

**HOFFMAN CONSTRUCTION COMPANY
OF OREGON**

METRO HEADQUARTERS

PROJECT MEETING MINUTES

Our Job No. 9214

Meeting No: 26
Date: June 16, 1992
Location: HCCO Field Office
Attendees: Berit Stevenson Metro
Sandy Stallcup Metro
Pat Merakle Metro
Maurice Neyman Metro
Paul Thimm Thompson Vaivoda & Associates
Cade Lawrence Hoffman Construction Company
Don Nail Hoffman Construction Company
Bill Stotts Hoffman Construction Company

26-1-0 ACTION ITEMS

26-1-1 Fitness Center Pricing: Metro questioned the status of the Fitness Center cost vs. the new design. HCCO explained they recently received the latest Fitness Drawings and will review the costs. Metro voiced concern about using carpet in the lavatory area and will discuss the issue with Bob Thompson. Metro requested TVA utilize fiberglass showers in lieu of ceramic tile showers.

LOOK AT SANTANA
RECYCLED PRODUCTS
FOR SHOWERS &
BENCH.

PRICING

Action: HCCO/TVA
Date: 6/23/92

26-2-0 RESOLVED ITEMS

25-2-2 Print Shop Sound/Air Design: Metro questioned whether the Print Shop design included a separate air supply system and extra sound insulation to control noise. TVA will check with

Glumac on the air supply issue and double check the wall construction.

Action: TVA
Date: 6/15/92

As of June 16, 1992: TVA checked with Glumac and confirmed the Print Shop will have a separate exhaust with the supply air tied into the main system. The walls will have sound insulation.

21-2-3 Spandrel Glass Color: TVA and HCCO explained the glass supplier had issued a letter which voiced concern about a light-colored frit on the spandrel glass allowing shadows to read at the exterior. HCCO will get with Harmon about a sample project which utilized the light frit. HCCO will also get the cost impact to TVA.

Action: HCCO
Date: 5/14/92

See previous meeting minutes for prior status.

As of May 26, 1992: HCCO sent a Harmon memo on pricing and existing building location to TVA for review. TVA will check on receipt of Harmon memo and schedule a time to review an existing installation.

As of June 2, 1992: HCCO informed TVA they expect to receive the latest spandrel glass samples on 6/3/92. TVA will review the existing Seattle building only if the samples do not work out.

As of June 9, 1992: HCCO explained that Viracon was discontinuing production of Guardian colored glass so they hope to have an alternate green glass color sample for TVA review by this afternoon. TVA will expedite their review of the glass.

As of June 16, 1992: TVA approved an "Evergreen" spandrel glass and the glass has been ordered.

24-2-2 Handicap Ramp at NE Corner: HCCO questioned whether the Plaza NE ramp was still to be provided as it was not shown on the latest drawings. TVA will get the ramp shown on the next set of Plaza drawings.

Action: TVA
Date: 6/9/92

As of June 9, 1992: Same as above.

As of June 16, 1992: HCCO confirmed they received the N.E. Plaza ramp design from TVA and are preparing to pour the ramp.

26-3-0 UNRESOLVED ITEMS

2-3-5 PP&L Energy Analysis: Metro reported they have a meeting with Glumac January 10, 1992 at 10:00 at Glumac's office to review the PP&L energy analysis issues. Any parties interested will attend the meeting.

Action: Metro
Date: January 10, 1992

See previous meeting minutes for prior status.

As of June 2, 1992: HCCO has all the "ECM" pricing together except the Daylighting and they hope to have the overall pricing submitted to Metro by the end of the week. Metro explained they hope to have the final "ECM" report from Glumac by this week.

As of June 9, 1992: HCCO explained they are still working on the "ECM" costs for the project. Metro explained Glumac is to issue the final "ECM" report this week which will include the parking garage light fixture revision. HCCO will price the final "ECM" study and submit the final pricing once the report is issued.

As of June 16, 1992: Metro will get a copy of the final "ECM" study to HCCO for review and final pricing. Metro confirmed they had received HCCO's preliminary pricing on the Energy Study and they are reviewing it at this time. Metro questioned the daylighting costs being in the RFP. HCCO will review.

4-3-5

Parking Structural Design: Metro explained they would like to see the design/build team start looking at the redesign of the parking garage. TVA and HCCO questioned what type of retrofit Metro was looking to receive. Metro will review their needs further and get back with the design/build team.

Action: Metro
Date: January 23, 1992

See previous meeting minutes for prior status.

As of June 2, 1992: HCCO explained they submitted the design fee pricing to Metro for review and approval. Metro will review and get back with HCCO if they have any concerns.

As of June 9, 1992: Metro voiced great concern about the cost of kpff's design fee on the parking garage shear walls. The kpff fee would take the design from schematic drawings to construction documents. TVA will get with kpff and have them clarify why their fee is so high.

As of June 16, 1992: Same as above.

MONDAY
@ 2:00 PM
PRELIMINARY
DESIGN MTC
W/EDGAR

11-3-1 Paging System: HCCO questioned the status of a paging system for the project. Metro explained they do want a paging system included in the T.I. design. TVA will review what is necessary to provide a paging system.

Action: TVA
Date: 3/10/92

See previous meeting minutes for prior status.

As of June 2, 1992: Metro decided to have "paging" designed by Glumac. Metro will issue a description on the paging system to HCCO so Glumac can design and submit a fee proposal. Metro and TVA will get together this week to address the audio/visual issues.

As of June 9, 1992: HCCO received Metro's paging description and forwarded it to Glumac for their design fee proposal. Glumac will include the design in the 6/24/92 drawings.

As of June 16, 1992: HCCO explained they had received Glumac's fee proposal and would be forwarding to Metro for review. Metro explained they may have Alta take over the paging system design.

12-3-1 Design Review Planning Meeting: TVA reported the design-review meeting is still scheduled to occur on 4/9/92. All parties agreed a preliminary planning meeting should be held by the team prior to attending the actual design-review meeting. TVA will continue to communicate with the City and will set up a planning meeting time.

Action: TVA
Date: 3/17/92

See previous meeting minutes for prior status.

As of June 2, 1992: HCCO will review preliminary Plaza retail pricing with Metro following this meeting.

As of June 9, 1992: HCCO reviewed the preliminary Plaza retail pricing (+\$264,000) with Metro following the previous meeting. Metro requested HCCO look at VE ideas to reduce the overall costs. HCCO will get with TVA and Harmon following this meeting to review modifying the storefront system down to a more affordable cost.

As of June 16, 1992: HCCO explained they have Harmon doing some VE pricing on the Plaza retail window system and they hope to receive the pricing by this afternoon. TVA voiced concern as they will be completing the design next week so any VE revisions will need to occur following the 6/24/92 drawing issuance.

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- 13-3-3 Security Analysis: TVA questioned whether the elevators should have a special security system or should the elevator be tied into the main building security system. HCCO will obtain several proposals for the security scope which meets the RFP and try to interface those proposals with the elevator so the separate elevator system can be deleted.

Action: HCCO
Date: 3/24/92

See previous meeting minutes for prior status.

As of June 2, 1992: A meeting with all parties and Selectron was held on 5/29/92 and the overall security scope was finalized. HCCO is waiting for any pricing impact due to the meeting. TVA tabled a security meeting summary (Attachment, Fig. #2) for all parties to review.

As of June 9, 1992: HCCO issued Selectron's new security scope description to Glumac, Metro and TVA for final review and TVA noted they believed Selectron should be showing a double-faced card reader at the S. entry sidelite. HCCO will contact Selectron about the S. card reader issue. HCCO explained they are still pursuing any revised pricing.

As of June 16, 1992: HCCO explained they received Selectron's cost proposals for adding another TV monitor, the tilt/pan camera and miscellaneous monitor points. HCCO will complete their review of the pricing and get it submitted to Metro by next week. Metro issued their review comments on the revised security scope to HCCO for review.

- 18-3-1 Daycare Design Status: HCCO questioned the status of the Daycare area design work. Metro and TVA will get together to start the design process up again.

Action: Metro/TVA
Date: 4/28/92

See previous meeting minutes for prior status.

As of June 2, 1992: TVA confirmed they are on schedule for a 6/24/92 issuance of Daycare construction documents. HCCO explained they are still doing their pricing review. TVA and Metro will meet again on 6/4/92 at 1:00 to continue the Daycare design.

As of June 9, 1992: Metro reported they had their last design meeting with TVA on the Daycare area so TVA can now work toward finishing the construction documents. TVA committed to having the Daycare drawings issued by 6/24/92 for bidding.

As of June 16, 1992: TVA confirmed they are still on schedule with production of the Daycare drawings and will issue by 6/24/92. Metro explained they have a few revisions forthcoming but all parties agreed those revisions would be incorporated following the 6/24/92 date. TVA will have Glumac get into how the existing interior manholes will be handled.

21-3-4 Carpet Selection: HCCO again approved TVA going to a carpet factory to select a carpet in the \$14/SY range. TVA committed to have a carpet selected within four weeks from this date (6/12/92). Metro and TVA approved having the carpet installed after miscellaneous demountable partitions are installed.

Action: TVA
Date: 6/12/92

See previous meeting minutes for prior status.

As of June 2, 1992: Same as above.

As of June 9, 1992: TVA explained they were close on the carpet selection but they need until 6/24/92 to make the selection. HCCO emphasized the selection is critical by 6/24/92 so the carpet selection can be included in the 6/24/92 bid package.

As of June 16, 1992: Same as above.

BY FRIDAY.

22-3-2 Rooftop Unit Approval: HCCO explained they have received Metro's comments about the Trane rooftop unit and have Trane working on a response. Glumac reviewed the rooftop unit submittal and they returned it as "revise and resubmit."

Action: HCCO
Date: 5/25/92

See previous meeting minutes for prior status.

As of June 2, 1992: Metro explained they are very concerned about the Trane unit meeting the specifications and they requested a meeting with Glumac to review their concerns. A tentative meeting was set up for 6/3/92 at 2:00 p.m. at Glumac's office.

As of June 9, 1992: A meeting was held on 6/3/92 at Glumac's

office with HCCO, Metro, HMC and Glumac attending. During the meeting, Metro authorized HCCO to purchase the McQuay unit and they would pay for the cost premium. Metro will issue a letter to HCCO requesting the McQuay unit and HCCO will firm up the cost variation.

As of June 16, 1992: Metro approved proceeding with purchase of the McQuay units in lieu of the Trane units and agreed to pay the premium cost. Metro requested the McQuay control package be deleted from the units and upgraded to purchase Barber Coleman controls. HCCO submitted a preliminary pricing breakdown to Metro for review.

LETTER TO HCCO. RESPONDING TO
MCQUAY LETTER

22-3-3 1% Art Selection: Metro explained they had received the art submissions and the committee is in the process of making a selection. Metro explained one of the favored art options would be special brick pavers at the Plaza level. TVA and HCCO voiced concern about how the art brick work would interface with the base brick at the Plaza. Metro and TVA will continue to expedite the artwork selection.

Action: Metro/TVA
Date: 5/26/92

See previous meeting minutes for prior status.

As of June 2, 1992: Metro explained they had reviewed the various art proposals and narrowed it down to six (6) art designs. All parties discussed the Plaza issues and HCCO will review the concrete vs. paver issues to determine which design best serves the project.

As of June 9, 1992: Metro explained they are still in the process of selecting the art design: artist interviews are to occur on 6/26/92. HCCO informed Metro and TVA they would like the Plaza design to utilize a concrete topping slab in lieu of sand bed.

As of June 16, 1992: Metro is still on schedule to make a selection by 6/26/92. Metro informed the artist they will have to work within the Plaza concrete fill design being shown on the drawings.

FRIDAY.

22-3-4 T.I. Drawings: Metro received the T.I. final signoffs on 5/13/92 so TVA started work on the T.I. construction documents. TVA committed to delivering the T.I. construction documents by 6/24/92.

Action: TVA
Date: 6/24/92

See previous meeting minutes for prior status.

As of June 2, 1992: Same as above.

As of June 9, 1992: Same as above.

As of June 16, 1992: Same as above. TVA did voice concern that they are running very tight against the 6/24/92 drawings. HCCO emphasized there is no time for extensions on the T.I. issuance date. All parties agreed that no further revisions would be picked up until after the 6/24/92 T.I. issuance date.

23-3-1 Telephone/Data Review: Metro will issue a preliminary telephone/data specification for the Design/Build team to review and incorporate into the T.I. documents.

Action: Metro
Date: 5/27/92

As of June 2, 1992: Metro issued the preliminary telephone/data specifications to HCCO and HCCO forwarded to Glumac. Metro explained they talked to Glumac about the requirements and Metro will issue a drawing by 6/5/92 which indicates where they need data/telephone outlets. Glumac will work from that drawing to create the design documents.

As of June 9, 1992: Metro issued drawings to Glumac on 6/4/92 which indicated where the phone and data outlets would be required. TVA confirmed Glumac had received the drawings and they would have the design incorporated into the 6/24/92 T.I. documents. HCCO emphasized it is important Metro increase the T.I. allowance if the scope of work is increased. Metro agreed and requested a change order submittal.

As of June 16, 1992: TVA confirmed the telephone drawings will be shown on the 6/24/92 T.I. drawings. Metro explained they have a consultant (Alta) coming following this meeting to review the phone system with Glumac.

25-3-1 Permit Status: HCCO explained the City had stopped any further brick work due to the lack of the main building permit. HCCO reported only four parties (Jerry Englehart, Art Atchison, Terry Beck and Bob Reslock) remained to sign off. HCCO is still hopeful the permit can be obtained by 6/15/92.

Action: HCCO
Date: 6/15/92

As of June 16, 1992: HCCO explained they are now trying to get a separate exterior skin permit to allow masonry work to begin again. HCCO hopes to obtain the new permit this week. See attachment, Fig. #2 for TVA's response to the City checklist.

BRICK TIE ISSUE.

25-3-3 Audio-Visual Proposal: All parties discussed the outstanding audio-visual design issues and agreed a design-build proposal should be pursued by HCCO. HCCO will utilize the Metro A/V description and obtain proposals. Metro requested HCCO have AA Tronics be allowed to submit a proposal.

Action: HCCO
Date: 6/15/92

As of June 16, 1992: Metro explained they have a telephone consultant (Alta) coming to the meeting today and they hope to address audio/visual with them. HCCO will continue to pursue design/build proposals.

26-4-0 **QUALITY/SAFETY ITEMS**

26-4-1 Quality Circle Meetings: No quality issues were brought up at this meeting.

26-4-2 Safety Manhours: HCCO reported they had presently worked approximately 27,000 manhours without a lost time accident.

26-4-0 **INFORMATION ITEMS**

- 26-4-1 Next Meeting: The next Project Review meeting is scheduled for June 23, 1992 at 8:00 a.m. at the jobsite office.
- 26-4-2 Schedule: HCCO reviewed the project 3 week schedule (Attachment, Fig. #1) with all parties.

Submitted by:

Cade Lawrence

Cade Lawrence
Assistant Operations Manager

CL:mcc

Attachments

cc: Attendees
Glenn Taylor, Metro
Bob Thompson, TVA
Wayne Drinkward, HCCO

Attachment,
Fig # 1

Hoffman Construction Job # 9214
Short Interval Schedule
METRO HEADQUARTERS

Page 1

ACTIVITY DESCRIPTION	Subcont.	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5
DAMPROOF BUILDING EXTERIOR	MCKINSET	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	H	INTERMITTENT
Misc Mech/Elect Demo BASEMENT	HSI	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	INTERMITTENT
PREP AND FRP SHEAR WALLS	HSI	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	SHOTCRETE BY JOHNSON WESTERN
FRP SKIN FOOTINGS	HSI	X	X	X	X	X																NEED FOR BRICK
DEMO CONCRETE WALLS IN 1ST FLOOR	HSI	X	X	X	X	X		X	X	X	X	X										
DRILL SHEAR WALL DOWELS	BROTHERS	X	X	X	X	X																
WELD SHEARWALL DOWELS	CWI																					X
INSTALL HYDRO ELEVATOR CASINGS CRITICAL	INFO DRILLING	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	START IN EXISTING SHAFT SUB WAS DUE 5-18-92
MODIFY SPRINKLER SYSTEM	BASIC FIRE	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	INTERMITTENT
BUILD CMU BEARING WALLS	DAVIDSON	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	INTERMITTENT
INSTALL BRICK ON SOUTH, EAST ELEVATION	DAVIDSON	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	NEED STRUCT STUDS AND MISC IRON AND PERMIT
LAYOUT AND ASBUILT FOR SKIN	HARMON	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	INSTALL BRICK LEDGER ANGLES EAST ELEVATION
FAB AND INSTALL WIND LOAD SUPPORTS	HARMON																				X	START ON EAST ELEVATION
INSTALL STRUCT STEEL AT ELEV. SHAFTS	CWI							X	X	X	X	X		X	X	X	X	X	X	X	X	*URGENT, NEED SUB AND PERMIT

Short Interval Schedule

METRO HEADQUARTERS

ACTIVITY DESCRIPTION	Subcont.	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	
INSTALL STRUCTURAL SKIN SUPPORTS	CWI								X	X	X	X	X					X	X	X	X		
INSTALL DRYWALL ON BACK AND 2 SIDES OF ELEV. SHAFT	PERFORMANCE								X	X	X	X	X					X	X	X	X		
INSTALL EAST ELEVATION STRUCTURAL STUDS	PERFORMANCE			X	X	X			X	X	X	X	X					X	X	X	X		
INSTALL METAL STUDS AT BUILDING EXTERIOR				X	X				X	X	X	X	X					X	X	X	X		
INSTALL 3 PHASE POWER TO ELEVATOR MACHINE ROOM									X	X	X	X	X										
INSTALL BLOCKOUTS AND ROUGHIN FOR SHOTCRETE	JWP GRASLE			X	X	X	X	X		X	X	X	X	X				X	X	X	X		
INSTALL BLOCKOUTS AND ROUGHIN FOR SHOTCRETE	PEN NOR			X	X	X	X	X		X	X	X	X	X				X	X	X	X		
INSTALL BLOCKOUTS AND ROUGHIN FOR SHOTCRETE	MCKINSTRY			X	X	X	X	X		X	X	X	X	X				X	X	X	X		
INSTALL HYDRO ELEVATOR	SOUND																	X	X	X	X		

FOR SHOTCRETE, CMU AND BRICK WALLS

FOR SHOTCRETE, CMU AND BRICK WALLS

FOR SHOTCRETE, CMU AND BRICK WALLS

ELEVATORS TO SHIP ON JUNE 19, 1992

Attachment,
Fig. # 2



June 12, 1992

Mr. Jerry Engelhardt
Bureau of Buildings
City of Portland
1220 SW Fifth Avenue
Portland, Oregon 97204

fax: 796-6983

RE: Response to METRO Headquarters Plancheck Comments
Application #20180A

Dear Jerry:

The following are the Architect's response to your plan review comments dated June 10, 1992, in an item by item format:

- Item 1 Sheets A6.2, A6.3 and A7.5 are all signed, the note "DESIGN DEVELOPMENT - NOT FOR CONSTRUCTION" should be stricken off. TVA will mark-out this note on the (3) permit sets and has issued an Architect's Supplemental Instruction #11 to the Contractor to clarify this item. Sheet A3.6 also has this note but we are deleting this sheet per Item #2.
- Item 2 TVA will void-out the following North Plaza related items on the (3) permit sets:
Sheet A3.6 - DELETE entire sheet.
Sheet A5.1 - DELETE detail #4, (partial North elevation).
Sheet A5.4 - DELETE detail #1, (partial West elevation).
Sheet A5.5 - DELETE entire sheet.
Sheet A5.6 - DELETE detail #5, (typical bay at plaza).
Sheet A8.9 - DELETE entire sheet
Sheet A8.10 - DELETE entire sheet
Sheet A8.11 - DELETE entire sheet
- Item 3 The fireproofing ratings as scheduled in specification Section 07255-3.7 do not indicate thicknesses because this will depend upon the actual system selected by the bidding process, therefore Hoffman Construction will add Spray-Applied Fireproofing to the Contractor Design Summary Sheet on file with the City of Portland.

METRO Plancheck, page 2

- Item 4 Hoffman Construction Co. and METRO are doing this. To be provided separate from this letter.
- Item 5 The entire daycare area (Sheet A3.8) is to be submitted for permit with the future T.I. document package. We will be showing exits swinging outwards and panic hardware, etc. at that time.
- Item 6 Void
- Item 7 All handrails will be 1 1/2 inches diameter, TVA will mark-out this note on the (3) permit sets and has issued an Architect's Supplemental Instruction #11 to the Contractor to clarify this item. The following details shall be changed from 2" diameter handrail to a 1 1/2 inch handrail:
- 6/A6.4, 4/A10.12, 5/A10.12, and on 20/A10.12 change only the handrail pipe size but keep the additional guardrail pipe at the 2" dimension.
- Item 8 We will add the low swing-gate barrier at the second floor level at stair #2 as per attached drawing ASI-1. This drawing will also be pasted into the (3) permit sets and has been issued to the Contractor.
We will also add one illuminated exit sign directly over door #209 on the stair side and another sign in corridor 211 directing towards the exit door #211A. This will be marked-up on the plans by GLUMAC.
- Item 9 The thermal wall insulation will be changed from unfaced to faced batts. The new product will be equal to Owens Corning Fiberglass faced batt insulation with R-13 value (R-12.5 is our minimum value required by the PPL energy conservation upgrade program for this building). Use kraft paper or foil facing where insulation will be covered by gypsum board finish, use Flame Spread 25 facing where insulation is left exposed to the room side. This Specification change has been issued to the Contractor and is attached to this document for the City's use.
- Item 10 This area will be insulated, etc. per code requirements at the time it is finished out for occupancy. METRO will not pay for any more shell cost for this space at this time. Also it is likely to remain raw space for quite some time and by the time it is finished the code requirements could be more restrictive. We have provided insulation for the occupied floor space above this area, therefore we do not intend to add any floor insulation at this time.
- Item 11 We will add the following note to 3/A8.1: "1/4 inch per foot maximum slope at doorway". This is an existing entry point and it actually is quite level, the drawing is misleading. Also as part of this renovation we are reconstructing

METRO Plancheck, page 3

all of the sidewalks around this building and this will allow us to adjust grade at all entry points to meet the barrier-free codes. These sidewalk documents are a separate package being prepared by KPFF Civil Engineers and is currently in plancheck with the City of Portland Office of Transportation.

I hope this will answer all of your concerns regarding the core and shell documents, we will be submitting the Tenant Improvement Documents in the near future and at that time I would like to meet with you to go over those plans as you review them.

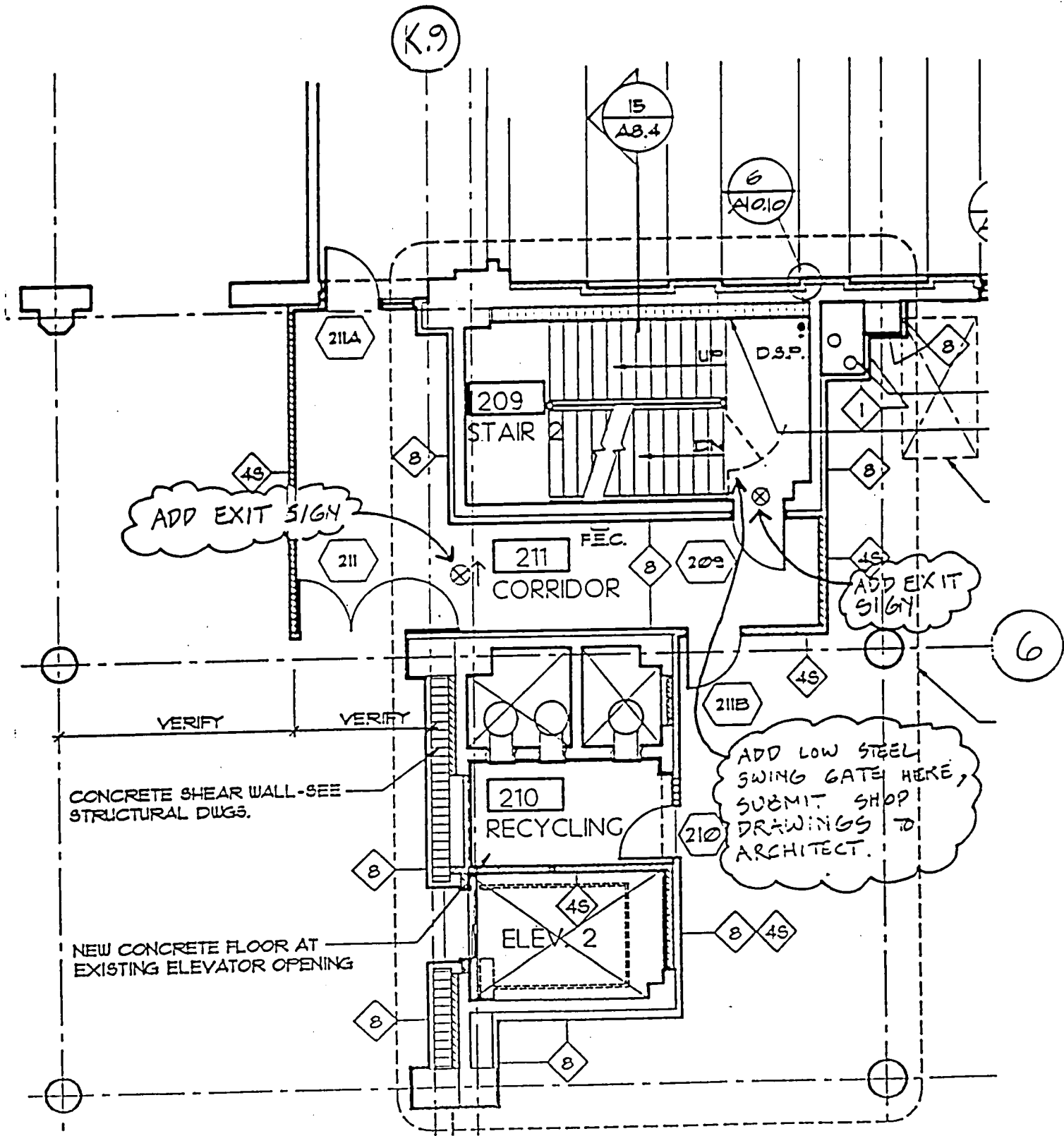
Please call if you have any questions.

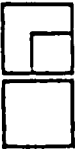
Sincerely,

A handwritten signature in black ink, appearing to read "Paul Thimm", with a long horizontal line extending to the right.

Paul W. Thimm, AIA
THOMPSON VAIVODA & ASSOCIATES ARCHITECTS

cc Cade Lawrence
Darryl Droba
Bob Grummel



 <p>THOMPSON VAMODA & ASSOCIATES ARCHITECTS AIA</p> <p>1010 SOUTHWEST ELEVENTH PORTLAND, OREGON 97205 TELEPHONE: (503) 220-0644</p>	METRO HEADQUARTERS		Scale 1/8"	Drawn by PT
	STAIR #2 GATE AND 2 EXIT LIGHTS		Project No. 91025	Drawing No. A51-11
	REFERENCE A3.7		Date 6/12/92	1

INSULATION

D. Foil-Faced Semi-Refractory Fiber Board Safing Insulation: Thermal insulation produced by combining semi-refractory mineral fibers manufactured from slag with thermosetting resin binders to comply with ASTM C 612 for Class indicated; passing ASTM E 136 for combustion characteristics of unfaced board; foil-scrim-kraft or foil-scrim-polyethylene vapor-retarder facing on one side with maximum flame spread and smoke developed values of 25 and 10, respectively; and as follows:

1. Low Density Semi-Rigid Board: Class 1 and 2, nominal density of 4.0 lbs. per cu. ft., r-value of 4.0 at 75 deg.F (23.9 deg.C).

E. Thermal Batt insulation for perimeter walls.

1. Owens Corning Fiberglass faced batt insulation with R-13 value (R-12.5 is our minimum value required by the PPL energy conservation upgrade program for this building). Use kraft paper or foil facing where insulation will be covered by gypsum board finish, use Flame Spread 25 facing where insulation is left exposed to the room side.

F. Thermal Resistance Schedule:

1. R-12.5 or R-13, 3-1/2" thick at walls and other vertical installations.
2. R19, 5-1/2" thick at exterior soffits.
3. R-17, 4 inches at floors over parking garage levels.

2.3 AUXILIARY INSULATING MATERIALS:

A. Adhesive for Bonding Insulation: Type recommended by insulation manufacturer, and complying with requirements for fire performance characteristics.

B. Mechanical Anchors: Type and size indicated or, if not indicated, as recommended by insulation manufacturer for type of application and condition of substrate.

1. 'Stic-klip' by Eckel Industries or approved, for installation of batt insulation at bottom face of concrete, floors. Color: White Washer