



ADDENDUM NO. 2

PROJECT: Saginaw County Dow Event Center
Parking Ramp Renovations

OWNER: The County of Saginaw, Michigan

ARCHITECT: William A. Kibbe & Associates, Inc.

**PROJECT
LOCATION:** 202 Johnson St., Saginaw MI.

DATE: August 7, 2012

WAK PROJECT NO.: 12-0462-0189

1. INSTRUCTIONS

- a. The Construction Documents Issued for Bid dated July 23, 2012 for the referenced project are modified as noted in this Addendum.
- b. The bid due date is extended to Monday August 13, 2012, 2:00pm at the County Controllers Office, Purchasing Department.**
- c. All work performed under this document shall be subject to the General Conditions of the Contract and Specifications for similar work in connection with this project.
- d. Verbal statements are not binding on the bids, contracts, or scopes of work. Only authorized written statements issued by the Owner or Architect shall be acknowledged and included as directions for the work.

2. CLARIFICATIONS

- a. The Owner has requested that several items be defined for costing. Therefore revised specification sections 012200 – UNIT PRICES and 012300 – ALTERNATES have been attached to this addendum and need to be completed and submitted with your proposals.
- b. Base Bid cost for expansion joint material is to include two (2) additional, 62 foot lengths and two (2) additional 18 ft. lengths as specified. Cost for additional lengths is not to include installation cost. In addition: a Unit Price for both types of expansion joint material will be listed in Unit Prices. This Unit Price is for material only. Quantities for the Base Bid must be verified by the bidder.
- c. Walk-Thru and RFI Questions and Answers:
 - i. What is the start / end dates? As soon as possible for both. Hockey season starts September 27.
 - See notes herein for direction.
 - ii. Is the GC to provide the performance and payment bond insurance for the elevator contractor?
 - Yes – an estimate of that cost will be forwarded as soon as possible.
 - iii. Has there been testing done for lead paint?
 - No. The county has an abatement program. Contractor must provide notification upon finding lead paint and county will respond accordingly.
 - iv. Which elevators get demo'd?
 - The northwest and southeast elevators are to be removed completely. The south-west elevator is being replaced under a separate bid/construction contract except for the performance & payment bond. The north-east elevator is to be refit with new lighting only.
 - v. Is there any pipe insulation?
 - No.
 - vi. Are all quantities to be field verified?
 - The documents specify certain quantities for the basis of bidding. These quantities will require verification in the field as the work progresses as approved by the engineer.
 - vii. Is the generator natural gas?
 - No – diesel with an on-board tank.
 - viii. Where is electric heat tracing?
 - Yes - Shown on the electrical drawings, heat tracing is called for on the roof drain piping in the stairwells and the water line in the south-west meter pit.

- ix. Can the concrete beams be drilled to install conduit?
 - No. All conduit shall be surface mounted.
- x. Are other brands of LED lighting fixtures acceptable?
 - Lightolier light fixtures are by alternate pricing. The base bid is what is on the drawings. All fixtures must meet the criteria for performance as approved by the engineer.
- xi. Is temporary lighting planned?
 - No temporary lighting has been planned. The object is to get as much done before the need for temporary lighting. If the work is not completed before that need, then the contractor is responsible for any temporary lighting required for the public access to the facilities as stated above.
- xii. Is conduit run inside the structure considered indoor or outdoor conduit installation?
 - Indoor rigid steel conduit as base bid.
- xiii. Can schedule 40 pvc conduit be used exposed inside the parking structure?
 - Schedule 80 PVC can be an alternate deduct to base bid.
- xiv. Spec Section 260533-5 M-2 indicates supporting conduit at intervals not exceeding 48". Is this if pvc conduit is used?
 - Conduit support shall meet and exceed the National Electric Code 2008.
- xv. Can "seal-tite" conduit be used at expansion joints?
 - Yes.
- xvi. Drawing E7.1 has notes 18, 19, 20, 21, and 25 on the drawing but nothing in the side bar to correspond with other than the one general demolition note. Can you identify the other notes?
 - Notes 18, 19, 20, 21 and 25 are from existing drawings and have no meaning for demolition.

d. Voluntary Alternates:

- i. Bidders may submit other manufacturer product(s) as a "Voluntary Alternate" but the base specifications shall be adhered to for the base bids. Voluntary Alternate manufacturers and products submitted must be accompanied not only with a cost difference from the base stated on the proposal, but also accompanied with catalog information to enable evaluation of the products offered by the Engineer/Architect/Owner. Alternate products submitted will be required to comply with all required installation, performance and operational criteria as the base product specified.

3. CHANGES TO SPECIFICATIONS

- a. **Add the following sentences at 2 locations;** a) Page 9, Article II – Scope of Work, and b) Section 11000 – Summary – Article 1.5 Coordination with Occupants:

Provide full access to the public during scheduled hockey game times throughout the ramp as directed by Owner. Areas of construction activity shall be protected with barriers and other means for safety to the public as required and directed.

- b. **Refer to Page 11, Article II – Scope of Work:**
- i. Delete paragraphs 9, 10, and 11. They are redundant.
- c. **Refer to attached revised Spec Section 012200 – UNIT PRICES:**
- i. Additional items for unit pricing have been added. Please note the additional items pricing required.
- d. **Refer to attached revised Spec Section 012300 – ALTERNATES:**
- i. Additional alternates have been added. Please note the alternate pricing required.
- e. **Refer to Section 101423 – Panel Signage:**
- i. Provide Professionally Engineered and Sealed design drawings for all foundations and footings for new sign installations with product submittals.
 - ii. At sign located at center of basement, replace back and retainer clips.
 - iii. At any other existing signs, replace damaged or missing retainer clips.
 - iv. Note signage quantity deviations between specified quantity and that which was field verified. Base bid for signage per quantity listed.
- f. **Refer to Section 00003 – Introduction, General Information , and Terms and Conditions – Article 18 Bonding (Page 8) -** Add the following sentence:
- i. Prime General Contractors shall include the value of the Performance and Payment Bond(s) for the Elevator Contractor within their bonding package to a maximum Elevator contact value of \$150,000.
- g. **Refer to Section 011000-Summary-Part I-1.3-Work Covered by Contract Documents-A.-2. Architectural**
- i. Existing hollow metal frames will not be removed. Damaged frames, referenced in the door schedule, will have section removed at the base of designated door frames and a new (profile and gage to match) section tack welded in place and then fiberglass patched, primed and painted. This remedial work applies to all HM Frames listed as Type II.

- ii. Base bid will include rust prep and preventative coating for 100 lin. Ft. of handrail. See unit pricing for additional cost.
- iii. Revise to read. "Paint guard rail units called out to be replaced in the Steel Guard Rail Schedule". See unit pricing for additional painting of existing steel guards.

4. CHANGES TO DRAWINGS

- a. **Refer to Drawing C3.1- New Site Layout and Dimension Plan for the 400 Block of Johnson Street:**
 - i. Add one (1) completely new additional "Small Pylon (Johnson Street Rework) sign on the east side of the entrance to the lot from Johnson Street. (Picture attached).
- b. **Refer to Drawing C5.1 – Miscellaneous Site Details:** Revised detail 7/C5.1 for the clearance sign pole.
- c. **Refer to Drawing E6.1 & E7.2 - Panel NB** shall be fed from MDP with a 50A 3 pole FA style breaker. The feeder cable shall be #4 AWG in place of the #6AWG. Conduit size to remain. Refer to attached panel schedules, equipment list and Sheet E7.2 for updates.
- d. **Refer to Drawing A3.1-Door Schedule - Door 307** to receive Hardware Set #5. Door FG2 will have full width push bar. No FG2 doors are to receive panic hardware. Hollow Metal Specification as follows: Level 3- Extra Heavy Duty; Model 1; Frames to be 14 Gauge, A60 galvanized; Doors to be 16 Gauge, A60 galvanized; Polystyrene Core.
- e. **Refer to Drawing A2.11, Details 2, 4, 5, and 6.**
LymTal International, Inc. "Iso-Flex Winged Expansion Joint and Pressure Lok can be submitted as a voluntary alternate for expansion joint material provided the material can meet the dimensional requirements required in the construction documentation. Cost will be listed as an add or deduction to the Base Bid and include all preparation required for installation including cutting or grinding of existing surfaces.

END OF ADDENDUM NO. 2

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.

1.2 DEFINITIONS

- A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Price</u>
A.	Concrete Surface Repair (1/S5.1)	SF	\$ _____
B.	Concrete Overhead Repair (2/S5.1)	SF	\$ _____

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C. Concrete Wall Repair (3/S5.1)	SF	\$ _____
D. Concrete Beam Repair (4/S5.1)	SF	\$ _____
E. Concrete Tread Repair (5/S5.1)	EA	\$ _____
F. Concrete Beam Replacement (6/S5.1)	EA	\$ _____
G. Concrete Beam Replacement		
1. (12 x10.5 Beam, 6/S5.1)	EA	\$ _____
H. Concrete Curb Replacement (9/S5.1)	SF	\$ _____
I. Concrete Edge Replacement (10/S5.1)	SF	\$ _____
J. Concrete Slab On Grade (11/S5.1)	SF	\$ _____
K. Expansion Joint material Model ZB-100	EA	\$ _____
1. Continuous 62ft. foot length (2,3 & 6 A2.11)		
2. This is an add to the Base Bid		
L. Expansion Joint material Model HB-200	EA	\$ _____
1. Continuous 18ft. foot length (4/A2.11)		
2. This is an add to the Base Bid		
M. Paint of Steel Guard Rail (A3.1)	EA	\$ _____
1. 48 ft. length including ends		
2. This is an add to the Base Bid		
N. Wood guard and finish. Each 16' length.	EA	\$ _____
1. See sheet A2.8 and detail 6/A3.1		
2. (30 count min., Base Bid)		
O. Paint steel handrail with rust preventative	LIN.FT.	\$ _____
1. paint. (100 lin. ft. min. Base bid)		
P. Paint ceiling and beams in ramp area	PER FLOOR	\$ _____
1. 19,200 sq. ft. each floor (5 floors)		
2. This is an add to the Base Bid		
Q. LED Lighting Fixtures furnished and installed.		
1. Type A	EA	\$ _____
2. Type B	EA	\$ _____
3. Type C	EA	\$ _____
4. Type D	EA	\$ _____

END OF SECTION 012200

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. C-1: Drive approach at Franklin Street.

1. Omit the removal of precast concrete wall panel. Omit construction of new concrete drive approach, sidewalk and catch basin/curb repairs at Franklin Street.

Add / Deduct \$ _____.

B. Alternate No. A-1: Elevator layout space.

1. General Contractor will supply and construct a 10' x 20' weatherproof room, complete with lockable door, to underside of basement level deck. Room will provide lay down space for elevator contractor. It will be 2 x 6 studs @ 24" o.c. max. with plywood sheathing exterior.

Add / Deduct \$ _____.

C. Alternate No. A-2: Removal of old elevator equipment at Northwest and Southeast Towers.

1. Abandon these elevators in place. Omit the removal of the elevator equipment, including rails, motors, and all associated equipment from the project.

Add / Deduct \$ _____.

D. Alternate No. A-3: Addition of "Event Parking" sign at entrance to 400 Block Parking Lot on Johnson Street.

1. Provide a new Event Parking sign similar to the sign on Johnson Street near the corner of South Washington street identified as the "Small Pylon (Johnson Street Rework)". This will be a new sign where there is no existing sign presently. The installation will include all materials for the sign, matrix, pole support, concrete base and footings as required. The electrical service is existing as installed in a separate construction project. Refer to the picture of the new sign on page 101423-7 (copy attached).

Add / Deduct \$ _____.

E. Alternate No. E-1: Replacement for Stair Lighting Fixtures.

1. Alternate: Fluorescent type as indicated on Drawings "Lighting Fixtures Schedule".

Add / Deduct \$ _____.

F. Alternate No. E-2: Base bid states rigid conduit surface mounted, in lieu of base bid use PVC schedule 40, except at connection points of fixtures that are pendant mounted.

Add / Deduct \$ _____.

- G. Alternate No. E-3: Leave the present electrical system in tact and omit its demolition.
 - 1. Omit provision of the new panels, wiring, LED lighting, and lighting control system. Electrical systems to stay in the project would be the new elevator connections, connection of exhaust fans and heaters.

Add / Deduct \$ _____.

- H. Alternate No. M-1: Omit the requirements to add the Washdown Standpipe system.
 - 1. Omit new piping and accessories, including but not limited to the new reduced pressure back-flow preventer at meter and risers with removable piping sections for winterization, wall hydrants, and associated valving.

Add / Deduct \$ _____.

- I. Alternate No. S-1: Omit the structural repairs for the Northwest and Southeast Towers.
 - 1. Omit the structural repairs within and in front of (slabs, beams and curbs) the Northwest and Southeast Stair/Elevator towers.

Add / Deduct \$ _____.

END OF SECTION 012300



PROVIDE THIS NEW SIGN COMPLETE AT ENTRANCE TO THE PARKING LOT AT 400 JOHNSON STREET PER DIRECTION.

dow event center
pylon on johnson street remove top sign
install pole...new cabinet...matrix...per specification

EQUIPMENT LIST

TAG	DESCRIPTION	MANUFACTURER	CATALOG #
GEN FDS	200 AMP FUSED DISCONNECT SWITCH WITH NUETRAL BUSS AND GROUND BUS. NEMA 3R CONSTRUCTION, SERVICE ENTRANCE RATED AND LOCKABLE HANDLE. FUSED AT 150 AMPS CLASS R.	SQUARE D	H364NRB-PKOGTA2
EH-1 FDS	30A NON FUSED DISCONNECT SWITCH, NEMA 1 ENCLOSURE AND U.L. LISTED	SQUARE D	DU321
ELEV. FDS SW	60A FUSED DISCONNECT SWITCH 3 POLE, 240VAC, FUSED AT 50 AMPS, GROUND BAR INCLUDED.	SQUARE D	H322N
MDP	800A MAIN BREAKER 120/208 VOLT, 3 PHASE, 4 WIRE, SOLID NUETRAL, GROUND BAR KIT, NEMA 3R ENCLOSURE, I-LINE DISTRIBUTION, BUSSING RATED AT 22KAIC, COPPER BUSSING, SURFACE MOUNTED, SERVICE ENTRANCE RATED, AND U.L LISTED	SQUARE D	HCP36868M-HCW68TSD-HC4286DB HC8SN-PK32DGTA-HC4286WP MGP36800 (3) QDA32150 (3) QDA32200 (1) FA36050 (1) FA36060
LCP-A	INTEGRATED BREAKER AND RELAY ENCLOSURE, TOUCH SCREEN CONTROL, PROGRAMMING STORED IN NON VOLATILE MEMORY, 30 AMP RELAYS (2POLE AND ENCLOSURE, UP TO 18 RELAYS, 120/208 3 PHASE MAIN LUG ONLY INPUT, OPERATING TEMPERATURE 32-122 DEG F, MASTER OVERRIDE ON/OFF/AUTO OR PC SOFTWARE, ASTRONIC CLOCK, 0-10V INPUTS, DIGITAL SWITCH INPUT, INTEGRAL 20A BREAKERS, TIMED INPUTS, ETHERNET PORTDMX INTERFACE, AND SQUARE D QOB BREAKERS, 42 SPACE INTERIOR.	COOPER CONTROL CONTROL KEEPER SQUARE D EQUAL	CKMB-120V3P-(SQD)-48-0-46-1-5-S-T-CCM1-AN2 (2) QOB220 (1) QOB120 EPD (37) QOB120 225A MIN. INTERIOR 42 SPACE
LCP-B	INTEGRATED BREAKER AND RELAY ENCLOSURE, TOUCH SCREEN CONTROL, PROGRAMMING STORED IN NON VOLATILE MEMORY, 30 AMP RELAYS (2POLE AND ENCLOSURE, UP TO 38 RELAYS, 120/208 3 PHASE MAIN LUG ONLY INPUT, OPERATING TEMPERATURE 32-122 DEG F, MASTER OVERRIDE ON/OFF/AUTO OR PC SOFTWARE, ASTRONIC CLOCK, 0-10V INPUTS, DIGITAL SWITCH INPUT, INTEGRAL 20A BREAKERS, TIMED INPUTS, ETHERNET PORTDMX INTERFACE, AND SQUARE D QOB BREAKERS, 30 SPACE INTERIOR. UL 924 COMPLIANT	COOPER CONTROL CONTROL KEEPER SQUARE D EQUAL	CKMB-120V3P-(SQD)-36-0-29-1-5-S-T-CCM1-AN1 (30) QOB120 225A MLO INTERIOR 30 SPACE
PHOTO CELL 24V	OUTDOOR LIGHT LEVEL SENSOR IN WEATHERPROOF HOUSING, 24VDC, 0-250FC, ANALOG PHOTODIODE, 5 YEAR WARRANTY AND UL LISTED.	GREENGATE COOPER CONTROLS	(4)- PC-O
DIGITAL SW	24V DC SUPPLY VOLTAGE VIA THE NETWORK, CLASS 2 WIRING, ALL PLASTIC CONSTRUCTION, 6 BUTTON UNIT OVERRIDE AND COMPATIBLE WITH THE RELAY SYSTEM.	COOPER CONTROL GREENGATE	(3) GDS-6-TSB-V-CE-BLANK
PANEL SE	225A MAIN LUG ONLY, 120/208V, 3 PHASE, 4 WIRE, 42 SPACE PANEL BOARD, GROUND BAR KIT, SOLID NUETRAL BUSSINNG, NEMA 3R ENCLOSURE, COPPER BUSSING, 10KAIC RATEDAND U.L. LISTED.	SQUARE D	NQ442L2C-MH38WP PK27GTACU (22) QOB120 (1) QOB120 EPD (1) QOB230
PANEL SW	225A MAIN LUG ONLY, 120/208V, 3 PHASE, 4 WIRE, 42 SPACE PANEL BOARD, GROUND BAR KIT, SOLID NUETRAL BUSSINNG, NEMA 3R ENCLOSURE, COPPER BUSSING, 10KAIC RATEDAND U.L. LISTED.	SQUARE D	NQ442L2C-MH38WP PK27GTACU (16) QOB120 (1) QOB315 (1) QOB230 (1) QOB320 (2) QOB330 (1) QOB120 EPD
PANEL	225A MAIN LUG ONLY, 120/208V, 3 PHASE, 4 WIRE, 42 SPACE PANEL BOARD, GROUND BAR KIT, SOLID NUETRAL BUSSINNG, NEMA 3R ENCLOSURE, COPPER BUSSING, 10KAIC RATEDAND U.L. LISTED.	SQUARE D	NQ442L2C-MH38WP (22) QOB120 (2) QOB230 (1) QOB350 (1) QOB220 (1) QOB 360 (2) QOB120 EPD
PANEL NB	EXISTING TO REMAIN	SQUARE D	AS REQUIRED

MAIN SWITCHBOARD PANEL SCHEDULE																
SWITCHBOARD PANEL: MDP					O.C. PROT: 800A											
MOUNTING: SURFACE					VOLTAGE: 208/120											
LOCATION:					BUSSING: 800A											
A.I.C.: 22,000					3 PHASE, 4 WIRE											
CIR. NO.		BREAKER			KVA LOAD DISTRIBUTION											
		AMPS	POLES	CAT#	LTG.			PWR.			MTR.			MISC.		
					A	B	C	A	B	C	A	B	C	A	B	C
1	LCP-A	150	3		10.9	10.2	9.7	0.5	1.2	0.4	0.1	1.0	1.0			
2	LCP-B	150	3		2.1	2.5	1.4	0.0	0.0	0.0	2.7	2.2	2.4			
3	PANEL NB	60	3	FA	0.3	0.0	0.0	1.1	0.0	0.0	3.0	3.0	3.2			
4	PANEL SE	150	3		0.0	0.0	0.0	0.2	0.2	1.3	4.2	3.7	0.4			
5	PANEL SW	200	3		0.2	0.0	0.0	0.0	0.7	1.3	13.8	12.4	14.5			
6	PANEL N	200	3		0.2	0.0	0.0	4.8	0.5	1.6	8.1	8.6	4.1			
7	ELEVATOR	50	3	FA							3.1	3.1	3.1			
8																
9																
10																
11																
12																
13																
14																

NOTES :

LOAD	CONN. KW LOAD	DEMAND FACTOR %	DEMAND KW LOAD
LIGHTING	37.5	125%	46.9
RECPT.	13.7	50%	11.9
MOTORS	97.5	100%	78.0
MISC.	0.0	100%	0.0
TOTALS	148.7		136.8

FEEDER VOLTAGE : 208/120	
FEEDER LOAD: 413.34 :AMPS	
FED FROM:	
FEEDER LENGTH:	
INTERRUPT. CAPACITY: 22,000	

LOAD	CONN. KW/PHAS	DEMAND	DEMAND KW LOAD
LIGHTING			
A	13.7	125%	17.1
B	12.7	125%	15.9
C	11.1	125%	13.9
RECPT.			
A	6.6	50%	6.64
B	2.6	50%	2.6
C	4.5	50%	4.48
MOTORS			
A	34.9	100%	34.9
B	33.9	100%	33.9
C	28.6	100%	28.6
MISC.			
A	0.0	100%	0.0
B	0.0	100%	0.0
C	0.0	100%	0.0
TOTALS			
A	55.3		58.7
B	49.2		52.4
C	44.2		47.0
TOTAL	148.7		158.1

PANELBOARD SCHEDULE

PANEL : PANEL NORTH (N)
 MOUNTING : SURFACE
 LOCATION :
 AIC : 10,000

O.C. PROT. : MLO
 VOLTAGE : 208/120
 BUSSING : 225A
 3 PHASE, 4 WIRE

CKT. NO.	ITEM OR AREA SERVED	O.C. PROT.	LTG. WATTS	REC. WATTS	MTR. WATTS	PH.	MTR. WATTS	REC. WATTS	LTG. WATTS	O.C. PROT.	ITEM OR AREA SERVED	CKT. NO.
1	EH-1 RM. 003	30/2			2500	A	2500			30/2	EH-1 RM. 001	2
3	NW	-			2500	B	2500			-	NE	4
5	EF-2 NW	20/1			350	C	700			20/1	EF-2 & EX. EF	6
7	RM. 003 HEAT TRACE REC.	20/1		1000		A		1260		20/1	NE STAIR REC	8
9	RM. 003 SUMP PUMP REC	20/1		200		B	3050			-		10
11	RM. 003 SUMP PUMP REC	20/1		200		C	3050			50/3	NE ELEVATOR DISC	12
13	RM. 003 REC & STAIR	20/1		1260		A	3050			-		14
15	RM. 605B HEAT TRACE EPD	20/1			500	B		200		20/1	RM. 001 REC SUMP PUMP 1	16
17	GATE OP NW	20/1		1200		C		200		20/1	RM. 001 REC SUMP PUMP 1	18
19	GATE OP NE	20/1		1200		A		100	200	20/2	CAR LIGHT BRKER PANEL	20
21	RM. 601B HEAT TRACE EPD	20/1				B		100		-		22
23	SPARE	20/1				C				20/1	SPARE	24
25	SPARE	20/1				A				20/1	SPARE	26
27	SPARE	20/1				B				20/1	SPARE	28
29	SPARE	20/1				C				20/1	SPARE	30
31	SPACE	20/1				A				20/1	SPACE	32
33	SPACE	20/1				B				20/1	SPACE	34
35	SPACE	20/1				C				20/1	SPACE	36
37	SPACE	20/1				A				-		38
39	SPACE	20/1				B				60/3	SPARE	40
41	SPACE	20/1				C				-		42

NOTES :

1. 20 INCH WIDE ENCLOSURE
2. COPPER BUSSING
3. EQUIPMENT GROUND BAR KIT
4. NEUTRAL LUGS

LOAD	CONN. KW LOAD	DEMAND FACTOR %	DEMAND KW LOAD
LIGHTING	0.2	125%	0.3
REC.	6.9	50%	6.9
MOTORS	20.7	100%	20.7
TOTALS	27.8		27.9

LOAD	CONN. KW/PHASE	DEMAND FACTOR %	DEMAND KW LOAD	
LIGHTING				
	A	0.2	125%	0.3
	B	0.0	125%	0.0
	C	0.0	125%	0.0
REC.				
	A	4.8	50%	4.8
	B	0.5	50%	0.5
	C	1.6	50%	1.6
MOTORS				
	A	8.1	100%	8.1
	B	8.6	100%	8.6
	C	4.1	100%	4.1
TOTALS				
	A	13.1		13.1
	B	9.1		9.1
	C	5.7		5.7
TOTAL		27.8		27.9

FEEDER VOLTAGE : 208/120	
FEEDER LOAD:	77.31 :AMPS
FED FROM:	
FEEDER LENGTH:	
INTERRUPT. CAPACITY:	10,000