

KAISER ENGINEERS, INC.
MIDDLETOWN, OHIO

FINAL PROJECT REPORT
ARMCO STEEL CORPORATION

STEELMAKING AREA & SOUTH AREA
LOCKER ROOMS

PROJECT 7114

MAY 1969

Distribution:

Armco

F. W. Barnes
R. F. Boschert
V. J. Curtis
T. R. Foley
A. M. Greco
C. G. Kramer
D. C. Osborne
P. R. Smith
J. M. Thomas

Kaiser

D. A. Daly
B. P. Franceschi
V. L. Frankson
E. D. Lowell
G. L. Roberts
R. J. Wolf

Prepared By: H. F. Wulfekamp
H. F. Wulfekamp

Approved: R. C. Hulseman
R. C. Hulseman

Approved: S. G. Imherr
S. G. Imherr

BLUE, SMALL RED

AKE-003212

KAISER ENGINEERS, INC.
MIDDLETOWN, OHIO

FINAL PROJECT REPORT

ARMCO STEEL CORPORATION

STEELMAKING AREA AND SOUTH AREA
LOCKER ROOMS

PROJECT 7114

CONTENTS

- PROJECT SUMMARY
  - General Description
  - Project Authorization
  - Project Personnel
  - Project Progress
- PROJECT SCHEDULE
- FINAL SUMMARY COST AND COMPARISON
- DRAWINGS

BLUE, SMALL RED

FINAL PROJECT REPORT

STEELMAKING AREA & SOUTH AREA LOCKER ROOMS

PROJECT 7114

1.0 GENERAL DESCRIPTION

Two Locker Room Facilities have been constructed in the current Middletown Works Expansion Program. One is in the Steelmaking Area to serve the Basic Oxygen Plant and other melting facilities. The other is in the South Area and serves the 86" Hot Strip Mill, Slab Mill, Soaking Pits, and Finishing Facilities. The South Area facility was constructed for 820 lockers and the Steelmaking Area facility for 632 lockers. A more detailed description is contained in Engineering Report No. 7114.

2.0 PROJECT AUTHORIZATION

Engineering Report No. 7114 was issued December 12, 1966, with an appropriation request for $678,000. Armco management approval of the request for appropriation was granted February 10, 1967.

3.0 PROJECT PERSONNEL

Armco Program Engineer ..... Mr. T. R. Foley

Armco Project Engineer ..... Mr. R. F. Boschert

Armco Project Engineer - Electrical .... Mr. J. J. Delaney

Kaiser Engineers' Project Engineer ... Mr. H. F. Wulfekamp

BLUE, SMALL RED

AKE-003214

4.0 PROJECT PROGRESS

The basic requirements for this project were developed from Industrial Engineering Report M-66-090, as revised by Armco Middletown Works Management.

The scoping information for the project was reviewed and approved November 29, 1966. Final approval on Engineering Report No. 7114 was granted on December 12, 1966.

Detail design was started December 13, 1966, and completed March 15, 1967. A subcontract bid package of twenty-eight (28) drawings and a specification (twenty-one (21) sections) was prepared and bids were received in May, 1967. The subcontractor was given notice to proceed on June 6, 1967.

The original construction schedule called for completion of the South Area facility in September, 1967, and the Steelmaking facility in September, 1968.

The Steelmaking Area facility building shell only was to be constructed for use as a field office by K. E. construction forces at the Basic Oxygen Plant. The subcontractor was to return to the site and complete construction by September 1, 1967.

BLUE, SMALL RED

AKE-003215

Poor subsoil conditions in the South Area delayed start of construction and completion date was changed to December, 1967.

Changes in railroad track layout and grading delayed start of construction in the Steelmaking Area until July, 1967. At this time it was determined that completion would be too late for use as a construction office, so the decision was made to fully complete the structure and lock the facility until required for use by Armco. The South Area facility was completed in January, 1968, and accepted by Armco February 14, 1968. The Steelmaking Area facility was completed (except for connection to utilities) in April, 1968, and accepted by Armco May 2, 1968. The final connections to all building service utilities was completed on November 15, 1968. The facility was turned over to Armco on November 19, 1968.

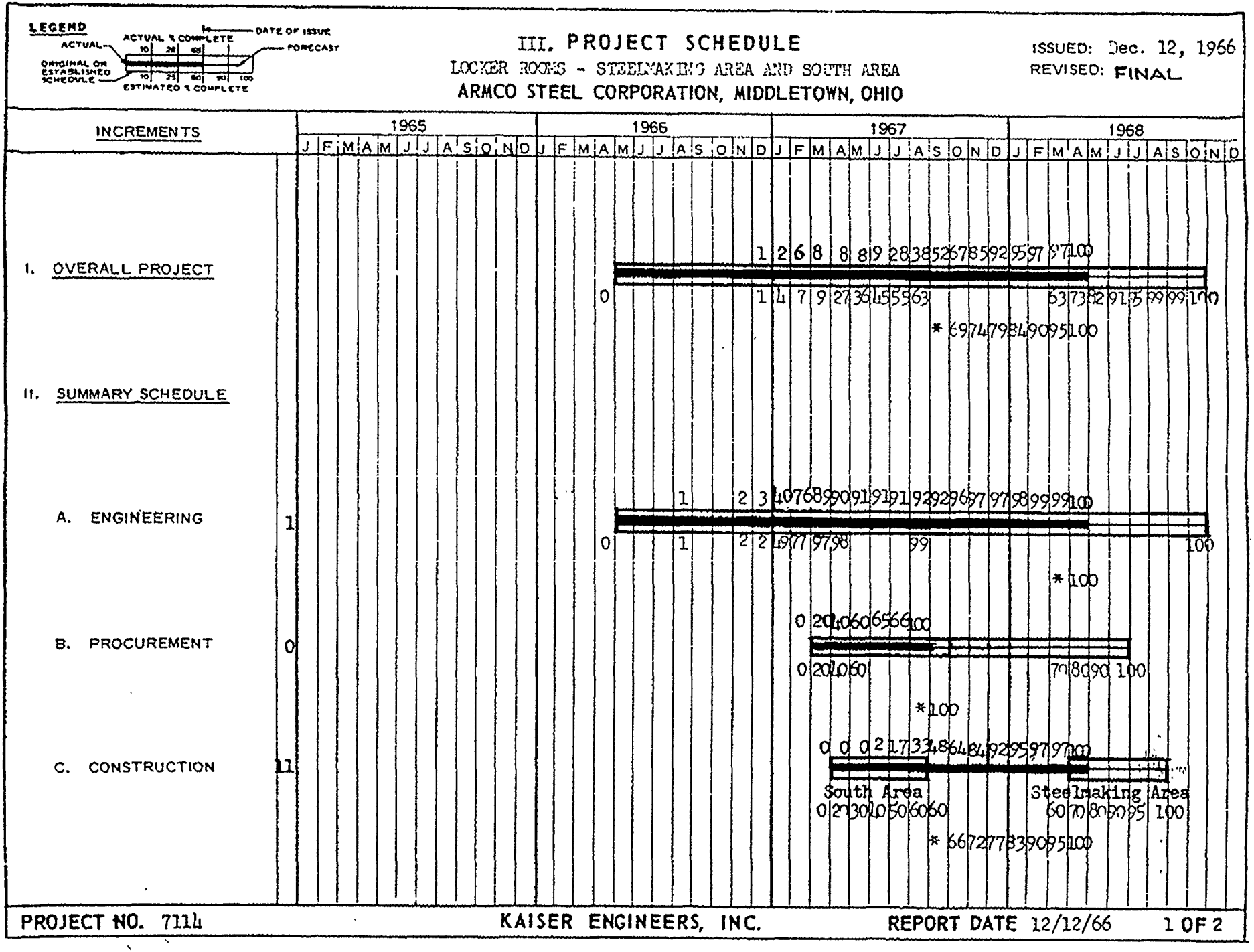
5.0 PROJECT SCHEDULE

A project schedule showing the actual versus the planned progress is attached.

BLUE, SMALL RED

AKE-003216

BLUE, SMALL RED



PROJECT NO. 7114 KAISER ENGINEERS, INC. REPORT DATE 12/12/66 1 OF 2

AKE-003217

6.0 FINAL SUMMARY COST AND COMPARISON

A tabulation of the final cost as compared with the Engineering Report budget for the project is attached. The original estimate for this project was prepared on the premise that the design and construction would be performed by Kaiser Engineers, Inc. The design was prepared by Kaiser, however, the construction was performed on a lump sum basis by David L. Smith Construction Company.

With the construction performed on a lump sum contract the costs assigned to various accounts vary considerably from the budget and do not represent the actual costs since this information was not available to our cost accounting.

BLUE, SMALL RED

AKE-003218

BLUE, SMALL RED

SUMMARY COST & COMPARISON TO ESTIMATE REPORT

FINAL REPORT

Report Date: _____

JOB NO. 6471-14 - Locker Rooms

Period Ending: December 24, 1968

Project Section	Description	Total Recorded & Committed	Appropriated Budget	ESTIMATE AT COMPLETION Current	Previous	Increase (Decrease)	(Over) Under Appropriated Budget	Percent Expended
	South Area							
201	Locker Room Structure	336,485	305,400	336,485	336,485		(31,085)	100
	Steelmaking Area							
202	Locker Room Structure	293,729	253,600	293,729	293,729		(40,129)	100
880	Electric S/C Overhead & Fee	225	6,000	225	225		5,775	100
	TOTAL DIRECT COSTS	630,439	565,000	630,439	630,439		(65,439)	100
910	Construction Overhead	7,325	14,000	7,325	7,325		6,675	100
940	Engineering & Staff	23,848	37,000	23,848	23,848		13,152	100
970	Contingency		62,000				62,000	
	TOTAL INDIRECT COSTS	31,173	113,000	31,173	31,173		81,827	100
	TOTAL DESIGN & CONSTRUCTION BUDGET	661,612	678,000	661,612	661,612		16,388	100
	Other Related Costs (Armco)							
	TOTAL APPROPRIATION NO. 7114	661,612	678,000	661,612	661,612		16,388	100
	Evaluated Exposure							
	TOTAL PROJECT NO. 7114	661,612	678,000	661,612	661,612		16,388	100

AKE-003219

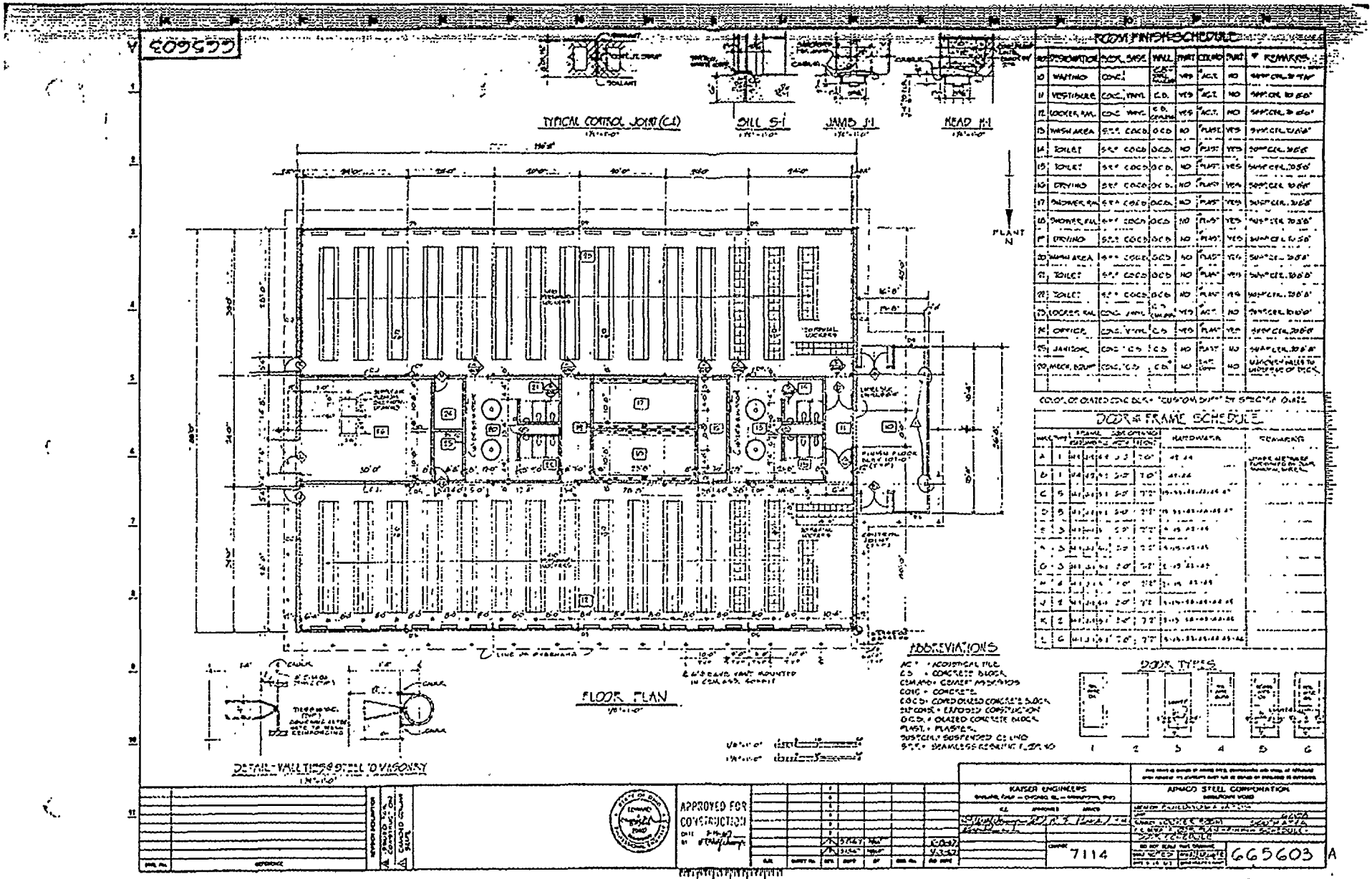
7.0 GENERAL ARRANGEMENT DRAWINGS

Drawings 665603, 665604, 665617, and 665618 showing the general features of these facilities are attached.

BLUE, SMALL RED

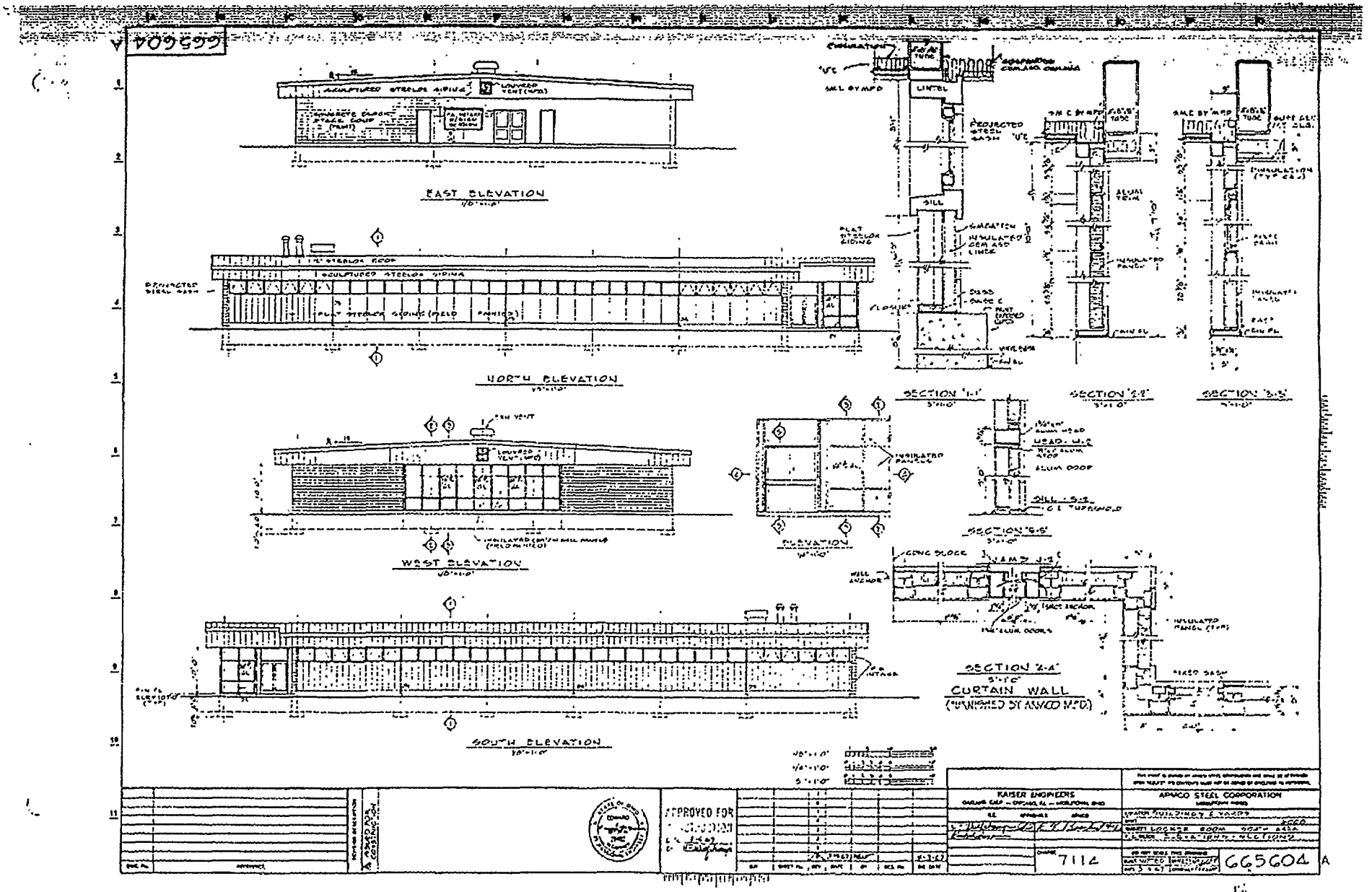
AKE-003220

BLUE, SMALL RED



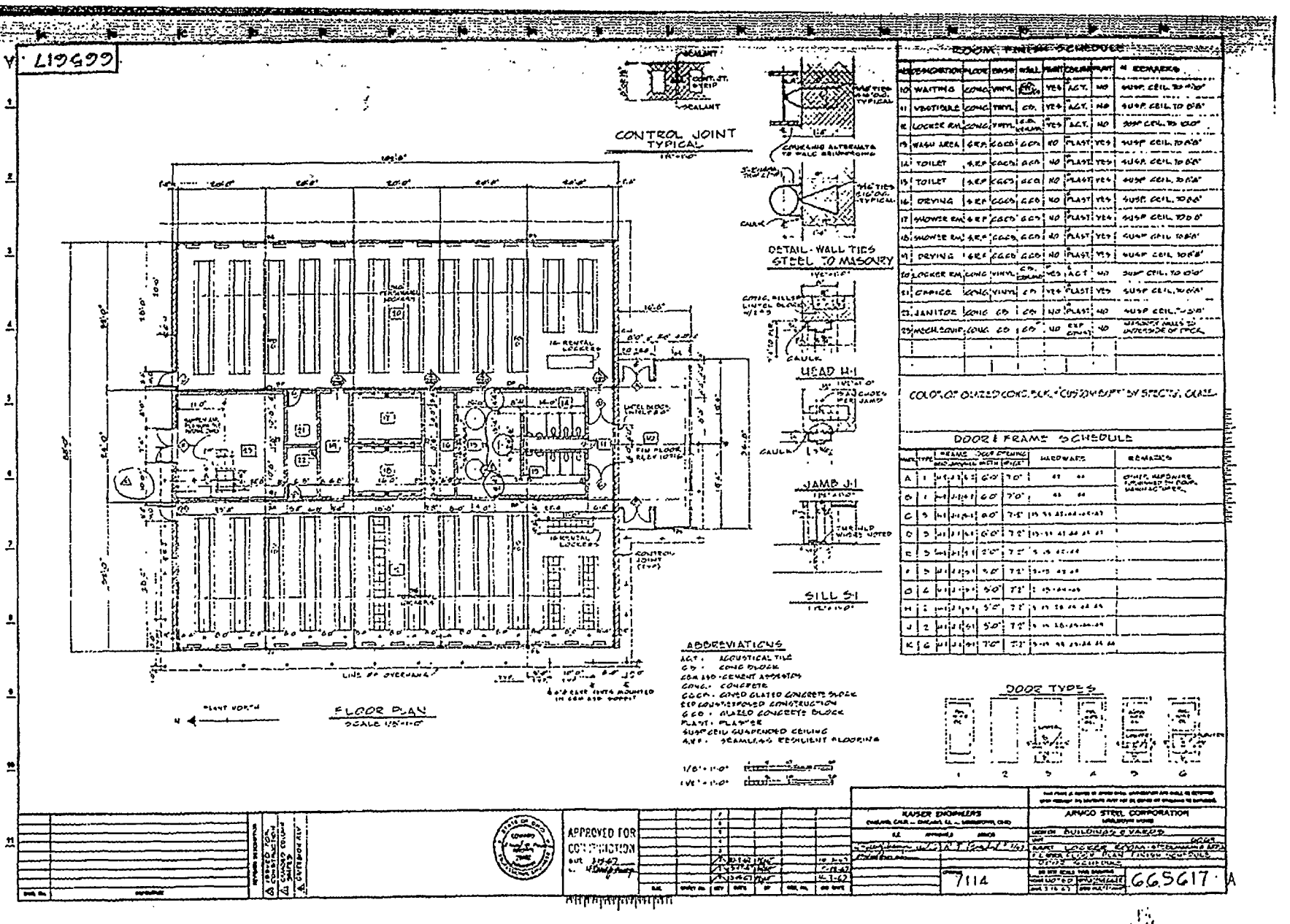
AKE-003221

BLUE, SMALL RED



AKE-003222

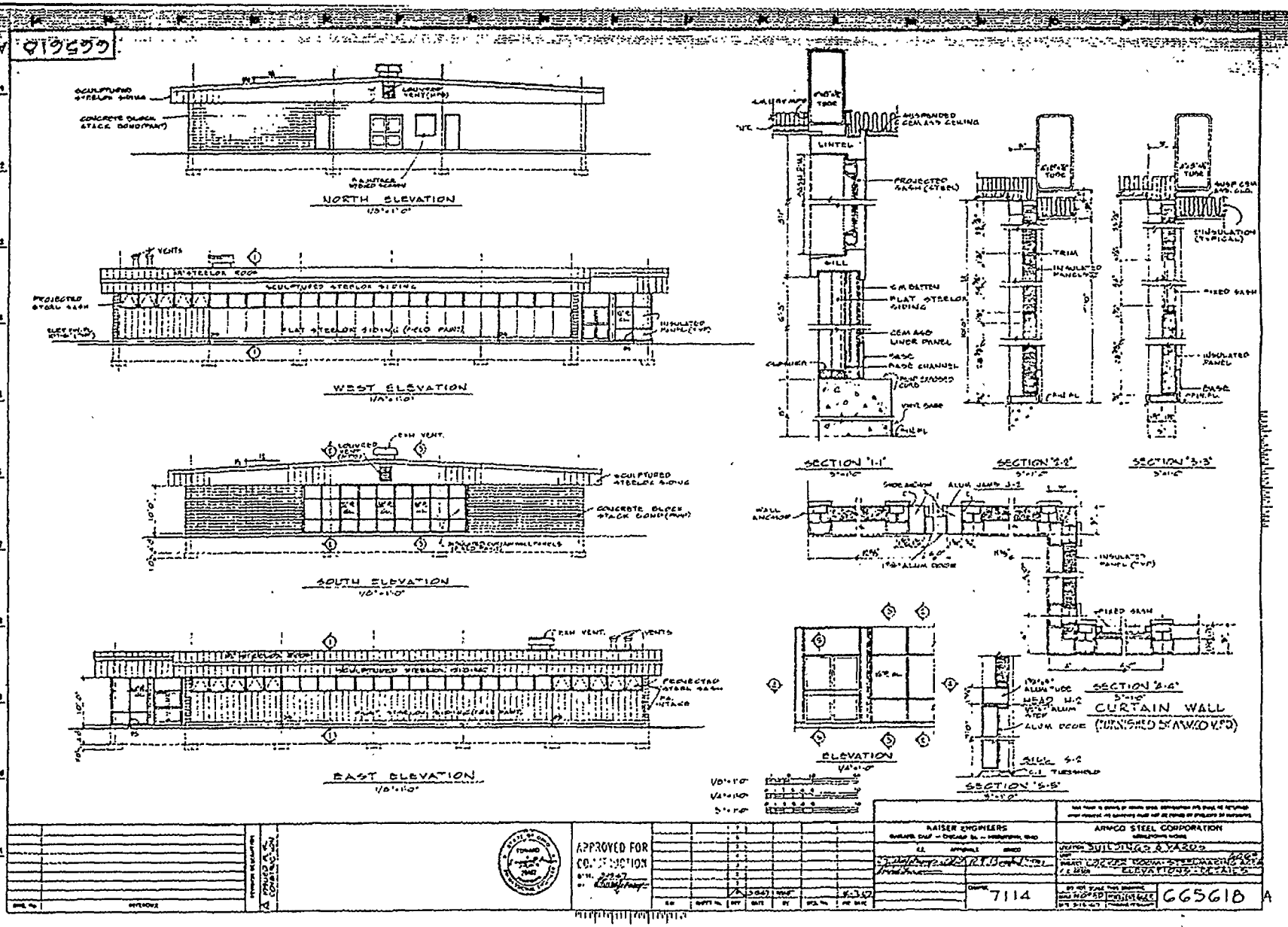
BLUE, SMALL RED



BLUE, SMALL RED

AKE-003223

BLUE, SMALL RED



AKE-003224