

**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Public Works and Government Services / Travaux  
publics et services gouvernementaux  
Kingston Procurement  
Des Acquisitions Kingston  
86 Clarence Street, 2nd floor  
Kingston  
Ontario  
K7L 1X3  
Bid Fax: (613) 545-8067

**SOLICITATION AMENDMENT**  
**MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise  
indicated, all other terms and conditions of the Solicitation  
remain the same.

Ce document est par la présente révisé; sauf indication contraire,  
les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du**  
**fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Public Works and Government Services / Travaux  
publics et services gouvernementaux  
Kingston Procurement  
Des Acquisitions Kingston  
86 Clarence Street, 2nd floor  
Kingston  
Ontario  
K7L 1X3

<b>Title - Sujet</b> Indoor & Outdoor walk-in Freezer-Re	
<b>Solicitation No. - N° de l'invitation</b> 21120-133422/A	<b>Amendment No. - N° modif.</b> 010
<b>Client Reference No. - N° de référence du client</b> 21120-13-1913422	<b>Date</b> 2014-01-16
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$KIN-650-6189	
<b>File No. - N° de dossier</b> KIN-2-38306 (650)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2014-01-24</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Standard Time EST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Rombough, Lori	<b>Buyer Id - Id de l'acheteur</b> kin650
<b>Telephone No. - N° de téléphone</b> (613) 545-8061 ( )	<b>FAX No. - N° de FAX</b> (613) 545-8067
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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**AMENDMENT #010**

The intent of this amendment is to answer potential bidders' questions & revise the Requirement.

**Q1.** Are shop drawings required when submitting this tender? Usually these drawings are only done after a contract has been awarded to a successful bidder. Are these just basic drawings showing dimensions, door location, etc?

**A1.** Yes, bidders must submit basic drawings that show line drawings and nominal dimensions to demonstrate the Bidder's understanding of the project.

**References: 1.1.1 Mandatory Technical Criteria**

**Draft Drawings:** The Bidder must provide draft drawings for each walk-in.

Once the contract is awarded, this clause in Annex "A", applies:

3.3 The Contractor shall provide detailed drawings of the boxes and mechanical, to the PA. The drawings will be used by a CSC provided certified installer. The Project Authority, in consultation with the Contractor, shall set a deadline for submission of all drawings. The drawings will include installation directions, manuals and standards that will need to be met by the installer.

**Q2.** When pricing the equipment in the tender it asks for example section 1.4a it asks for box and evap coils with defrost. Then in section 1.1b it is asking for the compressors and condenser equipment. It asks the same in 1.2b, 1.3b and so on.

In the description of the tender it asks to be a complete system with all compressors in parallel. I am offering 1 complete system for each location and the pricing cannot be broken down.

How do I go about filling in these sections?

**A2.** The requirement of the RFP in section 6.2.1A is to provide a Remote Outdoor Roof-mounted Multi-circuits Refrigeration Parallel Rack system. . Pricing needs to be supplied for the Walking cooler and evaporators and for the enclosed rack system separately. If the Bidder offers one complete system then only one section of the applicable pricing basis section needs to be filled out and the Bidder should identify one system will be offered.

**Q3. Further to Amendment #003, Q&A#3:** Am I to assume that "roof mounted" is the roof of the facility and not the roof of the walk-in?

The supplied drawings show the mechanicals (condensing units) mounted on a pad on the loading dock next to the walk-in. Can you please clarify?

**References:**

**Amendment #003, QUESTION #3:** Page number 12-- combination outdoor walk-in cooler and freezer,( 5 and 5a), is this part of the overall quote, if yes, do they want stand alone refrigeration system for these two rooms, or they want equipment to be part of mechanical equipment for other walk-in rooms.

**Amendment #003,:** Yes all refrigeration equipment in the solicitation is part of a single submission. In section 6.2.1 A. General Description Bath Institution (Cook Chill Facility) outlines the overall design requirements for the mechanicals to be mounted in a Rack System that is to be roof mounted.

**A3.** This requirement is for goods only and installation will be done by others. Bidders are to supply and price according to specifications given in RFP. The location of compressors will be determined at time of installation on an outside concrete pad or on the roof.

**Q4.** The merchandising doors that are requested for Room # 63 are listed to be 9' 7 3/4" wide with a door size of 28 3/4" x 78". Although close, these are not standard size CDS merchandising doors. The standard size for these doors are 9' 8 5/8" with a door size of 28" x 75". In past RFP's for similar projects, the standard size was requested. We request to supply standard size, available doors.

**A4.** The dimensions identified in the RFP are nominal measurements only. After contract award, the Contractor will submit final drawings that take into consideration the space provided.

**Q5.** The larger rooms for all facilities require a roof support system. There are options for this. In some case, we supply an internal "I" beam with beams imbedded in the side walls to support ceiling beam. In other cases, we supply C-channel supports from which ceiling panels are supported by hanger rods from the facilities roof supports. We would request input from the client to ensure the proper and cost effective solution is supplied. We can supply what we feel is the best solution for each larger room, however must ensure that the proper structures are available at the facilities.

**A5.** For the large rooms where ceiling support is recommended, CSC will require internal I-beams embedded in the side wall to be used to provide the necessary support for the ceiling beams and panels. Access to roof supports for Rod and c-channel supports is not practical.

**Q6.** Bath/Millhaven Stores Outdoor Walk-ins: We are having a problem getting quote from vendors who will not be quoting due to the out door walk-in depression and warranty.

Supplier X builds the walk-ins based on an 11 1/2" size. We have found that building a walk in is not always the optimal choice. We also notice that most customers do not allow for the proper air gap between the wall panel and the building wall.

If we have to provide exact dimensions I do not think we will be able to quote this job

**A6.** As indicated in A4, the dimensions identified in the RFP are nominal measurements only. Final drawings and measurements must be completed and confirmed following award before the order is placed. Any changes to accommodate the final delivery of product will be made at that time.

Please note that this requirement is for Goods only, installation is not part of this requirement. Prior to installation, CSC will ensure the existing concrete pad layout is inspected and if necessary, modifications will be made to prohibit any issues that may affect the warranty. However concerns for initial warrantees as pertaining to installation will be noted.

**Q7.** We have some concerns that need further clarification. Question & Answer #10 was addressed in Amendment 3 but not clearly answered. It is important that this be cleared up if we are to supply the correct equipment.

The original question and answer is:

#### **QUESTION #10**

##### **Reference pages 21-22 of 29, and 14 of 29, Bath institute**

The over all dimensions are listed but there are no measurements for each compartment, only that one is "smaller" and one is "larger". We sized the two rooms from the depiction in the drawing and would like clarification. We have assumed the following measurements:

18' - 6" x 57' - 0" x 8' - 7" rectangular indoor cooler/cooler combo #8 - 17' - 10" ID x 46' - 2" ID x 7' - 10 3/4" ID -1C cooler 118 (with floor) - 17' - 10" ID x 9' - 10" ID x 7' - 10 3/4" ID -1C cooler 119 (with floor)

Also, there appears to be a pass through between the two rooms in the drawings. Please clarify. There are two different holding temperatures for each compartment and if there is a pass through, it will need to be regulated with a door, window, strip curtains, or other methods.

#### **Answer#10**

The large indoor cooler for the chilled food holding area is as per the stated dimensions. It is one single room with 2 sliding doors. Please disregard the depiction of two spaces within the drawing. Under annex "A" 1.1.4 it states:

1. 1.1.4 One indoor walk-in chilled food holding area -10C with an insulated floor and remote roof-mounted refrigeration rack systems. **Drawing #: BATH INSTITUTION F210 Equipment List # 8** and under 6.1.1 B , #6 on the chart (pg. 14 of 29) it is confirmed that it is 1 room with two sliding doors and a holding temp. of -1C. It does however state "over all size dimensions" and this is usually associated with combo rooms containing more than one compartment.

To further this, under 6.2.2 A (pages 21 of 29 continuing on 22 of 29) it states the capacity of this room(s) as follows:

- 1 Walk-in Cooler Combination Two Compartment (Equipment List # 8):  
Small Cooler section: High temperature, 2C - 4C, hermetic type compressor....and continuing on the next page:
- Large Cooler section: High temperature, -1C , hermetic type compressor...

**BIDDER'S QUESTION:** This indicates it is 2 compartments and that there is a smaller section and a larger section each with different temperatures. This is how it appears in the supplied drawing. It also indicates that it is for Equipment list # 8 which verifies that it is the one earlier listed as a single room with one temp.

There is no capacity listed under 6.2.2. A for walk in # 63 and these specs do not match this room either.

Can we please have clarification?

**A7.** The client has confirmed that Unit #8 on the Original Equipment List for Drawing Bath F210 is actually one room (-1°C) with an insulated floor and integrated inside ramp for holding the chilled food prior to delivery to the sites. This unit is also the same unit identified on Page 14/29 of the original RFP.

In section 6.2.2A at the bottom of the page there appears to be an error that was not corrected when changes were originally made. This is the same -1°C chilled food holding are and it is one single room.

#### **Q8. Reference No. 1 in RFP**

In section 6.1.1. A to E, the power requirement charts specify the size and amperage of each compressor for a specified room. Again in 6.2.2. A, and 6.2.3 B, these specifications are mentioned along with type of compressor. Each facility has a mixture of scroll and hermetic compressors in varying sizes.

This would mean that the compressors are intended to operate a specific room.

#### **Reference No. 1 in RFP**

In section 6.2.1 A, the specs call for a "Multi-circuited Refrigeration Parallel configuration..." and that "all compressors to be arranged in a parallel configuration using a protocol control system to ensure redundancy and load matching with multiplex compressors..."

This would mean utilizing a common suction and liquid with manifolds providing redundancy and load matching. The discharge and the suction line of each compressor are linked together to make a single discharge line and split the liquid line to multiple circuits. The controller decides which compressor(s) will start based on the returning suction pressure; the compressor matching the load demand will fill the

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requirement. This provides the redundancy, meaning if a unit (compressor) goes down, the load is shifted to other compressor(s) in the bank and continues to maintain the temperature in all rooms.  
**(Refer to System No. 1)**

### **Conflict**

In your specifications, all the compressors are sized for each room and then put in a Multiplex Compressor System to provide redundancy, however each compressor in the bank is dedicated to their respective room. This is not possible.

### **Solutions**

#### **System No. 1 (a balanced, well tuned and efficient system delivering required power) (Recommended)**

The total load would be calculated by adding the required HP and balancing across 4-6 scroll compressors with extra oil level control features and digital downloading. This will provide redundancy by load matching and accurate capacity control down to less than 5% of the system capacity. There will be no dedicated compressor to a specific room. This is the main idea of a "Multiplex Compressor System". When a compressor is down for maintenance, the compressor matching the load demand will fill the requirement. This is done automatically with the CPC programming (protocol control system)

#### **System No. 2**

This system will have redundancy and dedicated compressors for each room and will require two independent refrigeration systems working in a Lead-Lag mode(primary and secondary system). This type of configuration is used in blood banks, vaccine storage, and plasma storage, not in a food industry. This will be very costly and not practical for your application.

#### **System No. 3 (using Scroll and hermetic compressors)**

This system will use combination of hermetic and scroll compressors in a multiplex compressor system. Hermetic compressors are not economical for parallel configuration. In addition, each hermetic compressor will need an oil separator for the oil system to function properly. Providing the specified compressors with redundancy and protocol control, will result in a very large, expensive and complicated system with redundantly sized compressors. ***There will still be no dedicated compressor to a particular room.*** There will be a lot of extra components which leads to more preventative/regular maintenance and inefficient operation.

#### **System No. 4**

This system will use a combination of Scroll and hermetic compressors dedicated to their respective room as per specifications. They can be arranged on an outdoor roof mounted rack system. ***There is no redundancy or protocol control in this configuration.*** If the compressor goes down, so does the room. This is not recommend for this application as the room will loose refrigeration until the respective unit is repaired.

### **Conclusion**

We want to ensure that the best, most efficient and cost effective solution is given for this application. We cannot build an efficient cost effective system that accounts for all the requirements as they are listed. We ask that you please review and consider the information above and advise of your conclusions. Our recommendation is system #1

**A8.** The client states that the overall design of the units are for a multi rack system with a compressor for each unit as per 6.2.1A for the Bath Cook Chill Facility.

In bullet point number four of the section it states:

- All compressors to be arranged in a parallel configuration using a protocol control system to ensure redundancy and load matching with multiplex compressors for the chilled food storage coolers/freezers.

The protocol control system with load matching multiplex compressors only applies to the Freezer on the loading dock and the chilled food holding area which is part of the cook chill facility.

Units #5, #5a and #8 need to be supported by a redundant system supported by load matching multiplex compressors configured to run with a protocol system. (System #1 Solution) in question number #8. The power requirements and compressor sizes for these units must be sized accordingly to provide the protocol solution required.

Please delete power requirements on 6.1.1A and power requirements item #6 "Indoor Cooler Walk-in -1C Chilled food Holding area with insulated floor #8"

All other refrigeration units at the Bath site are to be supplied with dedicated compressors on a multi rack system as per the first 2 bullet points of 6.2.1 A

**Q9.** The information (plans) on the website are quite minimal, making it difficult if not impossible to produce any sort of shop drawing . What would be required as a "draft drawing?"

**A9.** This question was previously answered within this amendment.

**Q10.** Page 20 and 21 of 29 in the bid documents makes reference to Multi circuited refrigeration parallel configuration rack system, protocol control system, multiplex compressors etc. We believe this is an error as units are individual condensing units.

Also there does not seem to be any system type specified (hermetic or scroll) described for box # 63 , other than the power requirements we see on page 15 of 29.

**A10.** As per Question 8 this only applies to the Chilled Food Holding area and Large combo freezer cooler on the loading docks. Units #5, #5a and #8

**NOTE TO BIDDERS: Additional information regarding Bath Institution Food Service Building – Outdoor Walk-in Cooler/Freezer Combination: #5 and 5a Bath Institution Drawing F210**

The racking systems, that will be purchased under a separate RFP, will positioned in the external freezer and fridge in the receiving area.

Please note that to allow for these racks, the positioning of the evaporator coil and doors will need to be adjusted accordingly.

## DELETIONS & INSERTIONS:

### **#1. Under: Annex "A" - REQUIREMENT**

#### **#1a. Within: 6.1.1 Dimensions, Sizes and Electrical Requirements**

**D. Millhaven Institution Food Services Building (Finishing Kitchen)** – Delete in its entirety & Insert:

#### **D. Millhaven Institution Food Services Building (Finishing Kitchen)**

All mechanicals are to be confirmed for proper sizing to meet the needs of the walk-in room dimensions and performance specifications

#	Walk-in Type	Walk-in Size	Door Type	Door Size	Holding Temp
2b	Large Cooler on Combo with floor	20'L x 20'W x 8'H <u>Delete:</u> (508mm x 508mm x 2438mm) <u>Insert:</u> (6096 mm x 6096 mm x 2438 mm)	<u>1 Left-hand swing door and 1 right-hand swing door</u>  <u>1 solid service door</u>	36"x78" (914mm x 1981mm)  36" x 36" (914mmx914mm)	-1°C

#### **#1b. Within: 6.1.3 Floors and Ramps - Delete in its entirety & Insert:**

#### **6.1.3 Floors & Ramps**

**Chilled Food Holding area** -1C, room 118, will have an insulated floor with integrated internal ramp at the entrance and exit with sufficient length and proper slope for easy loading of dollies with 4 inch wheels and pallets 45"x48" with electric powered pallet mover stacker. It is preferred that the ramps are heated but must have an integrated heated threshold with non skid strips on the ramp.

- The floor will withstand a minimum weight of 5,000 lbs per square foot of evenly distributed load.
- Made of materials that are resistant to mould and water and ensure a strong structure that will not rot or rust.
- Finished with a metal plate, foamed in place, to disperse weight evenly over the floor with aggressive surface to reduce slips such as , 1/8 inch diamond tread aluminum.

**The External Fridge/Freezer Combo** units will have an insulated floor that is even and level through the units with an inline configuration. The floor will have no transitions between the cooler and freezer area and will be flush and level to the loading dock floor once completed.

The floor will have a design to support the erecting of standard skid racking that will be bolted on the insulated floor. This will require that the floor have a sub flooring that will support the lag bolt for the upright frames supporting the skid racking. The subfloor must be a minimum ¾" thick CDX type plywood to ensure strength and resistant to mould and water damage.

The positioning of the Skid Rack Upright Frames will be supplied post award, to allow the successful bidder to plan for the placement of additional supports inside the insulated floor to ensure proper weight transfer from the skid rack post down to the concrete base. The Racking System post will be bolted on the supported area using a 1.5" wood lag bolt.

The floor must be finished with minimum 3/16 aluminum plate that will be secured to the insulated floor with counter sunk stainless steel screws.



### **SGMP Fridge/Combo**

The Combo Fridge/Freezer will be floorless on the refrigerator side and have an insulated floor in integrated internal ramp on the freezer side

- The floor will withstand a minimum weight of 5,000 lbs per square foot of evenly distributed load.
- Made of materials that are resistant to mould and water and ensure a strong structure that will not rot or rust.
- Finished with an aluminum plate, foamed in place, to disperse weight evenly over the floor with aggressive surface to reduce slips such as 1/8 inch diamond tread aluminum.

### **Millhaven Bath Institutional Stores outdoor Refrigerator and Freezer units**

The outdoor fridge and the freezer units at Millhaven and Bath Institutional Services, will have an insulated floor that is level to the cement threshold at the entrance. The perimeter around the insulated floor, laid into the 4" pit, will be grouted and caulked before wall panels are assembled and locked into place.

- The floor will withstand a minimum weight of 5,000 lbs per square foot of evenly distributed load.
- Made of materials that are resistant to mould and water and ensure a strong structure that will not rot or rust.
- Finished with an aluminum plate, foamed in place, to disperse weight evenly over the floor with aggressive surface to reduce slips such as 1/8 inch diamond tread aluminum.

### **#1c. Within: 6.1.5 BI Material Management Outdoor Units Roof – Insert:**

Flashing and waterproofing must be added between the two units and span the roof and walls to enclose the gap between the two outdoor units to minimize and eliminate water penetration between the Walls and Floor panels.

### **#1d. Within: 6.2.2A- Delete in its entirety & Insert:**

### **6.2.2 Remote Outdoor Refrigeration System (Bath Institution Cook Chill Facility)**

#### **A. Capacity:**

This rack system(s) shall allow the remote operation of all the refrigeration units in this building.

- 1 Outdoor Cooler/Freezer Combination Two Compartments (Equipment List # 5 & 5A):
  - Cooler section: High temperature, 2°C-4°C, scroll type compressors min. 3 HP max 18.8 amps.
  - Freezer section: Low temperature, -20°C, hermetic type compressor, min. 4HP max. 32.6 amps.
- 1 Walk-in Dairy Cooler (Equipment List # 6): High temperature, 2°C-4°C, scroll type compressor, min. 0.75 HP, max. 6.8 amps.
- 4 Walk-in Coolers:
  - (Equipment List # 13, 14, 15):  
High temperature, 2°C-4°C, scroll type compressors min. 2 HP, max. 7.5 amps.
  - (Equipment List # 16):  
High temperature, 2°C-4°C, scroll type compressors min. 2.5 HP, max. 9.1 amps.
- 1 Walk-in Cooler –Chilled Food Holding Area (Equipment List # 8):  
High temperature, -1°C with integrated defrost system

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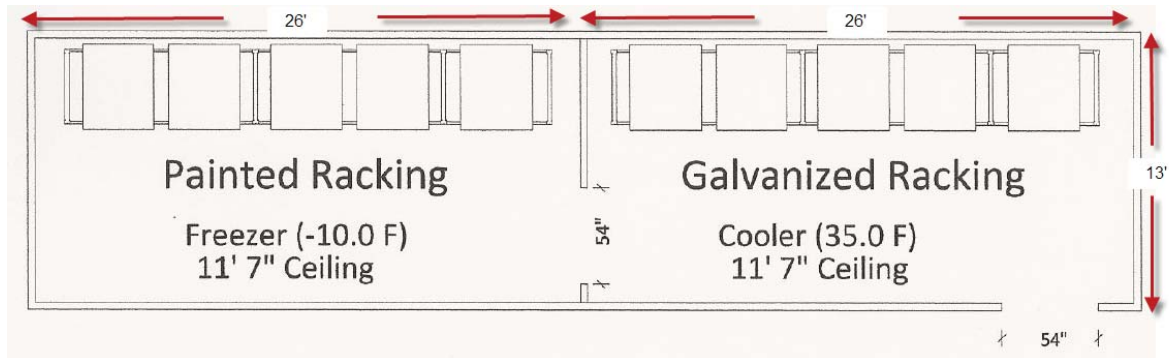
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**#2. Under: Annex "A-1"**

**INSERT- Drawing**

Approximate location of racking

**Bath Institution**



**DELETE – Drawing within BI F210**



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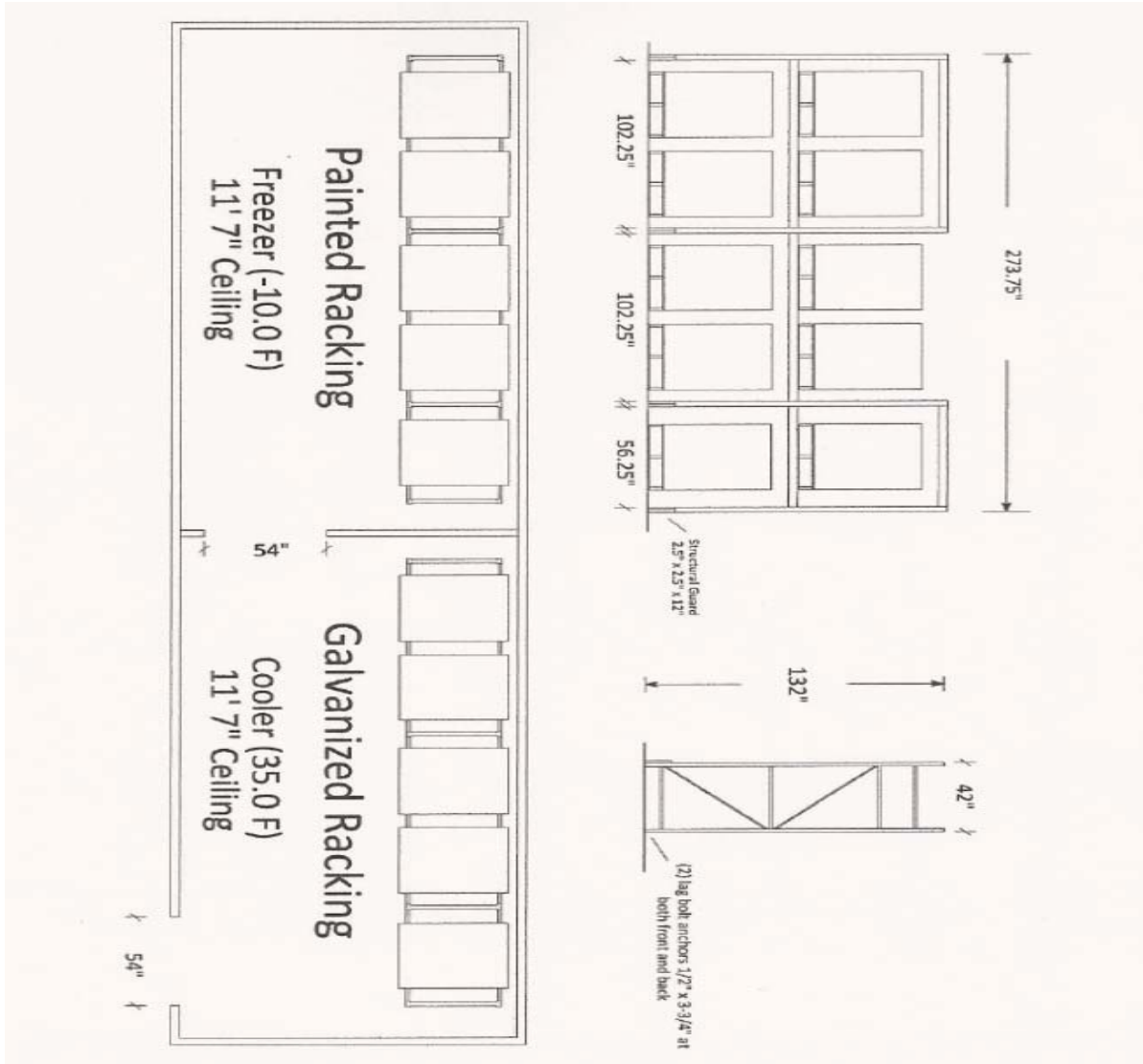
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## **UNDER: Annex "B" - Basis of Payment**

**Within: 1.3      Delivery – Delete in its Entirety & Insert:**

Preferred delivery is prior to 31 March 2014.

Delivery will occur with: \_\_\_\_\_ weeks of request by the Project Authority.

Bidders are required to quote the best possible delivery date, taking into account the possible consequences (Termination for Default) by not meeting