								REQUIRE		NTS		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)	Frei	id Tee	Nainenance Date	ion Data	Denonstration Names	nce Service	
040000		DDV										Final Completion Construction Photos; after Substantial
	Construction Photos	DBK				V					-	Completion
	Bentonite Waterproofing	S&S				X					5	
074113	Metal Roof Panels	DKG					Х				2	
	Panel Finishes	DKG					Х				20	
	Weather-Tightness	DKG					Х				20	
	Weather-Tightness Standing Seam Metal Roof Panels	DKG					Х				20	
074213	Metal Wall Panels	DKG					Х			_	2	
	Exposed Panel Finishes	DKG					Х				20	
074216	Insulated-Core Metal Wall Panels	DKG					Х				2	
	Exposed Panel Finishes	DKG					Х				20	
	Sheet Metal Flashing & Trim Finish	DKG					Х				20	
077100	Roof Specialties	DKG					Х				20	
	Finish Warranty	DKG					Х				20	
078100	Applied Fireproofing	Sprayworks				Х					2	
079200	Joint Sealants	S&S				Х						
	Special Installer's Warranty	S&S				Х					5	
	Special Manufacturer's Warranty	S&S				Х					5	
084113	Aluminum-Framed System	Champion				Х	Х				5	
	Aluminum System Finish	Champion				Х	Х				5	
084523	Fiberglass-Sandwich-Panel Assembly:	DKG					Х					
	Special Assembly Warranty	DKG					Х				5	
	Special Fiberglass-Sandwich-Panel Warranty	DKG					Х				10	
	Special Aluminum-Finish Warranty	DKG					Х				10	
087100	Door Hardware:	Tru-Fit					Х					Provide Key Control Cabinet
	Hardware	Tru-Fit					Х				3	
	Exit Devices	Tru-Fit					Х				2	
	Manual Closers	Tru-Fit					Х				10	
088000	Glazing	Champion										
	Coated-Glass Products Warranty	Champion		1							10	
	Laminated Glass Warranty	Champion									5	
	Insulating Glass Warranty	Champion									10	
088300	Mirrors	Dist of FL		1			Х				5	
093000	Tiling	Moyer										Provide Master Grade Certificates Tile & Trim Units: 3% of each type units and grout
095123	Acoustical Tile Ceilings	Center Bros	3/31	х	х		х					Acoustical Tiles & Suspension System Components: 2% installed
096519	Resilient Tile Flooring	Moyer	4/15	Х	Х		х					Resilient Base & accessories: 10 LF for every 500 LF installed
096813	Tile Carpeting	Moyer	4/15	Х	Х		Х				10	5% installed but not less than 10 SY

							F	EQUIR	ED DO	CUMENTS		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)	FieldT	Nainte	s Date ance Date Operation	Energy	ency Data soning	Notion of the sort	Calapse to Veal Maranth COMMENTS
099123	Interior Painting	Pro Pt										5% installed but not less than 1 Gal each type used
099600	High Performance Coatings	Pro Pt										5% installed but not less than 1 Gal each type used
101100	Visual Display Surfaces	Dist of FL				Х					Lifetime	Warranty Period: Life of the building
102113	Toilet Compartments	Dist of FL				Х						
102116	Shower and Dressing Compartments	SWP				Х						See Plumbing Fixtures
102800	Toilet, Bath and Laundry Accessories	Dist of FL				Х					15	Mirror Warranty
104413	Fire Extinguisher Cabinets	Dist of FL				Х						
104416	Fire Extinguishers	Dist of FL				Х					6	
105113	Metal Lockers	Dist of FL				x					2	10% installed but not less than 5 units of locks, ID plates and hooks
105213	Projection Screens	Dist of FL				Х						
122113	Horizontal Louver Blinds	DBK				Х						5% installed
124813	Entrance Floor Mats & Frames	Dist of FL				х						Entrance Tiles: Full-size units 2% for each size, color, and pattern indicated.
142100	Elevator	Otis				x			х		1	Include preventive maintenance 24 hour emergency service for one year
	Certificates of readiness								Х			See checklist in commissioning plan
	Certificates of completion of installation, prestart, and startup activities.								х			
	Elevator - Maintenance Control Program (MCP)	Otis	3/31	х								Provide quote for 5 year Preventive Maintenance Agreement Sprinkler Cabinet: 1 cabinet for each type used on job with 6
211212	Wat Dina Sprinklar Systems	McGilvray				v v	х	х				spare sprinklers plus wrench each.
211313 213113	Wet-Pipe Sprinkler Systems Electric-Drive, Centrifugal Fire Pumps	McGilvray				X X X X	X	X		Х		spare sprinkiers plus wrench each.
213113	Fire Pump Systems, Interlocking Wall-type enclosure	McGilvray				X X X	X	^		<u>^</u>		
213123	Pressure-Maintenance Pumps	McGilvray				X X	X	Х				
213400	Controllers for Fire-Pump Drivers	McGilvray				x x	x	x		X		timers, controls and alarm points, testing, adjusting and reprogramming microprocessor-based logic
	Extra Materials:	McGilvray										Indicating Lights: 2 of each type & color lens and 2 of each type & size lamp
		McGilvray										Auxiliary Contacts: 1 for each size and type of magnetic contactor installed
		McGilvray										Power Contacts: 3 for each size and type of magnetic contactor installed
		McGilvray										Contactor Coils: 1 for each size and type of magnetic controller installed
		McGilvray										Relay Boards: 1 for each size and type of relay board installed
		McGilvray										Operator Interface: 1 microprocessor board, complete with display and membrane keypad

								R		CUMEN	ITS		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)		Field Tes	Report	operation Date	a sency Date	Denonstration Namen	nce servi Parts	Calou Comments
220519	Meters and Gages for Plumbing Piping	SWP	3/31	Х	X		Х	Х					
	Facility Water Distribution Piping	McGilvray				Х	Х	Х					
	Domestic Water Piping Specialties	SWP	3/31	Х	Х		Х	Х					
	Domestic Water Pumps	SWP	3/31	Х	Х		Х	Х					
	Domestic-Water Packaged Booster Pumps	SWP	3/31	Х	Х		Х	Х	X	Х			
	Facility Sanitary Sewers	Redland				Х							
	Sanitary Waste and Vent Piping	SWP				Х							
221329	Sanitary Sewerage Pumps	Redland	3/31	Х	Х		Х	Х		Х		1	
221413	Facility Storm Drainage Piping	SWP				Х							
221513	General-Service Compressed-Air piping	SWP				Х	Х	Х	Х				
	General-Service Packaged Air Compressors and Receivers	SWP					Х	Х	Х	Х			
223300	Electric Domestic Water Heaters	SWP	3/31	Х	Х	Х	Х	Х	X	Х			
412213.15	Instantaneous Electric Water Heater	SWP	3/31	Х	Х						X	5	
	Commercial Electric: Storage Tank	SWP										10	
	Commercial Electric Controls & Components	SWP										5	
	Compression Tanks	SWP										1	
224000	Plumbing Fixtures	SWP	3/31	Х	Х		Х	Х	Х			3	
	Faucet Washers & O-rings	SWP											10% installed
	Faucet Cartridges & O-rings	SWP											5 % installed
	Flushometer Valve, Repair Kits	SWP											10% installed but not fewer than 10 of each type
	Hinged-top wood or metal box for above	SWP											
	Toilet Seats	SWP											5% installed
224500	Emergency Plumbing Fixtures	SWP	3/31	Х	Х	Х	Х				X		
224700	Drinking Fountains and Water Coolers	SWP	3/31	X	X	X	х	х	х			1.5	10% filter cartridges for each type installed, but not fewer than 5 of each type
230548	Vibration Controls for HVAC Piping and Equipment	Hyvac					Х	Х		Х			
230553	Identification for HVAC Piping and Equipment	Hyvac					Х						Valve Schedules: For each piping system to include in maintenance manual.
230593	Testing, Adjusting, and Balancing for HVAC	Hyvac				Х							Certified TAB Reports
230800	Commissioning of HVAC	Hyvac							X				
	Certificates of readiness	Hyvac							X				
	Certificates of completion of installation, prestart, and startup activities.	Hyvac							x				See checklist in commissioning plan
	Hydronic Pumps	Hyvac					Х	Х	Х				N/A
232300	Refrigerant Piping	Hyvac				Х	Х						
	Metal Ducts	Hyvac				Х							Leakage Tests
	Air Duct Accessories	Hyvac					Х	Х					
	HVAC Power Ventilators	Hyvac		Х		Х	Х	Х	Х				
	Packaged Compressor and Condenser Units	Hyvac		Х		Х	Х	Х	Х	Х		5	

								R	EQUIRED	DOC	UMENTS		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)		Field Te	Mainten	operation for	Data	Connissioning	inon a service service and a s	Catalog Catalog Hol Year Margan Forecamber Special Margan
237313	Modular Indoor Central-Station Air-Handling Units	Hyvac		х		х	х	х	x		х		Filters: Two sets for each unit. Fan Belts: One set for each unit fan.
				-									Filters: One set for each unit.
238126	Split-System Air-Conditioners	Hyvac		X		Х	Х	Х	Х		Х	5	Fan Belts: One set for each unit.
260519	Low-Voltage Electrical Power Conductors and Cables	Nagelbush				Х							
260526	Grounding and Bonding for Electrical Systems	Nagelbush				Х	Х	Х	Х				
													10% of each item installed for cable-support stanchions, arms
260543	Underground Ducts and Raceways for Electrical Systems	Nagelbush				Х							and associated fasteners.
260553	Identification for Electrical Systems	Nagelbush											Identification Schedule: An index of nomenclature of electrical equipment and system components used in identification signs and labels.
260553	Overcurrent Protective Device Coordination Study	Nagelbush								Х			
200373	Coordination-study input data, including completed	Nageibusii								^			
	computer program input data sheets.									х			
	Study and Equipment Evaluation Reports.									X			
-	Coordination-Study Report.									X			
260800	Commissioning of Generator	Nagelbush	3/31	Х	Х		Х	Х		X			
200000	Certificates of readiness	Nagelbush					~	~		X			
	Certificates of completion of installation, prestart, and	itageneach											
	startup activities.	Nagelbush								Х			See checklist in commissioning plan
260923	Lighting Control Devices	Nagelbush				Х	Х	Х	Х		Х		
260936	Modular Dimming Controls	Nagelbush				Х					Х		
262200	Low-Voltage Transformers	Nagelbush	3/31	Х	Х	Х	Х	Х	Х				
262413	Switchboards	Nagelbush	3/31	х	x	×	X	X	x		x	5	Potential Transformer Fuses: 10% > two Control-Power Fuses: 10% > two Fuses & Fusible Dev- Fused Circuit Breakers: 10% > three Fuses for Fused Switches: 10% > three Fuses for Fused Power-Circuit Devices: 10% > three Indicating Lights: 10% > one
													Panelboard Schedules: Submit final versions after load balancing. 2 spare keys for each type of panelboard cabinet lock Circuit Breakers incl GFCI and GFEP: 2 spares for each panelboard. Fuses for Fused Switches: 10% > 3.
262416	Panelboards	Nagelbush	3/31	Х	Х	Х	Х	Х	X		Х	5	Fuses for Fused Power-Circuit Devices: 10% > 3
262416	Panelboard Lighting Control System	Nagelbush	3/31	х	х		х	x				1	Wiring and routing diagrams must be in O&Ms provide quote for maintenance and service agreement following warranty period

				-				RI	EQUIRE	ED DO	CUMENT	S		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)		Field Tes	Nainen	operati	on Data	anov Data commission	noning monstra	pinerance p	enice catalog ars rotesimation rotesimation special action special actions
														* See spec section for detailed requirements for O&M provide
262713	Electricity Metering	Nagelbush				х	Х	х						tech support for 2 years and complimentary upgrades during this 2 years
202110		Rugelbuoli				~	Λ	~						Floor Service Outlet Assemblies: 1 for every 10 > 2
262726	Wiring Devices	Nagelbush				Х	Х	Х	Х					TVSS Receptacles: 1 for every 10 of each type > 2
000040	Exclusion d Oravitations and Oliverativ Decisions	Newstern	0/04	V	X	X	V	V	V					Fuses: 10% installed > 3 each size & type
262816	Enclosed Switches and Circuit Breakers	Nagelbush	3/31	X	X	Х	Х	Х	Х					Fuse Pullers: 2 for each size and type.
262913	Enclosed Controllers	Nagelbush				x	x	x	x		x			* See spec section for detailed requirements for O&M Fuses for Fused Swithces: 10% installed > 3 each size & type Control Power Fuses: 10 % installed > 2 each size & type Indicating Lights: 2 of each type and color installed Auxiliary Contacts: One spare for each size and type of magnetic controller Power Contacts: 3 spares for each size and type of magnetic contactor
263213	Engine Generators	Nagelbush	3/31	x	x	х	x	x	x		x	1		 Provide a list of tools recommended to bestore at project for ready access including part numbers, current prices and source of supply; Fuses: 1 for every 10 of each type and rating Indicator Lamps: 2 for every 6 of each type > 2 Filters: 1 set each of lubricating oil, fuel and combustion-air filters
263600	Transfer Switches	Nagelbush	3/31	X X	Х	Х	Х	Х	Х		Х			* See spec section for detailed requirements for O&M
264113	Lightning Protection for Structures	Nagelbush				Х								
264313	TVSS devices	Nagelbush	3/31	X	X	X	X	X	X					 5 Replaceable Protection Modules: 1 of each size & type Lamps: 10% each type & rating Plastic Diffusers & Lenses: 1% each type & rating > 1 Battery & Charger Data: 1 for each emergency lighting unit Ballasts: 10% each type & rating > 1
265100	Interior Lighting	Nagelbush				Х	Х	Х	Х					Globes and Guards: 10% each type & rating > 1
	Emergency Lighting Batteries	Nagelbush												0
	Emergency Flourescent Ballast and Self-Powered Exit	Nogelbush												7
	Sign Batteries Electronic Ballasts	Nagelbush Nagelbush												7 5
	T5 & T8 Flourescent Lamps	Nagelbush												1

				-				RI	EQUIRE	D DOC	CUMENT	S		
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)		field Tee	Hainen	Operation Operation	on Data	nev Data commis	nonstration Nonstration	nce servi Parts	Catalog Catalog Por Special Mattalia Special Mattalia Special Mattalia
														Lamps: 10% > 1 each type & rating Glass and Plastic Lenses, Covers and Other Optical Parts:
														10% > 1 each type & rating
														Ballasts: 10% > 1 each type and rating
265600	Exterior Lighting: Luminaries	Nagelbush				Х	Х	Х	Х		Х		STD	Globes & Guards: 10% > 1 each type and rating
271000	Building Communications Cabling	Nagelbush										1	1	See Warranty Requirements
	Hardware and Labor	Nagelbush											20	See Warranty Requirements
275116	Public Address & Mass Notification Systems	Nagelbush				Х	Х	Х	Х		Х			
														* See spec section for detailed requirements of O&M and Extra
														Materials; provide
283111	Digital, Addressable Fire-Alarm System	Nagelbush	3/31	Х	Х	Х	Х	Х	Х		Х	2		complimentary upgrade during 2 years of maintenance
412213.13	Bridge Cranes	Met-Con	3/22	Х	Х		Х	Х			3 days			
412213.14	Jacking System	Portec					Х	Х				Х	2	*Spare parts as recommended by manufacturer

							R	EQUIRE	D DOCUMEN	TS			
Spec Section	DESCRIPTION	SUB / VENDOR	Rec'd	Electronic Copy	Hard Copies (7)	Field Te	Nainen	ance Data	on Data Energency Data	ssioning ssioning penonstration M	intenance	Servit	Caland Comments
412213.15 TR	AIN MAINTENANCE SHOP EQUIPMENT												*Field Testing Procedures of last 30 days; spare parts list for routine maintenance; spare parts list considered critical; spare set of all disposable items as recommended by the Manufacturer Certificates of readiness Certificates of completion of installation, prestart, and startup
						X							activities.
	ach Watering Cabinets	Snyder				X	X		X			2	
	pper Trash and Scrap Container	Craft				X	X		X			2	
	rpet Extractor	Steambrite				X	X		X		X	2	
	hwasher	EH Thom	0/04			X	X		X		X	2	
	ick Washer	Proceco	3/31	X	X	X	Х	Х	X		X	2	
	rts Washer	Better	3/31	X	Х	X	Х	Х	X			2	
	rtable Welding Booth	Oskar	3/31	Х	Х	X	Х	Х	X		X	2	
	int Booth	Dietz	3/31	Х	Х	X	X		X		X	2	
	rtable Industrial Vacuum Systems		0.10.1			X	Х		X		X	2	
	nipulators	Dalmec	3/31	Х	Х	X	X	Х	X		X	2	
	tant Hot Water Heater	SWP	3/31	Х	Х	X	X		X			2	
	sks	Strong Hold				X	Х		X		Х	2	
	ter Jet Cutter	Multi-Cam	3/31	Х	Х	X	X	X	X		Х	2	
	rail System	Railcomm	- /- /			Х	Х		X		X	2	
	torized Curtains	Steel Guard	3/31	Х	Х	X	Х	Х	X		Х	2	
	prage Racks	Craft	1/26	Х	Х	X	Х		X			2	
	let Dump Stations	SWP	3/31	Х	Х	X	Х		X		X	2	
	se Reels	SWP	3/31	Х	Х	X	Х		X			2	
	Ton Jib Crane	Met-Con	3/22	Х	Х	X	Х		X		Х	2	
Ma	terials Vending	SupplyPro	3/31	X	X	X	X		X		Х	2	
end													