

Cable Plant Week of January 23, 2004

Russ' Projects:

ERC:

*No activity this week*

I Met with the project architect and their communication system consultant to justify the requirement for a minimum of 18 to 20 racks in the second floor communications room, located adjacent to the dispatch room. All servers, Ericsson switch, radios and network connectivity will be located in the room. We agreed to have the room large enough to contain the required racks.

Stevenson ADF Expansion:

*Will issue small cabling request to install fiber cables between the old and new ADF's*

Drawings showing planned usage of the new ADF area has been finalized and distributed for comment, which will be due back 12/16.

The In-fill project has requested a finalized layout of the ADF to allow the project to land their cabling.

There is a problem with the sweep on the new door, which left in the present condition, will allow excessive dirt to enter the ADF. I contacted PP&C to resolve both the door issue and the floor covering.

Ed and I will have the ADF cleaned after the In-Fill construction is completed this spring.

Humanities Bldg:

*Last week's design review meeting showed numerous problems continue with the design. I have spent considerable time this and last week reviewing and commenting on the design documents.*

I met with the architects to discuss the closets that remain too small. PP&C and I rearranged the adjacent electrical closet and moved the doors to allow an additional rack to be included in the two problematic closets.

NTS will fund the redundant fiber link between the new Humanities bldg. and the Stevenson ADF. It will need to be included as a budget item in approx. 3-4 years out.

PSB:

*The communications sub is not going to fulfill their contract due to both losing their bonding and contractual issues. This leaves the project with no cabling installed, no schedule, and the need to review new submittals.. Read Neil's report (below).*

FDM / Communication Building:

*A long and comprehensive construction punch list was produced last week. Cabling issues made up approximately 40% of the list. At my insistence, PP&C is producing a time line to coordinate the turn over of spaces versus contractor completion.*

Many station (to desk) fiber cables have failed the contractor testing. This will probably impact move schedules and activations. There are additional issues regarding copper station cabling both at the closet and desk ends.

SBC Cable Removal:

*I have worked with both SBC and Matt to resolve both the radio circuit and other previously unknown circuits that remain on this cable. No information / pricing from SBC regarding the Porter infill SBC cable removal.*

The radio circuits have been relocated. An additional blue light phone circuit has been discovered leaving a splice case that will require installation of new cabling if I cannot find another cable splice case that can feed this circuit.

The circuits remain to be relocated (12/12). Andy trying to locate contact names for the two sheriff radio circuits to coordinate efforts.

Telco group given some circuits to relocate as we used SBC cable for our service. Found out today that one circuit feeds the county police repeater on NS2. The transfer of this circuit will require coordination. This remains to be completed (10/26).

Crown ADF cooling:

*The installation is completed with no punch list items. The Grounds Keeper is now storing their wheelbarrow next to the condenser pump / coils. I will need to have the carpenter shop install a fence around the condenser pump / coils.*

The installation is underway starting Monday 12/15

McHenry Library Renovation:

*I am inventorying the capacity of existing various cable services to determine if additional cabling will be required.*

I requested the latest revision of drawings for review as I discovered that the project manager has not sent us the previous two revisions.

I had a brief meeting with Steve to discuss the space requirements for the phone switch and incoming copper/fiber. Met w/ engineers to determine how the bldg will receive service and closet issues.

Porter and Cowell Infill projects:

*Responding to contractor inquiries regarding underground backbone cables and attempting to obtain a construction schedule.*

I am working with SBC to get a cost estimate for the SBC cable removal to allow space for the Porter In-Fill copper to be installed. This cost will be part of the In-Fill project budget.

Baskin Riser Cable replacement:

No activity this week.

NextG:

No activity this week

Site visit by Ed Gentile of NEXTG to review the feasibility of NEXTG installing fiber to the cell site. A path is available from existing fiber at Crown-Merrill apartments ADF to the cell site. CMA's ADF has only 12 strands of SM fiber feeding it. I explained to Ed that they can use 6 strands maximum.

Nextel:

No activity this week.

Cingular:

No activity this week

SBC CAMFAC cable install:

*Coordinating activities between SBC and Jim Gabrio to get the conduit installed.*

SBC will saw cut the concrete into the above ground splice can. CAMFAC will dig the trench and install the conduit. I am obtaining a schedule from CAMFAC to coordinate the efforts.

CAMPAC has installed a 50pair cable into the SBC above ground splice can and wants it removed. I am working with SBC and CAMFAC to find a solution as the cable is important. I met with Gabrio, who is willing to install a new 2" PVC conduit between the MH and SBC's splice can at their expense. The cable CAMFAC installed is the main substation control cable and is VERY important. I have passed on Gabrio's offer to SBC and am awaiting their comment.

Student Health Center:

No activity this week.

Started review of the cabling issues into this building. Will meet with CAMFAC to determine if they are going to support the campus cable.

Thimann 191 / Lick Expansion:

After a flurry of email regarding our policy of extending fiber and creating new single use IDF's, we still have not reached a resolution to present to Lick. I will attempt to gather a consensus next week.

Kerr 2<sup>nd</sup> Floor Renovation

*Worked with Staff Human Resources regarding relocating their computer training lab from the 2<sup>nd</sup> to 1<sup>st</sup> floors. This includes sizing and locating a new telcom closet that will feed the entire floor.*

I finalized a preliminary budget and met with the project manager to review the budget.

Mary's report:

Project listing 01/21/04

1. Assigned self-reporting division network updates for Pinnacle, by Rich.
  - Ed has assigned David Hayden to the network side of Pinnacle. I will pass this on to him. Bob says this can only be accomplished after the Pinnacle conversion. Marcy stated that Michael told her, his techs had all the correct information for importing.

2. Investigating setting up Pinnacle to better track data needed for the small wiring projects. The new database is very complex, documentation is vague, therefore reading and experimentation in the test database is necessary to accomplish this task.
  - Will schedule meeting with Marcy to assess where she is at in testing of new procedure.
  - 1/21 sent email enquiry

3. Bob has asked that I assist in moving MAC template creation forward as it is the key to the Pinnacle web access.

This item was assigned to David Hayden, by Ed Titus, during the Pinnacle Web kick-off meeting.

1/21 – I spoke with Jim of Pinnacle, at length regarding MAC templates and the new web interface, and how data still doesn't work well with the latest version of Pinnacle. I brought up voice over IP as an example of true integration of data and voice. If they can't get Pinnacle to work well with data now, voice over IP isn't going to fit, either. He agreed the web interface was very poor, and assured us, the next rewrite has completely changed the face of Pinnacle and will be far superior. In the mean time, we're stuck with "monkey" rigging the MAC templates for data use. He gave me a few good suggestions at using tasks and services. I could throw something together on the test database and see how that works. Until Pinnacle gets it's customer base together.....I'd like to investigate ColdFusion, to see if it can provide temporary solutions for the data side of the database.

- I ordered "ColdFusion MX Web Application Construction", should arrive this week. I paid for this item, myself, as I preferred to maintain ownership of the item.
- Do you still want me to work at creating MAC templates for data, or, should Marcy and David be interfacing to complete this task?

4. Correcting and update of NTS web site.

- a. Updating and correcting when notified.
- b. **Need guidance on reconciling "hourly charges" with "consulting services" rates. They are very different, need to know which numbers to use for "hourly charges. I suggest the "consulting" rates.**

-12/11 Still no word on this.

-12/18 Still no word on this.

-01/08 Still no word on this

-01/21 Still no word....

~~C. Will set up some time with Robert, next week, to assist in updating the network trouble shooting part of the web site. It's scattered over several machines, pages and responsibilities. I recommend NTS assumes ALL responsibility of network trouble shooting guides and put those web pages on NOC~~

~~D. Robert says David Stihler has been given authority over his work schedule and I will need to talk with David.~~

~~-12/18 I'm going forward with learning ColdFusion to move this along. Looking into available tutorials. Looks like a good one available at Boarders. I'm planning to peruse it over this weekend and purchase it, myself, if it looks good.~~

~~no change~~

Dropping items C & D. There's no point in keeping it on my project list.

I will look into the trouble shooting items, and see if they can be consolidated to on area.

5. Proposed inventory plan for waps installation. Accepted by Rich and Frank (per Rich). Test bed likely to be installations in Col 9/10.
  - 12/11 Objections from Frank, sent off my response, haven't heard back from anyone.
  - 12/18 Have had no notification or communication on this item from other parties involved. Had expected this to be an item of discussion at the weekly wireless meeting, but it was never raised.
  - 1/21 Have received email from one Mr. Koch's students, Paul, stating that Mr. Koch has assigned this task to him, and I'm to assist. The cut sheet provided did not have enough information to properly inventory the wireless network into Pinnacle as per the outline approved by Mr. Chew. I would be happy to assist when the required information is provided.
  
6. Working on numbering.
  - PSB Met with Glen Mah on PSB regarding floor changes. Drawings are so messed up; he will obtain drawings from wiring contractor to provide accurate cabling installation. May require complete renumbering.
    - on hold for Glen, no change
    - Heard from Glenn, he says, "Mary - I don't have any good news for you. The project continues to fall behind schedule and we have some hard decisions to make this month. Regarding the comprehensive telecom drawings I asked the subcontractor for ... I was told that since the project has been delayed so long, Pacific Com Tel is refusing to do the work, so they aren't doing any shop drawings either.  
If you are continuing to have difficulty reading the design drawings (as I am also) due to changes and inconsistencies on the telecom ... contact Richard Spiese at 415-946-0273 who did the design. He should be able to help you with those symbols, etc."  
I will contact Mr. Spiese, next week.  
1/21 Haven't contacted Mr. Spiese, am working on Eng. Bldg jack numbering. I'll call him sometime Thursday or Friday.
  - Infill is done and handed off to Kevin.
  - Engineering – had questions, Bret will get back to me with the answers. Still waiting on Bret, he's waiting for new drawings.
    - i. Will email Bret for an update
    - ii. 1/21 working on jack numbering. Only half through 2<sup>nd</sup> floor and already have 571 CAT5e and 59 fiber.
  -

7. Working on new cable numbering for infill and new buildings.
  - PSB – done, need inventorying - no change
  - Infill – done, need inventorying – no change
  - Engineering – I’ll pull them from PP&C server.....
  
8. Still no word as to when the fiber inventory project will be given any priority and reassigned a technician.
  - There have been data/voice cable inventory projects; at the moment Mike has Joe inventorying jacks against the database. Why is the fiber inventory project consistently being ignored?
  - Since there’s NEVER any change in the status of this project, shall I just drop it from my queue?
  - 12/11 no change
  - 12/18 no change
  - 01/08 no change
  - 01/21 no change
  
9. Notified Russ and Neil for draft updates of Cable management web pages. Preliminary date is Nov. 15<sup>th</sup>.
  - No change. Haven’t received any updates.
  - Will check with Neil on status.
  - 1/21 Neil to work on it after vacation
  
10. Cleaning up tiff drawing of FSH. Plan is to turn this into a CAD drawing when the tiff is cleaned up enough to follow as a guide. Just something I’m trying my hand at.
  - Since this is not a high priority item, I work on it, intermittently.
  - No change
  - Almost finished.....
  
11. FYI, Media services are interested in accessing Pinnacle for their needs. They’ll schedule some time when they are available.
  - No contact from Media Svcs.
  - 12/11 no change
  - 12/18 no change
  - 01/08 no change
  - 01/21 They have a new cable guy, last one went back to work for PG&E...They’ll see if the new guy wants to inventory connections. Media Services is also interested in inventorying their equipment, since Pinnacle has the ability to read barcodes.

Neil's projects:

**Small Cable Projects:**

NW 251 - FiSH. Add 3 data Jacks to new office in residence area - Waiting for customer

NW 253 - Student Health Center. Add 4 data jacks to to Rm 149. Attempted Install on 12/17/03. Still no pathway

NW 254 - F&DM - Project on hold until F&DM main floor cabling is accepted.

**Engineering Building:**

1/15/04

Began inspections of Eng. Bldg. Kelly Stevenson, PP&C inspector and I toured the entire project, inspecting the five floors. Work on the upper floors is more advanced than on the lower floors. The building is still on temporary power.

Rosendin electric will be the sub for electrical and data work. Having the same company perform both functions will eliminate a lot of finger pointing during the project.

Cable tray and conduit have been installed throughout the building. Grounding and bonding has begun on the cable trays. The conduits that feed workstations have not yet been bonded to the tray. The 4" conduits that carry cabling through the hard-cap sections of the building have been installed, and look good except for a section on the 3<sup>rd</sup> floor south section, The one problem section was moved by the sprinkler installers, and will need to be realigned with the cable trays on both ends.

The conduits and gang boxes for workstation cabling have been installed.

The cable trays are rapidly being obscured by the mechanical work and sections of suspended ceiling. Cable installation will be much more difficult than it would have been a month ago.

Data and voice cabling are scheduled to begin within the next few weeks. This work will be done concurrently with the electrical work. Communications cabling is slated to be completed within six weeks of commencement. Due to the large number of connections and the increasingly tight conditions, this will require a large installation team, possibly one team per floor.

Fire alarm cabling has begun on the fourth floor.

In general the project is going very well, and looks to be completed earlier (May or June 2004) than the scheduled completion date.

**PSB Report:**

1/15/04

One additional stick of cable tray has been added to second floor. Several existing cable trays have now be bonded together and to conduits for grounding purposes. There are only a few workers on each floor. The project is severely delayed and has major problems.

-----

1/08/04

The general contractor has taken over the role of Mechanical Contractor at PSB. The current workforce at PSB is 50 workers - about 50% of the proper staffing. That number will fall to about 25 workers as the subcontractors continue to lay off or reassign workers. UCSC is looking into

the possibility of legal action concerning the project. During the last subcontractors meeting, Pacific ComTel announced that they would not be working on the project.

If the project gets back on track, the earliest expected completion date is early in 2005.

-----  
PSB has had no reportable progress since the last report.

Due to holdups concerning the bankruptcy of the mechanical contractor and the delays to the trades that follow his work (sheetrock, tape/texture, paint, ceiling grid) the cable trays will not be installed for about two more months. The cabling work will not begin until the trays have been completed on the first and second floors.

At the same time, Pacific ComTel has indicated that they no longer want to perform on the project for the agreed price. Due to the amount of time that has passed since the contract was signed, they do have that right. There will be a meeting this week between Pacific ComTel and Helix to help determine the future of Pacific Comtel at the PSB project.

The new (unofficial) completion date for the project is November/December 2004.

The official completion date was listed as November 2, 2003. The contractor's schedule shows final completion at 12/1/03. The most likely actual completion date (unofficially) is now Summer 2004.

- It appears that cabling will not commence in late October or early November. Kelly Stevenson indicates that the 4" telecom conduits are properly supported. Cabling may start in November or December.

-The T rating of both the electrical closets and data closets have been causing delays. The electrical closets have been combined into a "shaft" between all floors.

-The activity of starting the telecomm room on each of the floors, which was listed for August 11th, is scheduled for this week.

- More cable tray has been installed, but is not completed. Some cable tray has been removed to allow other utilities to pass at right angles and at the same height as the tray. This is going to cause complications for the cabling crew unless corrected.

-The roofing is not completed and the membrane is damaged in several locations. If it rains, there will be a problem.

#### **1<sup>st</sup> Floor:**

Data closet on the first floor is sheet rocked and taped.

There is still no cable tray on the first floor.

Sheet-rocking and taping is ongoing on the entire floor

The main cable conduits are only a few inches above the door in the data closet. We will need to check the height of the cable tray on the elevation plans.

#### **2<sup>nd</sup> Floor**

The data closet on the second floor is rocked, but not taped.

Most cable tray is installed and grounded. The cable tray has been routed over an air handler – cable installation will be harder than it should be.

T-Bar ceiling is installed in many locations.

#### **3<sup>rd</sup> Floor**

Data closet is 40% rocked, not taped.



Cable tray by closet (Drawing notes #1) is installed but not grounded. The clearance between the cable tray and ceiling will be very tight (less than 8"). No other tray has been installed since last report.

Sheet-rocking and taping is ongoing on the entire floor.

T-Bar ceiling is installed in many locations.

Referring to drawing notes 7&8: Conduit and tray are installed without ground wire.

#### **4<sup>th</sup> Floor**

Data closet <50% rocked.

Referring to drawing note 8 on second page: Conduit and ground wire installed – no tray.

Note 1: Tray and ground wire installed.

Note 2: Conduit is installed.

Note 5&6: Tray still not installed

Sheet-rocking and taping is ongoing on the entire floor.

T-Bar ceiling is installed in many locations.

#### **5<sup>th</sup> Floor**

Note 3: 1 stick of tray installed. No ground wire.

Steel 2x4's installed for hard-cap ceiling.

#### **Roof**

A roofing contractor is on-site.

---

### **Film and Digital Media Remodel**

1/15/04

Shackell has two employees on site. They are in the process of reterminating the failed fiber connectors. They are planning to complete the RJ-21x cross connect system on the ground floor by 1/23/04.

The F&DM meeting was cancelled by the contractor this week.

Cabling Punchlist items continue to increase faster than they are being resolved. The lack of the RJ-21X cross connect system on the ground floor prevents activation of voice services on new cabling on this floor. Much PVC cable remains in the cable trays. Shackell Telecom has not increase manpower to meet the needs of the project. The termination and testing of MT-RJ connectors continues to cause difficulties for Shackell.

Adacon has begun moving out of their trailer and plans to have the trailer painted and carpeted by Feb 2, 2004.

---

There are a number of issues with the F&DM project. Almost all fiber cables have failed certification. The copper cables in the main floor closet need to be reterminated. Cabling to the trailer has not yet been completed. Many punchlist items remain.

---

Punchlist is attached as a separate file. Punchlist items are being forwarded to Kevin as they are found.

### **Family Student Housing (Repair and Broadband)**

1/14/04

We still have not received test results from Shackell telecom. Repeated requests have not helped.

-----  
We still have not received results for copper backbone testing for this project. We are still waiting for SM results for Porter to FSH. Bruce Hoffmann is aware of the lack of results.

-----  
Shackell is scheduled to complete work on FSH on 12/5/2003. Work completed on 12/12/03. Need to check certifications supplied. Still waiting for SM results for Porter to FSH.

This project has occupied much time in the past two weeks. Working with both Bruce Hoffmann and Courtney Grazian. Fiber test results are attached as a separate document.

### **Infill Projects:**

TMS requests for change order payment has been declined. The work on Stevenson Infill goes very well. Stevenson Closet 41(A) cables 906-D001 through 906-D200, as are 906-D209,210,300,301, 302, 400,401 are terminated and labeled.

Voice station cables are terminated and labeled. There are skips in the numbers: V301,302,401 through 409.

Backbone cables (fiber, copper, CATV) are run and coiled in room but not terminated.

Almost all workstation jacks have been installed. The jacks checked for numbering accuracy (about 50% at this time) are all good.

There is still no access to the closet in Bldg 42.

The closet for bldg 43 has voice cables 905-V001 through V095 terminated and labeled. Data cables are terminated but not labeled.

Backbone cables are coiled in 43 but not terminated.

-----  
TMX questions if any of the layouts may constitute a change order to the construction documents. TMX will supply a written list of questions before winter break.

Inspecting closets – comparing to construction plans. Completed layout of building 41,42,43. ADF 3 copper is layed out. Need information on which rack to use for fiber in ADF 3. Working on final layouts for closets in buildings 11,12,73,74,75 and 72.

Completed layouts for Stevenson closets

Building 43 is now painted inside – inside jack work will follow shortly  
TMX is combing cabling in Stevenson Infill Telcom rooms. 110 blocks are mounted- racks are not yet placed.

**PSB Report:**  
**Porter Infill Report:**

1/15/04

Building 71: Sheetrock almost completed. No tape and texture. Building exterior being finished. All cable roughed-in. Cables are not yet numbered.  
Building 72. : Sheetrock almost completed. Tape and texture completed. Building is painted. All cable roughed-in. Cables are not yet numbered.  
Building 73. No access due to painting.  
Building 74. Sheetrock completed. Painting 90% completed. Cabinetry not installed. All cable roughed-in. Cables are not yet numbered.  
Building 75. Sheetrock completed. Painting completed. Cabinetry installed. All cable roughed-in. Cables are not yet numbered. Outer doors installed.  
Building 76. No access due to floor surfacing.  
Building 77. Least advanced building. Interior walls being installed. Cables roughed-in. Cables are not yet numbered.

-----  
There has been little reportable progress on the cabling at this project.

-----  
The rough-in cabling in all of the Porter Infill buildings 71, 72, 73, 74, 75, 76, 77 has been completed. All but building 77 are sheetrocked. Many are taped, textured and painted.

The voice and data work has not be started in the closets and no station jacks have been installed.

Devcon reports that 90% of communications/CATV work is completed.

Porter Infill is composed of buildings 71, 72, 73, 74, 75, 76, 77.

Building 71 is in the framing stage and utilities have not yet been installed.

Building 72 has all voice/data/catv cabling roughed-in.

Building 73 has been rocked, but no voice/data/CATV is visible)

Building 74 has all voice/data/catv cabling roughed-in.

Building 75 has all voice/data/catv cabling roughed-in.

Building 76 has some rock but utilities have not yet been installed.

Building 77 is in the framing stage and utilities have not yet been installed.

### **Stevenson infill Report:**

There has been a lot of progress in the Stevenson Infill project.

Building 41: The contractor has completed voice station cable termination in the equipment room. The work looks clean. The backbone voice cable has not yet been terminated. The fiber has not yet been terminated.

The data rack has been installed and the contractor is dressing the cables. No data cables have been terminated to the rack yet.

All of the station cabling has been roughed-in except for the computer lab which has not yet been cabled. No data or voice station jacks have been installed.

Building 42: All of the station cabling has been roughed-in. The contractor has completed voice station cable termination in the equipment room. The backbone voice cable has not yet been terminated. The fiber has not yet been terminated.

The data rack has been installed and the contractor has begun dressing the cables. No data cables have been terminated to the rack yet.

No data or voice station jacks have been installed.

Building 43 (Units A-E): All of the station cabling has been roughed-in. The contractor has completed voice station cable termination in the equipment room. The backbone voice cable has not yet been terminated.

The data rack has been installed and the contractor has dressed the cables. Data cables are terminated to the rack

All voice and data station cables have been terminated.

Devcon reports that 90% of communications/CATV work is completed.

Buildings 41A , 41B have Cat5E cabling to all residence rooms. Cabling is run back to one closet in building 41B. No cables are terminated. One cable in 41A lower floor is damaged in the cut-in box, but TMX should be able to terminate it - the short length may cause problems removing the cover plate.

Buildings 42 and 43 have Cat5E cabling to all residence rooms. No cables have been terminated.

### **Cowell infill Report:**

01/15/04

No walkthrough this week.

-----  
01/08/04

There has been little reportable change in the project.

-----  
Building 13A (Community Room) is being framed. No cabling work as yet.  
Building 13 (Dorm): All of the station cabling has been roughed-in.  
Building 12 (Lower): All of the station cabling has been roughed-in.  
Building 12 (Upper): All of the station cabling has been roughed-in.  
Building 11 (Lower): All of the station cabling has been roughed-in.  
Building 11 (Upper): Most of the station cabling has been roughed-in.

Closet work has not yet begun at the Cowell Infill buildings.

Cowell Infill is composed of buildings 11, 12, 13 and 13A.  
Devcon Construction reports that 65% of communications/CATV work is completed.  
Building 11 is being framed.  
Building 12 has cabling in the 1<sup>st</sup> to 2<sup>nd</sup> floor apartments but not the 2<sup>nd</sup> to 3<sup>rd</sup> floor apartments.  
Building 13 has roughed in cabling in almost all sections.