

# AIMS Charrette Schedule

**Attire:** Business Casual

**Weeks 1 & 2 Location:** Hilton Arlington: 950 N Stafford St, Arlington, VA 22203

**Weeks 3 & 4 Location:** Merrick and Company: 5970 Greenwood Plaza Blvd, Greenwood Village, CO 80111

In support of the redevelopment of McMurdo Station and to a smaller degree, Palmer Station, ASC has been tasked by the NSF to conduct a series of intense information and requirements gathering sessions called Charrettes. The purpose of these charrettes is to solicit input and ultimately, consensus, from end users of the Stations, including grantees and other key stakeholders, as we begin design. The information we gather is critical to ensuring true requirements are incorporated into the design of the redevelopment.

The primary mission of the United States Antarctic Program is to support science, so it is important for us to understand the needs of the scientific and other customers' needs. The agenda that follows outlines the type of information that we will be requesting during the charrette, as well as how we will be requesting it. This structured approach will ensure requirements are gathered in an orderly manner from the broadest and most general down to the smallest and most specific details.

While input from our customers is needed on a number of topics to help guide the design, a great deal of information has already been gathered on site development. This information was gathered (also using the charrette process), was incorporated into the site layout, and eventually served as the basis of the McMurdo Master Plan. Consequently, as we gather information from you, we will not be beginning with a blank slate. Rather, with the recently completed Master Plan serving as our road map for the long-range development of the campus, we will be working with you, our end users, to determine what your internal operational requirements, all encompassing, are.

As you'll see in the Master Plan, major buildings have already been sited and their approved locations will serve as a general parameter for ultimate development. Much thought and design went into the siting of these buildings to improve site related operational efficiencies and proximities. In addition, there was a tremendous amount of consideration given to marine and aviation access, vehicular movement, wind patterns, topography, site drainage, solar exposures, and even views of the unique landscape features. Equally important was the consideration given to maintaining operations during construction efforts, phasing of the different projects, packaging of the individual projects into "biddable" work, as well as ensuring the constructability issues a builder will require such as unencumbered access, delivery and staging of materials, crane locations, laydown areas, etc. In addition, serious consideration was given to efficiency in locating and routing all important infrastructure to support the facilities buildings, including power, water, waste water, IT and communications.

Because so many considerations have been discussed and resolved with regard to siting, we are able to focus with you on the issues of operational, spatial, and adjacency requirements in addition to infrastructure requirements to support your operations or equipment. The better our design teams understand those requirements, the better the design.

In addition to building siting, interior blocking diagrams have been established as part of the Master Plan. These are blocking diagrams that will be developed into floor plans, and as the name suggests are diagrammatic. They are organized to ensure that services, operational functions, work centers and collaborative space have been identified and planned for within each building's interior space. Stakeholder inputs will further optimize floor layouts and validate adjacencies, so blocking diagrams can be updated prior to the design process. During the charrette process, the first task of each morning will be to review the previous day's work to make sure requirements were understood and gathered properly before continuing with new discussions and requirements.

While this Charrette is of critical importance to gather information necessary to guide design, the charrette will not be the last opportunity for comment and participation. To ensure stakeholder comments and requirements have been properly understood and included in the basis of the design, iterative design review sessions will be held to review, comment and, if necessary, revise requirements. These design review sessions will happen both formally and informally as the designs progress.

Shortly after the conclusion of the charrette sessions, a Charrette Report will be published to document the information, sketches, required equipment and adjacencies that were identified. This Charrette Report will be sent to the NSF and all stakeholders who participated with a request to review and comment on the information within a two week period. This review is intended to ensure our team has understood the requirements. This review period will be followed by a teleconference to discuss each of the comments and come to resolution so the Charrette Report can be finalized and become part of the Basis of Design. Design of the facilities and utilities can then begin in earnest. The Architect/Engineer (AE) team will be issued a notice to proceed to a Schematic design level based on the information validated during the teleconference.

Once the AE has developed a schematic design for each sub-project, the NSF and key stakeholders will be issued a Schematic Design drawing package for review and comment. At the end of a 2 week review period, comments will be collected, and all recipients will be asked to participate in a formal design review meeting a week later; that review meeting is expected to last up to 3 days. The goal of the Schematic Design review meeting is to resolve any issues with the design and to provide direction to the design firms to incorporate new or updated information into the designs. Additionally, schedule information will be reviewed.

A subsequent Design Development package will be submitted at roughly 35% design; that submittal will be followed by a review and comment period, followed by a review meeting with the same participants providing comment. At conclusion of Design Development, however, the scope of the project will be determined and finalized. Any changes to the design or the project scope made after this point will be very time consuming and costly. Therefore, any changes requested after Design Development will require formal NSF Change Board action to approve/disapprove the cost and schedule impacts. It is therefore critical that all design requirements be identified and incorporated in to the design well before then. At this major milestone, the AE firms will work to complete the next design milestone for each of their projects.

Finally, the success of this significant planning effort relies on the full engagement of each participant.

## Charrette Week 1

Washington DC/NSF, July 13-17

## Contacts for VTC and/or call-in issues:

Primary: Anne Burton, 303-478-3397

Secondary: Dave Winkler, 303-775-4996

### Attendees:

#### NSF

**Science/Grantees:** Michael Gooseff, Anne Todgham, Lars Kalnajs, Christy Hansen, Joseph Levy, Andrew Klein, Kurt Panter, Amy Chiucholo, Kelly Brunt, Slawomir Tulaczyk, Howard Conway, Matthew Lazzara, Kristina Slawny, Thomas Nysten, John Stone, John Goodge, Chi-Hing Cheng-DeVries, Xinzhao Chu, Deneb Karentz, Sean Place, Byron Adams, Cole Kelleher, Kent Anderson, Jason Hebert, Marianne Okal, Abigail Vieregg, Jennifer Burns

**ASC:** PMO, Curt LaBombard, Liz Kauffman, Bija Sass, Bev Walker, Rob Robbins, Mark Neeley, Bill Turnbull, Michael Davis, Cara Sucher, Sune Tamm, Judy Shiple, Samina Ouda or Matthew Erickson, Dan Pickett, Erin Lancaster, Steve Dunbar, Tony Buchanan, Esther Hill

**OZ:** Don Schieferecke (PIC), Rick Petersen (PIC/Designer), Joe Levi (PM), Dan Miller (Designer), Tracy Tafoya (Programming/Interiors), Kiley Baham (Charette Support), Christine Eldridge (Project Coordinator/Scribe)

**Ferraro Choi:** Joe Ferraro, Kim Claucherty, Dan Dozer – Jacobs Consultancy (M-W, Th am), Phil Wirdzek – I2SL (M-W)

**Merrick:** Jon DeLay, Aaron Seal, Kevin Breslin, Dan Harrington, Richard Boehne (Engineers)

**Baker:** Bill Kontess

ASC – Antarctic Support Contract (Lockheed Martin)

A-E – Architecture & Engineering Firms that will be leading the charette sessions

OZ Architecture

Merrick & Company

Ferraro Choi

Michael Baker Corporation

### Mon July 13 (1.1)

**GoTo Access:** <https://global.gotomeeting.com/join/716949709> **Meeting ID:** 716-949-709

**Conference Call-in: 866-381-8626**

**Participant Code: 171909# (All Day)**

	8:30-10:15	(ASC /A-E Firms)	Team Meeting
	10:15-10:30	Break	
1.1.1	10:30-12:00	(ASC)	ASC Science Support
	12:00-1:00	Lunch	
1.1.2	1:00-1:30	(ASC)	Introductions and Objectives, Rules of Engagement – All Attendees

Welcome message from the NSF and ASC. Introductions of both the participants and to the Grantee Charrette process; this will entail a discussion of the overall purpose, goals and objectives of the charrette as well as a review of the overall charrette schedule. Ground rules will be set including an explanation that the building siting proposed within the Master Plan, and although not completely static, is well defined and logically placed and will not be revisited unless a compelling argument for revisiting it is discovered during the charrette process.

1.1.3	1:30-2:00	(ASC)	Review and Confirmation of MP 2.0: Goals, Assumptions, Parameters, Building Siting – All Attendees
-------	-----------	-------	--

Operating under the assumption that the grantees have previously been provided access to the McMurdo Master Plan and that they have reviewed it, a brief synopsis will be provided explaining defining elements and foundational information that was used to develop the McMurdo Master Plan. Special attention will be paid to explaining the logic of the building siting and review of the proposed phasing sequence.

1.1.4 2:00-3:00 (OZ) Material and Personnel Work Flows and Adjacencies – All Attendees

Improved operational efficiency is one of the capstones of the McMurdo Re-build effort. The logic of the proposed work flow, material and personnel adjacencies will be discussed as well as improvements that can be made during the design process. This discussion will explain the design programming logic and establish the logic to be used during the charrette sessions.

3:00-3:15 Break

1.1.5 3:15-5:00 (OZ) Science Operations Overview – All Attendees

- DC1.1.5.1 Role of science within McMurdo
- DC1.1.5.2 Current operations/Challenges
- DC1.1.5.3 Scalability of Spaces
- DC1.1.5.4 Anticipated science

This discussion will review the baseline assumptions used to develop the McMurdo Master Plan. A review of the current operations/challenges including cargo planning, processing and movements, gear issue and vehicle assignments will be discussed, along with anticipated science to ensure functionality and scalability of the campus has been properly captured before continuing the design process.

5:00-5:15 Break

5:15-7:00 (ASC /A-E Firms) Designers and ASC review day's input and develop notes and graphics for next day's sessions

**Tues July 14 (1.2)**

	7:00-8:00	(ASC /A-E Firms)	Set-up and confirm day's objectives
1.2.0	8:30-9:30	(OZ)	Review previous day's work – All Attendees <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>

This will be the first instance of designers and ASC reviewing the previous day's work and ensuring requirements have been properly captured. This activity will be repeated daily throughout the charrette sessions.

1.2.1	9:30-12:00		Break-out Sessions - Science
	1.2.1.1	(OZ)	Track 1: Deep Field Science <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
	1.2.1.2	(FC/OZ)	Track 2: Local Science: Sea Ice <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 661917#</a>
	1.2.1.3	(OZ)	Track 3: Local Science: Dry Valleys and Helicopter Supported Science <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 904595#</a>
	1.2.1.4	(FC/OZ)	Track 4: Local Science: LDB/Town Science <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 855818#</a>
	10:30-10:45	Break	

Break-out sessions will give grantees an opportunity to delve deeper into the details of particular work centers or disciplines of the overall design and physical layout at McMurdo. They are intended to group scientific disciplines together by location and determine how McMurdo support can best facilitate the science (pallet build-up, transportation methods, etc.). Focus will be maintained by individual moderators to ensure a global approach is being followed in the development of the requirements. Elements of scalability, process flow, equipment needs and efficiency will be a part of each session.

	12:00-1:00	Lunch	
1.2.2	1:00-5:00	(FC/OZ)	Debrief of Break-out Sessions and Confirmation of Requirements All Attendees <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
	3:00-3:15	Break	

This debrief will communicate the requirements gathered by individual groups to the larger forum. The review of the requirements gathered by individual break-out sessions will likely spur further and deeper discussion among the group thereby sharpening requirements and providing valuable input to the designers.

	5:00-5:15	Break	
	5:15-7:00	(ASC /A-E Firms)	Designers and ASC review day's input and develop notes and graphics for next day's sessions

**Wed July 15 (1.3)**

	7:00-8:00	(ASC /A-E Firms)	Set-up and confirm day's objectives
1.3.0	8:30-9:30	(OZ)	Review previous day's work – All Attendees <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>

Review the previous day's work and ensure requirements have been properly captured.

1.3.1	9:30-10:00	(FC/OZ)	Briefing on Crary Mechanical Constraints – All Attendees <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
-------	------------	---------	---

Describe some of the physical constraints of the building that will affect remodeling efforts.

	10:00-10:15	Break	
1.3.2	10:15-12:00		Break-out Sessions
1.3.2.1		(FC/OZ)	Track 1: Crary Lab Programming, Part 1 <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
1.3.2.2		(OZ)	Track 2: New Field Science Support Facility Programming, Part 1 <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 904595#</a>
1.3.2.3		(OZ)	Track 3: Dive Services Programming <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 661917#</a>

Break-out sessions to further vet the interior proposed spaces and functionalities of these three campus elements. Overall assumptions used to arrive at the particular building sites will be reviewed briefly and then discussion will commence on how to properly design these buildings to afford the maximum general usage effectiveness, scalability, design programming logic and support work center adjacencies.

	12:00-1:00	Lunch	
1.3.3	1:00-4:00		Break-out Sessions (Cont.)
1.3.3.1		(FC/OZ)	Track 1: Crary Lab Programming, Part 2 <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
1.3.3.2		(OZ)	Track 2: New Field Science Support Facility Programming, Part 2 <a href="#">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 904595#</a>
	3:00-3:15	Break	
1.3.4	4:00-5:00	(FC/OZ)	Brief results of break-out sessions – All Attendees

Debrief to the overall group on discussions during break-out sessions.

	5:00-5:15	Break	
	5:15-7:00	(ASC/A-E Firms)	Designers and ASC review day's input and develop notes and graphics for next day's sessions

## Thurs July 16 (1.4)

Having captured the science requirements in the preceding days, the discussion will now shift towards Central Services, which includes food services, recreation and quality of life. Attendance will increase as NSF and other agencies not involved with the science sessions join the charrette. Presentation of information gathered and significant points that have been gathered over the previous three days and that will be integrated into the design process.

	7:00-8:00	(ASC /A-E Firms)	Set-up and confirm day's objectives
1.4.0	8:30-9:00	(OZ)	Review previous day's work – All Attendees <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
1.4.1	9:00-10:00	(OZ)	Central Services: General Overview – All Attendees <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>

Central Services will be a major piece of the newly configured McMurdo campus. This presentation will focus on the general parameters and assumptions used to formulate the diagrammatic plan as it exists within the Master Plan. Adjacencies, support functions and general interior blocking will be discussed.

	10:00-10:15	Break	
1.4.2	10:15-12:00	(OZ)	Central Services: Recreation and Quality of Life – All Attendees <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a> <ul style="list-style-type: none"><li>• DC4.4.1    Physical Recreation</li><li>• DC4.4.2    Skills Development</li><li>• DC4.4.3    Collaboration/Social Spaces</li></ul>

These sessions will give grantees an opportunity to discuss and provide input on Central Services in general but will focus specifically on quality of life functions.

	12:00-1:00	Lunch	
1.4.2	1:00-2:00	(OZ)	Central Services: Entry Experience & Orientation – All Attendees <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
1.4.3	2:00-3:15	(OZ)	Central Services: Food Services and Dining – All Attendees <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>
	3:15-3:30	Break	
1.4.4	3:30-5:00	(OZ)	Field Science Support Programming, Part 3 <a href="tel:866-381-8626">Conf. Call-in: 866-381-8626</a> <a href="#">Participant Code: 171909#</a>

This discussion ties closely to the break-out session held the previous day and seeks to finalize requirements of Field Science Support. Much information is known already about Crary Lab and Dive Services but as Field Science is a new facility, the assumptions and work flows proposed for this building must be crystal clear to the designers and most of that information needs to come from the grantees.

Grantees and Other Participants are dismissed

5:00-5:15    Break

5:15-7:00 (ASC /A-E Firms) Designers and ASC review day's input and develop notes and graphics for next day's sessions

**Fri July 17 NSF Internal Charrette (1.5)**

Friday's session is for NSF participants only. Grantees and other attendees will be excused Thursday afternoon so an executive review can occur. Friday's session will include a thorough review of all gathered requirements and solicit input and direction from NSF to the designers.

	7:00-8:00	(ASC /A-E Firms)	Set-up and Confirm day's objectives
1.5.1	8:30-10:00	(ASC/A-E Firms)	Overview of MP 2.0, MREFC process, and current status
	10:00-10:15		Break
1.5.2	10:15-12:00	(ASC/A-E Firms)	NSF Review/Validation of Requirements
	12:00-1:00		Lunch
1.5.3	1:00-3:15	(ASC/A-E Firms)	NSF Review/Validation of Requirements (Cont.)
	3:15-3:30		Break
1.5.4	3:30-5:00	(ASC/A-E Firms)	Debrief, plan for next week, identify follow-ups, meeting minutes