

GENERAL NOTES & INSTRUCTIONS:

1. THE ORIGINAL GROUND ELEVATIONS, SERVING, UTILITY, AND SURVEY INFORMATION SHOW ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES, INCLUDING THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, ALL TO THE SATISFACTION OF THE ENGINEER.
3. PRIOR TO CONSTRUCTION START, THE CONTRACTOR SHALL PROVIDE PROOF OF INSURANCE TO THE ENGINEER IN THE AMOUNT AND TYPE OUTLINED IN THE CONTRACT AGREEMENT. THE INSURANCE POLICY SHALL NAME THE OWNER, ENGINEER, AND MUNICIPALITY AS CO-INSURED.
4. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
5. CONFIRM DIMENSIONS AND LAYOUT INFORMATION BEFORE CONSTRUCTION START, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
6. ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. DIMENSIONS ARE IN METERS UNLESS OTHERWISE STATED.
7. OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE CONSTRUCTION START.
8. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST MUNICIPAL STANDARDS AND SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
9. RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER, TO THE SATISFACTION OF THE ENGINEER.
10. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT" AND REGULATIONS FOR CONSTRUCTION PROJECTS. THE GENERAL CONTRACTOR IS DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
11. CONSTRUCTION SIGNAGE MUST CONFORM TO THE CURRENT MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

REPORTS & REFERENCE PLANS:

1. REFER TO SITE PLAN AND ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUT AND DETAILS.
2. REFER TO LANDSCAPE ARCHITECTURE PLANS FOR HARDSCAPE FEATURES AND PLANTING INFORMATION.
3. REFER TO THE SERVICING BRIEF NOVATECH FILE: 124147 REF: R-2025-80 DATED NOVEMBER 5, 2025 FOR SERVICING DESIGN DETAILS.
4. REFER TO GEOTECHNICAL REPORT PG7287-1 DATED OCTOBER 3, 2024 PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT SHALL REVIEW SITE CONDITIONS

EROSION AND SEDIMENT CONTROL NOTES :

1. ALL EROSION AND SEDIMENT CONTROLS ARE TO BE INSTALLED TO THE SATISFACTION OF THE ENGINEER, THE MUNICIPALITY AND THE CONSERVATION AUTHORITY. THEY ARE TO BE APPROPRIATE TO THE SITE CONDITIONS, PRIOR TO UNDERTAKING ANY SITE ALTERATIONS (FILLING, GRADING, REMOVAL OF VEGETATION, ETC.) AND DURING ALL PHASES OF SITE PREPARATION AND CONSTRUCTION. THESE PRACTICES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE CURRENT BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROL AND SHOULD INCLUDE AS A MINIMUM THOSE MEASURES INDICATED ON THE PLAN.
2. TO PREVENT SURFACE EROSION FROM ENTERING THE DITCH OR STORM SYSTEM DURING CONSTRUCTION, SILT SACKS WILL BE PLACED UNDER GRATES OF ALL PROPOSED AND EXISTING CATCHBASINS AND STRUCTURES. A LIGHT DUTY SILT FENCE BARRIER WILL ALSO BE INSTALLED IN SELECTED LOCATIONS SHOWN ON THIS PLAN, AND STRAW BALE BARRIERS WILL BE OUTLINED WITHIN THE OUTLET DITCHES. THESE CONTROL MEASURES WILL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED AND CONSTRUCTION COMPLETE.
3. THE SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED WHEN, IN THE OPINION OF THE ENGINEER, THE MEASURES ARE NO LONGER REQUIRED. NO CONTROL MEASURES MAY BE PERMANENTLY REMOVED WITHOUT PRIOR AUTHORIZATION FROM THE ENGINEER.
4. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO ANY DITCH OR STORM SEWER SYSTEM. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
5. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
6. THE CONTRACTOR SHALL ENSURE PROPER DUST CONTROL IS PROVIDED WITH THE APPLICATION OF WATER (AND IF REQUIRED, CALCIUM CHLORIDE) DURING DRY PERIODS.

REMOVALS NOTES :

1. THE CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS.
2. REMOVAL OF ALL ABOVE GROUND TRAFFIC PLANT AND STREETLIGHTING TO BE DONE BY OTHERS. CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING STREETLIGHTING, HYDRO POLES AND OVERHEAD LINES DURING CONSTRUCTION.
3. ALL BELL AND HYDRO OTTAWA MAINTENANCE HOLE ADJUSTMENTS SHALL BE PERFORMED BY AN APPROVED CONTRACTOR ONLY.
4. ALL TOPSOIL AND ANY SOFT, WET OR DELETERIOUS MATERIAL SHALL BE REMOVED FROM IMPROVED AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. FORESTRY TO BE CONTACTED PRIOR TO ANY SELECTIVE PRUNING OR REMOVALS WITHIN THE AREAS OF TRESS SURROUNDING THE TRANS CANADA TRAIL AND TREES THAT ARE TO REMAIN ARE TO HAVE PROPER TREE PROTECTION FENCING.
- STORM SEWERS:**
1. CONTRACTOR SHALL SUPPLY AND INSTALL ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH CURRENT MUNICIPAL STANDARDS AND SPECIFICATIONS (APPLIES TO STORM AND SANITARY SEWERS).
2. REINFORCED CONCRETE STORM SEWER PIPES SHALL BE IN ACCORDANCE WITH CSA A257.2. NON-REINFORCED CONCRETE STORM SEWER PIPES SHALL BE IN ACCORDANCE WITH WITH CSA A257.1. PIPE SHALL BE JOINTED WITH STANDARD RUBBERIZED GASKETS PER CSA A257.3. LATEST AMENDMENT APPLIES TO ALL OF THE ABOVE ITEMS.
3. STORM SEWER TRENCHING SHALL BE IN ACCORDANCE WITH OTTAWA DETAIL S6 AND S7.
4. PIPE BEDDING, COVER AND BACKFILL TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 802.01/802.013 FOR FLEXIBLE PIPE, AND 802.031/802.033 FOR RIGID PIPE. PIPE BEDDING SHALL BE CLASS "B", UNLESS OTHERWISE NOTED, AND SHALL CONSIST OF 150mm GRANULAR "A" (300mm IN ROCK) COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
5. PVC STORM SEWERS SHALL BE SDR35 APPROVED PER CSA B182.2, UNLESS OTHERWISE NOTED.
6. STORM LATERALS TO BE 150mmØ WHITE PVC SDR28 WITH A 1.0% GRADIENT (MIN). CONSTRUCT SERVICES TO WITHIN 1.0m OF THE BUILDING FACE AND CAP, MARK WITH A WOODEN 50mm x 100mm STAKE PAINTED GREEN THAT EXTENDS 1.0m ABOVE GROUND.
7. SERVICE CONNECTIONS TO SEWER MAIN IN ACCORDANCE WITH OTTAWA DETAIL S11 OR S11.1 AS APPROPRIATE.
8. STORM MANHOLE FRAME AND COVER SHALL BE PER OTTAWA DETAIL S24.1, AND S25.
9. CATCH BASINS IN ACCORDANCE WITH OTTAWA DETAIL S1 (CONCRETE GUTTER), S3 (INLET CATCHBASIN), AND OPSD 705.010. FRAME AND GRATE PER OTTAWA DETAIL S19 FOR BOTH ROADWAY AND REAR YARD STRUCTURES.
10. CATCH BASIN LEADS SHALL BE 200mmØ OR 300mmØ WITH A 1.0% (MIN) SLOPE
11. CATCH BASINS AND CBMH STRUCTURES TO HAVE 600mm DEEP SUMPS.
12. CONTRACTOR TO ENSURE CATCH BASINS ARE INSTALLED AT LOW POINT.
13. MINIMUM DIAMETER FOR REAR YARD PERFORATED PIPE IS 250mm, PER OTTAWA DETAIL S29.
14. ROOF DRAINS SHALL OUTLET TO LANDSCAPED AREAS.
15. CCTV ALL STORM SEWERS 250mm OR GREATER PRIOR TO PLACEMENT OF ASPHALT BASE COURSE.

SANITARY SEWERS:

1. SANITARY SEWERS SHALL BE PVC SDR35, IPEX "RING-TITE" (OR EQUIVALENT), PER CSA B182.2.
2. SANITARY SEWER TRENCH PER OTTAWA DETAIL S6 AND S7 WITH A CLASS "B" BEDDING.
3. SANITARY LATERALS TO BE 150mmØ (TERRA FLATS - 12 UNITS) AND 135mmØ (TOWN HOMES). NON-WHITE PVC SDR35, IPEX "RING-TITE" (OR EQUIVALENT) WITH A 1.0% GRADIENT (2.0% MIN. PERPEND). CONSTRUCT SERVICES TO WITHIN 1.0m OF THE BUILDING FACE AND CAP. MARK WITH A WOODEN 50mm x 100mm STAKE PAINTED RED THAT EXTENDS 1.0m ABOVE THE GROUND. LATERALS IN GENERAL CONFORMANCE WITH DETAIL S11.3, SECTION A-A.
4. BACK WATER VALVES SHALL BE INSTALLED ON ALL SANITARY SERVICES PER OTTAWA DETAIL S14.1 OR S14.2.
5. SANITARY MANHOLE FRAME AND COVERS PER OTTAWA DETAIL S24 AND S25.
6. CONTRACTOR TO PERFORM LEAKAGE TEST ON SANITARY SEWER IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24.
7. CCTV ALL SANITARY SEWERS 200mm OR GREATER PRIOR TO PLACEMENT OF ASPHALT BASE COURSE.

WATER SUPPLY:

1. PVC WATERMAIN SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR18 OR APPROVED EQUAL AND SUPPLIED IN ACCORDANCE WITH MATERIAL SPECIFICATION MW-18.1.
2. WATERMAIN TRENCH AND BEDDING IN ACCORDANCE WITH OTTAWA DETAIL W17.
3. PVC FITTINGS SHALL BE INSTALLED WITH A TRACER WIRE IN ACCORDANCE WITH OTTAWA DETAIL W36.
4. THE WATER SERVICES SHALL BE 25mmØ PEX (TERRA FLATS - 12 UNITS) AND 19mmØ PEX (TOWN HOMES). WATER SERVICE SHALL BE MARKED WITH A 50mm X 100mm STAKE PAINTED BLUE.
5. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS PER OTTAWA DETAIL W40 AND W42.
6. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWERS IN ACCORDANCE WITH OTTAWA DETAIL W25.2 AND W25 (APPLICABLE IF WATERMAIN COVER IS LESS THAN 2.4M).
7. INSULATE WATER SERVICES PER OTTAWA DETAIL W23, WHEN SEPARATION BETWEEN SERVICE AND MANHOLE IS LESS THAN 1.2m.
8. MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER OR UTILITY IS 0.25m WHEN CROSSING OVER A PIPE (W25.2), AND 0.50m WHEN CROSSING UNDER A PIPE (W25). THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SUPPORT TO THE EXISTING INFRASTRUCTURE.
9. WATER SERVICES CROSSING SEWERS SHALL BE INSTALLED PER OTTAWA DETAIL W38.

GRADING AND PAVEMENT NOTES:

1. ALL TOPSOIL, ORGANIC OR DELETERIOUS MATERIAL MUST BE ENTIRELY REMOVED FROM BENEATH THE PROPOSED HARD SURFACE (ie. PAVEMENT, CURB, SIDEWALK,

ETC.) AREAS AS DIRECTED BY THE SITE ENGINEER OR GEOTECHNICAL ENGINEER.

2. EXPOSED SUBGRADES IN PROPOSED PAVED AREAS SHOULD BE HEAVILY PROOF ROLLED WITH A LARGE (10 TON) VIBRATORY STEEL DRUM ROLLER UNDER DRY CONDITIONS AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF GRANULARS.
3. ANY SOFT AREAS EVIDENT FROM THE PROOF ROLLING SHOULD BE SUB-EXCAVATED AND REPLACED WITH SUITABLE MATERIAL THAT IS FROST COMPATIBLE WITH THE EXISTING SOILS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
4. THE GRANULAR BASE SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE. ANY ADDITIONAL GRANULAR FILL USED BELOW THE PROPOSED PAVEMENT SHOULD BE PLACED IN MAXIMUM 300mm LIFTS AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY VALUE.
5. ROADWAY SUBGRADE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION TO REVIEW IF A WOVEN GEOTEXTILE IS REQUIRED BELOW THE GRANULAR MATERIALS AND TO CONFIRM THE DEPTH AND COMPACTION OF GRANULAR 'B'.
6. PRIOR TO PLACEMENT OF TOPLIFT, THE CONTRACTOR SHALL ADJUST ALL STRUCTURES TO FINAL GRADE PER CITY OF OTTAWA STANDARDS.
7. MINIMUM OF 2% GRADE FOR ALL GRASS AREAS UNLESS OTHERWISE NOTED.
8. MAXIMUM TERRACING GRADE TO BE 3:1 UNLESS OTHERWISE NOTED.
9. ALL GRADES BY CURBS ARE EDGE OF PAVEMENT GRADES UNLESS OTHERWISE INDICATED.
10. ALL CURBS SHALL BE BARRIER CURB UNLESS OTHERWISE NOTED AND CONSTRUCTED PER CITY OF OTTAWA STANDARD (SC1.1).
11. REFER TO LANDSCAPE PLAN FOR PLANTING AND OTHER LANDSCAPE FEATURE DETAILS.

PAVEMENT STRUCTURE:

40mm ASPHALT SP12.5
50mm ASPHALT SP19.0
150mm GRAN "A"
450mm GRAN "B" TYPE II
600mm TOTAL DEPTH

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
10+000.00	102.02	99.62	TEE
10+005.30	102.09	99.69	45° V-BEND
10+005.57	102.08	100.13	45° V-BEND
10+006.37	102.05	100.10	45° V-BEND
10+006.64	102.04	99.64	45° V-BEND
10+007.04	102.02	99.62	22.5° H-BEND
10+013.51	102.08	99.68	22.5° H-BEND
10+017.19	102.11	99.71	VB1
10+025.00	102.43	100.03	-
10+050.00	103.80	101.40	-
10+080.90	103.79	101.39	TEE

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
11+000.00	100.46	98.06	TEE
11+016.27	101.06	98.66	VB2
11+025.00	103.25	100.85	-
11+050.00	104.27	101.87	-
11+058.25	104.48	101.58	45° H-BEND
11+060.61	104.28	101.58	45° H-BEND
11+075.00	103.84	101.44	-
11+082.98	103.80	101.40	TEE
11+095.47	103.62	101.42	HYDRANT TEE
11+100.00	103.87	101.47	-
11+102.53	103.83	101.43	TEE
11+106.53	103.74	101.34	VB12
11+108.00	103.71	101.31	TEE
11+125.00	103.73	101.33	-
11+141.36	103.82	103.82	VB4
11+147.36	103.79	101.39	TEE
11+150.00	103.76	101.36	-
11+153.36	103.71	103.71	VB3
11+164.57	103.66	101.26	TEE
11+170.20	103.79	101.39	VB6
11+175.00	103.82	101.42	-
11+182.95	103.68	101.28	TEE
11+189.86	103.65	101.25	REDUCER
11+195.35	103.71	101.31	45° H-BEND
11+198.39	103.71	101.31	45° V-BEND
11+198.69	103.72	101.79	45° V-BEND
11+199.44	103.74	101.81	45° V-BEND
11+199.74	103.74	101.34	45° V-BEND
11+200.00	103.75	101.35	-
11+207.08	104.03	101.63	45° H-BEND
11+225.53	104.04	101.64	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
12+000.00	103.66	101.26	TEE
12+006.00	103.81	101.41	VB5
12+007.14	103.85	101.45	HYDRANT TEE
12+025.00	103.82	101.42	-
12+035.81	103.87	101.47	TEE
12+042.71	103.81	101.41	TEE
12+050.00	103.81	101.41	-
12+062.97	103.87	101.47	HYDRANT TEE
12+066.47	103.92	101.52	TEE
12+067.95	103.92	101.52	45° H-BEND
12+070.95	103.93	101.53	45° H-BEND
12+075.00	103.90	101.50	VB8
12+100.00	103.96	101.56	-
12+124.00	103.90	101.50	VB9
12+125.00	103.90	101.50	45° H-BEND
12+133.04	103.94	101.54	45° H-BEND
12+134.76	103.91	101.51	TEE
12+136.37	103.88	101.48	HYDRANT TEE
12+190.00	103.82	101.42	-
12+180.33	103.89	101.49	TEE
12+161.63	103.85	101.45	TEE
12+175.00	103.81	101.41	-
12+183.96	103.84	101.44	VB11
12+190.53	103.83	101.43	TEE

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
13+000.00	103.87	101.47	TEE
13+006.00	103.85	101.45	VB7
13+025.00	103.84	101.44	-
13+050.00	103.81	101.41	-
13+055.86	103.86	103.86	VB10
13+061.86	103.85	101.45	TEE

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
1+000.00	103.68	101.28	TEE
1+002.68	103.69	101.29	45° V-BEND
1+003.70	103.69	102.33	45° V-BEND
1+004.60	103.70	102.34	45° V-BEND
1+005.62	103.70	101.30	45° V-BEND
1+006.45	103.71	101.31	22.5° H-BEND
1+011.11	103.94	101.54	22.5° H-BEND
1+025.00	104.12	101.72	-
1+027.11	104.10	101.70	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
2+000.00	103.71	101.31	TEE
2+001.34	103.70	101.30	22.5° H-BEND
2+007.80	103.67	101.27	22.5° H-BEND
2+025.00	104.17	101.77	-
2+027.03	104.15	101.75	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
3+000.00	103.80	101.40	TEE
3+001.34	103.72	101.32	22.5° H-BEND
3+001.68	103.70	101.30	45° V-BEND
3+002.65	103.64	102.24	45° V-BEND
3+004.71	103.62	102.22	45° V-BEND
3+005.68	103.62	101.22	45° V-BEND
3+007.80	103.70	101.30	22.5° H-BEND
3+025.00	104.11	101.71	-
3+027.03	104.09	101.69	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
4+000.00	103.89	101.49	TEE
4+025.00	104.16	101.76	-
4+026.80	104.14	101.74	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
5+000.00	103.91	101.51	TEE
5+025.00	103.74	101.34	-
5+030.00	103.74	101.34	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
6+000.00	103.92	101.52	TEE
6+025.00	103.79	101.39	-
6+029.67	103.79	101.39	CAP

WATERMAIN TABLE			
Station	F/G ELEVATION	TOP OF WATERMAIN	DESCRIPTION
7+000.00	103.81	101.41	TEE
7+003.30	103.73	101.33	22.5° H-BEND
7+008.52	103.77	101.37	22.5° H-BEND
7+025.00	104.08	101.68	-
7+027.62	104.04	101.64	CAP

SAN MANHOLE TABLE					
MANHOLE ID	Size (mm)	T/G ELEV	INVERT	PIPE DIAMETER (mm)	
110	1200ø	102.37	E=98.30	E=200	
111	1200ø	103.88	N=99.68 S=99.68	N=200 S=200	
112	1200ø	103.72	S=99.80 SW=100.00 N=100.40	S=200 SW=200 N=200	
113	1200ø	103.79	NE=100.22 SW=100.33 SE=100.39 NW=100.82	NE=200 NW=200 SW=200 SE=200	
114	1200ø	103.93	NE=100.49 SE=100.55	NE=200 SE=200	
115	1200ø	103.77	SE=101.21	SE=200	
116	1200ø	104.02	SE=100.56	SE=200	
117	1200ø	103.64	N=99.85 S=99.86 E=100.45	N=200 S=200 E=200	
118	1200ø	104.14	W=100.71	W=200	
119	1200ø	103.87	N=99.91 SW=100.51 S=100.45	N=200 SW=200 S=200	
120	1200ø	103.87	NE=100.69 SW=100.69 NW=100.82	NE=200 NW=200 SW=200	
121	1200ø	103.94	NE=100.84 SE=101.14	NE=200 SE=200	
122	1200ø	103.78	NW=101.31	NW=200	
123	1200ø	103.88			
124	1200ø	103.67	N=100.52 S=101.00 E=101.05	N=200 S=200 E=200	
125	1200ø	104.08	W=101.31	W=200	
126	1200ø	104.21	E=101.45 N=101.25	N=200 E=200	
127	1200ø	104.04	W=101.70	W=200	
128	1200ø	103.74	N=101.00 E=101.00	N=200 E=200	
129	1200ø	104.08	W=101.26	W=200	
130	1200ø	103.99	S=101.12 NE=101.58	S=200 NE=200	
131	1200ø	104.00	SW=101.71	SW=200	
132	1200ø	104.13	NW=101.06	NW=200	