approach with its ORC (e.g. one or several GMPs, Fixed Price Conversion, or a Target Price Model).

V. Evaluation

MDOT will select the PDB based on qualifications of the team with a cost component. The cost component will be for preconstruction services only and will be weighted accordingly. The criteria will be clearly defined in the RFP and the proposals will be scored by a diverse MDOT selection team. The evaluation criteria is expected to include the following, or similar criteria:

- a. Project Approach
- b. Experience, Qualifications, and Organization of Team
- c. Understanding of Design Services
- d. Understanding of Construction Services
- e. Approach to Contracting and DBE Participation
- f. Project Schedule
- g. Safety Approach
- h. Preconstruction Cost

The criteria will be weighted within the RFP with additional guidance on the scoring elements as they relate to the Project goals.

VI. Reporting

MDOT will prepare and submit to FHWA initial, interim, and final reports on this Project. Within each report, MDOT will address industry and 3rd party reaction, lessons learned, and quality improvements/benefits/innovations.

For industry and 3rd party reaction, MDOT will record and track the response from proposers regarding the procurement. This will also include an assessment of improvements to the procurement process that may be proposed by industry. MDOT will also record the response and reaction to any engaged 3rd parties or generalized reactions from the public.

For lessons learned, MDOT will provide a summary of any lessons learned throughout the Project, both from MDOT and industry's perspectives, and will include any items that may be

improved for any future projects that propose to utilize PDB delivery. This will focus on the early identification and management of risks to reduce project contingencies.

For quality improvement/benefits/innovations, MDOT will provide a summary of any noted innovations brought forth through the collaboration of the DBT and MDOT. The report will address how the collaboration efforts impacted the development of the innovation. The report will evaluate any innovations for long term implementation into MDOT's programs.

The initial report will be prepared at the approximate time of award of the design and preconstruction work. The initial report will include industry reaction to the progressive design-build process and procurement, a discussion of the contract negotiation process, and a breakdown of the design-builder's costs for categories of "design" and "preconstruction".

If early work packages are used, the MDOT will prepare an interim report after the initiation of the early works package, and before construction begins. The early work packages interim report will include reasons for the early work packages, will demonstrate how the early work packages help achieve Project goals, and will demonstrate how the early work package is severable from the remaining Project work and will not jeopardize the off-ramp. MDOT will seek concurrence in construction price reasonableness for all early work packages as required by FHWA.

MDOT will prepare an interim report upon agreement on the scope and price for the construction work. This report will describe MDOT's experience with the "construction award" process, including competitive contracting and open book negotiation procedures, MDOT's approach to determining price reasonableness, and reactions in the subcontractor community, as well as any identifiable effects of the progressive design-build approach on the final pricing.

A final report will be submitted upon completion of the design-build contracts for the Project and the MDOT's final acceptance of the work. The final report will contain an overall evaluation of the Project and the progressive design-build delivery model, along with "lessons learned" and any suggestions and recommendations for improving the process