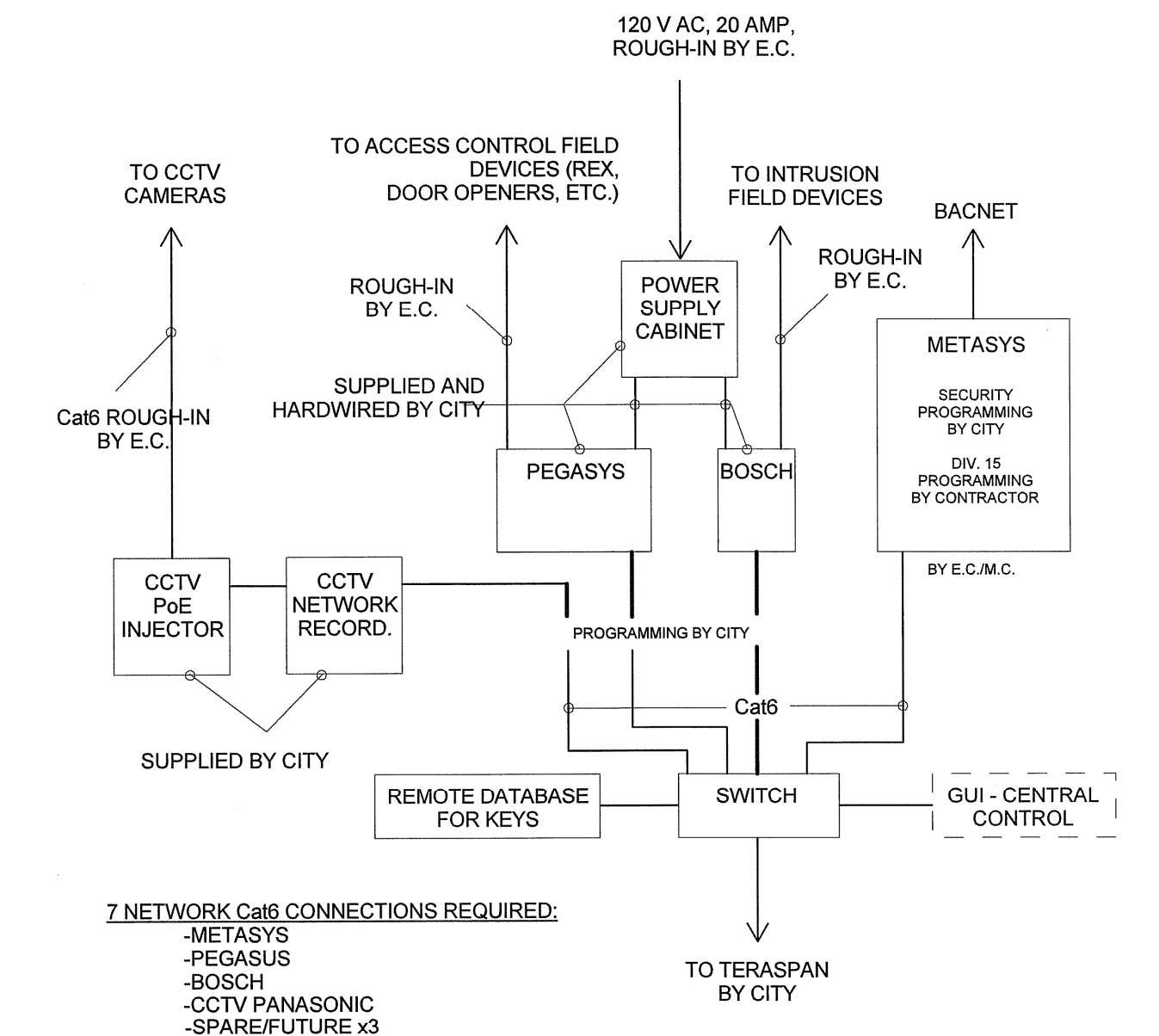
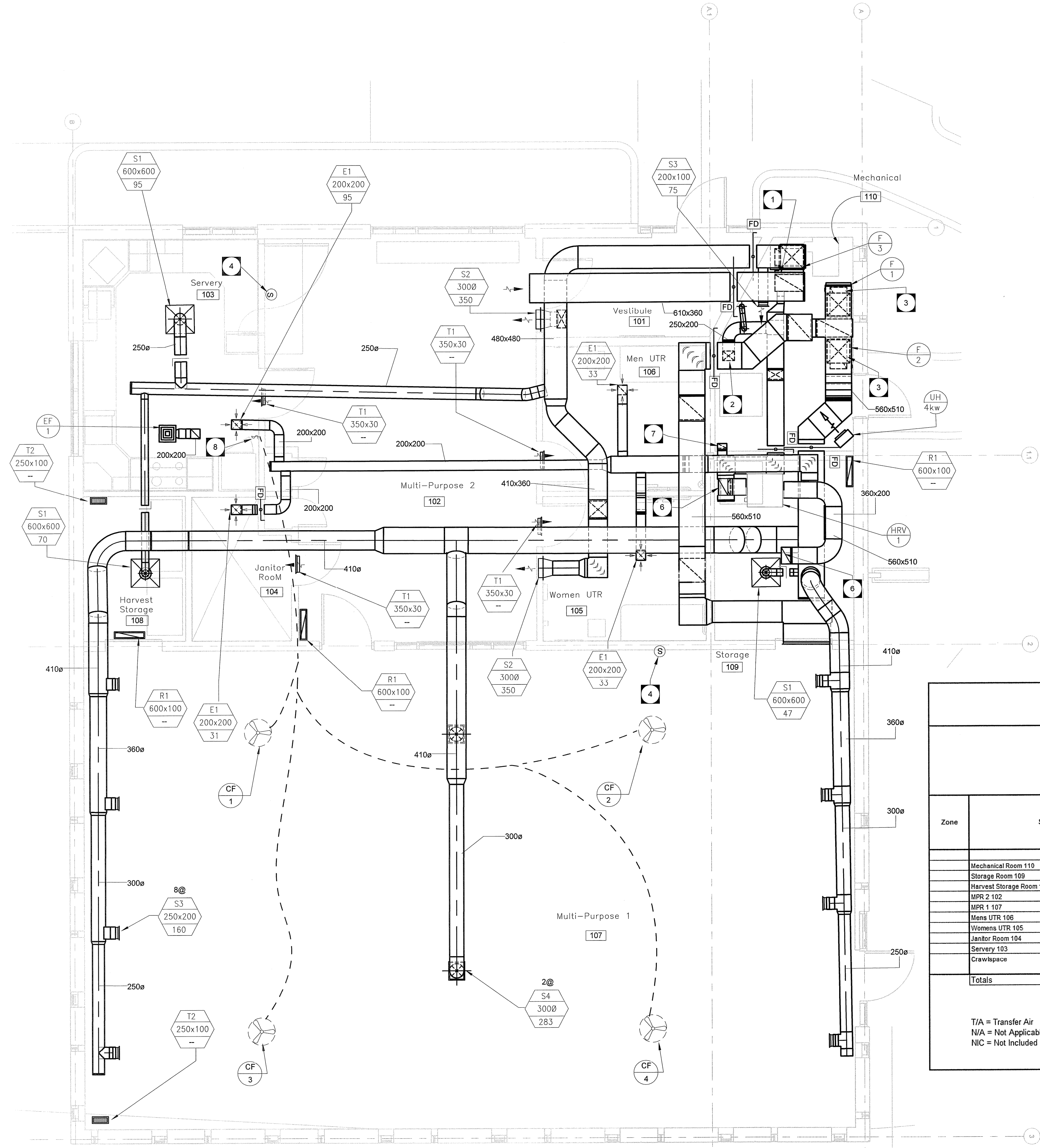


DRAWING NOTES:

- 1 TIE 150x150 S/A DUCT FROM HRV TO RETURN AIR DUCT FROM FURNACE E=1. BALANCE TO 73 L/S.
- 2 TIE 250x200 S/A DUCT FROM HRV TO RETURN AIR DUCT FROM FURNACE F=2 & F=3. BALANCE TO 210 L/S.
- 3 RETURN AIR DUCT FROM SPACE TO DROP DOWN AND TIE INTO FURNACE.
- 4 TEMPERATURE SENSOR.
- 5 SPEED SWITCH.
- 6 350x200 DUCT TO GOOSENECK ON ROOF.
- 7 200x100 E/A DUCT DOWN TO CRAWLSPACE. BALANCE TO 92 L/S.
- 8 CEILING FAN SPEED SWITCH



IT/SECURITY JOHNSON METASYS SYSTEMS DIAGRAM
 N.T.S.

ASHRAE 62.1-2007 OUTDOOR AIR CALCULATION

Zone	Space	Ceiling Height ft	Area ft ² A _t	Area m ² A _z	Volume ft ³	Zone Population P _z	Time Averaged Zone Population P _z *	Occupancy Density m ² /occ	Ventilation/ Fresh Air				Supply		Exhaust					
									ASHRAE cfm/person	ASHRAE cfm/ft ²	Breathing Zone Outdoor Airflow V _{bz} cfm	Breathing Zone Outdoor Airflow V _{bz} * cfm	Zone Outdoor Airflow V _{oz} Heating cfm	Zone Outdoor Airflow V _{oz} Cooling cfm	HVAC Unit	Ventilation Effectiveness E _v Heating	Ventilation Effectiveness E _v Cooling	Rate (cfm/ft ²)	cfm	
Mechanical Room 110		130	12,077	0					0.12	15.6			19.5	15.6	HRV-1	0.8	1.0			
Storage Room 109		140	13,056	0					0.12	16.8			21.0	16.8	HRV-1	0.8	1.0			
Harvest Storage Room 108		120	11,143	0					0.12	14.4			18.0	14.4	HRV-1	0.8	1.0			
MPR 2 102		450	41,808	0	10		4.2	5.0	0.06	77.0			96.3	77.0	HRV-1	0.8	1.0			
MPR 1 107		1770	164,44	0	50		3.3	5.0	0.06	356.2			445.3	356.2	HRV-1	0.8	1.0			
Mens UTR 106		110	10,219	0									T/A	T/A	HRV-1				70.0	
Womens UTR 105		110	10,219	0									T/A	T/A	HRV-1				70.0	
Janitor Room 104		85	6,0387	0									T/A	T/A	HRV-1				65.0	
Servery 103		210	19,51	0									T/A	T/A	HRV-1				200.0	
Crawlspace																				195.0
Totals			3105	288		60.0				480.0	0.0	600.0	480.0							600.0

T/A = Transfer Air
 N/A = Not Applicable
 NIC = Not Included in Calculation

HRV-1	600.0 cfm	Balance HRV-1 to 600 cfm F/A & E/A
Total =	600.0 cfm	Total = 600 cfm F/A