EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE -- EAR 99: The information contained in the document is technical in content, but not technical data as defined by the International Traffic in Arms Regulations (ITAR) or the Export Administration Regulations (EAR), and therefore is EAR 99 NLR, no export license required. [General Prohibition Six (Embargo) applies to all items subject to the EAR, (i.e., items on the CCL and within EAR 99 NLR). You may not make an export or re-export contrary to the provisions of part 746 (Embargos and Other Special Controls) of the EAR and 22 CFR part 126.1 of the ITAR]. Reference EDDR #1316268 -- NASA KSC Export Control Office -- 321-867-9209.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/4/67	

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

LAUNCH COMPLEX 39
MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLORIDA

FABRICATION AND ERECTION
VAB HIGH AND LOW BAY STEEL
VOLUMES 3,4,5 & 6

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY *G.A. Samuelson*
DATE 12 DEC 1967

VOLUME 3 - HIGH BAY AREA - STRUCTURAL FRAMING - FLOOR PLANS
VOLUME 4 - HIGH BAY AREA - STRUCTURAL FRAMING - COLUMN LINE SECTIONS
VOLUME 5 - HIGH BAY AREA - DETAILS OF CONNECTIONS AND FRAMING, STAIRS, GIRTS, CRANE BEAMS & CATWALKS
VOLUME 6 - LOW BAY AREA - STRUCTURAL FRAMING PLANS, SECTIONS & DETAILS

LIMITED BIDDING

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

URBAHN — ROBERTS — SEELYE — MORAN
ARCHITECTS - ENGINEERS
NEW YORK, NEW YORK

NOTICE

LIMITED BIDDING: THIS PROJECT INVOLVES WORK OF NATIONAL URGENCY. FOR THIS REASON THE NORMAL PROCEDURES APPLICABLE TO PUBLICLY ADVERTISED CONTRACTS CANNOT BE FOLLOWED. BIDS WILL BE ACCEPTED ONLY FROM PRIME BIDDERS WHO HAVE MADE APPLICATION FOR PREQUALIFICATION AND HAVE BEEN APPROVED PRIOR TO ISSUANCE OF THE INVITATION FOR BIDS. JOINT VENTURES MAY APPLY FOR PREQUALIFICATION AFTER ISSUANCE OF THE INVITATION FOR BIDS PROVIDED THE SPONSOR-MANAGER MEMBER IS ON THE APPROVED LIST OF PRE-QUALIFIED BIDDERS AT THE TIME OF ISSUANCE OF THE INVITATION. FULL INFORMATION ON THIS SUBJECT IS CONTAINED IN THE ADVANCE NOTICE TO BIDDERS.

BIDS RECEIVED FROM FIRMS THAT HAVE NOT BEEN APPROVED AS PRIME BIDDERS WILL BE CONSIDERED NON-RESPONSIVE AND WILL BE REJECTED.

27 MAY '63

PREPARED BY: URBAN — ARCHITECT ENGINEER	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LAUNCH OPERATIONS CENTER
SUBMITTED BY: — CHIEF MILITARY BRANCH	URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 17, NEW YORK / U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.
APPROVAL RECOMMENDED: — CHIEF, ENGINEERING DIVISION	NASA MERRITT ISLAND LAUNCH AREA, MERRITT ISLAND, FLA. **LC 39 VERTICAL ASSEMBLY BUILDING** FABRICATION AND ERECTION VAB HIGH AND LOW BAY STEEL TITLE SHEET
APPROVED: Paul Bangert — LT. CO. C.E. DISTRICT ENGINEER	INV. NO. ENG. (NASA) 08-123-63-41; DATED: MAY 1963; SIZE: F; FILE NO. 203-28,297
Dwn by S. ... / Ckd by ...	SCALE: NONE; SECTION NO. G-3-001; SHEET NO. 3-01

ECONOMY BLUE PRINT CO., INC.

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM	ZONE	DESCRIPTION	DATE	APPROVED
	X		VOID	1-6-67	JJF

Safety is here to stay
ARE YOU?

VOLUME 3

HIGH BAY AREA

STRUCTURAL FRAMING PLANS

I N D E X O F D R A W I N G S

SHEET NUMBER	SECTION NUMBER	DRAWING TITLE
		GENERAL
3-01	G-3-001	TITLE SHEET
3-02	G-3-002	INDEX
3-03	G-3-003	GENERAL AREA PLAN
3-04	G-3-004	ABBREVIATIONS, DESIGN DATA & GENERAL NOTES
		STRUCTURAL
3-05	S-3-001	ANCHOR BOLT LAYOUT - HIGH BAY
3-06	S-3-002	ANCHOR BOLT LAYOUT - LOW BAY
3-07	S-3-003	BASE PLATES - SCHEDULES & DETAILS
3-08	S-3-004	COLUMN LAYOUT - EAST HALF FLOOR 1 - LEVEL 0'-0"
3-09	S-3-005	COLUMN LAYOUT - WEST HALF FLOOR 1 - LEVEL 0'-0"
3-10	S-3-006	STRUCTURAL FRAMING - EAST HALF FLOOR 2 - LEVEL 14'-5"
3-11	S-3-007	STRUCTURAL FRAMING - WEST HALF FLOOR 2 - LEVEL 14'-5"
3-12	S-3-008	STRUCTURAL FRAMING - EAST HALF FLOOR 3 - LEVEL 27'-1"
3-13	S-3-009	STRUCTURAL FRAMING - WEST HALF FLOOR 3 - LEVEL 27'-1"
3-14	S-3-010	STRUCTURAL FRAMING - EAST HALF FLOOR 4 - LEVEL 39'-9"
3-15	S-3-011	STRUCTURAL FRAMING - WEST HALF FLOOR 4 - LEVEL 39'-9"
3-16	S-3-012	STRUCTURAL FRAMING - EAST HALF FLOOR 5 - LEVELS 52'-5" & 46'-1"
3-17	S-3-013	STRUCTURAL FRAMING - WEST HALF FLOOR 5 - LEVEL 46'-1"
3-18	S-3-014	STRUCTURAL FRAMING - EAST HALF FLOOR 6 - LEVEL 65'-1"
3-19	S-3-015	STRUCTURAL FRAMING - WEST HALF FLOOR 6 - LEVEL 65'-1"
3-20	S-3-016	STRUCTURAL FRAMING - EAST HALF FLOOR 7 - LEVEL 77'-9"
3-21	S-3-017	STRUCTURAL FRAMING - WEST HALF FLOOR 7 - LEVEL 77'-9"
3-22	S-3-018	STRUCTURAL FRAMING - EAST HALF FLOOR 8 - LEVEL 90'-5"
3-23	S-3-019	STRUCTURAL FRAMING - WEST HALF FLOOR 8 - LEVEL 90'-5"
3-24	S-3-020	STRUCTURAL FRAMING - EAST HALF FLOOR 9 - LEVEL 103'-1"
3-25	S-3-021	STRUCTURAL FRAMING - WEST HALF FLOOR 9 - LEVEL 103'-1"
3-26	S-3-022	STRUCTURAL FRAMING - EAST HALF FLOOR 10 - LEVEL 115'-9"
3-27	S-3-023	STRUCTURAL FRAMING - WEST HALF FLOOR 10 - LEVEL 115'-9"
3-28	S-3-024	STRUCTURAL FRAMING - EAST HALF FLOOR 11 - LEVEL 128'-5"
3-29	S-3-025	STRUCTURAL FRAMING - WEST HALF FLOOR 11 - LEVEL 128'-5"
3-30	S-3-026	STRUCTURAL FRAMING - EAST HALF FLOOR 12 - LEVEL 141'-1"
3-31	S-3-027	STRUCTURAL FRAMING - WEST HALF FLOOR 12 - LEVEL 141'-1"
3-32	S-3-028	STRUCTURAL FRAMING - EAST HALF FLOOR 13 - LEVEL 153'-9"
3-33	S-3-029	STRUCTURAL FRAMING - WEST HALF FLOOR 13 - LEVEL 153'-9"
3-34	S-3-030	STRUCTURAL FRAMING - EAST HALF FLOOR 14 - LEVEL 166'-5"
3-35	S-3-031	STRUCTURAL FRAMING - WEST HALF FLOOR 14 - LEVEL 166'-5"
3-36	S-3-032	STRUCTURAL FRAMING - EAST HALF FLOOR 15 - LEVEL 179'-1"
3-37	S-3-033	STRUCTURAL FRAMING - WEST HALF FLOOR 15 - LEVEL 179'-1"
3-38	S-3-034	STRUCTURAL FRAMING - EAST HALF FLOOR 16 - LEVEL 191'-9"
3-39	S-3-035	STRUCTURAL FRAMING - WEST HALF FLOOR 16 - LEVEL 191'-9"
3-40	S-3-036	STRUCTURAL FRAMING - EAST HALF FLOOR 17 - LEVEL 204'-5"
3-41	S-3-037	STRUCTURAL FRAMING - WEST HALF FLOOR 17 - LEVEL 204'-5"
3-42	S-3-038	STRUCTURAL FRAMING - EAST HALF FLOOR 18 - LEVEL 217'-1"
3-43	S-3-039	STRUCTURAL FRAMING - WEST HALF FLOOR 18 - LEVEL 217'-1"
3-44	S-3-040	STRUCTURAL FRAMING - EAST HALF FLOOR 19 - LEVEL 229'-9"
3-45	S-3-041	STRUCTURAL FRAMING - WEST HALF FLOOR 19 - LEVEL 229'-9"
3-46	S-3-042	STRUCTURAL FRAMING - EAST HALF FLOOR 20 - LEVEL 242'-5"
3-47	S-3-043	STRUCTURAL FRAMING - WEST HALF FLOOR 20 - LEVEL 242'-5"
3-48	S-3-044	STRUCTURAL FRAMING - EAST HALF FLOOR 21 - LEVEL 255'-1"
3-49	S-3-045	STRUCTURAL FRAMING - WEST HALF FLOOR 21 - LEVEL 255'-1"
3-50	S-3-046	STRUCTURAL FRAMING - EAST HALF FLOOR 22 - LEVEL 267'-9"
3-51	S-3-047	STRUCTURAL FRAMING - WEST HALF FLOOR 22 - LEVEL 267'-9"
3-52	S-3-048	STRUCTURAL FRAMING - EAST HALF FLOOR 23 - LEVEL 280'-5"
3-53	S-3-049	STRUCTURAL FRAMING - WEST HALF FLOOR 23 - LEVEL 280'-5"
3-54	S-3-050	STRUCTURAL FRAMING - EAST HALF FLOOR 24 - LEVEL 293'-1"
3-55	S-3-051	STRUCTURAL FRAMING - WEST HALF FLOOR 24 - LEVEL 293'-1"
3-56	S-3-052	STRUCTURAL FRAMING - EAST HALF FLOOR 25 - LEVEL 305'-9"
3-57	S-3-053	STRUCTURAL FRAMING - WEST HALF FLOOR 25 - LEVEL 305'-9"
3-58	S-3-054	STRUCTURAL FRAMING - EAST HALF FLOOR 26 - LEVEL 318'-5"
3-59	S-3-055	STRUCTURAL FRAMING - WEST HALF FLOOR 26 - LEVEL 318'-5"
3-60	S-3-056	STRUCTURAL FRAMING - EAST HALF FLOOR 27 - LEVEL 331'-1"
3-61	S-3-057	STRUCTURAL FRAMING - WEST HALF FLOOR 27 - LEVEL 331'-1"
3-62	S-3-058	STRUCTURAL FRAMING - EAST HALF FLOOR 28 - LEVEL 343'-9"
3-63	S-3-059	STRUCTURAL FRAMING - WEST HALF FLOOR 28 - LEVEL 343'-9"
3-64	S-3-060	STRUCTURAL FRAMING - EAST HALF FLOOR 29 - LEVEL 356'-5"
3-65	S-3-061	STRUCTURAL FRAMING - WEST HALF FLOOR 29 - LEVEL 356'-5"
3-66	S-3-062	STRUCTURAL FRAMING - EAST HALF FLOOR 30 - LEVEL 369'-1"
3-67	S-3-063	STRUCTURAL FRAMING - WEST HALF FLOOR 30 - LEVEL 369'-1"
3-68	S-3-064	STRUCTURAL FRAMING - EAST HALF FLOOR 31 - LEVEL 381'-9"
3-69	S-3-065	STRUCTURAL FRAMING - WEST HALF FLOOR 31 - LEVEL 381'-9"
3-70	S-3-066	STRUCTURAL FRAMING - EAST HALF FLOOR 32 - LEVEL 394'-5"
3-71	S-3-067	STRUCTURAL FRAMING - WEST HALF FLOOR 32 - LEVEL 394'-5"
3-72	S-3-068	STRUCTURAL FRAMING - EAST HALF FLOOR 33 - LEVEL 407'-1"
3-73	S-3-069	STRUCTURAL FRAMING - WEST HALF FLOOR 33 - LEVEL 407'-1"
3-74	S-3-070	STRUCTURAL FRAMING - EAST HALF FLOOR 34 - LEVEL 419'-9"
3-75	S-3-071	STRUCTURAL FRAMING - WEST HALF FLOOR 34 - LEVEL 419'-9"
3-76	S-3-072	STRUCTURAL FRAMING - EAST HALF FLOOR 35 - LEVEL 432'-5"
3-77	S-3-073	STRUCTURAL FRAMING - WEST HALF FLOOR 35 - LEVEL 432'-5"
3-78	S-3-074	STRUCTURAL FRAMING - EAST HALF FLOOR 36 - LEVEL 445'-1"
3-79	S-3-075	STRUCTURAL FRAMING - WEST HALF FLOOR 36 - LEVEL 445'-1"
3-80	S-3-076	STRUCTURAL FRAMING - EAST HALF FLOOR 37 - LEVEL 457'-9"
3-81	S-3-077	STRUCTURAL FRAMING - WEST HALF FLOOR 37 - LEVEL 457'-9"
3-82	S-3-078	STRUCTURAL FRAMING - EAST HALF FLOOR 38 - LEVEL 470'-5"
3-83	S-3-079	STRUCTURAL FRAMING - WEST HALF FLOOR 38 - LEVEL 470'-5"
3-84	S-3-080	STRUCTURAL FRAMING - EAST HALF FLOOR 39 - LEVEL 483'-1"
3-85	S-3-081	STRUCTURAL FRAMING - WEST HALF FLOOR 39 - LEVEL 483'-1"
3-86	S-3-082	STRUCTURAL FRAMING - EAST HALF FLOOR 40 - LEVEL 495'-9"
3-87	S-3-083	STRUCTURAL FRAMING - WEST HALF FLOOR 40 - LEVEL 495'-9"
3-88	S-3-084	STRUCTURAL FRAMING - EAST HALF FLOOR 41 - LEVEL 511'-0"
3-89	S-3-085	STRUCTURAL FRAMING - WEST HALF FLOOR 41 - LEVEL 511'-0"
3-90	S-3-086	STRUCTURAL FRAMING - EAST HALF ROOF - LEVEL 525'-7"
3-91	S-3-087	STRUCTURAL FRAMING - WEST HALF ROOF - LEVEL 525'-7"

VOID
INFORMATION NOT APPLICABLE TO PRESENT FIELD CONDITIONS
Facility Record Drawing
DOW DATE 1-6-67

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN 642 FIFTH AVENUE NEW YORK 19, NEW YORK	U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
I N D E X

INV. NO. ENG. (M A S A) 06-123-63-4		SIZE F	FILE NO. 203-28, 297
DATED: MAY 1963			
SCALE: NONE	SECTION NO. G-3-002	SHEET NO. 3-02	

Drawn by | Checked by

A02.00.00.0XD1072.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	△		REVISED TO CONFORM TO AMEND. No 8	4-16-64	[illegible]
	△		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/4/69	[illegible]

GENERAL NOTES

1. GENERAL AREA PLAN INDICATES FUTURE DEVELOPMENT OF SITE. ROADS SHOWN ARE FUTURE CONSTRUCTION EXCEPT ROAD A1A WHICH IS EXISTING.
2. BEARING AND COORDINATES SHOWN ARE BASED ON GRID NORTH. ALL ELEVATIONS ARE IN FEET AND REFER TO MEAN SEA LEVEL. CONTROL MONUMENTS ARE ESTABLISHED BY US ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT.
3. FILL LINE (FL) SHOWN ON THIS DRAWING INDICATES THE TOP OF HYDRAULIC FILL EXISTING THROUGHOUT THE SITE, AREA WITHIN THE FILL LINE BOUNDARIES ARE AT APPROXIMATE ELEVATION 5.7'±.
4. DESIGNATED AREAS ① TO ④ AND Ⓐ TO Ⓒ WITHIN THE VERTICAL ASSEMBLY BUILDING INDICATE SEQUENCE OF WORK IN THE ORDER OF COMPLETION TO BE FOLLOWED IN A SEPARATE FOUNDATION CONTRACT. FOUNDATION WORK IN THESE AREAS, INCLUDING ADJACENT INTERMEDIATE STORAGE AND DISTRIBUTION AREAS INT.① TO INT.④ AND INT.Ⓐ TO INT.Ⓒ WILL BE COMPLETE AND AVAILABLE TO THIS CONTRACTOR BY THE DATES SPECIFIED.
5. STRUCTURAL STEEL ERECTION SHALL PROCEED IN THE SAME SEQUENCE, AS NOTED IN NOTE 4 ABOVE
6. STRUCTURAL STEEL HANDLING AREA OR ALTERNATE HANDLING AREA SHOWN ON THIS DRAWING IS RESERVED FOR USE BY THIS CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS.
7. SEE SPECIFICATIONS FOR PROVISIONS GOVERNING THIS CONTRACTOR'S USE OF STRUCTURAL STEEL HANDLING AND INTERMEDIATE STORAGE AND DISTRIBUTION AREAS.

LEGEND

—FL— EXISTING HYDRAULIC FILL LINE

△ EXISTING CONTROL MONUMENT

BANANA CREEK

EL. 1.24
X 611,371.39
Y 1,548,127.34

EL. 2.81
X 611,488.11
Y 1,547,641.16

500'

LUT ERECTION AI SA UNDER CONSTRUCTION BY OTHERS

EXISTING FILL STOCKPILE AND BORROW AREA

APPROX. LIMITS

2000'

N 13°-30'-00" W

INTERMEDIATE STORAGE AND DISTRIBUTION AREAS

INT. ④ INT. ③ INT. ② INT. ① INT. Ⓐ INT. Ⓑ INT. Ⓒ

TOWER C TOWER F TOWER B TOWER E TOWER A TOWER D

COL. B COL. A COL. 23

X 611,955.00
Y 1,545,696.32

STRUCTURAL STEEL CONTRACTOR HANDLING AREA

1700'

S 76°-30'-00" W

N 76°-30'-00" E

X 614,799.99
Y 1,546,379.44

EL. 0.81
X 609,815.79
Y 1,545,182.64

EL. 3.53
X 610,301.97
Y 1,545,299.56

EXISTING STATE ROAD A1A

RESIDENT ENGRS. OFFICE

FOUNDATION CONTRACTOR GENERAL FABRICATION STORAGE AND MAINTENANCE AREA

EXISTING FILL STOCKPILE AND BORROW AREA

APPROX. LIMITS

STRUCTURAL STEEL CONTRACTOR ALTERNATE HANDLING AREA

WATERFRONT AREA UNDER CONSTRUCTION BY OTHERS

TURNING BASIN

RAILROAD UNDER CONSTRUCTION BY OTHERS

S 13°-30'-00" E

EL. 2.46
X 612,421.89
Y 1,543,751.68

EL. 2.58
X 612,538.61
Y 1,543,265.50

500'

Y 1,547,000

Y 1,546,000

Y 1,545,000

Y 1,544,000

X 610,000

X 611,000

X 612,000

X 613,000

BANANA CREEK

VERTICAL ASSEMBLY BUILDING

13.2 KV LINE

WATERFRONT UNLOADING DOCK

TURNING BASIN

LIMIT OF VAB FILL

BORROW AREA

LIMITED CONSTRUCTION AREA

CONSTRUCTION ROAD

FUTURE ROADS

F.P.L. CO. 69 KV LINE

HIGH WAY A1A

KEY MAP
SCALE: 1"=1000'

NOTE:
AREAS A, B, AND C LOW BAY OF VAB
AREAS 1, 2, 3 AND 4 HIGH BAY OF VAB

GENERAL AREA PLAN
1"=200'

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

200 0 200 400
1 INCH = 200 FEET

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URS/AMN - ROBERTS - SEELYE - MORAN
342 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
GENERAL AREA PLAN
VOLUME 3

INV. NO. ENG. (NASA) 06-123 63-41 | SIZE F | DRG. NO. 203-28,297
DATE: MAY 1963
SCALE: 1"= 200' | SECTION NO. G-3-003 | SHEET NO. 3-03

Drawn by [illegible] Ckd by [illegible]

A3S.02.01.0ADS017.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
12	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	JLHc
2	B		~~REVISED TO CONFORM TO AMEND #477~~	4-20-64	
	C		AS BUILT	12/4/67	
	D		REVISED FOR E.R.D. INDEX	2-6-68	

DESIGN DATA

A. STATIC LOADS

BASIC FRAMING FOR ALL FLOOR SLABS INCLUDING CEILINGS IS DESIGNED FOR LOADS AS INDICATED BELOW:

	LIVE LOAD	MISCELLANEOUS
FLOORS	100 P.S.F.	10 P.S.F. PARTITION (MINIMUM)
ROOF	20 P.S.F.	LOAD EQUIVALENT TO 40 P.S.F. ON COLUMNS EXTENDING ABOVE ROOF

IN ADDITION, COLUMNS AND FOUNDATIONS ARE DESIGNED FOR FUTURE FLOORS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TOWER →	A	B	C	D	E	F
PRESENT FLOORS(D.L.)	13	27	12	10	26	6
PRESENT FLOORS(L.L.)	9	20	8	7	21	4
FUTURE SLABS	3	6	21	6	7	27
TOTAL D.L. CAPACITY	16	33	33	16	33	33
TOTAL L.L. CAPACITY	11	21	21	11	21	21

FIGURES REPRESENT NUMBER OF FLOORS IN TOWER

FUTURE FLOORS MAY BE ADDED AT ANY ELEVATION IN THE BUILDING. NOTE, HOWEVER, THE TOTAL LIVE LOAD CAPACITY IN EACH TOWER WHICH MAY NOT BE EXCEEDED.

B. WIND LOADS

DESIGN PRESSURES FOR SHAPE FACTOR = UNITY (PROPORTION DIRECTLY FOR ANY SHAPE FACTOR)

HEIGHT	OPERATING WINDS (63 m.p.h. AT 30')	HURRICANE WINDS (125 m.p.h. AT 30')
0 TO 38'	10.2 P.S.F.	40.3 P.S.F.
38' TO 152'	13.9	54.9
152' TO 380'	18.8	74.1
380' AND UP	22.1	87.0

C. MISCELLANEOUS LOADS

ELEVATORS	GROUND FLOOR TO LEVEL 418	8000 LB. CAPACITY
ELEVATOR (A)	LEVEL 418 TO ROOF	2000 LB. CAPACITY
CRANES		250 TON
MOVABLE JIB CRANE		2 TON
TRANSFER AISLE CRANE		175 TON

MOVABLE PLATFORMS - MAXIMUM REACTIONS IN RETRACTED AND IN EXTENDED POSITIONS.

D. LOADING COMBINATIONS

1. DEAD LOAD PLUS LIVE LOAD PLUS THE MOST CRITICAL COMBINATION OF CRANE, PLATFORM AND ELEVATOR LOADS PLUS OPERATING WIND IN ANY DIRECTION.
2. DEAD LOAD PLUS HALF LIVE LOAD PLUS HURRICANE WIND IN ANY DIRECTION.
3. DEAD LOAD PLUS HURRICANE WIND IN ANY DIRECTION. (MAXIMUM UPLIFT).

E. CONNECTIONS

MEMBER FORCES INDICATED ON THE DRAWINGS ARE MAXIMUM CONDITIONS OF ALL LOADING CONDITIONS. WHERE WIND LOADS GOVERN THE MEMBER FORCES AND WOULD PERMIT USE OF INCREASED ALLOWABLE STRESSES, THE FORCES HAVE BEEN REDUCED BY 1/4 IN LIEU OF A 1/3 INCREASE IN ALLOWABLE STRESSES. MEMBERS ON WHICH FORCES ARE NOT INDICATED SHALL BE CONNECTED BY STANDARD AISC "B" SERIES CONNECTIONS, MODIFIED TO CONFORM TO REVISED STRESSES CONSISTENT WITH A-36 STEEL. COLUMN SPLICES ARE DETAILED FOR UPLIFT FORCES AND MOMENTS WHERE THEY OCCUR, SEE NOTE NO. 14. (A)

F. ALLOWABLE STRESSES

1. UNLESS SPECIFICALLY NOTED OR AUTHORIZED, FIELD WELDING WILL NOT BE PERMITTED. (A)
2. ALL WELDING SHALL CONFORM TO THE MINIMUM STANDARDS OF THE AWS BRIDGE SPECIFICATIONS D2.0-63. IN ADDITION THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, A COMPLETE WELDING SEQUENCE AND PROCEDURE FOR ALL MAJOR MEMBERS AND CONNECTIONS.
3. INSPECTION WILL BE PERFORMED BY THE GOVERNMENT. INSPECTION WILL INCLUDE VISUAL AND MAGNETIC PARTICLE METHODS AND MAY, IF REQUIRED, INCLUDE RADIOGRAPHIC AND/OR ULTRASONIC TESTING.

AS BUILT
APPROVED BY C. A. Lamberson
DATE 12 DEC 1967

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD.
2. SHOP OR FIELD SPLICES OF STRUCTURAL STEEL MEMBERS ARE PROHIBITED, EXCEPT AS DETAILED ON THE DRAWINGS AND/OR PERMITTED IN THE SPECIFICATIONS AND AS SPECIFICALLY APPROVED ON SHOP DRAWINGS PRIOR TO FABRICATION.
3. CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING EXCAVATION WORK ADJACENT THERETO.
4. ALL BOLTS OF 1/2" DIAMETER OR LARGER, USED FOR CONNECTIONS, WILL BE HIGH STRENGTH BOLTS CONFORMING TO ASTM SPEC. A325 USING FRICTION TYPE JOINTS UNLESS SPECIFICALLY NOTED OTHERWISE. (B)
5. ALL LEVELS REFER TO FLOOR 1 = 0'-0". FLOOR LEVEL IS TRUE ELEVATION 10'-0" REFERRED TO MEAN SEA LEVEL DATUM. (A)
7. WELDED STUD CONNECTORS SHOWN ON THE DRAWINGS ARE INDICATED FOR INFORMATION ONLY. THEY WILL BE PLACED UNDER ANOTHER CONTRACT.
8. STABILITY OF THE STRUCTURE IS DEPENDENT ON THE CONCRETE DECKS AT EACH MODULAR LEVEL AND AT THE ROOF BEING IN PLACE. ADEQUATE TEMPORARY BRACING SHALL BE PLACED AND ALLOWED TO REMAIN UNTIL SUCH TIME AS CONCRETE SLABS ARE PLACED AND PROPERLY CURED. MODULAR LEVELS ARE DEFINED AS THOSE LEVELS AT WHICH WORK POINTS ARE LOCATED (LEVELS 1, 4, 7, 10 ETC.). AT MODULAR LEVELS, FLOOR AREAS WHICH WILL BE CONCRETED ARE THOSE AREAS WHICH ARE FRAMED WITH CONVENTIONAL FLOOR BEAMS AND GIRDERS.
9. FORCES SHOWN ON DRAWINGS FOR EACH MEMBER ARE GIVEN IN KIPS. + DENOTES TENSION, − DENOTES COMPRESSION. FIGURE IN BRACKETS [ ] DENOTE BEAM SHEARS IN KIPS. NUMBER OF SHEAR CONNECTORS ARE INDICATED THUS [50] (A)
10. ANCHOR BOLT PLANS, DWG. NO. S-3-001 & S-3-002 ARE INCLUDED FOR INFORMATION ONLY.
11. LEGEND FOR FRAMING MEMBERS
    (a) FLOOR FRAMING PLANS SHOW MEMBER SIZE WITH WEIGHT (18 WF 108) AND SHEAR CONNECTORS [80] WHICH ARE INDICATED FOR INFORMATION ONLY, N.I.C.
    (b) NUMBERED COL. LINE FRAMING ELEVATIONS (1)(2) ETC., SHOW COL. SIZE ONLY (14 WF) WITH SPLICES. HORIZONTAL MEMBERS SHOW SIZE ONLY (30 WF) WITH BEAM SHEARS [58] AND AXIAL FORCES (±130) AND DIAGONAL BRACING WITH SIZE, WEIGHT AND FORCES (14 WF 108 : ±180)
    (c) LETTERED COL. LINE FRAMING ELEVATIONS (A)(B) ETC., SHOW COL. SIZE, WEIGHT AND PLATES (14 WF 513 + 2 PLATES 18 X 1 1/2) WITH SPLICES.
    HORIZONTAL MEMBERS SHOW SIZE ONLY (18 WF) WITH BEAM SHEARS [58] AND AXIAL FORCES (±180) AND DIAGONAL BRACING WITH SIZE, WEIGHT AND FORCES (14 WF 108 ± 180)
12. FOR CLARITY REASON ONLY INTERMEDIATE FLOORS ARE NOT INDICATED ON FRAMING ELEVATIONS SEE FLOOR PLANS FOR SAME.
13. ALL CATWALKS SHOWN ARE IN CONTRACT EXCEPT AS OTHERWISE NOTED. (A)
14. MINIMUM FORCE FOR ANY MEMBER CONNECTION SHALL BE MEMBER AREA X 6000 P.S.I.
15. ON ALL MODULAR FLOOR & ROOF PLANS, UNLESS OTHERWISE NOTED, DIAGONAL FRAMING MEMBERS SHALL BE CENTERED ON THE WORK POINT OF THE FLOOR. (B) CONCRETE WILL BE PLACED ON TOP OF FLOOR AND ROOF BEAMS UNDER ANOTHER CONTRACT. TOP OF SUCH BEAMS WILL RECEIVE SHEAR CONNECTORS AS CALLED FOR ON THE DRAWINGS UNDER ANOTHER CONTRACT. FOR PURPOSES OF ESTIMATING, CONTRACTOR SHALL ASSUME THAT CONCRETE SLABS WILL BE PLACED IN AREAS IN WHICH CONVENTIONAL FLOOR FRAMING* OCCURS.
    * CONVENTIONAL FLOOR FRAMING IS DEFINED AS PARALLEL OR PERPENDICULAR TO MAIN FRAMING.

ABBREVIATIONS

ABT	ABOUT
@	AT
∠	ANGLE
APPROX	APPROXIMATE
AUX	AUXILIARY
BRG	BEARING
BLDG	BUILDING
BOT	BOTTOM
BKT	BRACKET
COL	COLUMN
CONN	CONNECTION
COV	COVER
CTRWT	COUNTERWEIGHT
CONT	CONTINUED
CTRSK	COUNTERSUNK
CONC	CONCRETE
CMU	CONCRETE MASONRY UNITS
℄	CENTER LINE
DN	DOWN
DWG	DRAWING
DIAG	DIAGONAL
φ	DIAMETER
do	DITTO
E	EAST
EL	ELEVATION
ELEV	ELEVATOR
ENGR	ENGINEER
EW	EACH WAY
ES	EACH SIDE
EQ	EQUAL
EXP JT	EXPANSION JOINT
E W	EAST-WEST
FP	FIREPROOF
FIN	FINISHED
FL	FLOOR
F-S	FAR SIDE
GA	GAUGE
GUSS	GUSSET
GRND	GROUND
HORIZ	HORIZONTAL
HS	HIGH STRENGTH
(A) IPS	IRON PIPE SIZE
INT	INTERMEDIATE
ID	INSIDE DIAMETER
JT	JOINT
KB	KNEE BRACING
(A) LLBB	LONG LEG BACK TO BACK
LUT	LAUNCHER-UMBILICAL TOWER
(A) LLV	LONG LEG VERTICAL
MAX	MAXIMUM
MIN	MINIMUM
ML	MATCH LINE
MEZZ	MEZZANINE
N	NORTH
NO	NUMBER
NS	NEAR SIDE
NIC	NOT IN CONTRACT
N-S	NORTH-SOUTH
OD	OUTSIDE DIAMETER
OC	ON CENTER
OPP HD	OPPOSITE HAND
OPNG	OPENING
OSL	OUTSTANDING LEG
OPP	OPPOSITE
ℙ OR PL	PLATE
PLATF	PLATFORM
POL	PETROLEUM, OIL & LUBRICANTS
R	RADIUS
R	RISER
S	SOUTH
ST	STRUCTURAL TEE
STIFF	STIFFENER
SYM. (A)	SYMMETRICAL
SECT	SECTION
STRUC	STRUCTURAL
STL	STEEL
SP	SPACE OR SPACES
SP PL	SPLICE PLATE
T	TON
T/S	TOP OF STEEL
T/BKT	TOP OF BRACKET
T/R	TOP OF RAIL
T & B	TOP AND BOTTOM
TYP	TYPICAL
TR	TREAD
UTIL	UTILITY
VAB	VERTICAL ASSEMBLY BUILDING
VERT	VERTICAL
W	WEST
W/	WITH
WF	WIDE FLANGE
W.PT. (A)	WORKING POINT

SECTION AND DETAIL DESIGNATION

Symbol	Meaning
A — A (section arrows)	CUTTING SECTION WHEN SECTION IS DEVELOPED ON SAME DRAWING
(A)	CUTTING SECTION WHEN SECTION IS DEVELOPED ON SAME DRAWING
(A / S-3-050)	CUTTING SECTION WHEN SECTION IS DEVELOPED ON ANOTHER DRAWING LOWER FIGURES SHOWS WHERE DWG. APPEARS
SECTION A-A 1/2" = 1'-0"	DEVELOPED SECTION WITH SECTION LINE ON SAME DRAWING
SECTION 1/2" = 1'-0" (A)	DEVELOPED SECTION WITH SECTION LINE ON SAME DRAWING
SECTION 1/2" = 1'-0" (A / S-3-021)	DEVELOPED SECTION WITH SECTION LINE ON ANOTHER DRAWING
(1)	CUTTING SECTION FOR DETAIL, WITH DETAIL ON SAME DRAWING
(/ S-3-025)	CUTTING SECTION FOR DETAIL WITH DETAIL ON ANOTHER DRAWING
DETAIL TITLE SCALE (1)	DEVELOPED DETAIL WITH CUTTING LINE ON SAME DRAWING
DETAIL TITLE (1 / S-3-052)	DEVELOPED DETAIL WITH CUTTING LINE ON ANOTHER DRAWING

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

DRAWING NUMBERING SYSTEM

SECTION NUMBER — SECTION NO. S-3-05

(A) 1 LETTER INDICATES GROUP OR CLASS OF WORK
G - GENERAL INFORMATION
S - STRUCTURAL
A - ARCHITECTURAL
2 FIRST NUMBER (3) INDICATES CONTRACT PACKAGE
3 SECOND NUMBER INDICATES DRAWING NUMBER WITHIN SECTIONAL GROUP.

SHEET NUMBER — SHEET NO. 3-50

1. FIRST NUMBER INDICATES VOLUME NUMBER WHICH WILL BE EITHER 3, 4, 5 OR 6
2 SECOND NUMBER INDICATES THE SHEET NUMBER WITHIN EACH VOLUME

MATCH LINE DWG. S-3-052 — MATCH LINE DWG. S-3-052 — MATCH LINE ON DRAWING SHOWING WHERE DRAWING IS CONTINUED

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 442 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
ABBREVIATIONS, DESIGN DATA & GENERAL NOTES

INV. NO. ENG.(NASA) 08-123-63-41 DATED: MAY 1963	SIZE F	FILE NO. 203-28,297
SCALE: NONE	SECTION NO. G-3-004	SHEET NO 3-04

Drn by WILLIAMS — Ckd by WARNER

10 JUN 63

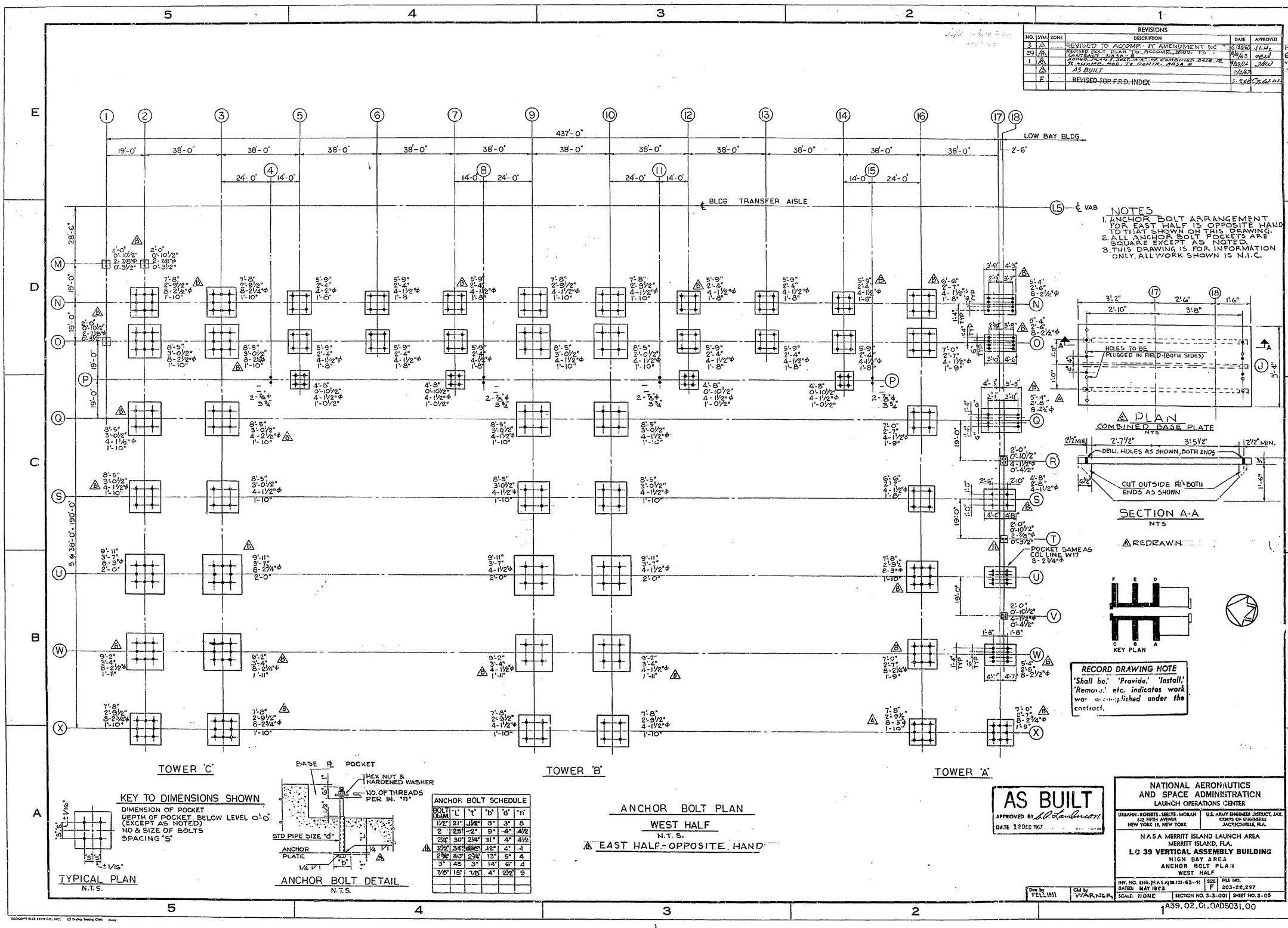
A39.02.01.0ADS018.00

ECONOMY BLUE PRINT CO., INC.

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
3	△		REVISED TO ACCOMP. 1ST AMENDMENT NC	6/20/63	JLH
2a	△		REVISED BOLT PLAN TO ACCOMP. MOD. TO CONTRACT NAS9-8	9/9/63	JLH
1	△		ADDED PLAN & SECT. AA OF COMBINED BASE PL TO ACCOMP. MOD. TO CONTR. NAS9-8	10/31/63	JLH
	△		AS BUILT	1/14/67	
	F		REVISED FOR F.R.D. INDEX	2-28-69	



NOTES
1. ANCHOR BOLT ARRANGEMENT FOR EAST HALF IS OPPOSITE HAND TO THAT SHOWN ON THIS DRAWING.
2. ALL ANCHOR BOLT POCKETS ARE SQUARE EXCEPT AS NOTED.
3. THIS DRAWING IS FOR INFORMATION ONLY. ALL WORK SHOWN IS N.I.C.

A PLAN
COMBINED BASE PLATE
NTS

SECTION A-A
NTS

△ REDRAWN

KEY PLAN

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

KEY TO DIMENSIONS SHOWN
DIMENSION OF POCKET
DEPTH OF POCKET BELOW LEVEL O'-0" (EXCEPT AS NOTED)
NO & SIZE OF BOLTS
SPACING "S"

TYPICAL PLAN
N.T.S.

ANCHOR BOLT DETAIL
N.T.S.

ANCHOR BOLT SCHEDULE					
BOLT DIAM	'L'	't'	'b'	'd'	'n'
1½"	21"	1½"	3"	3"	8
2	25½"	2"	9"	4"	4½
2¼"	30"	2¼"	11"	4"	4½
2½"	34½"	2½"	12"	4"	4
2¾"	40"	2¾"	13"	5"	4
3"	45	3"	14"	6"	4
7/8"	15"	7/8"	4"	2½"	9

ANCHOR BOLT PLAN
WEST HALF
N.T.S.
△ EAST HALF - OPPOSITE HAND

AS BUILT
APPROVED BY R.D. Lambson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
ANCHOR BOLT PLAN
WEST HALF

INV. NO. ENG. (N.A.S.A.) 08-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: NONE | SECTION NO. 3-3-001 | SHEET NO. 3-05

Drn by FELLINI | Ckd by WARNER

A39.02.CI.OADS031.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

NO.	SYM.	ZONE	REVISIONS DESCRIPTION	DATE	APPROVED
1	A		REVISED TO ACCOMPANY AMENDMENT NO. 12	6/26/63	
	B		AS BUILT	12/4/63	
	C		PLOT	3/4/64	

℄ TRANSFER AISLE

W V U T S R Q O N M L K J H G F E D C B

19'-0" 19'-0" 19'-0" 19'-0" 19'-0" 19'-0" 19'-0" 36'-0" 19'-0" 19'-0" 28'-6" 28'-6" 19'-0" 19'-0" 38'-0" 19'-0" 19'-0" 19'-0" 19'-0" 19'-0" 19'-0"

HIGH BAY BLDG.

17 18 19 20 21 22 23 24 25 26 27 28

E D C B A

1'-0" TYP LINE Q · 14'-4" · 7'-0" TYP LINE O · 6'-0" TYP LINE N · TYP LINE W · TYP LINE K · TYP LINE J · 6'-7'-0" · 14'-4" · 1'-0" TYP LINE H · TYP LINE B

NOTES

1- ANCHOR BOLTS N.I.C. THIS DWG FOR INFORMATION ONLY.
2- FOR BASE PLATES ALONG COL. LINE 18 SEE DWG. S-3-003.
3- FOR ALL OTHER BASE PLATES SEE DWG. S-3-262.

△ REDRAWN

KEY PLAN

GRAPHIC SCALE 1/16"=1'-0"

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove' etc. indicates work was accomplished under the contract.

AS BUILT

APPROVED BY R.C. Lambinon

DATE

KEY TO DIMENSIONS SHOWN

1- SIDE OF POCKET EAST-WEST.
2- SIDE OF POCKET NORTH-SOUTH.
3- DEPTH OF POCKET BELOW LEVEL OF EXCEPT AS NOTED
4- NO & SIZE OF BOLTS.
5- BOLT SPACING "S".

PLAN
TYPICAL BILLET PLATE POCKETS
NTS

HEX. NUT & HARDENED WASHER · NO. OF THREADS "n" PER INCH · PIPE SIZE "d" · DEPTH OF POCKET · ANCHOR "d" · "L" · "b"

ANCHOR BOLT DETAIL
NTS

ANCHOR BOLT SCHEDULE

BOLT DIA.	"L"	"t"	"b"	"d"	"n"
7/8"	18"	1/8"	4"	2½"	9
1½"	21"	1½"	8"	3"	8
2½"	34"	2½"	12"	4"	4
3"	45"	3"	14"	6"	4

DETAIL 1
NTS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
442 FIFTH AVENUE
NEW YORK 18, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
LOW BAY AREA
ANCHOR BOLT LAYOUT

DWG. NO. ENG. (N.A.S.A.) 05-03-63-441 · SIZE E · FILE NO. 203-28.251
DATED MAY 1963
SCALE AS NOTED · SECTION NO. S-3-001 · SHEET NO. 2

Drawn by BUTKUS · Checked by ZUTRAUN

1A39-52.01 OADS310.001

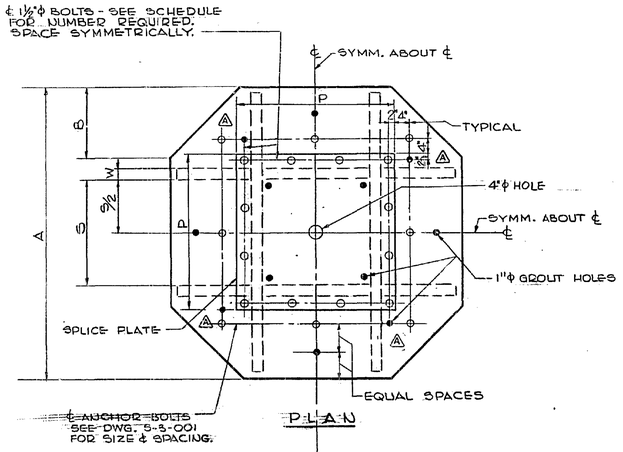
BEST AVAILABLE COPY

EXPORT CONTROL NOTICE: EAR 99

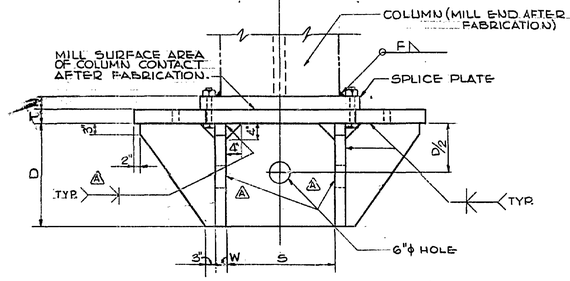
EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
26	△		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	J.L.H.
69	△		REVISED BASE PLATE ASSEMBLY TO ACCOMP. MOD. TO CONTR. (NASA)-8	8/26/63	JDW
50	△		REVISED BASE PLATES TO ACCOMPANY MODIFICATION TO CONTRACT NO (NASA)-8	9/4/63	JDW
4	△		REVISED SPLICE PLATE SCHEDULE TO ACCOMP. MOD. TO CONTR. NASA 8	11/1/63	JDW
	△		AS BUILT	12/16/67	
	F		REVISED FOR F.R.D. INDEX	2/14/68	

¢ 1½"ϕ BOLTS - SEE SCHEDULE FOR NUMBER REQUIRED. SPACE SYMMETRICALLY.

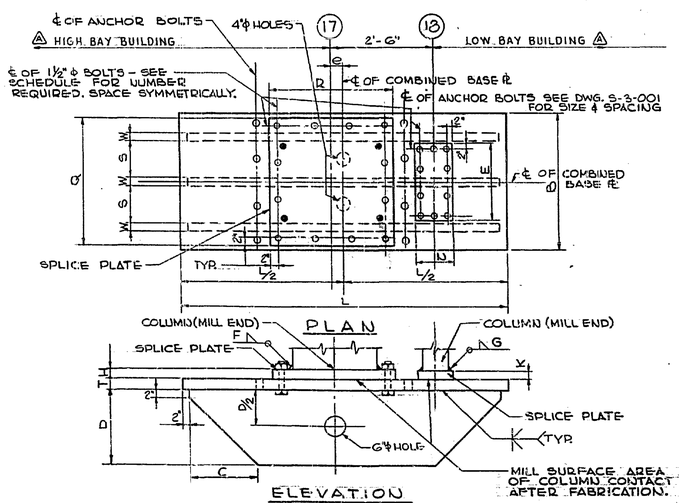


PLAN



ELEVATION

BASE PLATE DETAILS
N.T.S.



ELEVATION

COMBINED BASE PLATE DETAIL
N.T.S.

BASE PLATE SCHEDULE

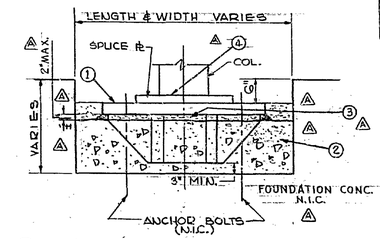
TYPE	A	B	D	S	W	T	ALLOWABLE LOAD IN KIPS
1	86"	21"	30"	26"	3"	4"	7340
2	80"	20"	27"	24"	3"	4"	6310
3	74"	18"	24"	22"	3"	3½"	5430
4	68"	16"	21"	22"	3"	3½"	4560
5	62"	12"	19"	20"	3"	3"	3820
6	56"	8"	19"	20"	2"	3"	3150
7	50"	0"	16"	18"	2"	2¾"	2490
8	SEE	DETAIL					

SPLICE PLATE SCHEDULE

COLUMN MARK	BASE ℄ TYPE	F	H	P	NO. OF 1½" DIA BOLTS
A2, X2	4	1⅛"	3½"	3'-0"	△20 *
A3, X3	4	△1¼"	△3½"	3'-0"	△24 *
A9, A10, X9, X10	4	△1¼"	1"	3'-0"	△24
A16, X16 △	△5	△1⅜"	△3½"	△3'-0"	△24 *
A17, X17	△5	△1¼"	△3"	△2'-10"	△20 *
B2, W2	2	¾"	3"	3'-2"	20
B3, W3	2	⅝"	△3"	3'-2"	20
B9, B10, W9, W10	2	⅝"	1"	3'-2"	△24
B16, W16	5	△1"	△3"	2'-10"	△24 *
B17, W17, D17, U17	COMB.				
D2, U2	1	△1"	4"	3'-4"	△20
D3, D9, D10, U3, U9, U10	1	△1⅜"	△3½" △1"	3'-4"	△ U9,D9 - 24* △ U3,D3 - 24 △ U10,D10 - 24
D16, U16	4	△1¼"	△4"	3'-10"	△24 *
F17, S17, H17, Q17	COMB.				
F2, S2	3	½"	2"	3'-0"	△4
F3, F9, F10, S3, S9, S10	3	½"	1" 1⅛"	3'-0"	4
F16, S16	6	½"	△1¼"	2'-8"	△4
J17, Q17, K17, N17	COMB.				
H2, Q2	3	1"	△1¼"	3'-0"	20
H3, H9, H10, Q3, Q9, Q10	3	△1⅛"	△1"	3'-0"	20
H16, Q16	5	△1"	1"	2'-10"	20
J6, O6	7	△½"	1"	△2'-8"	△12
J5, J7, J12, J14 P5, P7, P12, P14	8	½"	△5"	△3'-9"	—
J1, O1, L1, L2 M1, M2	6	¼"	⅝"	1'-3"	—
J2, O2	3	1"	△4"	3'-0"	16
J3, O3	3	△¾"	△3½"	3'-0"	△16
J5, J14, O5, O14	7	△1⅛"	1"	2'-8"	20
J7, O7	7	△⅝"	1"	2'-8"	12
J9, O9, J10, O10	3	△¾	1"	3'-0"	20
J12, O12	7	½"	1"	2'-8"	12
J13, O13	7	△⅝"	1"	△2'-8"	△12
J16, O16	5	△⅝"	1"	2'-10"	12
K2, N2	4	△1¼"	△4"	3'-0"	△16
K3, N3	4	△¾"	△3½"	3'-0"	△16
K5, N5, K14, N14	7	△1⅛"	1"	2'-8"	20
K6, N6	7	△1½"	△1"	2'-8"	12
K7, N7, K12, N12	7	½"	1½"	2'-8"	12
K9, N9, K10, N10	4	△1"	1"	3'-0"	20
K15, N15	7	△1½"	△1"	2'-8"	12
K16, N16	6	△⅝"	1½"	2'-8"	12
I4, I8, I11, I15 P4, P8, P11, P15	8A	⅜"	△2"	△2'-0" △	—

Q3, H3 - 2" △ OTHERS - 1" △

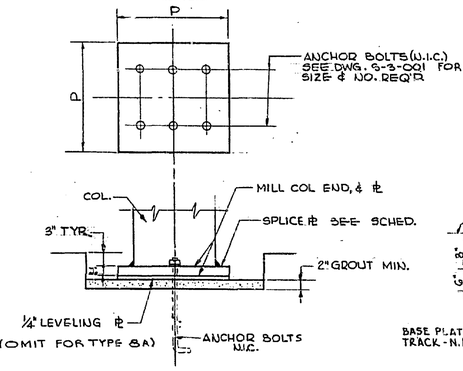
Q9, H9 - 24 △ Q10, H10 - 24 △



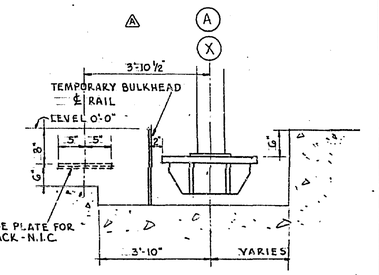
① PLACE AND LEVEL BASE ℄
② PLACE 3000#= CONCRETE - SEE NOTE "1
△③ PLACE GROUT UNDER PRESSURE △
△④ PLACE COL. AND SPLICE ℄

NOTE:
1. BASE PLATES SHALL BE CONCRETED AS SHOWN. AFTER CONCRETE HAS SET, GROUT SHALL BE APPLIED UNDER PRESSURE AT EACH GROUT HOLE.
2. ALL BOLTS EXCEPT THOSE INDICATED BY AN ASTERISK (*) SHALL BE HIGH STRENGTH AS PER A.S.T.M. SPEC. A325. THOSE BOLTS INDICATED BY AN ASTERISK SHALL BE A.S.T.M. A354, GRADE BC.

PLACING SEQUENCE
N.T.S.



TYPE 8 BASE PLATE
N.T.S.



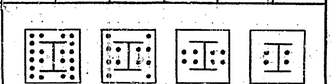
EAST-WEST SECT. THRU BASE PLATE - LINES A & X
N.T.S

NOTE:
CONTRACTOR SHALL PROVIDE TEMPORARY BULKHEAD AS SHOWN - LEAVE IN PLACE AFTER PLACING BASE PLATE.

COMBINED BASE PLATE SCHEDULE

DIM's ℄ NO. OF BOLTS REQ'D	COLUMN MARKS					
	J17, J18 O17, O18	K17, K18 N17, N18	H17, H18 Q17, Q18	F17, F18 S17, S18	D17, D18 U17, U18	B17, B18 W17, W18
L	86" △	84" △	90" △	84" △	84" △	86" △
B	40" △	40"	40"	32"	40"	40"
T	3" △	3" △	3" △	3" △	3" △	3" △
D	18" △	18" △	20" △	20" △	20" △	20" △
C	16" △	16" △	18" △	18" △	18" △	18" △
W	2"	2"	2"	2"	2"	2"
S	10" △	10"	10"	6"	10"	10"
e	5" △	5" △	6" △	2" △	1" △	0"
R	32"	32"	32"	32"	32"	32"
Q	36" △	36" △	36" △	32"	36" △	36" △
H	3½" △	4" △	2"	1"	3½" △	3" △
F	1" △	1" △	1" △	½"	1⅛" △	⅝" △
NO. BOLTS LINE 17	16" △	16	20	4	20	12
U	20"	20"	26" △	14"	14" △	11"
E	20"	34" △	34" △	18"	18"	18"
K	1½"	3½" △	4" △	2" △	1"	2½" △
G	½"	¾"	1"	½"	½"	½"
NO. BOLTS LINE 18	8 △	12 △	20	4	4	4

BOLT LAYOUT FOR LINE 18



AS BUILT
APPROVED BY G.C. Lambinon
DATE 21 DEC 1967

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
BASE PLATES
SCHEDULE & DETAILS

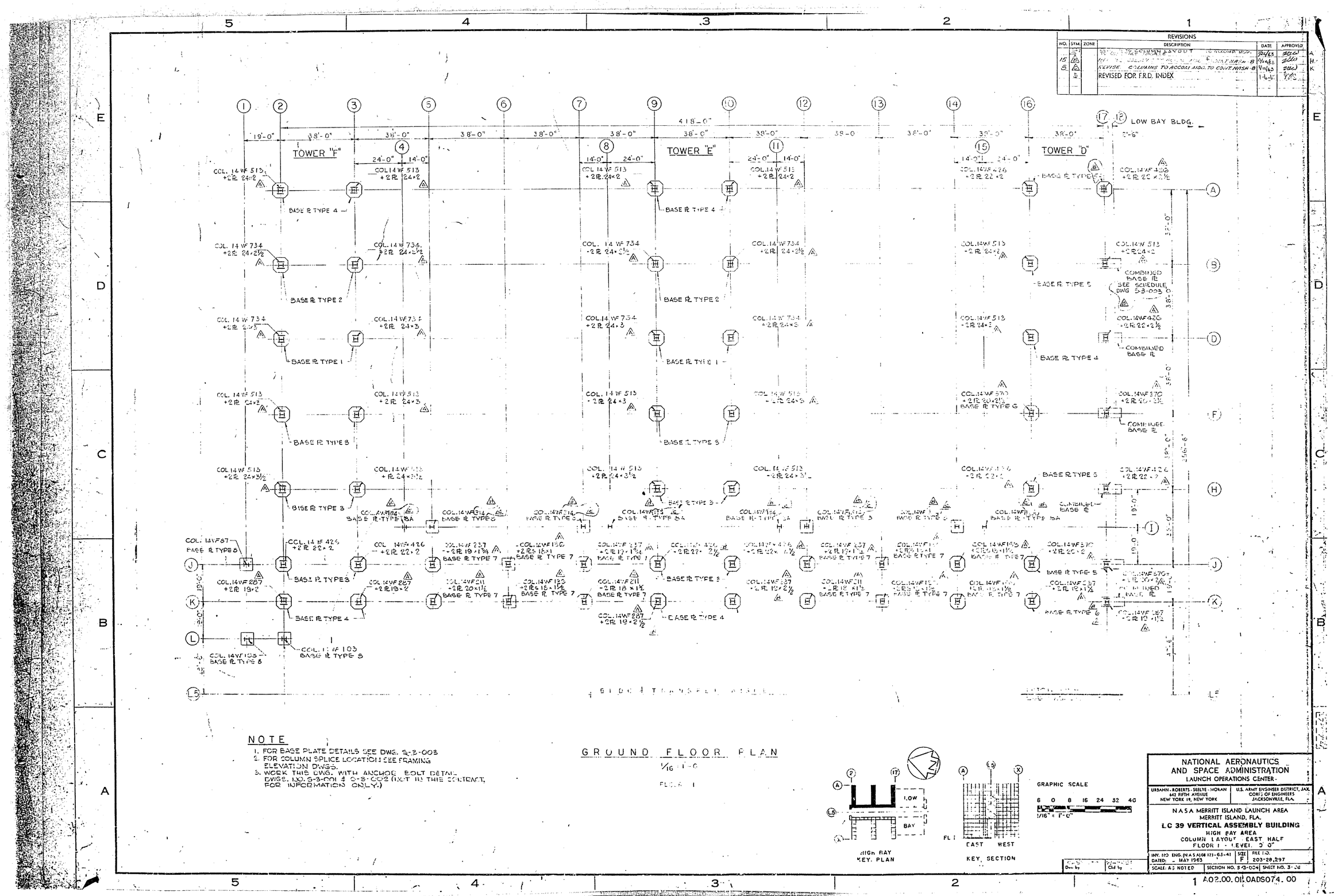
INV. NO. ENG. (NASA) 04-123.63 41		SIZE F	FILE NO. 203-28.297
DATE: MAY 1963			
SCALE: NONE	SECTION NO. S-3-003	SHEET NO. S-07	

Drn by RR Cassiffe | Ckd by WARNER

A39.02.01.0ADS034.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

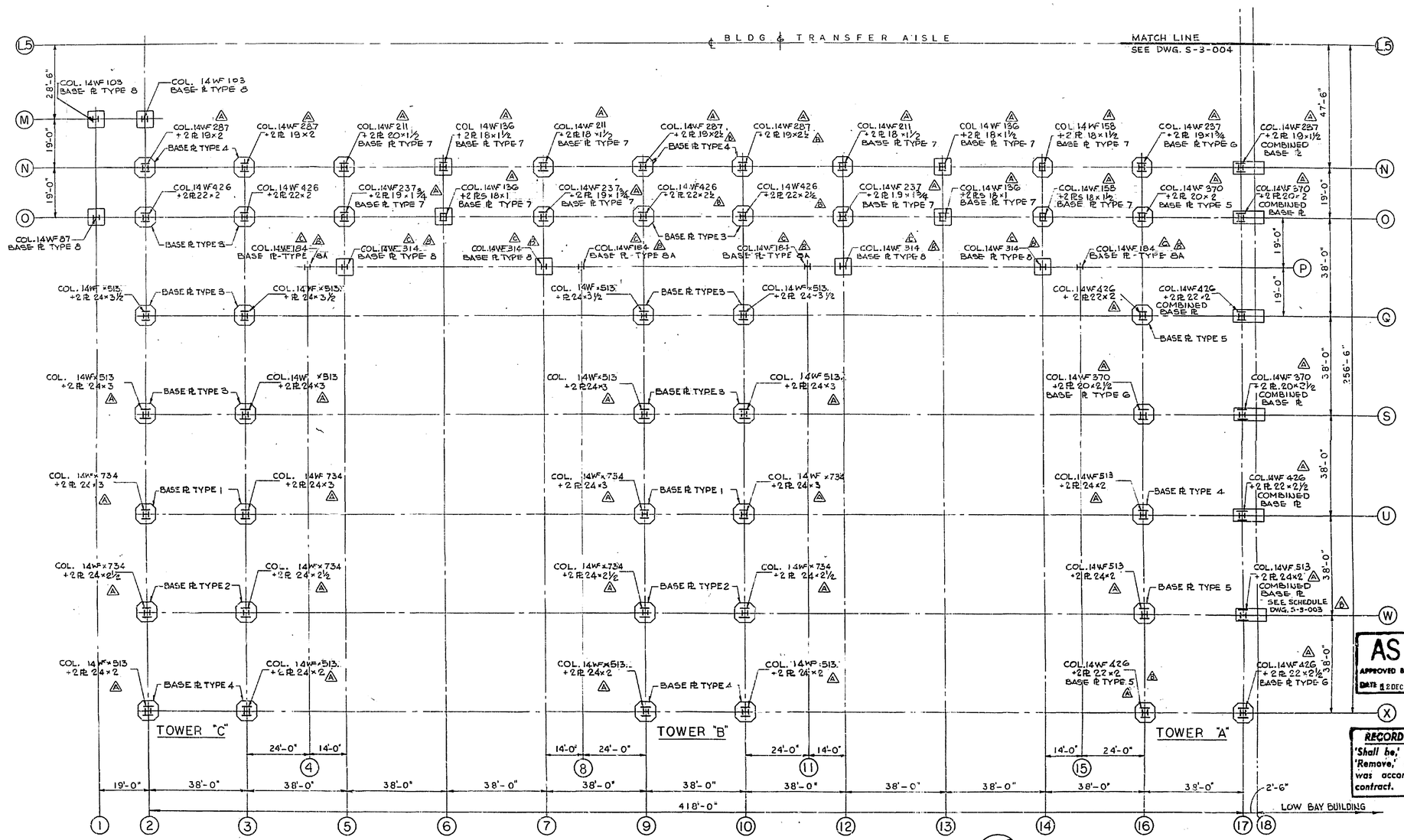


MICROFILMED FROM BEST AVAILABLE COPY
DOES NOT MEET REQUIRED QUALITY STANDARDS

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	△5		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD.	7/25/63	JBW
	△4		AS CONSTRUCTED REVISION	8/1/63	JBW
	△3		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONFIG-01 NASA-8	8/26/63	JBW
8	△2		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONFIG. NASA-8	9/11/63	JBW
	△1		AS BUILT	12/4/67	
	E		REVISED FOR F.R.D. INDEX	7/1/68	G.W.M.

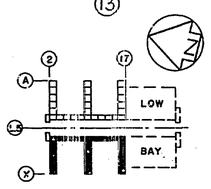


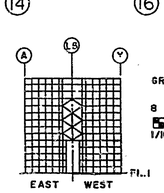
AS BUILT
APPROVED BY C.A. Lamb
DATE 12 DEC 1967

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

NOTE
1. FOR BASE PLATE DETAILS SEE DWG. S-3-005
2. FOR COLUMN SPLICE LOCATION SEE FRAMING ELEVATION DWGS.
3. WORK THIS DWG. WITH ANCHOR BOLT DETAIL DWGS. NO. S-3-001 & S-3-002

GROUND FLOOR PLAN
1/16"=1'-0"
FLOOR 1





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

CASSITTO Des. by	WAGNER Ckd by

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-HORN 643 FIFTH AVENUE NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
COLUMN LAYOUT - WEST HALF
FLOOR 1 - LEVEL 0'-0"

DRW. NO. ENG. (NASA) 08-123	SIZE F	FILE NO. 203-28.297
DATED: MAY 1963	SECTION NO. S 3 005	SHEET NO. S-09
SCALE: AS NOTED		

A39.02.01.0ADS075.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

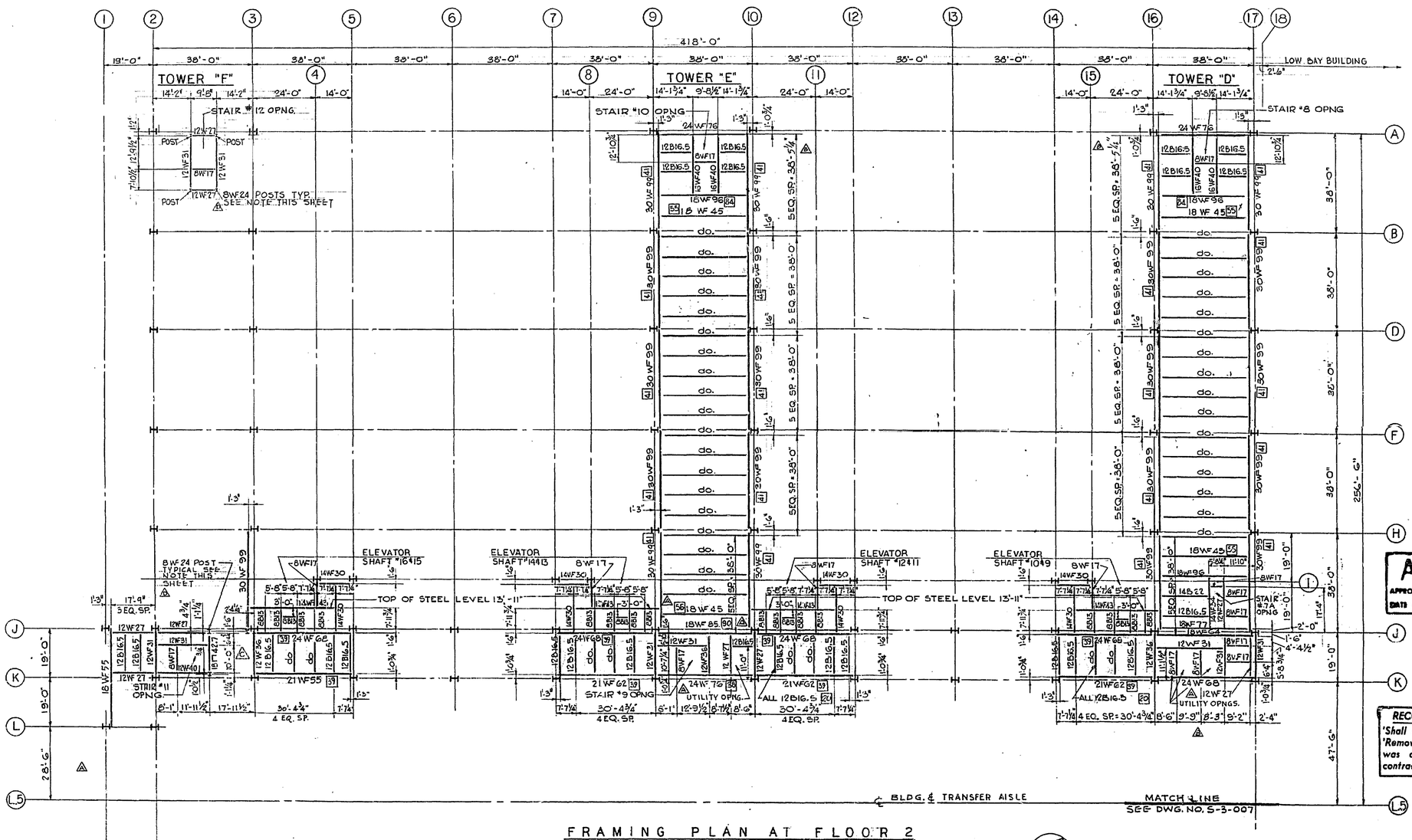
LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
5	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	J.L.H.
3	B		REVISED STRUCTURAL FRAMING TO ACCOM. MOD. TO CONTRACT NASA-8	9/11/63	[illegible]
1	C		CHANGED DIMENSIONS ON STAIR OPENING	10/11/63	[illegible]
3	D		ADDED NOTES	11/15/63	[illegible]
1	E		REVISED NOTE TO ACCOMP MOD TO CONT NASA-61	11/19/64	[illegible]
	F		AS BUILT	12/4/67	
	G		REVISED FOR F.R.D. INDEX	2-16-68	G. [illegible]



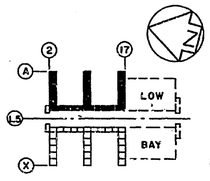
AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

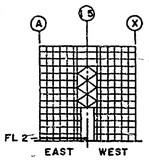
FRAMING PLAN AT FLOOR 2
1/16" = 1'-0"

NOTE: FOR 8WF24 POSTS SUPPORTING STAIR FRAMING, PROVIDE 10" x 3/4" x 0'-10" BASE PLATE AND 2 - 3/4" Φ EXPANSION BOLTS INTO GROUND FLOOR SLAB, THRU BASE PLATE. POSTS AT COLUMN LINES J AND Q, 2'-4 1/4" AND 17'-11 1/2" NORTH OF COL. LINE 3, RUN FROM LEVEL 0'-0" TO UNDERSIDE OF 18WF AT LEVEL 27'-1". ALL POSTS SHALL BE SHOP CONNECTED TO THE BASE PLATES, AND THE ASSEMBLY PLACED ON 3/4" GROUT.

NOTE: FIN. FLOOR - LEVEL 14'-5"
TOP OF STEEL LEVEL 14'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 2 - LEVEL 14'-5"

DWG. NO. ENG. (NASA) 06-123-07-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-006 | SHEET NO. S-10

CASSITTO Dwn by | HERRMANN Ckd by

A39.02.01.0ADS105.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

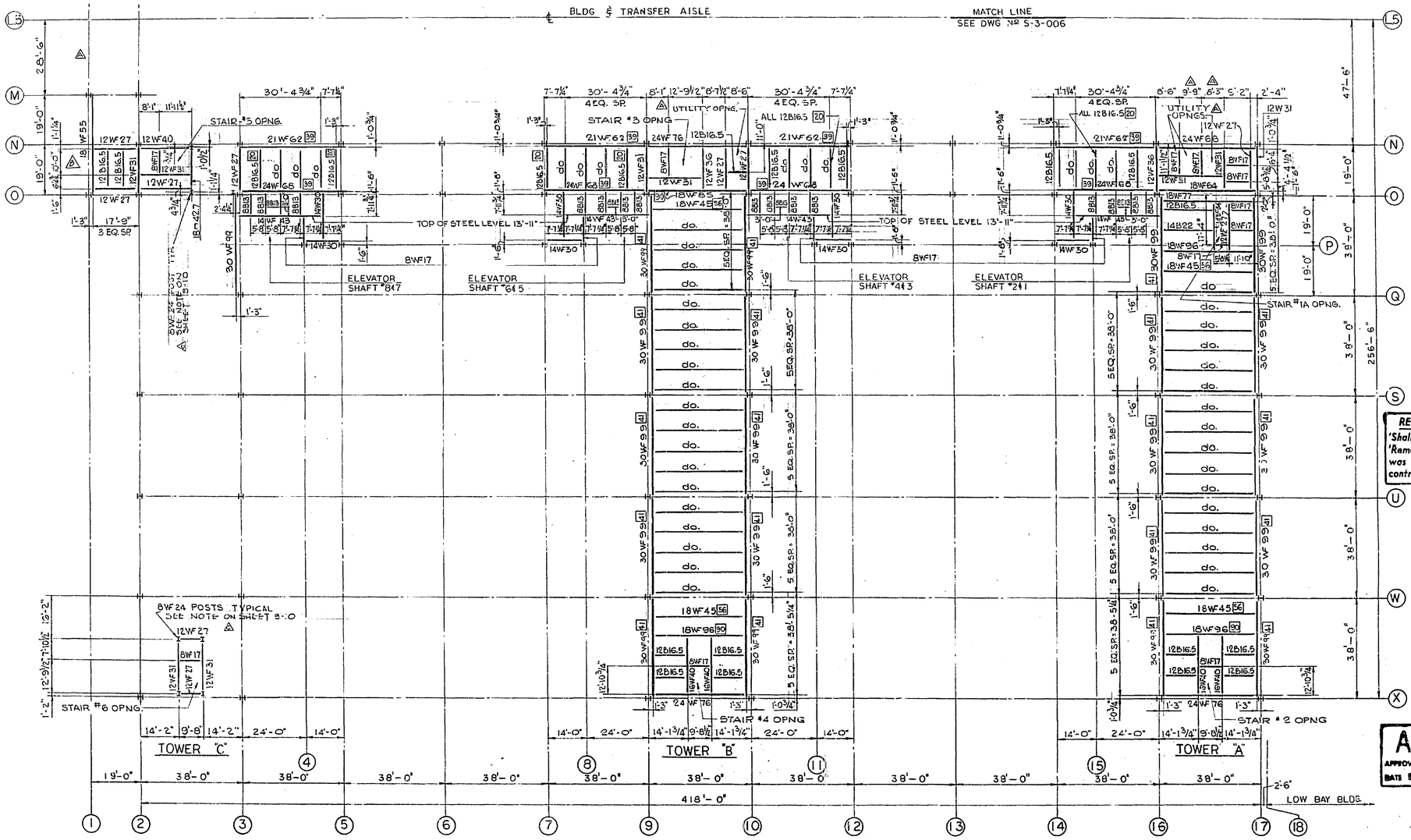
LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF ¾"x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAX. FOR FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[10] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

Copy to be sent as stamp ARE YOU?

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
5	△		REVISED TO ACCOMPANY AMENDMENT NO. 4	8-20-63	J.L.H.
1	△		CHANGED DIMENSIONS	9-16-63	[illegible]
2	△		ADDED NOTES	11-19-63	[illegible]
	△		AS BUILT	12-14-67	
	F		REVISED FOR F.R.D. INDEX	2-4-68	G.L.L.L.

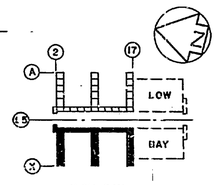


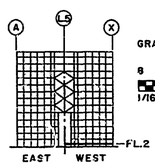
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 2
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 14'-5"
TOP OF STEEL LEVEL 14'-1" UNLESS OTHERWISE NOTED.





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 445 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING WEST HALF
FLOOR 2 - LEVEL 14-5"

DWG. NO. ENG. (NASA) 08-123-63-41	SIZE F	FILE NO. 203-28, 297	
DATED: MAY 1963	SCALE: AS NOTED	SECTION NO. S-3-00	SHEET NO. S-11

DRAWN BY FELLINI | CHK'D BY HEERMANN

A39.02.01.0ADS10S.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

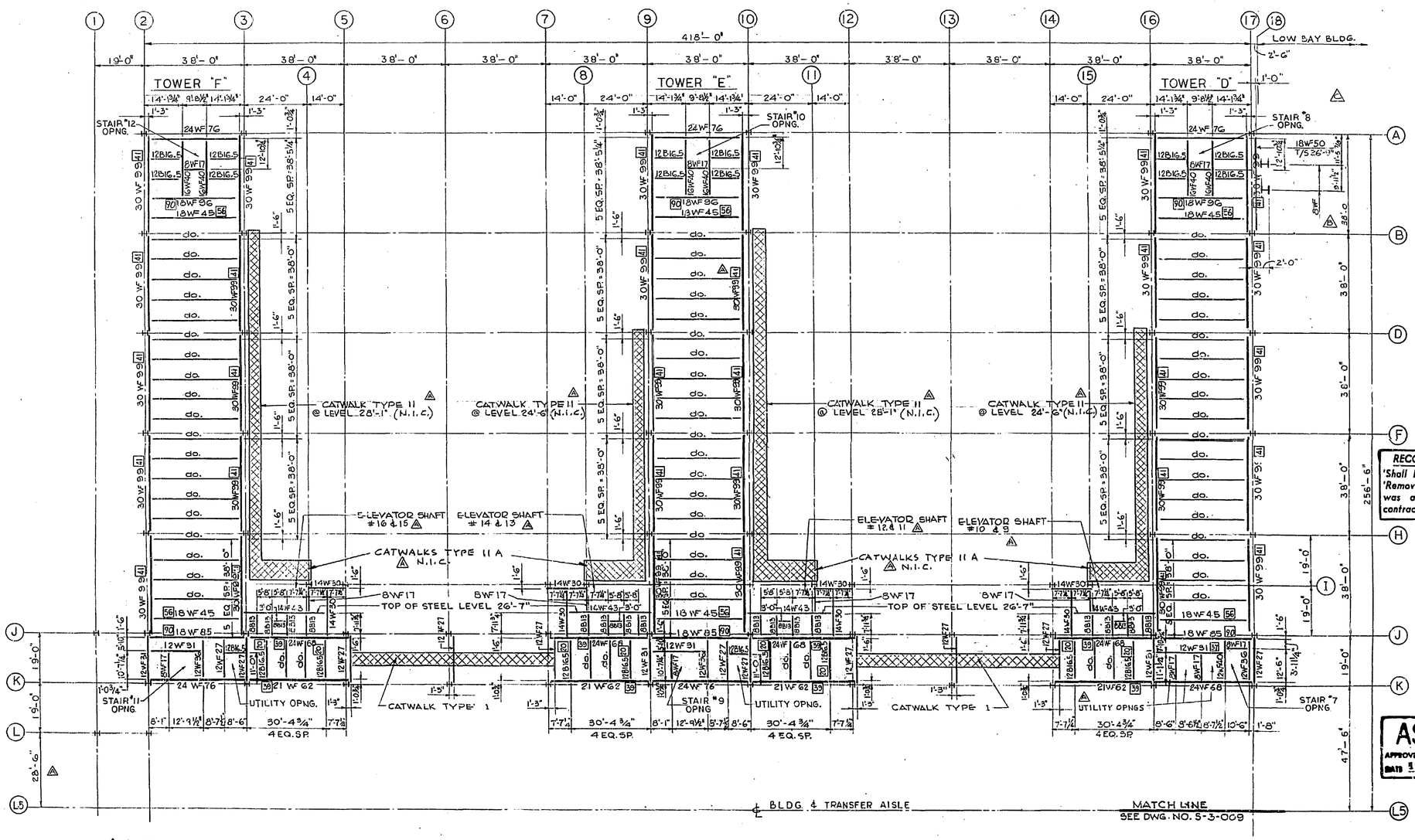
LEGEND FOR SHEAR CONNECTORS

[56] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[41] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
14	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	J.L.Mc
1	B		REVISED STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA 8	4/11/63	[illegible]
1	C		CHANGED 10 UP TO 8 WT & REVISED DIMENSIONS TO ACCOMP. MOD. TO CONTR. NASA 61	4/17/64	[illegible]
	A		AS BUILT	12/4/67	
	E		REVISED FOR F.R.D. INDEX	2/16/68	[illegible]



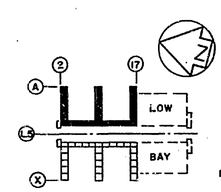
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

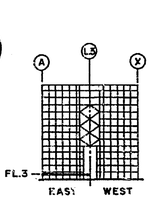
NOTE:
1. CATWALKS @ LEVELS 24'-6" AND 28'-1" ARE REMOVABLE BETWEEN COL. LINES D & H.

FRAMING PLAN AT FLOOR 3
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 27'-1"
TOP OF STEEL-LEVEL 26'-9"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 3 - LEVEL 27'-1"

INV. NO. ENG. (NASA) 00-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S 3 008
SHEET NO. 3-12

BOLOGOVSKY Dwn by
HERRMANN Chk by

A39.02.01.0ADS107.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

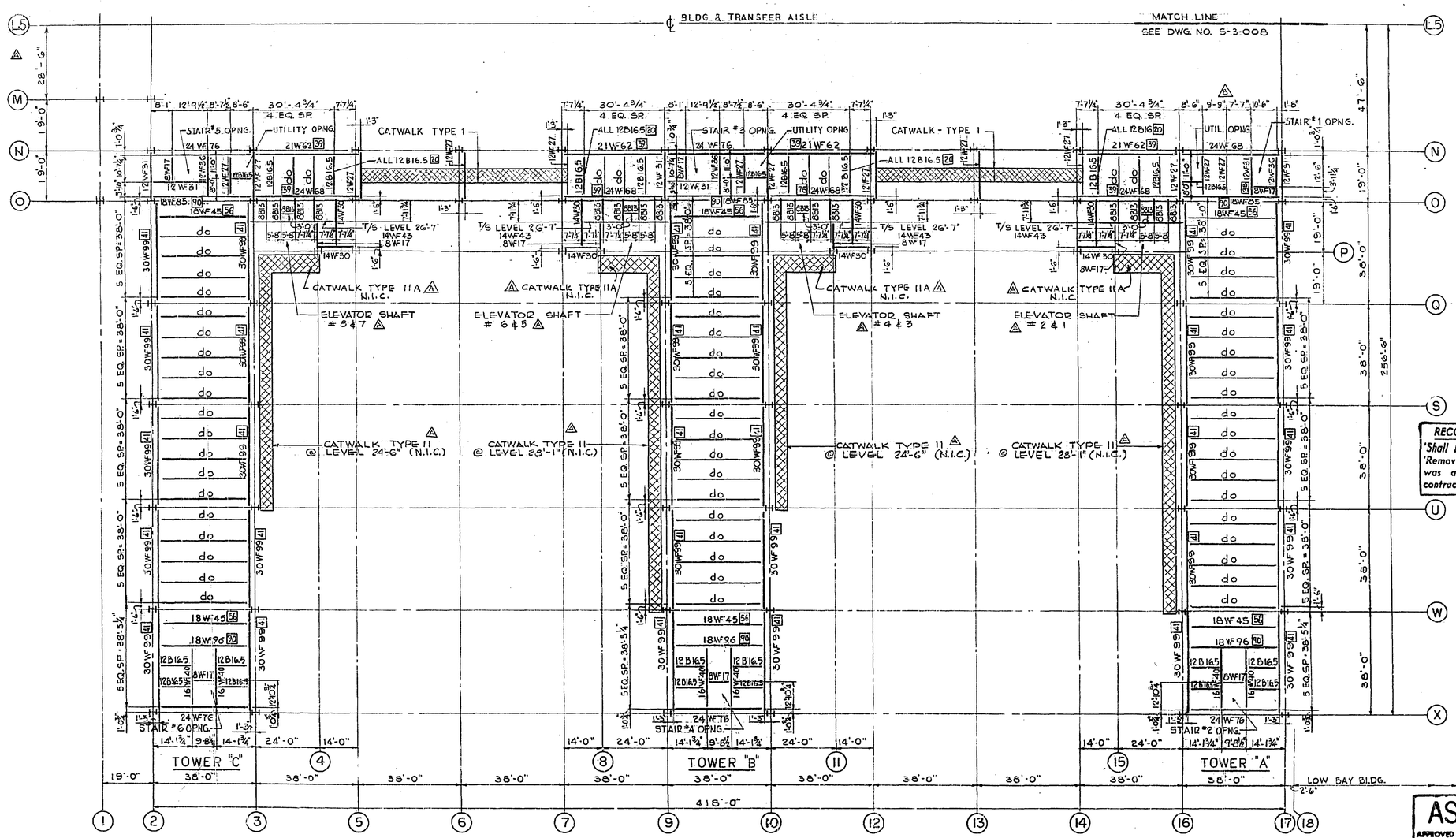
LEGEND FOR SHEAR CONNECTORS

[31] INDICATES NUMBER OF 3/4" × 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[41] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
14	△		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	JLHc
1	B	E-2	REVISED DIMENSIONS TO ACCOMPANY MOD. TO CONTRACT NASA 61	5/12/64	
	△		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	G.L.H.



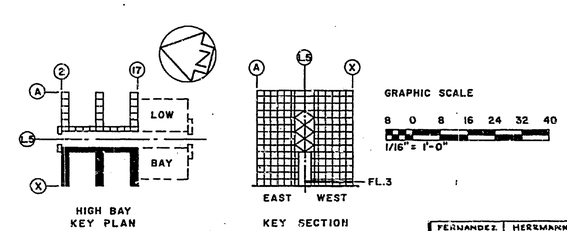
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

△ NOTE:
1. CATWALKS @ LEVELS 28'-1" AND 24'-6" ARE REMOVABLE BETWEEN COL. LINES Q AND U.

FRAMING PLAN AT FLOOR 3
1/16" = 1'-0"

NOTE: FIN. FLOOR – LEVEL 27'-1"
TOP OF STEEL LEVEL 26'-9" UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 3 - LEVEL 27'-1"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S-3-009
SHEET NO. 3-13

FERNANDEZ Dwn by
HERRMANN Ckd by

A39.02.01.0ADS108.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

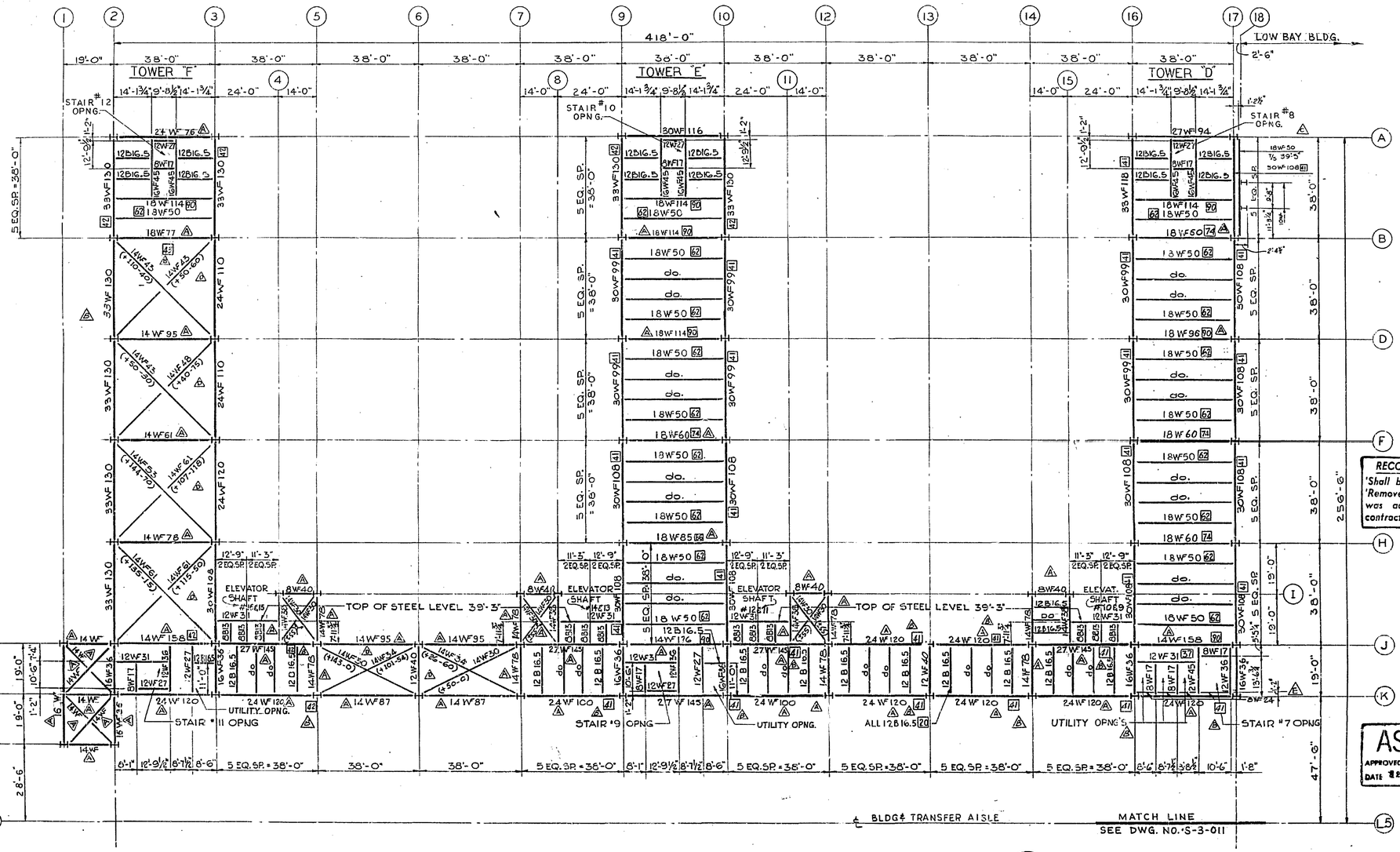
LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[38] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
56	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/29/63	J.L.H.
14	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	8/8/63	[illegible]
1	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. TO CONTRACT NASA-8	8/11/63	[illegible]
6	A		ADDED & CORRECTED WFs	12/11/63	[illegible]
1	A		REVISED FRAMING ON COL. LINE 2 BETWEEN COLS. 16 & 17 TO ACCOM. MOD. TO CONTR. NASA-61	6/16/64	[illegible]
	A		AS BUILT	12/4/67	
	B		REVISED FOR F.R.D. INDEX	2/12/68	[illegible]



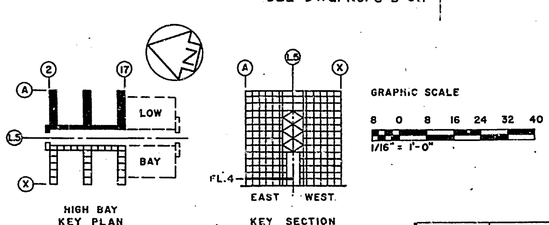
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

NOTE
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. No. S-3-088

FRAMING PLAN AT FLOOR 4
1/16"=1'-0"

NOTE: FIN. FLOOR-LEVEL 39'-9"
TOP OF STEEL-LEVEL 39'-5" UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
442 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 4 - LEVEL 39'-9"

INV. NO. ENG. (NASA) 08-123-63-41 DATED: MAY 1963	SIZE F	FILE NO. 203-28, 297	
SCALE: AS NOTED	SECTION NO. S-3-010	SHEET NO. 3-14	

FERNANDEZ Dwn by | HERRMANN Ckd by

A39.02.01.0ADS109.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

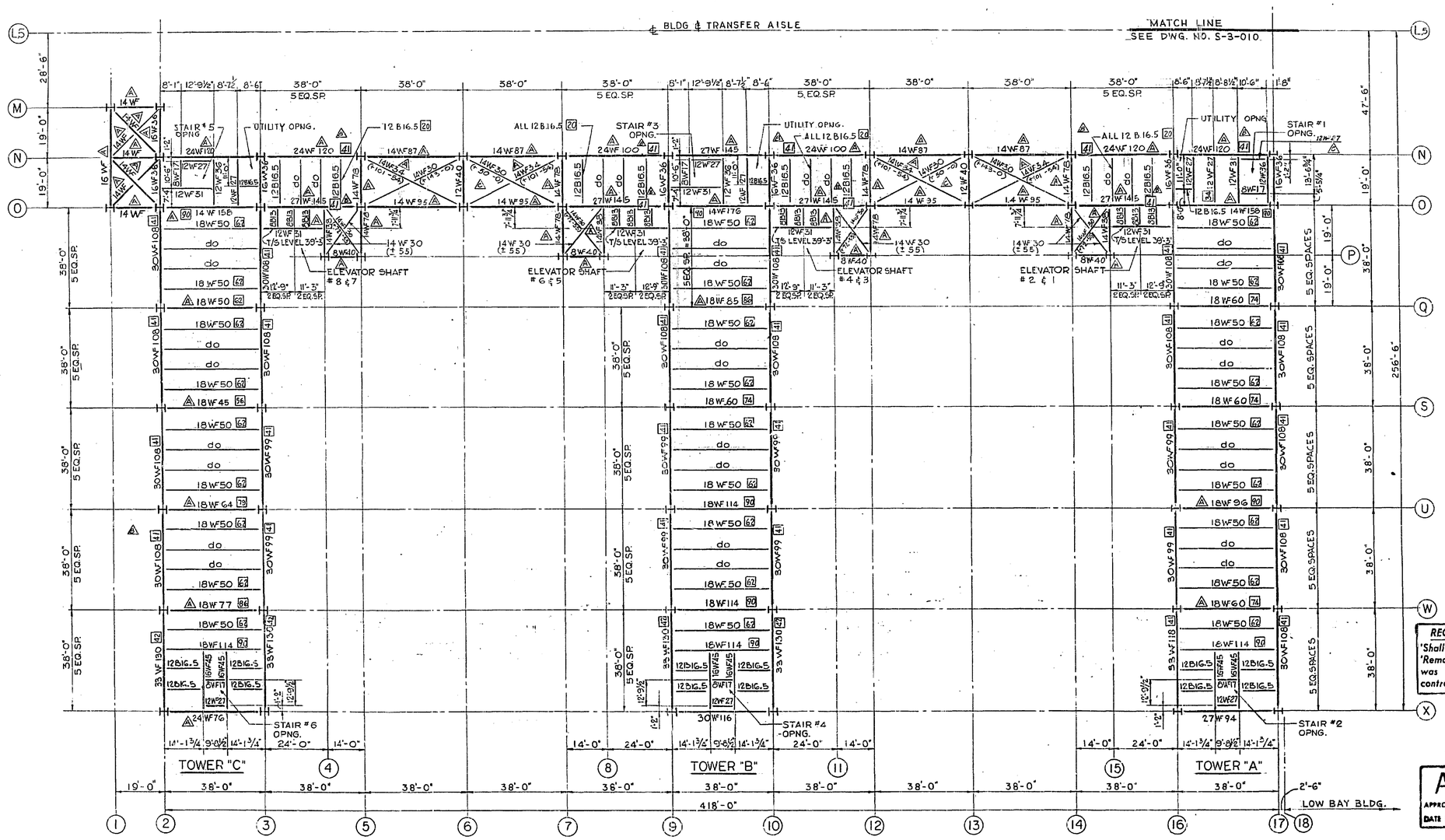
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
61	A		GENERAL REVISIONS TO ACCOMP. AMEND. NO. 7	6/20/63	JLHc
10	B		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	8/8/63	[illegible]
3	C		ADDED & CORRECTED WFs	10/11/63	[illegible]
	D		AS BUILT	12/4/67	
	E		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



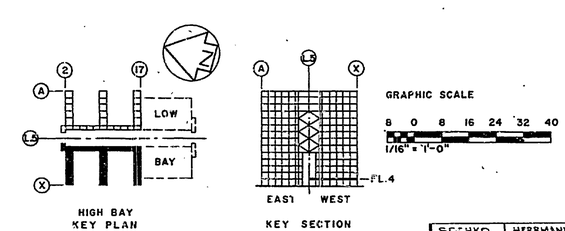
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.A. Lambrecon
DATE 12 DEC

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. NO. S-3-088

FRAMING PLAN AT FLOOR 4
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 39'-9"
TOP OF STEEL - LEVEL 39'-5"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
542 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 4 - LEVEL 39'-9"

INV. NO. ENG. (NASA) 08-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-011 | SHEET NO. 3-15

SCHKO Dwn by | HERRMANN Ckd by

A39.02.01.0ADS110.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

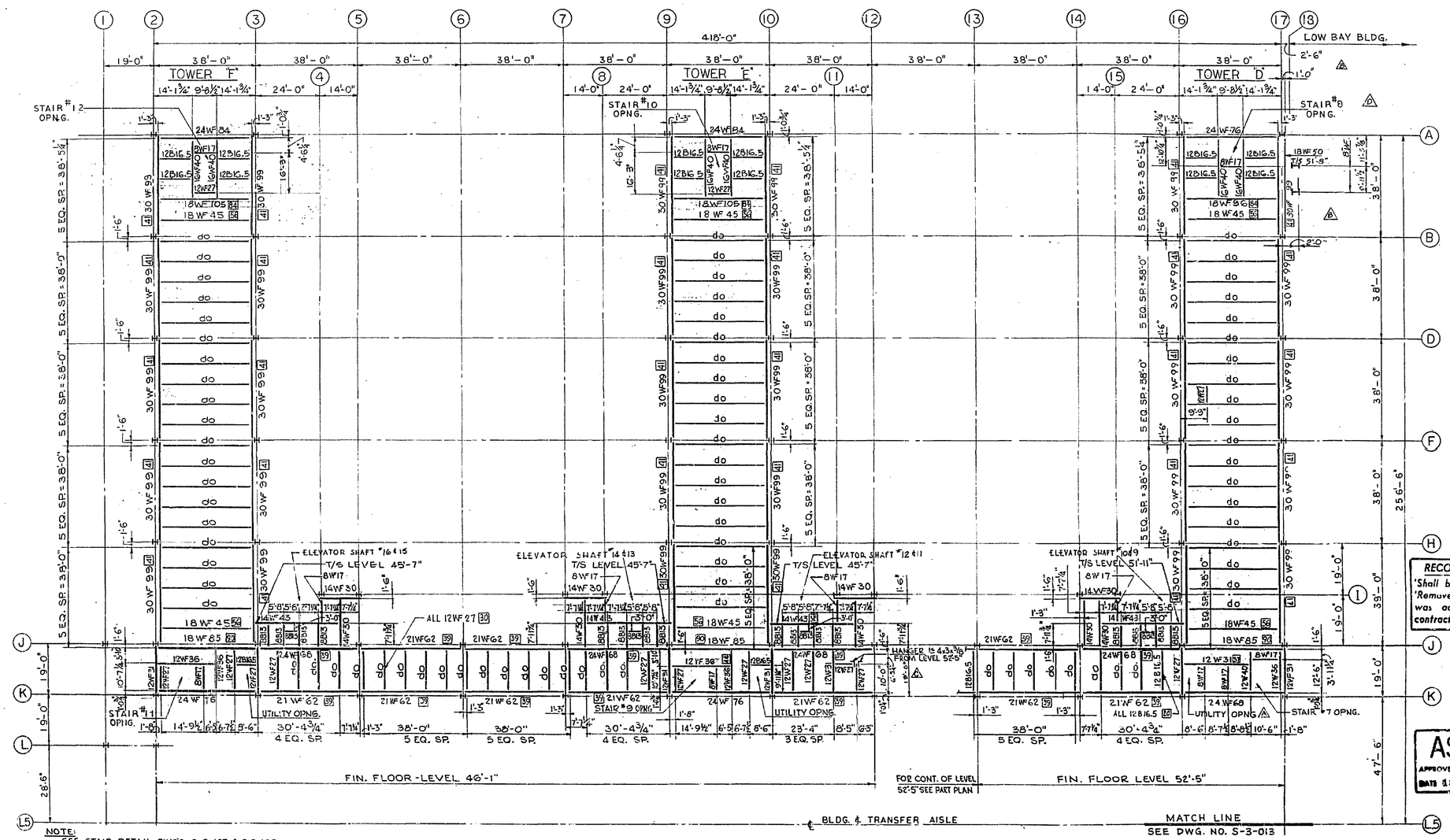
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" × 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP OF FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

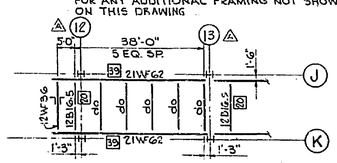
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
4	A		REVISED TO ACCOMP. AMMEND. NO. 7	6/20/63	JLHc
2	B		REVISED STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	4/11/63	JJW
1	C		REVISED DIMENSIONS TO ACCOMPANY MOD. TO CONTRACT - NASA 61	3/23/64	[illegible]
1	D		CHANGED MINF. TO BWF & REVISED DIMENSIONS TO ACCOMPANY MOD. TO CONTR. NASA 61	4/17/64	JJW
	A		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	2/16/68	[illegible]



RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C. A. Henderson
DATE 12 DEC 1967

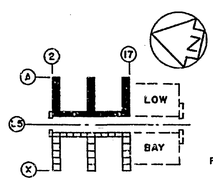
NOTE:
SEE STAIR DETAIL DWGS. S-3-167 & S-3-169 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DRAWING



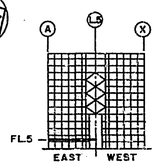
PART PLAN AT LEVEL 52'-5"
1/16" = 1'-0"

FRAMING PLAN AT FLOOR 5
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 52'-5" (TOWER "D")
TOP OF STEEL LEVEL 52'-1"
FIN. FLOOR-LEVEL 46'-1" (TOWER "E" & "F")
TOP OF STEEL LEVEL 45'-9"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 5 - LEVEL 52'-5" & 46'-1"

INV. NO. ENG. (NASA) 08-123-33-61
DATED: MAY 1963
SIZE F
FILE NO. 203-28.397
SCALE: AS NOTED
SECTION NO. S-3-012
SHEET NO. 3-16

BELOGOVSKY Dwn by
HERRMANN Ckd by

A39.02.01.0ADS111.00

EXPORT CONTROL NOTICE: EAR 99

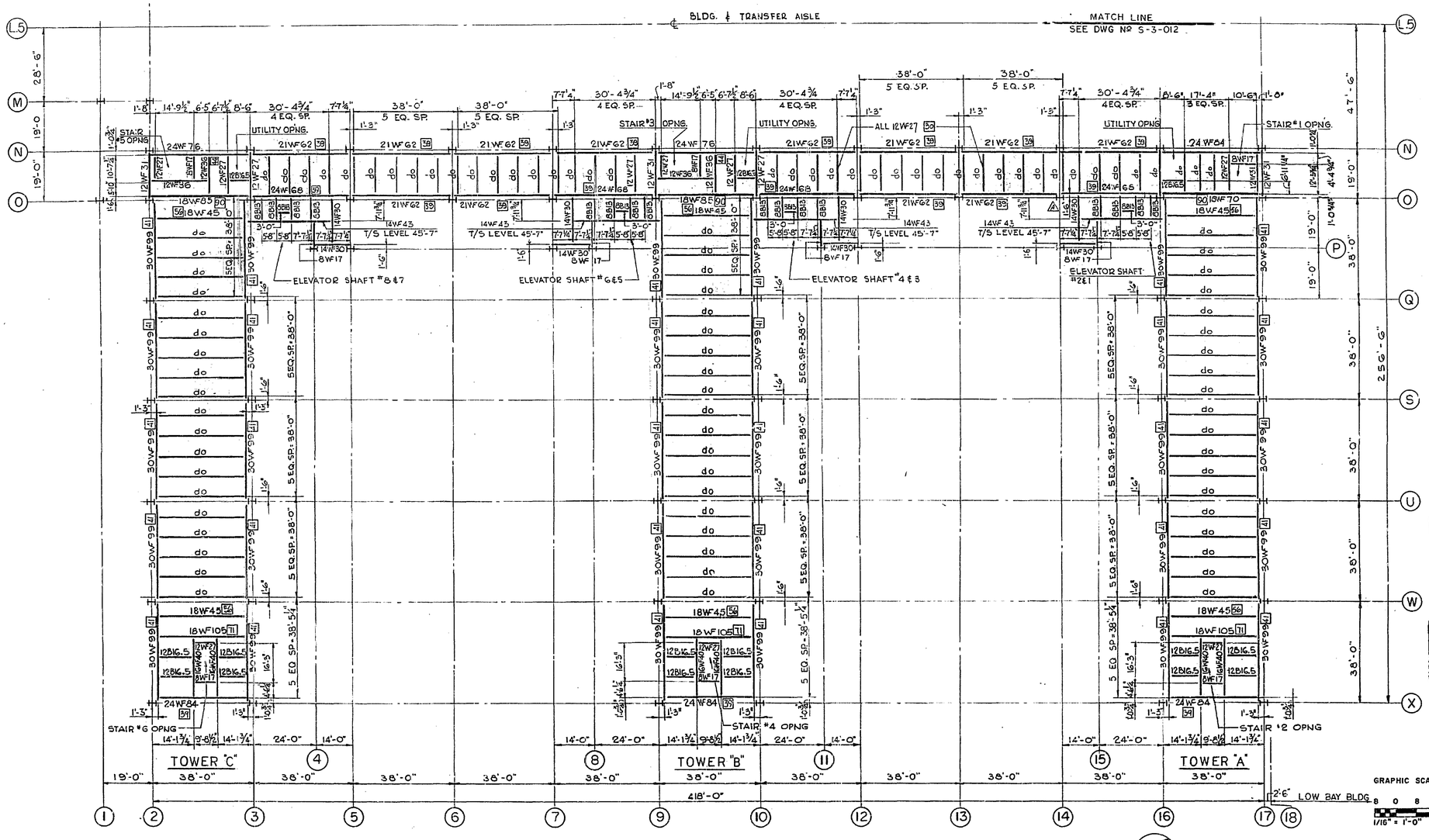
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[58] INDICATES NUMBER OF ¾"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[10] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
1	A		ADDED STRUCTURAL FRAMING TO ACCOM. MOD. TO CONTRACT NAS5-18	9/11/63	JDL
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2 Feb 68	Gilchrist



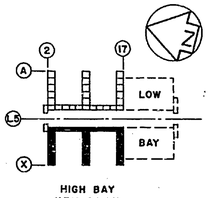
GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NOTE:
1. SEE STAIR DETAIL DWG S-3-169 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

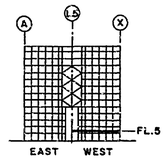
FRAMING PLAN AT FLOOR 5

1/16"=1'-0"

NOTE - FIN. FLOOR - LEVEL 46'-1"
TOP OF STEEL - LEVEL 45'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

RECORD DRAWING NOTE
'Shall be', 'Provide,' 'Install,' 'Remove' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY E.D. Hamilton
DATE 22 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MCRAN, 442 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 5 - LEVEL 46'-1"

INV. NO. ENG. (NASA) 08-121-63-41		SIZE F	FILE NO. 203-28.297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-013	SHEET NO. S-3-7	
FERNANDEZ Drn by	HERRMANN Ckd by		

A39.02.01.0AD5112.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

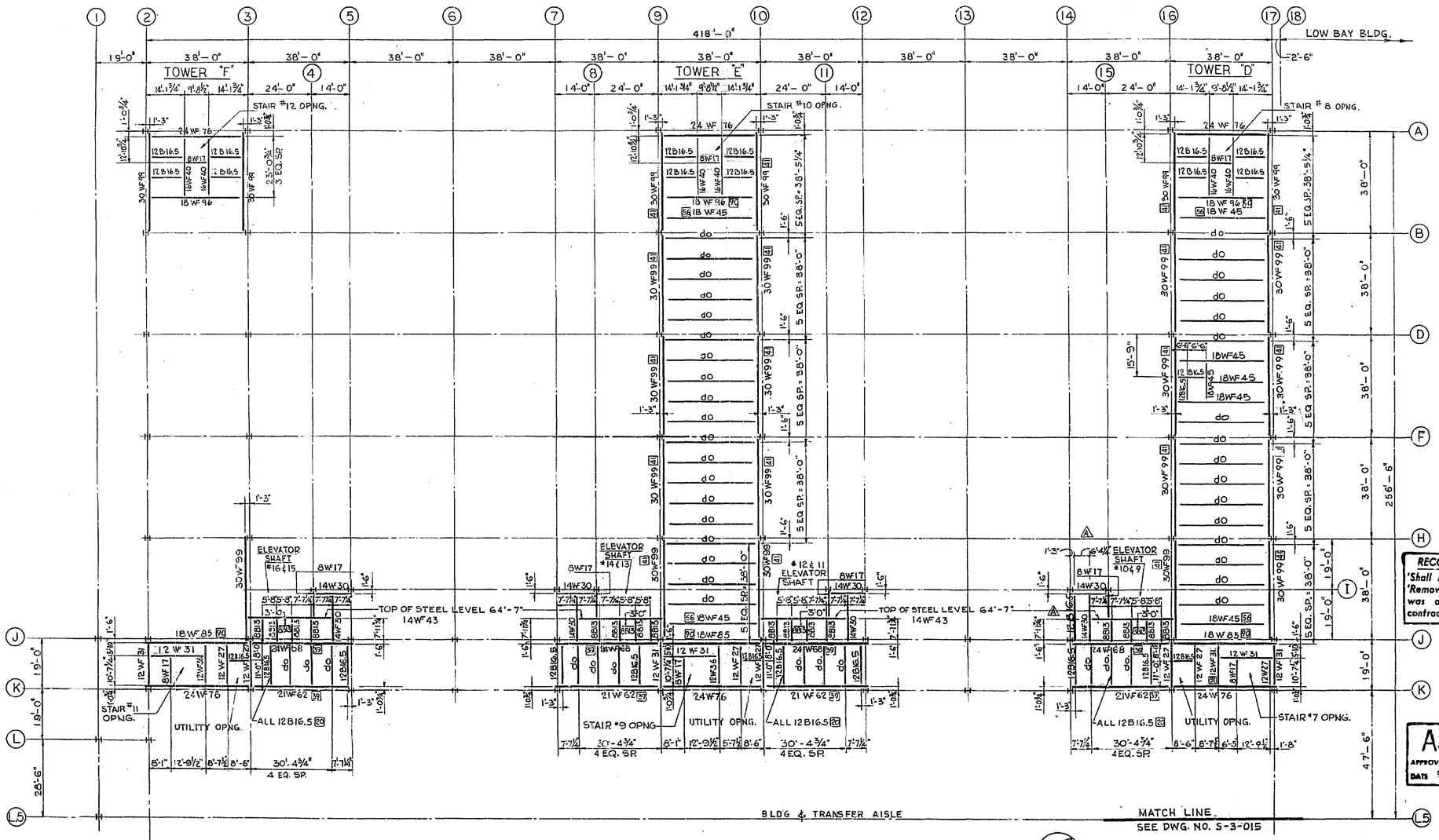
LEGEND FOR SHEAR CONNECTORS:

[41] INDICATES NUMBER OF 3/4" x 3" THREADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[38] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	J.L. He
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	[illegible]	[illegible]



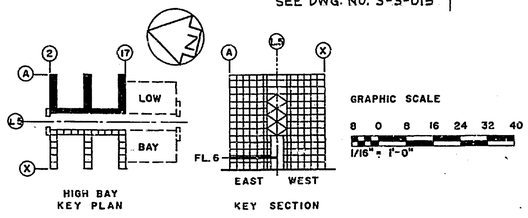
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

NOTE.
1. SEE STAIR DETAIL DWG. NO. S-3-167 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

FRAMING PLAN AT FLOOR 6
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 65'-1"
TOP OF STEEL LEVEL 64'-9"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

U.BAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 6 - LEVEL 65'-1"

INV. NO. ENG. (NASA) 06-123-63-41	SIZE F	FILE NO. 203-28,297
DATED: MAY 1963		
SCALE: AS NOTED	SECTION NO. S-3-014	SHEET NO. 3-18

FELLIN: Dwn by | HERRMANN Ckd by

A39.02.01.0ADS113.00

EXPORT CONTROL NOTICE: EAR 99

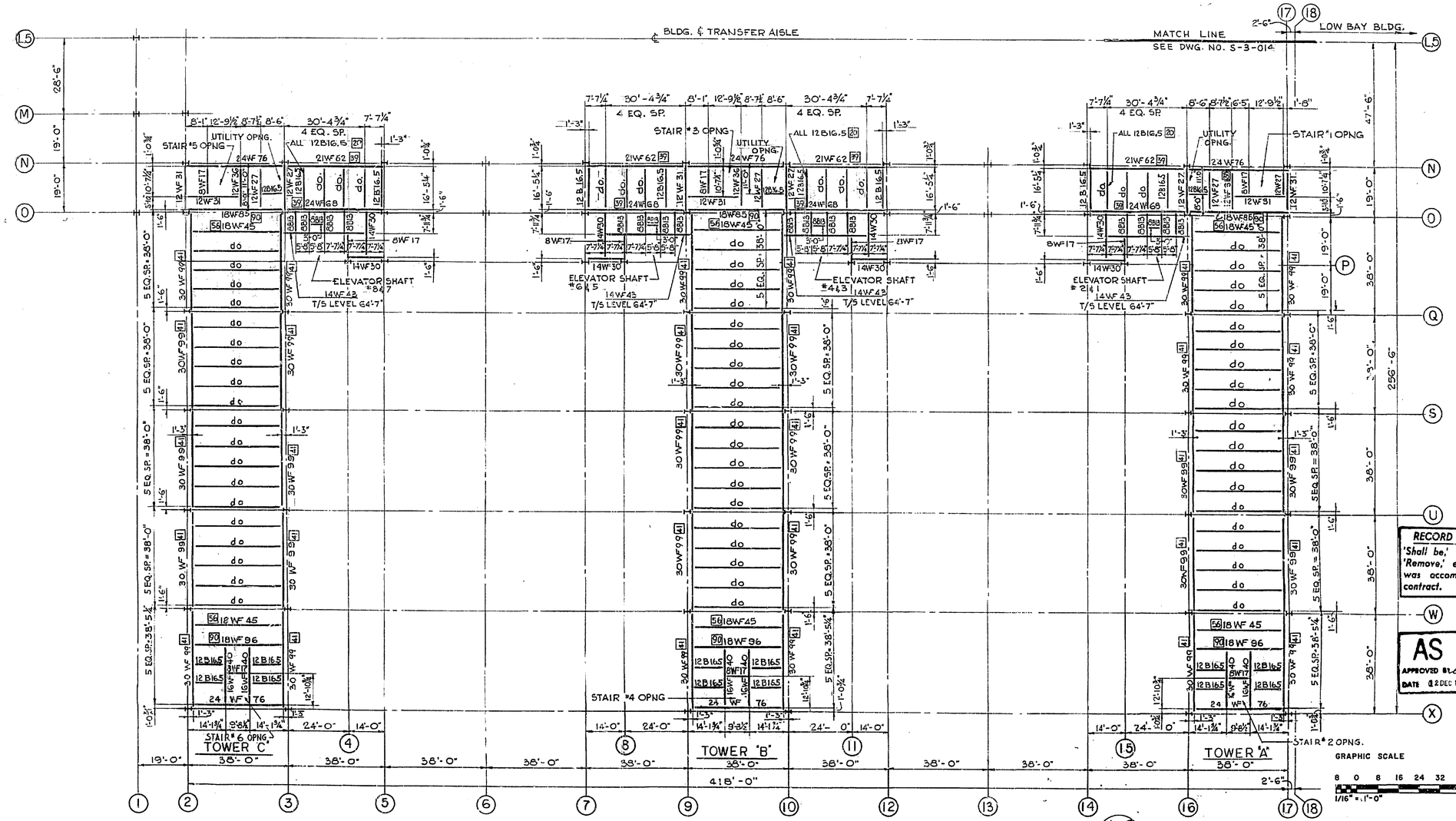
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

39 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/4/67	
	B		REVISED FOR F.R.D. INDEX	2-6-68	[illegible]



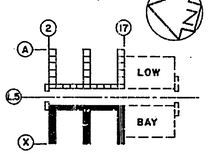
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

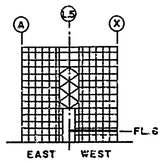
FRAMING PLAN AT FLOOR 6

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 65'-1"
TOP OF STEEL LEVEL 64'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 6 - LEVEL 65'-1"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-015
SHEET NO. 3-19

CASSITTO Dwn by
HERRMANN Ckd by

A39.02.01.0ADS114.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

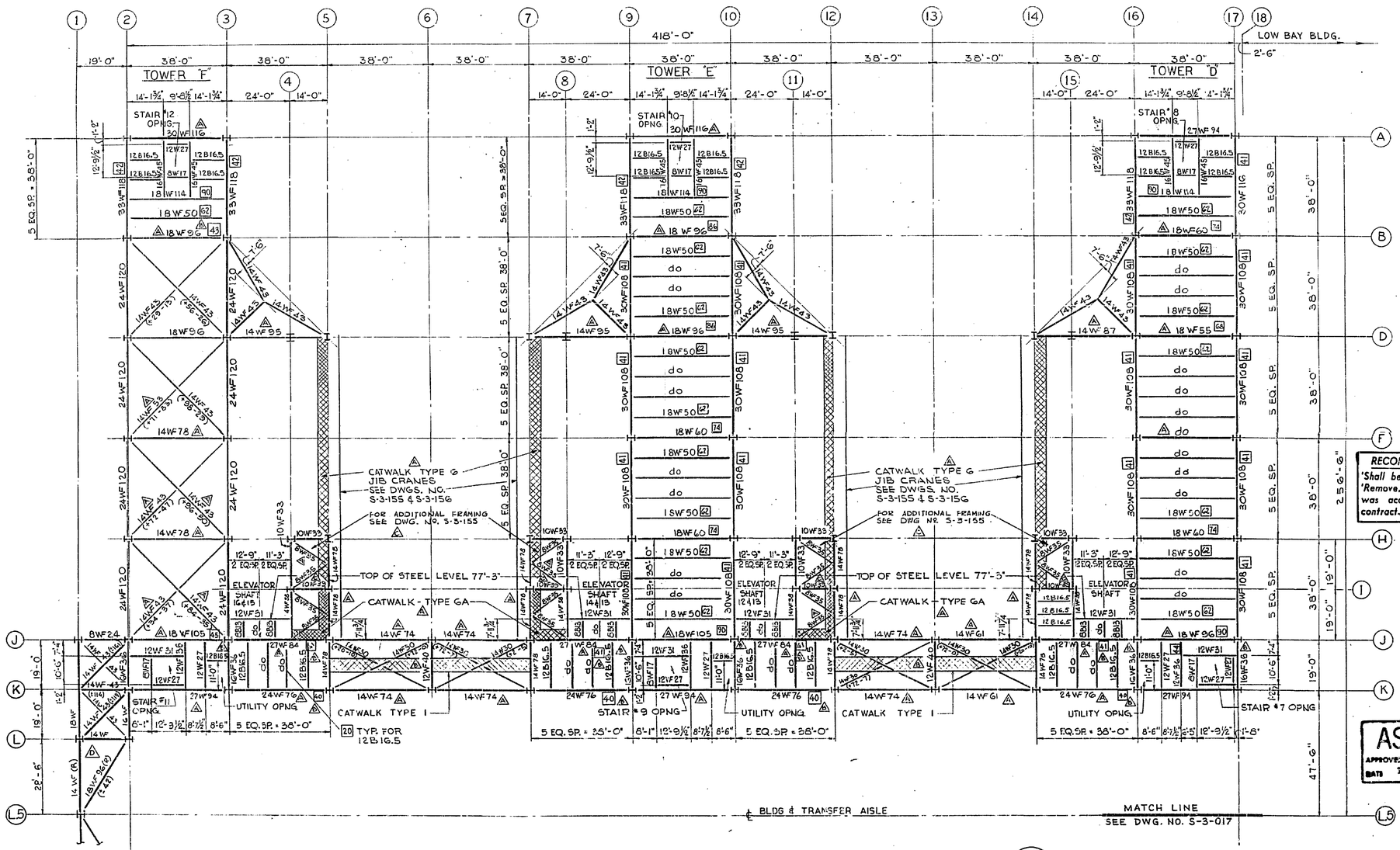
LEGEND FOR SHEAR CONNECTORS

[62] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM, FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[42] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
49	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/20/63	[illegible]
16	B		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-8	8/8/63	[illegible]
6	C		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. TO CONTRACT NASA-8	8/26/63	[illegible]
1	D		CHANGED BEAM SIZES	10/11/63	[illegible]
	E		AS BUILT	12/4/67	[illegible]
	F		REVISED FOR F.R.D. INDEX	2-16-68	G.W.W.



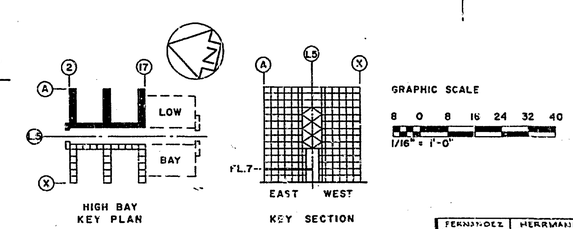
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. S-3-088

FRAMING PLAN AT FLOOR 7
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 77'-9"
TOP OF STEEL-LEVEL 77'-5" UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 7 - LEVEL 77'-0"

INV. NO. ENG. (NASA) 08-153-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-016 | SHEET NO. 3-20

FERNANDEZ Dwn by | HERRMANN Ckd by

A39.02.01.0ADS115.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

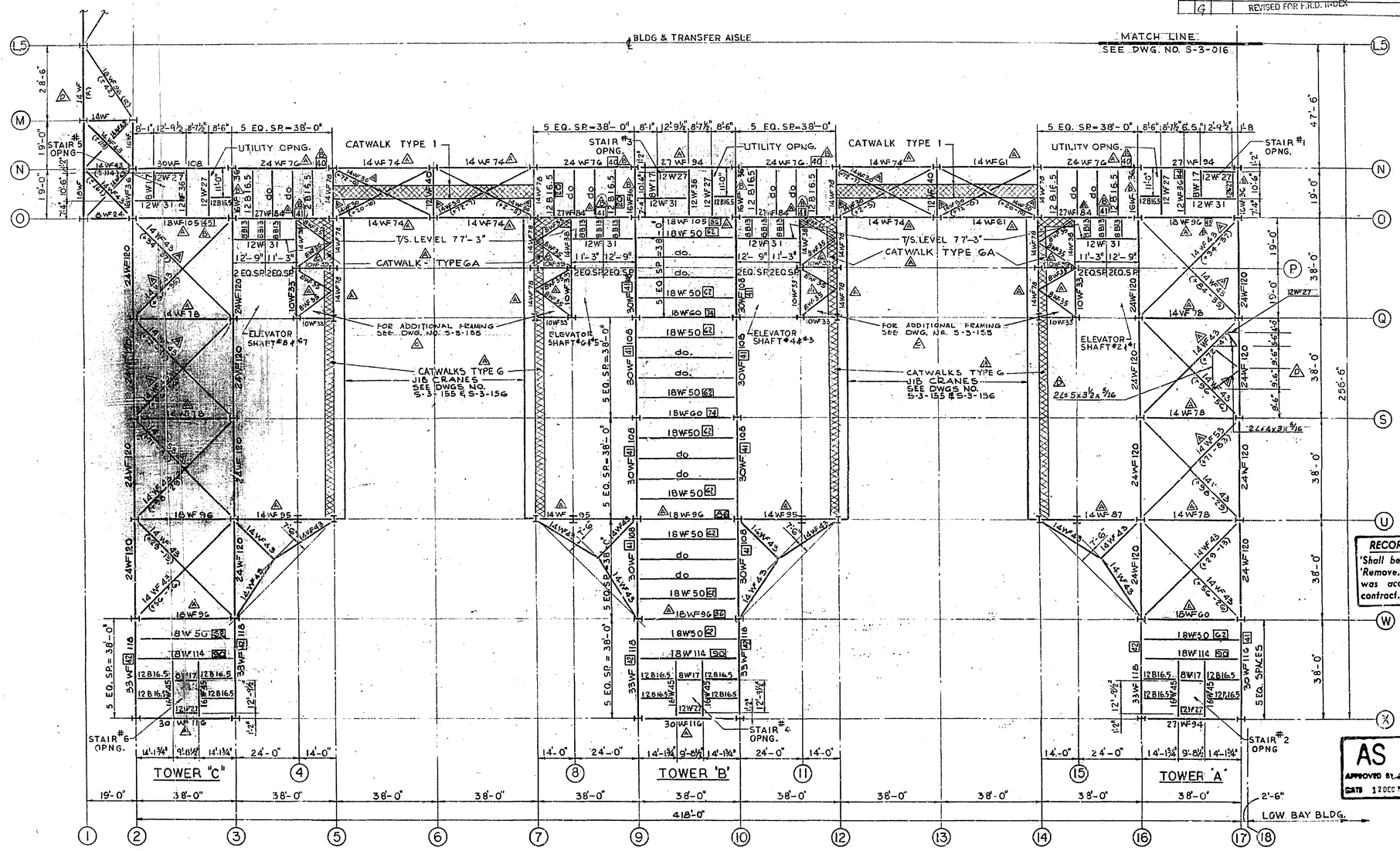
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM, FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
63	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/28/63	JLH
15	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-8	8/3/63	[illegible]
6	C		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	8/26/63	[illegible]
3	D		ADDED & CORRECTED #'s	10/11/63	[illegible]
1	E		ADDED NOTE #2	1/15/63	[illegible]
	F		AS BUILT	12/4/67	
	G		REVISED FOR F.R.D. INDEX	2/6/63	G.W.W.



RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

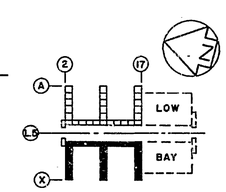
NOTE:

1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. S-3-088
2. CONTRACTOR MAY SUBSTITUE A STRUCTURAL TEE FOR TWO ANGLES PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

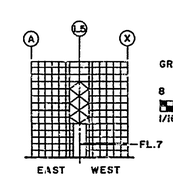
FRAMING PLAN AT FLOOR 7

1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 77'-9"
TOP OF STEEL-LEVEL 77'-5" UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 7 - LEVEL 77'-9"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S-3-017
SHEET NO. 3-21

KALNINS Dwn by
HERRMANN Ckd by

A39.02.01.0ADS116.00

EXPORT CONTROL NOTICE: EAR 99

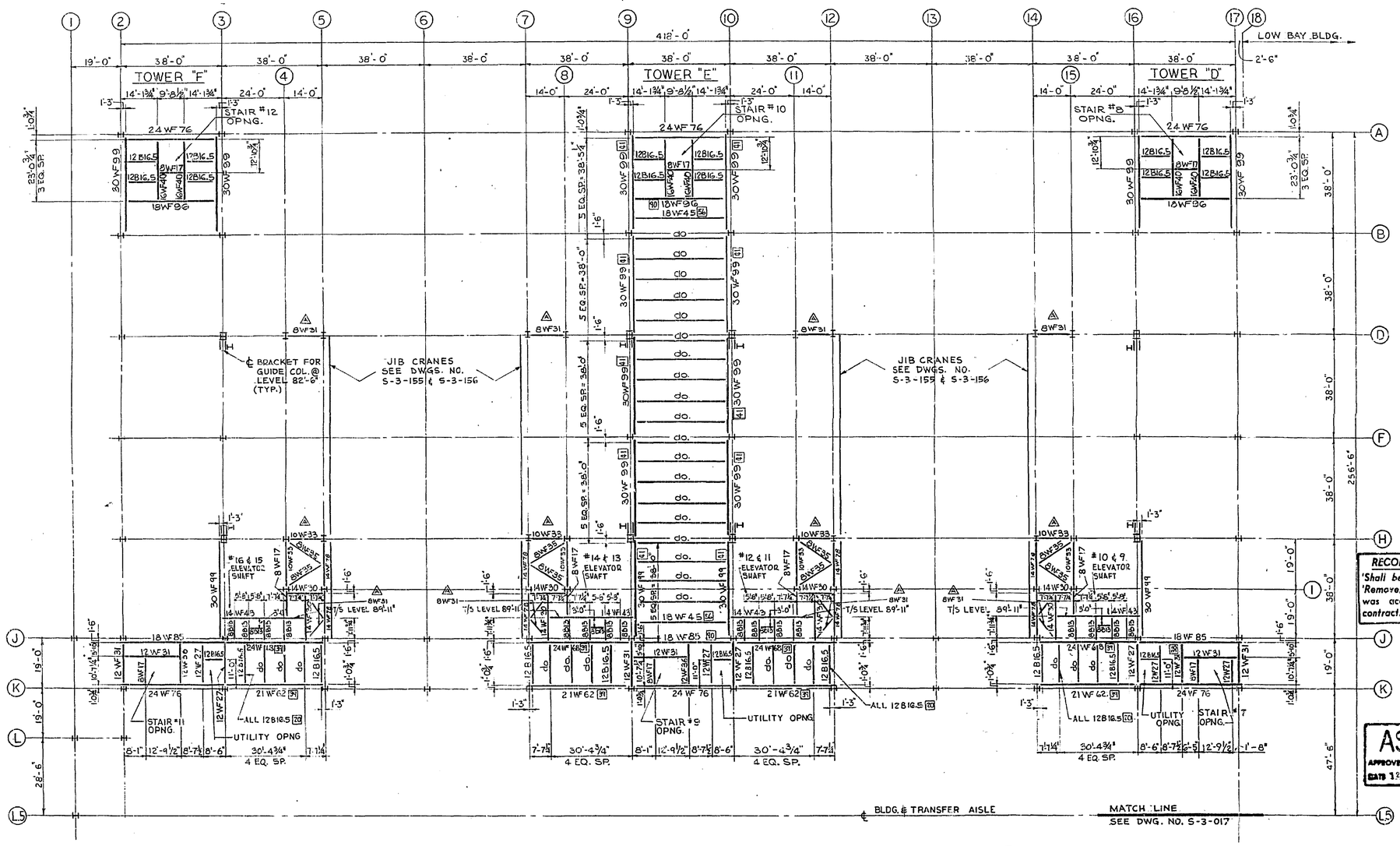
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0". MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
12	A		REVISED HIGH BAY STRUCTURAL FRAMING TO ACCOMP. MODIFICATION TO CONTRACT NO. (NASA)-8	9/2/63	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/6/68	[illegible]



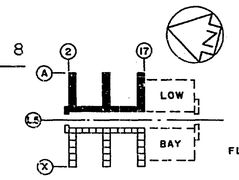
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

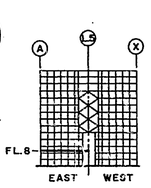
FRAMING PLAN AT FLOOR 8

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 90'-5"
TOP OF STEEL LEVEL 90'-1"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING EAST HALF
FLOOR 8 - LEVEL 90' 5"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-26, 297
SCALE: AS NOTED
SECTION NO. S-3-018
SHEET NO. 3-22

FELLINI Dwn by
DEERMANN Chk by

A39.02.01.0ADS117.00

EXPORT CONTROL NOTICE: EAR 99

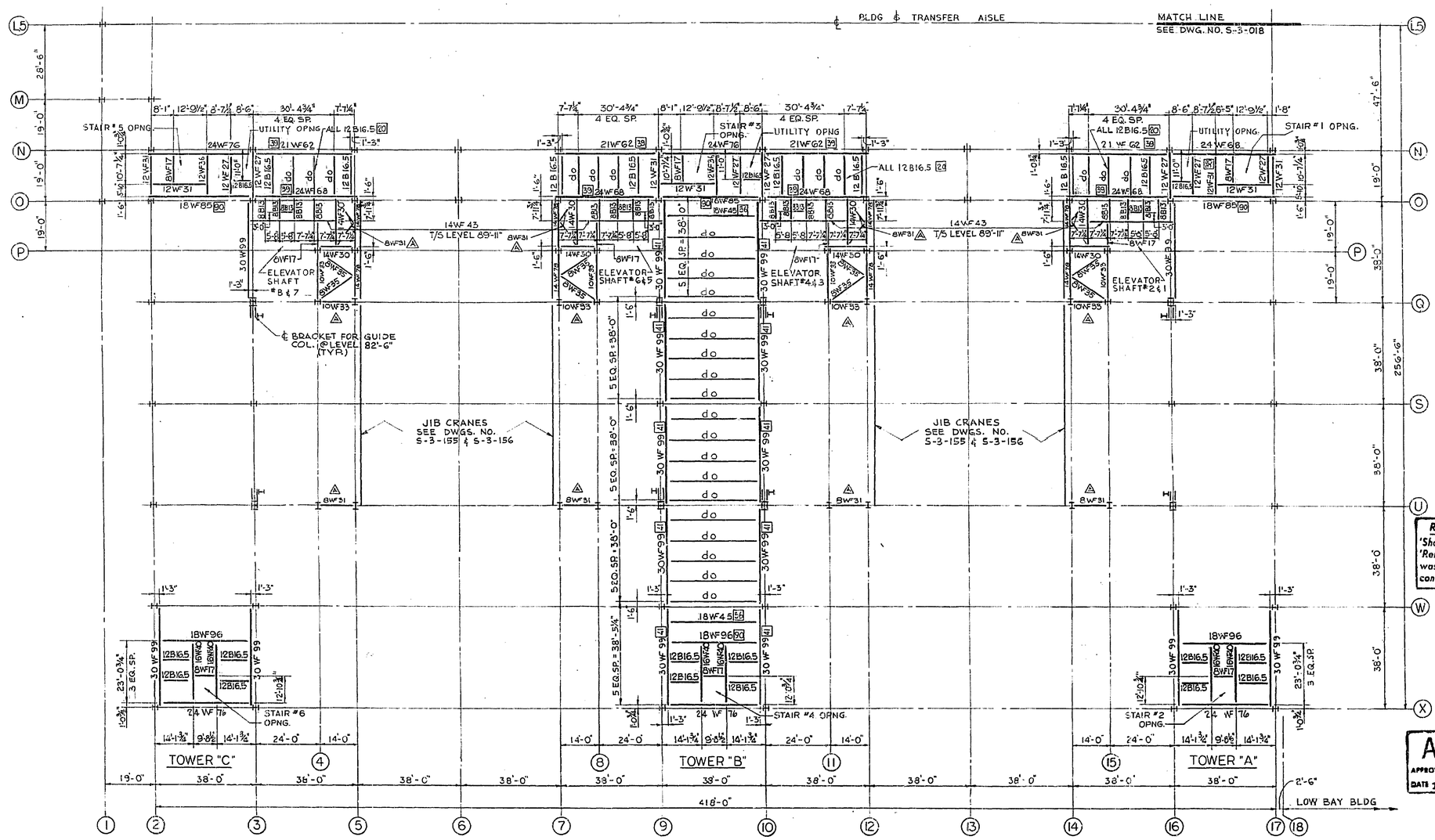
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONECTORS

[55] INDICATES NUMBER OF 3/4"x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[38] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
12	A		REVISED HIGH BAY STRUCTURAL FRAMING TO ACCOMPANY MODIFICATION TO CONTRACT NO. (NAS8)-8	7/2/63	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

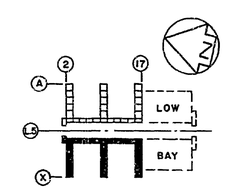


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove' etc. indicates work was accomplished under the contract.

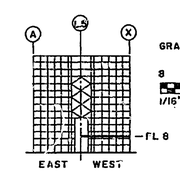
AS BUILT
APPROVED BY [illegible]
DATE [illegible]

FRAMING PLAN AT FLOOR 8
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 90'-5"
TOP OF STEEL - LEVEL 90'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



EAST WEST
KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
342 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 8 - LEVEL 90'-5"

INV. NO. ENG. (NASA) 38-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S 3-019
SHEET NO. 3 23

FELLINI Dwn by
HERRMANN Ckd by

A39.02.01.0ADS118.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
7	A		REVISED TO CONFORM TO AMEND. # 7	6-21-68	
	A		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/16/68	

TOWER "F" TOWER "E" TOWER "D"

416'-0"

ELEVATOR SHAFT NO. 15 & 16 ELEVATOR SHAFT NO 13 & 14 ELEVATOR SHAFT NO 11 & 12 ELEVATOR SHAFT # 9 & 10

STAIR NO. 11 OPNG. STAIR #9 OPNG. STAIR #7 OPNG.

UTILITY OPNG

14WF43 T/S LEVEL 102'-7"

℄ BRACKET FOR GUIDE COL @ LEVEL 95'-2" (TYP) SEE DWG NO. S-3-172

℄ BLDG. & TRANSFER AISLE

MATCH LINE SEE DWG. NO. S-3-021

ELEVATION AT DETAIL-B INTERMEDIATE LEVEL

GUIDE COLUMN DETAIL AT BOTTOM

LEVEL 103'-1"

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT

APPROVED BY G.B. Lambson

DATE 12 DEC 1967

NOTES:

1. SEE STAIR DETAIL DWGS: S-3-147 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

ELEVATION AT DETAIL-A

FRAMING PLAN AT FLOOR 9

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 103'-1"
TOP OF STEEL LEVEL 102'-9"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE

8 0 8 16 24 32 40

1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
141 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.

LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 9 - LEVEL 103'-1"

Drn by	HERRMANN	Chd by	
INV. NO. ENG. (NASA) 28-123-63-41 DATED: MAY 1963		SIZE F	FILE NO. 203-28.297
SCALE: AS NOTED	SECTION NO. S-3-020		SHEET NO. S-3-24

A39.02.01.0ADS119.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	2		ADDED 14" ø DIMENSIONS	9/11/63	
3	3		REVISED TO CONFORM TO AMEND. # 7	4-14-64	
	4		AS BUILT	12/14/67	
	JD		REVISED FOR F.F.D. INDEX	2/6/68	

MATCH LINE
SEE DWG. NO. S-3-020

℄ BLDG. & TRANSFER AISLE

STAIR #5 OPNG
STAIR #3 OPNG
STAIR #1 OPNG
STAIR #6 OPNG
STAIR #4 OPNG
STAIR #2 OPNG
UTILITY OPNG.
TOP OF STEEL LEVEL 102'-7"
ELEVATOR SHAFT NO. 1 & 8
ELEVATOR SHAFT NO. 5 & 6
ELEVATOR SHAFT NO. 3 & 4
ELEVATOR SHAFT NO. 1 & 2
FOR ELEVATOR GUIDES SEE SHT. 3-24 SIMILAR - EXCEPT OPP. HAND
& BRACKET FOR GUIDE COL. @ LEVEL 95'-2" (TYP.) SEE DWG. S-3-172
TOWER "C"
TOWER "B"
TOWER "A"
LOW BAY BLDG.
418'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY: E. B. Richardson
DATE: 13 DEC 1967

NOTES
1. SEE STAIR DETAIL DWG. S-3-167 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

FRAMING PLAN AT FLOOR 9
1/16"=1'-0"

NOTE: FIN. FLOOR - LEVEL 103'-1"
TOP OF STEEL - LEVEL 102'-9"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16"= 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
445 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

N.A.S.A. MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 9 - LEVEL 103'-1"

DRY. NO. ENG. (NASA) 06-122-63-41	SIZE	FILE NO.	
DATED: MAY 1962	F	203-28,297	
SCALE: AS NOTED	SECTION NO. S-3-021	SHEET NO. S-25	

FELLINI Des. by | HERRMANN Ckd. by

A39.02.01.0ADS120.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14 WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM

OPPOSITE HAND

PART FRAMING PLAN
N.T.S.

NOTE: 7 & 9, 14 & 16 OPPOSITE HAND

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4"x 4" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

10 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
58	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	2/20/63	JCH
25	A		REVISED TO DETAIL FRAMING TO ACCOMP. MOD. TO CONTRACT	5/9/63	JBW
11	A		REVISED TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	5/24/63	JBW
5	A		REVISED FRAMING @ COL'S 5,7,12,14, & ADDED CONNECTION DETAIL	7/6/63	JBW
5	A		REVISED TO CONFORM TO AMEND. NO. 7	9/24/63	JBW
	A		AS BUILT	12/14/67	
	C		REVISED FOR F.R.D. INDEX	3/6/68	GCL

TOWER "F" — TOWER "E" — TOWER "D" — LOW BAY BLDG.

418'-0"

SEE PART FRAMING PLAN ABOVE

STAIR #12 OPNG. — STAIR #10 OPNG. — STAIR #8 OPNG.

5 EQ. SP. = 38'-0"

OPNG.

UTILITY OPNG.

STAIR #11 OPNG. — STAIR #9 OPNG. — STAIR #7 OPNG.

ALL 12B16.5 [20]

℄ BRACKET FOR GUIDE COL. @ LEVEL 107'-10" (TYP.) SEE DWG S-3-172

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG S-3-065

ELEVATOR SHAFT — T/S LEVEL 115'-3"

℄ BLDG. & TRANSFER AISLE

MATCH LINE
SEE DWG. NO. S-3-023

℄ COL. 5 7 12 14 @ A & X
CONNECTION DETAIL
NOT TO SCALE

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. NO. S-3-

℄ ELEVATION AT DETAIL A

COL. SPLICE 2 PL- 3⅜"x 4½" 6-7/8ϕ H.S. BOLTS T.C.D.

FRAMING PLAN AT FLOOR 10
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 115'-9"
TOP OF STEEL - LEVEL 115'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be, 'Provide,' 'Install,' 'Remove' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.O. Samuelson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 10 - LEVEL 115'-9"

DWG. NO. ENG. (N.A.S.A.) 05-123-63-41 | SIZE F | FILE NO. 203-28, 297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S 3-022 | SHEET NO. 2-28

Drawn by BECK | Checked by HERRMANN

A30.02.01.0ADS121.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
			GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/24/63	[illegible]
31			REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-28	8/8/63	[illegible]
11			REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MODS. TO CONTR. NASA-28	9/25/63	[illegible]
5			REVISED FRAMING @ COLS. 4,7,12,15, & ADDED MB24	4/6/63	[illegible]
2			REVISED TO CONFORM TO AMEND. #7	4-14-64	[illegible]
			AS BUILT	12/14/67	
			REVISED FOR F.R.D. INDEX	2/1968	[illegible]

NOTE: WHERE CROSS BRACING EXISTS, EWF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND BWF48 SHALL BE A 14WF48 MINIMUM.

OPPOSITE HAND

X-BRACING

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS

[6] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

℄ OF BLDG. & TRANSER AISLE

MATCH LINE
SEE DWG. NO. S-3-022

STAIR #5 OPNG.

UTILITY OPNG.

STAIR #3 OPNG.

STAIR #1 OPNG.

ELEVATOR SHAFT #3 & 7

ELEVATOR SHAFT #4 & 5

ELEVATOR SHAFT #2 & 1

℄ BRACKET FOR GUIDE COL. @ LEVEL 107'-10" (TYP.)

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL S-3-065

FOR ELEVATOR GUIDES SEE SHT. 3-26- SIMILAR EXCEPT OPP. HAND

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

TOWER C

TOWER B

TOWER A

STAIR #6 OPNG.

STAIR #4 OPNG.

STAIR #2 OPNG.

SEE PART FRAMING PLAN ABOVE

LOW BAY BLDG.

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. NO. S-3-
2. FOR CANOPY FRMG. ON COL. LINE X SEE DWG. S-3-161.
3. FOR CONNECTION DETAIL @ COL'S 5, 7, 12, 14 SEE SHEET S-3-26.

FRAMING PLAN AT FLOOR 10
1/16" = 1'-0"

NOTE FIN. FLOOR LEVEL 115'-9"
TOP OF STEEL LEVEL 115'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 10 - LEVEL 115'-9"

INV. NO. ENG. (NASA) 08-123-611-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3 023 | SHEET NO. 3-27

KLEIN Drn. by | HERRMANN Chd. by

A39.02.01.0ADS122.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

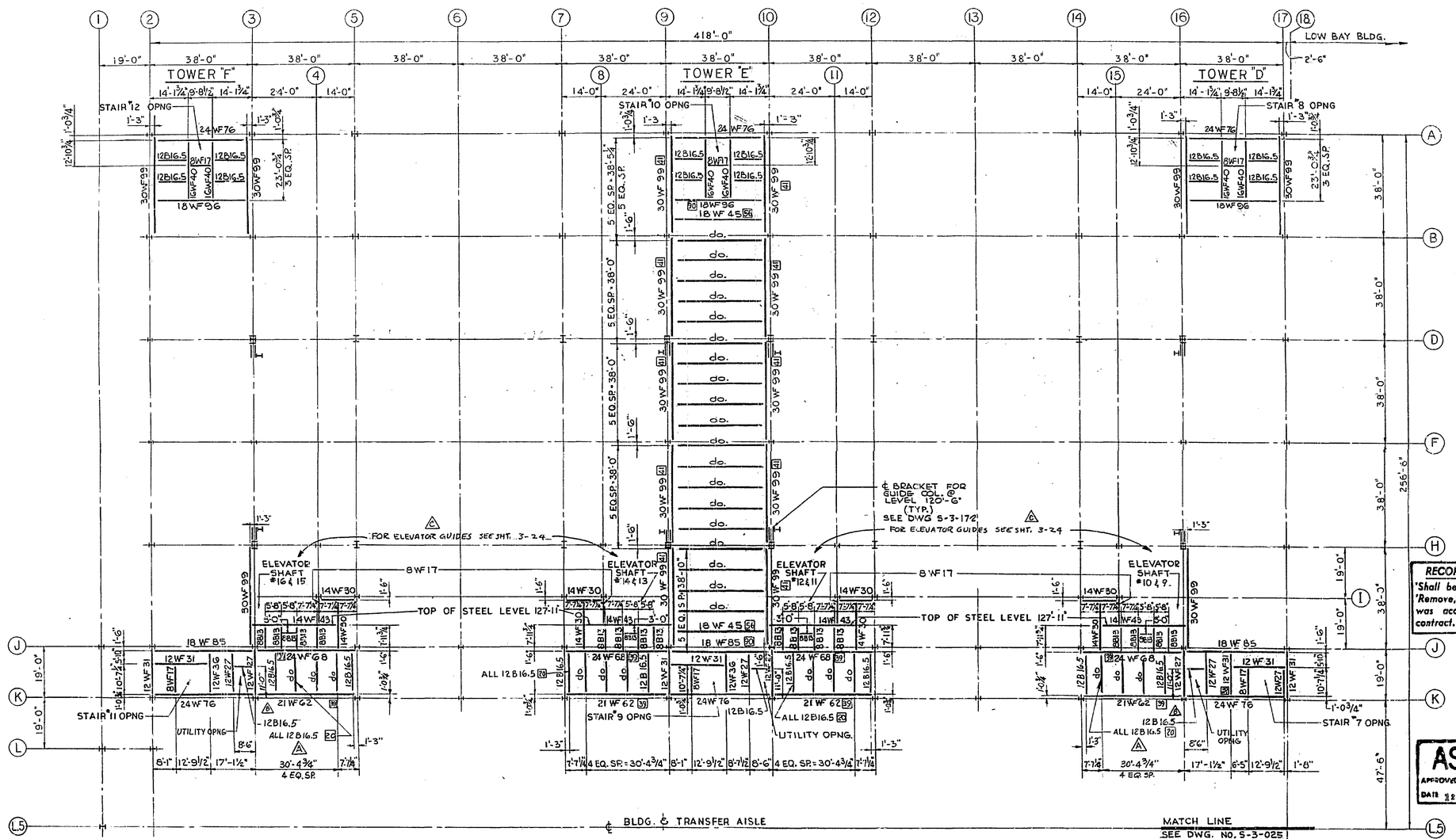
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS, ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-3	8/30/63	[illegible]
2	B		CORRECTED DIMENSION LINES	10/11/63	[illegible]
2	C		REVISED TO CONFORM TO AMEND. # 7	4-14-64	[illegible]
	D		AS BUILT	12/4/67	
	E		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

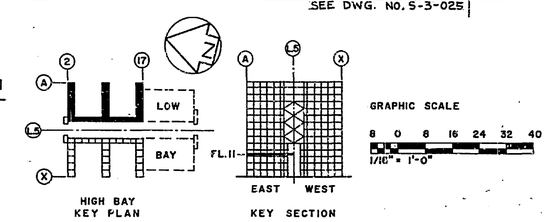


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 11
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 128'-5"
TOP OF STEEL LEVEL 128'-1"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MOHAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 11 - LEVEL 128'-5"

INV. NO. ENG. (NASA) 05-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-024 | SHEET NO. 3-28

SOCHKO Dwn by | HERRMANN Ckd by

A39.02.01.0ADS123.00

EXPORT CONTROL NOTICE: EAR 99

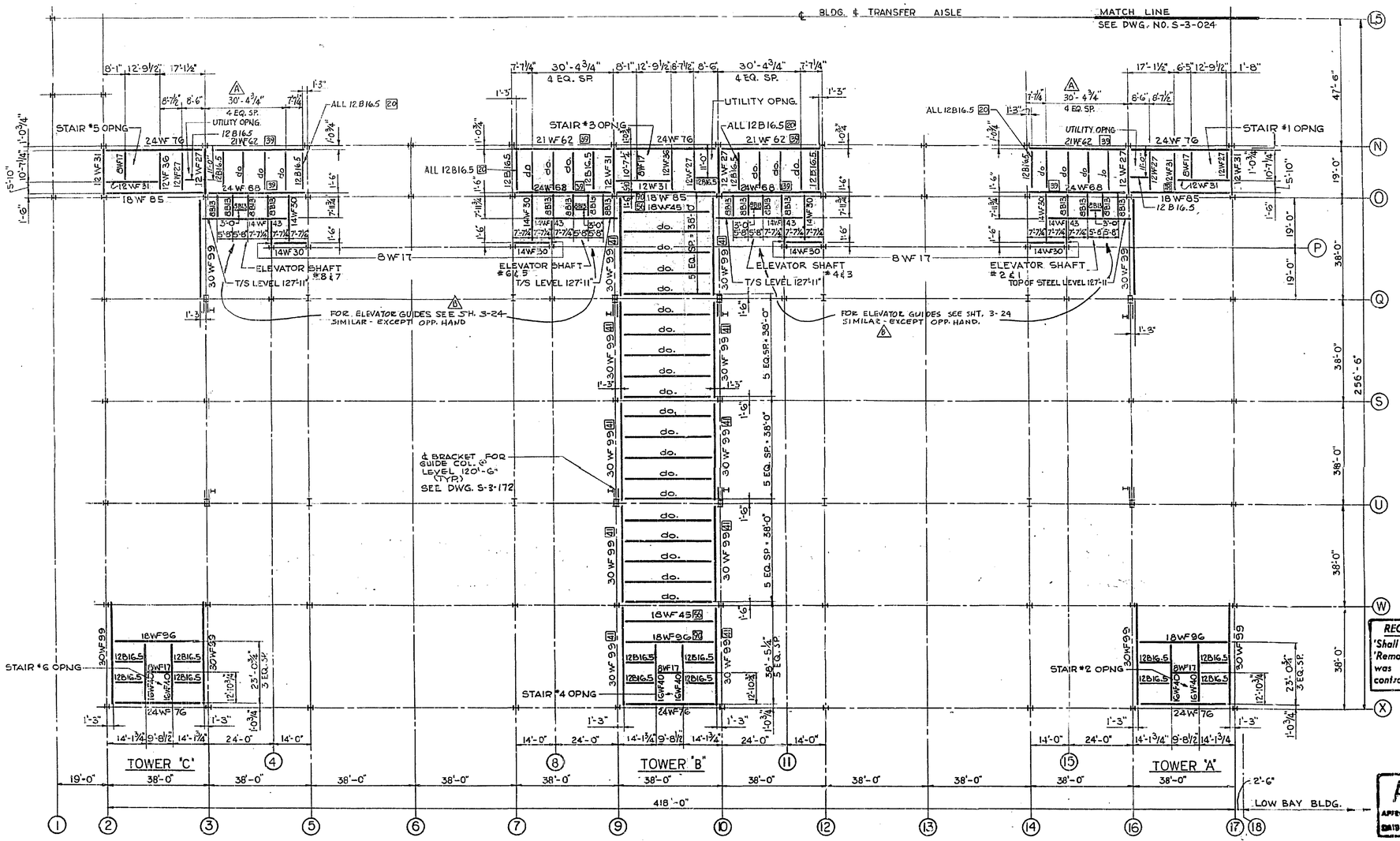
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

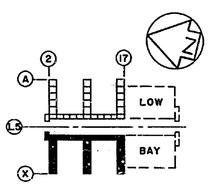
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP MODS TO CONTR. NASA-B	9/30/63	[illegible]
2	B		REVISED TO CONFORM TO AMEND. #7	1-29-68	[illegible]
	C		AS BUILT	12/4/67	
	D		REVISED FOR F.P.D. INDEX	2/16/68	[illegible]

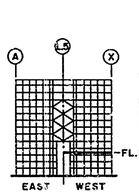


FRAMING PLAN AT FLOOR II

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 128'-5"
TOP OF STEEL LEVEL 128'-1"
UNLESS OTHERWISE NOTED





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.A. Tomlinson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
445 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR II - LEVEL 128'-5"

INV. NO. ENG. (NASA) 08-123-63-41	SIZE	FILE NO.	
DATED: MAY 1963	F	203-28.297	
SCALE: AS NOTED	SECTION NO. S-3-025	SHEET NO. 3-29	

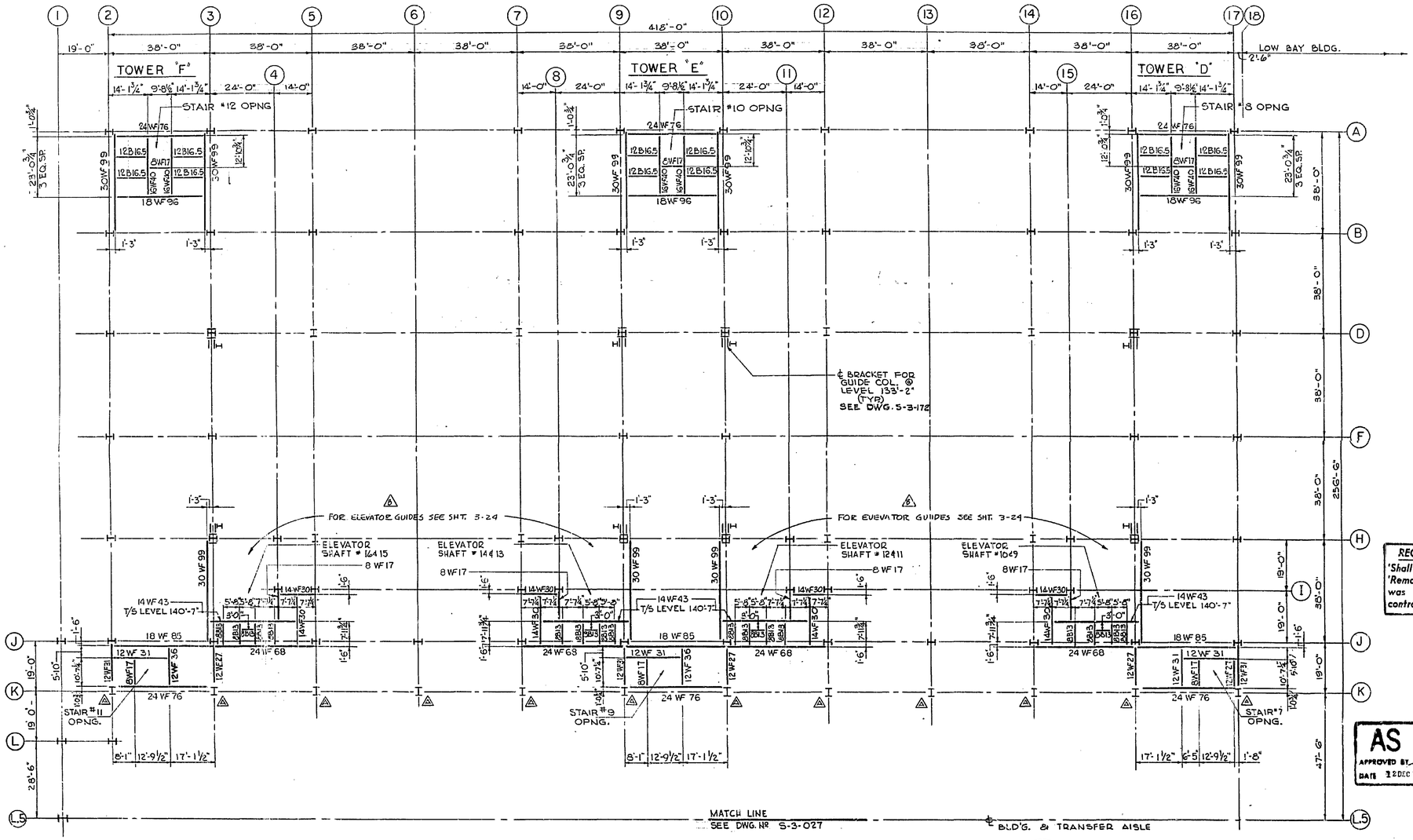
P. LEAMO Drn by | HERRMANN Chk by

A39.02.01.0ADS124.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

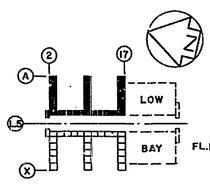
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
12	1		TURNED ROW OF COL'S 30° ON LINE "K"	10/1/62	
2	2		REVISED TO CONFORM TO AMEND. #7	5.11.65	
	3		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2/16/69	

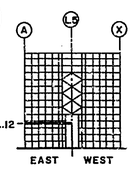


NOTES:
1. SEE STAIR DETAIL DWGS.
   FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

FRAMING PLAN AT FLOOR 12
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 141'-1"
TOP OF STEEL LEVEL 140'-9"
UNLESS OTHERWISE NOTED.





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.A. Lambson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 12 - LEVEL 141'-1"

DRAWN BY CASSITTO	CHK'D BY HERRMANN	INV. NO. ENG. (NASA) 08-123-63-41	SIZE F
DATED: MAY 1963		FILE NO. 203-28.297	
SCALE: AS NOTED		SECTION NO. S-3-0.6	SHEET NO. 3-30

A39.02.01.0ADS125.0C

EXPORT CONTROL NOTICE: EAR 99

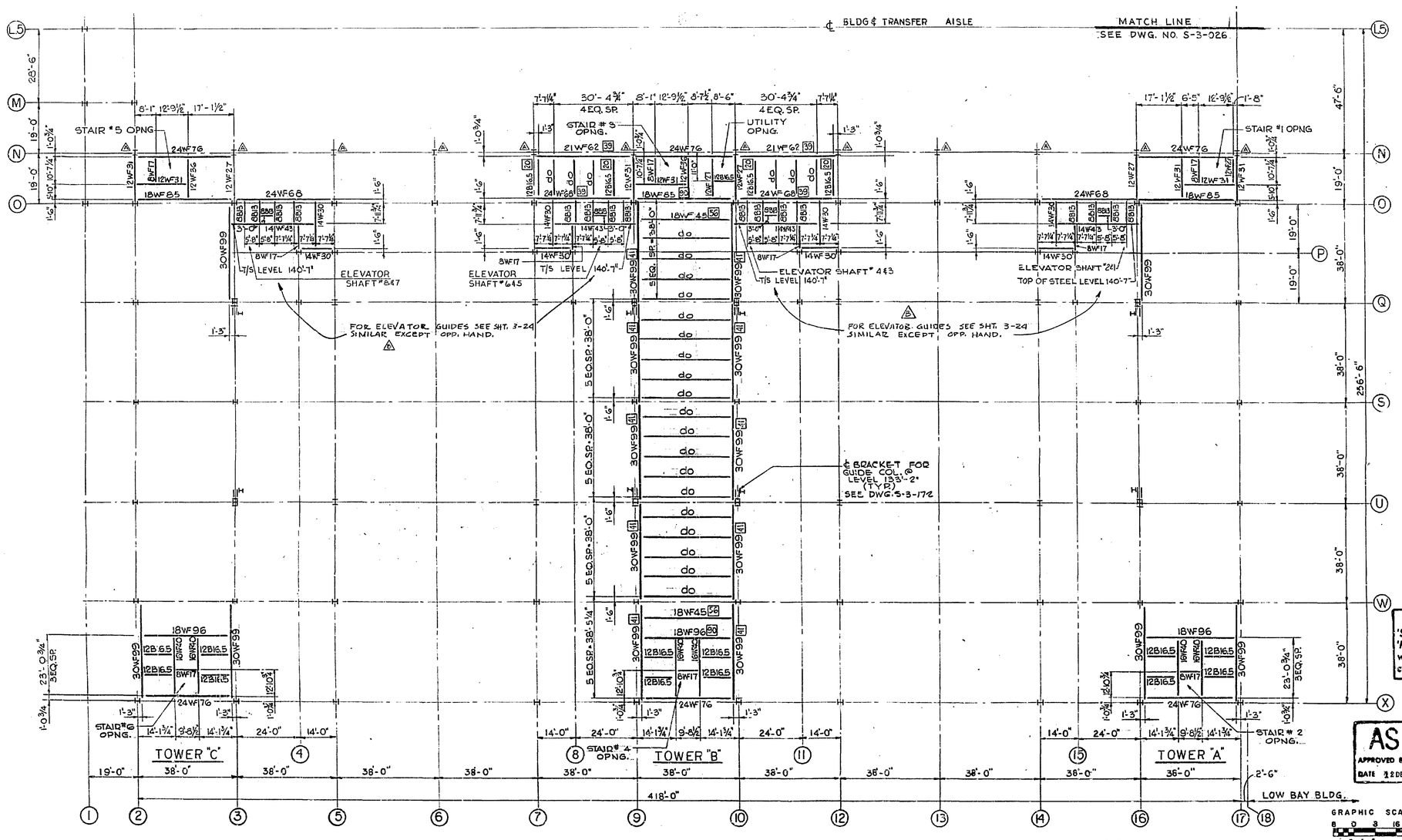
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[38] INDICATES SAME AS ABOVE EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

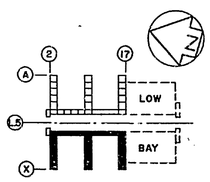
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
12	A		TURNED COLUMNS ON COLUMN LINE (N)	10/11/63	
2	A		REVISED TO CONFORM TO AMEND. #7	1-14-65	
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-6-68	



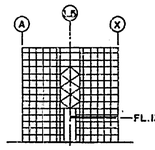
FRAMING PLAN AT FLOOR 12

1/16"=1'-0"

NOTE: FIN. FLOOR LEVEL 141'-1"
TOP OF STEEL LEVEL 140'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.G. Lambson
DATE 12 DEC 1967

GRAPHIC SCALE
8 0 3 16 24 32 40
1/16"= 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 12 - LEVEL 141'-1"

INV. NO. ENG. (NASA) 08-123-63-41	SIZE F	FILE NO. 203-28, 297
DATED: MAY 1963		
SCALE: AS NOTED	SECTION NO. S-3-027	SHEET NO. S-31

Des by PALERMO | Ckd by HEERMANS

A39.02.01.0ADS126.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, BW 17 SHALL BE A 14 WF OF IDENTICAL WEIGHT AND 8 WF 48 SHALL BE A 14 WF 48 MINIMUM

PART FRAMING PLAN N.T.S.

LEGEND FOR SHEAR CONNECTORS

[31] INDICATES NUMBER OF 3/4" x 8" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM WHERE NOT INDICATED, SPACE @ 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[6] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
90			GENERAL REVS. TO ACCOMP. AMEND. NO. 7	9/20/63	J.F.M.
11			REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NAS 8-5	9/23/63	PSW
32			REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NAS 8-5	9/24/63	JAN
1			REVISED STRUCTURAL FRAMING BETWEEN COL'S. (10) & (11)	10/11/63	PSW
1			ADDED NOTE # 2	11/15/63	PSW
4			REVISED STRUCTRAL FRAMING AND ADD DETAILS	12/5/63	JAN
1			REVISED STAIR DESIGNATION	12/19/63	JAN
6			STAIR DETAILS ADDED TO NOTE, BY AMEND. NO. 7 & 11 REVISED AND ADDED TO THIS SHEET BY MOD. NO. 2	2.10.64	JAN
			AS BUILT	12/16/67	
		K	REVISED FOR F.R.D. INDEX	2/16/68	

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.B. Tomlinson
DATE 12 DEC 1967

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1&2 NOT SHOWN, SEE SHEET NO. S-3-088
2. CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEDED.

FRAMING PLAN AT FLOOR 13
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 153'-9"
TOP OF STEEL-LEVEL 153'-5" UNLESS OTHERWISE NOTED.

GRAPHIC SCALE 8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 13 - LEVEL 153'-9"

INV. NO. ENG. (NASA) 08-133-63-01 DATES: MAY 1963
SIZE F | FILE NO. 203-28.297
SCALE: AS NOTED | SECTION NO. S-3-073 | SHEET NO. 3-32

DESIGNED: FERNANDEZ | DRAWN by: HERRMANN | CHK'D by:

A39.02.01.0ADS127.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

NOTE 7 & 9, 14 & 16 OPPOSITE HAND

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

OPPOSITE HAND

8WF17 (24#) 8WF17 (24#) 8WF17 (24#) 8WF17 (24#) 8WF17 (24#) 8WF48 (72#)

X-BRACING

14WF

PART FRAMING PLAN

N.T.S.

LEGEND FOR SHEAR CONNECTORS

(52) INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

(9) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
80	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/20/63	JC HS
36	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. AMD. TO CONTRACT NAS9-4	8/8/63	JCW
11	A		REVISED STRUCTURAL FRAMING TO ACCOM. AMDT. TO CONT. NAS9-4	9/24/63	JCW
2	A		ADDED ℄S, WF & DIMENSIONS	9-?-63	
1	A		ADDED NOTE # 2	11/15/63	
2	A		REVISED TO CONFORM TO AMEND. #7	2-21-64	JCW
	A		AS BUILT	12/1/67	
	H		REVISED FOR F.R.D. INDEX	8/1/68	

℄ BLDG. ℄ TRANSFER AISLE

MATCH LINE SEE DWG. NO. S-3-028

STAIR #5 OPNG.

UTILITY OPNG.

STAIR #3 OPNG.

UTILITY OPNG.

UTILITY OPNG.

STAIR #1 OPNG.

ELEV. SHAFT #5

ELEV. SHAFT #3

ELEV. SHAFT #1

T/S. LEVEL 153'-3"

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065

FOR ELEVATOR GUIDES SEE SHT. 3-26 SIMILAR EXCEPT OPP. HAND

℄ BRACKET FOR GUIDE COL. ® LEVEL 145'-10" TYP. SEE DWG. S-3-172

SEE PART FRAMING PLAN ABOVE

STAIR #6 OPNG.

STAIR #4 OPNG.

STAIR #2 OPNG.

TOWER 'C'

TOWER 'B'

TOWER 'A'

LOW BAY BLDG.

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under this contract.

AS BUILT

APPROVED BY E.H. Tamlinson

DATE 12 DEC 1967

NOTE

1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE SHEET NO. S-3-088

△2. CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 13

1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 153'-9"
TOP OF STEEL-LEVEL 153'-5"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE

8 0 8 16 24 32 40

1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - McCRAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 13 - LEVEL 153'-9"

DWG. NO. ENG. (NASA) 64123-63-41 | SIZE F | FILE NO. 203-28.297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-029 | SHEET NO. 3-33

FERNANDEZ Drn by | HERRMANN Chkd by

A39.02.01.0AD5128.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

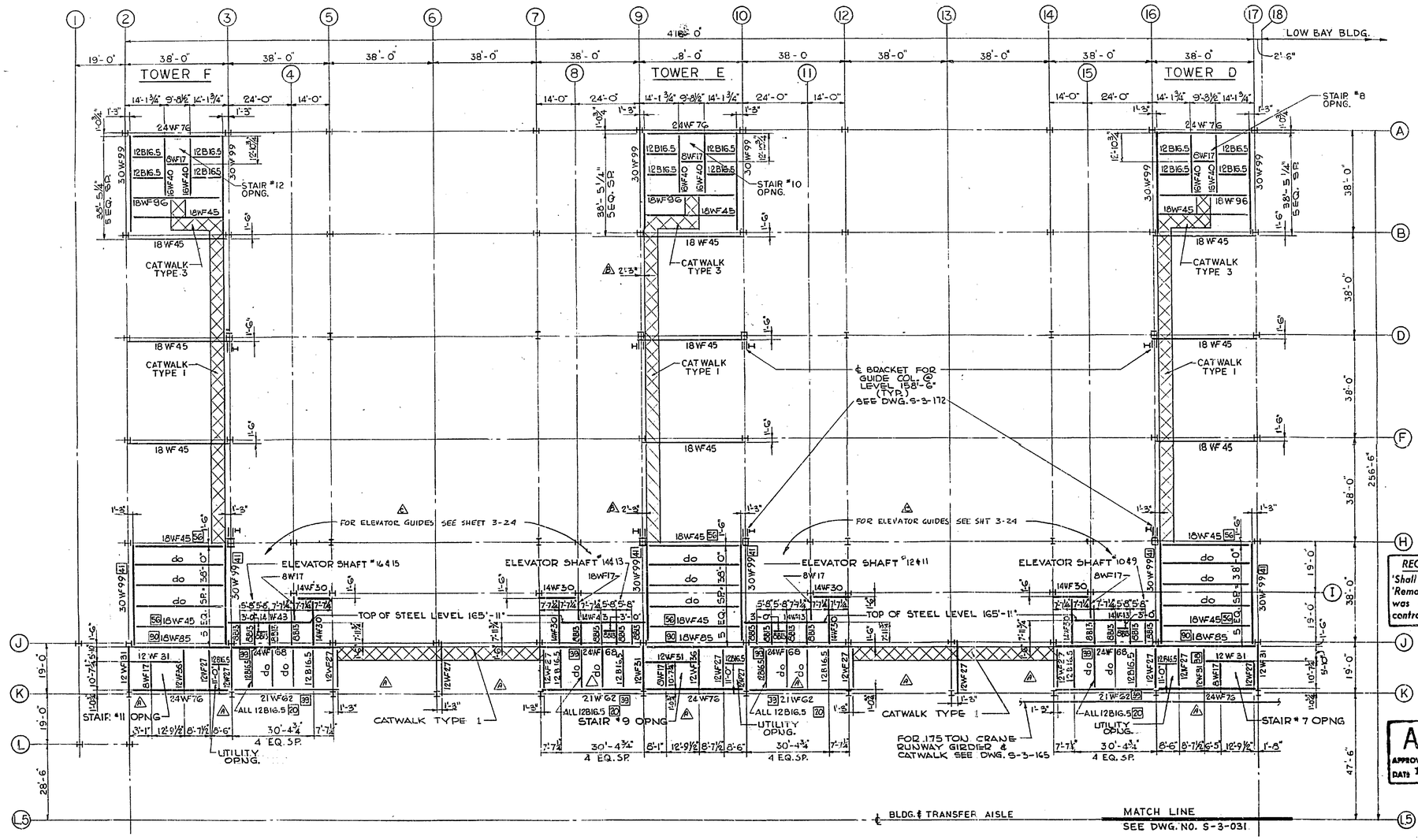
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEAD STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
9	A		TURNED COLUMNS	10/11/63	[illegible]
2	B		REVISED CATWALK DIMENSIONS	2/6/63	[illegible]
2	A		REVISED TO CONFORM TO AMEND. #7	5-24-64	[illegible]
	B		AS BUILT	12/4/67	
	E		REVISED FOR F.R.D. INDEX	2/6/68	[illegible]



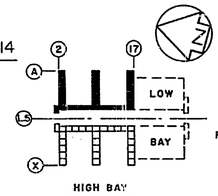
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 11 DEC 1967

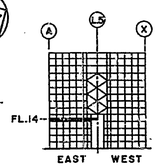
FRAMING PLAN AT FLOOR 14

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 166'-5"
TOP OF STEEL - LEVEL 166'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 14 - LEVEL 166'-5"

INV. NO. ENG. (NASA) 06-123-63-41 | SIZE F | FILE NO. 203-28.207
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-030 | SHEET NO. 3-34

TELLINI Dwn by | HERRMANN Ckd by

A39.02.01.0ADS129.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

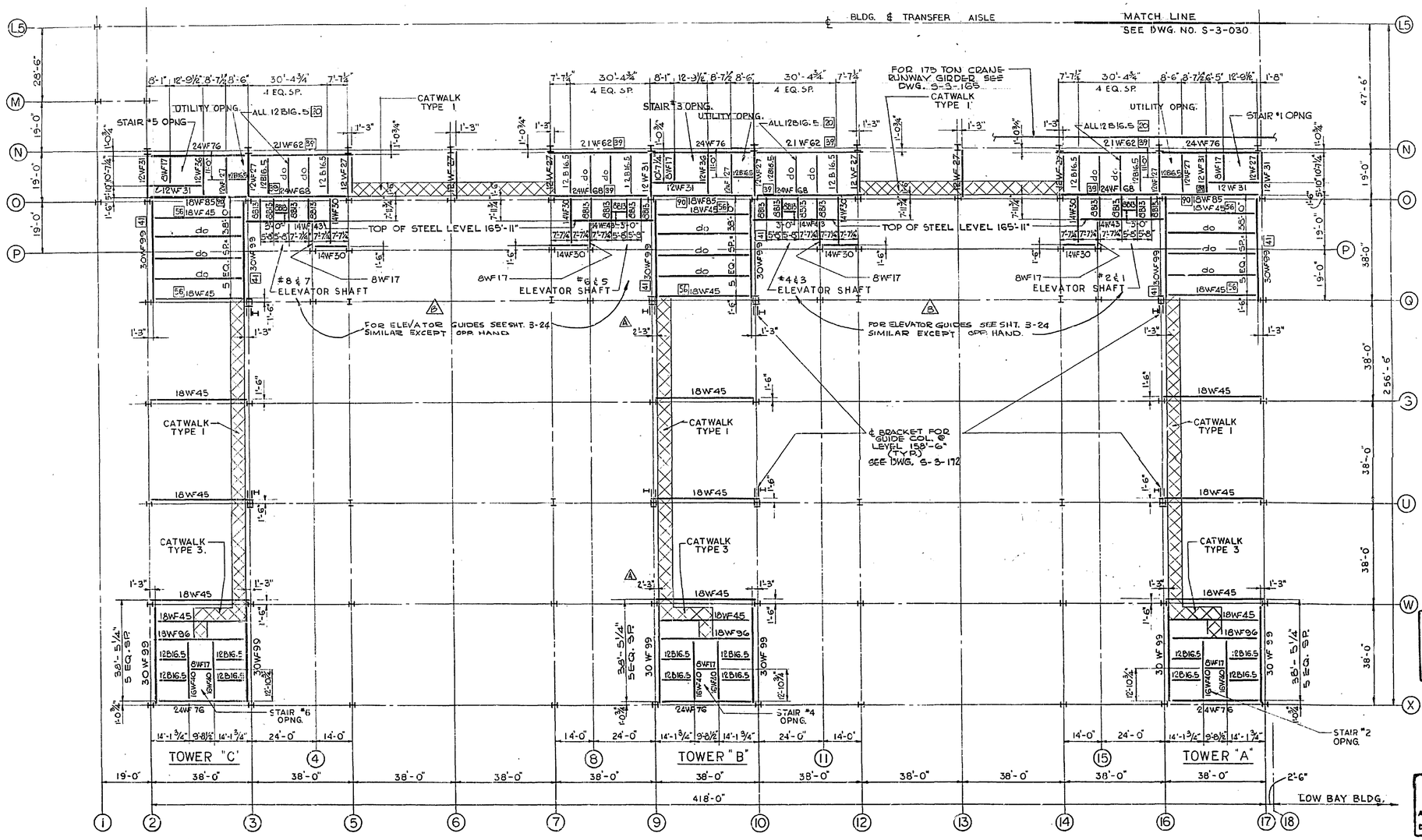
LEGEND FOR SHEAR CONNECTORS

[4] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED CATWALK DIMENSIONS	2/3/63	[illegible]
2	B		REVISED TO CONFORM TO AMEND. #7	4-24-64	[illegible]
	C		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

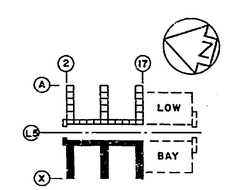


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

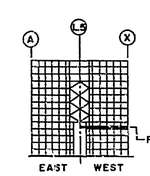
AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 14
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 166'-5"
TOP OF STEEL - LEVEL 166'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 14 - LEVEL 166'-5"

INV. NO. ENG. (NASA) 08-127-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-031
SHEET NO. 3-35

FELLINI Dwn by
HERRMANN Ckd by

A39.02.01.0ADS130.00

EXPORT CONTROL NOTICE: EAR 99

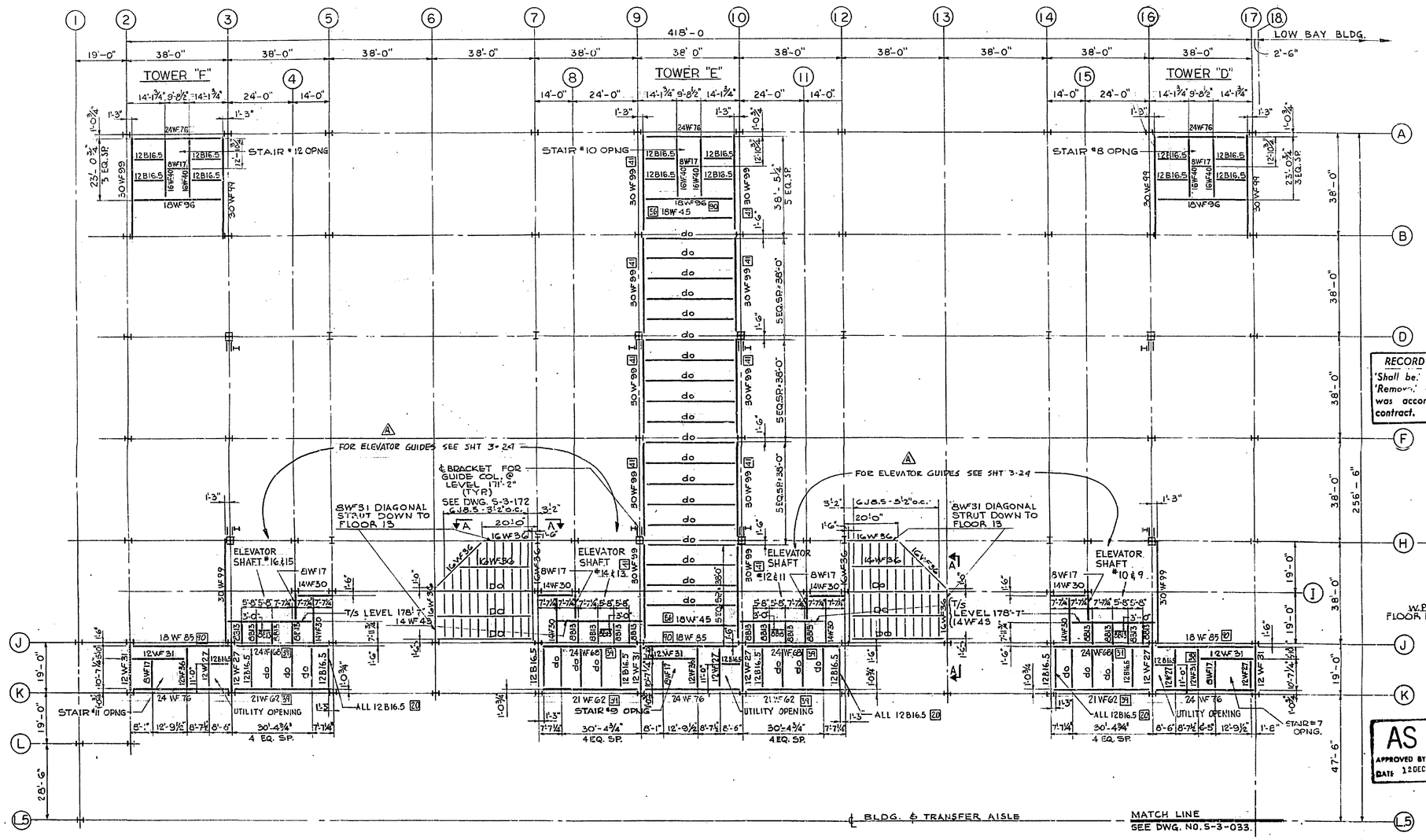
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS :

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

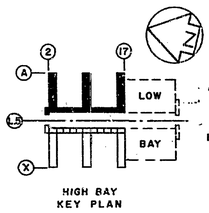
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	6-19-68	[illegible]
	B		AS BUILT	12/19/67	
	C		REVISED FOR F.R.D. INDEX	2/16/65	[illegible]



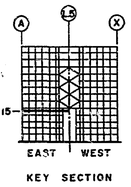
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

FRAMING PLAN AT FLOOR 15
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 179'-1"
TOP OF STEEL LEVEL 178'-9" UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URS/AMM - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 15 - LEVEL 179'-1"

INV. NO. ENG. (NASA) 08-122-63-41	SIZE F	FILE NO. 203-28.297
DATED: MAY 1963		
SCALE: AS NOTED	SECTION NO. S-3-032	SHEET NO. S-36

C/GLIANONE (Drn by) HERRMANN (Ckd by)

1 A39.02.01.0ADS131.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

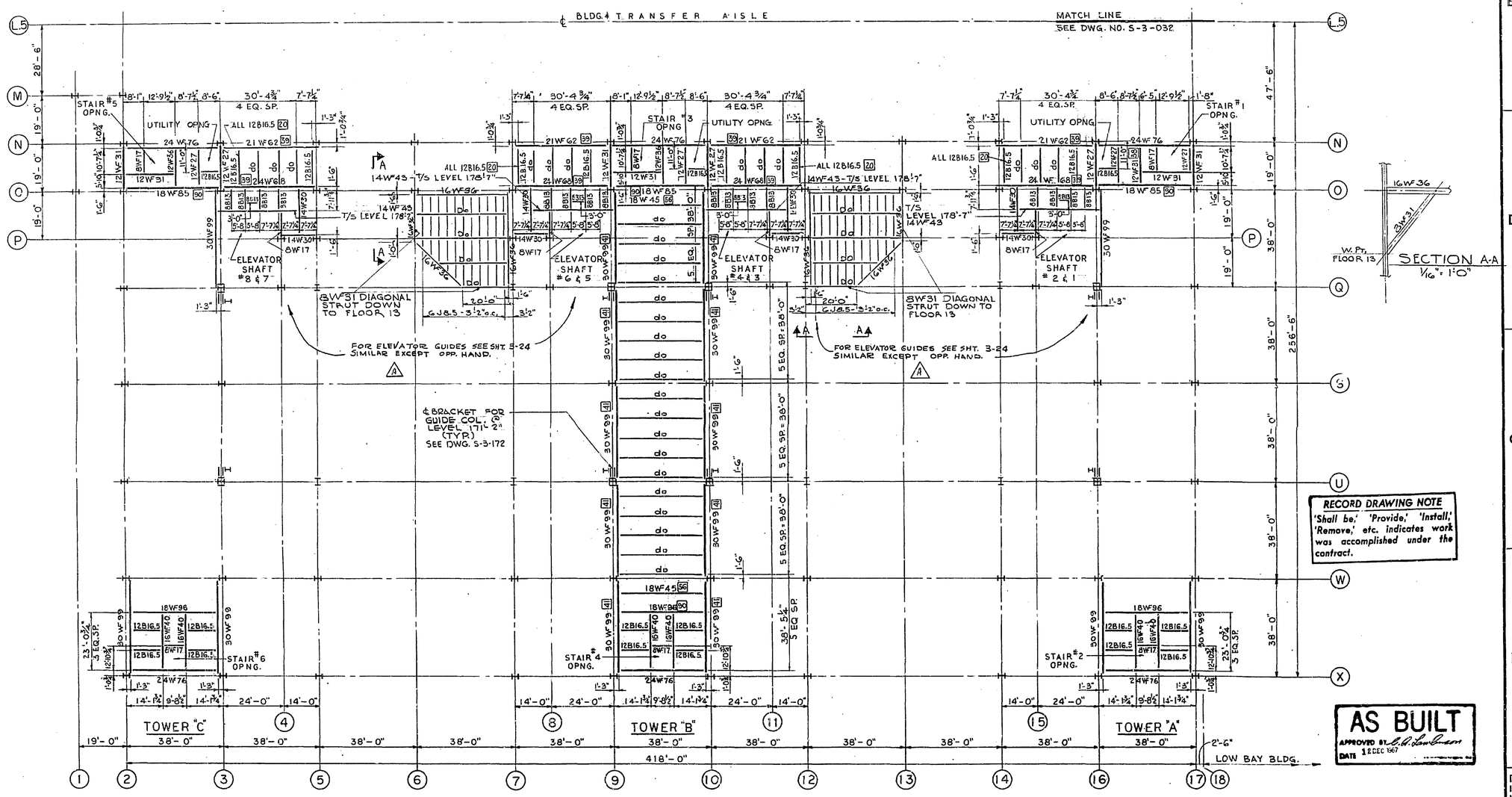
LEGEND FOR SHEAR CONNECTORS:

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	1-14-69	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

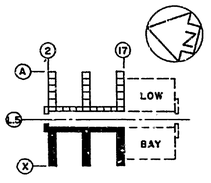


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

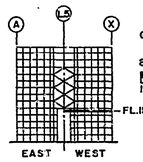
AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 15
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 179'-1"
TOP OF STEEL - LEVEL 178'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 15 - LEVEL 179'-1"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1953
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-033
SHEET NO. 3-37

CAGLIANONE Dwn by
HERRMANN Ckd by

A39.02.01.0ADS132.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

NOTE: 7 & 9, 14 & 16 OPPOSITE HAND

OPPOSITE HAND

8WF17 (44#) 8WF17 (44#) 8WF17 (44#) 8WF17 (44#) 8WF48 (48#) 8WF48 (48#)

14WF X-BRACING 28WF

PART FRAMING PLAN N.T.S.

LEGEND FOR SHEAR CONNECTORS:

(41) INDICATES NUMBER OF ¾"ø 3" THREADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

(30) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
92	4		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/20/63	JLHe
31	3		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MODS. TO CONTRACT NASA-B	8/9/63	JLHe
11	2		REVISED STRUCTURAL FRAMING TO ACCOMP. MODS. TO CONT. NAS2-B	8/26/63	JLHe
11	1		REVISED REVISION SYM. & ADDED WF's	10/11/63	JLHe
1	1		REVISED TO ADD 8WF24 MEMBER	10/31/63	JLHe
1	1		ADDED NOTE # 2	11/15/63	JLHe
2	4		REVISED TO CONFORM TO AMEND. # 7	4-28-64	JLHe
	4		AS BUILT	12/14/67	
	1		REVISED FOR F.R.D. INDEX	9/6/68	GA/JLH

TOWER F — TOWER E — TOWER D — LOW BAY BLDG.

418'-0" — 19'-0" — 38'-0" — 35'-0" — 2'-6"

STAIR #12 OPNG. — STAIR #10 OPNG. — STAIR #8 OPNG.

SEE PART FRAMING PLAN ABOVE

5 EQ. SP. = 38'-0" — 6 EQ. SP. — 24'-0" — 14'-0" — 14'-1¾" — 9'-8½" — 14'-1¾"

CATWALK TYPE 1 — CATWALK TYPE 2

FOR ELEVATOR GUIDES SEE SHT. 3-26

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. 5-3-065

℄ BRACKET FOR GUIDE COL. @ LEVEL 183'-10" (TYP.) SEE DWG 5-3-172

14 WF 30 (± 55) ELEVATOR SHAFT #14413 — ELEVATOR SHAFT #16415 — ELEVATOR SHAFT #12411

T/S LEVEL 191'-3" 12WF31

UTILITY OPNG. 5 EQ. SP. = 38'-0"

STAIR #11 OPNG. — STAIR #9 OPNG. — STAIR #7 OPNG.

MATCH LINE SEE DWG. NO. S-3-035

℄ BLDG & TRANSFER AISLE

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.A. Lawhorn
DATE 18 DEC 1967

NOTE:
1. FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN, SEE DWG. NO. S-3-088
2. CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 16

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 191'-9"
TOP OF STEEL - LEVEL 191'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN — KEY SECTION — EAST WEST — FL. 16 — LOW BAY

GRAPHIC SCALE 8 0 8 16 24 32 40 — 1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 342 FIFTH AVENUE, NEW YORK 19, NEW YORK — U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 16 - LEVEL 191'-9"

DWG. NO. ENG. (N.A.S.A.) 08-133-63-41 | SIZE F | FILE NO. 203-28, 097
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3 034 | SHEET NO. S-3 36

CAS 1170 Drn by | HERRMANN Ckd by

1 A39.02.01.0ADS133.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:
41 INDICATES NUMBER OF ¾" x 3" THREADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
59	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	5/26/63	J.L.H.
48	A		REVISED STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NAS8-5	8/8/63	J.L.H.
11	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NAS8-5	9/4/63	J.L.H.
2	A		REVISED TO CONFORM TO AMEND. #7	3-25-64	J.L.H.
	A		AS BUILT	12/14/67	
	F		REVISED FOR F.R.D. INDEX	2-1-68	G.G.L.

T/S SEE DWG NO. S-3-088

MATCH LINE SEE DWG. NO. S-3-034

BLDG. 6 TRANSFER AISLE

CATWALK TYPE 2

STAIR # 3 OPNG.

STAIR # 1 OPNG.

STAIR # 5 OPNG.

STAIR # 6 OPNG.

STAIR # 4 OPNG.

STAIR # 2 OPNG.

UTILITY OPNG.

ELEVATOR SHAFT #847

ELEVATOR SHAFT #643

ELEVATOR SHAFT #241

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG S-3-065

FOR ELEVATOR GUIDES SEE SHT. 3-26 - SIMILAR EXCEPT OPP. HAND.

4 BRACKET FOD GUIDE COL. LEVEL 183'-10" (TYP.) SEE DWG S-3-172

SEE PART FRAMING PLAN BELOW

TOWER C

TOWER B

TOWER A

LOW BAY AREA

NOTE:
FOR BEAM SIZES BETWEEN LINES 1 & 2 NOT SHOWN SEE DWG. NO. S-3-086

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.G. Lambram
DATE 12 DEC 1967

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

OPPOSITE HAND

NOTE - 7 & 9, 14 & 16 OPPOSITE HAND

X-BRACING

PART FRAMING PLAN
N.T.S.

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM

FRAMING PLAN AT FLOOR 16
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 191'-9"
TOP OF STEEL LEVEL 191'-5"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN

EAST WEST
KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
442 FIFTH AVENUE
NEW YORK 17, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 16 - LEVEL 191'-9"

CASSITTO Dwn by	HERMANN Ckd by	INV. NO. ENG. (NASA) 66-113-63-41	SIZE F
		DATED: MAY 1963	FILE NO. 203-28,237
		SCALE: AS NOTED	SECTION NO. S-3-035
			SHEET NO. 3-33

A39.02.01.0ADS134.00

EXPORT CONTROL NOTICE: EAR 99

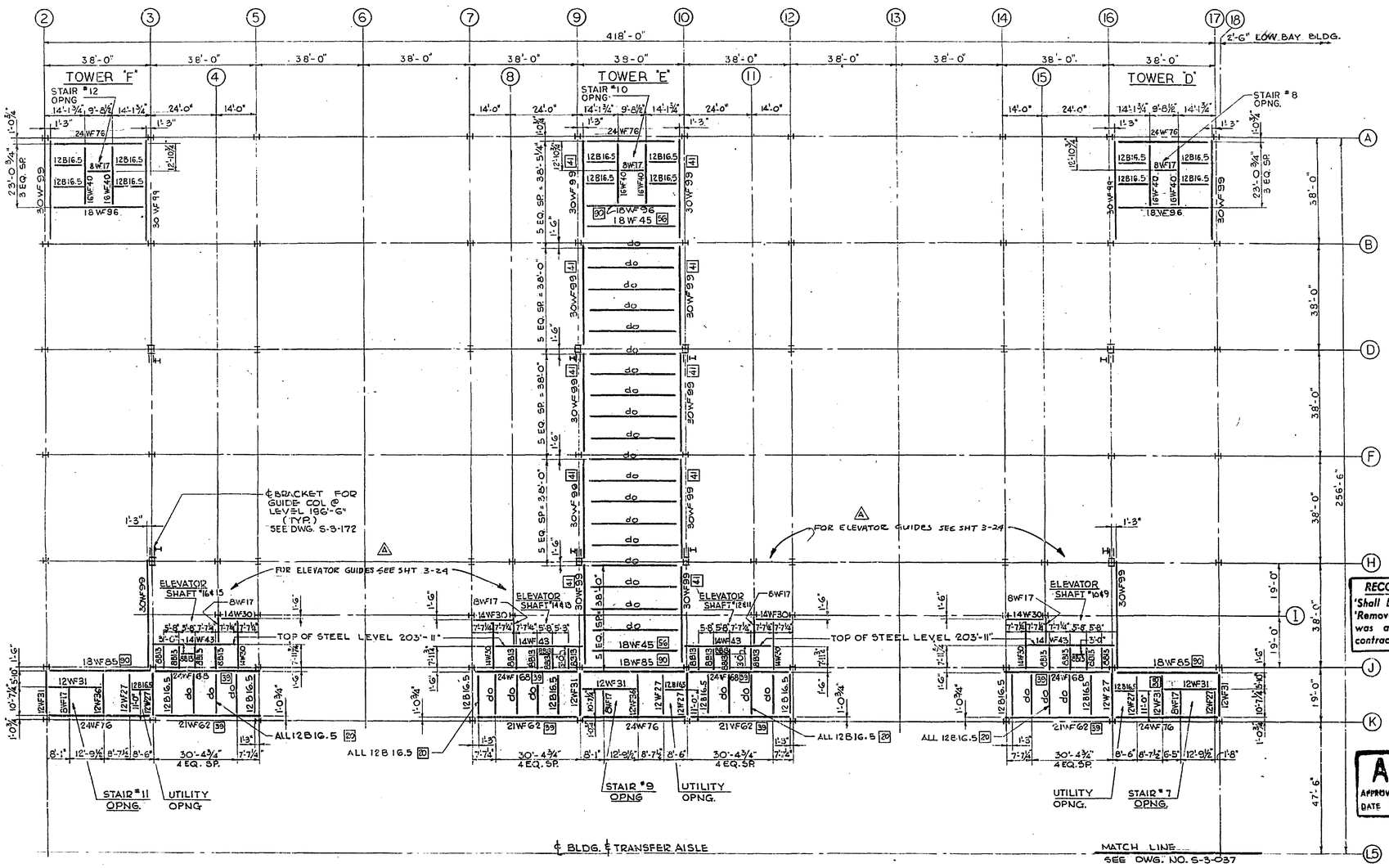
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[D] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. 7	4-30-69	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

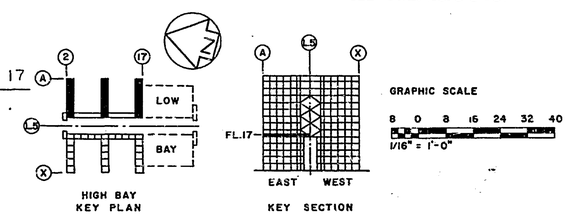


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 17
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 204'-5"
TOP OF STEEL LEVEL 204'-1"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 17 - LEVEL 204'-5"

INV. NO. ENG. (NASA) 08-123-63-41	SIZE F	FILE NO. 203-28,297	
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S 3-036	SHEET NO. 3-40	

FELLINI Dwn by | HERRMANN Chk by

A39.02.01.0ADS135.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

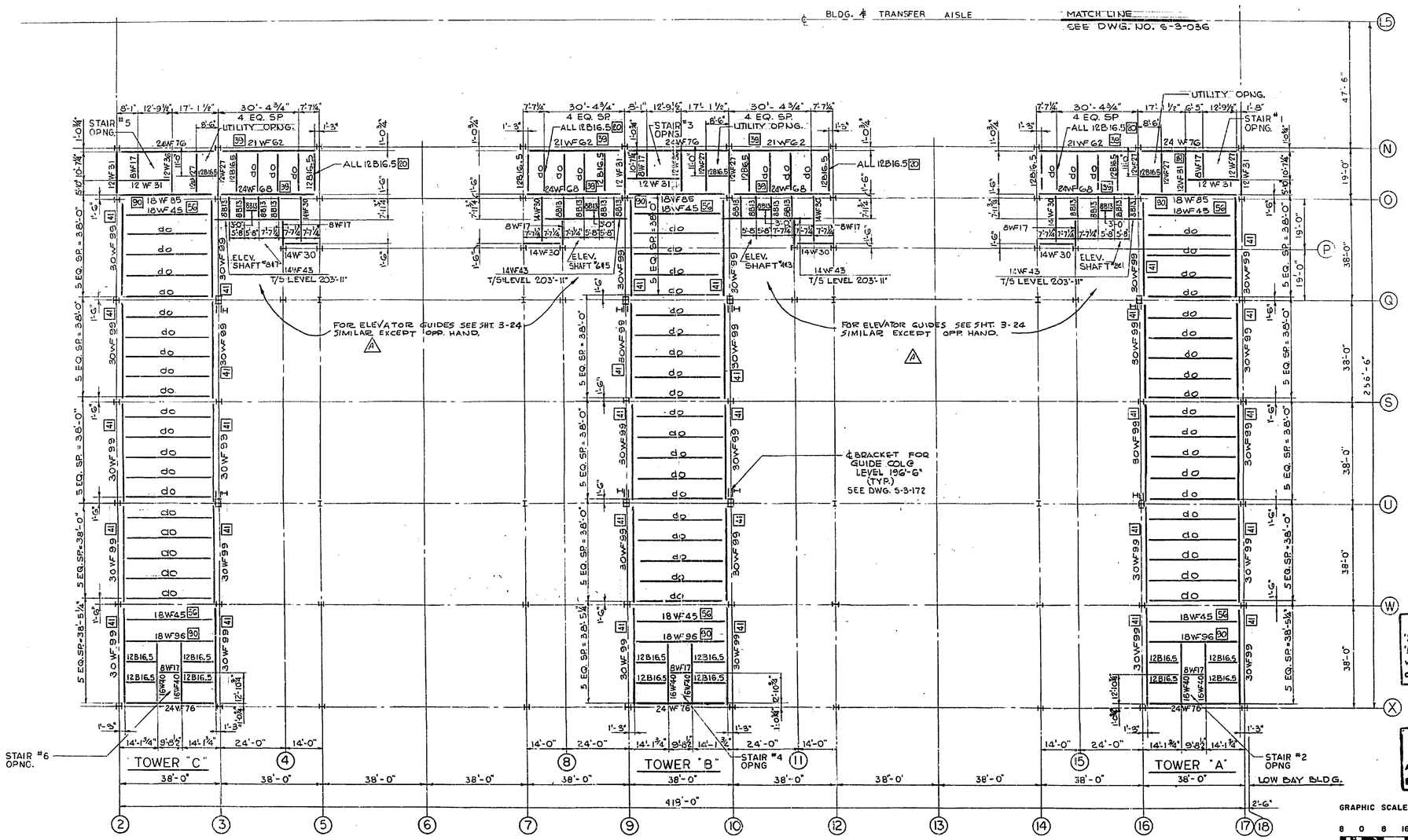
LEGEND FOR SHEAR CONNECTORS

[56] INDICATES NUMBER OF 3/4"×3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[41] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-28-68	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/6/68	[illegible]



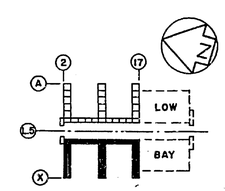
RECORD DRAWING NOTE
'Shall i.e.' 'Provide,' 'Install,' 'Remove, etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

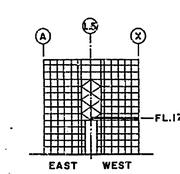
GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

FRAMING PLAN AT FLOOR 17
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 204'-5"
TOP OF STEEL - LEVEL 204'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 17 - LEVEL 204'-5"

INV. NO. ENG. (NASA) 06-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-037
SHEET NO. 3-41

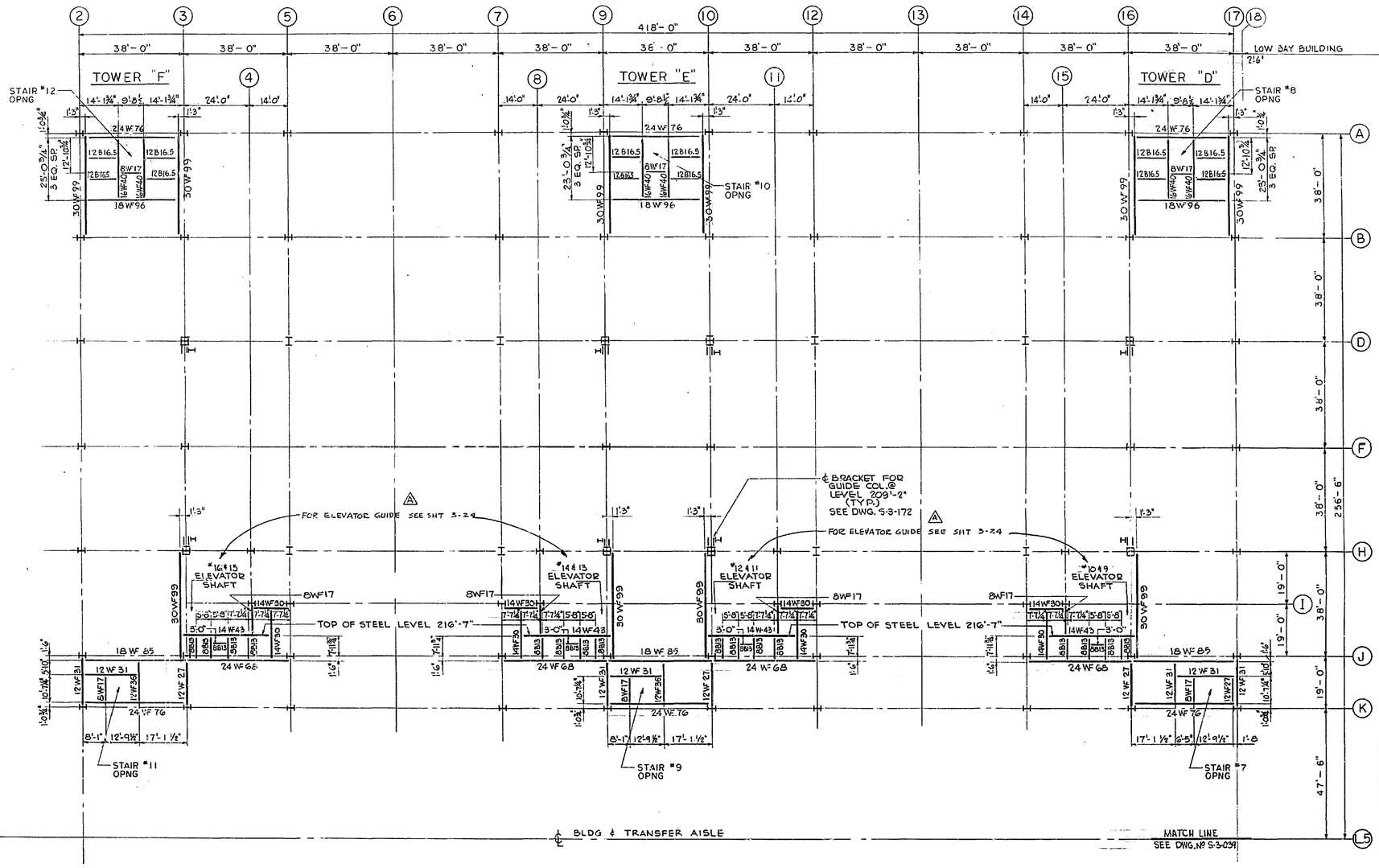
FELLINI Dwn by
HERRMANN Ckd by

A39.02.01.0ADS136.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND #7	6-21-68	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-66	[illegible]

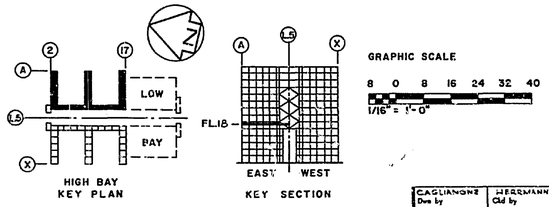


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 18
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 217'-1"
TOP OF STEEL - LEVEL 216'-9"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
442 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 18 - LEVEL 217'-1"

INV. NO. ENG. (NASA) 08-123 63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S 3 038
SHEET NO. 3 42

CAGLIANONE Dwn by
HERRMANN Ckd by

A39-02.01.0ADS137.00

EXPORT CONTROL NOTICE: EAR 99

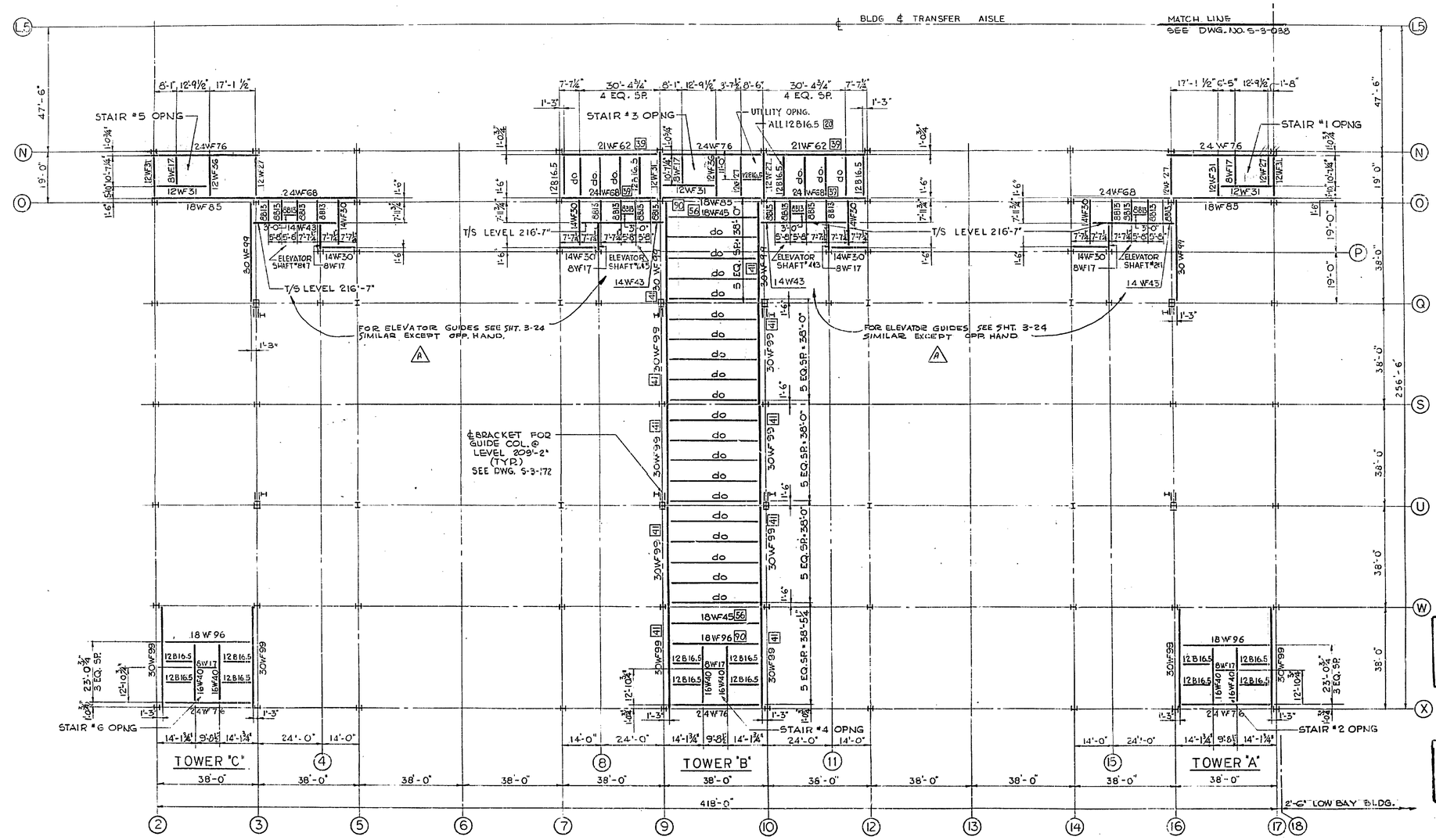
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:

[4] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-24-64	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

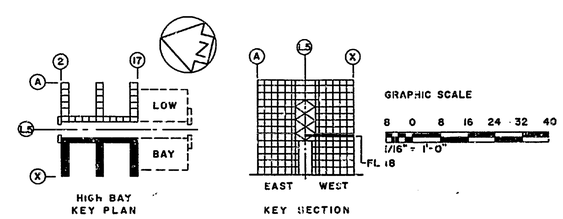


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 18
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 217'-1"
TOP OF STEEL - LEVEL 216'-9"
UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
442 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 18 - LEVEL 217'-1"

INV. NO. ENG.(NASA)06-123-53-41
DATED: MAY 1963
SIZE F
FILE NO. 203 28.297
SCALE: AS NOTED
SECTION NO. S-3 039
SHEET NO. 3-43

FELLINI Dwn by
HERRMANN Ckd by

A39.02.01.0ADS138.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

NOTE 7 & 9, 14 & 16 OPPOSITE HAND

PART FRAMING PLAN M.F.S.

LEGEND FOR SHEAR CONNECTORS

62 INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONC. SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

16 INDICATES REACTIONS TO BE PROVIDED FOR

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
66			REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	
34			REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. AMEND. 6 SPECIFICATIONS NOS. 8	6/6/63	
11			REVISED TO CONFORM TO FRAMING TO ACCOM.	2/14/63	
1			ADDED ½ BEAM	10/11/62	
1			ADDED NOTE AT BOTTOM OF SHEET	11/5/62	
2			ADDED ADDITIONAL FRAMING	1-24-62	
24			REVISED TO CONFORM TO AMEND. #7	9-14-62	
			AS BUILT	12/1/67	
	J		REVISED FOR F.R.D. INDEX	8/1/68	

TOWER 'F' — TOWER 'E' — TOWER 'D'

STAIR #12 OPNG. — STAIR #10 OPNG. — STAIR #8 OPNG.

SEE PART FRAMING PLAN ABOVE

FOR ELEVATOR GUIDES SEE SHT. 3-26

FOR ADDIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. 5-3-065

ELEVATOR SHAFT #16 & 15 — ELEVATOR SHAFT #14 & 13 — ELEVATOR SHAFT #12 & 11 — ELEVATOR SHAFT #10 & 9

T/S LEVEL 229'-3"

STAIR #11 OPNG. — STAIR #9 OPNG. — STAIR #7 OPNG

UTILITY OPNG. — DIAG. BRACING

BLDG. & TRANSFER AISLE

MATCH LINE SEE DWG. No. S-3-041

℄ BRACKET FOR GUIDE COL. @ LEVEL 221'-10" (TYP.) SEE DWG. S-3-172

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT APPROVED BY G.C. Lambertson DATE 18 DEC 1967

NOTE: CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 19

1/16" = 1'-0"

NOTE: FIN. FLOOR = LEVEL 229'-9"
TOP OF STEEL LEVEL 229'-5" UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN — KEY SECTION — GRAPHIC SCALE 1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 19 - LEVEL 229'-3"

INV. NO. ENG. (NASA) 06-123-63-41 | SIZE F | FILE NO. 213-28.297
DATED: MAY 1963 | SCALE: AS NOTED | SECTION NO. S 3 040 | SHEET NO. S-64

YELLIN Drawn by | MERRMANN Ckd by

A39.02.01.OADS139.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

NOTE: 7 & 9, 14 & 16 OPPOSITE HAND

X-BRACING

8WF35 (±187)

8WF48 (±143) 8WF67 (±99) 8WF58 (±119) 8WF40 (±171) 8WF31 (±215)

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS

(33) INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT F.O. MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

(33) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS, ARE STAGGERED ON 3½" GAGE.

[15] INDICATES REACTIONS TO BE PROVIDED FOR. (E)

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
51	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/14/63	JWC
38	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOM. MOD. TO CONTRACT NASA-6	6/10/63	JWC
	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-6	4/26/63	JWC
1	A		ADDED NOTE REGARDING STRUCTURAL TEES	11/5/63	JWC
2	A		ADDED ADDITIONAL FRAMING	2-24-64	JWC
2	A		REVISED TO CONFORM TO AMEND. # 7	8-4-64	JWC
	H		REVISED FOR F.R.D. INDEX	1-6-65	JWC

E H P "W"

20'-0" 7'-0" 11'-0"

2 PL 4x3x3/8

14WF43

5 EQ. SP. = 38'-0"

5 EQ. SP. = 38'-0" 8'-1" 12'-9½" 8'-7½" 8'-6" 5 EQ. SP. = 38'-0"

℄ OF BUILDING & TRANSFER AISLE

MATCH LINE SEE DWG. S-3-040

STAIR #3 OPNG.

UTILITY OPNG.

DIAG. BRACING.

STAIR #1 OPNG.

ELEVATOR SHAFT #261

ELEVATOR SHAFT #262

FOR ADDITIONAL CAT WALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065

FOR ELEVATOR GUIDE SEE SHT. S-26 - SIMILAR EXCEPT OPP. HAND

℄ BRACKET FOR GUIDE COL. @ LEVEL 224'-0" (TY.P.) SEE DWG. S-3-172

℄ BRACKET FOR GUIDE COL. @ LEVEL 221'-10" (TY.P.) SEE DWG. S-3-172

SEE PART FRAMING PLAN ABOVE

STAIR #6 OPNG.

STAIR OPNG.

STAIR #2 OPNG.

TOWER "C" 38'-0"

TOWER "B" 38'-0"

TOWER "A" 38'-0"

12'-6" LOW BAY BLDG.

418'-0"

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NOTE:
△ CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 19

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 229'-5"
TOP OF STEEL LEVEL 229'-5" UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYS-MORAN 342 FIFTH AVENUE NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 19 -- LEVEL 229'-9"

INV. NO. ENG. (N.A.S.A.) 06-123-63-41	SIZE	FILE NO.	
DATE: MAY 1963	F	203-28.297	
SCALE: AS NOTED	SECTION NO. S 2-041	SHEET NO. 3-45	

HOTZ Drn by | HERRMANN Chd by

A02.00.01.0A0S1140.00

EXPORT CONTROL NOTICE: EAR 99

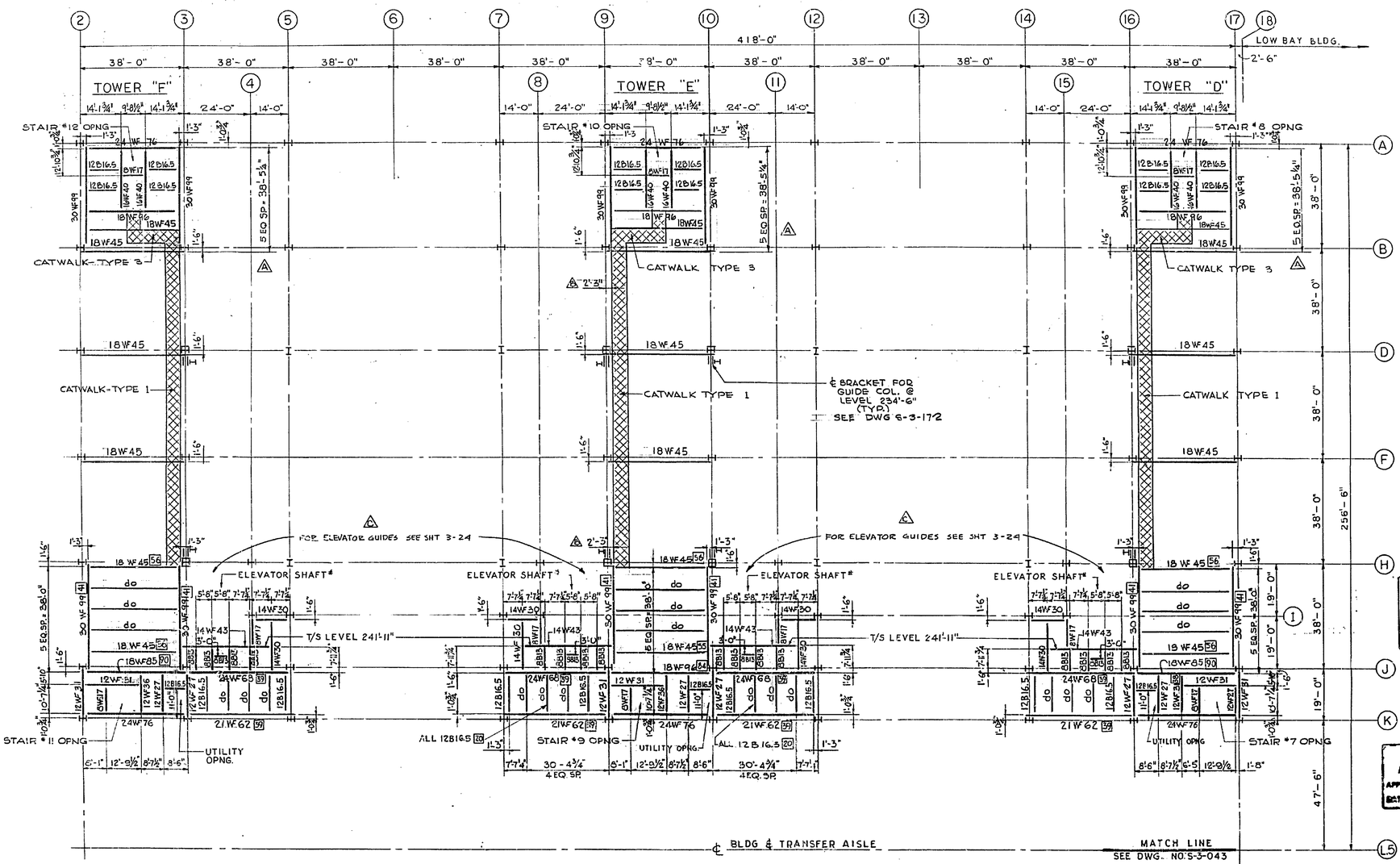
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF ¾"x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[B] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
3	A		REVISED STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. 2224.2	9/11/63	JDCJ
2	A		REVISED CATWALK DIMENSIONS	4/3/63	JDCJ
2	A		REVISED TO CONFORM TO AMEND. # 7	6-14-68	JWJ
	A		AS BUILT	12/1967	
	F		REVISED FOR F.R.D. INDEX	6/1/63	GEHL



RECORD DRAWING NOTE

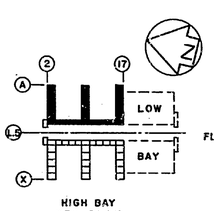
'Shall be,' 'Provide,' 'Install,' 'Remove' etc. indicates work was accomplished under the contract.

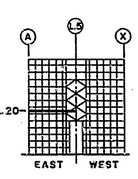
AS BUILT
APPROVED BY C.D. Lambert
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 20

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 242'-5"
TOP OF STEEL LEVEL 242'-1"
UNLESS OTHERWISE NOTED





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 20 - LEVEL 242'-8"

INV. NO. ENG. (NASA) 08-123-63-41		SIZE	FILE NO.
DATED: MAY 1963		F	203-28.297
SCALE: AS NOTED	SECTION NO. 3-3-042	SHEET NO. 3-46	

CAGLIANONE Des by | HEERMANN Chd by

1 A39.02.01.OADS141.00

EXPORT CONTROL NOTICE: EAR 99

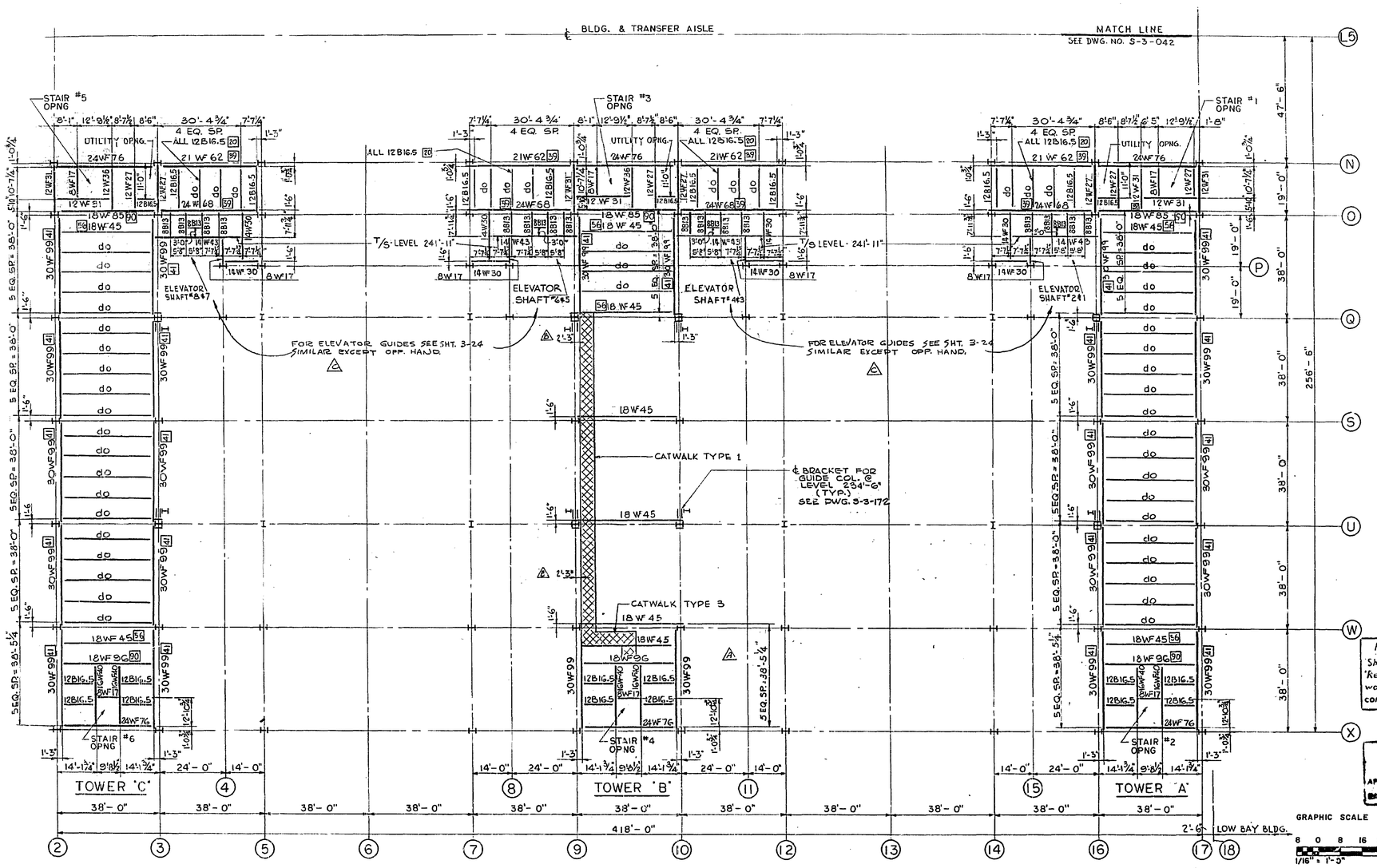
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
1	A		REVISED STRUCTURE TO AGREE WITH REVISED MOD. 50 CONTRACT PLANS & MISC. CHANGES	4/11/63	JSW
2	B		REVISED CATWALK DIMENSIONS	5/6/63	JSW
3	C		REVISED TO CONFORM TO AMEND. #7	7-15-63	JSW
	D		AS BUILT	12/6/67	
	E		REVISED FOR F.R.D. INDEX	2/6/68	



RECORD DRAWING NOTE

Shall be 'Provide,' 'Install,' 'Re[illegible]' indicates work to be accomplished under the contract.

AS BUILT

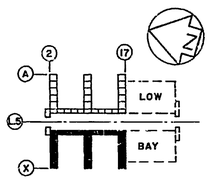
APPROVED BY [illegible]

DATE 12 DEC 1967

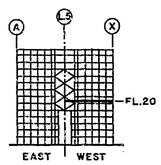
FRAMING PLAN AT FLOOR 20

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 242'-5"
TOP OF STEEL - LEVEL 242'-1"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 342 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 20 - LEVEL 242'-5"

INV. NO. ENG. (NASA) 08123-63-41		SIZE F	FILE NO. 203-28,297
DATE: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-045	SHEET NO. 3-47	
CAGLIANONE Drn by	HERRMANN Ckd by		

A39.02.01.0ADS142.00

EXPORT CONTROL NOTICE: EAR 99

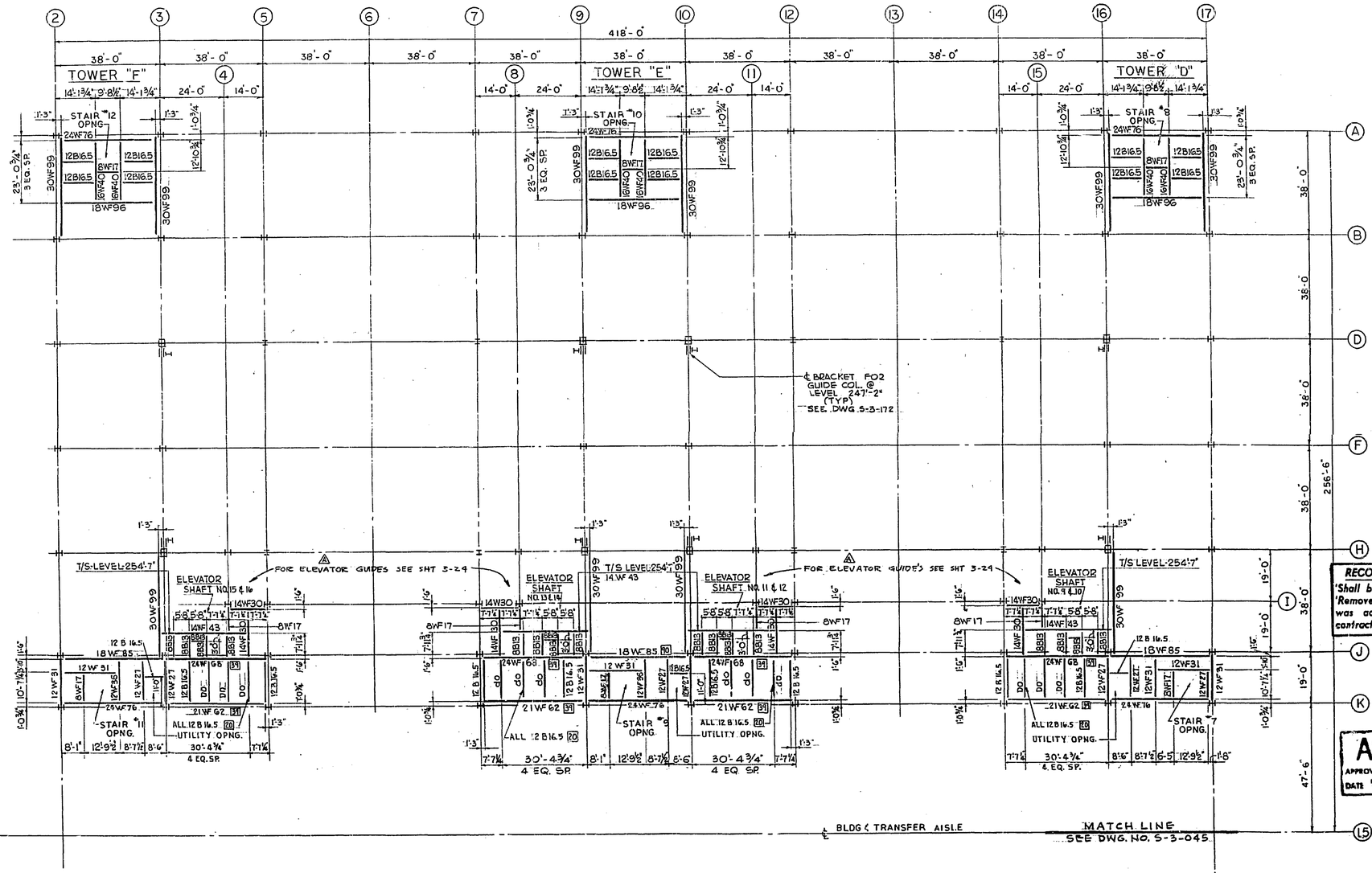
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[74] INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[74] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

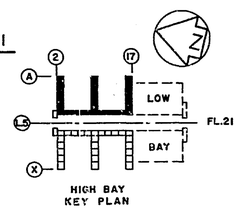
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	2		REVISED TO CONFORM TO AMEND. #7	4-17-68	[illegible]
	1		AS BUILT	12/14/67	
	C		REVISED FOR F.R.D. INDEX	[illegible]	



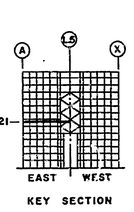
FRAMING PLAN AT FLOOR 21

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 255'-1"
TOP OF STEEL - LEVEL 254'-9"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 22 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
445 FIFTH AVENUE
NEW YORK 17, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.

LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 21 - LEVEL 255'-1"

INV. NO. ENG. (NASA) 08-123-63-41	SIZE	FILE NO.
DATED: MAY 1963	F	203-28, 297
SCALE: AS NOTED	SECTION NO. S-3-044	SHEET NO. S-48

FELLINI Drn by | MEERMANS Ckd by

A39.02.01.0ADS608.00

EXPORT CONTROL NOTICE: EAR 99

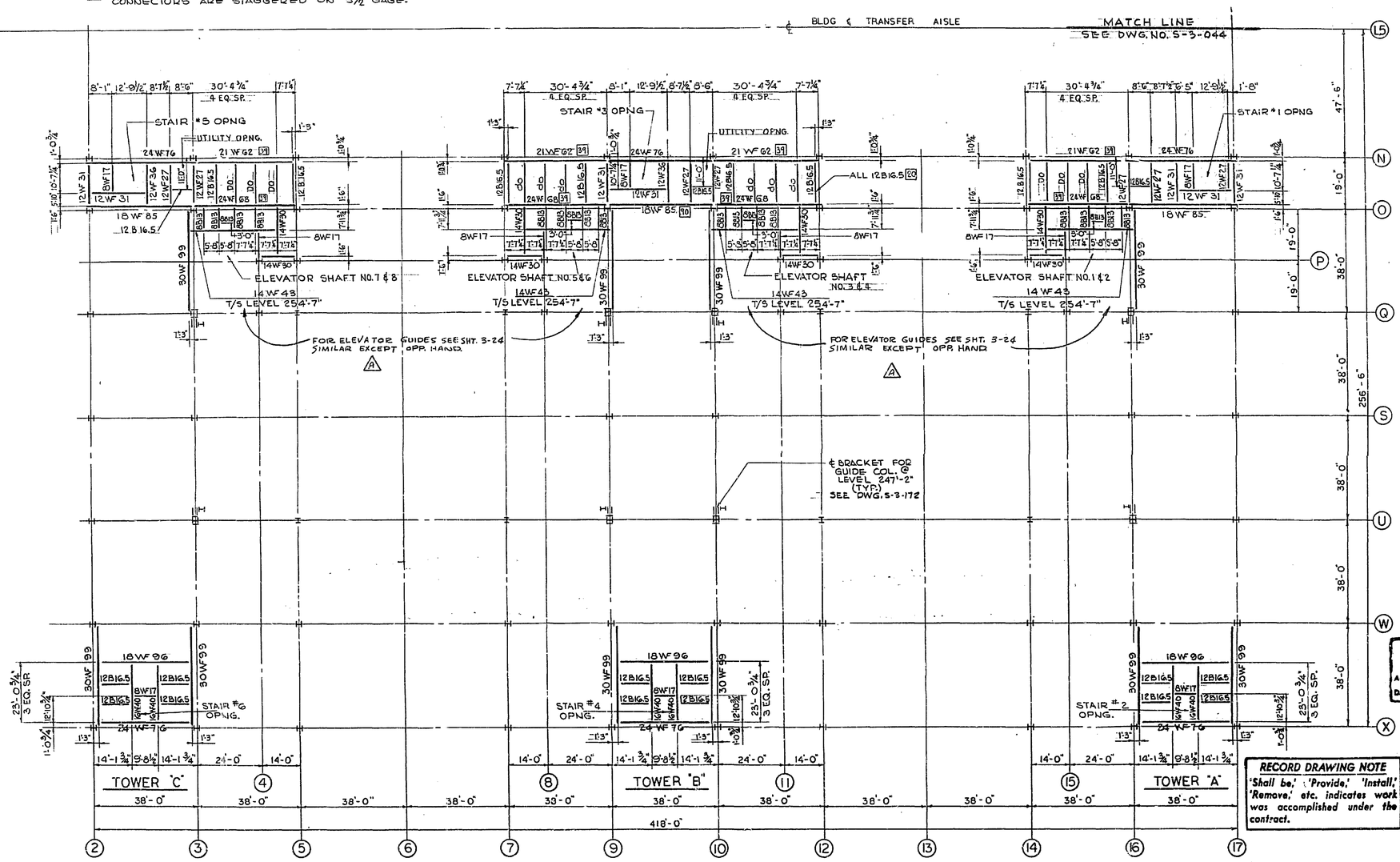
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] IDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-24-68	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/4/68	[illegible]

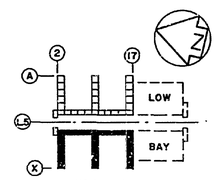


AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

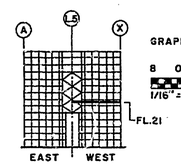
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

FRAMING PLAN AT FLOOR 21
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 255'-1"
TOP OF STEEL - LEVEL 254'-9" UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 21 - LEVEL 255'-1"

INV. NO. ENG. (NASA) DE-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-20,297
SCALE: AS NOTED
SECTION NO. S-3-045
SHEET NO. 3-49

CAGLIANONE Dwn by
HERRMANN Chk by

A39.02.01.CADS609.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A-2		REVISED To ACCOMPANY AMENDMENT No. 7	6/28/63	J.J.H.
30	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMM. MOD. TO CONTRACT NAS4-8	8/9/63	JJH
11	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NAS4-8	9/26/63	JJH
1	A		ADDED NOTE	11/15/63	JJH
2	A		REVISED TO CONFORM TO AMEND. # 7	5-12-64	JJH
	A		AS BUILT	12/14/67	
	A		REVISED FOR F.R.D. INDEX	2/6/68	G. Miller

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM. A

PART FRAMING PLAN (N.T.S.)

NOTE- 7 & 9, 14 & 16 OPPOSITE HAND

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

50 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

TOWER "F" — TOWER "E" — TOWER "D"

STAIR #12 OPNG. — STAIR #10 OPNG. — STAIR #8 OPNG.

SEE PART FRAMING PLAN ABOVE

418'-0"

FOR ELEVATOR GUIDES SEE SHT. 3-26

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065

#15&16 ELEVATOR SHAFT — #13&14 ELEVATOR SHAFT — #11&12 ELEVATOR SHAFT — #9&10 ELEVATOR SHAFT

T/S LEVEL 267'-3"

STAIR #11 OPNG. — STAIR #9 OPNG. — STAIR #7 OPNG.

UTILITY OPNG

CATWALK TYPE 2

DIAGONAL BRACING

℄ BRACKET FOR GUIDE COL. @ LEVEL 259'-10" (TYP.)

MATCH LINE SEE DWG NO S-3-047

℄ BLDG. & TRANSFER AISLE

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT

APPROVED BY [illegible]

DATE 1ST DEC 1967

NOTE:

A CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 22

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 267'-9"
TOP OF STEEL - LEVEL 267'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN — KEY SECTION — GRAPHIC SCALE 1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SELLYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.

LC 39 VERTICAL ASSEMBLY BUILDING

HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 22 - LEVEL 267'-9"

INV. NO. ENG. [NASA]06-123-63 41 | SIZE F | FILE NO. 203.28, 297
DATED: MAY 1963 | SCALE: AS NOTED | SECTION NO. S-3 046 | SHEET NO. 3-30

CHOI Det. by | HERRMANN Ckd by

A39.02.01.OADS145.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8 WF 17 SHALL BE A 14 WF OF IDENTICAL WEIGHT AND 8 WF 48 SHALL BE A 14 WF 48 MINIMUM. C

PART FRAMING PLAN N.T.S.

OPPOSITE HAND X-BRACING A

MATCH LINE SEE DWG. S-3-046

LEGEND FOR SHEAR CONNECTORS: A

(41) INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

(38) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
88	A		GENERAL REVS. TO ACCOMP. AMEND. NO. 7	6/20/63	JLH
31	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMM. MOD. TO CRANE, MISC-B	9/18/63	JLH
11	A		REVISED STRUCTURAL FRAMING TO ACCOM. MOD. TO CRANE, MISC-B	9/26/63	JLH
1	A		ADDED NOTE	11/15/63	JLH
2	A		REVISED TO CONFORM TO AMEND. # 7	1/16/64	JLH
	A		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	7/16/68	S.H.W.

DIAGONAL BRACING

BLDG. & TRANSFER AISLE

CATWALK TYPE 2

STAIR #5 OPNG

UTILITY OPNG.

STAIR #3 OPNG

STAIR #1 OPNG.

STAIR #2 OPNG.

ELEVATOR SHAFT #748

ELEVATOR SHAFT #645

ELEVATOR SHAFT #443

ELEVATOR SHAFT #241

T/S LEVEL 267'-3"

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065

FOR ELEVATOR GUIDES SEE SHT. 3-26 SIMILAR EXCEPT OPP. HAND.

BRACKET FOR GUIDE COL. @ LEVEL 259'-10" (TYP.) SEE DWG. NO. S-3-172

SEE PART FRAMING PLAN ABOVE

TOWER "C" TOWER "B" TOWER "A"

418'-0"

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY: A.B. Lambuson
DATE 12 DEC 1967

NOTE:
A CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALLED OR EXCEEDED.

FRAMING PLAN AT FLOOR 22

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 267'-9"
TOP OF STEEL LEVEL 267'-5" UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE 8 0 8 16 24 32 40 — 1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 640 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 22 - LEVEL 267'-9"

Drn by FERNANDEZ	Chk'd by HEERMANS	INV. NO. ENG. (NASA) 09-123-63-01	SIZE F
		DATED: MAY 1963	FILE NO. 203-29,297
		SCALE: AS NOTED	SECTION NO. S-3-047 SHEET NO. 3-51

A39.02.01.0ADS146.00

EXPORT CONTROL NOTICE: EAR 99

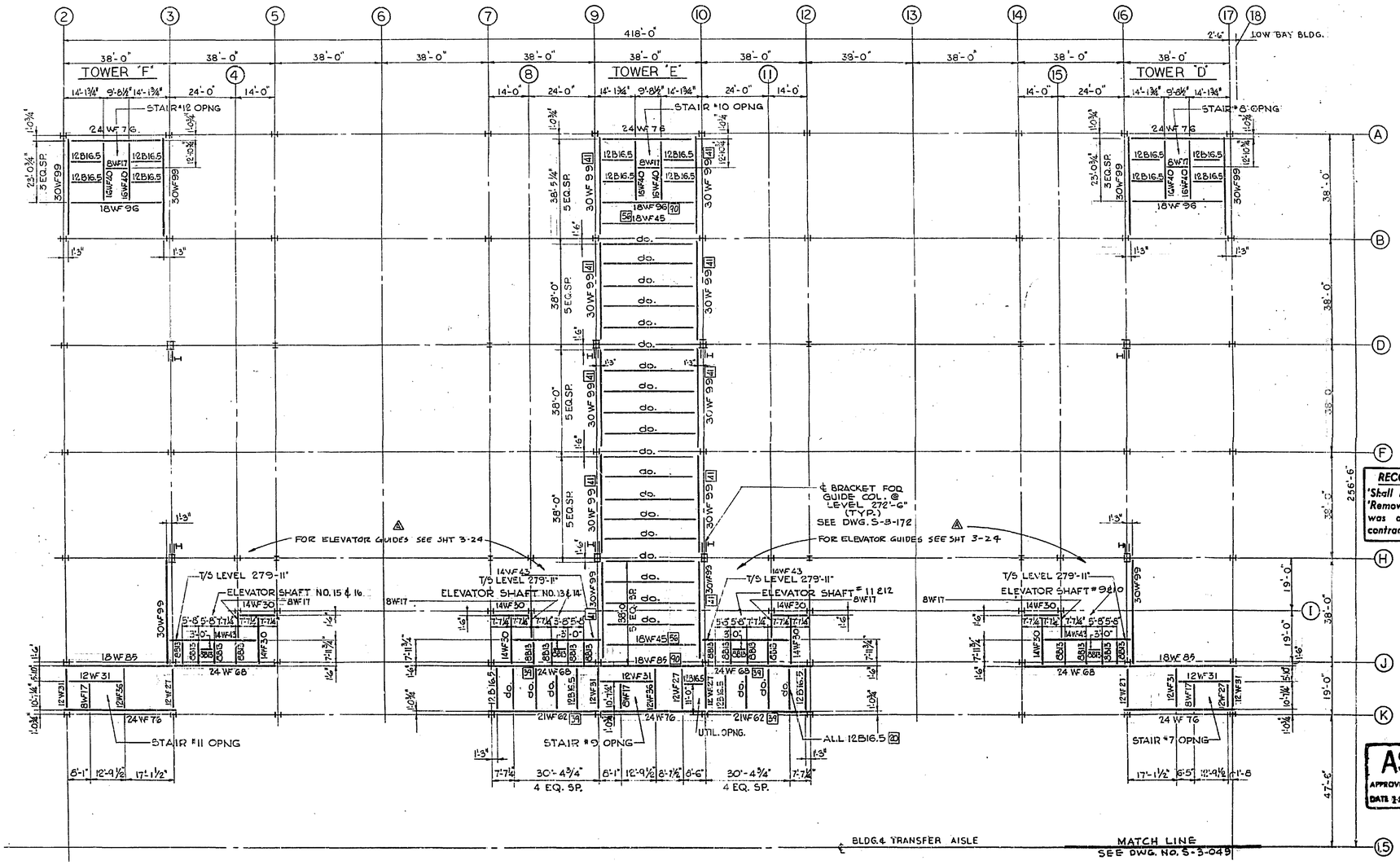
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[38] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[41] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	8-18-67	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-15-68	[illegible]



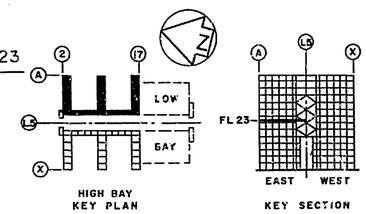
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C. R. Lambson
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 23

1/16" = 1'-0"

NOTE FIN. FLOOR - LEVEL 280'-5"
TOP OF STEEL - LEVEL 280'-1"
UNLESS OTHERWISE NOTED.



GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 23 - LEVEL 280'-5"

INV. NO. ENG. (NASA) 06-123-63-41	SIZE	FILE NO.	
DATED: MAY 1963	F	203-28,297	
SCALE: AS NOTED	SECTION NO. S-3-049	SHEET NO. 3-52	

FELLINI Dwn by | HERRMANN Chk by

A39.02.01.0ADS606.00

EXPORT CONTROL NOTICE: EAR 99

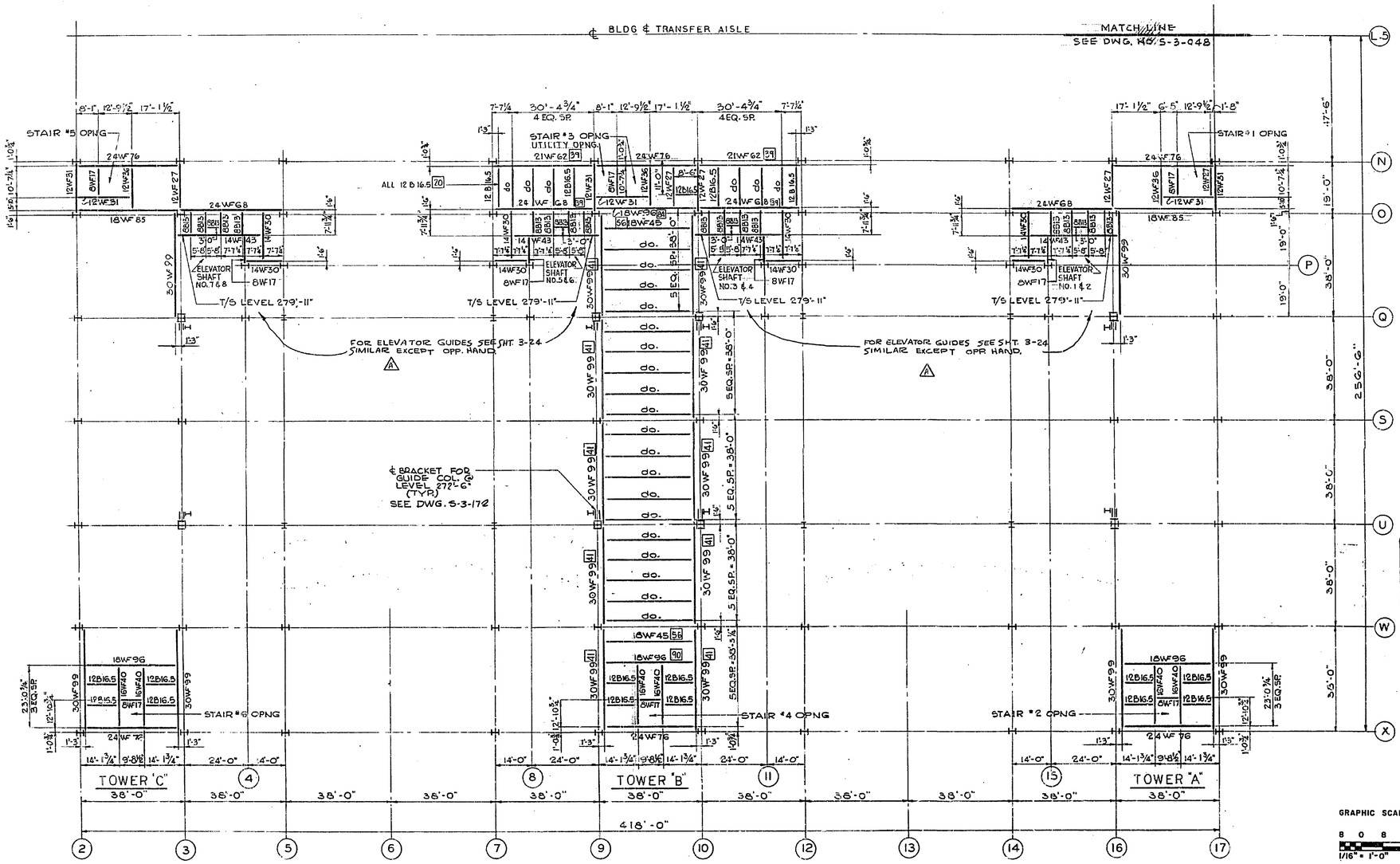
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-24-66	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



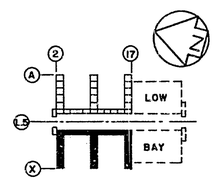
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

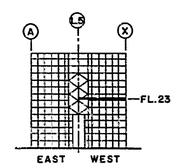
GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

FRAMING PLAN AT FLOOR 23
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 280'-5"
TOP OF STEEL LEVEL 283'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 23 - LEVEL 280'-5"

INV. NO. ENG. (NASA) 08-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-049 | SHEET NO. 3-53

FERNANDEZ | HERRMANN

A39.02.01.0A05607.00

EXPORT CONTROL NOTICE: EAR 99

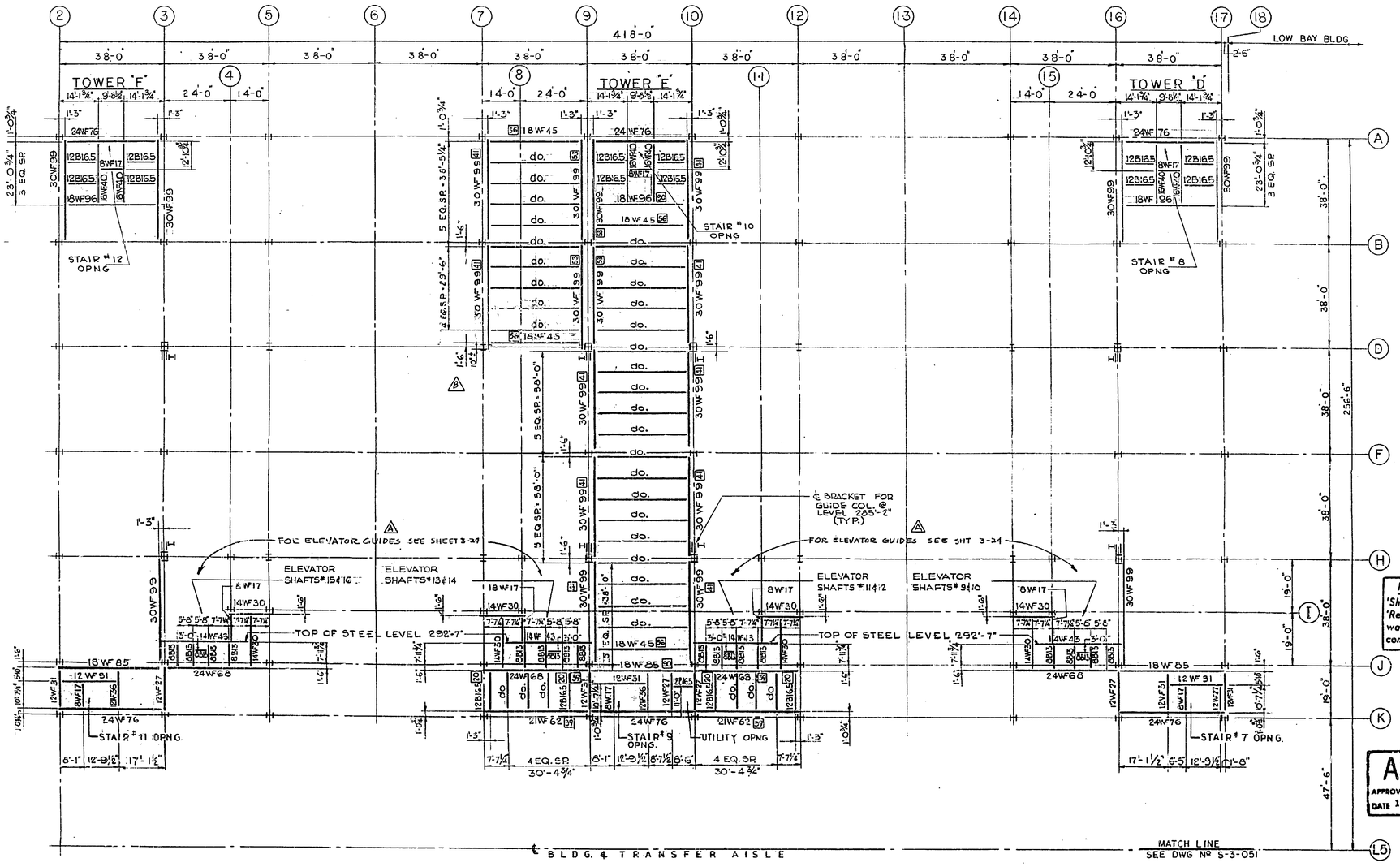
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-28-66	[illegible]
1	B	C-3 C-4	REVISED HIGH-BAY FRAMING TOWER E TO ACCOMPANY MOD. TO CONTRACT NASA-61	1-20-65	[illegible]
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



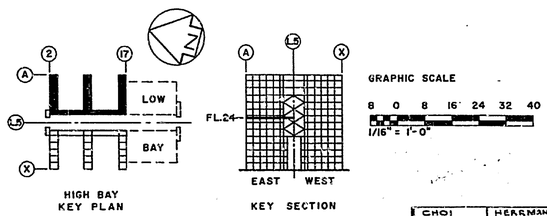
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 24

1/16" = 1'-0"

NOTE: FIN. FLOOR—LEVEL 293'-1"
TOP OF STEEL—LEVEL 292'-9" UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELTE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 24 - LEVEL 293'-1"

INV. NO. ENG. (NASA) 08-123-63-41 DATED: MAY 1963	SIZE F	FILE NO. 2011-28,297	
SCALE: AS NOTED	SECTION NO. S-3-050	SHEET NO. 3-54	

CHOI Dwn by | HERRMANN Ckd by

A39.02.01.0ADS 49.00

EXPORT CONTROL NOTICE: EAR 99

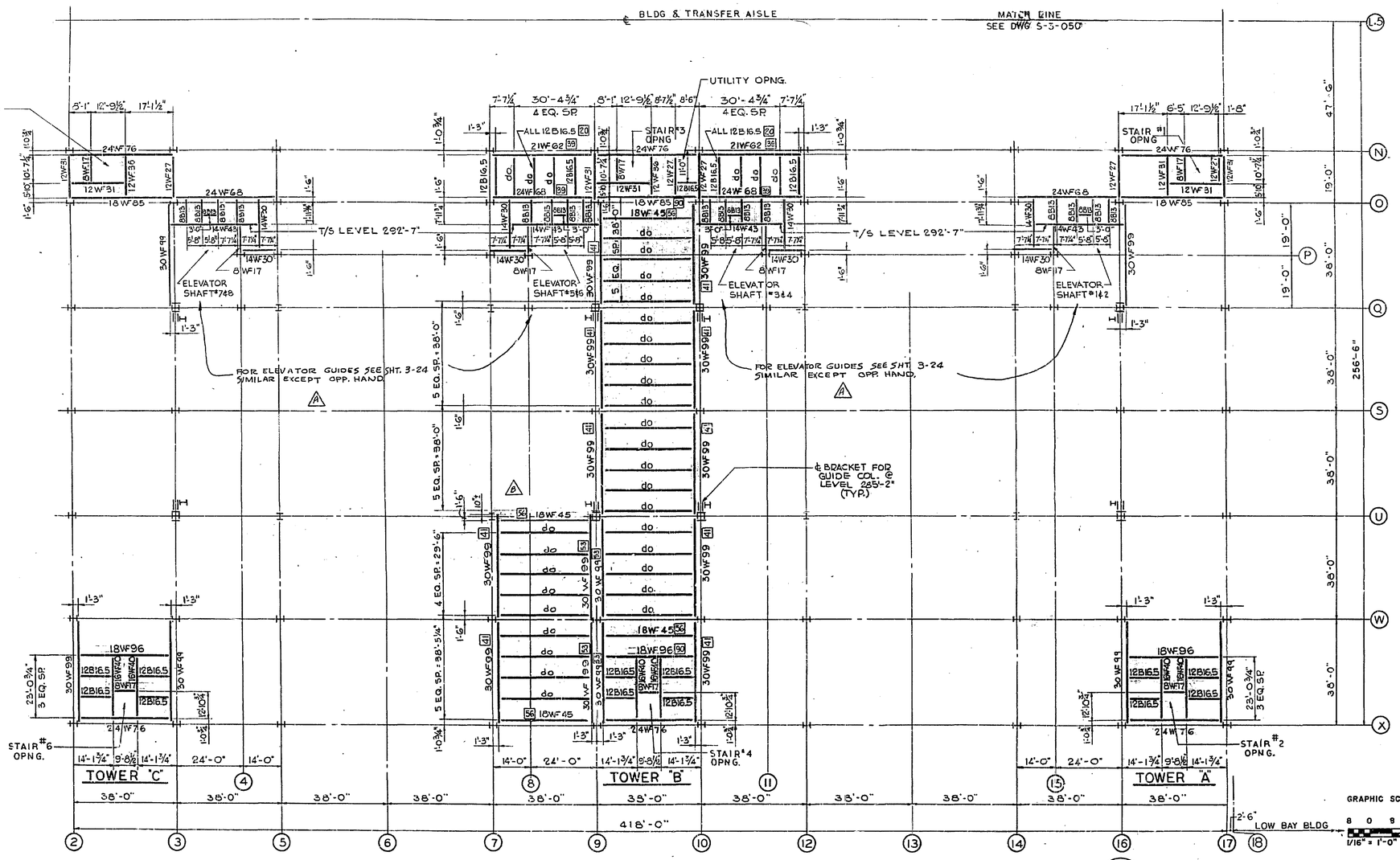
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	6-28-66	[illegible]
1	B	C-3 C-4	REVISED HIGH BAY FRAMING TOWER B TO ACCOMPANY MOD TO CONTRACT NASA-61	1-20-65	[illegible]
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-66	[illegible]

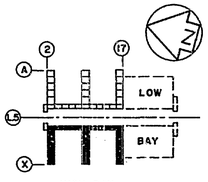


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

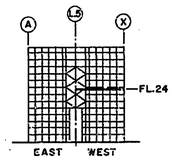
AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 24
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 293'-1"
TOP OF STEEL - LEVEL 292'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 24 - LEVEL 293'-1"

INV. NO. ENG. (NASA) 08-123-63-41	SIZE	FILE NO.
DATED: MAY 1963	F	203-28, 297
SCALE: AS NOTED	SECTION NO. S-3-051	SHEET NO. 3-55

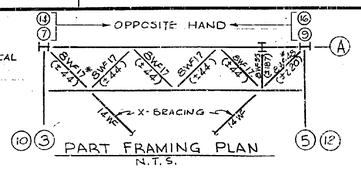
FERNANDEZ Dwn by | HERRMANN Ckd by

A39.02.01.0ADS150.C0

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF43 SHALL BE A 14 WF 48 MINIMUM.

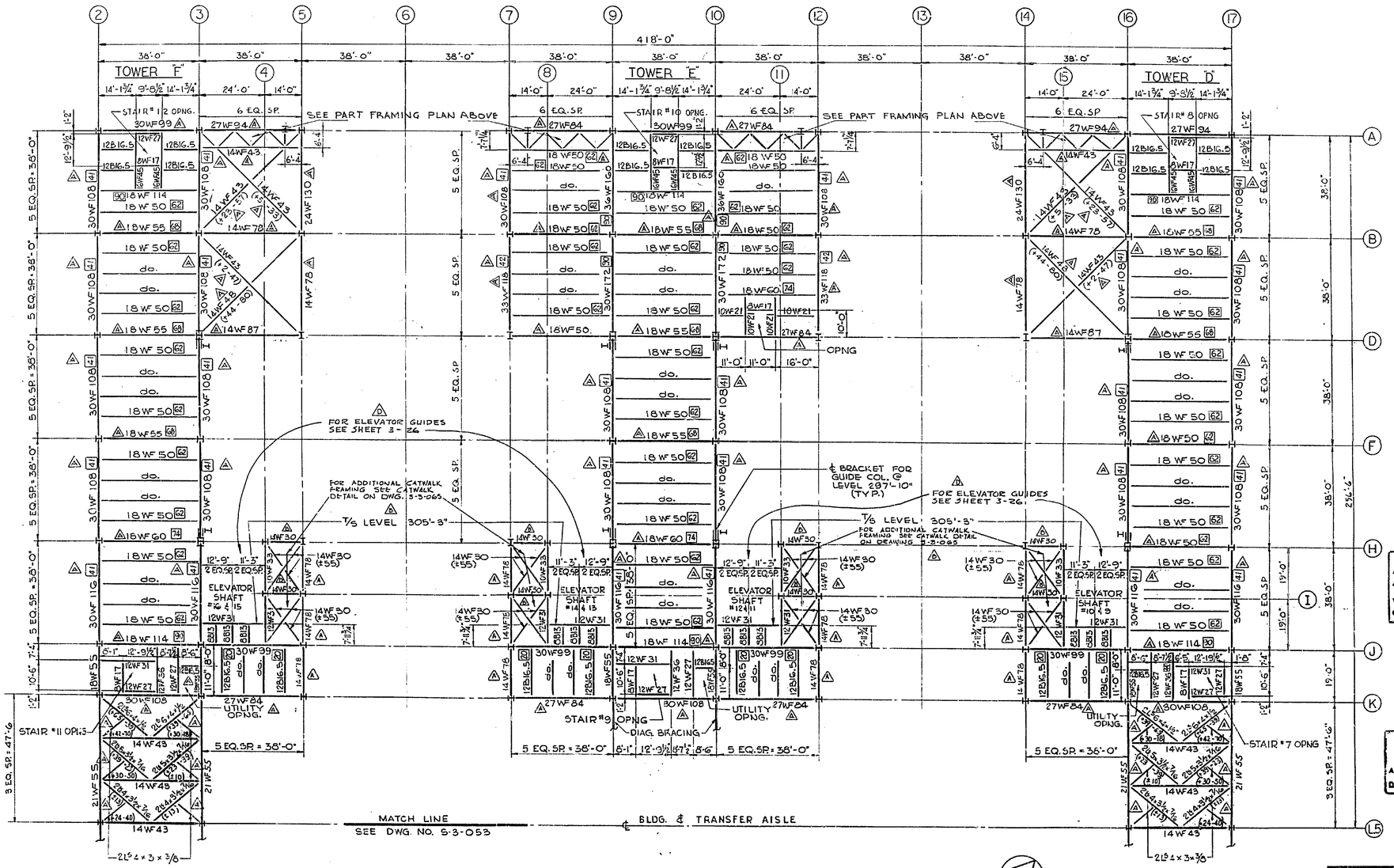


LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[55] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A(11)		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. #2 ON CONTRACT NASA-8	7/5/63	JSW
11	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. 10 CONTRACT NASA-8	7/26/63	JSW
1	A		ADDED NOTE	11/19/63	JSW
2	A		REVISED TO CONFORM TO AMEND. # 7	1-14-64	JSW
	A		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	3/28/68	



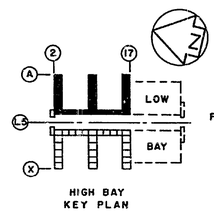
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

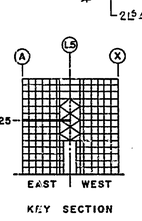
AS BUILT
APPROVED BY
DATE 1 DEC 1967

NOTE:
[A6] CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 25
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 305'-9"
TOP OF STEEL - LEVEL 305'-5
UNLESS OTHERWISE NOTED.





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SILSBEE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 25 - LEVEL 305'-9"

INV. NO. ENG. (NASA) 08.123 63 41	SIZE F	FILE NO. 203-28, 297
DATED: MAY 1963	SCALE: 1/5 NOTED	SECTION NO. S-3-052	SHEET NO. 3-85

FELLINI Des by | HEERMANS Cad by

A39.02.01.0ADS151.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

X-BRACING

LEGEND FOR SHEAR CONNECTORS

10 INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHERE STEEL SUPPORTS CONCRETE SLAB ONLY.

41 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A-10		REVISIONS TO SUPERSTRUCTURE FRAMING TO CONFORM TO REVISIONS IN SHT. S-3-054	7/24/63	
	A-11		REVISED TO REFLECT FRAMING TO ACCOMD. MOD. TO CONF. TO DWG. A	9/26/63	
1	A		ADDED NOTE	11/15/63	
2	A		REVISED TO CONFORM TO AMEND. # 7	4.14.64	
	A		AS BUILT	12/1967	
F			REVISED FOR F.R.D. INDEX	7/24/68	

PART FRAMING PLAN
N.T.S.

BLDG. & TRANSFER AISLE

MATCH LINE
SEE DWG. NO. S-3-052

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove. etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY B.B. Hamilton
DATE 12 DEC 1967

STAIR #1 OPNG.
STAIR #3 OPNG.
STAIR #2 OPNG.
UTILITY OPNG.
DIAG. BRACING
ELEVATOR SHAFT #615
ELEVATOR SHAFT #616
ELEVATOR SHAFT #617
FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG S-3-065
FOR ELEVATOR GUIDES SEE SHT. 3-26 SIMILAR EXCEPT OPP. HAND
CATWALK TYPE 1
℄ BRACKET FOR GUIDE COL. @ LEVEL 297'-10"
SEE PART FRAMING PLAN ABOVE
TOWER 'C'
TOWER 'B'
TOWER 'A'
2'-6" LOW BAY BLDG.

FRAMING PLAN AT FLOOR 25
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 305'-9"
TOP OF STEEL LEVEL 305'-5" UNLESS OTHERWISE NOTED

NOTE:
CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

PLAN OF WATER TANK SUPPORTS
1/8" = 1'-0"
LOCATE BETWEEN COL. LINES Q & S, ON FLOOR 25 AND BETWEEN O & Q ON FLOOR 40 DWG. S-2-083

SECTION A-A
½" = 1'-0"

SECTION B-B
½" = 1'-0"

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALES
1/16" = 1'-0"
1/8" = 1'-0"
1/2" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
342 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 25 - LEVEL 305'-9"

INV. NO. ENG. (NASA) NB-121-63 41		SIZE	FILE NO.
DATED: MAY 1963		F	203-28.237
SCALE: AS NOTED	SECTION NO. S-3-053		SHEET NO. 3-57

FELLINI Drn by | HERRMANN Ckd by

A39.02.01.0ADS152.00

EXPORT CONTROL NOTICE: EAR 99

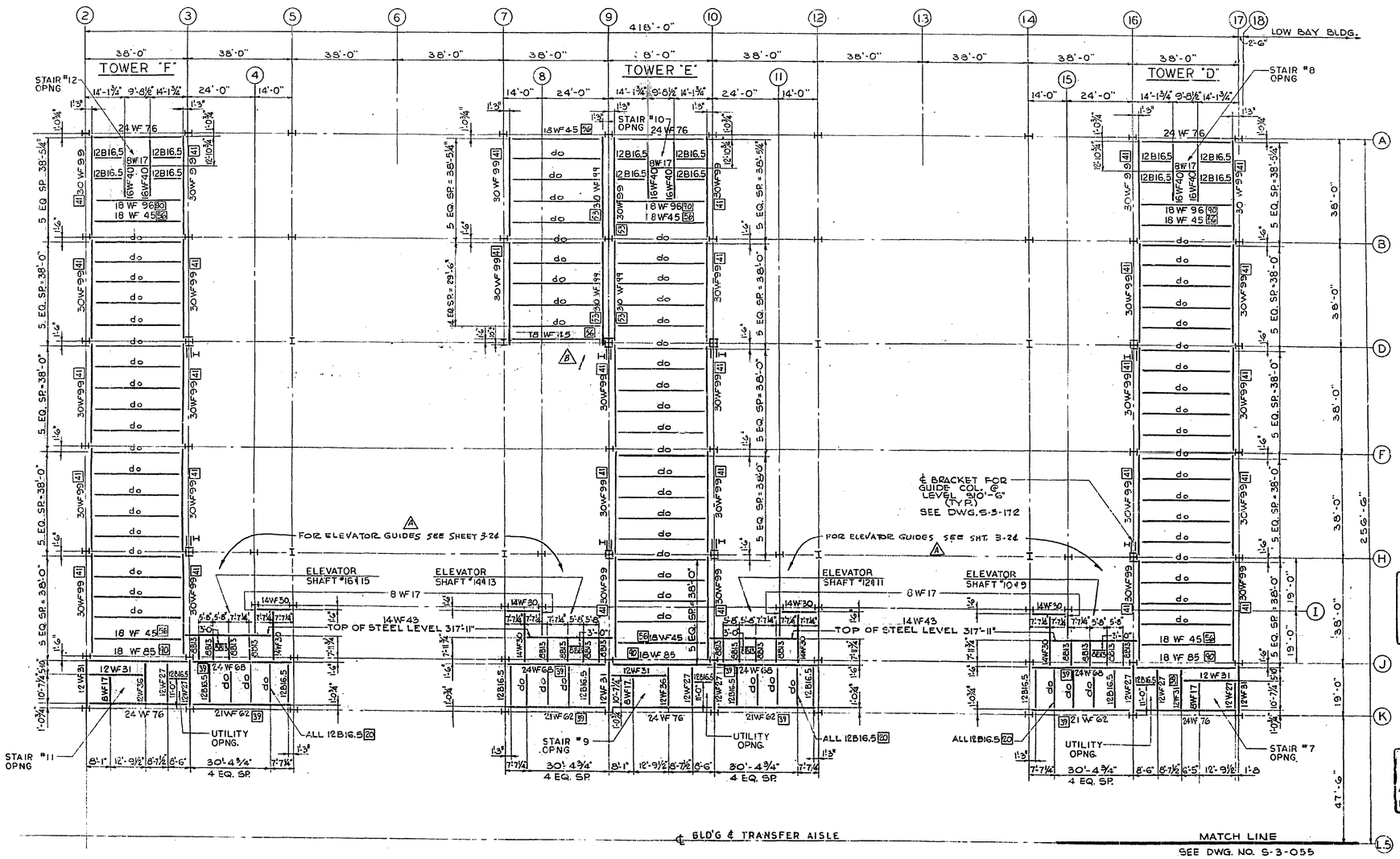
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

55 INDICATES MEMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-29-64	[illegible]
1	B	C-3 C-4	REVISED HIGH BAY FRAMING TOWER "E" TO ACCOMP. AMD. TO CONTRACT NASA-61	1-20-65	[illegible]
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

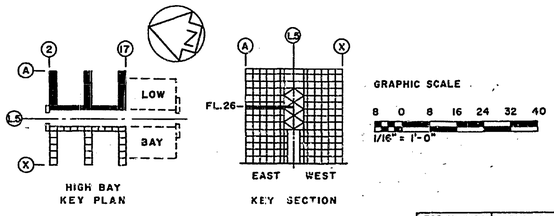


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 26
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 318'-5"
TOP OF STEEL LEVEL 318'-1"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING EAST HALF
FLOOR 26 LEVEL 318'-5"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-054
SHEET NO. 3-58

FERNANDEZ Dwn by
HERRMANN Ckd by

A39.02.01.0ADS153.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

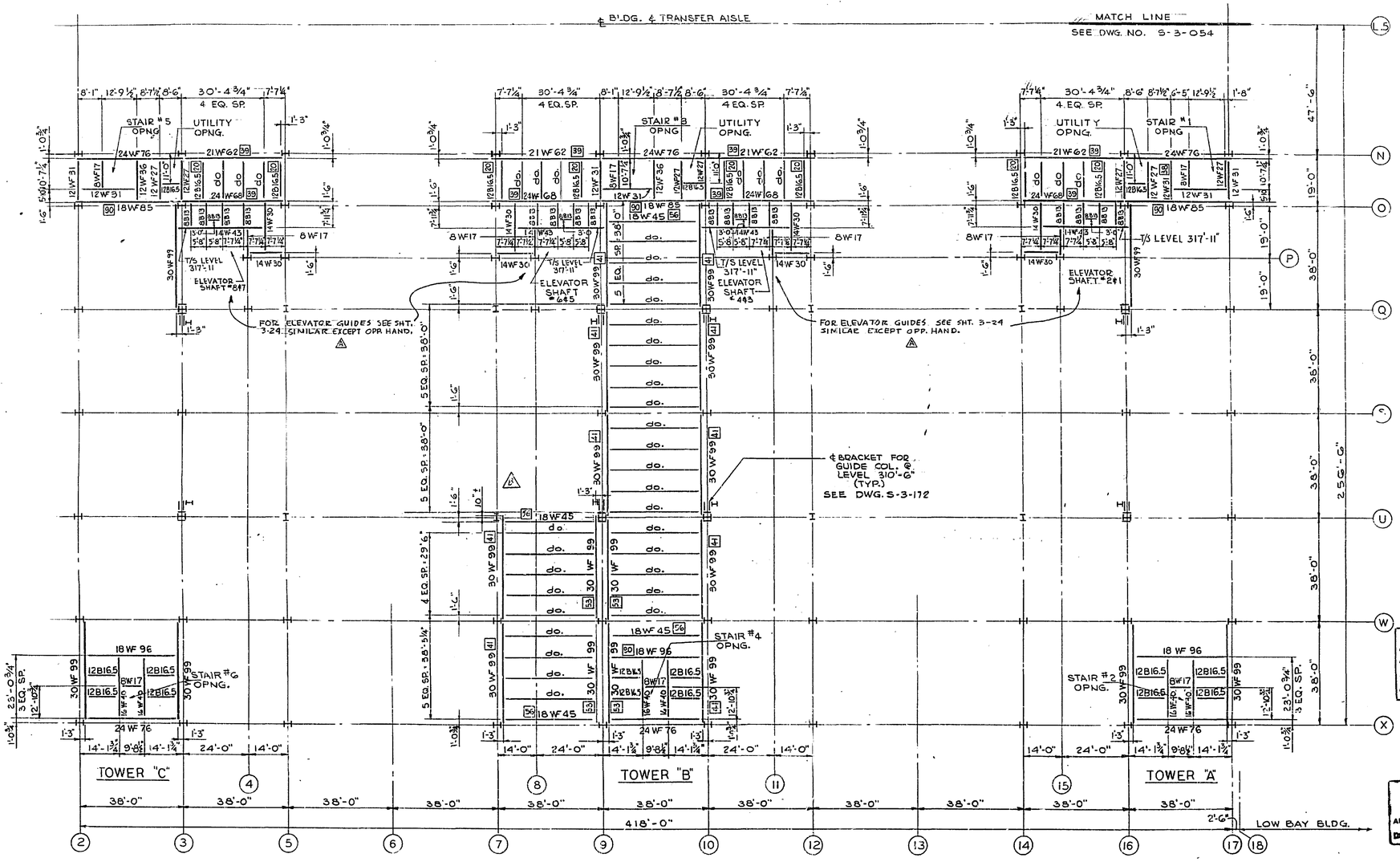
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

3 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	1-24-64	[illegible]
1	B	C-3 C-4	REVISED HIGH BAY FRAMING TOWER B TO ACCOMPANY MOD. TO CONTRACT NASA-61	1-20-65	[illegible]
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]

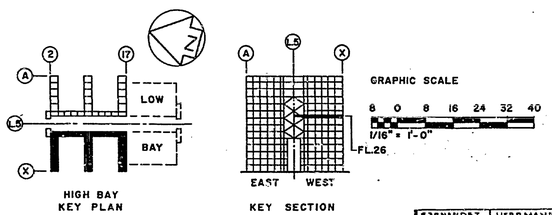


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 26
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 318'-5"
TOP OF STEEL LEVEL 318'-1"
UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 26 - LEVEL 318'-5"

INV. NO. ENG.(NASA)(9-123-63-4)
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S-3-055
SHEET NO. 3 59

FERNANDEZ Dwn by
HERRMANN Ckd by

A39.02.01.0ADS154.00

EXPORT CONTROL NOTICE: EAR 99

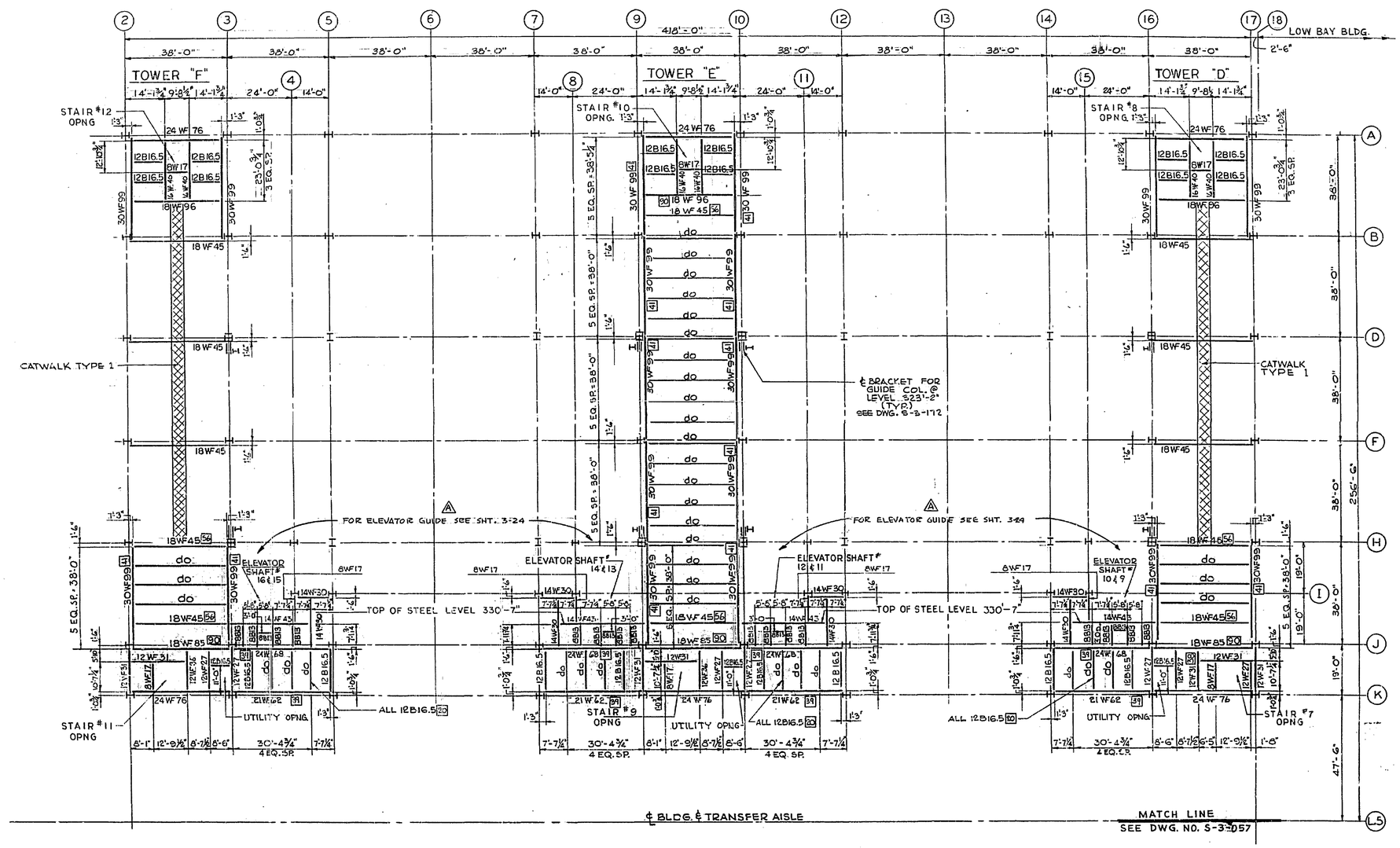
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[4] INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED 6" ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[3] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 5½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. 7	11/64	JDH
	A		AS BUILT	12/67	
	C		REVISED FOR F.R.D. INDEX	2/1668	G.A.L.



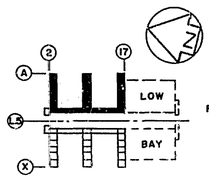
NOTES

1. SEE STAIR DETAIL DWG. NO. S-3-167 FOR ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

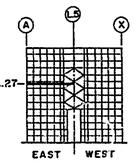
FRAMING PLAN AT FLOOR 27

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 331'-1"
TOP OF STEEL - LEVEL 330'-9" UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE

8 0 8 16 24 32 40

1/16" = 1'-0"

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT

APPROVED BY E.O. Adamson

DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 445 FIFTH AVENUE, NEW YORK 16, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.

LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 27 - LEVEL 331'-1"

DWG. NO. ENG. (NASA) 05-123-63-41		SIZE F	FILE NO. 203-28.297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-056	SHEET NO. 3-60	

CASSITTO Drn by | HEERMANN Ckd by

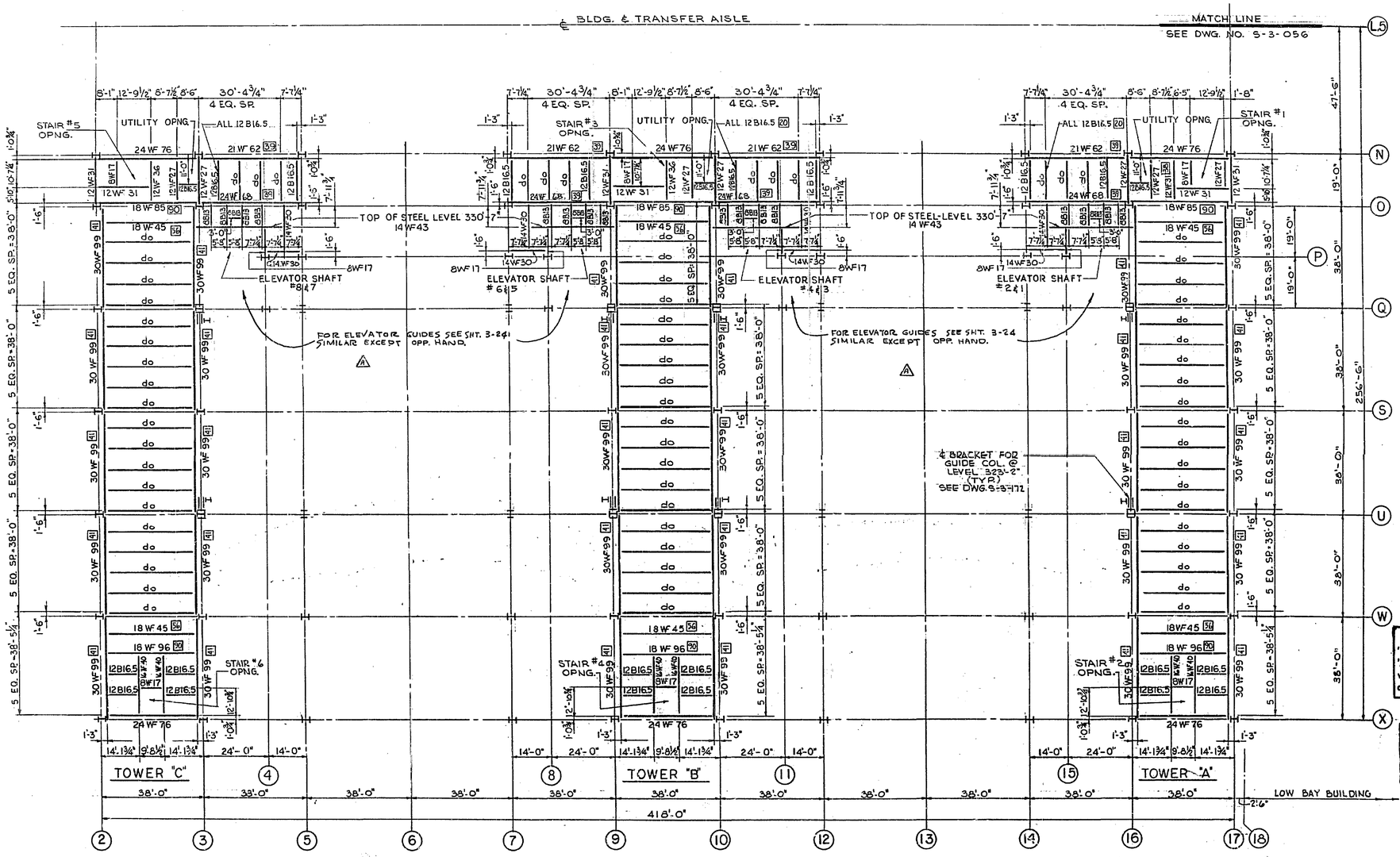
A39.02.01.0AD5604.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:
[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
[38] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS, ARE STAGGERED ON 3½ GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
7	A		REVISED TO CONFORM TO AMEND. # 7	1-14-68	[illegible]
	B		AS BUILT	12/14/67	
	C		REVISED FOR F.R.D. INDEX	2-12-68	[illegible]



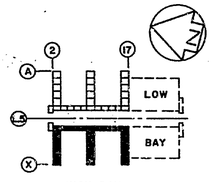
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 18 DEC 1967

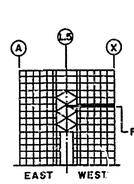
NOTES
1. SEE STAIR DETAIL DWG. NO. S-3-167 FOR ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

FRAMING PLAN AT FLOOR 27
1/16"=1'-0"

NOTE: FIN. FLOOR LEVEL 331'-1"
TOP OF STEEL LEVEL 330'-9" UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 27 - LEVEL 331'-1"

DWG. NO. ENG. (NASA) 08-122-63-41		SIZE F	FILE NO. 203-28,297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-057	SHEET NO. 3-61	
CASSITTO Drawn by	HERRMANN Chkd by		

A39.02.01.0ADS605.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A/04		REVISIONS TO STRUCTURAL FRAMING TO ACCOM. 100-TON CRANE	7/26/63	
11	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTOL TOWER-B	9/26/63	
1	A		ADDED NOTE	11/15/63	
2	A		REVISED TO CONFORM TO AMEND. #7	4-24-64	
	A		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	2/15/68	

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14 WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM

OPPOSITE HAND

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS

6 INDICATES NUMBER OF 3/4"ø 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

7 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

TOWER "F" — TOWER "E" — TOWER "D" — LOW BAY BLDG.

418'-0"

SEE PART FRAMING PLAN ABOVE

STAIR #12 OPNG — STAIR #10 OPNG — STAIR #8 OPNG

5 EQ. SP. = 25'-0" — 5 EQ. SP. = 36'-0" — 5 EQ. SP. = 38'-0"

FOR ELEVATOR GUIDES SEE SHEET 3-26

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG S-3-065

& BRACKET FOR GUIDE COL. @ LEVEL 335'-10" (TYP.) SEE DWG. S-3-172

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG S-3-065

ELEVATOR SHAFT #12

ELEVATOR SHAFT #10

ELEVATOR SHAFT #8

TOP OF STEEL LEVEL 343'-3"

UTILITY OPNG.

STAIR #11 OPNG

STAIR #9 OPNG

CATWALK TYPE 2

DIAGONAL BRACING

MATCH LINE
SEE DWG. NO. S-3-059

E BLDG & TRANSFER AISLE

NOTE:

△C CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED

FRAMING PLAN AT FLOOR 28

1/16"=1'-0"

NOTE: FIN. FLOOR - LEVEL 343'-9"
TOP OF STEEL LEVEL 343'-5" UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.D. Lambreon
DATE 15 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 28 - LEVEL 343'-9"

ENV. NO. ENG. (N.A.S.A.) 06-123-63-61		SIZE F	FILE NO. 705-28.297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-058	SHEET NO. S-3-62	

ZASSITO Drn by | HERRMANN Chd by

1 A39.02.01.OADS157.0C

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	4/6		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA E	7/24/63	[illegible]
	4/1		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA E	8/14/63	[illegible]
1	4		ADDED NOTE	11/15/63	[illegible]
2	4		REVISED TO CONFORM TO AMEND. #7	2/21/67	[illegible]
	4		AS BUILT	12/14/67	
	F		REVISED FOR F.R.D. INDEX	2/26/68	[illegible]

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

OPPOSITE HAND

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS:
(41) - INDICATES NUMBER OF ¾"ø-3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
(33) - INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

MATCH LINE SEE DWG. S-3-058

STAIR #5 OPNG. | STAIR #3 OPNG. | STAIR #1 OPNG

UTILITY OPNG.

ELEVATOR SHAFT #8 & 7 | ELEVATOR SHAFT #4 & 3 | ELEVATOR SHAFT #2 & 1

T/S LEVEL 343'-9"

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065.

FOR ELEVATOR GUIDES SEE SHT. 3-26 SIMILAR - EXCEPT OPP. HAND.

℄ BRACKET FOR GUIDE COL. @ LEVEL 335'-10" (TYP.) SEE DWG. S-3-172

OPNG.

STAIR #6 OPNG. | STAIR #4 OPNG. | STAIR #2 OPNG

SEE PART FRAMING PLAN ABOVE

TOWER 'C' | TOWER 'B' | TOWER 'A'

2'-6" LOW BAY BLDG.

418'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible] Lambson
DATE 12 DEC 1967

NOTE:
△6 CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 28
1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 343'-9"
TOP OF STEEL LEVEL 343'-5" UNLESS OTHERWISE NOTED

HIGH BAY | KEY SECTION | GRAPHIC SCALE 8 0 8 16 24 32 40 — 1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - DE ROSA - SEELYE - MORAN
618 18TH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 28 - LEVEL 343'-9"

INV. NO. ENG. (NASA) 06-122-63-41	SIZE: F	FILE NO. 203-28.297	
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-C59	SHEET NO. S-3-63	

FERNANDEZ Drawn by | WEERMANN Ckd by

A39.02.01.0ADS158.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

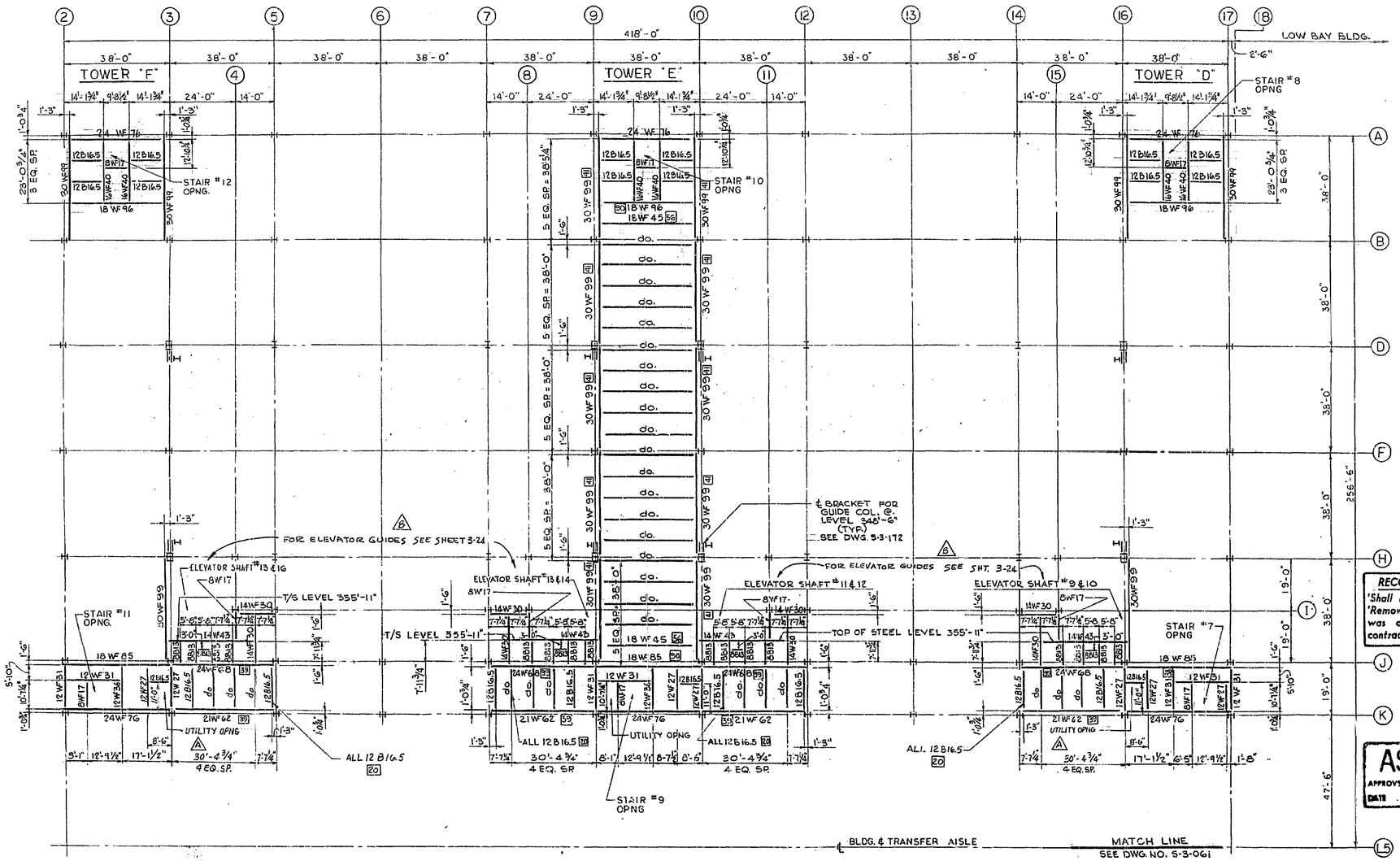
LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF 3/4" × 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD TO CONTR. NASA-8	9/30/63	[illegible]
2	B		REVISED TO CONFORM TO AMEND. #7	1-14-64	[illegible]
	A		AS BUILT	12/4/67	
	D		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



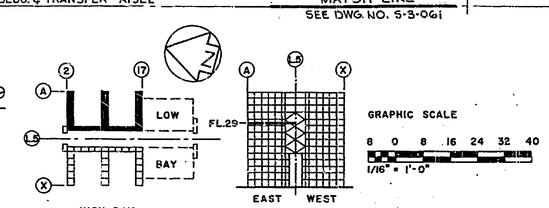
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C. A. Lambinson
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 29

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 356'-5"
TOP OF STEEL LEVEL 356'-1"
UNLESS OTHERWISE NOTED



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 29 - LEVEL 356'-5"

INV. NO. ENG. (NASA) 03-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-060
SHEET NO. 3-64

FELLINI Dwn by
HERRMANN Ckd by

A39.02.01.0ADS159.00

EXPORT CONTROL NOTICE: EAR 99

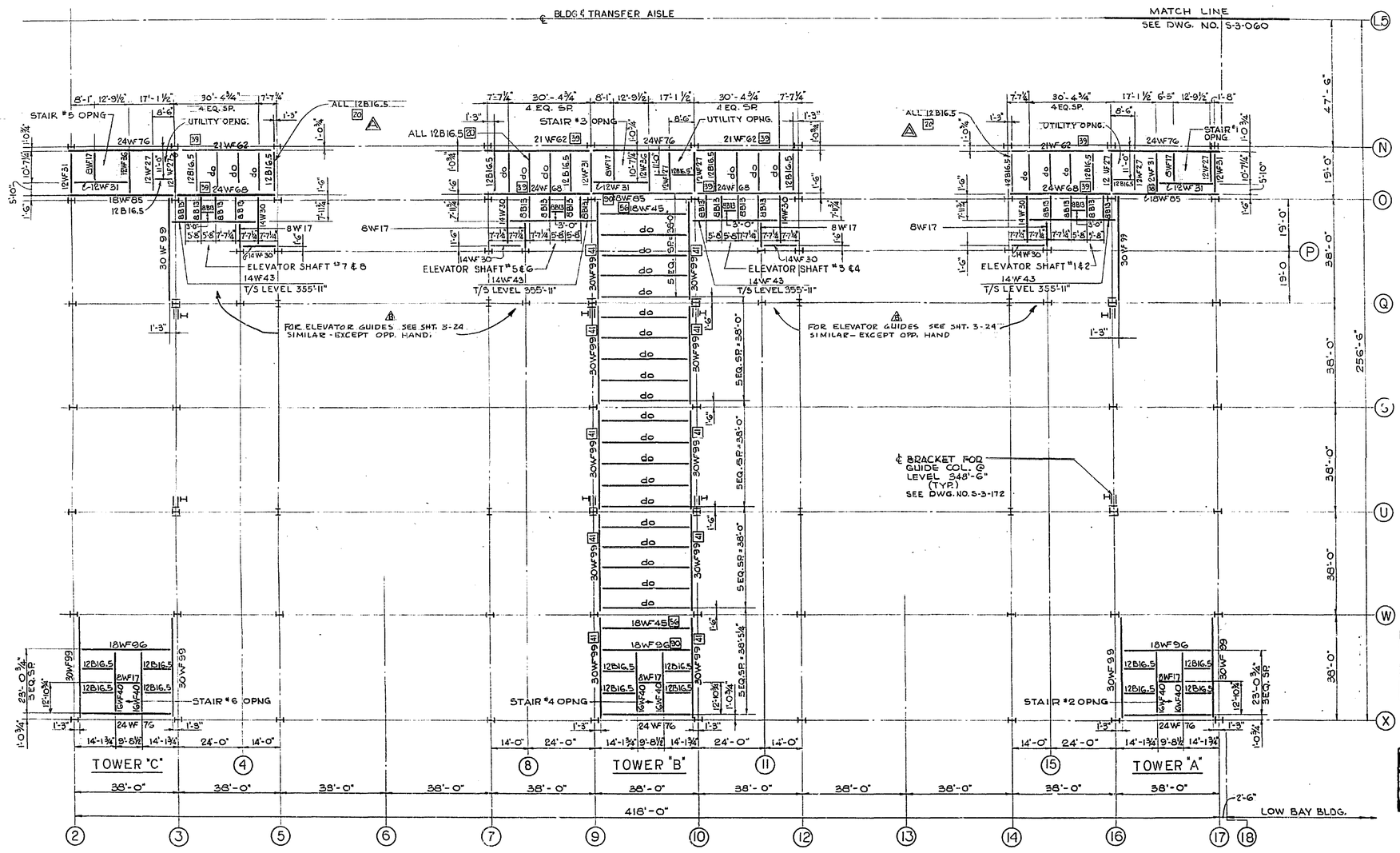
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

56 INDICATES NUMBER OF ¾"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

56 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

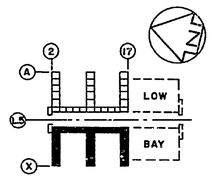
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-8	8/24/67	[illegible]
1	A		REVISED TO CONFORM TO AMEND. 47	4-11-68	[illegible]
	A		AS BUILT	12/68/67	
	D		REVISED FOR F.R.D. INDEX	2/16/68	[illegible]



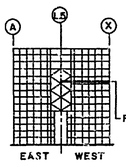
FRAMING PLAN AT FLOOR 29

1/16" = 1'-0"

NOTE: FIN FLOOR - LEVEL 356'-5"
TOP OF STEEL LEVEL 356'-1" UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



EAST WEST

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

FL. 29

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.H. Lamberson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX., CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 29 - LEVEL 356'-5"

LUTKUS Drawn by	HERRMANN Ckd by	INV. NO. ENG. (NASA) 63-122; 63-41	SIZE F
		DATED: MAY 1963	FILE NO. 203-20,297
		SCALE: AS NOTED	SECTION NO. S-3-061 SHEET NO. 3-55

A39.02.01.0ADS160.00

EXPORT CONTROL NOTICE: EAR 99

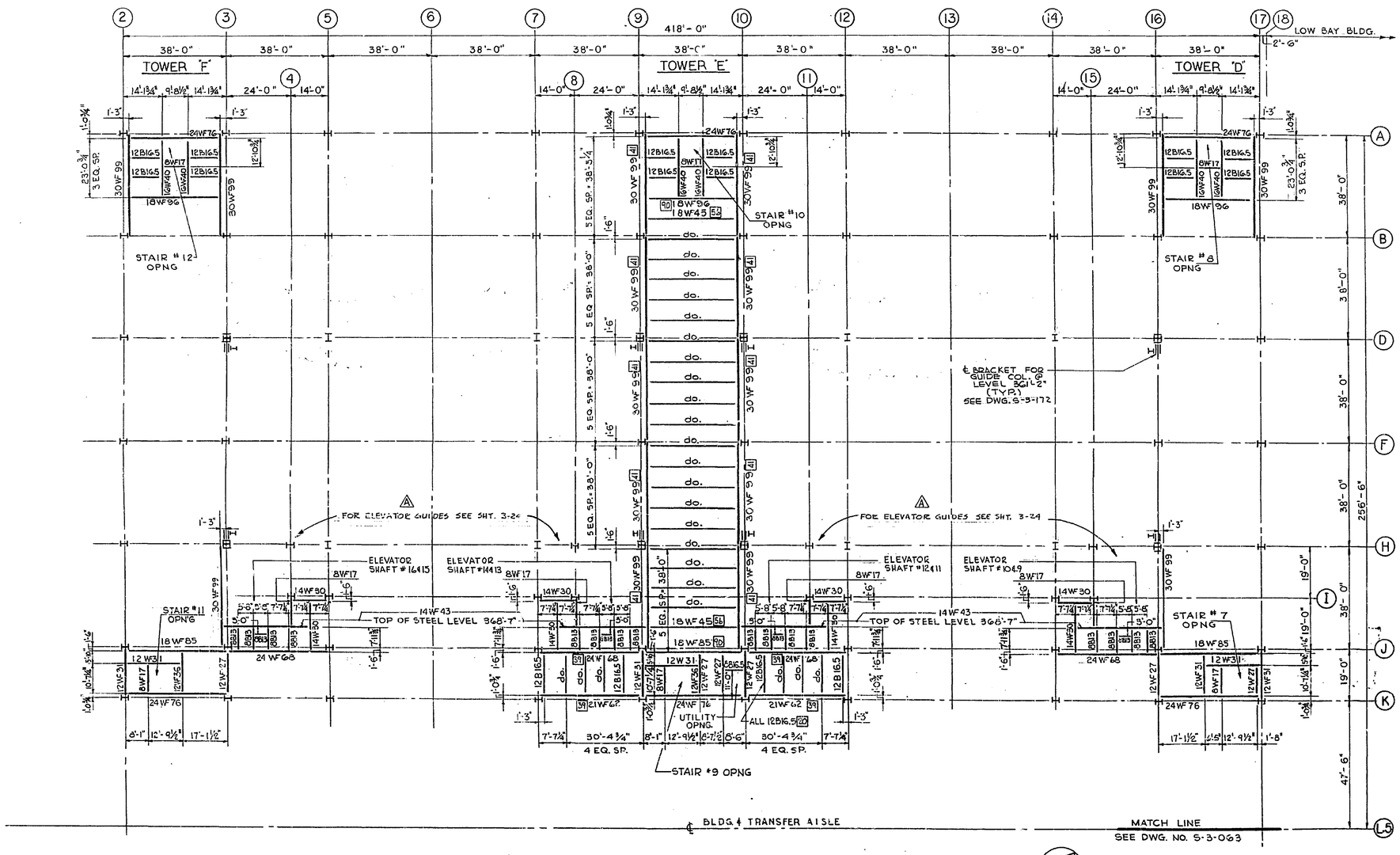
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[55] INDICATES NUMBER OF 3/4"×3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[41] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	6.24.64	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/16/68	G.H.W.

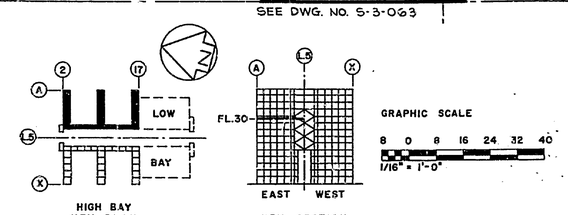


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

FRAMING PLAN AT FLOOR 30
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 369'-1"
TOP OF STEEL LEVEL 368'-9"
UNLESS OTHERWISE NOTED.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 30 - LEVEL 369'-1"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,297
SCALE: AS NOTED
SECTION NO. S-3-062
SHEET NO. 3-66

CASSITTO Dwn by
HERRMANN Ckd by

A39.02.01.0ADS161.00

EXPORT CONTROL NOTICE: EAR 99

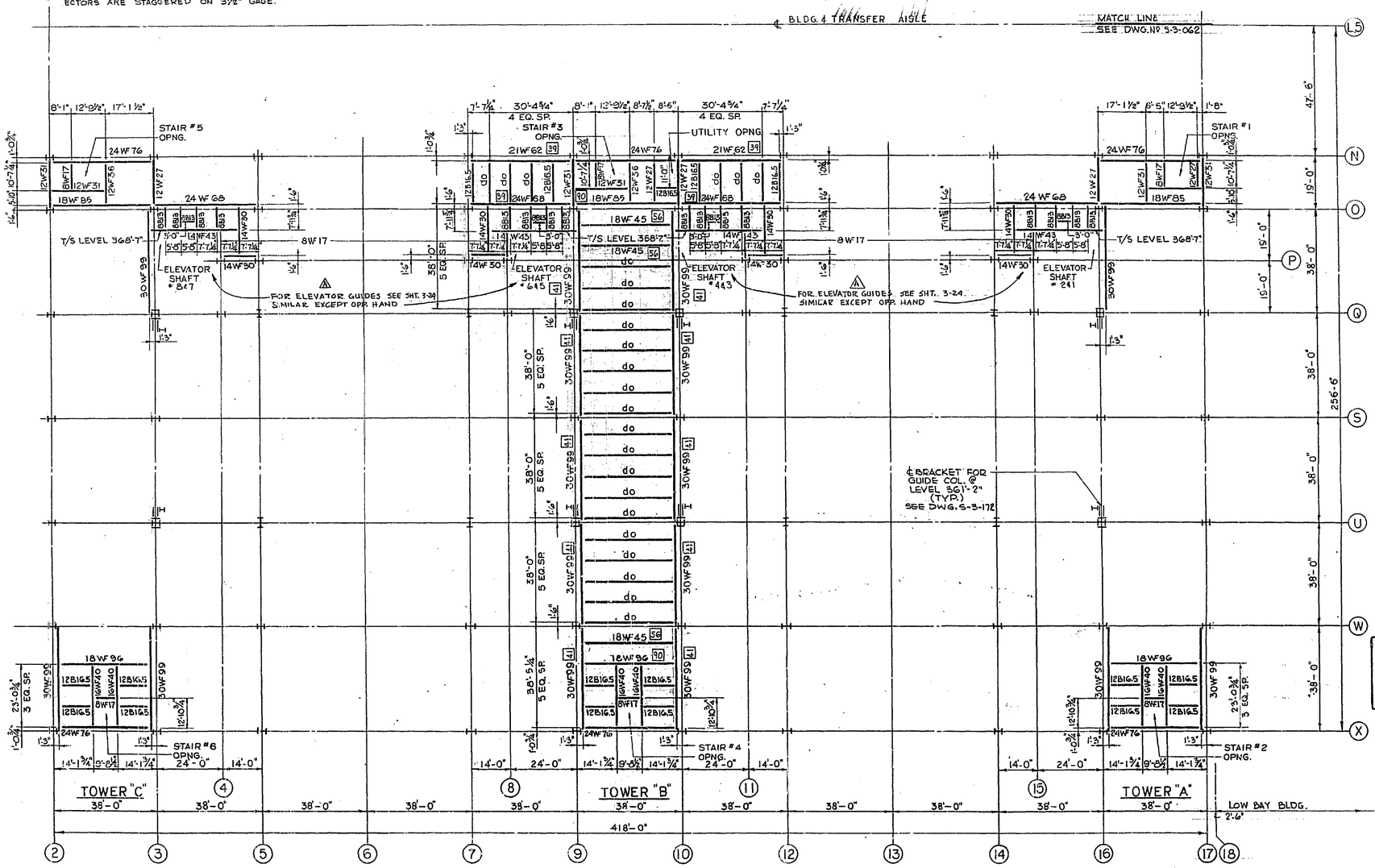
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[2] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

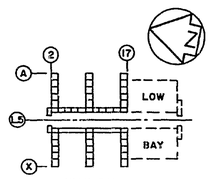
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	4-16-68	
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/26/68	

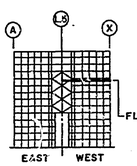


FRAMING PLAN AT FLOOR 30

1/16"=1'-0"

NOTE: FIN. FLOOR LEVEL 369'-1"
TOP OF STEEL LEVEL 368'-9" UNLESS OTHERWISE NOTED





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16"=1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.D. Landrum
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 640 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING WEST HALF
FLOOR 30 - LEVEL 369'-1"

INV. NO. ENG. (NASA) 00-123 63 41		SIZE F	FILE NO. 203-28,297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-063	SHEET NO. 3-67	

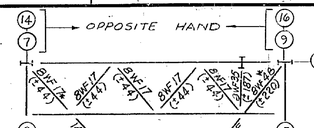
KALNINS Drn by | HERRMANN Ckd by

A39.02.01.0ADS162.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM

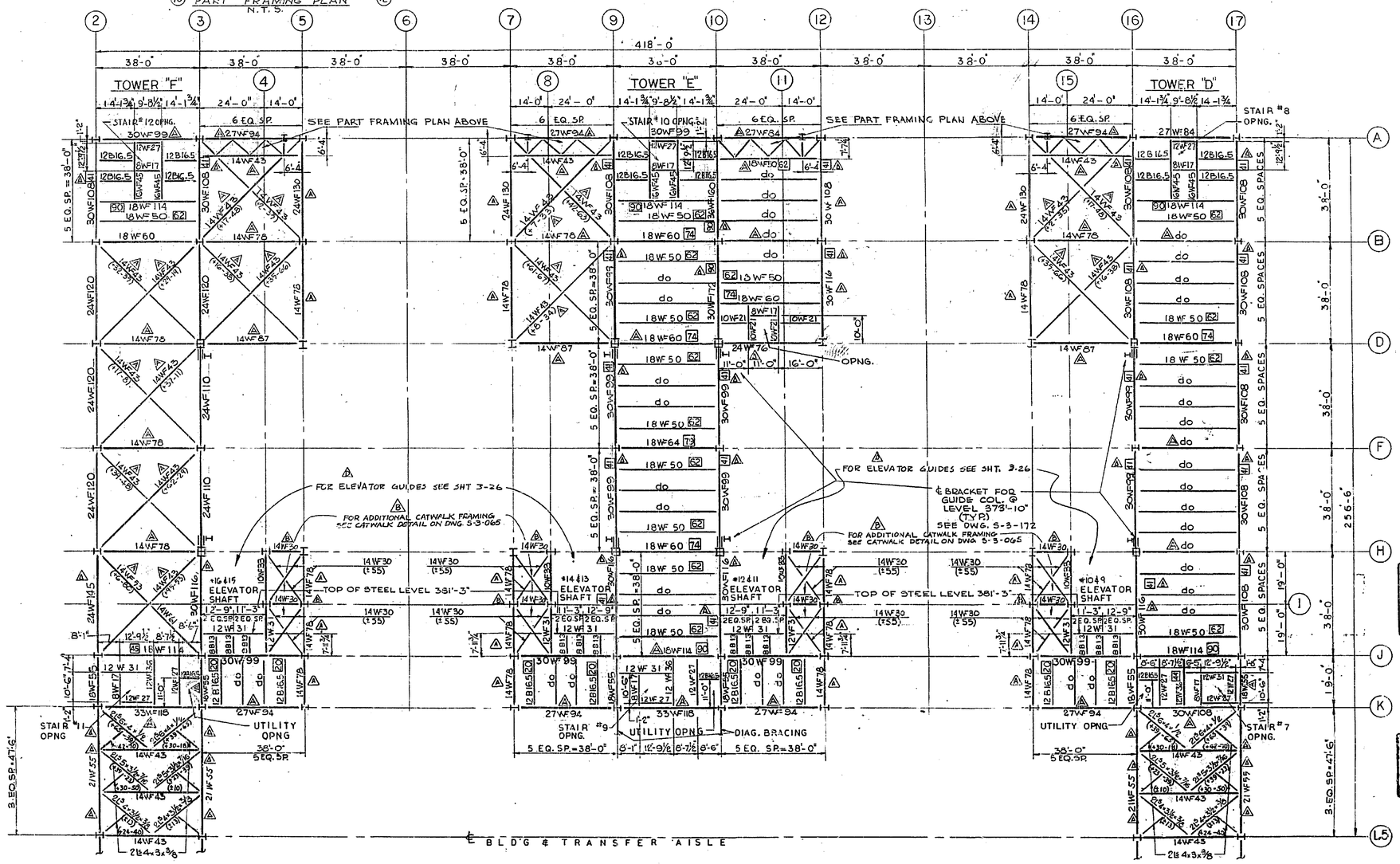


LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF ¾"ø HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 10" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	12		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. 10 (SEE SHT. 3-26.1)	12/4/63	JDM
11	11		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CENTER. NASA-8	9/4/63	JDM
1	1		ADDED NOTE	11/15/63	PM
2	2		REVISED TO CONFORM TO AMEND. 7	1-29-64	JDM
	A		AS BUILT	12/1967	
	F		REVISED FOR F.R.D. INDEX	2/6/68	



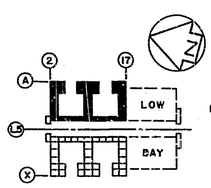
NOTE:

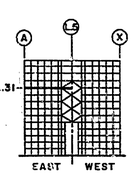
C CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED

FRAMING PLAN AT FLOOR 31

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 381'-9"
TOP OF STEEL LEVEL 381'-5"
UNLESS OTHERWISE NOTED





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.D. Hamberson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN 442 FIFTH AVENUE NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 31 - LEVEL 381'-9"

DWG. NO. ENG. (NASA) 06-132-63-41		SIZE	FILE NO.
DATED: MAY 1963		F	203-29.-97
SCALE: AS NOTED	SECTION NO. S-3-064	SHEET NO. 3-58	

BOLOGOVSKY Des. by | HERRMANN Ckd. by

A39.02.01.0ADS163.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
103	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONT. P. NASA-8	7/24/63	[illegible]
12	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. TO CONTRACT NAS9-8	8/14/63	[illegible]
1	A		ADDED NOTE	11/15/63	[illegible]
2	A		REVISED TO CONFORM TO AMEND. #7	4-15-64	[illegible]
	A		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	2/16/68	[illegible]

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

OPPOSITE HAND — 14WF X-BRACING — OPPOSITE HAND

8WF17 (2-44) | 8WF17 (3-93) | 8WF17 (4-44) | 8WF17 (5-44) | 8WF35 (7-107) | 8WF48 (G220)

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS:
- (41) INDICATES NUMBER OF ¾" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 10" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
- (41) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

BLDG & TRANSFER AISLE — MATCH LINE SEE DWG. S-3-064

STAIR #5 OPNG — STAIR #3 OPNG — STAIR #1 OPNG — STAIR #6 OPNG — STAIR #4 OPNG — STAIR #2 OPNG

UTILITY OPNG. — DIAGONAL BRACING

ALL 12B16.5 (20) (TYP.)

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON THIS SHEET.

FOR ELEVATOR GUIDES SEE SHT 3-26 SIMILAR - EXCEPT OPP. HAND.

ELEVATOR SHAFT #6&7 — ELEVATOR SHAFT #4&5 — ELEVATOR SHAFT #1&2

BRACKET FOR GUIDE COL. @ LEVEL 373'-10" (TYP.) SEE DWG. S-3-172

SEE PART FRAMING PLAN ABOVE

TOWER "C" — TOWER "B" — TOWER "A"

38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 38'-0" — 418'-0"

(4) (8) (11) (15)

LS — N — O — P — Q — S — U — W — X

3 EQ. SP. = 47'-6" — 5 EQ. SP. = 38'-0" — 5 EQ. SP. = 38'-0" — 3 EQ. SP. = 47'-6" — 256'-6"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

NOTE:
△C CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

CATWALK DETAIL NOTES:
1. DOTTED MEMBERS ARE EXISTING.
2. PLANS BETWEEN COLS. 4-5 & 11-12 OPPOSITE HAND.
3. DUE TO SUBSEQUENT ATTACHMENT OF RAIL POSTS ON EXTERIOR PERIPHERY OF C FRAMING, CONNS. SHALL BE MADE ON INSIDE OF C's.

PLAN — (WEST HALF SHOWN EAST HALF SIMILAR)

SECTION A-A

DEVELOP CONN. FOR 18" MOMENT

CATWALK DETAIL
N.T.S.

FRAMING PLAN AT FLOOR 31
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 381'-9"
TOP OF STEEL - LEVEL 381'-5"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN. — KEY SECTION — EAST — WEST — LOW — BAY — FL.31

GRAPHIC SCALE 8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 445 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 31 - LEVEL 381'-9"

INV. NO. ENG. (NASA)	63-123-63-41	SIZE	FILE NO.
DATED:	MAY 1963	F	203-28, 297
SCALE: AS NOTED	SECTION NO. S-3-065	SHEET NO. 3-69	

FELLINI Drn by — HERRMANN Chd by

A39.02.01.0ADS164.00

EXPORT CONTROL NOTICE: EAR 99

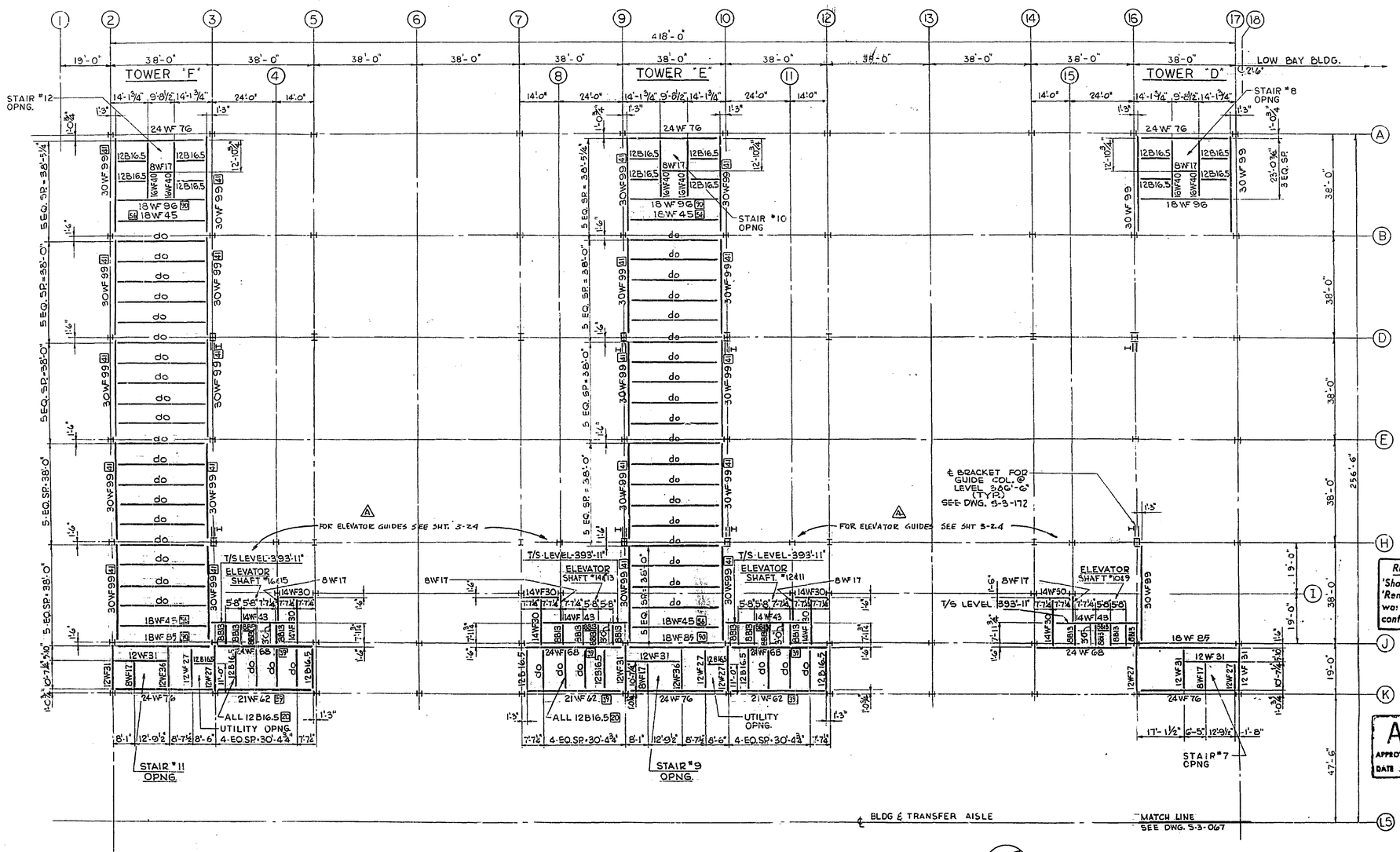
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS:

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

68 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. # 7	8-28-68	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



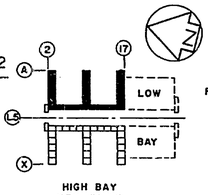
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

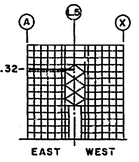
FRAMING PLAN AT FLOOR 32

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 394'-5"
TOP OF STEEL - LEVEL 394'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 32 - LEVEL 394'-5"

INV. NO. ENG. (NASA) 08-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-066 | SHEET NO. 3-70

BUTKUS Dwn by | HERRMANN Ckd by

A39.02.01.0ADS165.00

EXPORT CONTROL NOTICE: EAR 99

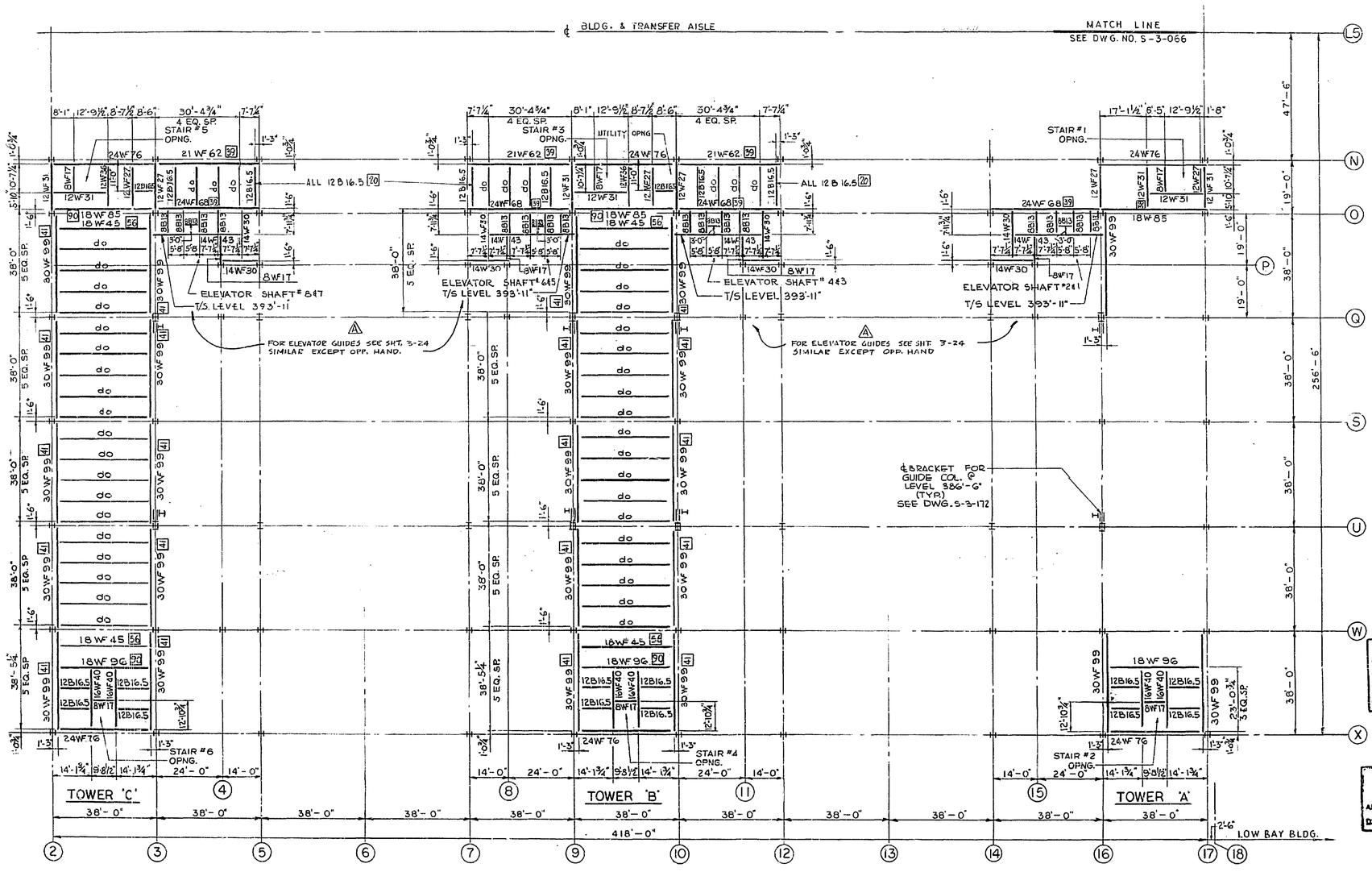
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF ¾"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	9.29.69	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	[illegible]	[illegible]



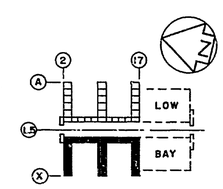
RECORD DRAWING NOTE
'Shall be' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

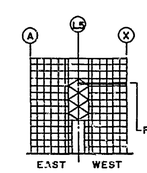
FRAMING PLAN AT FLOOR 32

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 394'-5"
TOP OF STEEL LEVEL 394'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"
FL. 32

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 32 - LEVEL 394'-5"

INV. NO. ENG. (NASA) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S-3-067
SHEET NO. 3-71

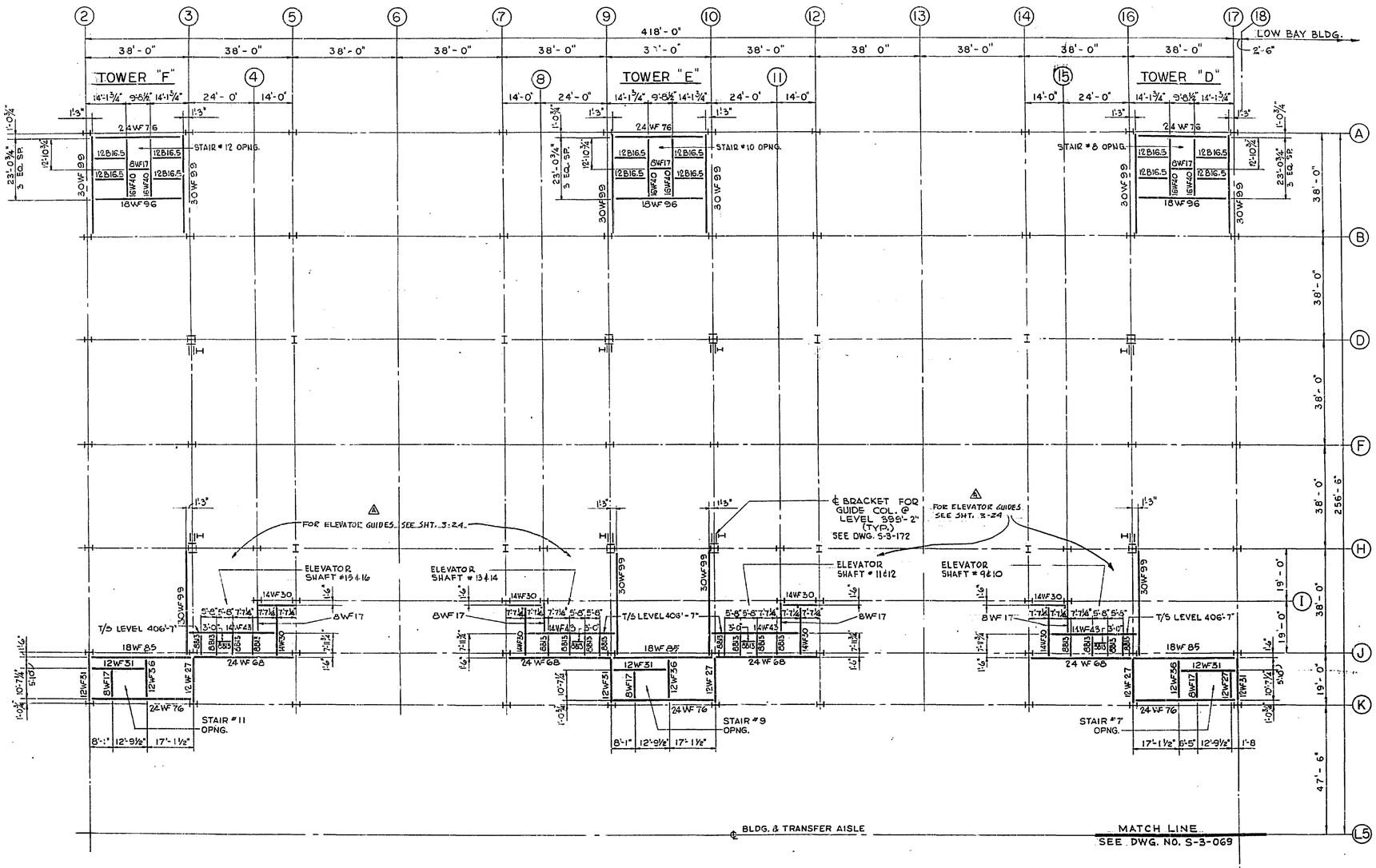
MINCKEY Dwn by
HERRMANN Ckd by

A39.02.01.0ADS166.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

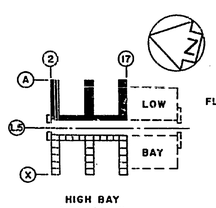
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND # 7	6-15-67	[illegible]
	B		AS BUILT	12/6/67	
	C		REVISED FOR F.R.D. INDEX	2/6/68	[illegible]



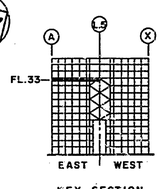
FRAMING PLAN AT FLOOR 33

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 407'-1"
TOP OF STEEL - LEVEL 406'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 33 - LEVEL 407'-1"

DWG. NO. ENG. (NASA)	68-123-63-41	SIZE	FILE NO.
DATED:	MAY 1963	F	203-28,297
SCALE: AS NOTED		SECTION NO. S-3-068	SHEET NO. S-72

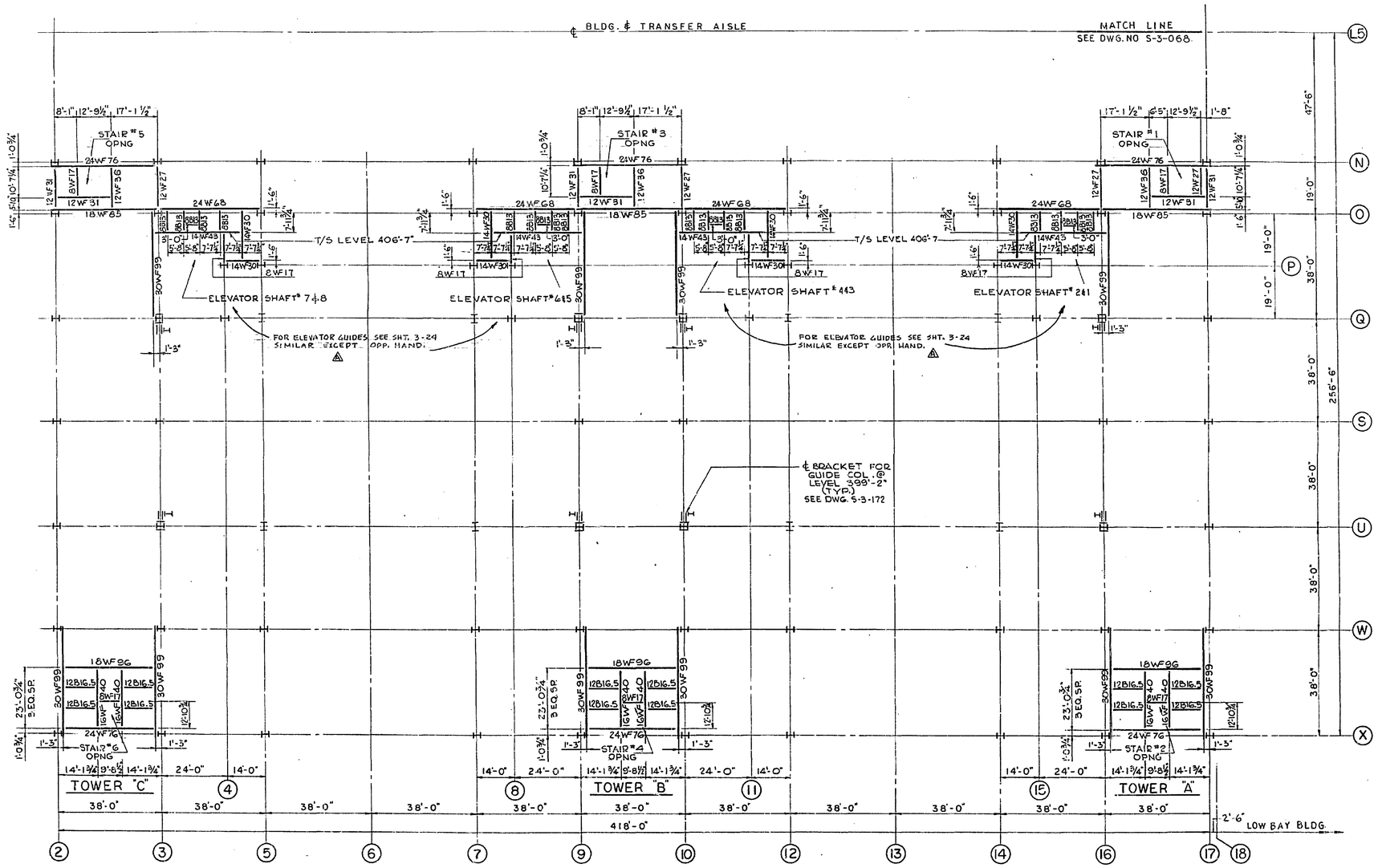
MIHETEV Drn by | HERRMANN Chd by

A39.02.01.0ADS167.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

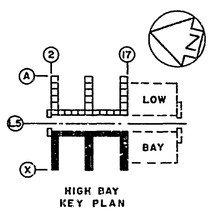
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	8 20 68	[illegible]
	A		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/4/68	G.B.Lind.



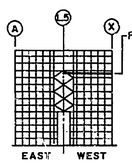
FRAMING PLAN AT FLOOR 33

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 407'-1"
TOP OF STEEL LEVEL 406'-9"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 33 - LEVEL 407'-1"

MIHEYEV Drn by	HERRMANN Ckd by	INV. NO. ENG. (NASA) 08-123-63-41	SIZE F
		DATED: MAY 1963	FILE NO. 203-28, 297
		SCALE: AS NOTED	SECTION NO. S-3-069 / SHEET NO. 3-73

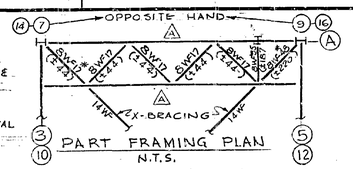
A39.02.01.0ADS168.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

NOTE: PART FRAMING PLAN BETWEEN COLS. ⑦-⑨ & ⑭-⑯ OPP. HAND.

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14 WF 48 MINIMUM.



PART FRAMING PLAN
N.T.S.

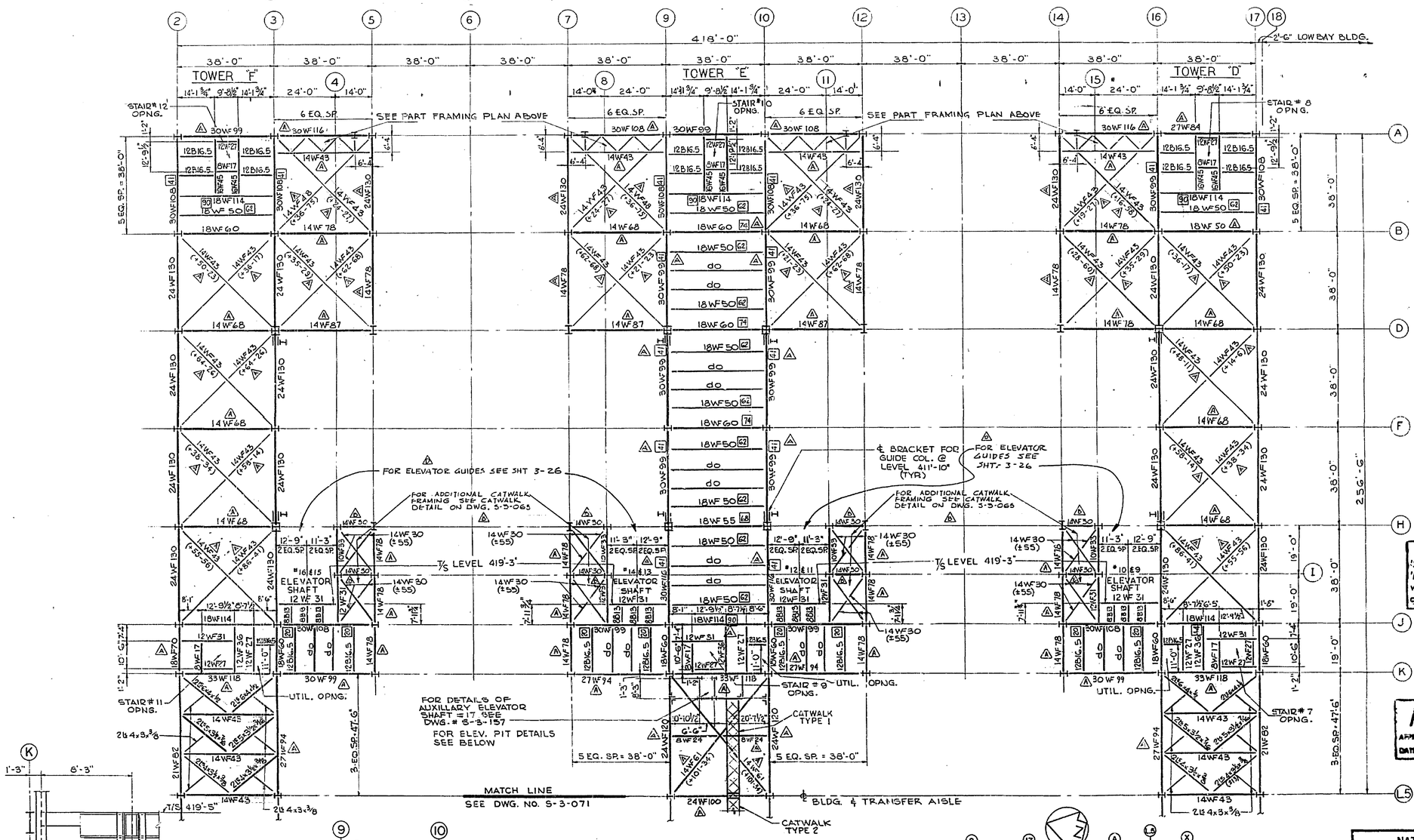
LEGEND FOR SHEAR CONNECTORS

[31] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE @ 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[31] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

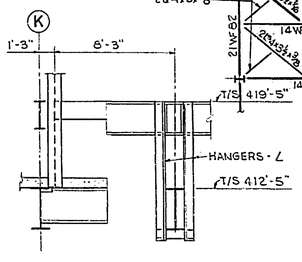
NOTE:
⑥ CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
		⑤	REVISIONS TO STRUCTURAL FRAMING TO ACCOM. ADDED TO CONTRACT	7/11/63	JDW
11	⑥		REVISIONS IN STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NASA-8	8/26/63	JDW
1	⑥		ADDED NOTE	11/5/63	JDW
2	⑦		REVISED TO CONFORM TO AMEND # 7	6.14.64	JDW
	⑧		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	2/4/68	[illegible]

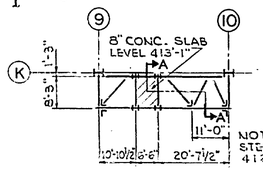


RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967



SECTION A-A
1/8" = 1'-0"

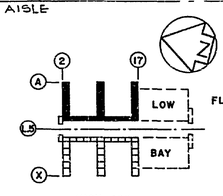


NOTE: TOP OF STEEL LEVEL 412'-5"

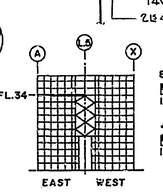
PLAN AT LEVEL 413'-1"
1/16" = 1'-0"

FRAMING PLAN AT FLOOR 34
1/16" = 1'-0"

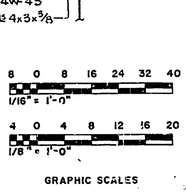
NOTE. FIN. FLOOR LEVEL 419'-9"
TOP OF STEEL LEVEL 419'-5"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION



GRAPHIC SCALES

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 442 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING EAST HALF
FLOOR 34 - LEVEL 419'-9"

INV. NO. ENG. (NASA) 06-123-63 4; DATED: MAY 1963		SIZE F	FILE NO. 203-28.297
SCALE: AS NOTED	SECTION NO. S-3-070		SHEET NO. S-3-74

FERNANDEZ Drawn by | HEERMANN Chkd by

A39.02.01.0ADS169.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

*NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

OPPOSITE HAND

X-BRACING

LEGEND FOR SHEAR CONNECTORS

[8] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[7] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	23		REVISIONS TO STRUCTURAL FRAMING TO ACCOM. HOOK TO CONFLUENCE LINE	7/26/63	JDW
	9, 11		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOV. TO SPACE - NASA 2	8/14/63	JDW
1	A		ADDED NOTE	11/15/63	JDW
2	14		REVISED TO CONFORM TO AMEND. # 7	4/24/64	JDW
	A		AS BUILT	12/14/67	
	F		REVISED FOR F.R.D. INDEX	2/16/68	G.D.L.

PART FRAMING PLAN

N.T.S.

MATCH LINE SEE DWG. NO. S-3-070

CATWALK (TYPE 1)

BLDG & TRANSFER AISLE

CATWALK TYPE 2

STAIR #5 OPNG.

STAIR #3 OPNG.

STAIR #1 OPNG

STAIR #6 OPNG

STAIR #4 OPNG

STAIR #2 OPNG

UTILITY OPNG.

5 EQ. SP. = 38'-0"

3 EQ. SP. = 47'-6"

5 EQ. SP. = 38'-0"

14 WF 30 (±55) TOP OF STEEL LEVEL 419'-3"

ELEVATOR SHAFT #A7

ELEVATOR SHAFT #5

ELEVATOR SHAFT #A3

ELEVATOR SHAFT #A1

FOR ADDITIONAL CATWALK FRAMING SEE CATWALK DETAIL ON DWG. S-3-065

FOR ELEVATOR GUIDES SEE SHT 3-26 SIMILAR - EXCEPT OPP. HAND.

℄ BRACKET FOR GUIDE COL. @ LEVEL 411'-10" (TYP.)

SEE PART FRAMING PLAN ABOVE

TOWER "C"

TOWER "B"

TOWER "A"

38'-0"

24'-0"

14'-0"

14'-1¾"

9'-8½"

418'-0"

2'-6" LOW BAY BLDG.

NOTE:

[C] CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED

FRAMING PLAN AT FLOOR 34

1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 419'-9"
TOP OF STEEL LEVEL 419'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE 1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.D.L. Lambertsen
DATE JUL 2 2002 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 34 - LEVEL 419'-9"

DRN. NO. ENG. NASA 03-123-63-41		SIZE	FILE NO.
DATED: MAY 1963		F	203-20, 297
SCALE: AS NOTED	SECTION NO. S-3-071	SHEET NO. S-3-75	
DRN by: L'ELLINI	CHK by: HERRMANN		

A39.02.01.0ADS170.00

17 June 63

ECONOMY BLUE PRINT CO., INC. 127 Dryden Swing Cloth

EXPORT CONTROL NOTICE: EAR 99

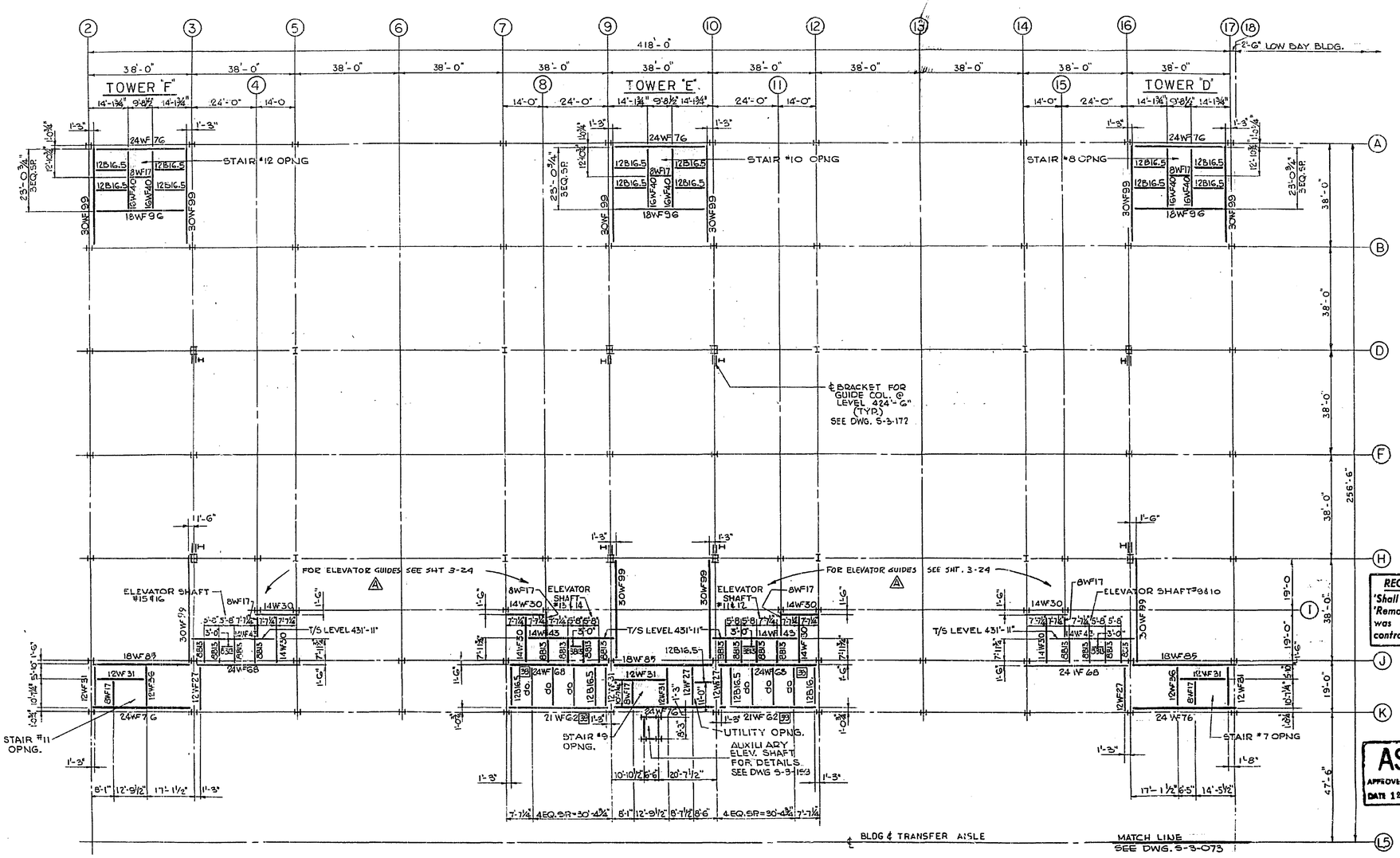
EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF ¾"×3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

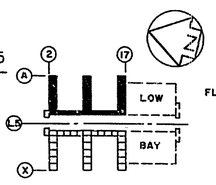
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISE TO CONFORM TO AMEND. #7	1-11-66	[illegible]
	A		AS BUILT	12/16/67	
	C		REVISED FOR F.R.D. INDEX	2-16-68	[illegible]



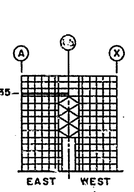
FRAMING PLAN AT FLOOR 35

1/16" = 1'-0"

NOTE: FIN. FLOOR – LEVEL 432'-5"
TOP OF STEEL – LEVEL 432'-1"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE

8 0 8 16 24 32 40

1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URS/JHN - ROBERTS - SEELYE - MORAN
442 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING EAST HALF
FLOOR 35 - LEVEL 432'-5"

INV. NO. ENG. (NASA) 06-123-63-41		SIZE F	FILE NO. 203-28,297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-072	SHEET NO. S-76	

FELLINI Drawn by | HERRMANN Checked by

A39.02.01.0ADS171.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

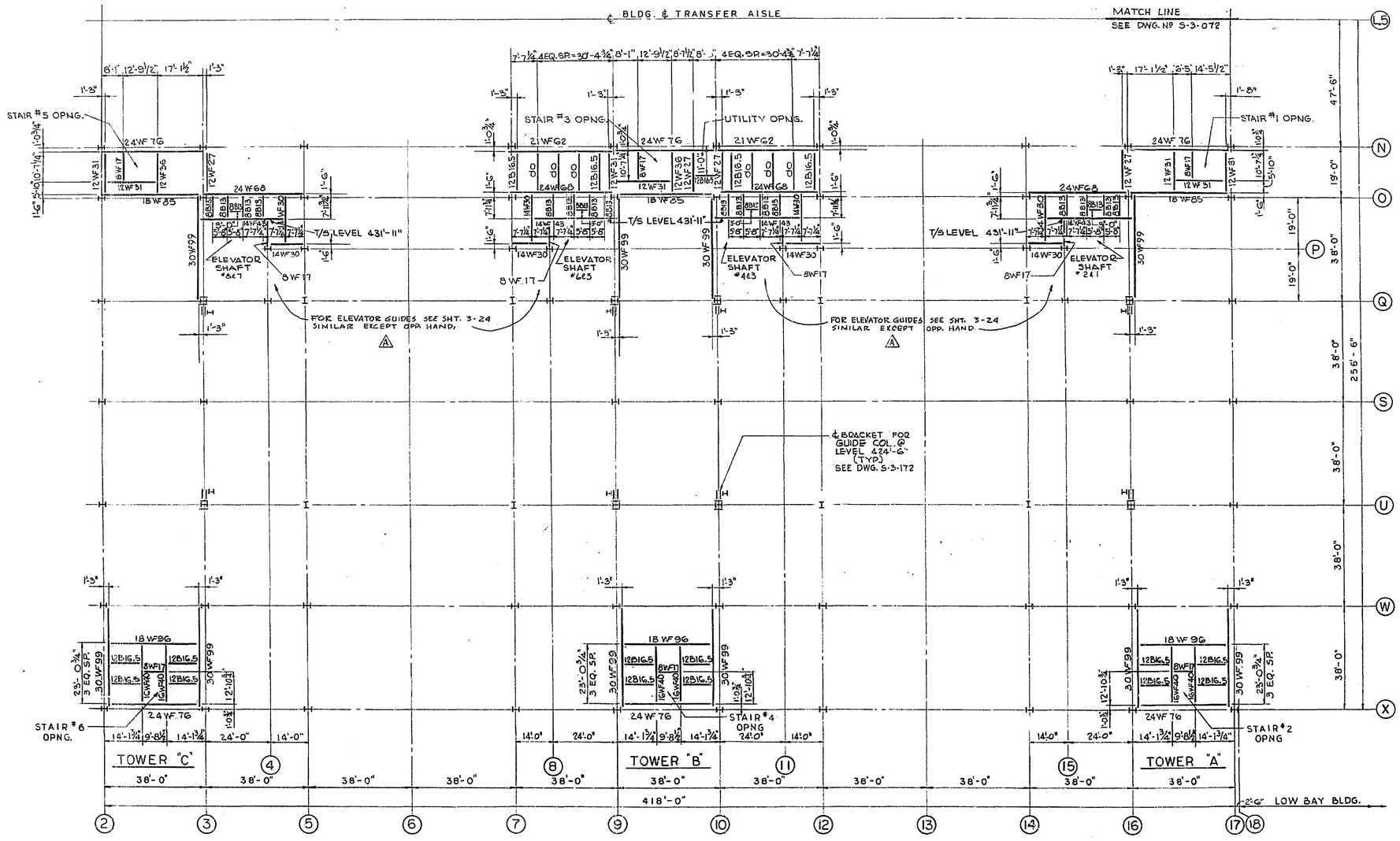
LEGEND FOR SHEAR CONNECTORS

[4] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[6] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	6-24-66	[illegible]
	B		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	2/16/68	[illegible]



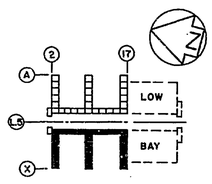
RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

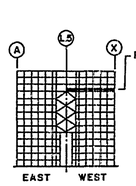
FRAMING PLAN AT FLOOR 35

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 432'-5"
TOP OF STEEL - LEVEL 432'-1"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 35 - LEVEL 432'-5"

INV. NO. ENG. (N.A.S.A) 08-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28,257
SCALE: AS NOTED
SECTION NO. S-3-073
SHEET NO. 3-77

MIHEYEV Dwn by
HERRMANK Ckd by

A39.02.01.0ADS172.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM, FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

38 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. 30 - CHANGE NO. 4 - A	9/11/63	[illegible]
3	B		ADDED SECTION "B-B" TO ACCOMP. MOD. 70.	11/15/63	[illegible]
2	C		REVISED TO CONFORM TO AMEND. # 7	4-14-64	[illegible]
	D		AS BUILT	12/14/67	
	E		REVISED FOR F.R.D. INDEX	2/68	E.D.W.

418'-0"

38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 38'-0" | 2'-6"

TOWER "F" | TOWER "E" | TOWER "D" | LOW BAY BLDG.

14'-1¾" | 9'-8½" | 14'-1¾" | 24'-0" | 14'-0"

STAIR #12 OPNG. | STAIR #10 OPNG. | STAIR #8 OPNG.

24 WF 76

12 B 16.5 | 6 WF 17 | 6 WF 40 | 18 WF 96 | 30 WF 99

23'-0¾" 3 EQ. SP.

1'-3" | 1'-6" | 1'-9" | 2'-6" | 3'-0" | 3'-6" | 4'-0"

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

SECTION A-A
1/2" = 1'-0"

LEVEL 449'-3" | 21 WF | 27 WF | HANGER L's | LEVEL 444'-9" | 18 WF | CONC. SLAB N.I.C. | L 3x3x5/16

FOR SIZES AND DIMENSIONS SEE DETAIL BELOW.

FOR ELEVATOR GUIDES SEE SHT. 3-24 (A)

STAIR #11 OPNG. | UTILITY OPNG. | STAIR #9 OPNG. | ℄ BRACKET FOR GUIDE COL. G LEVEL 487'-2" (TYP.) SEE DWG. S-3-172 | ELEV. SHAFT FOR DETAILS SEE DWG. S-3-157 | STAIR #7 OPNG.

12 B 16.5 | 18 WF 85 | 30 WF 108 | 12 WF 31 | 12 WF 27 | 12 WF 36 | 21 WF 62 | 24 WF 76 | 4 EQ. SP. = 30'-4¾"

℄ BLDG. & TRANSFER AISLE

MATCH LINE SEE DWG. NO S-3-075

SECTION "B-B"
SCALE 1" = 1'-0"

FLOOR BEAM | T/S LEVEL 449'-3" | 16 WF | 36 WF | 10 WF 21 | 4x8x3/8"L T4B | 2-7/8"ϕ T4B SLOT L's 10 WF 3" | TOP OF GUIDE COL. | 6 WF 15.5 | 6"x6" GUIDE COL.

NOTE: THE ABOVE SECTION SHOWS REVISION TO DETAIL AT TOP, WHICH WAS ADDED BY SKETCH ST-2 IN AMENDMENT NO. 7 TO DEFINE THE UPPER LIMITS OF ELEVATOR GUIDE COLUMNS (32 ELEVATOR GUIDE COLUMNS AFFECTED FOR REDUCED LENGTH) FOR OTHER DETAILS NOT SHOWN, SEE AMENDMENT NO. 7 SKETCHES ST-1, ST-2 & ST-3.

AS BUILT
APPROVED BY A.D. Lambson
DATE 12 DEC 1967

ELEVATOR FRAMING PLANS
3/32" = 1'-0"

NOTE: T/S LEVEL 444'-9" EXCEPT AS NOTED. FRAMING BET. COLS. 3-4, 10-11, OPPHD.

LEVEL 444'-3" | HANGER ∠4x3½x7/16 EA. SIDE | T/S LEVEL 443'-3" | ∠4x3½x7/16 EA. SIDE | 18 WF 45 | 30 WF 108

T/S LEVEL 449'-3". FRAMING BET. COLS. 3-4, 10-11, OPPHD.

FRAMING PLAN AT FLOOR 36
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 445'-1"
TOP OF STEEL - LEVEL 444'-9"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN | LOW BAY | FL. 36 | EAST | WEST | KEY SECTION

GRAPHIC SCALES
1/2" = 1'-0"
3/32" = 1'-0"
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
140 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.

LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 36 - LEVEL 445'-1"

INV. NO. ENG. (NASA) 36-121-63-41 | SIZE F | FILE NO. 203-28.297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-074 | SHEET NO. 3-7E

Drawn by FERNANDEZ | Checked by HERRMANN

A39.02.01.0ADS173.00

EXPORT CONTROL NOTICE: EAR 99

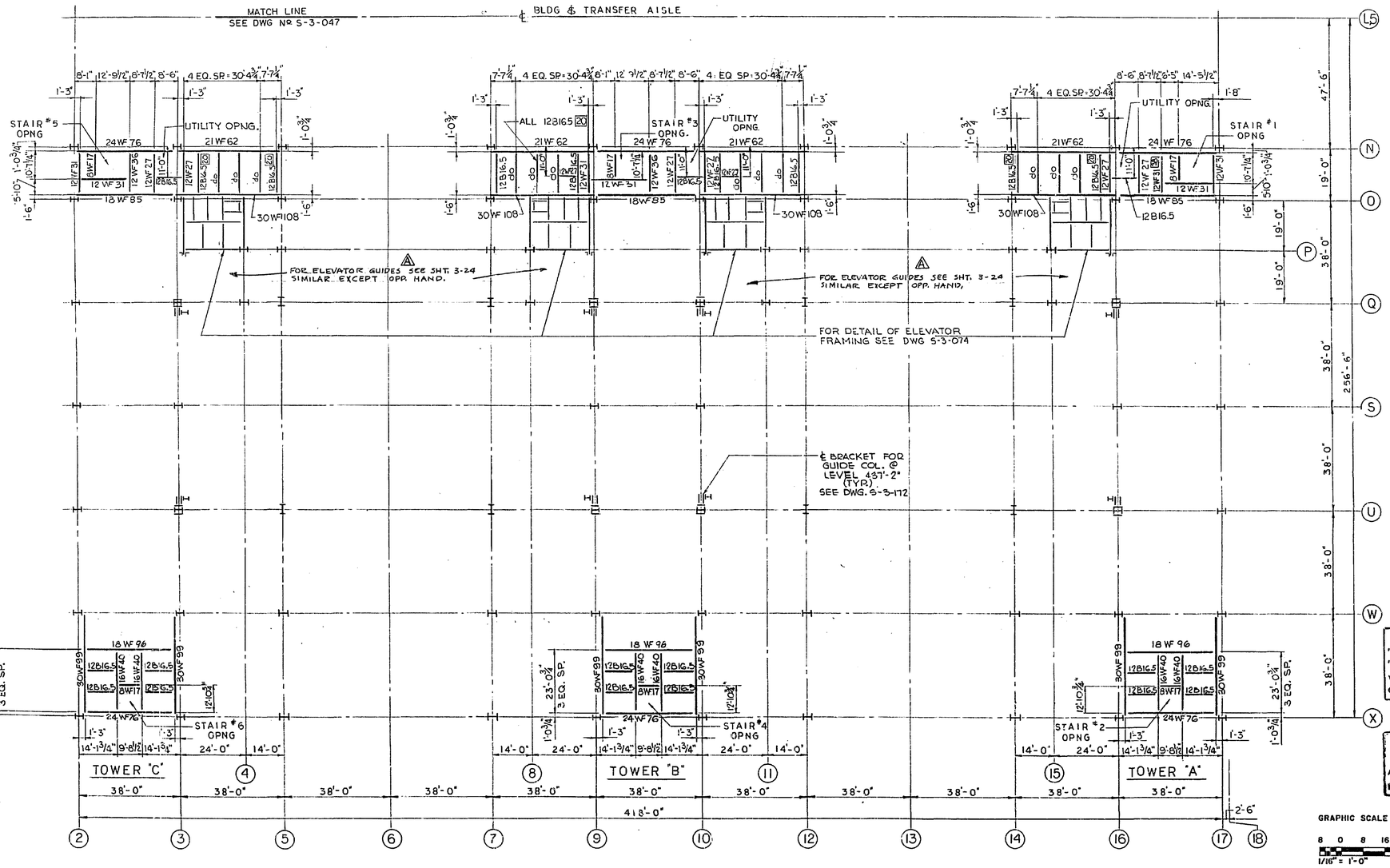
EXPORT CONTROL NOTICE: EAR 99

LEDGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4"x3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAX. FOR FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[10] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

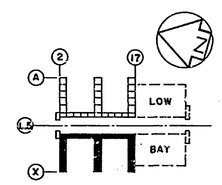
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO CONFORM TO AMEND. #7	1.11.68	JCW
	A		AS BUILT	12/4/67	
	C		REVISED FOR F.R.D. INDEX	7/17/68	G.W.L.C.



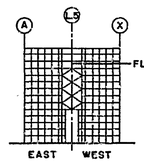
FRAMING PLAN AT FLOOR 36

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 445'-1"
TOP OF STEEL LEVEL 444'-9" UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.W. Hamberson
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 40 FIFTH AVENUE, NEW YORK 11, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 36 - LEVEL 445'-1"

INV. NO. ENG. (NASA) 08-123-63-41		SIZE F	FILE NO. 203-28,297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-075	SHEET NO. 3-79	

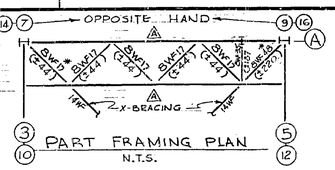
SOCHEO Drn by | HERRMANN Chd by

A39.02.01.0ADS174.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.



PART FRAMING PLAN
N.T.S.

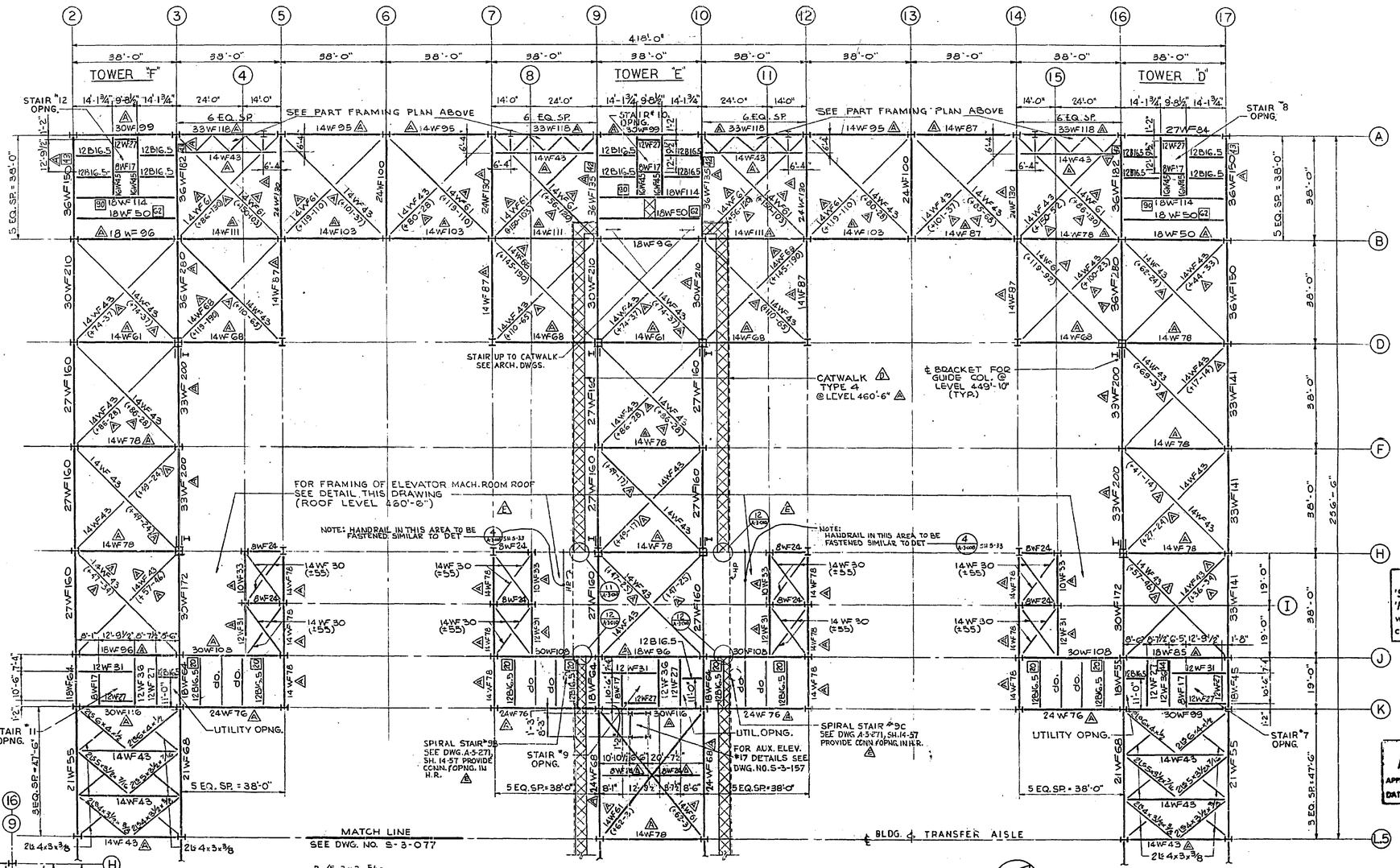
LEGEND FOR SHEAR CONNECTORS:

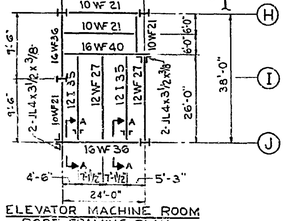
[41] – INDICATES NUMBER OF 3/4"×3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[33] – INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

NOTE: CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A [51]		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTRACT NAS4-8	7/24/63	[illegible]
	A		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. TO CONTRACT NAS4-8	9/24/63	[illegible]
1	A		ADDED NOTE	11/15/63	[illegible]
1	A		N.I.C. DELETED WHERE INDICATED WITH TYPE 4 CATWALK BY MOD. 2 TO NUMBER DRAWINGS SENT OUT MOD. 12	1-24-64	[illegible]
4	A		DELETED SECTION OF CAT-WALK TYPE 4 TO ACCOM. MOD. 12 CONT. NAS4-81	5/15/64	[illegible]
	A		AS BUILT	12/14/67	
	C		REVISED FOR F.R.D. INDEX	3/28/68	[illegible]



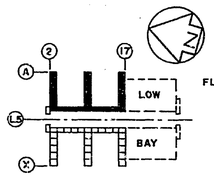


ELEVATOR MACHINE ROOM ROOF FRAMING PLAN
1/16" = 1'-0"

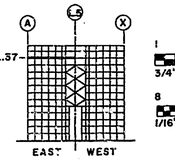
FRAMING PLAN AT FLOOR 37
1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 457'-9"
TOP OF STEEL - LEVEL 457'-5"
UNLESS OTHERWISE NOTED

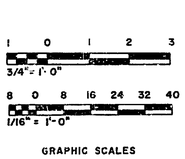
NOTE: FRAMING AT COLS. 3 TO 4 AND 10 TO 11 OPP. HAND. TOP OF STEEL LEVEL 460'-2"



HIGH BAY KEY PLAN



KEY SECTION



GRAPHIC SCALES

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
542 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 37 - LEVEL 457'-9"

DW. NO. ENG. (NASA)	M-121-63-41	SIZE	FILE NO.
DATED: MAY 1963		F	203-28.297
SCALE: AS NOTED	SECTION: NO. S-3-076	SHEET NO. S-3-80	

CASUALMONE Drn by | HERRMANN Chd by

17 JUNE 63

A39.02.01.0ADS175.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

NOTE: WHERE CROSS BRACING EXISTS 8 WF 17 SHALL BE A 14 WF OF IDENTICAL WEIGHT AND 8 WF 48 SHALL BE A 14 WF 48 MINIMUM.

PART FRAMING PLAN
N.T.S.

LEGEND FOR SHEAR CONNECTORS
41 INDICATES NUMBER OF 3/4" x 8" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE @ 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
5 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

NOTE: CONTRACTOR MAY SUBSTITUTE A STRUCTUAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A(L7)		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. 12 CONTRACT NAS5-6	4/4/63	JWW
	B	1	REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. 21 CONTR. NAS5-6	8/26/63	JWW
1	A		ADDED NOTE	11/5/63	PF
1	A		ADD 1 DELETED WHERE INDICATED WITH TYPE 4 CATWALK BY ADDEND. #10 NUMBER ADDED WHERE SHOWN BY ADDEND. #10 DELETED SECTION OF CAT-WALK SHOWN @ A-A ADDED TO CONT. NASA 81.	6-28-64	JWW
2	A		AS BUILT	9-25-64	JWW
	A		AS BUILT	12/14/67	
	G		REVISED FOR F.P.D. INDEX	2/14/68	Gladstone

MATCH LINE SEE DWG. NO. S-3-076

BLDG. ℄ TRANSFER AISLE

STAIR #5 OPNG. — UTILITY OPNG. — STAIR #3 OPNG. — CATWALK TYPE 4 — STAIR #1 OPNG.

FOR FRAMING OF ELEVATOR MACH. RM. ROOF SEE DETAIL THIS DRAWING. (ROOF LEVEL 460'-6")

NOTE: HANDRAIL IN THIS AREA TO BE FASTENED SIMILAR TO DET.

CATWALK TYPE 4 @ LEVEL 460'-6"

℄ BRACKET FOR GUIDE COL. @ LEVEL 449'-10" (TYP.) SEE DWG S-3-172

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY
DATE 18 DEC 1967

TOWER "C" — TOWER "B" — TOWER "A"

SEE PART FRAMING PLAN ABOVE

2'-6" LOW BAY BLDG.

GRAPHIC SCALES
1/16" = 1'-0"
3/4" = 1'-0"

NOTE: FRAMING AT COLS. 3 TO 4 AND 10 TO 11 OPP. HAND. TOP OF STEEL LEVEL 460'-2".

ELEVATOR MACHINE ROOM ROOF FRAMING PLAN
1/16" = 1'-0"

2-L8 3x3x5/16 TROLLEY STOP
W12 I MONORAIL FOR 3 TON HOIST
COPE FOR HOIST TROLLEY DROP-OUT
SECTION A-A
3/4" = 1'-0"

FRAMING PLAN AT FLOOR 37
1/16" = 1'-0"

NOTE: FIN. FLOOR-LEVEL 457'-9" TOP OF STEEL-LEVEL 457'-5" UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN — LOW BAY — HIGH BAY

KEY SECTION — EAST — WEST — FL. 37

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN 641 FIFTH AVENUE NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 37 ± LEVEL 457'-9"

DWG. NO. ENG. (N A S A) 10-123-63-41		SIZE	FILE NO.
DATED: MAY 1963		F	203-28,297
SCALE: AS NOTED	SECTION NO. S-3 077	SHEET NO. 3-81	

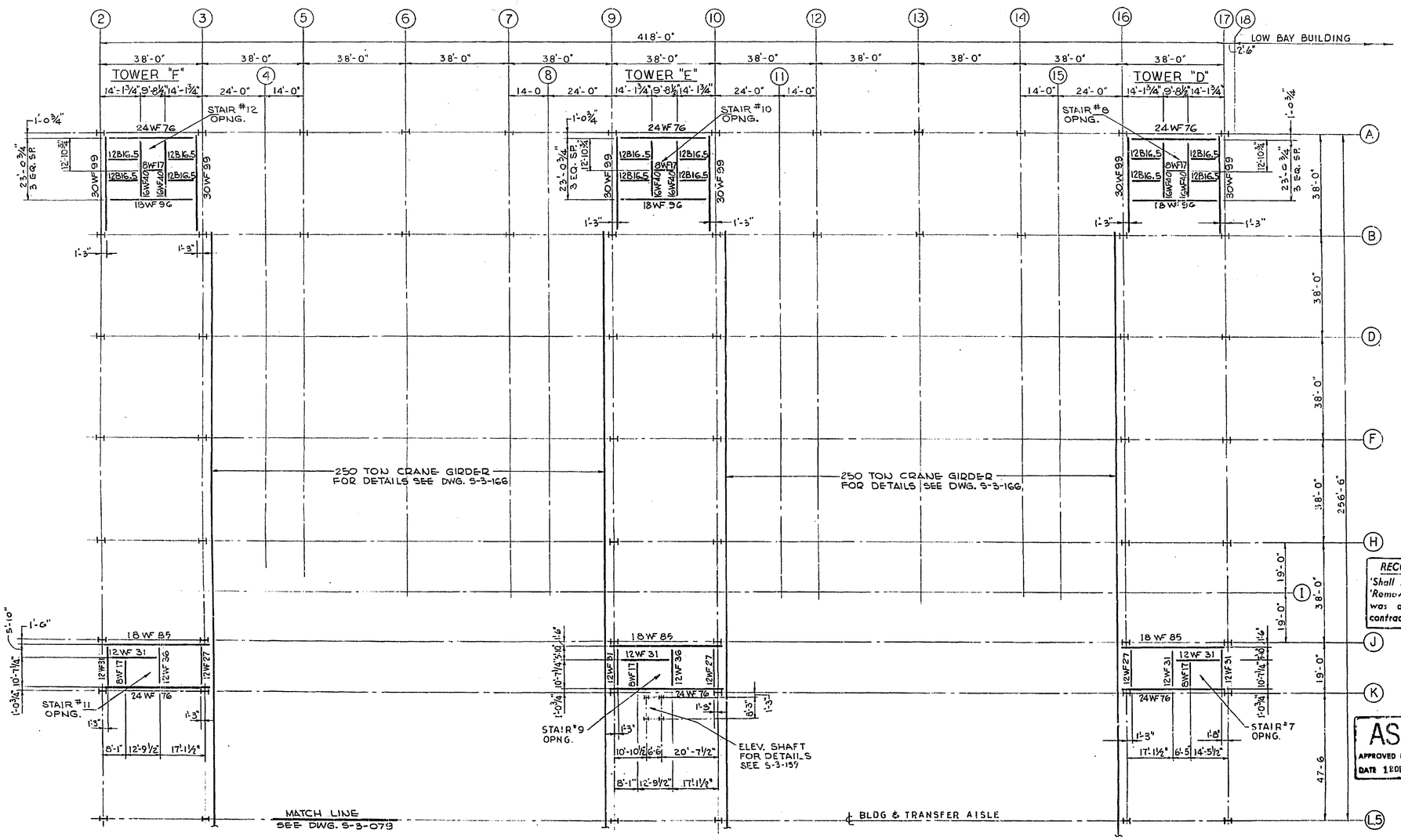
CAGLIANONE Drn by | HERRMANN Ckd by

A39.02.01.0ADS176.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

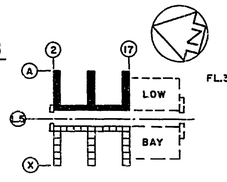
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/4/67	
	B		REVISED FOR F.R.D. INDEX	2-4-68	G.A.Smith



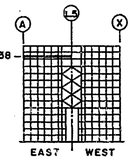
FRAMING PLAN AT FLOOR 38

1/16"= 1'-0"

NOTE: FIN. FLOOR - LEVEL 470'-5"
TOP OF STEEL - LEVEL 470'-1"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY A.D.Lambuson
DATE 1 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 38 - LEVEL 470'-5"

INV. NO. ENG. (N.A.S.A.) 08-133-63-41		SIZE F	FILE NO. 203-28, 297
DATED: MAY 1963			
SCALE: AS NOTED	SECTION NO. S-3-078	SHEET NO. 3-82	

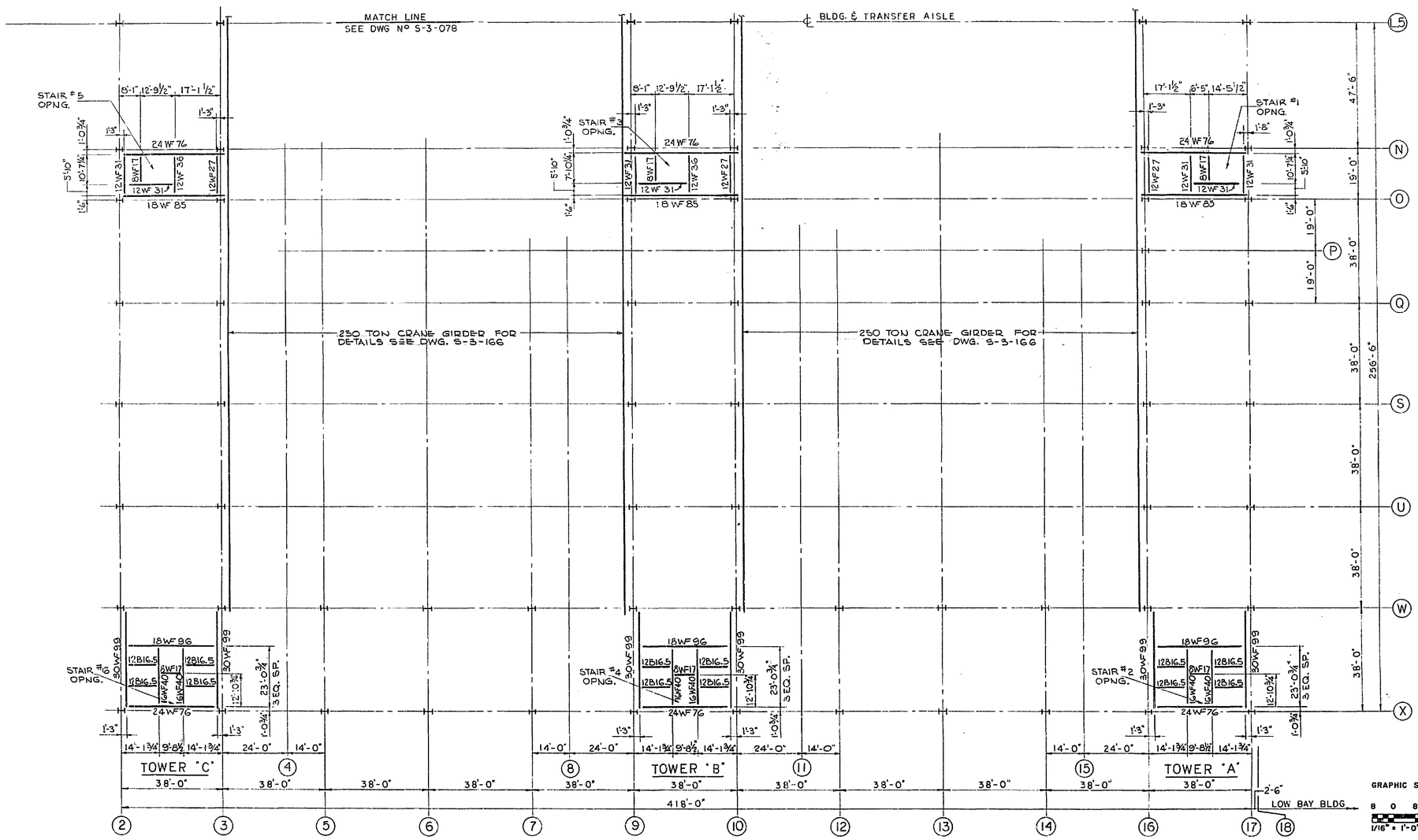
S.DICHKO Drn by | HERRMANN Ckd by

A39.02.01.0ADS177.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/14/67	
	B		REVISED FOR F.R.D. INDEX	2/5/68	G.L.H.A.

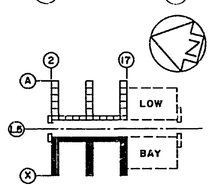


NOTE
SEE STAIR DETAIL DWG. S-3-170 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

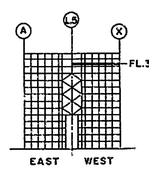
FRAMING PLAN AT FLOOR 38

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 470'-5"
TOP OF STEEL - LEVEL 470'-1"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

RECORD DRAWING NOTE
'Shall be' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY E.O. Lambrecht
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 38 - LEVEL 473'-5"

DWG. NO. ENG. (NASA) 08-123-63-41 DATED: MAY 1963	SIZE F	FILE NO. 203-28.297
SCALE: AS NOTED	SECTION NO. S-3-079	SHEET NO. 3-83

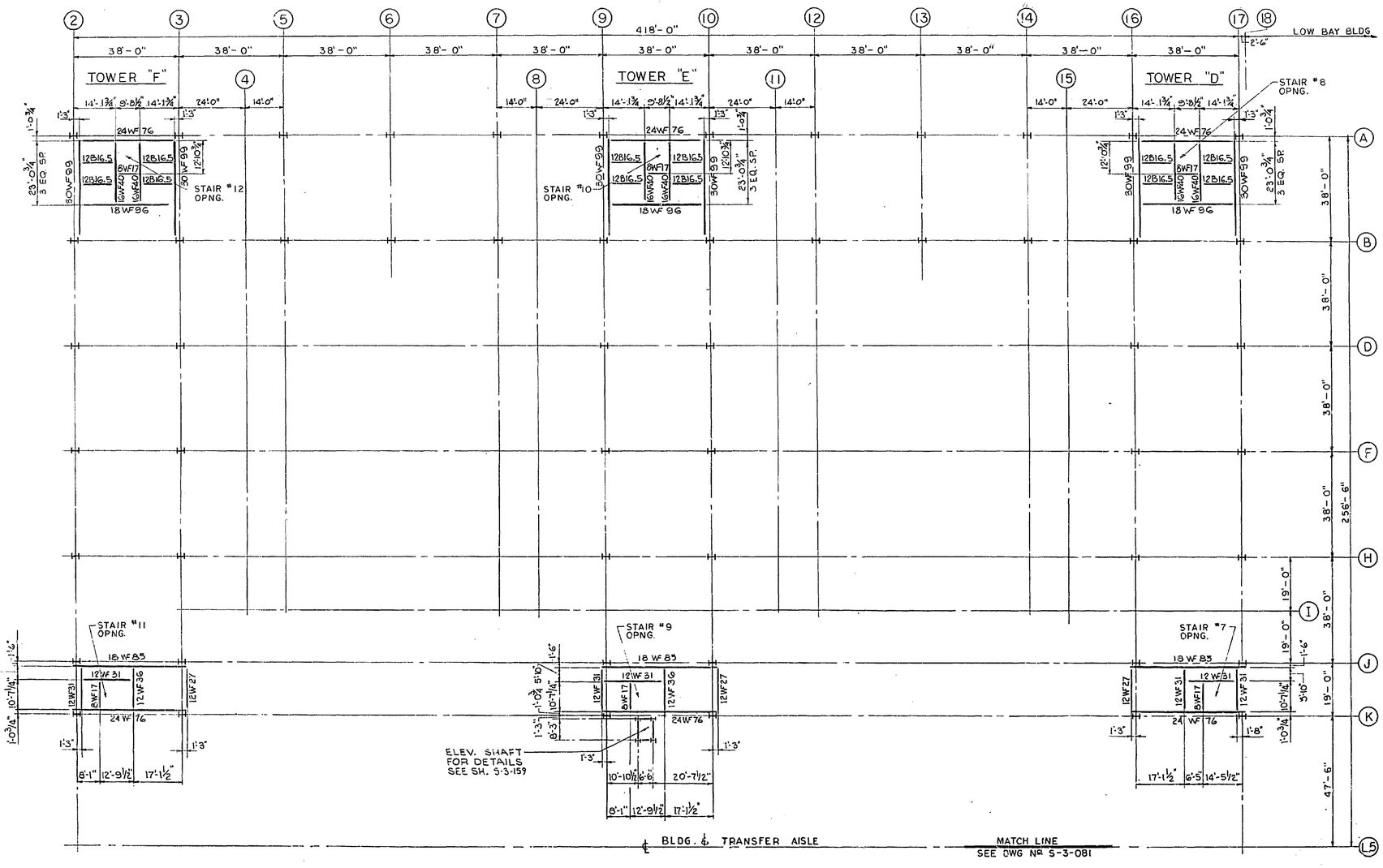
SOCHKO Drawn by | HERRMANN Chkd by

A39.02.01.CADS178.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/6/67	
	B		REVISED FOR F.R.D. INDEX	12/6/67	

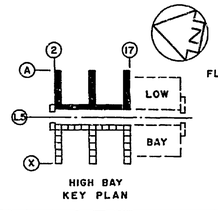


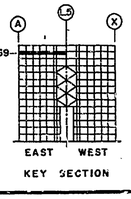
NOTE
SEE STAIR DETAIL DWG. S-3-170 FOR ANY ADDITIONAL FRAMING NOT SHOWN ON THIS DWG.

FRAMING PLAN AT FLOOR 39

1/16" = 1'-0"

NOTE: FIN. FLOOR LEVEL 483'-1"
TOP OF STEEL LEVEL 482'-9" UNLESS OTHERWISE NOTED





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 39 - LEVEL 483'-1"

INV. NO. ENG. (NASA) 08-133-63-41	SIZE	FILE NO.	
DATED: MAY 1963	F	203-28,297	
SCALE: AS NOTED	SECTION NO. S-3-080	SHEET NO. S-84	

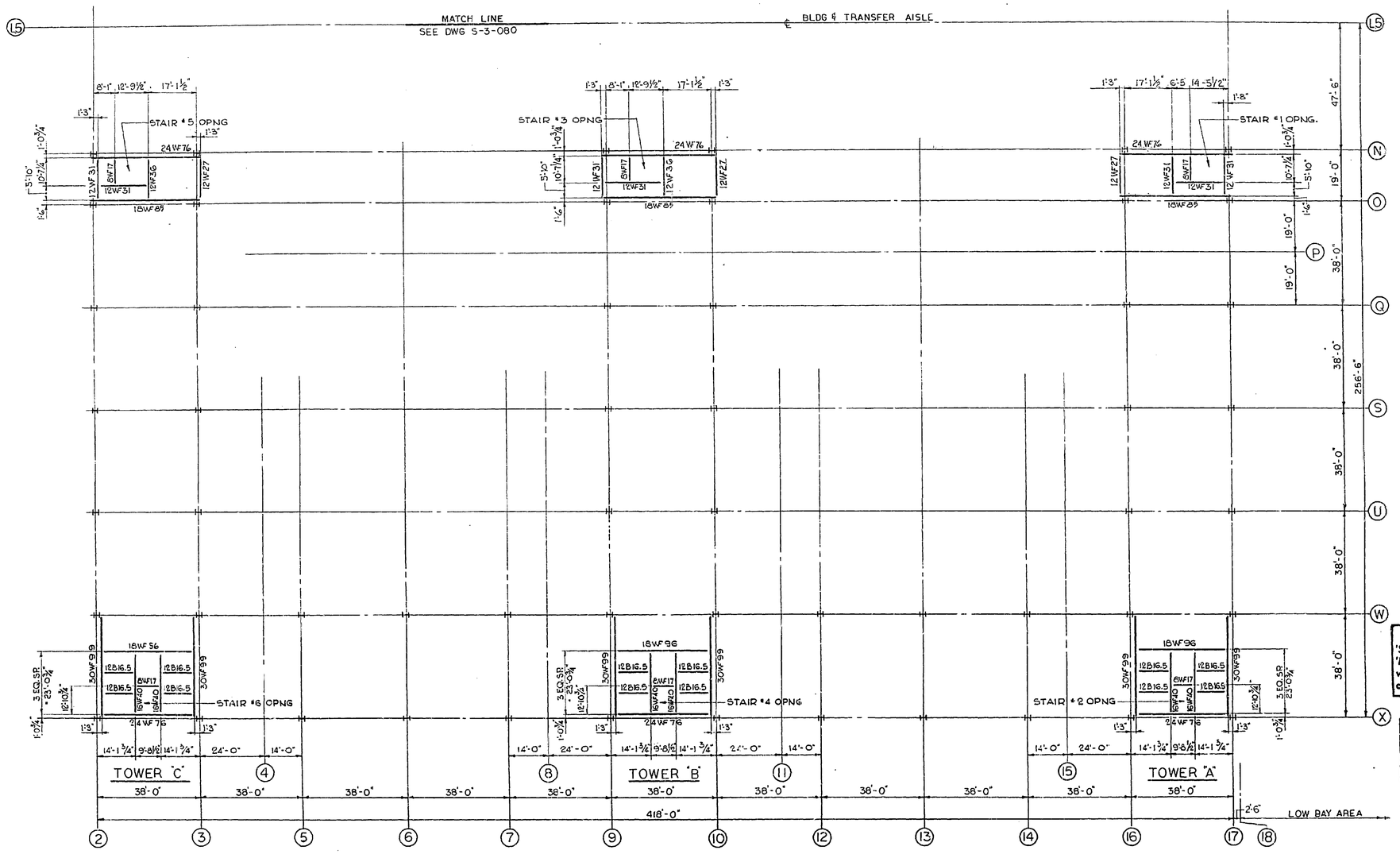
CAGLIANONE Drawn by | HERRMANN Ckd by

A39.02.01.0ADS179.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	A		AS BUILT	12/4/67	
	B		REVISED FOR F.R.C. INDEX	2-16-68	[illegible]



RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

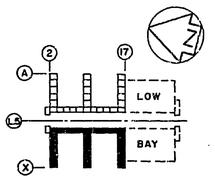
AS BUILT
APPROVED BY [signature]
DATE 12 DEC 1967

NOTE
SEE STAIR DETAIL DWG S-3-170 FOR ANY ADDITIONAL FRAMING NOTE SHOWN ON THIS DWG.

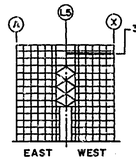
FRAMING PLAN AT FLOOR 39

1/16" = 1'-0"

NOTE: FIN FLOOR - LEVEL 483'-1"
TOP OF STEEL - LEVEL 482'-9"
UNLESS OTHERWISE NOTED.



HIGH BAY KEY PLAN



EAST WEST
KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
642 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 39 - LEVEL 483'-1"

INV. NO. ENG. (NASA) 08-123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-081 | SHEET NO. 3-85

FELLINI Dwn by | HERRMANN Chk by

A39.02.01.0ADS180.00

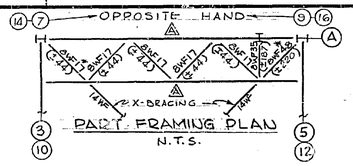
EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

(62) INDICATES NUMBER OF 5/8" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

(5) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.



PART FRAMING PLAN

N.T.S.

* NOTE: WHERE CROSS BRACING EXISTS, 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

REVISIONS				
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	24		REVISIONS TO STRUCTURAL FRAMING TO ACCOM. ADD'L 30 SQ.FT. SLAB	7/26/63	[illegible]
1	23		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MOD. TO CONTRACT #AT(40-1)-2	8/26/63	[illegible]
6	22		ADDED & REVISED DIMENSIONS	10/1/63	[illegible]
1	21		ADDED NOTE	11/5/63	[illegible]
	20		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. INDEX	2/[illegible]/68	[illegible]

TOWER "F" — TOWER "E" — TOWER "D"

STAIR #12 OPNG. — STAIR #10 OPNG. — STAIR #8 OPNG.

SEE PART FRAMING PLAN ABOVE

118'-0" (38'-0" x 3)

UTILITY OPNG. — STAIR #9 OPNG. — ELEV. SHAFT FOR DETAILS SEE DWG NO. 5-3-157 — STAIR #7 OPNG.

CATWALK TYPE 1 — CATWALK TYPE 2 — & BLDG. & TRANSFER AISLE

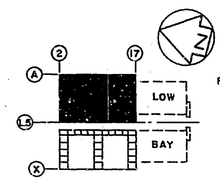
MATCH LINE SEE DWG. NO. 5-3-083

NOTE.
(D) CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED

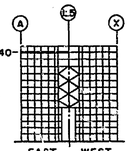
FRAMING PLAN AT FLOOR 40

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 495'-9"
TOP OF STEEL - LEVEL 495'-5"
UNLESS OTHERWISE NOTED



HIGH BAY KEY PLAN



KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY [illegible]
DATE 12 DEC 67

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - McRAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 40 - LEVEL 495'-9"

DWG. NO. ENG. (NASA)	06-123-63-41	SIZE	FILE NO.
DATED:	MAY 1963	E	203-28.297
SCALE: AS NOTED	SECTION NO. 3	3-062	SHEET NO. 3-86

CASLIANONE Drawn by | HERRMANN Checked by

A39.02.01.0ADS181.0C

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

55 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

*NOTE: WHERE CROSS BRACING EXISTS 8WF17 SHALL BE A 14WF OF IDENTICAL WEIGHT AND 8WF48 SHALL BE A 14WF48 MINIMUM.

NO.	SYM.	ZONE	REVISIONS DESCRIPTION	DATE	APPROVED
	24		FRAMING TO ACCOMP. REVISIONS TO STRUCT. AND TO CONTRACT	7/26/63	[illegible]
	25		REVISIONS TO STRUCT. MOD. TO CONTR.	8/22/63	[illegible]
G	26		ADDED & REVISED DIMENSIONS	10/11/63	[illegible]
I	27		ADDED NOTE	11/15/63	[illegible]
	28		AS BUILT	12/4/67	
	F		REVISED FOR F.R.D. [illegible]		[illegible]

CATWALK TYPE 1

CATWALK-TYPE 2

5=X-BRACING

OPP. HAND

OPP. HAND

PART FRAMING PLAN
N.T.S.

MATCH LINE
SEE DWG. NO. S-3-082

& BUILDING & TRANSFER AISLE

FOR BEAMS ON THIS LINE, SEE EAST HALF DWG. NO. S-3-082

FOR DETAILS AND PLAN OF WATER TANK SUPPORTS IN THIS BAY SEE DWG. S-3-053

STAIR #6 OPNG.

STAIR #3 OPNG.

STAIR #5 OPNG.

STAIR #6 OPNG.

STAIR #4 OPNG.

STAIR #2 OPNG.

SEE PART FRAMING PLAN ABOVE

SEE PART FRAMING PLAN ABOVE

TOWER "C"

TOWER "B"

TOWER "A"

UTILITY OPNG.

CATWALK TYPE 1

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY: [illegible]
DATE 12 DEC. 1967

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1' 0"

NOTE: CONTRACTOR MAY SUBSTITUTE A STRUCTURAL TEE FOR 2 ANGLES, PROVIDED AREA, RADIUS OF GYRATION AND OTHER PHYSICAL CHARACTERISTICS OF THE TWO ANGLES CALLED FOR ARE EQUALED OR EXCEEDED.

FRAMING PLAN AT FLOOR 40
1/16"=1'-0"

NOTE: FIN. FLOOR - LEVEL 495'-9"
TOP OF STEEL - LEVEL 495'-5"
UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

EAST WEST KEY SECTION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN ROBERTS - SEELYE - McCRAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 40 - LEVEL 495'-9"

DWG. NO. ENG. (NASA) 08-123-63-41 | SIZE F | FILE NO. 203-28.297
DATED: MAY 1965 | SCALE: AS NOTED | SECTION NO. S-2-083 | SHEET NO. S-87

CAGLIONE Drawn by | HERRMANN Ckd by

A39.02.01.OAD5182.08

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

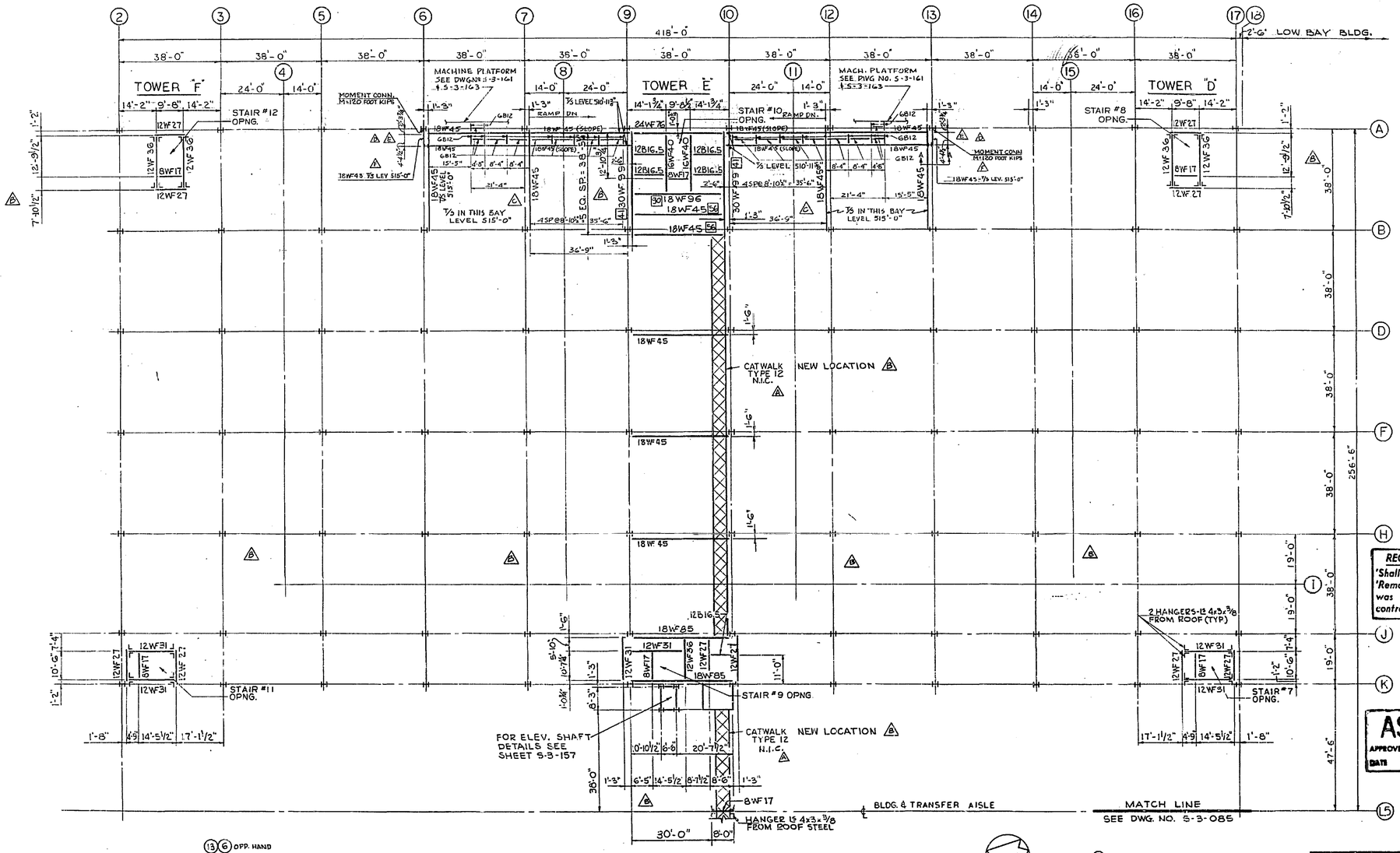
LEGEND FOR SHEAR CONNECTORS

41 INDICATES NUMBER OF ¾" × 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

9 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	JHH
10	A		RELOCATED CATWALK, DELETED COL.'S, REVISED DIMENSIONS	7/16/63	JHH
2	A		REVISED FRAMING @ FLOOR 41	11/8/63	JHH
8	A		DELETED CATWALK NOTE & CROSS HATCHING	12/16/63	JHH
2	A		ADDED DIMENSIONS TO ACCOMP MOD. TO CONTRACT NASA-8	1/29/64	JHH
3	A		ADDED FRAMING MEMBERS TO REVISE COLUMN & DETAIL TO ACCOM MOD. TO CONT. NASA-81	6/4/64	JHH
	A		AS BUILT	12/4/67	
	H		REVISED FOR FIRE UNDER	7/26/68	GLH



13 6 OPP. HAND

A SECTION A-A
SCALE: ½"=1'-0"

FRAMING PLAN AT FLOOR 41
1/16" = 1'-0"

NOTE FIN. FLOOR – LEVEL 511'-0"
TOP OF STEEL – LEVEL 510'-8"
UNLESS OTHERWISE NOTED.

HIGH BAY KEY PLAN

KEY SECTION

GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY G.L. Hamilton
DATE 12 DEC 1967

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN
442 FIFTH AVENUE
NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX.
CORPS OF ENGINEERS
JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRIT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
FLOOR 41 - LEVEL 511'-0"

INV. NO. ENG. (NASA) 06-123-63-41
DATED: MAY 1963
SIZE F
FILE NO. 203-28, 297
SCALE: AS NOTED
SECTION NO. S-3-064
SHEET NO. S-88

F. ELLIOTT Drn by
HERRMANN Ckd by

A39.02.01.0ADS183.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99

LEGEND FOR SHEAR CONNECTORS

[41] INDICATES NUMBER OF 3/4" x 3" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM FOR FULL LENGTH OF BEAM WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

[9] INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3 1/2" GAGE.

REVISIONS

NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
2	A		REVISED TO ACCOMPANY AMENDMENT NO. 7	6/20/63	JLHc
21	B		REMOVED COLUMNS FROM COLUMNS (P) & (Q) RELOCATED CATWALK - CHANGED DIMENSIONS	10/11/63	
2	C		REVISED FRAMING AT FLOOR 41	11/15/63	
2	D		DELETED CATWALK FRAMING & CROSS HATCHING	1/1/63	
2	E		ADDED DIMENSIONS TO ACCOMP. MOD. TO CONTRACT NASA-8	1/29/64	
2	F		ADDED FRAMING MEMBERS TO RECEIVE COLUMN TO ACCOM MOD TO CONT NASA-61	4/26/64	
	G		AS BUILT	12/4/67	
	H		REVISED FOR F.R.D. INDEX	2/16/68	

GRAPHIC SCALE

8 0 8 16 24 32 40

1/16" = 1'-0"

FRAMING PLAN AT FLOOR 41

1/16" = 1'-0"

NOTE: FIN. FLOOR - LEVEL 511'-0"

TOP OF STEEL LEVEL 510'-8" UNLESS OTHERWISE NOTED

HIGH BAY KEY PLAN

KEY SECTION

RECORD DRAWING NOTE

'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT

APPROVED BY [signature]

DATE 12 DEC 1967

10 JUN 63

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN - ROBERTS - SEELYE - MORAN, 642 FIFTH AVENUE, NEW YORK 19, NEW YORK

U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - WEST HALF
FLOOR 41 - LEVEL 511'-0"

INV. NO. ENG. (NASA) 08-123-63-41 | DATED: MAY 1963 | SIZE F | FILE NO. 203-28,297

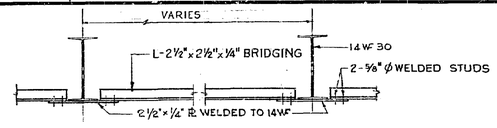
SCALE: AS NOTED | SECTION NO. S-3-085 | SHEET NO. 3-89

Drn by FERNANDEZ | Ckd by HERRMANN

A39.02.01.0ADS184.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99



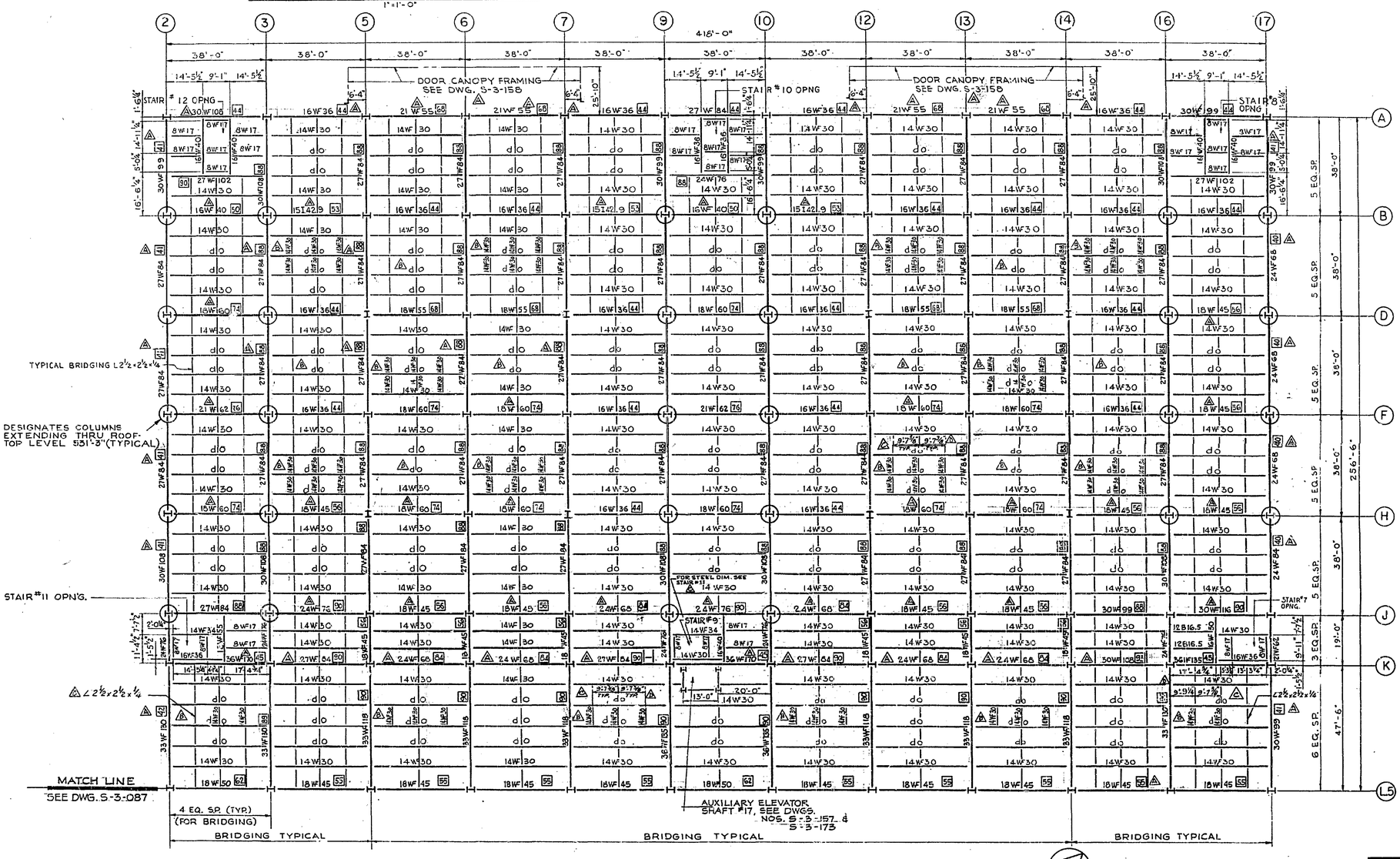
BRIDGING DETAIL AT SOFFIT OF ROOF
1"=1'-0"

LEGEND FOR SHEAR CONNECTORS:

(58) INDICATES NUMBER OF ¾"x5" HEADED STUD SHEAR CONNECTORS, CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM, WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.

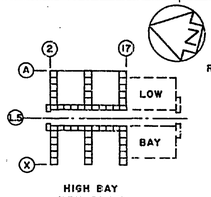
(41) INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE.

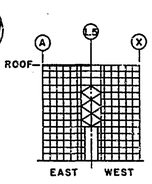
REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	24		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO GENERAL NASA-B	7/12/63	[illegible]
	24		REVISION TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-B	8/6/63	[illegible]
	5		CHANGED WF's TO LB, CORRECTED & ADDED DIM'S.	10/1/63	[illegible]
	3		REVISED DIMENSIONS.	10/1/63	[illegible]
		A	AS BUILT	12/4/67	
		F	REVISED FOR F.R.D. INDEX	2/16/68	[illegible]



NOTE:
STAIR DWGS.: NOS. S-3-167 TO S-3-170

ROOF FRAMING PLAN — EAST HALF
1/16" = 1'-0"
TOP OF STEEL - LEVEL 525'-3"





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY: [illegible]
DATE 18 DEC 67

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN, 342 FIFTH AVENUE, NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS, JACKSONVILLE, FLA.

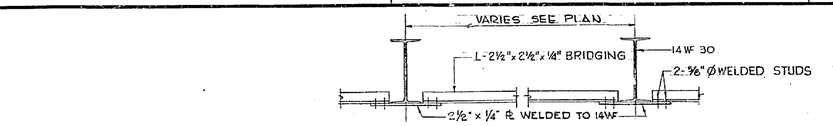
NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING - EAST HALF
ROOF - LEVEL 525'-7"

DRN. BY FERNANDEZ	CHK'D BY HERRMANN	INV. NO. ENG. (NASA) 08-123-63-41	SIZE F
DATE: MAY 1963		FILE NO. 203-28, 297	
SCALE: AS NOTED		SECTION NO. S-3-086	SHEET NO. 3-90

A39.02.01.0ADS185.00

EXPORT CONTROL NOTICE: EAR 99

EXPORT CONTROL NOTICE: EAR 99



BRIDGING DETAIL AT SOFFIT OF ROOF
1"=1'-0"

LEGEND FOR SHEAR CONNECTORS :
55 INDICATES NUMBER OF ¾"x3" HEADED STUD SHEAR CONNECTORS CENTERED ON TOP FLANGE OF BEAM AND UNIFORMLY SPACED FOR FULL LENGTH OF BEAM. WHERE NOT INDICATED, SPACE AT 1'-0" MAXIMUM. FULL LENGTH OF BEAM, WHEN STEEL SUPPORTS CONCRETE SLAB ONLY.
41 INDICATES SAME AS ABOVE, EXCEPT THAT SHEAR CONNECTORS ARE STAGGERED ON 3½" GAGE

REVISIONS					
NO.	SYM.	ZONE	DESCRIPTION	DATE	APPROVED
	△59		REVISIONS TO STRUCTURAL FRAMING TO ACCOMPANY MODIFICATION TO CONTRACT NASA-8	7/26/63	
24	△		REVISIONS TO STRUCTURAL FRAMING TO ACCOMP. MOD. TO CONTR. NASA-8	8/21/63	
5	△		CORRECTED DIMENSIONS & ADDED Ls	9/11/63	
1	△		REVISED DIMENSION	11/3/63	
1	△		REVISED STRUCTURAL FRAMING TO ACCOMP MOD TO CONTRACT NASA-8	1/29/64	
	△		AS BUILT	12/4/67	
	6		REVISED FOR F.R.D. INDEX	3/6/68	

MATCH LINE
SEE DWG. S-3-086

△Z 2½x2½x¼

STAIR #5 OPN'G.

BRIDGING L 2½x2½x¼ (TYP)

DESIGNATES COLUMNS EXTENDING THRU ROOF TOP LEVEL 531'-3" (TYPICAL)

STAIR #6 OPNG

BRIDGING TYPICAL

DOOR CANOPY FRAMING SEE DWG. S-3-159

STAIR #4 OPNG

BRIDGING TYPICAL

DOOR CANOPY FRAMING SEE DWG. S-3-159

STAIR #2 OPNG

BRIDGING TYPICAL

STAIR #3 OPNG.

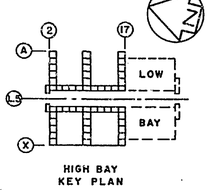
STAIR #1 OPNG

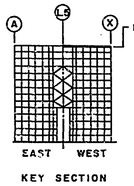
6 EQ. SP. 47'-6"
5 EQ. SP. 38'-0"
5 EQ. SP. 38'-0"
5 EQ. SP. 38'-0"
5 EQ. SP. 38'-0"
25'-6"

RECORD DRAWING NOTE
'Shall be,' 'Provide,' 'Install,' 'Remove,' etc. indicates work was accomplished under the contract.

AS BUILT
APPROVED BY C.A. Lambinus
DATE 12 DEC 1967

ROOF FRAMING PLAN - WEST HALF
1/16"= 1'-0"
TOP OF STEEL - LEVEL 525'-3"





GRAPHIC SCALE
8 0 8 16 24 32 40
1/16" = 1'-0"

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LAUNCH OPERATIONS CENTER

URBAHN-ROBERTS-SEELYE-MORAN 642 FIFTH AVENUE NEW YORK 19, NEW YORK
U.S. ARMY ENGINEER DISTRICT, JAX. CORPS OF ENGINEERS JACKSONVILLE, FLA.

NASA MERRITT ISLAND LAUNCH AREA
MERRITT ISLAND, FLA.
LC 39 VERTICAL ASSEMBLY BUILDING
HIGH BAY AREA
STRUCTURAL FRAMING WEST HALF
ROOF - LEVEL 525'-7"

DIV. NO. ENG. (NASA) OR 123-63-41 | SIZE F | FILE NO. 203-28,297
DATED: MAY 1963
SCALE: AS NOTED | SECTION NO. S-3-067 | SHEET NO. 3-91

Drn by Cassetto | HERRMANN Chd by

A39.02.01.GADS186.00

EXPORT CONTROL NOTICE: EAR 99