

STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION  
MAINTENANCE SUPPORT – SOUTH DISTRICT  
PLANS AND SPECIFICATIONS FOR:

CONTRACT NO: T201180101 P3e No: 10-01677

CONTRACT TITLE: GEORGETOWN ADMINISTRATION BUILDING  
GATE SECURITY, 2011

PLANS PREPARED BY: GLENN PHILLIPS, JR. (DESIGN TECHNICIAN)

PLANS REVIEWED BY: Shante A. Hastings / for DATE: 12/20/10  
MAINT.SUPPORT SUPERVISOR

<p>DATE RECOMMENDED: <u>12/20/10</u></p> <p>ASSISTANT MAINT. ENGINEER: <u>Shante A. Hastings</u></p>	
<p>DATE RECOMMENDED: <u>12/20/10</u></p> <p>MAINTENANCE ENGINEER: <u>[Signature]</u></p>	
<p>DATE RECOMMENDED: <u>12/29/10</u></p> <p>SOUTH DISTRICT ENGINEER: <u>Jeffrey S. Reed</u></p>	

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**CONTRACT DESCRIPTION**

THE PURPOSE OF THIS CONTRACT IS TO SECURE THE PROPERTIES OF THE STATE OF DELAWARE AT THE GEORGETOWN ADMINISTRATION BUILDING. AS DESCRIBED IN THE CONTRACT PLANS, THIS CONTRACT SHALL INCLUDE THE INSTALLATION OF GATE MOTORS FOR EXISTING SLIDING VEHICLE GATES, GATE CLOSURES FOR EXISTING PERSONNEL GATES, ALL KEYPAD PEDESTALS, BOLLARDS AND ALL GATE SECURITY FOR ALL GATES, ALL ELECTRICAL AND SECURITY SYSTEM COMPONENTS AS WELL AS ANY OTHER WORK OUTLINED IN THE CONTRACT PLANS SHALL ALSO BE INCLUDED IN THE CONTRACTORS SCOPE OF WORK. UPON COMPLETION OF THE PROJECT THE GATES SHALL BE IN FULL WORKING CONDITION PER THE PLANS AND SPECIFICATIONS. THE PROJECT LOCATION IS AT THE DELDOT SOUTH DISTRICT ADMINISTRATION BUILDING, 23697 DUPONT HWY, GEORGETOWN, DE. THE WORK SHALL INCLUDE ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT TO COMPLETE ALL WORK LISTED HEREIN.

1. THE CONTRACTOR SHALL SUBMIT THE REQUIRED COPIES OF A DETAILED PROGRESS SCHEDULE (PSC) AS OUTLINED IN STANDARD SPECIFICATION 108.04 PRIOR TO OR AT THE PRECONSTRUCTION MEETING. DETAILS SHALL INCLUDE A DESCRIPTION OF EACH WORK ACTIVITY, THE PLANNED DAYS OF WORK, NUMBER OF CREWS, AND SCHEDULED WORKING HOURS. DURING THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TWO-WEEK (OR AS REQUIRED) "LOOK AHEAD" SCHEDULES TO THE PROJECT MANAGER NO LATER THAN NOON OF EACH THURSDAY. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.
2. DURING THE BIDDING PERIOD, ANY QUESTIONS PERTAINING TO THE WORK SHALL BE DIRECTED TO THE CONTRACT ADMINISTRATOR. AFTER THE AWARD, SUCH QUESTIONS SHALL BE REFERRED TO THE PROJECT MANAGER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ATTAINING ALL BUILDING PERMITS (STATE, LOCAL, ETC) AS REQUIRED FOR COMPLETION OF WORK. THE COST FOR THE PERMITS AND ATTAINING THEM SHALL BE INCLUDED IN THE LUMP SUM BID.
4. REMOVAL AND LEGAL DISPOSAL OF REMOVED MATERIALS SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK.
5. ALL ONSITE LABOR SHALL BE PAID PER THE APPLICABLE STATE CONSTRUCTION WAGE SCALE FOR SUSSEX COUNTY, DELAWARE.
6. THE CONTRACTOR WILL BE PERMITTED TO PLACE TEMPORARY STORAGE TRAILERS ON SITE FOR MATERIAL STORAGE.
7. COMPLETE SHOP DRAWINGS SHOWING LAYOUTS, PROFILES, AND PRODUCT COMPONENTS INCLUDING POWER, CHAINS, AND CLOSURES AND, ACCESSORIES AND FINISHED DETAILS MUST BE SUBMITTED FOR APPROVAL BEFORE START OF WORK.
8. MANUFACTURERS PRODUCT DATA, LITERATURE AND COLOR SAMPLES FOR ALL COMPONENTS MUST BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS/ OPENINGS BY FIELD MEASUREMENTS AND RECORD OF SHOP DRAWINGS PRIOR TO FABRICATION. THE CONTRACTOR SHALL COORDINATE WITH FABRICATION CONSTRUCTION SCHEDULE IN ORDER TO AVOID CONSTRUCTION DELAYS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK AND SECURITY SYSTEM TIE-INS ASSOCIATED WITH ALL ASPECTS OF THE MAN GATES AND VEHICLE GATES.

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GEORGETOWN ADMINISTRATION BUILDING GATE SECURITY, 2011

11. THE DEPARTMENT RESERVES THE RIGHT TO ADD OR DELETE WORK WITHIN THIS CONTRACT. ANY PRICING REQUIRED FOR ADDED WORK WILL BE NEGOTIATED PRIOR TO THE COMMENCEMENT OF WORK. THE DEPARTMENT WILL BE ENTITLED TO A CREDIT FOR ANY WORK DELETED.
12. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH CAUSED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF AN INDEPENDENT TESTING COMPANY, WHO SHALL BE RESPONSIBLE FOR THE IDENTIFICATION AND LOCATION OF ALL SITE UTILITIES IN THE AREA OF EXCAVATION OR DRILLING. NO ADDITIONAL COMPENSATION SHALL BE GIVEN FOR REPAIRS REQUIRED FOR DAMAGES TO EXISTING SITE UTILITIES. THE CONTRACTOR SHALL IMMEDIATELY REPAIR, AT NO ADDITIONAL COST TO THE OWNER ANY DAMAGE DURING EXCAVATION, BACKFILLING OR BORING TO EXISTING SITE UTILITIES.
13. THE PROJECT SHALL BE PHASED TO PERMIT FREE FLOW PEDESTRIAN AND VEHICULAR TRAFFIC THROUGHOUT THE DURATION OF CONSTRUCTION.
14. PROVIDE ALL NECESSARY CONDUITS IN EACH PHASE FOR PRESENT AND SUCCESSIVE PHASES TO AVOID ALL DISTURBANCES TO SITE OF PREVIOUS PHASES.
15. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO PROVIDE ALL COSTS OF REMEDIATION OF THE SITE BY OTHER TRADES FOR THE NEGLECT TO INSTALL NECESSARY CONDUITS AND APPURTENANCES IN EACH PHASE.
16. PRIOR TO BIDDING, THE CONTRACTOR SHALL VERIFY THAT ALL CONDUITS SHOWN ON THE PLANS ARE IN PLACE. IN THE EVENT THAT A CONDUIT IS NOT ALREADY IN PLACE OR THE CONTRACTOR REQUIRES ADDITIONAL CONDUIT RUNS FOR PROPER INSTALLATION AND FULL FUNCTION OF GATE SYSTEMS; THE CONTRACTOR SHALL INCLUDE THIS CONDUIT IN THEIR BASE BID AS WELL AS ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED TO PLACE CONDUIT, BACKFILL AND REPAIR ADJACENT AREAS TO PREVIOUS CONDITIONS.
17. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH AND COORDINATE ALL ELEVATIONS AND LOCATE ALL SITE LIGHTING POLES, PEDESTALS AND EQUIPMENT REQUIRED UNDER THIS CONTRACT.

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### MOTORIZED VEHICLE GATES AND PERSONNEL GATE NOTES

- MOTORS AND AUTOMATIC CLOSURES/LOCKS SHALL BE INSTALLED AT EACH LOCATION AS SHOWN IN THE PLANS.
- ALL ELECTRICAL COMPONENTS SHALL BE INCLUDED IN THIS CONTRACT, AND BE COMPATIBLE WITH ALL OF THE EXISTING SECURITY SYSTEMS FEATURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY GRADING THAT MAY BE REQUIRED TO MEET APPROPRIATE INSTALLATION GRADES.
- MANUFACTURER'S DATA SHEETS SHALL BE SUBMITTED ON EACH PRODUCT TO BE USED, INCLUDING: PREPARATION INSTRUCTIONS AND RECOMMENDATIONS, STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS & INSTALLATION METHODS.
- SHOP DRAWINGS SHOWING LAYOUT, ELECTRICAL COMPONENTS, BOLLARDS, PEDESTALS AND KEY CARD ENTRIES INCLUDING ACCESSORIES MUST BE SUBMITTED PRIOR TO CONSTRUCTION.
- CLEANING: REMOVE TEMPORARY COVERINGS AND PROTECTION OF ADJACENT WORK AREAS. REPAIR OR REPLACE DAMAGED INSTALLED PRODUCTS. CLEAN INSTALLED PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS PRIOR TO OWNER'S ACCEPTANCE. REMOVE CONSTRUCTION DEBRIS FROM PROJECT SITE AND LEGALLY DISPOSE OF DEBRIS.
- PROVIDE AND INSTALL BOLLARDS TO PROTECT ALL PEDESTALS AS SHOWN IN THE CONTRACT PLANS
- ELECTRICAL WORK TO INCLUDE ALL NECESSARY PULLING OF WIRE, DISCONNECTS, CONDUITS, JUNCTION BOXES AND WIRE FOR POWER TO ALL DEVICES.
- TEN IN-GROUND LOOPS TO BE SAW CUT INTO ASPHALT FOR OBSTRUCTION AND REVERSE
- THE GATE SECURITY SYSTEM SHALL BE FULLY COMPATIBLE AND WORK SEAMLESSLY WITH THE DEPARTMENTS EXISTING BUILDING SECURITY SYSTEMS: ADVANTECH AND PROWATCH.

### MOTORIZED VEHICLE GATE SPECIFICATIONS

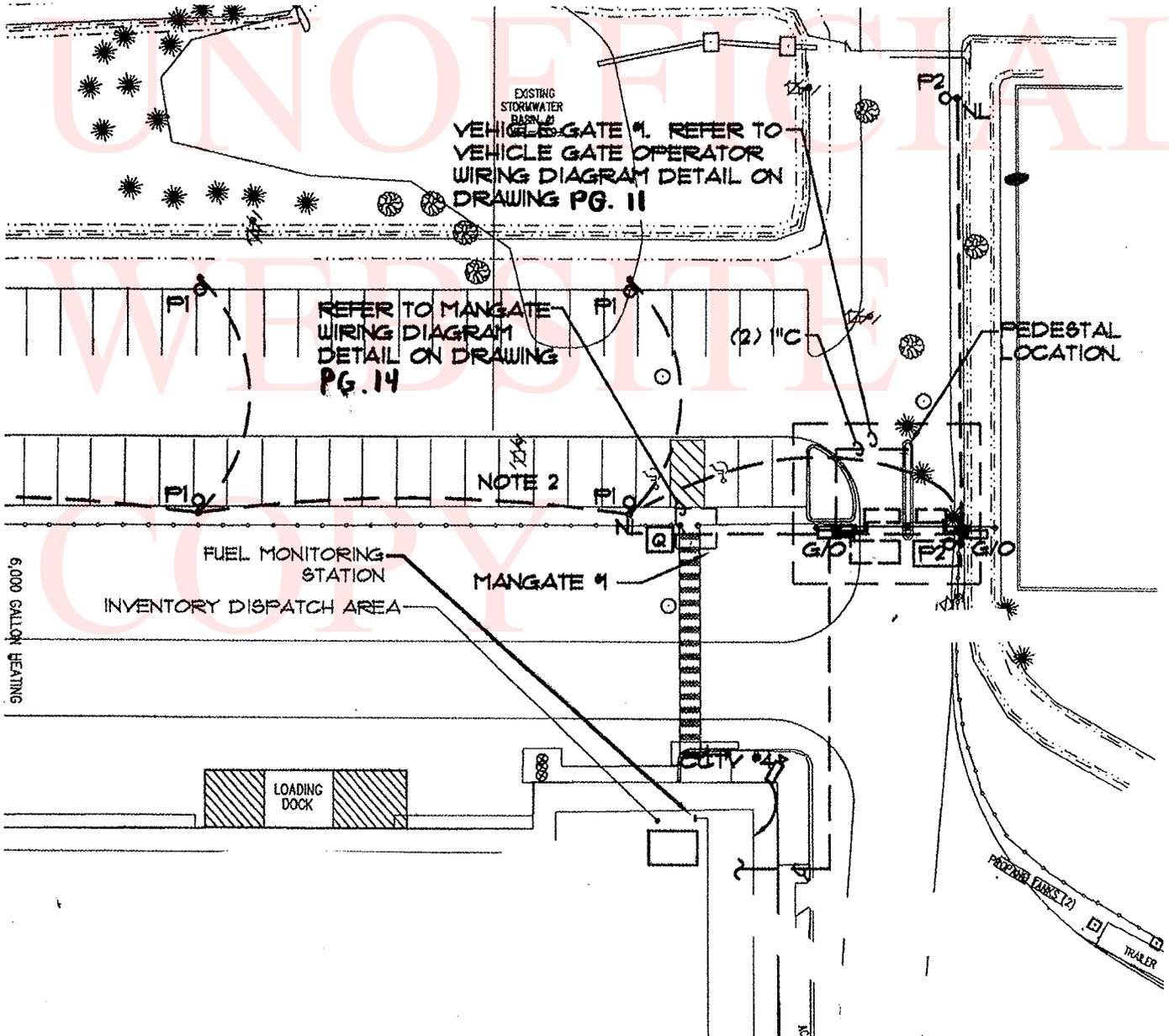
- CONTINUOUS DUTY, HYDRAULIC SLIDE GATE OPERATORS
- UP TO 1,000 LBS GATE, 12" PER SECOND
- TWO 6" DRIVE WHEELS
- PROGRAMMABLE SMART TOUCH CONTROLLER
- 3 USER RELAYS WITH 26 PROGRAMMABLE OPTIONS
- TROUBLESHOOTING WITH LED'S, LCD WITH DOWNLOADABLE FAULT LOG
- COMMUNICATES GATE STATUS TO COMMAND AND CONTROL SOFTWARE
- RATED TO FUNCTION IN -40 DEGREES F TO +160 DEGREES F
- ULTRA-DURABLE ENAMEL COATING FOR ENDURING FINISH
- EACH GATE TO HAVE ROTATING OPERATING BEACON
- OPERATORS TO BE 1HP WITH ALUMINUM DRIVE RAIL
- POWER TO VEHICLE GATES TO BE 208 VAC, 3 PHASE
- 46 LOOP DETECTORS MODULES WITH DIGITAL OUTPUT FOR DIRECT PLUG IN TO SMART TOUCH CONTROL BOARD
- 1 MILLER EDGE SAFETY REVERING SENSING EDGE, CHANNEL, SAFETY TRANSMITTER, RECEIVER AND ANTENNA (BACK GATE #3)
- ALL GATE MODIFICATION SHALL USE GALVANIZED STEEL
- VEHICLE GATES SHALL BE INSTALLED SUCH THAT GATES REMAIN OPEN FROM 7AM-4PM, MONDAY THROUGH FRIDAY. ALL OTHER HOURS GATES SHALL BE CLOSED AND LOCKED AND BE CONTROLLED BY KEYCARD CONTROLS
- THE SECURITY SYSTEM SHALL BE FULLY COMPATIBLE AND WORK SEAMLESSLY WITH THE DEPARTMENT'S EXISTING SECURITY SYSTEM: ADVANTECH AND PROWATCH THE CONTRACTOR WILL BE REQUIRED TO SUBMIT WITH THEIR BID, WHICH SECURITY SYSTEM SUBCONTRACTOR THEY WILL BE USING.
- (2) 6"W X 4'H BOLLARDS SHALL BE INSTALLED AT EACH VEHICLE GATE PEDESTAL LOCATION.
- ALL VEHICLE GATE PEDESTALS SHALL BE DOUBLE TIER INSTALLED ON 2' LENGTH X 2' WIDTH X 6" DEPTH P.C.C SLAB
- SAW CUT AND REMOVAL OF ANY HOT MIX SHALL ALSO BE INCLUDED

**PERSONNEL GATE SPECIFICATIONS**

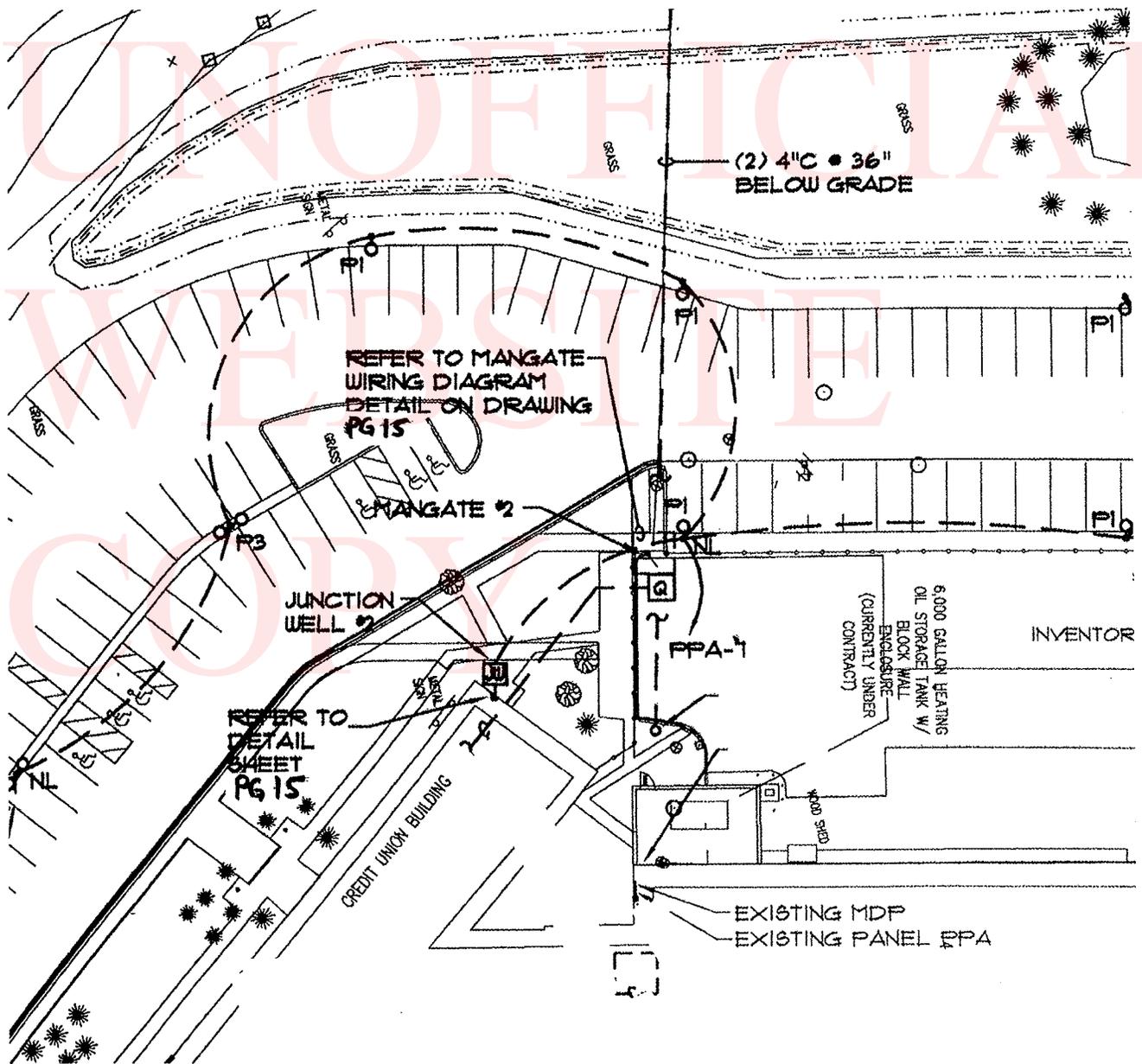
- POWER TO PERSONNEL GATES SHALL BE 120 VAC, SINGLE PHASE WITH KEYPAD OPERATORS INSTALLED ON PEDESTALS ON 4" DEPTH 16" X 16"
- EXTERIOR GRADE STAINLESS FINISH HYDRAULIC CLOSURE SYSTEM WITH COMPLETE MECHANICAL CLOSURE TO SUPPORT THE DOOR WEIGHT
- RATED TO FUNCTION IN -40 F DEGREES TO +160 F DEGREES
- ALL STEEL SHALL BE GALVANIZED OR STAINLESS
- OPENING SHALL BE 120 DEGREES
- INSTALL CARD READERS FOR BOTH ENTERING AND EXITING AREA
- HYDRAULIC GATE LOCK
- EMERGENCY EXIT BUTTON
- ALL PERSONNEL GATES SHALL USE KEYCARD ACCESS AT ALL TIMES
- EXISTING KEYPAD INSTALLED ON PERSONNEL GATE #3 SHALL BE REMOVED AND REPLACED WITH KEYCARD CONTROLLER.

WEBSITE

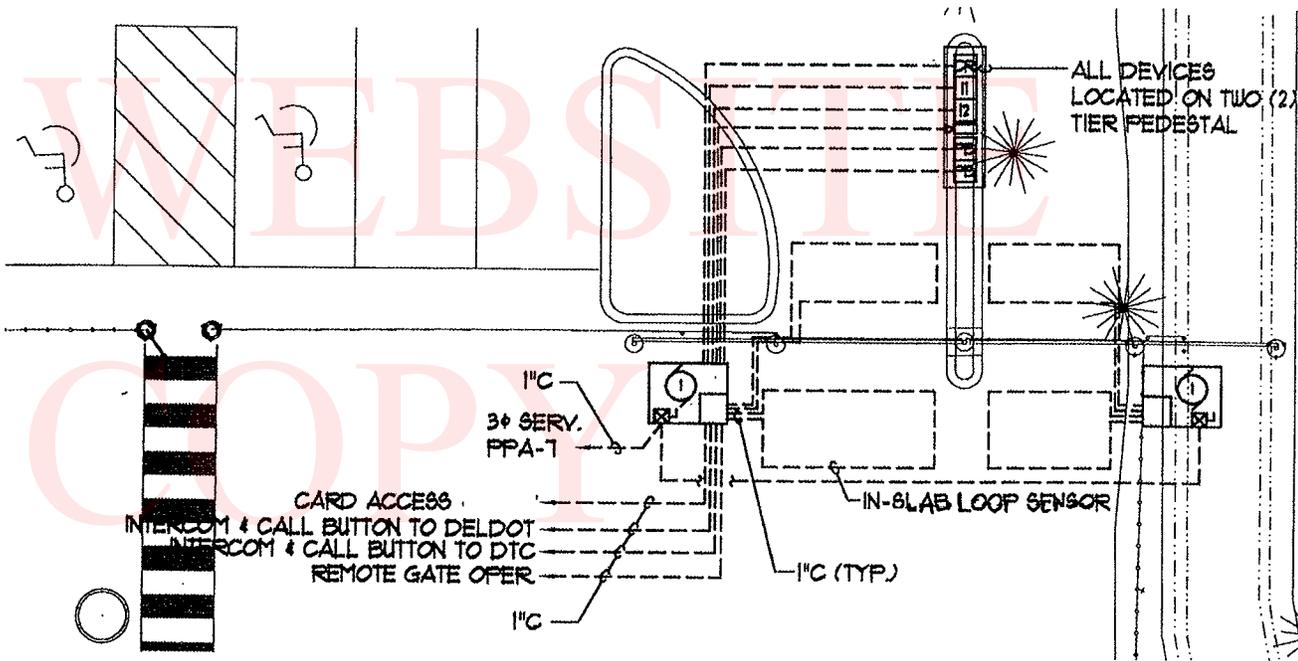
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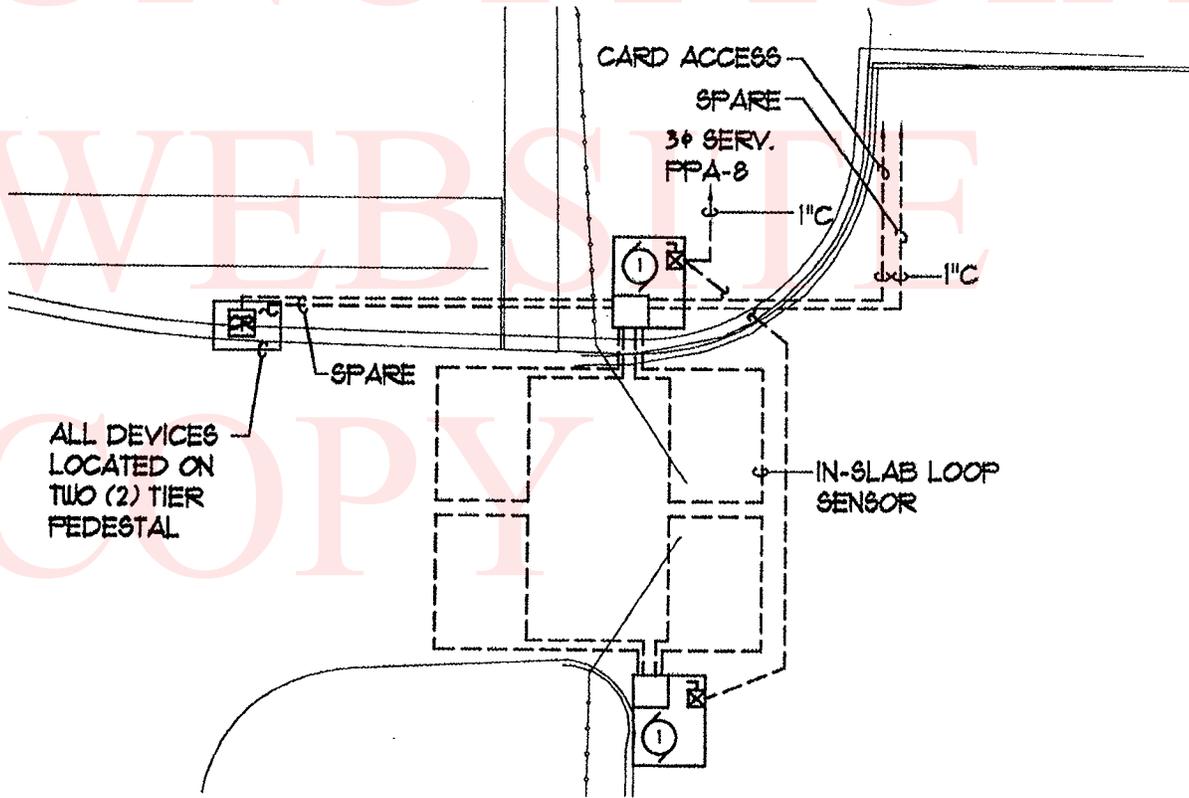






VEHICLE GATE #1  
OPERATORS WIRING DIAGRAM DETAIL  
NO SCALE

UNOFFICIAL  
WEBSITE  
COPY

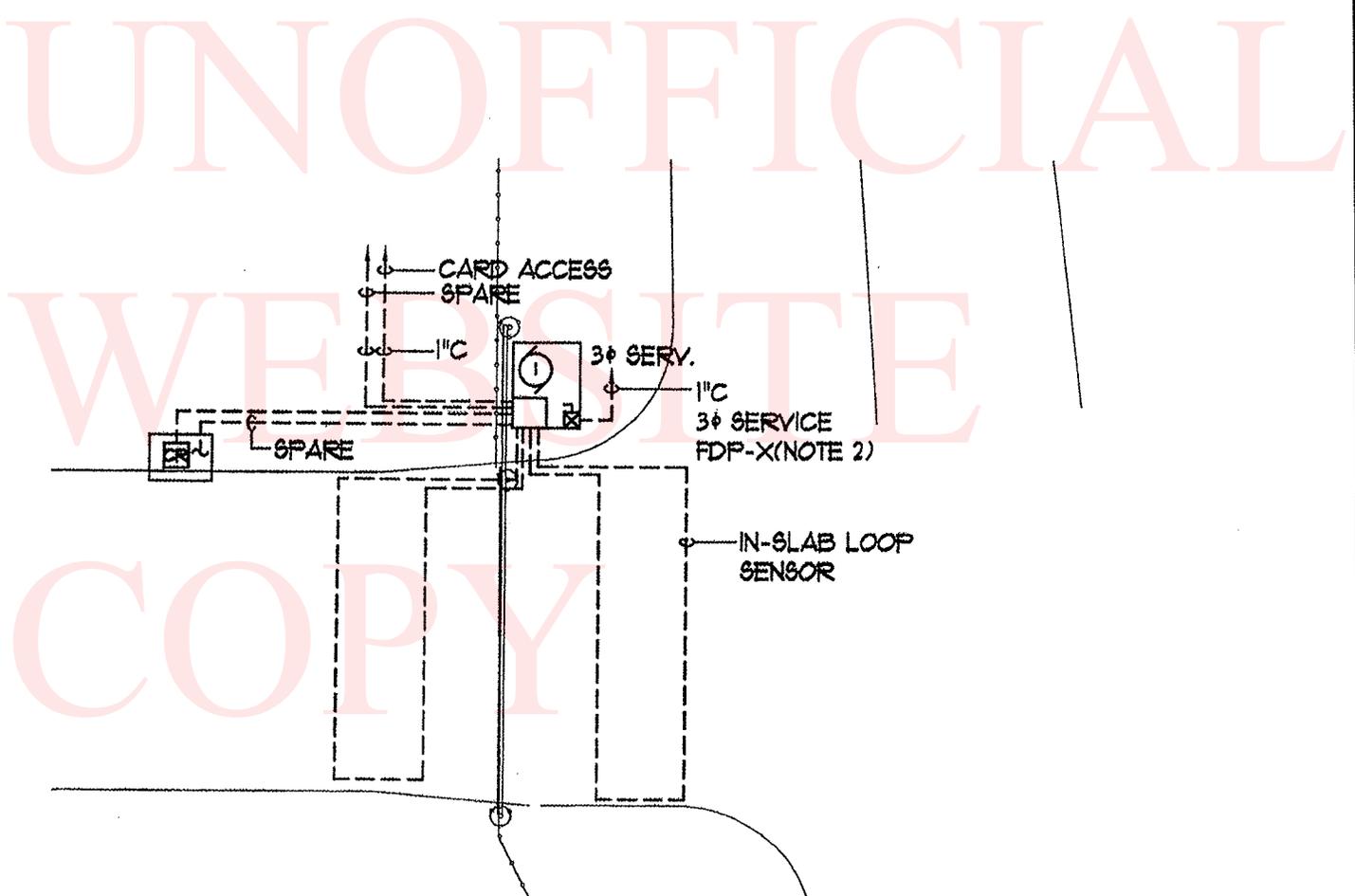


ALL DEVICES  
LOCATED ON  
TWO (2) TIER  
PEDESTAL

VEHICLE GATE #2

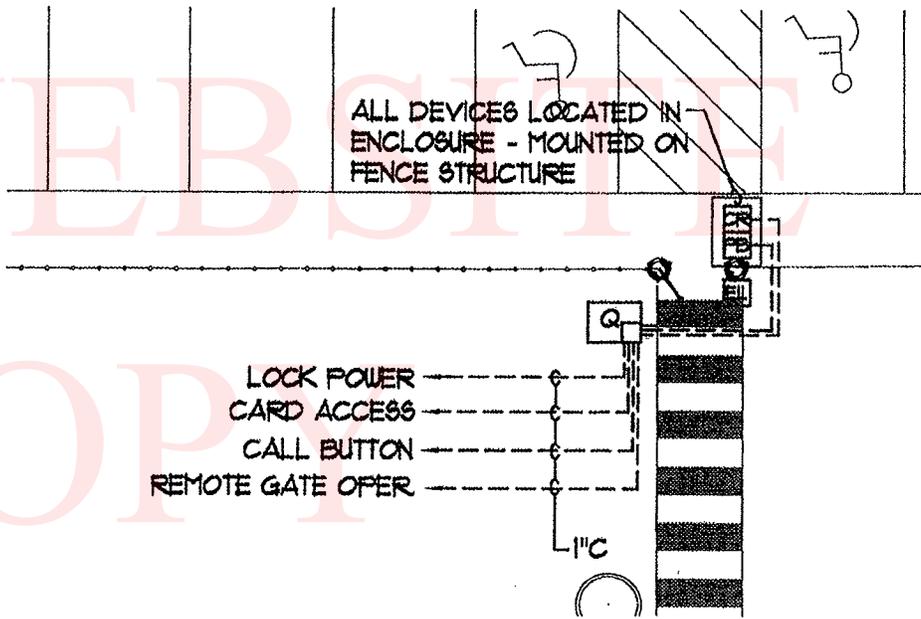
OPERATOR WIRING DIAGRAM DETAIL

NO SCALE

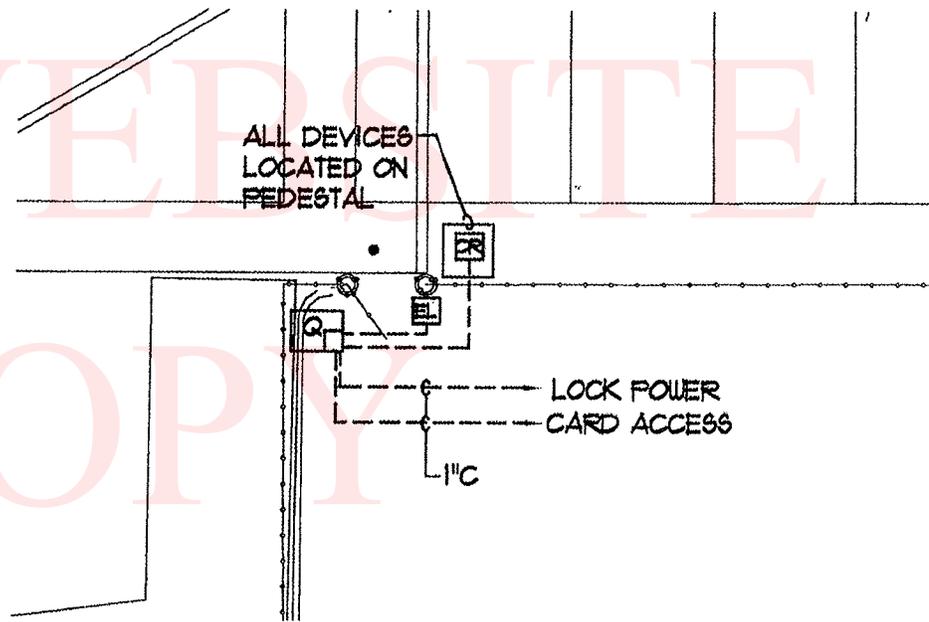


VEHICLE GATE #3  
OPERATOR WIRING DIAGRAM DETAIL  
NO SCALE

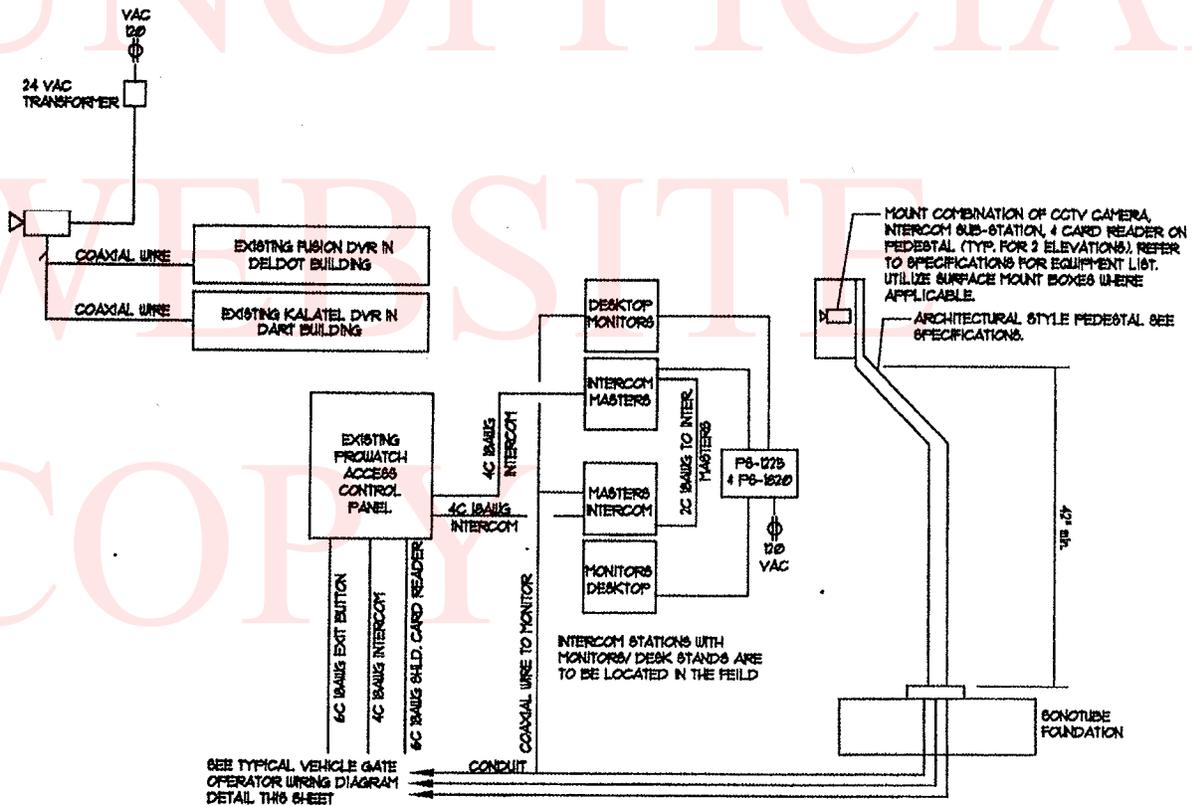
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MANGATE #1  
OPERATOR WIRING DIAGRAM DETAIL  
NO SCALE



MANGATES #2 & #3  
OPERATOR WIRING DIAGRAM DETAIL  
NO SCALE



### SECURITY RISER DIAGRAM

NO SCALE

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SCHEDULE FOR POWER PANEL: PPA WESTINGHOUSE: MODEL No. PHYA-33220 FED BY : MDP THRU 4-#1/0				General Panel Data: 208Y/120VAC, 3φ, 4Wire 225A-MLO 42CKT					LOCATED IN : MECH RM DELDOT MAIN FACILITY	
Schedule Number	LOAD SERVED			CIRCUIT PROTECTOR				WIRING DATA		
	TYPE OF LOAD	KVA	Ø VOLTS	QUAN.	AMPS.	POLES	TYPE			
1	AIR DRYER	EX	1 120	1	20	1	-	EXISTING		
2	BURNER CONTROLS	EX	1 120	1	20	1	-	EXISTING		
3	CIRC. PUMP	EX	1 120	1	20	1	-	EXISTING		
4	NIGHT LIGHTING CIRCUIT #1	1.25	3 208/120	1	20	3	-			
5	LIGHTING CONTACTOR LCA	.1	1 120	1	20	1	-			
6	SITE LIGHTING CIRCUIT #1	4.42	3 208/120	1	20	3	-			
7	GATE OPERATORS #1(IHP)	4.0	3 208	1	20	3	-			
8	GATE OPERATOR #2(IHP)	4.0	3 208	1	20	3	-			
9	HOT WATER HEATER	EX	1 208	1	30	2	-	EXISTING		
10	#3 H.W. PUMP	EX	3 208	1	20	3	-	EXISTING		
11	BOILER BLOWER	EX	3 208	1	20	3	-	EXISTING		
12	CIRC. PUMP	EX	3 208	1	20	3	-	EXISTING		
13	CONDENSING UNIT #2	EX	3 208	1	30	3	-	EXISTING		
14	CONDENSING UNIT #1	EX	3 208	1	30	3	-	EXISTING		
15	CHILLED WATER PUMP	EX	3 208	1	20	3	-	EXISTING		
16	AHU #1	EX	3 208	1	40	3	-	EXISTING		
17	AHU #2	EX	3 208	1	40	3	-	EXISTING		

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\* PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL.

CONTRACT

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SOUTH  
MAINTENANCE

GEORGETOWN ADMINISTRATION BUILDING GATE SECURITY, 2011

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LOCATION 1 (GEORGETOWN ADMINISTRATION BUILDING, GATE IMPROVEMENTS) FROM  
TO

LENGTH

GENERAL IMPROVEMENTS

UPDATE GATE SECURITY

COMMENTS:

UNOFFICIAL

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MATERIAL ESTIMATE FOR LOCATION 1

727551

SECURITY GATE

1.00 L.S.

WEBSITE

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DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT:

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SOUTH  
MAINTENANCE

GEORGETOWN ADMINISTRATION BUILDING GATE SECURITY, 2011

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CONTRACT QUANTITIES SUMMARY SHEET

727551 SECURITY GATE

1.00 L.S.

763000 INITIAL EXPENSE

LUMP SUM

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