SITE GRADING AND DRIVEWAY LOCATION:

INSPECTIONS BY A PROFESSIONAL ENGINEER WILL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO CONSULT WITH THE EARTHWORK CONTRACTOR AND A POST–CONSTRUCTION MEETING TO CONFIRM GRADING ON LOTS FOR ALL DRIVEWAYS TO ENSURE RUNOFF IS DIRECTED ACCORDING TO PLANS AND TO OVERSEE THE RE–STABILIZATION OF THE LOT INTO A VEGETATED COVER.

BASIC STANDARDS –– EROSION CONTROL MEASURES:

MINIMUM EROSION CONTROL STANDARDS WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE.

STORM DRAIN SCHEDULE

SD NO.	PIPE TYPE	LENGTH	SLOPE (FT/FT)
SD#1	12" HDPE	64 L.F.	0.01
SD#2	12" HDPE	51 L.F.	0.01
SD#3	12" HDPE	19 L.F.	0.01
SD#4	12" HDPE	11 L.F.	0.01
SD#5	12" HDPE	57 L.F.	0.01
SD#6	12" HDPE	14 L.F.	0.01
SD#7	12" HDPE	14 L.F.	0.01
SD#8	12" HDPE	5 L.F.	0.01
SD#9	12" HDPE	23 L.F.	0.01
SD#10	12" HDPE	27 L.F.	0.01
SD#11	12" HDPE	47 L.F.	0.01
SD#12	12" HDPE	114 L.F.	0.01
SD#13	12" HDPE	19 L.F.	0.01
SD#14	12" HDPE	79 L.F.	0.024
SD#15	NOT USED		
SD#16	12" HDPE	7 L.F.	0.01
SD#17	NOT USED		
SD#18	12" HDPE	22 L.F.	0.005
SD#19	12" HDPE	47 L.F.	0.01
SD#20	12" HDPE	15 L.F.	0.01
SD#21	12" HDPE	31 L.F.	0.01
SD#22	12" HDPE	4 L.F.	0.01
SD#23	12" HDPE	16 L.F.	0.01

LEACHING GALLEY SCHEDULE

NOTE: EACH LEACHING GALLEY TO BE 4' X 4' PRECAST CONCRETE STRUCTURE AS MANUFACTURED BY AMERICAN CONCRETE INDUSTRIES (ITEM #2840), AUBURN, MAINE (OR APPROVED EQUAL). SEE DETAIL SHEET L6.2.

LG NO.	INV. IN	INV.OUT
LG 1+2	120.60	120.60
LG 3+4	119.89	119.89
LG 5+6	120.63	120.63
LG 8,9+10	118.31	118.31
LG 11+12	NOT USED	
LG 13+14	115.53	115.53
LG 15,16,17	115.08	115.08

DRAINAGE STRUCTURE SCHEDULE

ALL CATCH BASIN AND MANHOLE PRECAST CONCRETE STRUCTURES SHALL BE 4'–0" DIAMETER (INSIDE).

CB#1	
RIM	126.35
INV.IN(RD)	121.95
INV.OUT	121.85
CB#2	
RIM	125.40
INV.OUT	120.90
CB#3	
RIM	125.65
INV.OUT	121.15
CB#4	
RIM	126.65
INV.IN	121.04
INV.OUT	120.94
CB#5	
RIM	125.50
INV.IN	120.37
INV.OUT	120.27
CB#6	
RIM	125.75
INV.IN(SD3)	120.41
INV.IN(SD6)	120.13
INV.OUT	120.03
CB#7	
RIM	124.70
INV.OUT	120.20
CB#8	
RIM	125.70
INV.IN(SD8)	119.84
INV.IN(SD9)	119.97
INV.IN(SD11)	120.16
NV.OUT	119.74
CB#9	
RIM	126.85
INV.IN(SD12)	118.60
INV.IN(FD)	118.80
INV.IN(RD)	121.00
INV.OUT	118.50
CB#10	
RIM	121.50
INV.IN	116.35
INV.OUT	116.25

CB#11	
RIM	120.20
INV.IN	115.78
INV.OUT	115.68
CB#12	
RIM	120.15
INV.IN(RD)	115.40
INV.IN(FD)	115.40
INV.IN(SD21)	115.22
INV.OUT	115.12
EX. DMH	
EX.RIM	119.97
EX.INV.IN	116.34
EX.INV.IN	116.52
INV.IN(SD14)	116.40
EX.INV.OUT	113.40
DMH#1	
RIM	127.40
INV.IN(FD)	121.31
NV.IN	121.21
INV.OUT	121.11
DMH#2	
RIM	120.50
INV.IN	114.96
INV.OUT	114.86
DRY WELL TO BE 4' X 4' LEACHING GALLEY RAISED TO FINISHED GRADE. SEE DETAIL SHEET L6.2.	
DW#1	
RIM	125.90
INV.OUT	123.90
DW#2	
RIM	126.00
INV.OUT	123.90
DW#3	
INV.OUT	123.90
RIM	126.15
TRENCH DRAIN	
RIM	118.72
INV.OUT	116.45

GRADING NOTES:

1. DO NOT SCALE THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ADDITIONAL WORK PROCEEDS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION OF OR INSTALLATION OF ANY PART OF THIS WORK.
4. CONTRACTOR SHALL AVOID ALL AREAS NOT REQUIRING GRADING. CONTRACTOR SHALL NOT DISTURB THESE AREAS.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL DIGSAFE (1–888–344–7233) AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.
6. CONTRACTOR SHALL CONDUCT TEST PIT EXCAVATION TO CONFIRM LOCATION OF EXISTING UTILITIES WHERE NEW BUILDING SANITARY SERVICE AND WATER SERVICE ARE PROPOSED.
7. WHERE STORM DRAINS OR SEWER MAINS HAVE LESS THAN FOUR (4) FEET OF COVER BETWEEN TOP OF PIPE AND FINISH GRADE, INSULATE PIPE USING TWO (2) INCH THICK STYROFOAM INSULATION BOARD OVER AND ALONG SIDES OF THE PIPE.
8. EXISTING DRAINAGE MANHOLES SHALL BE CORED TO ACCEPT NEW DRAINAGE PIPES AS NOTED.
9. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE–HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
10. ROOF DRAIN CONNECTIONS SHALL BE CONFIRMED WITH FINAL BUILDING PLANS.
11. ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH INDIVIDUAL UTILITY DISTRICT REQUIREMENTS; CONTRACTOR SHALL COORDINATE INSTALLATION WITH APPROPRIATE UTILITY DISTRICT BEFORE INSTALLATION.
12. ALL WORK WITHIN THE ROAD RIGHT–OF–WAY AND ALL UTILITIES CONNECTING TO INFRASTRUCTURE WITHIN THE ROAD SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
13. ELEVATIONS ARE ON CITY DATUM, BASED ON BENCH MARK AT 3' OFFSET MONUMENT UNDER COVER ON EASTERLY SIDE OF STEVENS AVENUE. BENCHMARK = 127.25
14. GRADING FOR THE A.D.A. COMPLIANT PARKING SPACES TO THE A.D.A. BUILDING ENTRANCES SHALL COMPLY WITH ACCESSIBILITY REQUIREMENTS INCLUDING MAXIMUM 2% SLOPE IN ANY DIRECTION AND SURFACE TREATMENT. ANY REPAIRS TO ACHIEVE COMPLIANCE SHALL BE COMPLETED AT NO EXTRA EXPENSE TO THE OWNER.
15. INSTALLATION OF NEW OR UPGRADES TO EXISTING SANITARY SEWERS, STORM DRAINS, WATER LINES OR OTHER UTILITIES SHALL MEET THE PROVISIONS OUTLINED IN SECTION 2 AND SECTION 9 OF THE CITY OF PORTLAND TECHNICAL MANUAL.

CONSTRUCTION OVERSIGHT:

THE OWNER WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES. IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE DRYWELL CONSTRUCTION PLANS AND DETAILS FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE STORMWATER SYSTEM HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDING ANT TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON THE SITE.

DEWATERING (IF REQUIRED):

INSPECTIONS BY A PROFESSIONAL ENGINEER WILL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO ESTABLISH THE APPROPRIATE LOCATION FOR DISCHARGING FILTERED WATER FROM DISCHARGING OPERATIONS. A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE–WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWN GRADIENT EROSION AND OFF SITE SEDIMENTATION OR WITHIN A RESOURCE, PLEASE FOLLOW THE DETAILS OF SUCH A PLAN.

SOIL INSPECTION:

THE OWNER WILL RETAIN THE SERVICES OF A CERTIFIED SOIL SCIENTIST TO INSPECT THE SOILS BEFORE CRUSHED STONE IS INSTALLED FOR THE STORMWATER FACILITIES. THE PURPOSE IS TO INSURE ALL FACILITIES ARE BELOW THE "HARDPAN" LAYERS AND THE SOILS ARE SUITABLE FOR STORMWATER INFILTRATION.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
GRANITE MONUMENT	■	
CATCHBASIN		
MANHOLE	S T D	
HYDRANT		
UTILITY POLE		●
WATER VALVE	WV	
SANITARY SEWER	ESAN	SAN
STORM DRAIN	ESD	
WATER	EW	H2O
TELEPHONE	ETEL	
GAS	EG	GAS
OVERHEAD WIRES	EXOHW	
UNGERGROUND ELECTRIC	EUGE	
LEACHING GALLEY		
CLEAN OUT		C.O. ●
CURB		
FENCE	X X	
SIGN		
DECIDUOUS TREE		
EVERGREEN TREE		
CONTOUR	72	73
SPOT ELEVATION		+ 74.00
WALL MOUNTED LIGHT		

SEAL
STATE OF MAINE
LESTER S. BERRY, JR.
No. 3341
LICENSED PROFESSIONAL ENGINEER

LICENSED LANDSCAPE ARCHITECT
ROBERT B. METCALF
No. 1815

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777 Stevens Avenue — Portland, Maine

Date:
OCTOBER 17, 2014

Issued For:
PERMITTING

Revisions:
NOV. 25, 2014: Per City of Portland Staff Review Comments
JAN. 5, 2015: Per City of Portland Staff Review Comments
MAR. 25, 2015: Site Pricing Set

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Title:
GRADING AND DRAINAGE PLAN

Scale: 1" = 30'
0 10 20 30 60 ft.

North:

Sheet No.:
L3.0

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