

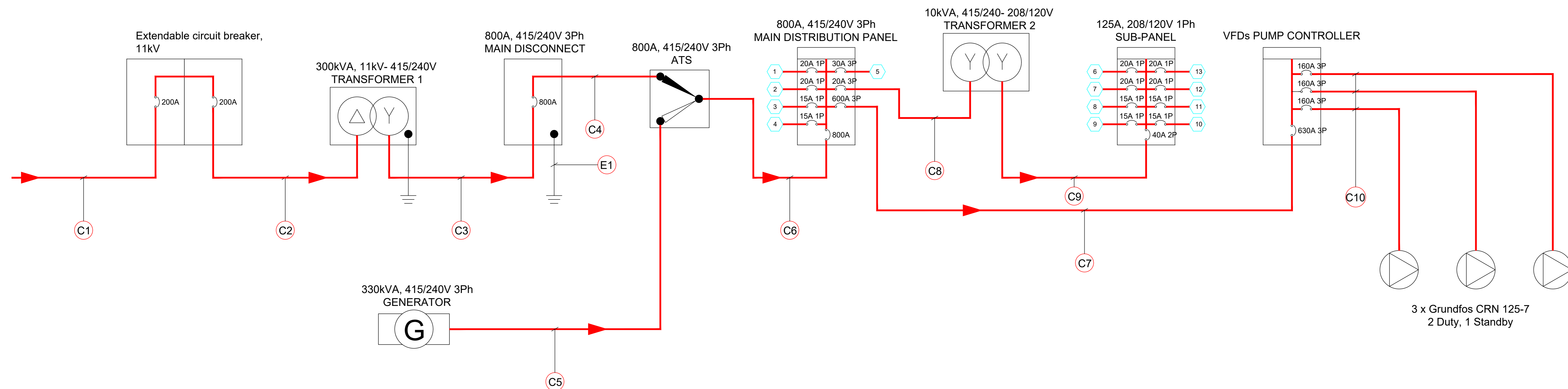
SITE LOCATION

DRAFTING NOTES

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2. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL ELECTRICAL PANELS & EQUIPMENT ARE TO BE INSTALLED BY OTHERS.
4. ALL CONDUIT AND CABLES ARE TO BE INSTALLED BY OTHERS.

TECHNICAL NOTES

1. 800 Amp Mains Disconnect
2. 800 Amp ATS
3. 800 Amp MDP
4. VFD Control Cabinet
5. 41.6Y/240V - 208Y/120V 3ph Transformer
6. 208Y/120V Subpanel
7. SCADA
8. Flow Meter Display
9. Pump (CRN 125-7)
10. ADSL
11. Flowmeter
12. Check Valve
13. Combination Air Valve
14. Y Strainer




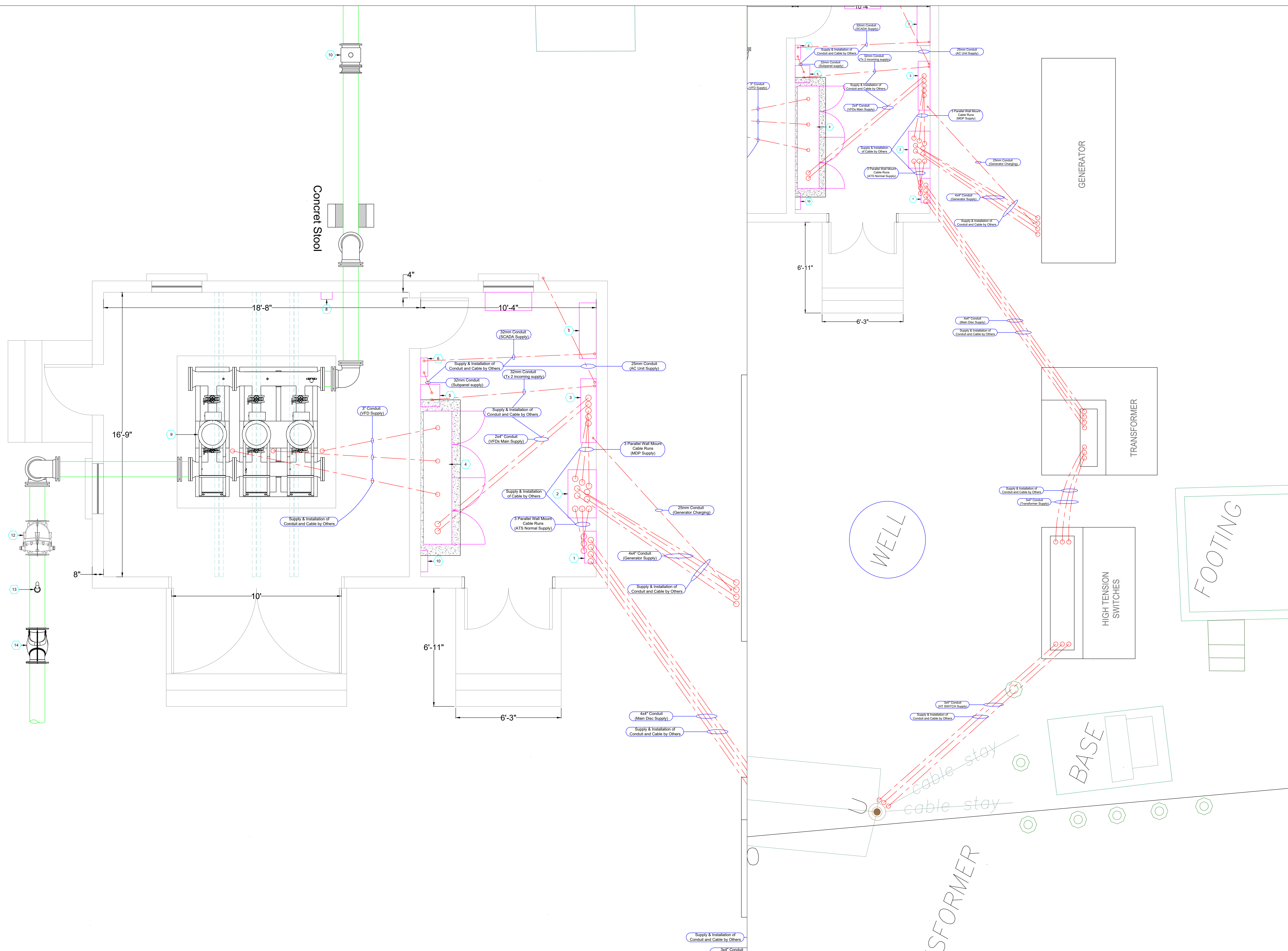
Service: 415/240V, 3Ph, 4W

Cable No./ Reference	From	To	Description of Equipment Served	Phases	Trip	Nominal Voltage	AWG/ kcmil	Parallel Runs	Approx Length (ft)	Calc. Load (A)	Conduit	Deg. C	Cable Type	Notes
1	BL&P POLE	HT Switch	Supply from BL&P pole to Transformer	3		11000		3			4"			
2	HT Switch	TRANSFORMER 1	Supply from BL&P pole to Transformer	3		11000		3			4"			
3	TRANSFORMER 1	MAIN DISC.	Transformer to main disconnect	3	800	415	250	3	50'	220	4"	90	THHN/ THWN-2	4 Core & Earth Cable
4	MAIN DISC.	ATS	Main disconnect to ATS	3	800	415	250	3	25'	220	4"	90	THHN/ THWN-2	4 Core & Earth Cable
*5	GENSET	ATS	Generator to ATS	3	800	415	250	3	40'	220	4"	90	THHN/ THWN-2	4 Core & Earth Cable
6	ATS	MPD 1	ATS to Main Distribution Panel	3	800	415	250	3	25'	220	4"	90	THHN/ THWN-2	4 Core & Earth Cable
7	MPD 1	VFDs	Main Distribution Panel to VFDs cabinet	3	600	415	300	2	30'	212	4"	90	THHN/ THWN-2	4 Core & Earth Cable
8	MPD 1	TRANSFORMER 2	Main Distribution Panel to transformer 2	1	20	415	12	1	30'	7.5	32mm	90	THHN/ THWN-2	3 Core & Earth Cable
9	TRANSFORMER 2	MPD 2	Transformer 2 to Sub-panel	1	40	208	8	1	10'	15	32mm	90	THHN/ THWN-2	3 Core & Earth Cable
*10	VFDs	Pumps	VFD cabinet to pumps 1,2 & 3	3	160	415	3/0	3	30'	106	3"	90	THHN/ THWN-2	3 Core & Earth Shielded VFD Cable
	MAIN DISC.	EARTH/GRD.	Grounding electrode conductor to grounding electrode via main earth bar				3/0	1	5'		1"	90	THHN/ THWN-2	1 Core Earth Cable

*To be supplied by the Barbados Water Authority

LEGEND

REV	DESCRIPTION	DATE	DRAWN BY	STATUS	 BARBADOS WATER AUTHORITY GOVERNMENT OF BARBADOS PINE COMMERCIAL ESTATE, PINE ST. MICHAEL, BARBADOS TEL:(246)434-4200 FAX:(246)426-4507	PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion	SHEET NAME : Lancaster Electrical Schematic
0	ISSUED FOR REVIEW	13/10/2020	N. Kirton	-----		PROJECT ID :	DESIGNED BY : N. Kirton
1	ISSUED FOR TENDER	15/03/2021	N. Kirton		CLIENT:	DRAWN BY : N. Kirton	SHEET : E1
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SITE LOCATION

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TECHNICAL NOTES

1. 800 Amp Mains Disconnect
2. 800 Amp ATS
3. 800 Amp MDP
4. VFD Control Cabinet
5. 416Y/240V - 208Y/120V 3ph Transformer
6. 208Y/120V Subpanel
7. SCADA
8. Flow Meter Display
9. Pump (CRN 125-7)
10. ADSL
11. Flowmeter
12. Check Valve
13. Combination Air Valve
14. Y Strainer

LEGEND

①	Technical Reference Note
○	Single Gang Switch
○ ○	Double Gang Switch
— —	4ft LED Light
110v	110v Outlet
220v	220v Outlet

REV	DESCRIPTION	DATE	DRAWN BY	STATUS
0	ISSUED FOR REVIEW	13/10/2020	N. Kirton	-----
1	Inclusion of Inlet Pipe and Valves and also High Tension Switchgear	05/11/2020	N. Kirton	
2	ISSUED FOR TENDER	15/03/2021	N. Kirton	
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BARBADOS WATER AUTHORITY
 GOVERNMENT OF BARBADOS
 PINE COMMERCIAL ESTATE, PINE ST. MICHAEL, BARBADOS
 TEL: (246) 434-4200
 FAX: (246) 426-4507

PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion
PROJECT ID :
CLIENT :

SHEET NAME : Lancaster Electrical Power Circuits Layout
 DESIGNED BY : N. Kirton
 DRAWN BY : N. Kirton
 REVIEWED BY : H. Marshall
 DATE : 15-Mar-21
 SHEET : E2

SITE LOCATION

DRAFTING NOTES

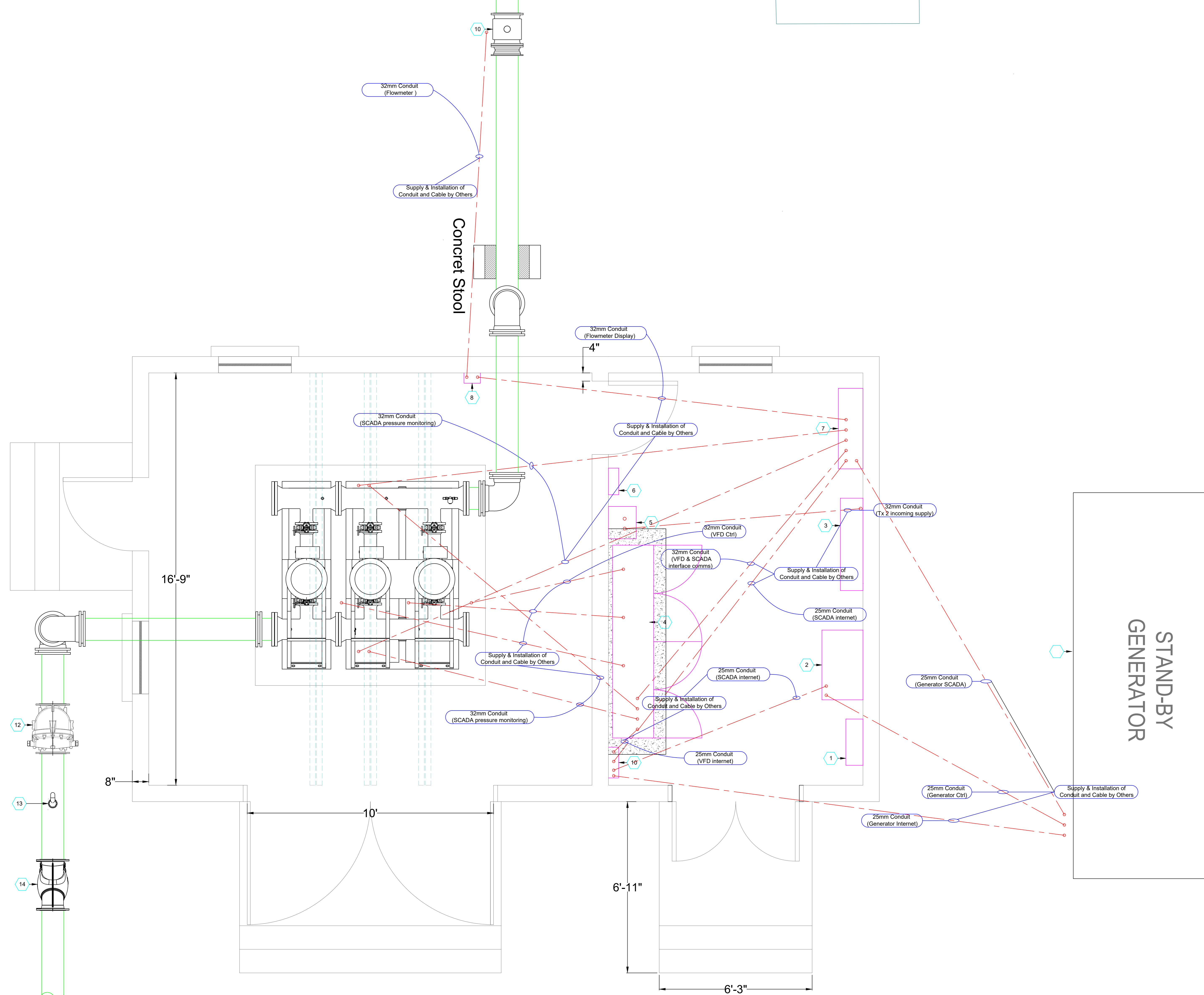
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TECHNICAL NOTES

1. 800 Amp Mains Disconnect
2. 800 Amp ATS
3. 800 Amp MDP
4. VFD Control Cabinet
5. 416Y/240V - 208Y/120V 3ph Transformer
6. 208Y/120V Subpanel
7. SCADA
8. Flow Meter Display
9. Pump (CRN 125-7)
10. ADSL
11. Flowmeter
12. Check Valve
13. Combination Air Valve
14. Y Strainer

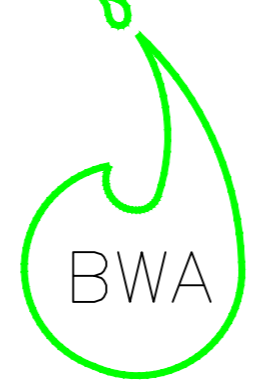
LEGEND

1	Technical Reference Note
○	Single Gang Switch
○ SS	Double Gang Switch
⌈	4ft LED Light
110v	110V Outlet
220v	220V Outlet



REV	DESCRIPTION	DATE	DRAWN BY	STATUS
0	ISSUED FOR REVIEW	13/10/2020	N. Kirton	-----
1	Inclusion of Inlet Pipe and Valves and also High Tension Switchgear	05/11/2020	N. Kirton	
2	ISSUED FOR TENDER	15/03/2021	N. Kirton	
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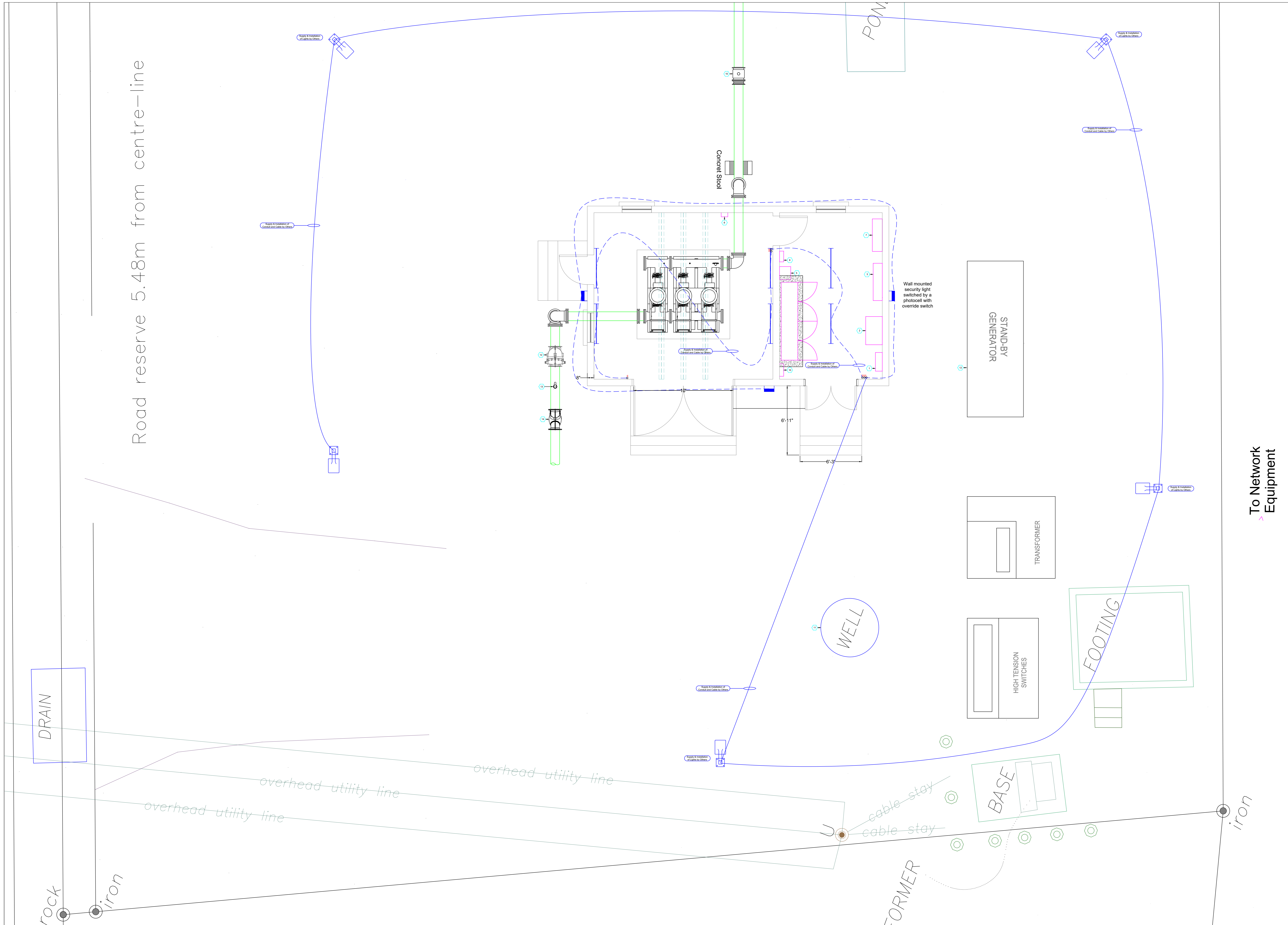
PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion

PROJECT ID :
CLIENT :

SHEET NAME : Lancaster Electrical Control Circuits Layout

DESIGNED BY : N. Kirton
DRAWN BY : N. Kirton
REVIEWED BY : H. Marshall

DATE : 15-Mar-21
SHEET : E3



SITE LOCATION

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TECHNICAL NOTES

1. 800 Amp Mains Disconnect
2. 800 Amp ATS
3. 800 Amp MDP
4. VFD Control Cabinet
5. 416Y/240V - 208Y/120V 3ph Transformer
6. 208Y/120V Subpanel
7. SCADA
8. Flow Meter Display
9. Pump (GRN 125-7)
10. ADSL
11. Flowmeter
12. Check Valve
13. Combination Air Valve
14. Y Strainer

LEGEND

	Technical Reference Note
	Single Gang Switch
	Double Gang Switch
	4ft LED Light
	110v Outlet
	220v Outlet
	Existing 10" Water Main
	Proposed 10" Water Main
	Existing 6" Water Main
	Proposed Temporary 6" Water Main

To Network Equipment

REV	DESCRIPTION	DATE	DRAWN BY	STATUS
0	ISSUED FOR REVIEW	13/10/2020	N. Kirton	-----
1	Inclusion of Inlet Pipe and Valves and also High Tension Switchgear	05/11/2020	N. Kirton	
2	ISSUED FOR TENDER	15/03/2021	N. Kirton	
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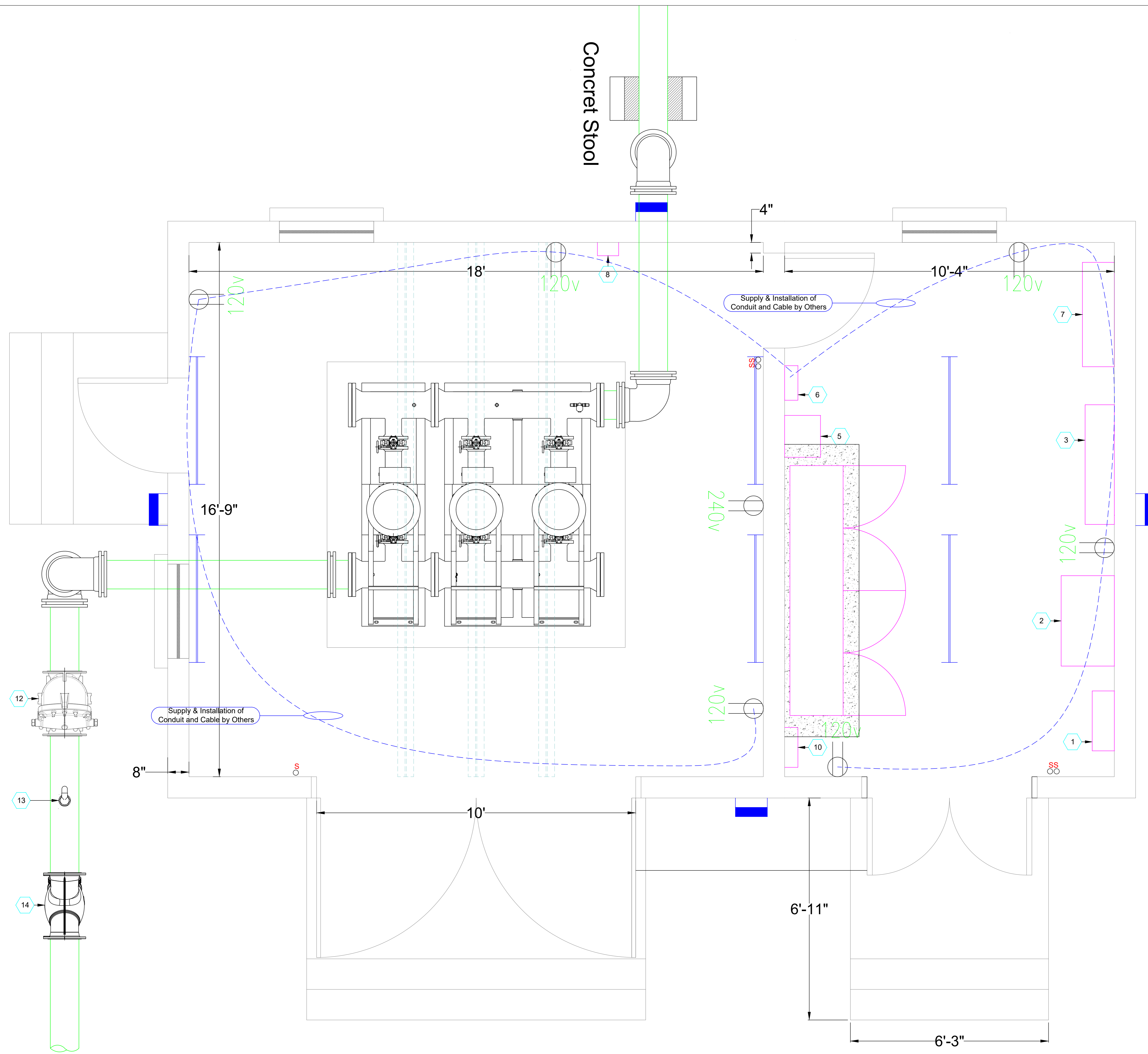
PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion

PROJECT ID :
 CLIENT :

SHEET NAME : Lancaster Electrical Lighting Layout

DESIGNED BY : N. Kirton
 DRAWN BY : N. Kirton
 REVIEWED BY : H. Marshall

DATE : 15-Mar-21
 SHEET : E4



SITE LOCATION

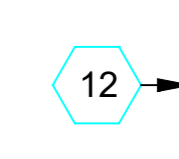
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TECHNICAL NOTES

1. 800 Amp Mains Disconnect
2. 800 Amp ATS
3. 800 Amp MDP
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5. 416Y/240V - 208Y/120V 3ph Transformer
6. 208Y/120V Subpanel
7. SCADA
8. Flow Meter Display
9. Pump (CRN 125-7)
10. ADSL
11. Flowmeter
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13. Combination Air Valve
14. Y Strainer

LEGEND




REV	DESCRIPTION	DATE	DRAWN BY	STATUS
0	ISSUED FOR REVIEW	13/10/2020	N. Kirton	-----
1	Inclusion of Inlet Pipe and Valves and also High Tension Switchgear	05/11/2020	N. Kirton	
2	ISSUED FOR TENDER	15/03/2021	N. Kirton	
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BARBADOS WATER AUTHORITY
GOVERNMENT OF BARBADOS

PINE COMMERCIAL ESTATE, PINE ST. MICHAEL, BARBADOS

TEL:(246)434-4200
FAX:(246)426-4507



PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion

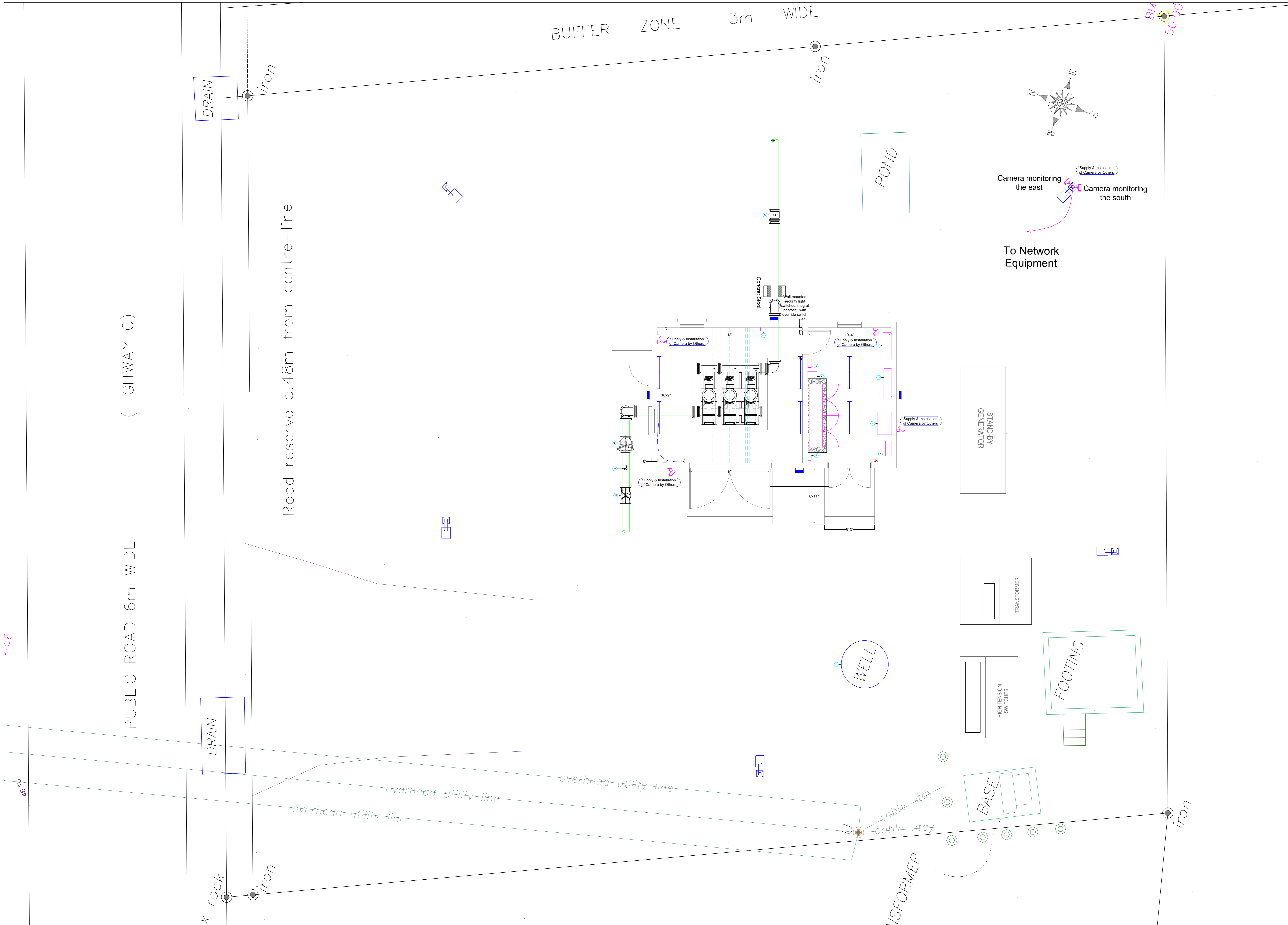
PROJECT ID :

CLIENT:

SHEET NAME : Lancaster Electrical Outlet Layout

DESIGNED BY : N. Kirton
DRAWN BY : N. Kirton
REVIEWED BY : H. Marshall

DATE : 15-Mar-21
SHEET : E5



SITE LOCATION

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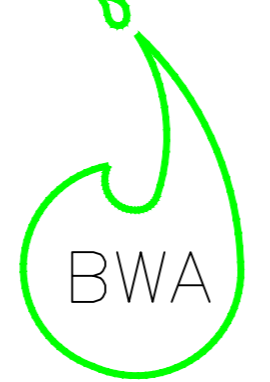
TECHNICAL NOTES

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3. 800 Amp MDP
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5. 416Y/240V - 208Y/120V 3ph Transformer
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9. Pump (CRN 125-7)
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BARBADOS WATER AUTHORITY
GOVERNMENT OF BARBADOS



PINE COMMERCIAL ESTATE, PINE ST. MICHAEL, BARBADOS TEL:(246)434-4200 FAX:(246)426-4507

PROJECT NAME : Lancaster Pumping Station Upgrade and Expansion

PROJECT ID :
CLIENT :

SHEET NAME : Lancaster Site Security Lighting and Camera Layout

DESIGNED BY : N. Kirton
DRAWN BY : N. Kirton
REVIEWED BY : H. Marshall

DATE : 15-Mar-21
SHEET : E6