

RFP Addendum -- Site Cabling
DRAFT 11/4/2009

Baltimore Metropolitan Council
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Introduction

On September 23, 2009, BMC issued a request for Proposals (RFP) for structured low-voltage cabling at a new site to which BMC plans to move.

On October 13, 2009, a "pre-bid" meeting was held at BMC's offices (2700 Lighthouse Point East, Suite 310, Baltimore, MD 21224) to discuss the RFP.

Potential bidders were encouraged to come to this meeting, in order to have an opportunity to meet BMC decision-makers and ask questions they may have had about the RFP. Bidders were permitted to submit questions after the meeting by telephone or e-mail until October 24, 2009.

This document provides answers to those questions, as well as other information updates.

Please note that many of the questions and answers refer to a floor plan diagram that accompanied the original RFP.

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Requirements Clarification/Modification

This section lists several important requirements changes, following from BMC's re-evaluation of its needs following the pre-bid meeting.

At the pre-bid meeting, concerns were raised as to the physical space available for the number of Cat6a cable runs the RFP called for. After the meeting, BMC examined the cubicles and re-evaluated its needs, in light of the physical requirements and cost of various types cabling media.

This resulted in a decision that for most cabling runs, Cat6a cable is unnecessary, and Cat6 is sufficient. Most of the modifications below result from this downgrade. However, there will be a mixture of Cat6 media and Cat6a media under any scenario.

Modification 1: Two options for workplace cabling

BMC, not wishing to be constrained as to the technology for provision of voice services, allowed Voice Communications System vendors to design a traditional (e.g. PRI) system, a VOIP system, or both. BMC had been working under the assumption that voice and data networks would be separate (its current PRI service is delivered via a T1 line).

However, many of the bidders' comments and questions appear to come from the assumption that a VOIP system uses an integrated network for both voice and data.

Because of this, we have clarified and extended the requirements of the Voice Communications System and Services RFP's to allow an integrated voice/data network option.

An integrated voice/data network would require fewer cabling runs, but more traffic across each run. This yields two mutually exclusive sets of cabling requirements for standard voice and data cabling runs into workplaces:

1. A single **Cat6a** run to each workplace termination point, to support an integrated voice/data network. Notice that six large offices still require two runs each for furniture placement options.

– OR –

2. Two **Cat6** runs, to support separate voice and data networks.

Modification 2: Conference room A/V connection

After discussion within BMC over the devices that will be used, any requirements for additional cabling to connect equipment to display devices within a conference room were deemed beyond the scope of this procurement and removed.

However, Contractor is still required to run voice and data connections from the server room into the four conference rooms, as well as cabling recommended by the Services contractor (most likely coaxial) for TV service.

Modification 3: Non-workplace cabling

1. Conference rooms M1-M2 will each have:
 - a. two **Cat6** runs for separate voice and data connectivity into a core drill in the room's floor.
 - b. one run of media specified by the Services contractor (probably coaxial) for TV service.
 - c. an additional **Cat6a** run into a wall location to support data and future videoconferencing. This wall location must be near the corresponding wall location where the cabling for TV service terminates. In room M1, this is the "AV nook" along the wall opposite elevator E2. The wall location in room M2 will be determined during the Requirements Analysis after the contract is awarded.

2. The conference rooms M3-M4 will each have:
 - a. one **Cat6a** run for data and future videoconferencing into a wall
 - b. one **Cat6** run for voice
 - c. one run of media specified by the Services contractor (probably coaxial) for TV service.All three termination points will be placed in close proximity to each other.

3. The conference room M1 will have an additional **Cat6a** run into its A/V nook (opposite elevator E2) to support a data connection with a computer that will sit in the nook, and connect to a planned ceiling-mounted data projector.

4. All other cabling runs to locations other than workplaces (and the extra "test lab" connection in W7) shall use **Cat6**.

Clarification/Modification 4: Cabling contractor's responsibility starts in room U7

During the pre-bid meeting for the Services RFP, potential bidders indicated that it is the usual practice to bring all services into a single room.

Bidders should plan for all demarcations between service providers and site cabling to occur in the server room, U7, and that they will have no responsibility to run cabling between the electrical switching room U1 and the server room.

This renders any outside wiring into this room the responsibility of the Services contractor.

Site and construction information

What is the site address?

1500 Woodall Street – however, the building owner is trying to have the street named "Whetstone Way", so at some point the address may become 1500 Whetstone Way.

Schedule update

The building is now scheduled for BMC occupancy during September 2010, meaning that tenant improvements will be underway during the spring and summer months. Builder has letters of intent to lease entire building.

Would it be possible to obtain a property management POC for the new location?

Property management would prefer that any questions come through BMC from the bidders. BMC will provide a POC for the building after award to the successful bidder. Until that time all questions should go through BMC.

McHenry Row Office Building IT Infrastructure

In the interest of full disclosure, property management personnel have informed me that they plan to have Verizon install its FiOS® product in the McHenry Row office building.

Has electrical contract been awarded? Is there a power plan yet?

No, building owner has not yet awarded construction contracts for tenant customization.

What are the building's dimensions?

BMC staff measured a plan whose scale was 1:96 (1"=8'). On the drawing, the building shell measured as 18.5" x 14.25". This results in an outside dimension of 148' x 116.5'

What is the ceiling height?

BMC is awaiting a response from building management.

Is there a storage location for equipment and materials?

BMC will provide a storage location; whether this will be at the existing site or the new site is yet to be determined.

Is the ceiling going to be a poured or a red iron ceiling?

BMC is awaiting a response from building management.

Will the Contractor be provided with a scale drawing?

The Contractor will be provided with a scale drawing after the contract is awarded.

How shall bidders reference the scale of the floor plan?

Since the cubicles are a standard size, BMC feels they are the most appropriate scale analogue for bidders to use. The cubicles W18-W26, W28-W32, and W34-W42 all measure 8'x8' internally with 2-inch cube walls (W15-W17 and W27 are 8'x10').

Note: One potential bidder suggested that the scale could be determined by assuming 25' on center distance between posts in the floor diagram. A measurement of a scale drawing shows this **not** to be the case. The internal support columns are 31' 3" parallel to the building's shorter axis, and varying distances from 31' to 33' parallel to the longer axis. The columns around the building shell are closer to the internal columns than that.

Tenant Customization Contractor Support

How will tenant customization contractor's electrical rough-in support the Cabling installation?

Building owner has indicated that TCC will supply "stub up" conduit to ceiling.

Since Cat6a is larger, larger conduit will be required, especially in the meeting rooms if A/V cabling is going to be in it as well. Bidders should specify the conduit dimensions to be used for various wall drops.

Will the walls have fire-rated 3/4" plywood installed on them by the TCC to mount telecommunications equipment to/on?

Yes, the back wall of the server room U7.

Will the TCC create floor cores and provide the associated poke-thru devices to the ceiling below to route horizontally between the server room and rooms M1 and M2?

BMC is awaiting a response from building management. Bidders may want to build in making the floor cores as a contingency option.

Will the TCC install a Telecommunications Grounding Busbar for us to bond equipment to?

BMC is awaiting a response from building management.

System Requirements

Cabling run summary

Here is an initial summary of cables and cable drops required for the base bid. This list will be finalized during the Requirements Analysis phase of the project, after the contract is awarded.

Type	Drops	Cables
Workplace runs (dual cat6 or single cat6a each) - 28 cubicles in 7 groups - 6 offices (W1, W5, W8, W9, W10, W11) with 2 drops each - 8 other workplaces with a single drop <small>All further mentions of workplaces list requirements in addition to the affected workplace's normal requirements.</small>	27*	48 (or 96)
Data interfaces for support staff printers (W2, W13, W14, W17)	0	4
Lobby voice lines (L2, L4)	2	2
Lobby Printers	4*	4
WAP data lines (near ceiling)	6	6
M1-M2 (1 cat6 + 2 cat6a + coax** each) <small>(1 floor core, 1 wall drop for data, 1 wall drop for coax each)</small>	6*	6
M3-M4 (1 cat6 + 1 cat6a + coax** each) <small>(1 wall drop for voice+data, 1 wall drop for coax each)</small>	4*	6
M6 (beyond counter)	2*	2
S3 (two analog, one voice cat6, and four data cat6)	7*	7
S5 (one data cat6)	1	1
W13 analog line	0	1
W7 Test lab (two data cat6)	1	2

*Contractor may be able to reduce this number by consolidating nearby drops, for example, through a shared wall.

**The actual cabling media used for TV service will be specified by the Services contractor.

Is there a phased approach to setup?

Most likely, Contractor will make 3 or 4 visits:

1. Install wall cabling after electrical rough-in and before drywall is installed.
2. Install wall jacks after drywall is installed and walls are painted.
3. System testing.
4. Complete cabling runs into cubicles during BMC's move to the new site.

Will contractor have to obtain permit(s) or will work be covered under a TCC permit?

If a permit is required for low-voltage cabling, bidders should assume that they will have to obtain it if awarded the contract. However, after the contract is awarded, Contractor may be able to work with the TCC to put everything under the same permit.

If sleeves (or other ancillary electrical materials) are needed, will electrician provide them, or must the contractor provide them?

Bidders should assume that they will have to provide any ancillary electrical materials if awarded the contract.

For the floor installations, is contractor required to provide and install the RJ45 keystone jack that will snap into the floor assembly/fixture?

Yes. Please see the above response on the floor cores.

Should cabling be plenum rated (fire rated)?

BMC is awaiting a response from building management. An initial response indicated that this is not a requirement; however, building management asked to confirm this with their architects.

Please clarify the requirements for A/V connections in the conference rooms M1-M4.

Please refer to Requirements Modification #2 and Requirements Modification #3 in this document.

Does contractor provide wireless access points?

No, Contractor places the jacks for wireless access points that BMC will purchase.

Are individual wireless access points required in all 6 conference rooms?

Not required, as long as specified areas are covered .

Different styles of wireless access point will result in different coverage. For bidding purposes, how many wireless access point locations should we assume that we are to provide cabling to?

For bidding purposes, plan for 6 jack locations for WAPs in base bid, with extra line-item per additional location.

Is BMC planning on using existing cubicles?

Yes.

Do the cubicles come with data jacks?

No, they do not. The cubicles have punch-out holes along the bottom metal plates. Contractor should provide mounting hardware for cubicle interfaces.

Cable dimensions of Cat6a are much greater than for Cat6. Will all of the cables fit in the cubicles' cable chases?

The cabling requirements modification (#1) should lessen this concern.

After the pre-bid meeting, BMC staff opened and measured the cabling chases at the bottom of a few cubicle locations and found that the chases measure 1 7/8" x 4 3/8". 1/2" wide support posts divide the horizontal space into a 1/2" gap and a 5/8" gap.

Can you get us the HON product line so we can determine if CAT6a will fit?

A: Existing cubicles were purchased 10 years ago. The closest modern equivalent is The Hon Simplicity II line, which you can view at <http://www.hon.com/Products/Panels/Simplicity-II.aspx>

The bend radius of Cat6a cable may not support cubicle termination points.

If adapters are required, they should be included in the cost of the mounting hardware. Assuming this applies only to cubicle connections, current cubicle jacks actually align the connector parallel to the inside cubicle wall, requiring much less of a bend than the 90° bend that a straight-out connector would require.

Since CAT6a is larger, larger conduit will be required, especially in the meeting rooms if A/V cabling is going to be in it as well. Has this been discussed with the electrician?

Requirements modification 1 should alleviate this concern. Bidders should specify the conduit dimensions to be used for various in-wall runs. Since the building owner has not yet awarded the electrical contract, this discussion will have to wait until then.

What are the requirements for lobby printer locations?

Bidders should plan for a plotter near W31, and three other locations, TBD during Requirements analysis.

Does the Contractor provide patch cords?

The Contractor is not required to provide patch cords to connect BMC equipment to cable interfaces.

However, the staging of cabling installation into the cubicles may result in contractor-constructed "patch cables" of a sort, where each run from an RJ45 female interface in the "hard" wall into an individual cube has an RJ45 male connector at the wall end and an RJ45 female interface in the workplace.

Please clarify the cabling requirements, if any, for S1, S2, S4 and S6.

Rooms S1, S2, S4, and S6 require no cabling whatsoever.

Please clarify the cabling requirements for the IT supply room S5.

Room S5 requires one Cat6 data connection.

Please clarify the cabling requirements, if any, for the employee lunch room M5. Does M5 require TV?

M5 (employee lunch room) should have wireless access under the wireless access plan the Contractor produces, but requires no other cabling. The wireless access plan may or may not result in the placement of a jack in M5 for a future WAP.

Please clarify the cabling requirements, if any, for the Regional Information Center, M6.

The Regional Information Center counter (W13), being a workplace, requires the standard cable runs for any workplace. It also requires an analog phone line to support a fax machine and a credit card reader. These devices share the line.

Beyond the counter, two data interfaces will be required in specific places.

Contractor should install one dual cabling run/set of jacks in each conference room?

Please refer to Requirements Modification #3.

Is there a requirement for duplicate cabling runs for redundancy, failover, and diversity?

Bidders should plan for the large offices W1, W5, W8-W9, W10, and W11 to have two sets of interfaces for furniture placement options. W7 will have 2 extra data jacks so that it can double as a test lab. This will be finalized with the eventual Contractor as part of the Requirements Analysis after the contract is awarded.

Bidding process

Will schedule affect cost proposals?

This will occur only if phone system provider requires exotic cable media or interfaces (i.e. neither cat6 nor cat6a, neither RJ11 nor RJ45) for phones.

What metrics will you use to decide on the winning bid? What makes one bid more attractive than another?

BMC does not use a "points" system. Cost proposal should include a cost for minimum system, and show separate costs for optional features.

BMC will compare costs of basic system bid and balance costs of optional features with perceived benefit.

BMC will also consider experience, site support, and service offered beyond the initial warranty period when evaluating bids.

How much of decision is based on cost?

At least 50%. Cost is not an absolute criterion; contract will be awarded based upon perceived value. BMC needs to build a total package from this RFP and the services RFP, and make a decision on the total cost. Additional costs for BMC purchased hardware and software will be figured into the total cost.

Selection process will stay in place regardless of construction schedule?

Yes.

We will be including 1 proposal, but 2 quotes- single Cat6a run to workplaces, and dual Cat6 runs. Will this be ok?

This is appropriate. However, the proposal should specify the workplace configurations as mutually exclusive options.

Should costs versus benefits of various technologies be written or physically demonstrated?

Written.

Is there a website associated or information updates bulletin?

Information updates and RFP addenda will be posted with the RFP announcement at <http://www.baltometro.org/whats-new/requests-for-proposals>

BMC requires only one affidavit for bundled bids, but has specified that this should be the affidavit in the Site Cabling RFP if the bundle includes a bid on that RFP. However, bids for the cabling RFP are due after bids for the phone system are due. When is the affidavit due?

Bidders should submit a Proposal Affidavit with the first proposal they submit. If bidders cannot supply the additional responses in the Site Cabling RFP affidavit by the time they submit bids on other RFPs, they should feel free to submit a second affidavit with their bid on the Site Cabling RFP.