

## MEMORANDUM

**TO:** Board of Trustees

**THROUGH:** Indra Winqest  
District General Manager

**FROM:** Brad Underwood, PE  
Director of Public Works

**SUBJECT:** Receive a project update on the Effluent Pipeline Project, and review, discuss and possibly authorize approval of a purchase order with Western Nevada Supply to purchase approximately 8,500 lineal feet of competitively bid pipeline materials and appurtenances for the Effluent Pipeline Project not to exceed \$1,402,000, Project: 2524SS1010 – Fund: Utilities; Division: Sewer.

### **STRATEGIC**

**PLAN REFERENCE:** Long Range Principle #5 – Assets and Infrastructure

**DATE:** December 14, 2022

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### **I. RECOMMENDATIONS**

1. Receive a project update that discusses the following topics: CMAR Process; 90% Opinion of Probable Construction Cost; Independent Cost Estimator Presentation; Granite Construction Presentation; Potential State Route 28 Road Closure; and Project Phasing. No action needed.
2. That the Board of Trustees make a motion to authorize approval of a purchase order with Western Nevada Supply to purchase 8,500 linear feet (LF) of pipeline materials and appurtenances for the Effluent Pipeline Project not to exceed \$1,402,000, Project: 2524SS1010 – Fund: Utilities; Division: Sewer.

### **II. STRATEGIC PLAN REFERENCE(S)**

Long Range Principle 5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvement to provide safe and superior long term utility services and recreation venues, facilities and services.

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- Maintain, renew, expand, and enhance District infrastructure to meet the capacity needs and desires of the community for future generations.

Maintain, procure, and construct District assets to ensure safe and accessible operations for the public and the District's workforce.

### **III. BACKGROUND**

#### **CMAR PROCESS**

On May 6, 2020, the IVGID Board of Trustees approved RFQ documents to hire a qualified professional consulting firm for project review of the District's Effluent Export Pipeline and Pond Lining Projects. The District did not receive an acceptable proposal through this process. It was then decided to pursue the option of using a Construction Manager At Risk (CMAR) for the projects.

On January 28, 2021, the IVGID Board of Trustees approved a contract with Granite Construction to provide pre-construction services as CMAR for the Effluent Pipeline and Pond Lining projects. CMAR selection was based upon scoring and evaluation by IVGID Staff and a member of the Board.

CMAR is an approach whereby the Owner procures a construction firm early in the design and planning process, but separately from the design firm. The intent is that the CMAR will construct the project upon completion of pre-construction services.

The CMAR process allows the opportunity to engage the expertise of the CMAR firm and leverage any existing third party relationships (such as NDOT) in the pre-construction phase. The design and planning phase allows the owner, construction and design teams to create a collaborative project environment before entering the construction phase that carries through the project duration. This allows the entire team to work through design revisions to alleviate potential construction conflicts with the intent to reduce project risks and costs. It is through this effort that the CMAR works closely with the design team to ensure the Guaranteed Maximum Price (GMP) is fully aligned with the design intent. To achieve this alignment, the CMAR is responsible for thoroughly reviewing all construction documents including drawings and specifications, and for ensuring all scopes of work and materials are included in the project estimating process.

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Throughout pre-construction services, the CMAR revises Opinions of Probable Construction Costs (OPCC) based on design and specification milestones (typically at 30%, 60% and 90% design). The next step for the CMAR is to establish the construction budget as a GMP. The GMP becomes part of the CMAR contract along with all other project documentation (plans, specifications, etc.).

Upon completion of the pre-construction services, the CMAR acts as the general contractor during the construction phase to select, schedule, and sequence subcontractors to complete the required construction work as included in the GMP.

The GMP can include general allowances for elevated costs that do not qualify as change orders. The Owners can require approval of allowance cost spending, ensuring thorough accounting. The method is known as construction manager “at risk” because the Owner and CMAR negotiate a guaranteed maximum price GMP during the design phase. The intent is for the construction manager to be responsible for any costs that exceed the GMP. However, the owner is not completely protected from risk in the construction project. For example, if any of the contract documents have inconsistencies or are missing anything important, the Owner may find themselves liable for those extra costs. For this reason it is typical for the Owner to carry some level of allowance within the contract, which is solely managed by the Owner.

While CMAR can be a complex process and the specifics of the delivery method will vary by jurisdiction, it will yield time and cost efficiencies by obtaining CMAR input during the design phase and beginning aspects of a construction project before the full design is complete. This is currently being realized by the collaborative efforts between IVGID, Granite and NDOT.

The method also prioritizes schedule and budget control, as the CMAR is working towards a GMP throughout the specific project milestones. With CMAR, the construction manager acts as an advocate for the Owner on both pre-construction and construction phases of a project to ensure the costs remain below the guaranteed maximum price.

The IVGID Board of Trustees, by entering into a contract for pre-construction services under the CMAR method of delivery, is committed to follow through with

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obtaining a GMP and negotiating with Granite Construction per the Nevada Revised Statutes (NRS) 338.1696. This Section in part, specifically states:

*1. If a public body enters into a contract with a construction manager at risk for preconstruction services pursuant to [NRS 338.1693](#), after the public body has finalized the design for the public work, or any portion thereof sufficient to determine the provable cost of that portion, the public body shall enter into negotiations with the construction manager at risk for a contract to construct the public work or the portion thereof for the public body for:*

- (a) The cost of the work, plus a fee, with a guaranteed maximum price;*
- (b) A fixed price; or*
- (c) A fixed price plus reimbursement for overhead and other costs and expenses related to the construction of the public work or portion thereof.*

Public Works staff is following through with this commitment and working with Granite to present a GMP to the Board for approval in March 2023.

### **90% OPINION OF PROBABLE CONSTRUCTION COST (OPCC)**

The development of the 90% OPCCs by Granite Construction and Rock Solid Solutions involves a cost reconciliation between each of their estimates. The review (which took place on December 5<sup>th</sup>) by IVGID Staff, Granite Construction, and Rock Solid Solutions will result in a revised Opinion of Probable Construction Cost as part of the CMAR process. The 90% OPCC is currently in the reconciliation phase of the process and will be provided to the Board once it is completed.

### **INDEPENDENT COST ESTIMATOR (ICE) PRESENTATION**

IVGID has recently contracted with Rock Solid Solutions to be the Independent Cost Estimator (ICE) for the Effluent Pipeline project. The ICE is an instrumental partner during the CMAR process to ensure the Owner is receiving both a fair and realistic construction budget and schedule. The following is an outline of what will be presented by Rock Solid Solutions in regard to the ICE's role and process:

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- Definition – A cost estimate, prepared by an organization independent of the project sponsor, using the same detailed technical and procurement information to make the project estimate. It is used to validate the CMAR’s opinion of probable construction cost determine whether it is accurate and reasonable.
- The independent cost estimate is a tool to assist in determining the reasonableness or unreasonableness of the bid or proposal being evaluated and range from a simple budgetary estimate to a complex estimate, based on inspection of the project, review of drawings or specifications, and prior procurement data.
- Several aspects for ICE development are identified below:
  - Historical Data.
  - Industry Standards.
  - Historical Database.
  - Documentation Methodology.
  - Labor Mix/Hours.
  - Subcontracting.
  - Travel.
  - Other Direct Costs (ODC).
- Five Parts of an Independent Cost Estimate.
  - Basis of Estimate – Contract Documents used to develop the estimate
  - General Assumptions – Labor Rates by craft, work hours, escalation
  - Bid Item Assumptions & Clarifications – items to be included in either the direct or indirect costs.
  - Exclusions – Items agreed to by the Owner and CMAR to be excluded from the Bid.
  - Risk Log – Identifying items that are known & unknown, which could have an affect on the project.
- CMAR and ICE
  - CMAR typically engaged at 30% Design
  - ICE is performed by both the ICE Consultant and the CMAR following 60% and 90% issued design
  - Begin to establish basis of understanding
  - Basis for GMP Finalization and NTP for CMAR to begin construction
- CMAR is an Alternative Project Delivery Method
  - In lieu of Low Bid Contracts

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- Select the contractor based on qualifications
- Utilizes the contractor for pre-construction services, leveraging relationships, and expertise
- Negotiate the construction fee including the cost of the construction
- Benefits of CMAR
  - CM is selected based on qualifications
  - Formal partnering with key stakeholders (i.e. NDOT)
  - Collaboration between all parties
  - Costs and fees are an open book
  - Minimize risk
  - All subcontracts selected before GMP is given
  - Minimized cost to Owners
  - Procurement process shortens schedule
  - Project cost estimates and design are conducted in parallel
  - Owner sees all bid costs
  - Owner influences/controls use of contingency

### **GRANITE CONSTRUCTION PRESENTATION**

The following is an outline of what will be presented by Granite Construction to support the Effluent Pipeline project:

- Introductions
- Same CMAR Team (Roll, O'Day, Donavin, Tina)
- Project Complexities
  - Based on our experience
  - Limited Season (May 1<sup>st</sup> to October 15<sup>th</sup>)
  - Access/Staging/Delivery (Hwy 28, narrow two-lane, scenic route, tourist destination)
  - Day/Night
  - Use Risk Register as Example
- Timeline of CMAR
  - Selected by the IVGID Board of Trustees
  - Overall Timeline (pressure evaluation, trenchless technologies, pond #1 and #2 temporary and permanent storage options, pipeline replacement)
  - Currently at 90% Pipeline Design with OPCC and cost reconciliation with ICE

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- A lot of value left to deliver...
  - ICE Involvement
  - Complete Design (material selection, testing parameters, corrosion protection system, existing conditions)
  - Collaboration with Key Stakeholders (e.g. NDOT, Incline Village residents)
  - Multiple GMP's:
    - Strategic Material Purchase Plan (early work package) – eliminating published upcoming material escalation
    - GMP 1 - 2023 Season (NDOT conflict work)
    - Remaining GMP's 2024 – 2026 Seasons (implement experiences from 2023 season construction)
- Cost/Price History
  - Explanation(s)
  - Approach to CMAR High Level – Complex Project!
    - Use our experience – follow a proven process (always arrived at GMP)
    - Identify Risk & Mitigate Risk
      - Design Risk Out(e.g. reduce shoring, pressure testing)
      - ICE is a collaborator
      - Early Work Packages (Price/Schedule certainties)
        - Material Purchase
        - Exploration (Hard Rock/Groundwater)
  - Project Savings Incurred thus far as a Team as addressed in Presentation/Proposal
    - Open Grade
    - Trench Depth, reduce shoring and material
    - Double shift crews work 24hrs 5days/week, maximize night shifts
    - Reduce shutdowns of pipeline
  - Price Certainty (ICE / open-book cost reconciliation)
- Next Steps
  - Sense of Urgency
  - Purchase 2023 Season Pipe
  - Advertise Sub Packages
  - Task Force Meetings w/Key Stakeholders (e.g. NDOT)
  - Finish Design

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- GMP

### **POTENTIAL STATE ROUTE 28 ROAD CLOSURE**

During the facilitated partnering workshops between IVGID and Granite, key stakeholders were invited to participate. Key stakeholders included NDOT, TRPA, USACE, NDEP, and Nevada Department of Water Resources – Dam Safety. Through open communication during and collaboration resulting from the workshops, conversations have developed regarding permit conditions, the potential for road closures, and proven successes regarding construction on SR 28. The CMAR Team is in process of developing a cost and time-saving innovation, which mutually benefits IVGID and NDOT through condensing the construction timeline, by closing SR28 during the shoulder seasons (prior to Memorial Day and after Labor Day). NDOT has an upcoming highway resurfacing project in the near future and has interest in IVGID potentially completing the pipeline project earlier.

In order to validate if this innovation is achievable, Public Works staff has requested the Nevada Department of Transportation (NDOT) to allow the contractor to close Highway 28 in the shoulder seasons to accommodate construction of the Effluent Pipeline Project. The request is to close the roadway beginning Sunday night through Friday noon each week. This approach would allow the roadway to be open during weekend when there are more visitors to the area, which generates additional vehicle traffic. This request is pending further NDOT review.

Closure of the roadway will provide greater worker and public safety, as there would be no conflicts during construction activities. It is also likely that IVGID would benefit through a reduction in the overall construction timeline and potential cost savings. Granite Construction is currently reviewing the potential benefits to road closure for the project.

Should IVGID decide to move forward with the road closure, a great deal of public outreach would be required. Public Works staff recommends contracting with a professional public outreach firm to lead this effort. The goal of the outreach would be to inform businesses, residents and general public of the road closure, outline impacts and benefits and learn about concerns. The effort should not be about getting approval from these interest groups. Therefore, the IVGID Trustees should give careful consideration to this decision through evaluating the

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pros and cons prior to directing staff to proceed with the road closure approach for construction during the shoulder seasons. Should NDOT approve this request, Public Works staff will bring this item to the IVGID Board at the January 11, 2023 meeting for consideration. Staff requests the Trustees inform us what information they would like to receive for consideration of this item.

### **PROJECT PHASING**

On June 10, 2020, Public Works staff presented to the Board an opportunity to explore a partnership with the Nevada Department of Transportation (NDOT) to allow for the possible replacement of up to 1,000 linear feet of Export Pipeline on State Route 28 in 2021. NDOT was preparing for a project on State Route 28 that would install drainage facilities and the existing Effluent Pipeline is in conflict with these improvements and requires relocation. After discussion, the Board declined pursuing this partnership with NDOT.

NDOT sent a letter July 9, 2020 to IVGID Public Works to inform of the requirement to remove the facilities that were in conflict by November 2, 2020. IVGID did not perform relocation work and the Contractor for NDOT had mobilized to construct the drainage facilities in early summer of 2022. It was at this time that current Public Works staff became aware of the conflict with the Effluent Pipeline and met with NDOT staff with concerns that the work may affect pipeline integrity. Staff met with NDOT to understand the design parameters and see if opportunity existed to revise the NDOT design. NDOT could not revise their design to accommodate leaving the IVGID Effluent Line in place, so relocation is necessary.

In collaborating with NDOT it was determined that IVGID would need to relocate the Effluent Pipeline by July 2023 in order to not further delay the NDOT work. Since their contractor started work on this aspect of the NDOT work in summer of 2022, IVGID could be subject to delay claims from the NDOT contractor. If the work is not complete in time for NDOT's contractor to perform the work prior to the end of their contract term, IVGID could be subject to significant delay costs.

With the NDOT work dictating a portion of the work that must be done in the 2023 construction season, staff took the opportunity to re-evaluate phasing of the project since this work is in Segment 2. In doing so staff considered the following:

1. Pipeline Segment 3 has been the priority, as most leaks have occurred in this section, the PICA data shows the largest percentage of deficiencies, and previous plans were to make pipeline repairs within this segment.
2. While the data provided by the PICA study was able to analyze the pipeline, analysis of the pipeline joints was not be provided due to technology limitations. The majority of the pipeline leaks that have occurred have been at the pipeline joints. The PICA data shows a high probability that a leak could occur between joints but this has not been the case thus far.
3. Segment 3 is within the lower pressure zone where most leaks have occurred. The Public Works Pipeline Maintenance team has become proficient in making repairs within this section. They are able to make a repair quickly and more importantly within the timeframe allowed based on the Wastewater Treatment Plant current storage capabilities. We keep repair parts within the warehouse and these parts are readily available should more be needed.
4. Within the past 18 months, one leak has occurred within Segment 2 (high-pressure zone). While not predicted to occur through the PICA data within this time frame, it did occur. The Public Works team completed the repairs to this pin hole leak with the assistance of a contracted welder. It was fortunate that the leak was minor, the conditions of the surrounding pipe was in good condition and a certified welder was immediately available.
5. The Public Works Engineering team met with the Operations staff to evaluate all potential risks to the District from both Effluent Pipeline Segments 2 and 3. The team identified that the most significant risk identified was a leak on the Effluent Pipeline within the high-pressure zone (Segment 2) for the following reasons:
  - a. Segment 2 is within a close proximity to Lake Tahoe, very little overland buffer to help prevent effluent from reaching the lake should a leak occur
  - b. High pressure failure could be a pin hole leak or a more significant leak(2021 leak was pin hole leak)
  - c. Operations crew does not have the ability to weld the pipe to make a repair, requiring contracted assistance which may or may not be readily available.

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- d. Should effluent reach the lake, monetary fines and follow up regulatory requirements are likely to be imposed by NDEP and TRPA
- e. For a more significant leak is anticipated to exceed the amount of time/storage at the plant. This is due to the processes of shutting down and draining the pipeline, finding a qualified contractor to mobilize and then make the repair. Exceeding the time for available storage in the Wastewater Treatment Plant would result in an unregulated effluent release into Pond #1 or Pond #2. This would likely result in additional monetary fines and follow up regulatory requirements from NDEP and TRPA
- f. The entire Segment 2 and Segment 3 will be replaced over the 3 -4 construction seasons. With this being the case it was determined that eliminating the highest risk to the District is the best course of action. Delaying work on Segment 3 an additional year or two is seen to be less risk.
- g. The Public Works Pipeline Maintenance team has become proficient in making repairs within Segment 3.

Public Works Staff will bring this item to the IVGID Board at the January 11, 2023 meeting for consideration.

### **PIPELINE PURCHASE**

There is an urgent need to begin the construction of the effluent pipeline early in the 2023 construction season, as there is approximately 2,275LF of existing effluent pipeline in conflict with a current NDOT project near Marlette Creek. This portion of the IVGID effluent pipeline construction is targeted for completion by early July 2023 to prevent further delays to the existing NDOT contract. The current lead times for ductile iron pipe (DIP) vary, but generally a minimum of 24 weeks is expected; therefore, Staff advised that the pipeline materials must be ordered in advance of final bid document issue and the first GMP submittal for the Project.

On October 12, 2022, the Director of Public Works requested Board of Trustee authorization to instruct Granite Construction to proceed with a competitive bid process for approximately 8,500LF of effluent pipeline materials and appurtenances to support the first year of the Effluent Pipeline Project (Project).

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The Board approved the request, and Staff and Granite Construction have since pursued material bids.

On November 18, 2022, Granite Construction on behalf of the District, released a Request for Quotation for 8,500LF of pipeline and appurtenances; the package was issued to multiple local suppliers with instruction to return the quote by December 2, 2022. The Request for Quotation required the suppliers include the documentation necessary to meet the requirements of federal funding such as Build America, Buy America. IVGID must comply with Federal funding requirements to receive the State Revolving Fund loans and USACE grants currently being pursued by IVGID staff.

The bids were reviewed for selection recommendation based on multiple criteria; a copy of the Request for Quotation is enclosed and outlines the qualitative factors considered for final selection. The most critical factors assessed include the following:

- 1) Compliance with American Iron and Steel (AIS) and Build America, Buy America Act (BABA) Requirements
- 2) Ability to supply materials by critical Project milestone dates
- 3) Price certainty/guarantee
- 4) Total cost

The teams recommendation is based principally on items 1 and 2 above; these two criteria are paramount to Project success with regard to critical funding avenues and ability to meet NDOT imposed deadlines for the work near Marlette Creek.

Request for Quotations were distributed to Western Nevada Supply, Sierra Mountain Pipeline, and Ferguson Water Works; response information received included four potential pipe manufacturers.

The bids were reviewed by Granite and Public Works staff to confirm specification compliance and to reach a collective recommendation for presentation to the Board.

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#### IV. **BID RESULTS**

The Request for Quotation responses include the materials to complete the initial 8,500LF of the Project and the appurtenances required for air release valves (ARVs), blow off valves (BOVs), locating wire and corrosion protection. A summary of the cost-portion bid results received are enclosed with this memo.

A summary of the Project critical selection criteria is shown in the table below:

	AIS/BABAA Compliance (Y/N)	On-time Material delivery (Y/N)	Meet Technical Specification requirements (Y/N)
Western NV Supply	Y	Y	Y
Ferguson Water Works	Y	N	Y
Sierra Mountain Pipe	N	n/a	n/a

Total quote values are shown in the table below:

Supplier	Pipe Manufacturer			
	US Pipe	American Pipe	McWane Ductile	ElectroSteel
Western Nevada Supply	\$1,401,319	--	\$1,466,645	--
Ferguson Water Works	--	\$1,502,771	--	--
Sierra Mountain Pipe*	--	--	--	N/A (Non-conforming product)

\* - Did not submit price quote as the pipe is manufactured overseas and does not meet AIS/BABAA requirements

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Staff is recommending that the pipe procurement order be placed with Western Nevada Supply for US Pipe manufactured DIP and fittings.

## **V. FINANCIAL IMPACT AND BUDGET**

The purchase order for pipeline materials required will not exceed \$1,402,000. This cost estimate is inclusive of the materials, manufacturer engineering, and delivery. This estimate also includes an allowance for manufactured sections of pipe known as “multi-bead spools” that allow for field adjustments that may arise due to changed or unknown field conditions. The total number allowed in the quote is suitable for the scope of the initial Project 8,500LF and represents a cost of nearly \$200,00. However, as explained below, this number may be reduced if the manufacturer produced engineering drawings for customer (CMAR and Staff) review prior to start of manufacture.

The estimate for the material purchase includes a \$5,200 fee for the manufacturer to produce drawings that determine the specific quantity of individual pipe segments required; the manufacturer-designed drawings are called “lay sheets” and are necessary to account for variations in manufactured pipe length (typical in DIP production) that will affect the total number of pipe segments required to fill the order. This includes standard pipe lengths and custom length pipe sections - typically shorter than standard length - for installation in areas where the new effluent pipeline must cross beneath existing stormdrain pipes in the highway; the custom lengths included in the lay sheets will allow a reduction in the multi-bead spools described above. As a result of this effort the final purchase material quantities may vary from the quantities included in the quote. However, the purchase will not exceed the approved purchase order amount of \$1,402,000.

The team identified a cost saving opportunity if IVGID purchases the pipeline materials and appurtenances directly rather than Granite. There is a cost savings of sales taxes and the CMAR fee that for this purchase is approximately \$328,000. We have been advised by the pipeline manufacturers that there will be a 7% price increase on pipe material on January 1, 2023. Delaying the purchase will impact material delivery which would delay project start and increase the cost of material purchase.

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There are currently enough funds in the Effluent Pipeline project budget to cover the cost of this procurement.

## **VI. ALTERNATIVES**

The available alternative is the other conforming pipe manufacturer (Western Nevada Supply: McWane Ductile) included in the RFQ and as indicated in the attached summary sheet. However, the other conforming supplier is more expensive than the recommended US Pipe supplier.

The other manufacturers do not meet project requirements and, therefore, are not feasible alternatives because they do not comply with AIS/BABAA, they cannot meet the specified delivery timeframes, or they do not meet project technical requirements.

## **VII. BUSINESS IMPACT**

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.

## **VIII. ATTACHMENTS**

RFQ | Ductile Iron Pipe  
Early Pipe Material Procurement RFQ Summary  
ICE Draft Powerpoint Presentation

November 18, 2022

VENDOR

**RE: IVGID Effluent Export Pipeline CMAR  
2023 Early Procurement  
Request for Quotation (RFQ) | Ductile Iron Pipe**

Granite Construction is the Construction Manager at Risk (CMAR) on the above referenced project for the Incline Village General Improvement District. Granite has prepared this RFQ for the procurement of materials to construct 8,500 LF of the Effluent Export Pipeline in the 2023 construction season.

Accompanying this request are the following documents:

- Project Specifications *IVGID Eff – Segment 2 100PCT Specifications*
- Plans *IVGID Eff Procurement Set (11.16.22)*
- Bill of Materials *IVGID CMAR - Early DIP Procurement 8500' (11.17.22)*

Please direct any inquiries or RFIs to:

Ryan Floyd, Project Engineer  
[Ryan.Floyd@gcinc.com](mailto:Ryan.Floyd@gcinc.com)  
[\(775\) 813-1008](tel:(775)813-1008)

The below qualitative inquiries will be evaluated by the project team in selection of the best for project solution in determining which vendor(s) are best to meet the construction schedule and budget of the project.

1) Pipe Material, Pressure Class and Quantities:

Pipe Size	Pressure Class	Interior Lining	Exterior Coating	Quantity (LF)	Anticipated Delivery Schedule
16"	Minimum PC 350	Cement Mortar	Asphaltic Coating	2,275	April 1, 2023
16"	Minimum PC 350	Cement Mortar	Asphaltic Coating	1,075	June 1, 2023
16"	Minimum PC 350	Cement Mortar	Asphaltic Coating	5,150	July 1, 2023

a) Can you provide materials in the quantities requested and deliver according to the above schedule?

- YES  NO

b) If not, please provide explanation and/or best possible delivery date.

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c) If not, can you provide a higher pressure class pipe within the timeframes specified?

- YES  NO

d) If there is a price difference, please advise:

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2) Please provide available options for exterior coatings with pricing for each:

- a) Type: Zinc Coating Price Addition (Reduction) per LF:
- b) Type: Polyethylene Encasement Price Addition (Reduction) per LF:
- c) Type:                                      Price Addition (Reduction) per LF:

3) Please provide submittal and/or data sheets that demonstrates compliance with the following project specifications:

- a) Section 40 05 00 Pipe and Pipe Fittings – Basic Requirements
- b) Section 40 05 19 Ductile Iron Process Pipe

4) Per Section 40 05 00, Part 3.8 – B Piping System 3, pressure testing requirements specify 1.25 x working pressure to be held for 6 hours.

- a) Maximum working pressure = 365 psi.
- b) Test Pressure = 365 x 1.25 = 456 psi
  - i) Provide documentation that your pipe can handle this pressure test.
  - ii) Provide documentation that the associated fittings (11.25 degree elbows, 22.5 degree elbows, 45 degree elbows, etc) can also handle this pressure test.

5) Is your company a Nevada certified DBE or MBE supplier?

- YES  NO

a) If not, does your company offer DBE or MBE credit through other means?

- YES  NO

b) If yes, please provide explanation:

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c) Is there a cost difference to use DBE or MBE components?

- YES  NO  N/A

d) If yes, please specify the difference in pricing on your proposal

6) What type of pricing guarantee (from time of quote) can you offer?

- 30 Days  60 Days  90 Days  Other

7) Do you have the capacity to store the materials at your facility?

- YES  NO

a) If yes, for how long after production:            Months            Days

b) Is there an additional costs for this service or inclusive?

- Additional  Included

c) If additional, please state amount: \$                                     

8) Does Pricing include freight?

- YES  NO
-

9) If providing freight, please figure shipping to:

Diamond Peak Ski Resort  
1210 Ski Way  
Incline Village, NV 89451

10) What is the warranty period of the:

- a) Pipe? \_\_\_\_\_ Years \_\_\_\_\_ Months
- b) Fittings? \_\_\_\_\_ Years \_\_\_\_\_ Months

11) Does the warranty period take effect upon delivery or when installed (in the event the material is not installed during the same year)?

- Delivery     Installation     Other \_\_\_\_\_

12) Are you willing to offer an extended warranty period?

- YES                       NO

How long? \_\_\_\_\_

Additional Cost (if any): \_\_\_\_\_

13) Any special requirements for handling and storage of the Ductile Iron Pipe?

If so, please provide instructions: \_\_\_\_\_  
\_\_\_\_\_

14) What are your payment terms? \_\_\_\_\_

15) Do your products comply with the American Iron and Steel (AIS) requirements?

- a) Pipe                       YES                       NO
- b) Fittings                 YES                       NO
- c) If yes, please provide a sample Certification Letter with your quote.

16) Do your products comply with the Buy America requirements?

- a) Pipe                       YES                       NO
- b) Fittings                 YES                       NO

**IVGID Effluent Export Pipeline - Early Pipe Material Procurement RFQ Summary**

Date: 12/7/2022

Manufacturer		US Pipe		McWane Ductile		American Pipe	
Distributor		WNS		WNS		Ferguson	
Product		16" x 18' HDSS		16" x 18' TR Flex		16" x 20' Flex-Ring	
<b>16" Ductile Iron Pipe</b>							
8,500	LF 16" PC350	\$ 113.22	\$ 962,370.00	\$ 121.20	\$ 1,030,200.00	\$ 127.43	\$ 1,083,112.50
8,500	LF Zinc Coating	\$ 12.39	\$ 105,315.00	\$ 13.26	\$ 112,710.00	\$ 12.00	\$ 102,000.00
Pipe Totals		\$ 1,067,685.00		\$ 1,142,910.00		\$ 1,185,112.50	
<b>16" Fittings &amp; Couplers</b>							
3	EA 16" DI x Steel Coupling	\$ 2,444.42	\$ 7,333.26	\$ 2,444.42	\$ 7,333.26	\$ 2,444.42	\$ 7,333.26
26	EA 16" TR Flex 45 Elbow	\$ 1,407.25	\$ 36,588.50	\$ 1,562.16	\$ 40,616.16	\$ 1,562.16	\$ 40,616.16
5	EA 16" TR Flex 22.5 Elbow	\$ 1,421.92	\$ 7,109.60	\$ 1,580.12	\$ 7,900.60	\$ 1,580.12	\$ 7,900.60
5	EA 16" TR Flex 11.25 Elbow	\$ 1,436.59	\$ 7,182.95	\$ 1,598.06	\$ 7,990.30	\$ 1,598.06	\$ 7,990.30
5	EA 16" x 6" TR Flex x Flange Tee	\$ 1,856.05	\$ 9,280.25	\$ 2,029.98	\$ 10,149.90	\$ 2,029.98	\$ 10,149.90
Fittings and Couplers Totals		\$ 67,494.56		\$ 73,990.22		\$ 73,990.22	
<b>Multi-Beads</b>							
41	EA 16" x 17' DI Multi-Bead Spool	\$ 4,615.31	\$ 189,227.71	\$ 4,615.31	\$ 189,227.71	\$ 4,615.31	\$ 189,227.71
-	EA 16" x 12' DI Multi-Bead Spool	\$ 4,177.96	\$ -	\$ 4,177.96	\$ -	\$ 4,177.96	\$ -
-	EA 16" x 6' DI Multi-Bead Spool	\$ 3,431.41	\$ -	\$ 3,431.41	\$ -	\$ 3,431.41	\$ -
41	EA Zinc Coating	\$ 12.39	\$ 8,635.83	\$ 13.26	\$ 9,242.22	\$ 12.00	\$ 8,364.00
Fittings and Couplers Totals		\$ 197,863.54		\$ 198,469.93		\$ 197,591.71	
<b>3" and 4" Fittings &amp; Couplers for ARV's / BOV's</b>							
1	LS 4" Fittings & Couplers	\$ 15,365.62	\$ 15,365.62	\$ 15,365.62	\$ 15,365.62	\$ 15,365.62	\$ 15,365.62
1	LS 3" Fittings & Couplers	\$ 17,554.68	\$ 17,554.68	\$ 17,554.68	\$ 17,554.68	\$ 17,554.68	\$ 17,554.68
Pipe Totals		\$ 32,920.30		\$ 32,920.30		\$ 32,920.30	
<b>Polywrap</b>							
8,500	LF Poly Encasement	\$ 2.95	\$ 25,075.00	\$ 0.95	\$ 8,075.00	\$ 0.95	\$ 8,075.00
150	EA 2" x 100' Pipe Tape	\$ 13.90	\$ 2,085.00	\$ 13.90	\$ 2,085.00	\$ 13.90	\$ 2,085.00
Pipe Totals		\$ 27,160.00		\$ 10,160.00		\$ 10,160.00	
<b>Misc</b>							
9	EA 3" Purple Reclaimed Dect Tape	\$ 50.00	\$ 450.00	\$ 50.00	\$ 450.00	\$ 50.00	\$ 450.00
9,000	LF 12/1 Purple Tracer Wire	\$ 0.25	\$ 2,250.00	\$ 0.25	\$ 2,250.00	\$ 0.25	\$ 2,250.00
50	EA Gel-Filled Twist Connects	\$ 5.92	\$ 296.00	\$ 5.92	\$ 296.00	\$ 5.92	\$ 296.00
Fittings and Couplers Totals		\$ 2,996.00		\$ 2,996.00		\$ 2,996.00	
Quote Totals		\$ 1,396,119.40		\$ 1,461,446.45		\$ 1,502,770.73	
Sales Tax (Washoe)		0.000% \$ -		\$ -		\$ -	
		\$ 1,396,119.40		\$ 1,461,446.45		\$ 1,502,770.73	
Engineering/Drafting Charge		\$ 5,200.00					
<b>Total = \$ 1,401,319.40</b>				Total = \$ 1,466,646.45		No pricing provided at Submission Due date. Assumed similar/same pricing as WNS quote.	
		\$ 1,597,504.12				Non-responsive quote	
		\$ 1,401,319.40					



**December 2, 2022**

**NOTICE TO BYPASS PROJECTS ON THE PRIORITY LIST  
CLEAN WATER STATE REVOLVING FUND**

The Clean Water State Revolving Fund (CWSRF) provides low interest loans to water systems needing to make capital improvements. The CWSRF Priority List is a ranked list of projects that have submitted “pre-applications” expressing an interest in obtaining a loan. The list is ranked to achieve water quality and public health goals consistent with the requirements of the Clean Water Act.

The Nevada Division of Environmental Protection (NDEP), CWSRF program, is planning to approve the following CWSRF loans:

**Projects are listed in ranking order based upon the Nevada CWSRF Priority List—effective July 2022**

- |    |   |
|----|---|
| 2  | Esmeralda County-Goldfield              |
| 3  | Minden-Gardnerville Sanitation District |
| 5  | McGill-Ruth GID                         |
| 8  | Incline Village GID                     |
| 13 | Hawthorne Utilities                     |
| 18 | Nye County -Gabbs                       |

The Division has determined that projects ranked above these projects are not ready to proceed and can be bypassed (NAC 445A.7675). A project can also be bypassed, if a letter of intent has not been filed (NAC 445A.7655). The CWSRF regulations require that the Division provide a notice to applicants that are bypassed

After receiving this notice, the applicants on the Priority List have 30 days to file an objection. Comments for consideration on this proposed decision must be submitted by January 2, 2023, to:

Elizabeth Kingsland  
Office of Financial Assistance  
901 South Stewart St., Suite 4001  
Carson City, NV 89701-5249

Questions regarding this notice may be directed to Elizabeth Kingsland at (775) 687-9357. Comments may also be submitted by FAX to (775) 687-5856 or by e-mail to [ekingsland@ndep.nv.gov](mailto:ekingsland@ndep.nv.gov).



# Construction Manager at Risk (CMAR)

Raquel Floyd, PSP, FPMCoS, Sr. Project Manager  
Jim Morris, CCM, Risk Manager

# Overview

- What is CMAR?
- What is the process?
- Who is using CMAR?
- What is NRS 338.169?
- What are the benefits of CMAR?

# What is CMAR?

- Alternate Project Delivery Method
- - In lieu of Low Bid Contracts
  - Select the contractor based on qualifications
  - Utilizes the contractor for pre-construction services
  - Negotiate the construction fee including the cost of the construction

# Qualifications Based Selection

- RFPs issued for CMAR
  - Defines project and scope of services
- Contractor's respond with qualifications
  - Experience
  - Personnel
  - Q/A procedures
  - Safety program
- Contractors are shortlisted
  - Interviews
  - Submit fee for pre-construction services

# Interview

- New team rankings based solely on interview
- Interview team must be primarily personnel with a construction background
- Evaluate and ranking based on interview criteria and fee
- Pre-construction fee is provided

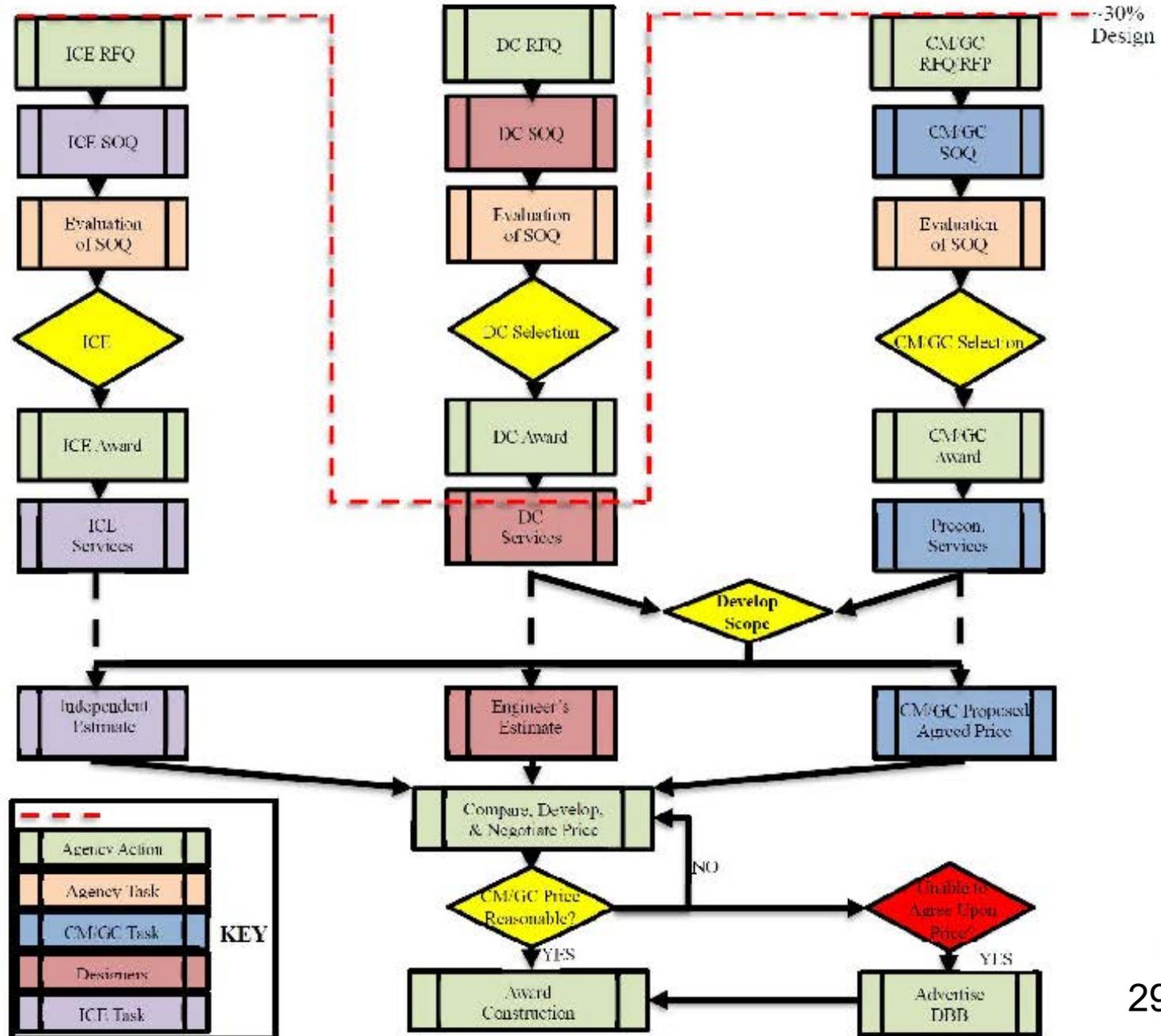
# Pre-Construction Services

- Assist in selecting A/E services
- Estimating
  - Conceptual, 30%, 60%, and 90%
- Scheduling
  - Master schedule and monthly updates
- Value Engineering Workshop
- Biddability/Constructability reviews

Independent Cost Estimator (ICE)

Design Consultant (DC)

Contractor (CM/GC)



# Construction Fees

- Guaranteed maximum price (GMP)
- Fixed Price – hard dollar plus reimbursables for overhead and other costs
- The cost of the work, plus a fee, with a guaranteed maximum price.

# Construction Costs

The costs of construction are the highest seen in 50 years with contractors and home builders feeling the effects.

Recent data from the U.S. Census Bureau shows construction costs went up by 17.5% year-over-year from 2020 to 2021, the largest spike in this data from year to year since 1970. (NBC)

2021's costs were also more than 23% higher than pre-pandemic 2019.

## Many materials prices shot up, steel and diesel in particular

Percent price change for goods important to construction

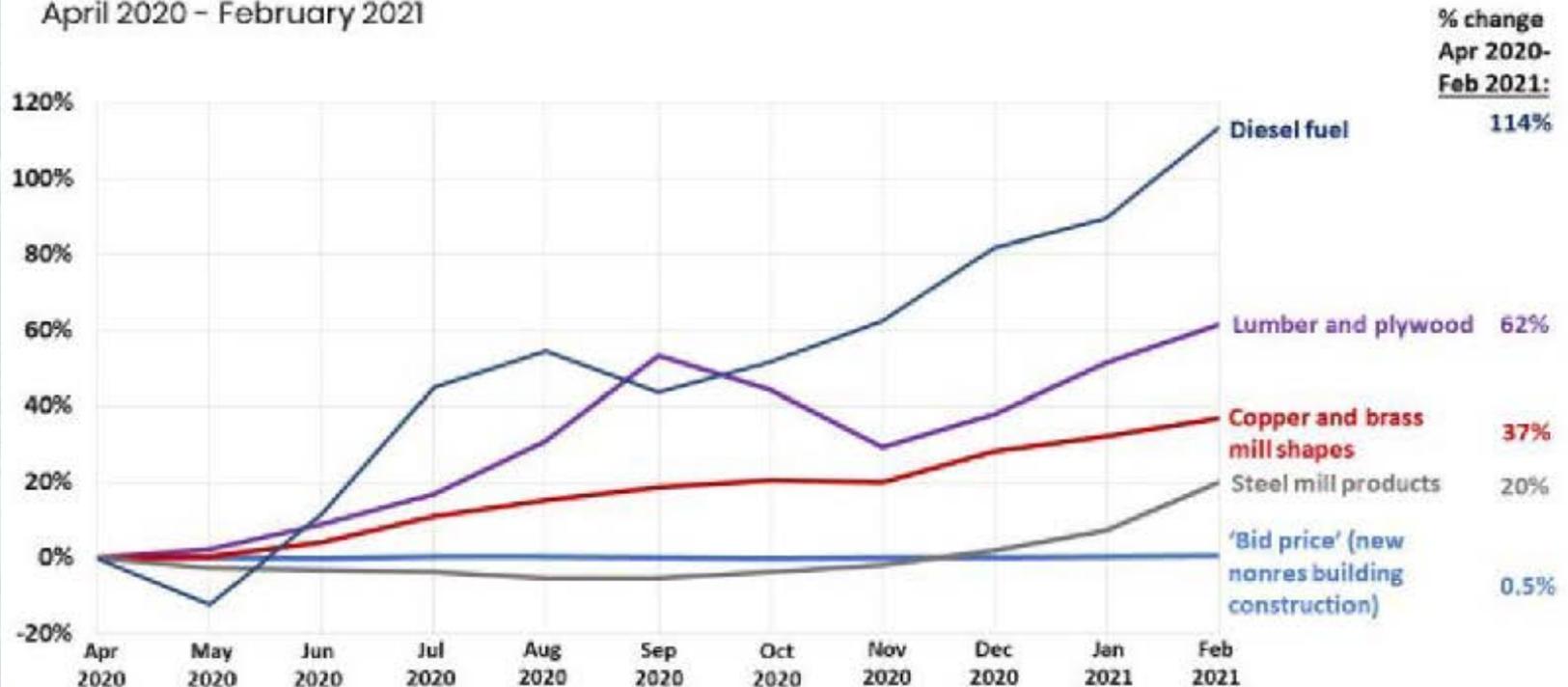
Steel mill products	134.2%
Diesel fuel	88.7%
Asphalt	52.2%
Copper and brass mill shapes	39.5%
Aluminum mill shapes	35.1%
Plastic construction products	29.5%
Gypsum products	23.0%
Insulation materials	19.0%
Flat glass	7.2%
Concrete products	5.6%
Brick and structural clay tile	4.4%

# Construction Costs

**FIGURE 2**

## Price changes for construction and selected materials

April 2020 - February 2021



Source: Bureau of Labor Statistics, producer price indexes (PPIs) for new nonresidential building construction (bid prices), diesel fuel, wood, and metal products, not seasonally adjusted

# NV Public Agencies Utilizing CMAR

- Washoe RTC
- Airport Authority
- NDOT
- State Public Works Board
- TMWA
- Washoe County
- Clark County

# What NRS 338.169?

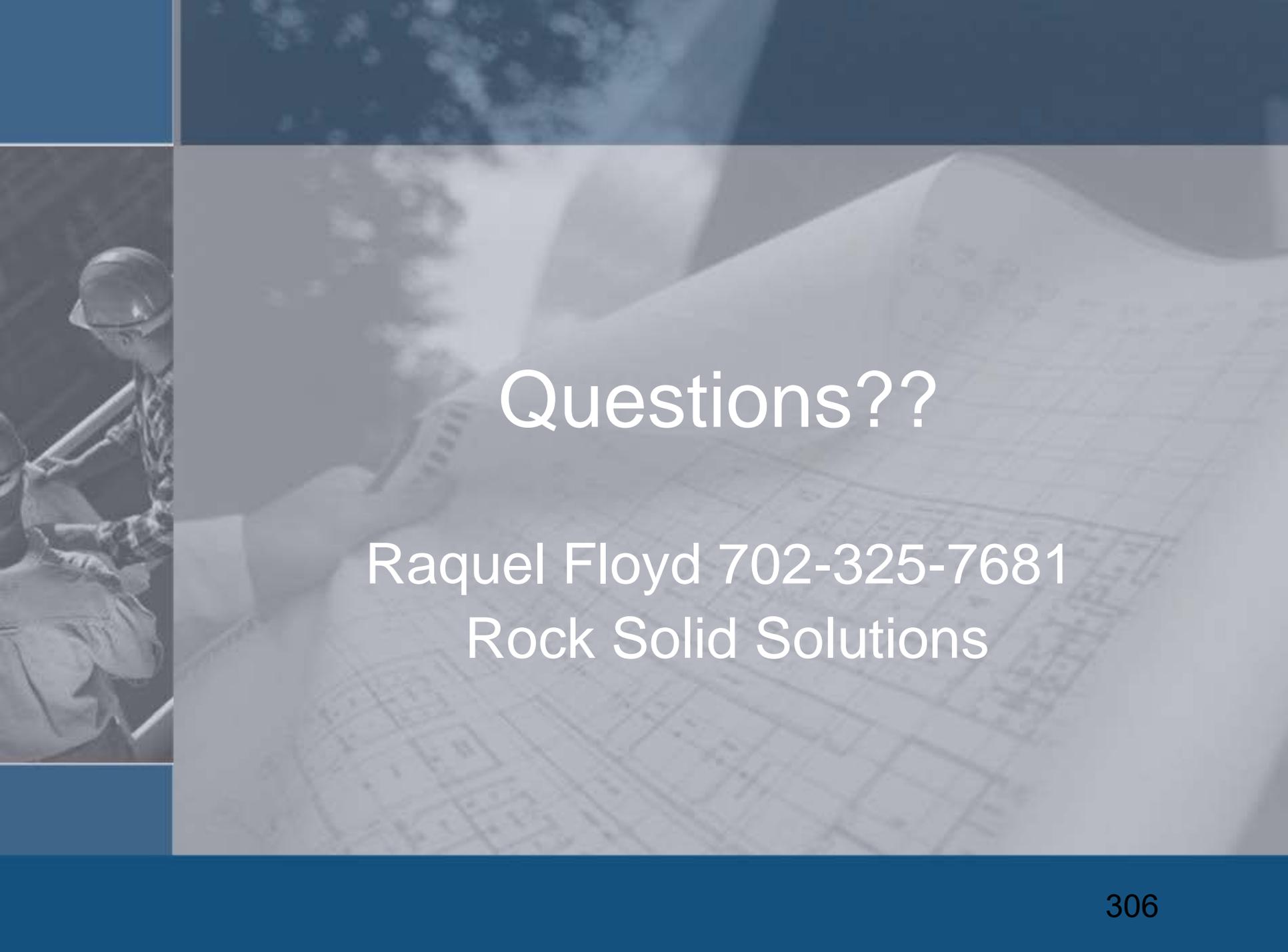
- Allow public bodies to enter into contracts for CM@Risk
- Services include pre-construction and construction services (ICE)
- Pre-construction is a negotiated fee
- Construction fee can be GMP, fixed fee, or fixed fee + reimburseables

# What are the benefits of CMAR?

- CM is selected based on qualifications
- Collaboration between all parties
- Costs and fees are an open book
- Minimize risk
  - All subcontracts selected before GMP is given
  - Minimized cost to Owners

# What are the benefits of CMAR?

- Procurement process shortens schedule
- Project cost estimates and design are conducted in parallel
- Owner sees all bid costs through both ICE and GMP process
- Owner influences/controls use of contingency



Questions??

Raquel Floyd 702-325-7681  
Rock Solid Solutions