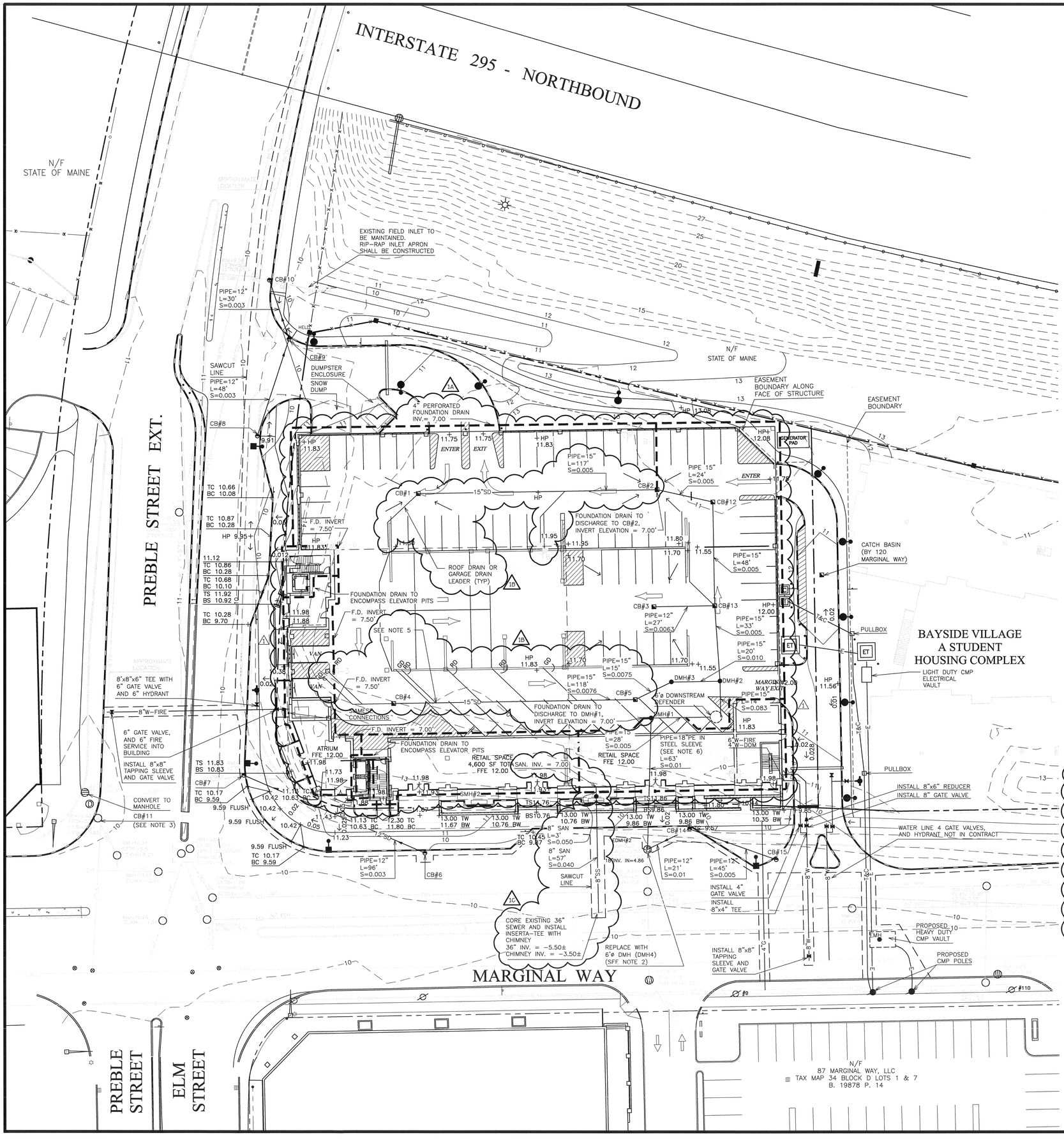

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
MONUMENT FOUND	■ MON	
CONTOUR	10	10
SPOT ELEVATION	+80.43	+80.43
CATCHBASIN		
DRAIN INLET		
MANHOLE		
HYDRANT		
WATER VALVE		
UTILITY POLE		
TEST BORING		
WATER SERVICE	EW	W
SEWER SERVICE	ESS	SS
ROOF DRAIN		RD
GARAGE DRAIN		GD
CLEAN OUT		CO●

	EXISTING	PROPOSED
STORM DRAIN	ESD	SD
COMBINED SEWER	ECS	
ELECTRIC SERVICE	EE	E
GAS SERVICE	EG	G
TELEPHONE AND CABLE SERVICE		T+C
OVERHEAD WIRES	ECHW	
SITE LIGHTING ELECTRIC		E
ELECTRIC TRANSFORMER		ET
TELEPHONE PAD		T
CABLE PAD		C
LIGHT FIXTURE - STREET		
LIGHT FIXTURE - SITE		
LIGHT FIXTURE - BULDING		
CURB		
TEST BORING		

STORM DRAIN AND SANITARY STRUCTURES

STRUCTURE	SIZE	RIM	INV. IN	INV. OUT
CB#1	4' DIA	11.15	–	7.15
CB#2	6' DIA	11.15	6.56	6.46
CB#3	4' DIA	11.15	–	6.17
CB#4	4' DIA	11.15	–	7.15
CB#5	6' DIA	11.15	6.25	6.15
CB#6	4' DIA	9.46	–	6.62
CB#7	4' DIA	9.34	6.33	6.23
CB#8	4' DIA	9.33	–	5.94
CB#9	4' DIA	10.05	5.79	5.69
CB#10	4' DIA	9.48	5.60	5.50
			5.60	
CB#11	4' DIA	9.40	5.64	5.64
CB#12	4' DIA	11.25	6.34	6.24
CB#13	6' DIA	11.25	6.00	5.90
			6.00	
CB#14	4' DIA	9.00	5.22	5.12
CB#15	4' DIA	9.45	–	5.45

STRUCTURE	SIZE	RIM	INV. IN	INV. OUT
DMH#1	4' DIA	11.38	5.59	5.49
DMH#2	4' DIA	11.66	5.74	5.64
			5.74	
DMH#3	4' DIA	11.38	6.04	5.94
DOWNSTREAM DEFENDER	6' DIA	11.58	4.48	5.73
DMH#4	6' DIA	9.07	4.91	4.57
			4.86	
~~SMH#1~~	~~4' DIA~~	~~10.00~~	~~6.00~~	~~5.51~~
SMH#2	4' DIA	11.83	6.85	6.45

UTILITY NOTE

1. 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 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.
2. EXISTING DRAINAGE MANHOLE 'EDMH2' SHALL BE REPLACED WITH A NEW 6' DIAMETER DRAINAGE MANHOLE, LABELED DMH #3. EXISTING 12' OUTLET PIPE SHALL BE RECONNECTED TO THE NEW STRUCTURE. THE STRUCTURE SHALL RECEIVE BUILDING DRAINAGE FLOWS FROM DMH #1 AND FROM CB #14.
3. CB #11 SHALL BE CONSTRUCTED WITH AN ECCENTRIC CONE ALIGNED SUCH THAT THE STRUCTURE MAY BE INSTALLED ALONG THE CURB LINE BUT SUCH THAT IT DOES NOT INTERFERE WITH THE EXISTING WATERLINE. THE STRUCTURE SHALL BE FIELD ADJUSTED AS NECESSARY, BUT SHALL REQUIRE NOTIFICATION OF CHANGES TO THE OWNER AND THE ENGINEER OF RECORD PRIOR TO IMPLEMENTATION OF SUCH CHANGES. ANY COORDINATION WITH THE PORTLAND WATER DISTRICT REGARDING THE ADJACENT WATER LINE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
4. ALL CATCH BASINS SHALL BE INSTALLED WITH ECCENTRIC OR CONCENTRIC CONES AS THE TOP RISER SECTION EXCEPT WHERE COVER WILL REQUIRE A FLAT TOP SECTION TO BE USED (REFER TO CATCH BASIN DETAIL). CATCH BASINS ALONG CURB LINES SHALL BE CONSTRUCTED WITH INLET STONES.
5. ROOF DRAIN CONNECTIONS SHALL BE CONFIRMED WITH FINAL BUILDING PLANS. STORM DRAIN INVERT SCHEDULE DOES NOT REFLECT INVERTS REQUIRED FROM ROOF DRAIN CONNECTIONS.
6. STORM DRAIN CARRIER PIPE SHALL BE POLYETHYLENE PRESSURE PIPE FROM DMH #1 TO DMH #4. THE CASING PIPE SLEEVE SHALL BE STEEL AND EXTEND INTO THE GARAGE AT LEAST TWO FEET FROM THE INTERNAL BUILDING WALL AND CONTINUE FOR A LENGTH OF APPROXIMATELY 45 FEET SO THAT IT TERMINATES BEYOND THE BUILDING STEPS THAT LEAD TO MARGINAL WAY.

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- A PLAN REVISION – 4' FOUNDATION UNDERDRAIN AROUND PERIMETER OF BUILDING AND PERIMETER OF STRUCTURAL SLAB REGIONS OF THE BUILDING. FOUNDATION DRAIN SHALL OUTLET TO DMH#1 AND CB#2 AND BE CONSTRUCTED WITH AN INVERT OF 7.00'. FOUNDATION DRAIN SHALL ALSO CONNECT TO THE 15' SD PIPE LOCATED DOWNSTREAM OF THE WATER QUALITY UNIT USING A 15"x4" WYE FITTING AS SHOWN ON THE ROOF/GARAGE DRAIN CONNECTION DETAIL. REFER TO FOUNDATION DRAIN DETAIL.
- B PLAN REVISION – ROOF DRAIN AND GARAGE DRAIN PIPE HEADERS HAVE BEEN REVISED. ROOF DRAIN AND GARAGE DRAIN CONNECTIONS TO THE STORM DRAIN PIPE SHALL BE MADE USING LATERAL WYE CONNECTIONS. WYES SHALL BE INSTALLED WITH A MINIMUM 1% SLOPE TOWARD THE STORM DRAIN PIPE. ALL JOINTS SHALL BE WATER-TIGHT. ROOF DRAIN LEADERS SHOWN CONNECTING TO CATCH BASINS SHALL ENTER THE STRUCTURE WITH AN INVERT AT OR ABOVE THE INVERT OUT ELEVATION. ROOF AND GARAGE DRAIN SIZE, LOCATION AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING AND FOUNDATION PLANS. REFER TO ROOF/GARAGE DRAIN CONNECTION DETAIL.
- C PLAN REVISION – SANITARY SEWER SERVICE CONNECTION TO MUNICIPAL SYSTEM HAS BEEN REVISED SINCE ISSUED AS SK-3 DUE TO TRAFFIC CONTROL RESTRICTIONS AS INDICATED BY THE CITY OF PORTLAND. THE REVISED SANITARY SEWER SERVICE SHALL EXIT THE BUILDING CENTERED BETWEEN ARCHITECTURAL GRIDLINES 7 + 8, WHICH IS 15 FEET ON CENTER FROM EITHER GRIDLINE. SMH #2 SHALL MAINTAIN SAME INVERTS AS NOTED ON SK3. THOUGH SANITARY PIPE SLOPE OUT OF THE MANHOLE SHALL BE CONSTRUCTED AT 4.0% SLOPE OR AS NECESSARY TO MAINTAIN 1 FOOT OF VERTICAL SEPARATION ABOVE THE 30-INCH MUNICIPAL STORM DRAIN LOCATED IN MARGINAL WAY. ONCE BEYOND THE STORM DRAIN, THE SANITARY SEWER SERVICE SHALL CHIMNEY DOWN TO THE 36-INCH SEWER MAIN AS SHOWN IN THE DETAIL ON SK-3. SMH #3 SHALL BE CONSTRUCTED AS A SEALED MANHOLE.

Scale: 1"=20'

0 10 20 40 ft.

STATE OF MAINE — WILLIAM C. HASKELL No. 8518 — LICENSED PROFESSIONAL ENGINEER — 7/11/07

pizzagalli construction company

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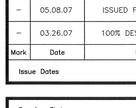
Project Title

84 MARGINAL WAY

Portland, Maine

HA Project No. 06196

Key Plan



Mark	Date	Description
–	06.22.07	REVISION 1
–	05.08.07	ISSUED FOR CONSTRUCTION
–	03.26.07	100% DESIGN DEVELOPMENT

Issue Dates

Drawing Status

ISSUED FOR CONSTRUCTION

Drawing Title

GRADING, DRAINAGE AND UTILITIES PLAN

PA / PE: WHC | Drawn By: BVD

Drawing Number

3

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