

Revision/Revisión	Description/Descripción	Date/Date
0	ISSUED FOR CONSTRUCTION	2020-10-09

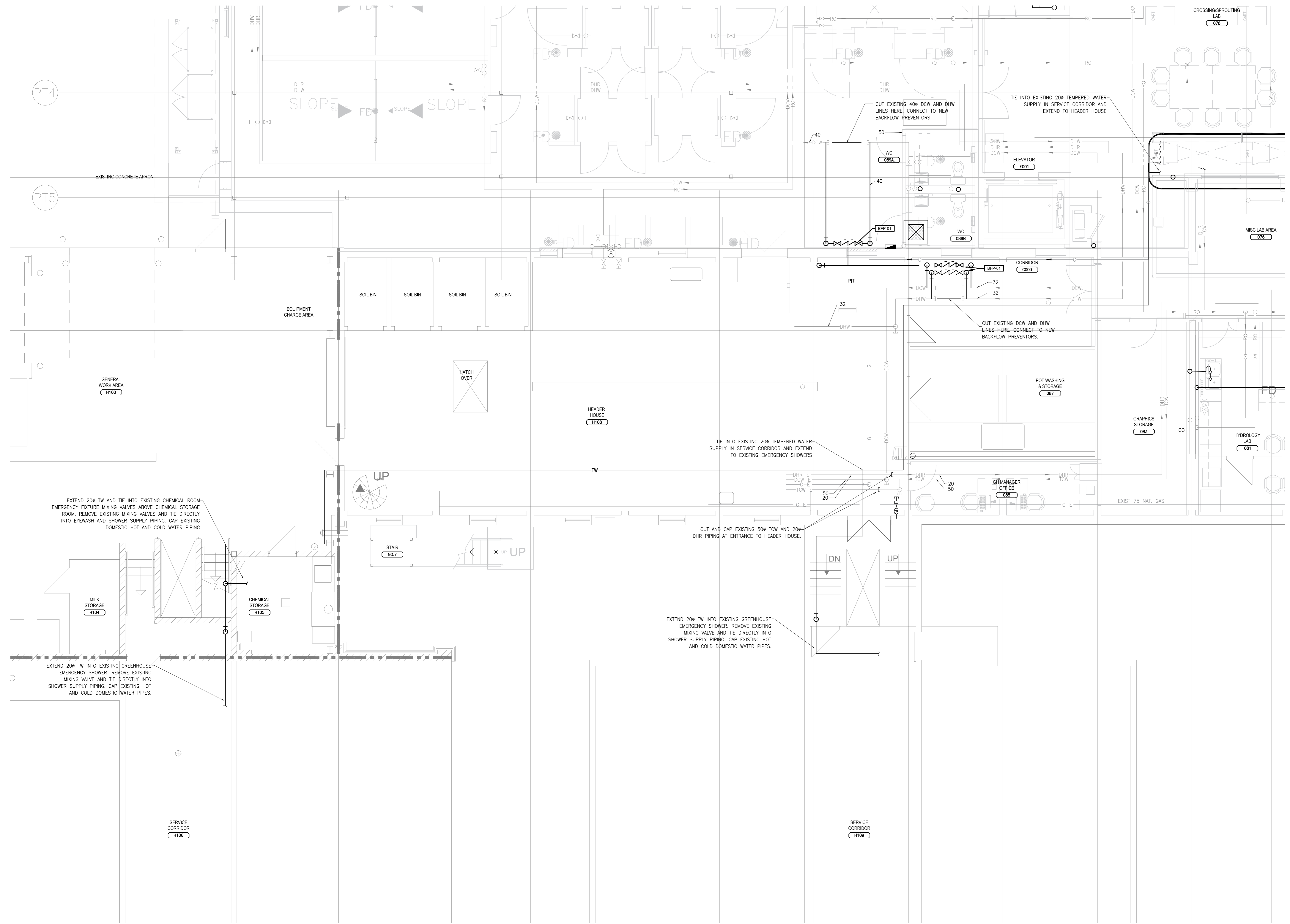
Client/Client  
**AGRICULTURE AND AGRI-FOOD CANADA**  
SWIFT CURRENT, SASKATCHEWAN

Project Title/Titre du projet  
**SWIFT CURRENT RESEARCH AND DEVELOPMENT CENTRE  
BOOSTER PUMP AND BACKFLOW PREVENTION UPGRADES**  
SWIFT CURRENT, SASKATCHEWAN

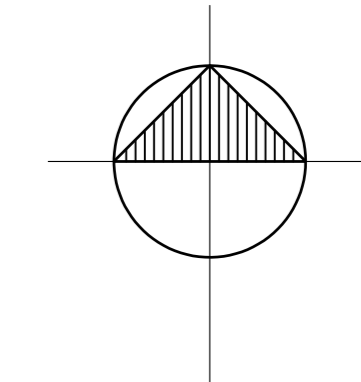
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AAFC Project Manager/Administrateur de Projets AAFC  
S. WARD

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**BASEMENT FLOOR - PHYTOTRON AND HEADER HOUSE  
PLUMBING PLAN**

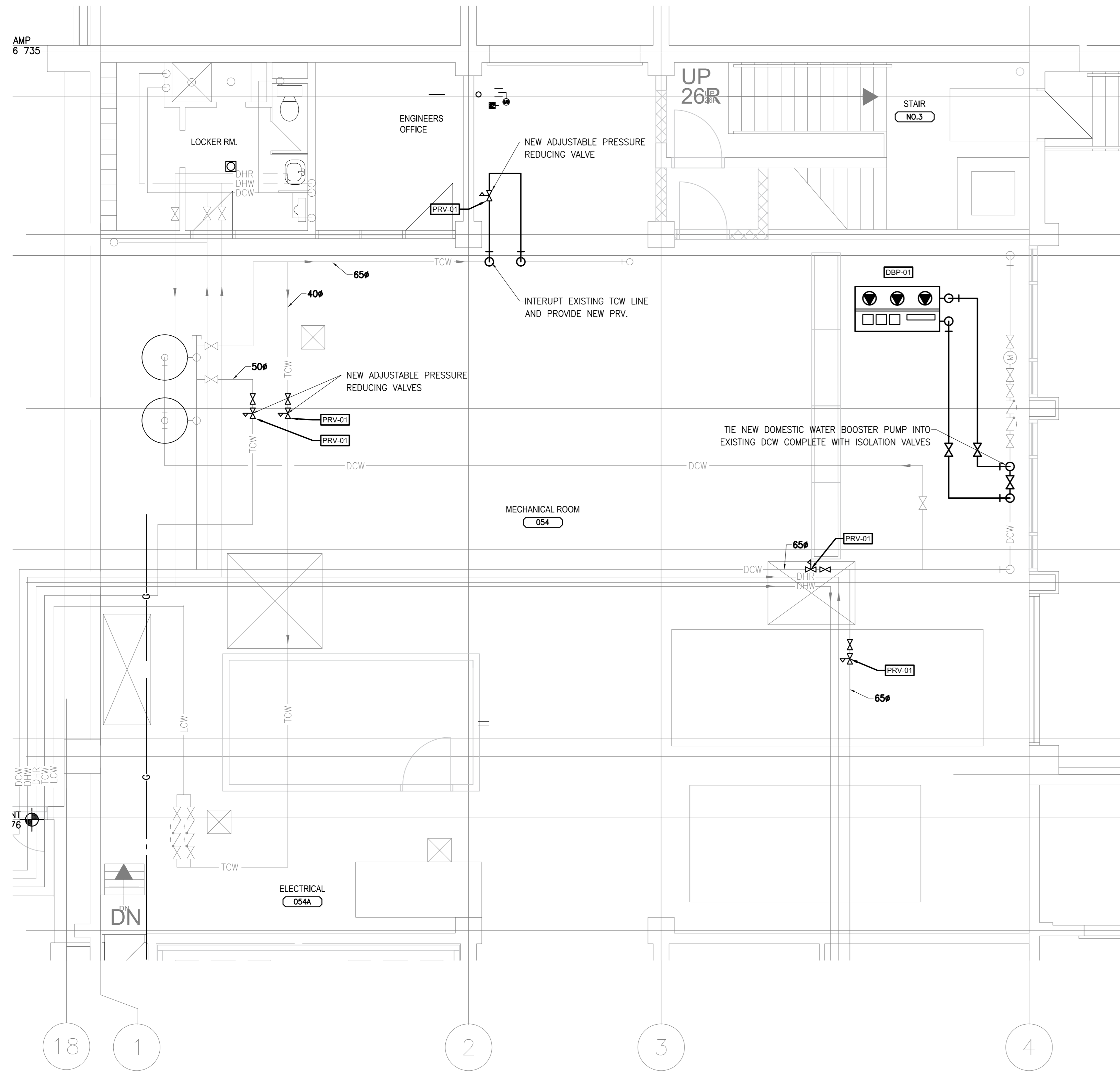
Project No./No. du projet	Sheet/Feuille	Revision no./No. Révision
WSP Project No. 12C-15378-00 AAFC Project No. 465-1-16-C45	<b>M100</b> 1 OF 03	<b>0</b>



1 BASEMENT FLOOR - PHYTOTRON PLUMBING PLAN  
MP100/MP101 1/20







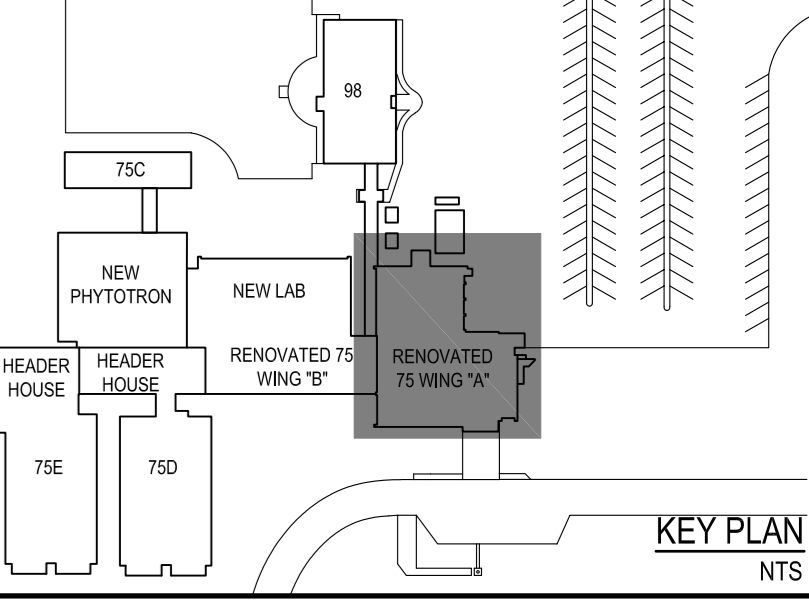
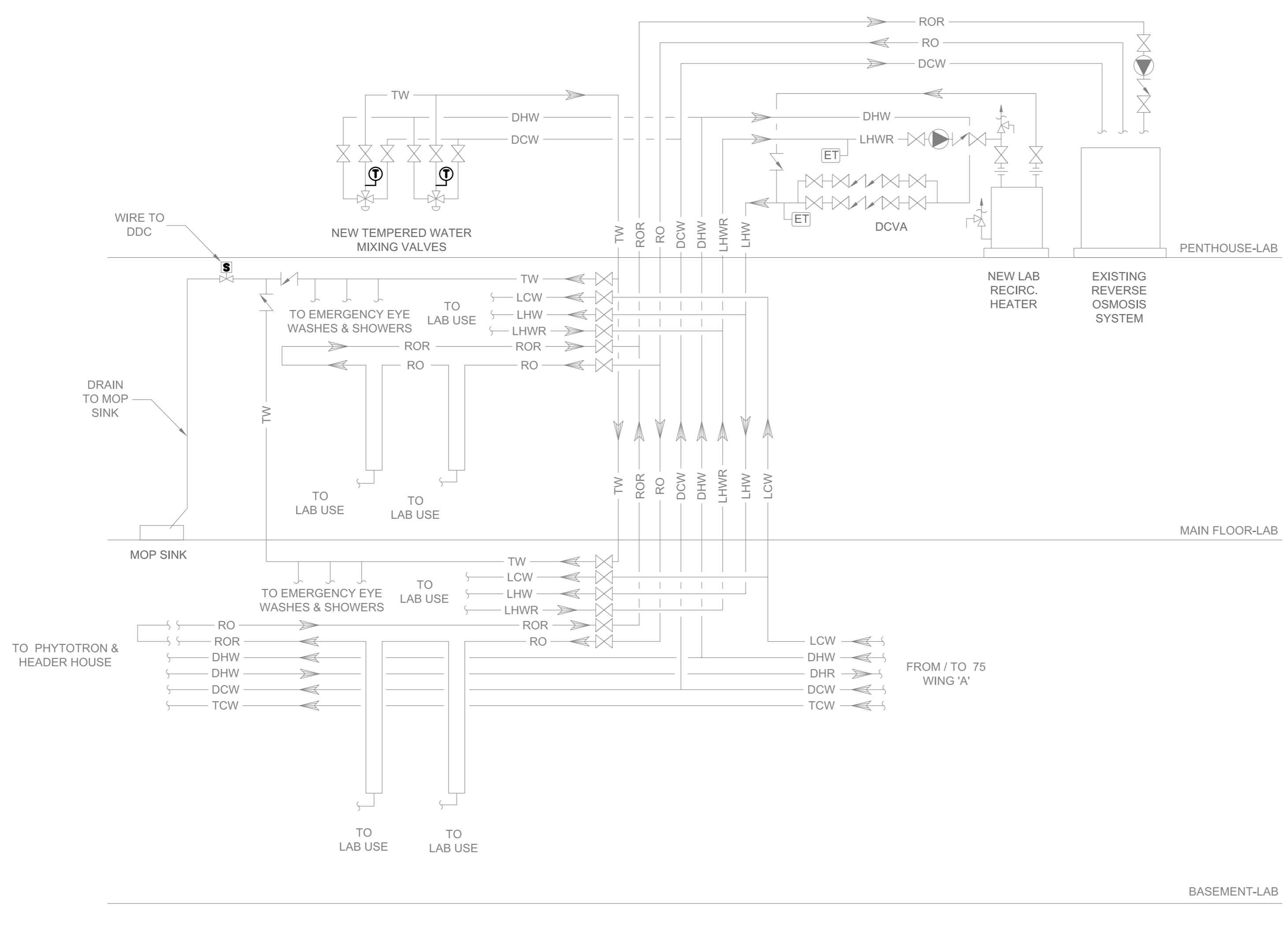
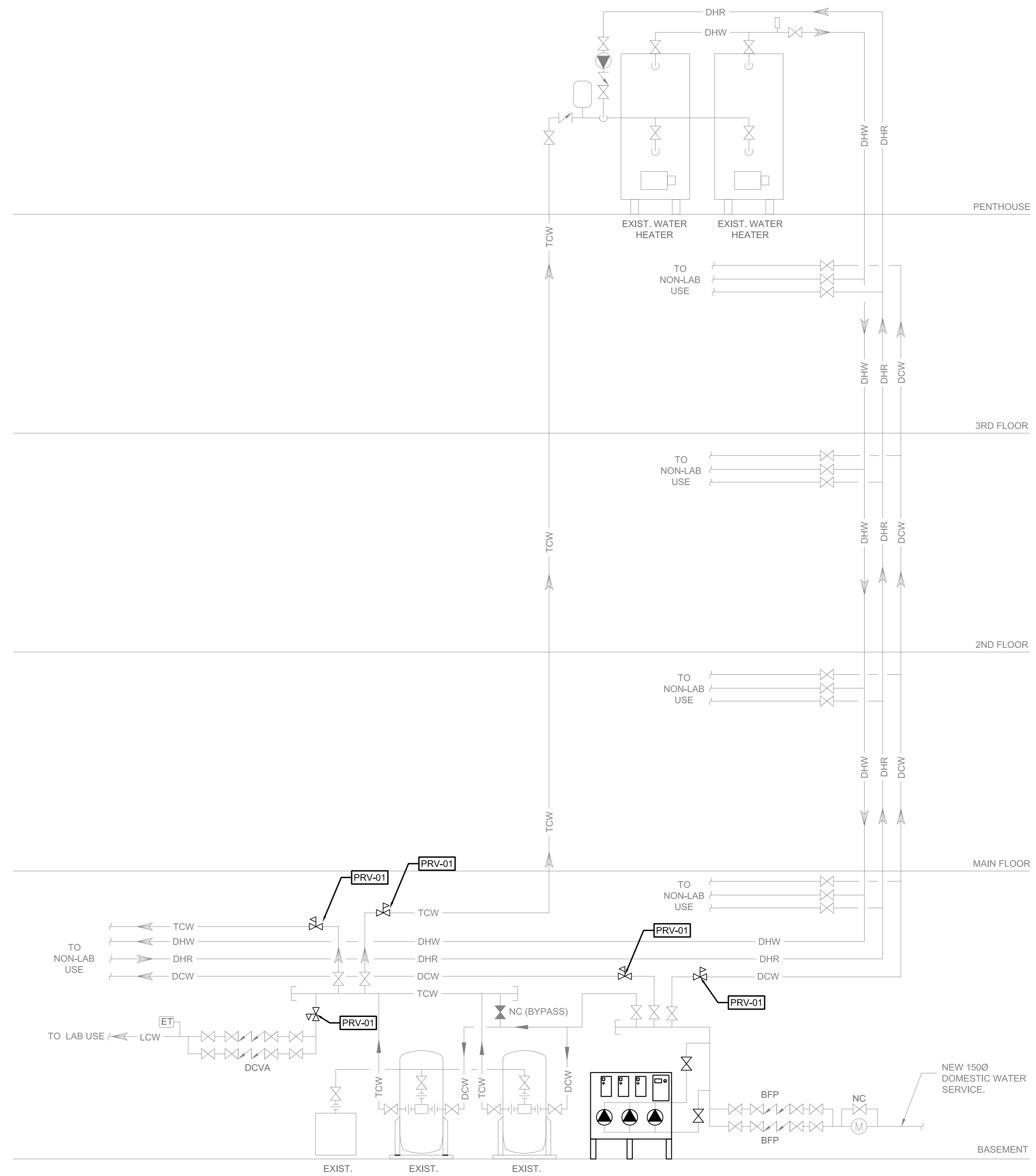
1 BASEMENT FLOOR - PARTIAL PLUMBING PLAN

PUMP SCHEDULE														
EQUIPMENT ID	LOCATION	SERVICE	MANUFACTURER	MODEL	FLOW RATE (L/S)	TOTAL HEAD (KPa)	FLUID TYPE	FLUID TEMP (°C)	MIN. EFF. (%)	NPSH REQ'D (KPa)	RPM	ELECTRICAL	MOTOR FLA	REMARKS
DBP-1	BASEMENT MECH ROOM	DOMESTIC WATER BOOSTER PUMP	BELL & GOSSETT	TechnoForce e-MT V3N18TDOB1GCK	3.79	173	DCW	15°C	73.2%	21	1750	575/980	10	TRIPLEX DOMESTIC WATER BOOSTER PUMP (DWB) WITH INTEGRAL CONTROLS COMPLETE WITH THREE MODEL 117000-10 PUMP TO OPERATE WITHOUT REDUNDANCY.

**PRESSURE REDUCING VALVE - PRV-01**  
 WATTS MODEL LF08-25 WATER PRESSURE REDUCING VALVES, LEAD-FREE, FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS. LEAD-FREE CAST COPPER SILICON ALLOY BODY, EPDM VALVE SEAT, REINFORCED EPDM O-RINGS, REPLACEABLE STAINLESS STEEL SEAT, INTEGRAL STAINLESS STEEL STRAINER, LEAD-FREE CAST COPPER SILICON ALLOY YOKE, NPT THREADED FEMALE UNION INLET X NPT FEMALE OUTLET W/BUILT IN THERMAL EXPANSION BYPASS, 0.5°C - 71°C, 172 - 517 KPa, 345 KPa, ASSE 1003, ANSI A112.28.2, CSA STANDARD B308, LISTED BY WPMO.  
 SEE TO MATCH EXISTING PIPING, WHERE PIPING IS 650. A 500 PRV SHALL BE USED.

**SETUP PROCEDURE:** ALL PRVS WILL REQUIRE SETUP TO DETERMINE THE PROPER SETTING. INITIALLY SET THE PRV TO MID RANGE, PROCEED TO A FIXTURE AT THE END OF THE PROTECTED SYSTEM SUCH AS LAB HOT/COLD WATER, WASHROOM HOT/COLD WATER, HEADER HOUSE NON-POTABLE WATER AND PHYTOTRON DOMESTIC COLD WATER. DETERMINE THAT THE FOLLOWING CONDITIONS ARE MET AT THE MOST REMOTE FIXTURES:  
 • HOT AND COLD WATER PRESSURES ARE BALANCED FOR THEIR RESPECTIVE SYSTEMS  
 • PRESSURE TO BE IN THE ACCEPTABLE OPERATING RANGE FOR THE FIXTURES AND EQUIPMENT THEY SERVE.  
 • CORRECT ANY PRESSURE DISCREPANCIES UNTIL COMPLETED TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.

**BACKFLOW PREVENTER - BFP-01**  
 WATTS REDUCED PRESSURE ZONE ASSEMBLY, LEAD-FREE, LEAD-FREE BRONZE BODY, CAST BRONZE FINISH, FEMALE THREADED, NPT INLET, FEMALE THREADED, NPT OUTLET, BACKPRESSURE AND BACKSPHONAGE PROTECTION, QUARTER TURN BALL VALVE, QUARTER TURN BALL VALVE, ENGINEERED PLASTIC SEAT, CONTINUOUS PRESSURE OPERATION, 1007 KPa, WITH OPTIONAL AIR GAP FITTING.  
 SEE TO MATCH EXISTING PIPING.



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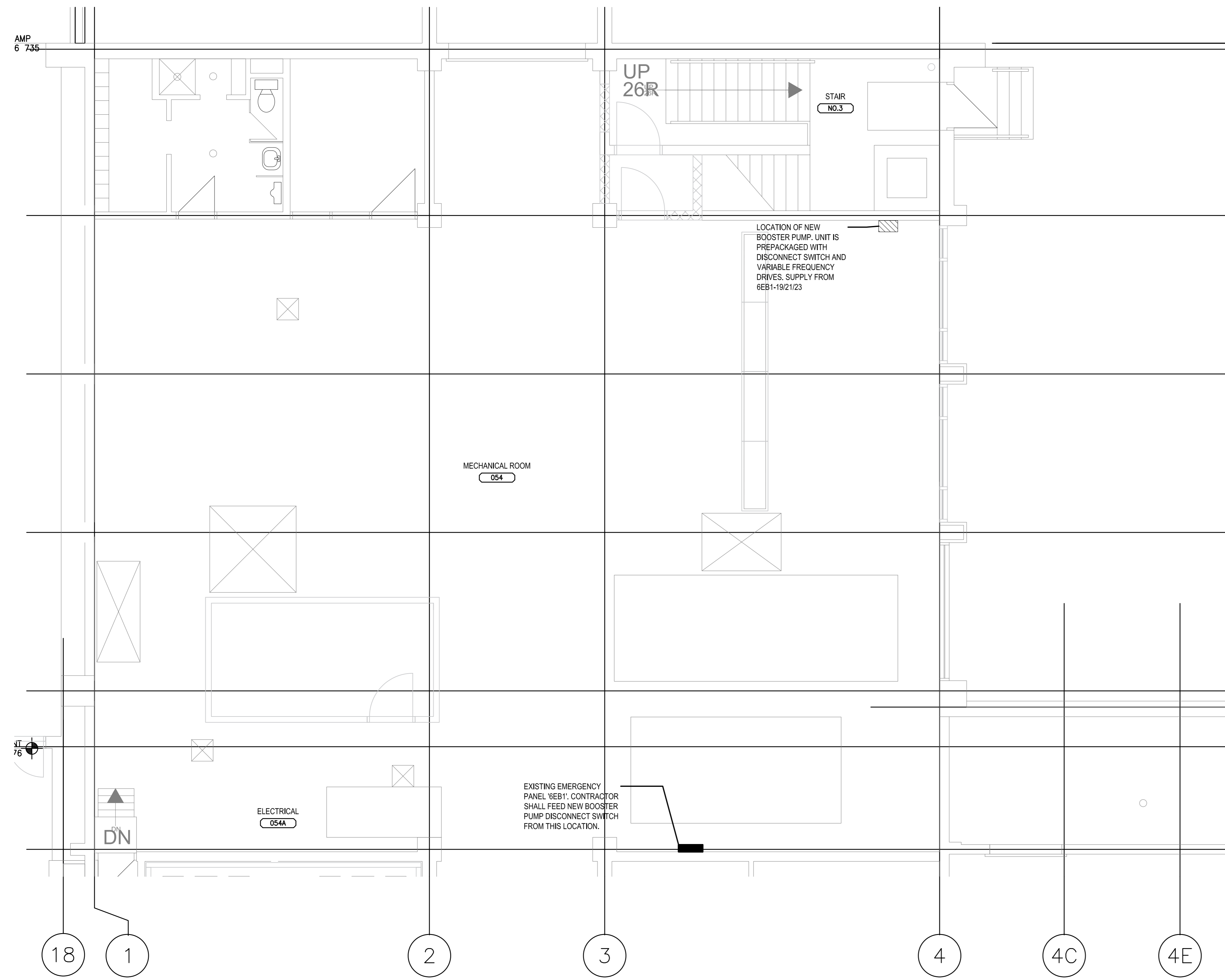
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**BASEMENT FLOOR - PHYTOTRON AND HEADER HOUSE PLUMBING PLAN**

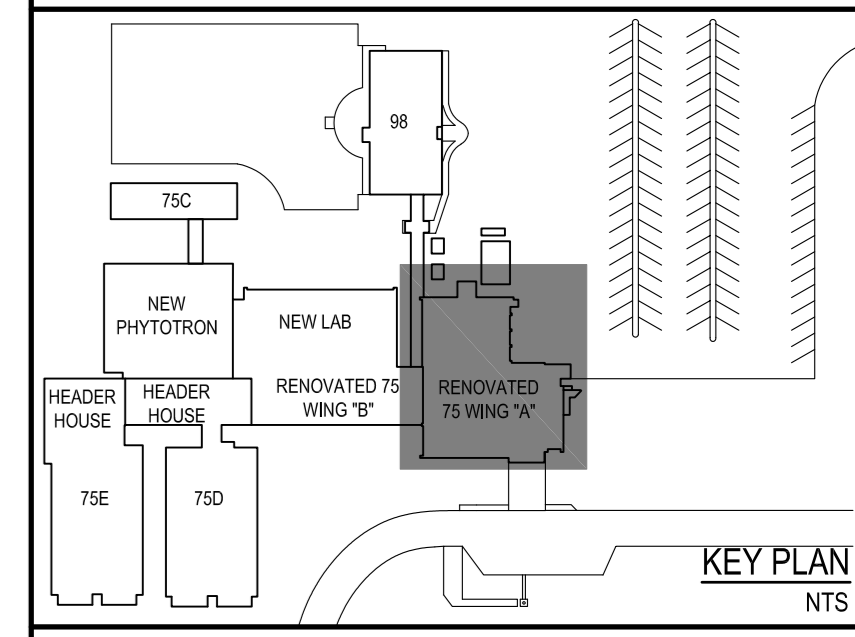
Project No./No. du projet WSP Project No. 122-15373-40 AAFC Project No. 465-1-16-C45	Sheet/Feuille <b>M100</b> 2 OF 03	Revision no./La Révision <b>0</b>
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1 BASEMENT FLOOR - PARTIAL ELECTRICAL  
MP100 | MP100 1/50

EQUIPMENT SCHEDULE										
TAG	DESCRIPTION	VOLTS	FLA	MCA	PHASE	STARTER	FEEDERS	BREAKER	PANEL	REMARKS
DBP-1	DOMESTIC BOOSTER PUMP	600V	10.0A	12.5A	3	BY MECH.	(3) #12AWG + #12AWG IN 21mm CONDUIT.	15A-3P	6EB1-19/21/23	- PACKAGED UNIT BY MECHANICAL. - SINGLE POINT CONNECTION.



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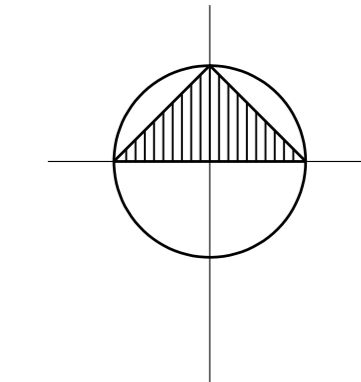
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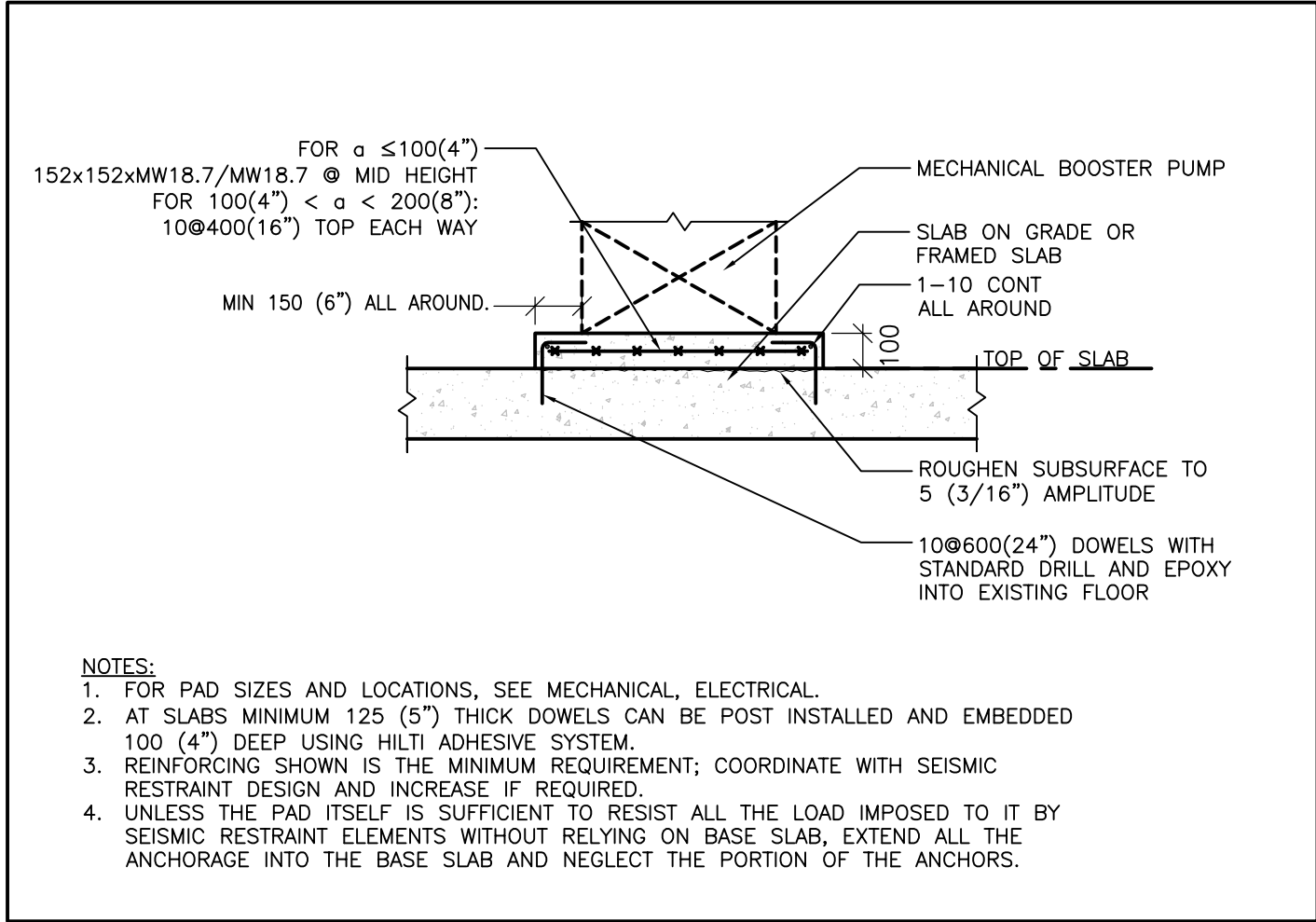
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<h1 style="margin: 0;">ARCHITECTURE 49</h1> <p style="font-size: small; margin-top: 10px;">1600 BUFFALO PLACE        WINNIPEG MANITOBA CANADA R3T 6B8        TEL: 204-477-1260   FAX: 204-477-6346   www.architecture49.com</p>	Project Title <b>BOOSTER PUMP AND BACKFLOW PREVENTION UPGRADE</b>		
	Drawn GML	Approved	Sheet Number
	Date Issued	2020 10 09	DA100
	Scale	1:20	Contract Number 465-1-16-C45