#### VT01 GENERAL ELEVATOR INFORMATION VT02 PLANS AND HOISTWAY SECTION - TOWER A - ELEVATOR KITCHEN SERVICE VT03 PLANS AND HOISTWAY SECTIONS - TOWER A - ELEVATORS TENANT 1 & 2 VT04 PLANS AND HOISTWAY SECTION - TOWER B - ELEVATOR LOBBY SHUTTLE VT05 PLANS AND HOISTWAY SECTIONS - TOWER B - ELEVATORS TENANT 3 & 4 VT06 PLANS AND HOISTWAY SECTION - TOWER C - ELEVATOR TENANT 5 INDEX OF DRAWINGS 1 ` VT01 SCALE: N/A

2500# @ 150 FPM MRL

4000# @ 150 FPM MRL

MRL

4000# @ 200 FPM

SUMMARY OF ELEVATORS

ELEVATOR LOBBY SHUTTLE

ELEVATOR KITCHEN SERVICE

VT01 SCALE: N/A

ELEVATORS TENANT 1 - TENANT 5

	$\smile$							
	AFF A P	ABOVE FINISH FLOOR	EIS		MG MTD	MOTOR-GENERAL MOUNTED	UBC	
	A/C	AIR CONDITIONING	EQ	EQUAL	NEC	NATIONAL ELECTRICAL	VERT.	
	ALT.	ALTERNATE	EQUIP.	EQUIPMENT		CODE	V.I.F. V.	VERIFY IN FIELD
	AC	AMERICAN SOCIETY OF	ESCL (E)	EXISTING	NFPA	PROTECTION	W.	WIDE
		MECHANICAL	° É	FAHRENHEIT		ASSOCIATION	W/	WITH
	AMP	ENGINEERS AMPERE	FPM F V		(N) NOM	NEW	VVP	WORKPOINT
	APPROX.	APPROXIMATE	F.F.	FINISH FLOOR	N/A	NOT APPLICABLE		
	ARCH.		FLR	FLOOR	NTS	NOT TO SCALE		
	BSMT	BASEMENT	FI FLOUR	FUI (FEET) FUI ORESCENT	NO.	NUMBER ON CENTER		
	BOT.	BOTTOM	F/0	FRONT OPENING	OPNG	OPENING		
	BTUH		FUT.	FUTURE	O.A.	OVERALL		
	BM	BEAM	GFCI	GRAVITY GROUND FAULT CIRCUIT	OPP. OVHD	OVERHEAD		
	BOCA	BUILDING OFFICIALS		INTERRUPTER	PL	PLATE		
		AND CODE	GOV.	GOVERNOR	PLIFM #			
	CLG	CEILING	GYP. BD.	GYPSUM BOARD	PSI	POUNDS PER SQUARE		
	°ر د	CELSIUS CENTERLINE	HT	HEIGHT				
	СM	CENTIMETERS	п <u>с</u> Н.	HIGH	RAD.	RADIUS		
	COL.	COLUMN	HSTWY	HOISTWAY	R/O	REAR OPENING		
	CONC.	CONCRETE	HORIZ.	HORIZONTAL	REF.			
	CMU	CONCRETE MASONRY	HP	HORSEPOWER	REV.	REVISION		
	CONT		HYDR.	HYDRAULIC	RM	ROOM		
	CONTR.	CONTRACTOR	IBC		R.O. SCCR	SHORT CIRCUIT		
	COORD	COORDINATE	IN.	INCH (INCHES)	been	CURRENT RATING		
	CWT	CONTROLLER	IGBT	INSULATED GATE	SEC.	SECONDARY		
	CYL.	CYLINDER	IJC	IN-JAMB CONTROLLER	SHT	SHEET		
	DEH	DEAD END HITCH	J/S	JOULES PER SECOND	SCR	SILICON CONTROLLED		
	0	DEGREES	KCAL KG	KILOCALORIE KILOGRAMS	SIM.	RECTIFIER SIMILAR		
	DTL	DETAIL	KN	KILONEWTONS	SPEC.	SPECIFICATION		
	DIM.	DIMENSION	KVA KW	KILOVOLT-AMPERE	SF SM	SQUARE FEET		
	DC	DIRECT CURRENT	K	KIPS	STD	STANDARD		
	DISC.	DISCONNECT DISTANCE BETWEEN	LT	LIGHT	SBC	STANDARD BUILDING		
	DDG	GUIDE RAILS	MPS MACH.	METERS PER SECOND MACHINE	STI	CODE		
	DN	DOWN	MRL	MACHINE ROOM LESS	STRUCT.	STRUCTURAL		
	EA.	EACH	MAX.	MAXIMUM	SW.	SWITCH		
	ELEC.	ELECTRICAL	MLZZ. M	METER	T.O.	TOP OF		
	EL. FLEV	FLOOR ELEVATION	MM	MILLIMETERS	(TYP.)	TYPICAL		
			MIN MISC.	MINIMUM MISCELLANEOUS	UNO	OTHERWISE		
		l				STRENUISE	I	
	$\frown$							
6	3		INS				_	
(	VT01	SCALE: N/A						

POWER FEEDER REQUIREMENTS (MAIN POWER SUPPLY: 480-3-60)							
						HEAT RELEASE	
ELEVATOR NUMBER	CAPACITY (POUNDS)	SPEED (FPM)	TRACTION MOTOR HP	FULI	LOAD AMPS	CONTROLLER SPACE MACHINE SP	MACHINE SPACE
				RUNNING	ACCELERATING	(BTUH PE	r car)
LOBBY SHUTTLE	2500	150	20	25	67	4570	2080
TENANT 1 - 5	4000	200	17	22	36	7920	2570
KITCHEN SERVICE	4000	150	17	22	36	7920	2570

1. ELECTRICAL POWER AND CURRENT ARE BASED ON THREE (3) PHASE A.C. POWER SUPPLY.

2. MAIN POWER TO BE PROVIDED AT EACH CONTROLLER THROUGH DISCONNECTS, MEETING NEC REQUIREMENTS.

MAIN POWER SUPPLY FEEDERS TO LIMIT VOLTAGE DROP TO LESS THAN 5%. MAX SCCR FOR ALL DISCONNECT FEEDER DESIGNS BASED ON <sup>5.</sup> 5KA RATING (NEC SECTION 409.022 AND UL506A SUPPLEMENT SB.

4. USE COPPER CONDUCTORS ONLY.

SEISMIC SENSOR DEVICE

NOTES:

5. FEEDER DEMAND FACTORS (NEC SECTION 430.026 AND 620.014) =

(2) CARS = 95%, (3) CARS = 90%, (4) CARS = 85%, (5) CARS = 82%, (6) CARS = 79%, (7) CARS = 77%, (8) CARS = 75%, (9) CARS = 73%, (10) CARS = 72%

<sub>5.</sub> THE AMBIENT CONTROL / MACHINE SPACE TEMPERATURE TO BE MIN. 13° C (55° F), MAX 32° C (90° F).

7. RELATIVE HUMIDITY MAX 80% NON-CONDENSING.

THE SELECTION OF MAIN POWER SUPPLY DISCONNECTING MEANS OVER CURRENT PROTECTION TO BE SIZED IN ACCORDANCE WITH THE

<sup>8.</sup> NATIONAL ELECTRIC CODE, SECTIONS 620.051 AND 430.052.

9. PROVIDE LOCAL TELEPHONE SERVICE LINE TO EACH CAR CONTROLLER (IF APPLICABLE). PROVIDE GFCI CONVENIENCE OUTLETS IN PIT, MACHINE ROOM, AND IN MACHINERY SPACES. IN PIT, PROVIDE ONE NON-GFCI OUTLET FOR

<sup>J.</sup> SUMP PUMP AND/OR OIL RETURN PUMP. 1. PROVIDE HOIST MACHINE WITH VOLTAGE TO MATCH SUPPLY VOLTAGE INDICATED. UNLESS NOTED OTHERWISE.

MAIN POWER SUPPLY FEEDERS TO LIMIT VOLTAGE DROP TO LESS THAN 5%. MAX SCCR FOR ALL DISCONNECT FEEDER DESIGNS BASED ON

AT EACH DISCONNECT

<sup>12.</sup> 5KA RATING (NEC SECTION 409.022 AND UL506A SUPPLEMENT SB.)

ADDITIONAL POWER AND DISCONNECT REQUIREMENTS IN MACHINE ROOM					
AUXILIARY SYSTEM SUPPLY TERMINAL SUPPLY VOLTAGE C					
CAR LIGHT AND FAN WITH LOCKABLE DISCONNECT	EACH CONTROLLER	120-1-60	(15 AMP PER CAF		
INTERCOM SYSTEM (IF APPLICABLE)	AT AMPLIFIER	120-1-60	1800 WATTS (15 AMP		

115-1-60

4	ELEVATOR ELECTR	RICAL AND MECHANIC	AL REQUIREMENTS
VT01	SCALE: N/A		

- 1. THESE DRAWINGS FOR GENERAL INFORMATION ONLY. REQUIREMENTS OF INDIVIDUAL VENDORS MAY VARY.
- THESE DRAWINGS TO BE DISTRIBUTED TO APPROPRIATE CONSULTING AND ENGINEERING FIRMS, INCLUDING

- <sup>2.</sup> ARCHITECT, STRUCTURAL, ELECTRICAL AND MECHANICAL ENGINEERS.

- 3. FIELD VERIFY ALL EXISTING DIMENSIONS.
- ROUGH OPENING DIMENSIONS FOR ELEVATOR ENTRANCES APPLY ONLY IN THE CASE OF MASONRY OR CONCRETE 4. CONSTRUCTION.
- 5. VERTICAL STRUCTURAL SUPPORT FOR RAIL BRACKETING IS PROVIDED BY HOISTWAY WALLS IN THE CASE OF REINFORCED CONCRETE HOISTWAY CONSTRUCTION.
- **GENERAL NOTES** 5

VT01 / SCALE: NTS









RA	RAIL FORCES MAXIMUM ON EACH GUIDE RAIL (FORCES ARE IN KIPS)							
	ELEVATOR NUMBER	LOBBY SHUTTLE	KITCHEN SERVICE	TENANT 1-5	OCCURRING ON			
S	CAR R1	0.7	1.4	1.3	CAR NORMAL FACE OF MAIN RAIL			
JRMAL FORCE	CAR R2	0.4	0.9	0.7	CAR NORMAL SIDE OF MAIN RAIL - LOADING OR RUNNING			
	CAR R3	27.4	31.2	32.2	FORCE TRANSMITTED TO PIT STRUCTURE AT CAR SAFETY APPLICATION*			
NO	CWT R3	23.4	N/A	N/A	FORCE TRANSMITTED TO PIT STRUCTURE AT CWT SAFETY APPLICATION*			
CES	CAR R1	0.7	1.1	1.1	CAR SEISMIC *** FACE OF MAIN RAIL			
IC FOR	CAR R2	0.4	0.5	0.5	CAR SEISMIC *** SIDE OF MAIN RAIL - LOADING OR RUNNING			
SEISMI	CWT R1	0.8	1.1	1.1	CWT SEISMIC *** FACE OF CWT RAIL			
IBC	CWT R2	0.4	0.6	0.6	CWT SEISMIC *** SIDE OF CWT RAIL			

FOR SOME MACHINE ROOM-LESS (MRL) MODELS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS (NORMAL FORCES R1 AND R2 CAN BE OVER 13.3 KN [3.0 K] FOR SOME APPLICATIONS). COORDINATE LOADING AND SUPPORT LOCATIONS WITH ELEVATOR CONTRACTOR.

<u>ASME A17.1</u>

BUILDING SUPPORTS TO RESIST HORIZONTAL FORCES WITH A TOTAL DEFLECTIONS AT SUPPORT POINT NOT IN EXCESS OF 6.35MM (1/4") UNDER NORMAL CONDITIONS.

\* THESE REACTIONS DO NOT OCCUR SIMULTANEOUSLY WITH PIT BUFFER REACTIONS

\*\* BUILDING SUPPORTS FOR GUIDE RAIL ATTACHMENT SHALL RESIST HORIZONTAL FORCES WITH A TOTAL DEFLECTION NOT IN EXCESS OF 6.4 MM BASED UPON 0.5 G ACCELERATION DURING SEISMIC CONDITIONS.

#### <u>IBC</u> \*\*\* BUILDING SUPPORTS FOR GUIDE RAIL ATTACHMENT SHALL RESIST HORIZONTAL FORCES DURING SEISMIC CONDITIONS.

SEISMIC INFORMATION					
SEISMIC DESIGN CATEGORY	ELEVATOR IMPORTANCE FACTOR	SDS	HORIZONTAL ACCELERATION EQUIVALENT		
D	1.0	0.5 G	0.5		

VERIFY. ALL ELEVATORS IN OCCUPANCY CATEGORY IV MUST BE Ip = 1.5. IN OCCUPANCY CATEGORIES I, II, OR III, THE STRETCHER ELEVATOR MAY NEED IP = 1.5 AS A LIFE SAFETY COMPONENT OF THE BUILDING. (SEE IBC CODE).



RAIL REACTIONS SCALE: N/A



## NOTES:

- APPLICATION DESIGNED FOR: TKE - REFER TO MANUFACTURER SHOP DRAWINGS

PIT AND OVERHEAD PLANS INDICATE REACTIONS FOR MACHINE ROOM-LESS EQUIPMENT OF VARIOUS ELEVATOR VENDORS. WHERE REACTIONS OF DIFFERENT VENDORS OVERLAP, THE HIGHER REACTION IS INDICATED. REACTIONS FOR ONE VENDOR DO NOT OCCUR WITH THE REACTIONS OF OTHER VENDORS. OVERHEAD

PLANS ARE NOT SHOWN FOR VENDORS WITH NO REACTIONS IN THE OVERHEAD.

CONDITION TOP OF HOISTWAY AS NECESSARY TO MAINTAIN A TEMPERATURE RANGE OF 55°-90°F (13°-32°C) WITH A MAXIMUM RELATIVE NON-CONDENSING HUMIDITY OF 80% ╺───┤──┤┤┣─── ┛┥ LEVEL P2A LEVEL B NO OCCUPIED SPACE BELOW HOISTWAY

— MECHANICALLY OR NATURALLY



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HOISTWAY SECTION - KITCHEN SERVICE

	6'-0" CONTROL	GIVEN ROOM (F.V.)	
NIM "0-'E		CNTRL.	12'-10 3/4" GIVEN CONTROL ROOM (F.V.)













PIT PLAN - LEVEL B - KITCHEN SERVICE SCALE: 1/4" = 1'-0"

EL	ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION.						
	ELEVATOR	R KITCHEI	N SERVIC	E			
/ED	Floor Number	OPENING REAR/FRONT		FLOOR TRAVEL (FEET)			
SER	1A		F	0'-0"			
DORS	P2		N/S	9'-0"			
FLO	P2A		F	3'-0"			
	В		F	14'-0"			
6	OPENINGS	0	3				
OTAL	STOPS	3					
	TRAVEL			26'-0"			

#### ELEVATOR KITCHEN SERVICE 4000# @ 150 FPM MRL

## **OVERHEAD NOTES:**

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY.
- 2. PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI- PROTECTED UTILITY OUTLETS. COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR.
- 3. PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED.
- 4. PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR.
- 5. PROVIDE HOIST BEAM SUPPORT 15,000#. COORDINATE HOISTBEAM LOCATION(S) AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR.
- 6. OVERHEAD DIMENSIONS ARE CLEAR FROM F.F. AT TOP LANDING TO STRUCTURE OR ANY OBSTRUCTION ABOVE CAR AND/OR COUNTERWEIGHT.
- 7. MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY MACHINE LOCATION WITH ELEVATOR CONTRACTOR.
- 8. OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR SHOP DRAWINGS.

OVERHEA	D REACT	ION TABLE				
	DUTY: 4000# @ 150 FPM					
KEY	REACTION (FORCES IN KIPS)					
G	18.2	EACH				
(H)	11.6	EACH				

## HOISTWAY NOTES:

- 1. PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR.
- 2. FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY.
- 3. PROVIDE SMOKE VENTING PER LOCAL CODE REQUIREMENTS.
- 4. FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR.
- 5. ROUGH OPENINGS VARY BY MANUFACTURER, VERIFY ROUGH OPENING BEFORE CONSTRUCTION.
- 6. 1070 MM (42") CAR TOP RAILING PER CODE BY ELEVATOR CONTRACTOR.
- 7. ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 8. SIDE CWT MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 9. PROVIDE STRUCTURAL SUPPORT, FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS.

RAIL SUPPORT TABLE				
15# RAILS				
CAR GUIDE RAIL	10'-6"	MAX SPAN		
CWT GUIDE RAIL	10'-6"	MAX SPAN		

#### CONTROL ROOM NOTES:

- 1. PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR.
- 2. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR.
- 3. PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR CONTROLLER.
- 4. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR. THESE DISCONNECTING MEANS SHALL INCLUDE OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS.
- 5. FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 100' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

#### PIT NOTES:

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR.
- 2. PROVIDE PIT ACCESS LADDER(S) OR DOOR(S), LIGHT SWITCH(ES), LIGHT(S), AND GFCI-PROTECTED UTILITY OUTLET(S).
- 3. COORDINATE LIGHT FIXTURES AND UTILITY OUTLETS LOCATION WITH ELEVATOR CONTRACTOR.
- 4. PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND R3 RAIL FORCE REACTIONS.
- 5. ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS UNDERSIDE OF CAR AS REQUIRED.
- 6. PROVIDE INDIRECT PIT DRAIN OR 24"x24" SUMP PUMP, WITH GRATING COVER, LEVEL WITH PIT FLOOR. PROVIDE MINIMUM SUMP PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- 7. ELEVATOR CONTRACTOR IS TO PROVIDE A COUNTERWEIGHT GUARD PER CODE.
- 8. ELEVATOR CONTRACTOR TO PROVIDE BUFFER ACCESS PLATFORM AND LADDER AS REQUIRED.
- 9. CAR/CWT BUFFER REACTIONS WILL NOT OCCUR SIMULTANEOUSLY. UNLESS SPECIFIED OTHERWISE.

10.	REACTIONS HAVE BEEN DOUBLED FOR IMPACT.

	PIT REACTION TABLE							
	DUTY: 4000# @ 150 FPM							
KEY	REACTION (FORCES	IN KIPS)	DESCRI	PTION				
$\langle A \rangle$	52.3		CAR BUFFER					
B	47.8		CWT BUFFER	BUFFER				
(C)	31.2	EACH	CAR SAFETY	(SEE CAR R3 RAIL FORCES)				
A	LTERNATE PIT REAC	TIONS FOR	RAIL SUPPORTED	MACHINE				
	THE FOLLOWING RE	EACTIONS	OCCUR SIMULTAN	EOUSLY.				
	D 31.0 EACH DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL							
E     22.0     EACH     DYNAMIC LOAD ON CAR RAIL								
F	10.3	EACH	DYNAMIC LOAD	ON CWT RAIL				

-CAR GOVERNOR



FOR PROCUREMENT ONLY

#### - APPLICATION DESIGNED FOR: TKE - REFER TO MANUFACTURER SHOP DRAWINGS PIT AND OVERHEAD PLANS INDICATE REACTIONS FOR MACHINE ROOM-LESS EQUIPMENT OF VARIOUS ELEVATOR VENDORS. WHERE REACTIONS OF DIFFERENT VENDORS OVERLAP, THE HIGHER REACTION IS INDICATED. REACTIONS FOR ONE VENDOR DO NOT OCCUR WITH THE REACTIONS OF OTHER VENDORS. OVERHEAD

PLANS ARE NOT SHOWN FOR VENDORS WITH NO REACTIONS IN THE OVERHEAD.

NOTES:



ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION. ELEVATOR TENANT 1 FLOOR OPENING FLOOR NUMBER REAR/FRONT TRAVEL (FEET) 0'-0" 12'-0" 4 F 12'-0" 12'-0" 14'-0" R 3'-0" 1A F N/S 9'-0" P2 3'-0" P2A F 14'-0" F В OPENINGS STOPS 8 79'-0" TRAVEL



















HOISTWAY SECTION - TENANT 2 VT03 / SCALE: 1/4" = 1'-0"



ALL VERTICAL DIMENSIONS THAT ARE

DIMENSIONED FROM A BUILDING FLOOR

ELEVATION ARE DIMENSIONED TO THE FINISH

FLOOR ELEVATION.

ELEVATOR TENANT 2

R

FLOOR NUMBER REAR/FRONT

6

5

4

3

2

1

1A

P2

P2A

В

OPENINGS

STOPS

TRAVEL

OPENING

FLOOR

TRAVEL

(FEET)

0'-0"

12'-0"

12'-0"

12'-0"

F 12'-0"

F 14'-0"

N/S 3'-0"

N/S 3'-0"

F 14'-0"

F

9'-0"

91'-0"



# REMOTE CONTROL ROOM PLAN LEVEL B - ELEVATOR TENANT 1

PIT PLAN - LEVEL B -TENANT 1 (TENANT 2 SIM.)

#### ELEVATORS TENANT 1 & TENANT 2 4000# @ 200 FPM MRL

## **OVERHEAD NOTES:**

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY.
- 2. PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI- PROTECTED UTILITY OUTLETS. COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR.
- 3. PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED.
- 4. PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR.
- 5. PROVIDE HOIST BEAM SUPPORT 15,000#. COORDINATE HOISTBEAM LOCATION(S) AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR.
- 6. OVERHEAD DIMENSIONS ARE CLEAR FROM F.F. AT TOP LANDING TO STRUCTURE OR ANY OBSTRUCTION ABOVE CAR AND/OR COUNTERWEIGHT.
- 7. MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY MACHINE LOCATION WITH ELEVATOR CONTRACTOR.
- 8. OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR SHOP DRAWINGS.

OVERHEAD REACTION TABLE				
DUTY: 4000# @ 200 FPM				
KEY	KEY REACTION (FORCES IN KIPS)			
G	19.2 EACH			
(H)	10.8	EACH		

#### HOISTWAY NOTES:

- 1. PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR.
- 2. FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY.
- 3. PROVIDE SMOKE VENTING PER LOCAL CODE REQUIREMENTS.
- 4. FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR.
- 5. ROUGH OPENINGS VARY BY MANUFACTURER, VERIFY ROUGH OPENING BEFORE CONSTRUCTION.
- 6. 1070 MM (42") CAR TOP RAILING PER CODE BY ELEVATOR CONTRACTOR.
- 7. ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 8. SIDE CWT MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR
- 9. PROVIDE STRUCTURAL SUPPORT, FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS.

RAIL SUPPORT TABLE					
15# RAILS					
CAR GUIDE RAIL	10'-6"		MAX SPAN		
CWT GUIDE RAIL	10'-6"		MAX SPAN		

### CONTROL ROOM NOTES:

- 1. PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR.
- 2. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR.
- 3. PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR
- 4. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR. THESE DISCONNECTING MEANS SHALL INCLUDE OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS.
- 5. FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 100' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

#### PIT NOTES:

CONTROLLER.

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR. 2. PROVIDE PIT ACCESS LADDER(S) OR DOOR(S), LIGHT SWITCH(ES), LIGHT(S), AND GFCI-PROTECTED
- UTILITY OUTLET(S). 3. COORDINATE LIGHT FIXTURES AND UTILITY OUTLETS LOCATION WITH ELEVATOR CONTRACTOR.
- 4. PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND R3 RAIL FORCE REACTIONS. 5. ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS UNDERSIDE OF CAR AS
- REQUIRED.
- 6. PROVIDE INDIRECT PIT DRAIN OR 24"x24" SUMP PUMP, WITH GRATING COVER, LEVEL WITH PIT FLOOR. PROVIDE MINIMUM SUMP PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- 7. ELEVATOR CONTRACTOR IS TO PROVIDE A COUNTERWEIGHT GUARD PER CODE.
- 8. ELEVATOR CONTRACTOR TO PROVIDE BUFFER ACCESS PLATFORM AND LADDER AS REQUIRED.
- 9. CAR/CWT BUFFER REACTIONS WILL NOT OCCUR SIMULTANEOUSLY. UNLESS SPECIFIED OTHERWISE.
- 10. REACTIONS HAVE BEEN DOUBLED FOR IMPACT.

	PIT REACTION TABLE					
	DUT	Y: 4000# (	@ 200 FPM			
KEY	REACTION (FORCES	S IN KIPS)	DESCRIPTION			
A	53.3		CAR BUFFER			
B	48.8		CWT BUFFER			
Ċ	32.2	EACH	CAR SAFETY	(SEE CAR R3 RAIL FORCES)		
A	LTERNATE PIT REAC	TIONS FOR	RAIL SUPPORTED	MACHINE		
ר	THE FOLLOWING REA	CTIONS D	O OCCUR SIMULTA	NEOUSLY.		
	D 32.0 EACH DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL					
E	23.0	EACH	DYNAMIC LOAD	on car rail		
F	10.7	EACH	DYNAMIC LOAD	ON CWT RAIL		



#### NOTES:

- APPLICATION DESIGNED FOR: TKE - REFER TO MANUFACTURER SHOP DRAWINGS

PIT AND OVERHEAD PLANS INDICATE REACTIONS FOR MACHINE ROOM-LESS EQUIPMENT OF VARIOUS ELEVATOR VENDORS. WHERE REACTIONS OF DIFFERENT VENDORS OVERLAP, THE HIGHER REACTION IS INDICATED. REACTIONS FOR ONE VENDOR DO NOT OCCUR WITH THE REACTIONS OF OTHER VENDORS. OVERHEAD PLANS ARE NOT SHOWN FOR VENDORS WITH NO REACTIONS IN THE OVERHEAD.





HOISTWAY SECTION - LOBBY SHUTTLE VT04 SCALE: 1/4" = 1'-0"













PIT PLAN - LEVEL P1 - LOBBY SHUTTLE

EL	ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION.						
	ELEVATO	r lobby	SHUTTLE				
SERVED	FLOOR NUMBER	OPEI REAR/I	FLOOR TRAVEL (FEET)				
DORS	1	R		0'-0"			
FL(	P1	R	F	12'-0"			
S	OPENINGS	2	1				
OTAL	STOPS	2					
	TRAVEL			12'-0"			

CWT GOVERNOR

ELEVATOR LOBBY SHUTTLE 2500# @ 150 FPM MRL

## **OVERHEAD NOTES:**

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY.
- 2. PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI- PROTECTED UTILITY OUTLETS. COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR.
- 3. PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED.
- 4. PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5,000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR.
- 5. PROVIDE HOIST BEAM SUPPORT 15,000#. COORDINATE HOISTBEAM LOCATION(S) AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR. 6. OVERHEAD DIMENSIONS ARE CLEAR FROM F.F. AT TOP LANDING TO STRUCTURE OR ANY
- OBSTRUCTION ABOVE CAR AND/OR COUNTERWEIGHT. 7. MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY
- MACHINE LOCATION WITH ELEVATOR CONTRACTOR. 8. OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR

OVERHEAD REACTION TABLE					
DUTY: 2500# @ 150 FPM					
KEY	KEY REACTION (FORCES IN KIPS)				
H	13.2	EACH			
<li>L</li>	8.1	EACH			

#### HOISTWAY NOTES:

SHOP DRAWINGS.

- 1. PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR.
- 2. FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY.
- 3. PROVIDE SMOKE VENTING PER LOCAL CODE REQUIREMENTS.
- 4. FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR.
- 5. ROUGH OPENINGS VARY BY MANUFACTURER, VERIFY ROUGH OPENING BEFORE CONSTRUCTION.
- 6. 1070 MM (42") CAR TOP RAILING PER CODE BY ELEVATOR CONTRACTOR.
- 7. ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 8. SIDE CWT MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 9. PROVIDE STRUCTURAL SUPPORT, FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS.

RAIL SUPPORT TABLE				
15# RAILS				
CAR GUIDE RAIL	14'-0"	MAX SPAN		
CWT GUIDE RAIL	14'-0"	MAX SPAN		

#### CONTROL ROOM NOTES:

- 1. PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR.
- 2. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR.
- 3. PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR
- 4. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR. THESE DISCONNECTING MEANS SHALL INCLUDE OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS.
- 5. FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 100' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

#### PIT NOTES:

CONTROLLER.

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR.
- 2. PROVIDE PIT ACCESS LADDER(S) OR DOOR(S), LIGHT SWITCH(ES), LIGHT(S), AND GFCI-PROTECTED UTILITY OUTLET(S).
- 3. COORDINATE LIGHT FIXTURES AND UTILITY OUTLETS LOCATION WITH ELEVATOR CONTRACTOR.
- 4. PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND R3 RAIL FORCE REACTIONS.
- 5. ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS UNDERSIDE OF CAR AS REQUIRED.
- 6. PROVIDE INDIRECT PIT DRAIN OR 24"x24" SUMP PUMP, WITH GRATING COVER, LEVEL WITH PIT FLOOR. PROVIDE MINIMUM SUMP PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- 7. ELEVATOR CONTRACTOR IS TO PROVIDE A COUNTERWEIGHT GUARD PER CODE.
- 8. ELEVATOR CONTRACTOR TO PROVIDE BUFFER ACCESS PLATFORM AND LADDER AS REQUIRED.
- 9. CAR/CWT BUFFER REACTIONS WILL NOT OCCUR SIMULTANEOUSLY. UNLESS SPECIFIED OTHERWISE.

PIT REACTION TABLE					
	DUT	Y: 2500# (	@ 150 FPM		
KEY	REACTION (FORCES	IN KIPS)	DESCRI	PTION	
$\langle A \rangle$	29.1		CAR BUFFER		
B	26.4		CWT BUFFER		
$\langle \circ \rangle$	27.4	EACH	CAR SAFETY	(SEE CAR R3 RAIL FORCES)	
$\langle D \rangle$	23.4	EACH	CWT SAFETY	(SEE CWT R3 RAIL FORCES)	
A	LTERNATE PIT REAC	TIONS FOR	RAIL SUPPORTED	MACHINE	
Т	THE FOLLOWING REA	CTIONS DO	O OCCUR SIMULTA	NEOUSLY.	
E	25.0 EACH DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL				
F	17.0	EACH	DYNAMIC LOAD ON CAR RAIL		
G	8.9	EACH	DYNAMIC LOAD ON CWT RAIL		

10. REACTIONS HAVE BEEN DOUBLED FOR IMPACT.



FOR PROCUREMENT ONLY





ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION.							
	ELEVA	TOR TEN	ANT 4				
	FLOOR NUMBER OPENING REAR/FRONT (FEET						
	7		F	0'-0"			
	6		F	12'-0"			
0	5		F	12'-0"			
ERVEI	4		F	12'-0"			
RS SI	3		F	12'-0"			
FL00	2		F	12'-0"			
	1A		F	14'-0"			
	1	R		5'-0"			
	P1		F	12'-0"			
	P2		F	12'-0"			
	В		F	12'-0"			
S	OPENINGS	1	10				
OTAL	STOPS	1	1				
	TRAVEL			115'-0"			

HOISTWAY SECTION - TENANT 4 VT05 SCALE: 1/4" = 1'-0"



HOISTWAY SECTION - TENANT 3 SCALE: 1/4" = 1'-0"

VT05 /



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(E)



#### **REMOTE CONTROL ROOM PLAN -**LEVEL B - ELEVATOR TENANT 4



#### **REMOTE CONTROL ROOM PLAN -**LEVEL B - ELEVATOR TENANT 3

3'-0" MIN

2.0 K

 $H \rightarrow I$ 

**VT05** 



# OVERHEAD PLAN - LEVEL 7 - TENANT 3 (TENANT 4 SIM.)



# HOISTWAY PLAN - LEVEL 2 - TENANT 3 (TENANT 4 SIM.)



PIT PLAN - LEVEL B - TENANT 3 (TENANT 4 SIM.)

#### ELEVATORS TENANT 3 & 4 4000# @ 200 FPM

MRL

## **OVERHEAD NOTES:**

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY.
- 2. PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI- PROTECTED UTILITY OUTLETS. COORDINATE
- LOCATIONS WITH ELEVATOR CONTRACTOR. 3. PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED.
- 4. PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR.
- 5. PROVIDE HOIST BEAM SUPPORT 15,000#. COORDINATE HOISTBEAM LOCATION(S) AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR.
- 6. OVERHEAD DIMENSIONS ARE CLEAR FROM F.F. AT TOP LANDING TO STRUCTURE OR ANY OBSTRUCTION ABOVE CAR AND/OR COUNTERWEIGHT.
- 7. MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY MACHINE LOCATION WITH ELEVATOR CONTRACTOR.
- 8. OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR SHOP DRAWINGS.

#### OVERHEAD REACTION TABLE DUTY: 4000# @ 200 FPM REACTION (FORCES IN KIPS) KEY EACH 19.2 10.8 EACH $\langle H \rangle$

# HOISTWAY NOTES:

- 1. PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR.
- 2. FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR
- EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY. 3. PROVIDE SMOKE VENTING PER LOCAL CODE REQUIREMENTS.
- 4. FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR.
- 5. ROUGH OPENINGS VARY BY MANUFACTURER, VERIFY ROUGH OPENING BEFORE CONSTRUCTION.
- 6. 1070 MM (42") CAR TOP RAILING PER CODE BY ELEVATOR CONTRACTOR.
- 7. ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 8. REAR/SIDE CWT MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR. 9. PROVIDE STRUCTURAL SUPPORT, FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS.

RAIL SUPPORT TABLE				
15# RAILS				
CAR GUIDE RAIL	10'-6"	MAX SPAN		
CWT GUIDE RAIL	10'-6"	MAX SPAN		

## CONTROL ROOM NOTES:

- 1. PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR.
- 2. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR.
- 3. PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR
- CONTROLLER. 4. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR. THESE DISCONNECTING MEANS SHALL INCLUDE
- OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS.
- 5. FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 100' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

# PIT NOTES:

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR.
- 2. PROVIDE PIT ACCESS LADDER(S) OR DOOR(S), LIGHT SWITCH(ES), LIGHT(S), AND GFCI-PROTECTED UTILITY OUTLET(S).
- 3. COORDINATE LIGHT FIXTURES AND UTILITY OUTLETS LOCATION WITH ELEVATOR CONTRACTOR.
- 4. PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND R3 RAIL FORCE REACTIONS.
- 5. ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS UNDERSIDE OF CAR AS
- REQUIRED.
- 6. PROVIDE INDIRECT PIT DRAIN OR 24"x24"x24" SUMP PUMP, WITH GRATING COVER, LEVEL WITH PIT FLOOR. PROVIDE MINIMUM SUMP PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- 7. ELEVATOR CONTRACTOR IS TO PROVIDE A COUNTERWEIGHT GUARD PER CODE.
- 8. ELEVATOR CONTRACTOR TO PROVIDE BUFFER ACCESS PLATFORM AND LADDER AS REQUIRED.
- 9. CAR/CWT BUFFER REACTIONS WILL NOT OCCUR SIMULTANEOUSLY. UNLESS SPECIFIED OTHERWISE. 10. REACTIONS HAVE BEEN DOUBLED FOR IMPACT.

PIT REACTION TABLE					
	DUT	Y: 4000# (	@ 200 FPM		
KEY	REACTION (FORCES	5 IN KIPS)	DESCRI	PTION	
$\langle A \rangle$	53.3		CAR BUFFER		
B	48.8		CWT BUFFER		
Ċ	32.2	EACH	CAR SAFETY	(SEE CAR R3 RAIL FORCES)	
A	LTERNATE PIT REAC	TIONS FOR	RAIL SUPPORTED	MACHINE	
Т	THE FOLLOWING REA	CTIONS DO	O OCCUR SIMULTA	NEOUSLY.	
D	D 32.0 EACH DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL				
E	23.0 EACH DYNAMIC LOAD ON CAR RAIL				
F	10.7	EACH	DYNAMIC LOAD ON CWT RAIL		



NOTES:	

- APPLICATION DESIGNED FOR: TKE - REFER TO MANUFACTURER SHOP DRAWINGS

PIT AND OVERHEAD PLANS INDICATE REACTIONS FOR MACHINE ROOM-LESS EQUIPMENT OF VARIOUS ELEVATOR VENDORS. WHERE REACTIONS OF DIFFERENT VENDORS OVERLAP, THE HIGHER REACTION IS INDICATED. REACTIONS FOR ONE VENDOR DO NOT OCCUR WITH THE REACTIONS OF OTHER VENDORS. OVERHEAD PLANS ARE NOT SHOWN FOR VENDORS WITH NO REACTIONS IN THE OVERHEAD.











HOISTWAY PLAN - LEVEL 3 - TENANT 5 3 SCALE: 1/4" = 1'-0"







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VT06 SCALE: 1/4" = 1'-0"

ALL VERTICAL DIMENSIONS THAT ARE DIMENSIONED FROM A BUILDING FLOOR ELEVATION ARE DIMENSIONED TO THE FINISH FLOOR ELEVATION.						
	ELEVA	TOR TEN	ANT 5			
	Floor Number	OPENING REAR/FRONT		FLOOR TRAVEL (FEET)		
	8		F	0'-0"		
0	7	R	F	12'-0"		
ERVEI	6	R	F	12'-0"		
RS SI	5	R	F	12'-0"		
FL00	4	R	F	12'-0"		
	3	R	F	12'-0"		
	2	R	F	12'-0"		
	1	R		14'-0"		
	Р		F	12'-0"		
ŝ	OPENINGS	7	8			
OTALS	STOPS	9				
F	TRAVEL			98'-0"		

ELEVATOR TENANT 5							
FLOORS SERVED	Floor Number	OPENING REAR/FRONT		FLOOR TRAVEL (FEET)			
	8		F	0'-0"			
	7	R	F	12'-0"			
	6	R	F	12'-0"			
	5	R	F	12'-0"			
	4	R	F	12'-0"			
	3	R	F	12'-0"			
	2	R	F	12'-0"			
	1	R		14'-0"			
	Р		F	12'-0"			
TOTALS	OPENINGS	7	8				
	STOPS	9					
	TRAVEL			98'-0"			





#### ELEVATOR TENANT 5 4000# @ 200 FPM MRL

# **OVERHEAD NOTES:**

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT TOP OF HOISTWAY.
- 2. PROVIDE LIGHTS, LIGHT SWITCHES AND GFCI- PROTECTED UTILITY OUTLETS. COORDINATE LOCATIONS WITH ELEVATOR CONTRACTOR.
- 3. PROVIDE STRUCTURAL SUPPORT TO SUSTAIN REACTIONS INDICATED.
- 4. PROVIDE 2 LIFELINE ATTACHMENTS AT THE TOP FRONT OF EACH HOISTWAY. EACH ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING 5000# (2268 KG) LOAD PER OSHA. COORDINATE LOCATION OF ATTACHMENTS WITH ELEVATOR CONTRACTOR.
- PROVIDE HOIST BEAM SUPPORT 15,000#. COORDINATE HOISTBEAM LOCATION(S) AND LOAD REQUIREMENTS WITH ELEVATOR CONTRACTOR.
- 6. OVERHEAD DIMENSIONS ARE CLEAR FROM F.F. AT TOP LANDING TO STRUCTURE OR ANY OBSTRUCTION ABOVE CAR AND/OR COUNTERWEIGHT. 7. MACHINE BEAM SUPPORT. THIS SUPPORT IS REQUIRED FOR ABOVE CAR MACHINE LOCATION. VERIFY
- MACHINE LOCATION WITH ELEVATOR CONTRACTOR.
- 8. OVERHEAD REACTIONS VARY PER VENDOR BASED ON CWT LOCATION AND METHOD OF SUPPORT FOR HOIST MACHINE AND DEAD END HITCHES. COORDINATE FINAL REACTIONS WITH ELEVATOR SHOP DRAWINGS.

OVERHEAD REACTION TABLE							
DUTY: 4000# @ 200 FPM							
KEY	REACTION (FORCES IN KIPS)						
G	19.2	EACH					
Έ	10.8	FACH					

#### HOISTWAY NOTES:

- 1. PROVIDE ACCESS PANEL AT TOP TERMINAL WHEN CONTROL ROOM IS REMOTE. COORDINATE SIZE AND LOCATION WITH ELEVATOR CONTRACTOR.
- 2. FOR ABOVE CAR MACHINE LOCATION, ERECT ENTRANCE SIDE HOISTWAY WALL AT ELEVATOR EQUIPMENT STORAGE LEVEL AFTER ELEVATOR EQUIPMENT HAS BEEN INSTALLED IN HOISTWAY.
- 3. PROVIDE SMOKE VENTING PER LOCAL CODE REQUIREMENTS.
- 4. FOR CERTAIN MRL VENDORS, PROVIDE ADDITIONAL LATERAL SUPPORTS ABOVE THE TOP TERMINAL FOR THE LARGE GUIDE RAIL FORCES DUE TO HOIST MACHINE, DEFLECTOR SHEAVE, AND DEAD END HITCH LOADS. COORDINATE LOADING REQUIREMENTS AND LOCATIONS WITH ELEVATOR CONTRACTOR.
- 5. ROUGH OPENINGS VARY BY MANUFACTURER, VERIFY ROUGH OPENING BEFORE CONSTRUCTION.
- 6. 1070 MM (42") CAR TOP RAILING PER CODE BY ELEVATOR CONTRACTOR.
- 7. ABOVE CAR MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 8. SIDE CWT MACHINE LOCATION. VERIFY FINAL LOCATION WITH ELEVATOR CONTRACTOR.
- 9. PROVIDE STRUCTURAL SUPPORT, FOR CAR AND CWT GUIDE RAIL FASTENING AT MAX. VERTICAL SPACING THROUGH TOP OF HOISTWAY AS SPECIFIED IN RAIL SUPPORT TABLE. IF THIS SPACING CANNOT BE MAINTAINED, PROVIDE INTERMEDIATE SUPPORT BEAMS OR CONTINUOUS VERTICAL STRUCTURE BETWEEN FLOOR BEAMS.

RA	RAIL SUPPORT TABLE					
15# RAILS						
CAR GUIDE RAIL	10'-6"	MAX SPAN				
CWT GUIDE RAIL	10'-6"	MAX SPAN				

#### CONTROL ROOM NOTES:

- 1. PROVIDE SELF-CLOSING, SELF-LOCKING CONTROL ROOM ACCESS DOOR.
- 2. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 200 LUX (19 FC) ILLUMINATION AT CONTROL ROOM FLOOR.
- 3. PROVIDE 3-PHASE MAINLINE POWER FEEDER WITH DISCONNECTING MEANS FOR EACH ELEVATOR CONTROLLER.
- 4. PROVIDE 1-PHASE FEEDER WITH DISCONNECTING MEANS FOR CAR LIGHTING, VENTILATION SYSTEM AND RECEPTACLE FOR EACH ELEVATOR. THESE DISCONNECTING MEANS SHALL INCLUDE OVERCURRENT PROTECTION, SHALL BE LOCATED IN THE MACHINE ROOM, AND SHALL MEET N.E.C. REQUIREMENTS.
- 5. FOR MOST VENDORS, CONTROLLER MUST BE WITHIN 100' WIRE RUN LENGTH FROM THE CORRESPONDING MACHINE AT THE TOP OF THE HOISTWAY.

## PIT NOTES:

- 1. PROVIDE ADEQUATE LIGHTING TO MAINTAIN MIN. 100 LUX (10 FC) ILLUMINATION AT PIT FLOOR. 2. PROVIDE PIT ACCESS LADDER(S) OR DOOR(S), LIGHT SWITCH(ES), LIGHT(S), AND GFCI-PROTECTED
- UTILITY OUTLET(S). 3. COORDINATE LIGHT FIXTURES AND UTILITY OUTLETS LOCATION WITH ELEVATOR CONTRACTOR.
- 4. PROVIDE ADEQUATE STRUCTURAL SUPPORT REQUIRED FOR BUFFER AND R3 RAIL FORCE REACTIONS.
- 5. ELEVATOR CONTRACTOR PROVIDE PERMANENT MEANS TO ACCESS UNDERSIDE OF CAR AS REQUIRED.
- 6. PROVIDE INDIRECT PIT DRAIN OR 24"x24" SUMP PUMP, WITH GRATING COVER, LEVEL WITH PIT FLOOR. PROVIDE MINIMUM SUMP PUMP/DRAIN CAPACITY OF 3000 GALLONS/HOUR PER ELEVATOR.
- 7. ELEVATOR CONTRACTOR IS TO PROVIDE A COUNTERWEIGHT GUARD PER CODE.
- 8. ELEVATOR CONTRACTOR TO PROVIDE BUFFER ACCESS PLATFORM AND LADDER AS REQUIRED.
- 9. CAR/CWT BUFFER REACTIONS WILL NOT OCCUR SIMULTANEOUSLY. UNLESS SPECIFIED OTHERWISE.

## 10. REACTIONS HAVE BEEN DOUBLED FOR IMPACT.

PIT REACTION TABLE								
DUTY: 4000# @ 200 FPM								
KEY	REACTION (FORCES IN KIPS)		DESCRIPTION					
$\langle A \rangle$	53.3		Car Buffer					
B	48.8		CWT BUFFER					
(C)	32.2	EACH	CAR SAFETY	(SEE CAR R3 RAIL FORCES)				
ALTERNATE PIT REACTIONS FOR RAIL SUPPORTED MACHINE								
THE FOLLOWING REACTIONS DO OCCUR SIMULTANEOUSLY.								
	32.0	EACH	DRIVE MACHINE LOAD ON CAR RAIL COMBINED WITH CWT DEH LOAD ON CWT RAIL					
E	23.0	EACH	DYNAMIC LOAD ON CAR RAIL					
F	10.7	EACH	DYNAMIC LOAD ON CWT RAIL					



FOR PROCUREMENT ONLY