

July 16, 1984

Subject: Monitoring Report #1
Department of Corrections
Scott Regional Facility
Northville, Michigan
Contract C

Date of Monitoring: July 9, 1984

Day of contract execution: June 22, 1984 (working day 123)

Length of contract: 483 calendar days (approximately 337 working days)

Contract completion date: Evening of October 17, 1985 (working day 460) (This date to be checked)

Actions taken:

- Reviewed general project with prime contractors
- Prepared network model for building through completion of slab on grade
- Reviewed early procurement and turnaround of submittals

General Summary

At this first session we concentrated on planning the foundation work and getting the building ready for erection of structural steel. There was considerable discussion of whether or not the floor slab on grade should be poured out before structural steel erection. No final decision was reached on this matter at our meeting, but it will be given additional consideration. Much depends upon the delivery of structural steel and joists. Presently it appears that columns and joists and steel could be on the job by October 8, 1984 (working day 197). However, the general contractor believes this delivery can be improved and that steel and joists could be there possibly as early as mid-September, 1984. Since it probably will be difficult to get ready for slab on grade work until mid-October, 1984, it presently appears that steel should precede construction of the slab on grade. However, this matter will be reviewed in greater detail by the prime contractors, and we will discuss it again at our next planning session.

We also prepared a network model for installation and energization of temporary power at the site. The need for temporary power is great, and it is the responsibility of the contract C electrical contractor to provide temporary power at each of the

site entrances - A, B, and C. Our initial planning indicates that such temporary power might be available at site C by September 12, 1984 (working day 179). This is later than had been desired and an intensive evaluation will be made of this by the electrical contractor. Items required in order to bring temporary power to the site include approval of pole locations for temporary power, installation of about 20 poles, stringing of wire at the sites, making up the poles with power transformers, and then energizing the system. In addition, a temporary primary metering station must be installed.

Another early item that should be given early attention is procurement of foundation resteel. We have assumed the turnaround on submittals to be classed in one of three categories - normal, expedited, or super-expedited. Normal turnarounds have been established with a duration of 25 working days. Expedited turnarounds are considered to require 14 working days, and the superexpedited turnaround time has been set tentatively at 9 working days. These are all subject to review and approval of the owner, the architect/engineer and, of course, the other contractors. The time period extends from the point where the prime contractor receives shop drawings at his office on through to the time where the sub-contractor receives the approved shop drawing or submittal back from the prime contractor. A breakdown of these times is shown on contract C, sheet R-1, dated Issue #1, dated July 9, 1984 (working day 133).

I shall check the logic and calculations on sheets #1 and #2 and prepare sepias and prints of these. Sepias and prints will be forwarded to Mr. Robert McComb at the State of Michigan, who will distribute the network models as desired and established by the state and by the contractors.

At our next session we should plan to review the logic of the plan prepared to date and to continue on through with the network model to close in along with preparation of the laundry list for interior work items, both rough and finish. I shall set future meetings on this contract work with Mr. McComb. He will then confirm the dates for suitability with the various contractors involved.

The initial meeting went well, and I feel was quite productive. The cooperation of the contractors is greatly appreciated, and if future sessions can move in a similar manner, we should be able to provide all concerned with a good plan of work.

Ralph J. Stephenson, P.E.

September 7, 1984

Subject: Monitoring Report #2
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29

Date of Monitoring: August 28, 1984 (working day 169)

Monitored from Issue #1 dated July 9, 1984 (working day 133)

Day of execution: June 22, 1984 (working day 123)

Length of contract: 483 calendar days (approximately 337 working days)

Contract completion date: To be confirmed

Actions taken:

- Reviewed current status of project
- Continued preparation of network model
- Inspected project in field

General Summary

As of August 28, 1984 (working day 169) project foundation work is meeting current early start/early finish targets. Interior and exterior wall footings are well along and forming for foundation walls has started. Installation of temporary power lags the initial target set in Issue #1 dated July 9, 1984 (working day 133) by about 18 working days. Poles for temporary power are on the site and will be erected starting August 30, 1984 (working day 171). Following this, temporary power wiring and pole mounted transformers will be installed and then the temporary power can be energized. It is expected that energizing the temporary power at site C will occur about September 25, 1984 (working day 188). This is 9 working days later than had been anticipated in Issue #1 dated July 9, 1984 (working day 133). Some recapturing of the lag has been possible by reviewing and revising the site installation logic.

Our major work today consisted of planning the work up through close in and completion of the slab on grade. We also continued

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planning installation of some interior work. To help us in this effort we prepared a comprehensive laundry list of all interior work to be done. This laundry list has been distributed to the prime contractors for their review and confirmation of the durations shown on it (sheet R-1, Issue #2 dated August 28, 1984 (working day 169)). At our next session we should be able to complete planning of interior rough and finish work and bring the total rough network model close to completion.

Meanwhile, Mr. McComb has printed sheets R-1, #1, and #2 Issue #2 dated August 28, 1984 (working day 169) and distributed them to the prime contractors. I shall forward copies of this monitoring report directly to the prime contractors for their use and further distribution. I shall also be in touch with Mr. McComb shortly to set the date of the next meeting.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb

cc: Mr. R.M. Marino
Mr. Tom Page
Mr. Ron Lijewski

October 4, 1984

Subject: Monitoring Report #3
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29

Date of Monitoring: September 21, 1984 (working day 186)
Monitored from Issue #2 dated August 28, 1984 (working day 169)
Date of notice to proceed: June 5, 1984 (working day 110)
Total contract time: 483 calendar days
Contract completion date: Evening of October 1, 1985 (working day 448) (to be confirmed)

Actions taken:

- Reviewed current job progress
- Evaluated current job status
- Updated Issue #2 network model of August 28, 1984 (working day 169) to Issue #3 dated September 2, 1984 (working day 186)
- Completed network model for interior work

General Summary

As of September 21, 1984 (working day 186) foundation walls are nearly complete, interior footings are being finished, and exterior masonry to base plate level is about to start. Temporary power is being installed with a portion of the wiring to the other sites completed. The pole mounted transformers are being framed and installed. Harlan reports that by September 26, 1984 (working day 189) energy will be available to buildings 200, 600, and 400. The balance of temporary power will be available October 2, 1984 (working day 193) to the rest of the site.

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CONSULTING ENGINEER

Electrical duct bank work is expected to begin by October 1, 1984 (working day 192). There still needs to be resolved the electrical duct location. This is being given attention now and should be cleared by October 1, 1984 (working day 192).

We updated the Issue #2 network model dated August 28, 1984 (working day 169) and added several activities to this diagram that reflect current information. Overall, it appears that the project is moving relatively well except for installation of temporary power which lags by a projected amount of five working days. Structural steel delivery will be later than had been anticipated which gives structural steel erection a lag of about 15 working days. This lag continues on through and is about the amount by which total close in will be later than hoped.

Roofing is to be completed by about December 14, 1984 (working day 245); exterior masonry by about December 13, 1984 (working day 244); and siding complete by January 28, 1985 (working day 274). It is hoped that the siding can be installed at exposed areas earlier in January, 1985 and thus close the building to exterior weather. Present expectations are that installation of interior mechanical and electrical work will begin by December 14, 1984 (working day 245). This brings the entire project to a tentative early finish of late May, 1985 considerably earlier than the contract completion requirement. Even though there may be slippage on the facility it is anticipated that the job may be completed several weeks before required by contract. Thus, we did not establish a desired late finish at the meeting, and I shall be in touch with Mr. Robert McComb and the prime contractors shortly to determine what their desires are in the matter of a late finish date. We are presently drafting the network model into final form for issue and since it is desired to show late starts and finishes as well as early starts and finishes, this information is needed.

Meanwhile, I have printed and distributed the updated Issue #3 dated September 21, 1984 (working day 186) to the prime contractors, the architect/engineer and the owner. I urge all contract C participants to review this network model to insure that it conforms to the plan of work discussed at our updating meeting. If there are any changes to the logic or durations, I would appreciate hearing about these immediately since the model is being put into final form for field use.

Attached to this monitoring report is a set of data sheet lists including the following:

- general abbreviations found on the network models
- contract C responsibility codes

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CONSULTING ENGINEER

- contract C project name abbreviations of those invo ed
in the planning to date
- contract G (control) name abbreviations
- project name abbreviations for those invo ed in all portions
of the contract

These lists are for your use. If there are any changes I would appreciate hearing from you. I shall be in touch with Mr. Robert McComb shortly to set the next field meeting on the building 600 facility.

Ralph J. Stephenson, P.E.

RJS:sps

Attachments

To: Mr. Robert McComb

cc: Mr. R.M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

SCOTT REGIONAL FACILITY PROJECT GENERAL ABBREVIATIONS

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LISTED BY ABBREVIATION DATE PRINTED: SEP 13 1984

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GEN

ABB	MEANING	CAT	REC#
1	BUILDING 100	LOC	50
2	BUILDING 200	LOC	51
3	BUILDING 300	LOC	52
4	BUILDING 400	LOC	53
400A	SOUTHERN HALF OF BUILDING 400	LOC	12
400B	NORTHERN HALF OF BLDG 400	LOC	13
401	SECTION OF 400 BLDG	LOC	24
401U	UPPER LEVEL OF BLDG 401	LOC	25
4A-1	SOUTH 2ND FL DECK OF BLDG 400A	LOC	3
4A-2	NORTH 2ND FL DECK OF BLDG 400A	LOC	5
4A-3	MECHANICAL EQUIP ROOM FLOOR OF BLDG 400A	LOC	6
4A-4	SOUTH ROOF DECK OF BLDG 400A	LOC	7
4A-5	NORTH ROOF DECK OF BLDG 400A	LOC	8
5	BUILDING 500	LOC	54
6	BUILDING 600	LOC	55
7	BUILDING 700	LOC	56
700A	NORTHERN HALF OF BLDG 700	LOC	14
700B	SOUTHERN HALF OF BLDG 700	LOC	15
A	CONTRACT A	NP	9
AW/CT	AWARD CONTRACT	NP	38
B	CONTRACT B	NP	10
BOF	BUREAU OF FACILITIES	ORG	41
BOF	BUREAU OF FACILITIES	ORG	57
C	CONTRACT C	NP	11
CE	CONTRACT C ELECTRICAL CONTRACTOR	NP	43
DEC	DETROIT EDISON COMPANY	ORG	45
DIR	DIRECTION	NP	34
DOC	DEPARTMENT OF CORRECTIONS	ORG	49
E	EAST	DIR	35
EFRP	EXCAVATE, FORM, REINFORCE & POUR	NP	16
EIB	EXCAVATE, INSTALL & BACKFILL	NP	19
EOP	END OF PROJECT	NP	28
ET/R	END TIME RESTRAINT	NP	23
EXT	EXTERIOR	NP	59
F/D	FABRICATE & DELIVER	NP	29
FFG	FILL & FINE GRADE	NP	18
FRP	FORM, REINFORCE & POUR	NP	39
FRPS	FORM, REINFORCE, POUR & STRIP	NP	17
HM	HOLLOW METAL	NP	40
HN	HIGHEST NODE NUMBER ON SHEET	NP	27
IFW	IN FLOOR WORK - RESTL, SLEEVES, INSERTS	NP	20
INT	INTERIOR	NP	60
LN	LOWEST NODE NUMBER ON SHEET	NP	26
LOC	LOCATION	NP	4
MIN	MINIMUM	NP	48
N	NORTH	DIR	37
NP	NETWORK PLANNING	NP	2
OH	OVERHEAD	NP	58
ORG	ORGANIZATION	NP	46
P/I	PREPARE & ISSUE	NP	30
P/S	PREPARE & SUBMIT	NP	31
R/A	REVIEW & APPROVE	NP	32
S	SOUTH	DIR	36
SEC	SECURITY	NP	47

SCOTT REGIONAL FACILITY PROJECT GENERAL ABBREVIATIONS

LISTED BY ABBREVIATION

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ABB	MEANING	CAT	REC#
SDG	SLAB ON GRADE	NP	21
T/R	TIME RESTRAINT	NP	1
TMF	TMF & ASSOCIATES	ORG	42
UG	UNDERGROUND	NP	22
W	WEST	DIR	33
WP	WATERPROOFING	NP	44

LISTED BY CODE DATE PRINTED: SEP 21 1964
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(C)

NUM	REFERENCE	REC#
001	DEPARTMENT OF CORRECTIONS - DOC	1
002	DEPARTMENT OF MANAGEMENT & BUDGET - DMB	2
003	TMP & ASSOCIATES	3
004	SHERIDAN CONSTRUCTION	4
005	HARLAN ELECTRIC	5
006	PAGE CORPORATION - MECHANICAL CONTRACTORS	6
007	EXCAVATION CONTRACTOR	7
008	DAMPROOFING CONTRACTOR	8
009	CONCRETE CONTRACTOR	9
010	MASONRY CONTRACTOR	10
011	STEEL FABRICATOR	11
012	METAL DECK ERECTOR	12
013	STRUCTURAL STEEL ERECTOR	13
014	PRECAST CONCRETE ERECTOR	14
015	DETROIT EDISON	15
016	HONEYWELL COMMERCIAL DIV	16
017	ROOFING CONTRACTOR	17
018	PRECAST CONTRACTOR	18
019	METAL SIDING ERECTOR	19
020	GLASS & GLAZING CONTRACTOR	20
021	PAINTING CONTRACTOR	21
022	DRY WALL & ACOUSTIC CONTRACTOR	22
023	CARPENTRY CONTRACTOR	23
024	OVERHEAD DOOR CONTRACTOR	24
025	RESILIENT FLOOR CONTRACTOR	25
026	HARD TILE CONTRACTOR	26
027	BI FOLD DOOR CONTRACTOR	27
099	TIME RESTRAINT	28

SCOTT REGIONAL FACILITY PROJECT NAME ABBREVIATIONS
LISTED BY NAME DATE PRINTED: SEP 21 1984
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ABB	NAME & TITLE	ORG	CONTR	REC#
PJC	COUSINO, PAT J. - PROJECT MANAGER	PAC	C	59
DEC	DETROIT EDISON CO	DEC	C	53
HEC	HARLAN ELECTRIC CO	HEC	C	58
RSL	LIJEWSKI, RONALD S. - PROJECT ENGINEER	HEC	C	57
RMM	MARINO, RALPH M. PROJECT MANAGER	SCC	C	3
PAC	PAGE CORPORATION	PAC	C	60
SCC	SHERIDAN CONSTRUCTION COMPANY	SCC	C	4
TP	THE PAGE CORPORATION	PAC	C	65

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LISTED BY NAME DATE PRINTED: SEP 21 1984
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ABB	NAME & TITLE	ORG	CONTR	REC#
RD	DAVEY, RUFERT	HCD	G	6
HCD	HONEYWELL INC, COMMERCIAL DIV	HCD	G	7
DNL	LORENZ, DAVID N - PROJECT MANAGER	HCD	G	54
MF	PASTERAK, MIKE	HCD	G	50

ALL

ABB	NAME & TITLE	ORG	CONTR	REC#
SB	BEEBE, STAN - FIELD INSPECTOR TMP	TMP	ALL	10
GD	DAVENPORT, GAROLD - MANAGER CONST SERV DIV	DMB	ALL	5
DMB	DEPARTMENT OF MANAGEMENT & BUDGET	DMB	ALL	2
RTM	MCCOMB, ROBERT T. AREA SUPT	DMB	ALL	1
LJM	MCGOUGH, LEO J. - FIELD INSPECTOR	TMP	ALL	27
RJS	STEPHENSON, RALPH J. PE	RJS	ALL	52
TMP	TMP ASSOCIATES INC	TMP	ALL	11

October 29, 1984

Subject: Monitoring Report #4
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

483
365
118 / 17

Project: 84:29

Date of Monitoring: October 11, 1984 (working day 200)

16+

Monitored from Issue #3 dated September 21, 1984 (working day 186)

1 day

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract time: 483 calendar days

Contract completion date: Evening of October 1, 1985 (working day 448) (to be confirmed)

Actions taken:

- Inspected project
- Reviewed project with general and electrical contractor superintendents
- Reviewed project status with owner
- Evaluated current job status

448
127
321

448
355
93

228
93
321

General Summary

As of October 11, 1984 foundation walls are nearly complete. Backfilling and grading interior areas is in progress, and temporary power has been provided to the site. Installation of the electrical duct bank is in progress, and underground utility work at the interior of the building is due to begin about October 15, 1984.

355
228
127

Structural steel has not yet arrived on the job, and the current projected delivery date is now October 18, 1984 (working day 205). Steel was originally due to be on the job by October 8, 1984 (working day 197). This gives a projected lag of about 8 working days. It is important when evaluating the status of the 600 building to remember that its contract

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completion date is about October 1, 1985 whereas in the Issue #3 network model dated September 12, 1984 (working day 186) the project is being measured against a tentative early completion target of the evening of April 20, 1985 (working day 355). This finish was also selected as a desired late finish target and will be used until the prime contractors select an alternate late finish date for total contract C work.

We shall continue to check with the contractors as we monitor progress to determine their desires in this particular matter.

Included in the C contract was provision of temporary power to the entire site. Apparently this work was complete and temporary power was available to the other sites on September 29, 1984 (working day 192).

Overall, it appears that aside from late delivery of structural steel and joists which, as noted above, lags by a projected 8 working days other activities are currently meeting targets between early and late starts and finishes. The major thrust of work at present is to get the building as completely closed in as possible by cold weather.

We have not as yet made a full analysis of deliveries that are of importance to the close in process. Some of these are exterior masonry, exterior metal siding, exterior sash, and exterior doors. We shall evaluate these as monitoring of the project proceeds.

There was some discussion at our session about the method by which precast deck is to be erected relative to construction of floor slabs on grade. This is a matter which must be worked out considerably ahead of the point where precast is to be installed and a system of erection established that is satisfactory to all governing parties on the job. In the present network model there is no relationship shown between construction of the floor slab on grade and erection of the precast concrete mezzanine deck. This should be an ongoing analysis and we will discuss it at each of the monitoring sessions.

The Issue #3 network model dated September 21, 1984 (working day 186) has now been drafted and dated with calendar dates and working days for early starts, early finishes, late starts, and late finishes. This network has been provided to Mr. McComb for printing and distribution to the prime contractors. Monitoring currently will be against this network model until

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an updating is appropriate. If at any point any of the parties to the project feel that such an updating is needed or if monitoring of the project indicates that it might be desirable we shall consult with all concerned and take the appropriate updating steps.

I shall be in touch with Mr. McComb shortly to set the next field monitoring inspection.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb

cc: Mr. R.M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

January 3, 1985

Subject: Monitoring Report #5
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: December 18, 1984 (working day 247)

Monitored from Issue #3 dated September 21, 1984 (working day 186)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract time: 483 calendar days

Contract completion date: Evening of October 1, 1985 (working day 448) (to be confirmed)

Actions taken:

- Inspected project
- Reviewed project progress with general contractor superintendent
- Evaluated current job status

Building 600 - Monitored from Issue #3 dated September 21, 1984 (working day 186)

Most structural steel is erected and plumbed, some interior masonry has been erected, interior bearing masonry for precast is complete, and precast deck at the mezzanine has been erected. It appears that underground utility work is well along, and interior rough grading has been substantially completed. Metal deck is set in bundles on roof framing but no installation of deck has yet started.

In discussions with the superintendent for the architectural trades contract on building 600, there was some indication that further work may be held on building 600 until spring 1985. Apparently this is not fully decided as yet, and discussions are still under way with other prime contractors,

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RALPH J. STEPHENSON, P.E., P.O.
CONSULTING ENGINEER

the owner, and the architect/engineer in respect to details of a possible shut down. Metal roof deck on building 600 was due to begin in accordance with Issue #3 dated September 21, 1984 (working day 186) no later than November 20, 1984 (working day 228). It should be remembered though that the selected contract target completion date for the project was set at May 20, 1985 (working day 355) while the contract completion date is the evening of October 1, 1985 (working day 448).

Analyzing the status of the project presently, metal deck is ready to start and was considered to be a critical item. It was eut to begin no later than November 20, 1984 (working day 228). The differential between the contract completion date of October 1, 1985 (working day 448) and the desired completion date of the evening of May 20, 1985 (working day 355) or 93 working days is the maximum amount of slippage that could be allowed. Thus, metal deck will have to start under the present logic plan no later than April 3, 1985 (working day 321) to complete the project by the contract date.

Changes might be made to the logic and sequencing which would allow different installation procedures to be followed to shorten the time. However, the essential element is that from start of metal deck through to completion of the project under the present plan requires about 127 working days. Subtracting this from the contract completion date of the evening of October 1, 1985 (working day 448) gives us a start of metal deck the same as noted previously of April 3, 1985 (working day 321).

This matter should be given very serious consideration by all contractors involved since once we move to the late finish dates the project tightens up and there is no float time available on the critical activities. We shall discuss this matter in more detail at subsequent planning and monitoring sessions. I shall be in touch with Mr. McComb shortly to set the next planning meeting.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. R. M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

January 17, 1985

Subject: Monitoring Report #5
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29

Date of Monitoring: January 11, 1985 (working day 263)

Monitored from Issue #3 dated September 21, 1984 (working day 186)

Date of notice to proceed: 483 calendar days

Contract completion date: Evening of October 1, 1985
(working day 448) (to be confirmed)

Actions taken:

- Reviewed current project status with architectural, electrical, mechanical and site prime contractors
- Updated network model sheets #600-1, #600-2, and #600-3, Issue #3 dated September 21, 1984 (working day 186) to Issue #4 dated January 11, 1985 (working day 263)

General Summary

Our main work today consisted of reviewing the desired and revised plan of action which indicates that there may be a lessened field work load over the winter period than had been previously intended. There are many reasons for this, and many items to be resolved. At our session strong efforts were made to bring the updated completion date within the current contract requirement for completion. The initial calculation of the network indicates, however, that the new completion with the logic shown on Issue #4 dated January 11, 1985 extends out to November 6, 1985 (working day 473). The contract completion date is the evening of October 1, 1985 (working day 448). Thus, presently it appears that the revised plan (unchecked) extends past the contract completion by about 25 working days.

Copies of the preliminary network model Issue #4 dated January 11, 1985 (working day 263) have been distributed to

the prime contractors on the 600 building work. It is anticipated they will review this configuration and make every effort to bring the diagram plan back into conformance with contract date requirements. I shall be in touch with Mr. McComb shortly to check the procedures from here out.

We also evaluated the impact of site work on the 600 project. Those areas of site work having the most impact are in areas #2, area #8, and to a lesser extent areas #3, #5, #6, and #9. These areas refer to the preliminary area designations established with the site work contractor at a meeting on October 24, 1984 (working day 209). The site work contractor was at today's session and a preliminary discussion was held regarding how site work could best proceed. We must go into this in more detail at subsequent meetings since site work must be substantially completed this year to meet 1986 contract requirements.

There are several items discussed that are yet to be resolved according to the contractors. Some of these include:

- issuance of a bulletin for what appears to be substantial changes to bulletin 600
- resolution of an apparent gas line hold
- resolution of other holds informal and formal placed upon the project
- resolution of the Consumers Power gas service location from Five Mile Road
- receipt of information about the building use
- resolution of racking arrangement for electrical manholes
- a discussion of the deletions as outlined in TNP letter of 12-6-84
- checking interferences, if any, at the west end of building 600 at exterior utility work

It was not totally clear whether all of these items have an impact upon the project or not. However, they were mentioned at our meeting and, as such, should be evaluated to determine what effect they might have upon the project.

Meanwhile, as noted above, the revised network model Issue #4 dated January 11, 1985 (working day 263) has been printed in limited quantity and distributed to Sheridan, Harlan, Page,

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CONSULTING ENGINEER

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Elgin, Honeywell, TMP, and the state for review, checking, and comment. I shall proceed to update the drafted network model to the point where final calculations are inserted. Before finally calculating the diagram, however, I shall check with Mr. McComb to determine the procedure to be used. Meanwhile, the project will be monitored against the Issue #3 network model dated September 21, 1984 (working day 186) until the updated issue has been reviewed and finally accepted by all concerned.

Ralph J. Stephenson, P. E.

RJS:sps

To: Mr. Robert McComb

cc: Mr. R. M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Devey
Mr. Leo McGough

January 25, 1985

Subject: Monitoring Report #6
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: January 17, 1985 (working day 267)

Monitored from Issue #3 dated September 21, 1984 (working day 186)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract time: 483 calendar days

Contract completion date: Evening of October 1, 1985 (working day 448) (to be confirmed)

Note: In Monitoring Report #5 on page #1 it was noted that the date of notice to proceed was 483 calendar days. This should have read "Date of Notice to proceed: June 5, 1984 (working day 110). Total contract time: 483 calendar days." Please make this revision to your copy.

Actions taken:

- Inspected project
- Reviewed current status with Mr. Robert Adams

General Summary

The review of the project in Monitoring Report #5 dated January 17, 1985 generally applies to this monitoring report also. There is a concerted effort being made by the mason to close up the southwest corner at the slab on grade under the electrical area and mezzanine. However, other work appears to have come to a stop and there is no current information as to whether 600 construction will continue this winter or not.

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At our planning session on January 11, 1985 (working day 263) we updated the Issue #3 network model dated September 21, 1984 (working day 186). This model has been distributed to those involved and will be reviewed by each of the prime contractors. At our next planning and monitoring session we should make whatever revisions are appropriate to this network and issue the updated version. Meanwhile, those elements noted in Monitoring Report #5 as needing resolving are being worked upon and will be discussed on an ongoing basis by the project team. I shall be in touch with Mr. Robert McComb shortly to set the next planning and monitoring session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb

cc: Mr. R. M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

March 13, 1985

Subject: Monitoring Report #7
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 64:29C

Date of Monitoring: March 6, 1985 (working day 301)

Monitored from issue #4 dated January 11, 1985 (working day 263)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract time: 483 calendar days

Contract completion date: Evening of October 1, 1985
(working day 448) (to be confirmed)

Current completion date according to Issue #4 network model dated January 11, 1985 (working day 263); Evening of November 5, 1985 (working day 473). Note that this is later than the contract completion date.

Actions taken:

- Inspected project
- Reviewed current status of project with owner and architect field representative
- Evaluated current job status

General Summary

This meeting date had been as an updating meeting of the prime contractors on the building 600 work. However, none of the prime contractors attended the session and therefore, a field monitoring was made of the project.

It is important to note that the current network model Issue #4 dated January 11, 1985 (working day 263) shows a finish date beyond the contract completion date. To my current knowledge, there has been no resolution of any time extension

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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

request or alteration to this contract completion date. Thus, the discrepancy in the intended date as compared to the contract date should be resolved as early as possible. The general contract project group was not available for comments on this matter at the session and subsequent meetings will be scheduled in the near future to discuss what end dates are to be used, I shall be in touch with Mr. McComb shortly to discuss this matter.

In the field, very little additional work has been done since the previous monitoring on January 17, 1985 (working day 267). Some masonry has been erected at the west end and the slab on grade sub-base has been partially prepared under the west mezzanine. No floor slab on grade has yet been poured, and as of this monitoring, the sub-base at the west end under the mezzanine is beginning to refreeze since apparently no heat is being provided. The area has been partially strawed in the hope of keeping some of the frost out of the sub-base.

Roof metal deck is apparently on the job ready to install, but no work has yet begun on this trade. We are rapidly approaching the point even in the Issue #4 network dated January 11, 1985 (working day 263) where erection of roof metal deck must begin. It is shown in this network as starting on March 11, 1985 (working day 304) and is a critical item. Exterior masonry is also beginning to drop behind and will have to be concentrated on in the near future if we are maintain adherence to the Issue #4 network model dated January 11, 1985 (working day 263).

We deferred major discussions about delay elements to work on building 600 since no representatives of the prime contractors were available. I did visit with Mr. Sheridan, president of Sheridan Construction, at his office before inspecting the project. I suggested to Mr. Sheridan that it might be appropriate to review current job status with the state at upper management levels to determine what problems, if any, were tending to hold up work on the job. There was no indication as to whether this would be done or at what time.

In my opinion, it is important that a heavy concentration of effort be made on building 600 work if the present intent is to finish it by the contract completion date presently assumed as the evening of October 1, 1985 (working day 448). I shall be in touch with Mr. McComb shortly to set a meeting to discuss this matter and update the diagram.

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

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Contract C, Scott Regional Facility
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Meanwhile, however, discussions among prime contractors should continue so as to reach agreement as to what course of action is to be followed once the job starts into full production once again.

Ralph J. Stephenson, P.E.

RJS:eps

To: Mr. Robert McComb

cc: Mr. B. M. Marino
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

April 2, 1985

Subject: Monitoring Report #8
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: #4:29C

Date of Monitoring: March 26, 1985 (working day 315)

Monitored from Issue #4 dated January 11, 1985 (working day 263)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1985
(working day 448) (to be confirmed)

Actions taken:

- Updated network model Issue #4 dated January 11, 1985 (working day 263) to Issue #5 dated March 26, 1985 (working day 315)
- Reviewed current job status with general, mechanical, and electrical contractors on C
- Reviewed project status with owner and architect/engineer

General Summary

This meeting was primarily to update network model Issue #4 dated January 11, 1985 (working day 263) sheets #1, #2, and #3 and to attempt to re-establish the target contract end date in the plan of action.

We first identified the current position of work in the field and then applied updating time restraints to these current activities. Metal roof deck is installed, and forming and setting in floor work for the roof deck is in progress. Exterior masonry erection is expected to resume shortly; and slab on grade work for the interior of the main building area will be restarted about April 15, 1985 (working day 329).

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Page two

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

The contractor's intent is to restart work on slab on grades under the west mezzanine starting March 27, 1985 (working day 316) and completing slab work there by April 11, 1985 (working day 327). This area is critical for the electricians, and requests were made that the general contractor concentrate on this area at the electrical rooms.

Minor revisions were made to the network logic as required and requested, all of which resulted in a general realignment of the plan, which, in conjunction with reduced durations on some activities, brings the present early finish of the project to September 17, 1985 (working day 437). The mathematical calculations for the model were checked but must be rechecked to confirm if this is a suitable finish date with the present logic and resource assignment.

The contract completion date is the p.m. of October 1, 1985 (working day 448) so the project now has a total of about 11 working days of float time based on preliminary calculations, again yet to be checked. Thus, it appears we will be able to finish the project within the contract completion date. All present generally agreed to the logic plan as established.

We have made blueines of the rough updated network model sheets #1, #2, and #3 and forwarded them to the appropriate parties for each of the contractors, the owner, and the architect/engineer for review and approval. Meanwhile, I shall have the network models redrafted and issue it as the current plan of work unless I hear to the contrary from those involved in the updating effort.

Our next monitoring of the project is to be on April 5, 1985 (working day 323). It was requested by the electrical contractor that at that meeting we ask the prime electrical contractors for contracts A and C to participate in a discussion about how to best effect tie in of the various projects to the power source at the 600 building. This is being done and meeting arrangements will be taken care of by the owner's representative and the architect/engineer. The time will be set by those involved. I will be in touch with Mr. Adams at the site to determine the time of day selected.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Leo McGough

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER
April 5, 1985

Subject: Monitoring Report #9

Contract C - Northville, Michigan

Scott Regional Facility

Bureau of Facilities, State of Michigan

Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: April 5, 1985 (working day 323)

Monitored from issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1985 (working day 448)

Actions taken:

- Inspected project
- Reviewed current status of work with general contractor
- Reviewed current progress with owner representatives
- Met with the electrical prime contractors for A, B and C contract to discuss electrical tie-in work
- Evaluated current job status

General Summary

Project C is now again getting underway in the field although the heavy wet weather encountered over the past few days, has slowed progress.

The building roof deck has been poured out and mezzanine pre-cast plank grouted. The general contractor is working now to get underway on various slabs on grade in the building. He expects to begin work on the main building slab on grade shortly with the start of this work shown on sheet 2, issue #5, dated March 26, 1985 (working day 315) at April 15, 1985 (working day 329).

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Of critical importance is the slab on grade at the electrical equipment room. This area is fairly wet but it is hoped to be able to pour out this slab in the very near future.

The exterior switch gear base has been formed and probably will be poured Monday, April 8, 1985 (working day 324). This is also a critical area for the electrical contractors since it allows switch gear to be set and cable pulling to begin.

As part of our monitoring today, we met with the electrical contractors for contracts A, B and C to review the cable tie-in of the various buildings. Present plans are to energize switch gear by June or earlier if possible. The main cable pulls will begin June 17, 1985 (working day 375), and once these have been made and tie-ins accomplished at each of the buildings, the temporary power system can be removed. It is expected to have permanent power to all buildings by mid-July 1985 with the exception of the 700 unit where progress on bringing the job up above grade has been very slow. Once the permanent system is installed, the temporary power system can be removed, hopefully by late July 1985.

Work on Unit C should be able to proceed without excessive delays from here on to allow the building to achieve its present target date for insulation and roofing of April 17, 1985 (working day 331). Completion of the exterior skin is generally set for early June 1985 and interior finish work should be able to start in early to mid-June 1985.

We made some minor modifications to the network model issue #5 dated March 26, 1985 (working day 315). These did not impact upon the target desired early finish date.

Information about mezzanine miscellaneous iron handrail should be available shortly and this should allow the handrail to be fabricated and installed to free up work on waterproofing and topping on the mezzanine.

Exterior masonry appears to be moving more slowly than might be desirable, but as the weather improves an improvement in progress should be possible. We shall plan to monitor this on a regular basis from hereon, and I shall be in touch with Mr. McComb shortly to set the next monitoring session.

Ralph J. Stephenson, P.E.

RJS/pw

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey

May 9, 1985

Subject: Monitoring Report #10
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: May 3, 1985 (working day 343)

Monitored from Issue #5 dated March 25, 1985 (working
day 315)

Date of notice to proceed: June 6, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1986
(working day 448)

Actions taken:

- Inspected project
- Discussed project briefly with general contractor
- Reviewed current project status with owner
representatives
- Evaluated current job status

Currently filling and fine grading for the slab on grade at the main building area is in progress and erection of exterior masonry is continuing. There has been no major progress in laying insulation and roofing. At present there is some corrective action that must be taken on the roof concrete deck.

The electrical equipment room has not yet been poured out, and there are apparently difficulties with getting the electrical equipment into the room. These are being discussed and resolved at present. The switchgear has not yet been set on the base poured at the outside of the building.

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Some interior overhead work, primarily sheet metal duct work and mechanical piping, has started and this work is currently meeting targets between early and late starts and finishes. Floor slab on grade work at the main building was due to have early pours started on April 24, 1985 (working day 336). There is no current word on when the actual pour schedule would start, and it appears that currently the lag is about 7 working days and could extend on upward to 10 - 15 working days if this pour out is delayed further.

Exterior siding was due to have begun by April 8, 1985 (working day 328). Erection of girts has just begun and thus, siding installation lags by about 16 working days. Roofing was due to begin by April 10, 1985 (working day 326) and currently lags by about 17 working days.

Work on electrical switchgear and at the electrical room is also lagging. The switchgear was due to have been set by an early date of April 8, 1985 (working day 324) so currently lags there by 19 working days. It had been the intent to energize the sub-station by May 1, 1985 (working day 341). This, of course, is being delayed by the inability to resolve the matter of completion of the electrical room slab on grade and electrical equipment installation. This matter is presently being addressed by all concerned and should be worked out shortly.

It is important that the electrical phase of the work at building 600 be addressed promptly since it is from here that permanent power to the project is distributed. Plans were to energize the switchgear by June, 1985 or earlier if possible and to start main cable pulls about June 17, 1985 (working day 375). Thus, any delays to work will have to be picked up to accommodate these very important target dates if we are to have permanent power on the job by mid or late July, 1985.

I requested the general contractor superintendent to provide any network revisions desired or needed to issue #5 dated March 26, 1985 (working day 315). This work is presently being drafted into final form, and it would be appreciated if any

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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

changes could be received in the near future so as to be able to accommodate them in the drafting of the network model to be issued as Issue #5 dated March 26, 1985 (working day 315).

I shall be in touch with Mr. McComb shortly set the next planning and monitoring session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb

cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboli
Mr. David Renshaw

M-
RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

June 13, 1985

Subject: Monitoring Report #11
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: June 7, 1985 (working day 367)

Monitored from Issue #5 dated March 25, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1985
(working day 448)

Actions taken:

- Reviewed project status with general contractor superintendent
- Reviewed project status with owner representatives and architectural engineering representatives
- Evaluated current job status

General Summary

The overall lag on the project ranges from 9 working days to 46 working days. Presently the slab on grade is being completed, and most will be poured out by the evening of June 7, 1985 (working day 368). This is a lag of 25 working days over the projected desired completion in the network model Issue #5 dated March 25, 1985 (working day 315).

Exterior switchgear has not yet been set, and the equipment bases at the electrical room are presently in work. This electrical work lags from 34 to 43 working days over the dates shown in the Issue #5 network model dated March 25, 1985 (working day 315). It now appears that it will be very difficult to provide permanent power to the job site by the desired target of mid or late July, 1985. Plans were to

Monitoring Report #11
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RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

energize the switchgear by June, 1985 or earlier if possible and to start main cable pulls about June 17, 1985 (working day 373). A re-evaluation of this should be made by all parties concerned to determine the actual dates by which the cable pulls will be completed.

Roofing is still not started on the building, but it is expected that within the next week the roof slab will be in such condition to allow this roofing to begin. Roofing lags by about 46 working days. It will become very serious as a restraint on starting interior finish work such as painting and other weather susceptible trades.

Exterior masonry has been stopped by the mason's strike which began June 3, 1985 (working day 363). However, enough exterior masonry has been completed so siding is in work. It is currently in progress on the north elevation of the building. Siding was due to have been completed by May 28, 1985 (working day 360) p.m. There is no current project on when it will be actually finished.

Rough above floor work has proceeded independently of the slab on grade and of the roofing, and most mechanical and electrical work is in progress except for sprinkler piping. Sprinkler piping was due to begin no later than May 24, 1985 (working day 358). Thus, the current lag on rough above floor work can be considered about 9 working days.

Overall, it now appears unlikely that the project will be able to meet its contract completion point of the evening of October 1, 1985 (working day 448) unless considerable compression of time on succeeding interior trades is achieved. The work remaining at the interior of the building is considerable and above all will depend upon closing in the facility particularly getting a roof on the building.

An area to be watched carefully is the mezzanine area. The mezzanine rough deck is in place, but no other work has started either above or underneath the mezzanine areas.

I suggest that once the masonry strike is resolved we again consider re-evaluation and updating of the network model. I shall discuss this with those concerned.

Meanwhile of great importance is getting the electrical work needed for permanent power under way at the 600 building so

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CONSULTING ENGINEER

that permanent power will be available to the entire project
by the desired targets in July, 1985.

Ralph J. Stephenson, P. E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. David Renshaw

August 2, 1985

Subject: Monitoring Report #12
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: July 24, 1985 (working day 399)
Monitored from Issue #5 dated March 26, 1985 (working day 315)
Date of notice to proceed: June 5, 1984 (working day 110)
Total contract completion time: 483 calendar days
Contract completion date: Evening of October 1, 1985 (working day 448)

Actions taken:

- Inspected project
- Reviewed project briefly with general contractor superintendent
- Reviewed project with owner representative
- Evaluated current project status

General Summary

Major rough work on the project has now proceeded where it soon will be possible to begin interior finish trades. Roofing has not yet started, and there have been some recent difficulties with the roofing contractor which are being resolved. Roofing was due to begin on the project no later than April 10, 1985 (working day 326) so currently lags by about 72 working days. There is some indication that insulation and roofing is beginning but no production work has yet started.

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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

Close in of the building vertically is proceeding on, although there has been some slowing of exterior masonry at the south side of the building. Siding is being completed, but there was no indication as to when it could be expected to be fully erected.

Handrails at the mezzanine are being installed and the interior masonry underneath the mezzanine is presently in work. Above floor rough mechanical and electrical work appears to be moving fairly well, although there is some question about security wiring. No information regarding its status was available.

The exterior switchgear has been set, and cable has been pulled from the property line. Plans presently are to energize this switchgear sometime in early August, 1985 so as to provide permanent power for the site.

Electrical equipment inside the building has been set, and it appears that it presently is being connected.

Interior finish trades in the building were originally due to begin about mid or late June, 1985. Very few, if any, of these have started and the lag on interior finishes ranges from 20 to 30 working days over the contract completion date. One of the major interior areas that will have to be examined very carefully is installation of the 1st floor control room and the installation and testing of the security console and other security system elements.

It would be well to consider an updating of the current network sometime in the near future to determine the impact of the current work on lags on all trades. Meanwhile, it is imperative that the close in work for the building primarily roofing, siding, and exterior masonry be completed. As noted above, the lag in roofing is about 72 working days and the lags in siding and masonry range from 55 to 59 working days. These have and will continue to impact upon completion of the building and efforts must be made to complete these elements and get the building work concentrated on inside items.

I shall be in touch with Mr. McComb shortly to set the date of the next monitoring and to discuss a possible updating of the current network model.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. David Renshaw

September 6, 1985

Subject: Monitoring Report #13
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: August 29, 1985 (working day 425)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1985 (working day 448)

Actions taken:

- Inspected project
- Reviewed project progress with general contractor superintendent
- Reviewed progress with owner representative
- Evaluated current project status

The building is now reasonably well closed in and interior finish work has been initiated, primarily on painting of required interior surfaces. There still is some miscellaneous exterior metal siding and masonry to be completed, but this is not presently affecting interior finish trades. Most of the exterior area, according to the general contractor superintendent, has been backfilled and the site contractor now has the site available to him at the exterior of the building.

Work is proceeding below and above mezzanine levels with the handrail at the mezzanine being installed. Waterproofing has not yet been placed on the precast deck but this is not at present a major holdup to the project.

Still to be installed are the finish components of the exterior skin including exterior sash, the large doors, and other miscellaneous exterior items.

Much of the overhead mechanical and electrical work is complete inside the building, and present concentration of efforts is on installation of the office areas and completion of security equipment. Installation of light fixtures is under way at the west end of the building.

Measuring the project against the target completion of the p.m. of October 1, 1985 (working day 448) it appears presently the lag is from 14 to 20 working days primarily in finish work at the office areas. This does not encompass completion, installation, and testing of the security console at the control room. It was originally planned that this installation and testing would begin no later than July 30, 1985 (working day 403) and be completed by mid-September, 1985. However, it presently appears there will be a delay to completion of the security work since some of the final installation cannot begin until building areas, primarily at the first floor control room, are better able to receive this work. Thus, it is difficult to anticipate accurately when security work would be complete.

I recommend that remaining operations on out to completion of the full building be reviewed and if after such review, it appears an updating of the current network model for remaining work should be prepared, that we make such a network plan.

I shall be in touch with Mr. McComb about this matter in the near future. If an updating is desired it probably could be accomplished within the normal monitoring evaluation. The project now is moving into its final phases and since it will be finished considerably before other facilities on the site it might not necessarily be essential to update the plan. However, as noted, I shall be in touch with Mr. McComb to discuss this matter in more detail.

In summary, the work is now being brought to a completion point with the lag over the contract completion of the p.m. of October 1, 1985 (working day 448) being 14 to 20 working days

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Scott Regional Facility, Contract C
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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

in mechanical, electrical, and architectural trades and probably from 10 - 15 days more than that in security work installation. Thus, completion of the building can presently be projected at early or mid November, 1985 provided no additional delays or lags are encountered. I shall be in touch with Mr. McComb shortly to set the next monitoring date.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

October 2, 1985

Subject: Monitoring Report #14
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: September 19, 1985 (working day 439)

Monitored from issue #5, dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Total contract completion time: 483 calendar days

Contract completion date: Evening of October 1, 1985
(working day 448) (to be verified)

Oct 17, 1985

Actions taken:

- Inspected project
- Reviewed project progress with owner representatives
- Evaluated current project status

Work at the 600 building is now focused primarily on interior operations. Most exterior work has been done. The area to the south of the building (site area #8) is fairly clear, and primary switchgear has been energized, with about 90% of the cable pulled to other areas. All work on the distribution system to other areas is to be complete by late in September, 1985. Energizing of secondary service is the responsibility of individual contractors at each of the contract areas.

Interior masonry and miscellaneous iron at mezzanine areas is nearly complete. The slab on grade is complete except for the scale pit area where there is some delay in shop drawings on the scale but apparently this is not a serious problem. The dock leveler is partially installed; however, overhead and bifold doors have not yet been put in place. Installation of exterior sash is to be started shortly. The sash is on the job.

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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

The sub-station for the building is to be energized by October 1, 1985 (working day 447). Energizing of the emergency generator has been delayed since there is some disagreement about installation of muffler piping. Apparently this is being resolved at present.

Major interior work is now focused on completion of painting, installation of interior doors and hardware, hanging of light fixture, and completion of masonry under the mezzanine. The major items to be done relate primarily to finish trades and security wiring. Yet to be put in place are finishes at the office area and the toilet room areas. Also, installation and testing of the security console at the control room is a large item yet remaining to be done.

In evaluating the amount of work yet to be completed from the current network model, Issue #5, dated March 26, 1985 (working day 315) there appears to be about another 30 to 40 working days of installation to complete. This would bring completion of the project to mid or late November, 1985. This is considerably past the contract completion point, and I suggest the matter of how to handle this potential time overrun be discussed in detail soon among the owner, architect/engineer, and the contractors.

We shall continue to monitor the project from the current network model since we are relatively close to the completion of the entire building. If there is felt a need to update this network for any reason, it would be appreciated if such need was communicated to the owner. I shall be in touch with Mr. McComb shortly to set the next monitoring session and shall also review with him any indication that an updating would be desirable.

Ralph J. Stephenson, P.E.

RJS;sps
To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

October 28, 1985

Subject: Monitoring Report #15
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: October 22, 1985 (working day 462)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Had been reported as the evening of October 1, 1985 (working day 448) to be verified. However, it apparently is considered now to be October 17, 1985 (working day 460).

Actions taken:

- Inspected project
- Reviewed project progress with owner representatives

General Summary

Interior finish work continues on finish trades, and it presently appears there is now from 15 to 25 working days remaining to complete interior work. This is exclusive of installation of the security console, the first floor control room, and testing of the security console. For this work there is probably from 30 to 40 working days remaining as indicated by the network model. There was no authentic word at this meeting at where the equipment for the security console was presently located nor when it would be on the job site.

The exterior skin of the building is almost complete, and there is little, if any, interference at the exterior with site work. Overhead door installation has been partially completed, but there still remain bifold doors and some work on overhead doors to be done.

Reviewing the network model, elements yet to be done include:

- complete install miscellaneous iron at the mezzanine and other areas
- complete install overhead doors
- complete install bifold doors
- complete install and energize emergency generator

Note: The matter of who is to install the generator muffler has been established. The work, however, is not complete.

- complete painting interior areas
- complete install doors and hardware
- complete install security wiring
- install ceilings at office areas

Note: There was some discussion about whether all trades necessary to complete the ceiling work were under contract award. If not, they should be awarded immediately since this is an important item to get into work.

- complete install control room finishes
- complete construct observation platform
- complete install interior glazing
- complete install and test security console

As noted above, it is estimated the building work will probably require from 15 to 25 days, aside from the security work which may require as much as 30 to 40 working days. Thus, it can be expected that the building will be completed, if no delays are encountered by late November, 1985 or early December, 1985.

As pointed out in Monitoring Report #14, dated October 2, 1985 the overrun time should be resolved just as quickly as possible. I suggest that this item be addressed in the near future with all concerned so that when the project is completed that a rapid turnover can be effected and the project can be closed out as quickly as possible.

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Contract C, Scott Regional Facility
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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

The project is now nearing completion and probably one or two more monitorings will be all that is needed. I shall be in touch shortly with Mr. McComb to set the next inspection trip.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

- CRITICAL PATH PLANNING
- LAND PLANNING
- MANAGEMENT CONSULTING
- PLANT LOCATION

RALPH J. STEPHENSON, P.E., P.C.
CONSULTING ENGINEER

15064 WARWICK ROAD
DETROIT, MICHIGAN 48223

PHONE 273-5026
December 28, 1985

Subject: Monitoring Report #16
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: December 11, 1985 (working day 497)

Monitored from Issue #5, dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Considered to be October 17, 1985 (working day 460)

Number of days past contract completion date as of this monitoring: 37

Actions taken:

- Inspected project
- Reviewed progress with owner representatives
- Discussed project status briefly with general contractor superintendent
- Evaluated current job status

General Summary

The project is presently locked to general access and the work remaining is of a cleanup nature for the most part. However, there still are some critical items that are yet to be done, but are not being completed. Clean up, completion of painting, installation of guard posts, repair of miscellaneous damaged areas and completion of the control room and observation platform are a few of the more easily identified areas at which work must yet be done.

Installation of the security console has not yet been started, and there was no current word on when this would begin. Completion of the entire security system along with testing of

• CRITICAL PATH PLANNING

RALPH J. STEPHENSON, P.E., P.C.
CONSULTING ENGINEER

• LAND PLANNING
Monitoring Report #16
Contract C, Scott Regional Facility
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Page Two

15064 WARWICK ROAD
DETROIT, MICHIGAN 48223
PHONE 273-5026

• PLANT LOCATION

the console was due to have been done no later than September 10, 1985. Installation of the console was due to have begun no later than July 30, 1985 (working day 403) so lags at present by about 94 working days. Of course, this restrains the last few days of clean up and move out which was set at 15 so probably the actual lag would more on the order of 80 working days.

Because of the sizable lag and the conditions surrounding the contract completion date, I strongly recommend that the matter of completing this building be discussed in detail in the immediate future. Otherwise, resolution of problems will drag on and result in a less than desirable situation for all parties to the contract.

It is, in my opinion, imperative that ways be found to clean up and close out this job as quickly as possible. It is incumbent upon all parties to the contract and all representatives of the various contracting parties to engage in discussions that will clean up this contract as quickly as possible.

In the very near future I shall again review what has been happening on the job and the progress that is being made toward closing out the building work. Meanwhile, at the exterior of the building there appears little, if any, activity that would require special attention relative to site work.

I shall be in touch with Mr. Davenport shortly to set the next evaluation session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Robert McComb
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis



• CRITICAL PATH PLANNING

• LAND PLANNING

• MANAGEMENT CONSULTING

• PLANT LOCATION

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

15064 WARWICK ROAD
DETROIT, MICHIGAN 48223
PHONE 273-5026

February 21, 1986

Subject: Monitoring Report #17
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: January 24, 1986 (working day 527)
Monitored from Issue #5 dated March 26, 1985 (working day 315)
Date of notice to proceed: June 5, 1984 (working day 110)
Contract completion date: Considered to be October 17, 1985
(working day 460)
Number of days past contract completion date as of this monitoring: 67

Actions taken:

- Inspected project
- Reviewed progress with owner representative
- Discussed project status briefly with general contractor superintendent
- Evaluated current job status

General Summary

The project is locked to general access and clean up continues in the building. There are still a considerable number of minor items to complete in the building and it is the intent to punch out the facility as soon as cleaning has proceeded to a point where the owner and the architect/engineer feel punching out the facility will be meaningful. The control booth is complete and the control contractor is now on the job installing his wiring and instrumentation. Full production control work is expected to begin February 3, 1986 (working day 533).

We did not review in detail the present intended schedule of moving off the project. It appears that there might be some

* CRITICAL PATH PLANNING

* LAND PLANNING

* MANAGEMENT CONSULTING

* PLANT LOCATION

Monitoring Report #17
Contract C, Scott Regional Facility
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RALPH J. STEPHENSON, P.E., P.C.
CONSULTING ENGINEER

15064 WARWICK ROAD
DETROIT, MICHIGAN 48223
PHONE 273-5026

pending changes that have to be implemented; however, it was not clear at this monitoring exactly what these were. As recommended in previous monitorings, I believe it would be well to clean up and close out this project as quickly as all parties can bring it to a close.

We shall continue to monitor the program although at this point there remains to be done only clean up of minor items and completion of control work installation. I shall be in touch with Mr. Whiting shortly to set the next monitoring session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Leo McGough
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

March 11, 1986

Subject: Monitoring Report #18
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: March 7, 1986 (working day 557)
Monitored from Issue #5 dated March 26, 1985 (working day 315)
Date of notice to proceed: June 5, 1984 (working day 110)
Contract completion date: Considered to be October 17, 1985
(working day 460)

Number of days past contract completion date as of this
monitoring - 97

Actions taken:

- Inspected project
- Discussed project status briefly with
architect/engineer representative and owner
representative
- Evaluated current job status

General Summary

The major work under way at present is still clean up and installation of control wiring and systems. Control work is relatively well along; however, there still is no definitive word on when the project will be completed and closed out.

There is still additional work to be done on the emergency generator muffler, and this should be done within the next 10 to 15 working days. By Tuesday, March 11, 1986 (working day 559) heat should be available in the building.

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RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

We shall continue to monitor the project until closed out.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboli
Mr. Tom [unclear]

April 29, 1986

Subject: Monitoring Report #19
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: April 11, 1986 (working day 582)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

**Contract completion date: considered to be October 17, 1985
(working day 460)**

**Number of days past contract completion date as of this
monitoring - 122 working days**

Actions taken:

- Inspected project
- Evaluated current job status

General Summary

The general contractor is still on the project and there was no indication as of this monitoring when work would be completed. Security console work is in progress, and there is no word on when project completion could be expected. The interior of the building is beginning to fill with rubbish and dirt.

It is recommended that the project be closed out as quickly as possible so the building can be fully closed to construction traffic, cleaned and made ready for final turnover.

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

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I shall be in touch with Mr. Whiting shortly to set the next monitoring. We will continue to monitor the project until it is closed out.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

May 23, 1986

Subject: Monitoring Report #20
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Proje: 84:29C

Date of Monitoring: May 9, 1986 (working day 602)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Considered to be October 17, 1985
(working day 460)

Number of days past contract completion date as of this
monitoring: 142 working days

Actions taken:

- Briefly inspected project
- Reviewed current status with general contractor
superintendent
- Evaluated current status

General Summary

The general contractor is still on the project and there was no indication as of this monitoring as to when he would be leaving the site.

The emergency generator is operative. There still is about 45 gallons of minor painting to complete. The controls contractor is still installing his work, and to all intents and purposes little work other than that is being done.

It should be noted that the interior of the building is becoming progressively dirtier, with rubble and miscellaneous trash accumulating. In addition materials are being stored in the building, apparently for other contracts. I suggest that the arrangement under which these materials are being stored be clearly identified now so that there is no difficulty with

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Contract C, Northville, Michigan
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this matter in the future. There is no indication at this session as to whom these materials belonged or for what purpose they were being stored. However, they apparently do not belong to the building 600 group.

It is recommended that the project be closed out as quickly as possible by the contractor and, the owner and architect/engineer punching it out, closing it to major construction traffic and turning it over to the state just as quickly as possible.

I shall continue monitoring the project until it is closed out and will be in touch with Mr. Whiting shortly to set the next monitoring session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

RALPH J. STEPHENSON, P.E.

CONSULTING ENGINEER

July 11, 1986

Subject: Monitoring Report #21
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: June 19, 1986 (working day 630)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Considered to be October 17, 1985
(working day 460)

Number of days past contract completion date as of this
monitoring: 170 working days

Actions taken:

- Briefly inspected project
- Reviewed current status with owner representative
- Discussed project briefly with general contract
superintendent
- Evaluated current status

General Summary

The general contractor is still on the project doing
miscellaneous clean up operations. There are no indications, as
of this date, when the contractors will be leaving the site.

Clean up at this inspection was progressing and the building
was cleaner than at previous recent monitorings. However,
there is no current word on when this job will be closed out.
I strongly recommend that every effort be made to complete the
project and turn it over complete from the contractors to the
owner.

Monitoring Report #21
Contract C, Scott Regional Facility
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RALPH J. STEPHENSON, P.E.
CONSULTING ENGINEER

I shall be in touch with Mr. Whiting shortly to set the next monitoring date.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

RALPH J. STEPHENSON, P.E.

CONSULTING ENGINEER

August 2, 1986

Subject: Monitoring Report #22
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: July 11, 1986 (working day 645)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Considered to be October 17, 1985
(working day 460)

Number of days past contract completion date as of this
monitoring: 185

Tentative date set as substantial completion: June 1, 1986
(working day 617)

Actions taken:

- Briefly inspected project
- Reviewed current status with owner representative
- Discussed project briefly with general contract
superintendent
- Evaluated current status

661
460
201

General Summary

Our conversations at this monitoring indicated that the date of substantial completion has been set as June 1, 1986 (working day 617).

Punch lists have been made and corrective actions are now being taken. There was no indication at this session as to when occupancy of the facility would be effected by the owner. However, there is some consideration of its use in the very near future. I shall monitor the project until its completion and acceptance by the owner for use.

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Contract C, Scott Regional Facility
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RALPH J. STEPHENSON, P.E.
CONSULTING ENGINEER

I shall be in touch with Mr. Whiting shortly to set whatever may be appropriate for the next monitoring session.

Ralph J. Stephenson, P.E.

RJS:sps

To: Mr. Jerry Whiting
cc: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

August 29, 1986

Subject: Monitoring Report #23
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities, State of Michigan
Account #110-47-2699-001

Project: 84:29C

Date of Monitoring: August 4, 1986 (working day 661)

Monitored from Issue #5 dated March 26, 1985 (working day 315)

Date of notice to proceed: June 5, 1984 (working day 110)

Contract completion date: Considered to be October 17, 1985
(working day 460)

Number of days past contract completion date as of this
monitoring: 201

Tentative date set as substantial completion: June 1, 1986
(working day 617)

Actions taken:

- Briefly inspected project
- Reviewed current status with owner and architect/engineer representative
- Evaluated current status

As of August, 1986 (working day 661) there still remains some mechanical, electrical and architectural work to be completed, primarily in balancing and miscellaneous electrical hookup along with outside painting on columns and siding. Control work is yet to be completed also. The facility is apparently ready to be used with little additional work. However, I was not able to determine with accuracy the present plan or procedure for locking up and turning over the building.

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

Monitoring Report #23
Contract C, Scott Regional Facility
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I shall be in touch with Mr. Whiting shortly to determine if any additional monitoring is required.

Ralph J. Stephenson, P.E.

RJS:sps/gmy
TO: Mr. Jerry Whiting
CC: Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis

RALPH J. STEPHENSON, P. E., P. C.
CONSULTING ENGINEER

October 11, 1986

Subject: Monitoring Report #24
Contract C, Northville, Michigan
Scott Regional Facility
Bureau of Facilities
State of Michigan
Account #110-47-2699-001

Project: 84:29 C

Date of Monitoring: September 2, 1986 (working day 681)

Actions taken:

- Briefly inspected project
- Reviewed current status with owner and architect/engineer representative
- Evaluated current status

As of September 2, 1986 (working day 681) a certificate of occupancy has been obtained and the owner is ready to move in. Most outstanding claims have been resolved and contract formalities, prior to move in, are being cleared away.

There is no need to monitor this project further and so I will not conduct additional monitoring reviews or inspections unless specifically requested.

I should like to thank the owner, the architect/engineer, and the contractors on this project for their assistance in the work that I have done.

I shall not be in touch with Mr. Whiting re further meetings unless such a need is expressed.

Ralph J. Stephenson, P.E.

RJS: gmy
TO: Mr. Gerald Whiting
Mr. Leo McGough
Mr. Lee Peterman
Mr. Tom Page
Mr. Ronald Lijewski
Mr. Rupert Davey
Mr. Walter Baraboll
Mr. Tom Davis