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DATE: February 13, 2023

TO: Roubik R. Golanian, P.E., City Manager

FROM: Mark Young, General Manager – GWP

SUBJECT: Approval to use the Alternative Project Delivery Method for the Engineer-Procure-Construct (EPC) of Solar PV Systems at the Glendale Sports Complex Parking Lot, Montrose Parking Lot 3, Utility Operations Center Parking Lot, Brand Landfill, and Fire Station 21, Glendale Central Library, GWP Perkins Building, and Dunsmore Park Parking Lot.

Approval to use the alternative project delivery method for the EPC of the Solar PV Systems at the following proposed project locations: 1) Glendale Sports Complex Parking Lot, 2) Montrose Parking Lot 3, 3) Utility Operations Center Parking Lot, 4) Brand Landfill, 5) Fire Station 21, 6) Glendale Central Library, 7) GWP Perkins Building, 8) Dunsmore Park Parking Lot is respectfully requested. City Manager approval, prior to City Council approval, is required by Glendale Municipal Code, (GMC) Section 4.13.070 for Alternate Project Delivery Method projects.

Purpose and Function applicable to all eight projects listed below:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy to its commercial, business, and residential customers to meet the renewable and clean energy procurement and emission reduction goals. The program goals are to install and maintain solar PV systems on City owned properties to feed the energy generated from the solar PV systems directly into GWP's electric distribution grid. This initial phase of the project includes eight properties out of a potential of 65 sites in total that have been identified as viable locations for solar PV systems.

1) GLENDALE SPORTS COMPLEX PARKING LOT:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above.

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Glendale Sports Complex Parking Lot for total estimated system size of 916 kW. This location is proposed to have solar PV carport canopies installed in the parking lot.

3. Project Cost:

The estimated cost of the Glendale Sports Complex Parking Lot Carport Solar PV project is \$3 million, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

- i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

2) MONTROSE PARKING LOT 3:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above.

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Montrose Parking Lot 3 for total estimated system size of 807 kW. This location is proposed to have solar PV carport canopies installed in the parking lot.

3. Project Cost:

The estimated cost of the Montrose Parking Lot 3 Carport Solar PV project is \$2.7 million, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

3) UTILITY OPERATIONS CENTER PARKING LOT:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Utility Operations Center Parking Lot for total estimated system size of 305 kW. This location is proposed to have solar PV carport canopies installed in the parking lot.

3. Project Cost:

The estimated cost of the Utility Operations Center Parking Lot Carport Solar PV project is \$1 million, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:
None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

4) BRAND LANDFILL:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Brand Landfill for total estimated system size of 1,392 kW or 1.392 MW. This location is proposed to have ground mount solar PV installed at the ground level and secured by means of an anchoring design.

3. Project Cost:

The estimated cost of the Brand Landfill Ground Mount Solar PV project is \$4.6 million, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

5) FIRE STATION 21:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Fire Station 21 for total estimated system size of 237 kW. This location is proposed to have solar PV installed on the rooftop.

3. Project Cost:

The estimated cost of the Fire Station 21 Rooftop Solar PV project is \$800 thousand, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made

quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

6) GLENDALE CENTRAL LIBRARY:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Glendale Central Library for total estimated system size of 402 kW. This location is proposed to have solar PV installed on the rooftop.

3. Project Cost:

The estimated cost of the Glendale Central Library Rooftop Solar PV project is \$1.3 million, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24. The timing for the construction of the solar system will depend on the completion of roof redesign and reroofing project that is currently being managed by Public Works.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

7) GWP PERKINS BUILDING:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the GWP Perkins Building for total estimated system size of 155 kW. This location is proposed to have solar PV installed on the rooftop.

3. Project Cost:

The estimated cost of the GWP Perkins Building Rooftop Solar PV project is \$500 thousand, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:

i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

8) DUNSMORE PARK PARKING LOT:

Section I: As required by GMC Section 4.13.070, the following information about the project is provided:

1. Purpose and Function:

The City Owned Solar Development Project is a program aimed at providing cost-effective and sustainable energy as explained further in the Purpose and Function section above

2. Design and Features:

The initial phase of the project consists of the engineering design, procurement, and construction of a solar PV system at the Dunsmore Park Parking Lot for total estimated system size of 221 kW. This location is proposed to have solar PV carport canopies installed in the parking lot.

3. Project Cost:

The estimated cost of the Dunsmore Park Parking Lot Solar PV project is \$750 thousand, and the project estimated substantial completion is in March 2024.

4. Estimated Completion Date:

GWP's goal is to award an EPC contract by June 2023 and complete the initial phase of the project in FY 23-24.

5. Potential Design, Constructability, Maintenance, Repair, or Operability Issues:

The current global supply chain challenges could delay the availability of solar PV components and other electrical components, such as transformers.

6. Impact on The Public and City Services until the Project's Completion:

None.

Section II: As required by GMC Section 4.13.070, the alternative delivery method is being proposed for the following reason(s) and justification(s):

1. Overall schedule acceleration: The utilization of an alternative project delivery method for the Project will meet the Project's need for overall schedule acceleration [GMC Section 4.13.060(A)(7)], due to GWP's obligation to maintain, and improve, the level of service it provides to its customers, as well as the Project benefitting from early contractor involvement by avoiding delays and engineering and construction. [GMC Section 4.13.060(A)(4)]

2. Project efficiency: The EPC delivery method will improve the Project by:

A. Minimizing the Project delivery time, [GMC 4.13.060(B)(1)(a)], by enabling early contractor involvement to allow design and construction schedules to overlap and reduce the research and design phases with a similar outcome in the final

construction, as well as addressing items discovered once the excavation is made quickly as such items come up without the need for delays in engineering and construction which occur using the traditional design-bid-build method.

B. Minimizing the Project's overall cost [GMC Section 4.13.060(B)(2)], by minimizing through:


i. The Project designer and builder team having early coordination of the construction means, methods, and materials, thereby minimizing Project costs and maximizing its budget.

ii. Constant communication and coordination between the team members to have fewer design errors, constructions mistakes, and change orders, thereby enabling them to complete the Project on budget.

GWP has had excellent results in using the design-build project delivery method on other Water and Electric related projects, has exclusively been using this method over the last few years, and recommends the method be utilized for this project.

If you concur, please sign "Approved" as indicated below. Should you require any additional information or if you have any questions, please do not hesitate to contact me at extension 2107.

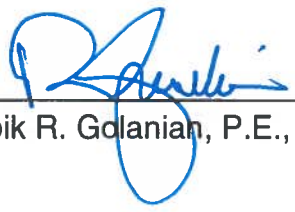
Thank you for your consideration.



Mark Young
General Manager – GWP

☒ Approval granted ☐ Approval denied

Approval granted with the following condition(s): _____



Roubik R. Golanian, P.E., City Manager



Date