



**U.S. Army Corps  
of Engineers**  
Engineering and Support  
Center, Huntsville

## **Iron Horse PFF**

### **Building 1925 Fort Carson, CO**



**POTR – Phase 1  
Project No 71165**

**DATE: September 25, 2012**

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## CHAPTER 1 - GENERAL

### 1-1 Purpose

The intent of this document is to present the findings of the Phase I Post Occupancy Technical Review (POTR) performed on Building 1925 (Iron Horse PFF) at Fort Carson, CO. The POTR was performed by the HNC team on September 25, 2012.

### 1-2 Facility Description

Building 1925 is a medium sized Physical Fitness Facility (PFF), with an attached natatorium, that was occupied May 3, 2012. Hours of operations for the facility are 7 days a week from 5:00 am to 10:00 pm.

The users are satisfied with the facility.

### 1-3 POTR Team Members

The following is a list of HNC's team members that participated in the POTR:

- Jay Clark – Architectural
- Robert Jackson – Mechanical
- Jackie White - Electrical

### 1-4 Meeting Contacts

The roster is attached in Appendix A. The facility director is Teia Mack.

### 1-5 Feedback on Contractors

The design-build contractor for this project was CTI and Big D.

- Contractors did a good job.
- Generally they were great to work with, and there was a good working relationship for the most part. But, they still could have been more responsive.
- Punch list items were not resolved in a timely manner.
- They were great to work with in regards to the site change after the start of construction.

### 1-6 Contract Modifications

The largest issue was the relocation of the facility from a remote area south of the main installation to a site in the middle of the installation. Another change was recessing the doors from the locker rooms to the pool deck into alcoves for safety reasons. Other mods are included in Appendix B.

## 1-7 Construction Issues

- Dealing with roof leaks. They are being handled by warranty. Could be due to flashing, vestibule arrangement, flat roofs, etc.
- Plaster is “alligatoring” in the pools. It looks like cracking but seems to just be a surface condition. Plaster tests indicate poor water quality however the water is in compliance with the National Swimming Pool Foundation (NSPF) and TM 5-662. It appears that when this is scrubbed it does not return. Question whether there was an issue with filling the pools after construction. This issue is still being investigated.



- Stereo equipment was located in the Communications Room, and since the users cannot access this room, they cannot control the stereo.
- The scoreboard reset is in the electrical room, which is also not accessible to the users.
- Shower handles are a maintenance issue.
- Stainless steel items are already rusting in the pool area. In fact, they brought a ladder railing from their other indoor pool, and it started rusting when placed in this pool environment. Already some rust coming through the connection between wall and floor.



- Floor drains in pool deck were not stainless steel.



**1-8 Overall Comments**

- Patrons love the facility; says it doesn't look like a fitness center. Very attractive facility.



- They love the large open feel and the large expanses of glass throughout the facility.



- The fitness floor is too crowded; need a larger weight room. To reduce the overcrowding, more cardio was moved to the second floor.

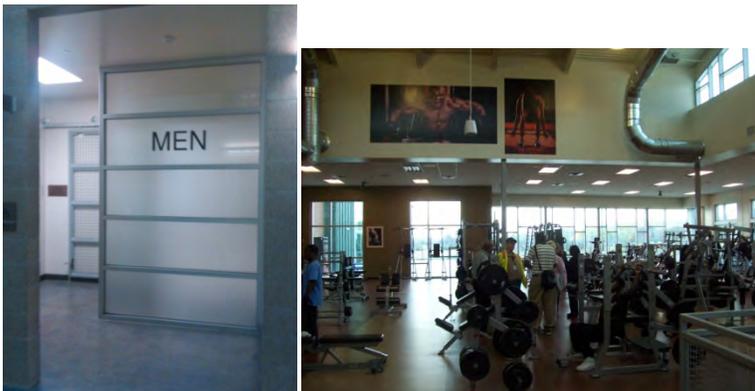
- Complaints about the saunas not working correctly; the timer does not function properly.



- Lots of complaints about no child care; even though there is a CDC right around the corner with hourly care.
- Customers really glad they got a new fitness facility. Last PFF project was in 1967 to renovate barracks into a PFF.
- Cardio is placed in a lot of different alcoves and balconies on the second floor.



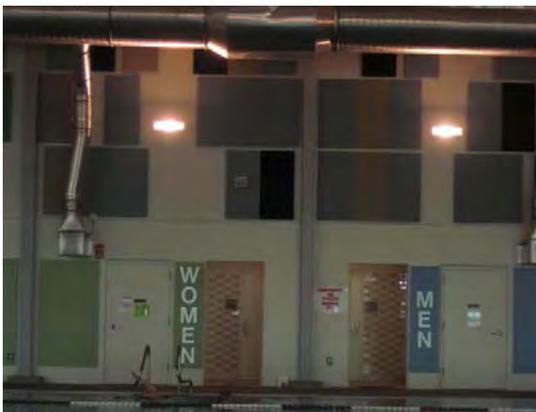
- Users love the industrial motif which is carried through the facility through the use of “gates”, exposed metal ductwork, stained concrete floor, etc.



- Huge advantage having the “open” standard which allowed the facility to provide for the user’s needs.
- There should be a “start up” period of at least 15 days before users move in.
- Secondary group exercise room is being used for functional fitness. Only concerns are that it is on the second floor, and wall construction may not be durable enough for the various activities.
- The Hot Tub Chair does not work.



- The doors from the 2 hot tubs swing out into pool deck. This is a safety hazard. They should be set back or swing inward. They are shown in the picture below adjacent to the signs.



- Vacancy sensor is preferred over occupancy sensors. The difference between a vacancy sensor and an occupancy sensor is the manner of which they are turned on. Each light switch will detect the lack of occupancy and turn the lights off, however only the occupancy sensor will automatically turn the lights on. The benefit of a vacancy sensor is that if you don't want the lights to turn on when you walk into an area, they will not unless you manually turn on the switch.
- A comment was made that markings "Caution Wall" should be on the bottom of pool to help prevent the swimmer from hitting the walls. However, appropriate lane markings should address this, and are industry standard.

CHAPTER 2 - ARCHITECTURAL

2-1 General Discussion

- Storage for the Indoor Cycling Room is located outside of the room, off of the corridor.
- Lighting in fitness module is NOT primarily indirect, but there has not been any complaints or safety concerns.
- They like the visibility of the fitness module from the admin suite on the second floor.



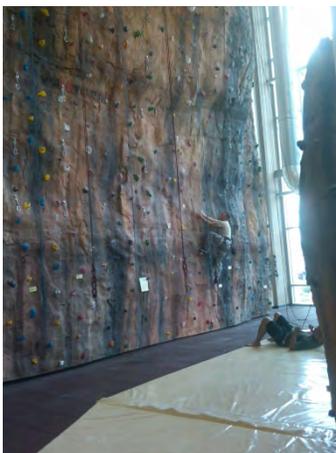
- Controls to raise the backboards are in 2 different locations. The backboards along one wall are controlled by switches along that wall. The backboards along the other wall are controlled by switches located in the storage room.
- Acoustics in the pool and gym are surprisingly good. This is due to the large number of acoustical panels on the wall, and acoustical treatment overhead.



- Lockers are “Ideal Products Inc.”, and are particle board, not plastic or phenolic.



- The roll up door in fitness storage is awesome!
- The control desk is very visible when you walk into the facility. It has a good view of the fitness floor, although access is across the circulation path. It also has views into the racquetball courts, which are located off the lobby, and into the gymnasium.
- The gymnasium contains 3 basketball courts side by side. There are some retractable bleachers on 2 walls to support the tournament court, and some portable tilt and roll bleachers on the ends. The gym floor is wood. There is a suspended 3-lane jogging track around the gymnasium. Cardio equipment is placed in alcoves around the track. The track has banked corners and is 9 laps per mile. There are a lot of windows and glass areas in the gym. The main entrance to the track is at a corner, with a couple steps up to the door. There is another entrance on the straight-away that is ABA compliant.
- There is a climbing wall and bouldering wall inside the lobby, between the lobby and the fitness floor.



- The group exercise room is divisible and is provided with a rubber floor. Flow-through storage is

provided as is mirrors and cubbies. There are no ceiling fans. Windows are provided in the corridor wall, with the cubbies located below the windows.



- The fitness area is one open area with rubber floor. There is no selectorized equipment in this facility. The floor is inadequately sized for all the equipment. Cubbies are provided.



- An indoor cycling studio is provided on the second floor with a window wall with a nice view and other walls with mirrors.
- Showers are individual booths with adjacent drying booth. Dividing walls are solid floor to ceiling and are full height ceramic tile.



- Lockers are a combination of full-height and half-height Z lockers. Benches are integral.
- The facility has men's and women's saunas, and men's and women's whirlpools.
- There was originally a concessions area in the lobby, but during design/construction, it became just a vending area.



- There is no supplemental UV filtration in the pools.
- Pools include an "L"-shaped lap/diving pool, and a smaller play pool with zero-depth entry.



### 2-2 Lessons Learned/ Standard Design Impacts

- Plan for wiring/infrastructure for electronic message boards. Locations would include lobby, and perhaps near locker rooms.
- Too many cubbies are provided in the Indoor Cycling Room. There are 31 bikes; could have used fewer cubbies and more bikes.



- Inadequate space for admin. One person has their office in the classroom, and three people (intramural sports) have their offices in a storage room.



- Low spots in the tile floor is creating puddling. The standard or criteria should require that a plan be provided in the construction documents that shows how the floor will be sloped to drains in all the wet areas.
- Add requirement for "hydration station" to standard. This is a drinking fountain with a bottle filler.



- Need to research other ways to handle sprinklers in the racquetball courts. The recessed sprinkler head covers still get knocked off during play. They have had to provide cages which interfere with the play.
- Padding for basketball courts need to be lower to floor. Bottom of padding should be no more than 4-6" off the floor. Padding should be 6' tall, and 12-14' wide is adequate.



- As seen in picture above, lights underneath jogging track are suspended on chains. This makes them susceptible to damage from balls. Need to require lights under jogging track be surface mounted.
- Need to require a ship's ladder at the very least to provide access from one roof area to another.
- A flood test should be performed on the floor to ensure all water runs to drains.



- A dishwasher should be provided in the break room.
- The same flooring in the activity area should be continued into the storage area.
- This facility has an outdoor basketball court adjacent to the facility. This court needs to be provided with lights as most play is in the evenings. The standard should provide at least 1 basketball court outside, adjacent to the facility.



- If the facility has a tournament court, there should be a requirement for a 4-sided ceiling mounted score board in addition to the wall mounted score board for the individual courts.
- Doors from whirlpools to pool are solid, and they swing into the pool deck area, which is a safety concern. They are looking at options to change this, including changing the doors to swing into the whirlpool room and making it a glass door.
- There is a real issue with the locker rooms when the facility is open but the pool is closed. There is no way to keep people from getting on the pool deck without closing off the locker rooms all together. The standard needs to require that the locker rooms are provided with a second means of egress that does not require direct access into the pool area.
- Need to provide CCTV cameras in stairways as well. Need to ensure adequate dollars are provided for the cameras. They average \$2000 each, and a medium facility could use about 25 cameras.
- When a natatorium is provided, swimming suit spin dryers should be a requirement.
- Look at acceptable lane widths for lap swimming as opposed to meets/competitions. These lanes are wide, but get comments that there are not enough lanes.
- Need to ensure trichloramines are adequately dealt with. This low-lying gas is formed from organic materials in and around the pool coming in contact with chlorine or other salts. UV filtration needs to be required to reduce the formation of trichloramines, and deck level ventilation needs to be required to remove the trichloramines once they have formed. Besides a health concern, the trichloramines lead to the rusting and corrosion of any metal surfaces. This is a real issue in the pool area of this facility.

## CHAPTER 3 - MECHANICAL

### 3-1 General Discussion

The user is happy with the HVAC system installed in the facility and feels that it is doing the job of providing a comfortable environment. The user did not have any major complaints about the HVAC system. To the best of the user's knowledge maintenance schedules of the HVAC system are being properly followed and it is easy to access equipment for maintenance and inspection (note: DPW did not have a representative present at the meeting, but was present during the walkthrough).

The natatorium is included in this facility. The facility is being monitored for energy consumption (monitoring started a week prior to our arrival.).

The user is happy with the plumbing system installed and all fixtures are operating properly. Low flow fixtures are being used in the bathrooms and locker rooms (1.28 gpf. flush toilets, 0.5 gpm automatic lavatories, waterless urinals). The hot water is being stored at 140 deg. F. The user is not experiencing any issues with the plumbing system. The user likes the sensor operated plumbing fixtures and the shower valves that are installed.

The user does not have any issues with the wet pipe sprinkler system. There was at least one false alarm and the fire doors came down. The user stated that event happened at the end of June/ first of July time frame. There have been no issues with performing inspection, testing and maintenance of the fire protection system.

### HVAC

- Most facilities on Ft. Carson are on an occupancy schedule. This facility is set up for it, but the HVAC is left running full 24 hours a day since the facility is open so long.
- 2 air changes per hour is ideal for the natatorium. Could go 1.5. Absolute minimum is 1.0 air change per hour.
- The set points for this facility are 75 degrees for cooling and 70 degrees for heating. Thermostats are set up to give a +/- 1 degree range. They have the capability of going +/- 2 degrees. Thermostats are basically just sensors now.
- The HVAC system installed is a chilled water air handling unit in connection with VAV units. All pumps and AHU fans have a variable frequency drive (VFD) motors. The AHU uses Merv 8 pre-filters and use Merv 13 for the final filter.
- Energy recovery wheels are installed

- The POC for HVAC related issues the user encounters is DPW-Kira.

### PLUMBING

- Solar panels are used for pre-heating the domestic hot water.
- The POC for plumbing related issues the user encounters is DPW-Kira.

### FIRE PROTECTION

- The user stated there were no issues with the wet pipe fire protection system.
- Document any false alarms/trips The fire doors came down for no reason.



### **3-2 Lessons Learned/ Standard Design Impacts**

- The suggestion was made during the walk-through by a member of the Ft. Carson team to include a commissioning requirement for all pool equipment and their systems in the RFP for future buildings. He stated that there was not a commissioning requirement in the RFP for all pool equipment and its systems for this facility.
- The suggestion was made during the walk-through by a member of the Ft. Carson team to have a 15 day HVAC performance run for Physical Fitness Facilities (PFF) where temperatures and humidity can be tracked before the bldg is “turned over” for occupation. If a system breaks down within the 15days then the contractor has to fix it and the clock starts over again. The 15 day wait includes the pool also.
- The suggestion was made during the walk-through by a member of the Ft. Carson team to include a provision to use/reclaim the condensate from the PDU (pool dehumidification unit) for the swimming pool surge tank. They estimate that they condensate about 10 gallons per hour and the water is already treated with chlorine etc.

**CHAPTER 4 - ELECTRICAL**

**4-1 General Discussion**

- Light switches for the whole facility are on the main wall of the fitness floor, and they are readily accessible, and can be turned on/off accidentally. When the pool lights go out, it takes at least 15 minutes for them to warm up again.



- Document the type of lighting used in the free weight area (minimum 70% indirect). Lights were all direct fixtures

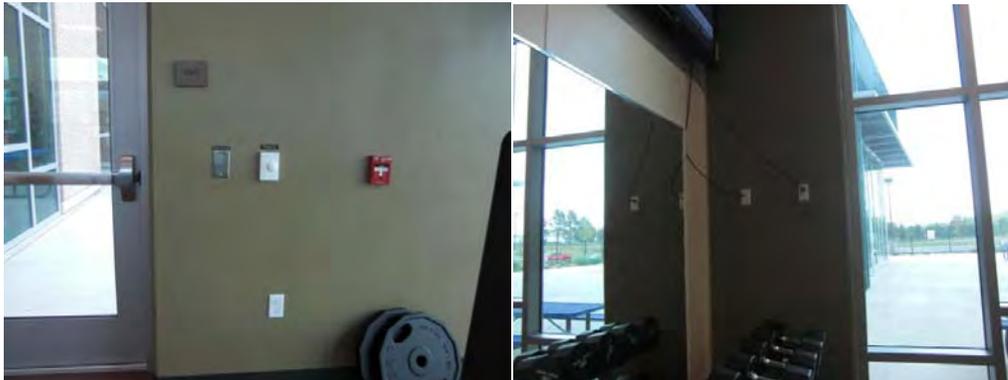


- Document any natural light via windows, clerestories, skylights



- Document if receptacles are located around the perimeter of the room and at freestanding columns

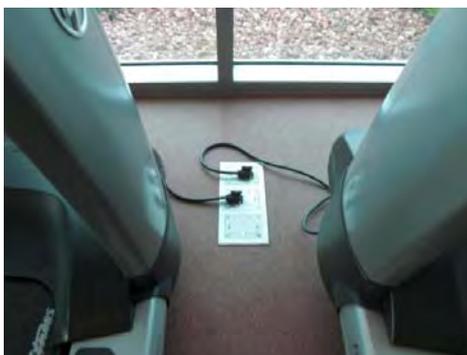
located more than 10 ft from the walls or nearest outlet



- Document if there are any floor mounted, dual or quad outlet, or recessed boxes. (Solid brass cover plates, flush mounted) Cover plates with flip-up or hinged lids are not recommended.



- Document Cardio Theater and personal fitness tracking systems. Not installed
- Document type of data outlets at cardio. Equip. floor boxes. (1 data port per each power outlet provided for cardio.) Only power outlets were installed.



- Document type of data ports.( workstations, card access device, mobile monitoring workstations) Video

recording is not installed at this time. A projector outlet with a data port was installed but it is not used.

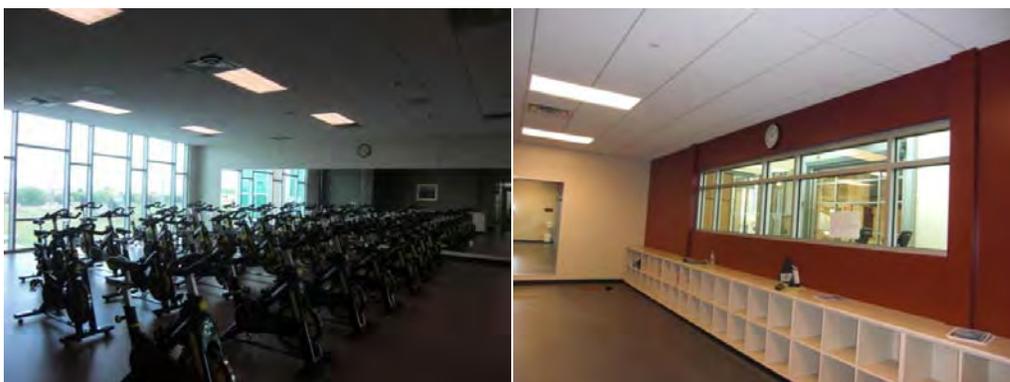


- Document type of sound system. (Speakers, Public Address, microphone station, cassette/cd combination unit, television monitors)



**4-2 Exercise Module Large Group Exercise (aerobics, martial arts, yoga, step-conditioning, kick boxing)**

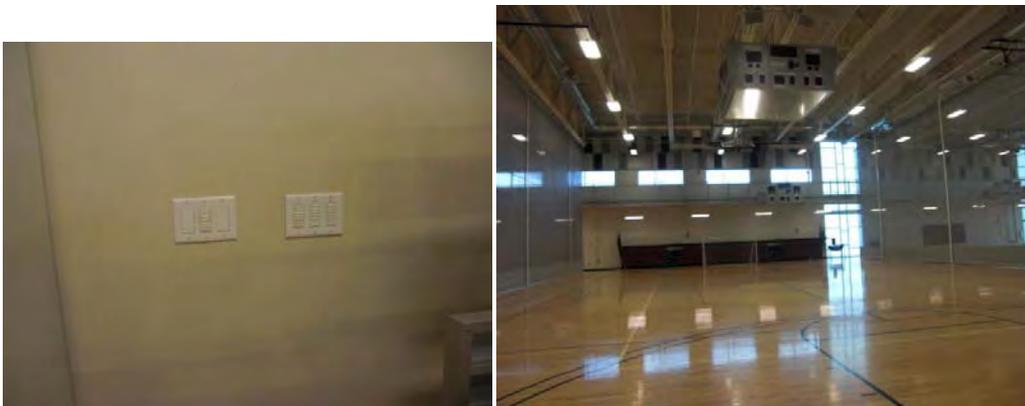
- Document if the lighting in the large group exercise areas are pendant mounted or suspended. The lighting is recessed.



- Document if the lighting is switched to allow for different light levels and natural light via windows. Yes



- Document how lighting on each side of the movable wall is controlled separately so each side of the room can function independently. Yes



- Document if there is a recessed A/V rack with an amplifier, input/output control device and 2 microphone inputs. CD/DVD/MPE player with remote control.



- Document if there is two microphone outlets wired to locations remote from one another within the module for directed activities.



- Document type of sound system. (Ceiling mounted speakers)



**4-3 Structured Activity Module (Climbing Wall, Spinning Studio, Racquetball or Squash court, Small Group Exercise Room, Fitness, Health Assessment, and Concessions Areas)**

- Document the type of direct/indirect lighting that illuminates the gymnasium



- Document if there is multilevel switching or dimming in the gymnasium. Yes
- Document independently control lighting on each court or for special activities are provided in the gymnasium. Yes

- Document if there is natural lights shining into the gymnasium spaces through the use of windows/overhead skylights.



- Document type of physical protection (wire cages/etc) for the gymnasium lighting, exit signage, fire alarm/annunciation devices.



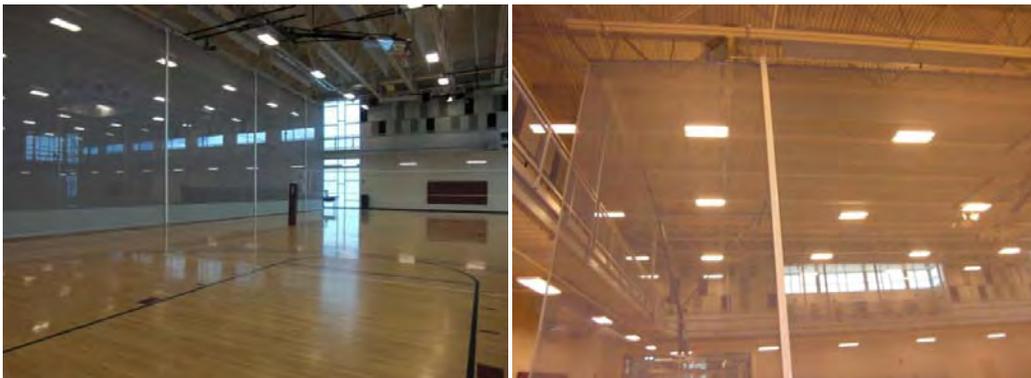
- Document where lighting control is located. (controlled/protected location) Lighting controls are located near bleachers
- Document if (1) 4-outlet, power outlet and (2) data connections both in recessed floor boxes, centered under the anticipated scorer's table location in the gymnasium were provided.



- Document the type of electronic scoreboard. 2 for each court, plus a center 4-sided board for the tournament court.



- Document if there is a divider curtains that blocks views , lower light levels in gymnasium



**4-4 Lobby, Administrative Space, Locker Rooms, Natatorium**

- Document if Lobby lighting allow for natural light through large windows and clerestories



- Document the type of lobby lighting control center at the control desk.



- Document if there is enough power/data receptacles at the Control Desk. Yes
- Document the type of TV throughout locker rooms. None
- Document if there is multilevel switching or dimming in admin and/or other areas. Yes
- Document if Lighting is controlled with an automated time clock with a manual on/off time override in the natatorium



- Document if there an electrical metering of the natatorium (EMS/UMCS connection?) Yes



- Document if the lighting is controlled IAW ASHRAE 90.1 (time clock, motion sensors, etc)



- Document if there is a keyed HOA switch at the reception area



- Document if Lightning Protection System is installed.



- Document if Cathodic Protection System was installed



- Document if wiring is concealed from view in finished rooms/areas. Yes
- Document if there a Service Entrance Panel metering (EMS/UMCS connection?) Yes
- Document adequate working clearance for electrical and communication panels



CHAPTER 5 - COMMUNICATIONS

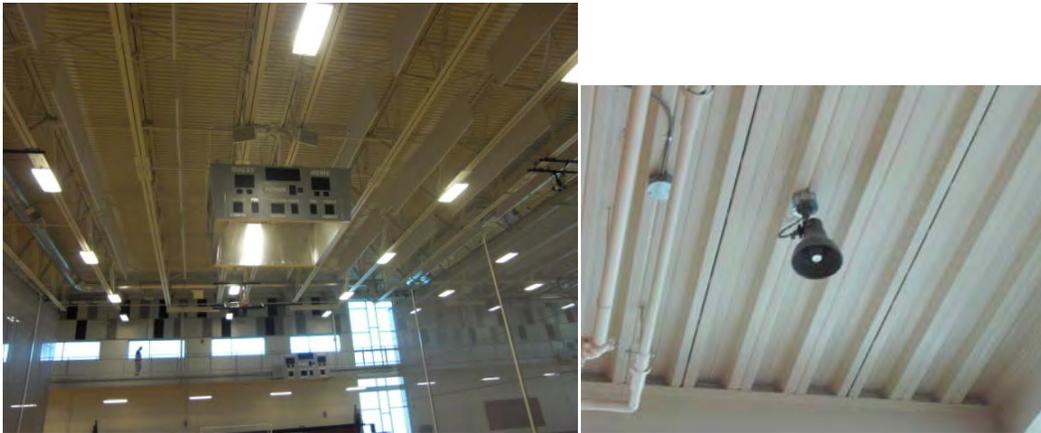
- Document satisfaction with intercom system (announcements understandable) Yes
- Document type of sound system in the racquetball court. (Flush recessed speakers linked to paging system. Provide one speaker in spectator/waiting area with court speaker at back upper wall)



- Document type of sound system in the Climbing Wall area. (Speakers, paging system)



- Document type of wall mounted speakers for public announcements in gymnasium. Speakers are ceiling mounted.



- Document type of ceiling mounted speakers for public announcements in corridor.



- Document type of sound system in the lockers, showers, toilet, and sauna areas. (Speakers, Public Address) None
- Document type of intercom system installed at the control area (wall mounted, free standing, etc.)



- Document if Telephone/Data/Power outlets meet needs at reception and admin areas. Yes
- Document if Communication Rooms are adequately heated/cooled. This room is always locked.

**CHAPTER 6 - SECURITY**

- Document satisfaction with security systems. Not installed
- Document recording capability of security systems. Not installed
- Document any video-surveillance of the entire pool area. Not installed
- Document any video-surveillance of entrance to locker room and racquetball courts. Not installed
- Document any video-surveillance of cardiovascular, circuit, exercise areas and gymnasium. Not installed.
- Document any control of who enters the building and check-in arrangement



**CHAPTER 7 - MISCELLANEOUS**

**7-1 CIVIL/SITE**

- Outdoor fields should be located adjacent to the PFF, and should be designed to NCAA standards.
- Lights on outdoor basketball courts should be provided.



**APPENDIX A - ROSTER**

# Post Occupancy Technical Review (POTR) - Roster

Installation: FT. CARSON		PN:	Bldg:
Name: Jay Clark		Organization: Huntsville	
Phone: (256) 895-1673	Email: james.t.clark@usace.army.mil		
Professional Responsibility: Architect			
Name: Jackie White		Organization: CEHNC	
Phone: (256) 895-1742	Email: jackie.white@usace.army.mil		
Professional Responsibility: Electrical Engineer			
Name: TIA CHANDLER		Organization: CENWO	
Phone: (402) 995-2784	Email: tia.chandler@usace.army.mil		
Professional Responsibility: PROJECT MANAGER			
Name: WAYNE J. MCCORMICK		Organization: USACE	
Phone: (719) 338-8171	Email: <del>wtmccormick@concast</del> wayne.j.mccormick@usace.army.mil		
Professional Responsibility: PE - IVY CDC			
Name: Carolyn Woods		Organization: DFMWR - CYSS	
Phone: (719) 526-2301	Email: carolyn.a.woods@naf@mail.mil		
Professional Responsibility: Transition Spec.			
Name: Lorri Martindale		Organization: DFMWR - Recreation	
Phone: (719) 526-9120	Email: lorri.d.martindale.civ@mail.mil		
Professional Responsibility: Facilities Mgr.			
Name: Robert E. Jackson II		Organization: USACE - HNC	
Phone: (256) 895-1704	Email: Robert.E.Jackson@usace.army.mil		
Professional Responsibility: Mechanical Engineer			

# Post Occupancy Technical Review (POTR) - Roster

Installation:	PN:	Bldg:
Name: <i>Diane McCarthy</i>		Organization: <i>USACE</i>
Phone: <i>(719) 375-4100</i>	Email: <i>diane.v.mccarthy@usace.army.mil</i>	
Professional Responsibility: <i>P.E. - MONARCH CDC</i>		
Name: <i>Matt Ellis</i>		Organization: <del><i>USACE</i></del> <i>CENWO-CD-PM-M</i>
Phone: <i>(719) 526-0574</i>	Email: <i>matthew.b.ellis@usace.army.mil</i>	
Professional Responsibility: <i>RE: ACO</i>		
Name: <i>MARTIN RASMUSSEN</i>		Organization: <i>CENWO-PM</i>
Phone: <i>(719) 526-8351</i>	Email: <i>martin.v.rasmussen@usace.army.mil</i>	
Professional Responsibility: <i>PM</i>		
Name:		Organization:
Phone: ( )	Email:	
Professional Responsibility:		
Name:		Organization:
Phone: ( )	Email:	
Professional Responsibility:		
Name:		Organization:
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Professional Responsibility:		

**APPENDIX B - CHANGE REQUESTS**



# Change Request Register

Change Request No	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No	Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Mod Age Days
						RFP Date	Proposal Date							
<b>Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson</b>														
R00001	Additional Concept Proposal - New Site	B	C	4	6	08/27/2009	Not Required	Not Required	Yes	R00001	09/01/2009	L - Mod completed, mod package sent to district	09/10/2009	5
							Not Required			A00001	08/29/2009	Necessity for change: 01. The Using Agency (Fort Carson) has determined the location of the new Physical Fitness Facility is better suited at the new site location due to proposed soldier living arrangements at the Wilderness Road site.	MRR	
R10001	Additional Concept Proposal New Site	B	C	4	6	09/17/2009	Not Required	Not Required	Yes	R10001	09/29/2009	L - Mod completed, mod package sent to district	11/01/2009	8
							Not Required			A00002	09/29/2009	Necessity for change: 1. The Using Agency (Fort Carson) has determined the location of the new Physical Fitness Facility is better suited at the new site location due to proposed soldier living arrangements at the Wilderness Road site.	MRR	
R00003	New Site Design Package	B	C	4	6	08/28/2009	\$972,289.00	0 days	Yes	R00003	11/24/2009	L - Mod completed, mod package sent to district	MRR	88
							09/25/2009			A00003	11/20/2009	Necessity for change: 1. The Using Agency (Fort Carson) has determined the location of the new Physical Fitness Facility is better suited at the new site location, within the Cantonment Area on Specker Avenue, due to proposed soldier living arrangements at the Wilderness Road site.		
R10003	Re-Adjust Line Items	B	C	4	6	12/04/2009	Not Required	Not Required	Yes	R10003	12/08/2009	L - Mod completed, mod package sent to district	12/14/2009	4
							Not Required			A00004	12/04/2009	Necessity for change: 1. This supplement is issued to identify and designate for payment, specific scopes of work related to, and limited by, Notice To Proceed previously issued under R00003, dated 20 November 2009. Total adjustment (NTE Amount) to the contract under this modification presently remains at \$500,000.00 and is designated for payment purposes	Wp	
R00004	Keyless Entry Turnkey	B	C	4	6	12/16/2009	\$68,603.00	0 days	Yes	R00004	04/19/2010	L - Mod completed, mod package sent to district	12/16/2009	123
							02/24/2010			A00005	04/18/2010	Necessity for change: 1. The User (Fort Carson DPW) is turning over facilities to units without operational keyless access. This is a security concern for these units. The User is having difficulty in the	MRR	

Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



US Army Corps  
of Engineers

# Change Request Register

17 Sep 2012

Restationing Resident Office

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No	Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Mod Age Days	
						RFP Date	Proposal Date								
Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)															
R00007	CDC Water/Sewer Service	B	C	1	6	09/16/2010	09/16/2010	\$52,137.00	0 days	Yes	R00007 A00006	10/20/2010 10/15/2010	L - Mod completed, mod package sent to district  development of contract services to perform this service and is requesting that the USACE add to current contracts as a turnkey service in order to provide secure facilities, in regards to keyless access, at turnover.	09/16/2010 MRR	34
R00010	Add 4" Electrical Conduit	B	C	1	6	01/28/2011	01/28/2011	\$11,033.00	0 days	Yes	R00010 A00007	02/15/2011 02/14/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. Future CDC is to be constructed just south and adjacent to the new Physical Fitness Facility (PFF) to support short term day care for soldiers and families of soldiers using the new PFF. New electrical conduit lines are to be installed on the south and east side of the new PFF. To prevent future disruption of parking pavement and utility interruptions on the PFF project site it was critical to install the CDC service connections during PFF utility construction. It will also cost less to install CDC service connections at the same time PFF utilities are install.	01/28/2011 ACH	18
R00011	Misc Site & System Changes -Trend Log #1	B	C	1	6	09/18/2009	05/04/2011	\$24,290.00	0 days	Yes	R00011 A00008	07/13/2011 07/13/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. 1. Air Exchange revisions are required in order to meet ASHRAE and LEED standards. The air changes in the prescriptive portion of the RFP result in a very energy inefficient facility. 2. The lighting levels described in the RFP were not compatible with attainment of the contract LEED	09/18/2009 JAH	663
Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]															
Sort - Modification No															



# Change Request Register

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date	RFP Date	Proposal Date	Contractor Proposal	Negotiated	Ref No	Mod No	Contractor Signature	Government Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Action	Mod Age Days
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Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)

CTI

															<p>requirements. The criteria change is necessary to meet project goals while providing a functional facility.</p> <p>3. The necessity to have detention ponds was considered in the change of project siting but planting other than lawn turf was not considered at the time of site change. The landscaping proposed under the re-siting was determined to be inadequate for a detention pond environment.</p> <p>4. The existing 6" isolation valve to the Event Center water service line is not operational and must be changed when the new 10" water main is installed.</p> <p>5. Trees that are called out to be temporarily removed and relocated back to the site cannot withstand the stress of being re-transplanted within a short period of time. Consequently, the trees were dug and relocated by this contractor will be maintained at the alternate site and not re-transplanted on this project site.</p> <p>6. Cuspidor planned location is just outside the gymnasium with fountains to keep them away from the hardwood floor. The device is designed to be installed recessed but will compromise the 2-hour fire rating of the wall. The user/operator was consulted and they agreed cuspidors are unpleasant to use and clean and unnecessary; a drinking fountain with a bottle filler is preferred.</p> <p>7. The seismic valves installed on prior projects cause nuisance outages due to vibration from truck or tank traffic, from falling icicles, and from thunder. Ft. Carson is in a very low seismic event probability zone. The protection potentially gained is not worth the problems associated.</p> <p>8. The excavation for the irrigation system at the track and ball field area uncovered unexpected cobble which is unsuitable for backfill material around the irrigation piping. Suitable backfill must be imported to be placed around the irrigation piping.</p> <p>9. Changing the swing of doors 128 &amp; 130 inward as opposed to outward into the pool area caused dark vestibule areas at these doorways. Additional can lights will be required to meet minimum lighting levels.</p> <p>10. Scoreboards require installation and will be a permanent part of the building necessary to perform its intended function. <u>Hot tub access controls are necessary to</u></p>			
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Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



# Change Request Register

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref		Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due		
						RFP Date	Proposal Date			No	Mod			Date	Action	By
Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)																
R0012	Misc Site & Systems Changes-Trend Log#2	B	C	1	6	07/06/2011	05/27/2011	\$38,750.00	0 days	Yes	R00012 A00009	08/10/2011 08/09/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. These changes are necessary for the following: 1. Seed mix density must be changed in order to ensure establishment. 2. Jogging trail near Victory Loop Rd must be added to ensure existing jogging trail network remains connected. 3. Fire access road must be modified to accommodate adjacent construction. 4. Infrastructure for future electronic message boards should be provided prior to closing up the walls to prevent future demo of the walls to install the power, comm, and backing necessary.	07/08/2011	SAS	35
R0013	Adverse Weather Jul 09 - Feb 11	B	C	E	6	11/02/2011	Not Required	Not Required	0 days	Yes	R00013 A00010	11/08/2011 11/02/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. This Defaults Clause addresses no-cost time extensions for delays beyond the fault and control of the contractor.		SAS	6
R0014	Field Fence Extension & Core Types	B	C	1	6	11/02/2011	09/23/2011	\$13,249.00	0 days	Yes	R00014 A00011	11/08/2011 11/02/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. The outfield fencing height is being increased to compensate for the shorter distance between the home plate and the fence due to existing topography. For door cores DPW is now accepting Medeco cores in addition to Best cores. Medeco cores are less expensive.	11/02/2011	SAS	6
R0015	Spa Lifts and Additional Trees	B	C	1	6	12/05/2011	11/30/2011	\$14,443.00	0 days	Yes	R00015 A00012	01/19/2012 01/19/2012	L - Mod completed, mod package sent to district  Necessity for change: 1. Additional trees are required to blend with the resiliency campus landscape approach and with the two new adjacent	12/05/2011	SAS	45

Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



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Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No		Contractor Signature		Stage / Status / Remarks / Necessity for Change	Mod Due		Mod Age Days
						RFP Date	Proposal Date			Mod No	Govt No	Date	Action By				
Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)																	
R0016	Drainage Repair	B	C	1	6	01/03/2012	01/18/2012	\$7,056.00	25 days	Yes	R00016 A00013	01/20/2012 01/19/2012	A spa lift for each spa, instead of one portable shared between the two, is a new spa code requirement (Virginia Graeme Baker Pool and Spa Safety Act), pools and spas currently under construction will not be grandfathered in under the previous version of the Act.	01/03/2012	SAS	17	
													Facilities.				
R0017	Sidewalk & Running Trail Addition	B	C	1	6	03/23/2012	04/02/2012	\$64,499.00	0 days	Yes	R00017 A00014	04/16/2012 04/16/2012	1. Site drainage at the northeast of the site is problematic due to adjacent construction projects. It is in the best interest of this project to address the issue under this contract to avoid other contractors working within the footprint of the Fitness Center construction site. L - Mod completed, mod package sent to district	03/23/2012	SAS	24	
													A separate completion date of 15 May 2012				
R00002	Suspension of Work (Construction Only)	B	C	4	6	10/08/2009	Not Required	Not Required		Yes	R00002 P00001	10/08/2009 10/08/2009	1. Connection to surrounding pedestrian traffic routes were not addressed in the contract requirements. Additional sidewalks and extension of the existing jogging trail is necessary to continue pedestrian flow through the project site. L - Mod completed, mod package sent to district	10/18/2009	MRR	0	
													Necessity for change:				
R10002	Suspension of Work (Construction Only)	B	C	4	6	12/01/2009	Not Required	Not Required		Yes	R10002 P00002	Not Required 12/02/2009	L - Mod completed, mod package sent to district	12/11/2009	MRR	1	
													Necessity for change:				
R20003	New Site Design & Delay Cost	B	C	4	6	12/10/2009	08/28/2009	\$1,527,993.00	0 days	Yes	R20003 P00003	02/01/2010 01/28/2010	L - Mod completed, mod package sent to district	01/24/2010	MRR	157	
													Necessity for change:				
													The Using Agency (Fort Carson) has determined the				

Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



# Change Request Register

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No	Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Mod Age Days
						RFP Date	Proposal Date							
<b>Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)</b>														
R40003	Lift Suspension of Work (Construct&Demo)	B	C	S	6	04/01/2010	04/02/2010	\$13,780.00	0 days	N/A			04/01/2010	33
R30003	New Shed/Utility Construction	B	C	4	6	08/12/2009	08/28/2009	\$1,638,549.00	0 days	Yes			08/12/2009	280
R50003	New Site Building Construction	B	C	4	6	08/20/2009	08/28/2009	\$5,074,083.00	162 days	Yes			08/20/2009	340
R00008	Under Slab Conduit	B	C	4	6	06/23/2010	06/23/2010	\$8,708.00	0 days	Yes			06/23/2010	147

Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



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# Change Request Register

17 Sep 2012

Restationing Resident Office

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No	Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Mod Age Days	
						RFP Date	Proposal Date								
Contract No. W9128F-09-C-0024 Physical Fitness Facility, Ft Carson (Continued)															
R00009	Quantum Lighting Submittal	B	C	4	6	06/23/2010	06/23/2010 10/21/2010	\$3,559.00	0 days	Yes	R00009 P00009	01/07/2011 12/22/2010	L - Mod completed, mod package sent to district	06/23/2010 MRR	198
R00006	Energy Optimization	B	C	4	6	06/23/2010	06/23/2010 10/21/2010	\$942,956.00	0 days	Yes	R00006 P00010	01/24/2011 01/19/2011	L - Mod completed, mod package sent to district  Necessity for change: 1. HQ has indicated that due to savings being realized due to the competitive environment lately, to pursue possible areas to "reinvest" these savings back into the contract/projects to reduce future O&M costs (energy/water).  Discussions/review/proposals shall focus in areas that reduce future energy and water costs to include raising the energy efficiency of the buildings and systems (e.g. raise energy reduction baseline to 40%, or 50%, building insulation/glazing systems, reduce water consumption, etc.). Innovation is encouraged.	06/23/2010 MRR	215
R00005	Furniture and Fitness Equipment Addition	B	C	4	4	02/23/2010	02/25/2010 06/28/2010	\$948,712.00	20 days	Yes	M	- Cancelled on 05/13/2011	Necessity for change: 1. Fort Carson Directorate of Family Morale Welfare Recreation (DFMWR) Office (User) requested that furniture	02/23/2010 MRR	0

Reason Codes [1,4,5,6,7,8,9,A,E,G,I,Q,R,S,T,V]

Sort - Modification No



# Change Request Register

Change Request No.	Change Request Title	Mod Type	Org Agency	Reason	Trans Code	Inception Date		Contractor Proposal	Negotiated	Ref No	Contractor Signature	Stage / Status / Remarks / Necessity for Change	Mod Due Date	Mod Age Days
						RFP Date	Proposal Date							
<b>24 Contract Changes</b>														
W9128F-09-C-0024	Physical Fitness Facility, Ft Carson (Continued)													
\$9,486,461.00 380 days Contract Required Completion Date 02/17/2012 and fitness equipment, per the final design package, be installed under the current construction contract. A RFP was issued to the construction contractor, cost negotiated and funding MIPR'd from the User to the USACE. In accordance with Section 01 10 00 paragraph 5.4.2.1 of the RFP "the government reserves the right to change the method of procurement of and installation of furniture to Contractor Furnished/Contractor Installed."														
													CTI	

**APPENDIX C - REQUESTS FOR INFORMATION**



# All Requests for Information

17 Sep 2012

All Requests for Information  
W9128F-09-C-0024 NA

Restationing Resident Office

RFI No.	Date Requested	Date Answered	Requester's Name	Answer Prepared by	Mod Required ?	Change No.	RFI Subject - Information Requested
RFI-0001	08/27/2009 08/28/2009	09/09/2009	Darwin Morrison Martin Rasmussen	Darwin Morrison Martin Rasmussen			<p>RFI Subject - Information Requested Government Response</p> <p>INFORMATION REQUESTED: NCAA Certifiable Track - Does USACE require a NCAA certifiable track instead of the track shown on RFP drawings? See attached sketch for proposed layout.</p> <p>GOVERNMENT RESPONSE: The Contractor is to construct an outdoor jogging track per the RFP and Contractor's proposal, which includes an asphalt surface bettement.</p> <p>The User (DFMWR) has requested that an NCAA certifiable track be constructed.</p> <p>Based on available funds the Contractor is to proceed with design and construction of a NCAA certifiable track with an asphalt surface as long as the funds for the proposed track are not exceeded.</p> <p>Additional bettements such as a surface upgrade and concrete curb will be tracked on the trend log. If funds are available the contractor will be directed to proceed with these bettements.</p>
RFI-0002	08/27/2009 08/28/2009	10/04/2009	Darwin Morrison Martin Rasmussen	Darwin Morrison Martin Rasmussen			<p>INFORMATION REQUESTED: Sound System in Pool Area - The RFP states that the "Pool office need to contain a sound system for the pool area." How many speaker, amps, components, and features does this system require. In addition, is this the part of the same system mentioned in section 3.8 which states "provide commercial grade audio system for each group exercise room with recessed A/V rack and ceiling mounted speakers". If not, what are the requirements for the system?</p> <p>GOVERNMENT RESPONSE: Per paragraph 6.5.2.7.7 sub-paragraph IV Natatorium In specification section 01 10 00 of the RFP "Pool office also needs to contain a sound system for the pool area for music."</p> <p>The pool sound system will need to meet the same requirements as for the gymnasium, at a minimum.</p> <p>Sound System: Built-in system for announcing events in the Pool area. Suspended directional ceiling speakers, 200 watt minimum output rating, capable of reproducing human speech, minimum. Multipurpose functions will be necessary, provide speakers capable of CD quality sound reproduction of music. Sound system must be designed for the humid and corrosive pool environment.</p> <p>The contractor will need to determine number of speakers, amps, and components required based on the information in this RFI and requirements of the RFP.</p> <p>Per paragraph 3.8 in specification section 01 10 00 the public address system may be integrated into the fire alarm/MNS. The contractor may have difficulties with testing requirements if the sound system is integrated into this same system. The pool sound system can be a component of the entire building sound system monitored at the master station at the control desk. If the sound system for the entire facility is monitored a the control desk it shall be able to provide for different music in different areas, i.e. there is spinning to rock music in one area, the pool has top 40 playing and in another area a yoga class has whale singing.</p> <p>In regards to the requirements in paragraph 3.8 of specification section 01 10 00 in which the contractor is to provide "commercial grade audio system for each group exercise room with recessed A/V rack and ceiling mounted speakers" for the pool area the contractor only needs to meet the same requirements, at a minimum, as for the gymnasium.</p> <p>INFORMATION REQUESTED: Mass Communication at Fields - Is mass communication required at the track and softball fields?</p> <p>Note: Verify if this is a Parade Field, if so mass communication could be a requirement.</p> <p>GOVERNMENT RESPONSE: Mass Notification is required 15' outside of a building where personnel congregate. This is provided by the wide area "big voice". The RFP does not address installing additional towers.</p> <p>The RFP also states "Mass Notification speakers shall be located on the exterior of the building in the vicinity of the play areas."</p>
RFI-0003	08/27/2009 08/28/2009	09/15/2009	Darwin Morrison Persephone Venable	Darwin Morrison Persephone Venable			

Range: All Status: All

Sort: RFI No.



# All Requests for Information

All Requests for Information  
W9128F-09-C-0024 NA

RFI No.	Date Requested Date Received	Date Answered	Requester's Name Answer Prepared by	Mod Required ? Change No.	RFI Subject - Information Requested Government Response
RFI-0004	08/28/2009 08/29/2009	09/03/2009	Darwin Morrison Martin Rasmussen		<p>Mass communication is not required at the track, ball fields, and parade field. Meet those requirements noted in the RFP and references to RFP noted above.</p> <p>INFORMATION REQUESTED: HVAC Required Air Change Rates - HVAC systems serving the Fort Carson Physical Fitness Facility will provide outdoor ventilation in accordance with the USACE RFP W9128F-09-R-0043 and ASHRAE 62.1-2004. HVAC supply, return and exhaust air systems will provide the required air change rate requirements described in the USACE RFP W9128F-09-R-0043 and the Technical Criteria U.S. Army Physical Fitness Facility documents. Please verify if these design assumptions are correct.</p> <p>GOVERNMENT RESPONSE: Yes the Contractor is correct, follow the RFI for the air changes per hour outlined and specified and follow ASHRAE 62.1-2004 for outdoor air and exhaust ventilation requirements as stated in paragraph 5.8.2.1.</p> <p>INFORMATION REQUESTED: Gym Hardwood Floors - Section 01 10 00 Page 32 of 543 under the paragraph Size and Construction. overall ball return of 96% with 86% or better shock absorption.</p> <p>The RFP requirements for the gymnasium floor is specifying an overall performance of 96% or better ball return with 86% or better shock absorption. I have attached a USSL laboratory test showing the minimum DIN standards. It Refers to a 90% ball return and a 53% for reduction. If we provide a floor that meets this DIN requirement will that be an acceptable solution?</p> <p>GOVERNMENT RESPONSE: Based on the information below collected over the last month the contractor is correct.</p> <p>Yes, the contractor needs to provide a floor that meets the DIN requirements as per the USSL testing meeting minimum DIN standards.</p> <p>Correspondence Information to aid in answering this RFI:</p> <p>Martin,</p> <p>After further research, I agree that the requirements should be as shown in the test report you forwarded me. Basically minimum 90% ball rebound and minimum 53% shock absorption.</p> <p>I have made a note to make this change to our RFP's for future projects.</p> <p>Please let me know if you have any other questions.</p> <p>Thanks,</p> <p>Jay</p> <p>Jay Clark, AIA Center of Standardization Architect - Child Development Centers (0-5) Physical Fitness Facilities US Army Engineering and Support Center, Huntsville 256-895-1673 voice; 256-895-1602 fax</p> <p>Martin,</p> <p>I had asked a basketball flooring company this question, and their answer is below. It appears that the criteria in the RFP is too stringent. I am TDY until Friday, but will try to do some more research before I make a final decision.</p>
RFI-0005	08/28/2009 08/29/2009	10/04/2009	Darwin Morrison Martin Rasmussen		



# All Requests for Information

17 Sep 2012

All Requests for Information  
W9128F-09-C-0024 NA

Restationing Resident Office

RFI No.	Date Requested	Date Answered	Requester's Name	Answer Prepared by	Mod Required ?	Change No.	RFI Subject - Information Requested
							Government Response
RFI-0006	08/28/2009 08/29/2009	10/06/2009	Darwin Morrison Martin Rasmussen				<p>Thanks,</p> <p>Jay</p> <p>Jay Clark, AIA Center of Standardization Architect - Child Development Centers (0-5) Physical Fitness Facilities US Army Engineering and Support Center Huntsville 256-895-1673 voice, 256-895-1602 fax</p> <p>-----Original Message----- From: Jay [mailto:jclark638@charter.net] Sent: Tuesday, September 15, 2009 11:51 AM To: Jamie Sartin Cc: Clark, James T HNC; jclark638@charter.net Subject: Re: Din Standards</p> <p>Jamie,</p> <p>Thanks for the info. This is a physical fitness facility with a 3-court gymnasium at an Army installation. They will be using a maple gymnasium floor. The issue is our specification seems to be more stringent than the industry standard. Your reply confirms that as well.</p> <p>Thanks again,</p> <p>Jay</p> <p>----- Jamie Sartin &lt;jsartin@cbsports.us&gt; wrote: =====</p> <p>Mr. Clark,</p> <p>Your letter assessment of DIN standards are correct. 90% minimum ball rebound and 53% minimum shock absorption. What type of floor are you specifying and for what type of facility?</p> <p>Let me know if we can help.</p> <p>Best regards, Jamie Sartin</p> <p>INFORMATION REQUESTED: Banked Corners at Running Track - Our understanding is that due to existing tracks with banked corners this project is not required to provide them. The proposal did not include costs for banked corners. Per design meeting 8/26/09 we are to proceed with rough order of magnitude pricing to modify track and basic design. Attached are 3 sketches showing our concept for the banked corners. Please confirm configuration of banked corners at the running track.</p> <p>GOVERNMENT RESPONSE: Contractor's configuration is accepted per review by DPW and DFMWR.</p> <p>A modification will be completed to cover the additional cost for the banked corners.</p> <p>INFORMATION REQUESTED: Pool Configuration - Please confirm the final pool configuration acceptable as proposed with two pools or do we connect them into one? Is the stair access location acceptable? Is the depth of the childrens/Zero entry pool to be at 2.5' at the deep end? Is a pool payment access control point required at front desk?</p>
RFI-0007	08/28/2009 08/29/2009	10/04/2009	Darwin Morrison Martin Rasmussen				



# All Requests for Information

RFI No.	Date Requested	Date Answered	Requester's Name	Mod Required ?	RFI Subject - Information Requested
	Date Received		Answer Prepared by	Change No.	
RFI-0008	08/28/2009 08/29/2009	10/04/2009	Darwin Morrison Martin Rasmussen		GOVERNMENT RESPONSE: A) Please confirm the final pool configuration acceptable as proposed with two pools or do we connect them into one? TWO POOLS IS ACCEPTABLE. CONNECTION OF THE TWO POOLS IS UNACCEPTABLE! CONFIGURATION PER ATTACHED DRAWING IS ACCEPTABLE! B) Is the stair access location acceptable? YES. PER ATTACHED DRAWING! C) Is the depth of the children's/zero entry pool to be at 2.5' at the deep end? YES. PER ATTACHED DRAWING! USACE IS WORKING MODIFICATION FOR ADDITIONAL COST, IF ANY! D) Is a pool payment access control point required at front desk? THE POOL PAYMENT CONTROL POINT WILL BE AT THE CONTROL DESK. (FOYER FRONT DESK)!
RFI-0009	08/28/2009 08/29/2009	09/09/2009	Darwin Morrison Persephone Venable		GOVERNMENT RESPONSE: Contractor shall coordinate placement locations for the "Fit Link" systems, including placement of the "kiosks" stations, with the USACE and User during the 60% Building Design Review submittal. This will be accomplished prior and during the October 14 review meeting to be held at Fort Carson. INFORMATION REQUESTED: Keyless Access Entry Control - Please provide the cut-sheets for the Lenel Systems International Inc. keyless access entry control system. GOVERNMENT RESPONSE: E-mailed Lenel system drawings to Mr. Ray Thom 8/24/09. If further information is required please let me know. I can try to provide a parts list but it would be up to the designer to follow through on individual cut sheets.
RFI-0010	08/28/2009 08/29/2009	10/04/2009	Darwin Morrison Martin Rasmussen		INFORMATION REQUESTED: Modular Furniture Design - Please provide the layout for the modular furniture design and all the locations for the televisions. Are the televisions ceiling or wall mounted? GOVERNMENT RESPONSE: Contractor shall coordinate furniture layout, including television mounting locations, with the USACE and User during the 60% Building Design Review submittal. This will be accomplished prior and during the October 14 review meeting to be held at Fort Carson. INFORMATION REQUESTED: Relocated Laundry Room - "During the Design Charrette Conference held on August 12, 2009, the Ft. Carson user group expressed a desire to have the laundry relocated closer to the control desk near the main entry. (See the attached drawings that show the revised location of the laundry room.) Please have the user group review and provide any comments or concerns regarding the revised layout."
RFI-0011	09/01/2009 08/29/2009	09/15/2009	Darwin Morrison Martin Rasmussen		GOVERNMENT RESPONSE: Revised location of laundry room is acceptable per attached drawings to this RFP that the Contractor provided. Please center door 141 along wall line 3.1 and turn utility sink 90 degrees and locate along wall 3.1. Also make sure to clarify dryer and washer requirements in the Contractor's design package per the RFP.



# All Requests for Information

RFI No.	Date Requested	Date Answered	Requester's Name	Answer Prepared by	Mod Required ?	Change No.	RFI Subject - Information Requested
RFI-0012	08/28/2009 08/29/2009	10/04/2009	Darwin Morrison	Martin Rasmussen			<p>RFI Subject - Information Requested Government Response</p> <p>INFORMATION REQUESTED: Fitness Equipment - Please provide cut sheets with sizes and power/communication requirements for all fitness equipment. The size of the equipment is needed to provide proper access for loading of equipment.</p> <p>GOVERNMENT RESPONSE: Contractor shall coordinate fitness equipment layout with the USACE and User during the 60% Building Design Review submittal. This will be accomplished prior and during the October 14 review meeting to be held at Fort Carson.</p> <p>Based on these meetings the contractor will be able to determine power/communication requirements for the fitness equipment.</p> <p>INFORMATION REQUESTED: Parking Lot Power - In the RFP section 6.9.3, an electrical "stub point" is mention for the exterior parking lot lights. Where exactly do you need this located, what would you like it to be terminated in (ie, junction box, panel, some kind of cabinet, disconnect, etc), and what is the voltage and phase of the 10KW power supply.</p> <p>GOVERNMENT RESPONSE: According to Appendix B, in the RFP, the list of CADD files supplied included a microstation file titled FCJ2E-LP001.dgn. This CADD file will show the nearest light pole that is required for the exterior lighting stub point.</p> <p>The power for the parking lot lighting should be 3 phase, 480V, 5-wire.</p> <p>We would like all electrical metering required to be part of the switchboard/panelboard and installed by the manufacturer.</p> <p>The RFP contradicts itself with the type of fiber optic connectors required. Ft. Carson uses ST connectors.</p> <p>Per the 13A this area is defines as "cancellation". Therefore, all communications ductbanks will need to be concrete encased.</p> <p>The RFP states that we should derate the electrical equipment for 5000'. Not sure if this will affect any equipment but we should be derating equipment for the altitude of the building. As we know this can cause problems with generators.</p> <p>Can the designer provide information in their specifications for electrical commissioning?</p> <p>INFORMATION REQUESTED: Cardio Theater - The Fort Carson PFF RFP section 6.5.2.7(h) mentions something called a "Cardio Theater". Attached is what we think a Cardio Theater is. Is this what you are looking for? In addition, what room will the Cardio Theater be placed in and how many TV's will it operate.</p> <p>GOVERNMENT RESPONSE: The attached equipment cut sheet for the "Cardio Theater" is acceptable per DFMWR. Selection of the equipment shall be determined by the designer to meet the RFP requirements.</p> <p>Placement of this equipment will be based on fitness equipment placement per RFIs 8 and 12. Contractor shall coordinate fitness equipment layout with the USACE and User during the 60% Building Design Review submittal. This will be accomplished prior and during the October 14 review meeting to be held at Fort Carson.</p> <p>Television placement and required number shall be determined after fitness equipment placement and design. The user would like to provide easy viewing when possible from all cardio equipment except spin bikes.</p> <p>INFORMATION REQUESTED: Sound System Requirements - 1. Section 6.5.2.7.7 (V) of the RFP states that the "Pool office needs to contain a sound system for the pool area". How many speaker, amps, components, and features does this system require. In addition, is this the part of the same system mentioned in section 3.8 which states "provide commercial grade audio system for each group exercise room with recessed AV rack and ceiling mounted speakers". If not, what are the requirements for this system.</p> <p>2. RFP Section 6.10.5 states "that there is an music interface (control station), wiring, and speakers installed such that music cab be piped into the locker rooms". Is this system part of a whole building system or the system for the pool, or a separate system.</p> <p>GOVERNMENT RESPONSE: Response to 1)</p> <p>Per paragraph 6.5.2.7.7 sub-paragraph IV Natatorium in specification section 01 10 00 of the RFP "Pool office also needs to contain a sound</p>
RFI-0013	09/03/2009 09/04/2009	09/09/2009	Darwin Morrison	Persephone Venable			
RFI-0014	09/03/2009 09/04/2009	10/04/2009	Darwin Morrison	Martin Rasmussen			
RFI-0015	09/03/2009 09/04/2009	10/04/2009	Darwin Morrison	Martin Rasmussen			



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RFI-0016	09/11/2009 09/14/2009	10/04/2009	Darwin Morrison Martin Rasmussen		<p>system for the pool area for music."</p> <p>The pool sound system will need to meet the same requirements as for the gymnasium, at a minimum.</p> <p>Sound System: Built-in system for announcing events in the Pool area. Suspended directional ceiling speakers, 200 watt minimum output rating, capable of reproducing human speech, minimum. Multipurpose functions will be necessary, provide speakers capable of CD quality sound reproduction of music. Sound system must be designed for the humid and corrosive pool environment.</p> <p>The contractor will need to determine number of speakers, amps, and components required based on the information in this RFI and requirements of the RFP.</p> <p>Per paragraph 3.8 in specification section 01 10 00 the public address system may be integrated into the fire alarm/MNS. The contractor may have difficulties with testing requirements if the sound system is integrated into this same system. The pool sound system can be a component of the entire building sound system monitored at the master station at the control desk. If the sound system for the entire facility is monitored at the control desk it shall be able to provide for different music in different areas, i.e. there is spinning to rock music in one area, the pool has top 40 playing and in another area a yoga class has whale singing.</p> <p>In regards to the requirements in paragraph 3.8 in specification section 01 10 00 in which the contractor is to provide "commercial grade audio system for each group exercise room with recessed A/V rack and ceiling mounted speakers" for the pool area the contractor only needs to meet the same requirements, at a minimum, as for the gymnasium.</p> <p>The response above is the same response used for RFI-0002.</p> <p>Response to 2):</p> <p>Per the requirements of paragraph 6 10 5 in specification section 01 10 00 of the RFP and per "Lockers, Showers, Toilet, Sauna" in specification section 01 10 00 of the RFP the contractor is directed to tie the locker room sound system into the building sound system controlled at the control desk located in the main foyer, if possible.</p> <p>INFORMATION REQUESTED: Main Sewer Flow Rate - Amendment 007 states that the sanitary sewer installed in the Parking Roads and Utilities Contract is adequate, but the existing sanitary main we are using for this project is 8". Per Manning's Formula, an 8" drain at 2% slope, flowing full, can only handle 637 gpm. Is the new main sewer installed under the Parking Roads and Utilities Contract larger than 8"? GOVERNMENT RESPONSE: A 12-inch sanitary sewer line services the new Physical Fitness Facility per Award Drawings for the Parking, Roads, and Utilities Project (Utility Plan, Area C2, sheet CU1C2).</p> <p>INFORMATION REQUESTED: Floor Drains at Lockers - RFP states (page 50 of 543) that for the Lockers, Showers, Toilet, Sauna area: Floor drains: Expect to provide one drain per shower, and one floor drain per 250 square feet of floor area. Typically, one drain centered near toilet/urnal wall is adequate for unexpected overflows.</p> <p>It appears that the intent of this requirement is to provide for fixtures backing up and overflowing on to the floor. If that is the case, then it would stand to reason that drains do not need to be provided in the locker area, only the toilet and shower areas. We are providing auxiliary drains between the showers, as well as two floor drains in each toilet area. Additionally, the concept photos included with Amendment 0003 show that floor drains were not provided in the locker areas for that project. If these drains are provided, due to their distance from plumbing fixtures, a panel mounted trap priming assembly would need to be provided, adding to maintenance concerns.</p> <p>Please confirm that floor drains will not be necessary near the lockers.</p> <p>GOVERNMENT RESPONSE: Per the RFP one floor drain per 250 square feet of floor area is required and per paragraph 2.20 "Plumbing" under "Natories" in specification section 01 10 00 of the RFP "Floor drains shall be provided in all dressing rooms," this includes locker</p>
RFI-0017	09/14/2009 09/15/2009	10/05/2009	Darwin Morrison Martin Rasmussen		



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							rooms. Floor drains will be required in the locker rooms.
RFI-0018	09/14/2009 09/15/2009	10/09/2009	Darwin Morrison Martin Rasmussen				<p>INFORMATION REQUESTED: Juice Bar Equipment - Please provide list of GFCI equipment for the juice bar and any power and plumbing requirements.</p> <p>GOVERNMENT RESPONSE: GFCI Equipment:</p> <p>Under the Counter - Dishwasher, Fridge, Freezer, and Microwave</p> <p>Most likely on the Counter - Juice Machine, Hot Dog Machine, and Snow cone Machine</p> <p>Power Requirements:</p> <p>GFCI outlets above/below counter, minimum of 10. Need a minimum of 2/220 outlets maybe a third in the storage area</p> <p>Plumbing:</p> <p>Hand washing sink</p> <p>Three compartment cleaning sink</p> <p>DFMWR is still working on the layout, provide design based on these requirements and we'll finalize with the user.</p> <p>Place outlets and sinks per available area in the juice bar.</p>
RFI-0019	09/14/2009 09/15/2009	10/05/2009	Darwin Morrison Martin Rasmussen				<p>INFORMATION REQUESTED: Hot Tub Equipment - The requirement in the RFP for the men's and women's hot tubs to be "built-in, with maintenance access from an area not in either locker room to avoid conflicts between maintenance personnel and facility users," seems to presume that the hot tubs would be of the off-the-shelf, pre-fabricated variety, in which the pumps and equipment are housed around and under the fiberglass hot tub. However, it is the intent to provide custom, built-in hot tubs using durable shotcrete construction. The equipment requiring maintenance would be located in the pool equipment room, thereby making this "maintenance access" requirement moot. Please confirm that remote equipment in the pool equipment room satisfies this requirement.</p> <p>GOVERNMENT RESPONSE: Yes, the mechanical equipment for the men's and women's hot tubs can be located in the pool equipment room.</p> <p>INFORMATION REQUESTED: Lighting Level Requirements - According to section 01 10 00 of the RFP, the design of the facility should be based on the Army Standards for Physical Fitness Facilities. "The Army Standards for Physical Fitness Facilities is derived from the American College of Sports Medicine (ACSM), Unified Facilities Criteria UFC 4-740-06, TI 800-01 - Appendix H, and the Technical Criteria for U.S. Army Physical Fitness Facilities dated October, 2003". In order to meet the foot candle requirements stated in the Technical Criteria for U.S. Army Physical Fitness Facilities, we exceed the maximum watts/sqft lighting levels prescribed by ASHRAE 90.1-2004.</p> <p>We propose using the Illuminating Engineering Society of North America (IESNA) lighting standard (2004), which are the standard lighting level requirements for commercial and industrial facilities, instead of the lighting levels stated in the Technical Criteria in order to meet the ASHRAE 90.1-2004 energy model requirements. This will reduce the energy consumption of the facility, reduce maintenance costs, and still provided an acceptable lighting level throughout the facility that meets the industry standard. Please confirm.</p> <p>GOVERNMENT RESPONSE: Below is the response from Thomas E. Small, P.E. with the Center of Standardization (COS) - Physical Fitness Facilities US Army Engineering and Support Center, Huntsville</p> <p>I have two responses to this RFI:</p>
RFI-0020	09/14/2009 09/15/2009	10/05/2009	Darwin Morrison Martin Rasmussen				



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RFI-0021	09/14/2009 09/15/2009	10/04/2009	Darwin Morrison Martin Rasmussen		<p>1) There will not be a "blanket" release from the RFP lighting level requirements. In general, the designer should be able to comply with the RFP and with EPACT-2005 using energy efficient lighting. If and when the designer can provide design calculations and market research supporting an assertion that it is not possible to meet a particular room/area lighting level target and comply with EPAC-2005, then the COS will evaluate and provide recommendations for that particular area.</p> <p>2) The other response is that we have changed Paragraph 3.6.2.2 in Section 01 10 00 of the current RFP's that may provide some relief to the contractor. The new paragraph reads: "3.6.2.2. Gymnasium/Suspended Running Track, High Intensity Discharge (HID) fixtures are not required. Lighting selected shall be identified as suitable for the intended use and lighting design shall meet IESNA recommendations for Basketball Sports-Lighting, Class III (Class of Play). Fixtures shall be mounted not less than 25' above the finished floor. Fixtures with 80% direct and 20% indirect lighting are preferred. For overhead locations, protect luminaires with wire cages and/or provide appropriate shatterproof enclosed luminaires. Switching for lighting control shall provide different lighting options to take into account natural lighting and different activities (such as boxing matches, etc.). Lighting control shall be located in a controlled area to avoid accidental and unauthorized switching." You may want to incorporate this changed paragraph to see if that helps in this instance. Our designer states that this is a cost change.</p> <p>The contractor may proceed with the revised RFP language noted under response 2 but will need to notify the USACE. If the contractor believes he will incur additional cost due to the new language under response 2 he shall not proceed without proper notification from the USACE.</p> <p><b>INFORMATION REQUESTED:</b> Sewer Capacity - A question in amendment 0007 inquires about a 750 gpm sewer capacity for the pool-filler backwash rate. However, by carefully designing and selecting the filter equipment, and by providing a tank for backwash-water retention, the discharge to the sewer can be much smaller-perhaps 250 gpm-which will allow for the draining of the lap pool in less than 24 hours. Please confirm that this approach to sewer-line sizing is acceptable.</p> <p><b>GOVERNMENT RESPONSE:</b> A 12-inch sanitary sewer line services the new Physical Fitness Facility per Award Drawings for the Parking, Roads, and Utilities Project (Utility Plan, Area C2, sheet CU1C2).</p> <p>If the designer's approach meets the RFP than it should be acceptable and only needs to be reviewed, which will occur during the 60 and 100 percent design submittal.</p> <p><b>INFORMATION REQUESTED:</b> Ultra Violet System - The RFP states that "An Ultra Violet (UV) System is strongly recommended for supplemental disinfection/sanitation" of the swimming pools, water quality and natatorium air. UV systems are not in the proposal. Water Design Inc., the aquatic consultant, also "strongly recommends" supplemental UV sanitizing units for reasons outlined below.</p> <p>Benefits of UV sanitizing:</p> <ol style="list-style-type: none"> <li>1. UV light sterilizes water-born bacteria, viruses, and parasites such as Giardia and Cryptosporidium, which had been the cause of outbreaks of water-born illnesses around the country. Chlorine alone takes a long time to defeat these bugs.</li> <li>2. UV light destroys chloramines which have been linked to Asthma and other respiratory illnesses in indoor natatoriums. Chloramines are also responsible for the "chlorine smell" sometimes present in indoor natatorium air.</li> <li>3. Many health departments around the country are requiring by law that UV sanitation be provided for certain types of recreational water features. This trend is growing.</li> <li>4. Many municipal entities have retrofitted all their pool facilities with UV systems.</li> <li>5. Most new installations of aquatic centers and recreation centers being designed and built today include UV sanitation.</li> </ol> <p>Is the Ultra Violet (UV) System one the user requests for this project? If so, please provide a request for pricing.</p> <p><b>GOVERNMENT RESPONSE:</b> Based on the cost of the system (\$118k) the USACE will coordinate with the DFMMWR and the USACE PM on the availability of funding and direct contractor accordingly.</p> <p><b>INFORMATION REQUESTED:</b> CCTV Locations - In RFP section 01 10 00 - 6 10.5 Special Equipment it states, "Provide conduit and junction boxes for ISIDS and Closed Circuit TV (CCTV)". Per this RFP section, we are not providing the Equipment, Cameras, programming or cabling for the ISIDS or the CCTV systems. Please provide a manufacturer so we can coordinate locations and rough in requirements for these systems.</p>
RFI-0022	09/14/2009 09/15/2009	10/04/2009	Darwin Morrison Martin Rasmussen		
RFI-0023	09/18/2009 09/23/2009	10/05/2009	Darwin Morrison Martin Rasmussen		



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17 Sep 2012

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W9128F-09-C-0024 NA

Restationing Resident Office

RFI No.	Date Requested Date Received	Date Answered	Requester's Name Answer Prepared by	Mod Required? Change No.	RFI Subject - Information Requested
RFI-0024	09/18/2009 09/23/2009	11/10/2009	Darwin Morrison Martin Rasmussen		<p>GOVERNMENT RESPONSE: ICIDS will not be required in the new Physical Fitness Facility, manufacturer not required.</p> <p>In regards to CCTV contractors/manufacturers the Design Build Contractor should be able to research and locate this information.</p> <p>NOTE: Once the Design Build Contractor identifies a contractor the DB Contractor shall coordinate with placement of the CCTV per the RFP with the USACE, DFMWR, and Fort Carson Security.</p> <p>INFORMATION REQUESTED: Air Change Variance - As the mechanical design has progressed, and energy/LEED analysis performed, conflicting design criteria have been identified in the contract documents. Air change rate performance requirements specified in the contract documents (RFP W9128F-09-R-0043, pg 23-69 of 543 and Technical Criteria U.S. Army Physical Fitness Facilities document) have been used to calculate the building air movement rates (in cubic feet per minute, CFM) as well as the fan capacity necessary to comply with those requirements. Based on those calculations, the overall HVAC fan energy required is unacceptably higher than the ASHRAE 90.1-2004 baseline energy requirements for this facility. Consequently, the targeted LEED Silver certification and EPCACT 2005 compliance (Section 109) are in jeopardy since the mechanical systems energy component for this facility represents a substantial portion of the overall building energy usage. In addition, if these air change performance criteria are achieved, the building energy usage will significantly exceed energy usage of a similar facility in the private sector. This RFI requests a variance from the room by room air change requirements referenced above to enable us to meet ASHRAE and achieve the intent of a the RFP (an energy efficient facility).</p> <p>Background technical information: Based on the RFP minimum air changes per hour (ACH) requirements on pages 23-69 of 543, the calculated total HVAC supply air flow rate inside the facility is approximately 260,000 CFM. For example, pg 33 of 543 requires the gymnasium to have 8-12 ACH, negative pressure and 20 CFM/person. Alternatively, heat load calculations for the facility and the design air flow rate criteria specified in industry standard ASHRAE 90.1-2004 paragraph G3.1.2.8 Design Air Flow Rates results in a baseline total HVAC supply air rate inside the facility of approximately 140,000 CFM. Converting the air flow rates to fan brake horsepower using the formulas listed in Table G3.1.2.10 Baseline Fan Brake Horsepower, ASHRAE 90.1-2004 yields 229 bhp for the RFP and 123 bhp for the baseline. Relative to baseline, this is an 86% increase in fan energy. Under this scenario, it will be nearly impossible to achieve the LEED Energy and Atmosphere Credits 1.1 through 1.5. Optimize Energy Performance, which essentially is the energy model comparison of the baseline building defined by ASHRAE 90.1-2004 and the proposed building design. Along the same rationale, EPCACT 2005 compliance will not be possible.</p> <p>GOVERNMENT RESPONSE: The Contractor is to proceed per the proposed air changes noted by the DOR in the attachment to this response.</p> <p>The contractor shall note in his design analysis how the air changes were determined. The contractor shall clearly note that air changes are per industry standards in the design analysis.</p> <p>If the DOR determines that the air changes will need to be revised per ASHRAE and EPCACT 05 the USACE shall be notified during the next design submittal review period.</p> <p>INFORMATION REQUESTED: Storage Closet at Room 208 - Currently the storage closet between room 204 and 208 has a wall separating the area into two closets. Is it acceptable to remove the wall and make one large storage closet?</p> <p>GOVERNMENT RESPONSE: Individual closets shall remain for rooms 209 and 213, the wall shall remain as shown.</p> <p>This RFP addresses rooms 209 and 213, not 204 and 208.</p> <p>INFORMATION REQUESTED: Building Occupancy - Building occupancy plays a major factor in mechanical and solar equipment sizing. In order for us to finalize our mechanical equipment sizing, please provide how many people would use this facility in a typical day. We have contacted the firm who did the Physical Fitness Facility Design Guide referenced in the RFP, but we were told that their study focused on the amount of square feet required per space, not overall building occupants.</p> <p>GOVERNMENT RESPONSE: PFF Occupancy (Typical Day):</p>
RFI-0025	10/13/2009 10/13/2009	10/21/2009	Darwin Morrison Martin Rasmussen		
RFI-0026	10/13/2009 10/13/2009	10/23/2009	Darwin Morrison Martin Rasmussen		



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RFL-0027	10/20/2009 10/20/2009	11/10/2009	Darwin Morrison Martin Rasmussen		<p>Staff: (Per DFMWR) Full Time Staff - 5, Part Time Staff (Instructors) - 3, Total - 8</p> <p>Pool:</p> <p>Indoor Pool (Per DFMWR 2009 Records) Average Daily Attendance - 115</p> <p>New Pool Peak Period (CTI DA) - 248</p> <p>Assume 75% of current indoor pool usage will move over to the new PFF. (.75 X 115) - 87</p> <p>Base Projected Growth 50%, Average Daily Attendance @ 150% (1.5 X 87) - 130</p> <p>53% New PFF Pool Peak Period - 131</p> <p>Total - 130</p> <p>New Facility:</p> <p>Forrest PFC Average 2009 (Average Tuesdays per DFMWR) - 600</p> <p>Forrest PFC Average 2009 - 560 (Monday, Tuesday, and Wednesday average use Per DFMWR. Utilization of new facility will be similar to Forrest)</p> <p>Total - 560</p> <p>Total PFF Typical Day Occupancy - 8 + 130 + 560 = 698, use 700</p> <p>700 is approximately 68% of the Peak Building Design.</p> <p>Proceed with this information, contractor is to use 700 for the typical day occupancy. The information will be forwarded to the user and the Omaha District Office for concurrence. The contractor will be notified if the number needs to be revised.</p> <p>INFORMATION REQUESTED: Lighting Level Requirements - Per the response to RFI Q20 and after completing a complete energy analysis of the facility, we request the lighting level foot candles(fc) in the following areas be reduced to the levels indicated in order to meet ASHRAE 90.1-2004 and EFACT-2005 energy density requirements. All the requested areas will meet or exceed IESNA lighting levels. See attached spreadsheet.</p> <p>GOVERNMENT RESPONSE: The Contractor is to proceed per the proposed lighting levels noted by the DOR in the attachment to this response dated November 5, 2009. The DOR shall note in the design analysis specific lighting levels for all areas of the facility.</p> <p>Per conference call with DOR and USACE on November 5, 2009, indirect lighting shall be utilized "only in exercise areas that require direct line of sight to the ceiling". The USACE will review the indirect lighting layout during the next design submittal for conformance.</p> <p>INFORMATION REQUESTED: As Buils for 12" Sewer Line - Please provide as-buils with invert elevations for the 12" main sewer line that the Physical Fitness Facility will tie into.</p> <p>GOVERNMENT RESPONSE: The Construction drawings for the Parking, Roads, and Utilities Project for the Wilderness Road area have been posted on the FTP site.</p>
RFL-0028	10/21/2009 10/22/2009	10/23/2009	Darwin Morrison Martin Rasmussen		



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Restationing Resident Office

17 Sep 2012

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RFI-0029	10/22/2009 10/22/2009	10/26/2009	Darwin Morrison Martin Rasmussen		<p>The invert for new manhole 10D is shown as 5930.92, this was confirmed by the USACE.</p> <p>INFORMATION REQUESTED: Food Preparation Area - Is it anticipated that grease will be introduced into the sanitary sewer system in the food preparation area of the Juice Bar? Per the response to RFI 0018 a Hot Dog machine will be used in this area.</p> <p>According to the plumbing code: A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas... Fixtures and equipment shall include pot sinks, pre-rinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks into which kettles are drained; automatic hoodwash units and dishwashers without pre-rinse sinks.</p> <p>Dishwashers usually aren't required to discharge into grease interceptors, but as you can see from the code snippet, they are required when there is no pre-rinse sink.</p> <p>Note: There is a potential cost impact if a grease interceptor is required.</p> <p>GOVERNMENT RESPONSE: Is it anticipated that grease will be introduced into the sanitary sewer system in the food preparation area of the Juice Bar?</p> <p>No, a grease trap will not be necessary. DFMWR will not be doing any amount of cooking with the exception of heating items, i.e., hotdogs, nacho cheese, pretzels, etc..</p> <p>If the designer of record still has questions or concerns with this direction please coordinate with the USACE COR.</p> <p>INFORMATION REQUESTED: Building Occupancy - Please confirm that the following information provided to us via an email from Martin Rasmussen, PE, is accurate for design calculations.</p> <p>Approximately 60% of facility users will shower. The facility provides towels for users. Approximately 20% of users will bring their own towels. The typical male/female ratio is 65% male, 35% female.</p> <p>GOVERNMENT RESPONSE: Yes, the contractor is correct and below is additional confirmation that matches:</p> <ol style="list-style-type: none"> <li>1. What percentage of users shower? Approximately 60%</li> <li>2. Do you provide towels for showers? Yes the facility provides towels.</li> <li>3. What percentage bring own towel for showering? Approximately 20%</li> <li>4. Typical ratio between male/female that use the facility e.g. 65% male, 35% female? The User specified a 65% male to 35% female ratio, typical</li> </ol>
RFI-0030	11/04/2009 11/04/2009	11/05/2009	Darwin Morrison Martin Rasmussen		



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RFI-0031	12/10/2009 12/10/2009	01/21/2010	Darwin Morrison Martin Rasmussen		<p>INFORMATION REQUESTED: Cardio Theater - Section 01 10 00 on sheet 36 of 543: "A cardio theater shall be provided in at least one of the cardio areas." Per the equipment design meetings with the user the "Cardio Theater" has been eliminated. Please confirm.</p> <p>GOVERNMENT RESPONSE: The User requested that the Cardio Theater be deleted from the RFP requirements. Fitness equipment to be utilized by the User will have individual viewing screens.</p> <p>The Government and Contractor will need to address the change in scope and cost due to the removal of the Cardio Theater, the contractor is tracking cost on the project trend log. The Government does not agree, at this time, a cost would be incurred by the Contractor this will need to be negotiated.</p> <p>In response to the Contractor's question, do not show a cardio theater but provide the required support for the fitness equipment to be utilized by the User.</p>
RFI-0032	12/04/2009 12/07/2009	12/18/2009	Darwin Morrison Martin Rasmussen		<p>INFORMATION REQUESTED: Backstops for Ball Fields - Please provide the USACE detail sheets for the backstop detail for the ball fields.</p> <p>GOVERNMENT RESPONSE: Completed December 18, 2009. Detail drawings provided (e-mailed) to CTI on December 3, 2009.</p>
RFI-0033	01/14/2010 01/18/2010	01/21/2010	Darwin Morrison Martin Rasmussen		<p>INFORMATION REQUESTED: ADA Accessible Pathway to Track &amp; Ball Fields - It is our understanding that an accessible pathway from the building to the track and ball fields should be provided in order to meet required accessibility codes. This path currently crosses the gravel fire lane. The fire lane is gravel per RFP requirements and is consistent with adjacent projects. Please have the on base Authority Having Jurisdiction (ADA specialist?) confirm this is acceptable as an accessible (ADA) means of travel. It should also be noted that if the PFF is moved to the Cantonment site an accessible route will need to be defined from the parking lot for the track and softball fields as the current designed ADA route is part of the building construction. Can the gravel fire lane function as part of an ADA route?</p> <p>GOVERNMENT RESPONSE: The emergency access drive will not be utilized as a personnel accessible pathway other than fire department emergency vehicle use. Contractor is to provide accessible pathway in accordance with the RFP and for both sites.</p> <p>Contractor will need to provide additional clarification in order for the Government to provide additional direction.</p> <p>INFORMATION REQUESTED: Mass Notification Requirements - At the 100% for construction document submittal several modifications were made to the mass notification system to meet the common intelligibility score (CIS) as recommended in the acoustical analysis; this effort was closely coordinated with the Kurt Dalings acoustical engineer at Spectrum engineers). In addition to modifications to mass notification, acoustical treatment has been provided as identified in the acoustical report. With these changes we feel comfortable that the facility can achieve intelligibility. However there are two specific areas that cannot meet common intelligibility score (CIS).</p> <p>The Natatorium (over the water) and Racquet ball rooms cannot meet all project RFP requirements for Mass Notification System design, common intelligibility score (CIS), and room aesthetics. One of the 3 requirements will have to be altered. There have been additional difficulties meeting the required CIS given available UL listed audible notification devices. It is our understanding that the approved requirements are a CIS of .8 within 33' of any location in the building in accordance with UFC 4-021-01/4-6.1.3.</p> <p>Natatorium: This room has been fitted with a considerable amount of acoustical treatment on the walls, in addition to the acoustical roof deck. We expect the reverberation time in this space will approach 1.5 seconds, which is excellent for a swimming pool. Without placing devices above 'water' areas the entire space will not meet the required CIS score.</p> <p>Racquet Ball Courts: These rooms by nature will have an excessive reverberation time and a UL listed device has not been found that can provide the appropriate CIS score.</p> <p>Given the special conditions of these two areas, is the current design sufficient to meet the intent of the Mass Notification System requirements? If not, please provide additional direction or alternative methods to achieve satisfactory design for the owners requirements.</p>
RFI-0034	05/11/2010 04/13/2010	05/18/2010	Darwin Morrison Rasmussen, Martin		<p>GOVERNMENT RESPONSE: The attached changes to UFC 4-021-01 will be issued in the near future. In the interim an Engineering and</p>



# All Requests for Information

All Requests for Information  
W9128F-09-C-0024 NA

RFI No.	Date Requested	Date Answered	Requester's Name	Mod Required?	RFI Subject - Information Requested
			Answer Prepared by	Change No.	Government Response
					Construction Bulletin (ECB) will be issued to the field ASAP that provide these changes. Please check to see if the attached changes will solve the MNS intelligibility issues on your project.  Contractor will need to provide all of the justification (which shouldn't be hard) and be able to tell us plus or minus the intelligibility that they expect to get in these spaces. The Government will then provide this information to Physical Security and the Fire Department for concurrence. Contractor will need to submit through QCS as a transmittal.  Please inform the Government if more information is necessary.
RFI-0035	08/24/2010 08/25/2010	08/26/2010	Pete Maxwell Martin Rasmussen		INFORMATION REQUESTED: Relocation of Ball Fields Transformer - Encore would like to relocate the Ball Field transformer from Southeast of the building (please see Redlined CU1011) to directly south of the building (please see updated CU1011) to reduce the length of the underground run to the parking lot lights to avoid splices and having to up size wire due to length of run.  GOVERNMENT RESPONSE: Confirm parking lighting circuit requirements with with Designer of Record, three phase.  Existing 3/4 inch rigid PVC for parking lights tie-in was determined, per field confirmation.  Transformer and electrical panel placement per contractor's recommendation is acceptable. Contractor shall coordinate final field placement of the transformer with the USACE COR prior to placement. Placement of the new transformer is critical to future building location.
RFI-0036	09/28/2010 10/04/2010	10/05/2010	Mark Nelson Joseph Brunson		INFORMATION REQUESTED: Plumbing Flex Connectors - Please reference Detail C4 on Sheet P-502. Code requires 24" between the fixture outlet and the weir of the trap. Is it possible to extend the 24" to 30" to accommodate the flex connectors?  Please Advise  GOVERNMENT RESPONSE: The extra 6" from the floor drain to the weir of the trap should not be significant issue if the floor drains are equipped with Trap Primers or the traps are located in an area that do not require trap primers due to the natural priming of the trap by condensate or other means that will keep the trap primed.  Additionally, the extra 6" down to the trap should not allow enough velocity to cause the trap to siphon and loose prime.  Per the items mentioned above extending the trap an additional 6-inches is acceptable. Also, the USACE is in agreement with the DOR (Contractor's Recommendation).
RFI-0037	10/29/2010 10/29/2010	11/01/2010	Guy Cuskelly Justin Scherzberg		INFORMATION REQUESTED: Wilderness Access Road - Bryan Construction is installing permanent fencing at Wilderness area. They are in the process of fencing across the access road to the Dining Facility.  CTI would like to propose that CTI have a pulling post installed at the south side of the access road south of ORTC barracks. Bryan would be able to complete fencing under their contract. CTI would be responsible for installation of permanent fencing at this location (approx. 40L) where it crosses the access road.  This fence would be installed per FE-6 specification. Having use of this access road for ball field and track construction would eliminate truck traffic etc. on newly paved parking areas. Is this acceptable to USACE?  GOVERNMENT RESPONSE: Government concurs with following clarifications: The pull post must be installed by 12 NOV 10 to facilitate the 40 feet opening that has been requested. Prior to the commencement of work, notify your government representative and again upon completion for final inspection. All portions of fence installed by CTI (pull post to the existing fence tie-in) will be required to meet the RFI-0037 specifications and must be installed per the RFI-0037 plans and will be subjected to the contractor's one year warranty period. This is a clarification of the contract requirements to be accomplished at no additional cost or time to the government.



# All Requests for Information

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W9128F-09-C-0024 NA

RFI No.	Date Requested	Date Answered	Requester's Name	Mod Required ?	RFI Subject - Information Requested
	Date Received		Answer Prepared by	Change No.	
RFI-0038	11/12/2010 11/18/2010	11/24/2010	Mark Nelson Martin Rasmussen		<p>RFI Subject - Information Requested Government Response</p> <p>INFORMATION REQUESTED: Sauna Changes - The sauna sub-contractor has proposed a number of changes that will improve functionality and design of the the sauna without increasing the cost. Please see attached proposal for changes. Are these changes acceptable?</p> <p>GOVERNMENT RESPONSE: Below is a summary from the contractor on what deviates from the RFP.</p> <p>1. Change the wood from cedar to western hemlock. (Western Hemlock is hypoallergenic Cedar is not. Western Hemlock is now industry standard.)</p> <p>2. Reconfigure the location of the heater and the seating to comply with ADA.</p> <p>3. Provide wall sconce lighting in lieu of lights on the ceiling.</p> <p>4. Provide tile behind the heater and tile on the floor. (The concern of the tile getting too hot should not be a problem. The Contractor spoke with a representative from Springs Saunas and they said that they have not had any real issue with the temp of the tile on the floor. They do provide a vinyl interlocking tile that can be removed and cleaned if the user would like. It comes standard with their installation. The representative was more concerned with the wood floor because it is not very durable and cannot meet the requirements for ADA.)</p> <p>DFMWR Response (Lori Martindale): Acceptable, liked the thought of tile flooring especially for cleaning. DFMWR does not want to use the interlock mat, interlock mat doesn't hold up as well as tile would. Hemlock wood is fine. Sconce lighting is fine, utilized in other saunas at Fort Carson.</p> <p>The COS (Jay Clark) concurs with all the proposed changes.</p> <p>Contractor shall proceed with sauna changes submitted with this RFI, if any additional revisions occur the Contractor will coordinate with the Government.</p>
RFI-0039	11/12/2010 11/18/2010	11/22/2010	Byce Sorenson Martin Rasmussen		<p>INFORMATION REQUESTED: Cuspidors - Cuspidors are only available as recessed. We show the cuspidor in the same manner as a water cooler, surface mount. The current location of the cuspidor is not is a functional location to be effective in hall 120. If we can eliminate the Cuspidor we can provide a drinking fountain with a bottle filler in its place. Is it acceptable to change the cuspidor for a drinking fountain with bottle filler?</p> <p>GOVERNMENT RESPONSE: USACE and DFMWR (Lori Martindale) agree with the change noted above (RFI-0039). Cost associated with the cuspidor will be tracked on the trend log.</p>
RFI-0040	11/23/2010 11/30/2010	12/01/2010	Emerson Scott		<p>INFORMATION REQUESTED: Ground Rod Test Well - Per sheet ESS01 detail C4 shows that all ground rod test wells must be exothermic welded. Talking with Persephone Venable in a lightning protection preparatory meeting she stated that the DPW would like a minimum of (1) ground rod test well to be clamped and not welded. Please confirm if this is acceptable.</p> <p>GOVERNMENT RESPONSE: Confirmed. It would be most preferable if 2 test wells on opposite corners were clamped.</p> <p>If that is an issue one clamped connection will suffice.</p>
RFI-0041	11/24/2010 11/30/2010	12/01/2010	Matt Dingman	Yes R00013	<p>INFORMATION REQUESTED: Seismic Valve - The RFP and Detail C1 on P502 indicate a seismic shutoff valve to be installed on gas line. In the gas preparatory meeting with the Corps they explained that they do not want seismic shutoff valves used. Please verify that seismic shutoff valves should not be used.</p> <p>GOVERNMENT RESPONSE: The seismic valve should not be provided as stated.</p>
RFI-0042	01/17/2011 01/18/2011	02/02/2011	Guy Cuskelly John Helager	Yes	<p>INFORMATION REQUESTED: Scarify Depth at Wilderness - Per the RFP section It is required to scarify the top 12" of soil for the seeded areas at the Wilderness site. Due to the presence of excessive cobble, and under the direction of USACE, we intend to scarify only 6" to minimize the amount of cobble that gets disturbed. Please confirm this is acceptable.</p>

Range: All Status: All

Sort: RFI No.



# All Requests for Information

All Requests for Information  
W9128F-09-C-0024 NA

RFI No.	Date Requested	Date Answered	Requester's Name	Mod Required ?	RFI Subject - Information Requested
	Date Received		Answer Prepared by	Change No.	
RFI-0043	04/04/2011 04/05/2011	05/19/2011	Mark Nelson Shauna Smith		<p>GOVERNMENT RESPONSE: Indeed this direction was given on or about 17 December 2010. This is a relaxation of the rip requirement and will be considered in the pending change for the differing site condition for the same gravel deposit requiring select fill for sprinkler lines.</p> <p>INFORMATION REQUESTED: Irrigation Pressure Testing - Spec. section 328400 3.16.C requires landscape irrigation to be tested for 2 hours at 40 psi greater than the working pressure or 150 psi, whichever is greater. To avoid causing damage to the sprinkler lines we would like to test at 90 psi at the point of connection. Is this acceptable?</p> <p>GOVERNMENT RESPONSE: Contractor's recommendation is acceptable. This is a clarification to the contract requirements and shall be performed at no additional time or cost to the government.</p>
RFI-0044	05/24/2011 05/25/2011	07/12/2011	Mark Nelson John Helager		<p>Shauna Smith COR</p> <p>INFORMATION REQUESTED: Prime Coat for Asphalt Paving - Specification section 3.4.C calls for a prime coat to be applied to aggregate base before placing asphalt. In the prep. meeting for asphalt paving it was suggested by North American Testing that the need for a prime coat is not common practice and has not been performed on Ft. Carson for many years. Under that direction asphalt work commenced and an RFI was written to Baker Engineering to have the requirement for prime coat eliminated. Baker Engineering is not willing to relax the requirement without documentation from North American and USACE that it is ok to eliminate the prime coat. Attached with this RFI is a letter from North American giving their professional opinion to eliminate the prime coat. We request confirmation from USACE that they accept placing asphalt without a prime coat. For clarification, this proposal is applicable to asphalt at both the Wilderness and Cantonment sites.</p> <p>GOVERNMENT RESPONSE: The deletion of the prime is accepted as discussed in the preparatory meeting. Please provide a proposal for deleting this spec requirement.</p>
RFI-0045	06/22/2011 06/27/2011	07/12/2011	Mark Nelson Shauna Smith		<p>Shauna Smith COR</p> <p>INFORMATION REQUESTED: Lock Cores - RFP section 01 10 00 6.5.3.3 - Keyed Access Entry Control calls for the use of Best lock cores. It is our understanding that USACE is now allowing the use of Medeco X4 cores from Assa Abloy. Please confirm if it is acceptable to use Medeco X4 cores for this project in lieu of Best.</p> <p>GOVERNMENT RESPONSE: DPW &amp; USACE have determined it acceptable to use Medeco X4 cores for this project in lieu of Best. Please provide a proposal for this change.</p>
RFI-0046	06/30/2011 07/19/2011	07/19/2011	Darwin Morrison Shauna Smith		<p>Shauna Smith COR</p> <p>INFORMATION REQUESTED: Fire Shutter Sensor - Specification section 083323 paragraph 2.8 - F lists the overhead door requirements for motorized doors. The spec is for overhead doors and the fire shutters. Paragraph 2.8 -F does not specifically call out the fire shutter requiring a photoelectric sensor. During our preparatory meeting with the fire shutter installer they stated they have never installed a photo sensor on a fire shutter. The door they are going to install has a pressure bar at the bottom of the door that will retract the door one time if it hits something when the door is activated. The photo sensor would be a secondary sensor that would prevent the door from closing in case of a fire. There is also a maintenance issue with the sensor being mounted at the floor in a high traffic area. Is a photo sensor required at the fire shutters in the first floor of the Gym?</p> <p>GOVERNMENT RESPONSE: Per coordination with the Fire Dept. (Jerry Morrison &amp; Dave Colmus) the photo sensor for the fire shutter doors (1st floor gym) can be deleted.</p>



# All Requests for Information

RFI No.	Date Requested Date Received	Date Answered	Requester's Name Answer Prepared by	Mod Required ? Change No.	RFI Subject - Information Requested Government Response
RFI-0047	07/18/2011 07/18/2011	09/06/2011	Ed Bennett		<p>Shauna Smith COR</p> <p>INFORMATION REQUESTED: Finish of Storefront Aluminum - RFP Section 01 10 00 - 3.3.1.3 calls for aluminum storefront to be anodized finish. Bennett requests the use of a Kynar painted finish in place of the anodized finish. They feel that the Kynar finish will produce a better finished product, and will be a better long term choice because it can be painted/repainted more easily and it also has a longer warranty period than anodized finish. In addition, switching to the Kynar finish will improve production time and help the project schedule. Is it acceptable to substitute Kynar finish for the storefront in all locations?</p> <p>GOVERNMENT RESPONSE: Concur with the contractor's recommendation. This is a contract clarification and shall be provided at no additional cost to the government.</p> <p>Shauna Smith COR</p>
RFI-0048	08/22/2011 11/01/2011	11/01/2011	Mark Nelson Shauna Smith		<p>INFORMATION REQUESTED: Running Track Start and Finish Lines - Please provide locations of where you would like the start and finish lines for the running track at Wilderness.</p> <p>GOVERNMENT RESPONSE: Please provide markings and signage per the attached sketch. This was coordinated with Lorri Martinez, MWR, for approval.</p>
RFI-0049	11/07/2011 02/07/2012	02/07/2012	Mark Nelson Shauna Smith		<p>INFORMATION REQUESTED: Hot Tub Handicap Lifts - The original intent for ADA lifts for the hot tubs was to have one portable lift that could service both tubs. RFI #1341 sent to the pool designer confirms that new ADA guidelines require a lift for each tub be provided. Attached is the response to the RFI including options and pricing for both portable and permanent lifts. Please provide direction as to whether or not we are held to these ADA standards, and if so what is your preference for type of lift?</p> <p>GOVERNMENT RESPONSE: Spa lifts were added to the contract per Modification R000015.</p>

**APPENDIX D - ADDITIONAL POOL COMMENTS**

## Wilderness Road Sports Complex

### Chlorine Storage Room:

Smaller Storage Tank (500 gallons)  
Secondary Containment for Tank  
Drains in floor  
Hose Bib in room

\*If unable to put drains in floor, relocate pumps to main mechanical room  
Just run suction tubing into room

### Muriatic Acid Storage Room:

Secondary Containment for Tank  
Drains in floor  
Hose Bib in room

\*If unable to put drains in floor, relocate pumps to main mechanical room  
Just run suction tubing into room

### Pool Mechanical Room:

Boilers Rated for High Altitude  
Hose Bib in Mechanical Room  
Multi Port Valves installed on Hot Tub and Family Pool Filters  
Spare Strainer Baskets for all Pumps Installed  
Storage shed located outside Mechanical Room for Chemical Storage  
Install an additional manual priming line on suction side of Hot Tub Circ Pumps  
Increase Storage Capacity for CO<sub>2</sub> – Currently run out every two weeks

### Hot Tub Rooms:

Install Timer Switches on Outside of Room  
Remove Doors to Pool Deck or Install Opening for Viewing from Pool Deck

### Pool Deck:

Install floor level exhaust fans to help with Breakpoint Chlorination

### Sauna:

Install timer and controls on outside of rooms so can be controlled by customer

### Comments:

Install only one larger hot tub and locate on pool deck – cut down on costs  
-Could use existing hot tub areas as pool storage rooms for Aquatics

Recommend the use of Diamond Brite Plaster for Pool Shell