

411-A-7

2005-0063

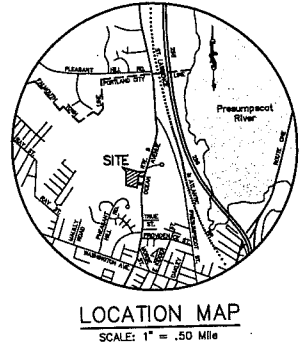
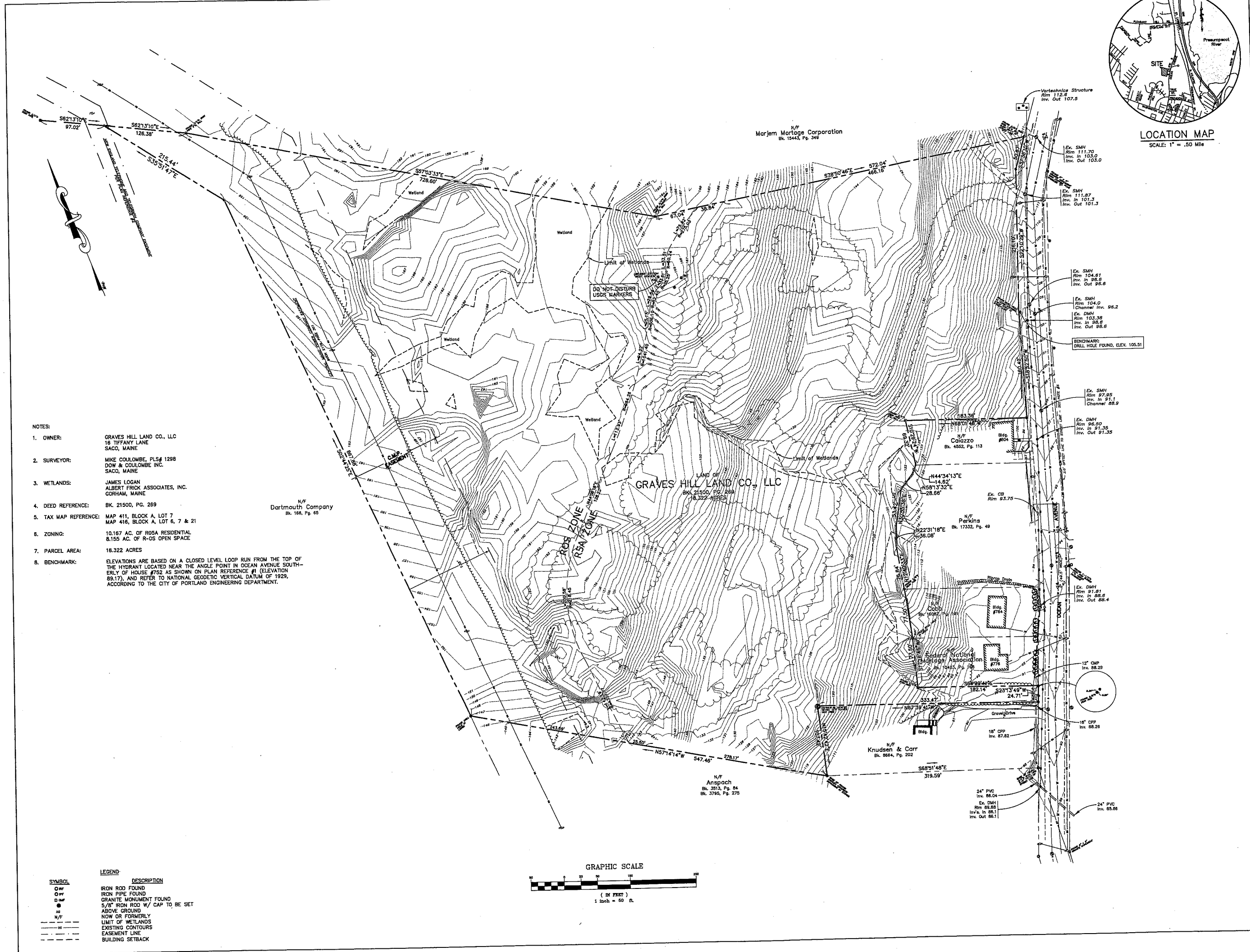
802 Ocean Ave.

Graves Hill Subdivision

Graves Hill Land Co.

add to Spreadsheet

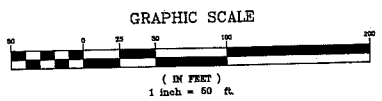
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- NOTES:
- OWNER: GRAVES HILL LAND CO., LLC
18 TIFFANY LANE
SACO, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS# 1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN
ALBERT FRICK ASSOCIATES, INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOT 6, 7 & 21
 - ZONING: 10.167 AC. OF ROSA RESIDENTIAL
8.155 AC. OF R-OS OPEN SPACE
 - PARCEL AREA: 18.322 ACRES
 - BENCHMARK: ELEVATIONS ARE BASED ON A CLOSED LEVEL LOOP RUN FROM THE TOP OF THE HYDRANT LOCATED NEAR THE ANGLE POINT IN OCEAN AVENUE SOUTHERLY OF HOUSE #782 AS SHOWN ON PLAN REFERENCE #1 (ELEVATION 89.17'), AND REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929, ACCORDING TO THE CITY OF PORTLAND ENGINEERING DEPARTMENT.

N/F
Darlington Company
Bk. 166, Pg. 65

LAND OF
GRAVES HILL LAND CO., LLC
Bk. 21500, Pgs. 269
18.322 ACRES



SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
○	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET ABOVE GROUND
---	NOW OR FORMERLY LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	
2	3/29/05	DATE OF REVISION	
3	10/24/05	DATE OF REVISION	

BH2M
Barry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04038, (207) 839-2771

FOR
Graves Hill Land Company, LLC
Saco, Maine 04072

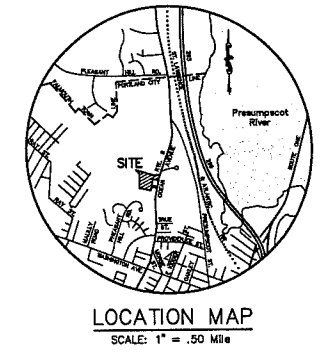
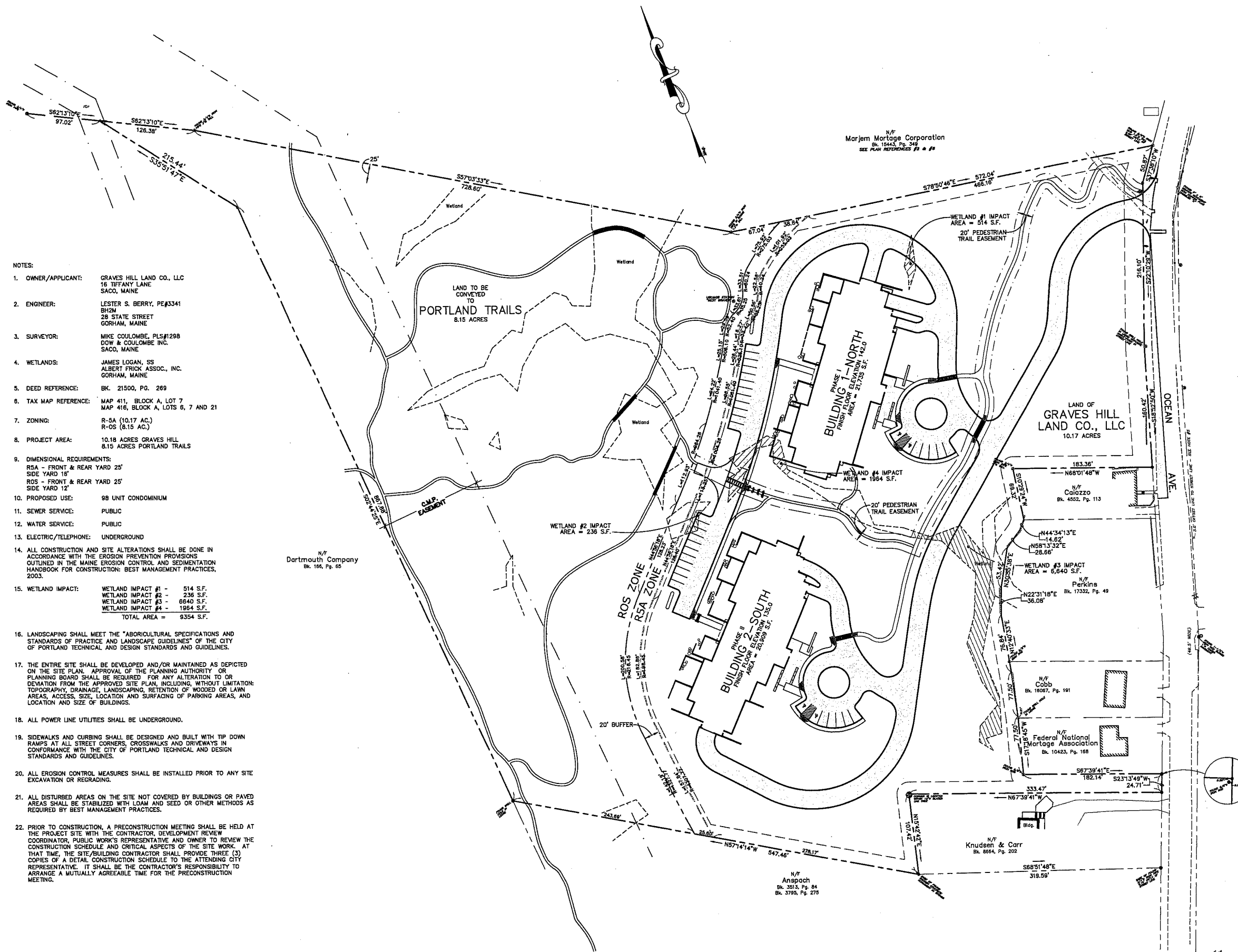
EXISTING CONDITIONS
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
DRAWN	SCALE
CHECKED	JOB. NO.
	02055

SHEET
C-2

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NO.	DATE	REVISION	DESCRIPTION
1	3/7/05		DATE OF ISSUE
2	3/7/05		DATE OF REC-SUBMITTAL
3	10/24/05		STANDARD REV.

- NOTES:
- OWNER/APPLICANT: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - ENGINEER: LESTER S. BERRY, PE#3341
BH2M
28 STATE STREET
GORHAM, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS#1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN, SS
ALBERT FRICK ASSOC., INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOTS 6, 7 AND 21
 - ZONING: R-SA (10.17 AC.)
R-OS (8.15 AC.)
 - PROJECT AREA: 10.18 ACRES GRAVES HILL
8.15 ACRES PORTLAND TRAILS
 - DIMENSIONAL REQUIREMENTS:
R5A - FRONT & REAR YARD 25'
SIDE YARD 15'
R0S - FRONT & REAR YARD 25'
SIDE YARD 12'
 - PROPOSED USE: 98 UNIT CONDOMINIUM
 - SEWER SERVICE: PUBLIC
 - WATER SERVICE: PUBLIC
 - ELECTRIC/TELEPHONE: UNDERGROUND
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES, 2003.
 - WETLAND IMPACT:

WETLAND IMPACT #1	=	514 S.F.
WETLAND IMPACT #2	=	236 S.F.
WETLAND IMPACT #3	=	6640 S.F.
WETLAND IMPACT #4	=	1964 S.F.
TOTAL AREA	=	9354 S.F.
 - LANDSCAPING SHALL MEET THE "ARBOICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
 - ALL POWER LINE UTILITIES SHALL BE UNDERGROUND.
 - SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIP DOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
 - ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES.
 - PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.

N/F
Dartmouth Company
Bk. 166, Pg. 65

N/F
Marjem Mortgage Corporation
Bk. 16445, Pg. 343
SEE PLAN REFERENCES #1 & #6

LAND OF
GRAVES HILL
LAND CO., LLC
10.17 ACRES

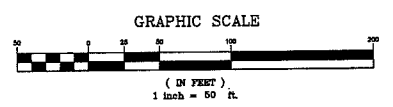
ROS ZONE
R5A ZONE

BUILDING 2 - SOUTH
FINISH FLOOR ELEVATION 135.0
AREA = 20,309 S.F.

BUILDING 1 - NORTH
FINISH FLOOR ELEVATION 142.0
AREA = 21,725 S.F.

LEGEND

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
●	GRANITE MONUMENT FOUND
●	5/8" IRON ROD W/ CAP TO BE SET
▲	ABOVE GROUND
N/F	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK
---	PROPERTY LINE



THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

DATE _____

CHAIR _____

DESIGNED _____ DATE April 2005

DRAWN _____ SCALE As Noted

CHECKED _____ JOB NO. 02055

SEE SHEETS C-3A AND C-3B FOR PHASING PLANS

BH2M
BERRY * HUFF * McDONALD * MILLIGAN, INC.
ENGINEERS * SURVEYORS * PLANNERS
28 State Street, Gorham, Maine 04038 (603) 689-2771

FOR
GRAVES HILL Land Company, LLC
Saco, Maine 04072

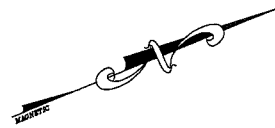
SUBDIVISION PLAN
98 UNIT CONDOMINIUM
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
DRAWN	SCALE
CHECKED	JOB NO.
	02055

SHEET
C-3

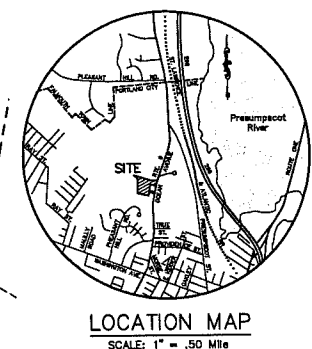
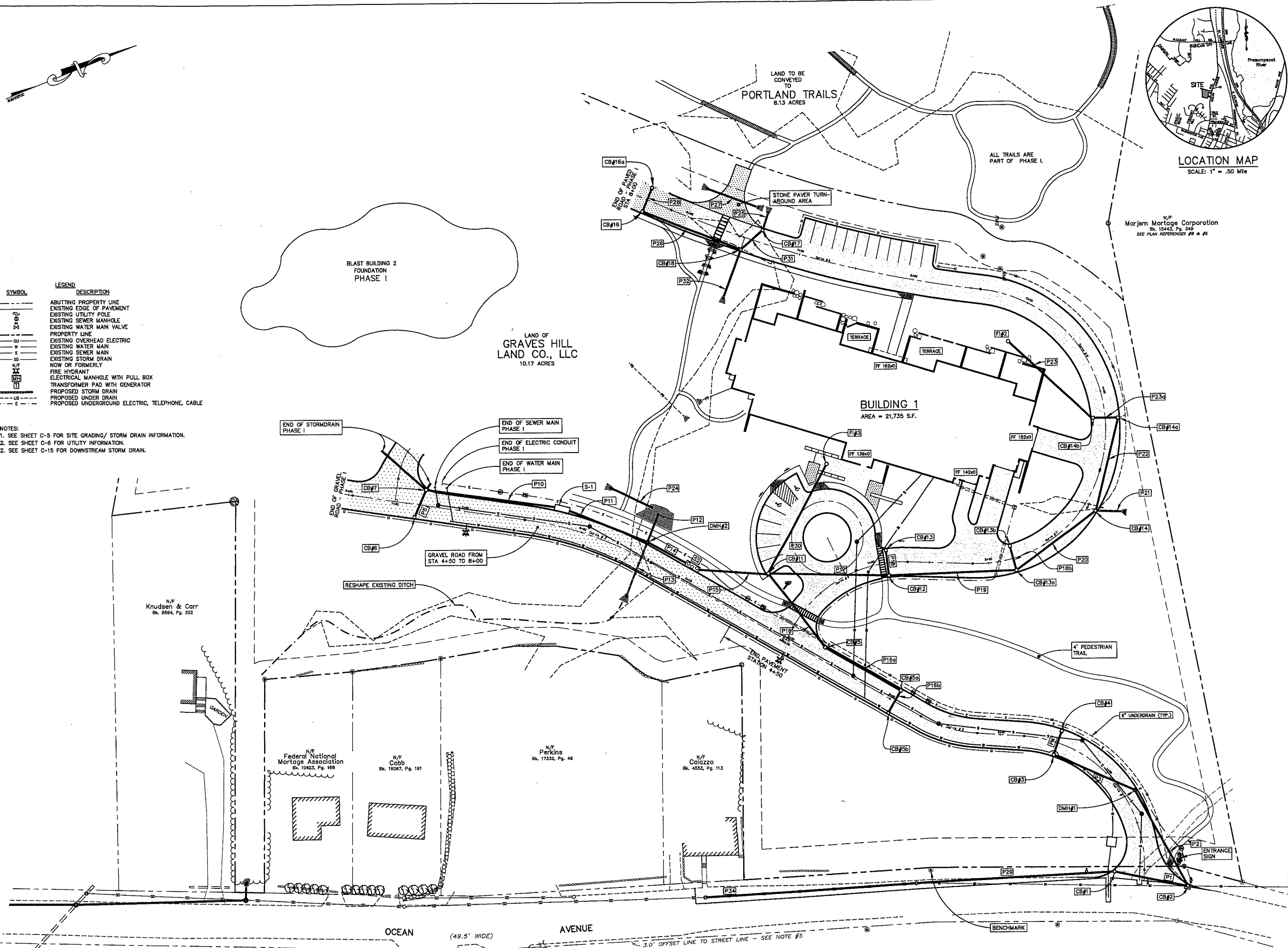
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SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
○	EXISTING UTILITY POLE
○	EXISTING SEWER MANHOLE
○	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
OU	EXISTING OVERHEAD ELECTRIC
W	EXISTING WATER MAIN
S	EXISTING SEWER MAIN
SD	EXISTING STORM DRAIN
N/F	NOW OR FORMERLY
⊕	FIRE HYDRANT
⊕	ELECTRICAL MANHOLE WITH PULL BOX
⊕	TRANSFORMER PAD WITH GENERATOR
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE

- NOTES:
 1. SEE SHEET C-5 FOR SITE GRADING/ STORM DRAIN INFORMATION.
 2. SEE SHEET C-6 FOR UTILITY INFORMATION.
 3. SEE SHEET C-15 FOR DOWNSTREAM STORM DRAIN.



NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMDRAIN REV'S

N/F
 Marjem Mortgage Corporation
 Bk. 15445, Pg. 349
 SEE PLAN REFERENCES #9 & #6

BH2M
 BERRY • HUFF • MCDONALD • MILLIGAN INC.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Portland, Maine 04108, (207) 859-2771

N/F
 Graves Hill Land Company, LLC
 110 Main Street
 Saco, Maine 04072

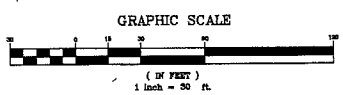
PHASE I
 GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

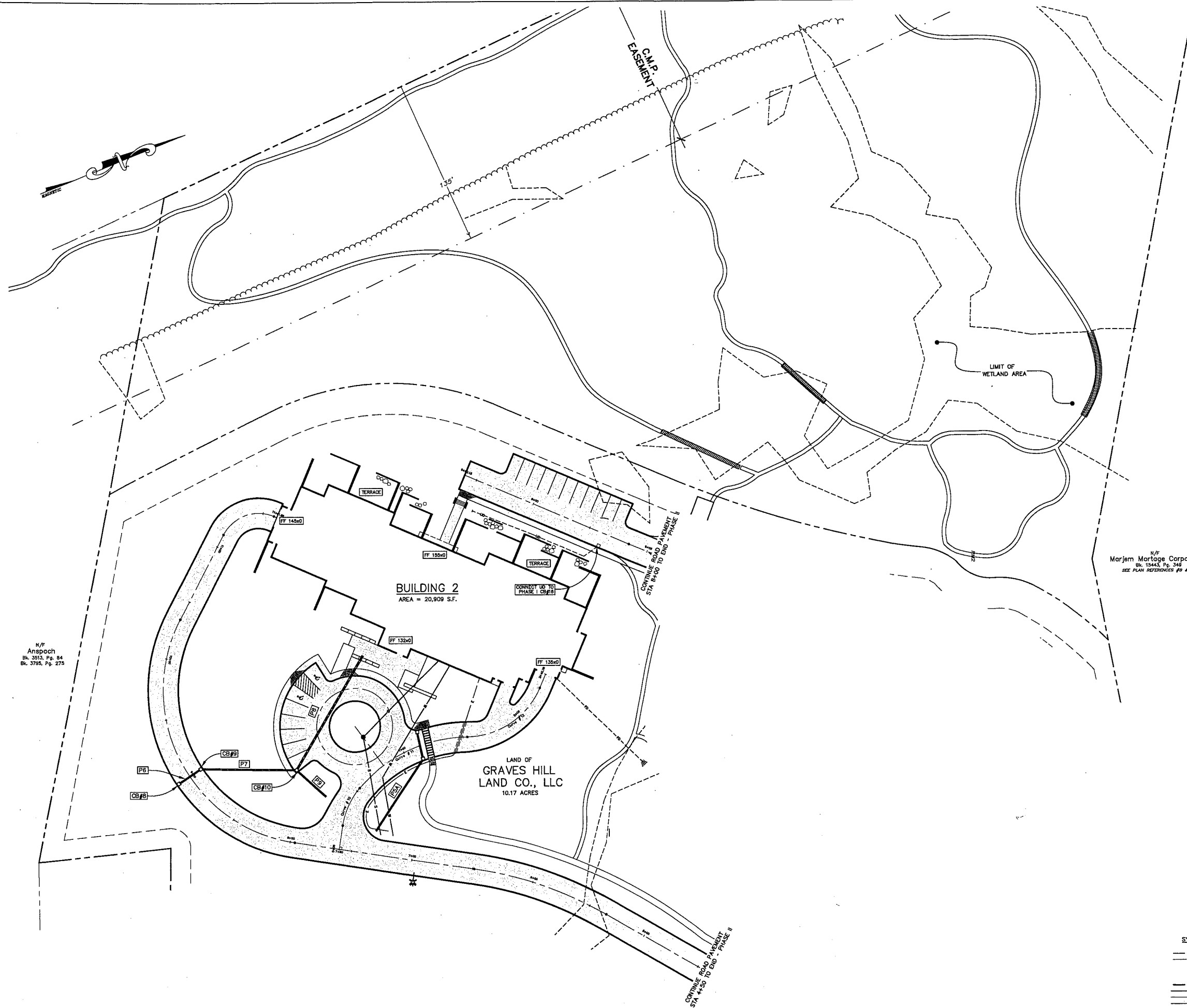
SHEET
C-3a

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DOWNSTREAM STORMDRAIN IMPROVEMENTS - PHASE I
 SEE SHEET C-15



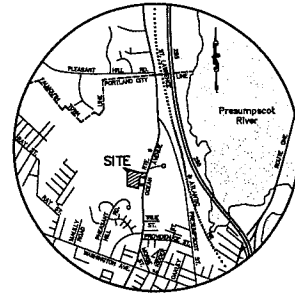
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N/F
Anspach
Bk. 3913, Pg. 84
Bk. 3795, Pg. 275

N/F
Marjem Mortgage Corporation
Bk. 15443, Pg. 348
SEE PLAN REFERENCES #8 & #E

LAND OF
GRAVES HILL
LAND CO., LLC
10.17 ACRES



LOCATION MAP
SCALE: 1" = .50 Mile

NO.	DATE	REVISION	DESCRIPTION
1	3/7/05	DATE OF ISSUE	
2	7/24/05	DATE OF RE-SUBMITTAL	
3	10/24/05	STANDARD REVS.	

BH2M
Barry • Huff • MacDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
25 State Street, Portland, Maine 04108, (207) 889-2771

FOR
Graves Hill Land Co., LLC
110 Main Street
Saco, Maine 04072

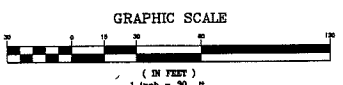
PHASE II
GRAVES HILL CONDOMINIUM
CORVAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
L. Berry	April 2005
DRAWN	SCALE
Dept.	1" = 30'
CHECKED	JOB. NO.
L. Berry	02055

SHEET
C-3b

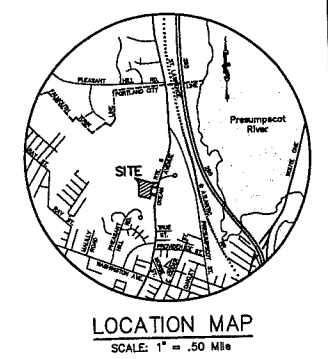
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SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING SEWER MAIN
---	EXISTING STORM DRAIN
---	NOW OR FORMERLY
---	FIRE HYDRANT
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE
---	PROPOSED CENTERLINE



NOTES:
1. SEE SHEET C-5 FOR GRADING & STORM DRAIN INFORMATION.
2. SEE SHEET C-6 FOR UTILITY INFORMATION.

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NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE
2	3/29/05		DATE OF RE-SUBMITTAL
3	10/24/05		STANDARD REVS.

N/F
Marjem Mortgage Corporation
Blk. 15443, Pg. 348
SEE PLAN REFERENCED #8 & #C

N/F
Anspach
Blk. 3513, Pg. 84
Blk. 3795, Pg. 275

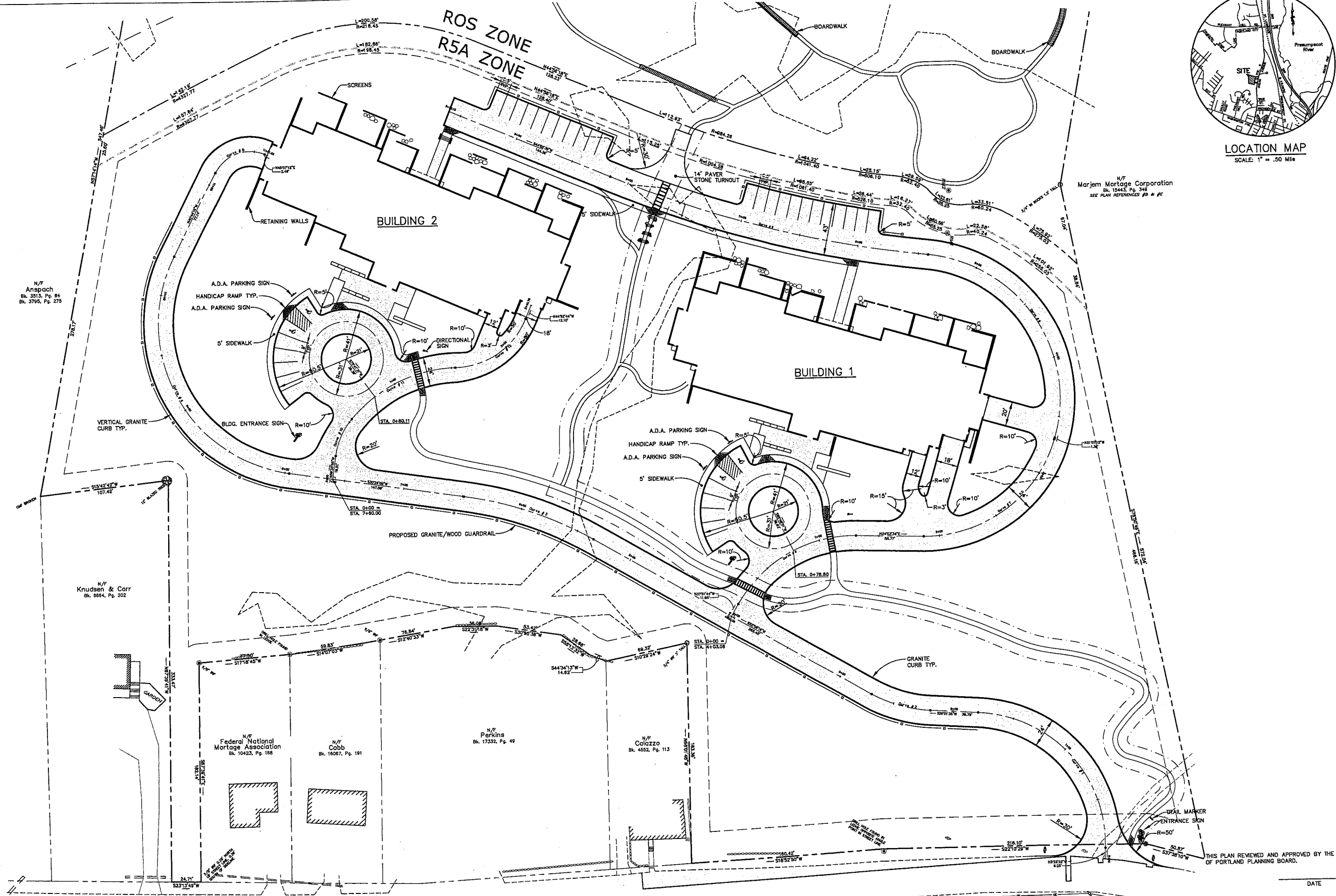
N/F
Knudsen & Carr
Blk. 6884, Pg. 202

N/F
Federal National Mortgage Association
Blk. 10423, Pg. 188

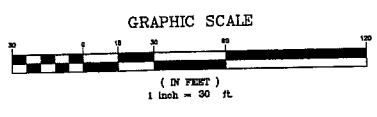
N/F
Cobb
Blk. 16007, Pg. 191

N/F
Perkins
Blk. 17332, Pg. 49

N/F
Colozzo
Blk. 4592, Pg. 113



S CURVE DATA			
CURVE #1 R=110.00' L=170.10' T=107.35' D=88°36'03" PC=0+09.25 PT=1+79.36	CURVE #4 R=125.00' L=237.59' T=174.94' D=108°54'17" PC=7+98.34 PT=10+33.77	CURVE #7 R=110.00' L=144.33' T=84.68' D=75°10'46" PC=1+86.60 PT=3+30.93	CURVE #10 R=60.00' L=33.74' T=17.33' D=32°12'57" PC=0+19.51 PT=0+53.25
CURVE #2 R=110.00' L=50.52' T=25.71' D=26°18'53" PC=2+19.15 PT=2+69.28	CURVE #5 R=120.00' L=47.85' T=29.77' D=85°51'29" PC=11+11.07 PT=11+59.03	CURVE #8 R=120.00' L=209.70' T=143.32' D=100°07'24" PC=3+32.32 PT=5+42.02	CURVE #11 R=118.00' L=100.29' T=53.40' D=48°41'55" PC=0+53.25 PT=1+53.54
CURVE #3 R=300.00' L=113.84' T=57.51' D=21°42'11" PC=5+35.12 PT=6+48.76	CURVE #6 R=110.00' L=118.89' T=65.99' D=81°55'18" PC=0+11.95 PT=1+30.83	CURVE #9 R=970.00' L=273.77' T=137.80' D=18°10'15" PC=5+42.02 PT=8+15.79	CURVE #12 R=65.00' L=75.13' T=42.40' D=61°34'41" PC=1+53.54 PT=2+28.68



SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
□	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
○	15' HIGH 150W H.P.S. LAMPS (7)
○	EXISTING UTILITY POLE
○	PROPOSED UTILITY POLE
---	PROPERTY LINE
---	LIMIT OF WETLANDS
---	EXISTING EDGE OF PAVEMENT
---	NOW OR FORMERLY
---	RAIL FENCE
---	HYDRANT

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

CHAIR _____ DATE _____

SITE PLAN
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

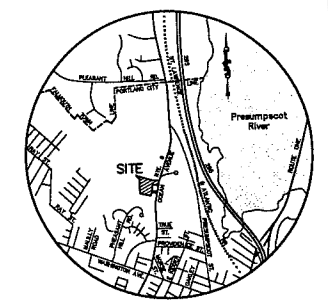
Site
Graves Hill, LLC
10 Jeffrey Lane
Saco, Maine 04072

BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04108, (207) 888-3771

DESIGNED W. Polley	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB NO. 02035
SHEET C-4	

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LOCATION MAP

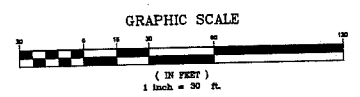
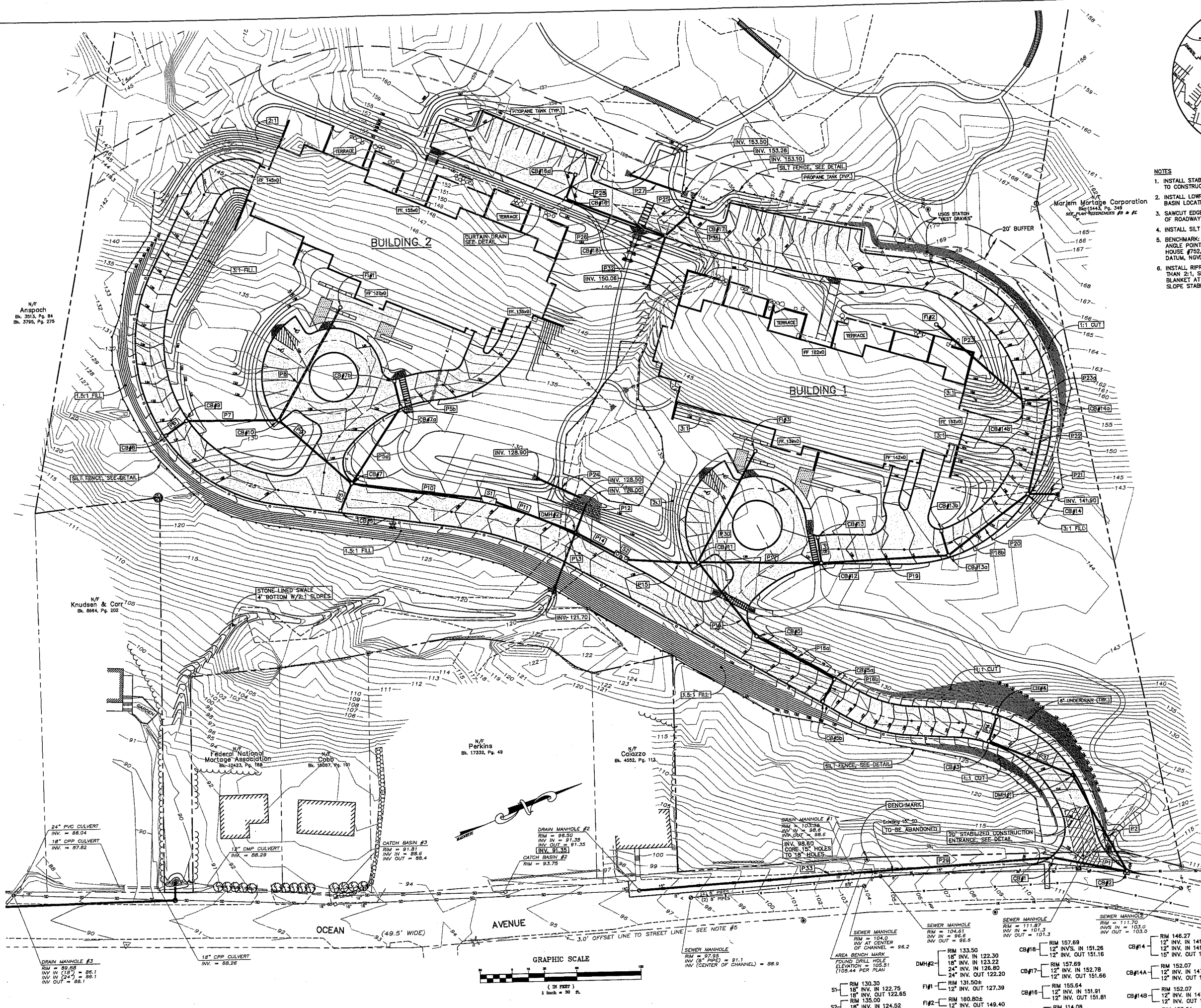
- SCALE: 1" = 50' Mph
- NOTES
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 2. INSTALL LOWPOINT CONTROL BARRIERS AT ALL CATCH BASIN LOCATIONS.
 3. SAWCUT EDGE OF PAVEMENT PRIOR TO PLACEMENT OF ROADWAY PAVEMENT.
 4. INSTALL SILT FENCE PRIOR TO CONSTRUCTION.
 5. BENCHMARK: DRILL HOLE IN LEDGE OPPOSITE ANGLE POINT IN STREET LINE SOUTHERLY OF HOUSE #752, ELEV. 105.51, CITY OF PORTLAND DATUM, NGVD 1929
 6. INSTALL RIPRAP AT ALL SIDE SLOPES GREATER THAN 2:1. SEE DETAIL. INSTALL EROSION CONTROL BLANKET AT SIDESLOPES OF 2:1 AND 3:1. SEE SLOPE STABILIZATION DETAIL.

STORMDRAIN PIPES

- P1 - 18" S.D., L=60', S=0.005'/FT.
- P2 - 12" S.D., L=90', S=0.048'/FT.
- P3 - 12" S.D., L=72', S=0.065'/FT.
- P4 - 12" S.D., L=18', S=0.005'/FT.
- P5 - 12" S.D., L=22', S=0.005'/FT.
- PSA - 12" S.D., L=73', S=0.04'/FT.
- P5B - 12" S.D., L=18', S=0.005'/FT.
- P6 - 12" S.D., L=74', S=0.03'/FT.
- P7 - 12" S.D., L=74', S=0.03'/FT.
- P8 - 12" S.D., L=105', S=0.02'/FT.
- P9 - 15" S.D., L=76', S=0.023'/FT.
- P10 - 18" S.D., L=108', S=0.005'/FT.
- P11 - 18" S.D., L=70', S=0.005'/FT.
- P12 - 24" S.D., L=24', S=0.05'/FT.
- P13 - 24" S.D., L=50', S=0.01'/FT.
- P14 - 18" S.D., L=38', S=0.05'/FT.
- P15 - 18" S.D., L=54', S=0.005'/FT.
- P16 - 12" S.D., L=78', S=0.005'/FT.
- P16A - 12" S.D., L=73', S=0.005'/FT.
- P16B - 12" S.D., L=18', S=0.005'/FT.
- P17 - 18" S.D., L=100', S=0.0815'/FT.
- P18 - 12" S.D., L=18', S=0.005'/FT.
- P18B - 12" S.D., L=18', S=0.005'/FT.
- P19B - 12" S.D., L=104', S=0.039'/FT.
- P20 - 15" S.D., L=80', S=0.055'/FT.
- P21 - 12" S.D., L=20', S=0.005'/FT.
- P22 - 12" S.D., L=80', S=0.07'/FT.
- P23 - 12" S.D., L=95', S=0.018'/FT.
- P23A - 12" S.D., L=18', S=0.005'/FT.
- P24 - 18" S.D., L=40', S=0.01'/FT.
- P25 - 12" S.D., L=16', S=0.020'/FT.
- P28 - 12" S.D., L=100', S=0.005'/FT.
- P27 - 12" S.D., L=48', S=0.005'/FT.
- P28 - 12" S.D., L=18', S=0.005'/FT.
- P29 - 18" S.D., L=168', S=0.035'/FT.
- P30 - 12" S.D., L=100', S=0.09'/FT.
- P31 - 12" S.D., L=20', S=0.023'/FT.
- P32 - 12" S.D., L=43', S=0.025'/FT.
- P33 - 18" S.D., L=176', S=0.0412'/FT.

STORMDRAIN STRUCTURES

- CB#1 - RIM 111.30, 18" INV. IN 105.27, 18" INV. OUT 105.07
- CB#2 - RIM 111.5±, Ex. 15" IN 105.1±, 12" INV. IN 107.50, 12" INV. OUT 105.57, Ex. 18" INV. OUT 105.1±, 18" INV. OUT 105.47
- CB#3 - RIM 118.06, 12" INV. IN 114.41, 12" INV. OUT 114.31
- CB#4 - RIM 118.06, 12" INV. OUT 114.50
- CB#5 - RIM 133.81, 12" INV. IN 125.37, 12" INV. OUT 125.27
- CB#5A - RIM 129.92, 12" INV. IN 125.83, 12" INV. OUT 125.73
- CB#5B - RIM 129.92, 12" INV. OUT 125.92
- CB#6 - RIM 127.14, 12" INV. OUT 123.50
- CB#7 - RIM 127.14, 12" INV. IN 123.39, 15" INV. IN 123.39, 12" INV. IN 123.39, 15" INV. OUT 123.29
- CB#7A - RIM 131.23, 12" INV. IN 126.41, 12" INV. OUT 126.31
- CB#7B - RIM 130.50, 12" INV. OUT 126.50
- CB#8 - RIM 131.23, 12" INV. OUT 127.70
- CB#9 - RIM 131.23, 12" INV. IN 127.61, 12" INV. OUT 127.51
- CB#10 - RIM 129.30, 12" INV. IN 125.29, 12" INV. IN 125.29, 15" INV. OUT 125.19
- CB#11 - RIM 136.20, 12" INV. IN 124.89, 12" INV. IN 124.89, 18" INV. IN 124.89, 18" INV. OUT 124.79
- CB#12 - RIM 137.05, 12" INV. IN 133.14, 12" INV. IN 141.80, 12" INV. IN 141.80, 15" INV. OUT 141.70
- CB#13 - RIM 137.05, 12" INV. OUT 133.23
- CB#13A - RIM 141.29, 12" INV. IN 137.30, 15" INV. IN 137.30, 15" INV. OUT 137.20
- CB#13B - RIM 141.29, 12" INV. OUT 137.39
- CB#14 - RIM 146.27, 12" INV. IN 141.80, 12" INV. IN 141.80, 15" INV. OUT 141.70
- CB#14A - RIM 152.07, 12" INV. IN 147.50, 12" INV. OUT 147.40
- CB#14B - RIM 152.07, 12" INV. IN 147.50, 12" INV. OUT 147.59
- CB#16A - RIM 155.64, 12" INV. OUT 152.00



NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF SUBMITTAL
2	10/24/05	STORMDRAIN REVS.

BH2M
 Barry • Huff • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 25 State Street, Portland, Maine 04103, (207) 859-2772

FOR:
 Graves Hill Land Company, LLC
 300 Main Street, Portland, ME 04102

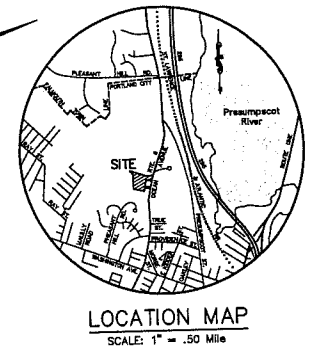
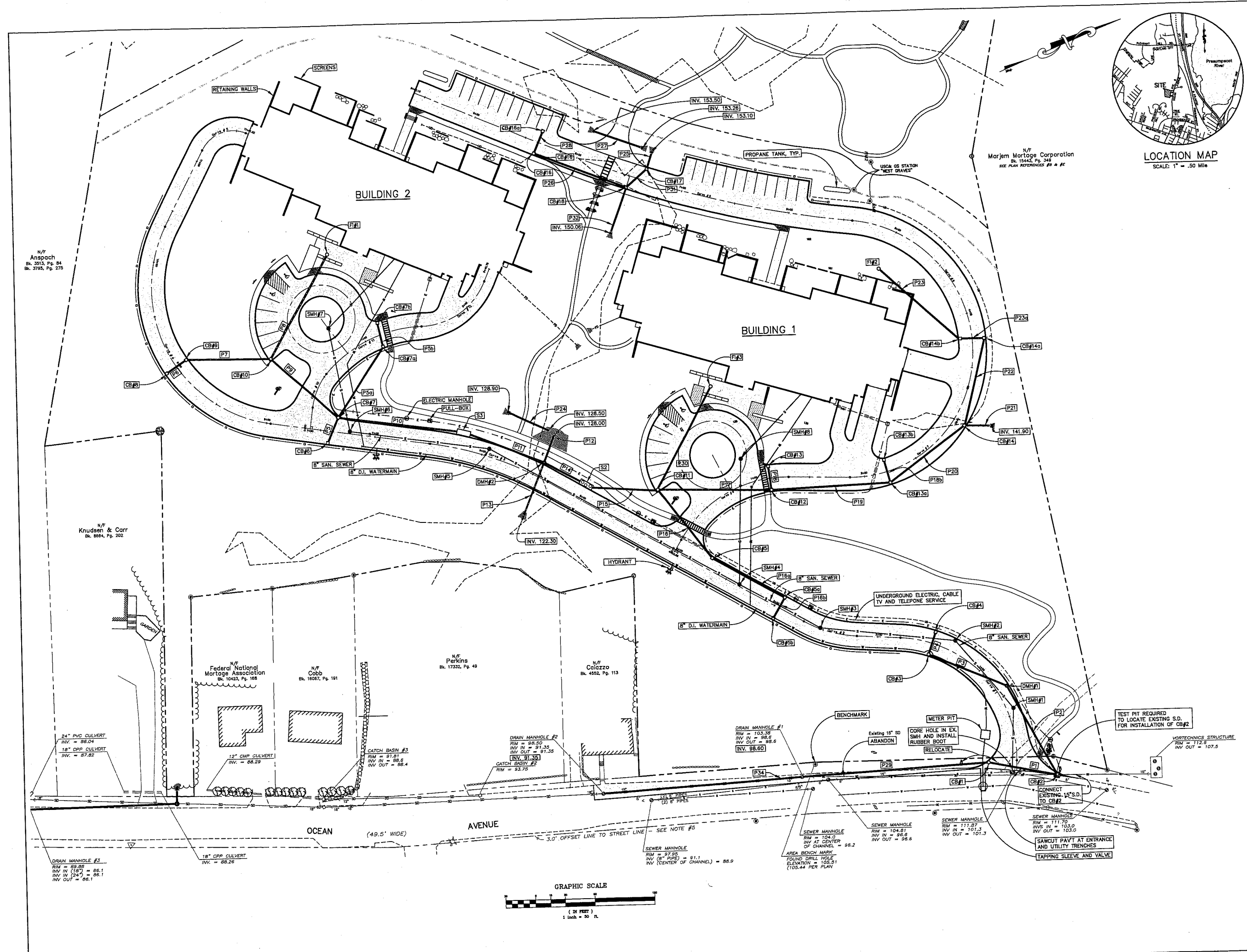
SITE GRADING
 GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED W. Pelkey	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Bery	JOB. NO. 02055

SHEET
C-5

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NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMWATER REVS.

N/F Marjani Mortgage Corporation
Bl. 15445, Pg. 248
SEE PLAN REFERENCES #8 & #8

N/F Anspach
Bl. 3513, Pg. 84
Bl. 3793, Pg. 275

N/F Knudsen & Carr
Bl. 884, Pg. 202

N/F Federal National Mortgage Association
Bl. 10423, Pg. 168

N/F Cobb
Bl. 16087, Pg. 191

N/F Perkins
Bl. 17332, Pg. 49

N/F Colizzo
Bl. 4552, Pg. 113

BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04103 (207) 859-3771

FOR
Greene Hill, LLC
151 Liberty Lane
Saco, Maine 04072

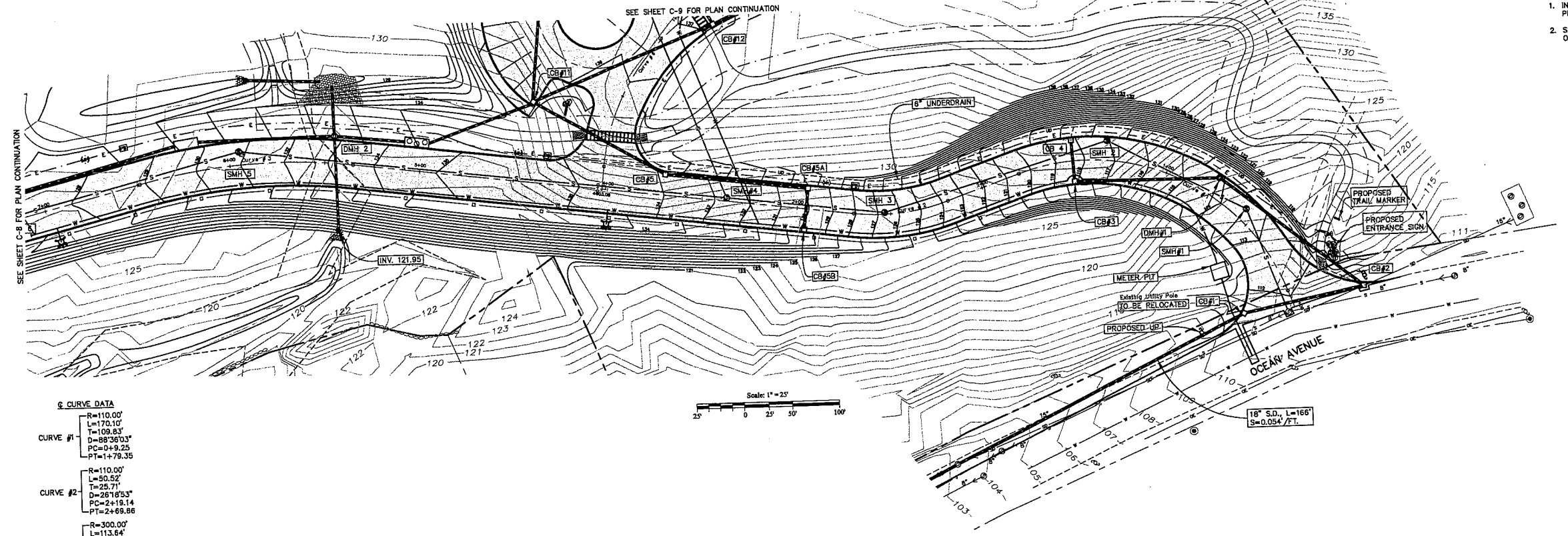
UTILITY PLAN
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED W. Peabody	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB NO. 02055

SHEET
C-6

REPRODUCTION OR USE OF THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF BH2M IS PROHIBITED

2002-w\020555-ra.pand\dwg\Prof A-1.dwg, OI/06/2006 12:36:36 PM

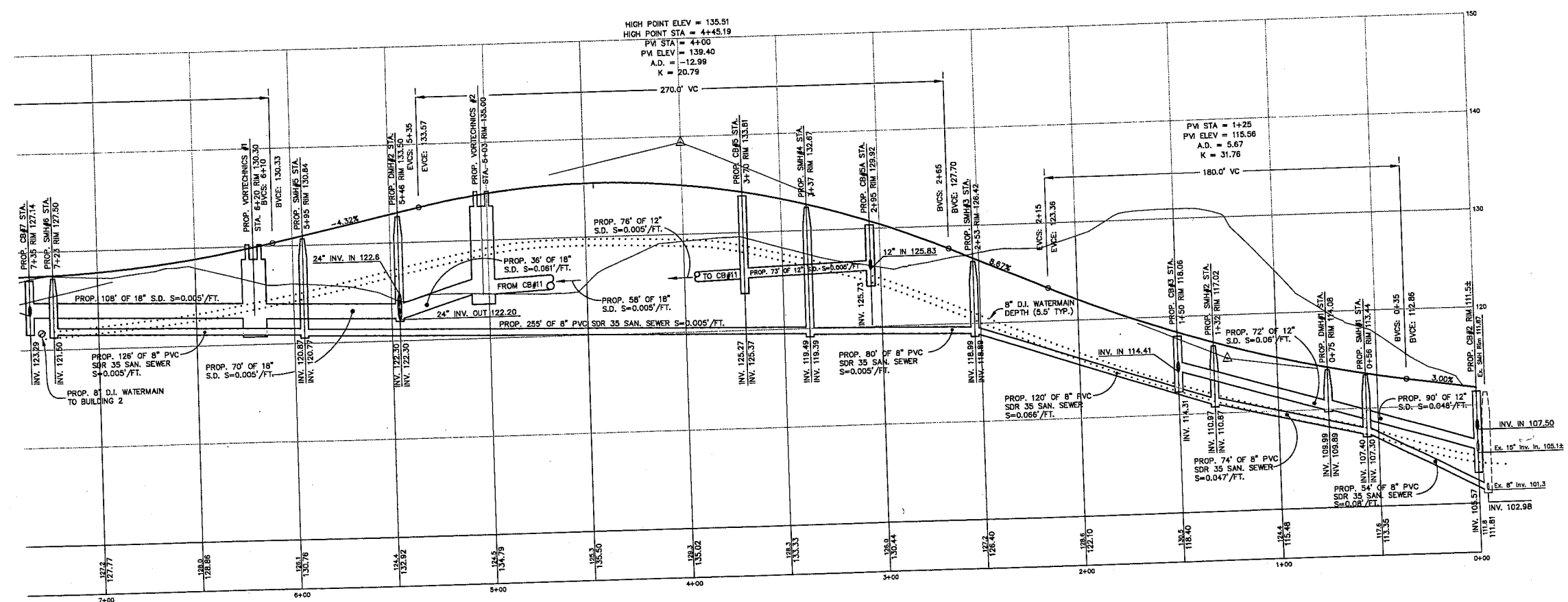


- LEGEND**
- | SYMBOL | DESCRIPTION |
|--------|---------------------------|
| --- | PROPOSED STORM DRAIN |
| --- | EXISTING CONTOUR |
| --- | PROPOSED CONTOUR |
| --- | OVERHEAD ELECTRIC |
| --- | UTILITY POLE |
| --- | EXISTING EDGE OF PAVEMENT |
| --- | EXISTING STORM DRAIN |
- NOTES:**
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 - SAWCUT EDGE OF PAVT PRIOR TO PLACEMENT OF PROPOSED BITUMINOUS PAVEMENT.

NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STANDARD REVS.

CURVE DATA

CURVE #	R	L	T	D	PC	PT
1	110.00'	170.10'	109.83°	68°36'03"	0+9.25	1+79.35
2	110.00'	50.52'	25.71°	28°18'53"	2+19.14	2+69.86
3	300.00'	113.64'	74.94°	21°42'11"	5+35.11	6+48.75



BH2M
Berry • Huff • McDaniel • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 Shaw Street, Gering, Nebraska 68038 (402) 839-2724

FOR
Graves Hill Land Company, LLC
16 Tillingham Court
Bacon, Nebraska 68002

PLAN & PROFILE A
Sta. 0+00 TO 6+00
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED W. Pelley	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-7

REPRODUCTION OR HEAVY USE OF THIS DOCUMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF BH2M IS PROHIBITED.

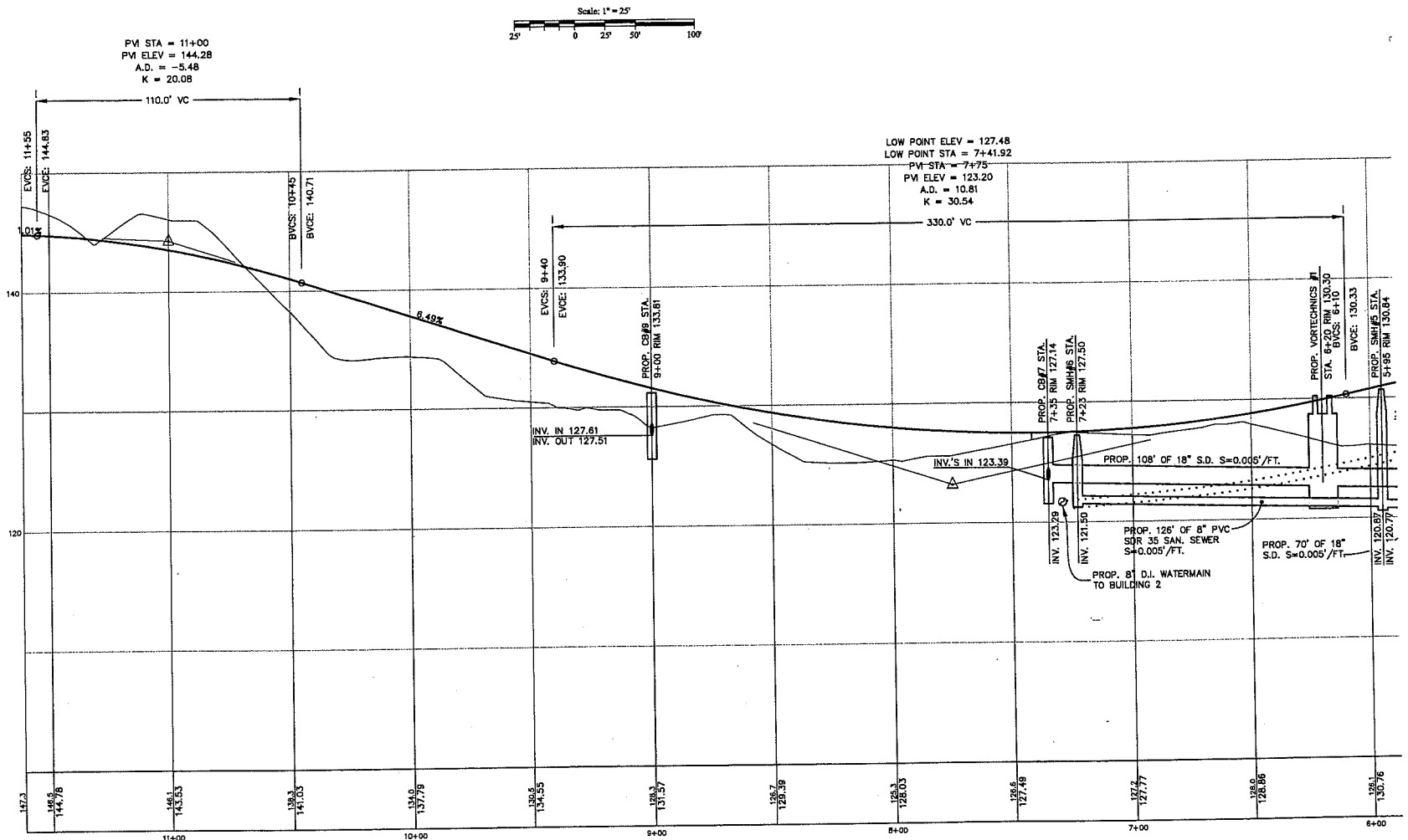
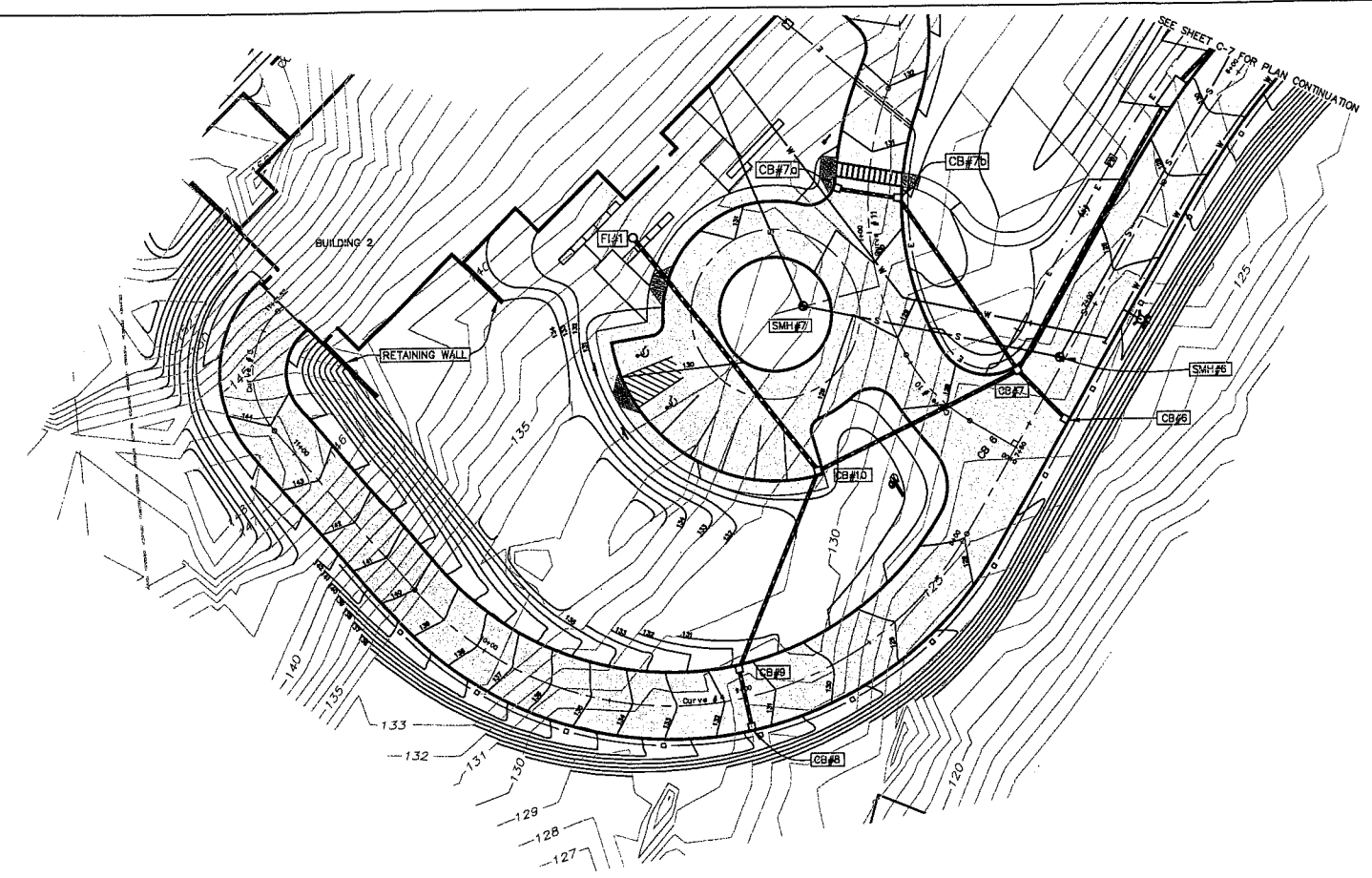
G:\2002-w\02055-no pond\dwg\Prof A-11.dwg, Cl / 06 / 2006 12:57:50 PM



S CURVE DATA

CURVE #4
 R=125.00'
 L=237.59'
 T=174.94'
 D=108°54'17"
 PC=7+58.34
 PT=10+33.93

CURVE #5
 R=32.00'
 L=47.95'
 T=29.77'
 D=85°51'28"
 PC=11+11.07
 PT=11+59.02



PROFILE
 SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	INITIAL
2	3/29/05	DATE OF REVISION	INITIAL
3	10/24/05	STANDARD REV.	

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BH2M
 Berry • Huff • MacDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 859-8771

FOR
 Graves Hill Land Company, LLC
 16 Fiddlers Lane
 Scarborough, Maine 04072

PLAN & PROFILE A
 Sta. 6+00 to 11+79.48
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED W. Peirce	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-8

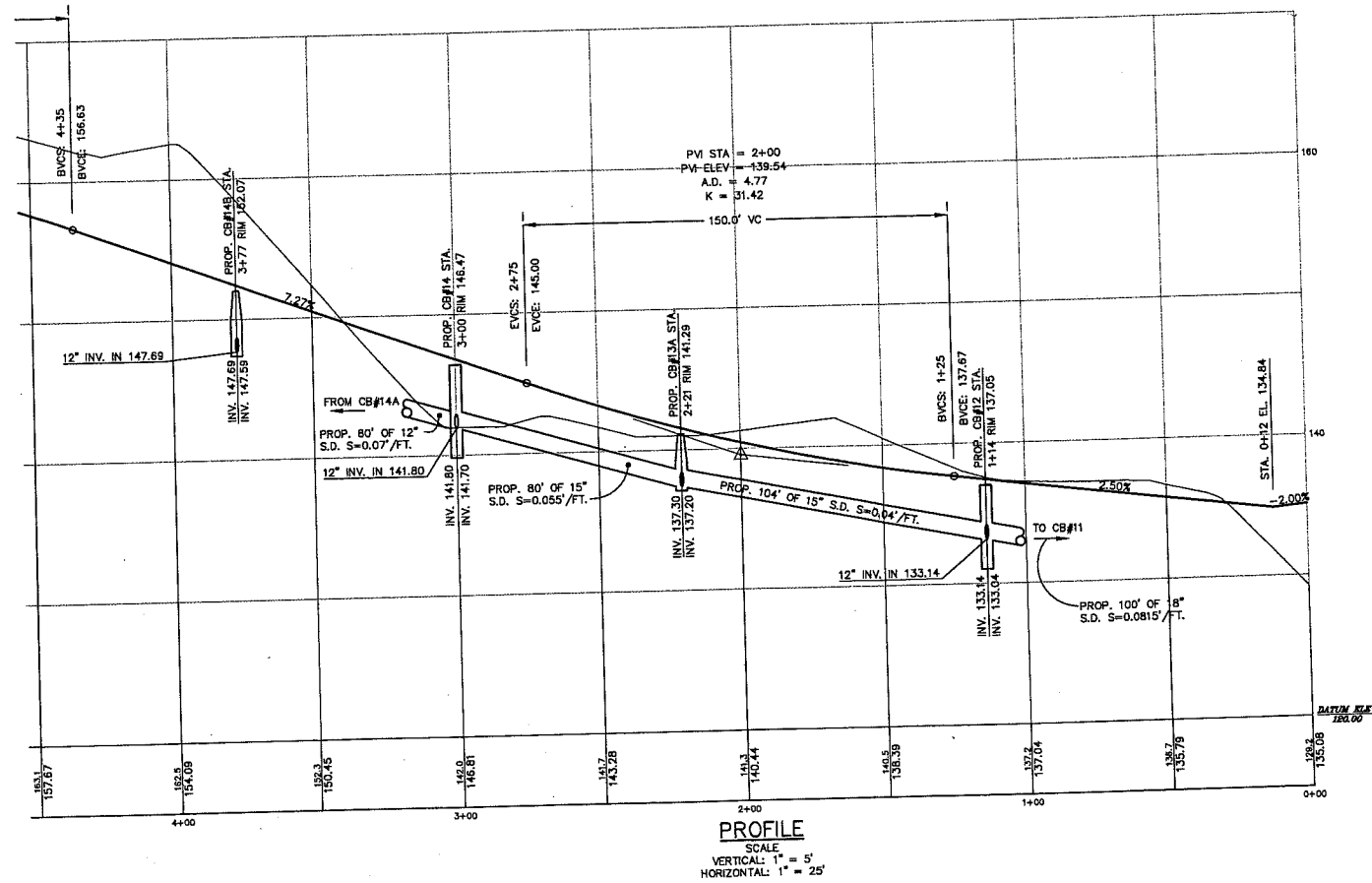
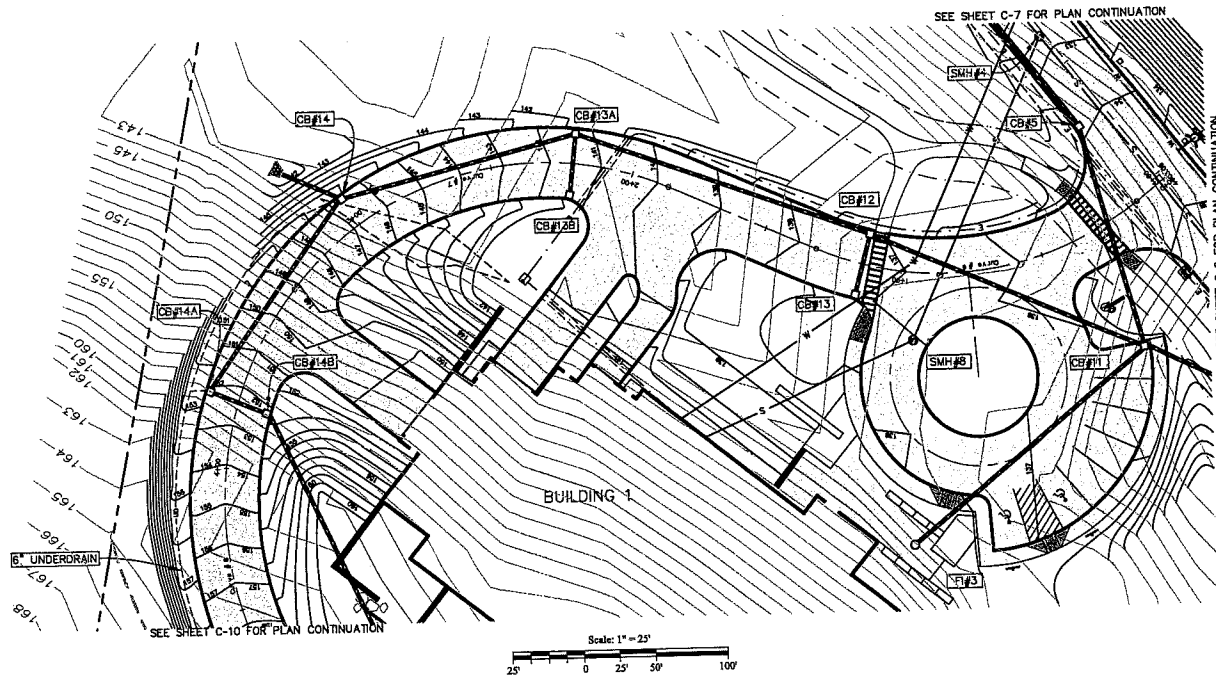
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9. CURVE DATA

CURVE #6	R=110.00'
	L=118.88'
	Δ=65.99°
	D=61°55'16"
	PO=0+11.95
	PT=1+30.83
CURVE #7	R=110.00'
	L=144.33'
	T=84.68'
	D=75°10'48"
	PC=1+38.60
	PT=3+30.93
CURVE #8	R=120.00'
	L=143.32'
	T=137.80'
	D=100°07'24"
	PC=3+32.32
	PT=4+75.64



NO.	DATE	REVISION DESCRIPTION
1	3/20/05	DATE OF ISSUE
2	3/20/05	DATE OF RE-SUBMITTAL
3	10/24/05	STANDARD REV.

BH2M
 Barry • Hiff • McDonald • Adelman Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04638, (207) 839-3771

FOR
 Graves Hill Community, LLC
 100 Liberty Lane
 Scarborough, Maine 04072

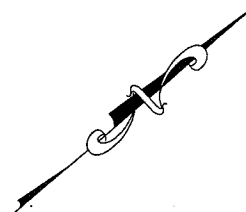
PLAN & PROFILE B
 Sta. 0+00 to 4+50
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	W. Pelkey	DATE	April 2005
DRAWN	Dept.	SCALE	As Noted
CHECKED	L. Berry	JOB. NO.	02055

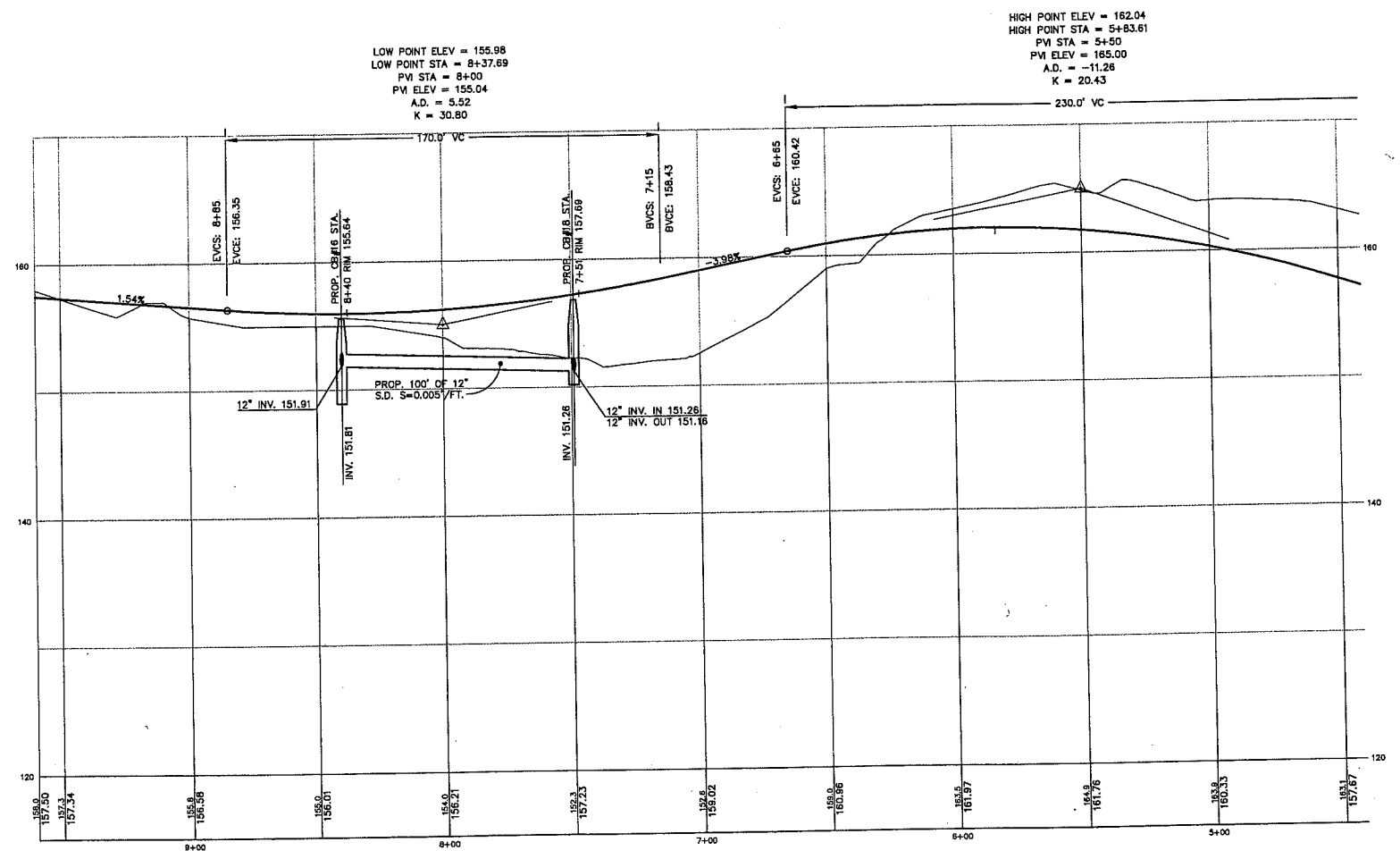
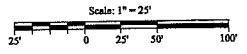
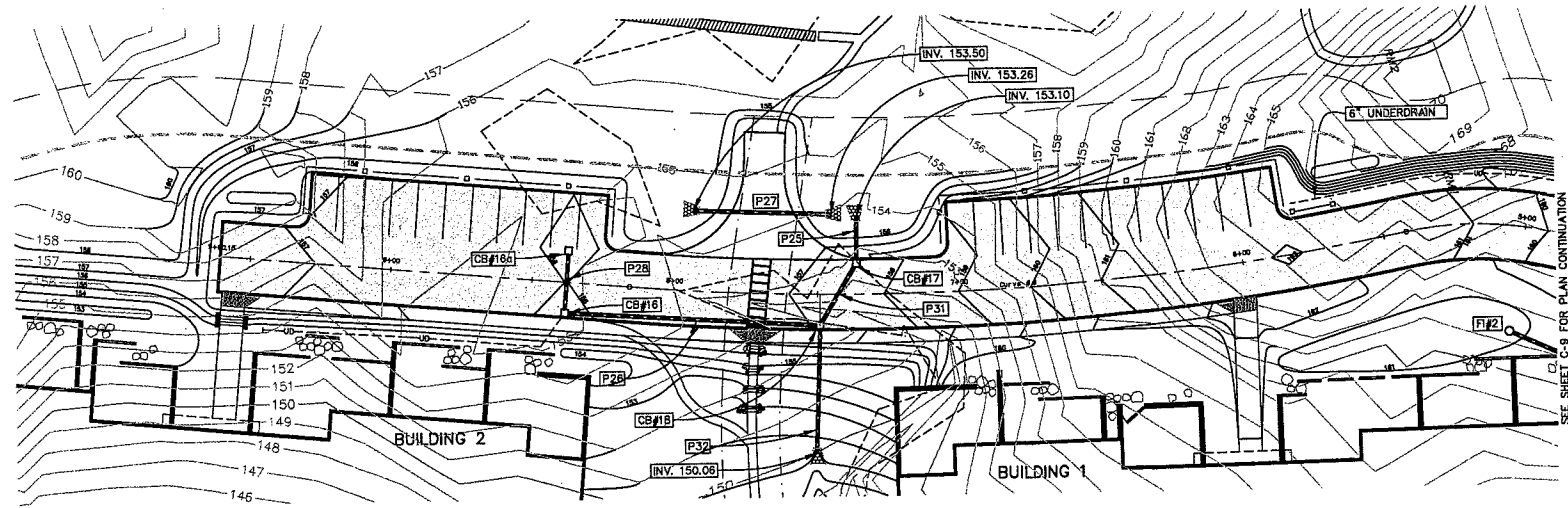
SHEET
C-9

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G:\2002-w\02055-no para\dwg\Prof B-1.dwg, OI / 06 / 2006 12:40:25 PM



Q CURVE DATA
 R=970.00'
 L=273.77'
 T=137.80'
 D=181°01'5"
 PC=4+75.84
 PT=7+49.41



PROFILE
 SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	FOR SUBMITTAL
2	12/24/05	STANDARD REV.	

BH2M
 Berry • Huff • MacDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 839-8711

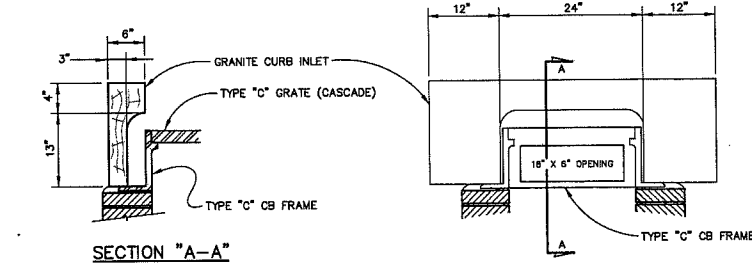
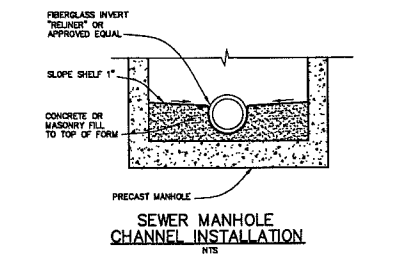
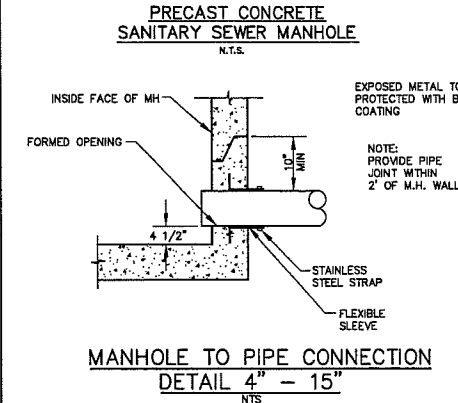
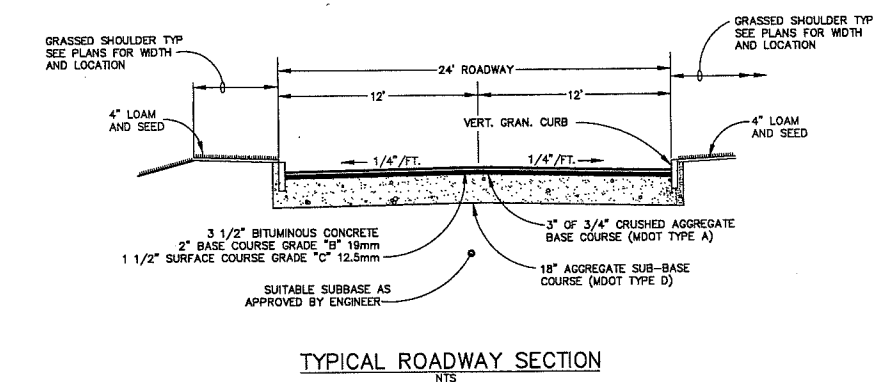
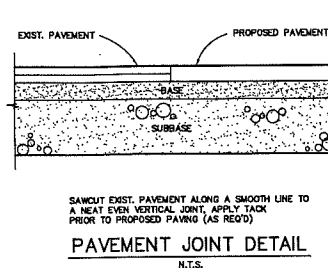
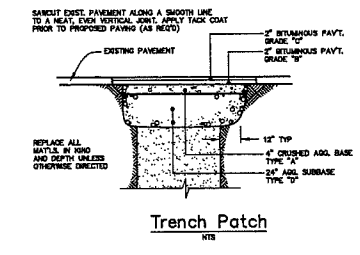
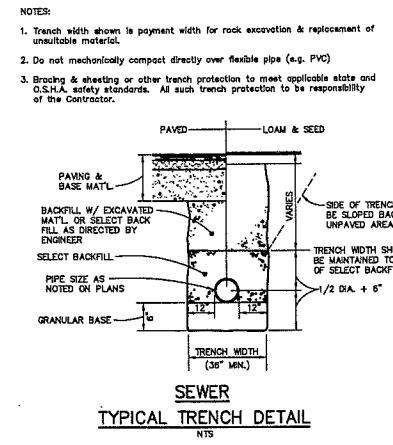
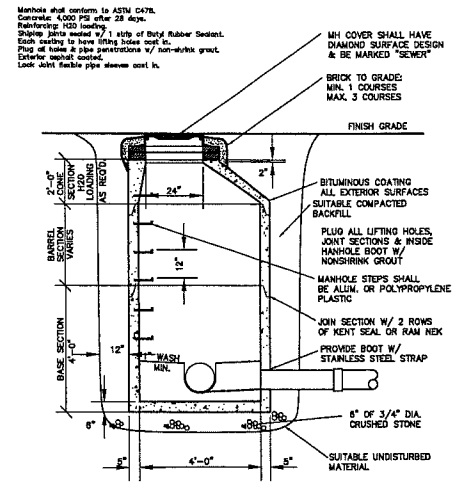
FOR
 Graves Hill Land Company, LLC
 16 Tibbety Lane
 Scarborough, Maine 04072

PLAN & PROFILE B
 Sta. 4+50 to 9+60.17
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

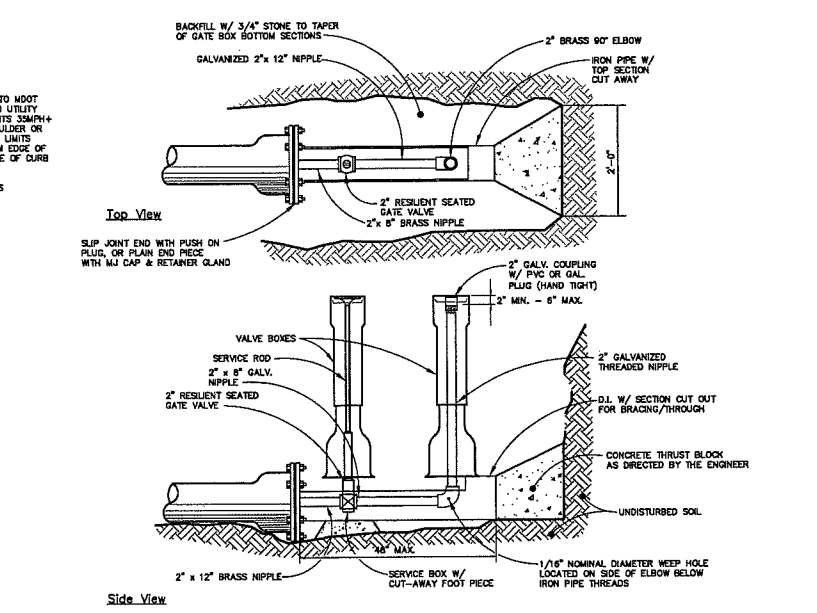
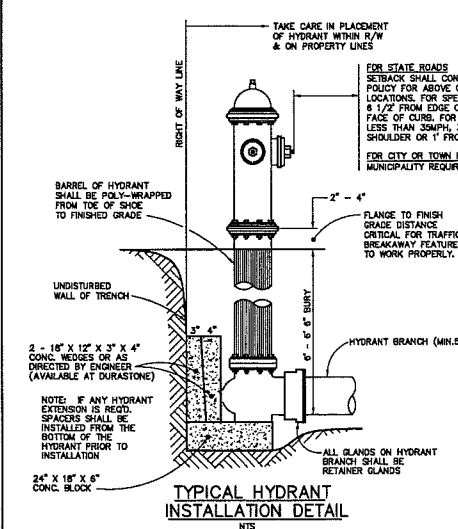
DESIGNED	DATE
W. Pelkey	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
L. Berry	02855

SHEET
C-10

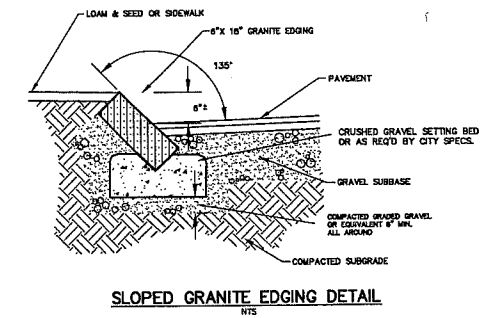
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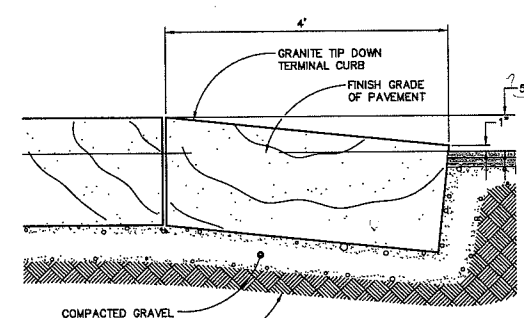
CURB INLET DETAIL
NTS



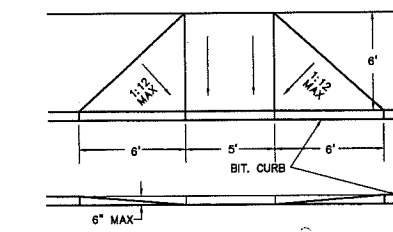
STANDARD 2" BLOW OFF
NTS



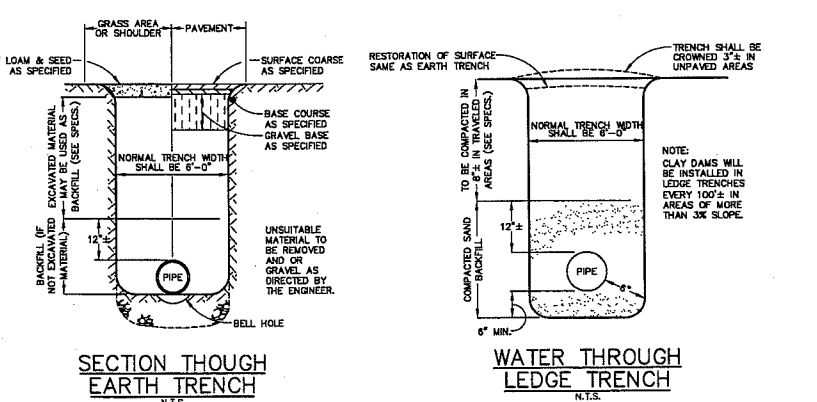
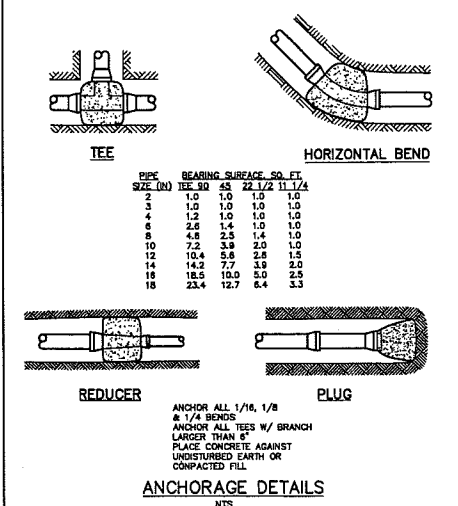
SLOPED GRANITE EDGING DETAIL
NTS



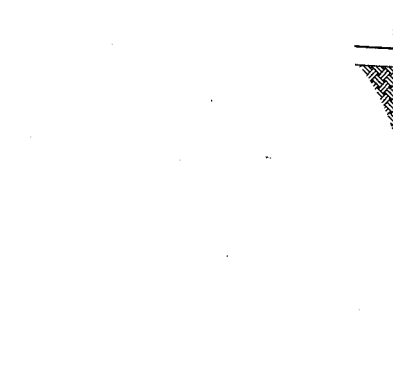
GRANITE TIP DOWN TERMINAL CURB
NTS



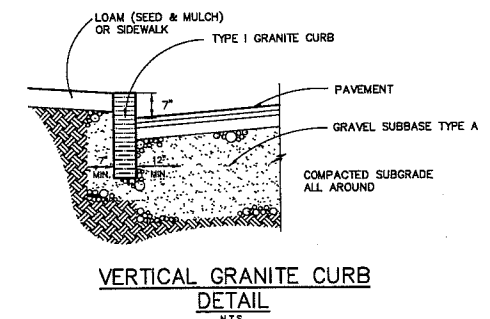
WHEELCHAIR RAMP DETAIL
NTS



SECTION THROUGH EARTH TRENCH
NTS



WATER THROUGH LEDGE TRENCH
NTS



VERTICAL GRANITE CURB DETAIL
NTS

NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/29/05	STANDARD REVISION

BH2M
Berry • Huff • McDevitt • Mulligan, Inc.
ENGINEERS • SURVEYORS • PLANNERS

FOR
Graves Hill Land Company, LLC
800 Main Street
Saco, Maine 04072

SITE DETAILS
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED W. Polley	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-12

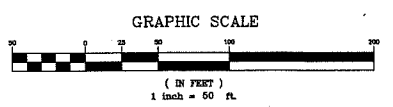
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G:\2002-w\02055-no pond\dwg\Site Details.dwg, 01/06/2006 12:42:56 PM

G:\2002-w\202055-no pond\dwg\PRE.dwg, 01/06/2006 12:55:07 PM

- NOTES:
1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COULOMBE INC. SACO, ME.
 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES OGDUN, ME.
 3. BENCHMARK= 105.51 NGVD 1929
 4. SOILS: CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING -LYMAN (ENTIRE SITE).

SYMBOL	DESCRIPTION
[Symbol]	SUBCATCHMENT AREA
[Symbol]	REACH
[Symbol]	POND
[Symbol]	EXISTING EDGE OF PAVEMENT
[Symbol]	EXISTING OVERHEAD ELECTRIC
[Symbol]	EXISTING STORM DRAIN
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING SEWER MANHOLE
[Symbol]	EXISTING WATER MAIN VALVE
[Symbol]	IRON PIPE FOUND/IRON ROD FOUND
[Symbol]	PROPERTY LINE
[Symbol]	EXISTING SEWER
[Symbol]	LIMIT OF WETLANDS
[Symbol]	TIME OF CONCENTRATION ROUTE
[Symbol]	EXISTING CONTOUR
[Symbol]	DRAINAGE BOUNDARY
[Symbol]	FLOW DIRECTION



NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMWATER REV.

BH2M
 Barry • Huff • MacDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 Stone Street, Guilford, Maine 04303, (207) 839-3771

POB
 Graves Hill Land Company, LLC
 16 Tillingham Street
 Scarborough, Maine 04072

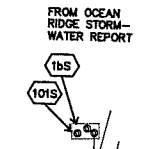
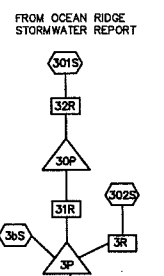
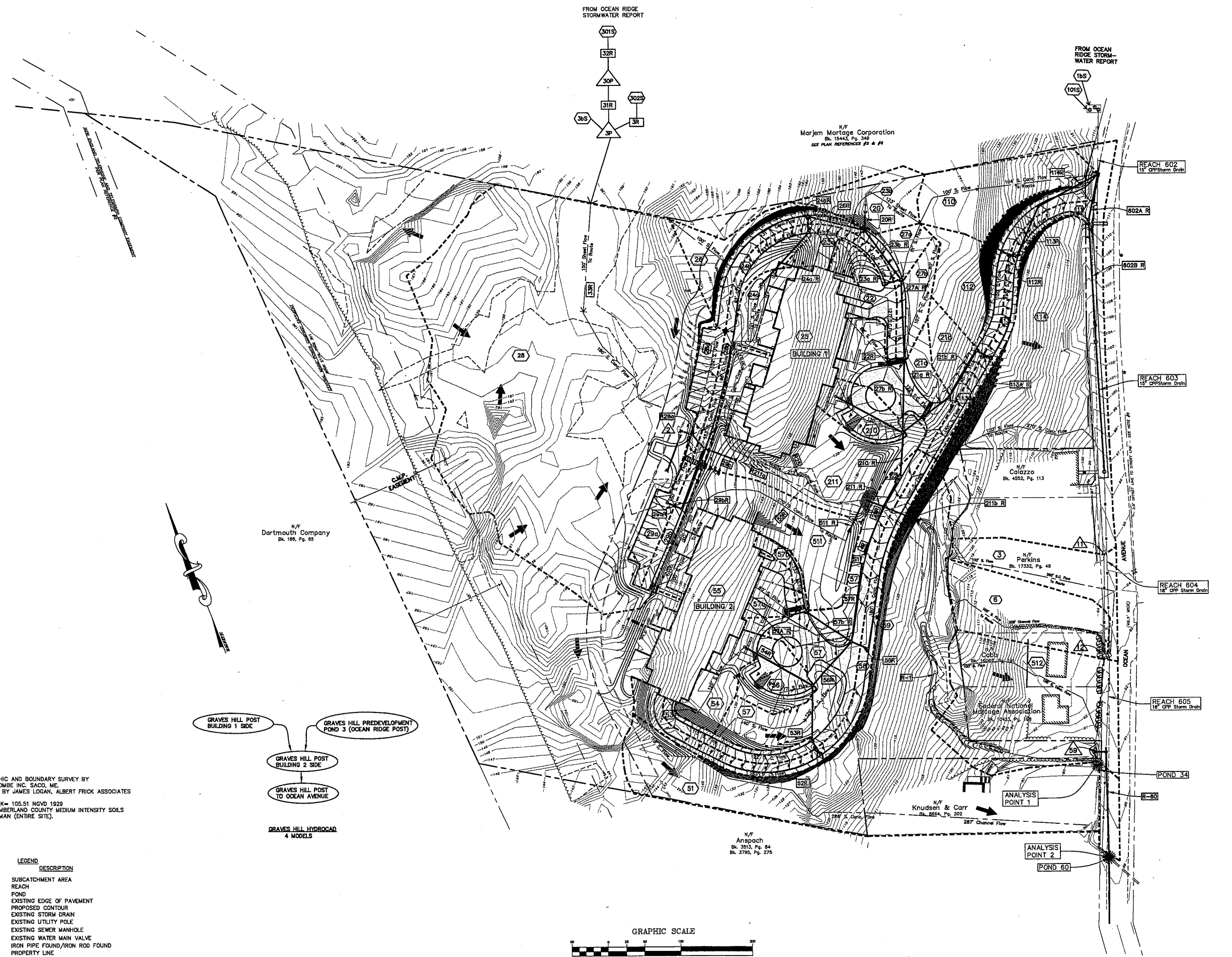
PRE DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE Mar-2005
DRAWN E. Vallerio	SCALE 1" = 50'
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-13

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N/F
Marjem Mortgage Corporation
Blk. 15443, Pg. 348
SEE PLAN REFERENCES #2 & #4

N/F
Dartmouth Company
Blk. 166, Pg. 85

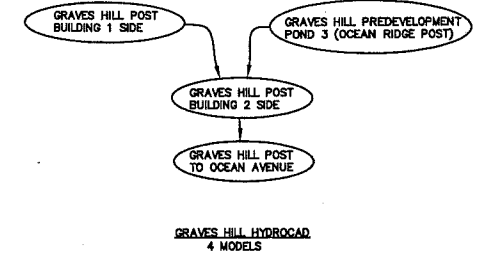
N/F
Calazzo
Blk. 4552, Pg. 115

N/F
Perkins
Blk. 17332, Pg. 49

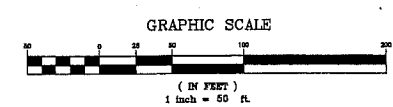
N/F
Anapach
Blk. 3513, Pg. 84
Blk. 3795, Pg. 275

N/F
Knudsen & Carr
Blk. 8254, Pg. 202

- NOTES:
1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COULMBE INC. SACO, ME.
 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES GORHAM, ME.
 3. BENCHMARK= 105.51 NGVD 1929
 4. SOILS: CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING -LYMAN (ENTIRE SITE).



SYMBOL	DESCRIPTION
[Symbol]	SUBCATCHMENT AREA
[Symbol]	REACH
[Symbol]	POND
[Symbol]	EXISTING EDGE OF PAVEMENT
[Symbol]	PROPOSED CONTOUR
[Symbol]	EXISTING STORM DRAIN
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING SEWER MANHOLE
[Symbol]	EXISTING WATER MAIN VALVE
[Symbol]	IRON PIPE FOUND/IRON ROD FOUND
[Symbol]	PROPERTY LINE
[Symbol]	EXISTING SEWER
[Symbol]	LIMIT OF WETLANDS
[Symbol]	TIME OF CONCENTRATION ROUTE
[Symbol]	EXISTING CONTOUR
[Symbol]	DRAINAGE BOUNDARY
[Symbol]	FLOW DIRECTION



NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE
2	3/29/05		DATE OF RE-SUBMITAL
3	10/24/05		STORMWATER REVS.

BH2M
 Berry • Huff • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Corham, Maine 04038, (207) 859-2771

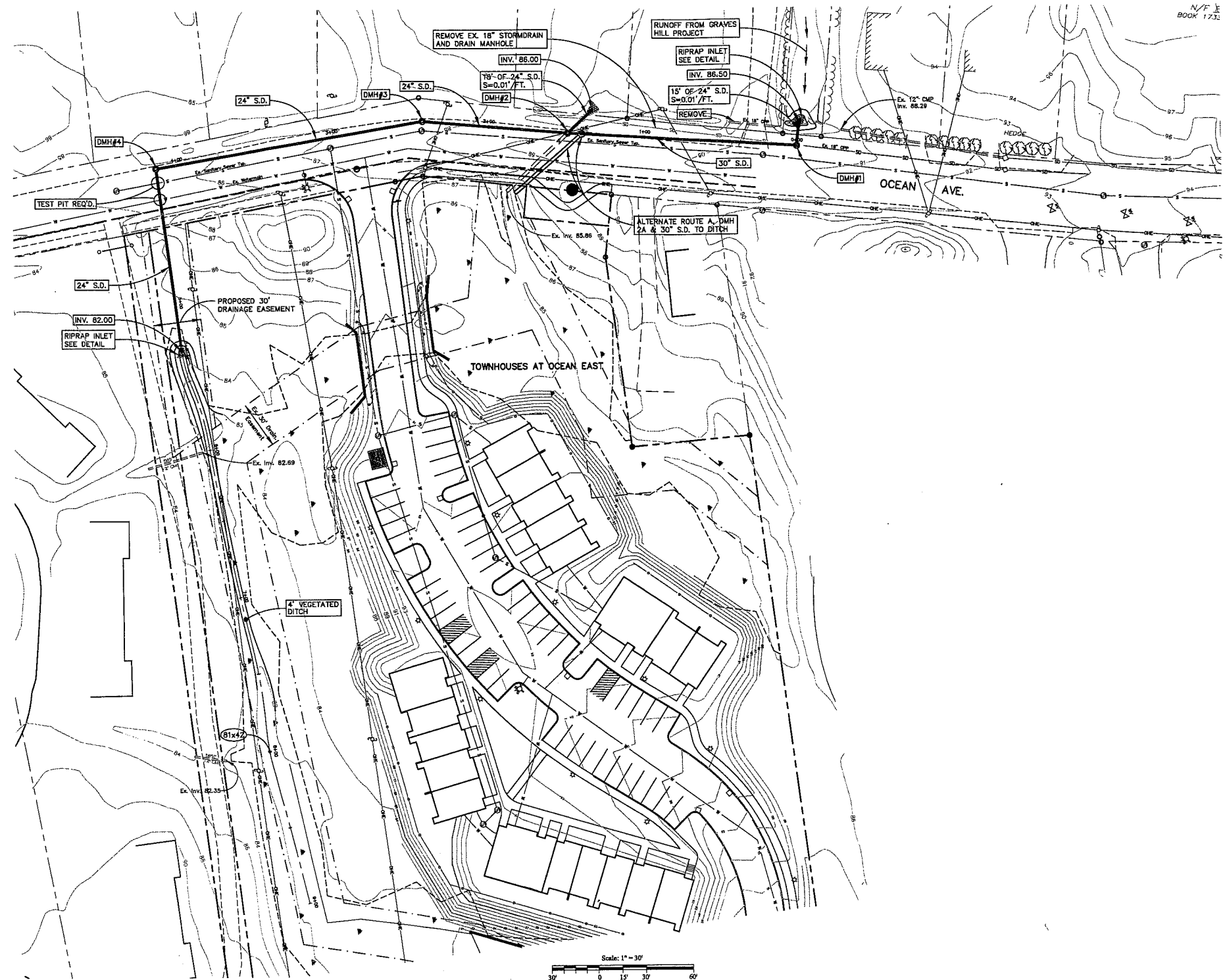
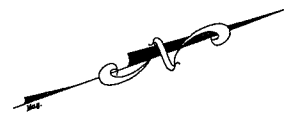
FOR
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 Saco, Maine 04072

POST DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE Mar. 2005
DRAWN Depc	SCALE 1" = 50'
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-14
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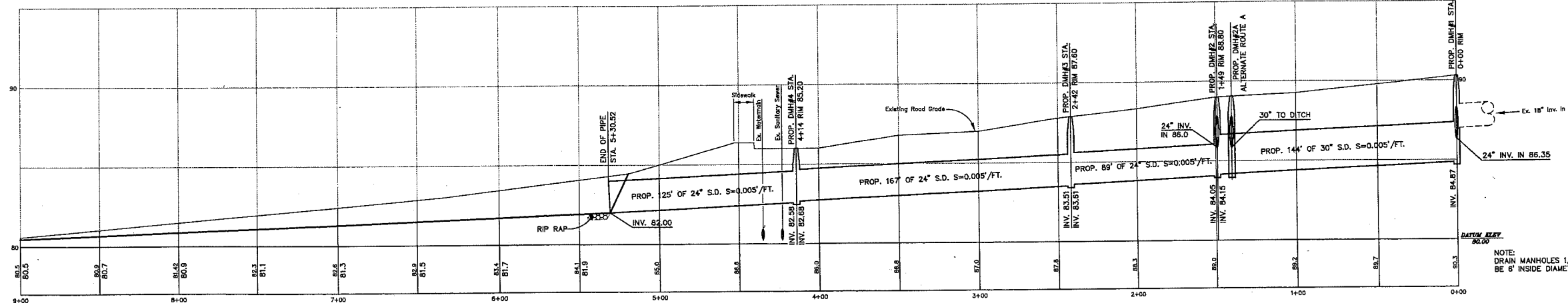
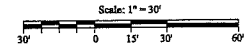
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N/F E
BOOK 173

SYMBOL	DESCRIPTION
—	PROPOSED STORM DRAIN
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	OVERHEAD ELECTRIC
---	UTILITY POLE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING STORM DRAIN
---	EXISTING STORM DRAIN

NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMDRAIN KEYS
4	12/29/05	ALTERNATE ROUTE A



PROFILE
SCALE
VERTICAL: 1" = 3'
HORIZONTAL: 1" = 30'

BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Conklin, Maine 04428, (207) 839-8774

FOR
Cheves Hill Land Company, LLC
110 Main Street
Bach, Maine 04978

STORMDRAIN EXTENSION
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED L. Berry	DATE Sept. 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-15

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AH. 5

GRAVES HILL

OCEAN AVENUE
PORTLAND, MAINE

A 98 UNIT CONDOMINIUM PROJECT

For
GRAVES HILL LAND COMPANY, LLC
16 TIFFANY LANE
SACO, MAINE

PLAN INDEX

- C-1 PROJECT INFORMATION
- C-2 EXISTING CONDITIONS
- C-3 SUBDIVISION PLAN
- C-3A PHASE I PLAN
- C-3B PHASE II PLAN
- C-4 SITE PLAN
- C-5 GRADING PLAN
- C-6 UTILITY PLAN
- C-7 PLAN & PROFILE SHEET- ROAD A STA 0+00 TO 6+00
- C-8 PLAN & PROFILE SHEET- ROAD A STA 6+00 TO 11+79.48
- C-9 PLAN & PROFILE SHEET- ROAD B STA 0+00 TO 4+50
- C-10 PLAN & PROFILE SHEET- ROAD B STA 4+50 TO 9+60.70
- C-11 EROSION CONTROL AND STORMDRAIN DETAILS
- C-12 SITE DETAILS
- C-13 PREDEVELOPMENT DRAINAGE PLAN
- C-14 POST DEVELOPMENT DRAINAGE PLAN
- C-15 DOWNSTREAM DRAINAGE PLAN

OCTOBER 2005

BH2M

Berry * Huff * McDonald * Milligan Inc.

ENGINEERS * SURVEYORS * PLANNERS

28 State Street, Gorham, Maine 04038, (207) 839-2771

AH. 5

GRAVES HILL

OCEAN AVENUE
PORTLAND, MAINE

A 98 UNIT CONDOMINIUM PROJECT

For
GRAVES HILL LAND COMPANY, LLC
16 TIFFANY LANE
SACO, MAINE

PLAN INDEX

C-1	PROJECT INFORMATION
C-2	EXISTING CONDITIONS
C-3	SUBDIVISION PLAN
C-3A	PHASE I PLAN
C-3B	PHASE II PLAN
C-4	SITE PLAN
C-5	GRADING PLAN
C-6	UTILITY PLAN
C-7	PLAN & PROFILE SHEET- ROAD A STA 0+00 TO 6+00
C-8	PLAN & PROFILE SHEET- ROAD A STA 6+00 TO 11+79.48
C-9	PLAN & PROFILE SHEET- ROAD B STA 0+00 TO 4+50
C-10	PLAN & PROFILE SHEET- ROAD B STA 4+50 TO 9+60.70
C-11	EROSION CONTROL AND STORMDRAIN DETAILS
C-12	SITE DETAILS
C-13	PREDEVELOPMENT DRAINAGE PLAN
C-14	POST DEVELOPMENT DRAINAGE PLAN
C-15	DOWNSTREAM DRAINAGE PLAN

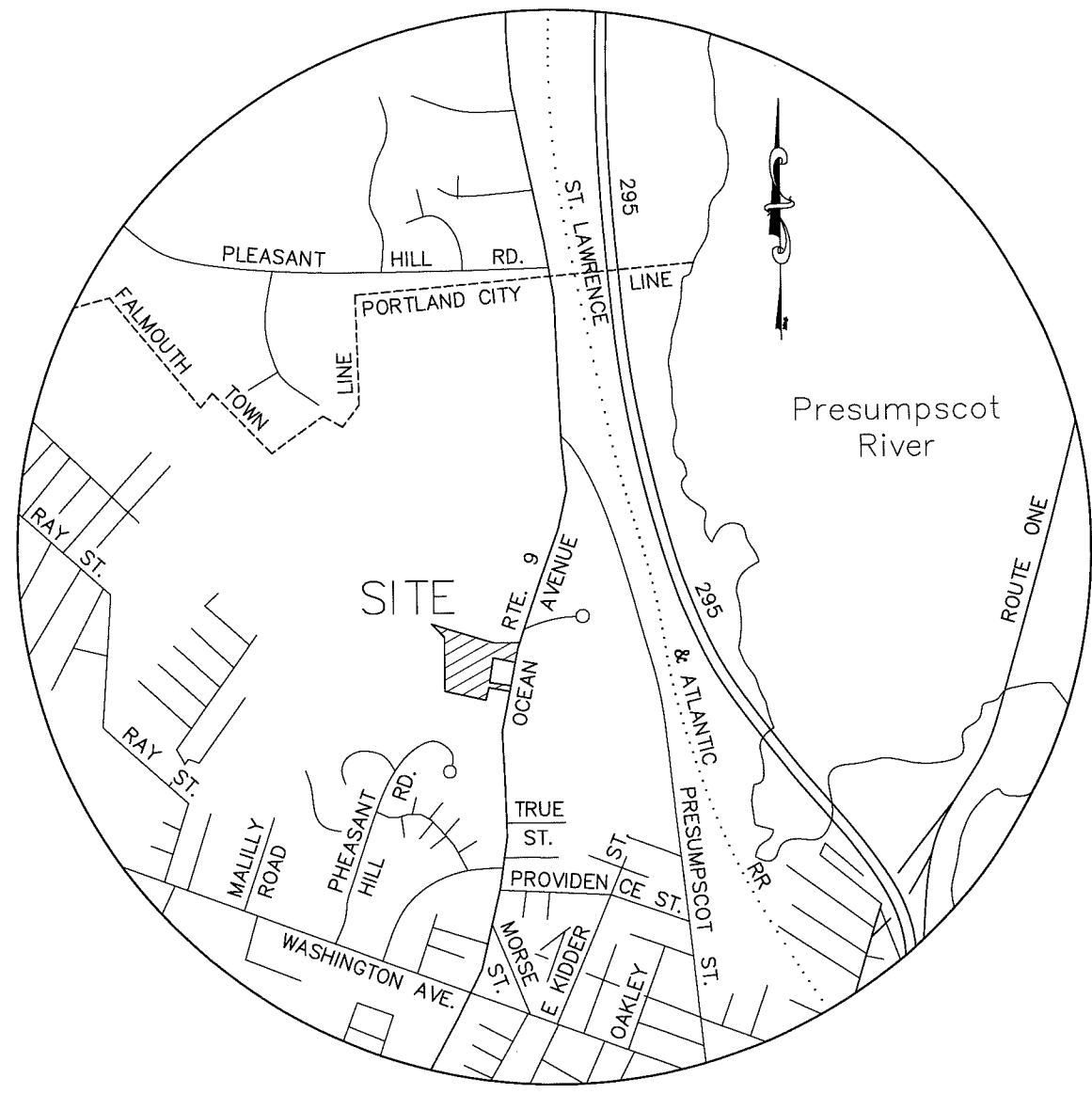
OCTOBER 2005

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ENGINEERS * SURVEYORS * PLANNERS
28 State Street, Gorham, Maine 04038, (207) 839-2771

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LEGEND		PROPOSED
EXISTING	DESCRIPTION	
	CONTOUR	151
	EASEMENT LINE	
	TREE LINE	
	OVERHEAD UTILITIES	
	STORM DRAIN	
	SANITARY SEWER	
	WATER LINE	
	TIME OF CONCENTRATION ROUTE	
	DRAINAGE BOUNDARY	
	LIMIT OF WETLANDS	
	STONE WALL	
	DRAIN MANHOLE	
	SANITARY SEWER MANHOLE	
	HYDRANT	
	CATCHBASIN	
	UTILITY POLE	
	GRANITE MONUMENT	
	FLOW DIRECTION	
	IRON ROD FOUND	
	IRON PIPE FOUND	
	5/8" IRON ROD W/ CAP TO BE SET ABOVE GROUND	
	N/W	
	NOW OR FORMERLY	



SCALE: 1" = .50 Mile

GENERAL NOTES:

- EXISTING PUBLIC AND PRIVATE UTILITY AND UNDERGROUND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, AND ALL UTILITIES AND PIPES ARE NOT NECESSARILY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IN THE FIELD THE LOCATIONS OF UTILITIES SHOWN, AND FOR INVESTIGATING AND IDENTIFYING THE EXISTENCE AND LOCATIONS OF ANY ADDITIONAL PUBLIC AND PRIVATE UTILITIES NOT SHOWN ON THE PLANS, BEFORE COMMENCING ANY EXCAVATIONS, AND SHALL BE RESPONSIBLE FOR REPAIRING ALL UTILITIES AND PIPES, BOTH PUBLIC AND PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, THAT ARE DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED IN INVESTIGATING AND REPAIRING SAID UTILITIES SHALL BE BORN BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK PAID FOR UNDER THE APPLICABLE LUMP SUM AND UNIT PRICES IN THE CONTRACT. UTILITIES INCLUDE BUT ARE NOT LIMITED TO UNDERGROUND ELECTRIC, GAS, TELEPHONE, WATER, SEWER, STORM DRAIN, AND CELLAR DRAIN LINES. SEE PROJECT DIRECTORY FOR A LIST OF KNOWN UTILITIES AND CONTACT PERSONS.
- ALL STRUCTURES INCLUDING EXISTING MANHOLES, VALVE COVERS, CATCH BASINS, ETC. SHALL BE ADJUSTED UP OR DOWN, AS REQ'D. TO MEET FINISH GRADES. THE COST OF SUCH WORK SHALL BE INCIDENTAL TO THE PROJECT.
- ALL NON-PAVED AREAS DISTURBED BY THE CONTRACTOR SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- ALL ELEVATIONS SHALL BE TAKEN FROM THE BENCHMARKS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY BENCHMARK ELEVATIONS WITH ENGINEER PRIOR TO USING. DO NOT USE CB OR MH RIMS.
- THE CONTRACTOR SHALL EXCAVATE TEST PITS SHOWN ON THE DRAWINGS TO LOCATE SEWERS AND OTHER UTILITIES CRITICAL TO THE PROPOSED PIPING PLAN. THE OWNER RESERVES THE RIGHT TO ADJUST PIPING LOCATIONS AND GRADES AS REQ'D. OTHER TEST PITS NOT INDICATED ON THE PLANS MAY BE REQ'D AT THE ENGINEER'S REQUEST. TEST HOLES DUG BY THE CONTRACTOR NOT INDICATED ON THE PLANS OR SO ORDERED BY THE ENGINEER WILL NOT BE PAID FOR.
- WHENEVER THE WORDS "REMOVE" OR "ABANDONED" ARE USED IN REFERENCE TO EXISTING PIPES OR STRUCTURES, IT SHALL MEAN THAT MANHOLES SHALL BE REMOVED COMPLETELY OR BROKEN WITHIN 36" OF THE FINISH GRADE. SEWER LINES PLUGGED WITH CONCRETE AND THE EMPTY STRUCTURE FILLED WITH COMPACTED GRANULAR MAT'L.
- THE WORD "PLUGGED" MEANS TO FILL AND SEAL WITH CONCRETE.
- WHERE THE WORK REQUIRES THE REMOVAL OF TREES AND/OR STUMPS SUCH REMOVAL SHALL BE INCIDENTAL TO THE ITEM AFFECTED.
- CONNECTIONS TO EXISTING MANHOLES, PIPES, OR OTHER STRUCTURES SHALL BE INCIDENTAL TO THE COST OF THE PIPE AND NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC WARNINGS SIGNS DURING THE PROGRESS OF THE WORK IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DRIVEWAYS AND WALKS IMPACTED BY THE PROJECT SHALL BE REPAIRED AS SHOWN IN THE DETAILS AND AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DIRECT THE CONTRACTOR AS TO THE METHOD OF DEALING WITH EACH DRIVE AND WALK.
- PIPE LENGTH EQUALS DISTANCE BETWEEN THE INSIDE FACE OF CATCH BASINS OR MANHOLES. (PIPE SLOPE COMPUTATION).
- PROPERTY LINE AND RIGHT OF WAY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR.
- UTILITY POLES SHALL BE RELOCATED BY CMP & VERIZON. UTILITY WIRES WILL BE REHUNG OR BURIED DURING THIS SAME CONSTRUCTION. COORDINATION WILL BE REQUIRED BY THE CONTRACTOR IN ORDER TO MINIMIZE CONFLICTS.
- PORTLAND WATER DISTRICT WILL BE INVOLVED IN WATERMAIN DECISIONS AND MONITORING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WATER COMPANY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG-SAFE" AND LOCAL UTILITY COMPANIES AT LEAST 3 BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, OR AS OTHERWISE REQUIRED BY MAINE STATE LAW.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THESE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
- ALL WORK SHALL BE IN CONFORMANCE WITH THE CITY OF PORTLAND AND ALL UTILITY COMPANIES STANDARDS.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY CONSTRUCTION ACTIVITY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
- NO BLASTING WILL BE ALLOWED WITHIN 500 FT OF ANY UTILITY WITHOUT THE NOTIFICATION AND APPROVAL OF THE APPROPRIATE UTILITY COMPANY. NO LEDGE BLASTING WILL BE PERMITTED WITHIN A UTILITY COMPANY EASEMENT UNTIL WRITTEN APPROVAL FROM THE UTILITY IS GIVEN. BLASTING OPERATIONS SHALL BE IN ACCORDANCE WITH MAINE DEPT. OF ENVIRONMENTAL PROTECTION BLASTING REQUIREMENTS AND SITE LOCATION OF DEVELOPMENT APPROVAL ORDER.
- ALL PAVEMENT CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE CUT EDGES AND NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- CONDUIT SHALL BE USED FOR ELECTRIC, TELEPHONE AND TV IN ACCORDANCE WITH THE RESPECTIVE COMPANIES REQUIREMENTS.
- ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED & MAINTAINED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S" MANUAL, THE PROJECT E&S REPORT PREPARED BY BH2M AND AS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS.

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE
2	3/29/05		DATE OF PRE-SUBMITTAL
3	10/24/05		DATE OF SUBMITTAL
4	10/24/05		DATE OF REVISION

BH2M
 Barry • Huff • McDonald • Mulligan, Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Portland, Maine 04101, (603) 859-2171

FOR
 Graves Hill Land Company, LLC
 16 Graves Hill Lane
 Scarborough, Maine 04072

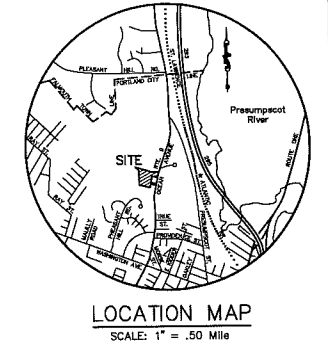
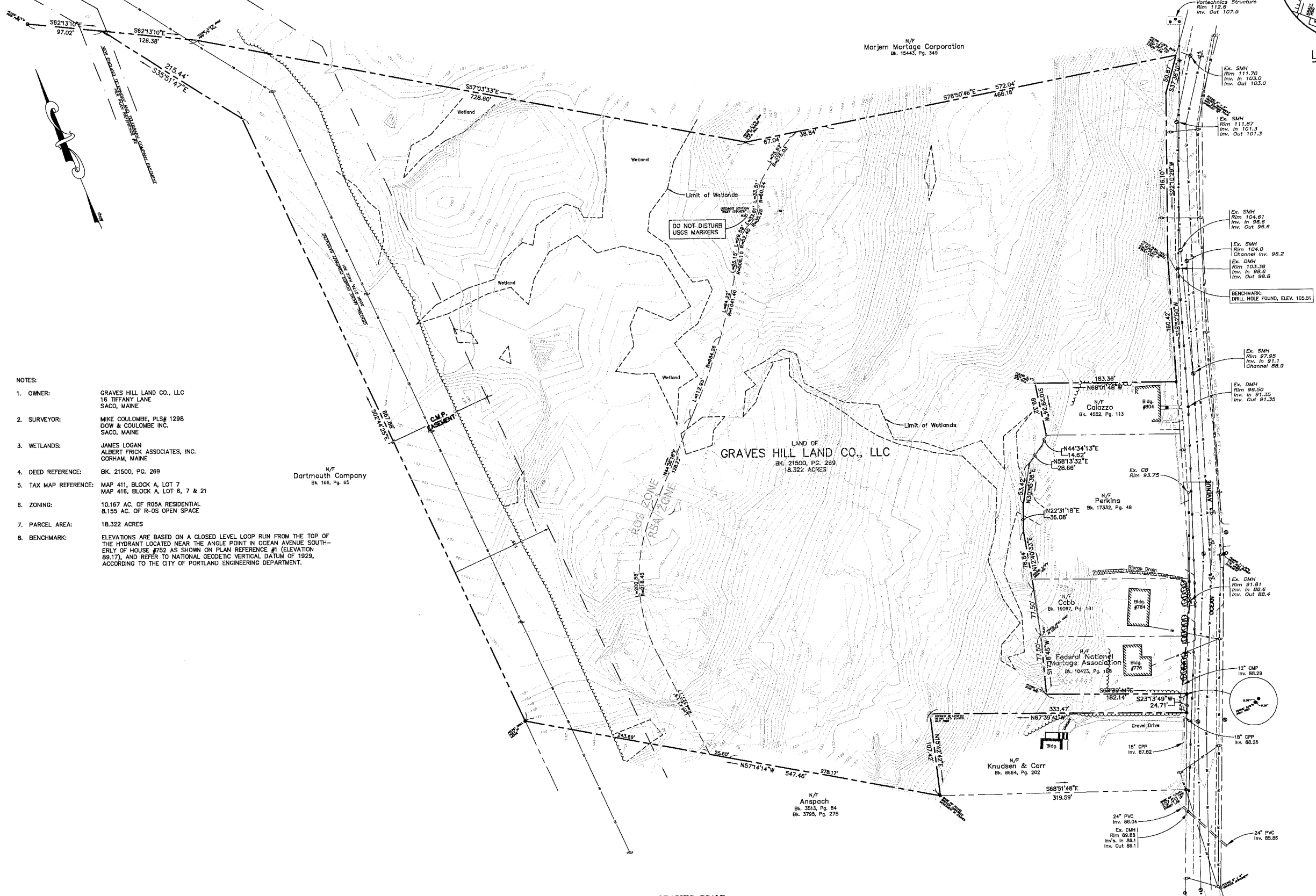
PROJECT INFORMATION
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
DRAWN	SCALE
CHECKED	JOB NO.

SHEET
C-1

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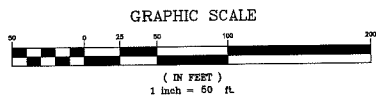
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- NOTES:
- OWNER: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS# 1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN
ALBERT FRICK ASSOCIATES, INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOT 6, 7 & 21
 - ZONING: 10.167 AC. OF R05A RESIDENTIAL
8.155 AC. OF R-OS OPEN SPACE
 - PARCEL AREA: 18.322 ACRES
 - BENCHMARK: ELEVATIONS ARE BASED ON A CLOSED LEVEL LOOP RUN FROM THE TOP OF THE HYDRANT LOCATED NEAR THE ANGLE POINT IN OCEAN AVENUE SOUTHERLY OF HOUSE #752 AS SHOWN ON PLAN REFERENCE #1 (ELEVATION 89.17), AND REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929, ACCORDING TO THE CITY OF PORTLAND ENGINEERING DEPARTMENT.

LEGEND:

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
●	GRANITE MONUMENT FOUND
●	5/8" IRON ROD W/ CAP TO BE SET
▲	ABOVE GROUND
N/F	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK



NO.	DATE	REVISION	DESCRIPTION
1	3/20/05		DATE OF ISSUE
2	3/20/05		DATE OF RE-SUBMITTAL
3	10/24/05		STANDARD REVS.

BH2M
 Berry • Huff • McDonald • Milligan, Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Conklin, Maine 04860, (603) 859-8774

FOR
 Graves Hill Land Company, LLC
 Saco, Maine 04072

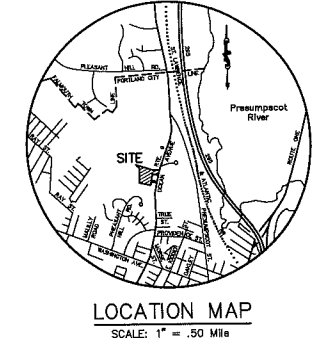
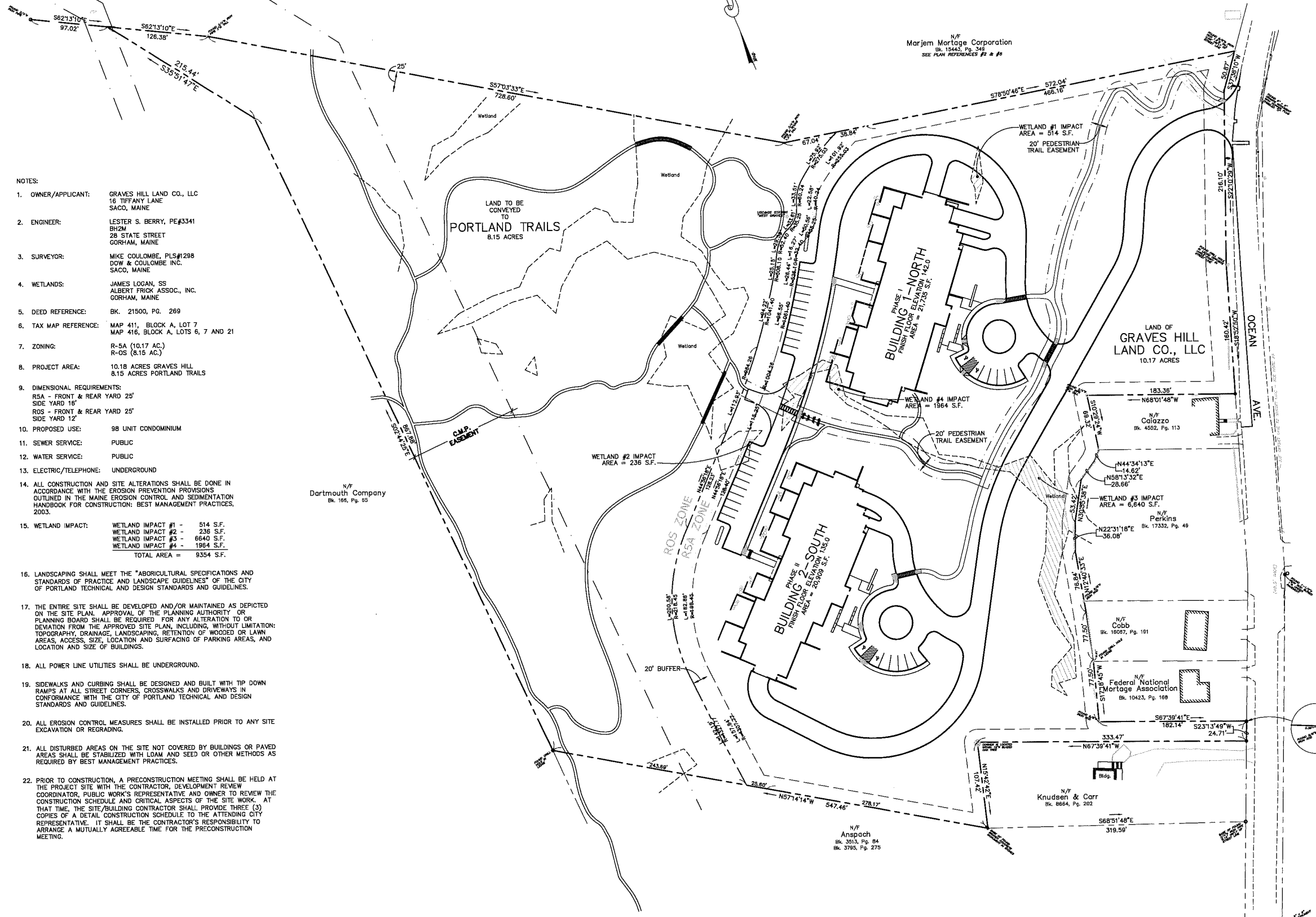
EXISTING CONDITIONS
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
Dept.	April 2005
CHECKED	SCALE
L. Berry	As Noted
JOB. NO.	
02055	

SHEET
C-2

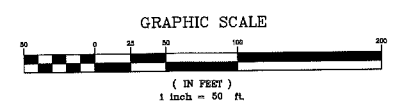
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- NOTES:
- OWNER/APPLICANT: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - ENGINEER: LESTER S. BERRY, PE#3341
BH2M
28 STATE STREET
GORHAM, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS#1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN, SS
ALBERT FRICK ASSOC., INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOTS 6, 7 AND 21
 - ZONING: R-5A (10.17 AC.)
R-OS (8.15 AC.)
 - PROJECT AREA: 10.18 ACRES GRAVES HILL
8.15 ACRES PORTLAND TRAILS
 - DIMENSIONAL REQUIREMENTS:
R5A - FRONT & REAR YARD 25'
SIDE YARD 16'
R-OS - FRONT & REAR YARD 25'
SIDE YARD 12'
 - PROPOSED USE: 98 UNIT CONDOMINIUM
 - SEWER SERVICE: PUBLIC
 - WATER SERVICE: PUBLIC
 - ELECTRIC/TELEPHONE: UNDERGROUND
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES, 2003.
 - WETLAND IMPACT:
WETLAND IMPACT #1 - 514 S.F.
WETLAND IMPACT #2 - 236 S.F.
WETLAND IMPACT #3 - 6640 S.F.
WETLAND IMPACT #4 - 1964 S.F.
TOTAL AREA = 9354 S.F.
 - LANDSCAPING SHALL MEET THE "AGRICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
 - ALL POWER LINE UTILITIES SHALL BE UNDERGROUND.
 - SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIP DOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
 - ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES.
 - PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
○	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
●	ABOVE GROUND
N/F	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK
---	PROPERTY LINE



THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

CHAIR	DATE
DESIGNED	DATE
Dept.	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
R. Libby Jr.	02055

SEE SHEETS C-3A AND C-3B FOR PHASING PLANS

NO.	DATE	REVISION DESCRIPTION
1	3/10/05	DATE OF ISSUE
2	3/10/05	DATE OF RE-SUBMITTAL
3	3/10/05	STANDARD REVS.

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ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04038, (603) 853-8774

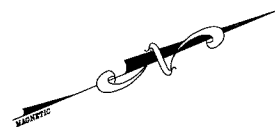
FOR:
Graves Hill Land Company, LLC
Saco, Maine 04072

SUBDIVISION PLAN
98 UNIT CONDOMINIUM
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

SHEET
C-3

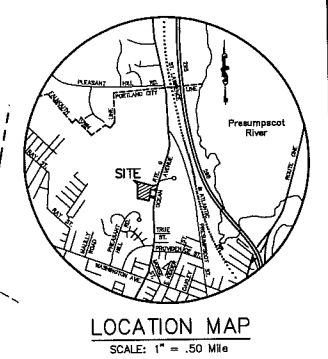
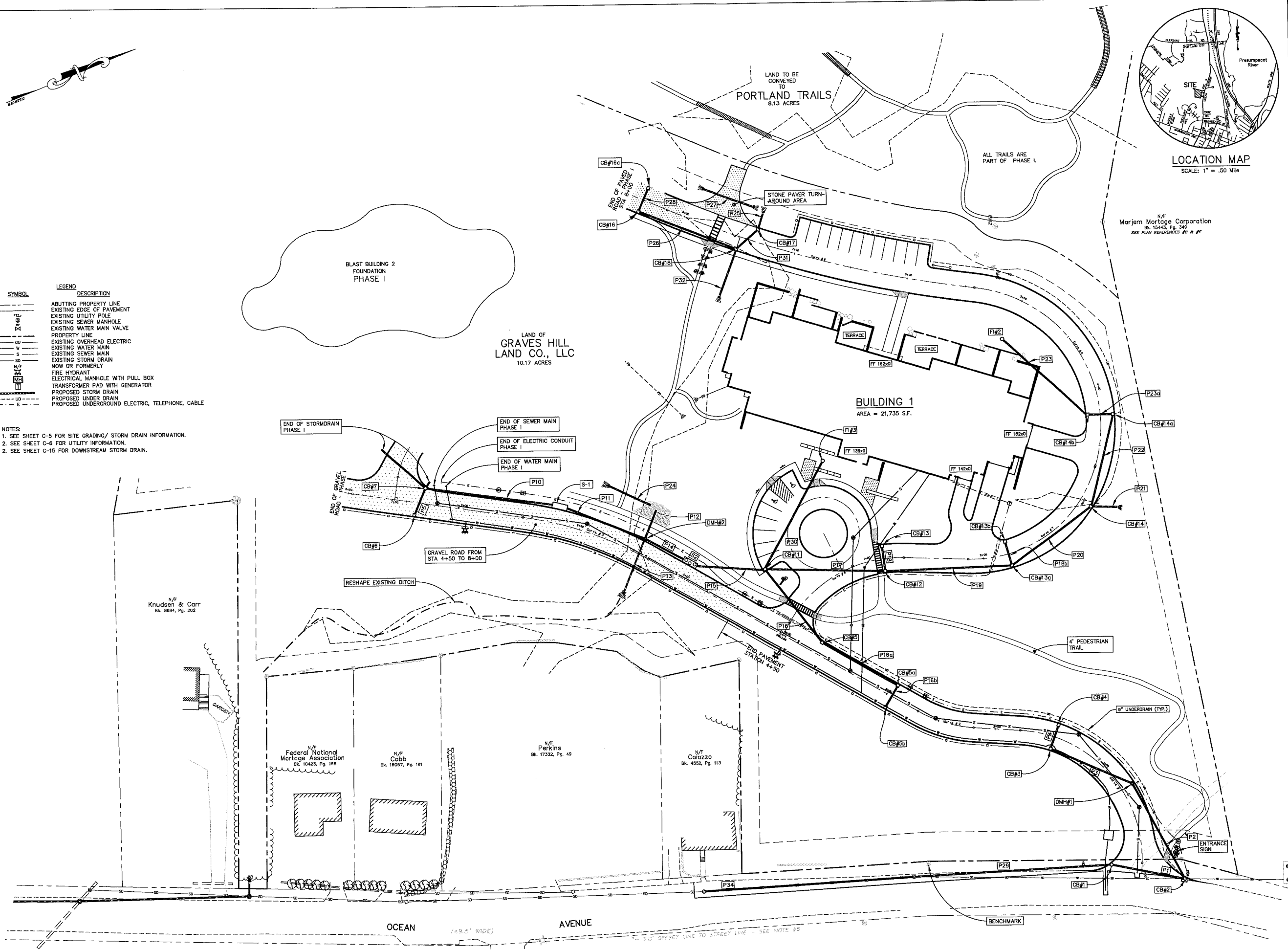
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SYMBOL	LEGEND	DESCRIPTION
---	---	ABUTTING PROPERTY LINE
---	---	EXISTING EDGE OF PAVEMENT
---	---	EXISTING UTILITY POLE
---	---	EXISTING SEWER MANHOLE
---	---	EXISTING WATER MAIN VALVE
---	---	PROPERTY LINE
---	---	EXISTING OVERHEAD ELECTRIC
---	---	EXISTING WATER MAIN
---	---	EXISTING SEWER MAIN
---	---	EXISTING STORM DRAIN
---	---	NOW OR FORMERLY
---	---	FIRE HYDRANT
---	---	ELECTRICAL MANHOLE WITH PULL BOX
---	---	TRANSFORMER PAD WITH GENERATOR
---	---	PROPOSED STORM DRAIN
---	---	PROPOSED UNDER DRAIN
---	---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE

NOTES:
 1. SEE SHEET C-5 FOR SITE GRADING/ STORM DRAIN INFORMATION.
 2. SEE SHEET C-6 FOR UTILITY INFORMATION.
 3. SEE SHEET C-15 FOR DOWNSTREAM STORM DRAIN.



N/F
 Marjorn Mortgage Corporation
 Bk. 15443, Pg. 349
 SEE PLAN REFERENCES #1 & #2

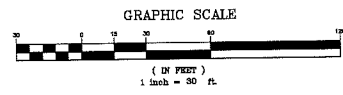
N/F
 Knudsen & Carr
 Bk. 8664, Pg. 202

N/F
 Federal National
 Mortgage Association
 Bk. 10423, Pg. 188

N/F
 Cobb
 Bk. 16087, Pg. 191

N/F
 Perkins
 Bk. 17332, Pg. 49

N/F
 Calozzo
 Bk. 4552, Pg. 113



DOWNSTREAM STORMDRAIN
 IMPROVEMENTS - PHASE I
 SEE SHEET C-15

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	
2	3/29/05	DATE OF RE-SUBMITTAL	
3	10/24/05	STORMDRAIN REV.	

BH2M
 Barry * Huff * McDonald * Milligan Inc.
 ENGINEERS * SURVEYORS * PLANNERS
 28 State Street, Gorham, Maine 04072, (207) 865-8771

FOR
 Graves Hill Land Company, LLC
 110 State Street, Suite 200
 Gorham, Maine 04072

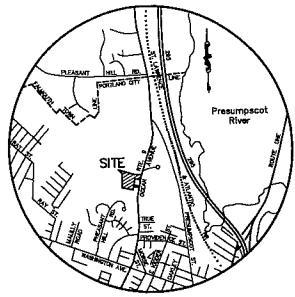
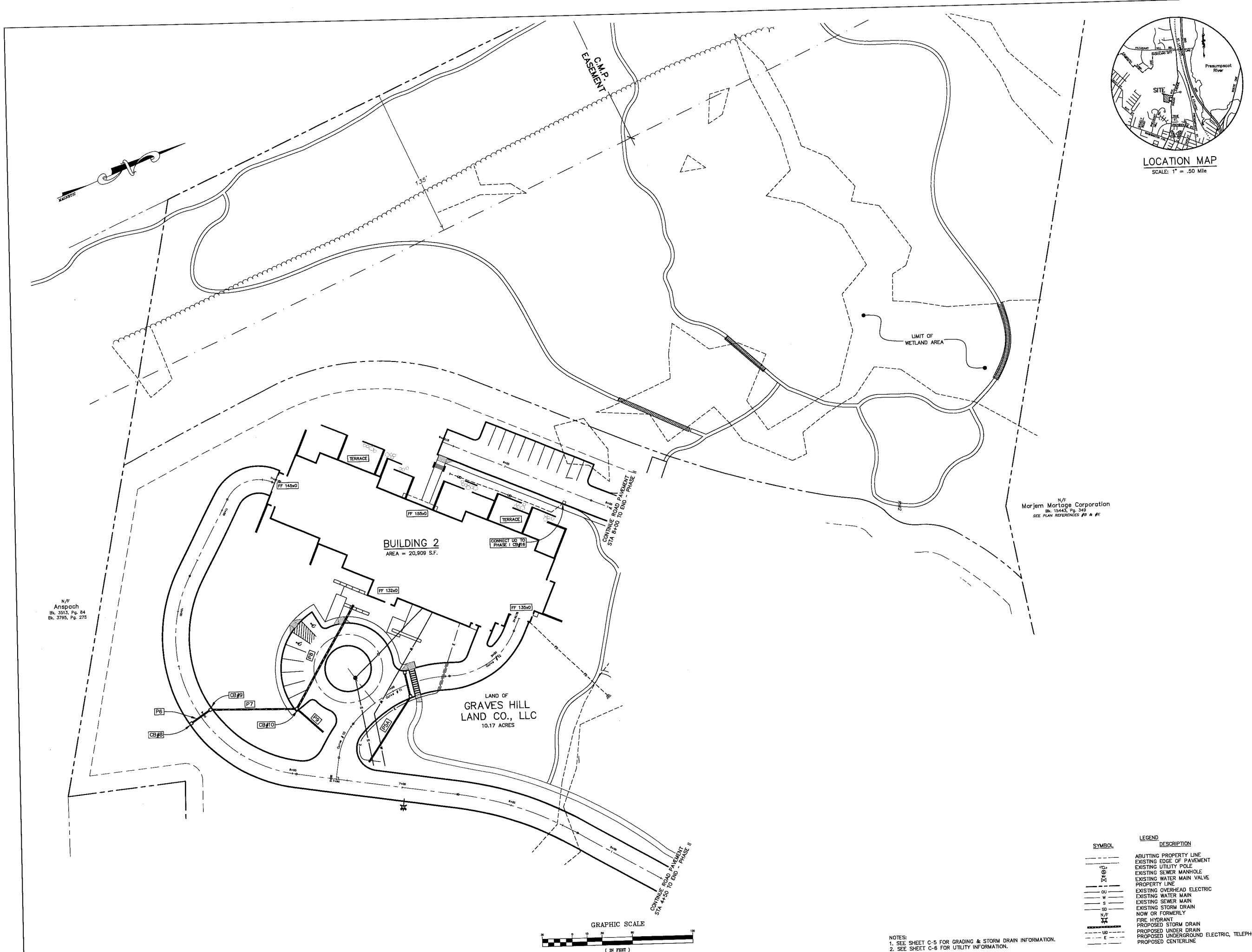
PHASE I
 GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-3a

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NO.	DATE	REVISION DESCRIPTION
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2	3/09/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMDRAIN REV.

BH2M
 Berry * Huff * McDonald * Milligan Inc.
 ENGINEERS * SURVEYORS * PLANNERS
 28 State Street, Gorham, Maine 04038 (207) 839-2774

FOR
 Graves Hill Land Company, LLC
 1000
 Saco, Maine 04072

PHASE II
GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 PORTLAND, MAINE

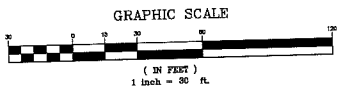
DESIGNED	L. Berry	DATE	April 2005
DRAWN	Dept.	SCALE	1" = 30'
CHECKED	L. Berry	JOB. NO.	02055

SHEET
C-3b

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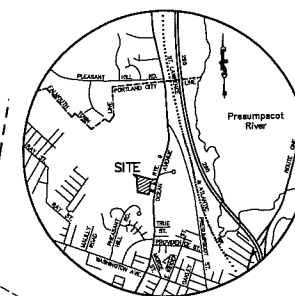
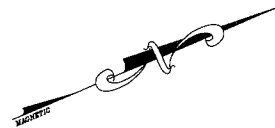
N/F
 Marjem Mortgage Corporation
 Bk. 15443, Pg. 349
 SEE PLAN REFERENCED #8 * #9

N/F
 Anspach
 Bk. 3513, Pg. 84
 Bk. 3795, Pg. 275



SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING SEWER MAIN
---	EXISTING STORM DRAIN
---	EXISTING STORM DRAIN
N/F	NOW OR FORMERLY
---	FIRE HYDRANT
---	PROPOSED STORM DRAIN
---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE
---	PROPOSED CENTERLINE

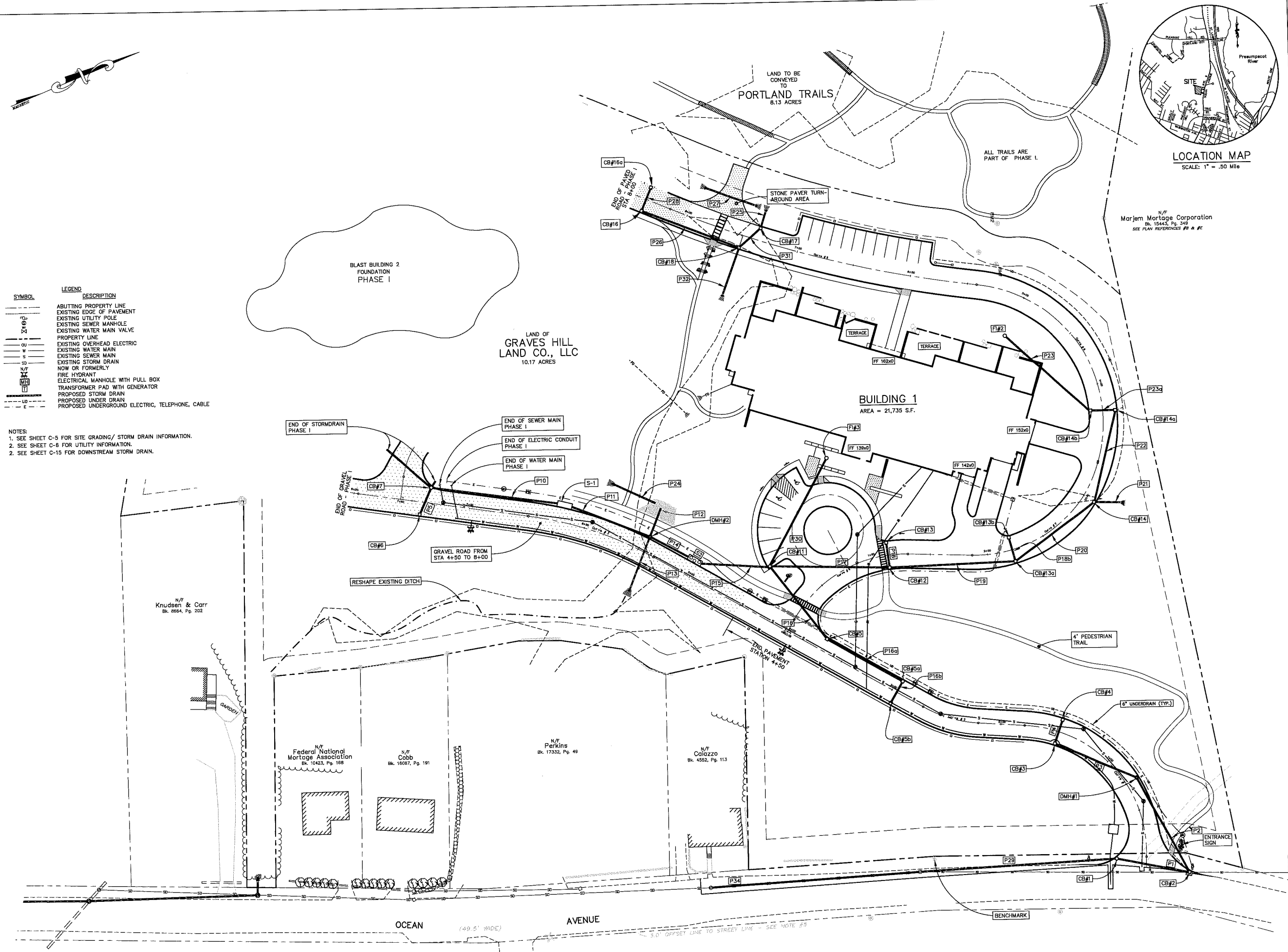
NOTES:
 1. SEE SHEET C-5 FOR GRADING & STORM DRAIN INFORMATION.
 2. SEE SHEET C-6 FOR UTILITY INFORMATION.



LOCATION MAP
SCALE: 1" = .50 Mile

SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING SEWER MAIN
---	EXISTING STORM DRAIN
---	NOW OR FORMERLY
---	FIRE HYDRANT
---	ELECTRICAL MANHOLE WITH PULL BOX
---	TRANSFORMER PAD WITH GENERATOR
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE

- NOTES:
- SEE SHEET C-5 FOR SITE GRADING/ STORM DRAIN INFORMATION.
 - SEE SHEET C-6 FOR UTILITY INFORMATION.
 - SEE SHEET C-15 FOR DOWNSTREAM STORM DRAIN.



N/F
Marjem Mortgage Corporation
Bk. 15443, Pg. 349
SEE PLAN REFERENCES #1 & #2

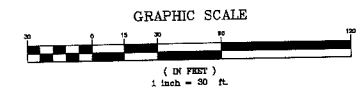
N/F
Knudsen & Carr
Bk. 8564, Pg. 202

N/F
Federal National
Mortgage Association
Bk. 10423, Pg. 188

N/F
Cobb
Bk. 16087, Pg. 191

N/F
Perkins
Bk. 17332, Pg. 49

N/F
Colazzo
Bk. 4552, Pg. 113



NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORMDRAIN REVS.

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ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04008, (207) 859-2771

N/F
Graves Hill Land Company, LLC
110 Main Street
Saco, Maine 04072

PHASE I
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED L. Berry	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

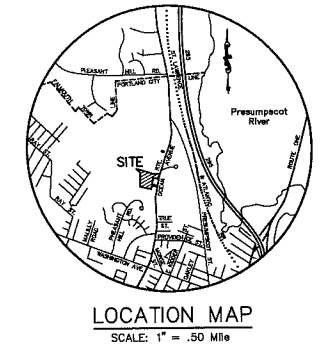
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C-3a

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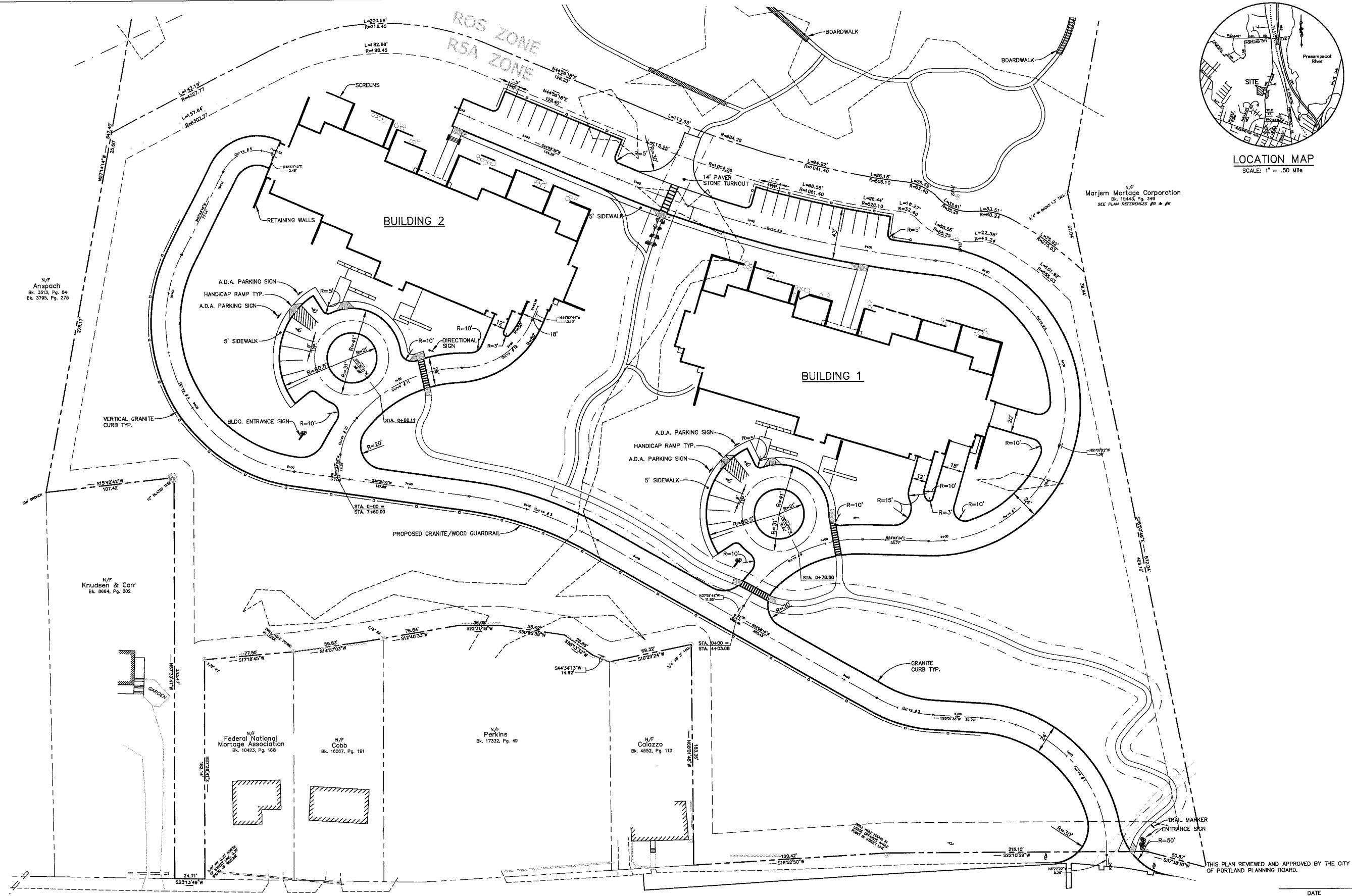
DOWNSTREAM STORMDRAIN IMPROVEMENTS - PHASE I
SEE SHEET C-15

G:\2002-w\020055-no pond.dwg Site.dwg, 01/06/2006 12:45:20 PM



NO.	DATE	REVISION	DESCRIPTION
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2	10/24/05		STANDARD REVS.

Marjem Mortgage Corporation
Bk. 15443, Pg. 349
SEE PLAN REFERENCES #D & #E



N/F Knudsen & Carr
Bk. 8864, Pg. 202

N/F Federal National Mortgage Association
Bk. 10423, Pg. 168

N/F Cobb
Bk. 10057, Pg. 191

N/F Perkins
Bk. 17332, Pg. 49

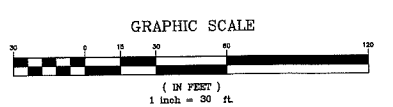
N/F Colozzo
Bk. 4652, Pg. 113

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

DATE

CHAIR

§ CURVE DATA			
CURVE #1 R=110.00' L=170.10' T=107.35' D=88°36'03" PC=0+09.25 PT=1+73.36	CURVE #4 R=125.00' L=237.59' T=174.94' D=108°54'17" PC=7+96.34 PT=10+33.77	CURVE #7 R=110.00' L=144.33' T=84.68' D=75°10'46" PC=0+19.51 PT=1+30.93	CURVE #10 R=60.00' L=33.74' T=17.33' D=32°12'57" PC=0+19.51 PT=0+53.25
CURVE #2 R=110.00' L=50.52' T=25.71' D=26°18'53" PC=2+19.15 PT=2+69.28	CURVE #5 R=120.00' L=47.95' T=29.77' D=85°51'28" PC=11+11.07 PT=11+59.03	CURVE #8 R=118.00' L=209.70' T=143.32' D=100°07'24" PC=3+32.32 PT=5+42.02	CURVE #11 R=118.00' L=100.29' T=53.40' D=48°41'55" PC=0+53.25 PT=1+53.54
CURVE #3 R=300.00' L=113.64' T=57.51' D=21°42'11" PC=5+35.12 PT=6+48.76	CURVE #6 R=110.00' L=118.88' T=65.99' D=61°53'18" PC=0+11.95 PT=1+30.83	CURVE #9 R=970.00' L=273.77' T=137.80' D=16°10'15" PC=5+42.02 PT=6+15.79	CURVE #12 R=65.00' L=75.13' T=42.40' D=66°13'41" PC=1+53.54 PT=2+28.68



SYMBOL	LEGEND	DESCRIPTION
○	IRON ROD FOUND	
○	IRON PIPE FOUND	
○	GRANITE MONUMENT FOUND	
○	5/8" IRON ROD W/ CAP TO BE SET	
○	15" HIGH 150W H.P.S. LAMPS (7)	
○	PROPOSED UTILITY POLE	
○	EXISTING UTILITY POLE	
○	PROPERTY LINE	
○	LIMIT OF WETLANDS	
○	EXISTING EDGE OF PAVEMENT	
○	NOW OR FORMERLY	
○	RAIL FENCE	
○	HYDRANT	

SITE PLAN
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
W. Felkey	April 2005

DRAWN	SCALE
Dept.	As Noted

CHECKED	JOB. NO.
L. Berry	02055

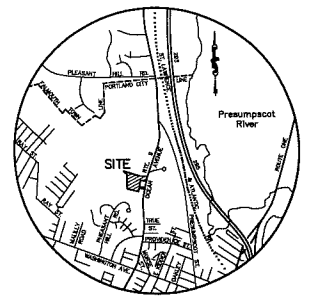
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C-4

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FOR
Owens Hill Land Company, LLC
Saco, Maine 04072

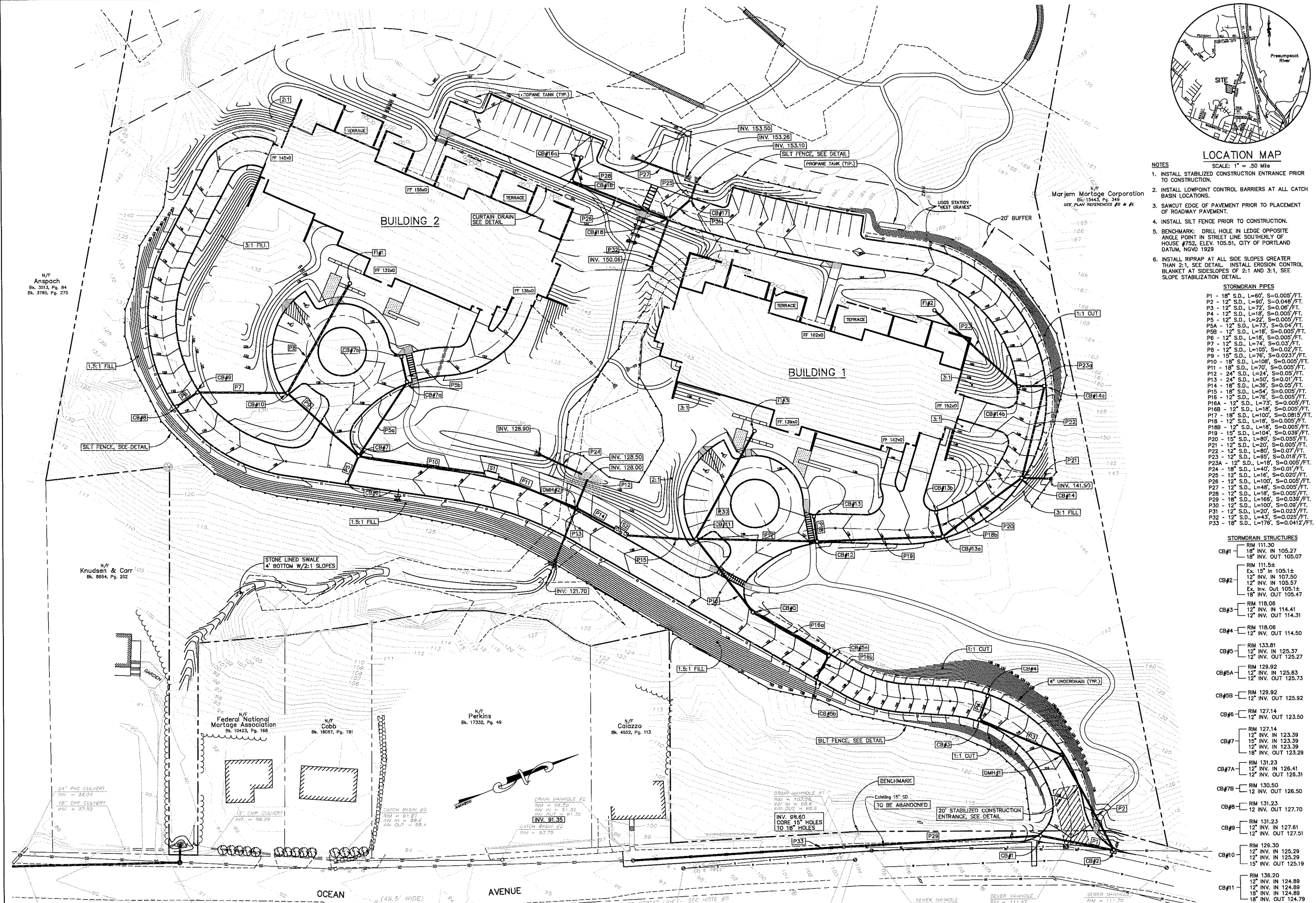
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LOCATION MAP

- NOTES
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 2. INSTALL LOWPOINT CONTROL BARRIERS AT ALL CATCH BASIN LOCATIONS.
 3. SAWCUT EDGE OF PAVEMENT PRIOR TO PLACEMENT OF ROADWAY PAVEMENT.
 4. INSTALL SILT FENCE PRIOR TO CONSTRUCTION.
 5. BENCHMARK: DRILL HOLE IN LEDGE OPPOSITE ANGLE POINT IN STREET LINE SOUTHERLY OF HOUSE #752. ELEV. 105.51, CITY OF PORTLAND DATUM, NGVD 1929
 6. INSTALL RIPRAP AT ALL SIDE SLOPES GREATER THAN 2:1. SEE DETAIL. INSTALL EROSION CONTROL BLANKET AT SIDESLOPES OF 2:1 AND 3:1. SEE SLOPE STABILIZATION DETAIL.

Marjerm Mortgage Corporation
Bk. 13443, Pg. 349
SEE PLAN REFERENCES #P & #E



STORMDRAIN PIPES

P1	- 18" S.D., L=80', S=0.005'/FT.
P2	- 12" S.D., L=90', S=0.048'/FT.
P3	- 12" S.D., L=72', S=0.06'/FT.
P4	- 12" S.D., L=18', S=0.005'/FT.
P5	- 12" S.D., L=22', S=0.005'/FT.
P5A	- 12" S.D., L=73', S=0.04'/FT.
P5B	- 12" S.D., L=18', S=0.005'/FT.
P6	- 12" S.D., L=18', S=0.005'/FT.
P7	- 12" S.D., L=74', S=0.037'/FT.
P8	- 12" S.D., L=105', S=0.02'/FT.
P9	- 15" S.D., L=76', S=0.0237'/FT.
P10	- 18" S.D., L=108', S=0.005'/FT.
P11	- 18" S.D., L=70', S=0.005'/FT.
P12	- 24" S.D., L=24', S=0.05'/FT.
P13	- 24" S.D., L=50', S=0.01'/FT.
P14	- 18" S.D., L=36', S=0.05'/FT.
P15	- 18" S.D., L=64', S=0.005'/FT.
P16	- 12" S.D., L=76', S=0.005'/FT.
P16A	- 12" S.D., L=73', S=0.005'/FT.
P16B	- 12" S.D., L=18', S=0.005'/FT.
P17	- 18" S.D., L=100', S=0.0815'/FT.
P18	- 12" S.D., L=18', S=0.005'/FT.
P18B	- 12" S.D., L=18', S=0.005'/FT.
P19	- 15" S.D., L=104', S=0.038'/FT.
P20	- 15" S.D., L=80', S=0.055'/FT.
P21	- 12" S.D., L=20', S=0.005'/FT.
P22	- 12" S.D., L=80', S=0.07'/FT.
P23	- 12" S.D., L=85', S=0.0187'/FT.
P23A	- 12" S.D., L=18', S=0.005'/FT.
P24	- 18" S.D., L=40', S=0.01'/FT.
P25	- 12" S.D., L=16', S=0.020'/FT.
P26	- 12" S.D., L=100', S=0.005'/FT.
P27	- 12" S.D., L=48', S=0.005'/FT.
P28	- 12" S.D., L=18', S=0.005'/FT.
P29	- 18" S.D., L=168', S=0.038'/FT.
P30	- 12" S.D., L=100', S=0.02'/FT.
P31	- 12" S.D., L=20', S=0.023'/FT.
P32	- 12" S.D., L=43', S=0.025'/FT.
P33	- 18" S.D., L=178', S=0.0412'/FT.

STORMDRAIN STRUCTURES

CB#1	- RIM 111.30 18" INV. IN 105.27 18" INV. OUT 105.07
CB#2	- RIM 111.54 Ex 18" IN 105.14 12" INV. IN 107.50 Ex Inv. Out 105.14 18" INV. OUT 105.47
CB#3	- RIM 118.06 12" INV. IN 114.41 12" INV. OUT 114.31
CB#4	- RIM 118.06 12" INV. OUT 114.50
CB#5	- RIM 133.81 12" INV. IN 125.37 12" INV. OUT 125.27
CB#5A	- RIM 129.92 12" INV. IN 125.83 12" INV. OUT 125.73
CB#5B	- RIM 129.92 12" INV. OUT 125.92
CB#6	- RIM 127.14 12" INV. OUT 123.50
CB#7	- RIM 127.14 12" INV. IN 123.39 15" INV. IN 123.39 12" INV. IN 123.39 18" INV. OUT 123.28
CB#7A	- RIM 131.23 12" INV. IN 126.41 12" INV. OUT 126.31
CB#7B	- RIM 130.50 12" INV. OUT 126.50
CB#8	- RIM 131.23 12" INV. IN 127.61 12" INV. OUT 127.51
CB#10	- RIM 129.30 12" INV. IN 125.29 12" INV. IN 125.29 15" INV. OUT 125.19
CB#11	- RIM 136.20 12" INV. IN 124.89 12" INV. IN 124.89 18" INV. IN 124.89 18" INV. OUT 124.79
CB#12	- RIM 137.05 12" INV. IN 133.14 12" INV. IN 133.14 18" INV. OUT 133.04
CB#13	- RIM 137.05 12" INV. OUT 133.23
CB#13A	- RIM 141.29 12" INV. IN 137.30 15" INV. OUT 137.30
CB#13B	- RIM 141.29 12" INV. OUT 137.39
CB#14	- RIM 146.27 12" INV. IN 141.80 12" INV. IN 141.80 15" INV. OUT 141.70
CB#14A	- RIM 152.07 12" INV. IN 147.50 12" INV. OUT 147.40
CB#14B	- RIM 152.07 12" INV. IN 147.89 12" INV. OUT 147.59
CB#16A	- RIM 155.64 12" INV. OUT 152.00

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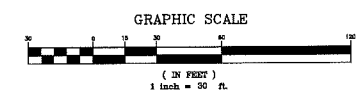
FOR
Graves Hill Land Company, LLC
110 Main Street
Saco, Maine 04072

SITE GRADING
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED	W. Pelkey	DATE	April 2005
DRAWN	Dpt.	SCALE	As Noted
CHECKED	L. Berry	JOB. NO.	02055

SHEET
C-5

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N/F Cobb
Bk. 16057, Pg. 191

N/F Perkins
Bk. 17332, Pg. 49

N/F Calozzo
Bk. 4552, Pg. 113

24" PVC CULVERT
RIM = 88.04
18" CMP CULVERT
RIM = 87.82

18" CMP CULVERT
RIM = 88.28

CATCH BASIN #3
RIM = 91.21
RIM IN = 89.6
RIM OUT = 88.4

DRAIN MANHOLE #2
RIM = 92.50
RIM IN = 91.35
RIM OUT = 91.35
INV. 91.35

SEWER MANHOLE
RIM = 104.0
RIM IN = 98.5
RIM OUT = 96.6

SEWER MANHOLE
RIM = 111.87
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

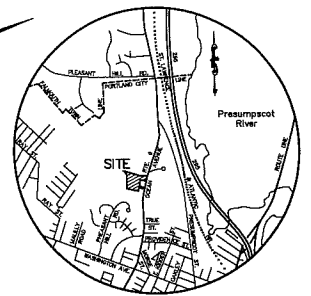
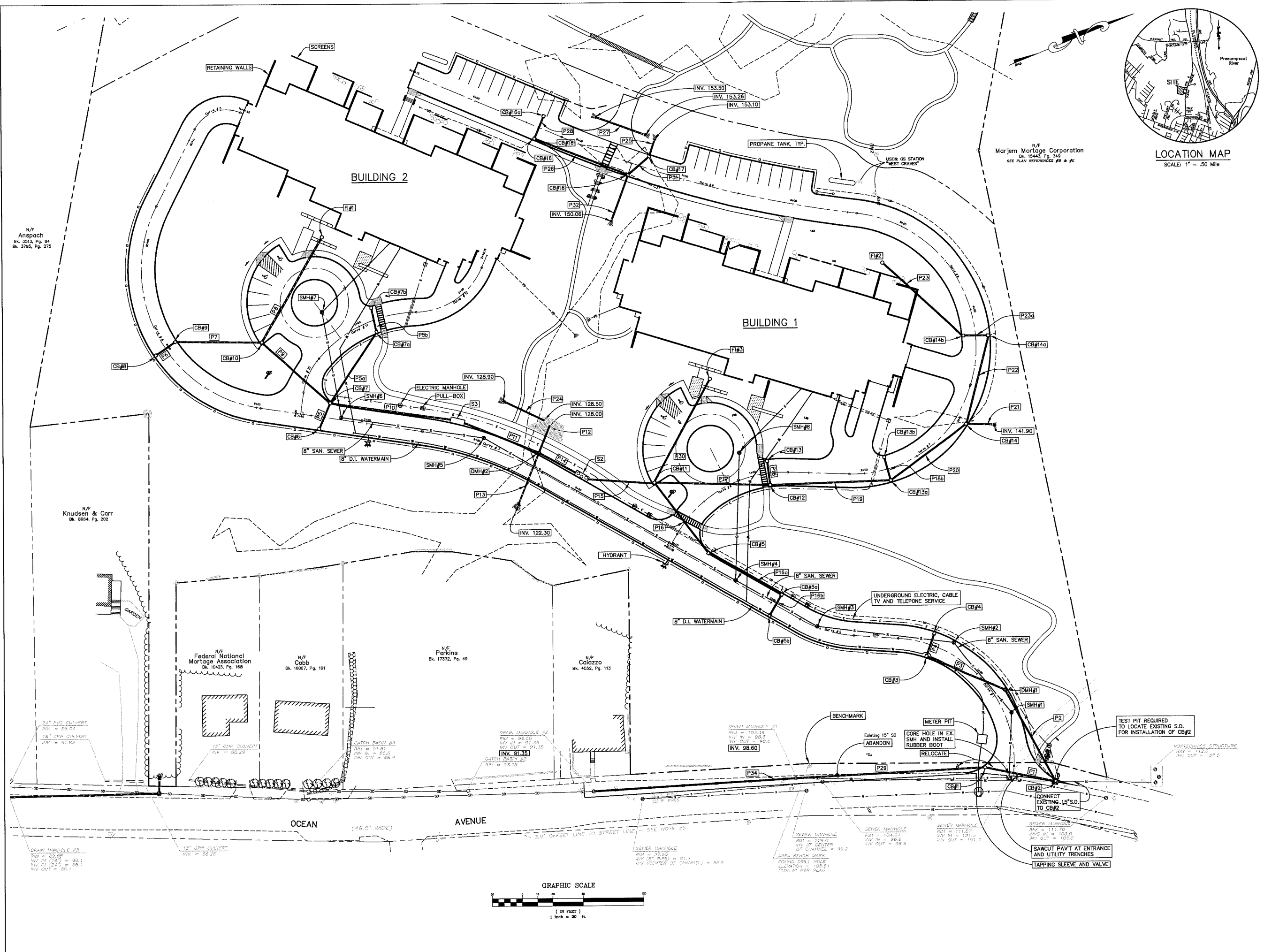
SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

SEWER MANHOLE
RIM = 111.70
RIM IN = 101.2
RIM OUT = 101.3

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N/F Marjem Mortgage Corporation
Bk. 10443, Pg. 349
SEE PLAN REFERENCES #0 & #C

N/F Anspach
Bk. 3513, Pg. 84
Bk. 3755, Pg. 275

N/F Knudsen & Carr
Bk. 8854, Pg. 202

N/F Federal National Mortgage Association
Bk. 10423, Pg. 188

N/F Cobb
Bk. 18057, Pg. 101

N/F Perkins
Bk. 17332, Pg. 49

N/F Calozzo
Bk. 4552, Pg. 113

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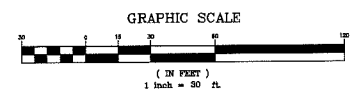
FOR
Owens Hill Land Company, LLC
16 Tiffany Lane
Saco, Maine 04072

UTILITY PLAN
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

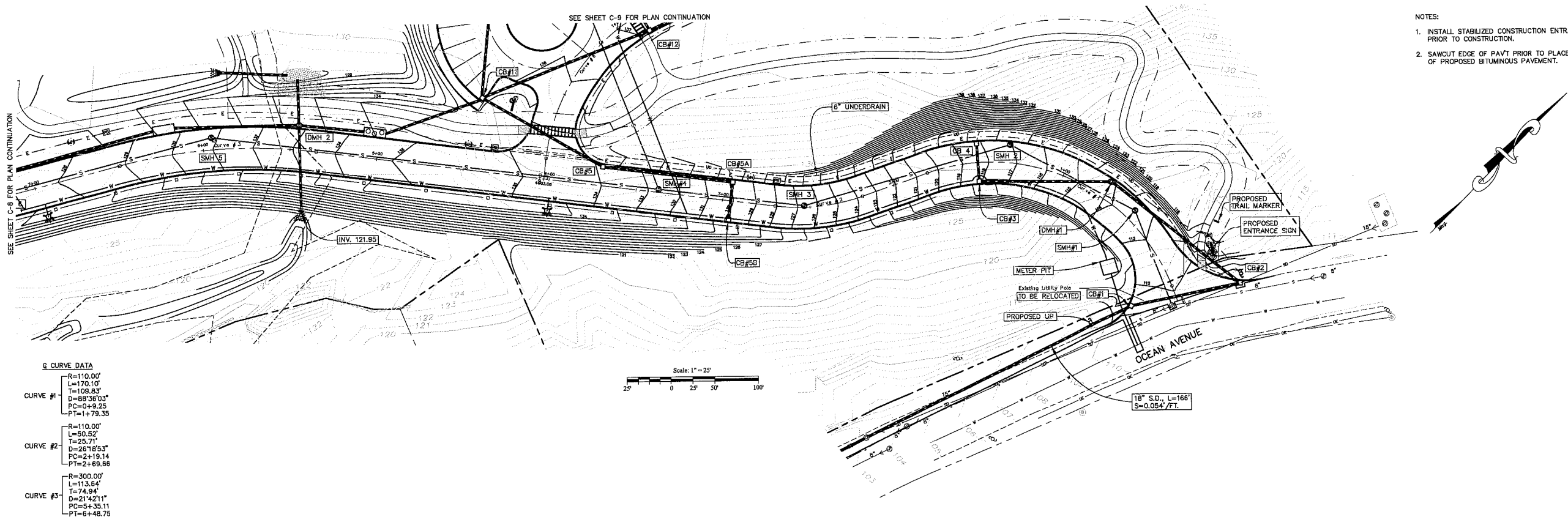
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DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

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C-6

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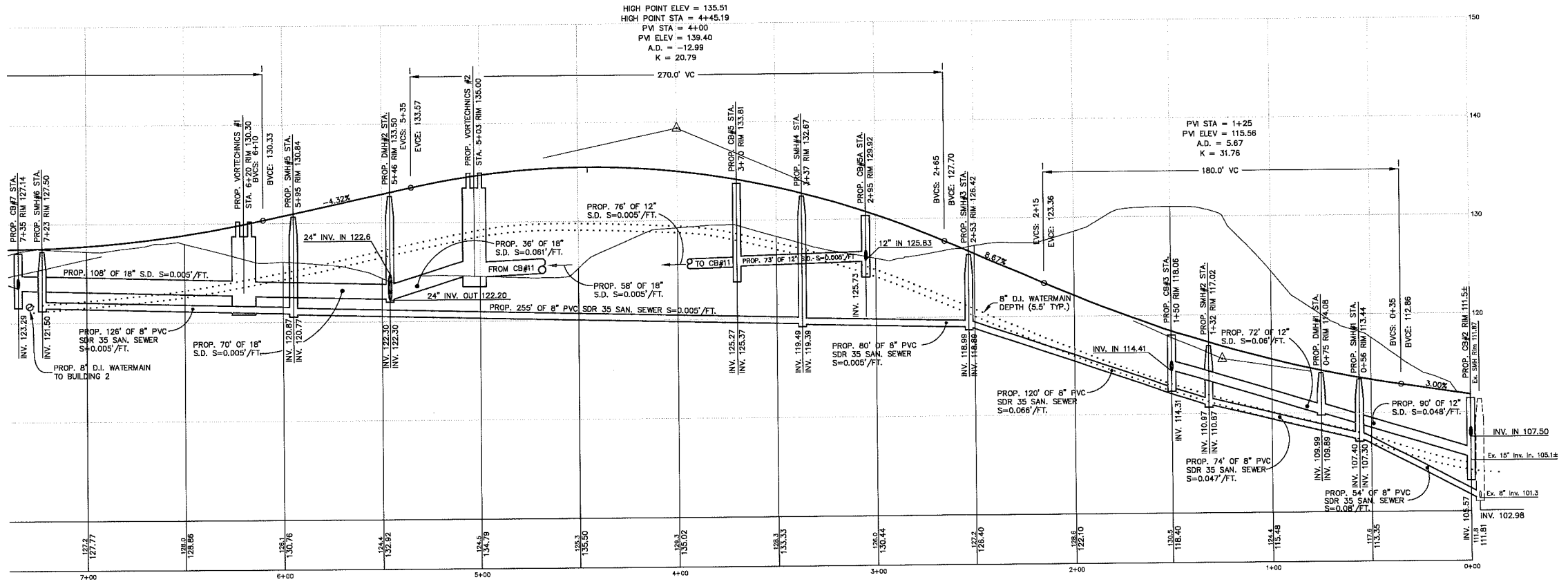


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8 CURVE DATA

CURVE #1	R=110.00'
	L=170.10'
	T=109.83'
	D=88°36'03"
	PC=0+9.25
	PT=1+79.35
CURVE #2	R=110.00'
	L=50.52'
	T=25.71'
	D=25°18'53"
	PC=2+19.14
	PT=2+69.66
CURVE #3	R=300.00'
	L=113.64'
	T=74.94'
	D=21°42'11"
	PC=5+35.11
	PT=6+48.75



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	INITIALS
2	8/29/05	DATE OF REVISION	DESCRIPTION
3	10/24/05	DATE OF REVISION	DESCRIPTION

REVISION

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 Barry • Eluff • McDonald • Milligan, Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Corvallis, Maine 04848, (807) 859-5771

FOR
 Graves Hill Land Company, LLC
 16 Tillary Street
 Saco, Maine 04072

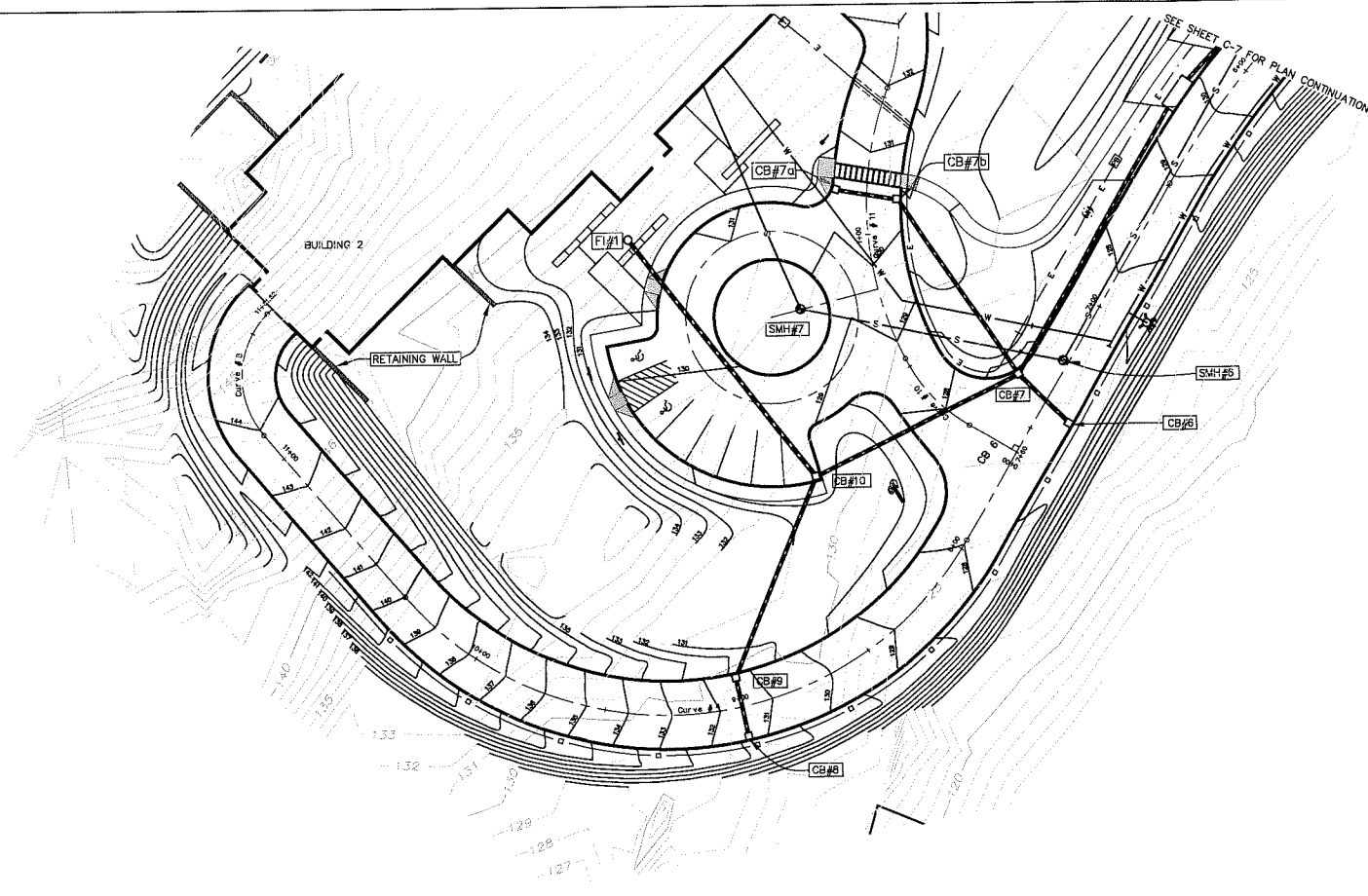
PLAN & PROFILE A
 Sta. 0+00 to 6+00
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED W. Pelkey	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-7

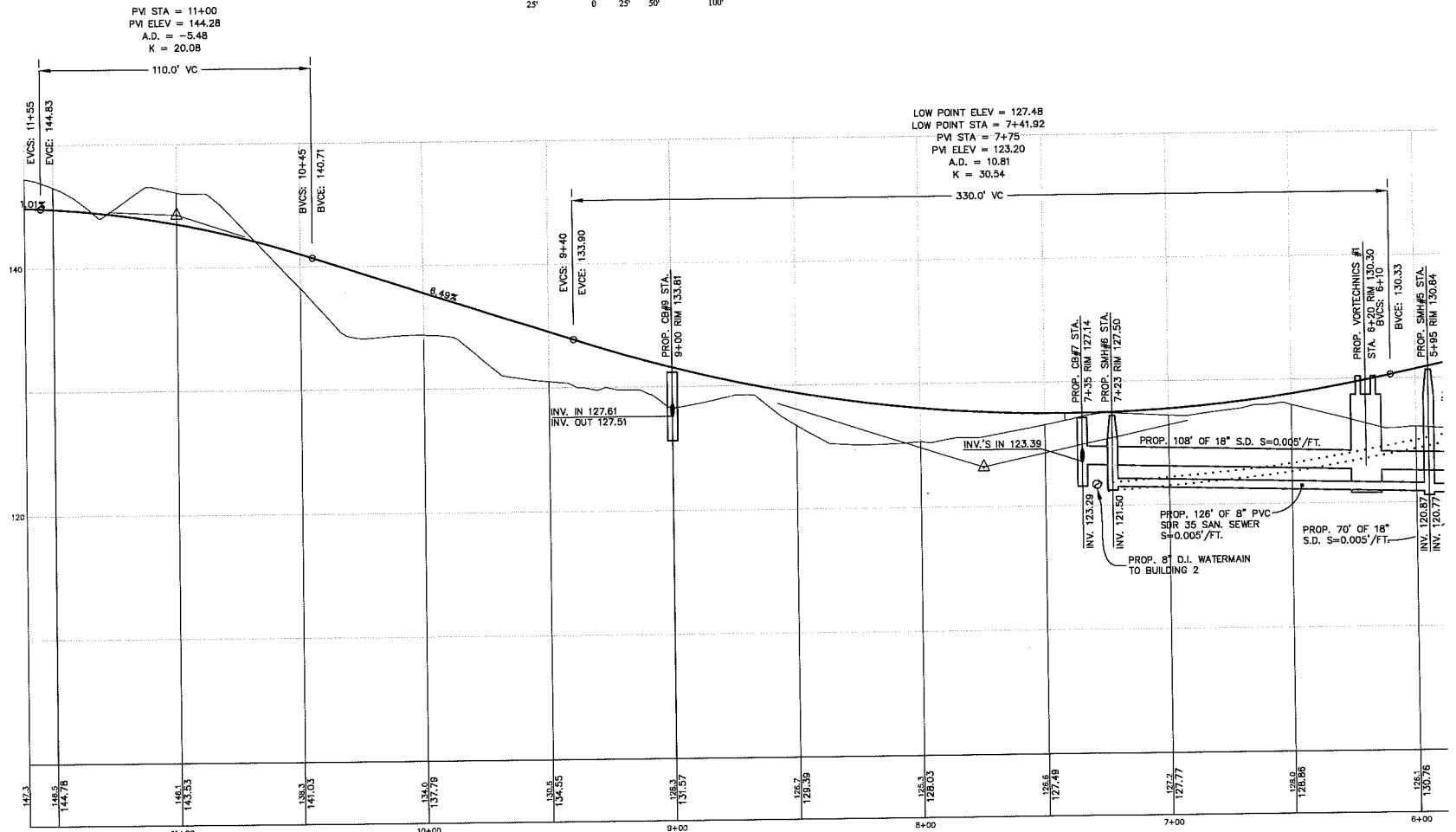
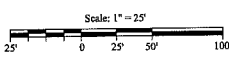
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Q CURVE DATA

CURVE #4	R=125.00'
	L=237.59'
	T=174.94'
	D=108°54'17"
PC=7+98.34	
PT=10+33.93	
CURVE #5	R=32.00'
	L=47.95'
	T=29.77'
	D=85°51'28"
PC=11+11.07	
PT=11+59.02	



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

NO.	DATE	REVISION	DESCRIPTION
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2	7/27/05	DATE OF RE-SUBMITAL	
3	10/24/05	STURMANN REVS.	

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FOR
Graves Hill Land Company, LLC
16 Tiffany Lane
Saco, Maine 04072

PLAN & PROFILE A
Sta. 6+100 to 11+79.48
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED W. Peiray	DATE April 2005
DRAWN Dept.	SCALE As Noted
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SHEET
C-8

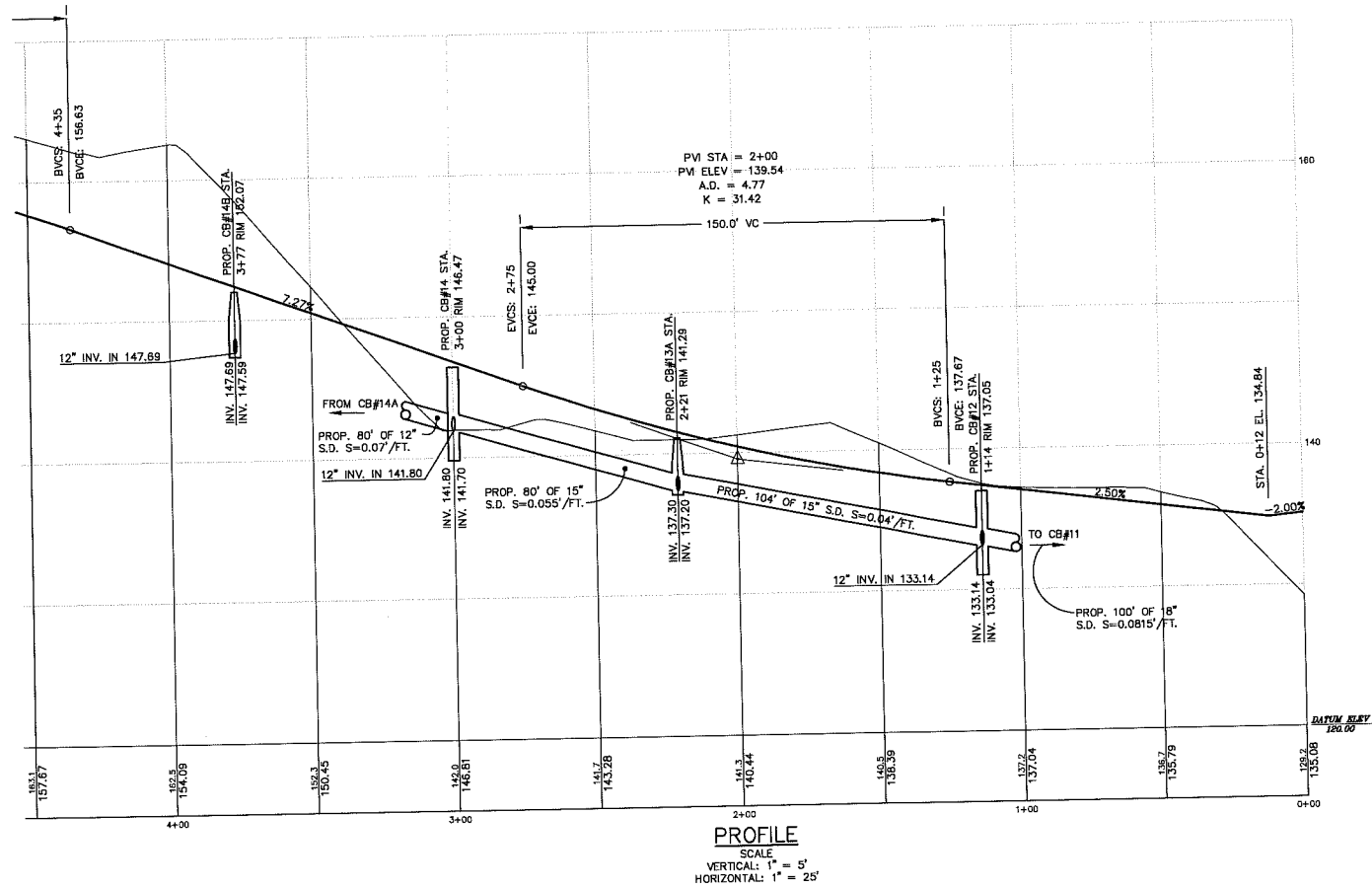
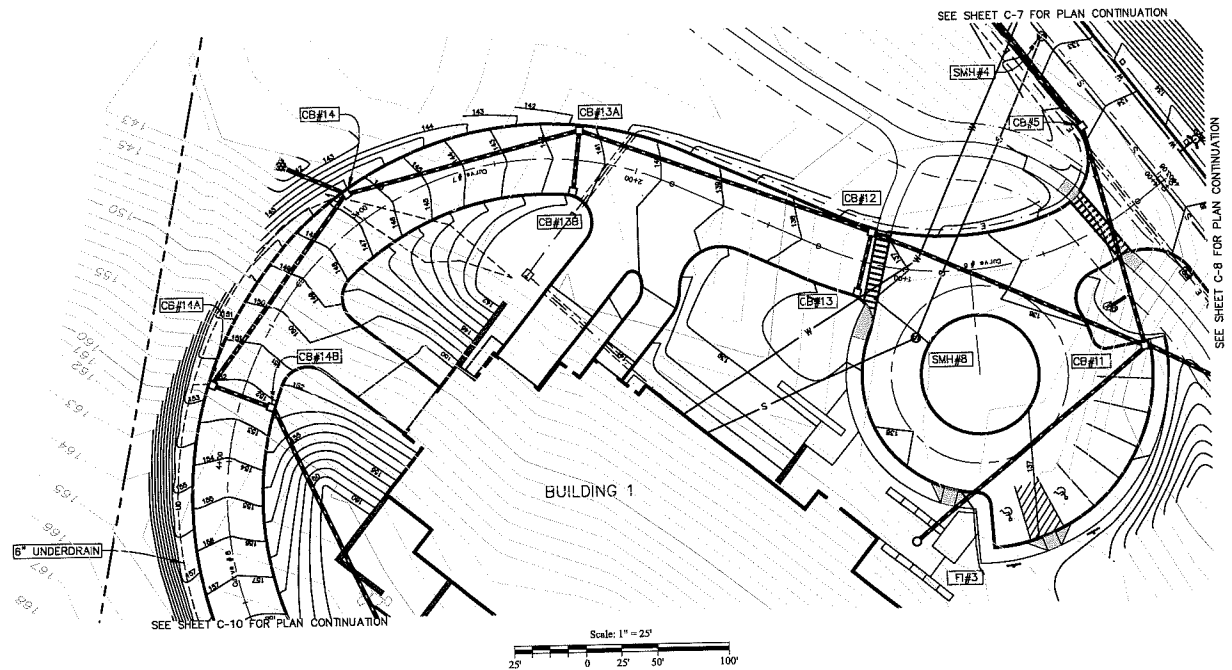
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\\2002-w\02055-no para\dwg\Prof B-1.dwg, OI / 06 / 2006 12:59:34 PM



② CURVE DATA

CURVE #6	R=110.00' L=118.88' T=65.89' D=61°55'18" PC=0+11.95 PT=1+30.83
CURVE #7	R=110.00' L=144.33' T=84.68' D=75°10'46" PC=1+06.80 PT=3+30.93
CURVE #8	R=120.00' L=143.32' T=137.80' D=100°07'24" PC=3+32.32 PT=4+75.64



NO.	DATE	REVISION	DESCRIPTION
1	3/28/05		DATE OF ISSUE
2	10/24/05		DATE OF RESUBMITTAL
3	10/24/05		STANDARD REVS.

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 ENGINEERS • SURVEYORS • PLANNERS
 298 State Street, Gorham, Maine 04038, (207) 839-2774

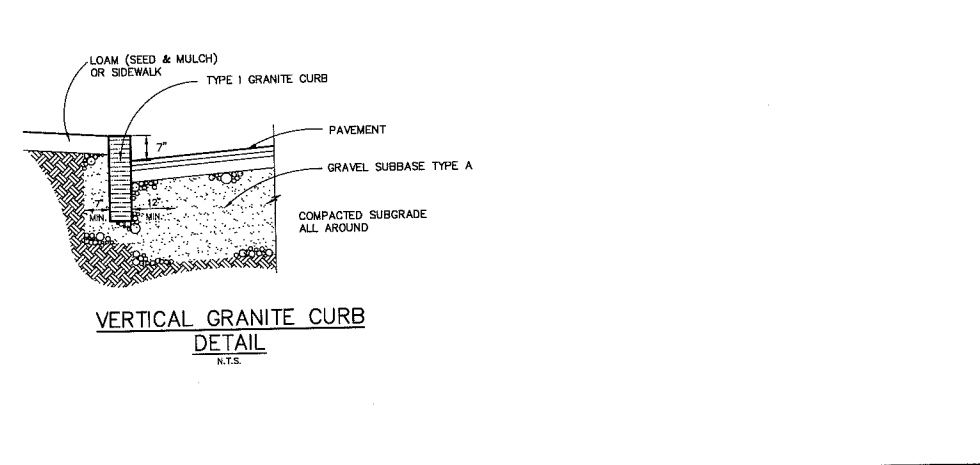
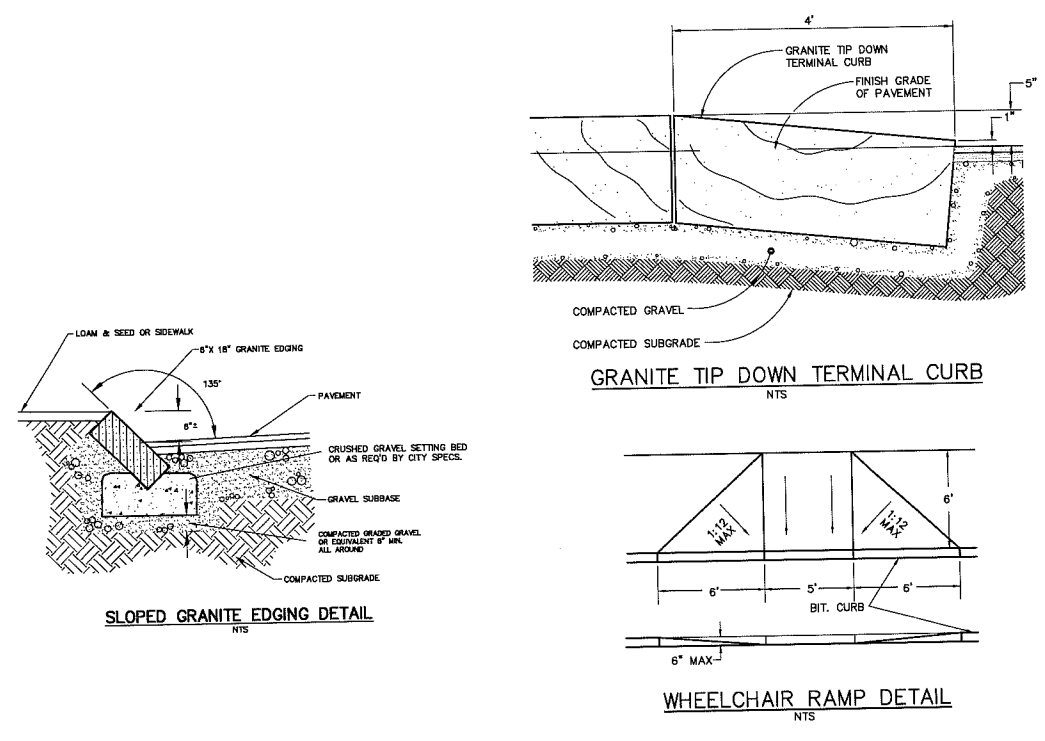
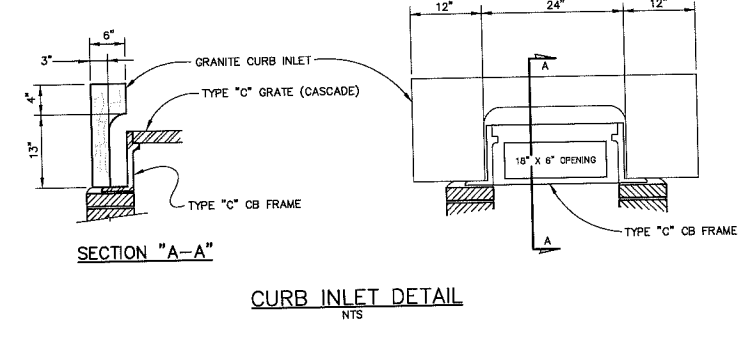
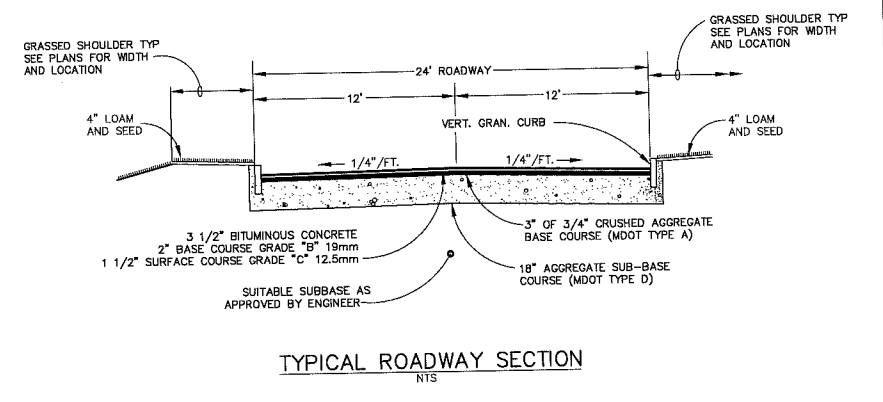
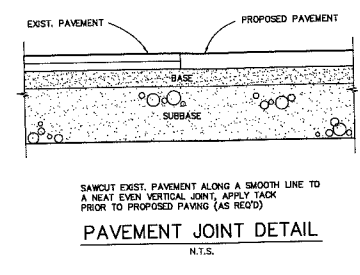
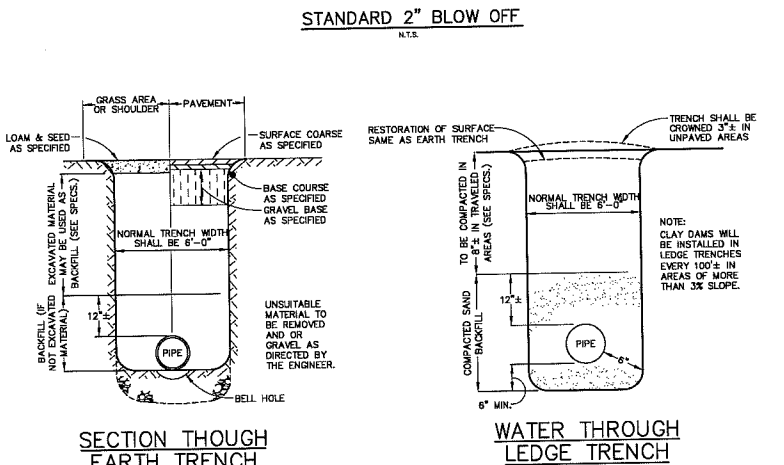
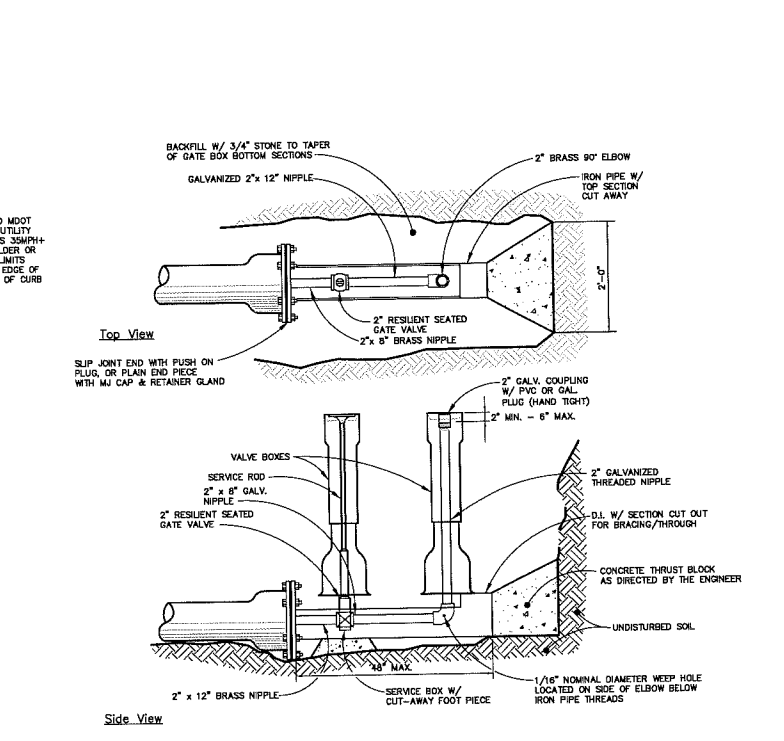
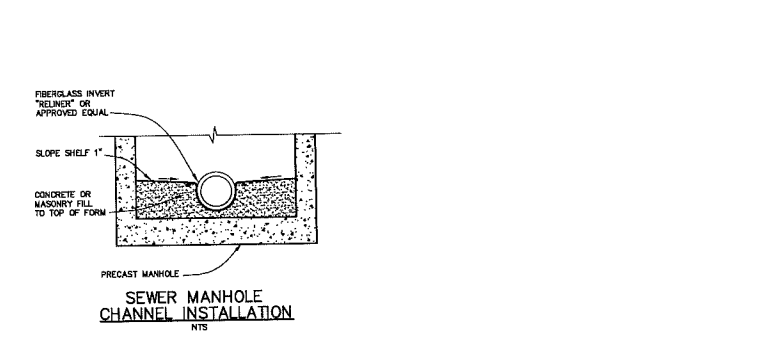
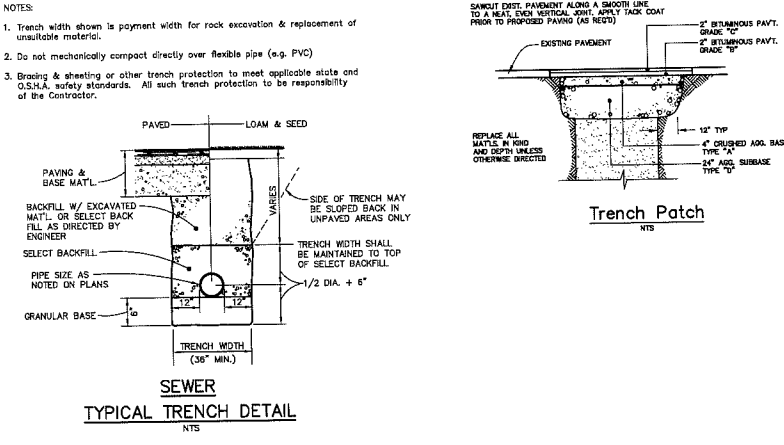
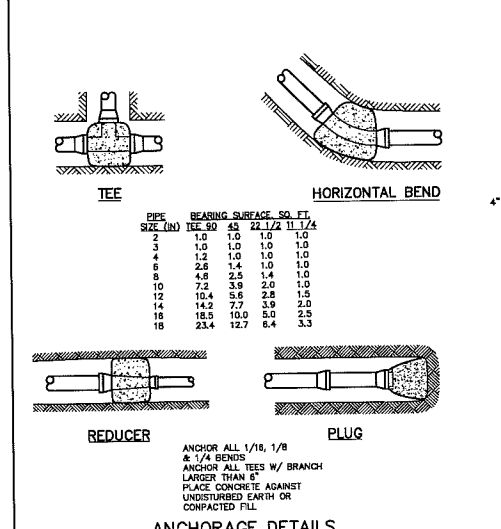
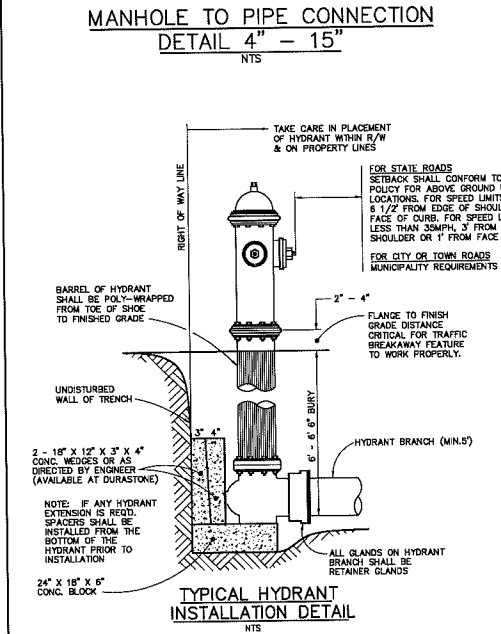
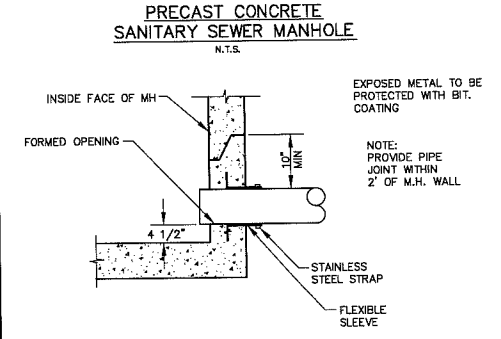
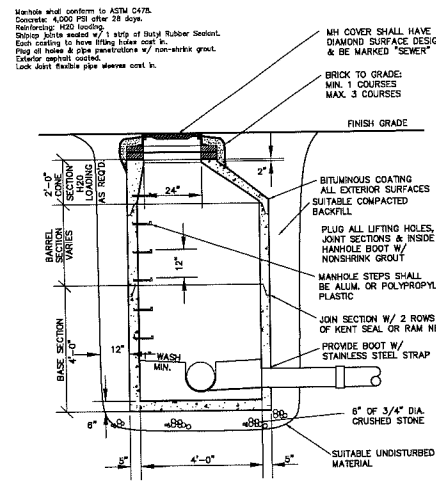
Graves Hill Land Company, LLC
 16 Tibbety Lane
 Saco, Maine 04072

PLAN & PROFILE B
 Sta. 0+00 to 4+50
 GRAVES HILL
 CRYSTAL AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
W. Polkey	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
L. Berry	02055

SHEET
C-9

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1	12/19/05	DATE OF ISSUE
2	3/29/06	DATE OF RE-SUBMITTAL
3	10/24/05	STANDARD REVISIONS

BH2M	
Barry • Huff • McDonald • Milligan Inc.	
ENGINEERS • SURVEYORS • PLANNERS	
28 State Street, Gorham, Maine 04038 (207) 839-2771	

FOR Graves Hill Land Company, LLC	
16 Tiffany Lane, Scarborough, Maine 04072	

SITE DETAILS	
GRAVES HILL	
OCEAN AVENUE	
PORTLAND, MAINE	

DESIGNED	DATE
W. Peckey	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
L. Berry	02055

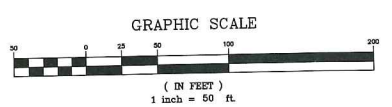
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C-12	
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\\2002-w\02055-no pond\dwg\Site Details.dwg, OI/06/2006 12:42:56 PM

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- NOTES:
1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COULOMBE INC. SACO, ME.
 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES GORHAM, ME.
 3. BENCHMARK= 105.51 NGVD 1929
 4. SOILS: CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING -LYMAN (ENTIRE SITE).

SYMBOL	DESCRIPTION
(Symbol)	SUBCATCHMENT AREA
(Symbol)	REACH
(Symbol)	POND
(Symbol)	EXISTING EDGE OF PAVEMENT
(Symbol)	EXISTING OVERHEAD ELECTRIC
(Symbol)	EXISTING STORM DRAIN
(Symbol)	EXISTING UTILITY POLE
(Symbol)	EXISTING SEWER MANHOLE
(Symbol)	EXISTING WATER MAIN VALVE
(Symbol)	IRON PIPE FOUND/IRON ROD FOUND
(Symbol)	PROPERTY LINE
(Symbol)	EXISTING SEWER
(Symbol)	LIMIT OF WETLANDS
(Symbol)	TIME OF CONCENTRATION ROUTE
(Symbol)	EXISTING CONTOUR
(Symbol)	DRAINAGE BOUNDARY
(Symbol)	FLOW DIRECTION



NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE
2	3/29/05		DATE OF RE-SUBMITTAL
3	10/24/05		STORMWATER REV.

BH2M
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 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 838-2771

FOR
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 Saco, Maine 04072

PRE DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE Mar 2005
DRAWN E. Valerio	SCALE 1" = 50'
CHECKED L. Berry	JOB. NO. 02055

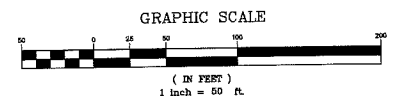
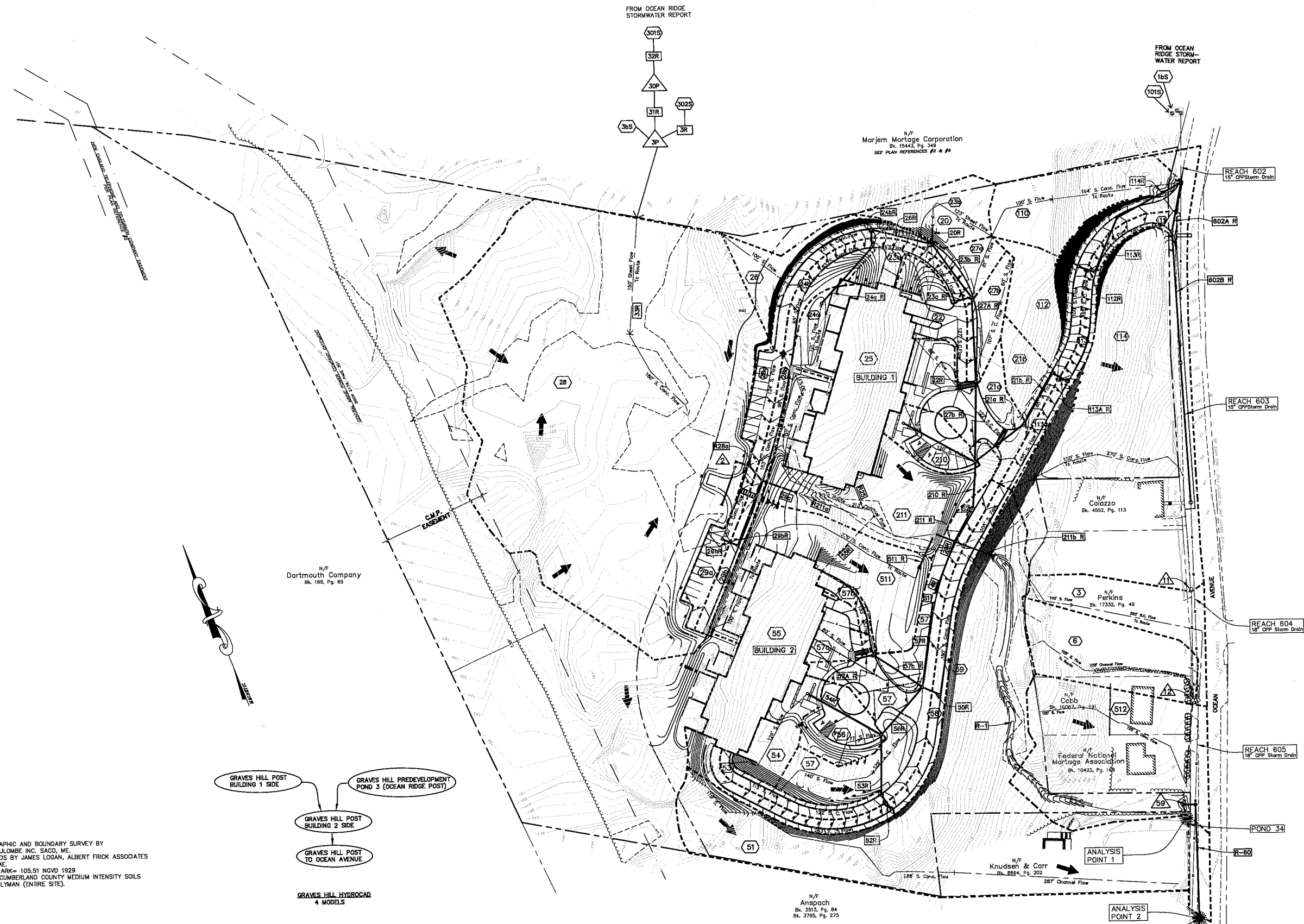
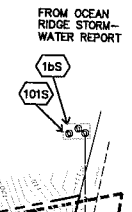
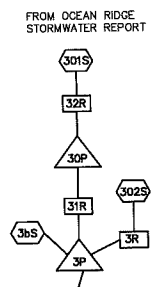
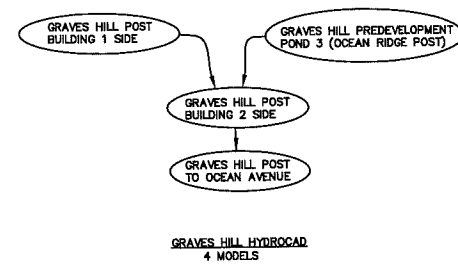
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1. 2002-w 020515-no pond.dwg, 01/06/2006 12:34:18 PM

- NOTES:**
1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COULMBE INC. SACO, ME.
 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES GORHAM, ME.
 3. BENCHMARK= 105.51 NGVD 1929
 4. SOILS: CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING -LYMAN (ENTIRE SITE).

SYMBOL	DESCRIPTION
	SUBCATCHMENT AREA
	REACH
	POND
	EXISTING EDGE OF PAVEMENT
	PROPOSED CONTOUR
	EXISTING STORM DRAIN
	EXISTING UTILITY POLE
	EXISTING SEWER MANHOLE
	EXISTING WATER MAIN VALVE
	IRON PIPE FOUND/IRON ROD FOUND
	PROPERTY LINE
	EXISTING SEWER
	LIMIT OF WETLANDS
	TIME OF CONCENTRATION ROUTE
	EXISTING CONTOUR
	DRAINAGE BOUNDARY
	FLOW DIRECTION



NO.	DATE	REVISION	DESCRIPTION
1	3/27/05		DATE OF ISSUE
2	3/28/05		DATE OF RE-SUBMITTAL
3	10/24/05		STORMWATER REVS.

BH2M
 Barry • Huff • MacDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 853-5774

FOR
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 Scarborough, Maine 04072

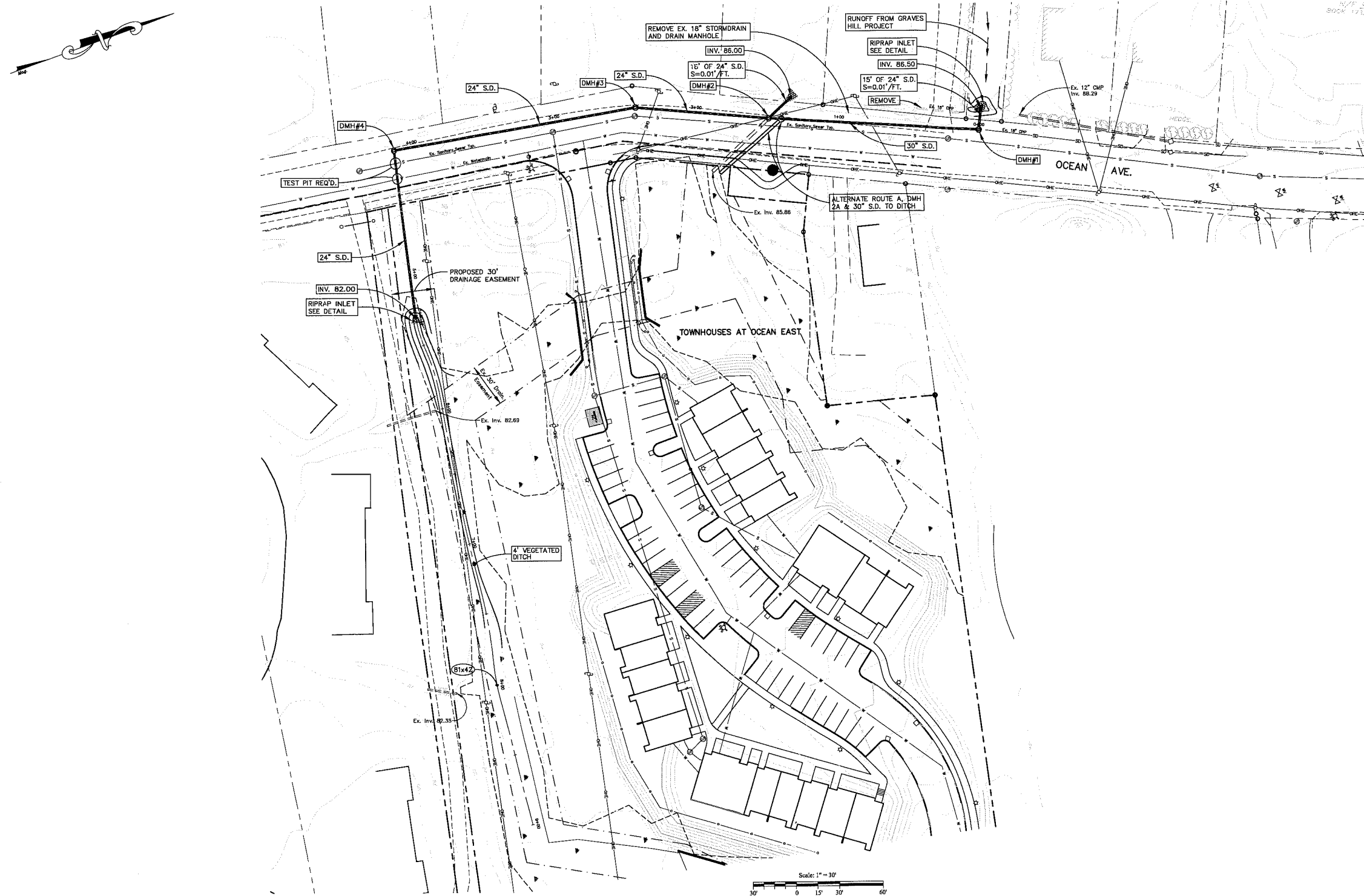
POST DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
L. Berry	Mar. 2005
DRAWN	SCALE
Dept.	1" = 50'
CHECKED	JOB. NO.
L. Berry	02055

SHEET
C-14

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SYMBOL	DESCRIPTION
(Solid line)	PROPOSED STORM DRAIN
(Dashed line)	EXISTING CONTOUR
(Dotted line)	PROPOSED CONTOUR
(Line with cross-ticks)	OVERHEAD ELECTRIC
(Line with circles)	UTILITY POLE
(Line with triangles)	EXISTING EDGE OF PAVEMENT
(Line with squares)	EXISTING STORM DRAIN
(Line with diamonds)	EXISTING STORM DRAIN

NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITAL
3	10/24/05	STORMDRAIN KEYS
4	12/9/05	ALTERNATE ROUTE A

BH2M
 Berry • Huff • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Guilford, Maine 04036, (207) 859-2771

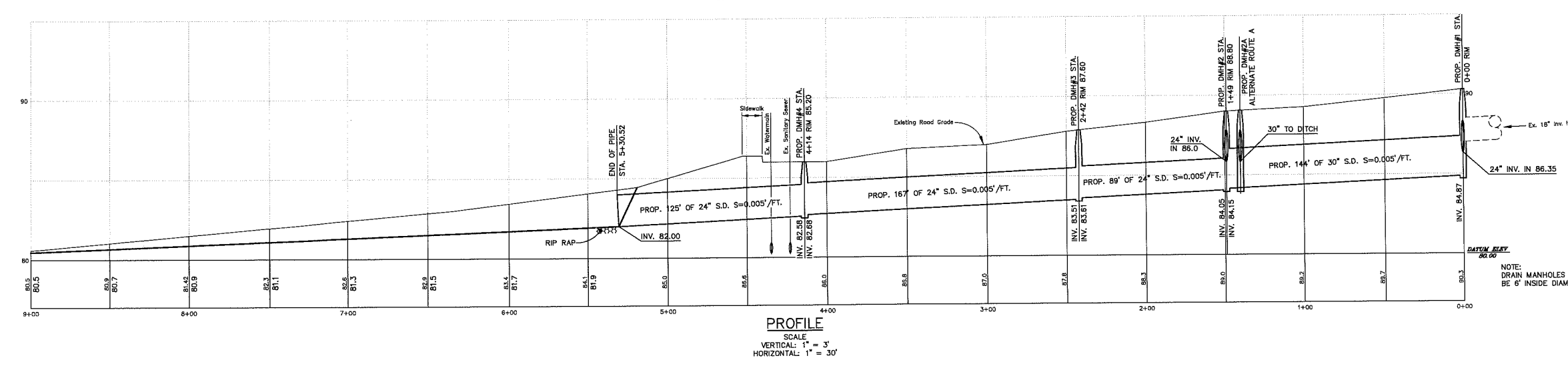
Genev Hill Land Company, LLC
 110 Main Street
 Saco, Maine 04072

STORMDRAIN EXTENSION
 GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 FORT-LAND, MAINE

DESIGNED L. Berry	DATE Sept. 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB NO. 02055

SHEET
C-15

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PROFILE
 SCALE
 VERTICAL: 1" = 3'
 HORIZONTAL: 1" = 30'

GRAVES HILL

OCEAN AVENUE
PORTLAND, MAINE

A 98 UNIT CONDOMINIUM PROJECT

FOR
GRAVES HILL LAND COMPANY, LLC
16 TIFFANY LANE
SACO, MAINE

PLAN INDEX

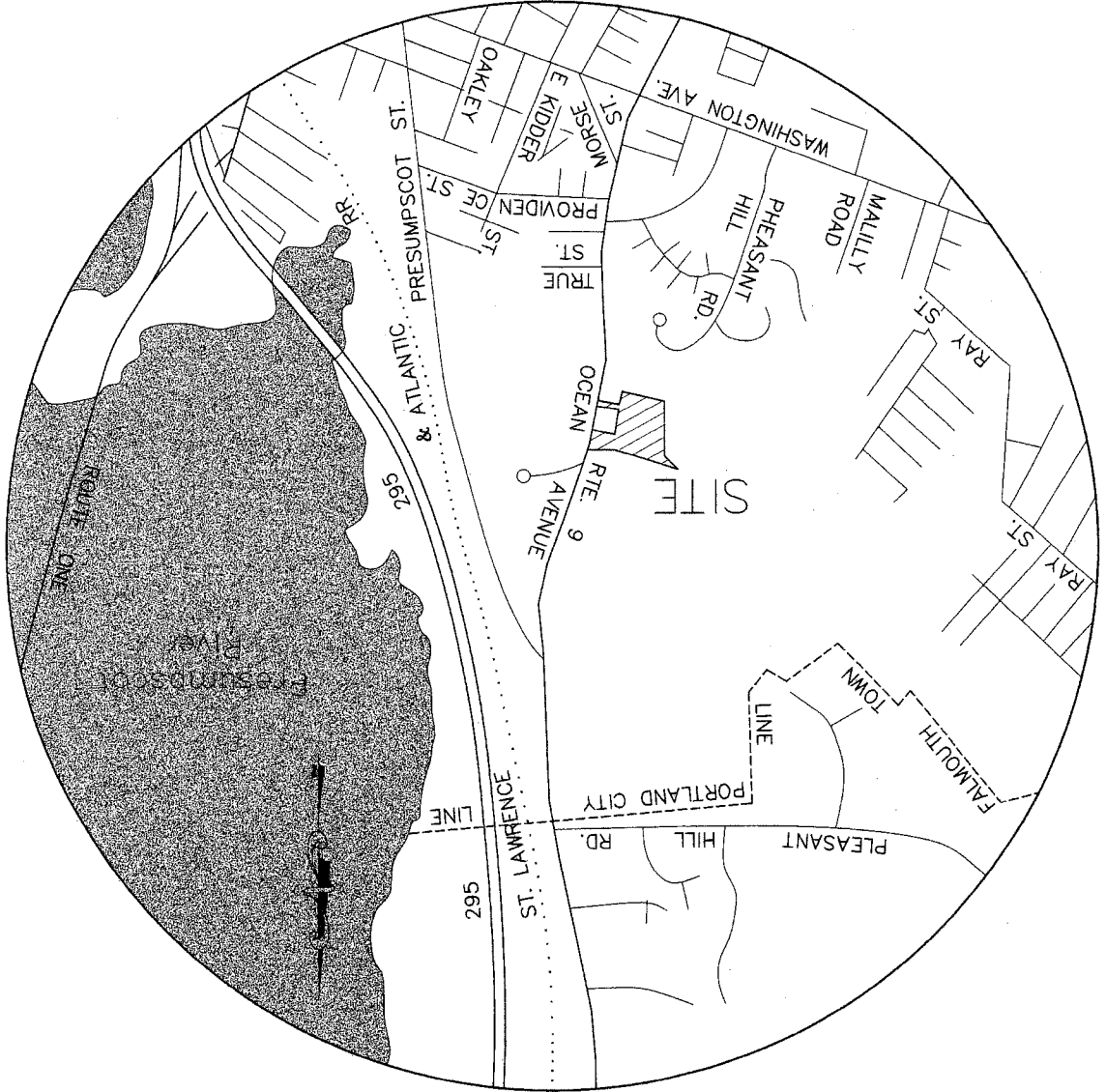
C-1	PROJECT INFORMATION
C-2	EXISTING CONDITIONS
C-3	SUBDIVISION PLAN
C-3A	PHASE I PLAN
C-3B	PHASE II PLAN
C-4	SITE PLAN
C-5	GRADING PLAN
C-6	UTILITY PLAN
C-7	PLAN & PROFILE SHEET- ROAD A STA 0+00 TO 6+00
C-8	PLAN & PROFILE SHEET- ROAD A STA 6+00 TO 11+79.48
C-9	PLAN & PROFILE SHEET- ROAD B STA 0+00 TO 4+50
C-10	PLAN & PROFILE SHEET- ROAD B STA 4+50 TO 9+60.70
C-11	EROSION CONTROL AND STORMDRAIN DETAILS
C-12	SITE DETAILS
C-13	PREDEVELOPMENT DRAINAGE PLAN
C-14	POST DEVELOPMENT DRAINAGE PLAN
C-15	DOWNSTREAM DRAINAGE PLAN

OCTOBER 2005



BH2M
Barry • Huff • McDonald • Mudge Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04103, (207) 859-2771

SCALE: 1" = .50 Mile



- GENERAL NOTES:**
- EXISTING PUBLIC AND PRIVATE UTILITY AND UNDERGROUND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND ALL UTILITIES AND PIPES ARE NOT NECESSARILY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IN THE FIELD THE LOCATIONS OF UTILITIES SHOWN AND FOR INVESTIGATING AND DETERMINING THE EXISTENCE AND LOCATIONS OF ANY ADDITIONAL PUBLIC AND PRIVATE UTILITIES. NOT SHOWN ON THE PLANS, BEFORE COMMENCING ANY EXCAVATIONS, AND SHALL BE RESPONSIBLE FOR REPAIRING ALL UTILITIES AND PIPES, BOTH PUBLIC AND PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, THAT ARE DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED IN INVESTIGATING AND REPAIRING SAID UTILITIES SHALL BE BORNE BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK PAID FOR UNDER THE PROPOSED PLANS AND LIMIT PRICES IN THE CONTRACT UTILITIES INCLUDE BUT ARE NOT LIMITED TO UNDERGROUND ELECTRIC, GAS, TELEPHONE, WATER, SEWER, STORM DRAIN, AND CELLAR DRAIN LINES. SEE PROJECT DIRECTORY FOR A LIST OF KNOWN UTILITIES AND CONTACT PERSONS.
 - ALL STRUCTURES INCLUDING EXISTING MANHOLES, VALVE COVERS, CATCH BASINS, ETC. SHALL BE ADJUSTED UP OR DOWN, AS REQUIRED, TO MEET FINISH GRADES. THE COST OF SUCH WORK SHALL BE INCIDENTAL TO THE PROJECT.
 - ALL NON-PAVED AREAS DISTURBED BY THE CONTRACTOR SHALL BE LOAMED AND SEEDDED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
 - ALL ELEVATIONS SHALL BE TAKEN FROM THE BENCHMARK ELEVATIONS SHOWN ON THE DRAWINGS. USING DO NOT USE CB OR MH MARKS.
 - THE CONTRACTOR SHALL EXCAVATE TEST PITS SHOWN ON THE DRAWINGS TO LOCATE SEWERS AND OTHER UTILITIES CRITICAL TO THE PROPOSED PAVING PLAN. THE OWNER RESERVES THE RIGHT TO ADJUST THE LOCATIONS AND DEPTHS AS REQUIRED. TEST HOLES DUG BY THE CONTRACTOR NOT INDICATED ON THE PLANS OR SO ORDERED BY THE ENGINEER WILL NOT BE PAID FOR.
 - WHENEVER THE WORDS "REMOVE" OR "ABANDONED" ARE USED IN REFERENCE TO EXISTING PIPES OR STRUCTURES, IT SHALL MEAN THAT MANHOLES SHALL BE REMOVED COMPLETELY OR BROKEN WITHIN 50' OF THE FINISH GRADE. SEWER LINES PLUGGED WITH CONCRETE AND THE EMPTY STRUCTURE FILLED WITH COMPACTED GRANULAR MATERIAL.
 - THE WORD "PLUGGED" MEANS TO FILL AND SEAL WITH CONCRETE.
 - WHERE THE WORK REQUIRES THE REMOVAL OF TREES AND/OR STUMPS SUCH REMOVAL SHALL BE INCIDENTAL TO THE ITEM AFFECTED.
 - CONNECTIONS TO EXISTING MANHOLES, PIPES, OR OTHER STRUCTURES SHALL BE INCIDENTAL TO THE COST OF THE PIPE AND NO SEPARATE PAYMENT WILL BE MADE.
 - THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC WARNINGS SIGNS DURING THE PROGRESS OF THE WORK IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - ALL DRIVERS AND WALKERS IMPACTED BY THE PROJECT SHALL BE REPAIRED AS SHOWN IN THE DETAILS AND AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DIRECT THE CONTRACTOR AS TO THE METHOD OF DEALING WITH EACH DRIVE AND WALK.
 - PIPE LENGTH EQUALS DISTANCE BETWEEN THE INSIDE FACE OF CATCH BASINS OR MANHOLES. (PIPE SLOPE COMPUTATION).
 - PROPERTY LINE AND RIGHT OF WAY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR.
 - UTILITY POLES SHALL BE RELOCATED BY OWP & VERTICAL UTILITY WRES WILL BE REHUNG OR BURIED DURING THIS SAME CONSTRUCTION. COORDINATION WILL BE REQUIRED BY THE CONTRACTOR IN ORDER TO MINIMIZE CONFLICTS.
 - PORTLAND WATER DISTRICT WILL BE INVOLVED IN WATERMAIN DECISIONS AND MONITORING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WATER COMPANY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG-SAFE" AND LOCAL UTILITY COMPANIES AT LEAST 3 BUSINESS DAYS BUT NOT MORE THAN 30 CALENDAR DAYS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, OR AS OTHERWISE REQUIRED BY MAINE STATE LAW.
 - THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THESE PLANS.
 - ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS. COMPANIES STANDARDS.
 - THE CONTRACTOR SHALL SECURE ALL NECESSARY CONSTRUCTION ACTIVITY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
 - NO BLASTING WILL BE ALLOWED WITHIN 500 FT OF ANY UTILITY WITHOUT THE NOTIFICATION AND APPROVAL OF THE APPROPRIATE UTILITY COMPANY. NO LEAD BLASTING FROM THE UTILITY IS GIVEN. BLASTING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND SITE LOCATION OF DEVELOPMENT APPROVAL ORDER.
 - ALL PAVEMENT CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE CUT EDGES AND NEW PAVEMENT BUILT TO IT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - RESPECTIVE COMPANIES REQUIREMENTS.
 - CONDUIT SHALL BE USED FOR ELECTRIC, TELEPHONE AND TV IN ACCORDANCE WITH THE ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL SWAPS" MANUAL. THE PROJECT EAS REPORT PREPARED BY BHM AND AS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS.

LEGEND

EXISTING	PROPOSED
CONTOUR	CONTOUR
EASEMENT LINE	EASEMENT LINE
OVERHEAD UTILITIES	OVERHEAD UTILITIES
STORM DRAIN	STORM DRAIN
SANITARY SEWER	SANITARY SEWER
WATER LINE	WATER LINE
DRAINAGE BOUNDARY	DRAINAGE BOUNDARY
LIMIT OF RETAINERS	LIMIT OF RETAINERS
STONE WALL	STONE WALL
DRAIN MANHOLE	DRAIN MANHOLE
SANITARY SEWER MANHOLE	SANITARY SEWER MANHOLE
HYDRANT	HYDRANT
CATCH BASIN	CATCH BASIN
GRANITE MONUMENT	GRANITE MONUMENT
UTILITY POLE	UTILITY POLE
IRON ROD FOUND	IRON ROD FOUND
IRON ROD W/ CAP TO BE SET	IRON ROD W/ CAP TO BE SET
ABOVE GROUND	ABOVE GROUND
NOW OR FORMERLY	NOW OR FORMERLY

PROJECT INFORMATION

GRAVES HILL

FOR
 GRAVES HILL
 16 (Dillon) Lane
 Saco, Maine 04072

BH2M
 BARRY * HUFF * MADDEN * MULLIGAN
 ENGINEERS * SURVEYORS * PLANNERS



NO.	DATE	REVISION
1	3/29/10	DATE OF ISSUE
2	3/29/10	DATE OF RE-SUBMITTAL
3	10/27/05	STANDARD REV'S

DESIGNED	DATE
APR 2009	

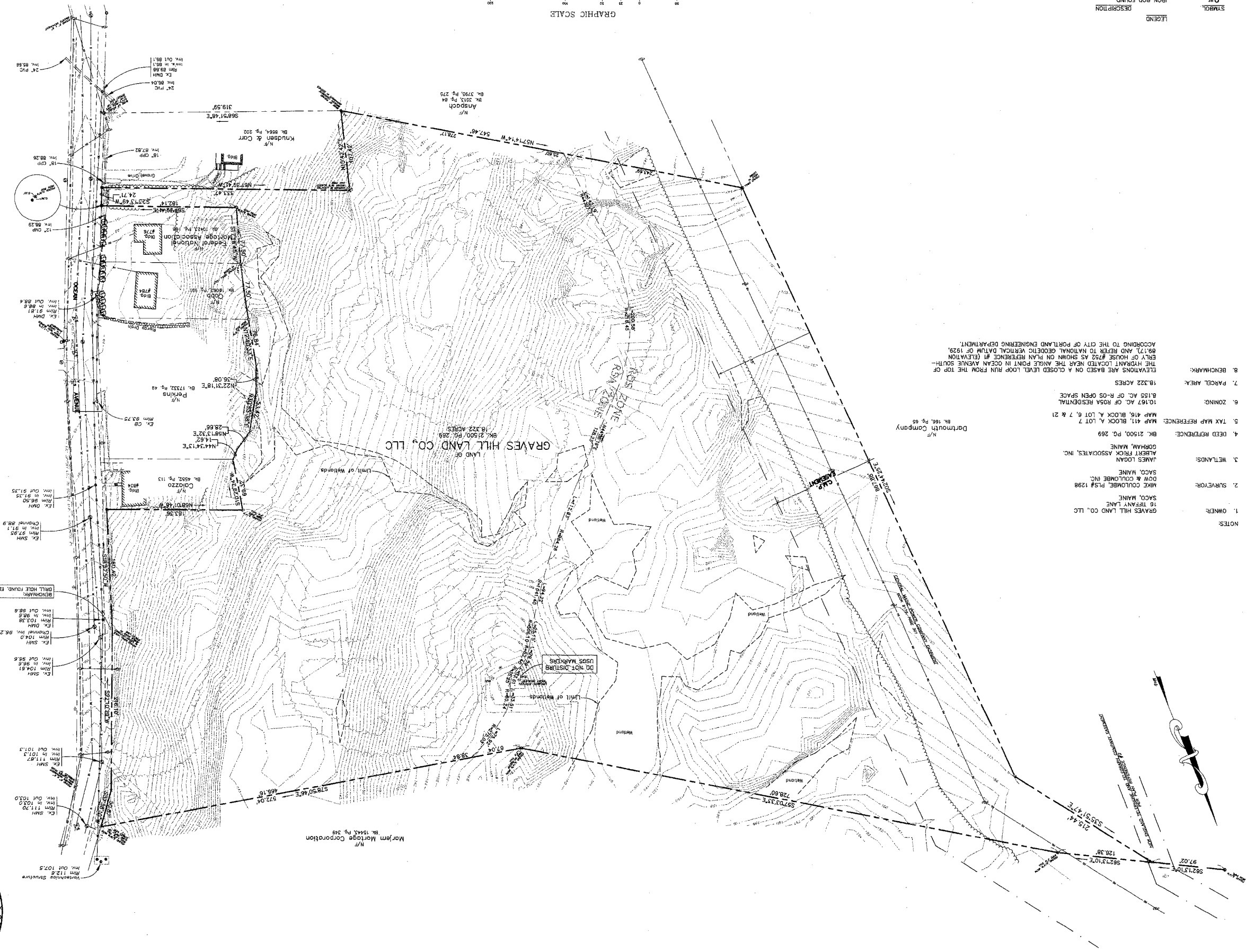
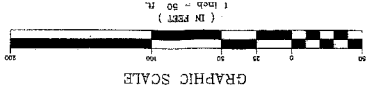
SCALE	DRAWN
AS NOTED	

CHECKED	JOB NO.
L. Barry	0705

SHEET
 C-1

LEGEND

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
○	ABOVE GROUND
○	N/F
○	LIMIT OF WELLS
○	NEW OR FORMERLY
○	EXISTING CONTOURS
○	EASEMENT LINE
○	BUILDING SETBACK



- NOTES:
1. OWNER: GRAVES HILL LAND CO., LLC
 2. SURVEYOR: MIKE COULOMBE, PLS# 1298 SACO, MAINE
 3. WETLANDS: JAMES LOGAN SACO, MAINE; ALBERT FRICK ASSOCIATES, INC. GORHAM, MAINE
 4. DEED REFERENCE: BK. 21500, PG. 269; MAP 411, BLOCK A, LOT 7 & 21; MAP 410, BLOCK A, LOT 6, 7 & 21
 5. TAX MAP REFERENCE: 10.167 AC. OF R-03A RESIDENTIAL; 8.155 AC. OF R-03 OPEN SPACE; 18.322 ACRES
 7. PARCEL AREA:
 8. BENCHMARK: ELEVATIONS ARE BASED ON A CLOSED LEVEL LOOP RUN FROM THE TOP OF THE HYDRANT LOCATED NEAR THE ANGLE POINT IN OCEAN AVENUE SOUTH-88.17) AND REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1983. ACCORDING TO THE CITY OF PORTLAND ENGINEERING DEPARTMENT.

DESIGNED: April 2003
 DRAWN: As Noted
 CHECKED: L. Berry 02/03
 SHEET: C-2

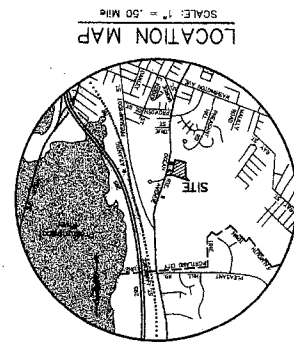
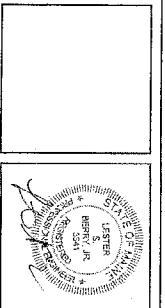
EXISTING CONDITIONS
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

Job:
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 South Portland 04073

BH2M
 Barry * Huff * McDonald * Milligan Inc.
 ENGINEERS * SURVEYORS * PLANNERS
 28 State Street, Portland, Maine 04103 (207) 859-2771

REVISION

NO.	DATE	DESCRIPTION
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2	3/29/05	DATE OF RE-SUBMITTAL
3	10/27/05	STANDARDIZATION REVS.

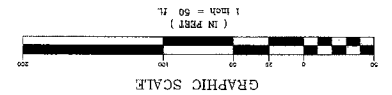


LOCATION MAP
 SCALE: 1" = 50' MAP

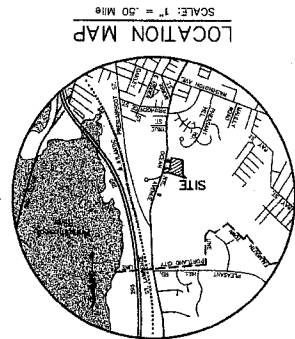
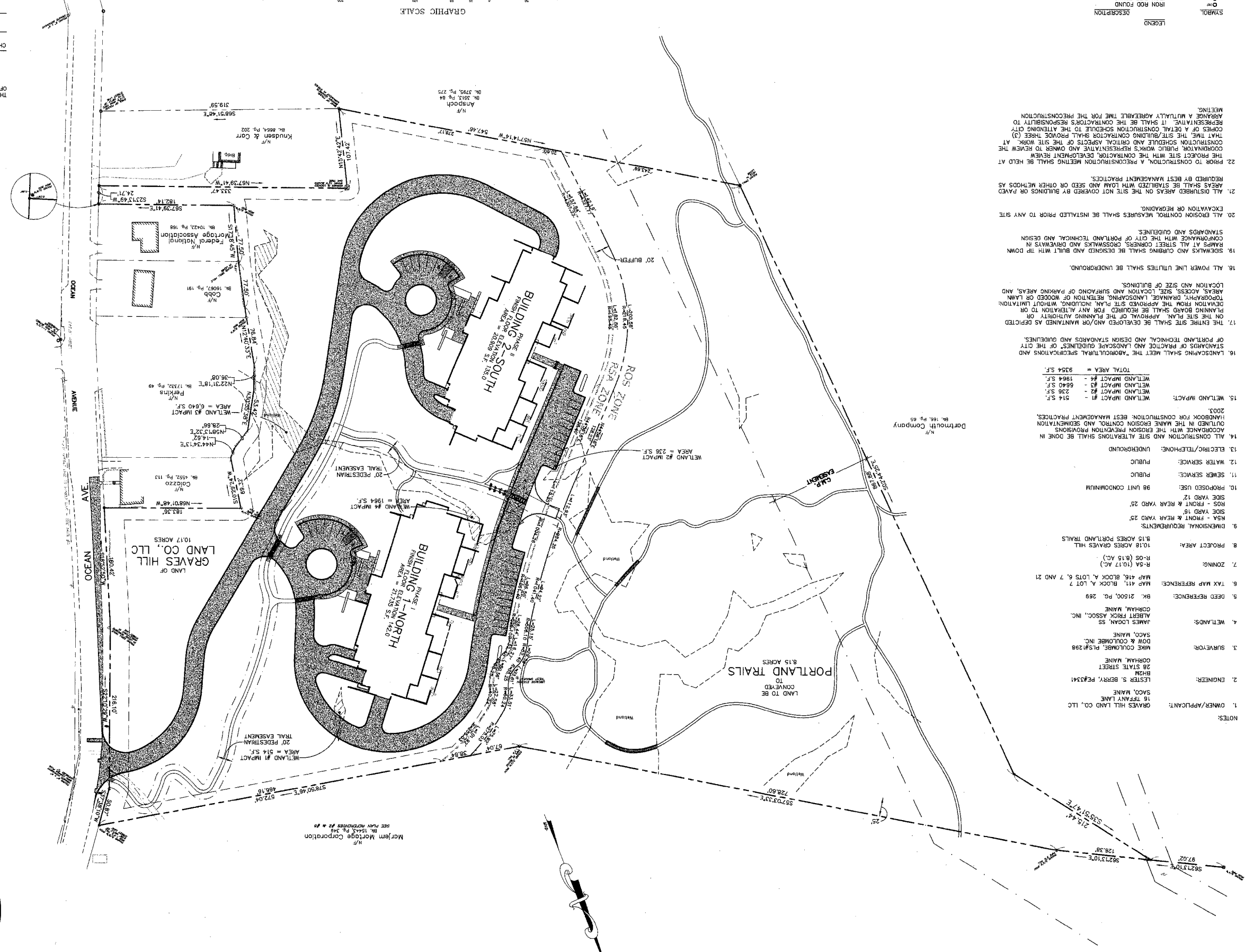
LEGEND

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
○	GRANITE MONUMENT FOUND
○	2" / IRON ROD / CAP TO BE SET ABOVE GROUND
N/T	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOUR
---	EASEMENT LINE
---	BUILDING SETBACK
---	PROPERTY LINE

- NOTES:**
1. OWNER/APPLICANT: GRAVES HILL LAND CO., LLC
16 PREFRAN LANE
SACO, MAINE
 2. ENGINEER: LESTER S. BERRY, PE#3341
BHZM
28 STATE STREET
GORHAM, MAINE
 3. SURVEYOR: MIKE COULOMBE, PLS#1288
DOW & COULOMBE INC.
SACO, MAINE
 4. WETLANDS: JAMES LOGAN, SS
ALBERT FRICK ASSOC., INC.
GORHAM, MAINE
 5. DEED REFERENCE: BK. 21600, PG. 289
 6. TAX MAP REFERENCE: MAP 416, BLOCK A, LOTS 6, 7 AND 21
 7. ZONING: R-5A (10.17 AC.)
R-OS (0.15 AC.)
 8. PROJECT AREA: 10.16 ACRES GRAVES HILL
 9. DIMENSIONAL REQUIREMENTS:
R5A - FRONT & REAR YARD 25'
SIDE YARD 18'
R5A - FRONT & REAR YARD 25'
SIDE YARD 12'
R5A - FRONT & REAR YARD 25'
 10. PROPOSED USE: 98 UNIT CONDOMINIUM
 11. SEWER SERVICE: PUBLIC
 12. WATER SERVICE: PUBLIC
 13. ELECTRIC/TELEPHONE: UNDERGROUND
 14. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION, BEST MANAGEMENT PRACTICES, 2003.
 15. WETLAND IMPACT:
WETLAND IMPACT #1 - 514 S.F.
WETLAND IMPACT #2 - 238 S.F.
WETLAND IMPACT #3 - 664 S.F.
WETLAND IMPACT #4 - 1964 S.F.
TOTAL AREA = 3254 S.F.
 16. LANDSCAPING SHALL MEET THE "ARBORESCULE SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND AND DESIGN STANDARDS AND GUIDELINES.
 17. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION, TOPOGRAPHY, LANDSCAPING, LOCATION OF PARKING AREAS, AND AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
 18. ALL POWER LINE UTILITIES SHALL BE UNDERGROUND.
 19. RAMPAS AND GRADING SHALL BE DESIGNED AND BUILT WITH "P" DOWN RAMPAS AT ALL STREET CROSSINGS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 20. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
 21. ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES.
 22. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DESIGNER, CITY COMMISSIONER, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTEMING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.



SEE SHEETS C-3A AND C-3B FOR PHASING PLANS



CHAIR

DATE

DESIGNED DATE: April 20th

SCALE: As Noted

DRAWN: A. NORTON

CHECKED: J. JOHNSON

LIBRARY: R. LIBBY JR.

DATE: 10/27/2016

DESCRIPTION: STRONGHOLD REV'S

DATE OF ISSUE: 10/27/2016

DATE OF RE-SUBMITTAL: 3/9/2016

DATE: 3/29/2016

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING AND BOARD.

DESIGNED DATE: April 20th

SCALE: As Noted

DRAWN: A. NORTON

CHECKED: J. JOHNSON

LIBRARY: R. LIBBY JR.

DATE: 10/27/2016

DESCRIPTION: STRONGHOLD REV'S

DATE OF ISSUE: 10/27/2016

DATE OF RE-SUBMITTAL: 3/9/2016

DATE: 3/29/2016

FOR THE SUBDIVISION PLAN 98 UNIT CONDOMINIUM GRAVES HILL

General Hill LLC

16 Prefran Lane

Saco, Maine 04072

BH2M

PLANNERS

STURTEVANT

HUFF

McDONALD

McMILLAN

INC.

ENGINEERS

PLANNERS

STURTEVANT

HUFF

McDONALD

McMILLAN

INC.

16 Prefran Lane

Saco, Maine 04072

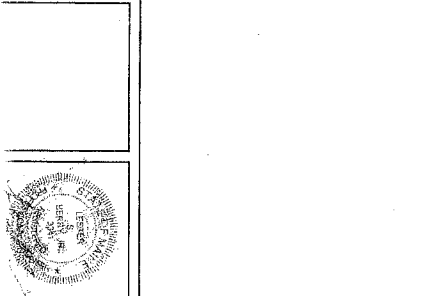
PH: 603.883.1234

FX: 603.883.1234

WWW.BH2M.COM

REVISION

NO.	DATE	DESCRIPTION
1	3/29/2016	DATE OF ISSUE
2	3/9/2016	DATE OF RE-SUBMITTAL
3	10/27/2016	STRONGHOLD REV'S

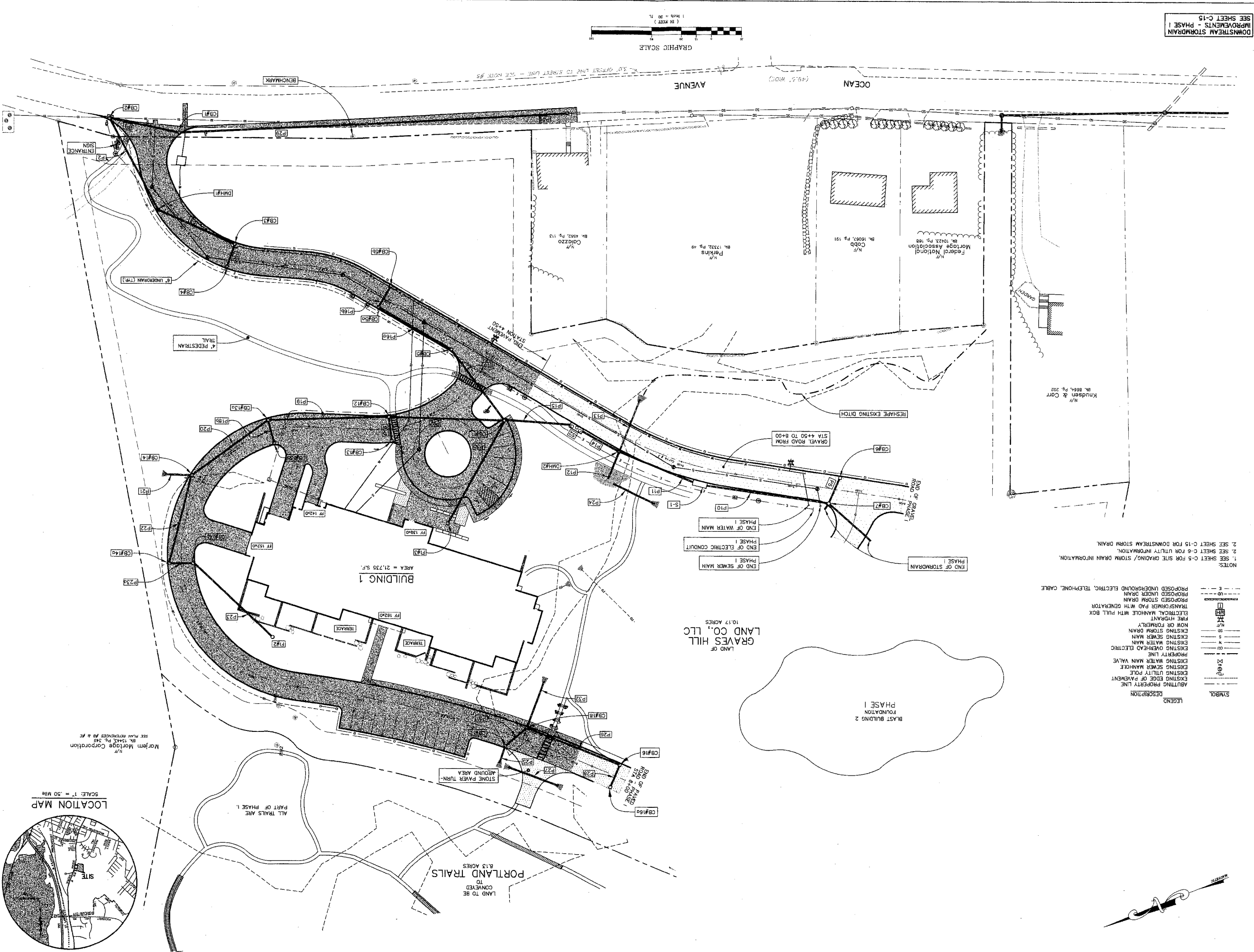
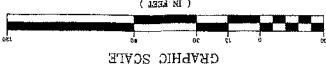


NO. DATE DESCRIPTION

1 3/29/2016 DATE OF ISSUE

2 3/9/2016 DATE OF RE-SUBMITTAL

3 10/27/2016 STRONGHOLD REV'S

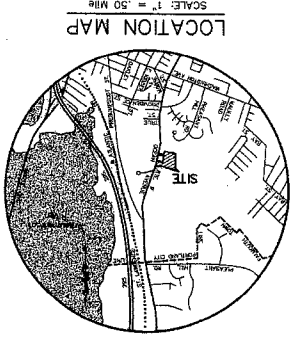


- NOTES:
1. SEE SHEET C-5 FOR SITE GRADING/ STORM DRAIN INFORMATION.
2. SEE SHEET C-6 FOR UTILITY INFORMATION.
3. SEE SHEET C-15 FOR DOWNSTREAM STORM DRAIN.
- | SYMBOL | DESCRIPTION |
|----------|---|
| (Symbol) | ABUTTING PROPERTY LINE |
| (Symbol) | EXISTING EDGE OF PAVEMENT |
| (Symbol) | EXISTING UTILITY POLE |
| (Symbol) | EXISTING SEWER MANHOLE |
| (Symbol) | EXISTING WATER MAIN VALVE |
| (Symbol) | PROPERTY LINE |
| (Symbol) | EXISTING OVERHEAD ELECTRIC |
| (Symbol) | EXISTING WATER MAIN |
| (Symbol) | EXISTING STORM DRAIN |
| (Symbol) | NEW OR FORMERLY |
| (Symbol) | FIRE HYDRANT |
| (Symbol) | ELECTRICAL MANHOLE WITH PULL BOX |
| (Symbol) | TRANSFORMER PAD WITH GENERATOR |
| (Symbol) | PROPOSED STORM DRAIN |
| (Symbol) | PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE |

LAND OF GRAVES HILL LAND CO., LLC
10.17 ACRES

LAND TO BE CONVEYED TO PORTLAND TRAILS 6.13 ACRES

Mormen Mortgage Corporation
BL 1544, Pg. 148
SEE PLAN REFERENCES FOR A #



DESIGNED	L. Barry	DATE	APRIL 2005
DRAWN	A. N. ...	SCALE	
CHECKED	L. Barry	JOB NO.	02055

PHASE I
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

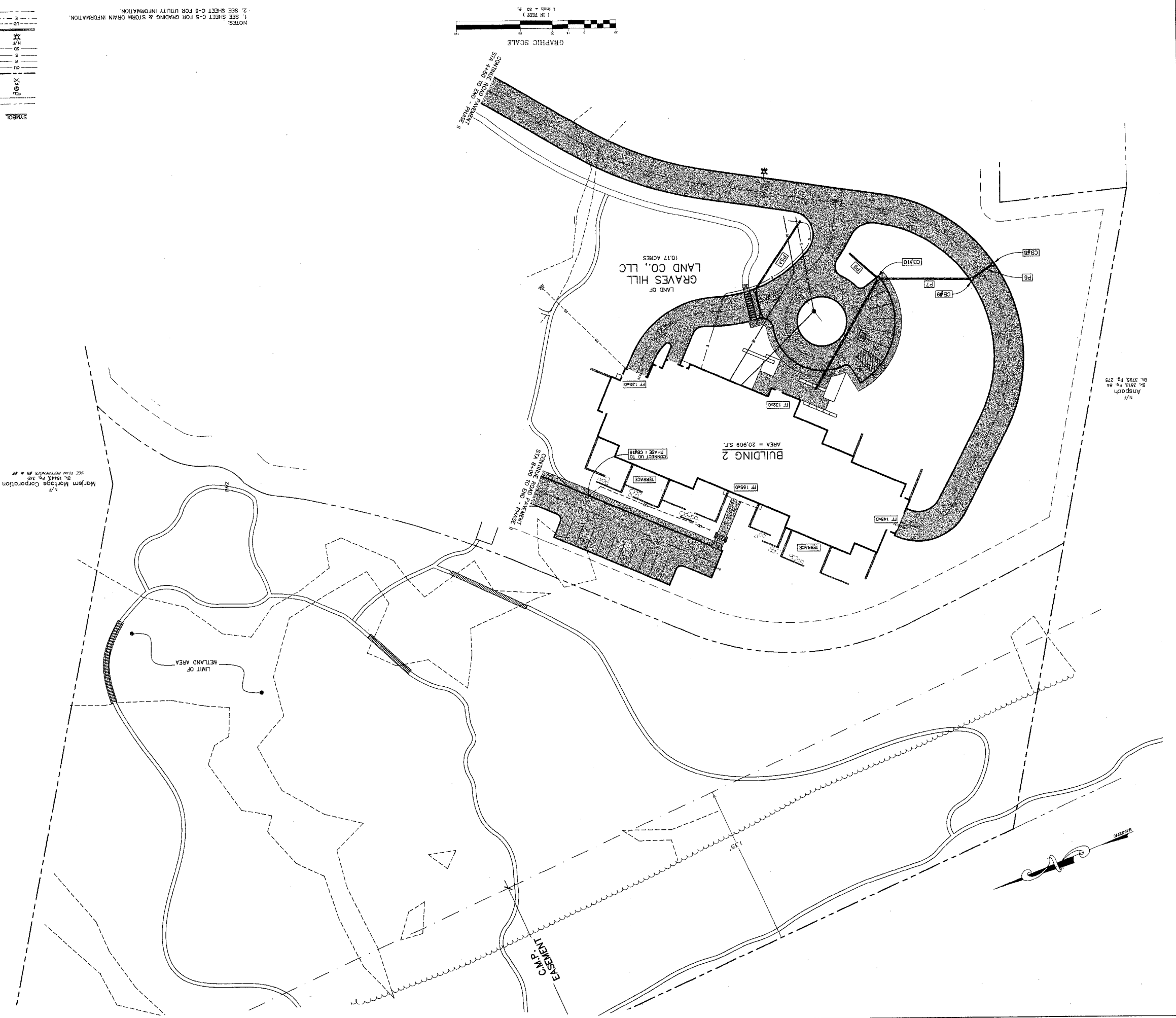
Graves Hill Land Company, LLC
1000
1500
1500
1500

BH2M
Barry • Hurl • McDonald • Mudgett Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04108 (207) 839-2777



NO.	DATE	DESCRIPTION
1	1/27/05	DATE OF ISSUE
2	10/27/05	DATE OF RE-SUBMITTAL
3	10/27/05	DATE OF APPROVAL

DATE PLOTTED: 10/27/2010 10:58:00 AM



Morlem Mortgage Corporation
Bl. 1645, Pg. 248
N/S
SEE PLAN REFERENCES #8 & #9

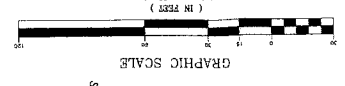
Anspach
Bl. 395, Pg. 275
N/S

NOTES:
1. SEE SHEET C-5 FOR GRADING & STORM DRAIN INFORMATION.
2. SEE SHEET C-6 FOR UTILITY INFORMATION.

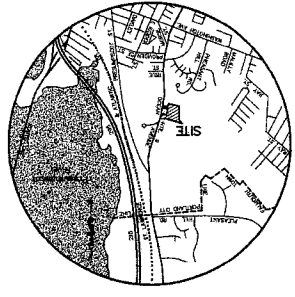
SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDC OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING STORM DRAIN
---	NOW OR FORMERLY
---	FIRE HYDRANT
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED CENTERLINE

LEGEND

SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDC OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING STORM DRAIN
---	NOW OR FORMERLY
---	FIRE HYDRANT
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED CENTERLINE



SCALE: 1" = 50' N/A



DESIGNED	DATE
L. Berry	April 2010

DRAWN	SCALE
D. Berry	1" = 30'

CHECKED	JOB NO.
L. Berry	10055

SHEET	C-36
-------	------

PHASE II
GRAVES HILL CONDOMINIUM

Job
Graves Hill Land Company, LLC
110 Main Street
Saco, Maine 04072

BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
27 State Street, Portland, Maine 04108 (207) 899-2771

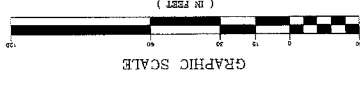


NO.	DATE	REVISION
1	10/27/10	DATE OF ISSUE
2	10/27/10	DATE OF RE-SUBMITTAL
3	10/27/10	STANDARD NOTES

DATE PLOTTED: 11/11/2011 10:58:11 AM

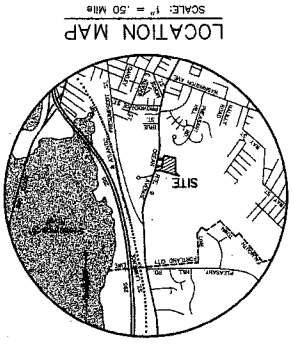
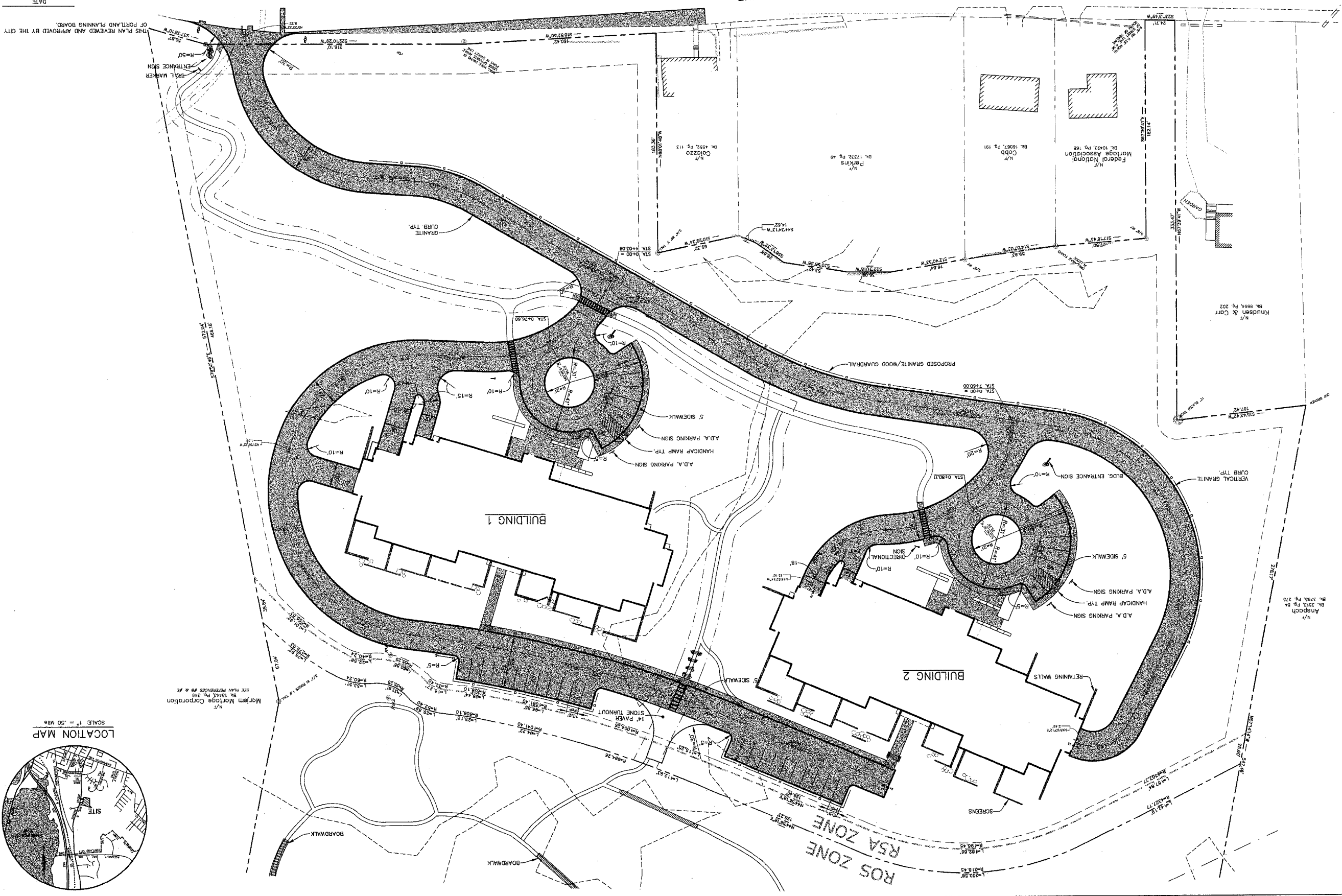
9 CURVE DATA

CURVE #1	R=110.00'	L=10.10'	PC=089.9023'	PT=179.36'
CURVE #2	R=2618.53'	L=50.52'	PC=2489.28'	PT=2489.28'
CURVE #3	R=300.00'	L=11.64'	PC=2142.12'	PT=2142.12'
CURVE #4	R=110.00'	L=10.10'	PC=1159.03'	PT=1159.03'
CURVE #5	R=857.26'	L=29.77'	PC=1007.24'	PT=1007.24'
CURVE #6	R=110.00'	L=10.10'	PC=542.02'	PT=542.02'
CURVE #7	R=110.00'	L=10.10'	PC=1033.77'	PT=1033.77'
CURVE #8	R=110.00'	L=10.10'	PC=196.60'	PT=196.60'
CURVE #9	R=970.00'	L=18.89'	PC=970.00'	PT=970.00'
CURVE #10	R=110.00'	L=10.10'	PC=212.74'	PT=212.74'
CURVE #11	R=110.00'	L=10.10'	PC=481.55'	PT=481.55'
CURVE #12	R=110.00'	L=10.10'	PC=153.54'	PT=153.54'



LEGEND

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
○	PROPOSED UTILITY POLE
○	PROPERTY LINE
○	LIMIT OF WETLANDS
○	EXISTING EDGE OF PAVEMENT
○	NOW OR FORMERLY
○	RAIL FENCE
○	HYDRANT



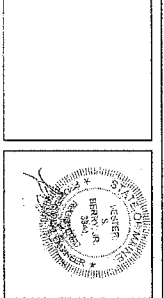
DESIGNED DATE: April 2005
 W. P. Barry
 SCALE: As Noted
 DRAWN: As Noted
 L. Barry
 CHECKED: JOB NO. 0355
 SHEET: C4
 REVISIONS ON REVERSE OF THIS SHEET

SITE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PER: 11/11/2011

Site:
 Graves Hill, Inc. and Company, LLC
 16 Tiffany Lane
 Sison, Maine 04072

BH2M
 Barry * Huff * McDonald * Milligan Inc.
 ENGINEERS * SURVEYORS * PLANNERS
 28 State Street, Portland, Maine 04108 (207) 850-2771

NO.	DATE	DESCRIPTION



SCALE: 1" = 50 MILES

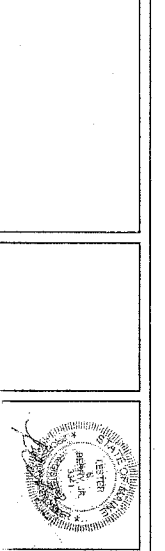
NO. 1 DATE 3/29/05 DATE OF ISSUE 3/29/05 DATE OF RE-SUBMITTAL 10/27/05 STATIONARY DATE 11/11/2011

DESIGNED	DATE	APR 2007
DRAWN	SCALE	AS SHOWN
CHECKED	JOB NO.	0033
L. BERRY	DATE	NOV 2007

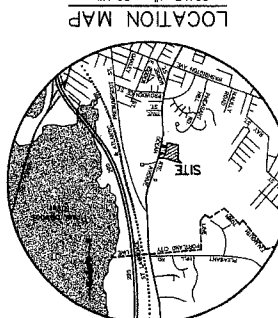
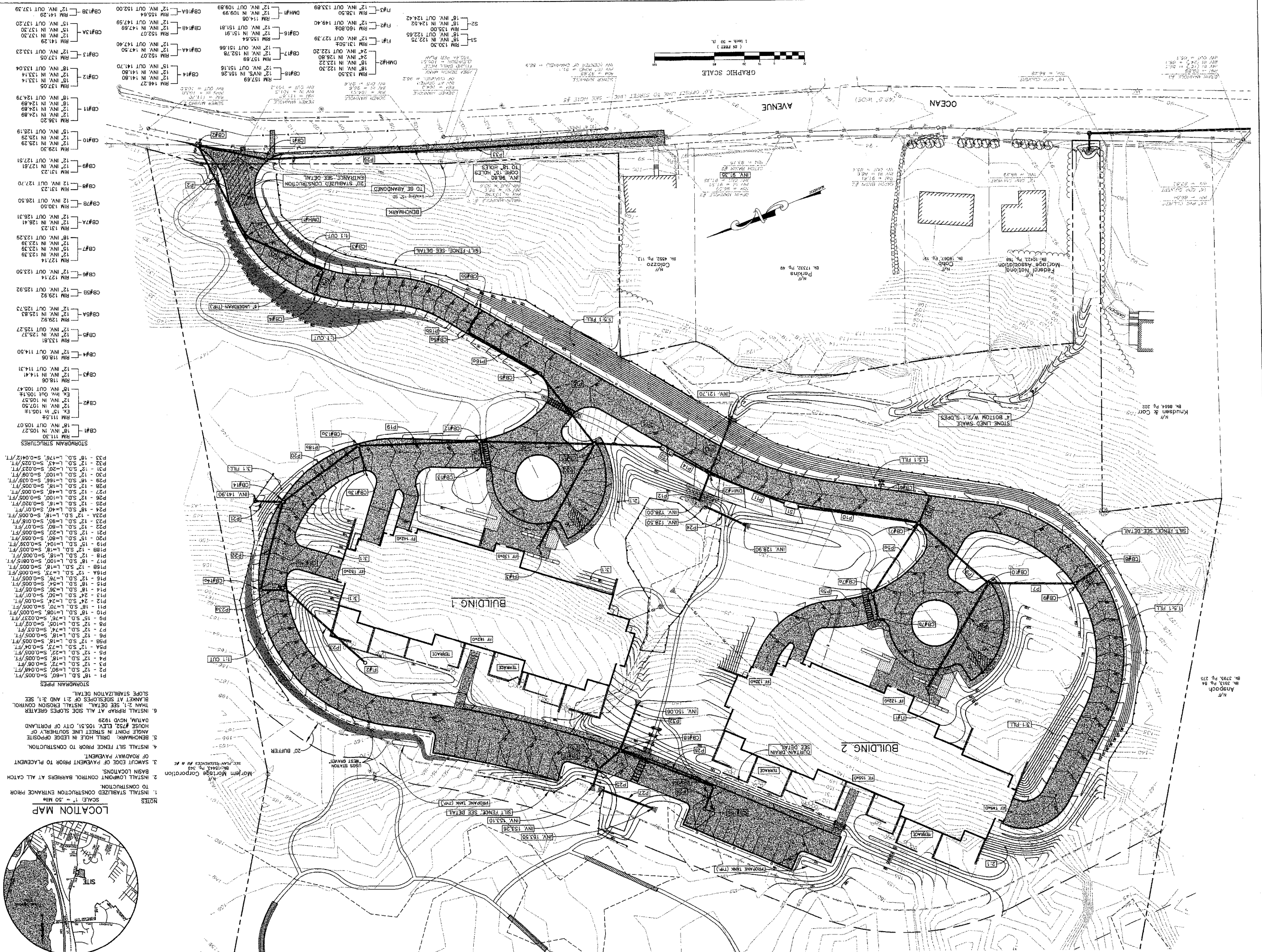
SITE GRADING
GRAVES HILL CONDOMINIUM

Graves Hill Land Company, LLC
110 Vista Street
San Jose, CA 95128

BH2M
BERRY • HIGGINS • MCDONALD • MATHIAS INC.
ENGINEERS • SURVEYORS • PLANNERS



NO.	DATE	DESCRIPTION
1	2/27/07	PRELIMINARY
2	10/24/07	STANDARD REVIEW



- NOTES
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 2. INSTALL LEAK DETECTION CONTROL BARRIERS AT ALL CATCH BASIN LOCATIONS.
 3. SAW CUT EDGE OF PAVEMENT PRIOR TO PLACEMENT OF ROADWAY PAVEMENT.
 4. INSTALL SILT FENCE PRIOR TO CONSTRUCTION.
 5. BENCHMARK: DRILL HOLE IN LEDGE OPPOSITE HOUSE POINT IN STREET LINE SOUTHERLY OF DATUM, NVD 1929.
 6. INSTALL RIPRAP AT ALL SLOPE SIZES GREATER THAN 2:1. SEE DETAIL. INSTALL EROSION CONTROL BLANKET AT SLOPES OF 2:1 AND 3:1. SEE SLOPE STABILIZATION DETAIL.

STORMWATER STRUCTURES

P1	18' S.D., L=60', S=0.005'/FT.
P2	12' S.D., L=72', S=0.004'/FT.
P3	12' S.D., L=72', S=0.004'/FT.
P4	12' S.D., L=72', S=0.004'/FT.
P5	12' S.D., L=72', S=0.004'/FT.
P6	12' S.D., L=72', S=0.004'/FT.
P7	12' S.D., L=72', S=0.004'/FT.
P8	12' S.D., L=72', S=0.004'/FT.
P9	12' S.D., L=72', S=0.004'/FT.
P10	12' S.D., L=72', S=0.004'/FT.
P11	12' S.D., L=72', S=0.004'/FT.
P12	24' S.D., L=24', S=0.005'/FT.
P13	18' S.D., L=72', S=0.005'/FT.
P14	18' S.D., L=72', S=0.005'/FT.
P15	18' S.D., L=72', S=0.005'/FT.
P16	12' S.D., L=76', S=0.005'/FT.
P17	12' S.D., L=100', S=0.005'/FT.
P18	12' S.D., L=100', S=0.005'/FT.
P19	12' S.D., L=104', S=0.005'/FT.
P20	15' S.D., L=80', S=0.005'/FT.
P21	12' S.D., L=20', S=0.005'/FT.
P22	12' S.D., L=80', S=0.016'/FT.
P23	12' S.D., L=80', S=0.016'/FT.
P24	12' S.D., L=46', S=0.016'/FT.
P25	12' S.D., L=100', S=0.005'/FT.
P26	12' S.D., L=100', S=0.005'/FT.
P27	12' S.D., L=48', S=0.005'/FT.
P28	12' S.D., L=100', S=0.005'/FT.
P29	12' S.D., L=100', S=0.005'/FT.
P30	12' S.D., L=100', S=0.005'/FT.
P31	12' S.D., L=20', S=0.005'/FT.
P32	12' S.D., L=20', S=0.005'/FT.
P33	18' S.D., L=176', S=0.005'/FT.

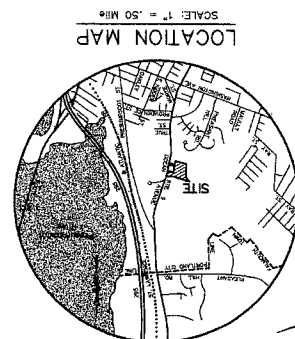
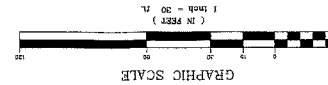
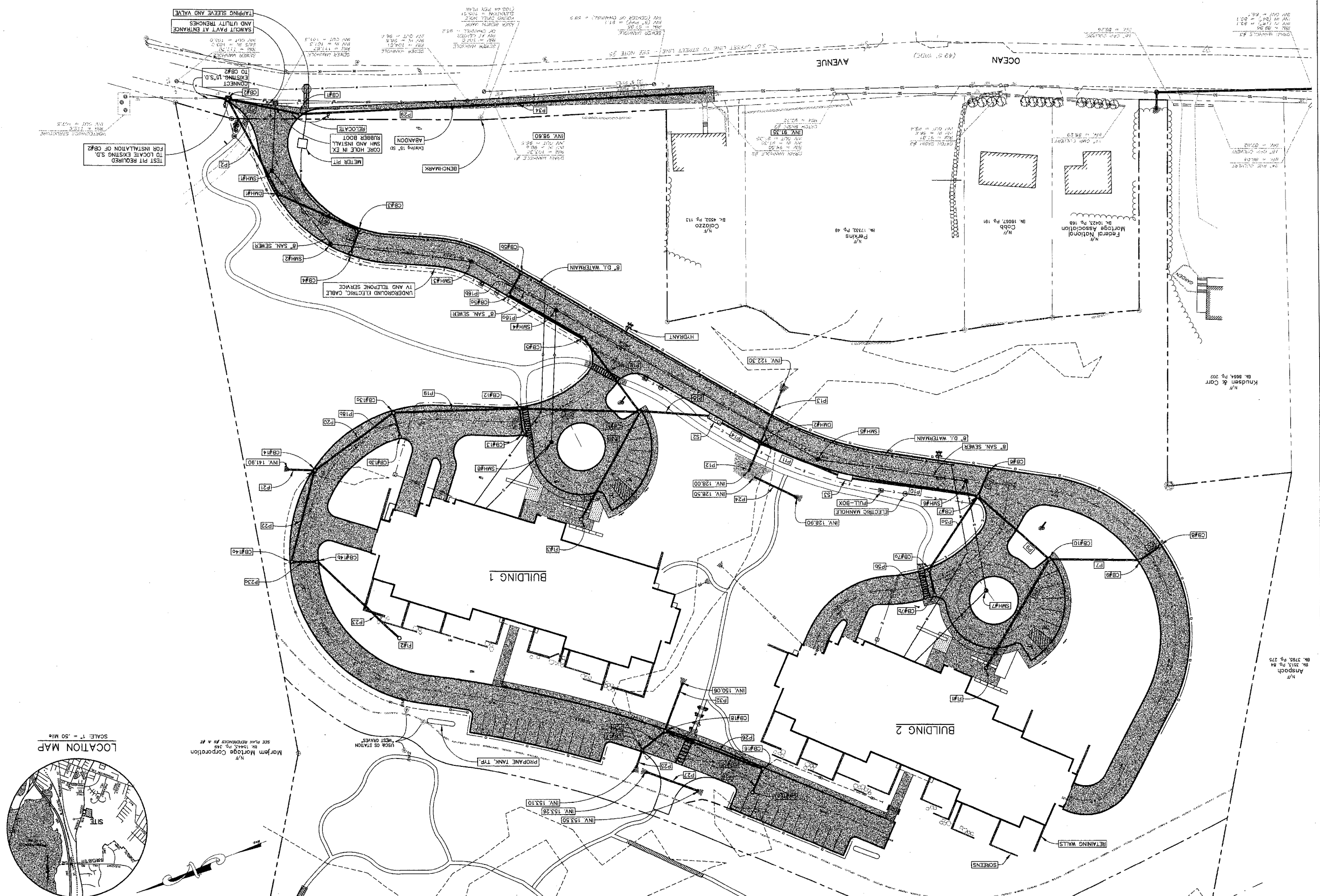
C-6	
SHEET	
CHECKED	L. Barry
JOB NO.	00355
SCALE	AS NOTED
DESIGNED	W. Kelly
DATE	APR 2009

UTILITY PLAN
GRAVES HILL
OCEAN AVENUE
PART AND MAIN

Prepared by:	Genevieve Hill Land Company, LLC
Address:	16 Tibbony Lane, South Miami 33156

BH2M
Berry Hill * McDonald * Milligan Inc.
ENGINEERS * SURVEYORS * PLANNERS
28 New Street, Coconut Grove, Miami 33133
(305) 442-2727

NO.	DATE	DESCRIPTION
1	3/29/09	DATE OF ISSUE
2	3/29/09	DATE OF RE-SUBMITTAL
3	10/27/09	STANDARDIZATION REVS.



USAC OR STATION
MIST GRAVES

M/J
Morjan Mortgage Corporation
BR. 1262, Pg. 518

SEE PLAN REVISIONS IN A # 2

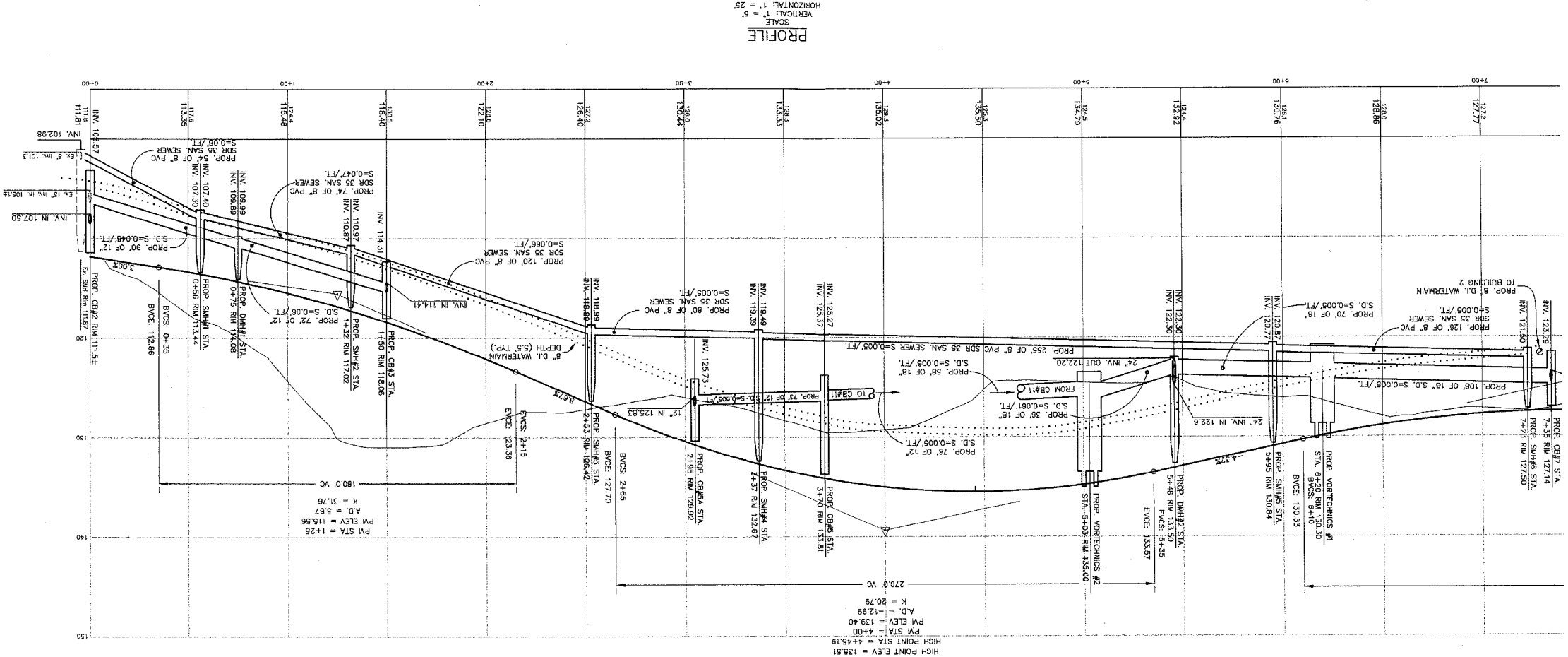
BR. 1023, Pg. 188
Federal National
Mortgage Association
Cobb
BR. 1607, Pg. 191

BR. 1732, Pg. 49
Parkins
N/7

BR. 4552, Pg. 113
Coizzo
N/7

BR. 894, Pg. 202
Krudsen & Carr
N/7

BR. 392, Pg. 275
Anspach
N/7



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

C-7

CHECKED	L. Barry
DESIGNED	W. Wilkey
DATE	April 2006
SCALE	As Noted
JOB NO.	02035
SHEET	

PLAN & PROFILE A
Sta. 0+00 to 6+00
GRAVES HILL

Graves Hill Land Company, LLC
16 Tibbitts Lane
Saco, Maine 04072

BH2M
ENGINEERS * SURVEYORS * PLANNERS

Barry * Huff * McDonald * Milligan Inc.
78 State Street, Portland, Maine 04108 (207) 878-2777

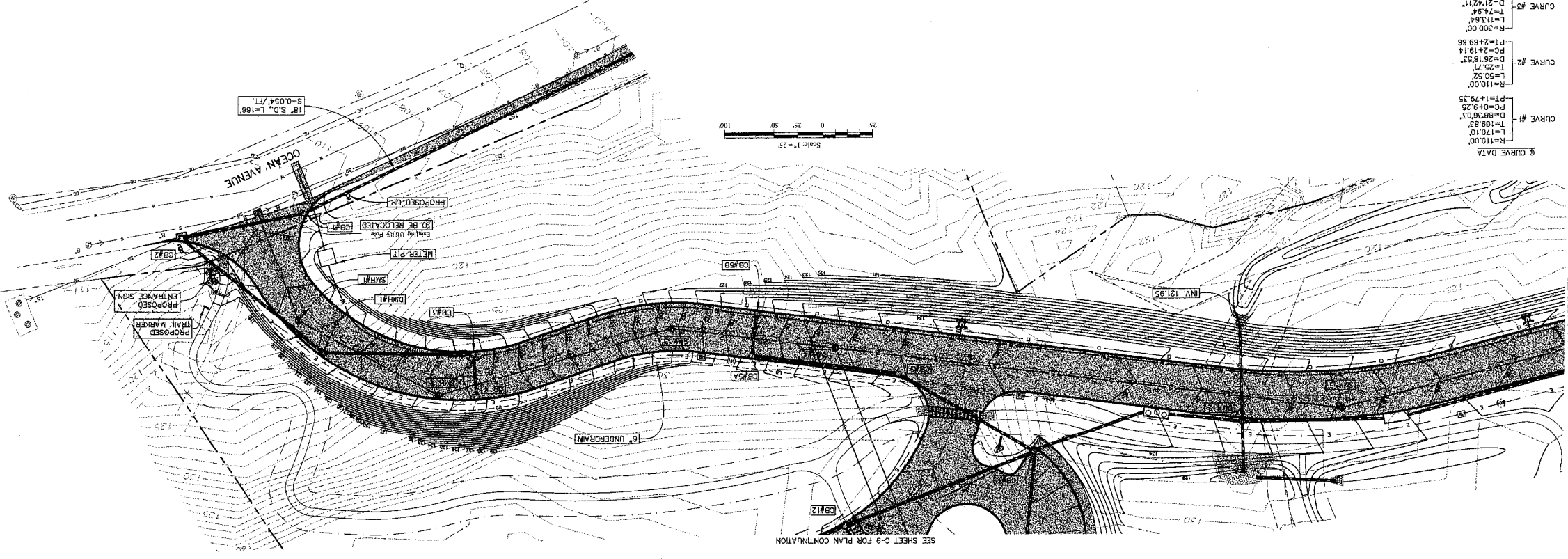


NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/27/05	STANDARD R.O.S.

LEGEND

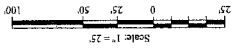
---	PROPOSED STORM DRAIN
---	EXISTING STORM DRAIN
---	PROPOSED CONTOUR
---	EXISTING CONTOUR
---	OVERHEAD ELECTRIC
---	UTILITY POLE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING STORM DRAIN

- NOTES
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 - SAMPLE EDGE OF PAVT PRIOR TO PLACEMENT OF PROPOSED BITUMINOUS PAVEMENT.



§ CURVE DATA

Curve #1	R=110.00
	L=110.00
	P=110.00
	T=109.83
	D=88.9603
	PC=0+5.25
	PT=1+79.35
Curve #2	R=110.00
	L=56.82
	T=25.71
	D=261.853
	PC=2+19.14
	PT=2+76.00
	P=2+49.58
	R=300.00
	L=113.64
	T=74.94
	D=214.11
	PC=4+35.11
	PT=6+48.75

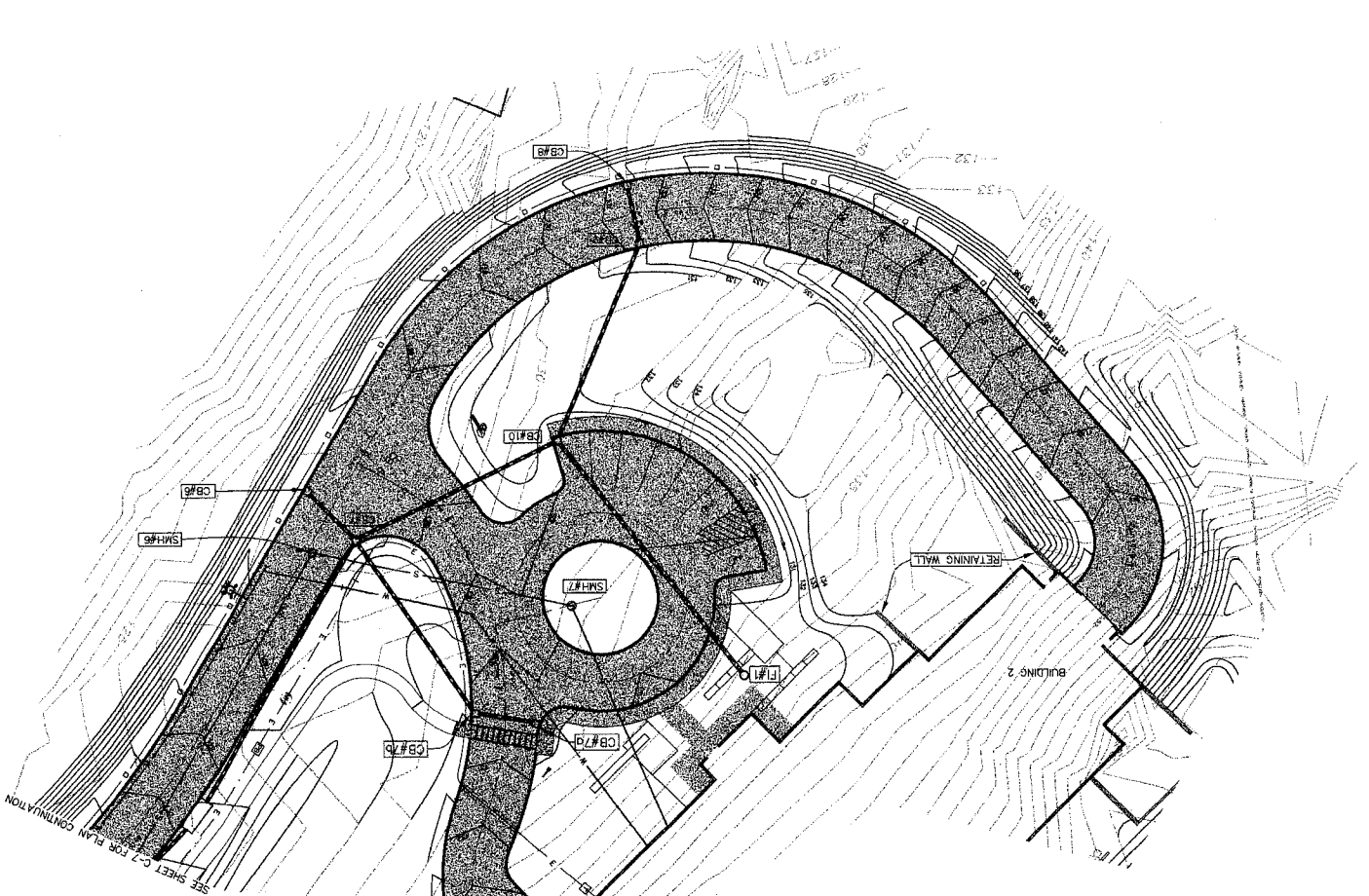
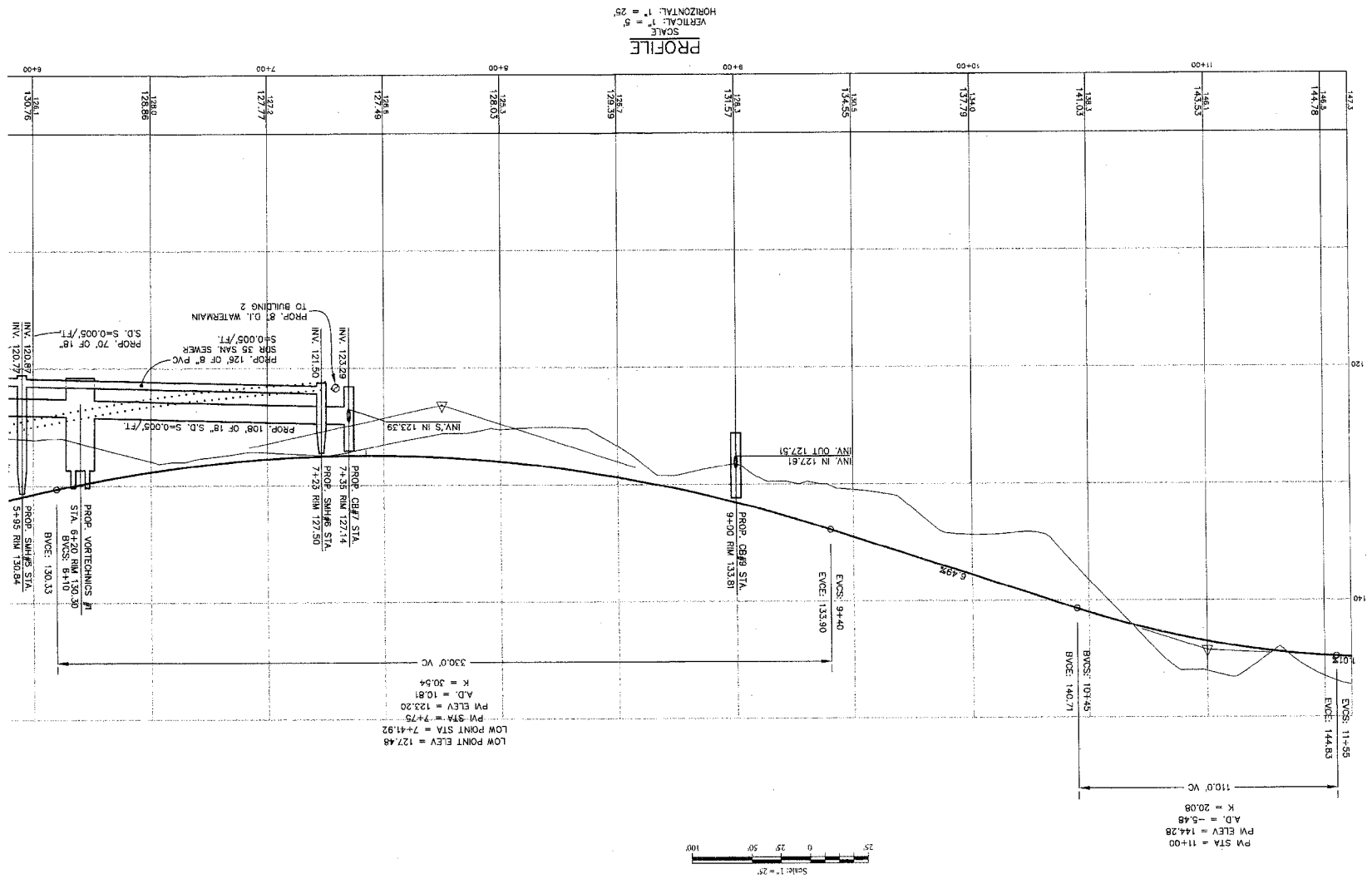


SEE SHEET C-8 FOR PLAN CONTINUATION

SEE SHEET C-9 FOR PLAN CONTINUATION

§ CURVE DATA

CURVE #4	R=125.00'
	L=237.58'
	D=108.5417'
CURVE #5	Pt=10+33.93
	PC=7+96.34
	Pt=11+59.02

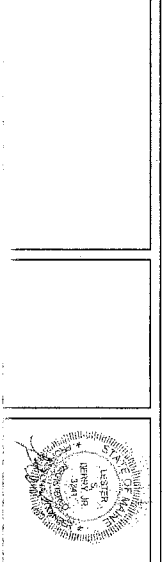


DESIGNED	W. Pinky	DATE	April 2001
DRAWN	A. Keady	SCALE	
CHECKED	L. Berry	JOB. NO.	10055
SHEET	C-8		

PLAN & PROFILE A
 Sta. 6+00 to 11+79.48
GRAVES HILL
 OCEAN AVENUE
 PERTLAND, MAINE

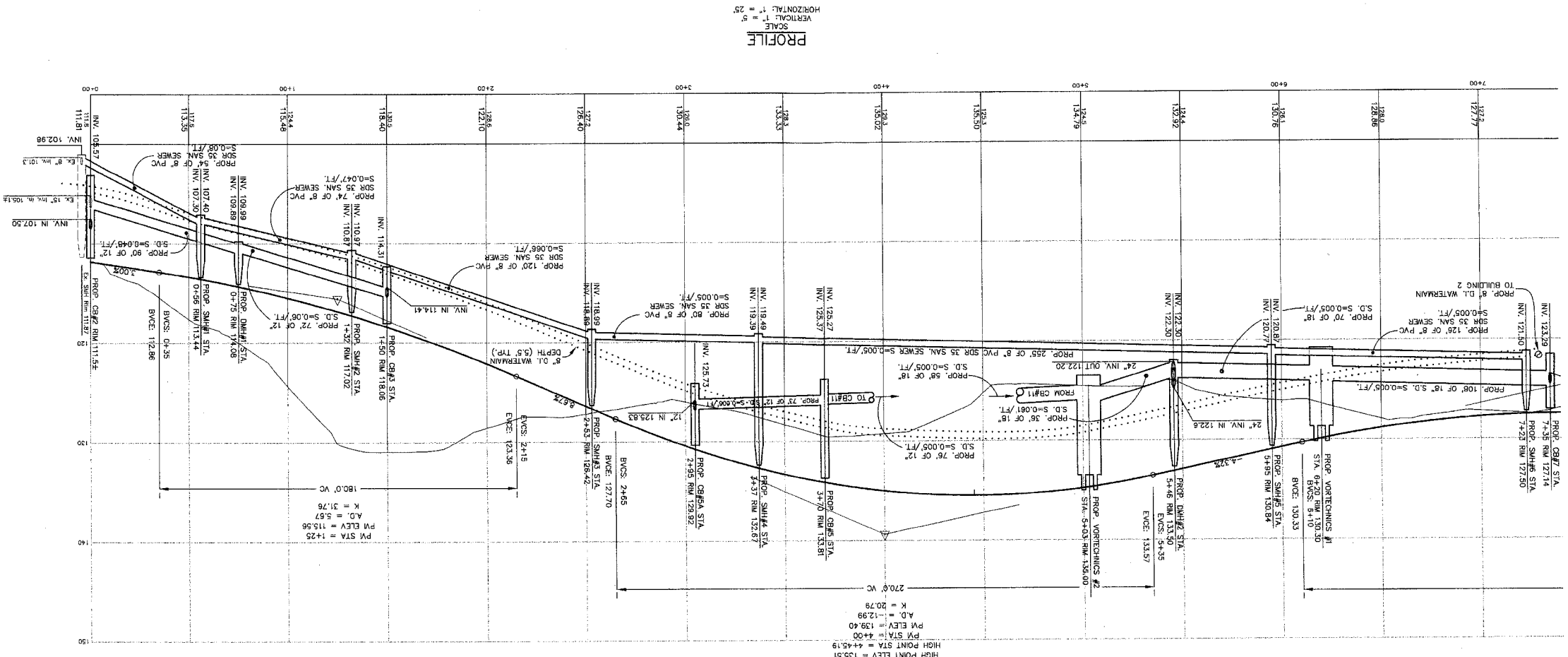
100
 Graves Hill Land Company, LLC
 16 Tibbetts Lane
 Scarborough, ME 04077

BH2M
 Barry • Hill • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 20 New Street, Portland, Maine 04109 (603) 838-2777



NO.	DATE	REVISION	DESCRIPTION
1	3/29/08		DATE OF ISSUE
2	3/29/08		DATE OF RE-SUBMITAL
3	10/27/09		STANDARD R.C.S.

152074-0200-0001-PLANVIEW-11/27/2018 10:44 AM



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

DESIGNED	DATE	SCALE	JOB NO.	CHECKED	DATE
W. Polkey	April 2017	As Noted	10055	L. Berry	11/18/17

PLAN & PROFILE A
Sta. 0+00 to 6+00
GRAVES HILL

100
Graves Hill Land Company, LLC
16 Tilden Lane
Ston, Maine 04072

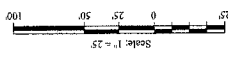
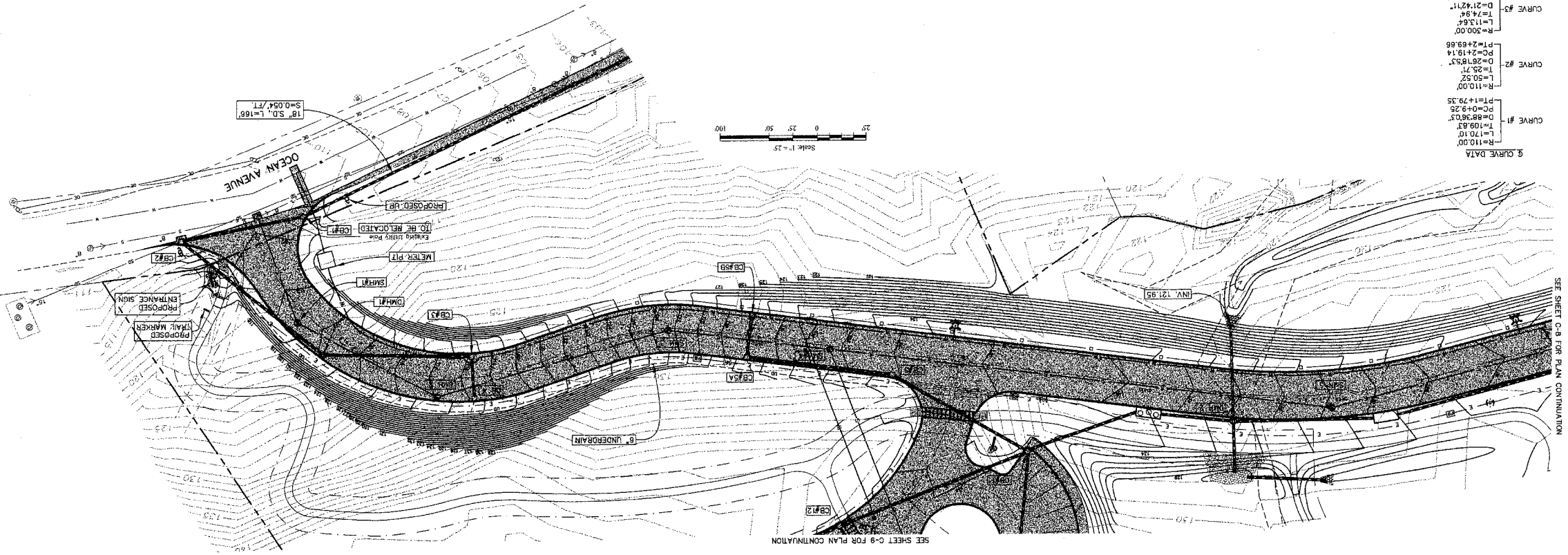
BH2M
Berry * Huff * McDonald * Milligan Inc.
ENGINEERS * SURVEYORS * PLANNERS
18 State Street, Concord, Maine 04401 (207) 239-3771



NO.	DATE	DESCRIPTION
1	3/29/20	DATE OF ISSUE
2	3/29/20	DATE OF RE-SUBMITTAL
3	10/24/20	STANDARD REVISIONS

- NOTES:
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 2. SAWCUT EDGE OF PAVT PRIOR TO PLACEMENT OF PROPOSED BITUMINOUS PAVEMENT.

SYMBOL	DESCRIPTION
---	PROPOSED STORM DRAIN
---	EXISTING STORM DRAIN
---	PROPOSED CONTOUR
---	EXISTING CONTOUR
---	OVERHEAD ELECTRIC
---	UTILITY POLE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING STORM DRAIN

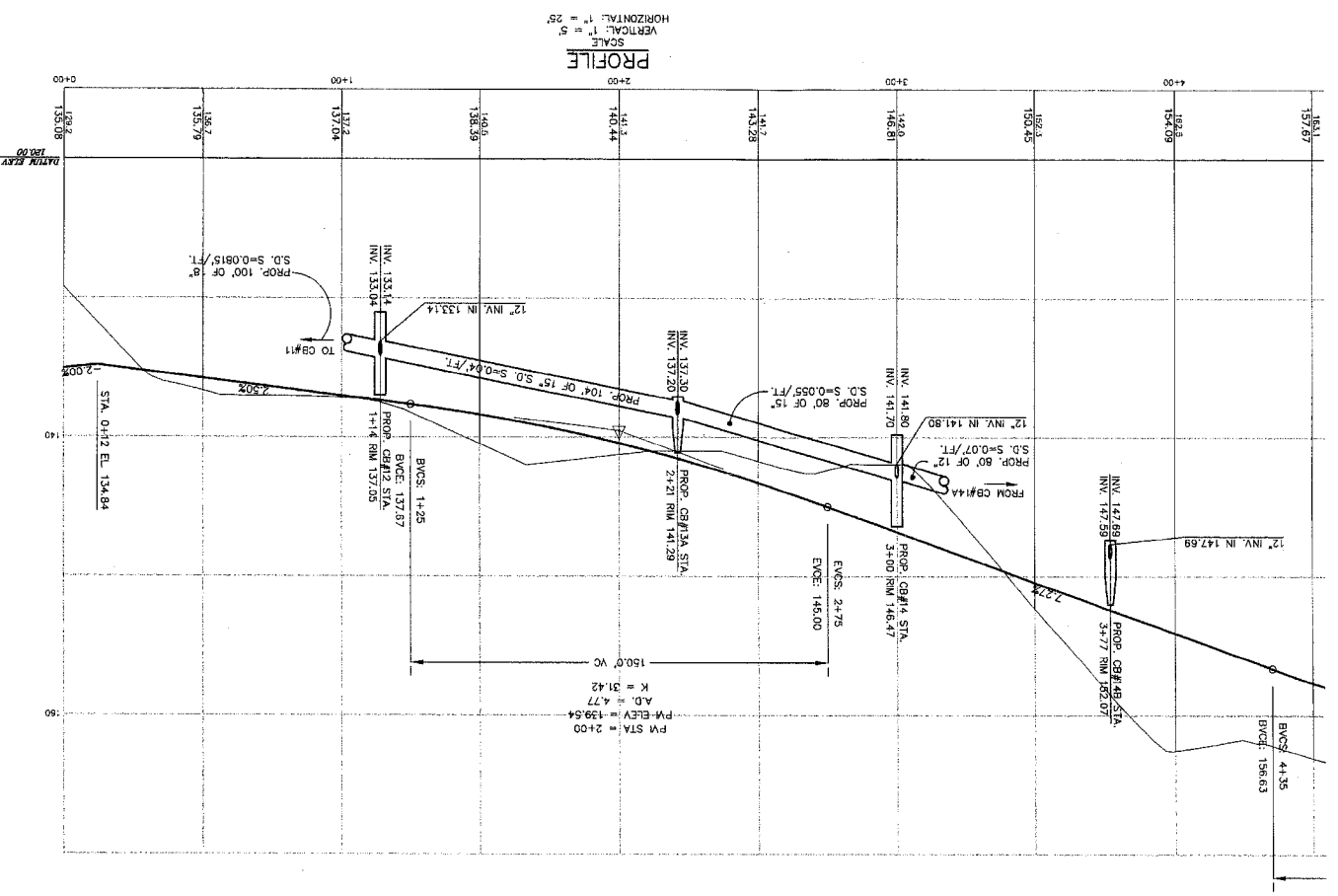


g. CURVE DATA

CURVE #	R	L	T	PC	PT
CURVE #1	110.00	170.10	109.83	0+89.36	1+79.35
CURVE #2	50.52	25.71	150.52	2+19.14	2+69.66
CURVE #3	300.00	113.64	174.34	4+25.11	5+48.75

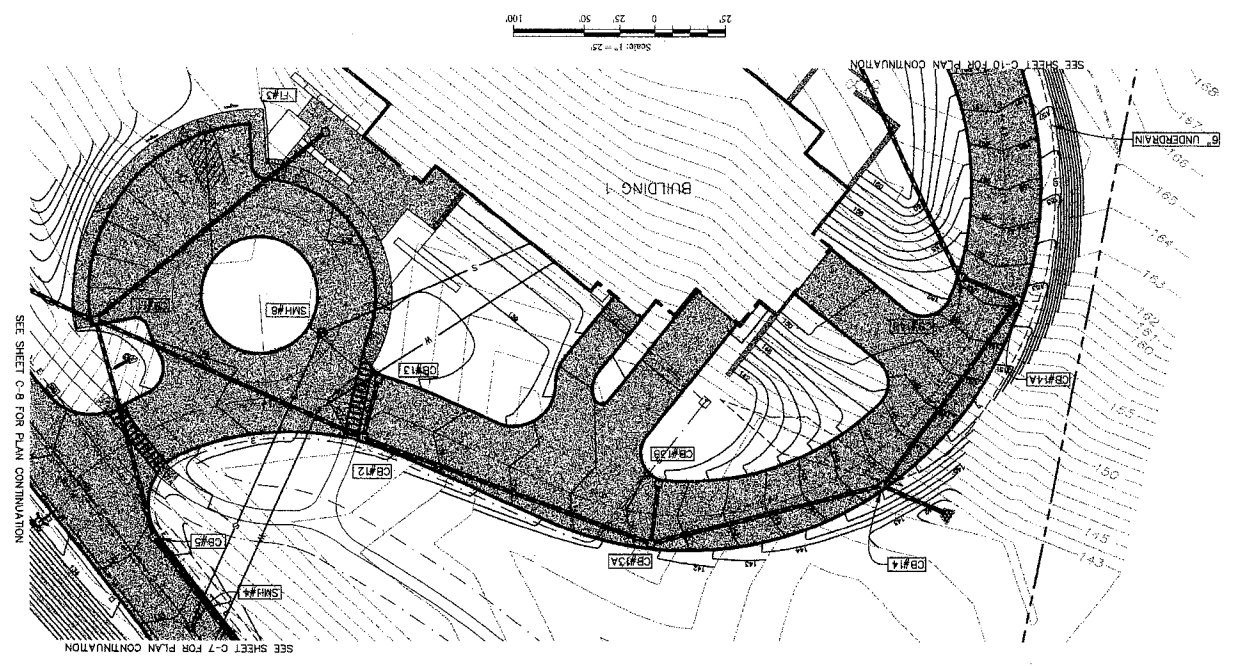
SEE SHEET C-9 FOR PLAN CONTINUATION

SEE SHEET C-8 FOR PLAN CONTINUATION



5 CURVE DATA

CURVE #6	R=110.00'
L=18.88'	
D=65.99'	
PC=+11.55	
PT=+30.83	
CURVE #7	R=110.00'
L=14.33'	
D=84.68'	
PC=+19.60	
PT=+30.93	
CURVE #8	R=120.00'
L=14.32'	
D=100.724'	
PC=+32.32	
PT=+75.64	



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

DESIGNED DATE: April 2004
DRAWN SCALE: As Noted
CHECKED JOB: No.
L. Berry 02035

PLAN & PROFILE B
Sta. 0+00 to 4+50
GRAVES HILL
GRAVES HILL

PREPARED BY: Graves Hill Landscaping, LLC
16 Tibbony Lane
Ston, Maine 04072

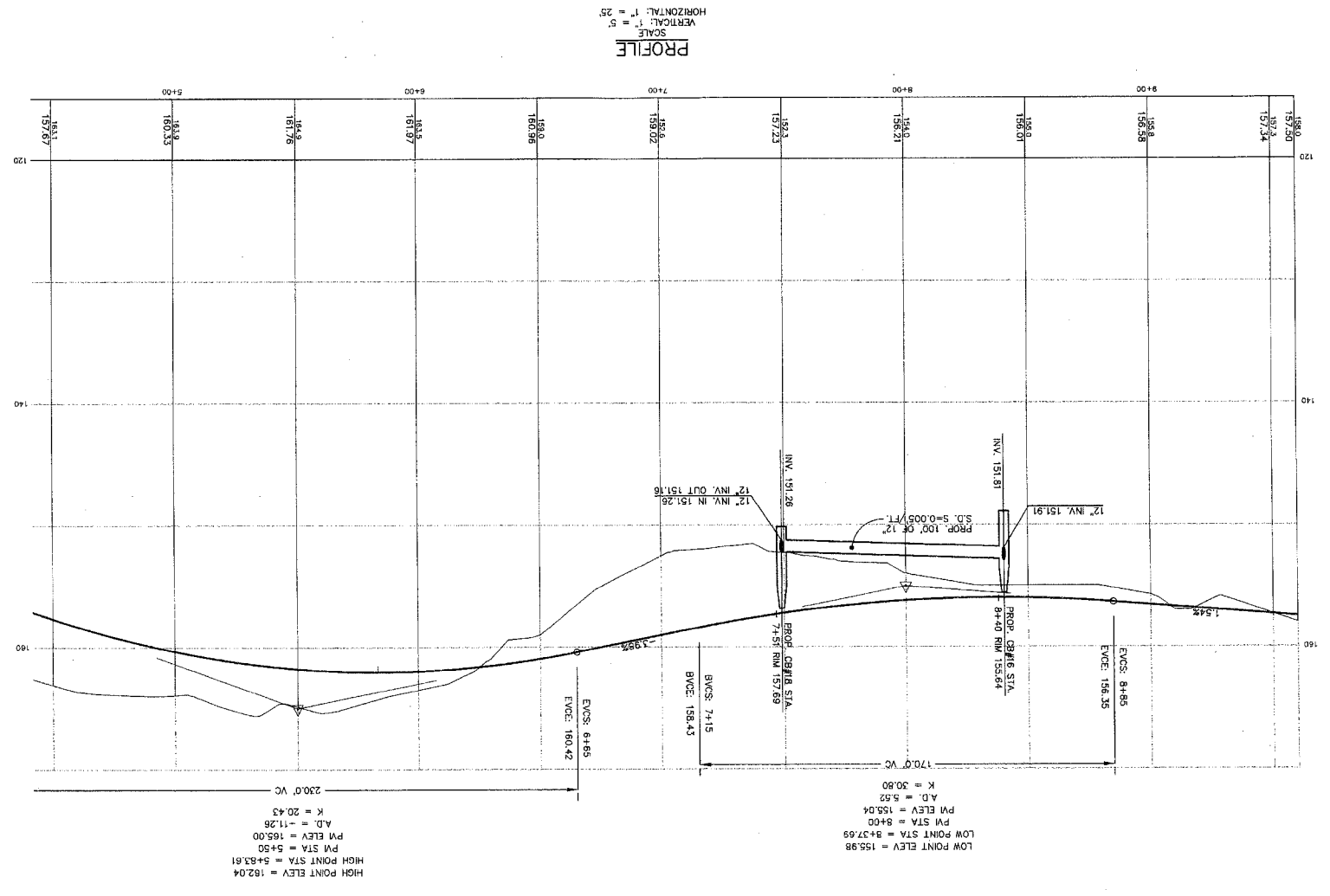
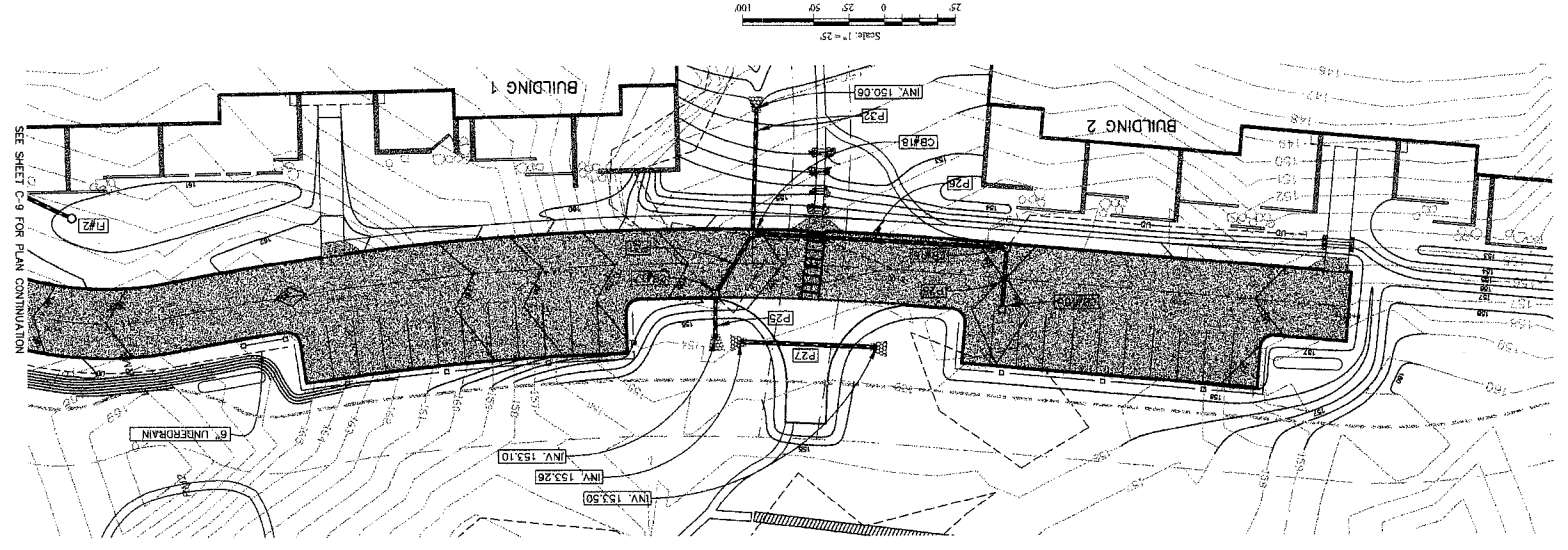
BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
25 State Street, Portland, Maine 04101 (207) 875-5779



NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/24/05	STANDARD REVS.



© CURVE DATA
 R=970.00'
 L=273.77'
 T=137.80'
 D=157.15'
 PC=4+75.64
 PT=7+49.41



PROFILE
 SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

NO.	DATE	REVISION
1	3/29/05	DATE OF ISSUE
2	3/09/05	DATE OF RE-SUBMITTAL
3	10/22/08	STANDARD REVISION



BH2M
 Berg * Huff * McDonald * Milligan Inc.
 ENGINEERS * SURVEYORS * PLANNERS
 25 State Street, Carmel, California, 93921-2777

FOR
 GREEN HILL LAND MANAGEMENT, LLC
 156 Elmer Lane
 San Jose, CA 95127

PLAN & PROFILE B
 Sta. 4+50 to 9+60.17
 GRAVES HILL
 OCEAN AVENUE
 PORT AND VANNER

DESIGNED	W. P. King	DATE	April 2015
DRAWN	Al. Nabel	SCALE	
CHECKED	Job. No.	JOB. NO.	
L. Berg	02055		

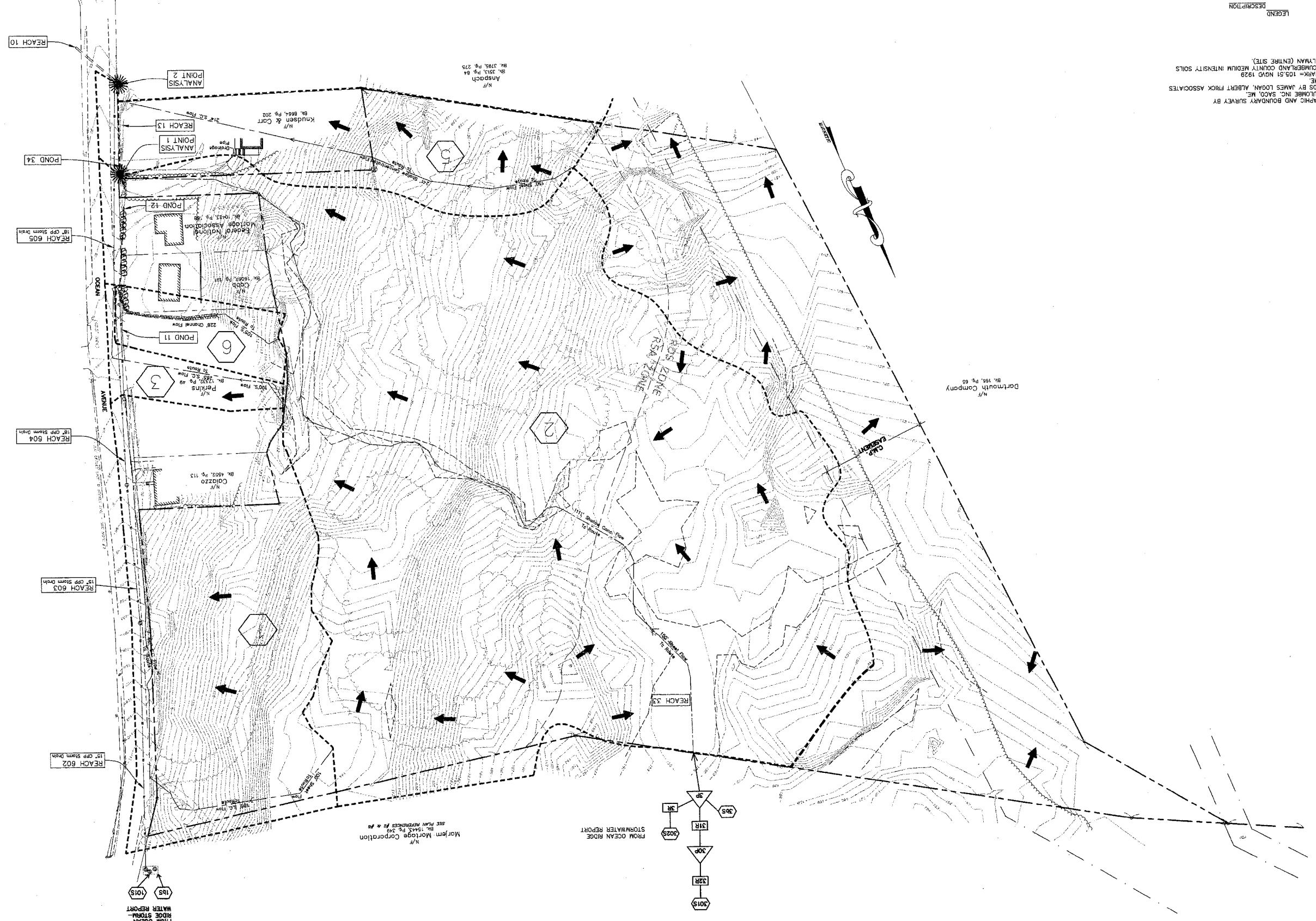
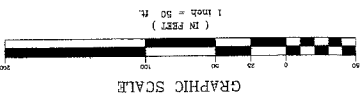
SHEET
C-10

1:3000 (ENTIRE SITE)
 2: WELANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES
 3: BENCHMARK-105.51 MVD 1929
 4: SOILS, DUNBARLAND COUNTY MEDIUM INTENSITY SOILS
 GORHAM, ME
 MAPPING - LYMAN (ENTIRE SITE)

NOTES:
 1. TOPOGRAPHIC AND BOUNDARY SURVEY BY
 DOW & COLLIERIE INC. SACO, ME.
 2. WELANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES
 3. BENCHMARK-105.51 MVD 1929
 4. SOILS, DUNBARLAND COUNTY MEDIUM INTENSITY SOILS
 GORHAM, ME
 MAPPING - LYMAN (ENTIRE SITE)

LEGEND

SYMBOL	DESCRIPTION
○	SUBSTATION AREA
△	POND
○	REACH
○	EXISTING EDGE OF PAVEMENT
○	EXISTING STORM DRAIN
○	EXISTING UTILITY POLE
○	EXISTING SEWER MANHOLE
○	EXISTING WATER MAIN VALVE
○	IRON PIPE FOUND/IRON ROD FOUND
○	PROPERTY LINE
○	EXISTING SEWER
○	EXISTING CONCENTRATION ROUTE
○	EXISTING CONTOUR
○	DRAINAGE BOUNDARY
○	FLOW DIRECTION



DESIGNED DATE: 10/24/03
 L. Berry
 MFD 2003

SCALE: 1" = 50'
 E. Valentin
 10/24/03

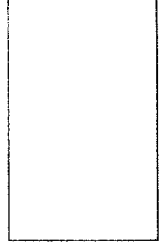
CHECKED JOB NO.: 02055
 L. Berry

SHEET: C-13

PRE DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

100
 Graves Hill Land Company, LLC
 15 Wilbur Lane
 Scarborough, ME 04072

BH2M
 Berry • Huff • McDonald • Malby
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Portland, Maine 04108 (207) 559-2777



NO.	DATE	REVISION
1	1/25/05	DATE OF ISSUE
2	3/28/05	DATE OF RE-SUBMITTAL
3	10/24/03	STANDARD REV.

NO.	DATE	REVISION
1	1/25/05	DATE OF ISSUE
2	3/28/05	DATE OF RE-SUBMITTAL
3	10/24/03	STANDARD REV.

AS/172-1-2008/10/10/17/2020/20/10/10

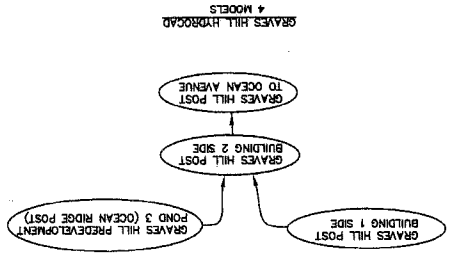
LEGEND

SYMBOL	DESCRIPTION
	SUBCATCHMENT AREA
	REACH
	POND
	EXISTING EDGE OF PAVEMENT
	PROPOSED CONTOUR
	EXISTING STORM DRAIN
	EXISTING UTILITY POLE
	EXISTING SEWER MANHOLE
	EXISTING WATER MAIN VALVE
	IRON PIPE FOUND/IRON ROD FOUND
	PROPERTY LINE
	LIMIT OF WETLANDS
	EXISTING SEWER
	LIMIT OF CONCENTRATION ROUTE
	EXISTING CONTOUR
	FLOW DIRECTION

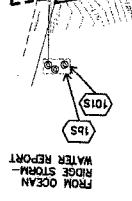
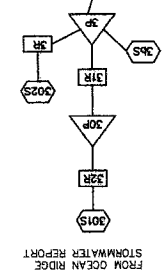
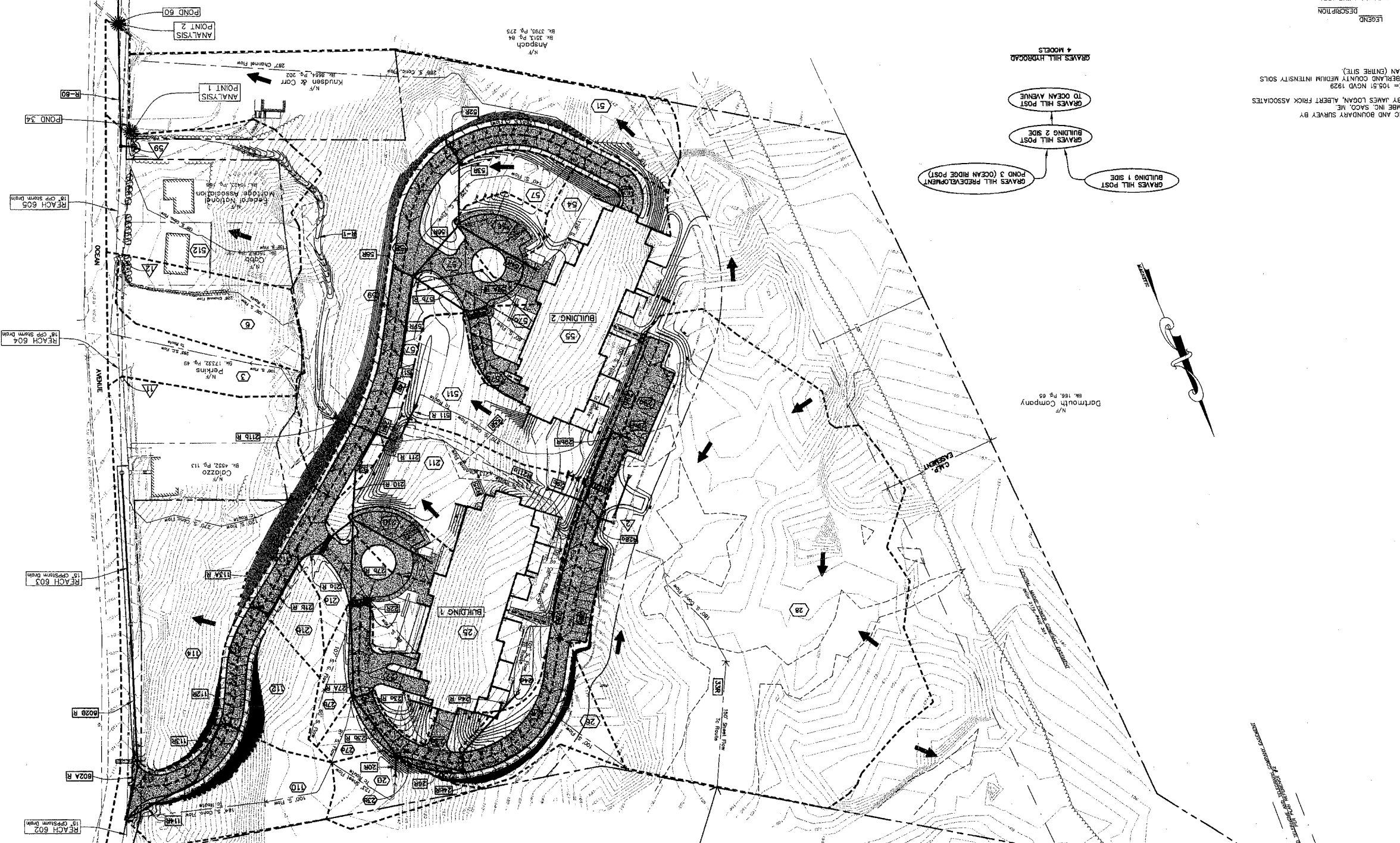
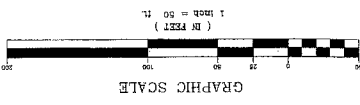
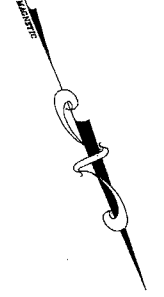
NOTES

1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COLLMER INC. SACO, ME
2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES
3. BECOMBARY-105.51 NVD 1928
4. SOILS CUMBERLAND COUNTY MEDIUM INTENSITY SOILS

MAPPING - LYMAN (ENTIRE SITE)



Dartmouth Company
N/A
Bk. 165, Pg. 68



REPRODUCTION OF THIS SHEET OR ANY PART THEREOF WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS PROHIBITED.

DESIGNED	DATE	L. Berry	Mar. 2005
DRAWN	SCALE	L. Berry	1" = 30'
CHECKED	JOB NO.	L. Berry	00055
SHEET C-14			

POST DEVELOPMENT
DRAINAGE PLAN
GRAVES HILL
OCEAN AVENUE

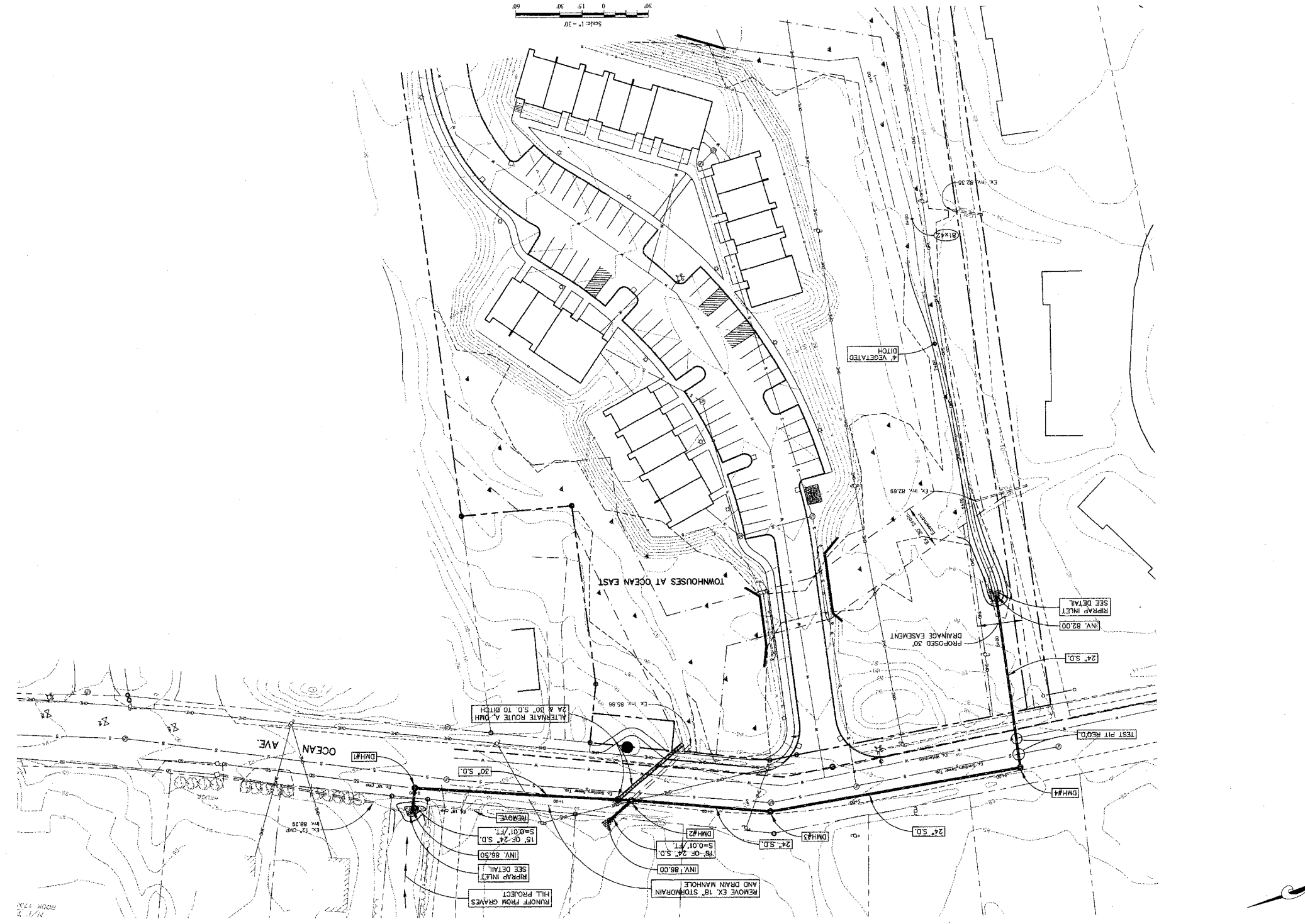
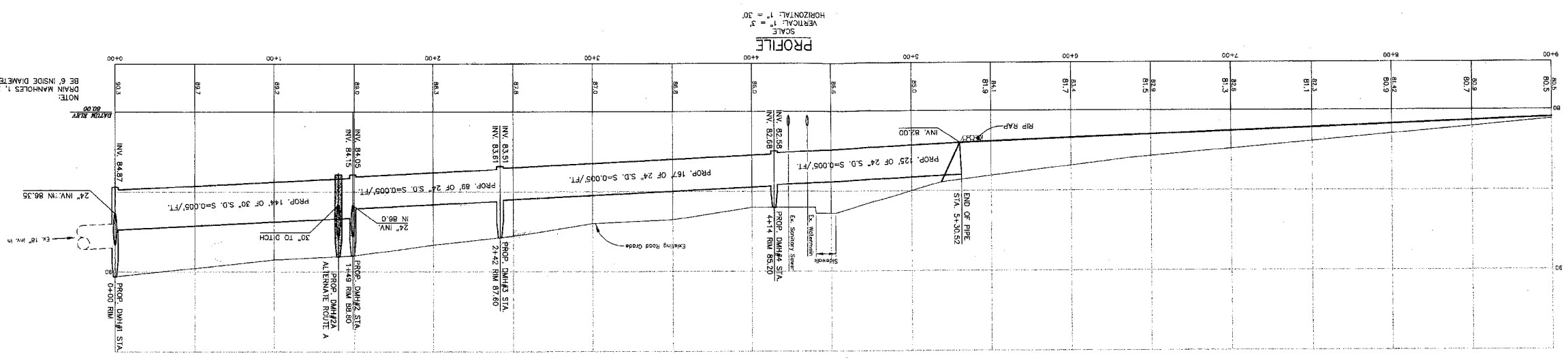
100
Graves Hill Land Company, LLC
16 Tibbetts Lane
Saco, Maine 04077

BH2M
ENGINEERS • SURVEYORS • PLANNERS

Berry • Huff • McDonald • McLaughlin Inc.
25 State Street, Portland, Maine 04103 (207) 899-2277



NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF RE-SUBMITTAL
3	10/27/08	STANDARD PLAN



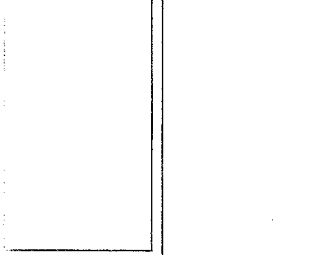
REVISIONS OF THIS SHEET

NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	10/24/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORM DRAIN NOTES
4	12/1/05	ALTERNATE ROUTE A

DESIGNED DATE: 10/24/05
 DRAWN SCALE: AS SHOWN
 CHECKED JOB NO. 02055
 L. Berry

STORM DRAIN EXTENSION
 GRAVES HILL CONDOMINIUM
 OCEAN AVENUE
 PORTLAND, MAINE

BH2M
 BERRY • HUFF • MACDONALD • MCDONNELL
 ENGINEERS • SURVEYORS • PLANNERS



LEGEND

SYMBOL	DESCRIPTION
---	PROPOSED STORM DRAIN
---	EXISTING STORM DRAIN
---	EXISTING STORM DRAIN
---	EXISTING EDGE OF PAVEMENT
---	UTILITY POLE
---	OVERHEAD ELECTRIC
---	PROPOSED CONTOUR
---	EXISTING CONTOUR

REVISIONS OF THIS SHEET

NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	10/24/05	DATE OF RE-SUBMITTAL
3	10/24/05	STORM DRAIN NOTES
4	12/1/05	ALTERNATE ROUTE A

01/11
 DATE: 01/11/2005
 REVISION: 01/11/2005
 PROJECT: GRAVES HILL
 SHEET: L-5

SITE PLAN

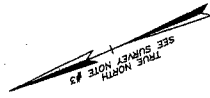
PROJECT GRAVES HILL
 232 EAST AVENUE
 PORTLAND, ME

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 AND IS NOT TO BE REPRODUCED OR
 COPIED IN ANY MANNER WITHOUT THE
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 & ASSOCIATES ARCHITECTS.

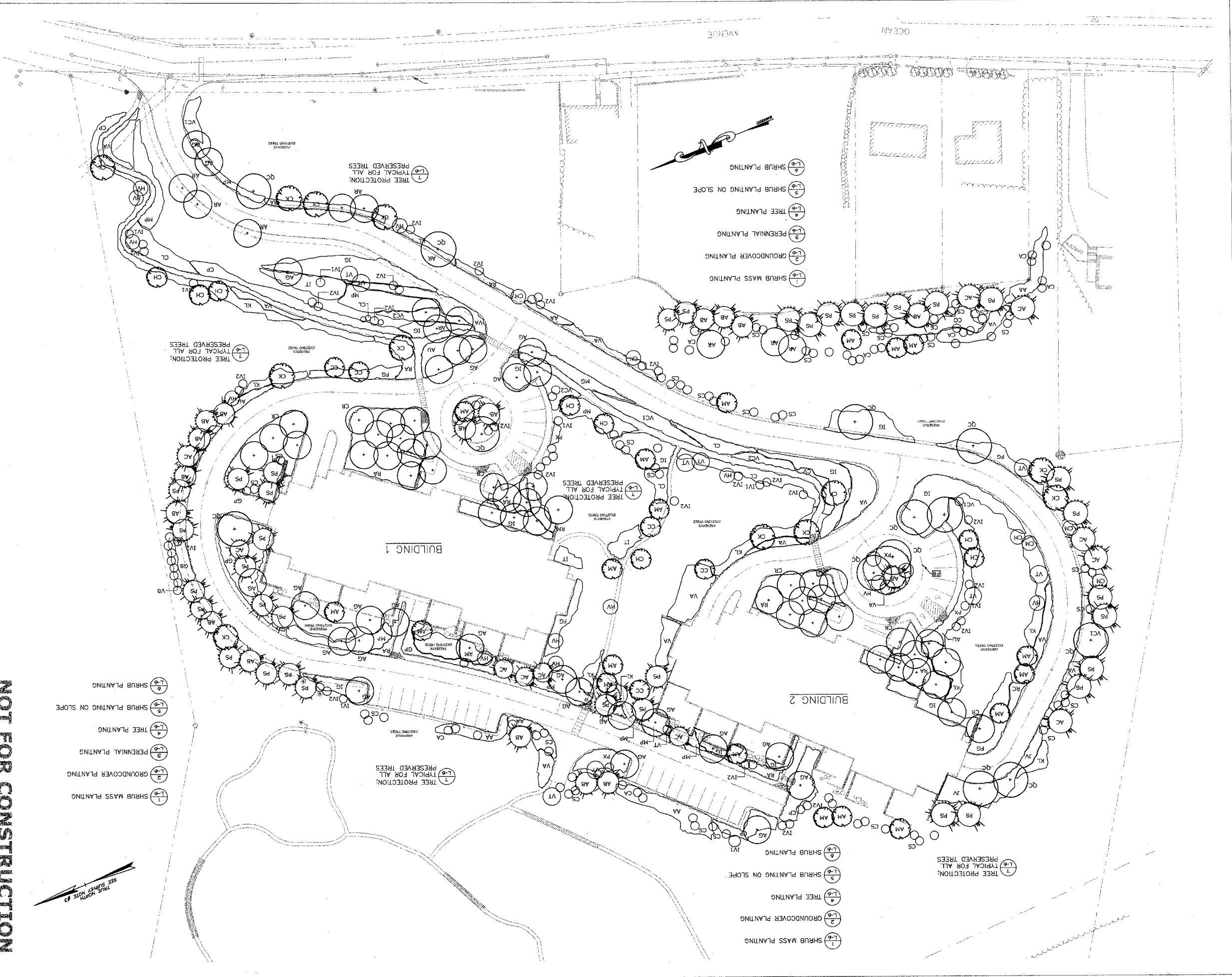
11 Middle Street
 5th Fl., Portland, ME 04102
 Tel: 207.286.9291
 Fax: 207.286.9650
 richardsonassociates.com

Richardson & Associates
 Landscape Architects

NOT FOR CONSTRUCTION



- ① SHRUB MASS PLANTING
- ② GROUNDCOVER PLANTING
- ③ PERENNIAL PLANTING
- ④ TREE PLANTING
- ⑤ SHRUB PLANTING ON SLOPE
- ⑥ SHRUB PLANTING



- ① SHRUB MASS PLANTING
- ② GROUNDCOVER PLANTING
- ③ PERENNIAL PLANTING
- ④ TREE PLANTING
- ⑤ SHRUB PLANTING ON SLOPE
- ⑥ SHRUB PLANTING

⑦ TREE PROTECTION:
TYPICAL FOR ALL
PRESERVED TREES

⑦ TREE PROTECTION:
TYPICAL FOR ALL
PRESERVED TREES

- ① SHRUB MASS PLANTING
- ② GROUNDCOVER PLANTING
- ③ PERENNIAL PLANTING
- ④ TREE PLANTING
- ⑤ SHRUB PLANTING ON SLOPE
- ⑥ SHRUB PLANTING

⑦ TREE PROTECTION:
TYPICAL FOR ALL
PRESERVED TREES

⑦ TREE PROTECTION:
TYPICAL FOR ALL
PRESERVED TREES

⑦ TREE PROTECTION:
TYPICAL FOR ALL
PRESERVED TREES

GRAVES HILL PORTLAND, MAINE

NORTH DETENTION PONDS

SCALE: 1" = 10'



GRAVES HILL PORTLAND, MAINE

NORTH DETENTION PONDS SCALE: 1" = 10'

TO PORTLAND TRAILS

TRAIL

GRANITE BLOCKS (SEATING)

INFORMATION KIOSK

DETENTION POND

BENCH

BOULDERS

PAVING

DECK

VIEWING

CULVERT

DETENTION POND

CULVERT

BOULDERS (RECYCLABLE)

GRANITE BLOCKS

WOOD CULVERT

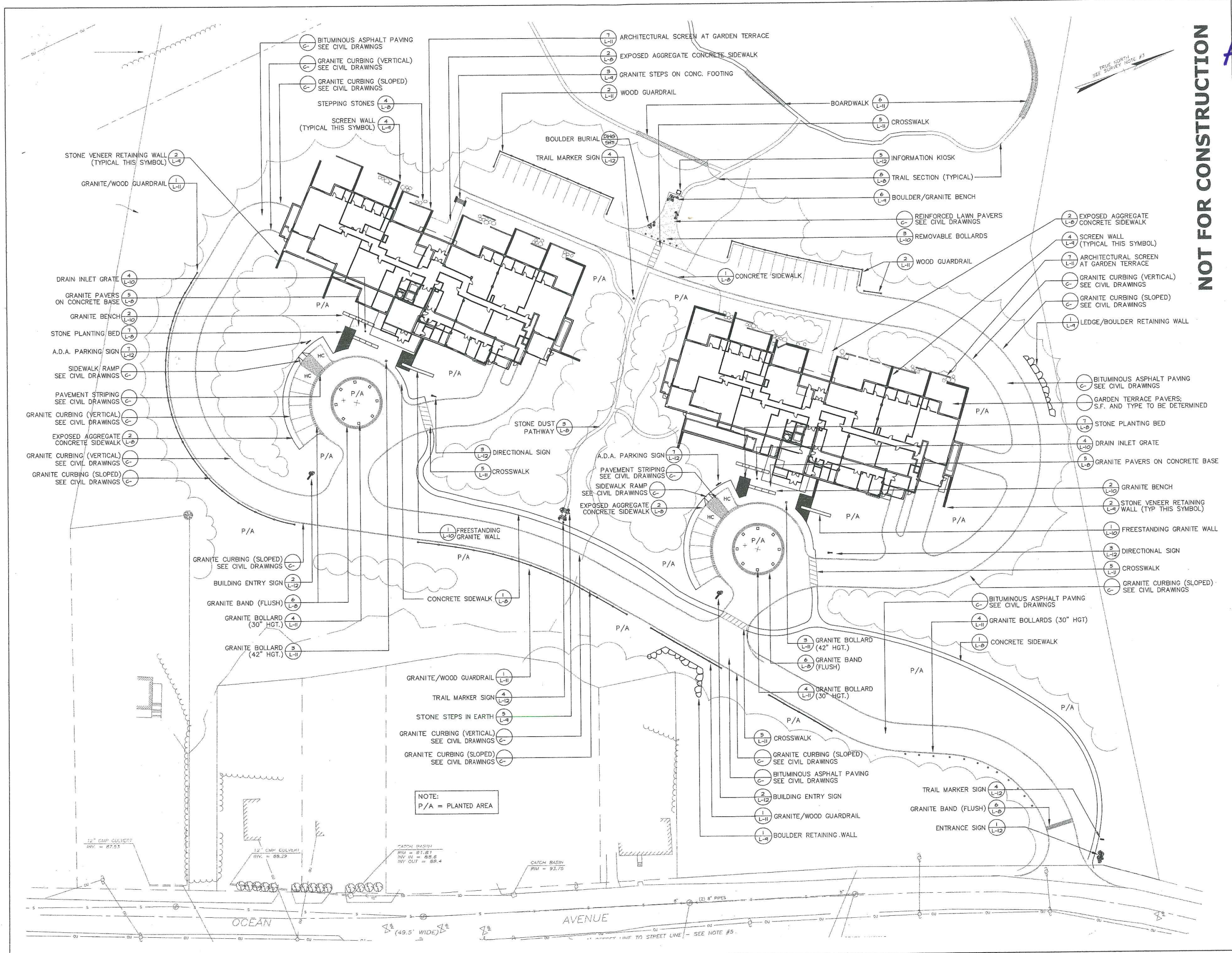
CROSSWALK

Shurman & Associates
31 Middle Street
Bangor, ME 04902



Att. 3

NOT FOR CONSTRUCTION



Richardson & Associates
Landscape Architects

11 Middle Street
Saco, Maine 04072
tel 207.286.9291
fax 207.286.9650
mail@richardsonassociates.com

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PROJECT
GRAVES HILL

OCEAN AVE
PORTLAND, ME

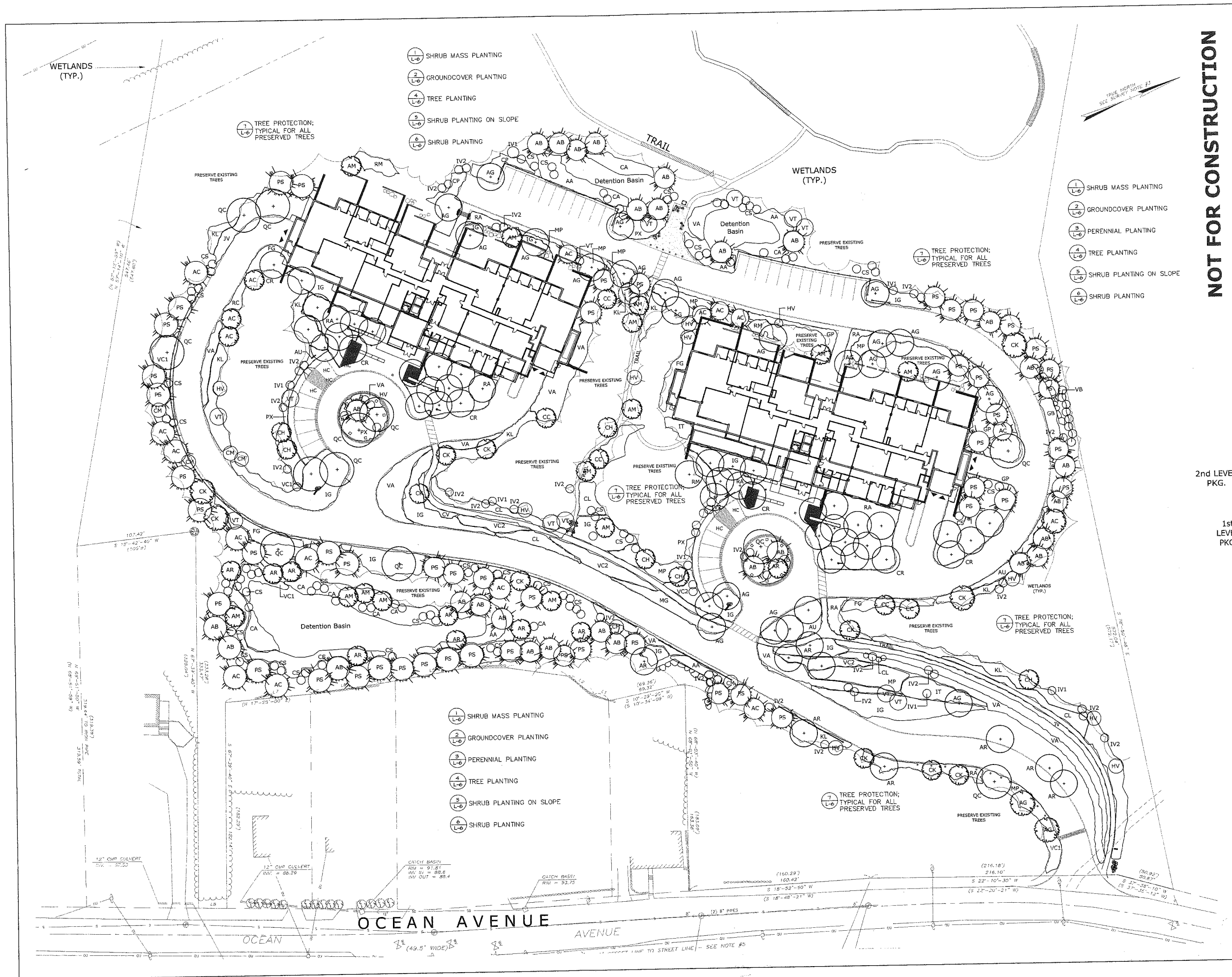
TITLE
MATERIALS PLAN

STATUS:

DATE: 3.25.2005
SCALE: 1"=30'
PROJECT NO. 2003-0280
DRAWN BY: BC/TC
2004 © Scott Simon Architects

REVISION / DATE:
12-15-2004 PRICING SET

DWG NO. **L-1**



- 1 L-6 SHRUB MASS PLANTING
- 2 L-6 GROUNDCOVER PLANTING
- 4 L-6 TREE PLANTING
- 5 L-6 SHRUB PLANTING ON SLOPE
- 6 L-6 SHRUB PLANTING

1 L-6 TREE PROTECTION; TYPICAL FOR ALL PRESERVED TREES

- 1 L-6 SHRUB MASS PLANTING
- 2 L-6 GROUNDCOVER PLANTING
- 3 L-6 PERENNIAL PLANTING
- 4 L-6 TREE PLANTING
- 5 L-6 SHRUB PLANTING ON SLOPE
- 6 L-6 SHRUB PLANTING

1 L-6 TREE PROTECTION; TYPICAL FOR ALL PRESERVED TREES

1 L-6 TREE PROTECTION; TYPICAL FOR ALL PRESERVED TREES

1 L-6 TREE PROTECTION; TYPICAL FOR ALL PRESERVED TREES

- 1 L-6 SHRUB MASS PLANTING
- 2 L-6 GROUNDCOVER PLANTING
- 3 L-6 PERENNIAL PLANTING
- 4 L-6 TREE PLANTING
- 5 L-6 SHRUB PLANTING ON SLOPE
- 6 L-6 SHRUB PLANTING

1 L-6 TREE PROTECTION; TYPICAL FOR ALL PRESERVED TREES



NOT FOR CONSTRUCTION

2nd LEVE
PKG.

1st
LEVE
PKG.



Richardson & Associates
Landscape Architects
11 Middle Street
Saco, Maine 04072
Tel 207.286.9291
Fax 207.286.9650
me@richardsonassociates.com

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PROJECT
GRAVES HILL

OCEAN AVE
PORTLAND, ME

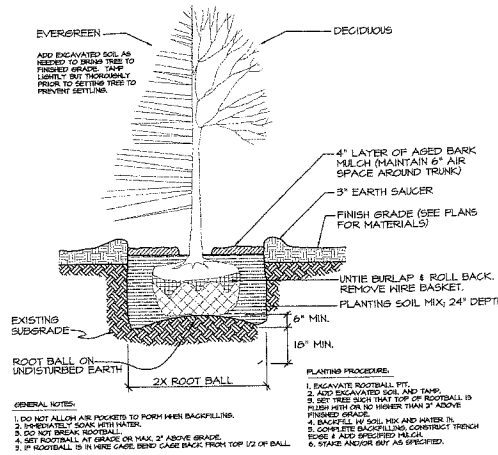
TITLE
LANDSCAPE PLAN

STATUS:

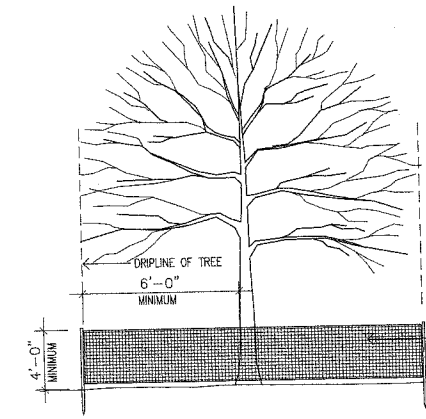
DATE: 12-29-2005	REVISION / DATE:
SCALE: 1"=30'	12-15-2004 PRICING SET
PROJECT NO. 2005-030	
DRAWN BY: BC/TC	2004 © Scott Simms Architects
DWG NO. L-5	04001

GENERAL PLANTING NOTES

- Contractor shall begin maintenance immediately after planting and shall continue until final acceptance. Contractor shall be responsible for all means and methods of watering and maintenance.
- The Landscape contractor shall supply all plant materials in quantities sufficient to complete all plantings shown on this drawing. Clarify any discrepancies with the landscape architect prior to ordering plant material.
- All materials shall conform to the guidelines established by the American Association of Nurserymen.
- All plants shall bear the same relationship to finish grade as the original grades before digging.
- The landscape contractor shall guarantee all plant materials for one (1) full year from date of substantial completion.
- All plant materials are subject to the approval of the landscape architect at the nursery and at the site.
- All areas of the site which have been disturbed and not otherwise developed shall be loamed with a minimum depth of 6" of topsoil and seeded as specified.
- Landscape contractor is encouraged to provide the landscape architect with concerns and/or suggestions with regard to proposed plant material selection prior to placing a purchase order.
- All trees located adjacent to walks and drives shall have 6' of clear height to first branching.
- Contractor shall verify all tree removals with landscape architect prior to start of construction.
- Contractor shall obtain approval for proposed lawn seed mix prior to installation.
- No plant shall be put into the ground before rough grading has been finished and approved by the project landscape architect.
- All plants shall be balled and wrapped or container grown as specified. No container grown stock will be accepted if it is root bound. All root wrapping material made of synthetics or plastics shall be removed at the time of planting.
- With container grown stock, the container shall be removed and the container ball shall be cut through the surface in two vertical locations.
- The location of trees, shrubs and seedlings shall be staked for approval by the landscape architect prior to installation. The contractor shall notify the landscape architect 48 hours prior to required site visit.
- All broad leaf evergreen plants shall be sprayed with an antidesiccant at the beginning of their first winter.
- All plants shall be installed as per details and the contract specifications. The landscape contractor shall refer to the contract specifications for additional requirements.
- All plants and stakes shall be set plumb unless otherwise specified.
- The landscape contractor shall provide loam fill as per the contract specifications.
- All plants shall be watered thoroughly during the first 24-hour period after planting. All plants shall then be watered by the contractor, as necessary to insure health until final acceptance.
- The landscape contractor shall refer to the plant list and planting specifications for seasonal requirements and other restrictions related to the time of planting.

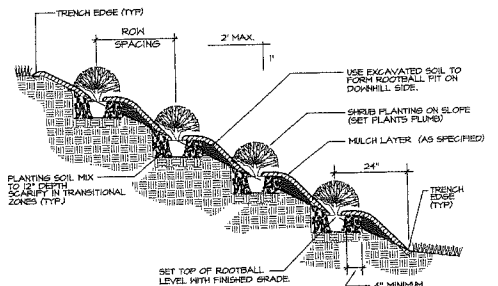


4 TREE PLANTING
L-6 NOT TO SCALE

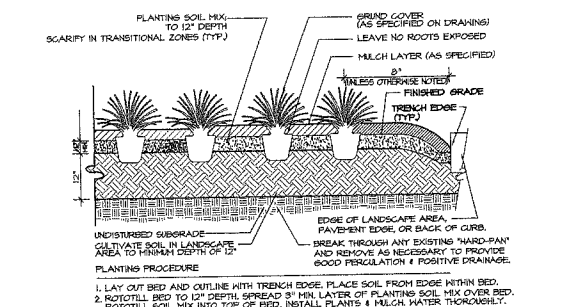


7 TREE PROTECTION
L-6 NOT TO SCALE

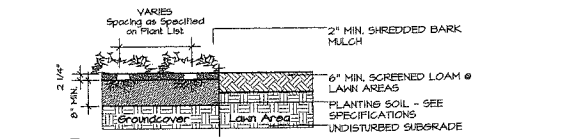
- NOTES:**
- TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY.
 - INSTALL FENCING TO LIMIT OF DRIFTLINE ON TREE OR A MINIMUM OF 5' FROM TRUNK WHEN NECESSARY, WITH PRIOR PERMISSION OF LANDSCAPE ARCHITECT.
 - DO NOT STORE CONSTRUCTION EQUIPMENT, MATERIALS, TOOLS, ETC. WITHIN PROTECTIVE FENCING.
 - MAINTAIN FENCING IN A NEAT AND ORDERLY FASHION THROUGHOUT CONSTRUCTION PERIOD.



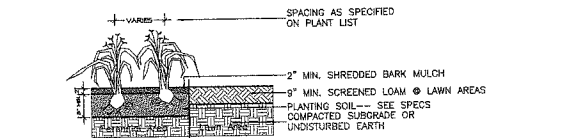
5 SHRUB PLANTING ON SLOPE
L-6 NOT TO SCALE



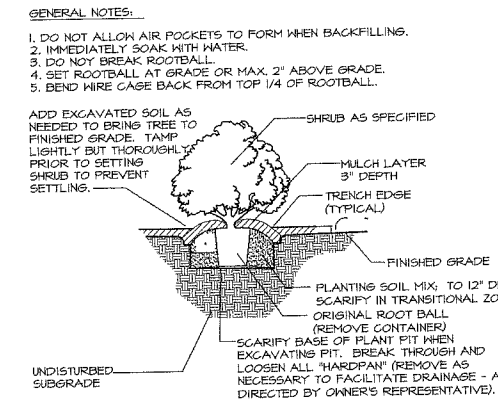
1 SHRUB MASS PLANTING
L-6 NOT TO SCALE



2 GROUND COVER PLANTING
L-6 NOT TO SCALE



3 PERENNIAL PLANTING
L-6 NOT TO SCALE



6 SHRUB PLANTING
L-6 NOT TO SCALE

PLANTING KEY

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENT
AA	160	ARONIA ARBUTIFOLIA 'VIKING'	DWARF CHOKEBERRY	15-18"	CONT.	PLANT 30' O.C.
AB	23	ABIES BALSAMEA	BALSAM FIR	8-10'	B4B	
AC	10	ABIES CONCOLOR	WHITE FIR	8-10'	B4B	
AM	15	AMELANCHIER CANADENSIS	SHADELOW/SERVICEBERRY	6-8'	B4B	MULTI-STEM/CLUMP
AG	26	ACER GINNALA 'FLAME'	AMUR MAPLE	2' CAL.	B4B	
AR	17	ACER RUBRUM	RED MAPLE	2-2.5' CAL.	B4B	
AU	497	ARGENTOSTAPHYLOS (VA-URS)	BEARBERRY	1 GAL.	B4B	PLANT 24' O.C.
CV	170	GALLINA VULGARIS 'COUNTY HICKLOW'	COUNTY HICKLOK HEATHER	15 GAL.	CONT.	PLANT 24' O.C.
CR	34	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2-2.5' CAL.	B4B	SINGLE LEADER
CO	402	GEMALANTHUS OCCIDENTALIS	BUTTONBUSH	18-24"	CONT.	PLANT 30' O.C.
CL	596	CLETHRA ALNIFOLIA 'MINNINGSBIRD'	DWARF CLETHRA	18-24"	CONT.	PLANT 4' O.C.
CA	47	CORNUS AMOMUM	SILKY DOGWOOD	24-30"	CONT.	PLANT 30' O.C.
CH	5	CORNUS MAS	CORNELIANCHERRY DOGWOOD	4-5'	B4B	MULTI-STEM/CLUMP
CC	5	CERCIS CANADENSIS	EASTERN REDBUD	15-2' CAL.	B4B	SINGLE TRUNK
CH	6	CHIONANTHUS VIRGINICUS	FRINGETREE	6-8'	B4B	MULTI-STEM/CLUMP
CF	224	COMPTONIA PEREGRINA	SHEETPERN	24-30"	B4B	PLANT 30' O.C.
CS	67	CORNUS SERICEA 'CARDINAL'	RED TWIG DOGWOOD	24-30"	B4B	PLANT 5' O.C.
CK	12	CORNUS ALTERNIFOLIA	PASADENA DOGWOOD	6-8'	B4B	MULTI-STEM/CLUMP
FB	146	FOTHERGILLA MAJOR	BOTTLEBRUSH BUSH	24-30"	CONT.	PLANT 5' O.C.
GP	112	GALLTHERIA PROCUMBENS	WINTERGREEN	15 GAL.	CONT.	PLANT 24' O.C.
GB	61	GAYLUSSAGIA BACCATA	BLACK HUCKLEBERRY	2 GAL.	CONT.	PLANT 30' O.C.
HV	13	HAMAMELIS VIRGINIANA	COMMON WITCHHAZEL	4-5'	B4B	
IB	1340	ILEX GLABRA 'SHAMROCK'	SHAMROCK HICKBERRY	24-30"	CONT.	PLANT 36' O.C.
IV	2	ILEX VERTICILLATA 'APOLLO'	'APOLLO' HINTERBERRY	30-36"	CONT.	
IV2	44	ILEX VERTICILLATA 'WINTER RED'	'WINTER RED' HINTERBERRY	30-36"	CONT.	
IT	63	ITEA VIRGINICA	VIRGINIA SHEETSPIRE	10-24"	CONT.	PLANT 36' O.C.
JV	367	JUNIPERUS VIRGINIANA 'GREY OAK'	GREY OAK JUNIPER	18-24" SPR.	CONT.	PLANT 36' O.C.
KL	557	KALIA LATIFOLIA 'NIPMICK'	NIPMICK MOUNTAIN LAUREL	24-30"	B4B	PLANT 4' O.C.
MG	284	MYRICA GALE	SWEETSAGE	15-18"	CONT.	PLANT 30' O.C.
PX	833	PAXISTIMA GAMBELI	CLIFF-GREEN	24-30"	CONT.	PLANT 18' O.C.
MP	365	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	24-30"	CONT.	PLANT 4' O.C.
PE	51	PINUS STROBUS	EASTERN WHITE PINE	8-10'	B4B	SINGLE LEADER, HEAVY GROWTH
QC	12	QUERCUS COCCINEA	SCARLET OAK	2-2.5' CAL.	B4B	SINGLE LEADER
RA	110	RHUS ARBUTICATA 'BRO-LON'	DWARF FRAGRANT SUMAC	1 GAL.	CONT.	PLANT 30' O.C.
RH	40	RHOODODENDRON CATAWBA GRANDIFLORUM	RHOODODENDRON	24-30"	CONT.	PLANT 4' O.C.
RM	40	RHOODODENDRON CATAWBA GRANDIFLORUM	RHOODODENDRON	1 GAL.	CONT.	PLANT 24' O.C.
VA	2129	VACCINIUM ANGSTROMII	LOBELUSH BLUEBERRY	1 GAL.	CONT.	PLANT 24' O.C.
VGI	132	VACCINIUM CORTYBOSUM 'NORTHLAND'	HIGHBUSH BLUEBERRY	24-30"	B4B	PLANT 30' O.C.
VGI2	83	VACCINIUM CORTYBOSUM 'FRIENDSHIP'	HIGHBUSH BLUEBERRY	24-30"	B4B	PLANT 30' O.C.
VBI	8	VIBURNUM X BURKHOOPI	BURKHOOB VIBURNUM	4-5'	B4B	PLANT 5' O.C.
VT	14	VIBURNUM TOMENTOSUM 'SHASTA'	SHASTA VIBURNUM	30-36"	B4B	PLANT 5' O.C.

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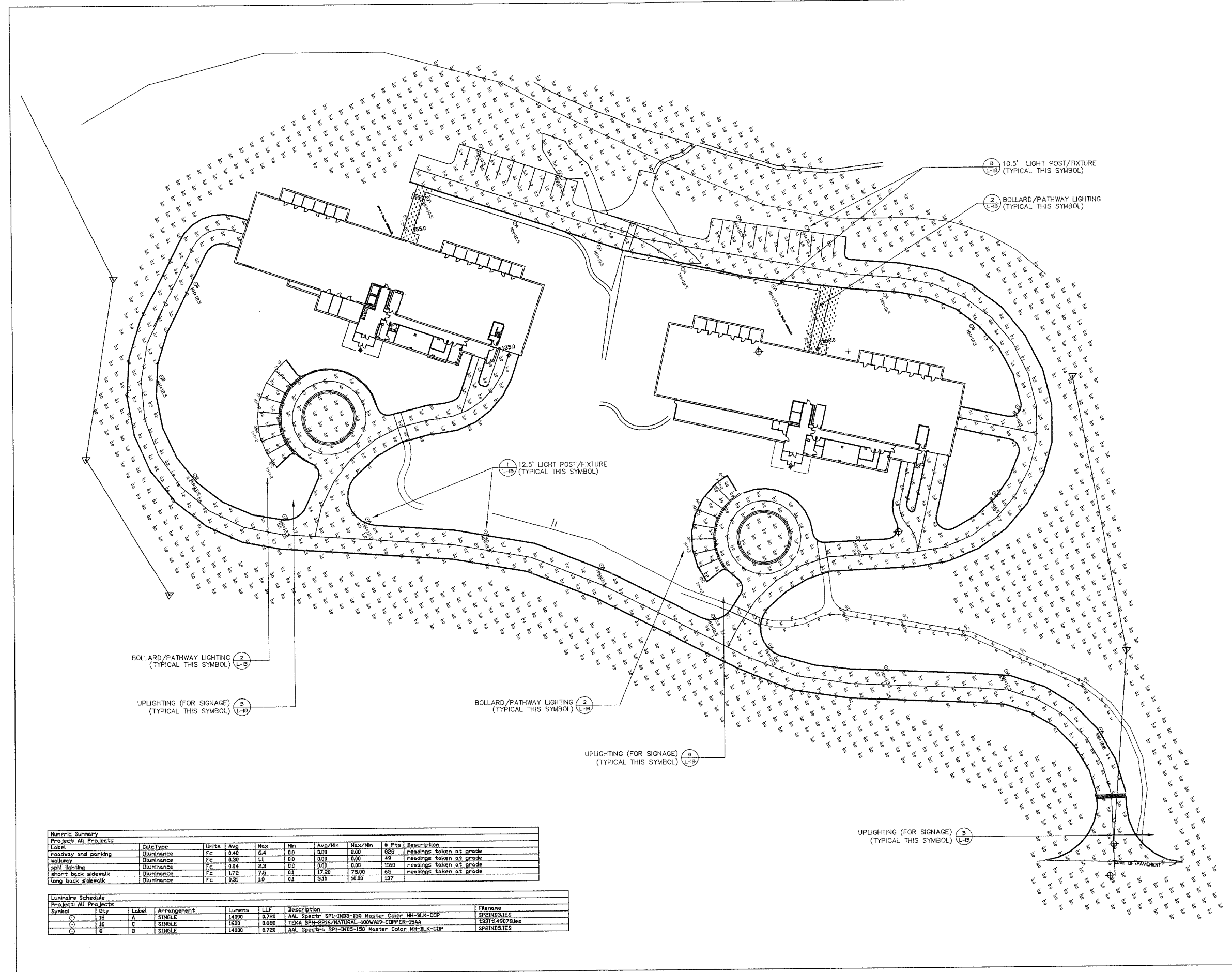
PROJECT
GRAVES HILL
OCEAN AVE
PORTLAND, ME

TITLE
PLANTING SCHEDULE & DETAILS

STATUS:
DATE: 3.25.2005
SCALE: 1"=30'
PROJECT NO.: 2003-0289
DRAWN BY: SC/TG
DWG NO.: L-6
REVISION /DATE: 12-15-2004 PRICING SET
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Numeric Summary									
Project All Projects									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	# Pts	Description
roadway and parking	Illuminance	Fc	0.40	8.4	0.0	0.00	0.00	829	readings taken at grade
walkway	Illuminance	Fc	0.30	1.1	0.0	0.00	0.00	49	readings taken at grade
spill lighting	Illuminance	Fc	0.04	0.3	0.0	0.00	0.00	1160	readings taken at grade
short back sidewalk	Illuminance	Fc	1.72	7.5	0.1	17.20	75.00	65	readings taken at grade
long back sidewalk	Illuminance	Fc	0.31	1.9	0.1	3.10	16.00	137	

Luminaire Schedule						
Project All Projects						
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
○	19	A	SINGLE	14000	0.720	AAL Spectro SPI-IND3-150 Master Color MH-BLK-COP
○	16	C	SINGLE	1600	0.690	TEKA BPH-ZEIGER-154A
○	8	B	SINGLE	14000	0.720	AAL Spectro SPI-IND3-150 Master Color MH-BLK-COP

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PROJECT
GRAVES HILL

OCEAN AVE
PORTLAND, ME

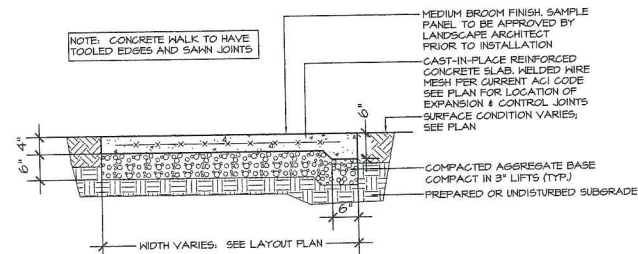
TITLE
SITE LIGHTING &
PHOTOMETRIC
PLAN

STATUS:

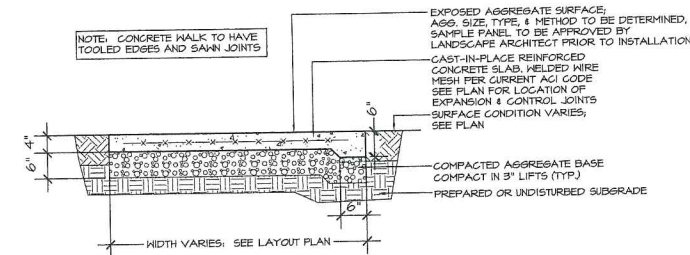
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PROJECT NO. 2003-0289
DRAWN BY: BC/TC
DWG NO. L-7

REVISION /DATE:
12-15-2004 PRICING SET

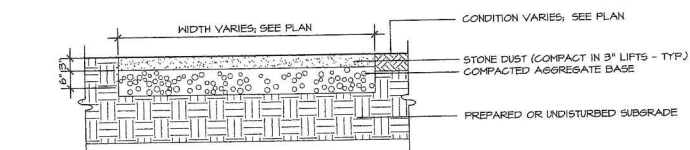
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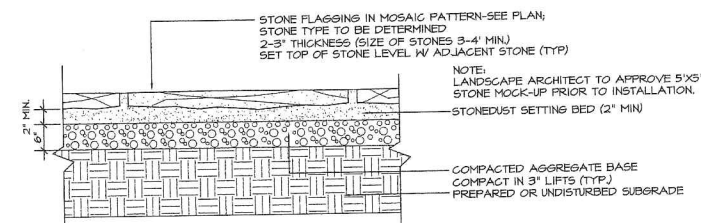
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L-B NOT TO SCALE



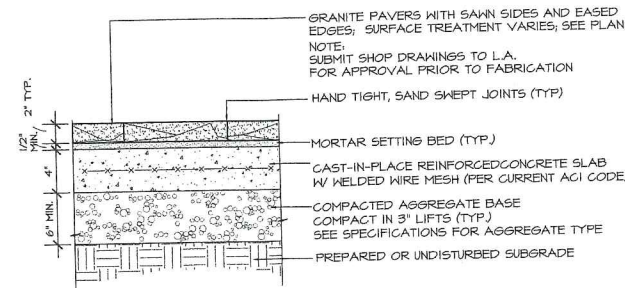
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L-B NOT TO SCALE



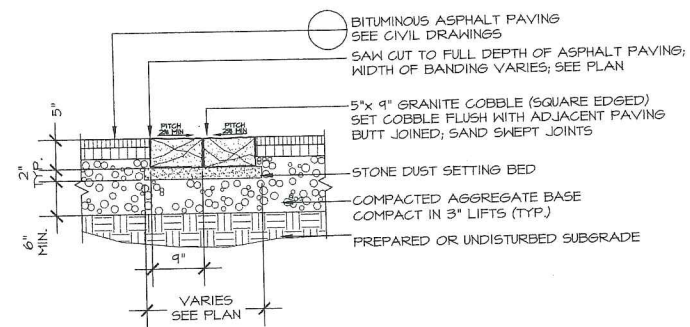
3 STONE DUST PATH
L-B NOT TO SCALE



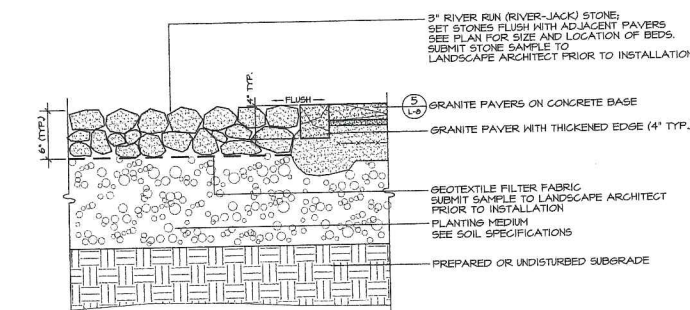
4 STEPPING STONES
L-B NOT TO SCALE



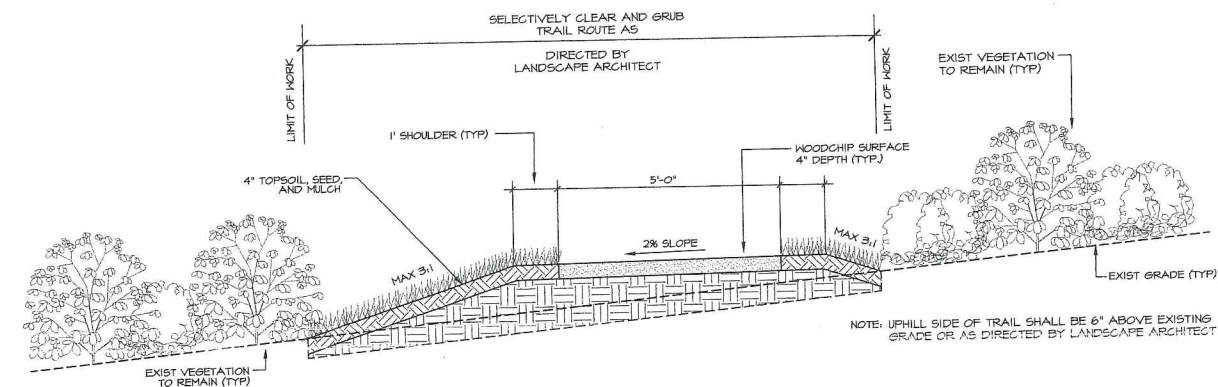
5 GRANITE PAVERS ON CONCRETE BASE
L-B NOT TO SCALE



6 GRANITE BAND (FLUSH)
L-B NOT TO SCALE



7 STONE PLANTING BED
L-B NOT TO SCALE



8 TRAIL SECTION (TYPICAL)
L-B NOT TO SCALE

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PROJECT

GRAVES HILL

TITLE

OCEAN AVE
PORTLAND, ME

STATUS:

SITE DETAILS

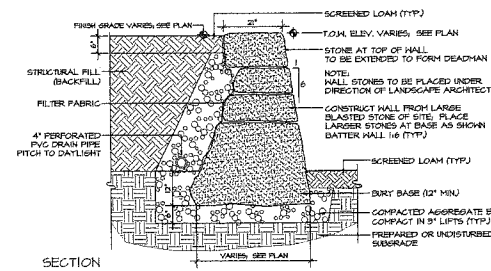
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PROJECT NO.: 2001-0280
DRAWN BY: BC/TC
DWG NO.: 2004 Scott Sikora Architects

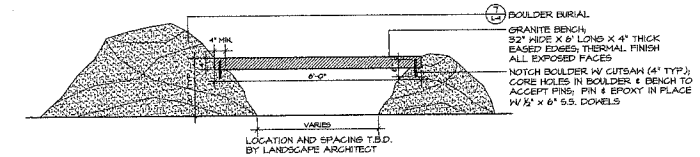
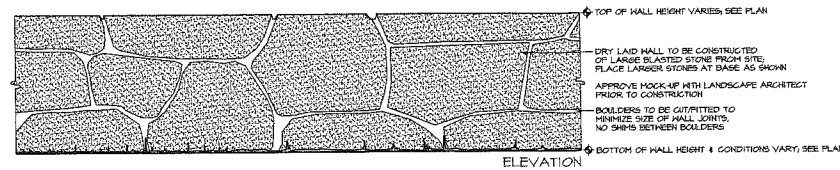
REVISION / DATE:
12-15-2004 PRICING SET

L-8

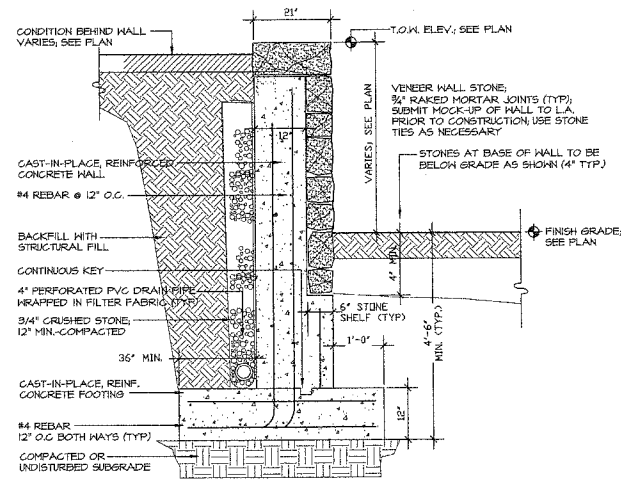
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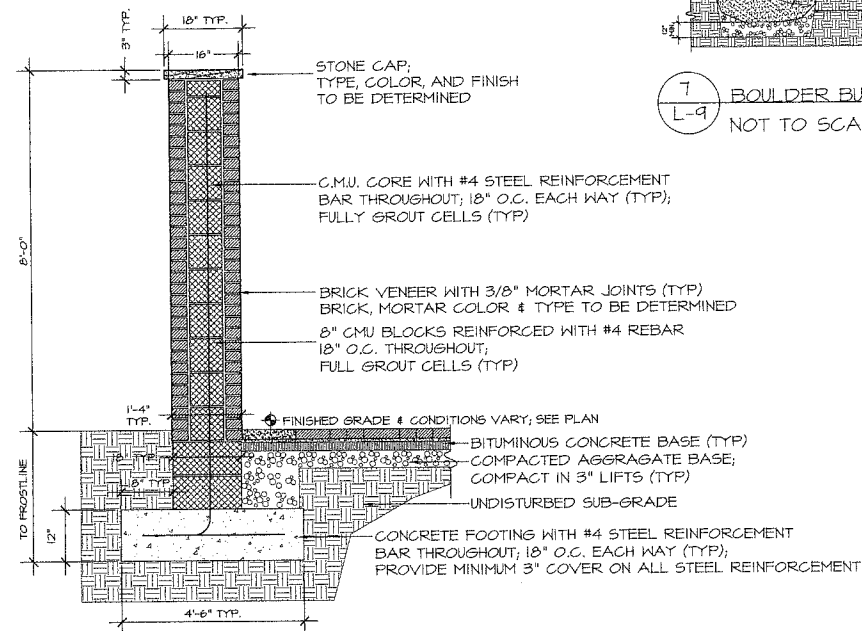
1 LEDGE / BOULDER RETAINING WALL
L-9 NOT TO SCALE



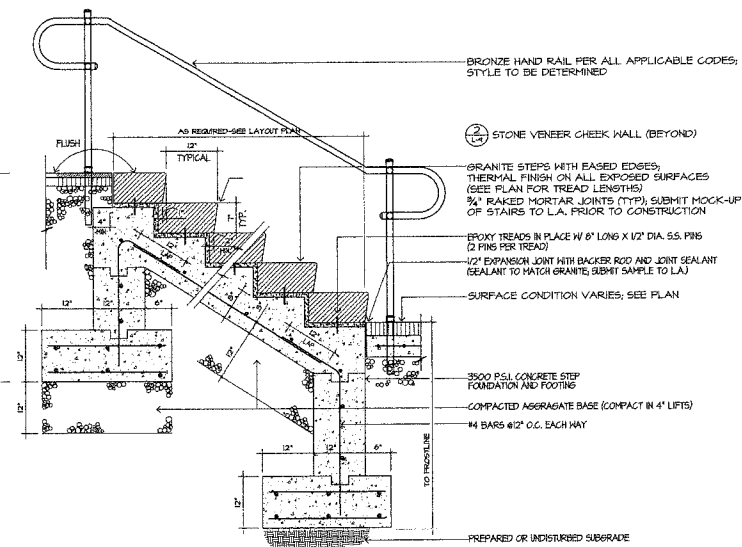
6 BOULDER / GRANITE BENCH
L-9 NOT TO SCALE



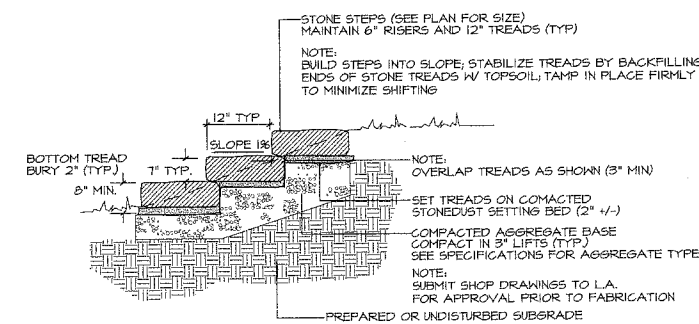
2 STONE VENEER RETAINING WALL
L-9 NOT TO SCALE



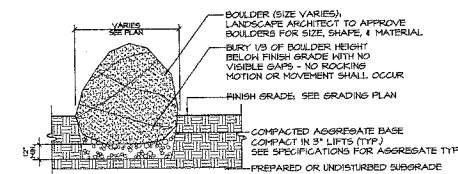
4 SCREEN WALL
L-9 NOT TO SCALE



3 GRANITE STEPS ON CONCRETE FOOTING
L-9 NOT TO SCALE



5 STONE STEPS IN EARTH
L-9 NOT TO SCALE



7 BOULDER BURIAL
L-9 NOT TO SCALE



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PROJECT

GRAVES HILL

OCEAN AVE
PORTLAND, ME

TITLE

SITE DETAILS

STATUS:

PLANNING BOARD SUBMITTAL

DATE: 3.23.2005

SCALE: AS SHOWN

PROJECT NO.: 2003-0280

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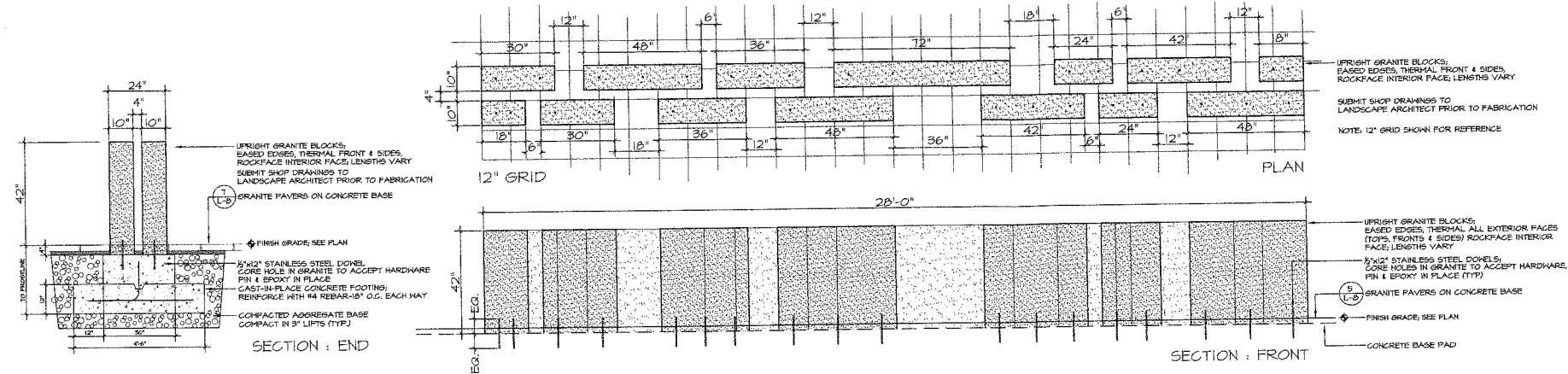
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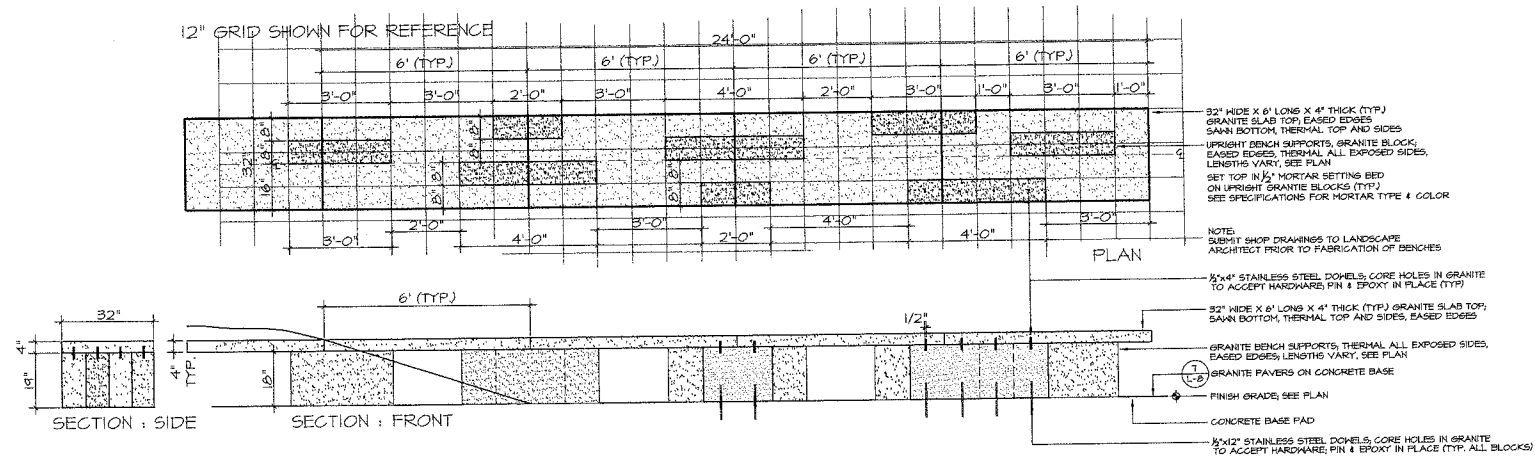
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04/01

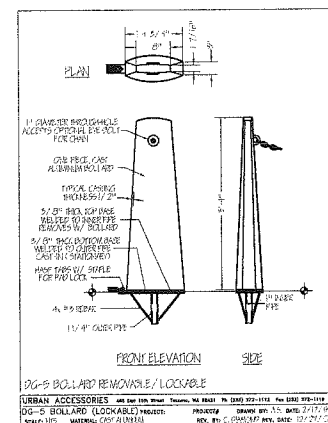
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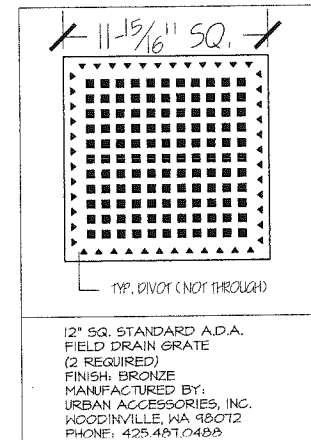
1 FREESTANDING GRANITE WALL
L-10 NOT TO SCALE



2 GRANITE BENCH
L-10 NOT TO SCALE



3 REMOVABLE BOLLARD
L-10 NOT TO SCALE



4 DRAIN INLET GRATE
L-10 NOT TO SCALE

NOT FOR CONSTRUCTION



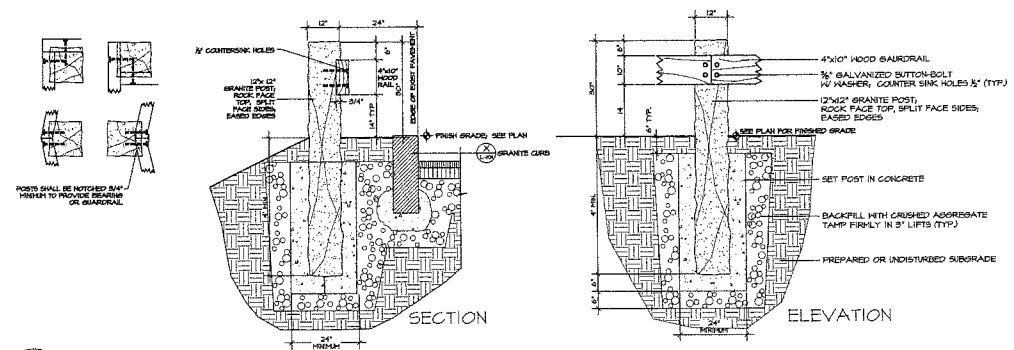
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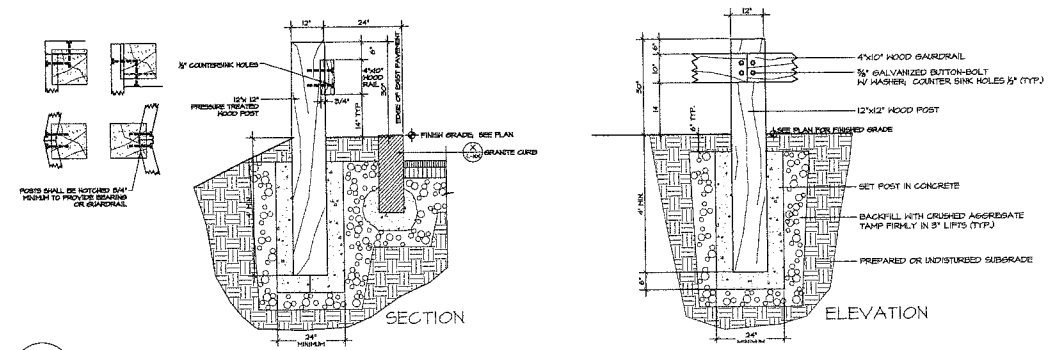
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TITLE
SITE DETAILS

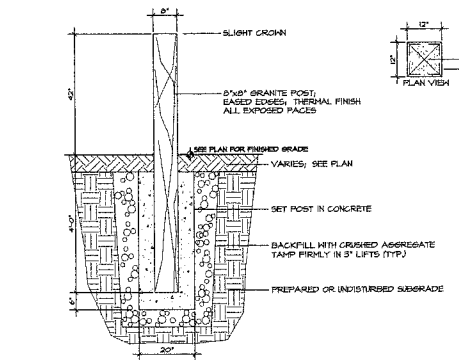
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04601



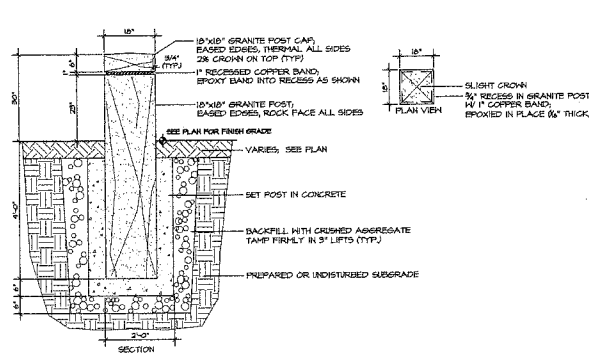
1 GRANITE / WOOD GAURDRAIL
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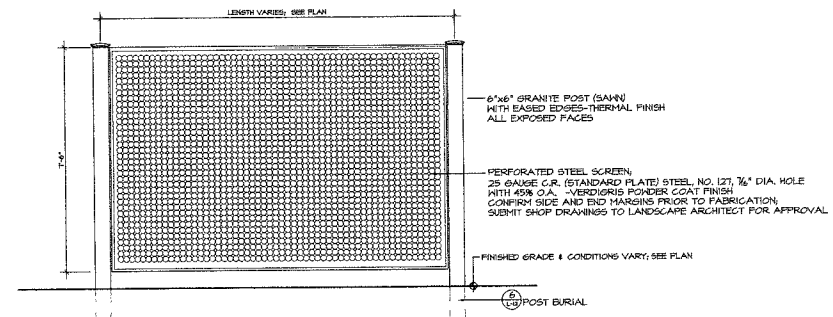
2 WOOD GAURDRAIL
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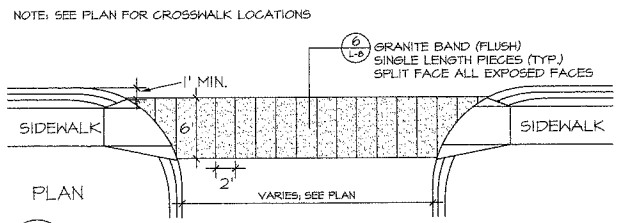
3 GRANITE BOLLARD (42\"/>



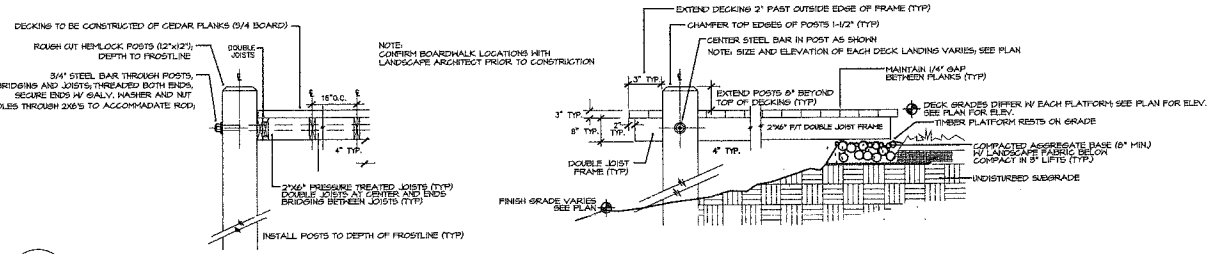
4 GRANITE BOLLARD (30\"/>



7 ARCHITECTURAL SCREEN AT GARDEN TERRACE
L-II NOT TO SCALE



5 CROSSWALK
L-II NOT TO SCALE



6 BOARDWALK
L-II NOT TO SCALE



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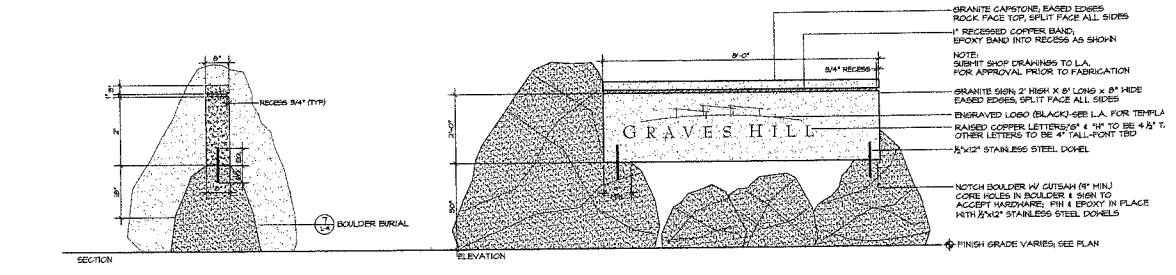
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OCEAN AVE
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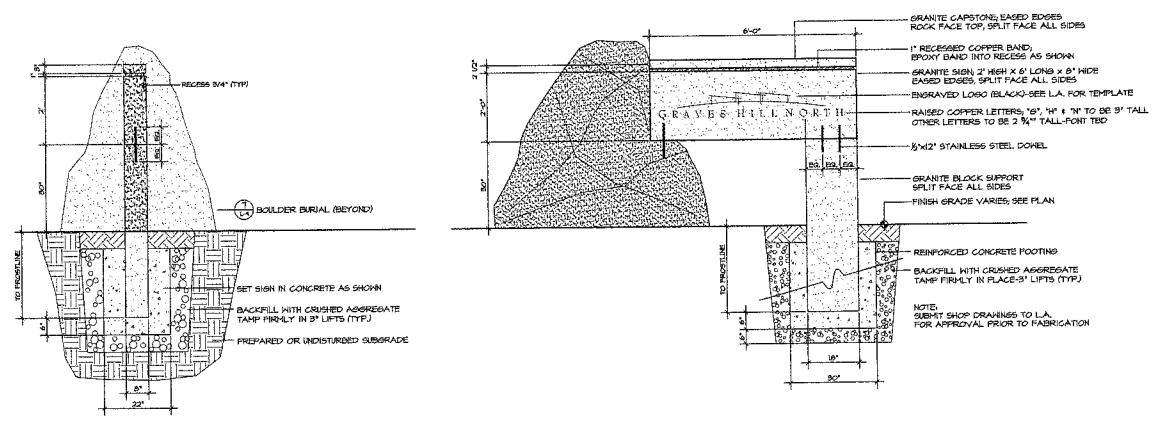
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STATUS:
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DATE: 7.24.2005
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PROJECT NO.: 2003-0226
DRAWN BY: BCT/C
DWG NO.: L-11 04001

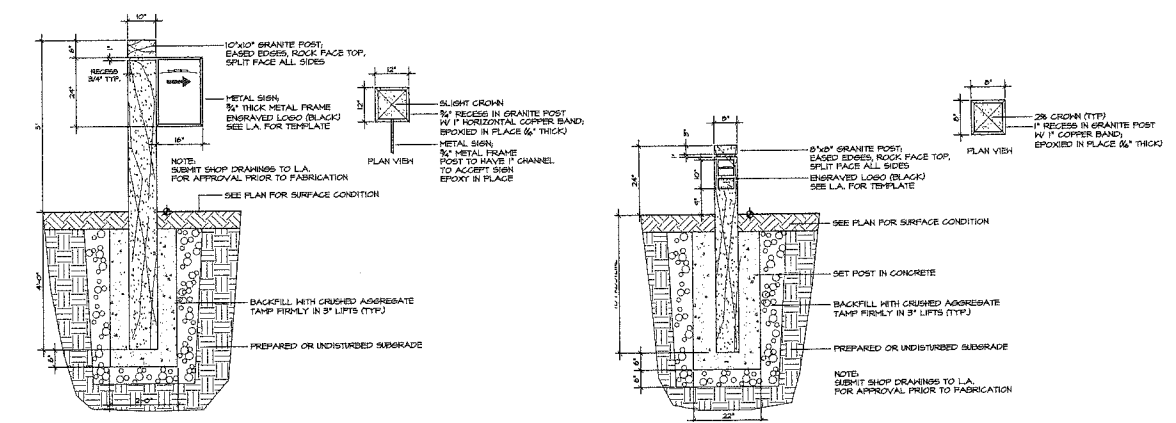
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1 ENTRANCE SIGN
L-12 NOT TO SCALE

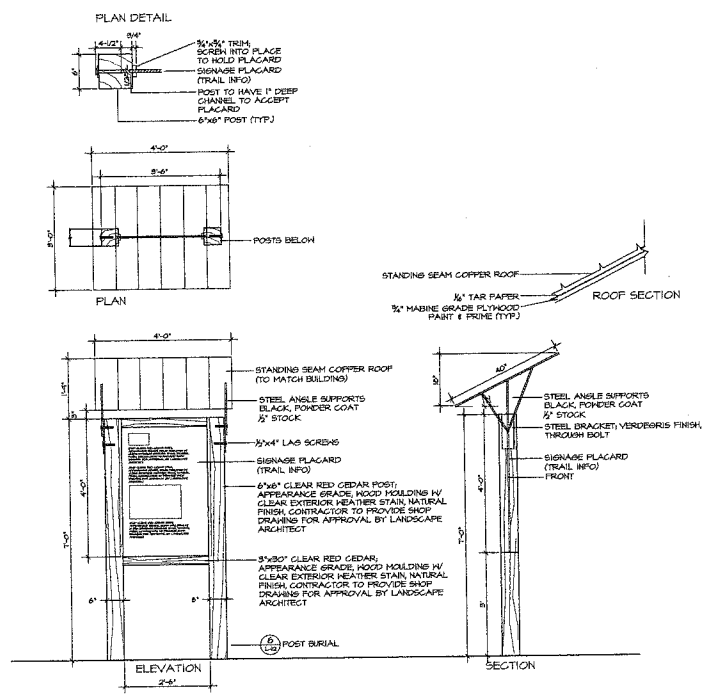


2 BUILDING ENTRY SIGN
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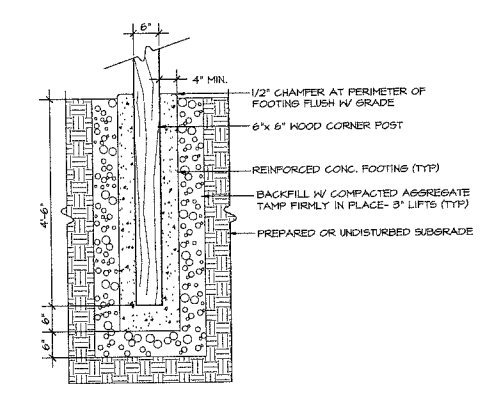


3 DIRECTIONAL SIGN
L-12 NOT TO SCALE

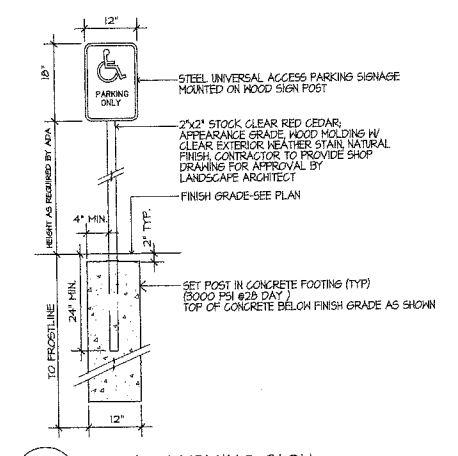
4 TRAIL MARKER SIGN
L-12 NOT TO SCALE



5 INFORMATION KIOSK
L-12 NOT TO SCALE



6 POST BURIAL
L-12 NOT TO SCALE



7 A.D.A. PARKING SIGN
L-12 NOT TO SCALE



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GRAVES HILL
OCEAN AVE
PORTLAND, ME

TITLE
SITE DETAILS

STATUS:
PLANNING BOARD SUBMITTAL

DATE: 3.23.2005
SCALE: AS SHOWN
PROJECT NO. 2003-0280
DRAWN BY: BG/TC
DATE: 12-15-2004
REVISION / DATE: PRICING SET
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DWS NO.

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Submitted by Swany Lighting Associates Inc on Dec 9, 2004 (THERESE MILLETT X103)

Project: GRAVES HILL
 Architect: Richardson & Associates
 Type: A
 SP1/IND-3-150MM*BLK-COP/PHILLIPS
 #MHC150/JUMP/3K/ALTO

SPECTRA™ SP1 IND - Large Scale - Indirect Hood DATE TYPE

SP1 IND SP1/IND-3-150MM*BLK-COP/PHILLIPS #MHC150/JUMP/3K/ALTO

FORMER / HOOD LENS ELEMENT LAMP BALLAST COLOR

1/2 3 4 5

ARM ATTACH POLE

6 7 8 9

Page 1 of 2

HOOD FINISH OPTION 6

4. LAMP/BALLAST

5. COLOR

6. OPTIONAL HOOD FINISH

7. OPTIONS

8. DIMENSIONS

9. WEIGHT

10. IP: 65

NOTE: PLEASE SPECIFY VOLTAGE

11. JOB NAME

12. SOLD TO

13. APPROVED

14. ARCHITECTURAL AREA LIGHTING

15. 11400 Avenue Blvd / La Mesa, CA 92040

16. 714 994-2700 / Fax 714 994-0522 / www.aal.net

17. 4025PAC1.pdf Copyright 2003 Swany

Submitted by Swany Lighting Associates Inc on Dec 9, 2004 (THERESE MILLETT X103)

Project: GRAVES HILL
 Architect: Richardson & Associates
 Type: A
 SP1/IND-3-150MM*BLK-COP/PHILLIPS
 #MHC150/JUMP/3K/ALTO

SPECTRA™ SP1 IND - Large Scale - Indirect Hood DATE TYPE

SP1 IND SP1/IND-3-150MM*BLK-COP/PHILLIPS #MHC150/JUMP/3K/ALTO

FORMER / HOOD LENS ELEMENT LAMP BALLAST COLOR

1/2 3 4 5

ARM ATTACH POLE

6 7 8 9

Page 2 of 2

HOOD FINISH OPTION 6

8. ARM

9. DIMENSIONS

10. WEIGHT

11. IP: 65

NOTE: PLEASE SPECIFY VOLTAGE

12. JOB NAME

13. SOLD TO

14. APPROVED

15. ARCHITECTURAL AREA LIGHTING

16. 11400 Avenue Blvd / La Mesa, CA 92040

17. 714 994-2700 / Fax 714 994-0522 / www.aal.net

18. 4025PAC1.pdf Copyright 2003 Swany

Submitted by Swany Lighting Associates Inc on Dec 9, 2004 (THERESE MILLETT X103)

Project: GRAVES HILL
 Architect: Richardson & Associates
 Type: B
 SP1/IND-5-150MM*BLK-COP/PHILLIPS
 #MHC150/JUMP/3K/ALTO

SPECTRA™ SP1 IND - Large Scale - Indirect Hood DATE TYPE

SP1 IND SP1/IND-5-150MM*BLK-COP/PHILLIPS #MHC150/JUMP/3K/ALTO

FORMER / HOOD LENS ELEMENT LAMP BALLAST COLOR

1/2 3 4 5

ARM ATTACH POLE

6 7 8 9

Page 1 of 2

HOOD FINISH OPTION 6

4. LAMP/BALLAST

5. COLOR

6. OPTIONAL HOOD FINISH

7. OPTIONS

8. DIMENSIONS

9. WEIGHT

10. IP: 65

NOTE: PLEASE SPECIFY VOLTAGE

11. JOB NAME

12. SOLD TO

13. APPROVED

14. ARCHITECTURAL AREA LIGHTING

15. 11400 Avenue Blvd / La Mesa, CA 92040

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FORMER / HOOD LENS ELEMENT LAMP BALLAST COLOR

1/2 3 4 5

ARM ATTACH POLE

6 7 8 9

Page 2 of 2

HOOD FINISH OPTION 6

8. ARM

9. DIMENSIONS

10. WEIGHT

11. IP: 65

NOTE: PLEASE SPECIFY VOLTAGE

12. JOB NAME

13. SOLD TO

14. APPROVED

15. ARCHITECTURAL AREA LIGHTING

16. 11400 Avenue Blvd / La Mesa, CA 92040

17. 714 994-2700 / Fax 714 994-0522 / www.aal.net

18. 4025PAC1.pdf Copyright 2003 Swany

1 12.5' LIGHT POST / FIXTURE
 L-13 NOT TO SCALE

3 10.5' LIGHT POST / FIXTURE
 L-13 NOT TO SCALE

TEKA
 ILLUMINATION

ILLUMINATION

12" slip fit depth

TEKA ILLUMINATION, INC
 80 Gibson Road, P.O. Box 100, Tipton, CA 95326
 (925) 434-3511 Fax (925) 434-3512 www.tekaillumination.com

2 BOLLARD/PATHWAY LIGHTING
 L-13 NOT TO SCALE

TEKA
 ILLUMINATION

ILLUMINATION

H.I.D. PAR Floodlight

TEKA ILLUMINATION, INC
 80 Gibson Road, P.O. Box 100, Tipton, CA 95326
 (925) 434-3511 Fax (925) 434-3512 www.tekaillumination.com

4 UPLIGHTING (TYP. FOR ALL SIGNAGE)
 L-13 NOT TO SCALE

TEKA
 ILLUMINATION

ILLUMINATION

T-50

H.I.D. PAR Floodlight

TEKA ILLUMINATION, INC
 80 Gibson Road, P.O. Box 100, Tipton, CA 95326
 (925) 434-3511 Fax (925) 434-3512 www.tekaillumination.com

NOT FOR CONSTRUCTION



Richardson & Associates
 Landscape Architects

11 Middle Street
 Saco, Maine 04072
 tel 207.286.9291
 fax 207.286.9650
 mail@richardsonassociates.com

THIS DRAWING IS THE PROPERTY OF RICHARDSON & ASSOCIATES. IT IS TO BE REPRODUCED IN PART OR WHOLE.

PROJECT: GRAVES HILL

OCEAN AVE
 PORTLAND, ME

TITLE: SITE LIGHTING DETAILS

STATUS: PLANNING BOARD SUBMITTAL

DATE: 3.23.2005
 SCALE: AS SHOWN
 PROJECT NO.: 2003-0280
 DRAWN BY: BC/TC
 DWG NO.: L-13

GRAVES HILL

OCEAN AVENUE
PORTLAND, MAINE

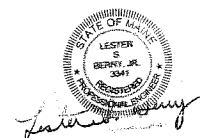
A 98 UNIT CONDOMINIUM PROJECT

For
GRAVES HILL LAND COMPANY, LLC
16 TIFFANY LANE
SACO, MAINE

PLAN INDEX

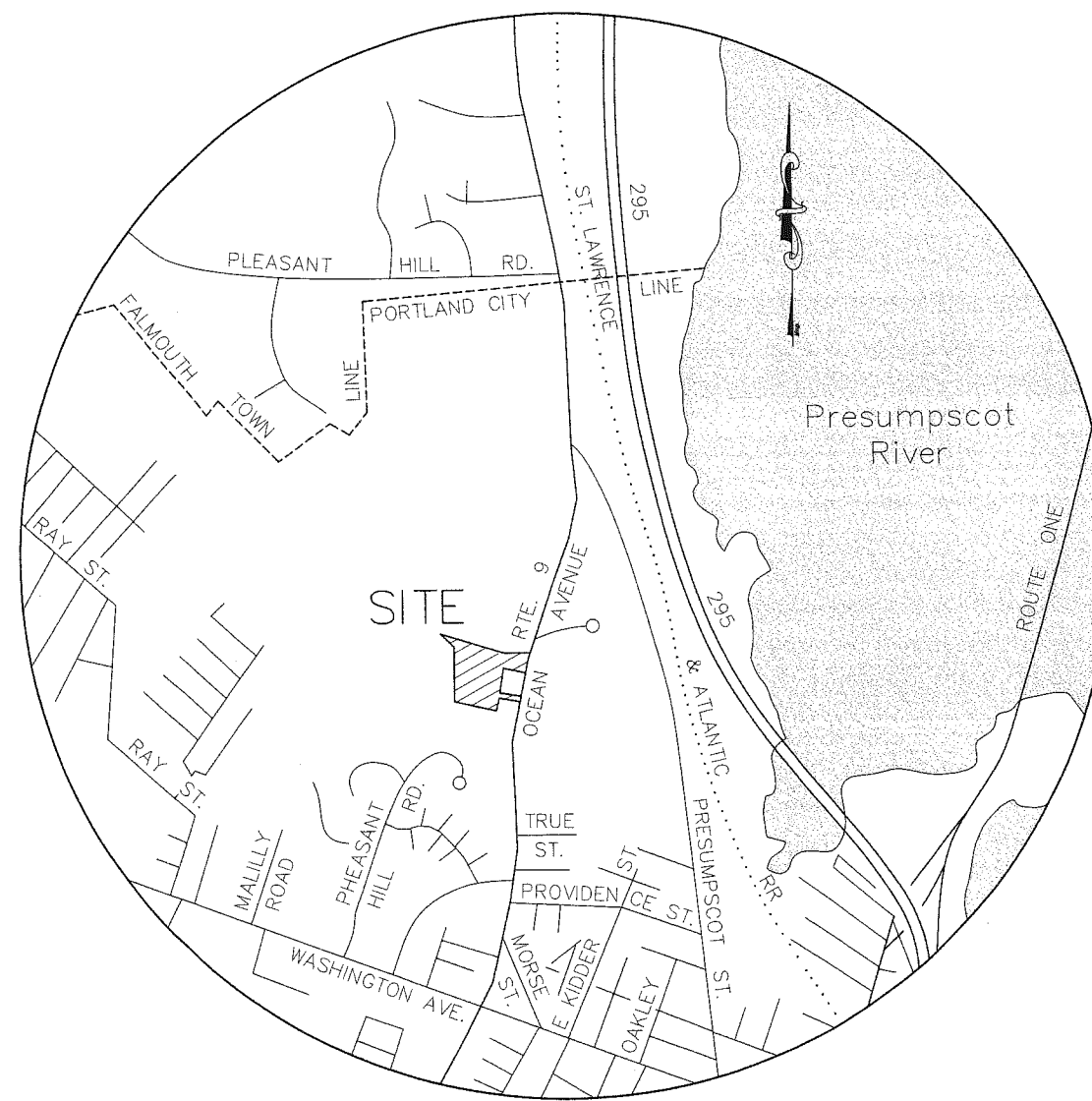
- C-1 PROJECT INFORMATION
- C-2 EXISTING CONDITIONS
- C-3 SUBDIVISION PLAN
- C-4 SITE PLAN
- C-5 GRADING PLAN
- C-6 UTILITY PLAN
- C-7 PLAN & PROFILE SHEET- ROAD A STA 0+00 TO 6+00
- C-8 PLAN & PROFILE SHEET- ROAD A STA 6+00 TO 11+79.48
- C-9 PLAN & PROFILE SHEET- ROAD B STA 0+00 TO 4+50
- C-10 PLAN & PROFILE SHEET- ROAD B STA 4+50 TO 9+60.70
- C-11 EROSION CONTROL AND STORMDRAIN DETAILS
- C-12 SITE DETAILS
- C-13 PREDEVELOPMENT DRAINAGE PLAN
- C-14 POST DEVELOPMENT DRAINAGE PLAN
- C-15 DETENTION POND DETAILS - POND 1
- C-16 DETENTION POND DETAILS - POND 2

MARCH 2005



BH2M

Berry * Huff * McDonald * Milligan Inc.
ENGINEERS * SURVEYORS * PLANNERS
28 State Street, Gorham, Maine 04038, (207) 839-2771



LOCATION MAP

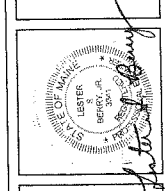
SCALE: 1" = .50 Mile

EXISTING	DESCRIPTION	PROPOSED
---	CONTOUR	---
---	EASEMENT LINE	---
---	TREE LINE	---
---	OVERHEAD UTILITIES	---
---	STORM DRAIN	---
---	SANITARY SEWER	---
---	WATER LINE	---
---	TIME OF CONCENTRATION ROUTE	---
---	DRAINAGE BOUNDARY	---
---	LIMIT OF WETLANDS	---
---	STONE WALL	---
⊙	DRAIN MANHOLE	⊙
⊙	SANITARY SEWER MANHOLE	⊙
⊙	HYDRANT	⊙
⊙	CATCHBASIN	⊙
⊙	UTILITY POLE	⊙
⊙	GRANITE MONUMENT	⊙
→	FLOW DIRECTION	→
⊙	IRON ROD FOUND	⊙
⊙	IRON PIPE FOUND	⊙
⊙	5/8" IRON ROD W/ CAP TO BE SET ABOVE GROUND	⊙
⊙	NOW OR FORMERLY	⊙

GENERAL NOTES:

- EXISTING PUBLIC AND PRIVATE UTILITY AND UNDERGROUND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, AND ALL UTILITIES AND PIPES ARE NOT NECESSARILY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IN THE FIELD THE LOCATIONS OF UTILITIES SHOWN, AND FOR INVESTIGATING AND IDENTIFYING THE EXISTENCE AND LOCATIONS OF ANY ADDITIONAL PUBLIC AND PRIVATE UTILITIES NOT SHOWN ON THE PLANS, BEFORE COMMENCING ANY EXCAVATIONS, AND SHALL BE RESPONSIBLE FOR REPAIRING ALL UTILITIES AND PIPES, BOTH PUBLIC AND PRIVATE WHETHER SHOWN ON THE PLANS OR NOT, THAT ARE DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED IN INVESTIGATING AND REPAIRING SAID UTILITIES SHALL BE BORN BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK PAID FOR UNDER THE APPLICABLE LUMP SUM AND UNIT PRICES IN THE CONTRACT. UTILITIES INCLUDE BUT ARE NOT LIMITED TO UNDERGROUND ELECTRIC, GAS, TELEPHONE, WATER, SEWER, STORM DRAIN, AND CELLAR DRAIN LINES. SEE PROJECT DIRECTORY FOR A LIST OF KNOWN UTILITIES AND CONTACT PERSONS.
- ALL STRUCTURES INCLUDING EXISTING MANHOLES, VALVE COVERS, CATCH BASINS, ETC. SHALL BE ADJUSTED UP OR DOWN, AS REQ'D, TO MEET FINISH GRADES. THE COST OF SUCH WORK SHALL BE INCIDENTAL TO THE PROJECT.
- ALL NON-PAVED AREAS DISTURBED BY THE CONTRACTOR SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- ALL ELEVATIONS SHALL BE TAKEN FROM THE BENCHMARKS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY BENCHMARK ELEVATIONS WITH ENGINEER PRIOR TO USING. DO NOT USE CB OR MH RIMS.
- THE CONTRACTOR SHALL EXCAVATE TEST PITS SHOWN ON THE DRAWINGS TO LOCATE SEWERS AND OTHER UTILITIES CRITICAL TO THE PROPOSED PIPING PLAN. THE OWNER RESERVES THE RIGHT TO ADJUST PIPING LOCATIONS AND GRADES AS REQ'D. OTHER TEST PITS NOT INDICATED ON THE PLANS MAY BE REQ'D AT THE ENGINEER'S REQUEST. TEST HOLES DUG BY THE CONTRACTOR NOT INDICATED ON THE PLANS OR SO ORDERED BY THE ENGINEER WILL NOT BE PAID FOR.
- WHENEVER THE WORDS "REMOVE" OR "ABANDONED" ARE USED IN REFERENCE TO EXISTING PIPES OR STRUCTURES, IT SHALL MEAN THAT MANHOLES SHALL BE REMOVED COMPLETELY OR BROKEN WITHIN 36" OF THE FINISH GRADE, SEWER LINES PLUGGED WITH CONCRETE AND THE EMPTY STRUCTURE FILLED WITH COMPACTED GRANULAR MAT'L.
- THE WORD "PLUGGED" MEANS TO FILL AND SEAL WITH CONCRETE.
- WHERE THE WORK REQUIRES THE REMOVAL OF TREES AND/OR STUMPS SUCH REMOVAL SHALL BE INCIDENTAL TO THE ITEM AFFECTED.
- CONNECTIONS TO EXISTING MANHOLES, PIPES, OR OTHER STRUCTURES SHALL BE INCIDENTAL TO THE COST OF THE PIPE AND NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC WARNINGS SIGNS DURING THE PROGRESS OF THE WORK IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DRIVEWAYS AND WALKS IMPACTED BY THE PROJECT SHALL BE REPAIRED AS SHOWN IN THE DETAILS AND AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DIRECT THE CONTRACTOR AS TO THE METHOD OF DEALING WITH EACH DRIVE AND WALK.
- PIPE LENGTH EQUALS DISTANCE BETWEEN THE INSIDE FACE OF CATCH BASINS OR MANHOLES. (PIPE SLOPE COMPUTATION).
- PROPERTY LINE AND RIGHT OF WAY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR.
- UTILITY POLES SHALL BE RELOCATED BY CMP & NYNEX. UTILITY WIRES WILL BE REHUNG OR BURIED DURING THIS SAME CONSTRUCTION. COORDINATION WILL BE REQUIRED BY THE CONTRACTOR IN ORDER TO MINIMIZE CONFLICTS.
- BIDDEFORD SAGO WATER CO. WILL BE INVOLVED IN WATERMAIN DECISIONS AND MONITORING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WATER COMPANY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG-SAFE" AND LOCAL UTILITY COMPANIES AT LEAST 3 BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, OR AS OTHERWISE REQUIRED BY MAINE STATE LAW.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THESE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
- ALL WORK SHALL BE IN CONFORMANCE WITH THE CITY OF PORTLAND AND ALL UTILITY COMPANIES STANDARDS.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY CONSTRUCTION ACTIVITY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
- NO BLASTING WILL BE ALLOWED WITHIN 500 FT OF ANY UTILITY WITHOUT THE NOTIFICATION AND APPROVAL OF THE APPROPRIATE UTILITY COMPANY. NO LEDGE BLASTING WILL BE PERMITTED WITHIN A UTILITY COMPANY EASEMENT UNTIL WRITTEN APPROVAL FROM THE UTILITY IS GIVEN. BLASTING OPERATIONS SHALL BE IN ACCORDANCE WITH MAINE DEPT. OF ENVIRONMENTAL PROTECTION BLASTING REQUIREMENTS AND SITE LOCATION OF DEVELOPMENT APPROVAL ORDER.
- ALL PAVEMENT CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE CUT EDGES AND NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- CONDUIT SHALL BE USED FOR ELECTRIC, TELEPHONE AND TV IN ACCORDANCE WITH THE RESPECTIVE COMPANIES REQUIREMENTS.
- ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED & MAINTAINED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S" MANUAL, THE PROJECT E&S REPORT PREPARED BY BH2M AND AS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS.

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE



BH2M
 Barry J. Huff • McDaniel • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (603) 852-8171

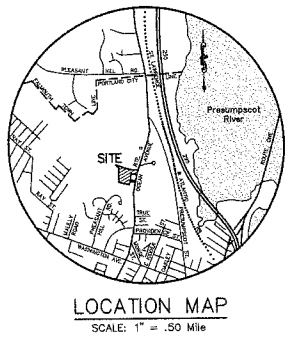
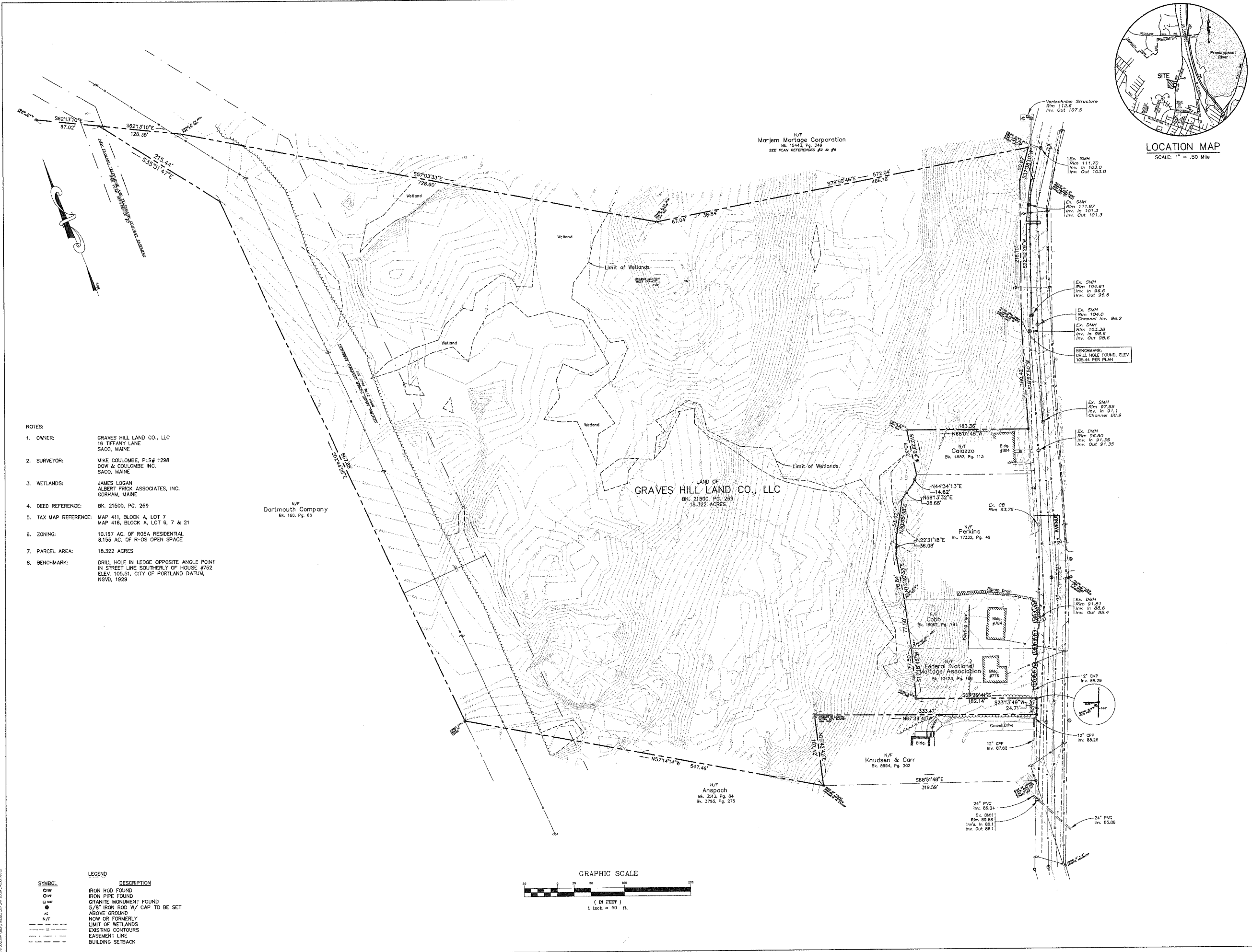
FOR
 Graves Hill Land Company, LLC
 100 S. Main Street
 South, Maine 04087

PROJECT INFORMATION
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED Survey	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED R. Libby Jr.	JOB. NO. 92655

SHEET
C-1

REPRODUCTION OR RAISE OF THIS DOCUMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF BH2M, INC. IS PROHIBITED.



- NOTES:
- OWNER: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS# 1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN
ALBERT FRICK ASSOCIATES, INC.
CORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOT 6, 7 & 21
 - ZONING: 10.187 AC. OF ROSA RESIDENTIAL
8.155 AC. OF R-OS OPEN SPACE
 - PARCEL AREA: 18.322 ACRES
 - BENCHMARK: DRILL HOLE IN LEDGE OPPOSITE ANGLE POINT
IN STREET LINE SOUTHERLY OF HOUSE #752
ELEV. 105.51, CITY OF PORTLAND DATUM,
NGVD, 1929

N/F
Dorlmouth Company
Bk. 166, Pg. 69

LAND OF
GRAVES HILL LAND CO., LLC
BK. 21500, PG. 269
18.322 ACRES

N/F
Marjem Mortgage Corporation
Bk. 15443, Pg. 349
SEE PLAN REFERENCES #2 & #3

N/F
Caldazzo
Bk. 4552, Pg. 113

N/F
Perkins
Bk. 17332, Pg. 49

N/F
Cobb
Bk. 18987, Pg. 191

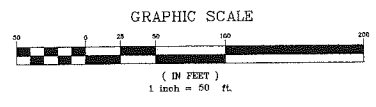
N/F
Federal National
Mortgage Association
Bk. 10423, Pg. 166

N/F
Knudsen & Carr
Bk. 8864, Pg. 202

N/F
Anspach
Bk. 3513, Pg. 64
Bk. 3795, Pg. 275

LEGEND

SYMBOL	DESCRIPTION
○ IR	IRON ROD FOUND
○ IP	IRON PIPE FOUND
□ GMP	GRANITE MONUMENT FOUND
●	5/8" IRON ROD W/ CAP TO BE SET
—	ABOVE GROUND
---	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK



REVISION	DATE	DESCRIPTION
1	12/29/05	DATE OF ISSUE

BH2M
BERRY • HUFF • McDONALD • MILLIGAN INC.
ENGINEERS • SURVEYORS • PLANNERS
26 State Street, Portland, Maine 04108, (207) 859-3771

FOR THE
Graves Hill Land Company, LLC
16 Tiffany Lane
Saco, Maine 04072

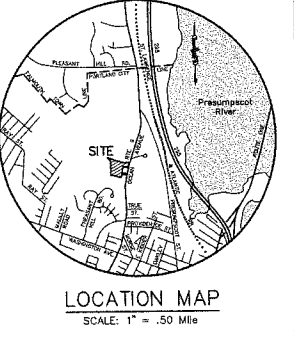
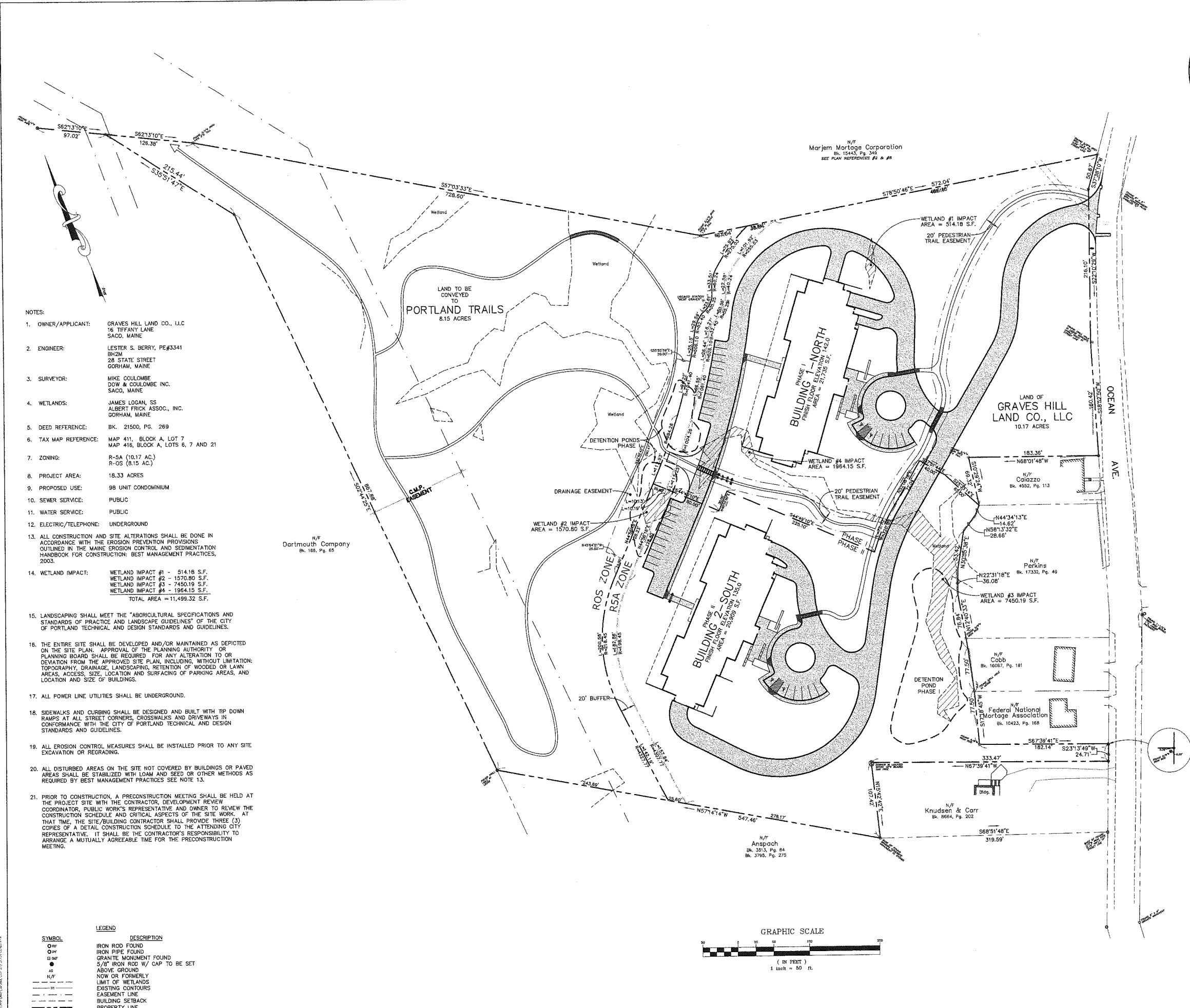
EXISTING CONDITIONS

GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED Survey	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED R. Libby Jr.	JOB. NO. 02055

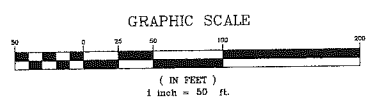
SHEET
C-2

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- NOTES:
- OWNER/APPLICANT: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - ENGINEER: LESTER S. BERRY, PE #3341
BH2M
28 STATE STREET
GORHAM, MAINE
 - SURVEYOR: MIKE COULMBE
DOW & COULMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN, SS
ALBERT FRICK ASSOC., INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOTS 6, 7 AND 21
 - ZONING: R-5A (10.17 AC.)
R-OS (8.15 AC.)
 - PROJECT AREA: 18.33 ACRES
 - PROPOSED USE: 98 UNIT CONDOMINIUM
 - SEWER SERVICE: PUBLIC
 - WATER SERVICE: PUBLIC
 - ELECTRIC/TELEPHONE: UNDERGROUND
 - ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES, 2003.
 - WETLAND IMPACT: WETLAND IMPACT #1 - 514.18 S.F.
WETLAND IMPACT #2 - 1570.80 S.F.
WETLAND IMPACT #3 - 7450.19 S.F.
WETLAND IMPACT #4 - 1984.15 S.F.
TOTAL AREA = 11,499.32 S.F.
 - LANDSCAPING SHALL MEET THE "AGRICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
 - ALL POWER LINE UTILITIES SHALL BE UNDERGROUND.
 - SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIP DOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
 - ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
 - ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES SEE NOTE 13.
 - PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.

SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
□	GRANITE MONUMENT FOUND
●	5/8" IRON ROD W/ CAP TO BE SET
AS	ABOVE GROUND
N/F	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK
---	PROPERTY LINE



THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

DATE _____

CHAIR _____

DESIGNED: Surrey DATE: April 2005

DRAWN: Dept. SCALE: As Noted

CHECKED: R. Libby, Jr. JOB NO.: 02955

SHEET C-3

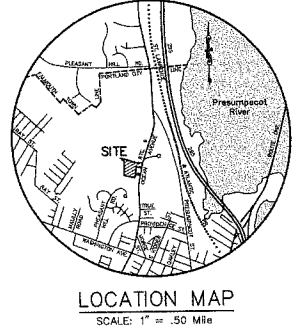
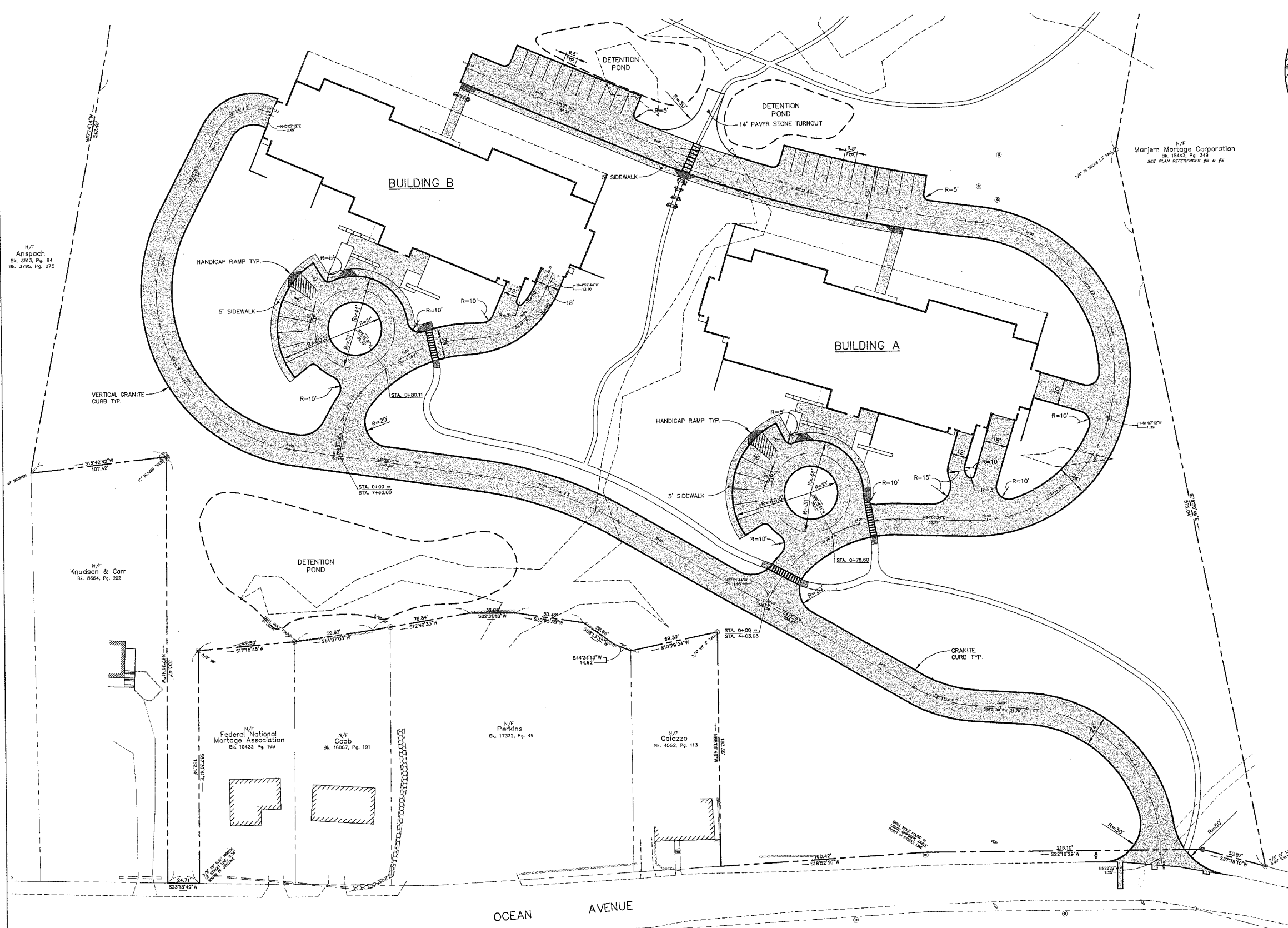
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NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE

Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04038, (207) 559-2771

Graves Hill Land Company, LLC
16 Tiffany Lane
Saco, Maine 04072

SUBDIVISION PLAN
98 UNIT CONDOMINIUM
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE



N/F Anspach
Bk. 3511, Pg. 84
Bk. 3795, Pg. 275

N/F Knudsen & Carr
Bk. 8884, Pg. 202

N/F Federal National Mortgage Association
Bk. 10423, Pg. 168

N/F Cobb
Bk. 16067, Pg. 191

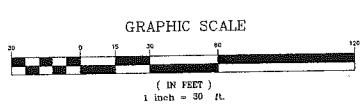
N/F Perkins
Bk. 17332, Pg. 49

N/F Calozzo
Bk. 4652, Pg. 113

N/F Marjem Mortgage Corporation
Bk. 15443, Pg. 349
SEE PLAN REFERENCES #1 & #2

Q CURVE DATA

<p>CURVE #1 R=110.00' L=170.10' T=107.35' D=88°36'03" PC=0+09.25 PT=1+79.36</p>	<p>CURVE #4 R=125.00' L=237.59' T=174.94' D=108°54'17" PC=7+46.34 PT=10+33.77</p>	<p>CURVE #7 R=110.00' L=144.33' T=84.68' D=75°10'46" PC=1+86.60 PT=3+30.83</p>	<p>CURVE #10 R=60.00' L=33.74' T=17.33' D=32°25'37" PC=0+19.51 PT=0+53.25</p>
<p>CURVE #2 R=110.00' L=50.52' T=25.71' D=28°18'53" PC=2+19.15 PT=2+89.28</p>	<p>CURVE #5 R=32.00' L=47.95' T=29.77' D=85°51'28" PC=11+11.07 PT=11+59.03</p>	<p>CURVE #8 R=120.00' L=209.70' T=143.52' D=100°07'24" PC=3+32.32 PT=5+42.02</p>	<p>CURVE #11 R=118.00' L=100.29' T=53.40' D=48°41'55" PC=0+53.25 PT=1+53.54</p>
<p>CURVE #3 R=300.00' L=113.64' T=57.51' D=21°42'11" PC=5+35.12 PT=6+48.76</p>	<p>CURVE #6 R=110.00' L=118.88' T=68.99' D=61°55'18" PC=0+11.95 PT=1+30.83</p>	<p>CURVE #9 R=970.00' L=273.77' T=157.80' D=16°10'15" PC=5+42.02 PT=8+15.78</p>	<p>CURVE #12 R=65.00' L=75.15' T=42.40' D=86°13'41" PC=1+53.54 PT=2+28.68</p>



LEGEND

○	IRON ROD FOUND
○	IRON PIPE FOUND
○	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
○	15" HIGH 150w H.P.S. LAMPS (7)
---	BUILDING SETBACK
---	PROPERTY LINE
---	EXISTING CONTOUR
---	NOW OR FORMERLY
---	RAIL FENCE
---	HYDRANT

THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

DESIGNED W. Felkey	DATE April 2005
DRAWN Dpk	SCALE As Noted
CHECKED L. Barry	JOB NO. 02055
SHEET C-4	

REVISION

NO.	DATE	DESCRIPTION
1	5/29/05	DATE OF ISSUE

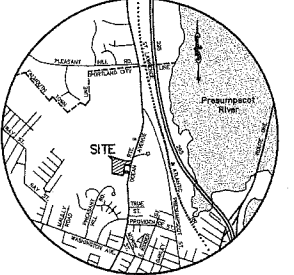
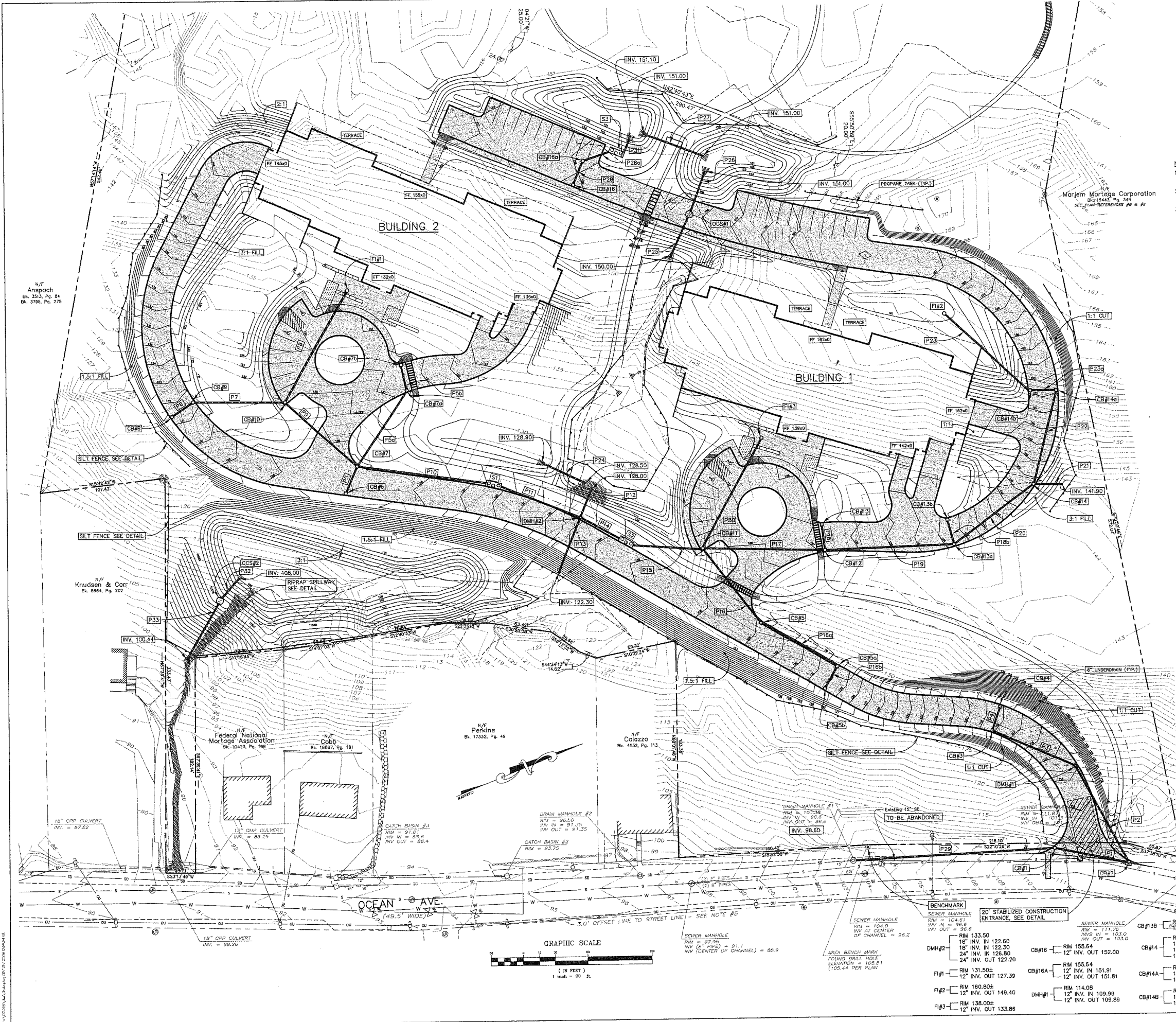


BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04108, (207) 859-2771

FOR
Graves Hill Land Company, LLC
16 Jeffrey Lane
Shaw, Maine 04072

SITE PLAN
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

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LOCATION MAP

- SCALE: 1" = 50 Mils
- NOTES**
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 2. INSTALL LOWPOINT CONTROL BARRIERS AT ALL CATCH BASIN LOCATIONS.
 3. SAWCUT EDGE OF PAVEMENT PRIOR TO PLACEMENT OF ROADWAY PAVEMENT.
 4. INSTALL SILT FENCE PRIOR TO CONSTRUCTION.
 5. BENCHMARK: DRILL HOLE IN LEDGE OPPOSITE ANGLE POINT IN STREET LINE SOUTHERLY OF HOUSE #752, ELEV. 105.51, CITY OF PORTLAND DATUM, NGVD 1929
 6. INSTALL RIPRAP AT ALL SIDE SLOPES GREATER THAN 2:1, SEE DETAIL. INSTALL EROSION CONTROL BLANKET AT SIDESLOPES OF 2:1 AND 3:1, SEE SLOPE STABILIZATION DETAIL.

- STORMDRAIN PIPES**
- P1 - 12" S.D., L=60', S=0.005'/FT.
 - P2 - 12" S.D., L=90', S=0.048'/FT.
 - P3 - 12" S.D., L=72', S=0.068'/FT.
 - P4 - 12" S.D., L=18', S=0.005'/FT.
 - P5 - 12" S.D., L=22', S=0.005'/FT.
 - P6A - 12" S.D., L=73', S=0.04'/FT.
 - P6B - 12" S.D., L=18', S=0.005'/FT.
 - P6 - 12" S.D., L=18', S=0.005'/FT.
 - P7 - 12" S.D., L=74', S=0.03'/FT.
 - P8 - 12" S.D., L=105', S=0.02'/FT.
 - P9 - 12" S.D., L=76', S=0.0237'/FT.
 - P10 - 18" S.D., L=108', S=0.005'/FT.
 - P11 - 18" S.D., L=70', S=0.005'/FT.
 - P12 - 24" S.D., L=34', S=0.005'/FT.
 - P13 - 24" S.D., L=50', S=0.088'/FT.
 - P14 - 18" S.D., L=38', S=0.05'/FT.
 - P15 - 18" S.D., L=36', S=0.005'/FT.
 - P16 - 12" S.D., L=76', S=0.005'/FT.
 - P16A - 12" S.D., L=73', S=0.005'/FT.
 - P16B - 12" S.D., L=18', S=0.005'/FT.
 - P17 - 18" S.D., L=100', S=0.085'/FT.
 - P18 - 12" S.D., L=18', S=0.005'/FT.
 - P18B - 12" S.D., L=18', S=0.005'/FT.
 - P19 - 15" S.D., L=104', S=0.04'/FT.
 - P20 - 15" S.D., L=80', S=0.055'/FT.
 - P21 - 12" S.D., L=20', S=0.005'/FT.
 - P22 - 12" S.D., L=80', S=0.07'/FT.
 - P23 - 12" S.D., L=85', S=0.08'/FT.
 - P23A - 12" S.D., L=18', S=0.005'/FT.
 - P24 - 18" S.D., L=40', S=0.07'/FT.
 - P25 - 12" S.D., L=32', S=0.015'/FT.
 - P26 - 12" S.D., L=35', S=0.015'/FT.
 - P27 - 18" S.D., L=54', S=0.07'/FT.
 - P28A - 12" S.D., L=23', S=0.005'/FT.
 - P29 - 12" S.D., L=166', S=0.056'/FT.
 - P30 - 12" S.D., L=163', S=0.055'/FT.
 - P31 - 12" S.D., L=12', S=0.005'/FT.
 - P32 - 12" S.D., L=22', S=0.00'/FT.
 - P33 - 12" S.D., L=54', S=0.140'/FT.

- STORMDRAIN STRUCTURES**
- CB#1 - RM 111.30
12" INV. IN 107.90
12" INV. OUT 107.80
 - CB#2 - RM 111.5±
Ex. 18" INV. IN 105.1±
12" INV. IN 107.50
12" INV. OUT 105.57
Ex. Inv. Out 105.1±
 - CB#3 - RM 118.06
12" INV. IN 109.99
12" INV. OUT 109.89
 - CB#4 - RM 118.06
12" INV. OUT 114.50
 - CB#5 - RM 133.81
12" INV. IN 125.37
12" INV. OUT 125.27
 - CB#5A - 12" INV. IN 125.83
12" INV. OUT 125.73
 - CB#5B - RM 129.92
12" INV. OUT 125.92
 - CB#6 - RM 127.14
12" INV. OUT 123.50
 - CB#7 - RM 129.30
12" INV. IN 123.39
15" INV. IN 123.39
12" INV. IN 123.39
18" INV. OUT 123.29
 - CB#7A - RIM 131.23
12" INV. IN 126.41
12" INV. OUT 126.31
 - CB#7B - RIM 130.50
12 INV. OUT 126.50
 - CB#8 - RIM 130.50
12 INV. OUT 127.70
 - CB#9 - RIM 131.23
12" INV. IN 127.61
12" INV. OUT 127.51
 - CB#10 - RIM 129.30
12" INV. IN 125.29
12" INV. IN 125.29
15" INV. OUT 125.19
 - CB#11 - RIM 136.20
12" INV. IN 124.89
12" INV. IN 124.89
18" INV. IN 124.85
18" INV. OUT 124.79
 - CB#12 - RIM 137.05
12" INV. IN 133.14
12" INV. IN 133.14
18" INV. OUT 133.04
 - CB#13 - RIM 137.05
12" INV. OUT 133.25
 - CB#13A - RIM 141.29
12" INV. IN 137.30
15" INV. OUT 137.20
 - CB#13B - RIM 141.29
12" INV. OUT 137.39
 - CB#14 - RIM 146.27
12" INV. IN 141.80
12" INV. IN 141.80
18" INV. OUT 141.70
 - CB#14A - RIM 152.07
12" INV. IN 147.50
12" INV. OUT 147.40
 - CB#14B - RIM 152.07
12" INV. IN 147.69
12" INV. OUT 147.59

N/F Anspach
Bk. 3513, Pg. 84
Bk. 3785, Pg. 275

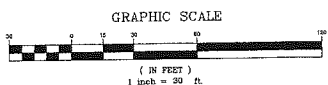
N/F Knudsen & Carr
Bk. 8864, Pg. 202

Federal National Mortgage Association
Bk. 10423, Pg. 198

N/F Cobb
Bk. 18007, Pg. 181

N/F Parkins
Bk. 17332, Pg. 46

N/F Calozzo
Bk. 4052, Pg. 113



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ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04101 (207) 859-5771

SITE GRADING
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

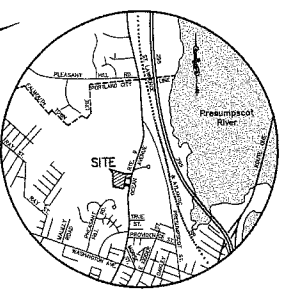
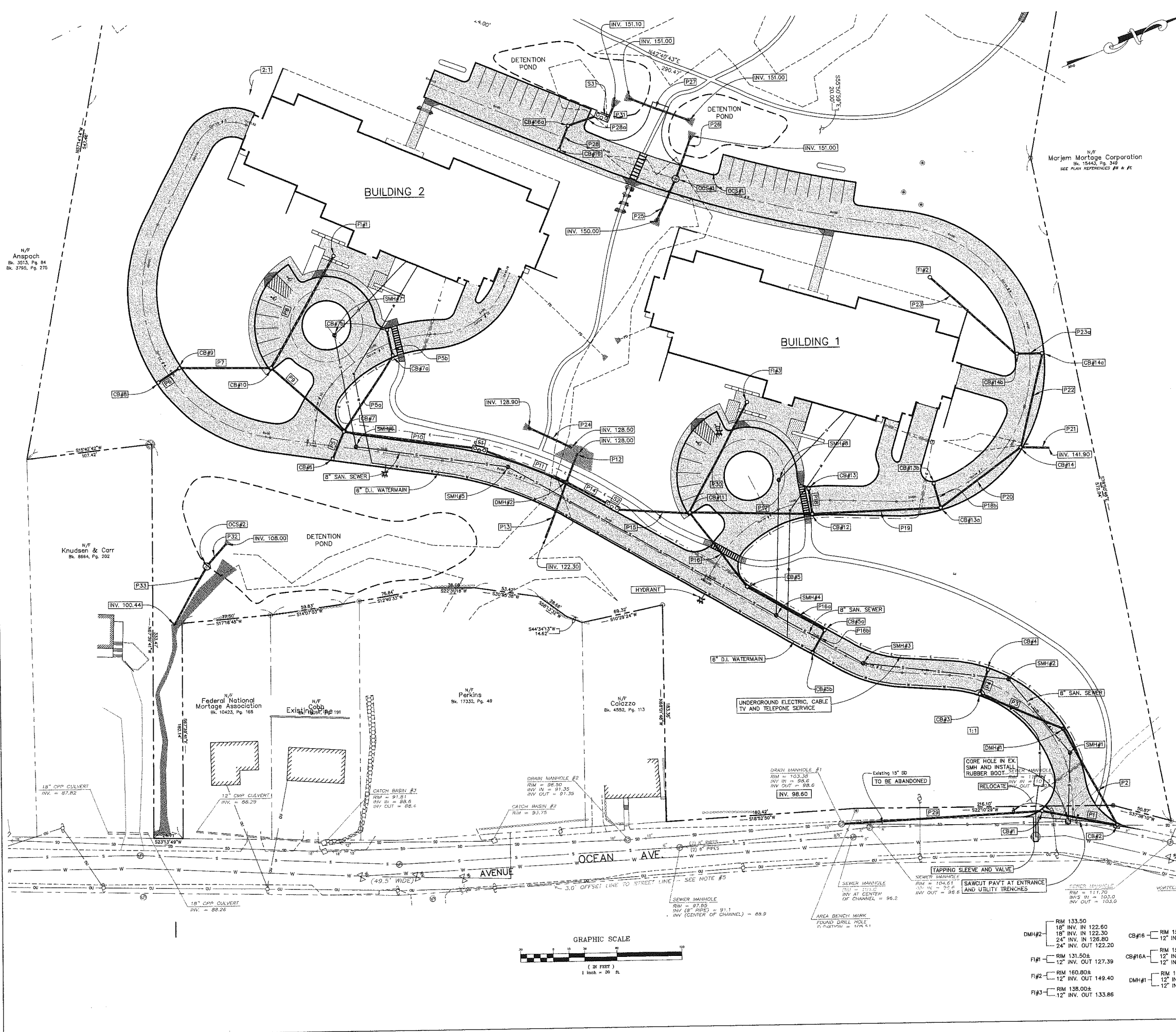
DESIGNED: W. Pelkey
DATE: April 2005

DRAWN: Dept.
SCALE: As Noted

CHECKED: L. Berry
JOB NO. 02055

SHEET
C-5

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LOCATION MAP
SCALE: 1" = 50' (ft)

STORMDRAIN PIPES

P1	12" S.D., L=60', S=0.005'/FT.
P2	12" S.D., L=90', S=0.048'/FT.
P3	12" S.D., L=72', S=0.06'/FT.
P4	12" S.D., L=18', S=0.005'/FT.
P5	12" S.D., L=22', S=0.005'/FT.
P5A	12" S.D., L=73', S=0.04'/FT.
P5B	12" S.D., L=18', S=0.005'/FT.
P6	12" S.D., L=18', S=0.005'/FT.
P7	12" S.D., L=74', S=0.03'/FT.
P8	12" S.D., L=105', S=0.02'/FT.
P9	15" S.D., L=75', S=0.0237'/FT.
P10	18" S.D., L=108', S=0.005'/FT.
P11	18" S.D., L=70', S=0.005'/FT.
P12	24" S.D., L=24', S=0.08'/FT.
P13	24" S.D., L=50', S=0.088'/FT.
P14	18" S.D., L=35', S=0.05'/FT.
P15	18" S.D., L=58', S=0.005'/FT.
P16	12" S.D., L=18', S=0.005'/FT.
P16A	12" S.D., L=73', S=0.005'/FT.
P16B	12" S.D., L=18', S=0.005'/FT.
P17	18" S.D., L=100', S=0.0815'/FT.
P18	12" S.D., L=18', S=0.005'/FT.
P18B	12" S.D., L=18', S=0.005'/FT.
P19	15" S.D., L=104', S=0.04'/FT.
P20	15" S.D., L=80', S=0.055'/FT.
P21	12" S.D., L=20', S=0.005'/FT.
P22	12" S.D., L=80', S=0.07'/FT.
P23	12" S.D., L=85', S=0.06'/FT.
P23A	12" S.D., L=18', S=0.005'/FT.
P24	18" S.D., L=40', S=0.01'/FT.
P25	12" S.D., L=32', S=0.015'/FT.
P26	12" S.D., L=35', S=0.015'/FT.
P27	18" S.D., L=54', S=0.00'/FT.
P28	12" S.D., L=18', S=0.005'/FT.
P28A	12" S.D., L=23', S=0.005'/FT.
P29	12" S.D., L=168', S=0.056'/FT.
P30	12" S.D., L=163', S=0.055'/FT.
P31	12" S.D., L=12', S=0.037'/FT.
P32	12" S.D., L=22', S=0.00'/FT.
P33	12" S.D., L=54', S=0.140'/FT.

STORMDRAIN STRUCTURES

CB#1	RIM 111.30 12" INV. IN 107.90 12" INV. OUT 107.80
CB#2	RIM 111.5± 12" INV. IN 105.1± 12" INV. IN 105.5± Ex. Inv. Out 105.1±
CB#3	RIM 118.06 12" INV. IN 108.99 12" INV. OUT 109.89
CB#4	RIM 118.06 12" INV. OUT 114.50
CB#5	RIM 133.81 12" INV. IN 125.37 12" INV. OUT 125.27
CB#5A	RIM 125.92 12" INV. IN 125.83 12" INV. OUT 125.73
CB#5B	RIM 129.92 12" INV. OUT 125.92
CB#6	RIM 127.14 12" INV. OUT 123.50
CB#7	RIM 129.30 15" INV. IN 123.39 12" INV. IN 123.39 18" INV. OUT 123.29
CB#7A	RIM 131.23 12" INV. IN 126.41 12" INV. OUT 126.31
CB#7B	RIM 130.50 12" INV. OUT 126.50
CB#8	RIM 130.50 12" INV. OUT 127.70
CB#9	RIM 131.23 12" INV. IN 127.61 12" INV. OUT 127.51
CB#10	RIM 129.30 12" INV. IN 125.29 12" INV. IN 125.29 15" INV. OUT 125.19
CB#11	RIM 136.20 12" INV. IN 124.89 12" INV. IN 124.89 18" INV. IN 124.89 18" INV. OUT 124.79
CB#12	RIM 137.05 15" INV. IN 133.14 12" INV. IN 133.14 18" INV. OUT 133.04
CB#13	RIM 137.05 12" INV. OUT 133.23
CB#13A	RIM 141.29 12" INV. IN 137.30 15" INV. IN 137.30 15" INV. OUT 137.20
CB#13B	RIM 141.29 12" INV. OUT 137.39
CB#14	RIM 146.27 12" INV. IN 141.80 12" INV. IN 141.80 15" INV. OUT 141.70
CB#14A	RIM 152.07 12" INV. IN 147.50 12" INV. OUT 147.40
CB#14B	RIM 152.07 12" INV. IN 147.59 12" INV. OUT 147.59
CB#16	RIM 155.64 12" INV. OUT 152.00
CB#16A	RIM 155.64 12" INV. IN 151.91 12" INV. OUT 151.81
DMH#1	RIM 114.08 12" INV. IN 109.99

N/F Anspach
Bk. 3513, Pg. 84
Bk. 3795, Pg. 275

N/F Knudson & Carr
Bk. 884, Pg. 202

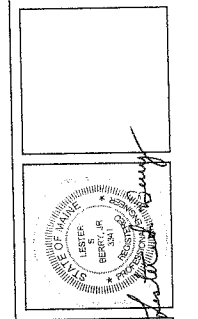
N/F Federal National
Mortgage Association
Bk. 10423, Pg. 168

N/F Cobb
Existing
Bk. 191

N/F Perkins
Bk. 17332, Pg. 49

N/F Cotozzo
Bk. 4552, Pg. 113

NO.	DATE	REVISION	DESCRIPTION
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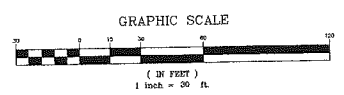
BH2M
ENGINEERS • SURVEYORS • PLANNERS
Berry • Huff • MacDonald • Milligan Inc.
28 State Street, Corvallis, Maine 04841, (207) 852-2771

FROM
Graves Hill Land Company, LLC
Saco, Maine 04072

UTILITY PLAN
GRAVES HILL
CREAN AVENUE
PORTLAND, MAINE

DESIGNED	W. Peley	DATE	April 2005
DRAWN	Dept.	SCALE	As Noted
CHECKED	L. Berry	JOB. NO.	02055

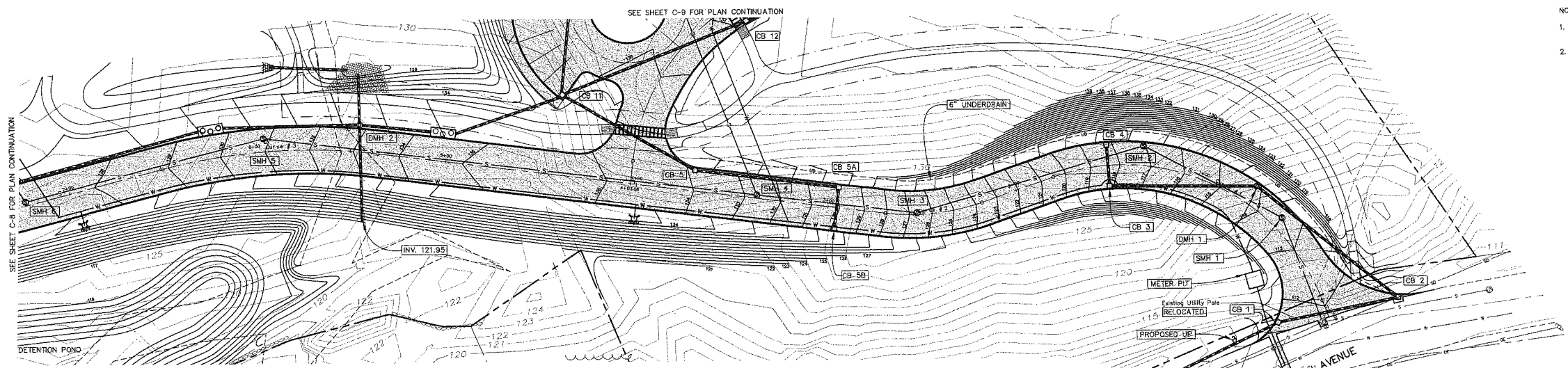
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S:\2005\02055\02055.dwg (1/29/05) 11:58 AM

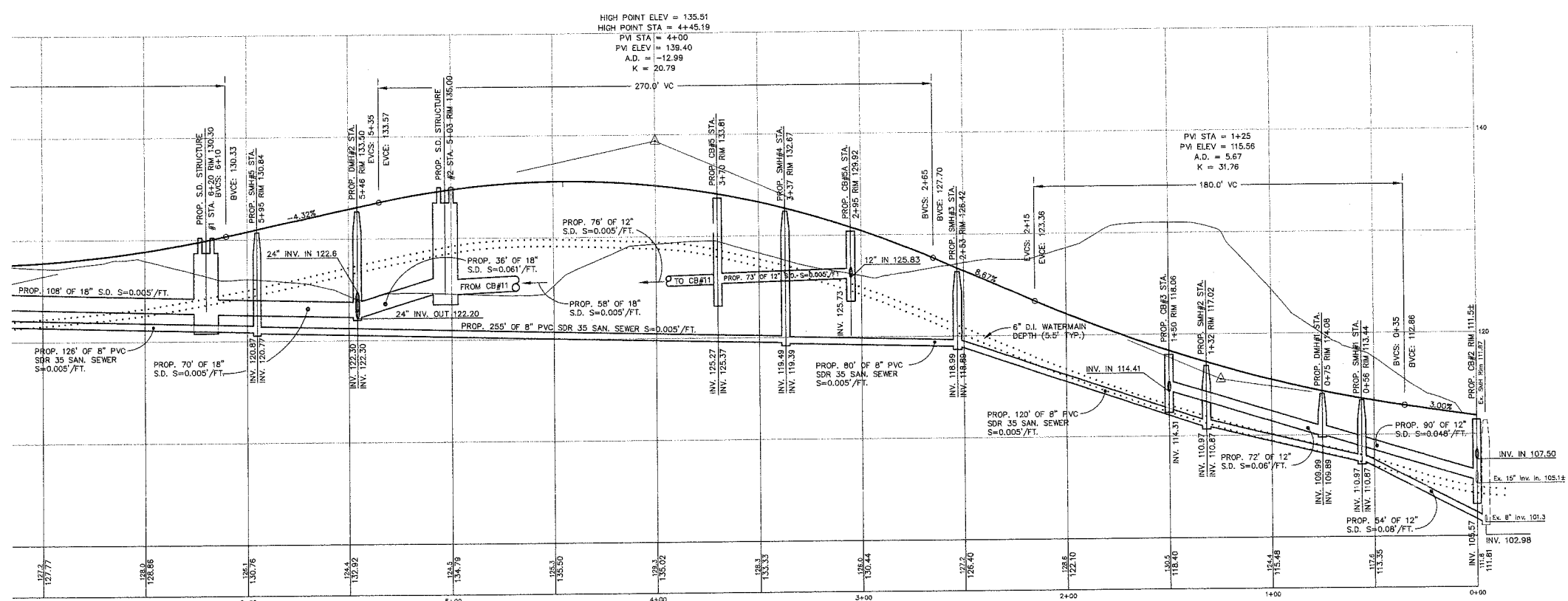
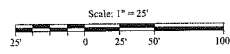
SYMBOL	DESCRIPTION
	PROPOSED STORM DRAIN
	EXISTING CONTOUR
	PROPOSED CONTOUR
	OVERHEAD ELECTRIC
	UTILITY POLE
	EXISTING EDGE OF PAVEMENT
	EXISTING STORM DRAIN

- NOTES:
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO CONSTRUCTION.
 - SAWCUT EDGE OF PAVT PRIOR TO PLACEMENT OF PROPOSED BITUMINOUS PAVEMENT.



§ CURVE DATA

CURVE #1	R=110.00' L=170.10' T=109.83' D=88°36'03" PC=0+9.25 PT=1+79.35
CURVE #2	R=110.00' L=50.52' T=25.71' D=26°18'33" PC=2+18.14 PT=2+69.66
CURVE #3	R=300.00' L=113.84' T=74.94' D=21°42'11" PC=5+35.11 PT=6+48.75



PROFILE
SCALE
VERTICAL: 1" = 5'
HORIZONTAL: 1" = 25'

NO.	DATE	DESCRIPTION



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 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Guilford, Maine 04036, (207) 859-2771

PKA
 Graves Hill Landscaping, LLC
 16 Tiffany Lane
 Saco, Maine 04072

PLAN & PROFILE A
 Sta. 0+00 to 6+00
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED W. Wilkey	DATE April 2005
DRAWN Jepk	SCALE As Noted
CHECKED L. Berry	JOB NO. 02055

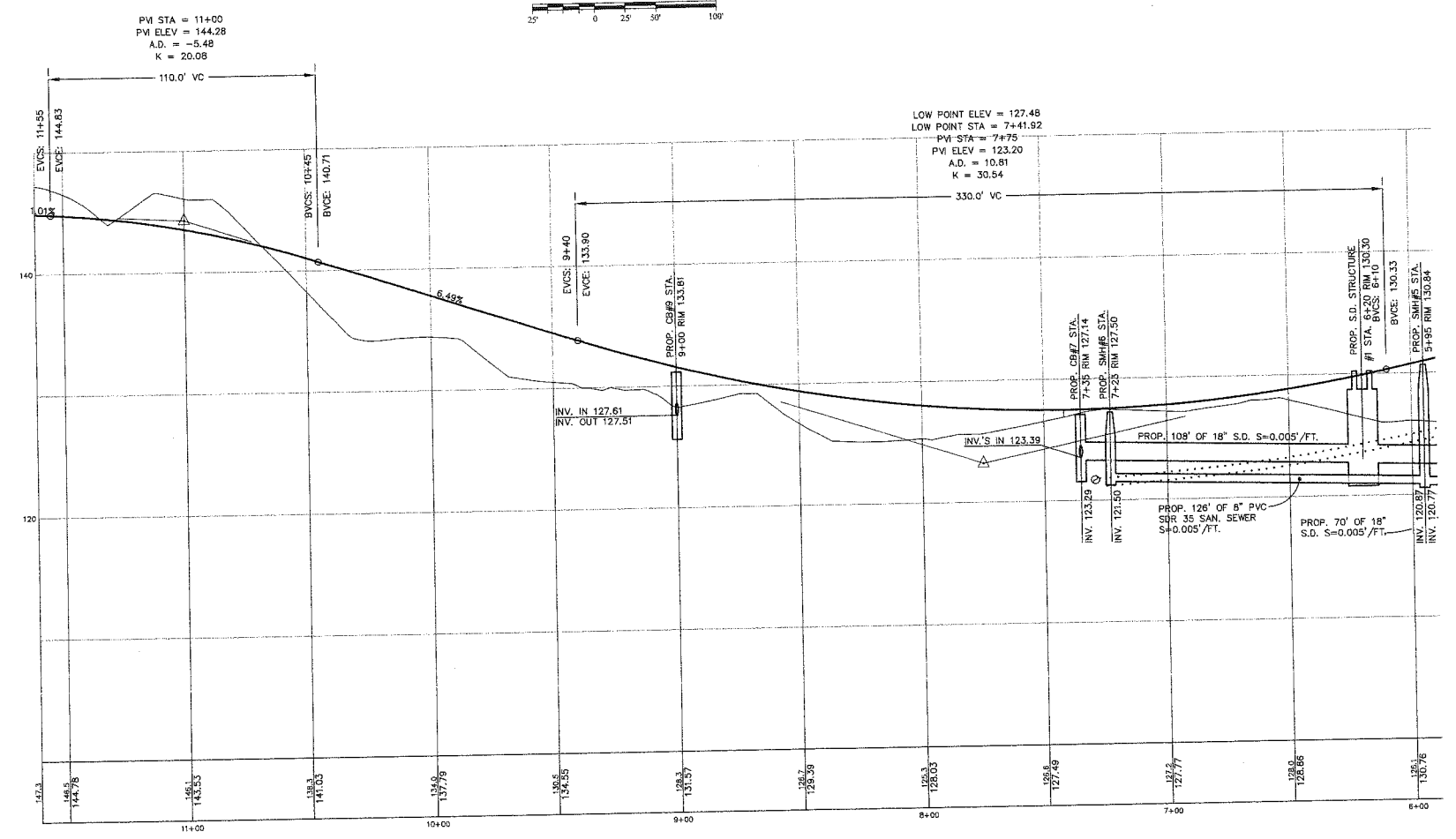
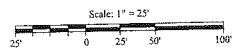
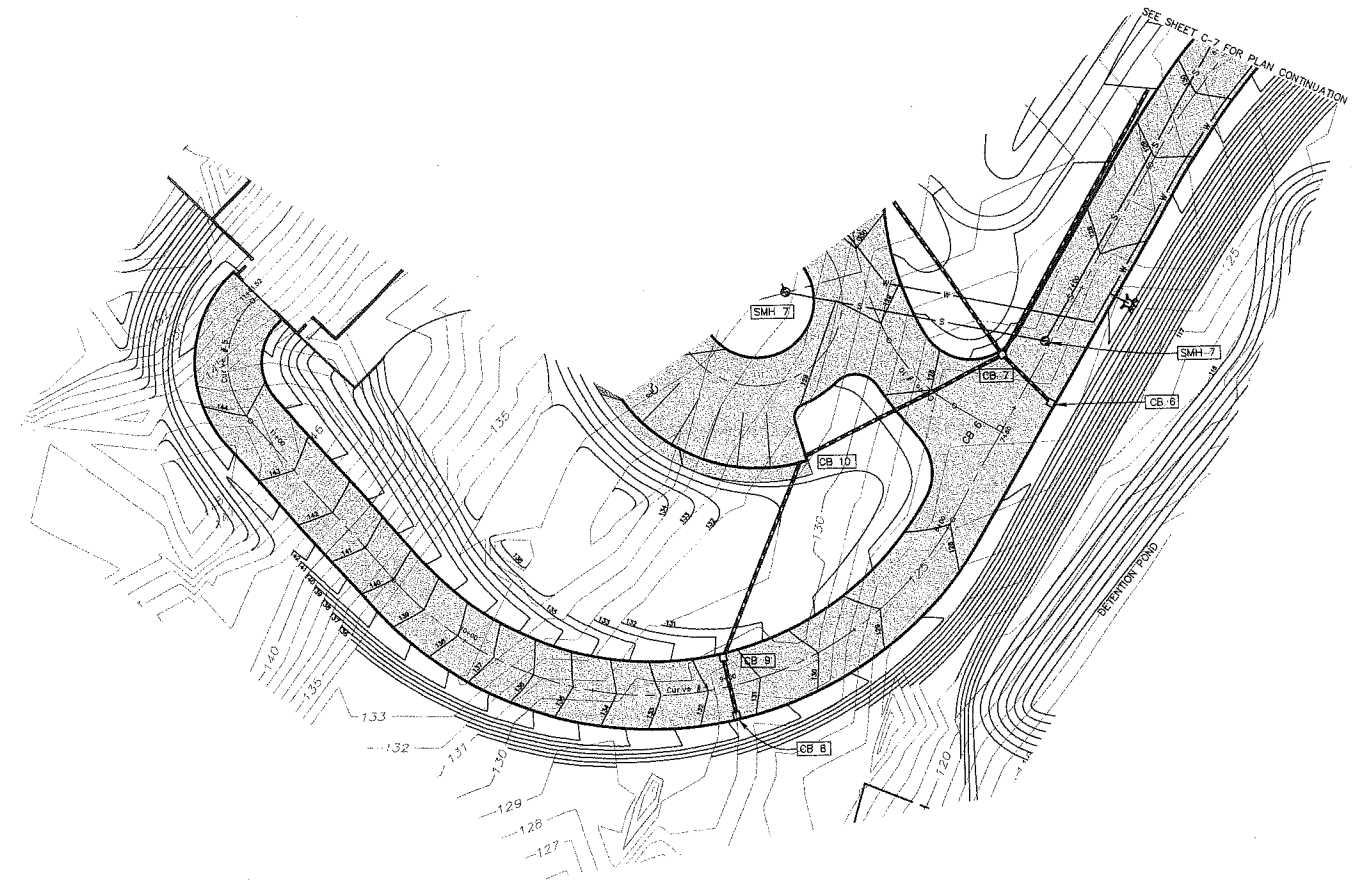
SHEET
C-7

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④ CURVE DATA

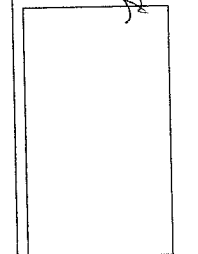
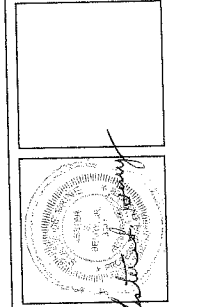
CURVE #4	R=125.00'
	L=237.59'
	T=174.94'
	D=108°54'17"
PC=7+96.34	
PT=10+33.93	
CURVE #5	R=32.00'
	L=47.95'
	T=23.77'
	D=85°51'28"
PC=11+11.07	
PT=11+59.02	



PROFILE
 SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

1:2025-03-20 PM 1:14:14 (P) 2025-03-20 10:27:48 AM

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 26 State Street, Portland, Maine 04108 (207) 899-2771

FOR
 Graves Hill Land Company, LLC
 1000
 State, Maine 04072

PLAN & PROFILE A
 Sta. 6+00 to 11+79.48
GRAVES HILL
 CECILIA SURVEY
 PORTLAND, MAINE

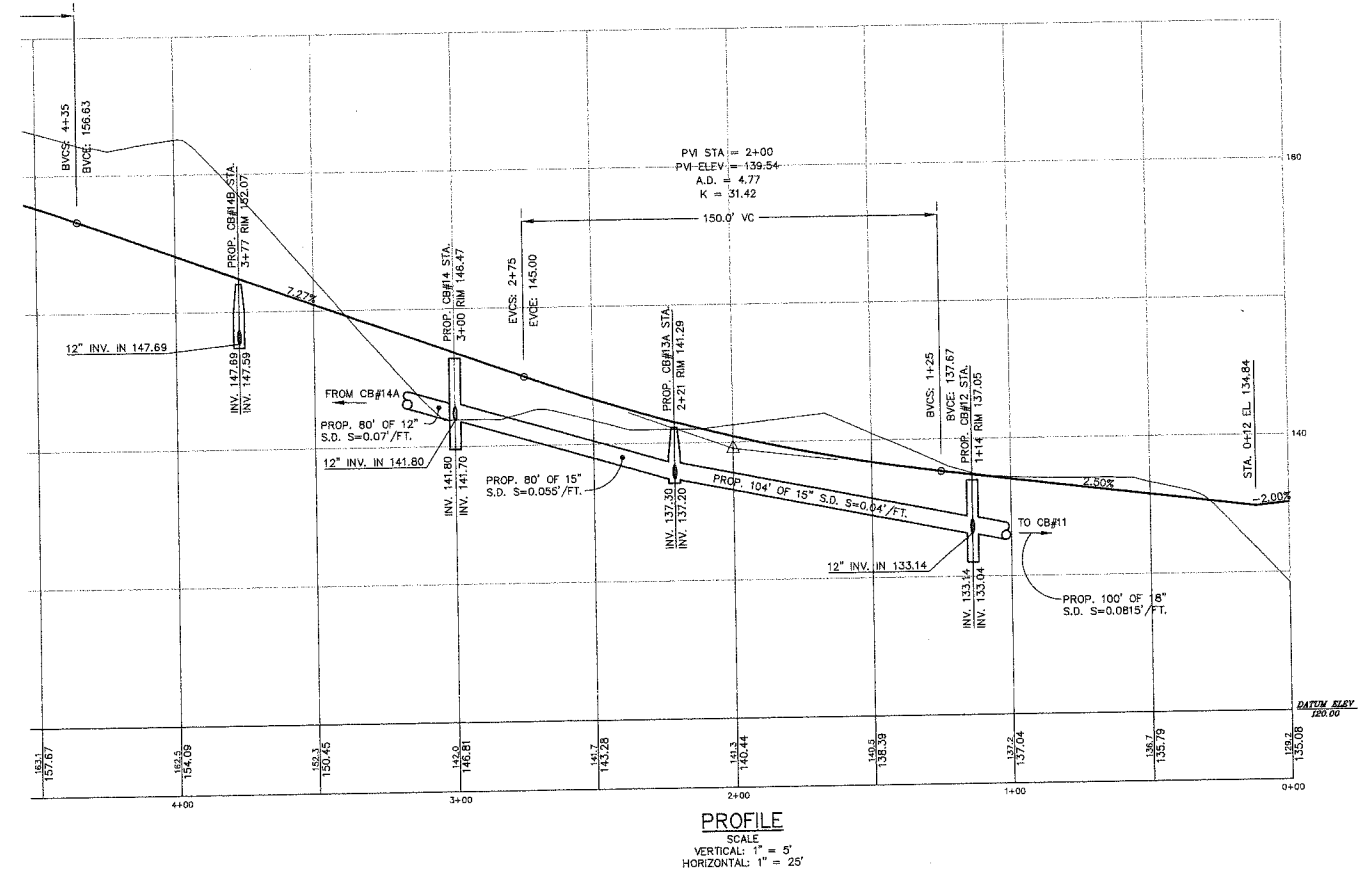
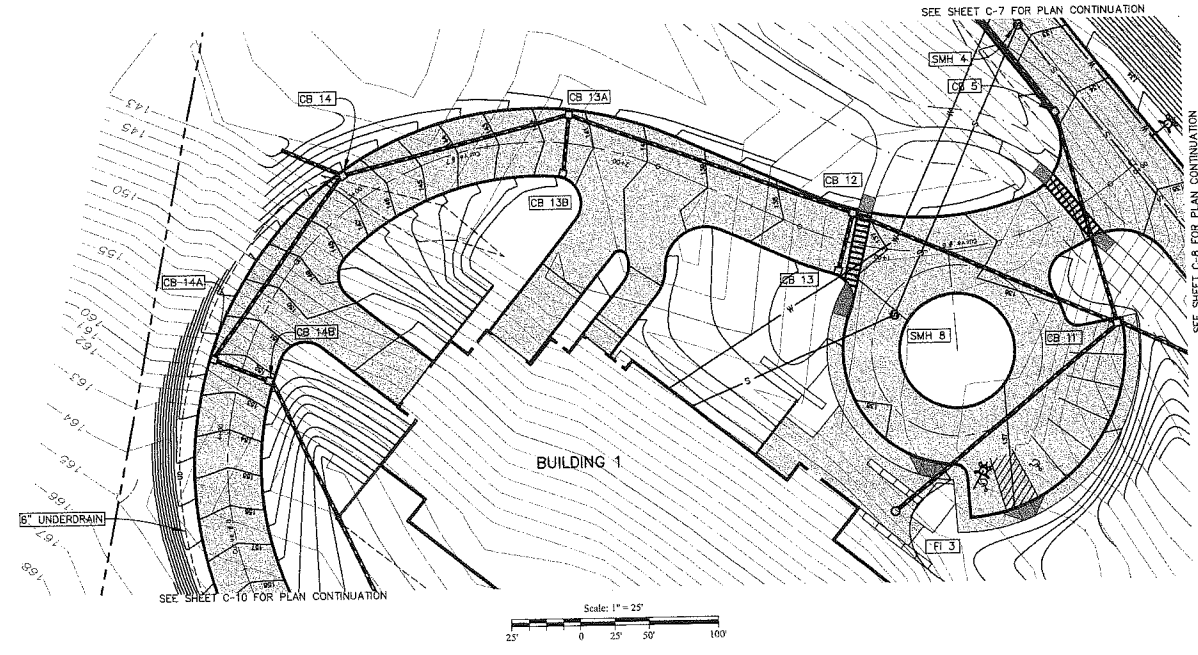
DESIGNED W. Pelkey	DATE April 2005
DRAWN Degr.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-8

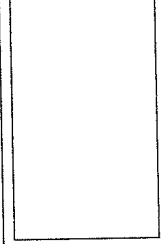
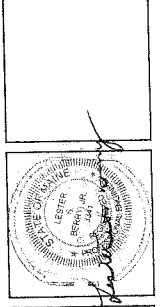
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§ CURVE DATA

CURVE #6	R=110.00' L=118.88' D=61°55'18" PD=0+11.95 PT=1+30.63
CURVE #7	R=110.00' L=144.33' D=84.68' D=75°10'46" PD=1+86.60 PT=3+30.93
CURVE #8	R=120.00' L=143.32' T=137.80' D=100°07'24" PD=3+32.32 PT=4+75.64



NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE



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 ENGINEERS • SURVEYORS • PLANNERS
 25 State Street, Corvallis, Oregon 97331, (503) 839-2771

FOR
 Graves Hill Land Company, LLC
 Seaside, Maine 04072

PLAN & PROFILE B
 Sta. 0+00 to 4+50
GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

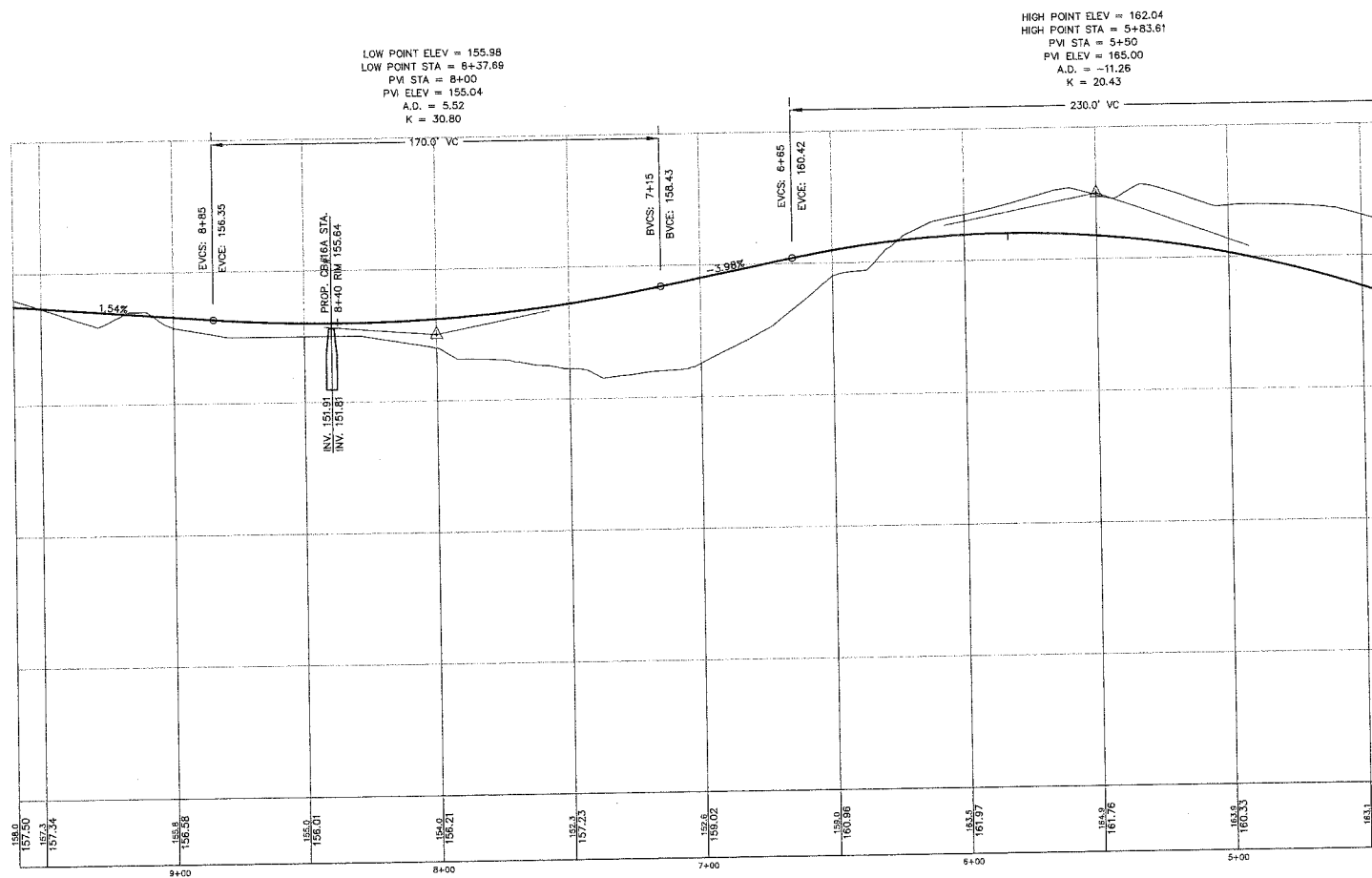
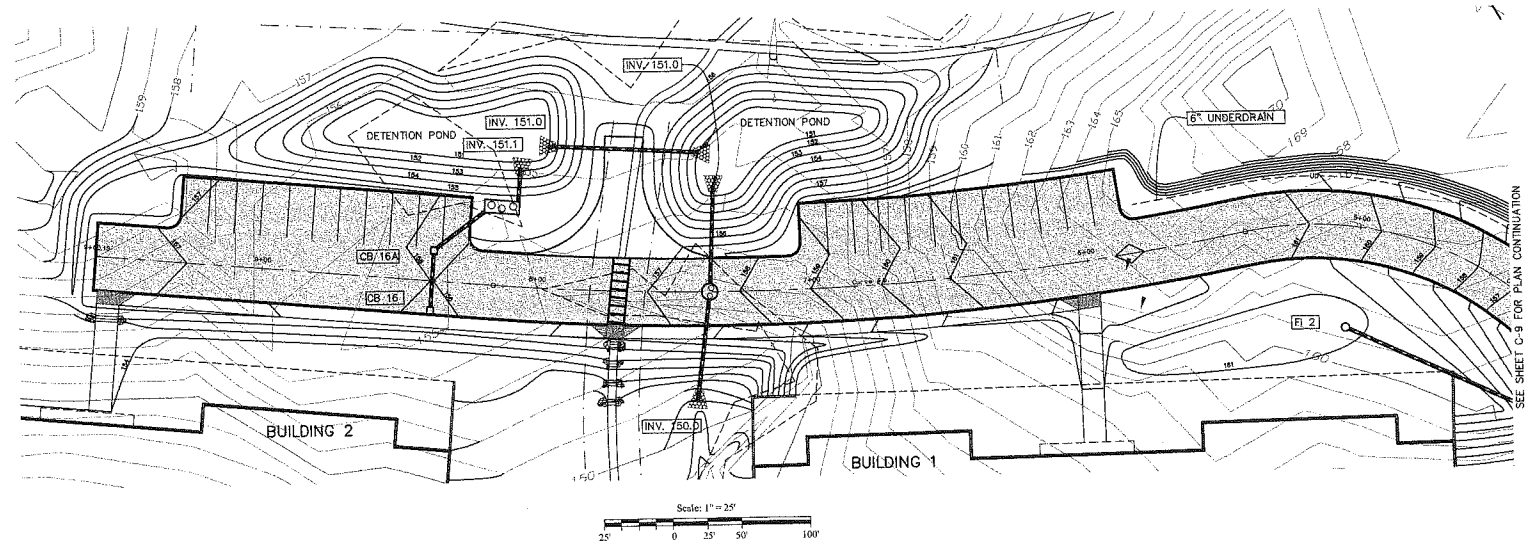
DESIGNED	DATE
W. Polkey	April 2005
DRAWN	SCALE
Depc.	As Noted
CHECKED	JOB. NO.
L. Berry	02055

SHEET
C-9

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\s\2005\3\29\05\14072\Plan\Profile\A\07-2005\PC\050109

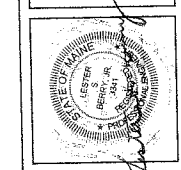
@ CURVE DATA
 R=970.00'
 L=273.77'
 T=137.80'
 D=1670'15"
 PC=4+75.84
 PT=7+49.41



PROFILE
 SCALE
 VERTICAL: 1" = 5'
 HORIZONTAL: 1" = 25'

SEE SHEET C-9 FOR PLAN CONTINUATION

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		



BH2M
 Berry • Huff • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 838-2771

FOR
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 Saco, Maine 04072

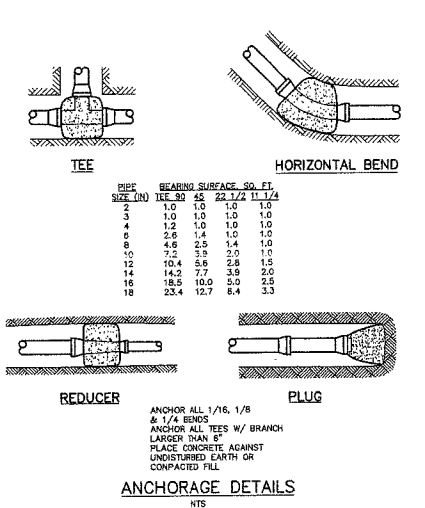
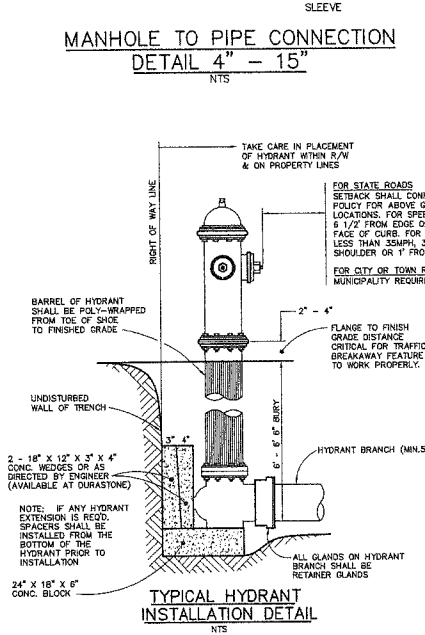
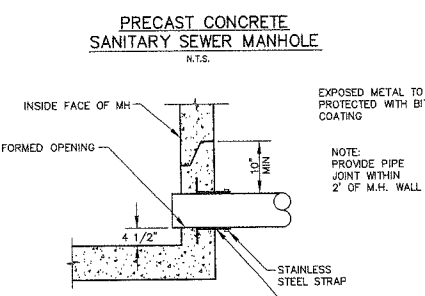
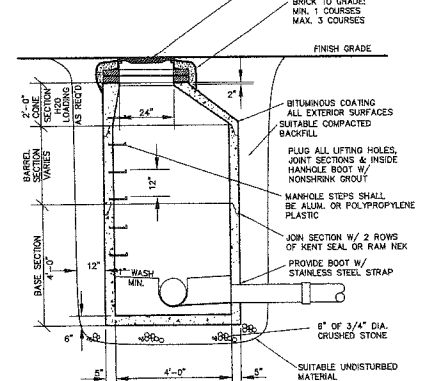
PLAN & PROFILE B
 Sta. 4+50 to 9+60.17
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED W. Peckey	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

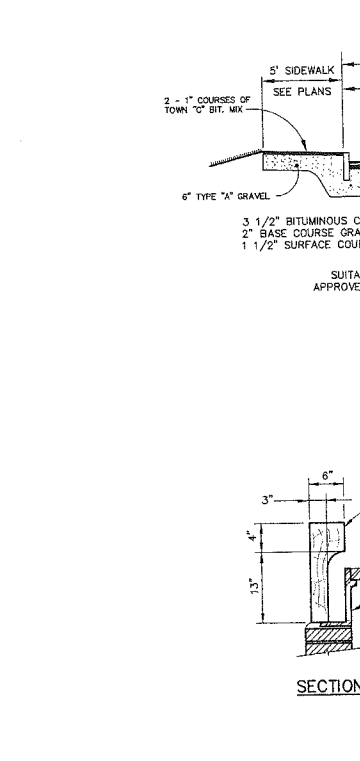
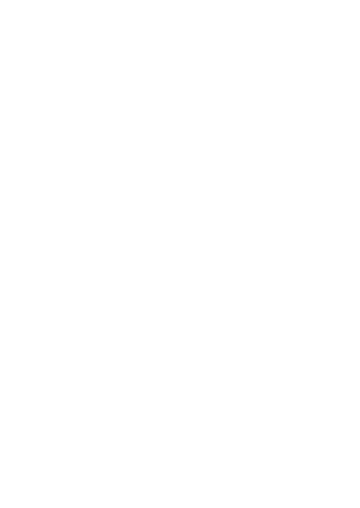
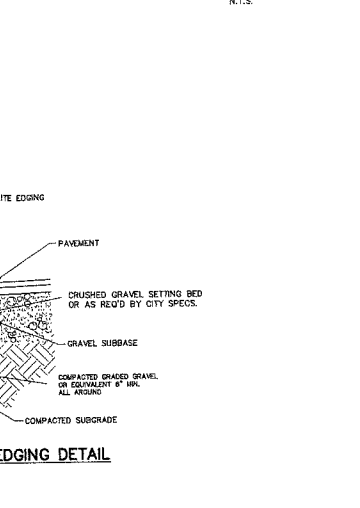
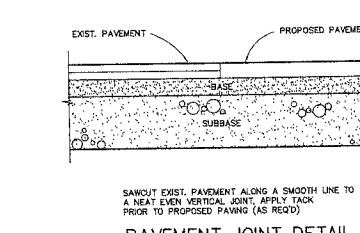
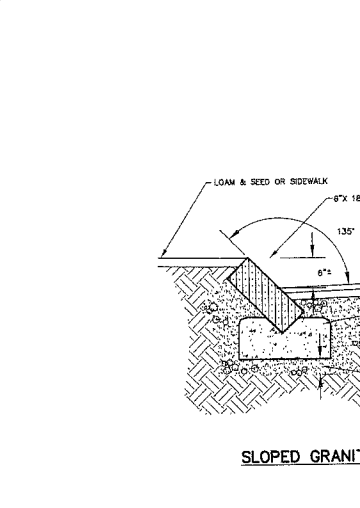
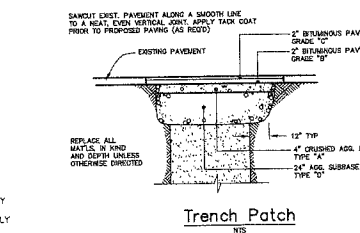
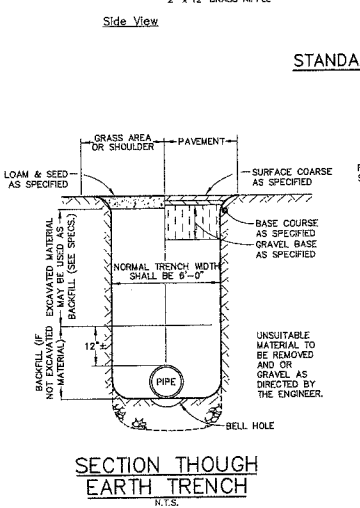
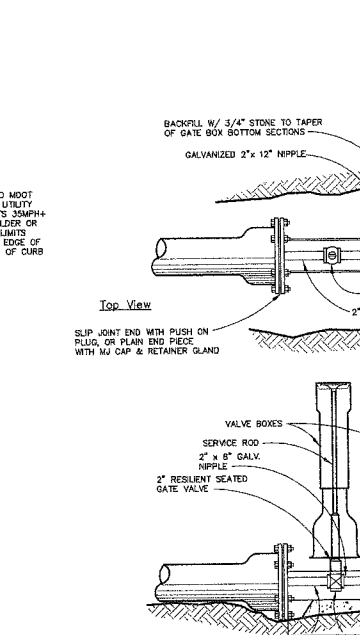
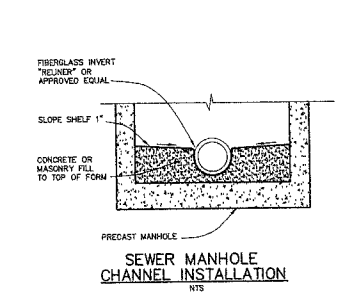
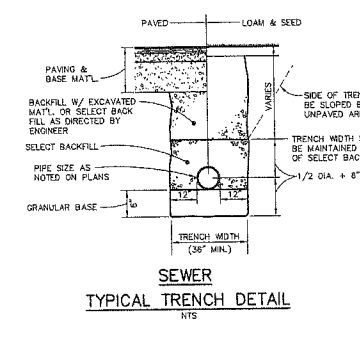
SHEET
C-10

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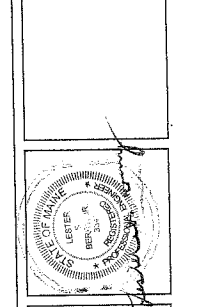
Manhole shall conform to ASTM C478
Concrete, 4000 PSI after 28 days.
Reinforcing, 120 coating.
Shrink joints sealed w/ 1" strip of Butyl Rubber Sealant.
Each covering to have 1/2" thick steel cap.
Plug of holes & pipe penetrations w/ non-solvent grout.
Exterior finish coat.
Lock tight flexible pipe sleeve coat in.



- NOTES:
- Trench width shown is payment width for rock excavation & replacement of unsuitable material.
 - Do not mechanically compact directly over flexible pipe (e.g. PVC)
 - Bracing & sheeting or other trench protection to meet applicable state and O.S.H.A. safety standards. All such trench protection to be responsibility of the Contractor.



NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE



BH2M
Berry • Huff • MacDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
20 State Street, Guilford, Maine 04038 (207) 839-2771

BH2M
FOR
Graves Hill Land Company, LLC
Graves Hill, ME 04042
Saco, Maine 04072

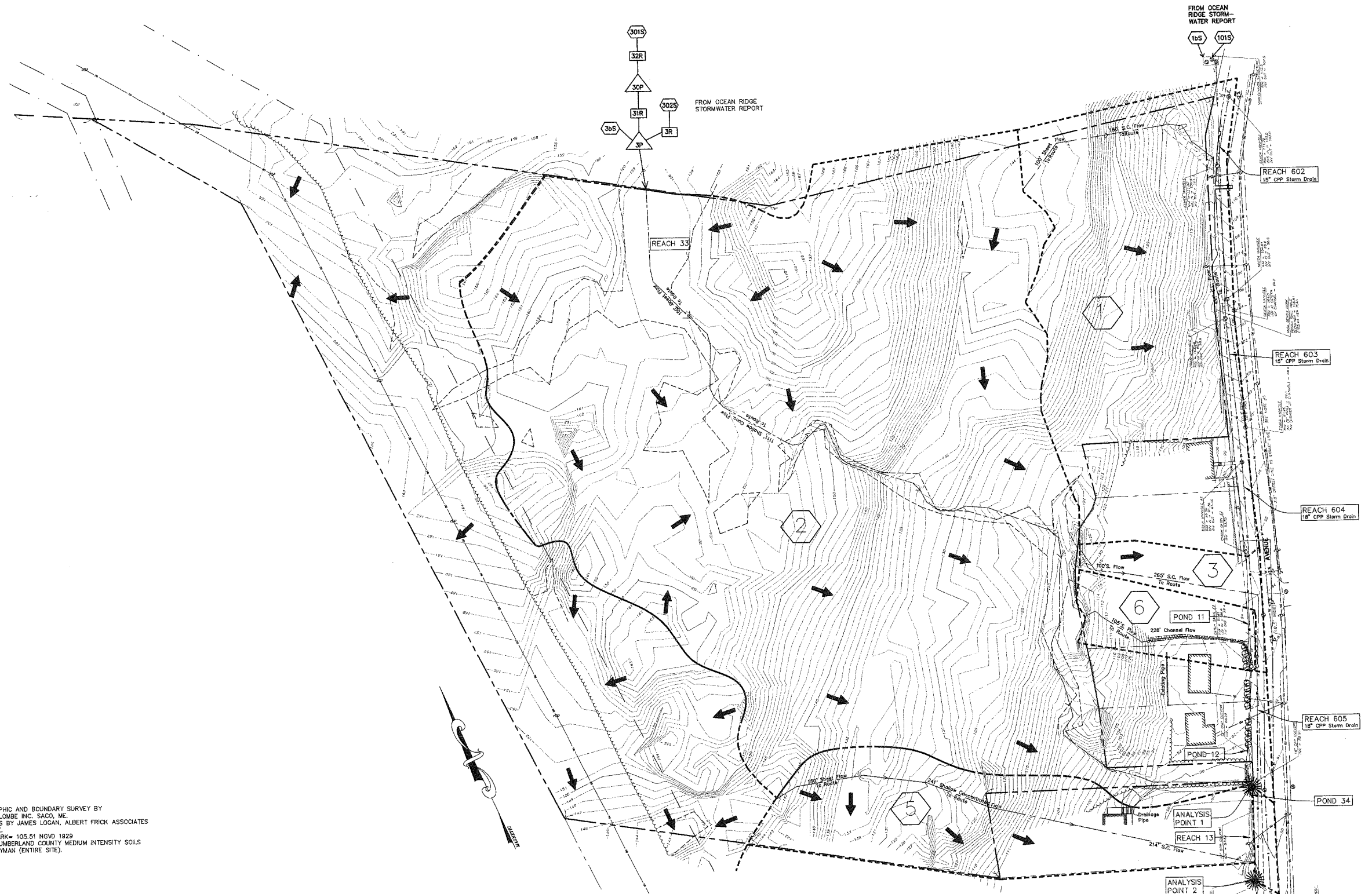
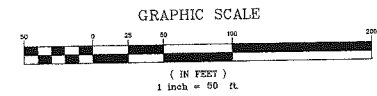
SITE DETAILS
GRAVES HILL
OCEANA AVENUE
PORTLAND, MAINE

DESIGNED	DATE
W. Felkey	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB NO.
L. Berry	02053
SHEET	
C-12	

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NOTES:
 1. TOPOGRAPHIC AND BOUNDARY SURVEY BY DOW & COULOMBE INC, SACO, ME.
 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES CORHAM, ME.
 3. BENCHMARK= 105.51 NGVD 1929
 4. SOILS: CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING -LYMAN (ENTIRE SITE).

SYMBOL	LEGEND	DESCRIPTION
[Symbol]	SUBCATCHMENT AREA	
[Symbol]	REACH	
[Symbol]	POND	
[Symbol]	EXISTING EDGE OF PAVEMENT	
[Symbol]	EXISTING OVERHEAD ELECTRIC	
[Symbol]	EXISTING STORM DRAIN	
[Symbol]	EXISTING UTILITY POLE	
[Symbol]	EXISTING SEWER MANHOLE	
[Symbol]	EXISTING WATER MAIN VALVE	
[Symbol]	IRON PIPE FOUND/IRON ROD FOUND	
[Symbol]	PROPERTY LINE	
[Symbol]	EXISTING SEWER	
[Symbol]	LIMIT OF WETLANDS	
[Symbol]	TIME OF CONCENTRATION ROUTE	
[Symbol]	EXISTING CONTOUR	
[Symbol]	DRAINAGE BOUNDARY	
[Symbol]	FLOW DIRECTION	



NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE



BH2M
 ENGINEERS * SURVEYORS * PLANNERS
 Berry * Huff * McDonald * Milligan Inc.
 25 State Street, Corvallis, Maine 04848 (207) 859-2773

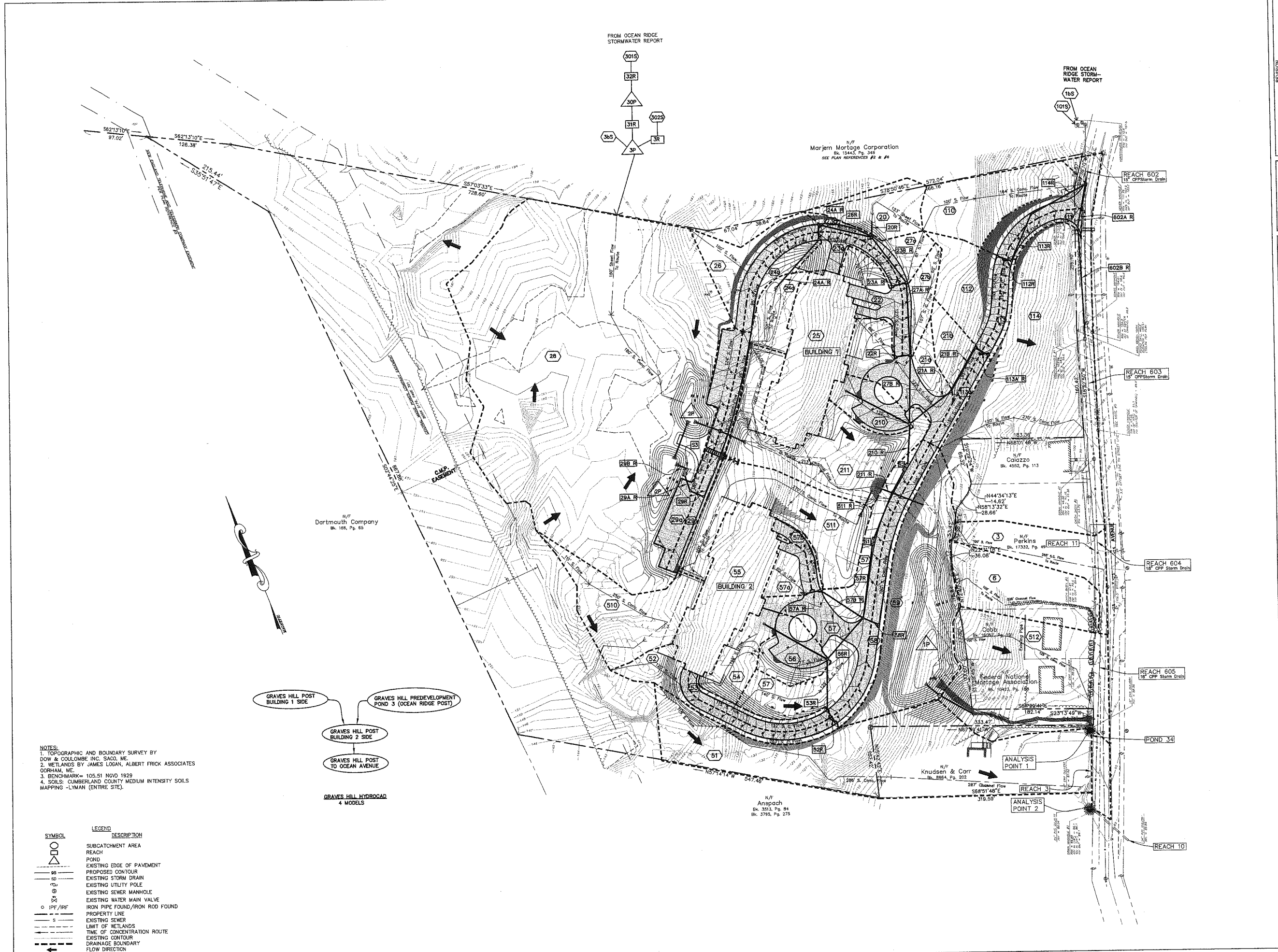
FOR
 Geneva Hill Land Company, LLC
 Saco, Maine 04072

PRE DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED L. Berry	DATE Mar. 2005
DRAWN E. Valerio	SCALE 1" = 50'
CHECKED L. Berry	JOB. NO. 02055

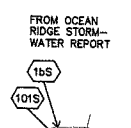
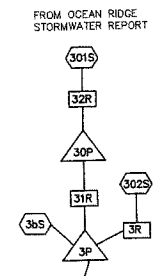
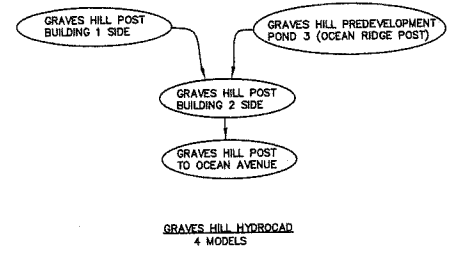
SHEET
C-13

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NOTES:
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 2. WETLANDS BY JAMES LOGAN, ALBERT FRICK ASSOCIATES GORHAM, ME.
 3. BENCHMARK - 105.51 NGVD 1929
 4. SOILS - CUMBERLAND COUNTY MEDIUM INTENSITY SOILS MAPPING - LYMAN (ENTIRE SITE).

SYMBOL	DESCRIPTION
(Symbol)	SUBCATCHMENT AREA
(Symbol)	REACH
(Symbol)	POND
(Symbol)	EXISTING EDGE OF PAVEMENT
(Symbol)	PROPOSED CONTOUR
(Symbol)	EXISTING STORM DRAIN
(Symbol)	EXISTING UTILITY POLE
(Symbol)	EXISTING SEWER MANHOLE
(Symbol)	EXISTING WATER MAIN VALVE
(Symbol)	IRON PIPE FOUND/IRON ROD FOUND
(Symbol)	PROPERTY LINE
(Symbol)	EXISTING SEWER
(Symbol)	LIMIT OF WETLANDS
(Symbol)	TIME OF CONCENTRATION ROUTE
(Symbol)	EXISTING CONTOUR
(Symbol)	DRAINAGE BOUNDARY
(Symbol)	FLOW DIRECTION



NO.	DATE	REVISION	DESCRIPTION
1	3/29/05		DATE OF ISSUE



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 Berry • Huff • McDonald • Milligan Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 28 State Street, Gorham, Maine 04038, (207) 859-2771

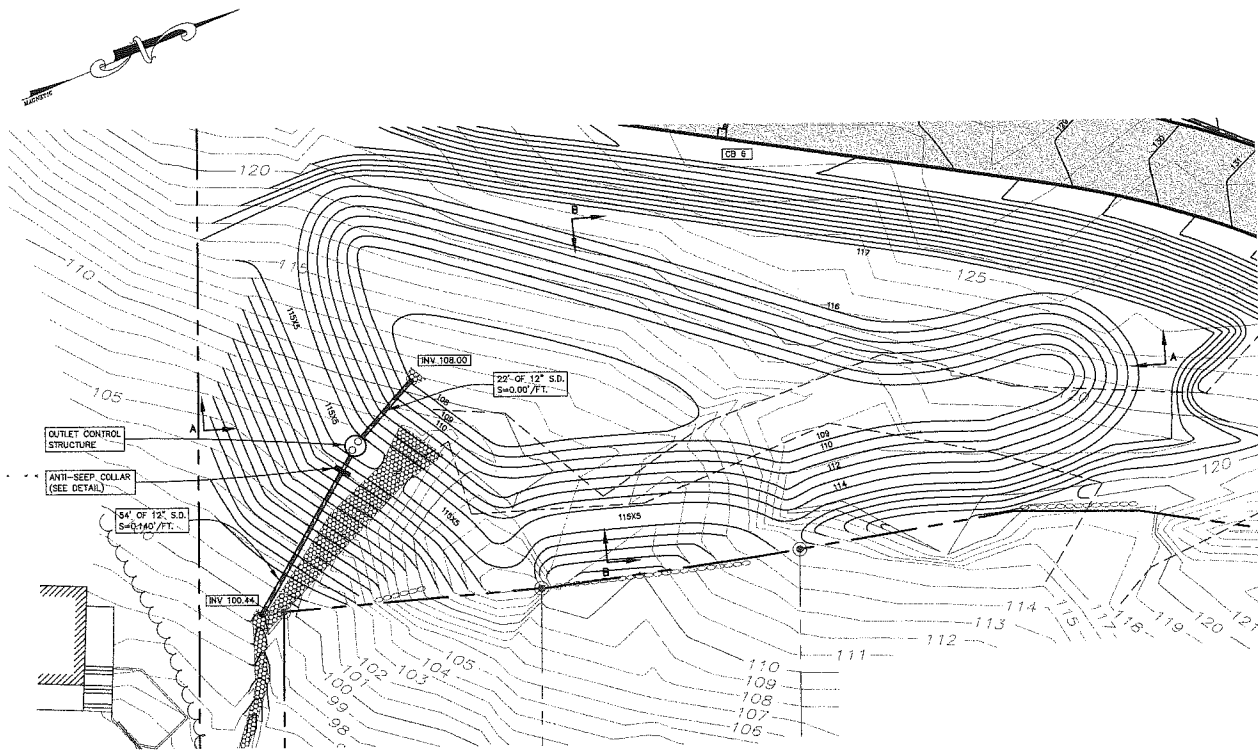
FOR
 Graves Hill Land Company, LLC
 15 Tibbety Lane
 Saco, Maine 04072

POST DEVELOPMENT
 DRAINAGE PLAN
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

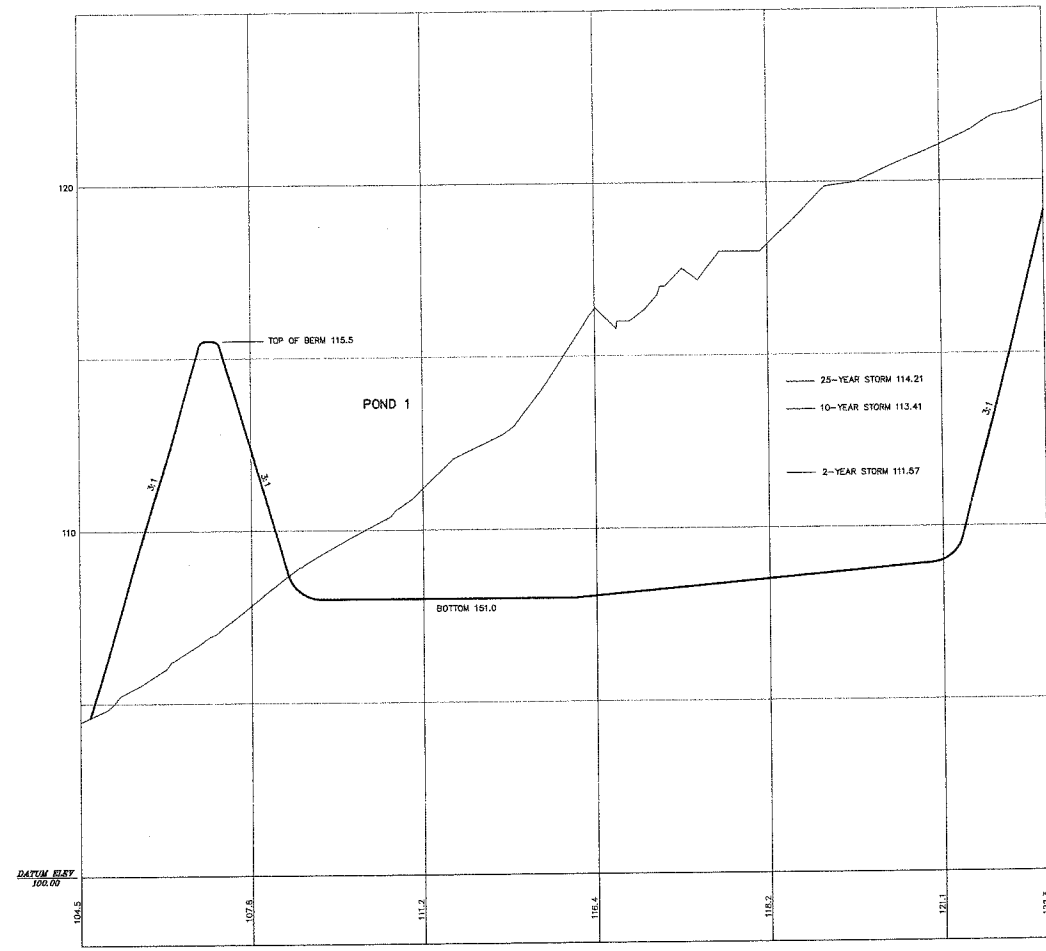
DESIGNED	L. Berry	DATE	Mar. 2005
DRAWN	Dept.	SCALE	1" = 50'
CHECKED	L. Berry	JOB. NO.	02055

SHEET
C-14

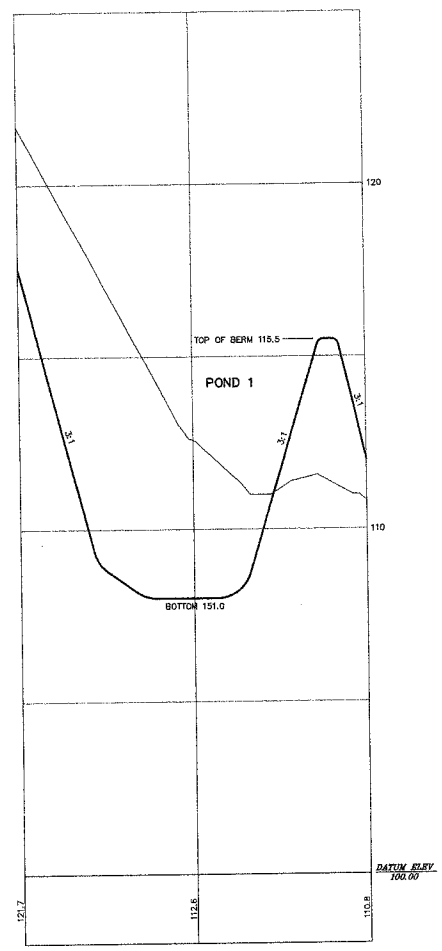
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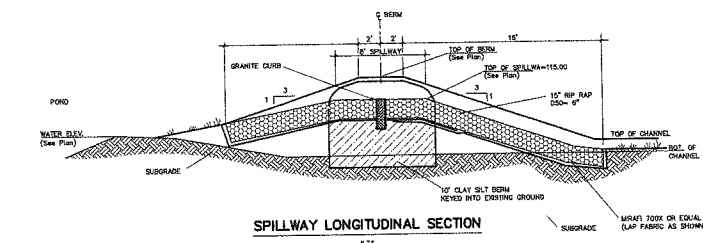
PLAN VIEW-POND 1
SCALE: 1" = 20'



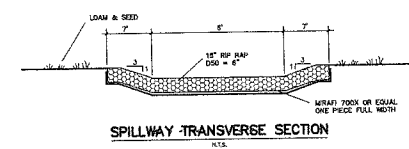
POND 1 SECTION A-A
SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20'



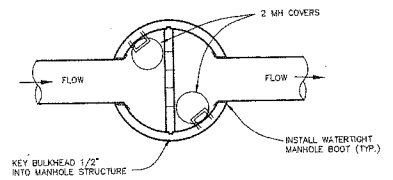
POND 1 SECTION B-B
SCALE:
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20'



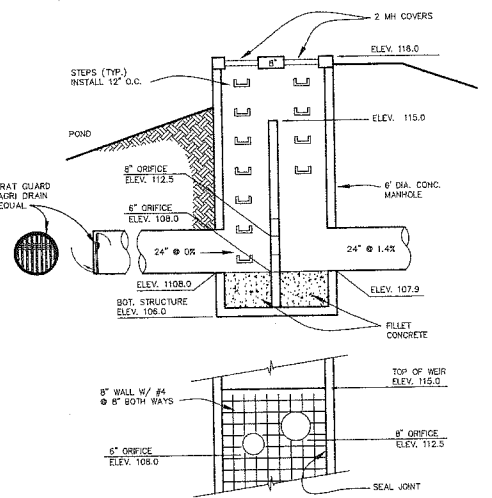
SPILLWAY LONGITUDINAL SECTION
N.T.S.



SPILLWAY TRANSVERSE SECTION
N.T.S.

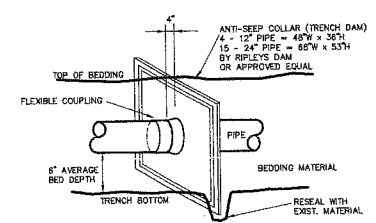


KEY BULKHEAD 1/2" INTO MANHOLE STRUCTURE



OUTLET CONTROL STRUCTURE
Not to Scale

DETENTION / RETENTION POND EMBANKMENT NOTES:
THE FOUNDATION AREA SHALL BE CLEARED OF TREES, LOGS, ROOTS, BRUSH, ROCKS, ETC. BEFORE A TRENCH IS OPENED. THE SHOULDER SHALL OBSERVE & APPROVE. THE EMBANKMENT SUBGRADE SHALL BE FREE OF SOFT SPOTS, PROTRUSING ROCKS, STONES, OR OTHER OBSTRUCTIVE MATERIAL. ALL SHOULDER OR PROTRUSING MATERIAL SHALL BE REMOVED PRIOR TO USING ADDITIONAL FILL. FILLING SHALL COMMENCE IN THE LOWEST POINT OF THE CUTOFF TRENCH AND/OR DAM & CONTINUE IN HORIZONTAL LIFTS TO THE POINT OF THE CUTOFF TRENCH AND/OR DAM. THE DISTRIBUTION & GRADATION OF THE FILL SHALL BE SUCH THAT NO LENSES, POCKETS, STRAINS, OR LAYERS OF SUBSTANTIALLY DIFFERENT MATERIALS ARE PLACED IN THE LAYERS OF THE EMBANKMENT. FILL WITHIN 3' OF THE DISCHARGE PIPE & STRUCTURE SHALL BE COMPACTED TO 98% MOISTURE PROCTOR.



ANTISEEP COLLAR
N.T.S.

NO.	DATE	DESCRIPTION
1	3/29/05	DATE OF ISSUE



BH2M
Berry • Huff • McDonald • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04038, (207) 839-3771

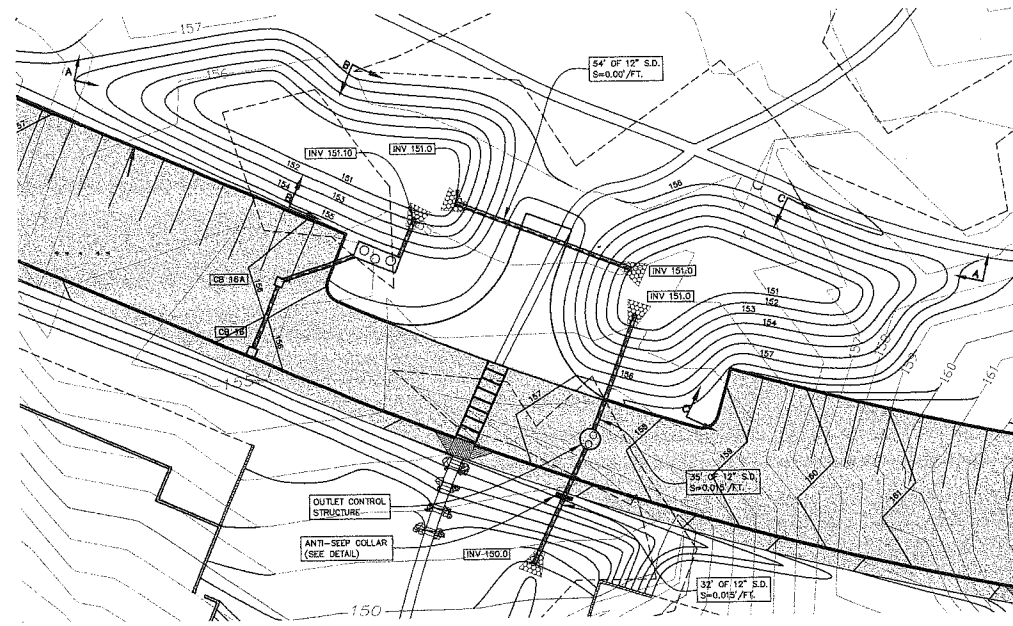
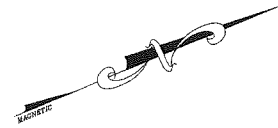
GRAVES HILL LEAD COMPANY, LLC
16 Tiffany Lane
Saco, Maine 04072

POND 1 DETAIL SHEET
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

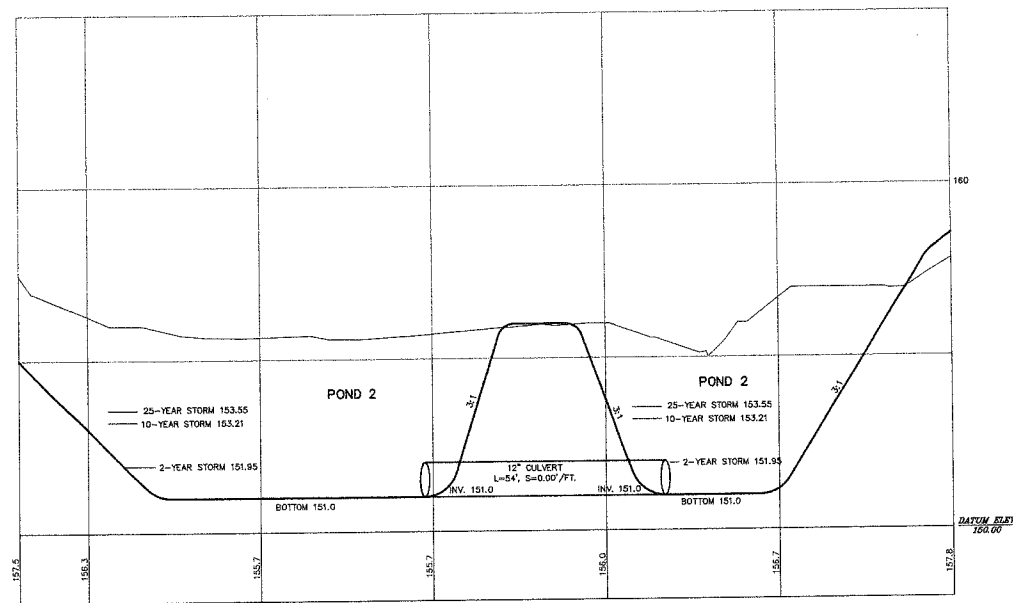
DESIGNED L. Berry	DATE April 2005
DRAWN Dept.	SCALE As Noted
CHECKED L. Berry	JOB. NO. 02055

SHEET
C-15

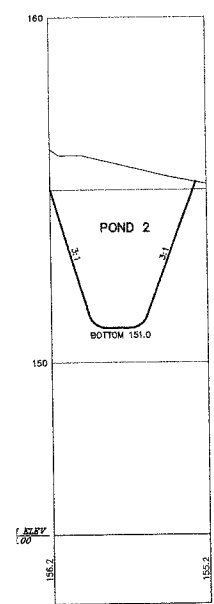
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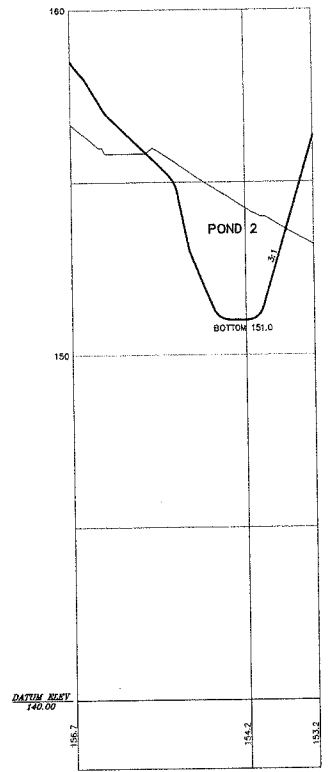
PLAN VIEW-POND 2
SCALE: 1" = 20'



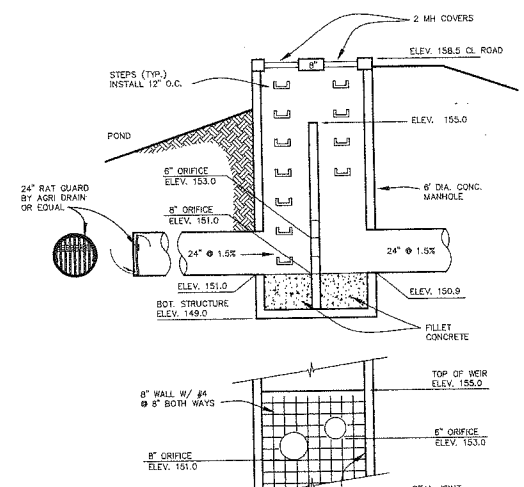
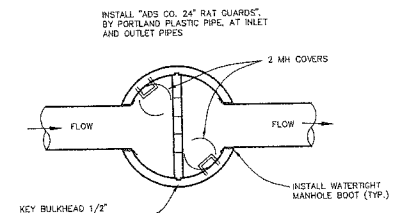
POND 2 SECTION A-A
SCALE
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20'



POND 2 SECTION B-B
SCALE
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20'

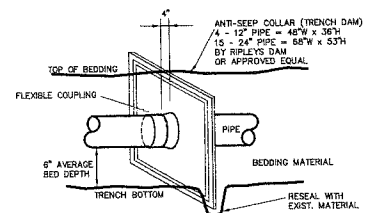


POND 2 SECTION C-C
SCALE
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20'



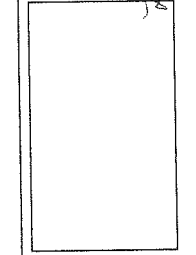
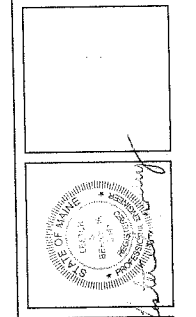
OUTLET CONTROL STRUCTURE
Not to Scale

DETENTION / RETENTION POND ENHANCEMENT NOTES:
THE FOUNDATION AREA SHALL BE CLEARED OF BRUSH, LOGS, ROOTS, BRUSH, BOLLERS, 500 RUBBER & TORSION. THE CONTRACTOR SHALL OBSERVE & APPROVE THE ENHANCEMENT SUBGRADE PRIOR TO PLACING ANY FILL TO DETERMINE SUITABILITY & POSSIBLE NEED FOR A CUTOFF FRENCH. FILL MATERIAL FOR THE ENHANCEMENT SHALL CONSIST OF SIFT AND/OR GLEAY MATERIAL, APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL NOTE THAT ACCEPTABLE MATERIAL MAY NOT BE FOUND ON-SITE. ALL FILL MATERIAL SHALL BE FREE OF BRUSH, ROOTS, FROZEN SOIL, STONES GREATER THAN 1/2 DIA. & OTHER OBJECTS. FILL SHALL BE PLACED IN 6" LIFT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSESSING AND/OR DAM CONTROLS TO HORIZONTAL LIFTS NO GREATER THAN 12" FOR EACH LIFT. THE DISTRIBUTION & GRADATION OF THE FILL SHALL BE SUCH THAT NO UNIFORM POINTS, STREAKS, OR LAYERS OF SUBSTANTIALLY GREATER MATERIALS ARE PLACED IN THE LAYERS OF THE ENHANCEMENT FILL WITHIN 8" OF THE DISCHARGE PIPE & STRUCTURE SHALL BE COMPACTED TO 95% MOISTURE PRODUCTION.



ANTISEEP COLLAR
NTS

NO.	DATE	REVISION DESCRIPTION
1	3/29/05	



BH2M
Barry • Huff • McDonald • Milligan Inc.
ENGINEERS - SURVEYORS & PLANNERS
28 Pine Street, Portland, Maine 04108 (207) 858-2771

For
Graves Hill Land Company, LLC
110 Main Street
Saco, Maine 04072

POND 2 DETAIL SHEET
GRAVES HILL CONDOMINIUM
COLEMAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
L. Berry	March 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB NO.
L. Berry	02055

SHEET
C-16

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ARCHITECT:
Scott Simons Architects
 75 York St
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
<http://www.simonsarchitects.com>

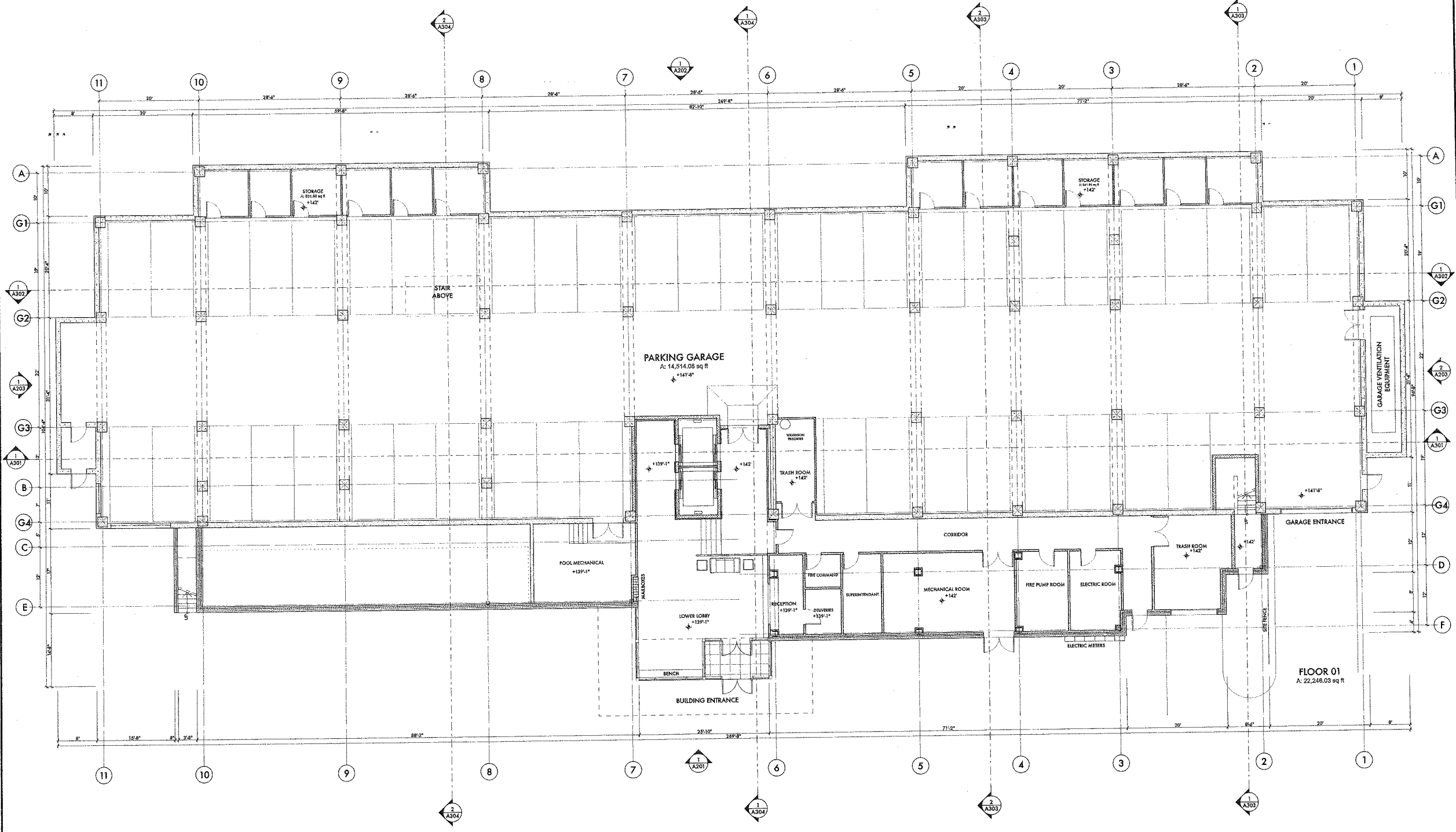
CONSULTANTS:
 General Contractor:
Allied Cook Construction
 P.O. Box 1396
 Portland, ME 04104
 phone 207 772-2888
 email george@alliedcook.com

Landscape Architect:
Richardson Associates
 P.O. Box 426
 Saco, ME
 phone 207 286 9291
 fax 207 286 9450

Civil Engineer:
BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 8250

Structural Engineer:
Becker Structural Eng. Inc.
 75 York Street
 Portland, ME 04101
 phone 207 879 1838
 fax 207 879 1822

Mechanical Engineer:
Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



SEAL: _____

REVISION DATE:	DATE
PHASE	DATE

PROJECT NAME:
GRAVES HILL

OCEAN AVE
 PORTLAND, ME

DRAWING SCALE: 1/8" = 1'-0"
 DATE OF ISSUE: 03/10/2003
 PROJECT NUMBER: 2003-0280

STATUS:
 SCHEMATIC DESIGN 2

TITLE:
FLOOR 01: LOBBY & GARAGE

DWG NO:
A101

DATE: A311, FLOOR 01: LOBBY & GARAGE, PLOTTR: 3-33 Plt 3/11/03 by Juma. PATH: P:\COURT\FLOOR01\2003-0280_Drawing_HL\2003-0280_A1 ARCHCAD:2003-0280.dwg PLOTNAME:2003-0280_Schematic.dwg



ARCHITECT:
 Scott Simons Architects
 75 York St
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
 http://www.simonsarchitects.com

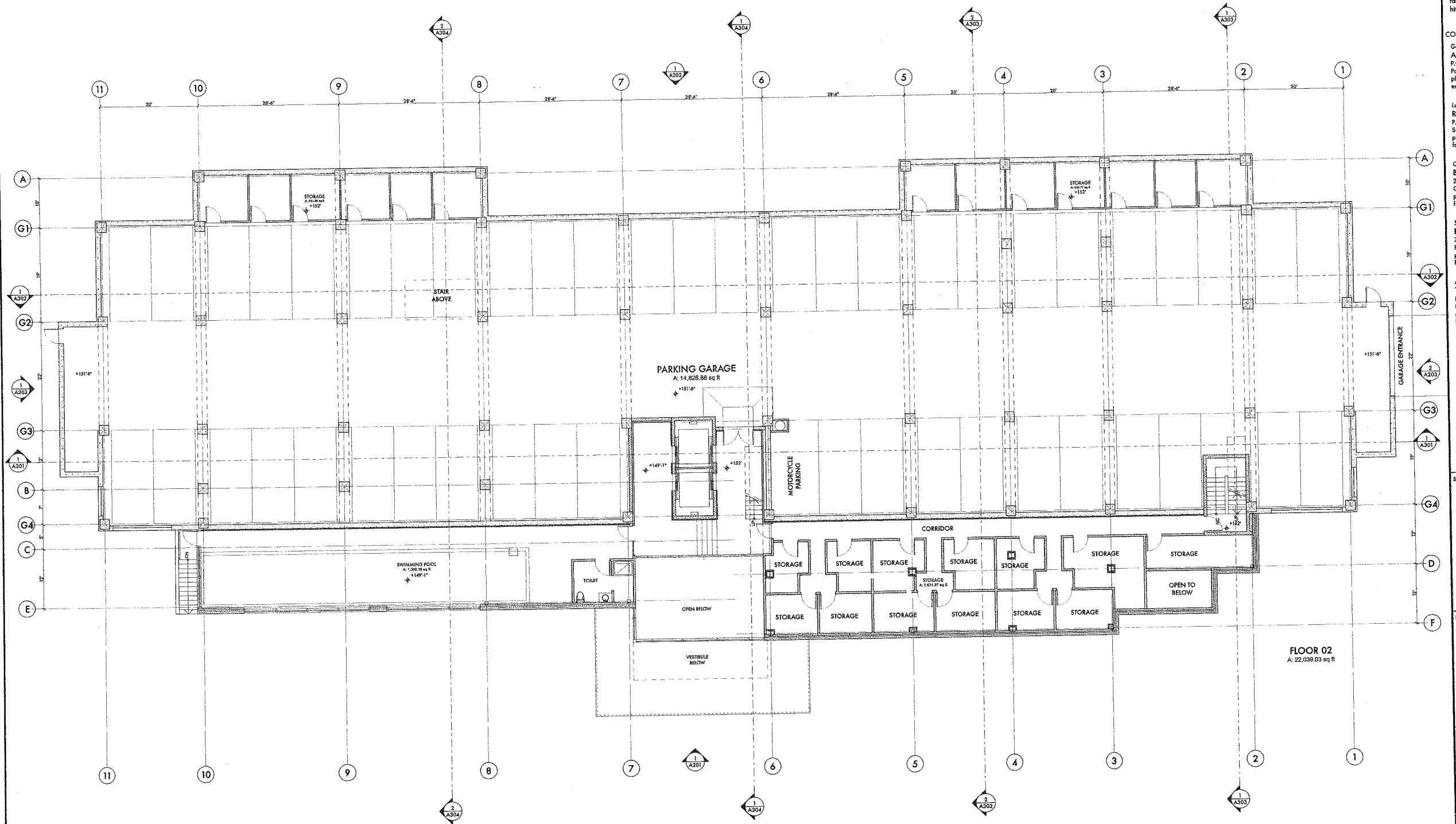
CONSULTANTS:
 General Contractor:
 Allied Cook Construction
 P.O. Box 1396
 Portland, ME 04104
 phone 207 772-2888
 email george@alliedcook.com

Landscape Architect:
 Richardson Associates
 P.O. Box 426
 Saco, ME
 phone 207 286 9291
 fax 207 286 9450

Civil Engineer:
 BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 8250

Structural Engineer:
 Becker Structural Eng, Inc
 75 York Street
 Portland, ME 04101
 phone 207 879 1839
 fax 207 879 1822

Mechanical Engineer:
 Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



SEAL:

REVISION DATE:	DATE

PROJECT NAME:

GRAVES HILL

OCEAN AVE
 PORTLAND, ME

DRAWING SCALE: 1/8" = 1'-0"

DATE OF ISSUE: 03/16/2005

PROJECT NUMBER: 2003-0280

STATUS:
 SCHEMATIC DESIGN 2

TITLE:
FLOOR 02: POOL & GARAGE

DWG NO:
A102

ARCHITECT:
 Scott Simons Architects
 75 York St
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
 http://www.simonsarchitects.com

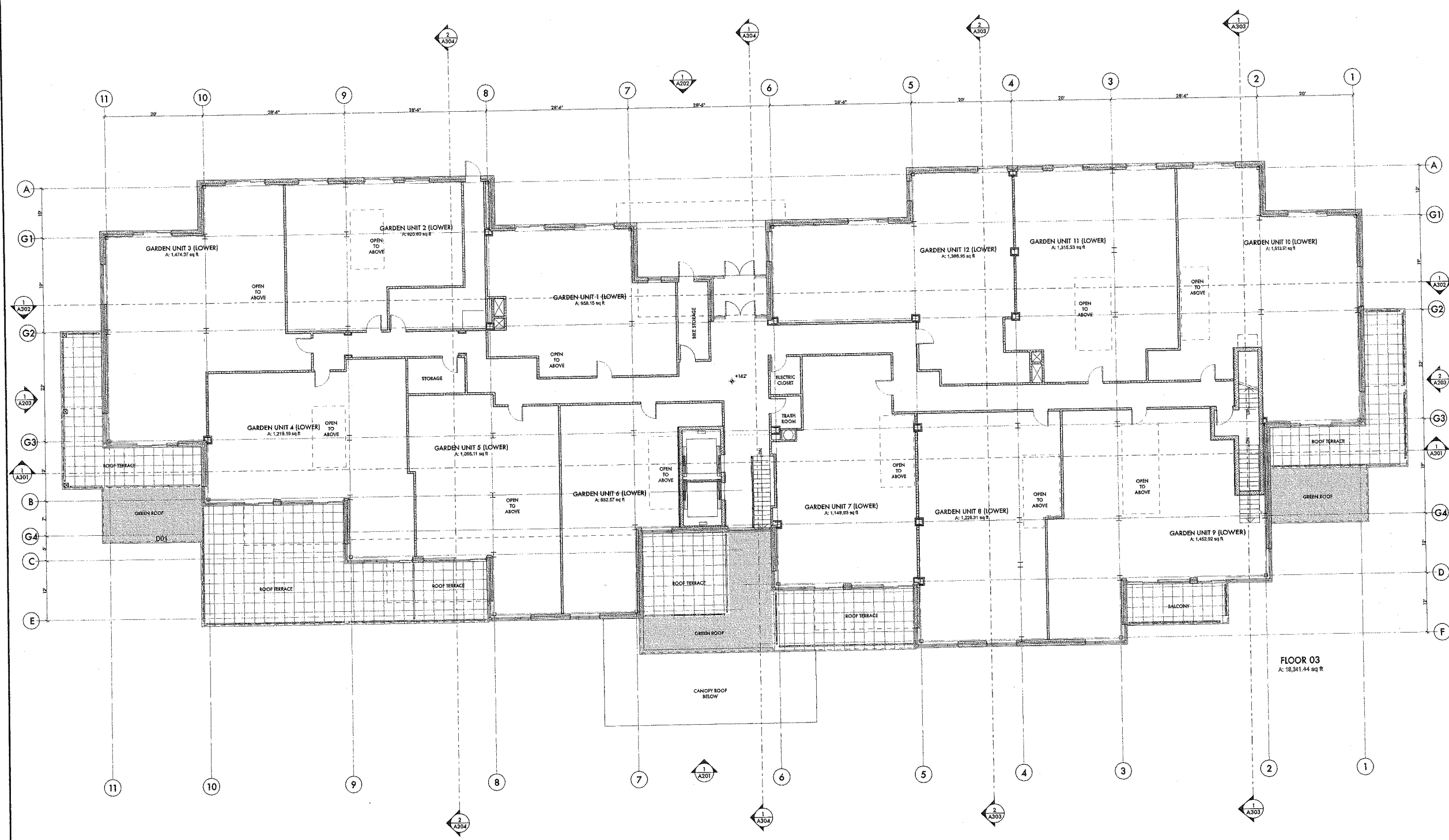
CONSULTANTS:
 General Contractor:
 Allied Cook Construction
 P.O. Box 13196
 Portland, ME 04104
 phone 207 772-2888
 email george@alliedcook.com

Landscape Architect:
 Richardson Associates
 P.O. Box 426
 Saco, ME
 phone 207 286 9291
 fax 207 286 9650

Civil Engineer:
 BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 8250

Structural Engineer:
 Becker Structural Eng. Inc
 75 York Street
 Portland, ME 04101
 phone 207 879 1838
 fax 207 879 1822

Mechanical Engineer:
 Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



SEAL:

REVISION DATE:

PHASE	DATE

PROJECT NAME:

GRAVES HILL

OCEAN AVE
 PORTLAND, ME

DRAWING SCALE: 1/8" = 1'-0"

DATE OF ISSUE: 05/10/2005

PROJECT NUMBER: 2003-0280

STATUS:

SCHEMATIC DESIGN 2

TITLE:

**FLOOR 03: GARDEN
 APT 1**

DWG NO:

A103



ARCHITECT:
 Scott Simons Architects
 75 York St
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
 http://www.simonsarchitects.com

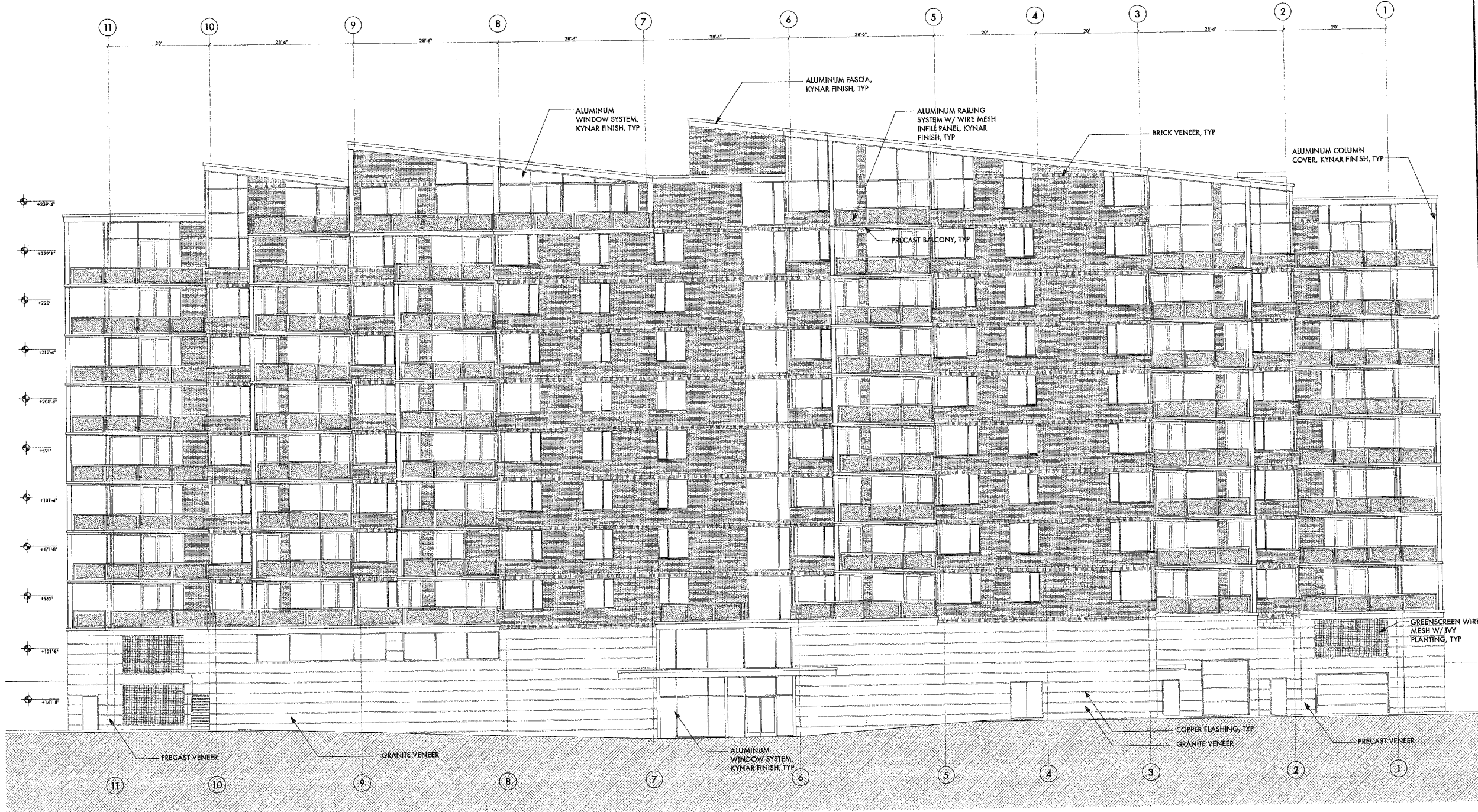
CONSULTANTS:
 General Contractor:
 Allied Cook Construction
 P.O. Box 1394
 Portland, ME 04104
 phone 207 772-2888
 email george@alliedcook.com

Landscape Architect:
 Richardson Associates
 P.O. Box 426
 Saco, ME
 phone 207 286 9291
 fax 207 286 9450

Civil Engineer:
 BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 8250

Structural Engineer:
 Buckler Structural Eng, Inc
 75 York Street
 Portland, ME 04101
 phone 207 879 1838
 fax 207 879 1822

Mechanical Engineer:
 Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



1 SOUTHEAST ELEVATION
 A201 SCALE: 1/8" = 1'-0"

SEAL:

--	--

REVISION DATE:

PHASE	DATE

PROJECT NAME:

GRAVES HILL

OCEAN AVE
 PORTLAND, ME

DRAWING SCALE: 1/8" = 1'-0"
 DATE OF ISSUE: 03/10/2005
 PROJECT NUMBER: 2003-0280
 STATUS: SCHEMATIC DESIGN 2

TITLE:
SOUTHEAST ELEVATION

DWG NO:
A201



ARCHITECT:
Scott Simons Architects
 75 York St.
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
 http://www.simonsarchitects.com

CONSULTANTS:
General Contractor:
Allied Cook Construction
 P.O. Box 1396
 Portland, ME 04104
 phone 207 772-2888
 email gaorge@alliedcook.com

Landscape Architect:
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 Saco, ME
 phone 207 286 9291
 fax 207 284 9450

Civil Engineer:
BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 8250

Structural Engineer:
Becker Structural Eng. Inc.
 75 York Street
 Portland, ME 04101
 phone 207 879 1838
 fax 207 879 1822

Mechanical Engineer:
Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



1 NORTHWEST ELEVATION
 SCALE: 1/8" = 1'-0"

SEAL:

REVISION DATE:	PHASE	DATE

PROJECT NAME:	GRAVES HILL
	OCEAN AVE PORTLAND, ME
DRAWING SCALE:	1/8" = 1'-0"
DATE OF ISSUE:	03/10/2005
PROJECT NUMBER:	2003-0280
STATUS:	SCHEMATIC DESIGN 2
TITLE:	NORTHWEST ELEVATION
DWG NO.:	A202



ARCHITECT:
Scott Simons Architects
 75 York St
 Portland, Maine 04101
 phone 207 772 4656
 fax 207 828 4656
<http://www.simonsarchitects.com>

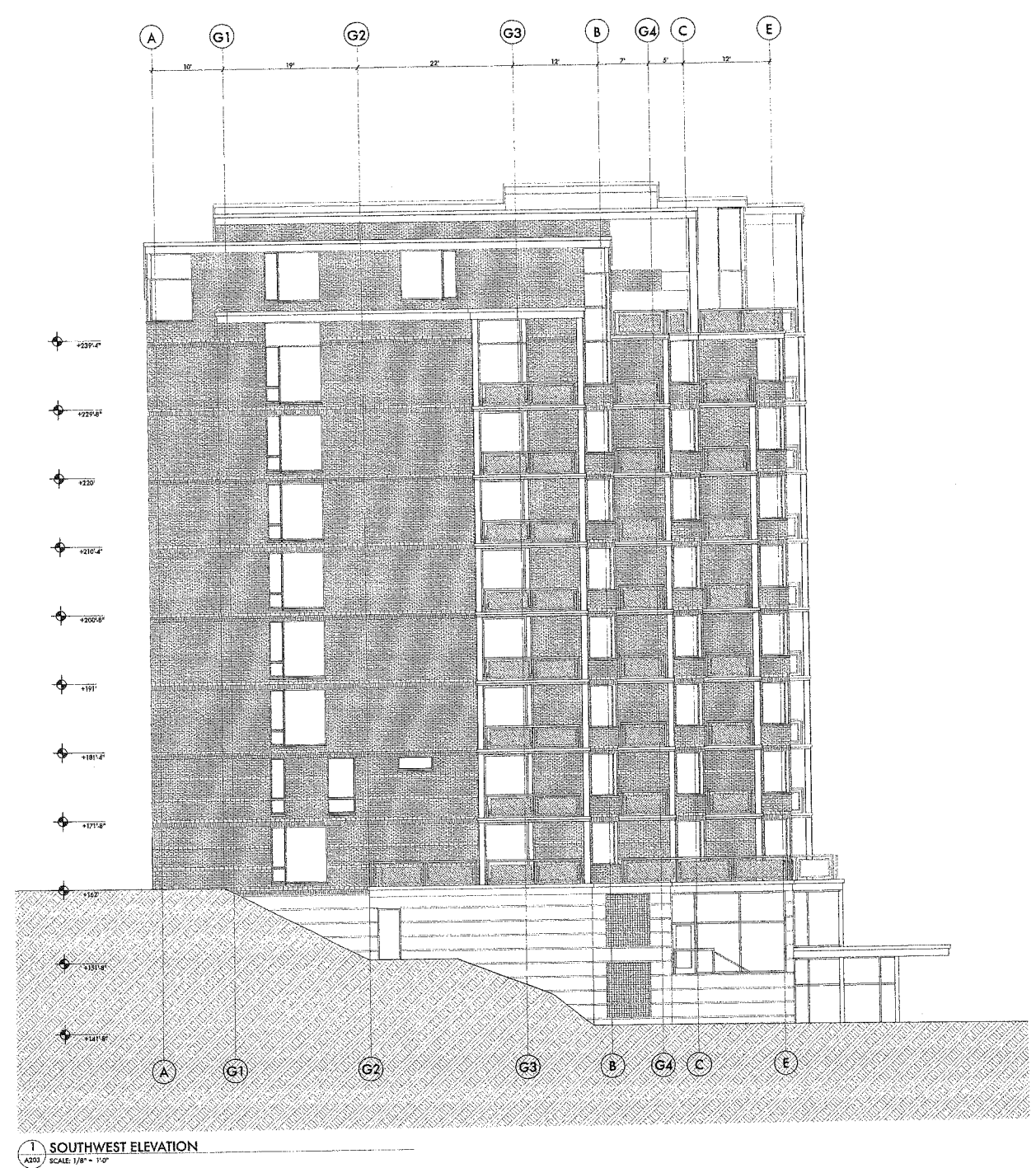
CONSULTANTS:
 General Contractor:
Allied Cook Construction
 P.O. Box 1396
 Portland, ME 04104
 phone 207 772-2888
 email georgel@alliedcook.com

Landscape Architect:
Richardson Associates
 P.O. Box 426
 Saco, ME
 phone 207 286 9291
 fax 207 286 9430

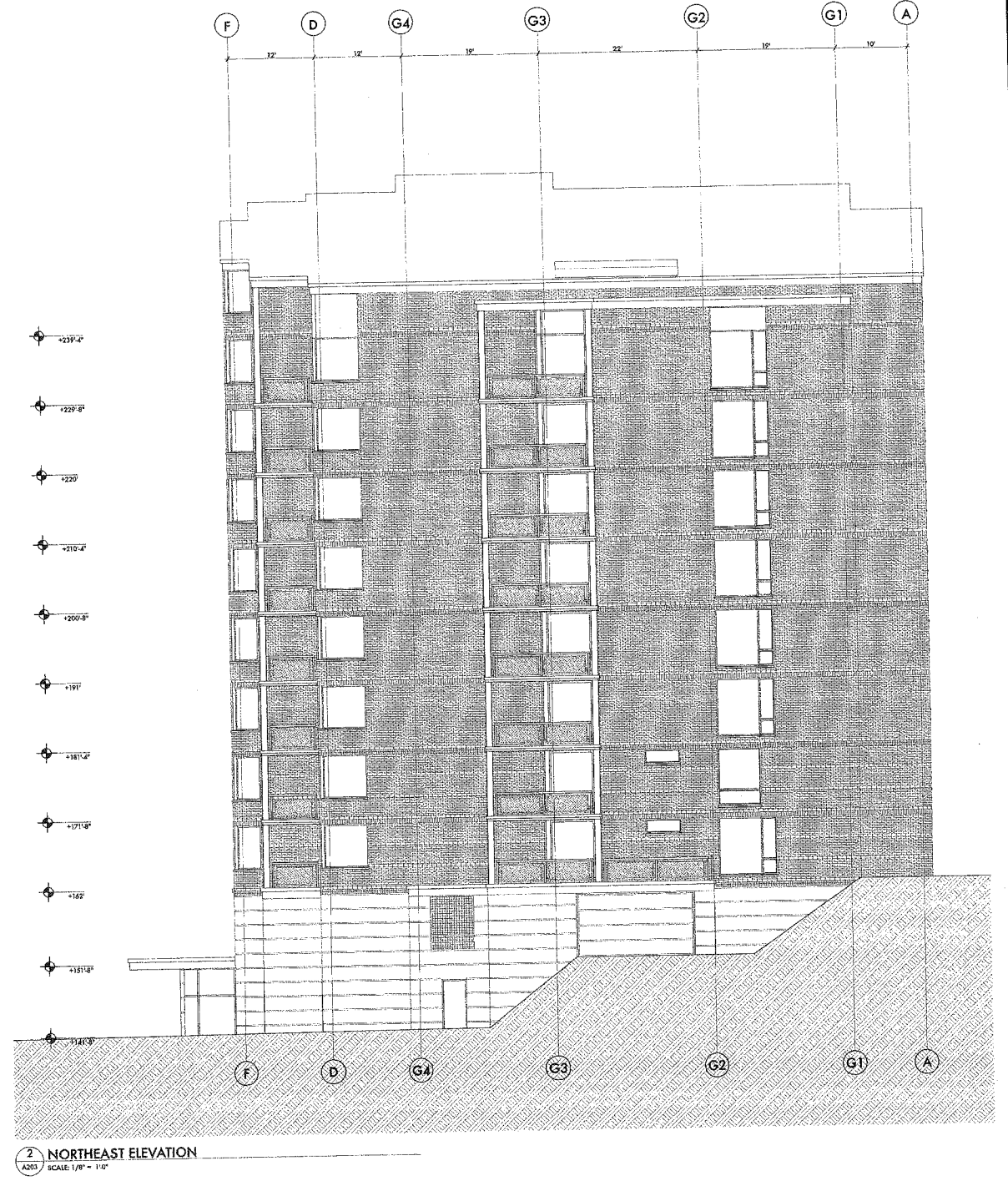
Civil Engineer:
BH2M
 28 State St.
 Gorham, ME
 phone 207 839 2771
 fax 207 839 6250

Structural Engineer:
Becker Structural Eng. Inc
 75 York Street
 Portland, ME 04101
 phone 207 879 1838
 fax 207 879 1822

Mechanical Engineer:
Titan Mechanical, Inc.
 P.O. Box 3927
 Portland, ME 04104
 phone 207 878 5223
 fax 207 878 5235



1 SOUTHWEST ELEVATION
 SCALE: 1/8" = 1'-0"



2 NORTHEAST ELEVATION
 SCALE: 1/8" = 1'-0"

REVISION DATE:

PHASE	DATE

PROJECT NAME:

GRAVES HILL

OCEAN AVE
 PORTLAND, ME

DRAWING SCALE: 1/8" = 1'-0"

DATE OF ISSUE: 03/10/2003

PROJECT NUMBER: 2002-0280

STATUS: SCHEMATIC DESIGN 2

TITLE:
SW & NE ELEVATIONS

DWG NO:
A203

Att. 5

GRAVES HILL

OCEAN AVENUE
PORTLAND, MAINE

A 98 UNIT CONDOMINIUM PROJECT

For
GRAVES HILL LAND COMPANY, LLC
16 TIFFANY LANE
SACO, MAINE

PLAN INDEX

C-1	PROJECT INFORMATION
C-2	EXISTING CONDITIONS
C-3	SUBDIVISION PLAN
C-3A	PHASE I PLAN
C-3B	PHASE II PLAN
C-4	SITE PLAN
C-5	GRADING PLAN
C-6	UTILITY PLAN
C-7	PLAN & PROFILE SHEET- ROAD A STA 0+00 TO 6+00
C-8	PLAN & PROFILE SHEET- ROAD A STA 6+00 TO 11+79.48
C-9	PLAN & PROFILE SHEET- ROAD B STA 0+00 TO 4+50
C-10	PLAN & PROFILE SHEET- ROAD B STA 4+50 TO 9+60.70
C-11	EROSION CONTROL AND STORMDRAIN DETAILS
C-12	SITE DETAILS
C-13	PREDEVELOPMENT DRAINAGE PLAN
C-14	POST DEVELOPMENT DRAINAGE PLAN
C-15	DOWNSTREAM DRAINAGE PLAN

OCTOBER 2005

BH2M

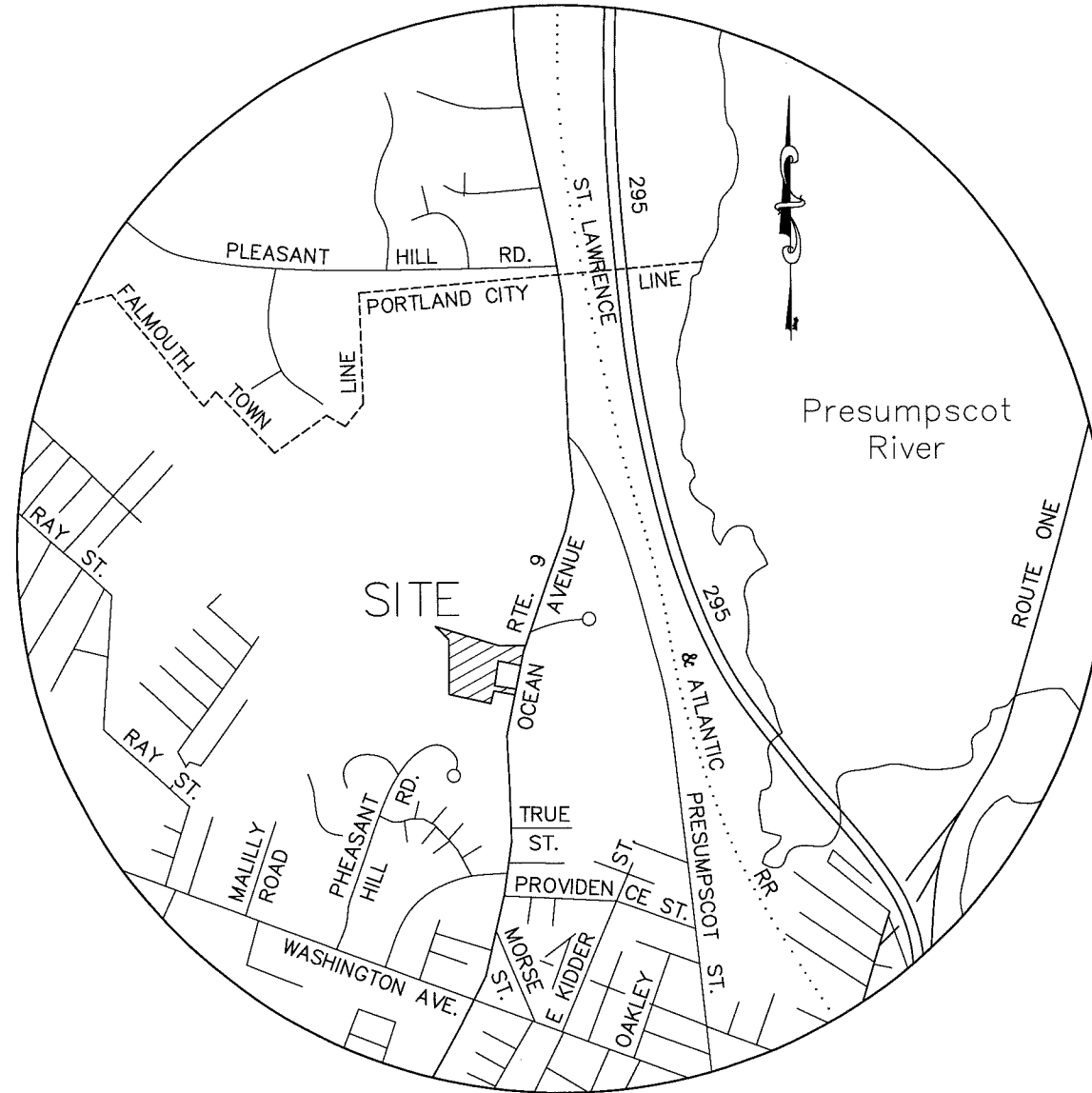
Berry * Huff * McDonald * Milligan Inc.

ENGINEERS * SURVEYORS * PLANNERS

28 State Street, Gorham, Maine 04038, (207) 839-2771

G:\2002-w\02055-10 portland\dwg\PROJECT INFO _CI.dwg, O / 06 / 2006 12:41:22 PM

EXISTING	DESCRIPTION	PROPOSED
	CONTOUR	
	EASEMENT LINE	
	TREE LINE	
	OVERHEAD UTILITIES	
	STORM DRAIN	
	SANITARY SEWER	
	WATER LINE	
	TIME OF CONCENTRATION ROUTE	
	DRAINAGE BOUNDARY	
	LIMIT OF WETLANDS	
	STONE WALL	
	DRAIN MANHOLE	
	SANITARY SEWER MANHOLE	
	HYDRANT	
	CATCHBASIN	
	UTILITY POLE	
	GRANITE MONUMENT	
	FLOW DIRECTION	
	IRON ROD FOUND	
	5/8" IRON ROD W/ CAP TO BE SET	
	ABOVE GROUND	
	NOW OR FORMERLY	



SCALE: 1" = .50 Mile

GENERAL NOTES:

- EXISTING PUBLIC AND PRIVATE UTILITY AND UNDERGROUND LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, AND ALL UTILITIES AND PIPES ARE NOT NECESSARILY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IN THE FIELD THE LOCATIONS OF UTILITIES SHOWN, AND FOR INVESTIGATING AND IDENTIFYING THE EXISTENCE AND LOCATIONS OF ANY ADDITIONAL PUBLIC AND PRIVATE UTILITIES NOT SHOWN ON THE PLANS, BEFORE COMMENCING ANY EXCAVATIONS, AND SHALL BE RESPONSIBLE FOR REPAIRING ALL UTILITIES AND PIPES, BOTH PUBLIC AND PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, THAT ARE DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED IN INVESTIGATING AND REPAIRING SAID UTILITIES SHALL BE BORNE BY THE CONTRACTOR AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK PAID FOR UNDER THE APPLICABLE LUMP SUM AND UNIT PRICES IN THE CONTRACT. UTILITIES INCLUDE BUT ARE NOT LIMITED TO UNDERGROUND ELECTRIC, GAS, TELEPHONE, WATER, SEWER, STORM DRAIN, AND CELLAR DRAIN LINES. SEE PROJECT DIRECTORY FOR A LIST OF KNOWN UTILITIES AND CONTACT PERSONS.
- ALL STRUCTURES INCLUDING EXISTING MANHOLES, VALVE COVERS, CATCH BASINS, ETC. SHALL BE ADJUSTED UP OR DOWN, AS REQ'D, TO MEET FINISH GRADES. THE COST OF SUCH WORK SHALL BE INCIDENTAL TO THE PROJECT.
- ALL NON-PAVED AREAS DISTURBED BY THE CONTRACTOR SHALL BE LOAMED AND SEEDDED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- ALL ELEVATIONS SHALL BE TAKEN FROM THE BENCHMARKS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY BENCHMARK ELEVATIONS WITH ENGINEER PRIOR TO USING. DO NOT USE CB OR MH RIMS.
- THE CONTRACTOR SHALL EXCAVATE TEST PITS SHOWN ON THE DRAWINGS TO LOCATE SEWERS AND OTHER UTILITIES CRITICAL TO THE PROPOSED PIPING PLAN. THE OWNER RESERVES THE RIGHT TO ADJUST PIPING LOCATIONS AND GRADES AS REQ'D. OTHER TEST PITS NOT INDICATED ON THE PLANS MAY BE REQ'D AT THE ENGINEER'S REQUEST. TEST HOLES DUG BY THE CONTRACTOR NOT INDICATED ON THE PLANS OR SO ORDERED BY THE ENGINEER WILL NOT BE PAID FOR.
- WHENEVER THE WORDS "REMOVE" OR "ABANDONED" ARE USED IN REFERENCE TO EXISTING PIPES OR STRUCTURES, IT SHALL MEAN THAT MANHOLES SHALL BE REMOVED COMPLETELY OR BROKEN WITHIN 36" OF THE FINISH GRADE, SEWER LINES PLUGGED WITH CONCRETE AND THE EMPTY STRUCTURE FILLED WITH COMPACTED GRANULAR MAT'L.
- THE WORD "PLUGGED" MEANS TO FILL AND SEAL WITH CONCRETE.
- WHERE THE WORK REQUIRES THE REMOVAL OF TREES AND/OR STUMPS SUCH REMOVAL SHALL BE INCIDENTAL TO THE ITEM AFFECTED.
- CONNECTIONS TO EXISTING MANHOLES, PIPES, OR OTHER STRUCTURES SHALL BE INCIDENTAL TO THE COST OF THE PIPE AND NO SEPARATE PAYMENT WILL BE MADE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC WARNING SIGNS DURING THE PROGRESS OF THE WORK IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DRIVEWAYS AND WALKS IMPACTED BY THE PROJECT SHALL BE REPAIRED AS SHOWN IN THE DETAILS AND AS DIRECTED BY THE ENGINEER. THE ENGINEER SHALL DIRECT THE CONTRACTOR AS TO THE METHOD OF DEALING WITH EACH DRIVE AND WALK.
- PIPE LENGTH EQUALS DISTANCE BETWEEN THE INSIDE FACE OF CATCH BASINS OR MANHOLES. (PIPE SLOPE COMPUTATION).
- PROPERTY LINE AND RIGHT OF WAY MONUMENTS DISTURBED BY CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE BY A REGISTERED LAND SURVEYOR.
- UTILITY POLES SHALL BE RELOCATED BY CMP & VERIZON. UTILITY WIRES WILL BE REHUNG OR BURIED DURING THIS SAME CONSTRUCTION. COORDINATION WILL BE REQUIRED BY THE CONTRACTOR IN ORDER TO MINIMIZE CONFLICTS.
- PORTLAND WATER DISTRICT WILL BE INVOLVED IN WATERMAIN DECISIONS AND MONITORING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE WATER COMPANY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG-SAFE" AND LOCAL UTILITY COMPANIES AT LEAST 3 BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, OR AS OTHERWISE REQUIRED BY MAINE STATE LAW.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS, METHODS AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THESE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
- ALL WORK SHALL BE IN CONFORMANCE WITH THE CITY OF PORTLAND AND ALL UTILITY COMPANIES STANDARDS.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY CONSTRUCTION ACTIVITY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
- NO BLASTING WILL BE ALLOWED WITHIN 500 FT OF ANY UTILITY WITHOUT THE NOTIFICATION AND APPROVAL OF THE APPROPRIATE UTILITY COMPANY. NO LEDGE BLASTING WILL BE PERMITTED WITHIN A UTILITY COMPANY EASEMENT UNTIL WRITTEN APPROVAL FROM THE UTILITY IS GIVEN. BLASTING OPERATIONS SHALL BE IN ACCORDANCE WITH MAINE DEPT. OF ENVIRONMENTAL PROTECTION BLASTING REQUIREMENTS AND SITE LOCATION OF DEVELOPMENT APPROVAL ORDER.
- ALL PAVEMENT CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE CUT EDGES AND NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- CONDUIT SHALL BE USED FOR ELECTRIC, TELEPHONE AND TV IN ACCORDANCE WITH THE RESPECTIVE COMPANIES REQUIREMENTS.
- ALL EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSTALLED & MAINTAINED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BMP'S" MANUAL, THE PROJECT E&S REPORT PREPARED BY BH2M AND AS OTHERWISE SPECIFIED OR INDICATED ON DRAWINGS.

NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	INITIAL
2	10/24/05	DATE OF REVISION	STANDARD REVS.

BH2M
 Berry • Huff • McDonald • Milligan, Inc.
 ENGINEERS • SURVEYORS • PLANNERS
 20 State Street, Portland, Maine 04102, (603) 877-2171

FOR
 Graves Hill Land Company, LLC
 155 State Street
 Saco, Maine 04072

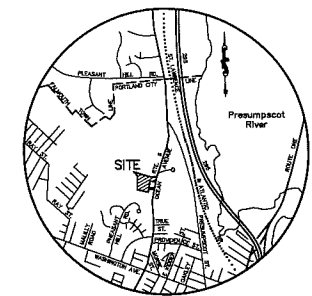
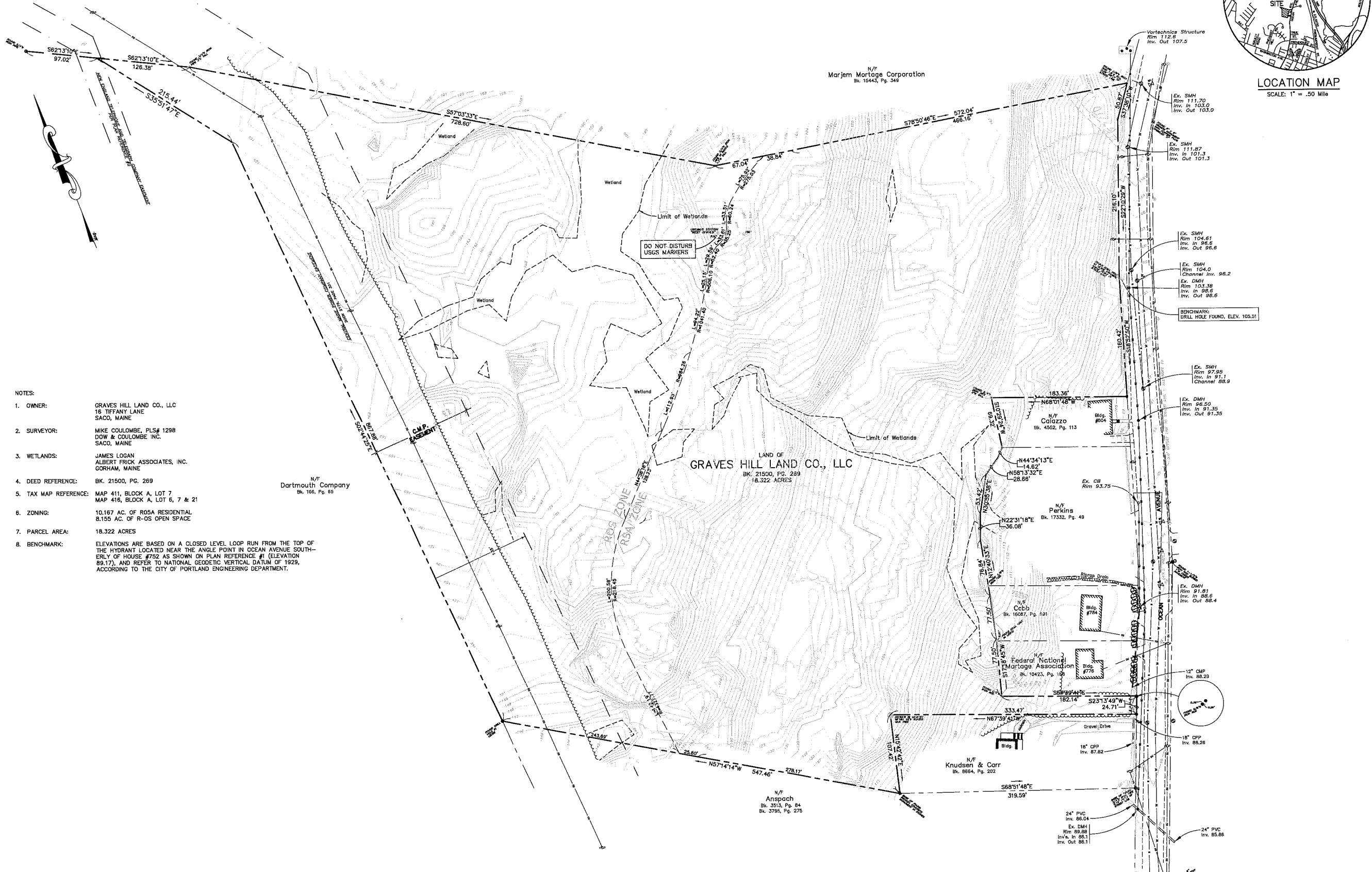
PROJECT INFORMATION
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
DRAWN	SCALE
CHECKED	JOB. NO.

SHEET
C-1

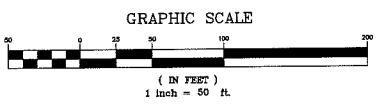
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- NOTES:
- OWNER: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
 - SURVEYOR: MIKE COULOMBE, PLS# 1298
DOW & COULOMBE INC.
SACO, MAINE
 - WETLANDS: JAMES LOGAN
ALBERT FRICK ASSOCIATES, INC.
GORHAM, MAINE
 - DEED REFERENCE: BK. 21500, PG. 269
 - TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOT 6, 7 & 21
 - ZONING: 10.167 AC. OF ROSA RESIDENTIAL
8.155 AC. OF R-OS OPEN SPACE
 - PARCEL AREA: 18.322 ACRES
 - BENCHMARK: ELEVATIONS ARE BASED ON A CLOSED LEVEL LOOP RUN FROM THE TOP OF THE HYDRANT LOCATED NEAR THE ANGLE POINT IN OCEAN AVENUE SOUTHERLY OF HOUSE #752 AS SHOWN ON PLAN REFERENCE #1 (ELEVATION 89.17), AND REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929, ACCORDING TO THE CITY OF PORTLAND ENGINEERING DEPARTMENT.

SYMBOL	DESCRIPTION
○ IR	IRON ROD FOUND
○ IP	IRON PIPE FOUND
● GM	GRANITE MONUMENT FOUND
○ IR	5/8" IRON ROD W/ CAP TO BE SET
AS	ABOVE GROUND
N/F	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK



NO.	DATE	REVISION	DESCRIPTION
1	3/29/05	DATE OF ISSUE	
2	3/29/05	DATE OF RE-SUBMITTAL	
3	10/24/05	STANDARD REVISIONS	

BH2M
 ENGINEERS * SURVEYORS * PLANNERS
 Berry * Huff * McDonald * Milligan Inc.
 25 State Street, Gorham, Maine 04038, (207) 852-2721

for
 Graves Hill Land Company, LLC
 16 Tiffany Lane
 Saco, Maine 04072

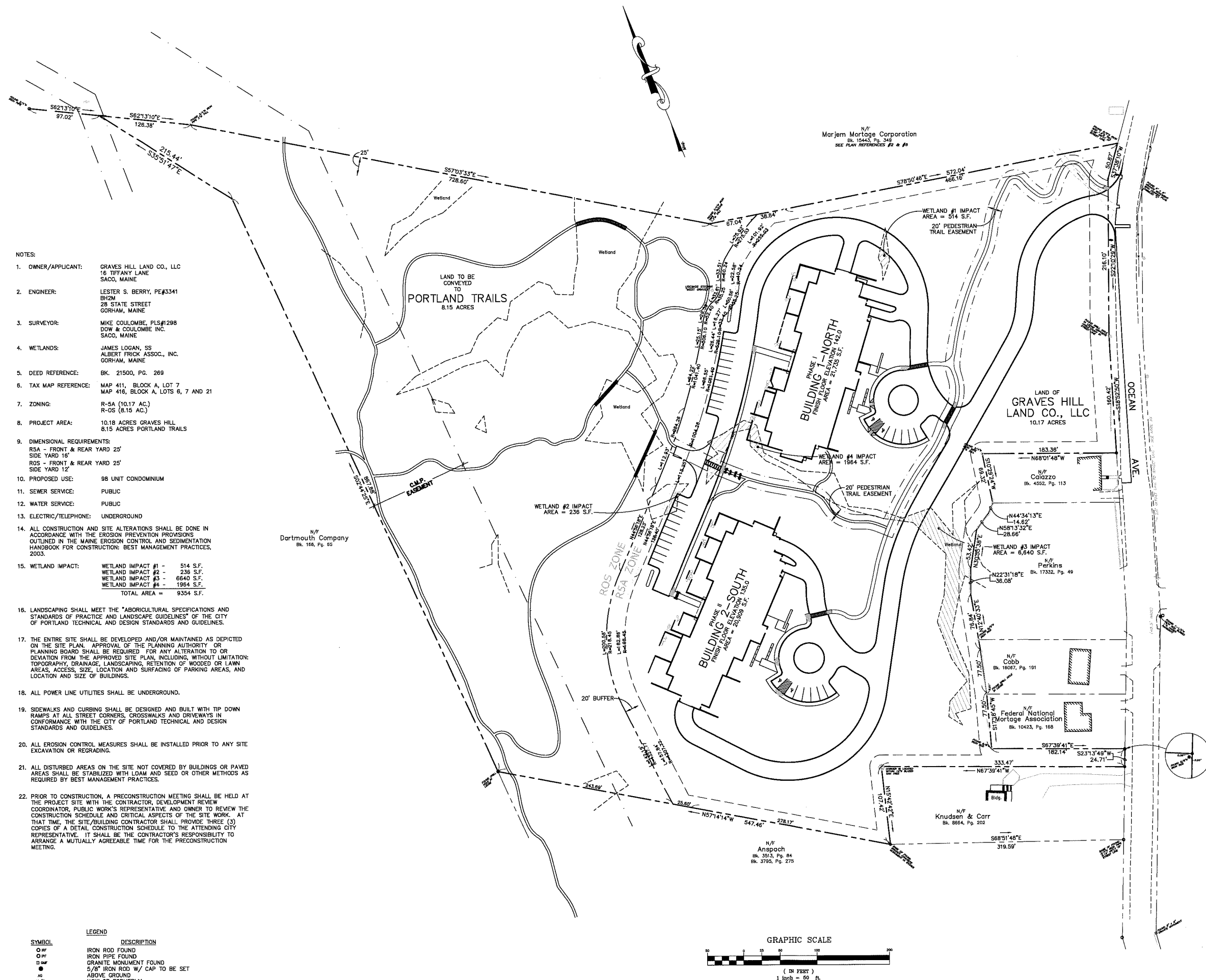
EXISTING CONDITIONS
 GRAVES HILL
 OCEAN AVENUE
 PORTLAND, MAINE

DESIGNED	DATE
DRAWN	SCALE
CHECKED	JOB. NO.

SHEET
C-2

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NOTES:

- OWNER/APPLICANT: GRAVES HILL LAND CO., LLC
16 TIFFANY LANE
SACO, MAINE
- ENGINEER: LESTER S. BERRY, PE#3341
BH2M
28 STATE STREET
GORHAM, MAINE
- SURVEYOR: MIKE COULOMBE, PLS#1298
DOW & COULOMBE INC.
SACO, MAINE
- WETLANDS: JAMES LOGAN, SS
ALBERT FRICK ASSOC., INC.
GORHAM, MAINE
- DEED REFERENCE: BK. 21500, PG. 269
- TAX MAP REFERENCE: MAP 411, BLOCK A, LOT 7
MAP 416, BLOCK A, LOTS 6, 7 AND 21
- ZONING: R-5A (10.17 AC.)
R-05 (8.15 AC.)
- PROJECT AREA: 10.18 ACRES GRAVES HILL
8.15 ACRES PORTLAND TRAILS
- DIMENSIONAL REQUIREMENTS:
RSA - FRONT & REAR YARD 25'
SIDE YARD 16'
ROS - FRONT & REAR YARD 25'
SIDE YARD 12'
- PROPOSED USE: 98 UNIT CONDOMINIUM
- SEWER SERVICE: PUBLIC
- WATER SERVICE: PUBLIC
- ELECTRIC/TELEPHONE: UNDERGROUND
- ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES, 2003.
- WETLAND IMPACT:
WETLAND IMPACT #1 - 514 S.F.
WETLAND IMPACT #2 - 236 S.F.
WETLAND IMPACT #3 - 6640 S.F.
WETLAND IMPACT #4 - 1964 S.F.
TOTAL AREA = 9354 S.F.
- LANDSCAPING SHALL MEET THE "AGRICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
- ALL POWER LINE UTILITIES SHALL BE UNDERGROUND.
- SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIP DOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
- ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES.
- PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.

N/F Dartmouth Company
Bk. 168, Pg. 65

N/F Marjem Mortgage Corporation
Bk. 15443, Pg. 348
SEE PLAN REFERENCES #1 & #2

LAND OF GRAVES HILL
LAND CO., LLC
10.17 ACRES

N/F Anspach
Bk. 3513, Pg. 84
Bk. 3755, Pg. 275

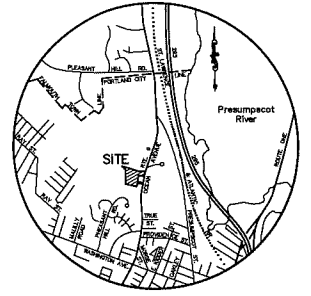
N/F Cobb
Bk. 16067, Pg. 191

N/F Federal National
Mortgage Association
Bk. 10423, Pg. 168

N/F Knudsen & Carr
Bk. 8664, Pg. 202

N/F Perkins
Bk. 17332, Pg. 49

N/F Colozzo
Bk. 4552, Pg. 113



LOCATION MAP
SCALE: 1" = .50 Mile

NO.	DATE	REVISION DESCRIPTION
1	3/29/05	DATE OF ISSUE
2	3/29/05	DATE OF PRELIMINARY
3	10/29/05	STANDARD PLAN

BH2M
Berry • Huff • McDonald • Milligan, Inc.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Gorham, Maine 04038, (207) 639-8771

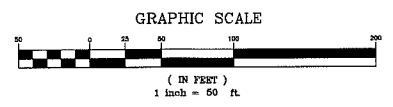
FOR GRAVES HILL Land Company, LLC
Saco, Maine 04072

SUBDIVISION PLAN
98 UNIT CONDOMINIUM
GRAVES HILL
OCEAN AVENUE
PORTLAND, MAINE

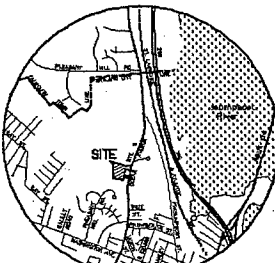
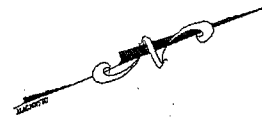
THIS PLAN REVIEWED AND APPROVED BY THE CITY OF PORTLAND PLANNING BOARD.

CHAIR	DATE
DESIGNED	DATE
Dept.	April 2005
DRAWN	SCALE
Dept.	As Noted
CHECKED	JOB. NO.
R. Libby Jr.	02055
SHEET	
C-3	
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SEE SHEETS C-3A AND C-3B FOR PHASING PLANS



SYMBOL	DESCRIPTION
○	IRON ROD FOUND
○	IRON PIPE FOUND
●	GRANITE MONUMENT FOUND
○	5/8" IRON ROD W/ CAP TO BE SET
●	ABOVE GROUND
○	NOW OR FORMERLY
---	LIMIT OF WETLANDS
---	EXISTING CONTOURS
---	EASEMENT LINE
---	BUILDING SETBACK
---	PROPERTY LINE



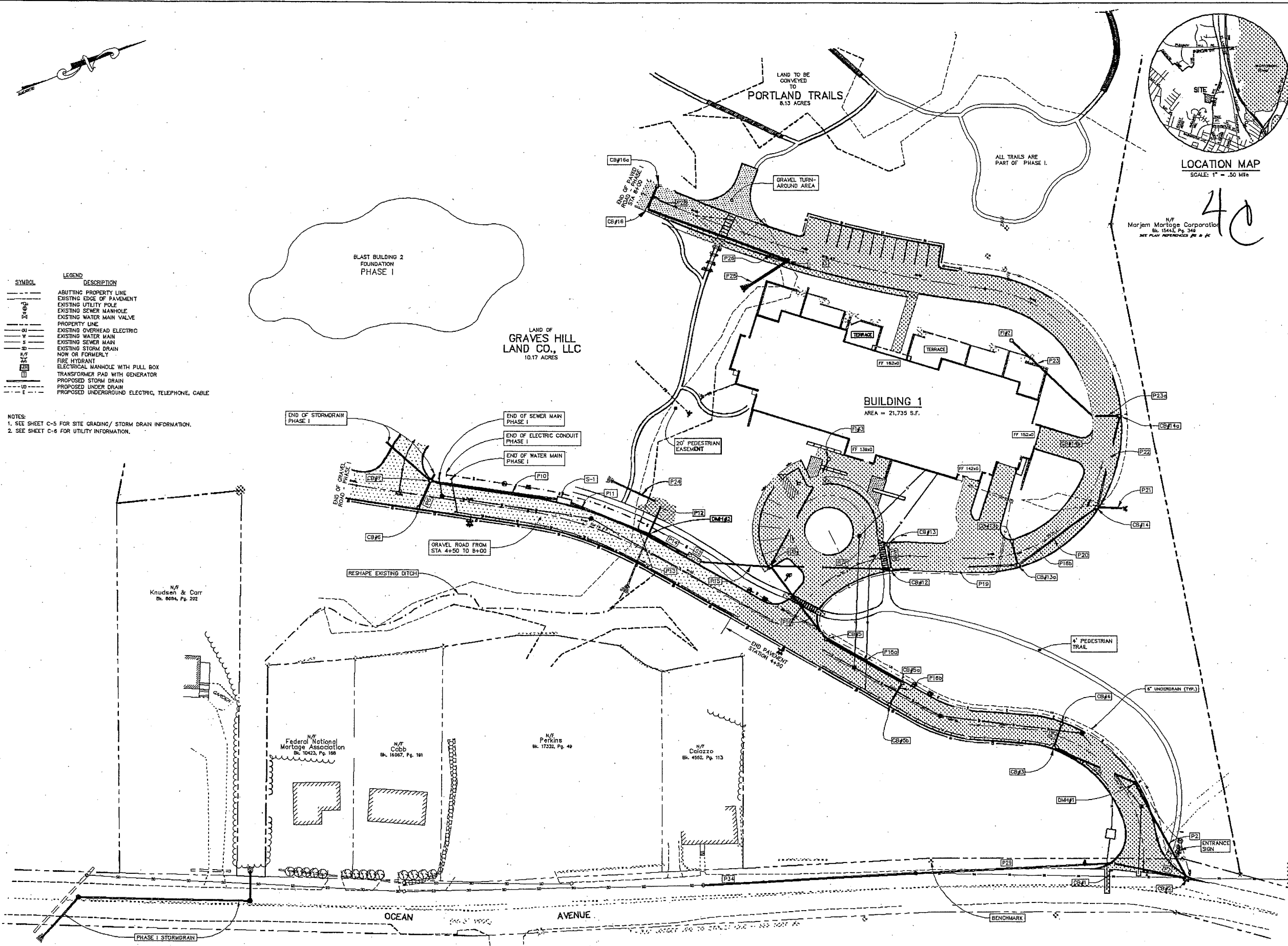
LOCATION MAP
SCALE: 1" = .50 MILE

N/F
Morjem Mortgage Corporation
Blk. 1544, Pg. 349
SEE PLAN REFERENCED IN B & C

40

SYMBOL	LEGEND	DESCRIPTION
---	---	ADJUTING PROPERTY LINE
---	---	EXISTING EDGE OF PAVEMENT
---	---	EXISTING UTILITY POLE
---	---	EXISTING SEWER MANHOLE
---	---	EXISTING WATER MAIN VALVE
---	---	PROPERTY LINE
---	---	EXISTING OVERHEAD ELECTRIC
---	---	EXISTING WATER MAIN
---	---	EXISTING SEWER MAIN
---	---	EXISTING STORM DRAIN
---	---	NOW OR FORMERLY
---	---	FIRE HYDRANT
---	---	ELECTRICAL MANHOLE WITH PULL BOX
---	---	TRANSFORMER PAD WITH GENERATOR
---	---	PROPOSED STORM DRAIN
---	---	PROPOSED UNDER DRAIN
---	---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE

NOTES:
1. SEE SHEET C-5 FOR SITE GRADING/ STORM DRAIN INFORMATION.
2. SEE SHEET C-6 FOR UTILITY INFORMATION.



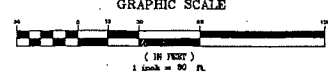
N/F
Knudsen & Carr
Blk. 6654, Pg. 292

N/F
Federal National
Mortgage Association
Blk. 10423, Pg. 168

N/F
Cobb
Blk. 16067, Pg. 191

N/F
Perkins
Blk. 17332, Pg. 49

N/F
Calozzo
Blk. 4662, Pg. 113



DOWNSTREAM STORMDRAIN
IMPROVEMENTS - PHASE I

NO.	DATE	REVISION	DESCRIPTION
1	1/7/2005	DATE OF ISSUE	PROVISIONAL
2	7/27/05	DATE OF REVISION	REVISION
3	1/7/06	DATE OF REVISION	REVISION

BH2M
BERRY • HUFF • McDONALD • MILLIGAN INC.
ENGINEERS • SURVEYORS • PLANNERS
28 State Street, Portland, Maine 04101, (207) 884-8774

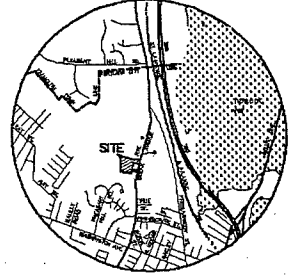
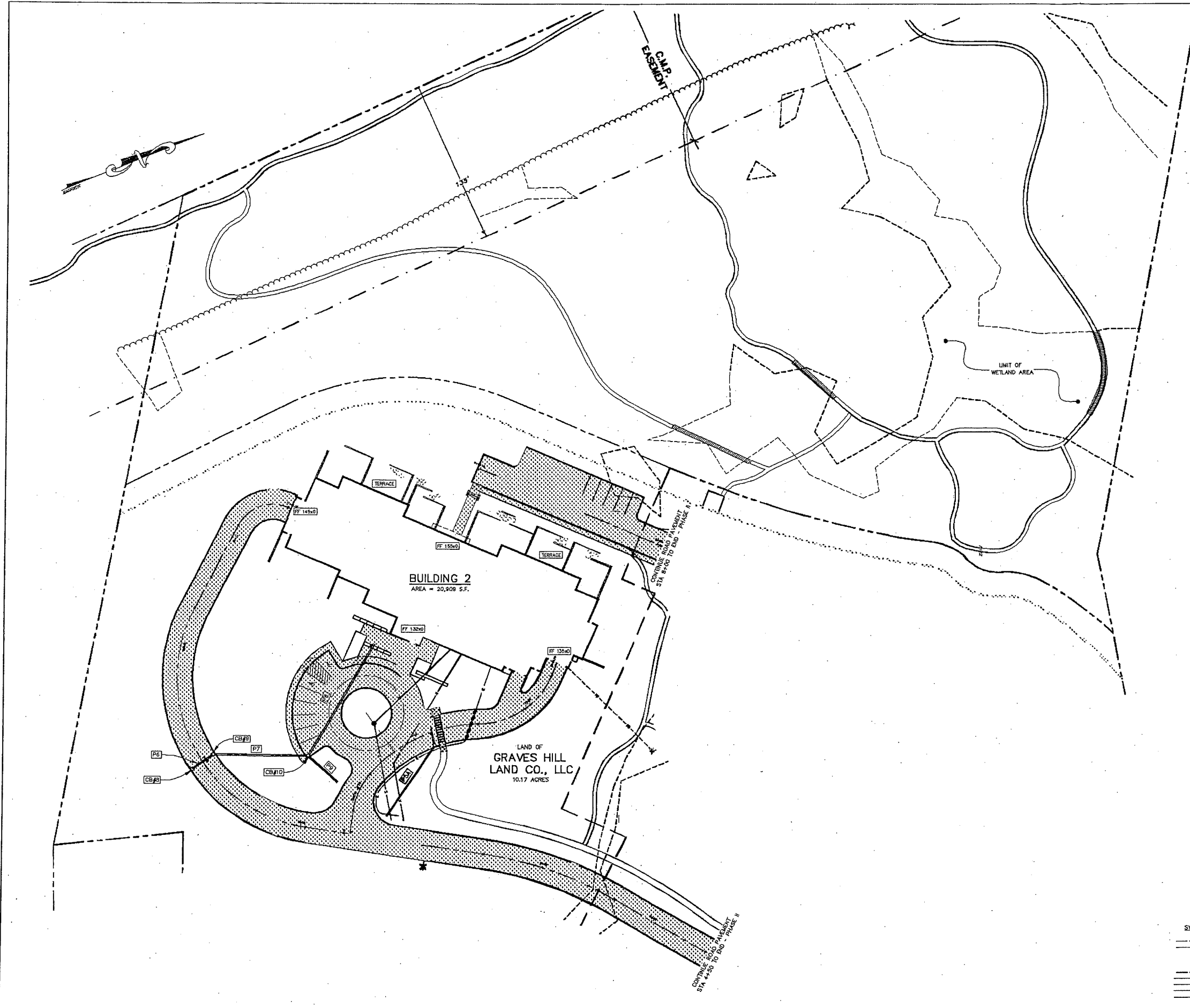
N/F
Graves Hill Land Co., LLC
1717 Main Street
Bangor, Maine 04902

PHASE I
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED L. Dwyer	DATE April 2005
DRAWN T. Peery	SCALE As Shown
CHECKED T. Peery	JOB. NO. 10655

SHEET
C-3a

REPRODUCTION OR USE OF THIS
DRAWING WITHOUT THE
WRITTEN AND EXPRESSED
CONSENT OF BH2M IS PROHIBITED



LOCATION MAP
SCALE: 1" = 50' Min

40

SYMBOL	DESCRIPTION
---	ABUTTING PROPERTY LINE
---	EXISTING EDGE OF PAVEMENT
---	EXISTING UTILITY POLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER MAIN VALVE
---	PROPERTY LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER MAIN
---	EXISTING SEWER MAIN
---	EXISTING STORM DRAIN
---	NOW OR FORMERLY
---	FIRE HYDRANT
---	PROPOSED STORM DRAIN
---	PROPOSED UNDER DRAIN
---	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE, CABLE
---	PROPOSED CENTERLINE

NOTES:
1. SEE SHEET C-5 FOR GRADING & STORM DRAIN INFORMATION.
2. SEE SHEET C-5 FOR UTILITY INFORMATION.

NO.	DATE	REVISION
1	3/20/05	DATE OF SUBMITTAL
2	9/7/05	REVISION

NO.	DATE	REVISION

BH2M
Berry • Bluff • McDowell • Milligan Inc.
ENGINEERS • SURVEYORS • PLANNERS
30 Street Street, Portland, Oregon, (503) 284-2774

BY
Graves Hill Land Co., LLC
110 Main Street
Seaside, Oregon 97138

PHASE II
GRAVES HILL CONDOMINIUM
OCEAN AVENUE
PORTLAND, MAINE

DESIGNED	DATE
L. Berry	April 2005
DRAWN	SCALE
Drawn	1" = 30'
CHECKED	JOB. NO.
L. Berry	00611

SHEET
C-3b