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*PUBLIC WORKS DEPARTMENT*

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REQUEST FOR PROPOSALS  
#PWD 24-303

**CALLIPPE PRESERVE GOLF COURSE BUNKER  
RENOVATIONS**

**Bid Due Date:**

**Thursday July 18, 2024**

by  
2 p.m.

City Clerk's Office  
123 Main Street

[pleasantoncityclerk@cityofpleassantonca.gov](mailto:pleasantoncityclerk@cityofpleassantonca.gov)

**PROPOSAL MAY BE DISQUALIFIED IF BID PACKAGE DOES NOT INCLUDE ALL REQUESTED DOCUMENTS AND DOES NOT ADHERE TO ALL OF GUIDELINES IN THIS DOCUMENT**

**APPROVED**

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*Tamara Baptista*

Tamara Baptista for Siew-Chin Yeong  
Director Public Works

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## I. INTRODUCTION

The City is seeking proposals from qualified contractors for the renovation of eleven (11) greenside golf bunkers at the Callippe Preserve Golf Course located at 8500 Clubhouse Drive in Pleasanton. Callippe Preserve opened in November 2005 and was designed by Brian Costello, of JMP Golf Design Group. There are five sets of tees on this par 72, with the black tees playing at 6,748. The blue tees measure at 6,409, then the white tees at 6,024 yards, the gold tees at 5,560, and the red at 4,788 yards. Callippe Preserve is managed by CourseCo, Inc.

## II. SUBMITTAL PROCESS

Proposals will be received by the City of Pleasanton City Clerk's office:

- In-person, Civic Center, at 123 Main Street, Pleasanton, CA 94566
- By mail to City of Pleasanton, P.O. Box 520, Pleasanton, CA 94566
- By Express Courier only, send to City Clerk's Office 123 Main Street
- By email to: [pleasantoncityclerk@cityofpleasantonca.gov](mailto:pleasantoncityclerk@cityofpleasantonca.gov)

**Deadline: 2:00 pm on Thursday July 18, 2024**

Please reference the Title and Project Number for all Submittals

**“Callippe Preserve Golf Course Bunker Revovations”  
Project No. PWD 24.303**

Qualifications and Bid proposals shall include completed Bid Response Package with the following: Contractor Information, Work Experience, Implementation Plan, Bid Form, Personnel, and any Additional Information deemed relevant by the Contractor.

This RFP has been posted on the City's website and at the following locations: <https://www.cityofpleasantonca.gov/business/bids/>  
<https://www.bidnetdirect.com/california/cityofpleasantonca>

It shall be the Contractor's responsibility to check the City's website to obtain any addenda that may be issued.

It is the bidder's responsibility to ensure that it is received by the City Clerk prior to the bid due date and time. It is strongly encouraged to allow for several additional days for mail processing. Late submissions may not be accepted and will be returned unopened.

## III. PROCUREMENT SCHEDULE

EVENT	DATE/LOCATION
RFP Advertised	Wednesday, June 19, 2024
Site Meeting – Mandatory	<b>Wednesday, July 10, 2024, 9:00am</b> – Callippe Preserve Golf Course 8500 Clubhouse Drive, Pleasanton CA 94566 (meet at the clubhouse)
Written Questions Due	<b>Thursday, July 11, 2024</b> by 5:00pm

<b>Proposal Submittal Due Date</b>	<b>Thursday, July 18, 2024, at 2:00pm</b>	<b>at: Pleasanton City Clerk</b> <a href="mailto:pleasantoncityclerk@cityofpleasantonca.gov">pleasantoncityclerk@cityofpleasantonca.gov</a> <b>PO Box 520</b> <b>123 Main Street</b> <b>Pleasanton, CA 94566</b>
<b>Evaluation Period</b>	<b>The week of July 22, 2024</b>	
<b>Council Consent Date</b>	<b>Tuesday, September 3, 2024</b>	
<b>Contract Start Date</b>	<b>October 1, 2024</b>	

**Special Note:** After Proposal submittal deadline, all other dates are approximate and will be adjusted accordingly.

#### **IV. MANDATORY BIDDER’S CONFERENCE**

A mandatory pre-bid meeting will be held at **9:00am, Wednesday, July 10, 2024**, at 8500 Clubhouse Drive, Pleasanton. This will provide an opportunity for potential contractors to observe the project location, ask specific questions about the services and request clarification on any concerns. It is mandatory for at least one representative from each prospective bidder to attend the pre-bid meeting. Failure to attend will result in disqualification from participating in the bidding process.

#### **V. SCOPE OF WORK (see Exhibit A further details)**

The work consists of furnishing all equipment and materials and performing all work in connection with the removal of existing sand, replacement of the existing sub-surface drainage pipe, reconstitution of bunker cavity to ensure no slopes are greater than the angle of repose of said bunker sand, installation of new drainage pipe and fittings, installation of approved pea gravel, installation of Better Billy Bunker lining material or approved equal, installation of approved bunker sand to a compacted depth and finished grading, installation of subsurface irrigation around the perimeter of the bunker, and sodding of all disturbed areas outside of bunker cavity.

The greenside bunkers proposed for renovation are listed below. All area measurements are approximate and are for informational purposes only. Actual dimensions are to be confirmed by the Contractor.

<b>HOLE NUMBER</b>	<b>APPROX. SQ. FT. AREA</b>
10	602
10	611
12	1,414
12	891
12	636
13	1,520
13	1,523
15	2,227

16	1,390
18	1,058
18	951
<b>TOTAL</b>	<b>12,823</b>

## VI. SELECTION PROCESS

It is the City's intention to select the most qualified contractor in terms of work experience, the implementation plan and project approach, as well as offering the most competitive project cost. All proposals will be evaluated by the City Selection Committee (CSC). The CSC will be composed of City and Golf Course staff and other parties that may have subject matter expertise or experience in Bunker Renovations.

Any additional information deemed necessary by your company to assist the City in the selection process including any special provisions or specifications that the contractor brings to the bid process and actual services may be submitted.

**Rejection of Proposal** - The City reserves the right to reject any or all proposals and to determine which bid is, in the City's judgment or by the CSC, the lowest responsive and responsible bid of a Bidder or group of Bidders. The City also reserves the right to waive any inconsequential omissions or discrepancies in any bid and to delete certain items listed in the bid as set forth therein. Costs for developing, submitting, and presenting bids are the sole responsibility of the Bidder and claims for reimbursement will not be accepted by the City.

**Bid Withdrawal** - Bidders claiming mistakes must specify in written detail how the errors occurred and must file their written statement with the Office of the City Clerk within five (5) working days of the bid opening. For bids opened between 2:00-3:00 p.m. on Thursdays, the deadline is 3:00 p.m. the following Thursday. Failure to meet the deadline may result in an otherwise valid claim for relief due to a mistake being denied. (ref. Public Contract Code §5100-5110). A bidder that has withdrawn its bid for mistake is prohibited from participating in further bidding on the project, including re-bids or a substantially similar project.

**Bid Protest** - Any bidder or other interested party desiring to protest any proposal must file a written bid protest with the Office of the City Clerk within five (5) working days of the bid opening. For bids opened between 2:00-3:00 p.m. on Thursdays, the Bid Protest Deadline is 3:00 p.m. the following Thursday.

The written bid protest must comply with the following requirements:

- a. Only a bidder who has actually submitted a bid for the subject project is eligible to submit a protest against another bidder. Subcontractors are not eligible to submit protests. A bidder may not rely on the protest submitted by another bidder but must timely pursue its own protest.
- b. The protest must contain a complete statement of the basis for the protest and all supporting documentation. Material submitted after the Bid Protest Deadline will not be considered. The protest must refer to the specific portion(s) of the Contract Documents upon which the protest is based. The protest must contain the project

- number and project name. The protest must contain the name, address and telephone number of the person representing the protesting bidder.
- c. A copy of the protest and all supporting documents must also be transmitted by fax or email, by or before the Bid Protest Deadline, to the protested bidder and any other bidder who has a reasonable prospect of receiving an award depending upon the outcome of the protest.
  - d. The protested bidder(s) may submit a written response to the protest, provided the response is received by the City before 5:00 p.m. within two (2) working days after the Bid Protest Deadline or after receipt of the bid protest, whichever is sooner (“Response Deadline”). The response must include all supporting documentation and the name, address and telephone number of the person representing the protested bidder. Material submitted after the Response Deadline will not be considered.
  - e. A copy of the protest response and all supporting documents must also be transmitted by fax or email, by or before the Response Deadline, to the protesting bidder and any other bidder who has a reasonable prospect of receiving an award depending upon the outcome of the protest.
  - f. The procedures and time limits set forth in this section are mandatory and are the bidder’s sole and exclusive remedy in the event of bid protest. The bidder’s failure to comply with these procedures shall constitute a waiver of any right to further pursue a bid protest, including filing a Government Code Claim or initiation of legal proceedings.
  - g. In all cases, the first level of review of any protest shall be conducted by PWD Management Analyst which shall, within 48 hours of receiving a protest from the City Clerk’s office, will acknowledge receipt of protest in writing to the protesting bidder. As appropriate, the City Clerk, the Project Manager, the Management Analyst, and/or the City Attorney will be consulted to resolve the protest.
  - h. The City shall make their best effort to resolve the protest within twenty-five (25) working days after the protest is filed. A written determination of the protest will be issued to the protesting bidder by the PWD Management Analyst on behalf of the City.
  - i. The City may not award the contract pending the City’s determination of the protest unless the contract award is justified for urgent and compelling reasons or is determined to be in the best interest of the City. Such justification or determination shall be approved by the Director of the Public Works Department or the designee.

## **VI. EVALUATION CRITERIA**

1. All contact during the evaluation phase shall be through Public Works Department’s Management Analyst. Companies and persons submitting proposals should neither contact nor lobby evaluators during the evaluation process. Attempts to contact and/or influence members of the CSC may result in disqualification.
2. The CSC will select a short-list of firms qualified for this project to participate in an oral interview. The interviews, at the discretion of the City, will be either via a video conferencing service or in person.
3. Based on qualifications provided in statements and oral interviews, the committee will rank the proposals. The top ranked proposal will be the selected.

4. The basic information that each section should contain is specified below, these specifications should be considered as minimum requirements. Much of the material needed to present a comprehensive proposal can be placed into one of the sections listed. However, other criteria may be added to further support the evaluation process whenever such additional criteria are deemed appropriate in considering the nature of the services being solicited.
5. Each of the Evaluation Criteria below will be used in determining the quality of proposals. The scores for all Evaluation Criteria will then be added, according to their assigned weight (below), to arrive at a score for each proposal. A proposal with a high total will be deemed of higher quality than a proposal with a lesser-weighted total. The final maximum score for any proposal is one hundred (100) points, total of ninety (90) points prior to interviews.

The Evaluation Criteria and their respective weights are as follows:

	<b>Evaluation Criteria</b>	<b>Weight</b>
<b>A.</b>	<p><b>Completeness of Response:</b> Responses that do not include the proposal content requirements identified within this RFP and subsequent Addenda and do not address each of the items listed below will be considered incomplete, be rated a Fail in the Evaluation Criteria and will receive no further consideration.</p>	Pass/Fail
<b>B.</b>	<p><b>Implementation Plan and Schedule:</b> The Plan will be evaluated against the proposer’s understanding of the project’s scope of work. Contractor to provide a detailed plan specific to how they will handle the project with an understanding of the Scope of Work. The plan will include but not limited to communication, key personnel (subcontractors included if applicable), estimated schedule/duration of project, products and materials that will be used/installed, equipment to be used, end of day approach, material and equipment staging plan, and any other pertinent information deemed necessary by the Contractor.</p>	30 Points
<b>C.</b>	<p><b>Relevant Experience:</b> Proposals will be evaluated against the RFP specifications and the questions below:</p> <ol style="list-style-type: none"> <li>1. What experience do you have with recent similar bunker renovations? Please include any bunker renovations at municipal golf courses.</li> <li>2. How extensive is the applicable experience of the personnel designated to oversee the project?</li> <li>3. What experience do you have with installing the Better Billy Bunker system or similar bunker systems?</li> </ol>	30 Points

<b>C.</b>	<b>Relevant Experience (continued):</b> 4. How familiar are you with the sand, aggregate, and turfgrass suppliers in the region for the materials required for this project?	
<b>D.</b>	<b>Proposal Form:</b> Based on “ <b>BID FORM</b> ” – proposed cost to complete the Project	30 Points
<b>E.</b>	<b>Oral Presentation and Interview:</b> The oral presentation by each qualified proposer shall not exceed thirty (30) minutes in length. The oral interview will consist of standard questions asked of each of the companies or person making a proposal and specific questions regarding the specific proposal. Proposers will also be expected to elaborate and explain the Implementation Plan and Schedule.	10 Points

**VII. SPECIAL PROVISIONS & REQUIREMENTS**

**Service Agreement**

Within ten days of being notified by the City, the lowest responsible bidder shall submit to the City:

- A signed copy of the City’s Construction Agreement (**Attachment III**)
- Certificates of Insurance, with Endorsement letter naming the City as additional insurer
- Evidence of a current business license to conduct business in the City of Pleasanton
- Completed W-9 Form (if a new vendor)

**Insurance**

Contractor and Sub-contractors must provide and maintain in full force for the duration of the Agreement General Liability and Bodily Injury Insurance, Automobile Insurance, Worker’s Compensation Insurance and Certificates of Insurance with a supporting endorsement letter according to Agreement (**Attachment III**).

**Self-Performance by Contractor**

Any Contractor being awarded this contract must have Self-Performance at a 30% minimum of the total scope of services, excluding Specialty Items if any per the Bid Schedule.

**Requirements**

Contractors to be current members of one of the following: Golf Course Builders Association of America, Golf Course Superintendents Association of America, or Golf Course Superintendents Association of Northern California.

**Contractor’s License Classification**

As Provided in California Business and Professions Code Section 7028.15, the City has determined that at the time of bid, the Contractor shall possess a valid A-General Engineering California Contractor’s license. The Contractor’s failure to possess the specified license shall render the Bid

as non-responsive and shall act to bar award of the contract to any Bidder not possessing said license at the time of bid, unless exempted by federal or state law.

### **Labor Nondiscrimination**

The awarded Contractor shall comply with the requirements of the State of California's Standard Specification Code Section 7-1.01A(4) "Labor Nondiscrimination" under this contract.

### **Performance and Payment Bonds**

- Successful Bidder shall provide performance bond and payment bonds and each shall be issued in an amount equal to the contract amount as security for the faithful performance and/or payment of all obligations. Performance and payment bonds shall be issued by a solvent company authorized to do business in the State of California and shall meet any other requirements established by law or by City pursuant to applicable law.
- Bidder shall submit, as an attachment to this RFP, a letter from a qualified surety to commit a Bond or Letter of Credit.

### **Retention Policy**

Five percent (5%) of the amount due shall be retained by the City as a retention. The City shall retain five percent (5%) of the contract amount for thirty-five (35) days after the Notice of Completion for the work is recorded. The Contractor may elect to receive 100 percent of payments due under the agreement from time to time, without retention from any portion of the payment by the City, by depositing securities of equivalent value with the City in accordance with the provisions of Section 22300 of the California Public Contract Code. Such securities, if deposited by the Contractor, shall be valued by the City, whose decision on valuation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in Section 16430 of the California Government Code.

### **D.I.R.**

*Contractors will be subject to registration and annual renewal fee to the Department of Industrial Relations (DIR) per Senate Bill 854. The mandate applies to all contractors and sub-contractors who intend to bid or perform work on public works projects (as defined in the Labor Code).*

### **Registration of Contractors with the Department of Industrial Relations**

For bids submitted the bidder and its sub-contractors must be registered and qualified to perform public work pursuant to section 1725.5 of the Labor Code, subject to limited legal exceptions under Labor Code section 1771.1. A contractor or sub-contractor shall not be qualified to bid on, be listed in a bid proposal, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5. A bid will not be accepted, nor any contract entered into without proof that the bidder and its sub-contractors are registered with the California Department of Industrial Relations to perform public work pursuant to Labor Code Section 1725.5, subject to limited legal exceptions.

### **Certified Payroll Records**



Contractor shall furnish the records specified in California Labor Code section 1776, including but not limited to the certified payrolls, directly to the Labor Commissioner. The Contractor shall furnish the records specified in California Labor Code section 1776 to the Labor Commissioner for all projects, whether new or ongoing. Copies of those certified payroll records shall also be submitted electronically to the City, upon request.

**Prevailing Wage**

In accordance with California Labor Code Section 1170 et seq., the Contractor shall pay general prevailing rate of per diem wages to all workers employed under this contract.

**Job Site Postings by Contractor**

Contractors are required to post all job site notices prescribed by law or regulation. See 8 Calif. Code Reg. section 16451(d).

**Permits**

Contractor will be responsible for obtaining all necessary permits to perform work (encroachment, building, etc.), scheduling of inspections and any other permits required to perform the work identified in the agreement.

**Identification**

Contractor's crews shall be identified at all times either by a Company uniform, or by a safety vest worn outside other clothing with the Company name clearly displayed. Vehicles will have a Company sign clearly displayed.

**City of Pleasanton's Standard Specifications and Details (November 2016)**

To the extent applicable, all projects shall adhere to the latest City of Pleasanton's [Standard Specifications and Details](#) (November 2016) which can be accessed (see link below). The purpose of these Specifications is to provide minimum standards for materials used of construction for the City's public infrastructure.

<https://www.cityofpleasantonca.gov/our-government/public-works/engineering/>

**Conflict of Interest**

The City has established a policy concerning potential conflict of interest in maintenance services, program management, design, and construction. This policy applies to all proposers and their proposed contractors/consultants/sub-consultants. See Standard Professional Services Contract for additional information.

**Clarification Questions**

Questions should be directed to the Parks Division Manager, Giacomo Damonte by email at [gdamonte@cityofpleasantonca.gov](mailto:gdamonte@cityofpleasantonca.gov). If interpretation or change is deemed necessary to the original documents, then the question(s) or modifications shall be addressed in writing and an Addendum shall be posted to the City's website. To allow time for issuance of addenda, questions shall only be accepted prior to seven (7) calendar days before the bid opening date.

**ATTACHMENTS/EXHIBITS**

ATTACHMENT I – BID RESPONSE PACKAGE

EXHIBIT A – SCOPE OF WORK

ATTACHMENT II – BUNKER LOCATION MAP

ATTACHMENT III – SAMPLE CONSTRUCTION AGREEMENT

## ATTACHMENT I BID RESPONSE PACKAGE

### Required Documentation and Submittals

All the specific documentation listed below is **required** to be submitted in order for a bid to be deemed complete. Bidders shall submit all documentation, in the order listed below, and clearly label each section with the appropriate title.

### Submitted bid **MUST** contain the following or may be subjected to disqualification:

- 1. **CONTRACTOR INFORMATION:** name, address, year established, principals of company and professional status as applicable.
- 2. **IMPLEMENTATION PLAN:** Is a comprehensive plan that will be Implemented by the Contractor to perform and accomplish all steps within the Scope of Work.
- 3. **RELEVANT EXPERIENCE:**
  - Bid response shall include a detailed discussion of a minimum of three recent similar municipal bunker renovation projects.
  - Include golf course name and location, number of bunkers, and square footage of bunkers renovated for each project.
  - Discuss the key personnel that will be used for this project and their credentials and provide a complete list of personnel associated with the RFP.
  - Describe your experience installing the Better Billy Bunker system or similar system if you are proposing an alternative bunker system.
  - Include your experience sourcing all necessary aggregate materials required for this project.
- 4. **BID FORM:** Complete the tables with the dollar amount for each of the bunkers to be renovated.
- 5. **SUPPLEMENTAL INFORMATION:** Any additional information deemed necessary by your company to assist the City in the selection process including any special project provisions or specifications that the contractor brings to the bid process and actual service work.

**IMPORTANT NOTICE:** If Bidder or other interested person is a corporation, provide legal name of corporation, state where incorporated, and names of the president and secretary thereof; if a partnership, give name of the company, also names of individuals co-partners composing company; if contractor or other interested person is an individual, give first and last names in full.

**CONTRACTOR INFORMATION**  
*(Required)*

CONTRACTOR: (Company Name)		Year Est.:
BUSINESS ADDRESS:		
WEBSITE:		
DIR REGISTRATION NUMBER:	*DIR # must match the Company Named mentioned above	
APPLICABLE LICENSE(S) # AND MEMBERSHIPS:		
SUBMITTED BY: (Name & Title)	Name: Title:	
TELEPHONE:	Office: Cell:	
EMAIL:	Email: Email:	

**Questionnaire (please circle):**

1. Has the contractor license been suspended in the past? (If Yes, please explain)  
Yes No If, Yes \_\_\_\_\_
2. Do you have any contracts terminated by Owner in the past? (If Yes, please explain) Yes No If,  
Yes \_\_\_\_\_
3. Has the company been debarred or suspended by Owner in the past? (If yes, please explain) Yes No If,  
Yes \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_

I declare under penalty of perjury that I have the authority to execute this bid and that the foregoing is true and correct.

**BID FORM**  
***Callippe Preserve Golf Course Bunker Renovations PWD 24.303***  
***(Required)***

Bidder hereby certifies to City that all representations, certifications, and statements made by Bidder, as set forth in this Bid Form and attachments are true and correct and are made under penalty of perjury pursuant to the laws of California.

The cost quoted below shall include all taxes and all other charges, including travel expenses, and is the cost the City will pay for the contract that is a result of this bid.

Bidders are encouraged to submit with their bid any literature, warranty information, and other documentation to support the Bidder’s compliance with the specifications contained in this bid package.

The listed prices include the composite price for labor and equipment, including all incidental power tools, hand tools and vehicles, as well as all overhead costs.

Callippe Preserve Golf Course Greenside Bunker Renovation Holes 10, 12, 13,15, 16, 18					
Item #	Description of Item	Estimated Quantity	Unit	Unit Price	Amount
1	Mobilization Cost	1	Each		
2	Removal of Bunker Sand, Gravel & Drainpipe	12,823	SF		
3	Turf Removal and Disposal Offsite. Up to 4 ft around perimeter.		SF		
4	Better Billy Bunker Construction (or equal) – Including new drainpipe, gravel, polymer, sand. Clean and re-establish firm bunker edge.	12,823	SF		
5	Soil preparation for turf installation around perimeter of bunkers		SF		
6	Irrigation sub-surface drip system per bunker.	11	Each		

7	Amendments, fertilizers, for turf prep. Owner purchased and Contractor to apply and incorporate into soil.		SF		
8	Sod – Purchase, Delivery & Installation		SF		
Total					

Contractor Name: \_\_\_\_\_ SIGNATURE \_\_\_\_\_

## EXHIBIT A SCOPE OF WORK

All work is to be performed in accordance with City Standard Specifications and Details (Approved November 2016), to view this document go to:

<https://www.cityofpleasantonca.gov/assets/our-government/public-works/engineering/standard-specifications-november-2016.pdf>

**Note:** The following specifications may reference Better Billy Bunker, Inc. products or methods, as well as other brand name products. It is not the intention of the City of Pleasanton, or Pleasanton Public Works to indicate in any way that Better Billy Bunkers and other referenced products are all that may be utilized on this project. Rather, the intent is to utilize this system and named products as a benchmark for the quality and the process that we prefer to be utilized during execution and completion of this project. Any product and or process that matches or exceeds this benchmarked process and products will be considered as an approved equal. Any product and or process must have drainage capabilities in excess of 1,200inches an hour. The review and approval of other submitted products and or processes will be made by representatives of the City of Pleasanton Public Works and CourseCo, Inc. employees. Respondents having similar products and/or processes that meet or exceed these products and/or processes are strongly encouraged to bid.

### SCOPE OF WORK SUMMARY

#### 1. BUNKER RENOVATION MATERIALS

- 1.1. **Contractor Provided Golf Course Drainpipe and Drain Inlets** - As manufactured by Advanced Drainage System, Inc. or approved equal.
- 1.2. **Approved Gravel (3/16"-3/8" washed)** – As manufactured by Vulcan Materials, Pleasanton or approved equal and approved by a Turf & Soil Diagnostics Lab
- 1.3. **Bunker Sand (BB-205)** – As manufactured by TMT Enterprises, Inc. or approved equal and approved by Turf & Soil Diagnostic Lab

The guidelines that shall be used to evaluate and approve a bunker sand shall be as follows:

1. Particle Size Analysis and Sand Distribution –
  - a.  $\leq 3\%$  gravel passing (2mm) #10
  - b.  $>20\%$  very coarse sand retained on (0.5MM) #35 sieve
  - c.  $\geq 65\%$  total coarse and medium sand #35 sieve (0.5MM) + #60 sieve (0.25mm)
  - d.  $\leq 18\%$  total medium-fine and fine sand (0.18mm) #80 sieve and (0.015MM) #100 sieve
  - e.  $< 5\%$  very fine sand (passing #140 (0.10mm) and #270 (0.05mm))
  - e.  $\leq 3\%$  total silt and clay
2. D85  $> 0.75\text{MM}$  (as per ASTM F1632)
3. Crusting and Set Up - No crusting or set up desired after saturated and dried.

- 4. Angle of Repose preferred >30 degrees  
Color - Beige to match existing bunkers  
Angular to sub angular shaped with a minimal amount sub round particles.

1.4. **Contractor Provided Sod for Renovation and Repair work** – Dwarf Tall Fescue sod.

1.5. **Bunker Liner ST410 Polymer** – As manufactured by Better Billy Bunker, Inc. or approved equal.

## **INSPECTION AND ACCEPTANCE**

All material of whatever nature used in the reconstruction of the bunkers shall be subject to inspection for workmanship, quality, flow grades, and satisfactory demonstration of flow into all inlets and through all pipes with no damage at exit point before approval by the OWNER or AGENT. All materials shall be subject to rejection for failure to conform to any specification requirements. OWNER or AGENT shall plainly mark rejected material and the Contractor shall replace rejected material with material that meets the requirements of these specifications and remove rejected material immediately from the work site.

## **2. SCOPE OF WORK**

Work to be performed by Contractor at CALLIPPE PRESERVE GOLF COURSE will be the renovation of all named bunker cavities including, but not limited to the following:

### **Bunker Renovation/Sand Replacement**

The work consists of furnishing all equipment and materials and performing all work in connection with the removal of existing sand, replacement of the existing sub-surface drainage pipe, reconstitution of bunker cavity to ensure no slopes are greater than the angle of repose of said bunker sand, installation of new drainage pipe and fittings, installation of approved pea gravel, installation of Better Billy Bunker lining material, installation of approved bunker sand to a compacted depth and finished grading, installation of subsurface irrigation around the perimeter of the bunker, and sodding of all disturbed areas outside of bunker cavity.

## **3. AREA OF DISTURBANCE**

All excavation areas shall be marked out in advance of excavation by OWNER or AGENT. All sod within the delineated area will be removed and disposed of offsite.

## **4. EXCAVATION OF EXISTING SAND**

All sand and drainage materials shall be excavated from the bunker cavity. Any resulting excavated native soil will be stocked piled and used in the reconstitution of the bunker edges and slopes to a maximum of 25 degrees. Contractor will perform removal of the sand and drainage materials in a manner to minimize equipment damage to the bunker complex and surrounding area. Any damage resulting from the removal of the sand and drainage materials will be repaired by Contractor to the approval of OWNER or AGENT. Excavated bunker sand will be distributed in areas designated by the Golf Course Superintendent and placed to a depth per their instruction over the designated area(s).

## **5. DEWATERING**



The Contractor shall remove all water from any source that accumulates during the excavation process and prior to the installation of specified drainage pipe. The embedment or pipe shall not be installed in water.

## **6. BUNKER CAVITY PREPARATION**

Remove all sand, gravel and loose material to a compacted base. Sand bunker edges will be marked for trimming by OWNER or AGENT. The cavity edges shall be excavated vertically to a depth of six (6) inches. All bunker slopes will not exceed the angle of repose of chosen bunker sand and will be checked by a digital level to the satisfaction of OWNER or AGENT and Contractor will not be allowed to reconstruct any slopes in excess of the angle of repose of the bunker sand. Where soil material prevents proper foundation preparation at the proposed elevation, the Contractor shall deepen excavation to a level where a proper foundation can be prepared. Any materials removed shall be replaced with acceptable fill until stable at proposed grade. Sand limits will be painted in the field by OWNER or AGENT. In general it is OWNER or AGENT'S intent to maintain the existing sand lines, however in a few cases the sand lines will be modified by OWNER or AGENT to aid in the establishment of an acceptable slope.

## **7. DRAINAGE INSTALLATION**

The entire foundation area in the bottom of all trench excavation and bunker cavity shall be smooth, firm, stable, and at uniform density and completed immediately prior to the placing of pipe or materials. Drainage of sand bunkers shall be accommodated by a drainage trench or multiple trenches connecting to each other, each trench measuring eight (8) inches wide and twelve (12) inches deep connecting into an acceptable and functional outfall pipe. Contractor is responsible for ensuring outfall pipe exiting the bunker cavity is not restricted and functioning properly to allow the bunker cavity to drain.

The locations of trenches will be as determined and subsequently painted out in the cavity by OWNER or AGENT. It is anticipated that the existing drainage layout can be used. Each sand bunker is to be drained with drainage trenches in a herringbone pattern with no distance between trenches or un-drained area in excess of twenty (20) feet, unless approved by OWNER or AGENT. The top of the pipe shall be set no higher than two (2) inches below the top surface of the trench and centered within the eight (8) inch width of the trench. Each drainage trench shall slope a minimum of one-half percent (.5%) and shall terminate to the low point (or points) of the sand bunker where drainage will be collected and exit via the outfall pipe. Drainage from the bunker floor shall continue downgrade at a greater depth, if necessary, to the edge of the sand bunker where OWNER or AGENT has designated the drainage exiting the sand bunker.

The minimum rate of fall shall not be less than one-half percent (.5%) at any point within the drainage trenches. At the edge of the sand bunker where drainage exits, the perforated pipe shall connect to the existing outfall pipe. All areas of the sand bunkers are to be built with adequate drainage. No water will be permitted to stand in any portion of any bunker. This is to be accomplished by sub-grades draining to the herring-bone drainage system and exiting the bunker via the "outfall" connection point.

Prior to placement of the gravel blanket Contractor will provide OWNER or AGENT with a record drawing (As-built) of the installed drainage showing the percentages of fall. In addition

to the record drawing Contractor will provide to OWNER or AGENT digital photos, on USB flash drive or via email, showing the complete drainage system. **CONTRACTOR WILL NOT BE GRANTED APPROVAL TO INSTALL THE GRAVEL LAYER UNTIL AS-BUILT DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY OWNER OR AGENT.** The OWNER of AGENT may waive the As-built submittal requirement if no major changes to the drainage system layout are required. OWNER or AGENT will visually inspect all drainage installation, with written sign-off required before Contractor is authorized to install the pea gravel layer in bunker cavity.

Installation of new drainage lines may not require flush-out lines. However, if needed and determined by OWNER or AGENT, a flush-out line may be required for some sand bunkers. In general, flush-out lines shall extend from the top side of the main drainage line of the sand bunker and terminate to the point where it will connect to a riser and trimmed and finished as specified by OWNER or AGENT. Single flush outs will be contained in a six (6) inch diameter irrigation valve box. In instances where two flush outs are next to each other, the risers will be contained in a single ten (10) inch irrigation diameter valve box.

## **8. BUNKER LINER INSTALLATION**

Contractor will not be allowed to deviate from the Better Billy Bunker or other manufacturers specifications and must not cause any portion of the Better Billy Bunker or other approved manufacturer's warranty to be voided or disallowed due to construction means and methods utilized by the Contractor.

### **8.1. Bunker Cavity Preparation**

The Better Billy Bunker System or other approved system must be installed in an approved bunker cavity. The area to be covered with the specified liner shall be water settled and mechanically compacted with a hand operated compacting machine to a minimum dry density of ninety-five percent (95%). Absolutely no loose soil shall remain in the bunker cavity prior to liner placement. No liner material will be placed in bunker until OWNER or AGENT has approved the bunker shape, depth, and compaction of the bunker cavity.

### **8.2. Gravel Layer Blanket**

A layer of approved gravel shall be placed over the entire floor of the bunker at a depth of two (2) inches (51mm) deep. This gravel shall be brought up the edge of the bunker leaving room for four (4) inches of bunker sand on all slopes and edges. Should machines be used to spread the gravel in the bunker cavity, care must be taken to prevent any damage to the sub-base and/or drain lines. Contractor must protect the vertical bunker edges at all times when dumping gravel along the bunker edges. The gravel selected will be sent by the Contractor to Turf & Soil Diagnostics, (613 1<sup>st</sup> Street, Linwood Kansas 6602 (913)723-3700) soils lab or other approved lab for testing of the sand and gravel to ensure both materials meet the minimum "bridging" standard. This common standard is based on engineering principles that rely on the largest 15% of the sand particles "bridging" with the smallest 15% of the gravel particles. The gravel must be placed evenly and raked smooth.

Prior to placement of the gravel blanket Contractor will provide OWNER or AGENT with a record drawing (As-built) of the installed drainage showing the percentages of fall. In

addition to the record drawing Contractor will provide to OWNER or AGENT digital photos, on USB flash drive, showing the complete drainage system.

**8.3. ST410 Polymer Binder Application**

ST410 POLYMER shall be sprayed by a certified and trained Better Billy Bunker or other approved manufacturer installer. Using proper pressure spray equipment, a uniform layer of ST410 POLYMER shall be applied to the gravel in the bunker at a rate of one (1) gallon of ST410 POLYMER per 30-35 square feet. The gravel must be dry (less than 15% as tested by the certified installer) at application time. The treated bunker shall be allowed to cure for approximately 24 hours prior to sand installation. NOTE: ST410 POLYMER will penetrate approximately ½ - 1 inch (12mm - 25mm) depth of the gravel. A sturdy pliable layer of glued gravel will be the result.

**8.4. Inspection and Quality Control**

After 12-24 hours, the initial ST410 POLYMER application will have cured. Contractor will walk and inspect every square foot (meter) of each bunker at the end of the curing process. Any areas not to have received the specified rate of polymer will be marked with turf paint and re-sprayed prior to calling for a final inspection by OWNER or AGENT. Improper application or omitting of the inspection process and follow up polymer application could result in weak areas and/or loose gravel. It is the installer's responsibility to inspect and maintain the highest standards when installing the Better Billy Bunker or approved equal.

**9. SUBSURFACE IRRIGATION SYSTEM INSTALLATION**

In conjunction with the soil preparation needed for the sod installation, a subsurface irrigation system is to be installed around the perimeter of each renovated bunker.

**9.1. Subsurface Irrigation Parts**

Subsurface drip line shall be Toro DL2000 (low flow) and Drip Zone Valve Kit which includes control valve, pressure regulator, Y-filter and manual ball valve. Toro air vent assembly, flush assembly fittings and all associated fittings to be supplied by Contractor. Drip line spacing to be 12 inches or as directed by the Golf Course Superintendent.

**10. RE-SODDING OF DISTURBED AREAS**

All sand bunker banks and slopes leading away from edges that have been damaged during the bunker work shall be sodded as directed by OWNER or AGENT. If slopes are greater than 3:1, Contractor shall use wooden stakes to hold the sod in place until established. Wooden stakes must be of sufficient length to provide firm bearing.

**10.1. Surface Preparation**

All surfaces within the areas of disturbance to be re-sodded, which are slicked or glazed shall be scarified, amended, and smoothed by floating or hand raking prior to planting. All areas to be sodded shall be floated in two directions to eliminate water holding depressions and pockets. All lumps and soil clods shall be eliminated. Soil amendments and fertilizers to be supplied by the City.

**10.2. Sod Quality**

Sod will be cut in a uniform thickness width and length. Sod shall be delivered to the job site within twenty-four hours after being harvested. Any sod permitted to dry out or rot may be rejected if, in the judgment of OWNER or AGENT, its survival after placement is doubtful, and shall be replaced at the sole cost of the Contractor.

**10.3. Installation Procedures**

Sod shall be placed by hand with close joints and no overlapping. All spaces between sections of sod, openings at angles, and similar gaps shall be plugged with sod. After laying, the sod shall be thoroughly watered and then tamped with an approved sod tamper or rolled sufficiently to incorporate the sod with the sod bed and insure tight joints between the sections of strips. Rolling shall not be done to the extent that it causes excessive compaction. Any voids, openings, or crevices before and after tamping or rolling shall be filled with topsoil. Upon completion of the above work, the surface of the sodded area shall coincide with the finish grade and shall be flush with other grassed areas.

**10.4. Protection of Sod Prior to Handover**

It will be the responsibility of the Contractor to repair any damage, to newly sodded and established grass areas, at the sole cost to the Contractor until the work area has been turned over to OWNER or AGENT.

Following the sodding operations within an area of disturbance and after the planted area(s) has been accepted by OWNER or AGENT, the maintenance and watering of these areas will be the responsibility of OWNER or AGENT.

The Contractor accepts responsibility for repairing any damage caused by drainage problems, irrigation breaks and run-off, as result to the construction means and methods of the Contractor until the area has been accepted by OWNER or AGENT. Contractor will be required to repair damaged areas, so the repaired area(s) match the surrounding turf conditions in terms of both plant population and quality of turf. Contractor may be required to install sod within the damaged areas.

If, after the third mowing by OWNER or AGENT problems arise or are perceived, in any grassed areas, which are related to construction methods used on the project, the Contractor is responsible for repair of these areas.

All areas disturbed as a result of construction works shall be restored to their original condition or to the desired new appearance as directed by OWNER or AGENT.

**11. SAND PLACEMENT**

After the entire bunker is lined using the above procedures, sodding has been completed and written approval given, the Contractor will clean the cavity with a hand blower to remove all foreign debris. Absolutely no loose soil shall remain in the bunker cavity prior to sand placement. NO SAND WILL BE PLACED IN BUNKER UNTIL OWNER OR AGENT HAS APPROVED IN WRITING THE SOD, BUNKER LINING INSTALLATION AND REMOVAL OF ALL DEBRIS.

After approval, the sand shall be spread evenly throughout at a minimum compacted depth of four (4) inches on slopes and six (6) inches on the bottom of the cavity. Contractor will spread the sand against the bunker edges upon completing the installation of the sand in the specific bunker. Should machines be used to spread bunker sand, care must be taken to avoid any damage to the polymer bound gravel layer. Machines entering bunkers for sand installation must sit atop a minimum of twelve (12) inches of bunker sand and plywood. Contractor must protect the vertical bunker edges at all times when dumping sand along the bunker edges. After spreading, all sand shall be water settled and compacted with a hand operated compaction machine. If any sand bunker has less than four (4) inches of sand, the Contractor shall be responsible for installing additional sand to meet specifications on sand depth.

The Contractor is responsible for controlling and removing any vegetative growth or contamination within sand bunkers during construction.

## **12. PROJECT SCHEDULE**

The project is anticipated to begin in mid-September 2024 and be completed by the end of October 2024.

## **13. HOURS OF SERVICE**

Work hours are to be determined by the Golf Course Superintendent, but are generally weekdays from sunrise to 4:00pm

## **14. MATERIALS**

Contractor shall furnish, as part of this agreement, all necessary personnel, supplies, materials and equipment to renovate the identified sand bunkers at the Callippe Preserve Golf Course. Contractor's employees will be responsible from removing and disposing of any construction waste. Debris and trash shall be removed at the end of each day's work. There shall be no additional charges to the City for removal and/or disposal of materials. All defective materials shall be removed in accordance with all applicable rules, regulations, codes, law, ordinances, statutes, etc.

## **15. SAFETY TRAINING/PROCEDURES**

Contractor must provide a copy of its safety training program that includes, but are not limited to, training staff on hazardous material, Safety Data Sheets, safety procedures, and safe work practices. This is required before Contractor can begin performing its services.

## **16. COMMUNICATION AND DOCUMENTATION**

16.1. Daily the Contractor shall provide general updates and daily work plan details to the Golf Course Superintendent. Updates are to include information regarding work location(s) on the course and pending material deliveries.

16.2. Copies of all quarry tags/delivery slips for any bulk materials shall be provided to the Golf Course Superintendent for confirmation of material compliance. Bulk materials shall include gravel, sand, soil amendments, compost, and polymer.

## **17. SUPERVISION AND APPROVAL AUTHORITY**

- 17.1. Contractor must provide for adequate supervision and inspection of all work performed to ensure that each requirement of these specifications is consistently met.
- 17.2. A supervisor representing the Contractor shall be readily available to meet with the Golf Course Superintendent or Designee as needed for the purposes of correcting problems, conflicts, and coordinating work schedules.
- 17.3. Inspection by Golf Course Superintendent or Designee shall be made during normal City operating hours, unless otherwise arranged.
- 17.4. The progress and standard of quality of work to be accomplished shall be to the degree reasonably acceptable to the Golf Course Superintendent or Designee. In the event the Golf Course Superintendent determines contractor's work is unsatisfactory, Contractor will be required to perform the additional work at no cost to the City.

## **18. DAMAGES**

All damages to landscaping, sprinklers, irrigation systems, hardscape, plants, or other golf course components shall be reported by Contractor to the City and will be repaired by the Contractor at no additional cost to the City.