53-E-14

2008-0140

29 Chestnut St.

Crescent ~~St Apts~~. Heights

Developers Collaborative

GENERAL NOTES:

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF ALL REGULATIONS ADMINISTERED BY THE LOCAL UTILITY COMPANIES AND THE CITY OF PORTLAND.
2. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCES, EXITS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS.
3. ALL REQUIRED AND NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL SERVICE CONNECTIONS.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-888-DIGSAFE). IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
5. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
6. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
7. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO PROJECT CONTRACT SPECIFICATIONS, AND THE CITY OF PORTLAND TECHNICAL STANDARDS, WHICHEVER IS MORE STRINGENT.
8. TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION WAS PROVIDED BY OWEN HASKELL, INC. IN JUNE 2008. BENCHMARK IS LOCATED AT CORNER OF BRAMHALL AND HILL STREETS AS SHOWN IN LOCATION MAP OF BOUNDARY SURVEY.
9. FEMA MAP COMMUNITY PANEL NUMBER 2300510013B. THE SITE IS LOCATED IN C ZONE.
10. THE PROPERTY SHOWN ON THIS PLAN MAY BE DEVELOPED AND USED ONLY AS DEPICTED IN THIS APPROVED PLAN. ALL ELEMENTS AND FEATURES OF THE PLAN AND ALL THE PROPERTY WHICH APPEARS IN THE RECORD OF THE PLANNING BOARD PROCEEDINGS ARE CONDITIONS OF THE APPROVAL. NO CHANGE FROM THE CONDITIONS OF APPROVALS IS PERMITTED UNLESS AN AMENDED PLAN IS FIRST SUBMITTED TO AND APPROVED BY THE PLANNING AUTHORITY.
11. ALL SIGNAGE SHALL CONFORM TO THE STANDARDS FOR SIZE, HEIGHT, LOCATION AND REFLECTIVITY SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
12. ALL CURB SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS AS NOTED ON THE PLANS: GRANITE AND BITUMINOUS CONCRETE CURB SHALL MEET THE REQUIREMENTS OF MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS 609.03 AND 609.04 AND CITY OF PORTLAND TECHNICAL STANDARDS.
13. ALL DIMENSIONING UNLESS OTHERWISE NOTED IS TO THE FACE OF CURB OR FACE OF BUILDING.
14. THE FACILITY IS SERVICED BY PUBLIC WATER, SEWER, NATURAL GAS AND UNDERGROUND POWER.
15. THE CONTRACTOR IS REQUIRED TO NOTIFY THE CITY OF PORTLAND PUBLIC WORKS INSPECTION SERVICES DIVISION (874-8300 EXT. 8838), CODE ENFORCEMENT OFFICE AND DEVELOPMENT REVIEW COORDINATOR IN WRITING THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. A PRECONSTRUCTION MEETING MAY BE REQUIRED TO INCLUDE THE PUBLIC WORKS AUTHORITY OR DEVELOPMENT REVIEW COORDINATOR.
16. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.
17. WARNING SIGNS, MARKERS, BARRICADES OR FLAGMEN MUST BE EMPLOYED ON ADJACENT STREETS AS NECESSARY.
18. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED AND DISPOSED OF IN ACCORDANCE WITH THE CITY OF PORTLAND'S SOLID WASTE ORDINANCE CHAPTER 12. ALL DEMOLITION MATERIAL FROM THE PROJECT SITES SHALL BE TAKEN TO THE RIVERSIDE RECYCLING FACILITY OR AS OTHERWISE DIRECTED PENDING THE RESULTS OF A HAZARDOUS BUILDING MATERIALS SURVEY AS AUTHORIZED AND COORDINATED BY THE OWNER. ALL SALVAGED MATERIAL WITHIN THE PUBLIC R.O.W.(SIDEWALKS, BRICKS, GRANITE CURB) NOT REUSED SHALL BE DISPOSED OF AS DIRECTED BY THE PORTLAND PUBLIC SERVICES DEPARTMENT AT NO EXTRA COST TO THE OWNER.
19. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
20. PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AT ALL TIMES DURING CONSTRUCTION TO INSURE INTEGRITY. IF DISTURBED THEY SHALL BE REPLACED BY A SURVEYOR REGISTERED IN THE STATE OF MAINE AT THE CONTRACTOR EXPENSE.
21. THE OWNER SHALL BE RESPONSIBLE TO COORDINATE THE PERFORMANCE OF A HAZARDOUS MATERIALS INSPECTION OF THE EXISTING PROPERTIES.
22. A STREET OPENING PERMIT MUST BE OBTAINED FROM THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COMPLETED IN CONFORMANCE TO THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS.
23. CONTRACTOR MUST MAINTAIN THROUGH TRAFFIC ON CRESCENT AND WESCOTT STREETS AT ALL TIMES.
24. ALL METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS IDENTIFIED HEREIN SHALL CONFORM TO THE CITY OF PORTLAND CONSTRUCTION AND TECHNICAL STANDARDS AND SPECIFICATIONS AND/OR CURRENT MDOT STANDARDS AND SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
25. SITE WORK FOR BUILDING SHALL INCLUDE GRADING THE BUILDING PAD AREA (DEFINED AS THE BUILDING FOOTPRINT PLUS 5'-0" BEYOND THE EXTERIOR WALL) TO A GRADE 18" BELOW THE GROUND FLOOR FINISH ELEVATION. ALL WORK SHALL INCLUDE EXCAVATION (INCLUDING ROCK REMOVAL AND EXISTING FOUNDATION DEMOLITION) AND BACKFILL OF ALL FOOTINGS AND FOUNDATIONS, INSTALLATION OF PERIMETER FOUNDATION DRAINS, EXCAVATION AND BACKFILL OF ALL UNDERSLAB UTILITIES AND PLACEMENT OF ALL AGGREGATES BELOW THE FLOOR SLAB AND ADJACENT THE FOUNDATION WALLS IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
26. RECORD DRAWINGS REQUIRE ALL BURIED UTILITIES INCLUDING, BUT NOT LIMITED TO, BENDS, APPURTENANCES, AND OTHER FEATURES TO BE LOCATED BY COORDINATE INFORMATION TO BE RECORDED BY THE CONTRACTOR AND SUPPLIED TO THE OWNER AT THE END OF THE PROJECT.

ZONING SUMMARY
ZONING: RESIDENTIAL- 6
PERMITTED USES:

RESIDENTIAL:
- SINGLE-FAMILY, TWO-FAMILY AND MULTI-FAMILY DWELLING UNIT
- HANDICAPPED FAMILY UNIT
- SINGLE-FAMILY, SINGLE-FAMILY AND MULTIPLE FAMILY COMPONENT MANUFACTURED HOUSING

OTHER:
- LODGING HOUSE
- CEMETERIES
- PARKS AND NON-COMMERCIAL RECREATION SPACE
- ACCESSORY USES INCIDENTAL TO PRINCIPLE USES
- HOME OCCUPATION
- MUNICIPAL USES
- SPECIAL NEEDS INDEPENDENT LIVING UNITS
- CONVERSION TO BED AND BREAKFAST (UP TO 4 BEDROOM)

DIMENSIONAL STANDARD	REQUIRED DIMENSION	PROVIDED DIMENSION
MINIMUM LOT SIZE	4,500 SF	13,525.8 SF
MINIMUM AREA PER ROOMING UNIT	250 SF - 44 BEDS @ 250 S.F. = 11,000 SF	19,163 SF TOTAL
MINIMUM STREET FRONTAGE	40 FEET	113.07 FEET
MINIMUM FRONT YARD	10 FEET OR THE AVERAGE DEPTH OF THE FRONT YARDS ON EITHER SIDE. AVERAGE DEPTH = 1 FOOT	2 FEET
MINIMUM REAR YARD	20 FEET	24 FEET
MINIMUM SIDE YARD	4 STORY-12 FEET. 5 STORY = 15 FEET THE WIDTH OF ONE SIDE YARD MAY BE REDUCED 1 FT. FOR EVERY FOOT THAT THE OTHER SIDE IS CORRESPONDINGLY INCREASED, BUT NO SIDE YARD SHALL BE LESS THAN 10 FEET	12 FEET
MAXIMUM LOT COVERAGE	40% FOR LOTS CONTAINING 20 OR MORE UNITS. 50% FOR LOTS CONTAINING FEWER THAN 20 UNITS.	36.29%
MINIMUM LOT WIDTH	50 FEET	74 FEET
MAXIMUM STRUCTURE HEIGHT	45 FEET	45 FEET *
OPEN SPACE RATIO	20% FOR LOTS CONTAINING FEWER THAN 20 UNITS AND 30% FOR LOTS CONTAINING 20 UNITS OR GREATER.	48.70%

* COMPLIANCE WITH CODE SECTION 14-139(i)(g) RELATED TO BUILDING HEIGHT HAS BEEN CONFIRMED BY WINTON SCOTT ARCHITECTS UNDER SEPARATE CORRESPONDENCE WITH THE PORTLAND CODE ENFORCEMENT OFFICE.

BUILDING SUMMARY

FOOTPRINT:	4908 S.F.
TOTAL:	19,163 S.F.
# BEDS:	44
# UNITS	11
# STORIES:	4

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n = 0.013 OR LESS. UNLESS A SPECIFIC PIPE MATERIAL IS CALLED FOR ON THE CONTRACT DRAWINGS. PVC PIPING SHALL NOT BE USED IN AREAS OF EXPOSED SUNLIGHT.
2. SLOPE PROTECTION IS TO BE PROVIDED PER THE DESIGN PLANS AND MAY INCLUDE RIPRAP, SOD OR MULCH.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EARTHWORK OPERATIONS TO INSURE THAT DISTURBANCE TO THE STEEP SLOPE AREAS ARE MINIMIZED TO THE EXTENT PRACTICABLE.
4. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY OTHERS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
5. ALL PAVING WITHIN THE PUBLIC R.O.W. SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC R.O.W.
6. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
7. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
8. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES AND PHYSICAL FEATURES THAT ARE OUTSIDE THE SCOPE OF WORK. THE CONTRACTOR SHALL MAINTAIN SITE STABILITY DURING CONSTRUCTION TO AVOID EROSION AND SEDIMENT TRANSPORT. CONTRACTOR SHALL RESTORE ALL AREAS TO A FINAL STABILIZED CONDITION AS DIRECTED BY DESIGN DRAWINGS.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
10. EXTERIOR GRADES AROUND PROPOSED STRUCTURE SHALL BE COORDINATED WITH FINAL BUILDING PLANS AND PROVIDE FOR ALL ACCESS OPENINGS.
11. SUBGRADE FILL PLACED BENEATH ALL PERMANENT PAVEMENT, SIDEWALK OR CONCRETE SURFACES EXCLUDING ANY BUILDING AREAS, SHALL BE GRANULAR BORROW. SUBGRADE FILL PLACED BENEATH ALL LANDSCAPE AREAS EXCEPT THOSE ADJACENT THE FOUNDATION SYSTEMS MAY BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUBGRADE CONSTRUCTION. EXCAVATED ON-SITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. EXCAVATED ONSITE MATERIALS MAY NOT BE USED AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS OR AS FOUNDATION BACKFILL. GRANULAR BORROW AND COMMON BORROW SHALL COMPLY WITH THE MDOT SPECIFICATIONS.
12. ALL FILLS SHALL BE PLACED IN LAYERS NOT MORE THAN 12" LOOSE DEPTH AND COMPACTED BY HEAVY COMPACTION EQUIPMENT. MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ASTM 1557, MODIFIED AND FIELD DENSITY ASTM D2922 (NUCLEAR METHODS).

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE STABILIZED CONSTRUCTION ENTRANCES.
3. SILT BARRIERS SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.
4. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS THEY BECOME SATURATED WITH MUD TO ENSURE THAT THEY WORK AS PLANNED DURING CONSTRUCTION AND SHALL KEEP CRESCENT STREET CLEAR OF DIRT AND MUD.
5. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.
6. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITIES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST THREE (3) BUT NOT MORE THAN (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A.
7. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AS SPECIFIED ON PLANS.
8. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

UTILITY NOTES:

1. ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED BETWEEN THE SITE WORK CONTRACTOR AND DIVISION 22/26 CONTRACTOR(S). THE SITE WORK CONTRACTOR SHALL BE RESPONSIBLE TO EXTEND ALL PROPOSED UTILITIES TO WITHIN FIVE (5) FEET OF THE BUILDING TO A LOCATION COORDINATED WITH THE MECHANICAL AND ELECTRICAL SUBCONTRACTORS. THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES WITHIN FIVE (5) FEET AND INSIDE THE BUILDING OR UNDER SLAB.
2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH FAIRPOINT COMMUNICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.
3. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER; THE TELECOMMUNICATIONS SERVICE WITH FAIRPOINT COMMUNICATIONS AND CABLE SERVICE WITH TIME WARNER CABLE. ALL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS OR UTILITY COMPANY STANDARDS, WHICHEVER IS MORE STRINGENT.
4. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
6. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.
8. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.
9. THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE JOBSITE. TEMPORARY SERVICES SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. COORDINATE ALL TEMPORARY SERVICES WITH UTILITY COMPANY, OWNER AND AFFECTED BUSINESSES.
10. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY ELECTRICAL SERVICES IN CONDUIT TO SITE LIGHTING, COMPLYING WITH APPLICABLE CODES. COORDINATE WITH OWNER AND ARCHITECTURAL AND CMP PLANS.
11. ALL SANITARY SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT. ALL SANITARY SERVICES AND APPURTENANCES TO BE ABANDONED SHALL BE PROPERLY RECORDED WITH PORTLAND PUBLIC WORKS ENGINEERING DEPARTMENT. A DIGITAL VIDEOTAPE SHALL BE MADE OF SANITARY SEWER SYSTEMS TO BE UTILIZED PRIOR TO CONSTRUCTION; UPSTREAM PIPES INTENDED FOR ABANDONMENT SHALL BE INSPECTED TO VERIFY THAT THEY NO LONGER SERVE OTHER FACILITIES.
12. THE DEMOLITION CONTRACTOR SHALL OBTAIN A SEAL DRAIN PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICES PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, SUCH WORK TO BE PERFORMED UNDER SEPARATE CONTRACT. THE SEWER LATERALS SHALL BE SEALED BY THE DEMOLITION CONTRACTOR OUTSIDE OF THE BUILDINGS AND INSPECTED PRIOR TO THE BUILDING DEMOLITION THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE TO SEAL AND INSPECT THE UNUSED SEWER LATERALS AT THE SEWER MAIN.

SITE & SUBGRADE PREPARATION NOTES

EXCERPT FROM GEOTECHNICAL REPORT 08-0744 DATED OCTOBER 24, 2008 PREPARED BY S.W. COLE ENGINEERING, INC.

NOTEWELL: ALL FOUNDATION PREPARATION SHALL BE COORDINATED WITH THE STRUCTURAL DESIGN PLANS PREPARED BY BECKER STRUCTURAL ENGINEERS.

SITE PREPARATION SHOULD BEGIN WITH THE CONSTRUCTION OF AN EROSION CONTROL SYSTEM TO PROTECT ADJACENT DRAINAGE WAYS AND AREAS OUTSIDE THE CONSTRUCTION LIMITS. PROPOSED CONSTRUCTION AREAS SHOULD BE CLEARED AND GRUBBED OF ALL ORGANIC MATTER AND TOPSOIL. AS MUCH VEGETATION AS POSSIBLE SHOULD REMAIN OVER INACTIVE AREAS OF CONSTRUCTION TO LESSEN THE POTENTIAL FOR EROSION AND SITE DISTURBANCE. S.W. COLE RECOMMENDS THAT EXISTING FOUNDATIONS, SLABS AND BURIED UTILITIES BENEATH THE PROPOSED BUILDING FOOTING PRINT BE COMPLETELY REMOVED AND BACKFILLED WITH COMPACTED STRUCTURAL BACKFILL.

TERRACE AREA OF BUILDING PAD:

BASED ON THE SUBSURFACE FINDINGS AND S.W. COLE'S UNDERSTANDING OF THE PROPOSED CONSTRUCTION, S.W. COLE ANTICIPATES THAT FOOTINGS ON THE UPPER TERRACE OF THE SITE, GENERALLY WITHIN THE FOOTPRINT OF THE EXISTING BUILDINGS, WILL ENCOUNTER MEDIUM DENSE TO DENSE GLACIAL TILL SOILS OR COMPACTED STRUCTURAL BACKFILL. FOR FOOTINGS IS THIS AREA, S.W. COLE RECOMMENDS THAT EXCAVATION BE COMPLETED WITH A SMOOTH-EDGED BUCKET AND SUBGRADES BE PROTECTED WITH 6 INCHES OF CRUSHED STONE PLACED OVER WOVEN GEOTEXTILE FABRIC SUCH AS MIRAFI 500X.

SLOPING AREA OF BUILDING PAD:

BASED ON THE SUBSURFACE FINDINGS AND S.W. COLE'S UNDERSTANDING OF THE PROPOSED CONSTRUCTION, THEY ANTICIPATE THAT FOOTINGS ON THE SLOPING PORTION OF THE SITE WILL ENCOUNTER SURFICIAL FILLS THAT ARE UNSUITABLE FOR DIRECT FOUNDATION SUPPORT. FOR FOOTING SUBGRADES IN THE SLOPE AREA OF THE BUILDING PAD, S.W. COLE RECOMMENDS REMOVING THE EXISTING FILLS DOWN TO DENSE GLACIAL TILL AND BACKFILLING WITH COMPACTED STRUCTURAL FILL. REMOVING AND BACKFILLING THE UNSUITABLE SOILS WILL REQUIRE DISPLACING SOIL FROM THE SITE AND IMPORTING SUITABLE STRUCTURAL FILL. THE LIMITS OF EXCAVATION FOR UNSUITABLE FILL REMOVAL SHOULD EXTEND 1 FOOT LATERALLY OUTWARD FROM THE BUILDING FOOTPRINT FOR EACH FOOT OF EXCAVATION DEPTH, UNLESS FOOTINGS ARE FOUNDED AT THE ELEVATION OF DENSE GLACIAL TILL.

FOUNDATION DRAINAGE:

WE RECOMMEND THAT FOUNDATION UNDERDRAINS BE PROVIDED AROUND THE EXTERIOR OF PERIMETER FOUNDATIONS AS WELL AS BELOW INTERIOR PORTIONS OF BASEMENT SLABS ON THE UPSLOPE SIDE OF THE PROPOSED BUILDING. THE UNDERDRAINS MAY CONSIST OF 6-INCH DIAMETER HDPE UNDERDRAIN PIPE WITH FILTER SOCK ENVELOPED IN AT LEAST 6 INCHES OF UNDERDRAIN SAND AND BACKFILL WITH FREE-DRAINING SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL AS GIVEN HEREIN. THE UNDERDRAINS SHOULD BE INSTALLED AT FOOTING SUBGRADE ELEVATION AND ROUTED TO A POSITIVE GRAVITY OUTLET. ROOF DRAINS MUST BE ROUTED IN SEPARATE WATERTIGHT PIPES.

ENTRANCE SLABS AND SIDEWALKS:

CLEAN, NON-FROST SUSCEPTIBLE SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL SHALL BE PROVIDED TO A DEPTH OF AT LEAST 4.5 FEET BELOW THE TOP OF ENTRANCE SLABS. THIS THICKNESS OF STRUCTURAL FILL SHOULD EXTEND THE FULL WIDTH OF THE ENTRANCE SLABS AND OUTWARD AT LEAST 4.5 FEET, THEREAFTER TRANSITIONING UP TO BOTTOM ADJACENT SIDEWALK OR PAVEMENT SUBBASE GRAVEL AT A 3H:1V OR FLATTER SLOPE. SEE DETAIL G ON SHEET C-13B FOR FURTHER INFORMATION.

ON-GRADE FLOOR SLABS:

ON-GRADE FLOOR SLABS IN HEATED SPACES MAY BE DESIGNED USING A SUBGRADE REACTION MODULUS OF 150 PCI PROVIDED THE SLAB IS UNDERLAIN BY AT LEAST 12 INCHES OF STRUCTURAL FILL OVERLYING A PROPERLY PREPARED SUBGRADE. ALL EXISTING UNSUITABLE FILLS BELOW THE SLAB IN THE SLOPING AREA OF THE SITE SHOULD BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL.

BACKFILL AND COMPACTION:

BASED ON THE SURFACE FINDINGS, THE EXISTING SURFICIAL FILLS ARE FROST SUSCEPTIBLE AND UNSUITABLE FOR REUSE AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS AND AS FOUNDATION BACKFILL.

LEGEND

EXISTING	PROPOSED
PROPERTY BOUNDARY	CONTOUR LINE
5/8"IRON ROD TO BE SET	EDGE OF PAVEMENT
IRON PIPE FOUND	UTILITY LINE
MONUMENT FOUND	BUILDING
N/F NOW OR FORMERLY	CATCH BASIN
UTILITY POLE	STORM DRAIN MANHOLE
SIGN	STORM DRAIN LINE
EXISTING MANHOLE	FENCE
CATCH BASIN	VERTICAL GRANITE CURB
GRANITE CURB	BOLLARD LIGHT
WATER VALVE	BRICK SIDEWALK
HYDRANT	CONCRETE PAD
LIGHT POLE (UNLESS NOTED)	BLUESTONE PAVING STONE
EXISTING BUILDING	RIPRAP
EXISTING CONTOUR	
UNDERGROUND TELEPHONE LINE	
SEWER LINE	
STORM DRAIN LINE	
WATER LINE	
GAS LINE	
EDGE OF PAVEMENT	
PVC CLEANOUT	
SURVEY CONTROL POINT	
TIE BACK	
RIPRAP	
ORNAMENTAL OR WOOD FENCE	
EXISTING TREES	
BRICK SIDEWALK	

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS - RELEASED FOR CM REVIEW
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REPLIED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE - STEPHEN R. BUSHEY - NO. 7429 - LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: GENERAL NOTES AND LEGEND

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-GEN.		
SHEET	C-2		

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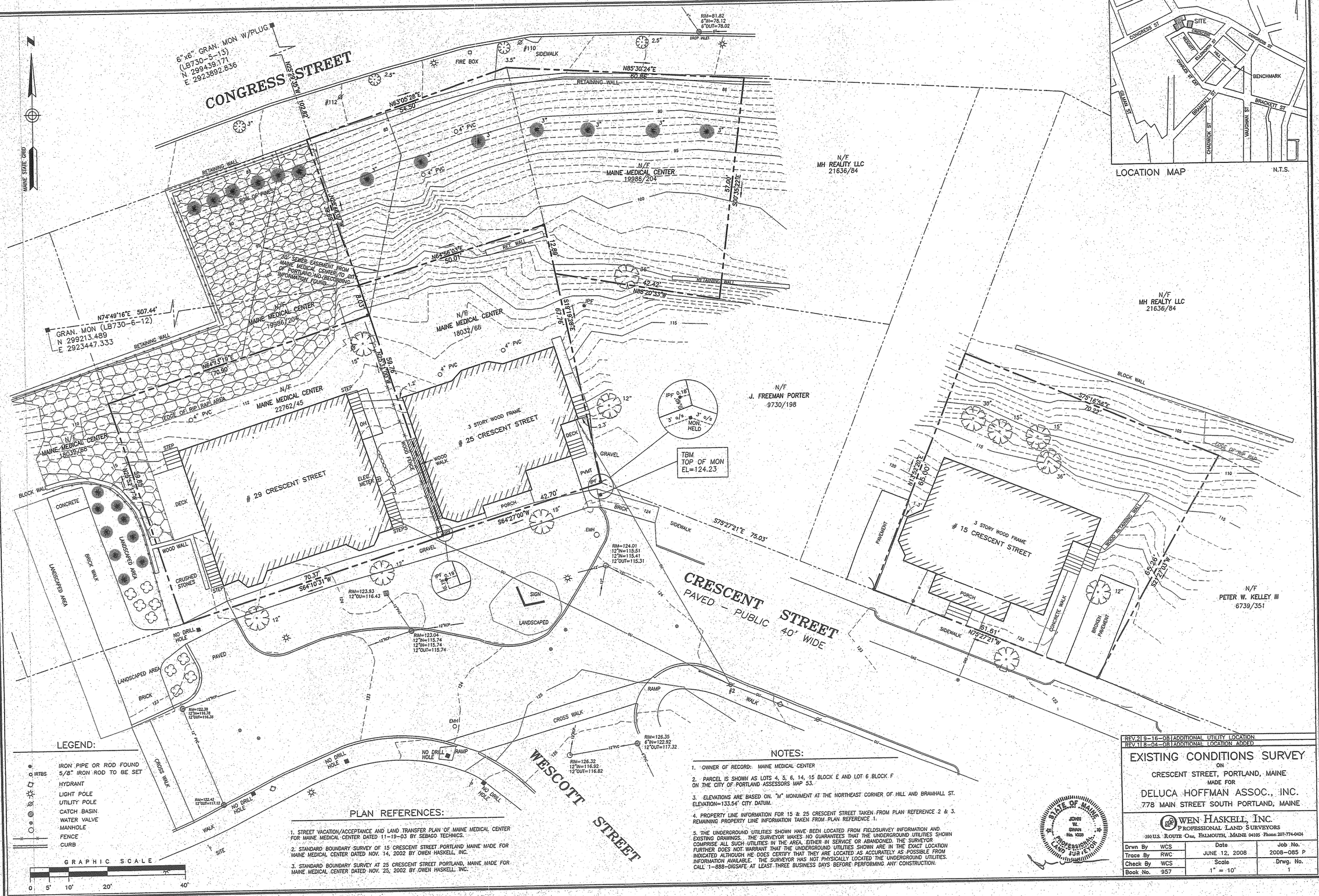


LEGEND:

- IRON PIPE OR ROD FOUND
- IRTBS 5/8" IRON ROD TO BE SET
- HYDRANT
- LIGHT POLE
- UTILITY POLE
- CATCH BASIN
- WATER VALVE
- MANHOLE
- FENCE
- CURB

GRAPHIC SCALE
0 5' 10' 20' 40'

PLAN REFERENCES:

1. STREET VACATION/ACCEPTANCE AND LAND TRANSFER PLAN OF MAINE MEDICAL CENTER FOR MAINE MEDICAL CENTER DATED 11-19-03 BY SEBAGO TECHNICS.
2. STANDARD BOUNDARY SURVEY OF 15 CRESCENT STREET PORTLAND MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 14, 2002 BY OWEN HASKELL, INC.
3. STANDARD BOUNDARY SURVEY AT 25 CRESCENT STREET PORTLAND, MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 25, 2002 BY OWEN HASKELL, INC.

NOTES:

1. OWNER OF RECORD: MAINE MEDICAL CENTER
2. PARCEL IS SHOWN AS LOTS 4, 5, 6, 14, 15 BLOCK E AND LOT 6 BLOCK F ON THE CITY OF PORTLAND ASSESSORS MAP 53.
3. ELEVATIONS ARE BASED ON "M" MONUMENT AT THE NORTHEAST CORNER OF HILL AND BRAMHALL ST. ELEVATION=133.54' CITY DATUM.
4. PROPERTY LINE INFORMATION FOR 15 & 25 CRESCENT STREET TAKEN FROM PLAN REFERENCE 2 & 3. REMAINING PROPERTY LINE INFORMATION TAKEN FROM PLAN REFERENCE 1.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELDSURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.

STATE OF MAINE
JOHN W. SWAIN
No. 10029
PROFESSIONAL LAND SURVEYOR

REV.	DATE	DESCRIPTION
2	9-16-08	ADDITIONAL UTILITY LOCATION
1	8-04-08	ADDITIONAL LOCATION ADDED

EXISTING CONDITIONS SURVEY

ON

CRESCENT STREET, PORTLAND, MAINE

MADE FOR

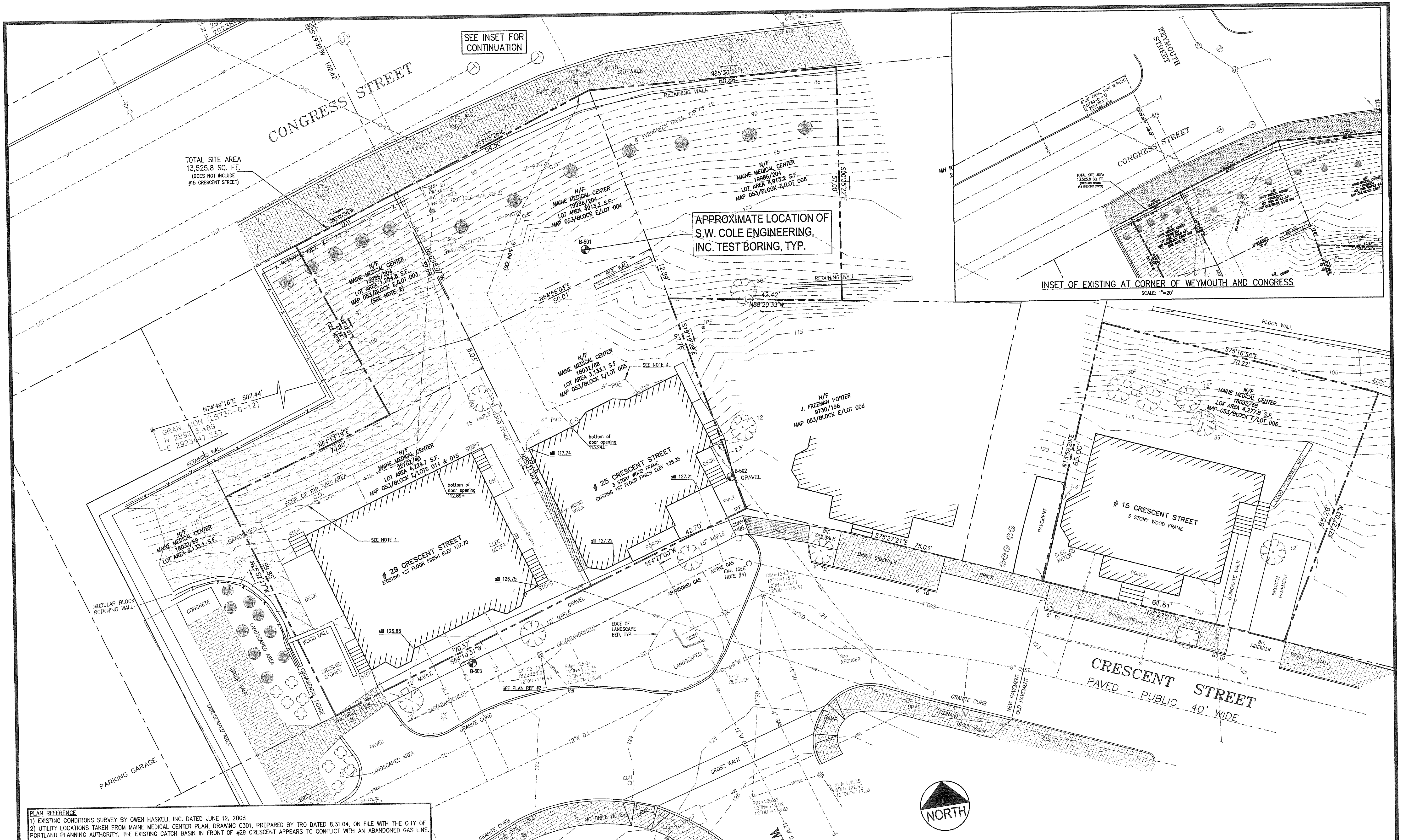
DELUCA HOFFMAN ASSOC., INC.

778 MAIN STREET SOUTH PORTLAND, MAINE

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE One, FALMOUTH, MAINE 04105 Phone: 207-774-0424

Drwn By	WCS	Date	Job No.
Trace By	RWC	JUNE 12, 2008	2008-085 P
Check By	WCS	Scale	Drwg. No.
Book No.	957	1" = 10'	1

C:\drawings\2008-085 CRESCENT S\08-085.dwg, 11/18/2009 9:21:03 AM, 1:10



PLAN REFERENCE

1) EXISTING CONDITIONS SURVEY BY OWEN HASKELL INC. DATED JUNE 12, 2008

2) UTILITY LOCATIONS TAKEN FROM MAINE MEDICAL CENTER PLAN, DRAWING C301, PREPARED BY TRO DATED 8.31.04, ON FILE WITH THE CITY OF PORTLAND PLANNING AUTHORITY. THE EXISTING CATCH BASIN IN FRONT OF #29 CRESCENT APPEARS TO CONFLICT WITH AN ABANDONED GAS LINE.

NOTES:

1) PORTION OF FORMER SANITARY SEWER FROM MAINE MEDICAL CENTER DISCONTINUED AS PART OF PARKING GARAGE PROJECT

2) PORTION OF LOT DESCRIBED IN CCRD BOOK 19986/ PAGE 204 CONVEYED TO CRESCENT HEIGHTS LLC BY MMC.

3) THE EXACT LOCATION OF UNDERGROUND POWER/TELEPHONE/CABLE INTO THE EXISTING BUILDINGS IS UNKNOWN. THE ENGINEER HAS NOT ENTERED THE BUILDINGS TO DETERMINE THIS INFORMATION.

4) SANITARY SEWER LOCATION FOR #25 TAKEN FROM CITY SEWER CARD RECORDS

5) NO CITY SEWER RECORD AVAILABLE FOR 15 CRESCENT ST. LOCATION OF SEWER LATERAL BASED ON DIMENSIONS PROVIDED BY CITY OF PORTLAND VIDEO INSPECTION LOG REPORT DATED 7.13.99.

6) THIS STRUCTURE IS A 4' DIA. PRECAST VAULT WITH COMMUNICATIONS WIRES OF UNKNOWN ORIGIN. IT IS UNKNOWN IF THESE FACILITIES ARE ACTIVE OR ABANDONED. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND MAINTAIN THESE FACILITIES DURING CONSTRUCTION AT NO EXTRA EXPENSE TO THE OWNER.

7)THE CONTRACTOR SHALL CONFIRM ALL EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID AND TAKE NOTE THAT CERTAIN FEATURES MAY NOT BE REFLECTED ON THIS PLAN. THIS PLAN DOES NOT REFLECT CERTAIN REMARKS BY OTHERS WHICH MAY BE PERFORMED PRIOR TO THE START OF BUILDING CONSTRUCTION.

REV	DATE	DESCRIPTION
7	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
6	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
5	12.19.08	RESUBMITTED TO CITY OF PORTLAND
4	11.18.08	SUBMITTED TO CITY OF PORTLAND
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE · STEPHEN R. BUSHEY · No. 7429 · LICENSED · PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EXISTING CONDITIONS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-4		

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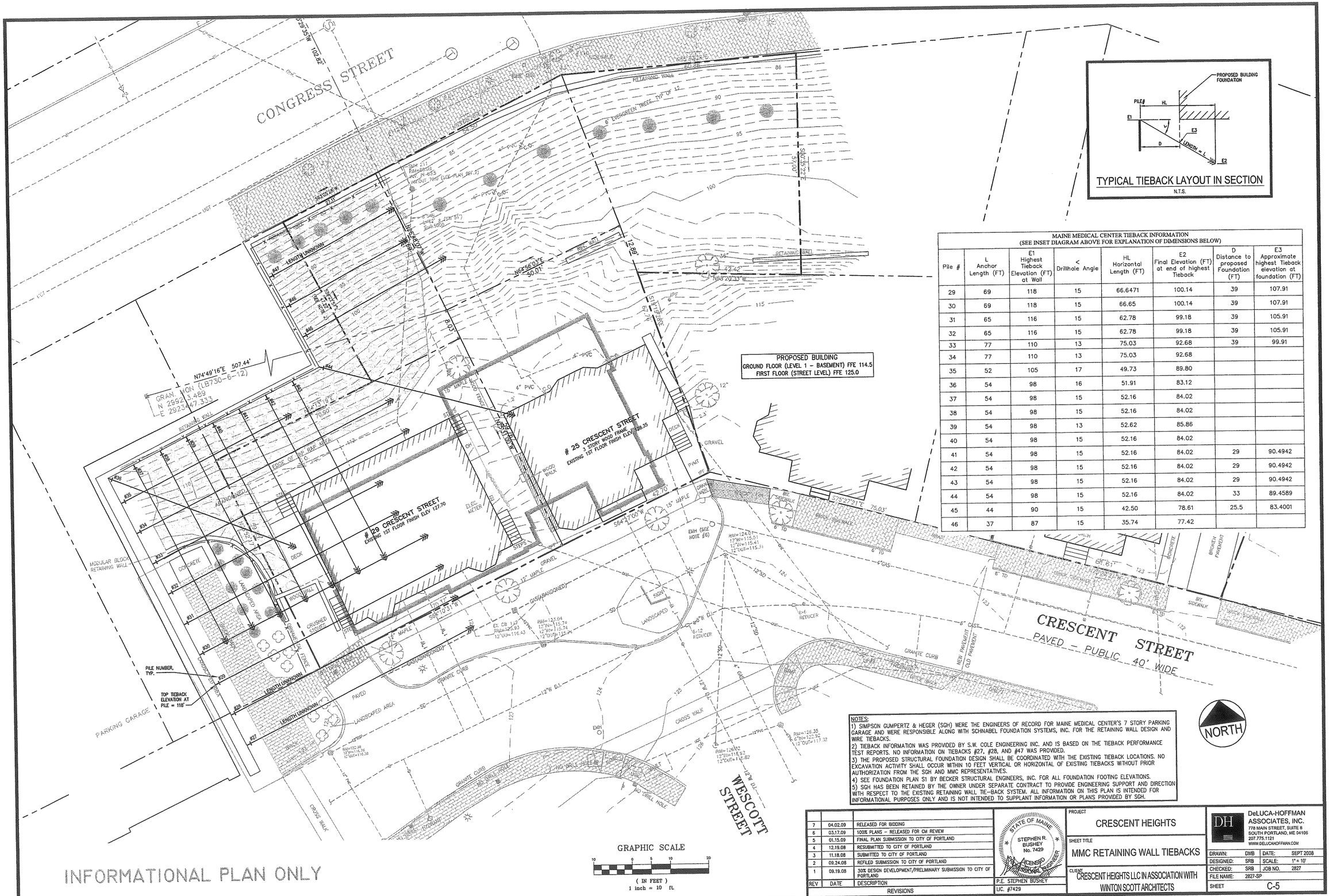

MAINE MEDICAL CENTER TIEBACK INFORMATION
(SEE INSET DIAGRAM ABOVE FOR EXPLANATION OF DIMENSIONS BELOW)

Pile #	L Anchor Length (FT)	E1 Highest Tieback Elevation (FT) at Wall	< Drillhole Angle	HL Horizontal Length (FT)	E2 Final Elevation (FT) at end of highest Tieback	D Distance to proposed Foundation (FT)	E3 Approximate highest Tieback elevation at foundation (FT)
29	69	118	15	66.6471	100.14	39	107.91
30	69	118	15	66.65	100.14	39	107.91
31	65	116	15	62.78	99.18	39	105.91
32	65	116	15	62.78	99.18	39	105.91
33	77	110	13	75.03	92.68	39	99.91
34	77	110	13	75.03	92.68		
35	52	105	17	49.73	89.80		
36	54	98	16	51.91	83.12		
37	54	98	15	52.16	84.02		
38	54	98	15	52.16	84.02		
39	54	98	13	52.62	85.86		
40	54	98	15	52.16	84.02		
41	54	98	15	52.16	84.02	29	90.4942
42	54	98	15	52.16	84.02	29	90.4942
43	54	98	15	52.16	84.02	29	90.4942
44	54	98	15	52.16	84.02	33	89.4589
45	44	90	15	42.50	78.61	25.5	83.4001
46	37	87	15	35.74	77.42		

NOTES:
1) SIMPSON GUMPERTZ & HEGER (SGH) WERE THE ENGINEERS OF RECORD FOR MAINE MEDICAL CENTER'S 7 STORY PARKING GARAGE AND WERE RESPONSIBLE ALONG WITH SCHNABEL FOUNDATION SYSTEMS, INC. FOR THE RETAINING WALL DESIGN AND WIRE TIEBACKS.
2) TIEBACK INFORMATION WAS PROVIDED BY S.W. COLE ENGINEERING INC. AND IS BASED ON THE TIEBACK PERFORMANCE TEST REPORTS. NO INFORMATION ON TIEBACKS #27, #28, AND #47 WAS PROVIDED.
3) THE PROPOSED STRUCTURAL FOUNDATION DESIGN SHALL BE COORDINATED WITH THE EXISTING TIEBACK LOCATIONS. NO EXCAVATION ACTIVITY SHALL OCCUR WITHIN 10 FEET VERTICAL OR HORIZONTAL OF EXISTING TIEBACKS WITHOUT PRIOR AUTHORIZATION FROM THE SGH AND MMC REPRESENTATIVES.
4) SEE FOUNDATION PLAN S1 BY BECKER STRUCTURAL ENGINEERS, INC. FOR ALL FOUNDATION FOOTING ELEVATIONS.
5) SGH HAS BEEN RETAINED BY THE OWNER UNDER SEPARATE CONTRACT TO PROVIDE ENGINEERING SUPPORT AND DIRECTION WITH RESPECT TO THE EXISTING RETAINING WALL TIE-BACK SYSTEM. ALL INFORMATION ON THIS PLAN IS INTENDED FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED TO SUPPLANT INFORMATION OR PLANS PROVIDED BY SGH.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
MMC RETAINING WALL TIEBACKS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-5		

G:\2827 Crescent Street Apt\dwg\OPTION 2\2827-SP-OPTION 2.dwg, TIEBACKS, 4/2/2009 9:48:47 AM, cwintermute

INSTALL AND MAINTAIN DOUBLE ROW OF SILT FENCE

CONGRESS STREET

INSTALL SILT FENCE, TYP.

GRAN. MON (LB730-6-12)
N 2992 3.489
E 2923447.333

THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE TO COVER EXPOSED SOILS DURING THE COURSE OF EXISTING FOUNDATION-DEMOLITION AND PROPOSED FOUNDATION PREPARATION. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, PLASTIC SHEETING, SAND BAGS, HAY BALES, EROSION CONTROL BLANKET. ALL CONSTRUCTION DEWATERING SHALL BE DIRECTED TO AN APPROVED SEDIMENT CAPTURE DEVICE SUCH AS A DIRTBAG OR APPROVED EQUAL. TURBID WATER SHALL NOT BE DISCHARGED TO EXISTING CATCH BASINS OR MANHOLES. IF NECESSARY TURBID WATER SHALL BE PUMPED TO A VAC TRUCK AND REMOVED FROM THE SITE FOR DISPOSAL AT AN APPROVED LOCATION.

ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE – ADJUST AS NECESSARY DURING COURSE OR WORK, TYP

25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35

29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70

15 CRESCENT STREET
3 STORY WOOD FRAME

INSTALL AND MAINTAIN TEMPORARY SILT FENCE DURING DEMOLITION OF HOUSE #15 AND BACKFILLING OF FOUNDATION HOLE.

INSTALL STABILIZED CONSTRUCTION ENTRANCE

INSTALL TEMPORARY SILT SACK SEDIMENT CAPTURE BAG IN EXISTING CATCH BASINS DURING CONSTRUCTION, TYP ALL STRUCTURES IN WORK ZONE

ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE ADJUST AS NECESSARY DURING COURSE OF WORK

CONTRACTOR SHALL CLEAN AND SWEEP WESCOTT STREET AND CRESCENT STREET ON A DAILY BASIS DURING THE COURSE OF CONSTRUCTION

INSTALL STABILIZED CONSTRUCTION ENTRANCE

CRESCENT STREET
PAVED – PUBLIC 40' WIDE

WESCOTT STREET

NORTH

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft

REV	DATE	DESCRIPTION
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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
DEMOLITION PHASE
EROSION CONTROL PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-6		

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ABANDON EXISTING SEWER CONNECTION INTO CONGRESS STREET MANHOLE BY SEALING WITH BRICK AND MORTAR – SEE UTILITY PLAN

PROTECT EXISTING TREES, TYP.

PROTECT EXISTING RETAINING WALL, TYP.

ABANDON PORTION OF EXISTING SANITARY SEWER OUTSIDE OF PROPOSED BUILDING FOOTPRINT

REMOVE EXISTING RETAINING WALL

EXISTING SEWER SERVICE TO BE SEALED OUTSIDE BUILDING FOUNDATION BY DEMOLITION CONTRACTOR UNDER SEPARATE CONTRACT, TYP.

SEAL EXISTING LATERAL TO BE ABANDONED PER CITY REQUIREMENTS

REMOVE EXISTING SANITARY SEWER AND BACKFILL WITH CLEAN GRANULAR MATERIAL

PROTECT EXISTING RIPRAP EMBANKMENT

A PORTION OF THE BUILDING DEMOLITION IS TO BE PERFORMED UNDER SEPARATE CONTRACT. SEE DEMOLITION SPECIFICATIONS FOR ADDITIONAL INFORMATION. THE BUILDING CONTRACTOR SHALL INCLUDE IN THEIR WORK THE REMOVAL OF THE EXISTING FOUNDATION MATERIALS AND THE EXCAVATION OF COMMON BORROW SOILS THAT WILL BE PLACED WITHIN THE FOUNDATION HOLE BY THE DEMOLITION CONTRACTOR UPON DEMOLITION OF EACH BUILDING. (TYP. FOR #25 AND #29 ONLY) THE FOUNDATION FOR #15 SHALL REMAIN.

REMOVE TREE AND STUMP

REMOVE EXISTING FENCE

PROTECT EXISTING STREET AND PROPERTY MONUMENTS

REMOVE EXISTING PAVEMENT, CURB, & BRICK. SALVAGE & REUSE BRICK & CURB. SEE NOTE 3

PROTECT TREES

REMOVE RETAINING WALL

REMOVE UTILITY POLE

ABANDON EXISTING SANITARY SEWER

REMOVE EXISTING WATER SERVICE AND ABANDON SECTION OF SERVICE BENEATH MMC SIGN

SEAL EXISTING SEWER LATERAL PER CITY REQUIREMENTS

REMOVE EXISTING WATER SERVICES DURING INSTALLATION OF NEW WATER, TYP.

REMOVE EXISTING WALL UP TO MODULAR BLOCK WALL

REMOVE TREE

REMOVE EXISTING TREE AND STUMP, TYP OF 3 IN STREET R.O.W.

PROTECT EXISTING LIGHT POLE, TYP

PROTECT EXISTING MMC SIGN & LANDSCAPING

SEE NOTE 2

REMOVE TREE

REMOVE PAVEMENT

PROTECT EXISTING STREET TREE

EXISTING OHE REMOVED BY OTHERS

SEAL ABANDONED SEWER AT MAIN PER CITY REQUIREMENTS – COORDINATE WITH PUBLIC SERVICES DIVISION

REMOVE AND REPLACE GRANITE CURB WITH TIP DOWNS AND FLUSH GRANITE FOR ADA ACCESSIBLE RAMP

PROTECT EXISTING STRUCTURE (TYP.)

REMOVE PAVEMENT, CURB, & BRICK. SALVAGE & REUSE BRICK AND CURB

SAWCUT EXISTING PAVEMENT

A PORTION OF THE BUILDING DEMOLITION IS TO BE PERFORMED UNDER SEPARATE CONTRACT. SEE DEMOLITION SPECIFICATIONS FOR ADDITIONAL INFORMATION

REMOVE AND RESET CURB FOR WATER SERVICE INSTALLATION

PROVIDE 1¼" DEEP PAVEMENT GRIND A MIN. OF 24" BEYOND SAWCUT TO RECEIVE FINAL PAVING COURSE, TYP

SEE NOTE 1

CONGRESS STREET

25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35

29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70

15 CRESCENT STREET
3 STORY WOOD FRAME

CRESCENT STREET
PAVED – PUBLIC
40' WIDE

WESCOTT STREET

GRAN. MON (LB730-6-12)
N 2992 3.459
E 2923447.333

MAINE MEDICAL CENTER
19586/204
LOT AREA 2813.2 S.F.
MAP 053/BLOCK E/LOT 004

MAINE MEDICAL CENTER
19586/204
LOT AREA 2813.2 S.F.
MAP 053/BLOCK E/LOT 006

MAINE MEDICAL CENTER
19586/204
LOT AREA 4277.8 S.F.
MAP 053/BLOCK E/LOT 005

MAINE MEDICAL CENTER
18032/68
LOT AREA 31,133.1 S.F.
MAP 053/BLOCK E/LOT 005

MAINE MEDICAL CENTER
19586/204
LOT AREA 4277.8 S.F.
MAP 053/BLOCK E/LOT 005

MAINE MEDICAL CENTER
18032/68
LOT AREA 3,133.1 S.F.
MAP 053/BLOCK E/LOT 010

J. FREEMAN PORTER
9730/198
MAP 053/BLOCK E/LOT 008

N/F
MH REALTY LLC
21636/64

N/F
MH REALTY LLC
21636/64

NOTES:
1) STREET OPENING ACTIVITIES SHALL BE GOVERNED BY THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. SEE SECTION 4.09 PERTAINING TO ACTIVITIES WITHIN STREETS CURRENTLY UNDER 5-YEAR MORATORIUM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LIMITS OF FINAL PAVING AND ALL STREET OPENING FEES.
2) TO AVOID TRENCHING IN CRESCENT STREET IN FRONT OF #15 CRESCENT STREET THE OWNER WILL SEEK A WAIVER FROM THE PWD TO ALLOW ABANDONMENT OF THE EXISTING WATER SERVICE AT THE CURB STOP.
3) EXCESS GRANITE CURB OR BRICK SHALL BE DELIVERED TO THE CITY OF PORTLAND STOCKYARD ON OUTER CONGRESS STREET AT NO EXTRA EXPENSE TO THE OWNER.
4)THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL AT A LICENSED FACILITY, ALL NON HAZARDOUS SOLID WASTE DISCOVERED DURING THE COURSE OF EXCAVATION, AT NO EXTRA EXPENSE TO THE OWNER.

NORTH

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

REV	DATE	DESCRIPTION
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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

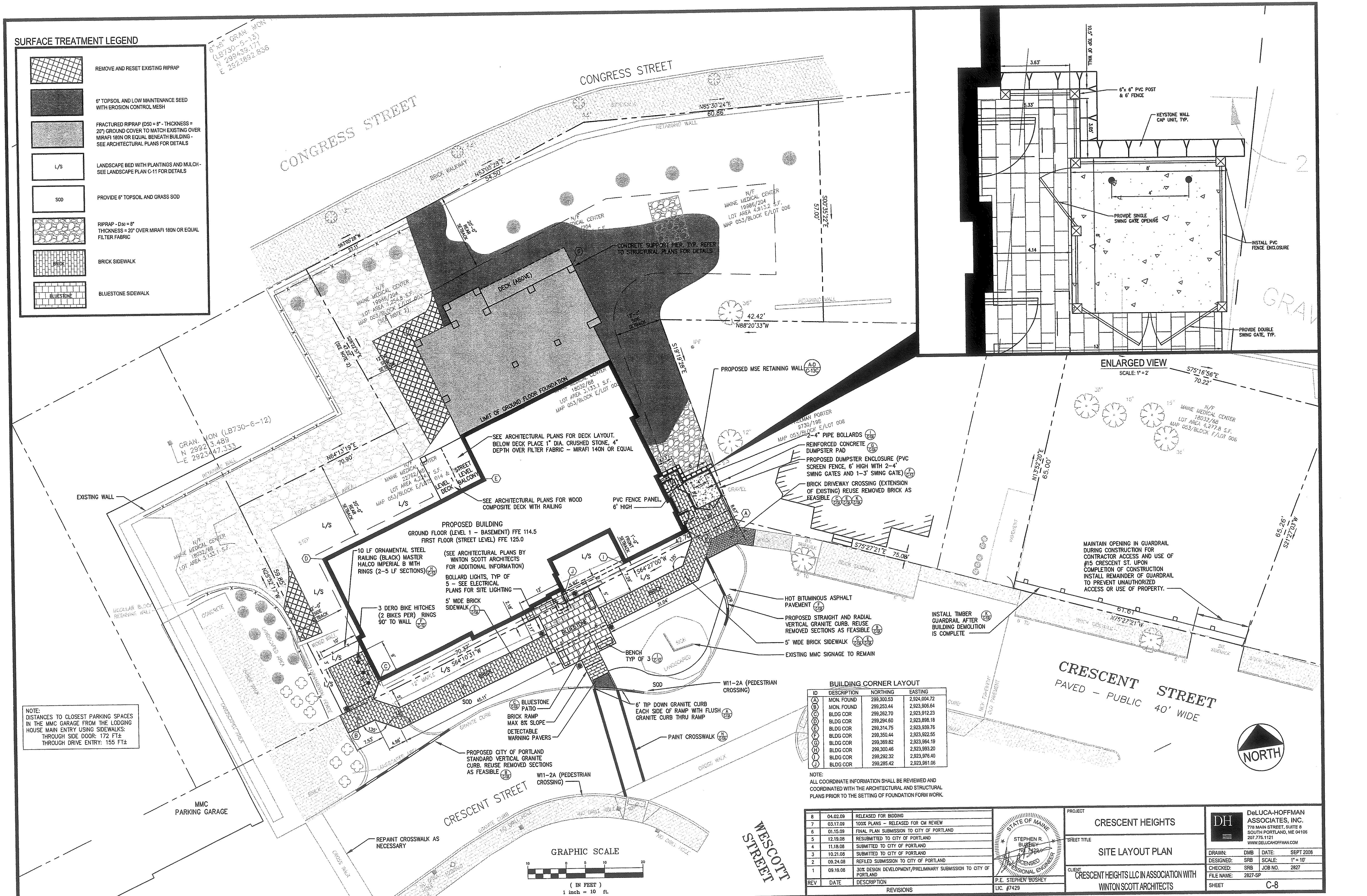
PROJECT
CRESCENT HEIGHTS

SHEET TITLE
DEMOLITION PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-7		


SURFACE TREATMENT LEGEND
REMOVE AND RESET EXISTING RIPRAP
6" TOPSOIL AND LOW MAINTENANCE SEED WITH EROSION CONTROL MESH
FRACTURED RIPRAP (D50 = 8" - THICKNESS = 20") GROUND COVER TO MATCH EXISTING OVER MIRAFI 180N OR EQUAL BENEATH BUILDING - SEE ARCHITECTURAL PLANS FOR DETAILS
L/S
LANDSCAPE BED WITH PLANTINGS AND MULCH - SEE LANDSCAPE PLAN C-11 FOR DETAILS
SOD
PROVIDE 6" TOPSOIL AND GRASS SOD
RIPRAP - D50 = 8" THICKNESS = 20" OVER MIRAFI 180N OR EQUAL FILTER FABRIC
BRICK
BRICK SIDEWALK
BLUESTONE
BLUESTONE SIDEWALK
CONGRESS STREET
CRESCENT STREET
PAVED - PUBLIC 40' WIDE
WESCOTT STREET
MMC PARKING GARAGE
ENLARGED VIEW
SCALE: 1" = 2'
NORTH
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1 - BASEMENT) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
(SEE ARCHITECTURAL PLANS BY WINTON SCOTT ARCHITECTS FOR ADDITIONAL INFORMATION)
LIMIT OF GROUND FLOOR FOUNDATION
DECK (ABOVE)
CONCRETE SUPPORT PIER, TYP. REFER TO STRUCTURAL PLANS FOR DETAILS
SEE ARCHITECTURAL PLANS FOR DECK LAYOUT. BELOW DECK PLACE 1" DIA. CRUSHED STONE, 4" DEPTH OVER FILTER FABRIC - MIRAFI 140N OR EQUAL
SEE ARCHITECTURAL PLANS FOR WOOD COMPOSITE DECK WITH RAILING
PVC FENCE PANEL, 6' HIGH
PROPOSED MSE RETAINING WALL
2-4" PIPE BOLLARDS
REINFORCED CONCRETE DUMPSTER PAD
PROPOSED DUMPSTER ENCLOSURE (PVC SCREEN FENCE, 6' HIGH WITH 2-4' SWING GATES AND 1-3' SWING GATE)
BRICK DRIVEWAY CROSSING (EXTENSION OF EXISTING) REUSE REMOVED BRICK AS FEASIBLE
HOT BITUMINOUS ASPHALT PAVEMENT
PROPOSED STRAIGHT AND RADIAL VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
5' WIDE BRICK SIDEWALK
EXISTING MMC SIGNAGE TO REMAIN
W11-2A (PEDESTRIAN CROSSING)
6" TIP DOWN GRANITE CURB EACH SIDE OF RAMP WITH FLUSH GRANITE CURB THRU RAMP
PAINT CROSSWALK
PROPOSED CITY OF PORTLAND STANDARD VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
REPAINT CROSSWALK AS NECESSARY
BLUESTONE PATIO
BRICK RAMP MAX 8% SLOPE
DETECTABLE WARNING PAVERS
BENCH TYP OF 3
10 LF ORNAMENTAL STEEL RAILING (BLACK) MASTER HALCO IMPERIAL B WITH RINGS (2-5 LF SECTIONS)
BOLLARD LIGHTS, TYP OF 5 - SEE ELECTRICAL PLANS FOR SITE LIGHTING
5' WIDE BRICK SIDEWALK
3 DERO BIKE HITCHES (2 BIKES PER) RINGS 90° TO WALL
EXISTING WALL
STREET LEVEL BALCONY
LEVEL 1 DECK
INSTALL TIMBER GUARDRAIL AFTER BUILDING DEMOLITION IS COMPLETE
MAINTAIN OPENING IN GUARDRAIL DURING CONSTRUCTION FOR CONTRACTOR ACCESS AND USE OF #15 CRESCENT ST. UPON COMPLETION OF CONSTRUCTION INSTALL REMAINDER OF GUARDRAIL TO PREVENT UNAUTHORIZED ACCESS OR USE OF PROPERTY.
6"x 6" PVC POST & 6' FENCE
KEYSTONE WALL CAP UNIT, TYP.
PROVIDE SINGLE SWING GATE OPENING
INSTALL PVC FENCE ENCLOSURE
PROVIDE DOUBLE SWING GATE, TYP.
NOTE:
DISTANCES TO CLOSEST PARKING SPACES IN THE MMC GARAGE FROM THE LODGING HOUSE MAIN ENTRY USING SIDEWALKS:
THROUGH SIDE DOOR: 172 FT±
THROUGH DRIVE ENTRY: 155 FT±

BUILDING CORNER LAYOUT

ID	DESCRIPTION	NORTHING	EASTING
A	MON. FOUND	299,300.53	2,924,004.72
B	MON. FOUND	299,253.44	2,923,906.64
C	BLDG COR	299,262.70	2,923,912.23
D	BLDG COR	299,294.60	2,923,898.18
E	BLDG COR	299,314.75	2,923,939.76
F	BLDG COR	299,350.44	2,923,922.55
G	BLDG COR	299,369.82	2,923,964.19
H	BLDG COR	299,300.46	2,923,993.20
I	BLDG COR	299,292.32	2,923,976.40
J	BLDG COR	299,285.42	2,923,961.06

NOTE:
ALL COORDINATE INFORMATION SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO THE SETTING OF FOUNDATION FORM WORK.

REV	DATE	DESCRIPTION
8	04.02.09	RELEASED FOR BIDDING
7	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
6	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
5	12.19.08	RESUBMITTED TO CITY OF PORTLAND
4	11.18.08	SUBMITTED TO CITY OF PORTLAND
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE · STEPHEN R. BUSHEY · No. 7429 · LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE LAYOUT PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-8		

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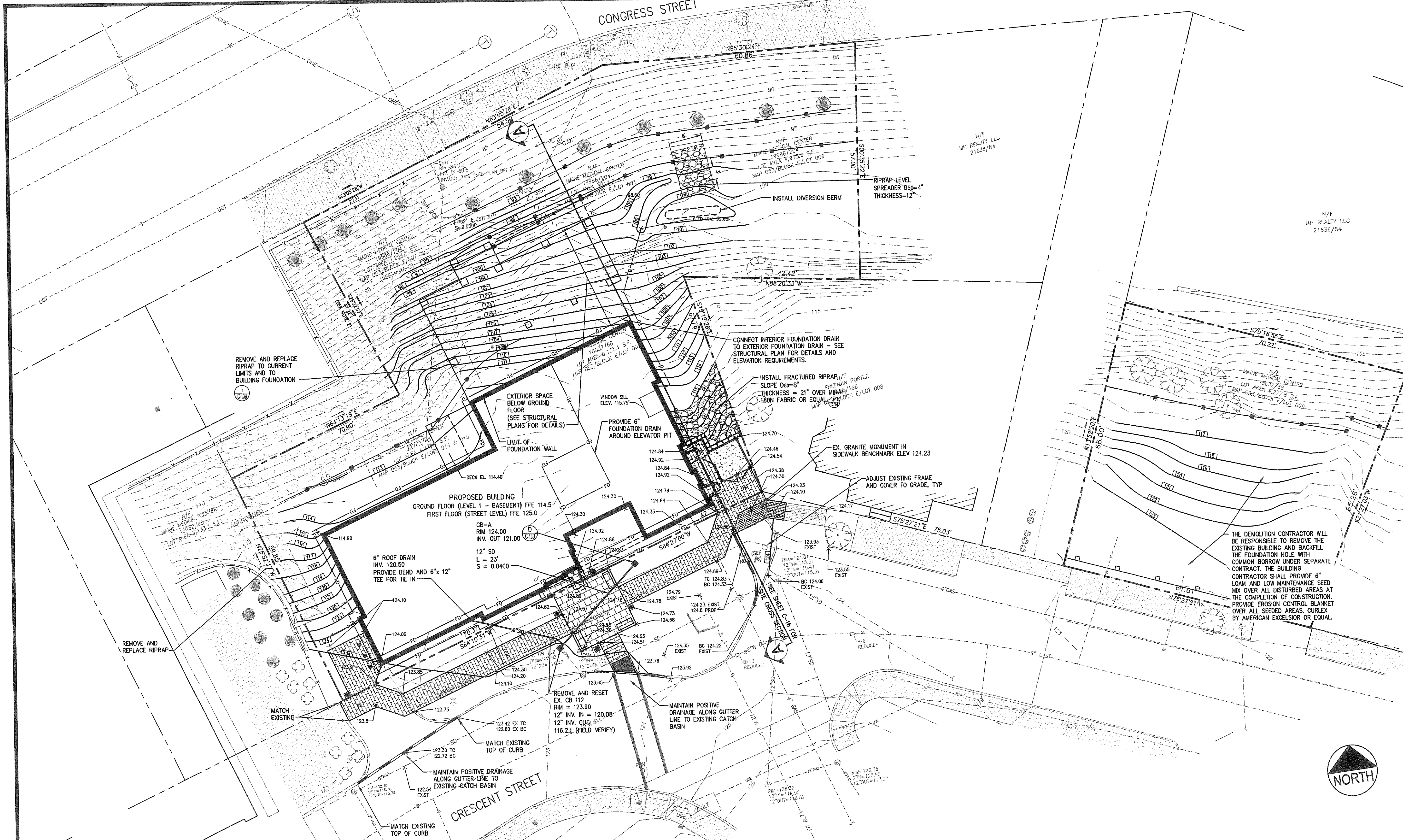
CONGRESS STREET
CRESCENT STREET
NORTH
N/F MH REALTY LLC 21636/84
RIPRAP LEVEL SPREADER D50=4" THICKNESS=12"
INSTALL DIVERSION BERM
REMOVE AND REPLACE RIPRAP TO CURRENT LIMITS AND TO BUILDING FOUNDATION
EXTERIOR SPACE BELOW GROUND FLOOR (SEE STRUCTURAL PLANS FOR DETAILS)
LIMIT OF FOUNDATION WALL
WINDOW SILL ELEV. 115.75'
PROVIDE 6" FOUNDATION DRAIN AROUND ELEVATOR PIT
DECK EL. 114.40
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1 - BASEMENT) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
CB-A RIM 124.00 INV. OUT 121.00
12" SD L = 23' S = 0.0400
6" ROOF DRAIN INV. 120.50 PROVIDE BEND AND 6"x 12" TEE FOR TIE IN
CONNECT INTERIOR FOUNDATION DRAIN TO EXTERIOR FOUNDATION DRAIN - SEE STRUCTURAL PLAN FOR DETAILS AND ELEVATION REQUIREMENTS.
INSTALL FRACTURED RIPRAP SLOPE D50=8" THICKNESS = 21" OVER MIRAFI 180N FABRIC OR EQUAL
EX. GRANITE MONUMENT IN SIDEWALK BENCHMARK ELEV 124.23
ADJUST EXISTING FRAME AND COVER TO GRADE, TYP
SEE SHEET C-16 FOR SITE CROSS SECTION
REMOVE AND REPLACE RIPRAP
MATCH EXISTING
REMOVE AND RESET EX. CB 112 RIM = 123.90 12" INV. IN = 120.08 12" INV. OUT = 116.2± (FIELD VERIFY)
MAINTAIN POSITIVE DRAINAGE ALONG GUTTER LINE TO EXISTING CATCH BASIN
MATCH EXISTING TOP OF CURB
MAINTAIN POSITIVE DRAINAGE ALONG GUTTER LINE TO EXISTING CATCH BASIN
MATCH EXISTING TOP OF CURB
THE DEMOLITION CONTRACTOR WILL BE RESPONSIBLE TO REMOVE THE EXISTING BUILDING AND BACKFILL THE FOUNDATION HOLE WITH COMMON BORROW UNDER SEPARATE CONTRACT. THE BUILDING CONTRACTOR SHALL PROVIDE 6" LOAM AND LOW MAINTENANCE SEED MIX OVER ALL DISTURBED AREAS AT THE COMPLETION OF CONSTRUCTION. PROVIDE EROSION CONTROL BLANKET OVER ALL SEEDED AREAS. CURLEX BY AMERICAN EXCELSIOR OR EQUAL.

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
GRADING AND DRAINAGE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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CONGRESS STREET

PROVIDE TEST PIT TO VERIFY EXISTING PIPE ALIGNMENT AND DEPTH

SMH-A
RIM EL 96.00
4" INV. IN 90.5±
8" INV. OUT 90.0±

REMOVE AND RESET RIPRAP AS NECESSARY

ABANDON SEWER IN ACCORDANCE WITH CITY REQUIREMENTS SEAL AT MAIN, CAP NEAR BUILDING

SUBBASEMENT (SEE STRUCTURAL PLANS FOR DETAILS)

4" SAN L=32' S=0.453

SEWER EXIT INV. 105.0±

ABANDON EXISTING SEWER UPSTREAM OF SMH A AND REMOVE PIPE WHERE IN CONFLICT WITH BUILDING FOUNDATION, PIPE TO REMAIN SHALL BE FILLED WITH FLOWABLE FILL, TYP.

ELECTRIC METER AND SWITCH (SEE ELECTRICAL PLANS FOR DETAILS)

EXISTING GAS SERVICE TO BE ABANDONED PER UNITIL REQUIREMENTS

FIELD VERIFY GAS SERVICE POINT OF CONNECTION

PROPOSED BUILDING
GROUND FLOOR (LEVEL 1 – BASEMENT) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0

SEE ELECTRICAL PLANS FOR SITE LIGHTING CIRCUITING, TYP

EXISTING GAS SERVICE CLOSED (CUT)

PROPOSED WATER SERVICE ENTRY CONFIRM WATER ENTRANCE ELEVATIONS W/ MECH/PLUMBING PLANS

COORDINATE GAS REGULATOR LOCATION AND PROVIDE PROTECTIVE MEASURES AS NECESSARY – COORDINATE WITH LANDSCAPE ARCHITECT

PROVIDE CURB STOP

NEW WATER SERVICES TO GO UNDER STORM DRAIN

TEST PIT

ABANDON EXISTING WATER PER PWD REQUIREMENTS

TEST PIT

REMOVE AND RESET CURB AS REQUIRED

INSTALL 3-PHASE TRANSFORMER ON POLE – SEE NOTES

REPAIR DISTURBED BRICK WALK, CURB, PAVEMENT

EXISTING FIRE HYDRANT

CRESCENT STREET

PROTECT EXISTING UGE-SECONDARY LINES IF ENCOUNTERED – REPLACE IF NECESSARY AT NO EXTRA EXPENSE TO THE OWNER

INSTALL 2" CORPORATION AND 2" CURB STOP

INSTALL 6"x12" TAPPING SLEEVE AND GATE VALVE

EXISTING FIRE HYDRANT

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

SEAL SEWER AT MAIN IN ACCORDANCE WITH CITY STANDARDS

APPROXIMATE EXISTING SEWER SERVICE CONNECTION

CONGRESS STREET

INSET AT CORNER OF WEYMOUTH AND CONGRESS
SCALE: 1"=20'

ABANDON EXISTING WATER SERVICE – SEE NOTE 1

ABANDON GAS MAIN – CAP AT RIGHT-OF-WAY LINE

ABANDON EXISTING SEWER – SEAL AT MAIN AND CAP OUTSIDE OF RIGHT OF WAY – SEE NOTE 2

NORTH

NOTES:
1) EXISTING WATER SERVICE(S) SHALL BE ABANDONED IN ACCORDANCE WITH THE PWD REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
2) ALL EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY SHALL BE GOVERNED BY THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. ALL FEES AND PAVEMENT RESTORATION REQUIREMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO EXTRA COST TO THE OWNER.
3) VERIFY AND COORDINATE ALL SITE ELECTRICAL AND COMMUNICATIONS WITH PLANS PREPARED BY BARTLETT DESIGN.

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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
UTILITY PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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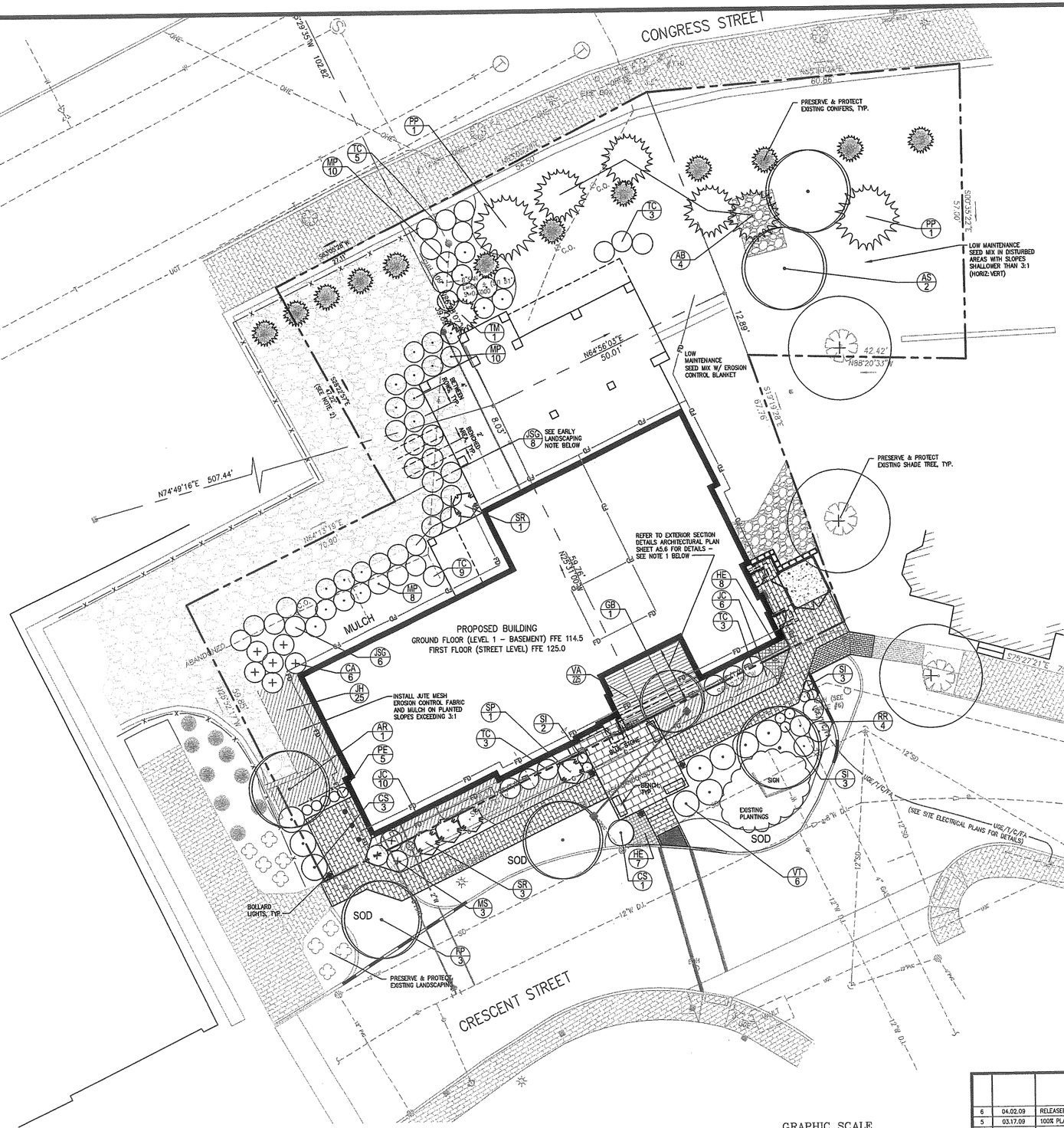

PLANT LIST

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	SPACING	REMARKS
TREES						
AB	4	Abies balsamea Balsam Fir	6-7' ht.	B&B		
AR	1	Acer rubrum 'Autumn Flame' Autumn Flame Red Maple	2 1/2-3" cal.	B&B		
AS	2	Acer saccharum 'Green Mountain' Green Mountain Sugar Maple	2 1/2-3" cal.	B&B		
FP	3	Fraxinus pennsylvanica 'Summit' Summit Ash	2 1/2-3" cal.	B&B		
GB	1	Ginkgo biloba Ginkgo Tree	2" cal.	B&B		
PP	2	Picea pungens 'Glauca' Colorado Blue Spruce	6-7' ht.	B&B		
TM	1	Taxus X media 'Hicksii' Hick's Yew	24-30" ht	B&B		
SHRUBS & ORNAMENTAL GRASSES						
CA	6	Calamagrostis acutifolia 'Karl Foerster' Karl Foerster Feather Reed Grass	full	3 gal.	4'oc	
CS	4	Cornus sericea 'Isanti' Isanti Red Twig Dogwood	24-30" ht	5 gal./B&B	5'oc	
JSP	14	Juniperus chinensis 'Sea Green' Sea Green Juniper	18-24" spr.	3 gal/B&B	4'oc	
MP	28	Myrica pensylvanica Bayberry	18-24" ht	3 gal/B&B	4'oc	
MS	3	Miscanthus sinensis 'Graziella' Silver Grass	full	3 gal.	4'oc	
RR	4	Rosa rugosa Rugosa Rose, pink	18-24"ht.	3 gal.	4'oc	
SP	1	Syringa patula 'Miss Kim' Miss Kim Lilac	30-36" ht.	B&B		
SR	4	Syringa x prestoniae 'Donald Wyman' Lilac, deep pink	30-36" ht.	B&B	4'oc	shrub form
TC	23	Taxus cuspidata 'Green Wave' Green Wave Yew	18-24" spr.	B&B/3 gal.	4'oc	
VT	6	Viburnum trilobum 'Alfredo' Alfredo American Cranberry Viburnum	24-30" ht.	B&B/3 gal.	5'oc	
GROUNDCOVER & PERENNIALS						
VA	225	Vaccinium angustifolium Low-bush Blueberry sod	sod	sq. ft.		
HE	15	Hemerocallis, mixed Daylily, red, yellow, orange mixed	3-4 ppp	1 gal.	2' oc	similar blade/plant size
JC	16	Juniperus chinensis 'Blue Chip' Blue Chip Juniper	18-24" spr.	3 gal.	4' oc	
*JH	25	Juniperus horizontalis 'Bar Harbor' Creeping Thyme	18-24" spr.	3 gal.	3' oc	on >3:1 slope
PE	5	Perennials, flowering e.g., Echinacea, Gaillardia	full	1 gal.	2' oc	
SI	8	Iris siberica 'Caesar's Brother' Siberian Iris, blue	3-4 ppp	1 gal.	2' oc	blue flower

* ALTERNATE: Low-bush Blueberry sod, 275 S.F.

EARLY LANDSCAPING

INSTALL 20+ SHRUBS ON BENCHED AREAS PRIOR TO REPAIR OF RIPRAPPED SLOPE. SEE DETAIL I, SHEET C-13B. WATER FOR DURATION OF CONSTRUCTION PERIOD UNTIL FINAL ACCEPTANCE OF LANDSCAPING.

NOTE:

1. THE CIVIL / SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MATERIALS AND INSTALLATION OF THE FOLLOWING GREEN ROOF SECTION ELEMENTS:
   - -BIO BARRIER ® ROOT BARRIER FABRIC
   - -4" DRAINAGE GRAVEL - MDOT 703.22 TYPE C
   - -SOIL SEPARATION FABRIC - MIRAFI 140N OR EQUAL
   - -8" LOAM
   - -2" BLUEBERRY SOD
   - -2" MULCH

LANDSCAPE LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUB/ ORNAMENTAL GRASS
- EVERGREEN SHRUB
- EXISTING TREES AND SHRUBS TO REMAIN
- EVERGREEN GROUND COVER WITH 3" MULCH (MIN.)
- DECIDUOUS GROUND COVER WITH 3" MULCH (MIN.)
- FLOWERING PERENNIAL GROUND COVER WITH 3" MULCH (MIN.)

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1	08.29.08	30% DESIGN DEVELOPMENT

REVISIONS

LICENSED LANDSCAPE ARCHITECT SHELLEY E. BRUNELLE No. 2593 STATE OF MAINE

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: LANDSCAPE PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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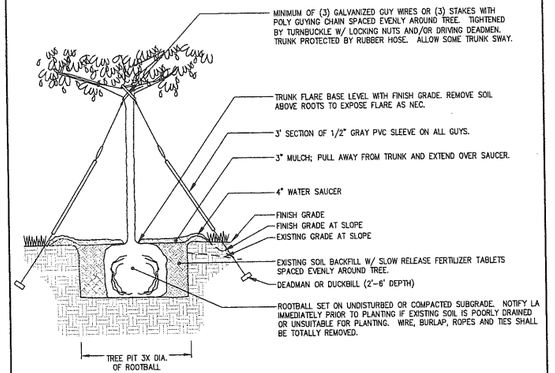
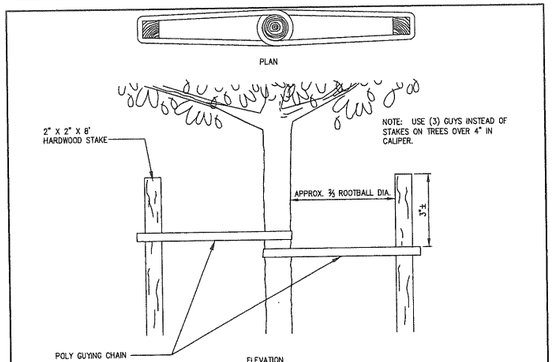
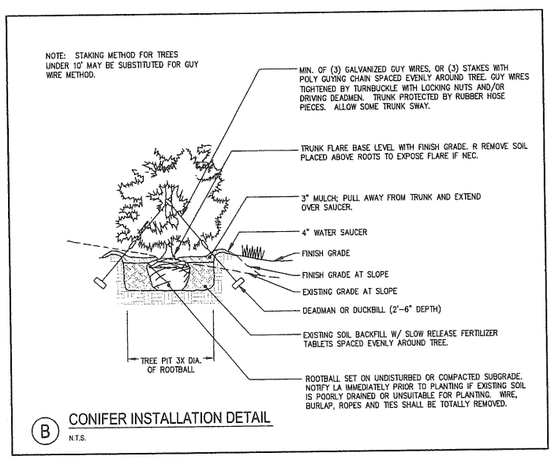


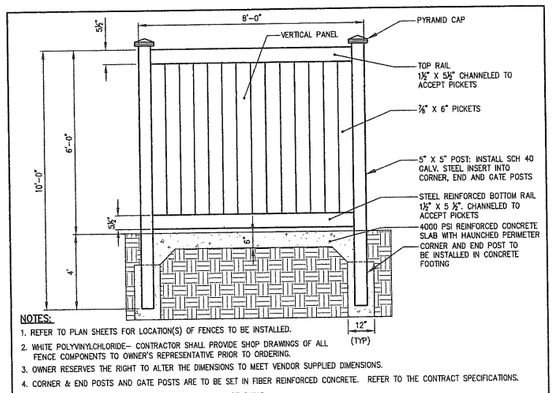
A TREE INSTALLATION DETAIL: >10' HT.
N.T.S.



D POLY GUYING DETAIL
N.T.S.

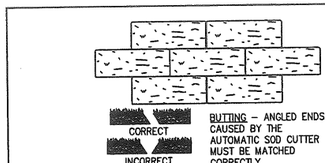


B CONIFER INSTALLATION DETAIL
N.T.S.



NOTES:
1. REFER TO PLAN SHEETS FOR LOCATION(S) OF FENCES TO BE INSTALLED.
2. WHITE POLYVINYLCHLORIDE-- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL FENCE COMPONENTS TO OWNER'S REPRESENTATIVE PRIOR TO ORDERING.
3. OWNER RESERVES THE RIGHT TO ALTER THE DIMENSIONS TO MEET VENDOR SUPPLIED DIMENSIONS.
4. CORNER & END POSTS AND GATE POSTS ARE TO BE SET IN FIBER REINFORCED CONCRETE. REFER TO THE CONTRACT SPECIFICATIONS.
5. DOUBLE SWING GATES SHALL HAVE IRON PINS TO SECURE SWING.

F DUMPSTER ENCLOSURE FENCE DETAIL
N.T.S.



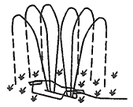
LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP.

CORRECT

INCORRECT

BUTTING – ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.



WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

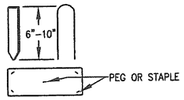
MOW WHEN THE SOD IS ESTABLISHED – WHEN MOST BLADES ARE 1½" –3" IN HEIGHT. SET THE MOWER HIGH (2"–3").

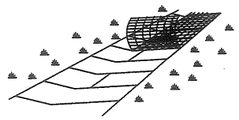
APPEARANCE OF HEALTHY SOD

SHOOTS OR GRASS BLADES. GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"–3" CUTTING HEIGHT.
THATCH – GRASS CLIPPINGS AND DEAD LEAVES, UP TO 1/2" THICK.
ROOT ZONE – SOIL AND ROOTS. SHOULD BE 1/2"–3/4" THICK, WITH DENSE ROOT MAT FOR STRENGTH.

LAY SOD ACROSS THE DIRECTION OF FLOW.

USE PEGS OR STAPLES TO FASTEN SOD FIRMLY – AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3–4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.





IN CRITICAL AREAS, SECURE SOD WITH CHICKEN WIRE OR NETTING. USE STAPLES.

G SOD PLACEMENT DETAILS
N.T.S.

SPECIFICATIONS

SITE PREPARATION
(a) INSTALL NEEDED WATER CONTROL MEASURES.
(b) GRADE SLOPES 2:1 OR FLATTER.
(c) BEFORE LAYING SOD, PROVIDE ADEQUATE DRAINAGE WHERE INTERNAL WATER MOVEMENT, ESPECIALLY AT THE TOE OF SLOPES, MAY CAUSE SEEPS OR SOIL SLIPPAGE.

SOIL PREPARATION
(a) PROVIDE THE BEST POSSIBLE SOIL CONDITIONS FOR SODDING. THE DESIRABLE SOIL TEXTURES INCLUDE SANDY LOAM, LOAM, AND SILT LOAM. WHERE DROUGHTY OR CLAYEY SOILS ARE ENCOUNTERED, CONSIDER AMENDING THEM WITH IMPORTED MATERIALS (TOPSOIL, COMPOST, SAND, ETC.) TO IMPROVE MOISTURE AND NUTRIENT RETENTION AND DRAINAGE. RESPREAD SCREENED NATIVE TOPSOIL (WHEN AVAILABLE) AFTER GRADING.

(b) IF TIME PERMITS, HAVE SOILS TESTED AND FOLLOW LIME AND FERTILIZER RECOMMENDATIONS.

(c) FILL AREAS MUST BE COMPACTED ENOUGH TO PREVENT UNEVEN SETTLING. THE ENTIRE SURFACE TO BE SODDED SHALL BE FREE FROM LARGE CLODS, STONES, OR OTHER DEBRIS. AT THIS STAGE, INCORPORATE LIME AND FERTILIZER UNIFORMLY INTO THE SURFACE SOIL AS NEEDED. IMMEDIATELY BEFORE SODDING, THE SOIL SHALL BE LOOSENED TO A DEPTH OF 1 INCH AND THOROUGHLY DAMPENED, IF NOT ALREADY MOIST. SOD SHALL NOT BE LAID ON DRY SOIL. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHENEVER PRACTICAL.

SELECTION OF SOD
(a) SELECT SOD GROWN FROM SEED OF ADAPTED VARIETIES OR TYPES AND UNDER CULTURAL PRACTICES CONDUCIVE TO HIGH QUALITY SOD FREE OF THATCH, WEED, INSECT, DISEASE, AND OTHER PEST PROBLEMS.

(b) SELECT SPECIES AND VARIETIES BEST SUITED FOR THE SITES TO BE STABILIZED.

(c) SELECT SOD AT LEAST 15 MONTHS OLD AND NO OLDER THAN 3 YEARS. CULTIVATED TURF GRASS IS USUALLY CONSIDERED READY FOR HARVEST WHEN A CUT PORTION OF SOD 3 FEET LONG BY 1 TO 1 1/2 FEET WIDE WILL SUPPORT ITS OWN WEIGHT WHEN SUSPENDED VERTICALLY FROM THE UPPER 10 PERCENT OF THE SECTION. THE MOST COMMON AGE OF SOD WHEN CUT IS 15 TO 24 MONTHS.

(d) SELECT SOD CUTS OF WIDTH AND LENGTH SUITED TO THE PROJECT AND AVAILABLE EQUIPMENT. GENERALLY, SOD PIECES ARE 12 TO 24 INCHES WIDE, AVERAGING 18 INCHES IN WIDTH. LENGTHS OF PIECES VARY FROM 4 TO 8 FEET. SOD MAY BE CUT AND ROLLED OR FOLDED IN THE MIDDLE AND STACKED ON PALLETS. FOLDED SOD IS CUT SHORTER THAN ROLLED SOD – ABOUT 3 TO 4 FEET IN LENGTH. SOD SHOULD BE CUT WITH A 1/4 TO 1/2 INCH LAYER OF SOIL. ABOUT 80 PERCENT OF ALL RHIZOMES ARE IN THE TOP 3/4 INCH OF SOIL. THE THINNER THE SOD IS CUT THE MORE QUICKLY IT WILL KNIT TO THE SITE SOIL, BUT THE SOIL LAYER MUST BE THICK ENOUGH TO HOLD CUT PIECES TOGETHER WITHOUT FALLING APART.

(e) HAVE SOD DELIVERED TO THE SITE AS SOON AS PRACTICAL AFTER LIFTING. DURING HOT WEATHER, DELIVERY SHOULD BE MADE WITHIN 6 HOURS AND MAY BE EXTENDED TO 48 HOURS DURING COOL SEASONS. IT IS GENERALLY UNWISE TO MOVE SOD DURING JULY AND AUGUST. IF MOVED DURING THIS PERIOD, SOD MAY NEED TO BE CUT THICKER AND IT WILL REQUIRE FREQUENT IRRIGATION.

ESTABLISHMENT
(a) DATES: SOD CAN BE ESTABLISHED FROM APRIL 1st TO NOVEMBER 15th (MAY VARY WITH REGION OF STATE).

(b) LAY STRIPS OF SOD AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT THE LOWEST ELEVATION. WEDGE THE EDGES AND ENDS OF THE SOD STRIPS TOGETHER AND TAMP OR ROLL. STAGGER JOINTS. LAY SO THE TOP OF THE SOIL LAYER IS FLUSH WITH THE TOP OF THE UNDISTURBED GROUND OR PAVEMENT SURFACE.

(c) USE WIRE STAPLES, FINE MESH WIRE OR WOOD PINS AND BINDER TWINE ON VERY STEEP SLOPES TO HOLD SOD IN PLACE UNTIL SECURED BY PLANT GROWTH.

(d) IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. IF UNFAVORABLE DRY WEATHER OR OTHER CONDITIONS PREVAIL, ADDITIONAL WATERING WILL SUBSEQUENTLY BE REQUIRED. IT MAY ALSO BE DESIRABLE TO IRRIGATE AREA FROM WHICH SOD IS TO BE REMOVED PRIOR TO LIFTING.

SODDED WATERWAYS
(a) CARE SHALL BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THE SPECIFICATIONS. THE SOD TYPE SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY.

(b) SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW (FIGURE 4.2). CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.

(c) AFTER ROLLING OR TAMPING, SOD SHALL BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. CHICKEN WIRE, JUTE OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

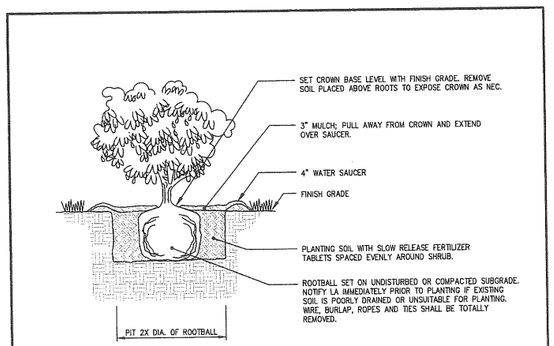
(d) ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

TIMING
WHEN SOD IS INSTALLED TO STABILIZE AREAS OF CONCENTRATED FLOW (INLETS, DIVERSIONS, DITCHES, ETC.), INSTALLATION MUST BE COMPLETED BEFORE RUNOFF IS DIRECTED TO THAT AREA.

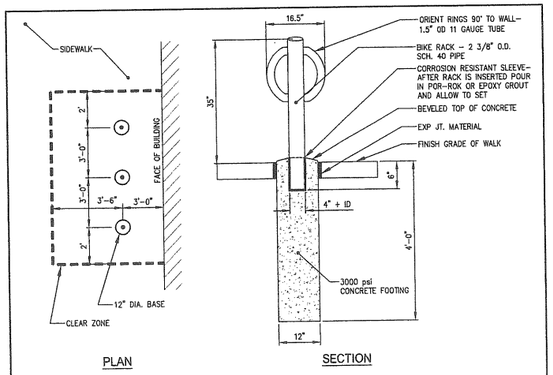
MAINTENANCE
(a) AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.

(b) NO MORE THAN 1/3 OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

(c) AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS.

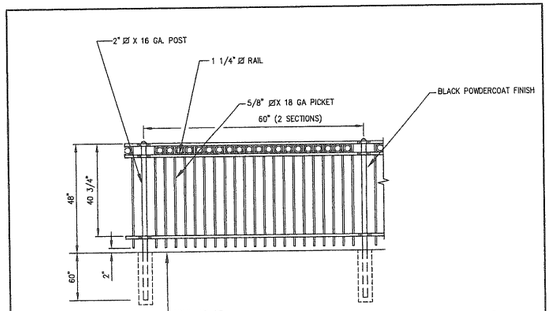


C SHRUB INSTALLATION DETAIL
N.T.S.



MFR: DERO BIKE RACKS
IN-GROUND MOUNT, POWDER COAT FINISH
COLOR: BLACK
www.dero.com
1-800-298-4915

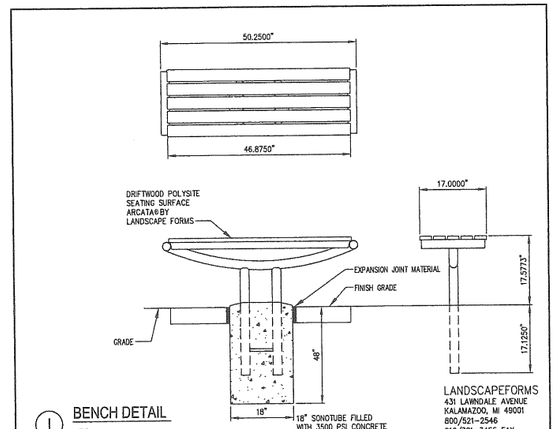
F BIKE HITCH MOUNTING DETAIL
N.T.S.



EMBED POSTS IN CONCRETE FILLED 8" DIA. SONOTUBE EXTENDING TO FROST LINE (5'–6" DEPTH). SLOPE TOP OF CONCRETE TO DRAIN.

MASTER HALCO COMMERCIAL GRADE IMPERIAL B W/RINGS

H ORNAMENTAL METAL PICKET FENCE DETAIL
N.T.S.



LANDSCAPEFORMS
431 LAWNDALE AVENUE
KALAMAZOO, MI 49001
800/521–2546
616/381–3455 FAX
www.landscapeforms.com

I BENCH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

LICENSED LANDSCAPE ARCHITECT — SHELLEY E. BRUNELLE No. 2593 — STATE OF MAINE

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
LANDSCAPE AND SITE FURNISHING DETAILS

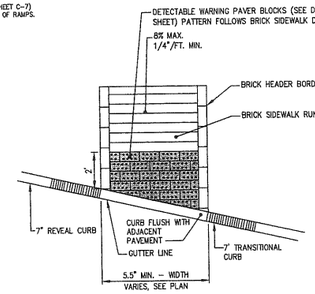
CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-12		

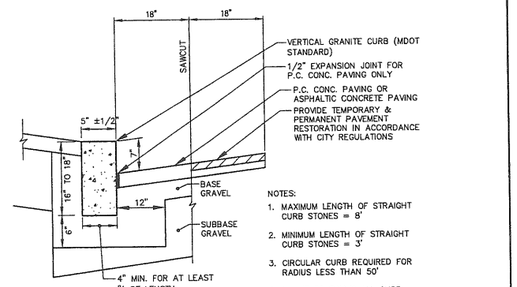
G:\2827 Crescent Street Apt\dwg\PERMIT\2827-DET.dwg, LAND &SITE FURN. DET, 4/2/2009 4:53:59 PM, cwintemute

NOTES:
1. SEE SITE LAYOUT PLAN (SHEET C-7) FOR LOCATIONS & DIMENSIONS OF RAMPS.



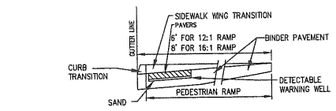
LAYOUT 1 – PLAN VIEW

(A) ADA RAMP DETAIL - WITH PAVER BLOCKS
N.T.S.

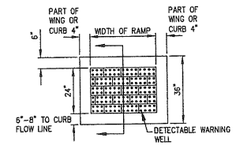


NOTES:
1. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
2. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
3. CIRCULAR CURB REQUIRED FOR RADIUS LESS THAN 50'
4. GROUT OR CAULK ALL CURB JOINTS OVER ¾" IN WIDTH. INSTALL STRIP OF FILTER FABRIC BEHIND EACH CURB JOINT.

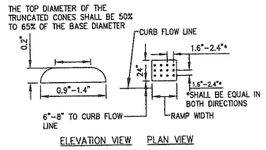
(B) VERTICAL GRANITE CURB
N.T.S.



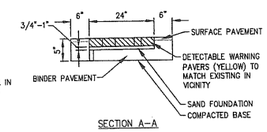
SIDE SECTION VIEW OF DETECTABLE WARNING, WELL, CURB AND GUTTER



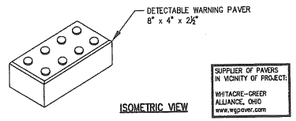
PLAN VIEW OF DETECTABLE WARNING AND WELL
PAVERS NOT DRAWN TO SCALE



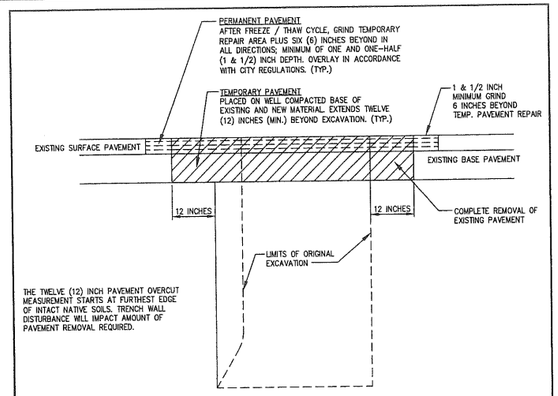
DOME AND DETECTABLE WARNING DETAILS



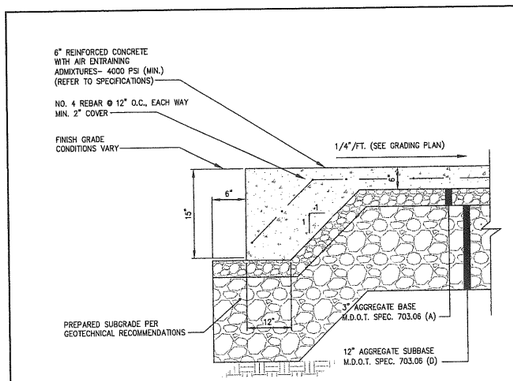
NOTE:
ALL DETECTABLE WARNING AREAS SHALL START 6 INCHES FROM THE FLOW LINE OF THE CURB AND BE 24 INCHES PARALLEL TO CURB LINE (6 TO 30" FROM FACE OF CURB) AND COVER THE COMPLETE WIDTH OF THE RAMP AREA, UNLESS OTHERWISE NOTED



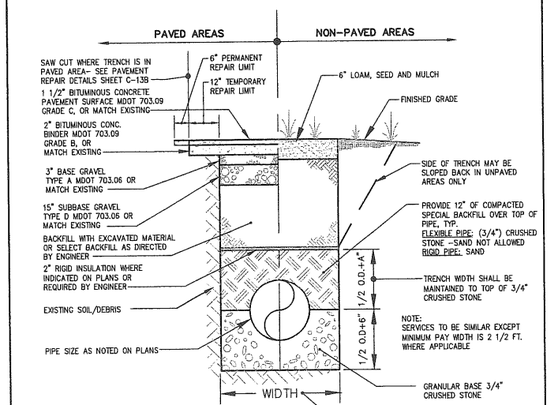
(D) DETECTABLE WARNING PAVER DETAIL
N.T.S.



(F) CROSS SECTION OF TYPICAL EXCAVATION
N.T.S.

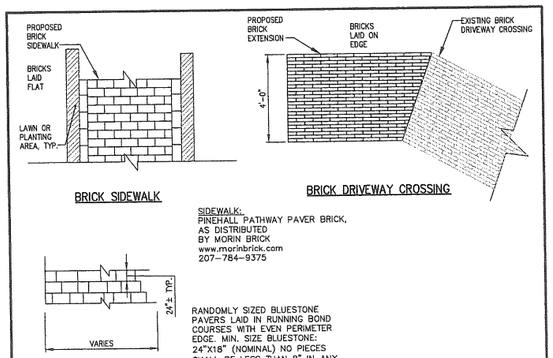


(G) REINFORCED CONCRETE PAD DETAIL
N.T.S.



NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

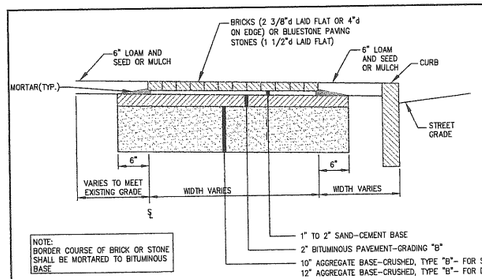
(J) TYPICAL UTILITY PIPE TRENCH SECTION DETAIL
N.T.S.



SIDEWALK:
PINEHALL PATHWAY PAVER BRICK, AS DISTRIBUTED BY MORIN BRICK
www.morinbrick.com
207-784-9375

RANDOMLY SIZED BLUESTONE PAVERS LAID IN RUNNING BOND COURSES WITH EVEN PERIMETER EDGE. MIN. SIZE BLUESTONE: 24"X18" (NOMINAL) NO PIECES SHALL BE LESS THAN 8" IN ANY DIMENSION.

(C) PAVER PATTERNS
N.T.S.

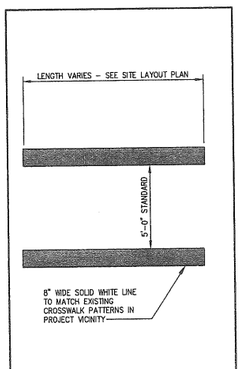


NOTE:
BORDER COURSE OF BRICK OR STONE SHALL BE MORTARED TO BITUMINOUS BASE

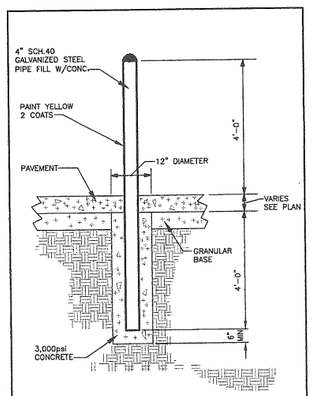
SECTION VIEW

REFER TO THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES- SECTION 1- STREET DESIGN STANDARDS FOR PERTINENT INFORMATION ON SIDEWALK CONSTRUCTION.

(E) MASONRY SIDEWALK WITH BITUMINOUS BASE
N.T.S.

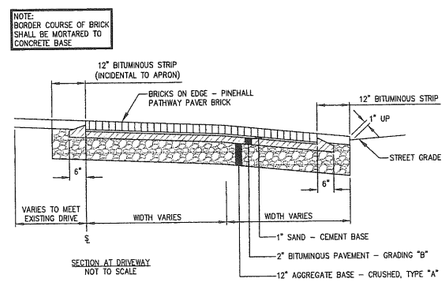


(H) CROSSWALK STRIPING DETAIL
N.T.S.



(I) PIPE BOLLARD DETAIL
N.T.S.

NOTE:
BORDER COURSE OF BRICK SHALL BE MORTARED TO CONCRETE BASE



CITY OF PORTLAND
BRICK WITH BITUMINOUS BASE
SIDEWALK AND DRIVEWAY CONSTRUCTION DETAIL

(K)
N.T.S.

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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
SITE AND UTILITY DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

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DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13A		

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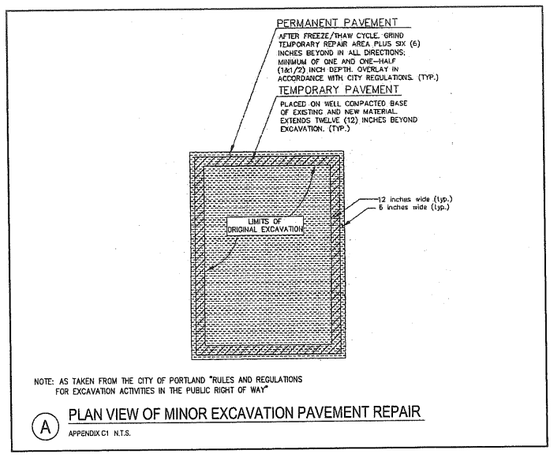
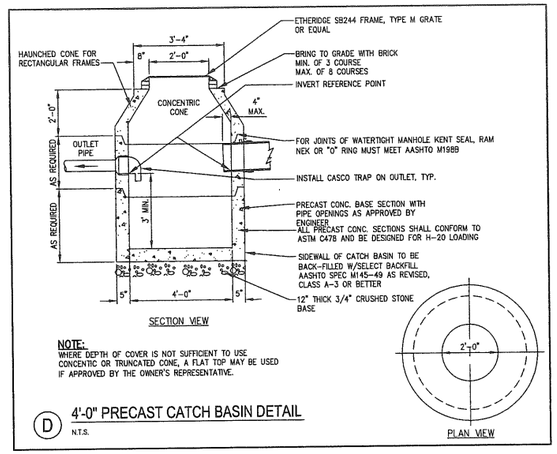


NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

Ⓐ PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

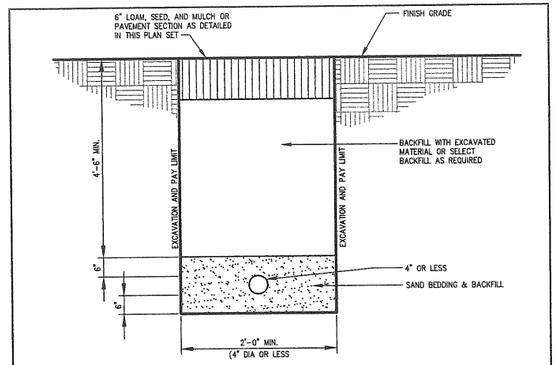
APPENDIX C1 N.T.S.



NOTE:
WHERE DEPTH OF COVER IS NOT SUFFICIENT TO USE CONCENTIC OR TRUNCATED CONE, A FLAT TOP MAY BE USED IF APPROVED BY THE OWNER'S REPRESENTATIVE.

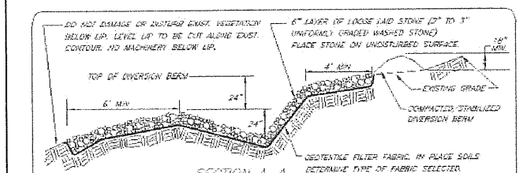
Ⓓ 4'-0" PRECAST CATCH BASIN DETAIL

N.T.S.

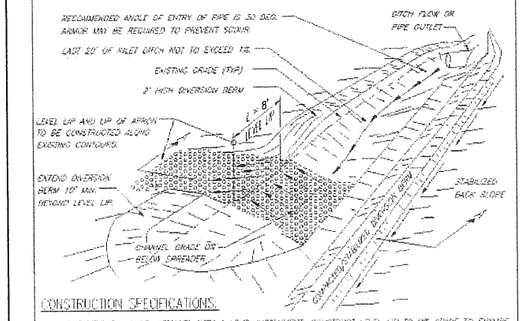


Ⓖ WATER SERVICE TRENCH DETAIL

N.T.S.



SECTION A-A



CONSTRUCTION SPECIFICATIONS:

1. SPREADERS SHALL BE INSTALLED WITH A LEVEL INSTRUMENT. CONSTRUCT LEVEL LIP TO USE GRADE TO ENSURE UNIFORM SHEET FLOW. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT FILL).
2. SELECT GEOTEXTILE FABRIC BASED ON UNDISTURBED SOILS (SANDS, SILTS, CLAYS, ETC.).
3. PLACE 6" LAYER OF UNIFORMLY GRADED STONE 2" TO 3" IN DIA. RAKE TO FORM SMOOTH UNIFORM SURFACE. DO NOT FILL VOIDS IN STONE.
4. THE INLET DITCH SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 20 FEET, BEFORE ENTERING THE SPREADER.
5. STORM RUN-OFF CONVERTED TO SHEET FLOW ACROSS OUTLET APRON SHALL FLOW ONTO STABILIZED AREAS. RUN-OFF SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.
7. CONSTRUCTION OF LEVEL LIP SPREADER SHALL BE FROM UPHILL SIDE ONLY. LEVEL LIP & AREA BELOW SPREADER SHALL BE AT EXISTING GRADES & UNDISTURBED BY EARTHWORK OR EQUIPMENT.
8. CONSTRUCT SPREADER WITH LIP AT EXISTING ELEVATION AS SPECIFIED.
9. DOWNGRADIENT RECEIVING AREA MUST BE NATURALLY WELL VEGETATED.
10. DISCHARGE NOT PERMITTED WITHIN 25' OF A STREAM OR WETLAND. CONSULT DEP IF STRUCTURE MUST BE WITHIN 75' OF STREAM OR WATER BODY.

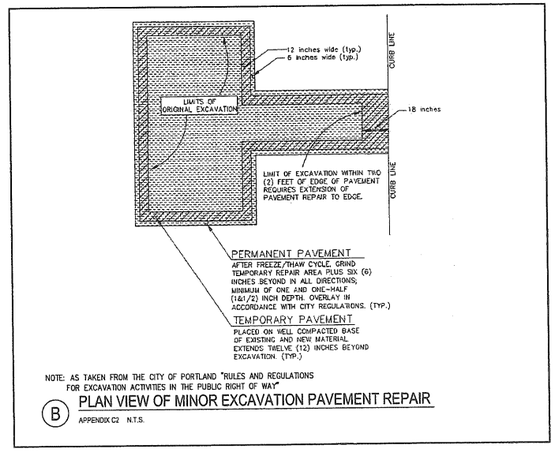
LEVEL LIP SPREADER

ME DEP 2003

FILE: LVLLPSPRDR

Ⓙ LEVEL LIP SPREADER

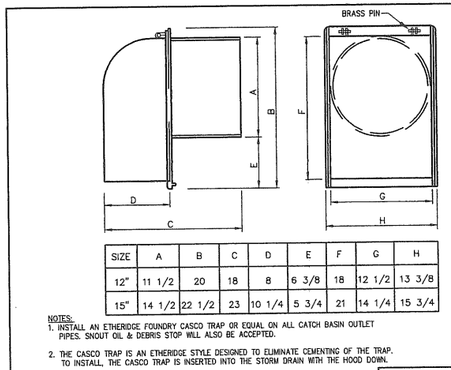
N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

Ⓑ PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

APPENDIX C2 N.T.S.



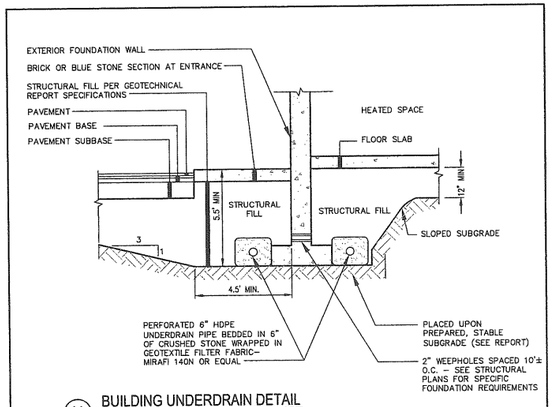
SIZE	A	B	C	D	E	F	G	H
12"	11 1/2	20	18	8	6 3/8	18	12 1/2	13 3/8
15"	14 1/2	22 1/2	23	10 1/4	5 3/4	21	14 1/4	15 3/4

NOTES:
1. INSTALL AN ETHERIDGE FOUNDRY CASCO TRAP OR EQUAL ON ALL CATCH BASIN OUTLET PIPES. SNOUT OIL & DEBRIS STOP WILL ALSO BE ACCEPTED.
2. THE CASCO TRAP IS AN ETHERIDGE STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP. TO INSTALL, THE CASCO TRAP IS INSERTED INTO THE STORM DRAIN WITH THE HOOD DOWN.

INSTALLATION OF CASCO TRAP IS INCIDENTAL TO CATCH BASIN STRUCTURE.

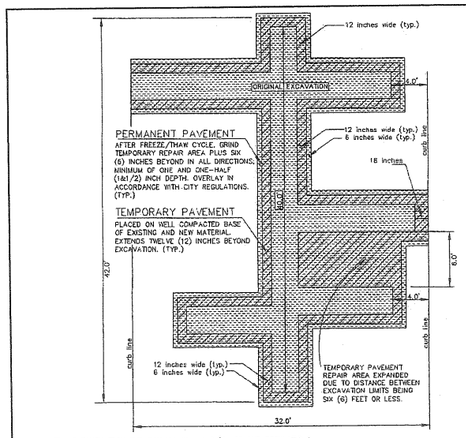
Ⓔ ETHERIDGE FOUNDRY CASCO TRAP DETAIL

N.T.S.



Ⓗ BUILDING UNDERDRAIN DETAIL

N.T.S.



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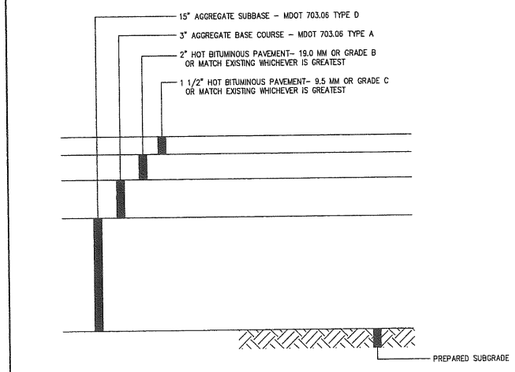
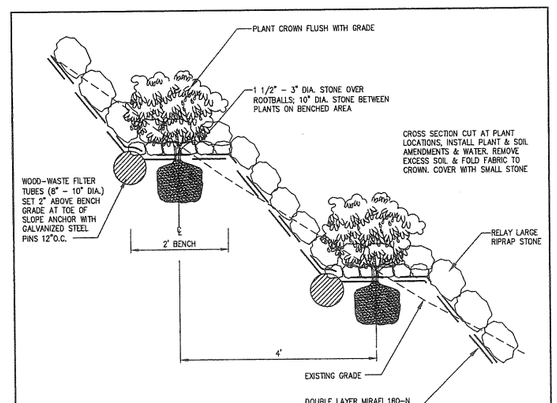
Ⓒ PLAN VIEW OF MAJOR EXCAVATION PAVEMENT REPAIR

APPENDIX C3 N.T.S.



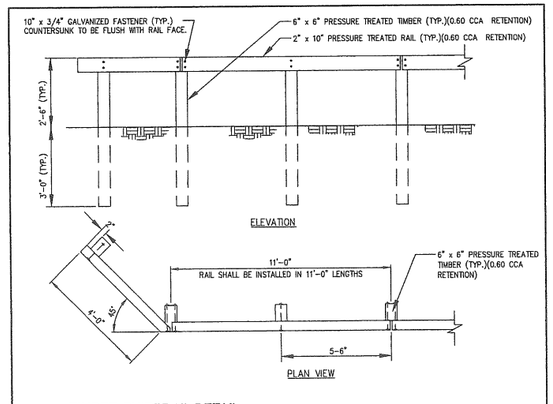
Ⓕ TYPICAL PAVEMENT SECTION

N.T.S.



Ⓘ PLANTED RIPRAP SLOPE SECTION

N.T.S.



Ⓚ TIMBER GUIDERAIL DETAIL

N.T.S.

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3	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
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1	12.19.08	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE AND UTILITY DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13B		

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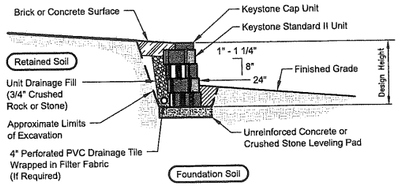
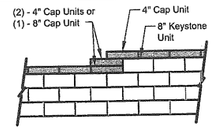


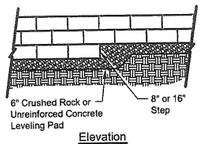
TYPICAL GRAVITY WALL SECTION
BY KEYSTONE RETAINING WALL SYSTEMS

(A) N.T.S. Standard II Unit - 1" Setback



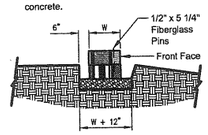
Note:
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps



Elevation

Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



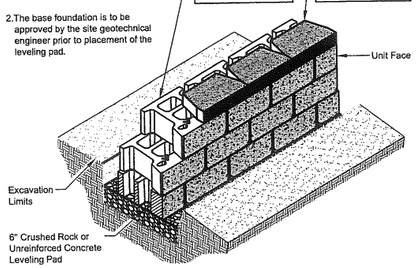
Section
Leveling Pad Detail

(D) TOP OF WALL STEPS AND LEVELING PAD DETAIL
N.T.S.

Base Leveling Pad Notes:
1. The leveling pad is to be constructed of crushed stone or 2,000 psi± unreinforced concrete
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard II Unit	
Width:	18"
*Depth:	18"
Height:	8"
*Weight:	112 lbs

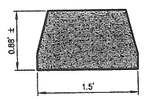
Cap Unit	
Width:	18"
*Depth:	10 1/2"
Height:	4"
*Weight:	50 lbs



(B) STANDARD II UNIT/BASE PAD ISOMETRIC SECTION VIEW
N.T.S. * Dimensions & Weight May Vary by Region

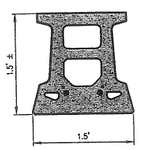
Cap Unit Elevation

Standard II Elevation



Cap Unit Plan

Straight Split
Cap Unit Option
* Dimensions & Availability
Will Vary by Region



Standard II Plan

Standard II Unit
* Dimensions May Vary
by Region

(C) STRAIGHT SPLIT CAP UNIT OPTION AND STANDARD II UNIT DETAIL
N.T.S.

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
1	03.17.09	100% PLANS – RELEASED FOR CM REVIEW

REVISIONS

STATE OF MAINE
STEPHEN R BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
SITE AND UTILITY DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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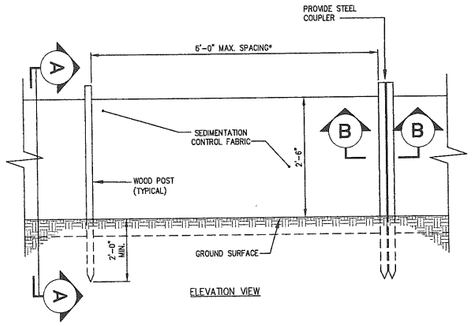
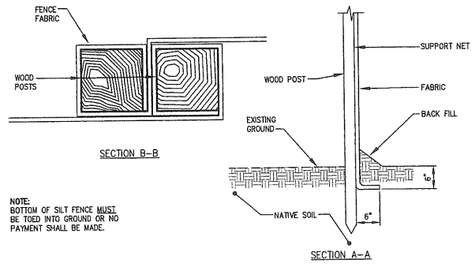
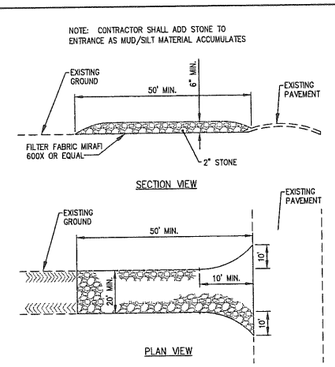
DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13C		



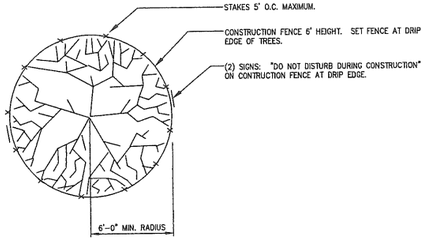
*NOTE:
THE SILT FENCE SHOULD HAVE A MINIMUM STAKING OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MINIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6" IN WHICH CASE STAKES MAY BE SPACED AT 10'.



A SILTATION FENCE DETAIL
N.T.S.



C STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



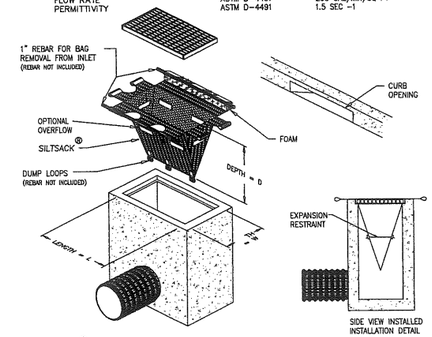
E TREE PROTECTION DETAIL
N.T.S.

SILTSACK®
SPECIFICATIONS

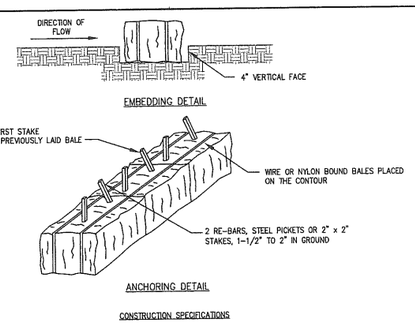
NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

HI-FLOW SILTSACK® (FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



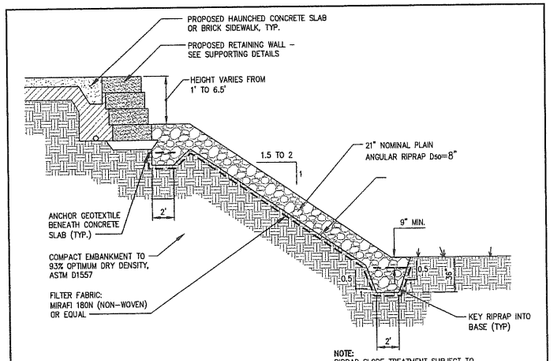
H SILT SACK® DETAIL & SPECIFICATIONS
N.T.S.



CONSTRUCTION SPECIFICATIONS

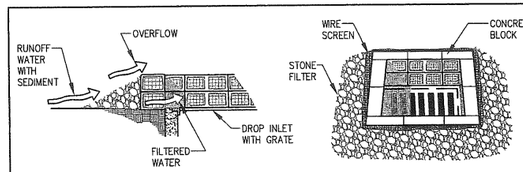
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE WAS ANGLED TOWARD PREVIOUSLY LAD BALE TO FORCE BALES TOGETHER.
4. INSPECTION WILL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MAKE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

D STRAW OR HAYBALE BARRIER
N.T.S.



NOTE:
RIPRAP SLOPE TREATMENT SUBJECT TO REVIEW AND RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE SAMPLE OF RIPRAP FOR OWNER APPROVAL OF COLOR AND TEXTURE PRIOR TO DELIVERY TO SITE.

F RIPRAP SLOPE DETAIL
N.T.S.



SPECIFIC APPLICATION

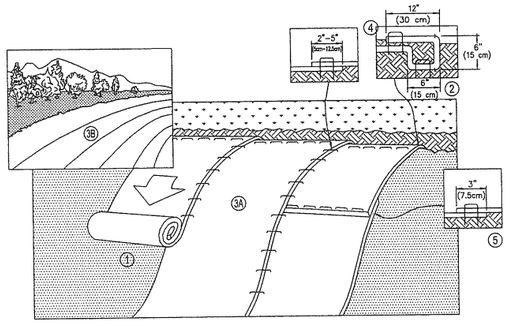
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24 INCHES HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

I CATCH BASIN STONE SEDIMENT BARRIER DETAIL
N.T.S.

EROSIONAL CONTROL BLANKET DETAIL
FOR SLOPE INSTALLATION



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIAMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

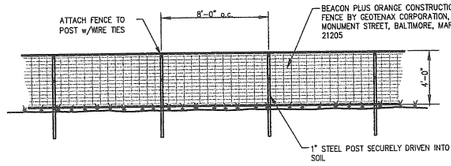
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON TEH PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXAMTE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAT BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

B EROSION CONTROL BLANKET



G ORANGE CONSTRUCTION FENCE DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS - RELEASED FOR CM REVIEW
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EROSION AND SEDIMENT CONTROL DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-14		

EROSION AND SEDIMENT CONTROL NOTES

The primary emphasis of the erosion/sedimentation control plan to be implemented for this project are as follows:
Development of a careful construction sequence. Rapid revegetation of denuded areas to minimize the period of soil exposure. Rapid stabilization of drainage paths to avoid fill and gully erosion. The use of onsite measures to capture sediment (hay bales/silt fence, etc.) The provisions for long term erosion/sediment and pollutant treatment by the incorporation of permanent Best Management Practices.

Description and Location of Limits of All Proposed Earth Movements

The construction of the development will require the following on-site improvements:

Demolition of existing structures.

Earthwork activity including cuts and fills to bring the building pad and landscape areas to subgrade.

Construction of utilities.

Construction of building foundations.

Erosion/Sedimentation Control Devices

The following erosion and sediment control devices will be implemented by the Contractor as part of the site development. These devices shall be installed as indicated on the plans. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, latest edition.

Siltation fence shall be installed downgradient of any disturbed areas to trap runoff borne sediments until the site is revegetated. The silt fence or erosion control mix barrier shall be installed per the details provided in the plan set and inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made immediately by the Contractor if there are any signs of erosion or sedimentation below the fence line. Proper placement of stakes and fabric into the ground is critical to the fence's effectiveness. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence, the contractor shall perform measures to reduce concentrated flows.

Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive Turf Reinforcement by North American Green or equal. Mulch application rates are provided at the end of this section. Hay mulch shall be available on site at all times in order to provide immediate temporary stabilization when necessary.

Riprap slopes, stone check dams, sod and hay bale barriers are intended to reduce runoff velocities and protect denuded soil surfaces from concentrated flows. Installation details and stone sizes are provided in the construction plan set on the erosion control detail sheets.

Construction entrance will be constructed at all access points onto the site to prevent tracking of soil onto Crescent Street or nearby streets.

Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers or a premanufactured SiltSack™ as distributed by A. H. Harris. Stone sediment barrier installation details are provided in the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

Sod is intended to serve as the primary permanent revegetative measure within the #25/ #29 development area for all denuded areas not provided with other erosion control measures, such as riprap or mulched planting beds. The #15 Crescent Street site shall receive 6" top soil, lime, fertilizer, seed and mulch at the end of construction once the site is no longer used for staging/ materials storage

Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

Crushed stone stabilized construction entrance(s) shall be placed at the site access to Crescent Street.

Siltation fence shall be installed along the downgradient side of all disturbed areas. The siltation barrier will remain in place and properly maintained until the site is acceptably revegetated. Multiple rows of silt fence may be required due to the project site's steeper grades.

Stumps, grubbings, or common excavation shall be removed from the site as the work proceeds. Temporary stockpiles shall not be allowed due to the lack of available space and the steepness of the site.

All denuded areas which have been rough graded and are not located within the building pad or pavement subbase area, shall receive temporary mulch or erosion control mesh fabric within 7 days of initial disturbance of soil.

For work which is conducted between November 1 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 3 days for all areas or immediately in advance of a predicted rainfall event.

Crescent Street and Wescott Street shall be swept to control mud and dust as necessary. A street sweeper shall be available on immediate notice.

During grubbing operations stone check dams will be installed at any evident concentrated flow discharge points.

Silt fencing with a maximum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be properly anchored a minimum of 6" per the plan detail and backfilled. Any silt fence identified by the owner or reviewing agencies as not being properly installed during construction shall be immediately repaired in accordance with the installation details.

The contractor may choose to place temporary plastic sheeting anchored with sand bags along steeper exposed slopes or foundation construction areas to protect denuded ground surface and to protect subgrade areas.

All turbid water within trenches or excavations shall be pumped into an approved sediment removal devise such as a Dirtbag or approved equal. If necessary turbid water shall be pumped into a vac truck and removed from the site and disposed of at an approved off site location.

Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

The foundation drain pipe shall have a riprap apron and level spreader at the outlet to protect the outlet from scour and deterioration. Installation details are provided in the plan set. The apron shall be installed and stabilized immediately upon pipe installation.

All areas disturbed during construction, but not subject to other restoration (paving, riprap, planting beds, etc.) will be loamed, limed, and sodded within the proposed building site. The #15 Crescent Street site shall be used as a staging area for the project once the existing building is demolished. At the end of construction all denuded area at #15 Crescent Street shall be loamed (6" min.), limed, fertilized, mulched and seeded within 7 days of final cleanup.

Timing and Sequence of Erosion/Sedimentation Control Measures

The following construction sequence shall be required to insure the effectiveness of the erosion and sedimentation control measures are optimized. The sequence applies to all phases of construction.

For all grading activities, the contractor shall exercise extreme caution not to overexpose the site by limiting the disturbed areas.
Install crushed stone stabilized construction entrances as shown on plans.
Install perimeter siltation barriers as indicated on the plans.
Demolish the existing buildings and foundations and clear and grub areas necessary for the utilities and new building foundation areas.
Begin excavation.
Excess materials shall be removed from the site.
Perform earthwork to bring building pad to subgrade.
Begin installation of drainage appurtenances and piping and utilities
Commence additional earthwork around the building foundation as it is completed.
Complete installation of storm drainage appurtenances within landscaped areas.
Structures within the landscaped areas shall be temporarily set to subgrade and shall be reset upon placement of final loam and seeding or other surface restoration measures.
Complete all remaining earthwork operations including fine grading of slopes.
Install subbase and base gravels within sidewalk or other hardsurface areas.
Install base course paving for sidewalks.
Loam, lime, fertilize, seed or sod and mulch disturbed areas and complete all landscaping.
Install brick paving for sidewalk areas.
Remove accumulated sediment from ahead of any sediment barriers as necessary.
Once the site is stabilized, a 90% catch of vegetation has been obtained,
remove all temporary erosion control measures.
Touch up grassed areas by fertilizing and regrassing as necessary.

Note: All denuded areas not subject to final paving, riprap or gravel, shall be revegetated.

For all work which will be conducted between November 1 and April 15 of the calendar year, the Contractor shall submit a schedule which will satisfy the following criteria:

Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 7 days.

During the construction process, all disturbed areas shall be temporarily covered with mulch within 3 days of final grading if not otherwise available for final riprap, planting bed or sod treatment.

Once final grades have been established, the contractor may choose to dormant seed the disturbed areas prior to placement of mulch and placement of fabric netting anchored with staples.

If dormant seeding is used for temporary stabilization of the site, all disturbed areas shall receive 6" of loam and seed at an application rate of 6#/1000 s.f.

All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90 percent catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used for the site, all disturbed areas shall be revegetated with temporary seeding or permanent landscaping and sod in the spring.

The area of denuded non-stabilized construction shall be limited to the minimum area practicable. An area shall be considered to be denuded until the subbase gravel is installed in sidewalk areas, the base slab gravel is installed in building areas, or the areas of future landscape treatment have been loamed, seeded, and mulched or fully sodded. The mulch rate shall be twice the rate specified. [For example, 115#/1,000 s.f. x 2 = 230#/1,000s.f.]

The Contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions at no extra expense to the owner.

PERMANENT SEEDING PLAN - LOW MAINTENANCE- #15 & #25 CRESCENT STREET SITES

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N-P-K/ac. OR
20 pounds of 10 – 20 – 20 N-P-K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
30% Creeping Red Fescue
35% Tall Fescue
20% Perennial Ryegrass
15% Annual Ryegrass

7.Mulching instructions: Apply at the rate of tons per acre. OR
115 pounds per M. Sq. Ft.

Amount	Unit #, Tons, Etc.
8.TOTAL LIME	138 #/1000 sq. ft.
9.TOTAL FERTILIZER	20 #/1000 sq. ft.
10.TOTAL SEED	6 #/1000 sq. ft.
11.TOTAL MULCH	115 #/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to October 15 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

Fertilizer and lime requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer and lime application rates to the owner

TEMPORARY SEEDING PLAN (APPLICABLE TO BOTH #15 CRESCENT STREET ANS #25/ #29 CRESCENT STREET)

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N-P-K/ac. OR
20 pounds of 10 – 20 – 20 N-P-K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
50% Perennial Ryegrass
50% Annual Ryegrass
When using small grain as nurse crop seed it at one-half the normal seeding rate.

7.Mulching instructions: Apply at the rate of tons per acre. OR
230 pounds per M. Sq. Ft.

Amount	Unit #, Tons, Etc.
8.TOTAL LIME	138#/1000 sq. ft.
9.TOTAL FERTILIZER	20#/1000 sq. ft.
10.TOTAL SEED	2#/1000 sq. ft.
11.TOTAL MULCH	230#/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Recommended seeding dates after August 15. For areas with slopes >10% and fall and winter erosion control areas, mulch netting shall be used per manufacturer's specifications.

Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the owner

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT MAY REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LADEN RUNOFF, TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG, WITHIN A DEWATERING SUMP.

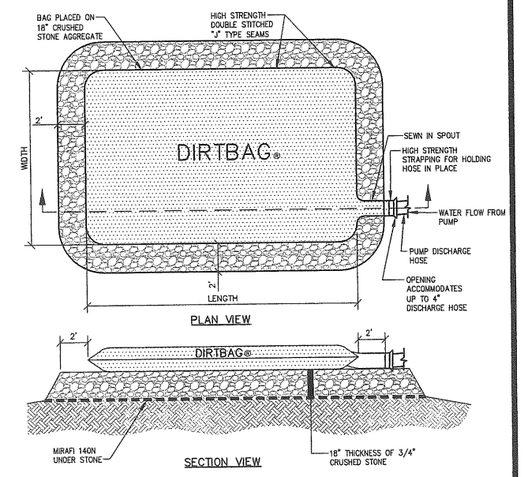
REQUIREMENTS FOR DIRTBAGS:

AT ALL TIMES THERE MUST BE AN UNUSED DIRTBAG AVAILABLE FOR EMERGENCY USE.

AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE DIRTBAG ACTIVE OR READY FOR USE. THE DIRTBAGS SHALL BE FIELD LOCATED BY THE CONTRACTOR. THE DIRTBAG SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 140N, AND 18 INCHES OF 3/4 INCH CRUSHED STONE. THE PLAN DIMENSION OF THE CRUSHED STONE PAD SHALL EXCEED THE PLAN AREA OF THE DIRTBAG BY AT LEAST TWO FEET IN ALL DIRECTIONS. THE DIRTBAG SHALL NOT BE INSTALLED ON AN UNDERLYING SLOPE OF GREATER THAN 15 PERCENT.

CONSTRUCTION DEWATERING OPERATIONS:

ALL CONSTRUCTION-DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE DIRTBAG, THE SELECTION OF THE USE OF THE DIRTBAG OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT THE SITE CONTRACTOR TO ALTER THE SELECTED OPERATION IF TURBID DISCHARGE IS OBSERVED.



A DIRTBAG DETAIL & SPECIFICATIONS
N.T.S.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EROSION AND SEDIMENT CONTROL NOTES

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-15		

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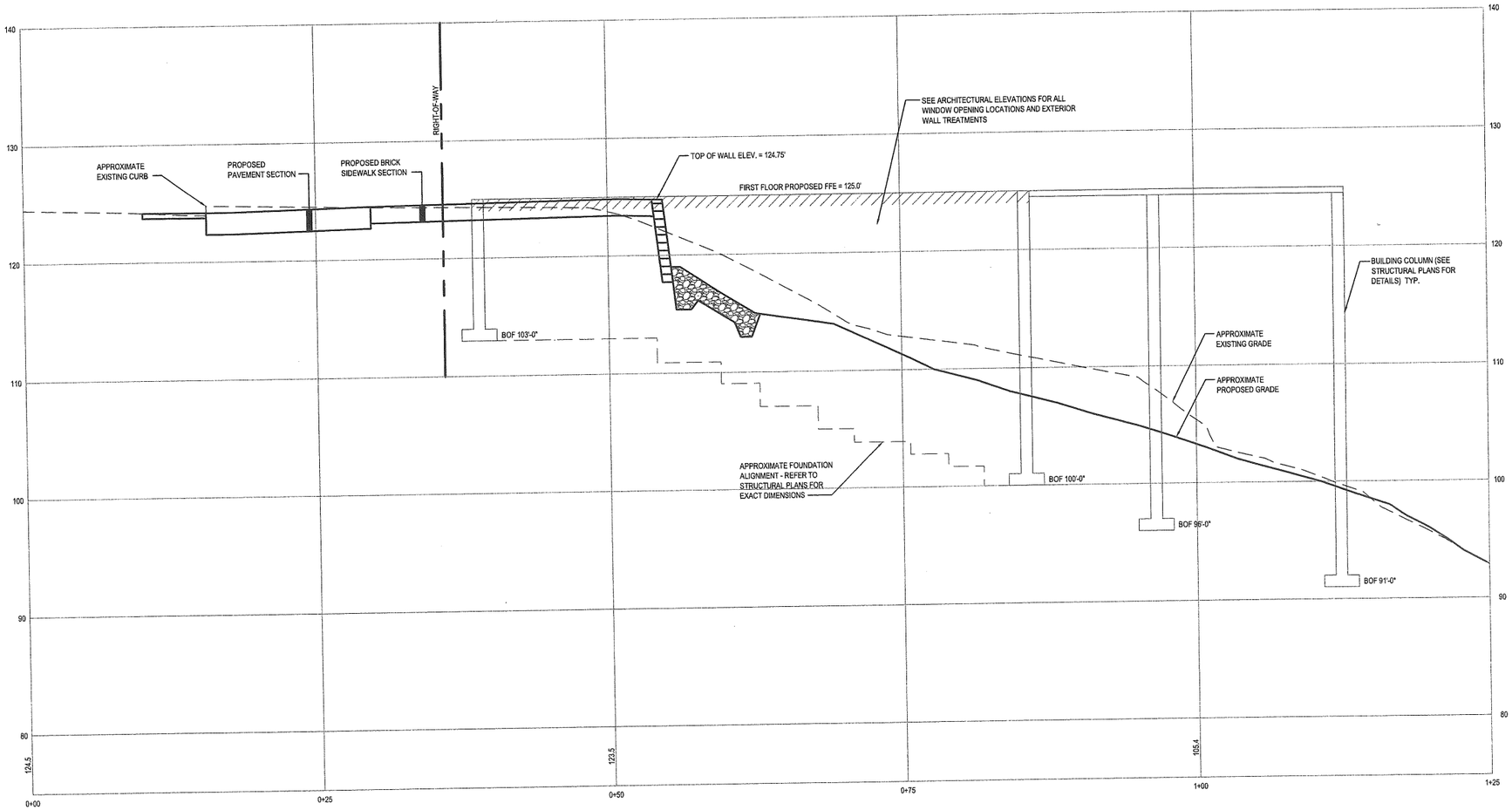

SITE CROSS SECTION

SCALE: H: 1" = 5'; V: 1" = 5'

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
1	03.17.09	100% PLANS – RELEASED FOR CM REVIEW

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
SITE CROSS SECTION
(FOR REFERENCE ONLY)

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
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207.775.1121
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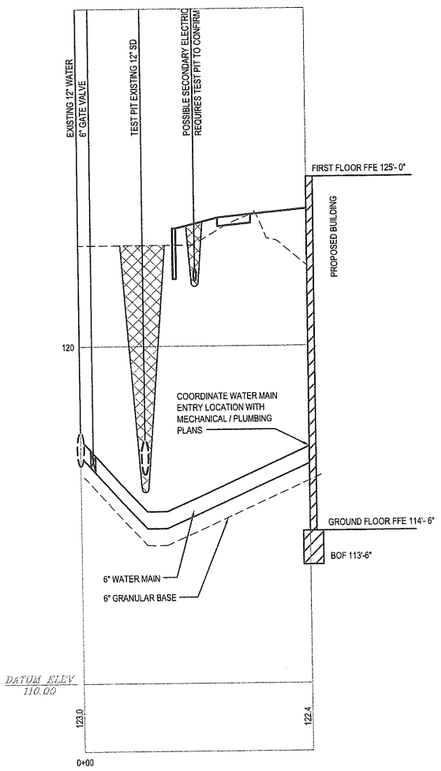
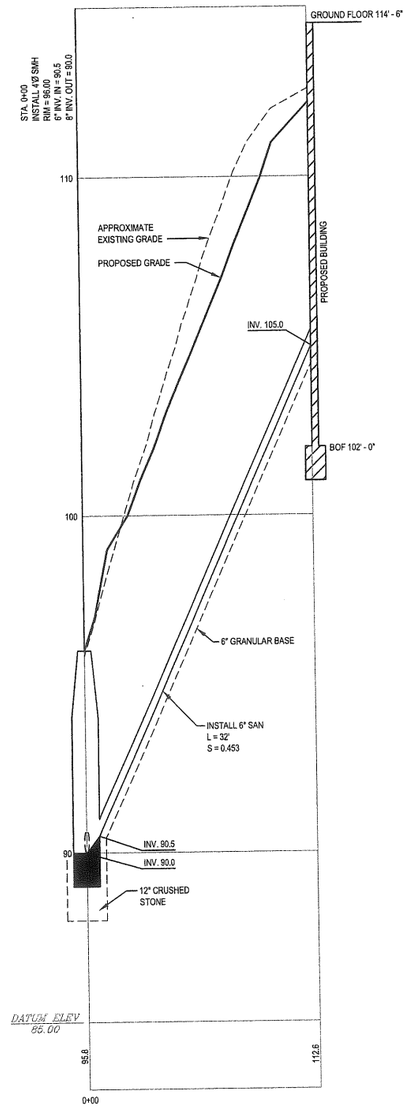
DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET C-16



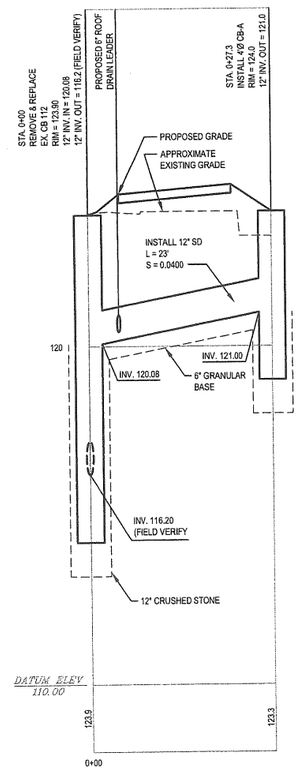
WATER MAIN PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'



SANITARY SEWER PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'



STORMDRAIN PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
1	03.17.09	100% PLANS – RELEASED FOR CM REVIEW

REVISIONS

STATE OF MAINE
STEPHEN R BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
UTILITY PROFILES

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH
WINTON SCOTT ARCHITECTS

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DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-17		

GENERAL NOTES:

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF ALL REGULATIONS ADMINISTERED BY THE LOCAL UTILITY COMPANIES AND THE CITY OF PORTLAND.
2. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCES, EXITS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS.
3. ALL REQUIRED AND NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL SERVICE CONNECTIONS.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-888-DIGSAFE), IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
5. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
6. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
7. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO PROJECT CONTRACT SPECIFICATIONS, AND THE CITY OF PORTLAND TECHNICAL STANDARDS, WHICHEVER IS MORE STRINGENT.
8. TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION WAS PROVIDED BY OWEN HASKELL, INC. IN JUNE 2008. BENCHMARK IS LOCATED AT CORNER OF BRAMHALL AND HILL STREETS AS SHOWN IN LOCATION MAP OF BOUNDARY SURVEY.
9. FEMA MAP COMMUNITY PANEL NUMBER 2300510013B. THE SITE IS LOCATED IN C ZONE.
10. THE PROPERTY SHOWN ON THIS PLAN MAY BE DEVELOPED AND USED ONLY AS DEPICTED IN THIS APPROVED PLAN. ALL ELEMENTS AND FEATURES OF THE PLAN AND ALL THE PROPERTY WHICH APPEARS IN THE RECORD OF THE PLANNING BOARD PROCEEDINGS ARE CONDITIONS OF THE APPROVAL. NO CHANGE FROM THE CONDITIONS OF APPROVALS IS PERMITTED UNLESS AN AMENDED PLAN IS FIRST SUBMITTED TO AND APPROVED BY THE PLANNING AUTHORITY.
11. ALL SIGNAGE SHALL CONFORM TO THE STANDARDS FOR SIZE, HEIGHT, LOCATION AND REFLECTIVITY SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
12. ALL CURB SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS AS NOTED ON THE PLANS: GRANITE AND BITUMINOUS CONCRETE CURB SHALL MEET THE REQUIREMENTS OF MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS 609.03 AND 609.04 AND CITY OF PORTLAND TECHNICAL STANDARDS.
13. ALL DIMENSIONING UNLESS OTHERWISE NOTED IS TO THE FACE OF CURB OR FACE OF BUILDING.
14. THE FACILITY IS SERVICED BY PUBLIC WATER, SEWER, NATURAL GAS AND UNDERGROUND POWER.
15. THE CONTRACTOR IS REQUIRED TO NOTIFY THE CITY OF PORTLAND PUBLIC WORKS INSPECTION SERVICES DIVISION (874-8300 EXT. 8838), CODE ENFORCEMENT OFFICE AND DEVELOPMENT REVIEW COORDINATOR IN WRITING THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. A PRECONSTRUCTION MEETING MAY BE REQUIRED TO INCLUDE THE PUBLIC WORKS AUTHORITY OR DEVELOPMENT REVIEW COORDINATOR.
16. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.
17. WARNING SIGNS, MARKERS, BARRICADES OR FLAGMEN MUST BE EMPLOYED ON ADJACENT STREETS AS NECESSARY.
18. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED AND DISPOSED OF IN ACCORDANCE WITH THE CITY OF PORTLAND'S SOLID WASTE ORDINANCE CHAPTER 12. ALL DEMOLITION MATERIAL FROM THE PROJECT SITES SHALL BE TAKEN TO THE RIVERSIDE RECYCLING FACILITY OR AS OTHERWISE DIRECTED PENDING THE RESULTS OF A HAZARDOUS BUILDING MATERIALS SURVEY AS AUTHORIZED AND COORDINATED BY THE OWNER. ALL SALVAGED MATERIAL WITHIN THE PUBLIC R.O.W.(SIDEWALKS, BRICKS, GRANITE CURB) NOT REUSED SHALL BE DISPOSED OF AS DIRECTED BY THE PORTLAND PUBLIC SERVICES DEPARTMENT AT NO EXTRA COST TO THE OWNER.
19. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
20. PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AT ALL TIMES DURING CONSTRUCTION TO INSURE INTEGRITY. IF DISTURBED THEY SHALL BE REPLACED BY A SURVEYOR REGISTERED IN THE STATE OF MAINE AT THE CONTRACTOR EXPENSE.
21. THE OWNER SHALL BE RESPONSIBLE TO COORDINATE THE PERFORMANCE OF A HAZARDOUS MATERIALS INSPECTION OF THE EXISTING PROPERTIES.
22. A STREET OPENING PERMIT MUST BE OBTAINED FROM THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COMPLETED IN CONFORMANCE TO THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS.
23. CONTRACTOR MUST MAINTAIN THROUGH TRAFFIC ON CRESCENT AND WESCOTT STREETS AT ALL TIMES.
24. ALL METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS IDENTIFIED HEREIN SHALL CONFORM TO THE CITY OF PORTLAND CONSTRUCTION AND TECHNICAL STANDARDS AND SPECIFICATIONS AND/OR CURRENT MDOT STANDARDS AND SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
25. SITE WORK FOR BUILDING SHALL INCLUDE GRADING THE BUILDING PAD AREA (DEFINED AS THE BUILDING FOOTPRINT PLUS 5'-0" BEYOND THE EXTERIOR WALL) TO A GRADE 18" BELOW THE GROUND FLOOR FINISH ELEVATION. ALL WORK SHALL INCLUDE EXCAVATION (INCLUDING ROCK REMOVAL AND EXISTING FOUNDATION DEMOLITION) AND BACKFILL OF ALL FOOTINGS AND FOUNDATIONS, INSTALLATION OF PERIMETER FOUNDATION DRAINS, EXCAVATION AND BACKFILL OF ALL UNDERSLAB UTILITIES AND PLACEMENT OF ALL AGGREGATES BELOW THE FLOOR SLAB AND ADJACENT THE FOUNDATION WALLS IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
26. RECORD DRAWINGS REQUIRE ALL BURIED UTILITIES INCLUDING, BUT NOT LIMITED TO, BENDS, APPURTENANCES, AND OTHER FEATURES TO BE LOCATED BY COORDINATE INFORMATION TO BE RECORDED BY THE CONTRACTOR AND SUPPLIED TO THE OWNER AT THE END OF THE PROJECT.

ZONING SUMMARY
ZONING: RESIDENTIAL- 6
PERMITTED USES:

RESIDENTIAL:
- SINGLE-FAMILY, TWO-FAMILY AND MULTI-FAMILY DWELLING UNIT
- HANDICAPPED FAMILY UNIT
- SINGLE-FAMILY, SINGLE-FAMILY AND MULTIPLE FAMILY COMPONENT MANUFACTURED HOUSING

OTHER:
- LODGING HOUSE
- CEMETERIES
- PARKS AND NON-COMMERCIAL RECREATION SPACE
- ACCESSORY USES INCIDENTAL TO PRINCIPLE USES
- HOME OCCUPATION
- MUNICIPAL USES
- SPECIAL NEEDS INDEPENDENT LIVING UNITS
- CONVERSION TO BED AND BREAKFAST (UP TO 4 BEDROOM)

DIMENSIONAL STANDARD	REQUIRED DIMENSION	PROVIDED DIMENSION
MINIMUM LOT SIZE	4,500 SF	13,525.6 SF
MINIMUM AREA PER ROOMING UNIT	250 SF - 44 BEDS @ 250 S.F. = 11,000 SF	19,163 SF TOTAL
MINIMUM STREET FRONTAGE	40 FEET	113.07 FEET
MINIMUM FRONT YARD	10 FEET OR THE AVERAGE DEPTH OF THE FRONT YARDS ON EITHER SIDE. AVERAGE DEPTH = 1 FOOT	2 FEET
MINIMUM REAR YARD	20 FEET	24 FEET
MINIMUM SIDE YARD	4 STORY-12 FEET. 5 STORY - 15 FEET THE WIDTH OF ONE SIDE YARD MAY BE REDUCED 1 FT. FOR EVERY FOOT THAT THE OTHER SIDE IS CORRESPONDINGLY INCREASED, BUT NO SIDE YARD SHALL BE LESS THAN 10 FEET	12 FEET
MAXIMUM LOT COVERAGE	40% FOR LOTS CONTAINING 20 OR MORE UNITS; 50% FOR LOTS CONTAINING FEWER THAN 20 UNITS.	36.29%
MINIMUM LOT WIDTH	50 FEET	74 FEET
MAXIMUM STRUCTURE HEIGHT	45 FEET	45 FEET *
OPEN SPACE RATIO	20% FOR LOTS CONTAINING FEWER THAN 20 UNITS AND 30% FOR LOTS CONTAINING 20 UNITS OR GREATER.	48.70%

* COMPLIANCE WITH CODE SECTION 14-139(i)(g) RELATED TO BUILDING HEIGHT HAS BEEN CONFIRMED BY WINTON SCOTT ARCHITECTS UNDER SEPARATE CORRESPONDENCE WITH THE PORTLAND CODE ENFORCEMENT OFFICE.

BUILDING SUMMARY

FOOTPRINT:	4908 S.F.
TOTAL:	19,163 S.F.
# BEDS:	44
# UNITS	11
# STORIES:	4

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n = 0.013 OR LESS. UNLESS A SPECIFIC PIPE MATERIAL IS CALLED FOR ON THE CONTRACT DRAWINGS. PVC PIPING SHALL NOT BE USED IN AREAS OF EXPOSED SUNLIGHT.
2. SLOPE PROTECTION IS TO BE PROVIDED PER THE DESIGN PLANS AND MAY INCLUDE RIPRAP, SOD OR MULCH.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EARTHWORK OPERATIONS TO INSURE THAT DISTURBANCE TO THE STEEP SLOPE AREAS ARE MINIMIZED TO THE EXTENT PRACTICABLE.
4. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY OTHERS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
5. ALL PAVING WITHIN THE PUBLIC R.O.W. SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC R.O.W.
6. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
7. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
8. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES AND PHYSICAL FEATURES THAT ARE OUTSIDE THE SCOPE OF WORK. THE CONTRACTOR SHALL MAINTAIN SITE STABILITY DURING CONSTRUCTION TO AVOID EROSION AND SEDIMENT TRANSPORT. CONTRACTOR SHALL RESTORE ALL AREAS TO A FINAL STABILIZED CONDITION AS DIRECTED BY DESIGN DRAWINGS.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
10. EXTERIOR GRADES AROUND PROPOSED STRUCTURE SHALL BE COORDINATED WITH FINAL BUILDING PLANS AND PROVIDE FOR ALL ACCESS OPENINGS.
11. SUBGRADE FILL PLACED BENEATH ALL PERMANENT PAVEMENT, SIDEWALK OR CONCRETE SURFACES EXCLUDING ANY BUILDING AREAS, SHALL BE GRANULAR BORROW. SUBGRADE FILL PLACED BENEATH ALL LANDSCAPE AREAS EXCEPT THOSE ADJACENT THE FOUNDATION SYSTEMS MAY BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUBGRADE CONSTRUCTION. EXCAVATED ON-SITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. EXCAVATED ONSITE MATERIALS MAY NOT BE USED AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS OR AS FOUNDATION BACKFILL. GRANULAR BORROW AND COMMON BORROW SHALL COMPLY WITH THE MDOT SPECIFICATIONS.
12. ALL FILLS SHALL BE PLACED IN LAYERS NOT MORE THAN 12" LOOSE DEPTH AND COMPACTED BY HEAVY COMPACTION EQUIPMENT. MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ASTM 1557, MODIFIED AND FIELD DENSITY ASTM D2922 (NUCLEAR METHODS).

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE STABILIZED CONSTRUCTION ENTRANCES.
3. SILT BARRIERS SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.
4. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS THEY BECOME SATURATED WITH MUD TO ENSURE THAT THEY WORK AS PLANNED DURING CONSTRUCTION AND SHALL KEEP CRESCENT STREET CLEAR OF DIRT AND MUD.
5. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.
6. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITIES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST THREE (3) BUT NOT MORE THAN (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A.
7. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AS SPECIFIED ON PLANS.
8. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

UTILITY NOTES:

1. ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED BETWEEN THE SITE WORK CONTRACTOR AND DIVISION 22/26 CONTRACTOR(S). THE SITE WORK CONTRACTOR SHALL BE RESPONSIBLE TO EXTEND ALL PROPOSED UTILITIES TO WITHIN FIVE (5) FEET OF THE BUILDING TO A LOCATION COORDINATED WITH THE MECHANICAL AND ELECTRICAL SUBCONTRACTORS. THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES WITHIN FIVE (5) FEET AND INSIDE THE BUILDING OR UNDER SLAB.
2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH FAIRPOINT COMMUNICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.
3. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER; THE TELECOMMUNICATIONS SERVICE WITH FAIRPOINT COMMUNICATIONS AND CABLE SERVICE WITH TIME WARNER CABLE. ALL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS OR UTILITY COMPANY STANDARDS, WHICHEVER IS MORE STRINGENT.
4. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
6. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.
8. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.
9. THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE JOBSITE. TEMPORARY SERVICES SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. COORDINATE ALL TEMPORARY SERVICES WITH UTILITY COMPANY, OWNER AND AFFECTED BUSINESSES.
10. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY ELECTRICAL SERVICES IN CONDUIT TO SITE LIGHTING, COMPLYING WITH APPLICABLE CODES. COORDINATE WITH OWNER AND ARCHITECTURAL AND CMP PLANS.
11. ALL SANITARY SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT. ALL SANITARY SERVICES AND APPURTENANCES TO BE ABANDONED SHALL BE PROPERLY RECORDED WITH PORTLAND PUBLIC WORKS ENGINEERING DEPARTMENT. A DIGITAL VIDEOTAPE SHALL BE MADE OF SANITARY SEWER SYSTEMS TO BE UTILIZED PRIOR TO CONSTRUCTION; UPSTREAM PIPES INTENDED FOR ABANDONMENT SHALL BE INSPECTED TO VERIFY THAT THEY NO LONGER SERVE OTHER FACILITIES.
12. THE DEMOLITION CONTRACTOR SHALL OBTAIN A SEAL DRAIN PERMIT FROM THE DEPARTMENT OF PUBLIC SERVICES PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, SUCH WORK TO BE PERFORMED UNDER SEPARATE CONTRACT. THE SEWER LATERALS SHALL BE SEALED BY THE DEMOLITION CONTRACTOR OUTSIDE OF THE BUILDINGS AND INSPECTED PRIOR TO THE BUILDING DEMOLITION THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE TO SEAL AND INSPECT THE UNUSED SEWER LATERALS AT THE SEWER MAIN.

SITE & SUBGRADE PREPARATION NOTES

EXCERPT FROM GEOTECHNICAL REPORT 08-0744 DATED OCTOBER 24, 2008 PREPARED BY S.W. COLE ENGINEERING, INC.

NOTEWELL: ALL FOUNDATION PREPARATION SHALL BE COORDINATED WITH THE STRUCTURAL DESIGN PLANS PREPARED BY BECKER STRUCTURAL ENGINEERS.

SITE PREPARATION SHOULD BEGIN WITH THE CONSTRUCTION OF AN EROSION CONTROL SYSTEM TO PROTECT ADJACENT DRAINAGE WAYS AND AREAS OUTSIDE THE CONSTRUCTION LIMITS. PROPOSED CONSTRUCTION AREAS SHOULD BE CLEARED AND GRUBBED OF ALL ORGANIC MATTER AND TOPSOIL. AS MUCH VEGETATION AS POSSIBLE SHOULD REMAIN OVER INACTIVE AREAS OF CONSTRUCTION TO LESSEN THE POTENTIAL FOR EROSION AND SITE DISTURBANCE. S.W. COLE RECOMMENDS THAT EXISTING FOUNDATIONS, SLABS AND BURIED UTILITIES BENEATH THE PROPOSED BUILDING FOOTING PRINT BE COMPLETELY REMOVED AND BACKFILLED WITH COMPACTED STRUCTURAL BACKFILL.

TERRACE AREA OF BUILDING PAD:

BASED ON THE SUBSURFACE FINDINGS AND S.W. COLE'S UNDERSTANDING OF THE PROPOSED CONSTRUCTION, S.W. COLE ANTICIPATES THAT FOOTINGS ON THE UPPER TERRACE OF THE SITE, GENERALLY WITHIN THE FOOTPRINT OF THE EXISTING BUILDINGS, WILL ENCOUNTER MEDIUM DENSE TO DENSE GLACIAL TILL SOILS OR COMPACTED STRUCTURAL BACKFILL. FOR FOOTINGS IS THIS AREA, S.W. COLE RECOMMENDS THAT EXCAVATION BE COMPLETED WITH A SMOOTH-EDGED BUCKET AND SUBGRADES BE PROTECTED WITH 6 INCHES OF CRUSHED STONE PLACED OVER WOVEN GEOTEXTILE FABRIC SUCH AS MIRAFI 500X.

SLOPING AREA OF BUILDING PAD:

BASED ON THE SUBSURFACE FINDINGS AND S.W. COLE'S UNDERSTANDING OF THE PROPOSED CONSTRUCTION, THEY ANTICIPATE THAT FOOTINGS ON THE SLOPING PORTION OF THE SITE WILL ENCOUNTER SURFICIAL FILLS THAT ARE UNSUITABLE FOR DIRECT FOUNDATION SUPPORT. FOR FOOTING SUBGRADES IN THE SLOPE AREA OF THE BUILDING PAD, S.W. COLE RECOMMENDS REMOVING THE EXISTING FILLS DOWN TO DENSE GLACIAL TILL AND BACKFILLING WITH COMPACTED STRUCTURAL FILL. REMOVING AND BACKFILLING THE UNSUITABLE SOILS WILL REQUIRE DISPLACING SOIL FROM THE SITE AND IMPORTING SUITABLE STRUCTURAL FILL. THE LIMITS OF EXCAVATION FOR UNSUITABLE FILL REMOVAL SHOULD EXTEND 1 FOOT LATERALLY OUTWARD FROM THE BUILDING FOOTPRINT FOR EACH FOOT OF EXCAVATION DEPTH, UNLESS FOOTINGS ARE FOUNDED AT THE ELEVATION OF DENSE GLACIAL TILL.

FOUNDATION DRAINAGE:

WE RECOMMEND THAT FOUNDATION UNDERDRAINS BE PROVIDED AROUND THE EXTERIOR OF PERIMETER FOUNDATIONS AS WELL AS BELOW INTERIOR PORTIONS OF BASEMENT SLABS ON THE UPSLOPE SIDE OF THE PROPOSED BUILDING. THE UNDERDRAINS MAY CONSIST OF 6-INCH DIAMETER HDPE UNDERDRAIN PIPE WITH FILTER SOCK ENVELOPED IN AT LEAST 6 INCHES OF UNDERDRAIN SAND AND BACKFILL WITH FREE-DRAINING SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL AS GIVEN HEREIN. THE UNDERDRAINS SHOULD BE INSTALLED AT FOOTING SUBGRADE ELEVATION AND ROUTED TO A POSITIVE GRAVITY OUTLET. ROOF DRAINS MUST BE ROUTED IN SEPARATE WATERTIGHT PIPES.

ENTRANCE SLABS AND SIDEWALKS:

CLEAN, NON-FROST SUSCEPTIBLE SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL SHALL BE PROVIDED TO A DEPTH OF AT LEAST 4.5 FEET BELOW THE TOP OF ENTRANCE SLABS. THIS THICKNESS OF STRUCTURAL FILL SHOULD EXTEND THE FULL WIDTH OF THE ENTRANCE SLABS AND OUTWARD AT LEAST 4.5 FEET, THEREAFTER TRANSITIONING UP TO BOTTOM ADJACENT SIDEWALK OR PAVEMENT SUBBASE GRAVEL AT A 3H:1V OR FLATTER SLOPE. SEE DETAIL C ON SHEET C-13B FOR FURTHER INFORMATION.

ON-GRADE FLOOR SLABS:

ON-GRADE FLOOR SLABS IN HEATED SPACES MAY BE DESIGNED USING A SUBGRADE REACTION MODULUS OF 150 PCI PROVIDED THE SLAB IS UNDERLAIN BY AT LEAST 12 INCHES OF STRUCTURAL FILL OVERLYING A PROPERLY PREPARED SUBGRADE. ALL EXISTING UNSUITABLE FILLS BELOW THE SLAB IN THE SLOPING AREA OF THE SITE SHOULD BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL.

BACKFILL AND COMPACTION:

BASED ON THE SURFACE FINDINGS, THE EXISTING SURFICIAL FILLS ARE FROST SUSCEPTIBLE AND UNSUITABLE FOR REUSE AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS AND AS FOUNDATION BACKFILL.

LEGEND

EXISTING	PROPOSED
PROPERTY BOUNDARY	CONTOUR LINE
5/8"IRON ROD TO BE SET	EDGE OF PAVEMENT
IRON PIPE FOUND	UTILITY LINE
MONUMENT FOUND	BUILDING
NOW OR FORMERLY	UTILITY POLE
SIGN	CATCH BASIN
EXISTING MANHOLE	STORM DRAIN MANHOLE
CATCH BASIN	STORM DRAIN LINE
GRANITE CURB	FENCE
WATER VALVE	VERTICAL GRANITE CURB
HYDRANT	BOLLARD LIGHT
LIGHT POLE (UNLESS NOTED)	BRICK SIDEWALK
EXISTING BUILDING	CONCRETE PAD
EXISTING CONTOUR	BLUESTONE PAVING STONE
UNDERGROUND TELEPHONE LINE	RIPRAP
SEWER LINE	
STORM DRAIN LINE	
WATER LINE	
GAS LINE	
EDGE OF PAVEMENT	
PVC CLEANOUT	
SURVEY CONTROL POINT	
TIE BACK	
RIPRAP	
ORNAMENTAL OR WOOD FENCE	
EXISTING TREES	
BRICK SIDEWALK	

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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND
		REVISIONS

STATE OF MAINE · STEPHEN R. BUSHEY · No. 7429 · LICENSED · PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: GENERAL NOTES AND LEGEND

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB
DESIGNED:	SRB
CHECKED:	SRB
FILE NAME:	2827-GEN.
DATE:	SEPT 2008
SCALE:	AS NOTED
JOB NO.	2827
SHEET	C-2

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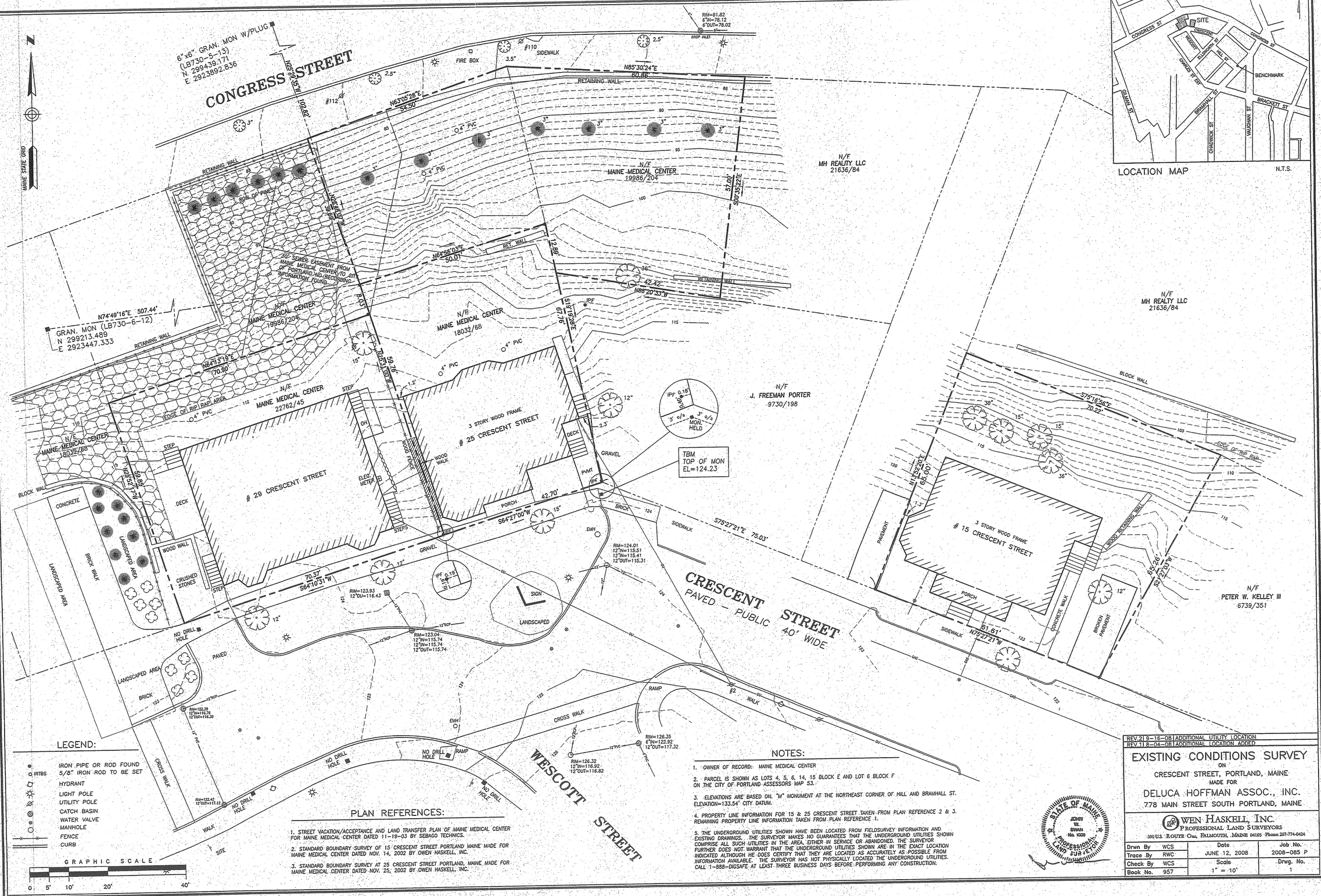

LOCATION MAP N.T.S.

LEGEND:

- IRON PIPE OR ROD FOUND
- IRTBS 5/8" IRON ROD TO BE SET
- HYDRANT
- LIGHT POLE
- UTILITY POLE
- CATCH BASIN
- WATER VALVE
- MANHOLE
- FENCE
- CURB

PLAN REFERENCES:

1. STREET VACATION/ACCEPTANCE AND LAND TRANSFER PLAN OF MAINE MEDICAL CENTER FOR MAINE MEDICAL CENTER DATED 11-19-03 BY SEBAGO TECHNICS.
2. STANDARD BOUNDARY SURVEY OF 15 CRESCENT STREET PORTLAND MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 14, 2002 BY OWEN HASKELL, INC.
3. STANDARD BOUNDARY SURVEY AT 25 CRESCENT STREET PORTLAND, MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 25, 2002 BY OWEN HASKELL, INC.

NOTES:

1. OWNER OF RECORD: MAINE MEDICAL CENTER
2. PARCEL IS SHOWN AS LOTS 4, 5, 6, 14, 15 BLOCK E AND LOT 6 BLOCK F ON THE CITY OF PORTLAND ASSESSORS MAP 53.
3. ELEVATIONS ARE BASED ON "M" MONUMENT AT THE NORTHEAST CORNER OF HILL AND BRAMHALL ST. ELEVATION=133.54' CITY DATUM.
4. PROPERTY LINE INFORMATION FOR 15 & 25 CRESCENT STREET TAKEN FROM PLAN REFERENCE 2 & 3. REMAINING PROPERTY LINE INFORMATION TAKEN FROM PLAN REFERENCE 1.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELDSURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.

STATE OF MAINE JOHN W. BRAUN No. 10030 PROFESSIONAL LAND SURVEYOR

REV.	DATE	DESCRIPTION
2	9-16-08	ADDITIONAL UTILITY LOCATION
1	8-04-08	ADDITIONAL LOCATION ADDED

EXISTING CONDITIONS SURVEY

ON

CRESCENT STREET, PORTLAND, MAINE

MADE FOR

DELUCA HOFFMAN ASSOC., INC.

778 MAIN STREET SOUTH PORTLAND, MAINE

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE One, FALMOUTH, MAINE 04105 Phone: 207-774-0424

Drwn By	WCS	Date	Job No.
Trace By	RWC	JUNE 12, 2008	2008-085 P
Check By	WCS	Scale	Drwg. No.
Book No.	957	1" = 10'	1

C:\drawings\2008-085 CRESCENT S\08-085.dwg, 11/18/2008 9:21:03 AM, 1:10

CONGRESS STREET

SEE INSET FOR CONTINUATION

TOTAL SITE AREA
13,525.8 SQ. FT.
(DOES NOT INCLUDE #15 CRESCENT STREET)

APPROXIMATE LOCATION OF S.W. COLE ENGINEERING, INC. TEST BORING, TYP.

N/F MAINE MEDICAL CENTER 19986/204 LOT AREA 1,224.8 S.F. MAP 053/BLOCK E/LOT 003 (SEE NOTE 2)

N/F MAINE MEDICAL CENTER 19986/204 LOT AREA 4,913.2 S.F. MAP 053/BLOCK E/LOT 004

N/F MAINE MEDICAL CENTER 19986/204 LOT AREA 4,913.2 S.F. MAP 053/BLOCK E/LOT 006

N/F MAINE MEDICAL CENTER 18032/68 LOT AREA 3,133.1 S.F. MAP 053/BLOCK E/LOT 005

N/F MAINE MEDICAL CENTER 22782/45 LOT AREA 4,224.7 S.F. MAP 053/BLOCK E/LOTS 014 & 015

N/F MAINE MEDICAL CENTER 18032/68 LOT AREA 3,133.1 S.F.

N/F J. FREEMAN PORTER 9730/198 MAP 053/BLOCK E/LOT 008

N/F MAINE MEDICAL CENTER 18032/68 LOT AREA 4,277.8 S.F. MAP 053/BLOCK F/LOT 008

25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35

29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70

15 CRESCENT STREET
3 STORY WOOD FRAME

CRESCENT STREET
PAVED – PUBLIC – 40' WIDE

WESCOTT STREET

WEYMOUTH STREET

INSET OF EXISTING AT CORNER OF WEYMOUTH AND CONGRESS
SCALE: 1"=20'

PARKING GARAGE

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

NORTH

PLAN REFERENCE
1) EXISTING CONDITIONS SURVEY BY OWEN HASKELL INC. DATED JUNE 12, 2008
2) UTILITY LOCATIONS TAKEN FROM MAINE MEDICAL CENTER PLAN, DRAWING C301, PREPARED BY TRO DATED 8.31.04, ON FILE WITH THE CITY OF PORTLAND PLANNING AUTHORITY. THE EXISTING CATCH BASIN IN FRONT OF #29 CRESCENT APPEARS TO CONFLICT WITH AN ABANDONED GAS LINE.

NOTES:
1) PORTION OF FORMER SANITARY SEWER FROM MAINE MEDICAL CENTER DISCONTINUED AS PART OF PARKING GARAGE PROJECT
2) PORTION OF LOT DESCRIBED IN CCRD BOOK 19986/ PAGE 204 CONVEYED TO CRESCENT HEIGHTS LLC BY MMC.
3) THE EXACT LOCATION OF UNDERGROUND POWER/TELEPHONE/CABLE INTO THE EXISTING BUILDINGS IS UNKNOWN. THE ENGINEER HAS NOT ENTERED THE BUILDINGS TO DETERMINE THIS INFORMATION.
4) SANITARY SEWER LOCATION FOR #25 TAKEN FROM CITY SEWER CARD RECORDS
5) NO CITY SEWER RECORD AVAILABLE FOR 15 CRESCENT ST. LOCATION OF SEWER LATERAL BASED ON DIMENSIONS PROVIDED BY CITY OF PORTLAND VIDEO INSPECTION LOG REPORT DATED 7.13.99.
6) THIS STRUCTURE IS A 4' DIA. PRECAST VAULT WITH COMMUNICATIONS WIRES OF UNKNOWN ORIGIN. IT IS UNKNOWN IF THESE FACILITIES ARE ACTIVE OR ABANDONED. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND MAINTAIN THESE FACILITIES DURING CONSTRUCTION AT NO EXTRA EXPENSE TO THE OWNER.
7)THE CONTRACTOR SHALL CONFIRM ALL EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID AND TAKE NOTE THAT CERTAIN FEATURES MAY NOT BE REFLECTED ON THIS PLAN. THIS PLAN DOES NOT REFLECT CERTAIN REMARKS BY OTHERS WHICH MAY BE PERFORMED PRIOR TO THE START OF BUILDING CONSTRUCTION.

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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EXISTING CONDITIONS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 6
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-4		

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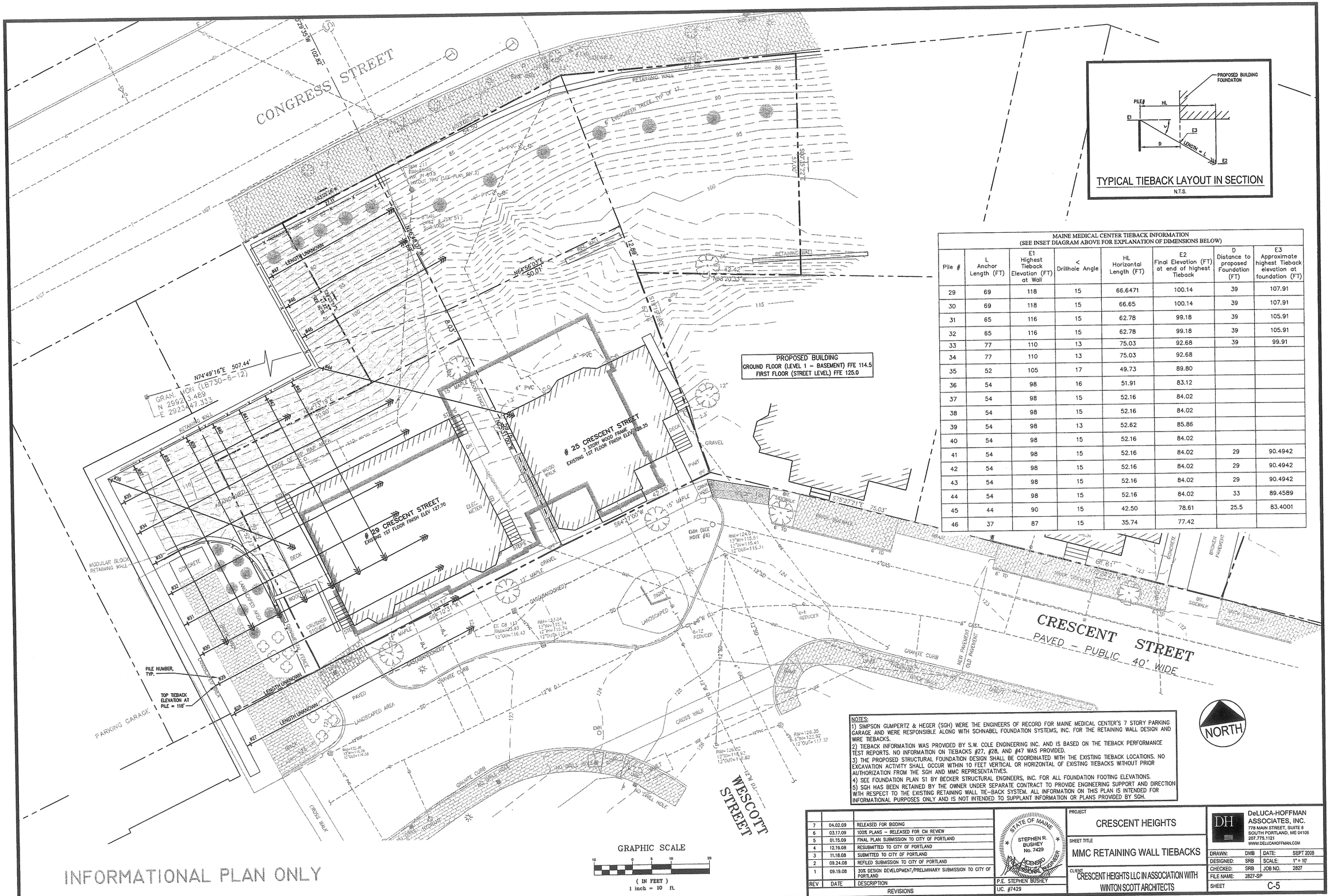

TYPICAL TIEBACK LAYOUT IN SECTION
N.T.S.

MAINE MEDICAL CENTER TIEBACK INFORMATION
(SEE INSET DIAGRAM ABOVE FOR EXPLANATION OF DIMENSIONS BELOW)

Pile #	L Anchor Length (FT)	E1 Highest Tieback Elevation (FT) at Wall	< Drillhole Angle	HL Horizontal Length (FT)	E2 Final Elevation (FT) at end of highest Tieback	D Distance to proposed Foundation (FT)	E3 Approximate highest Tieback elevation at foundation (FT)
29	69	118	15	66.6471	100.14	39	107.91
30	69	118	15	66.65	100.14	39	107.91
31	65	116	15	62.78	99.18	39	105.91
32	65	116	15	62.78	99.18	39	105.91
33	77	110	13	75.03	92.68	39	99.91
34	77	110	13	75.03	92.68		
35	52	105	17	49.73	89.80		
36	54	98	16	51.91	83.12		
37	54	98	15	52.16	84.02		
38	54	98	15	52.16	84.02		
39	54	98	13	52.62	85.86		
40	54	98	15	52.16	84.02		
41	54	98	15	52.16	84.02	29	90.4942
42	54	98	15	52.16	84.02	29	90.4942
43	54	98	15	52.16	84.02	29	90.4942
44	54	98	15	52.16	84.02	33	89.4589
45	44	90	15	42.50	78.61	25.5	83.4001
46	37	87	15	35.74	77.42		

NOTES:
1) SIMPSON GUMPERTZ & HEGER (SGH) WERE THE ENGINEERS OF RECORD FOR MAINE MEDICAL CENTER'S 7 STORY PARKING CARAGE AND WERE RESPONSIBLE ALONG WITH SCHNABEL FOUNDATION SYSTEMS, INC. FOR THE RETAINING WALL DESIGN AND WIRE TIEBACKS.
2) TIEBACK INFORMATION WAS PROVIDED BY S.W. COLE ENGINEERING INC. AND IS BASED ON THE TIEBACK PERFORMANCE TEST REPORTS. NO INFORMATION ON TIEBACKS #27, #28, AND #47 WAS PROVIDED.
3) THE PROPOSED STRUCTURAL FOUNDATION DESIGN SHALL BE COORDINATED WITH THE EXISTING TIEBACK LOCATIONS. NO EXCAVATION ACTIVITY SHALL OCCUR WITHIN 10 FEET VERTICAL OR HORIZONTAL OF EXISTING TIEBACKS WITHOUT PRIOR AUTHORIZATION FROM THE SGH AND MMC REPRESENTATIVES.
4) SEE FOUNDATION PLAN S1 BY BECKER STRUCTURAL ENGINEERS, INC. FOR ALL FOUNDATION FOOTING ELEVATIONS.
5) SGH HAS BEEN RETAINED BY THE OWNER UNDER SEPARATE CONTRACT TO PROVIDE ENGINEERING SUPPORT AND DIRECTION WITH RESPECT TO THE EXISTING RETAINING WALL TIE–BACK SYSTEM. ALL INFORMATION ON THIS PLAN IS INTENDED FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED TO SUPPLANT INFORMATION OR PLANS PROVIDED BY SGH.

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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
MMC RETAINING WALL TIEBACKS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
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DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-5		

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INSTALL AND MAINTAIN DOUBLE ROW OF SILT FENCE

CONGRESS STREET

INSTALL SILT FENCE, TYP.

GRAN. MON (LB730-6-12)
N 2992 3.489
E 2923447.333

THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE TO COVER EXPOSED SOILS DURING THE COURSE OF EXISTING FOUNDATION-DEMOLITION AND PROPOSED FOUNDATION PREPARATION. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, PLASTIC SHEETING, SAND BAGS, HAY BALES, EROSION CONTROL BLANKET. ALL CONSTRUCTION DEWATERING SHALL BE DIRECTED TO AN APPROVED SEDIMENT CAPTURE DEVICE SUCH AS A DIRTBAG OR APPROVED EQUAL. TURBID WATER SHALL NOT BE DISCHARGED TO EXISTING CATCH BASINS OR MANHOLES. IF NECESSARY TURBID WATER SHALL BE PUMPED TO A VAC TRUCK AND REMOVED FROM THE SITE FOR DISPOSAL AT AN APPROVED LOCATION.

ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE – ADJUST AS NECESSARY DURING COURSE OR WORK, TYP

25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35

29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70

INSTALL AND MAINTAIN TEMPORARY SILT FENCE DURING DEMOLITION OF HOUSE, #15 AND BACKFILLING OF FOUNDATION HOLE.

15 CRESCENT STREET
3 STORY WOOD FRAME

INSTALL STABILIZED CONSTRUCTION ENTRANCE

MODULAR BLOCK RETAINING WALL

PARKING GARAGE

ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE ADJUST AS NECESSARY DURING COURSE OF WORK

CONTRACTOR SHALL CLEAN AND SWEEP WESCOTT STREET AND CRESCENT STREET ON A DAILY BASIS DURING THE COURSE OF CONSTRUCTION

INSTALL TEMPORARY SILT SACK SEDIMENT CAPTURE BAG IN EXISTING CATCH BASINS DURING CONSTRUCTION, TYP ALL STRUCTURES IN WORK ZONE

INSTALL STABILIZED CONSTRUCTION ENTRANCE

CRESCENT STREET
PAVED – PUBLIC – 40' WIDE

WESCOTT STREET

NORTH

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
DEMOLITION PHASE
EROSION CONTROL PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
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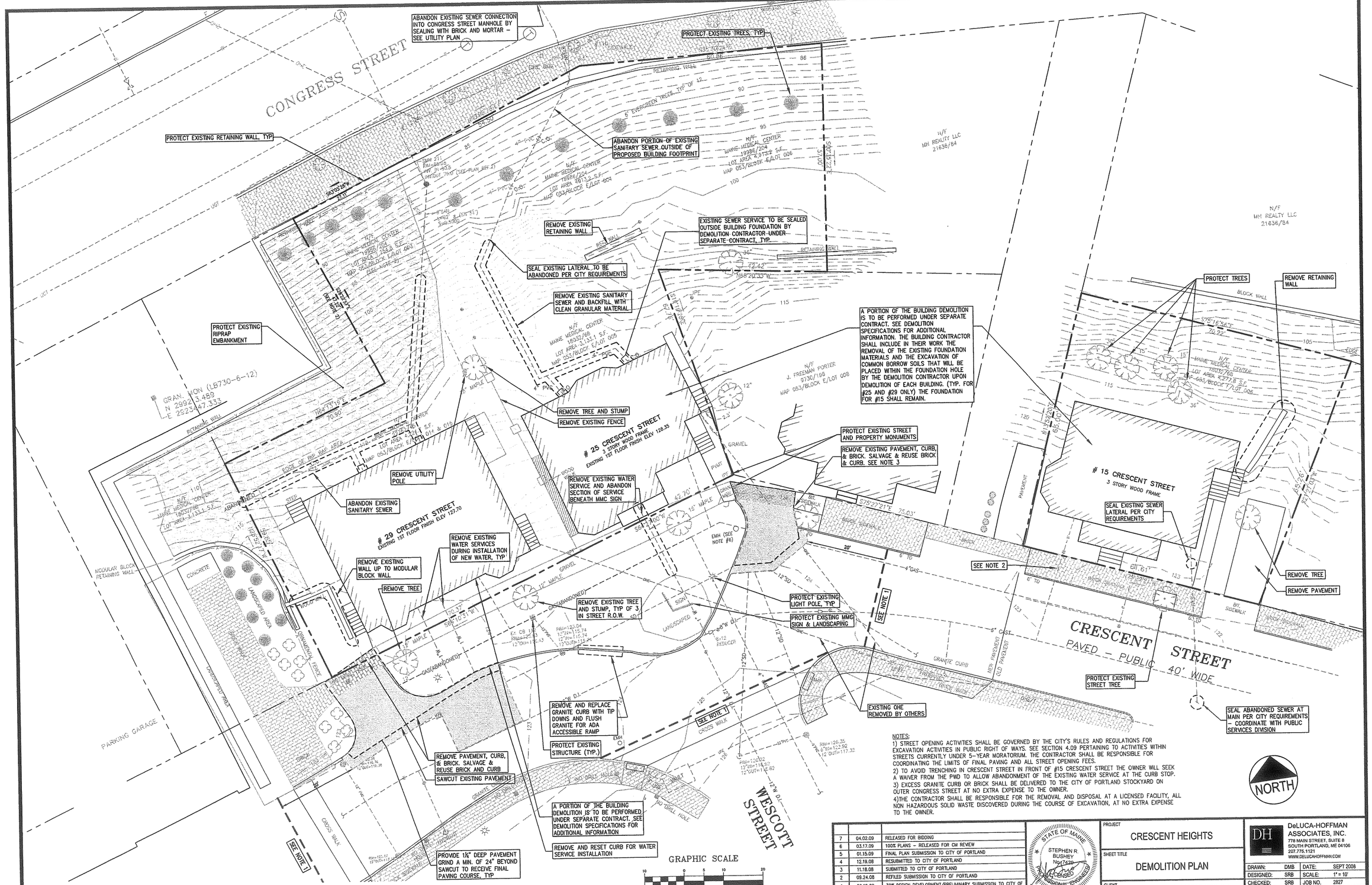
SHEET	C-6		



NOTES:

1) STREET OPENING ACTIVITIES SHALL BE GOVERNED BY THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. SEE SECTION 4.09 PERTAINING TO ACTIVITIES WITHIN STREETS CURRENTLY UNDER 5-YEAR MORATORIUM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LIMITS OF FINAL PAVING AND ALL STREET OPENING FEES.

2) TO AVOID TRENCHING IN CRESCENT STREET IN FRONT OF #15 CRESCENT STREET THE OWNER WILL SEEK A WAIVER FROM THE PWD TO ALLOW ABANDONMENT OF THE EXISTING WATER SERVICE AT THE CURB STOP.

3) EXCESS GRANITE CURB OR BRICK SHALL BE DELIVERED TO THE CITY OF PORTLAND STOCKYARD ON OUTER CONGRESS STREET AT NO EXTRA EXPENSE TO THE OWNER.

4)THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL AT A LICENSED FACILITY, ALL NON HAZARDOUS SOLID WASTE DISCOVERED DURING THE COURSE OF EXCAVATION, AT NO EXTRA EXPENSE TO THE OWNER.

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REVISIONS

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LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
DEMOLITION PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-7		

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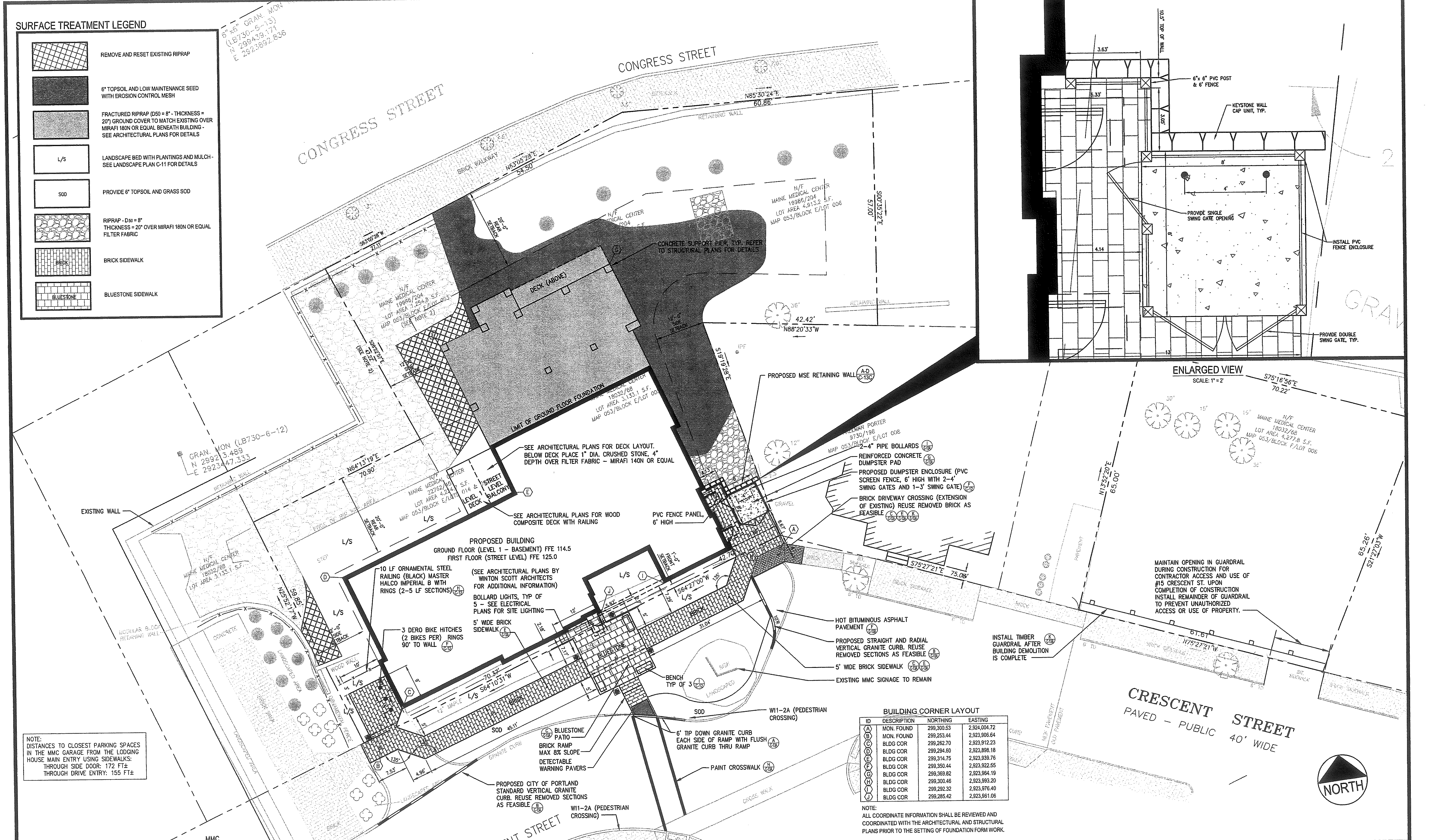

SURFACE TREATMENT LEGEND
REMOVE AND RESET EXISTING RIPRAP
6" TOPSOIL AND LOW MAINTENANCE SEED WITH EROSION CONTROL MESH
FRACTURED RIPRAP (D50 = 8" - THICKNESS = 20") GROUND COVER TO MATCH EXISTING OVER MIRAFI 180N OR EQUAL BENEATH BUILDING - SEE ARCHITECTURAL PLANS FOR DETAILS
L/S
LANDSCAPE BED WITH PLANTINGS AND MULCH - SEE LANDSCAPE PLAN C-11 FOR DETAILS
SOD
PROVIDE 6" TOPSOIL AND GRASS SOD
RIPRAP - D50 = 8" THICKNESS = 20" OVER MIRAFI 180N OR EQUAL FILTER FABRIC
BRICK
BRICK SIDEWALK
BLUESTONE
BLUESTONE SIDEWALK
CONGRESS STREET
CONGRESS STREET
BRICK WALKWAY
N85°30'24"E
60.86'
N53°05'28"E
54.50'
CONCRETE SUPPORT PIER, TYP. REFER TO STRUCTURAL PLANS FOR DETAILS
DECK (ABOVE)
42.42'
N88°20'33"W
LIMIT OF GROUND FLOOR FOUNDATION
PROPOSED MSE RETAINING WALL
2-4" PIPE BOLLARDS
REINFORCED CONCRETE DUMPSTER PAD
PROPOSED DUMPSTER ENCLOSURE (PVC SCREEN FENCE, 6' HIGH WITH 2-4' SWING GATES AND 1-3' SWING GATE)
BRICK DRIVEWAY CROSSING (EXTENSION OF EXISTING) REUSE REMOVED BRICK AS FEASIBLE
SEE ARCHITECTURAL PLANS FOR DECK LAYOUT. BELOW DECK PLACE 1" DIA. CRUSHED STONE, 4" DEPTH OVER FILTER FABRIC - MIRAFI 140N OR EQUAL
STREET LEVEL BALCONY
SEE ARCHITECTURAL PLANS FOR WOOD COMPOSITE DECK WITH RAILING
PVC FENCE PANEL, 6' HIGH
EXISTING WALL
GRAN. MON (LB730-6-12)
N64°13'19"E
70.90'
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1 - BASEMENT) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
(SEE ARCHITECTURAL PLANS BY WINTON SCOTT ARCHITECTS FOR ADDITIONAL INFORMATION)
10 LF ORNAMENTAL STEEL RAILING (BLACK) MASTER HALCO IMPERIAL B WITH RINGS (2-5 LF SECTIONS)
BOLLARD LIGHTS, TYP OF 5 - SEE ELECTRICAL PLANS FOR SITE LIGHTING
5' WIDE BRICK SIDEWALK
3 DERO BIKE HITCHES (2 BIKES PER) RINGS 90° TO WALL
S75°27'21"E
75.06'
S64°27'00"W
HOT BITUMINOUS ASPHALT PAVEMENT
PROPOSED STRAIGHT AND RADIAL VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
5' WIDE BRICK SIDEWALK
EXISTING MMC SIGNAGE TO REMAIN
BENCH TYP OF 3
W11-2A (PEDESTRIAN CROSSING)
6' TIP DOWN GRANITE CURB EACH SIDE OF RAMP WITH FLUSH GRANITE CURB THRU RAMP
PAINT CROSSWALK
BLUESTONE PATIO
BRICK RAMP MAX 8% SLOPE
DETECTABLE WARNING PAVERS
70.32'
S64°10'31"W
PROPOSED CITY OF PORTLAND STANDARD VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
W11-2A (PEDESTRIAN CROSSING)
CRESCENT STREET
WESCOTT STREET
REPAINT CROSSWALK AS NECESSARY
MMC PARKING GARAGE
NOTE:
DISTANCES TO CLOSEST PARKING SPACES IN THE MMC GARAGE FROM THE LODGING HOUSE MAIN ENTRY USING SIDEWALKS:
THROUGH SIDE DOOR: 172 FT±
THROUGH DRIVE ENTRY: 155 FT±
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.
6"x 6" PVC POST & 6' FENCE
KEYSTONE WALL CAP UNIT, TYP.
PROVIDE SINGLE SWING GATE OPENING
INSTALL PVC FENCE ENCLOSURE
PROVIDE DOUBLE SWING GATE, TYP.
ENLARGED VIEW
SCALE: 1" = 2'
S75°16'56"E
70.22'
N13°32'20"E
65.00'
65.26'
S21°27'03"W
MAINTAIN OPENING IN GUARDRAIL DURING CONSTRUCTION FOR CONTRACTOR ACCESS AND USE OF #15 CRESCENT ST. UPON COMPLETION OF CONSTRUCTION INSTALL REMAINDER OF GUARDRAIL TO PREVENT UNAUTHORIZED ACCESS OR USE OF PROPERTY.
INSTALL TIMBER GUARDRAIL AFTER BUILDING DEMOLITION IS COMPLETE
61.61'
N75°27'21"W
CRESCENT STREET
PAVED - PUBLIC 40' WIDE
NORTH

BUILDING CORNER LAYOUT

ID	DESCRIPTION	NORTHING	EASTING
A	MON. FOUND	299,300.53	2,924,004.72
B	MON. FOUND	299,253.44	2,923,906.64
C	BLDG COR	299,262.70	2,923,912.23
D	BLDG COR	299,294.60	2,923,898.18
E	BLDG COR	299,314.75	2,923,939.76
F	BLDG COR	299,350.44	2,923,922.55
G	BLDG COR	299,369.82	2,923,964.19
H	BLDG COR	299,300.46	2,923,993.20
I	BLDG COR	299,292.32	2,923,976.40
J	BLDG COR	299,285.42	2,923,961.06

NOTE:
ALL COORDINATE INFORMATION SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO THE SETTING OF FOUNDATION FORM WORK.

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8	04.02.09	RELEASED FOR BIDDING
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5	12.19.08	RESUBMITTED TO CITY OF PORTLAND
4	11.18.08	SUBMITTED TO CITY OF PORTLAND
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE – STEPHEN R. BUSHEY – No. 7429 – LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
SITE LAYOUT PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
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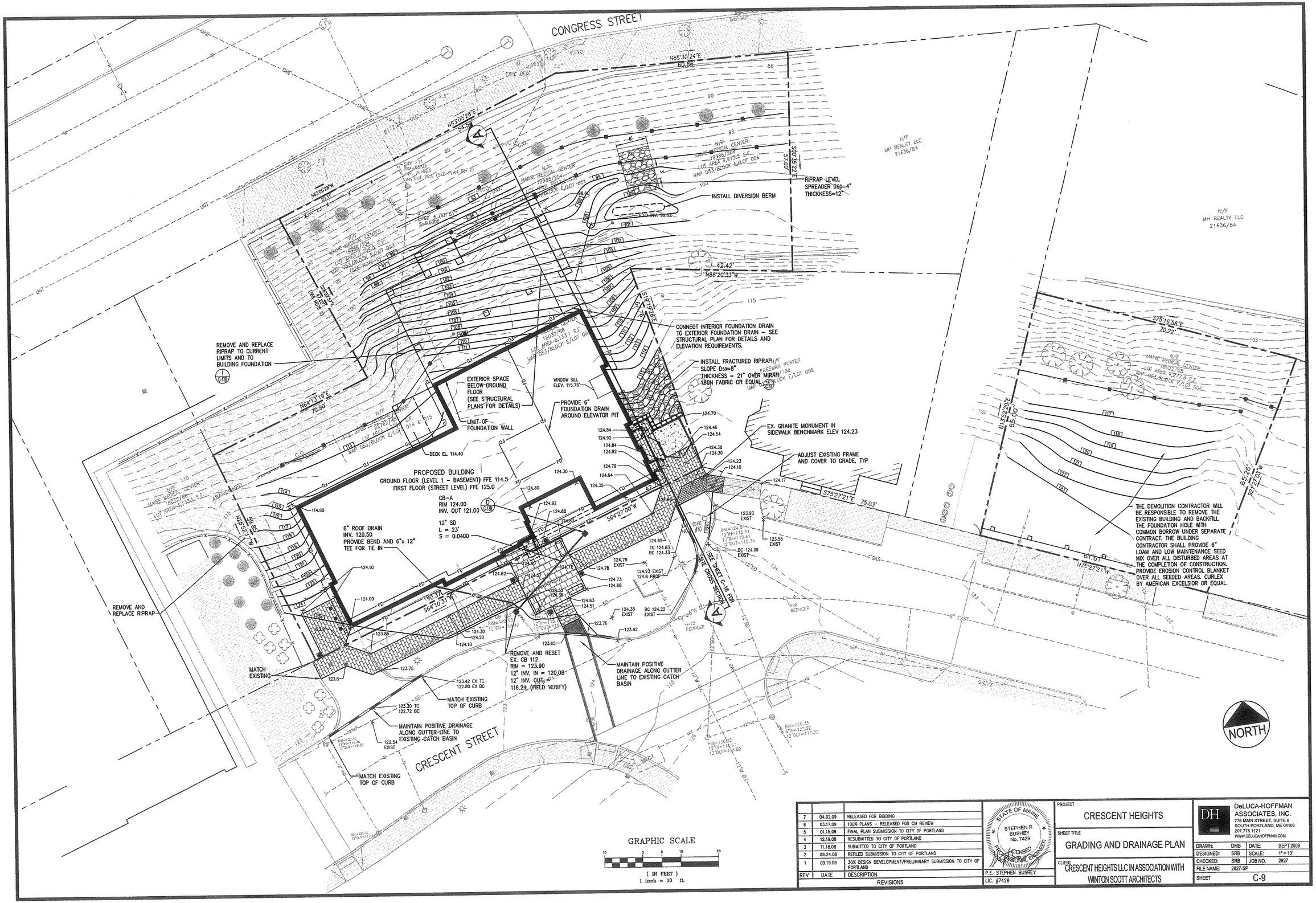

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

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STATE OF MAINE
STEPHEN R BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER
LICENSED

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
GRADING AND DRAINAGE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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CONGRESS STREET

PROVIDE TEST PIT TO VERIFY EXISTING PIPE ALIGNMENT AND DEPTH

SMH-A
RIM EL 96.00
4" INV. IN 90.5±
8" INV. OUT 90.0±

REMOVE AND RESET RIPRAP AS NECESSARY

ABANDON SEWER IN ACCORDANCE WITH CITY REQUIREMENTS SEAL AT MAIN, CAP NEAR BUILDING

SUBBASEMENT (SEE STRUCTURAL PLANS FOR DETAILS)

4" SAN L=32' S=0.453

SEWER EXIT INV. 105.0±

ABANDON EXISTING SEWER UPSTREAM OF SMH A AND REMOVE PIPE WHERE IN CONFLICT WITH BUILDING FOUNDATION, PIPE TO REMAIN SHALL BE FILLED WITH FLOWABLE FILL, TYP.

ELECTRIC METER AND SWITCH (SEE ELECTRICAL PLANS FOR DETAILS)

EXISTING GAS SERVICE TO BE ABANDONED PER UNITIL REQUIREMENTS

FIELD VERIFY GAS SERVICE POINT OF CONNECTION

PROPOSED BUILDING
GROUND FLOOR (LEVEL 1 – BASEMENT) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0

SEE ELECTRICAL PLANS FOR SITE LIGHTING CIRCUITING, TYP

EXISTING GAS SERVICE CLOSED (CUT)

PROPOSED WATER SERVICE ENTRY CONFIRM WATER ENTRANCE ELEVATIONS W/ MECH/PLUMBING PLANS

TEST PIT

REMOVE AND RESET CURB AS REQUIRED

NEW PAVEMENT / OLD PAVEMENT

INSTALL 3-PHASE TRANSFORMER ON POLE – SEE NOTES

REPAIR DISTURBED BRICK WALK, CURB, PAVEMENT

EXISTING FIRE HYDRANT

COORDINATE GAS REGULATOR LOCATION AND PROVIDE PROTECTIVE MEASURES AS NECESSARY – COORDINATE WITH LANDSCAPE ARCHITECT

PROVIDE CURB STOP

NEW WATER SERVICES TO GO UNDER STORM DRAIN

TEST PIT

ABANDON EXISTING WATER PER PWD REQUIREMENTS

CRESCENT STREET

PROTECT EXISTING UGE-SECONDARY LINES IF ENCOUNTERED – REPLACE IF NECESSARY AT NO EXTRA EXPENSE TO THE OWNER

INSTALL 2" CORPORATION AND 2" CURB STOP

INSTALL 6"x12" TAPPING SLEEVE AND GATE VALVE

EXISTING FIRE HYDRANT

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

INSET AT CORNER OF WEYMOUTH AND CONGRESS
SCALE: 1"=20'

CONGRESS STREET

SEAL SEWER AT MAIN IN ACCORDANCE WITH CITY STANDARDS

APPROXIMATE EXISTING SEWER SERVICE CONNECTION

ABANDON EXISTING WATER SERVICE – SEE NOTE 1

ABANDON GAS MAIN – CAP AT RIGHT-OF-WAY LINE

ABANDON EXISTING SEWER – SEAL AT MAIN AND CAP OUTSIDE OF RIGHT OF WAY – SEE NOTE 2

NORTH

NOTES:
1) EXISTING WATER SERVICE(S) SHALL BE ABANDONED IN ACCORDANCE WITH THE PWD REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
2) ALL EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY SHALL BE GOVERNED BY THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. ALL FEES AND PAVEMENT RESTORATION REQUIREMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO EXTRA COST TO THE OWNER.
3) VERIFY AND COORDINATE ALL SITE ELECTRICAL AND COMMUNICATIONS WITH PLANS PREPARED BY BARTLETT DESIGN.

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STEPHEN R BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
UTILITY PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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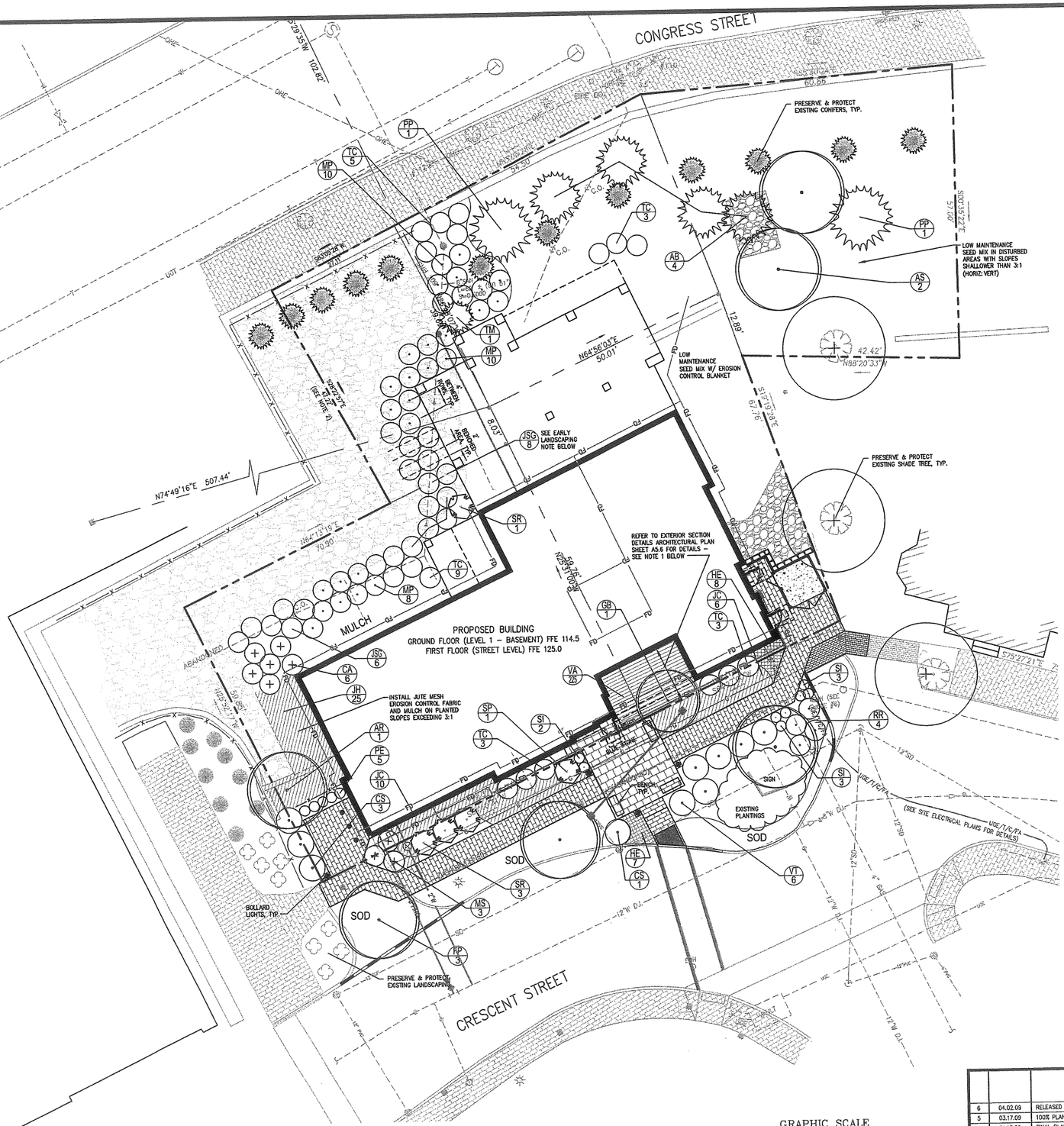

PLANT LIST

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	SPACING	REMARKS
TREES						
AB	4	Abies balsamea Balsam Fir	6-7' ht.	B&B		
AR	1	Acer rubrum 'Autumn Flame' Autumn Flame Red Maple	2 1/2-3" cal.	B&B		
AS	2	Acer saccharum 'Green Mountain' Green Mountain Sugar Maple	2 1/2-3" cal.	B&B		
FP	3	Fraxinus pennsyivanica 'Summit' Summit Ash	2 1/2-3" cal.	B&B		
GB	1	Ginkgo biloba Ginkgo Tree	2" cal.	B&B		
PP	2	Picea pungens 'Glauca' Colorado Blue Spruce	6-7' ht.	B&B		
TM	1	Taxus X media 'Hicksii' Hick's Yew	24-30" ht	B&B		
SHRUBS & ORNAMENTAL GRASSES						
CA	6	Calamagrostis acutifolia 'Karl Foerster' Karl Foerster Feather Reed Grass	full	3 gal.	4'oc	
CS	4	Cornus sericea 'Isanti' Isanti Red Twig Dogwood	24-30" ht	5 gal./B&B	5'oc	
JSP	14	Juniperus chinensis 'Sea Green' Sea Green Juniper	18-24" spr.	3 gal/B&B	4'oc	
MP	28	Myrica pensylvanica Bayberry	18-24" ht	3 gal/B&B	4'oc	
MS	3	Miscanthus sinensis 'Graziella' Silver Grass	full	3 gal.	4'oc	
RR	4	Rosa rugosa Rugosa Rose, pink	18-24"ht.	3 gal.	4'oc	
SP	1	Syringa patula 'Miss Kim' Miss Kim Lilac	30-36" ht.	B&B		
SR	4	Syringa x prestoniae 'Donald Wyman' Lilac, deep pink	30-36" ht.	B&B	4'oc	shrub form
TC	23	Taxus cuspidata 'Green Wave' Green Wave Yew	18-24" spr.	B&B/3 gal.	4'oc	
VT	6	Viburnum trilobum 'Alfredo' Alfredo American Cranberry Viburnum	24-30" ht.	B&B/3 gal.	5'oc	
GROUNDCOVER & PERENNIALS						
VA	225	Vaccinium angustifolium Low-bush Blueberry sod	sod	sq. ft.		
HE	15	Hemerocallis, mixed Daylily, red, yellow, orange mixed	3-4 ppp	1 gal.	2' oc	similar blade/plant size
JC	16	Juniperus chinensis 'Blue Chip' Blue Chip Juniper	18-24" spr.	3 gal.	4' oc	
*JH	25	Juniperus horizontalis 'Bar Harbor' Creeping Thyme	18-24" spr.	3 gal.	3' oc	on >3:1 slope
PE	5	Perennials, flowering e.g., Echinacea, Gaillardia	full	1 gal.	2' oc	
SI	8	Iris siberica 'Caesar's Brother' Siberian Iris, blue	3-4 ppp	1 gal.	2' oc	blue flower

* ALTERNATE: Low-bush Blueberry sod, 275 S.F.

EARLY LANDSCAPING

INSTALL 20+ SHRUBS ON BENCHED AREAS PRIOR TO REPAIR OF RIPRAPPED SLOPE. SEE DETAIL I, SHEET C-13B. WATER FOR DURATION OF CONSTRUCTION PERIOD UNTIL FINAL ACCEPTANCE OF LANDSCAPING.

NOTE:

1. THE CIVIL / SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MATERIALS AND INSTALLATION OF THE FOLLOWING GREEN ROOF SECTION ELEMENTS:
   - -BIO BARRIER ® ROOT BARRIER FABRIC
   - -4" DRAINAGE GRAVEL - MDOT 703.22 TYPE C
   - -SOIL SEPARATION FABRIC - MIRAFI 140N OR EQUAL
   - -8" LOAM
   - -2" BLUEBERRY SOD
   - -2" MULCH

LANDSCAPE LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUB/ ORNAMENTAL GRASS
- EVERGREEN SHRUB
- EXISTING TREES AND SHRUBS TO REMAIN
- EVERGREEN GROUND COVER WITH 3" MULCH (MIN.)
- DECIDUOUS GROUND COVER WITH 3" MULCH (MIN.)
- FLOWERING PERENNIAL GROUND COVER WITH 3" MULCH (MIN.)

NORTH

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1	08.29.08	30% DESIGN DEVELOPMENT

REVISIONS

LICENSED LANDSCAPE ARCHITECT
SHELLEY E. BRUNELLE
No. 2593
STATE OF MAINE
62-09

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
LANDSCAPE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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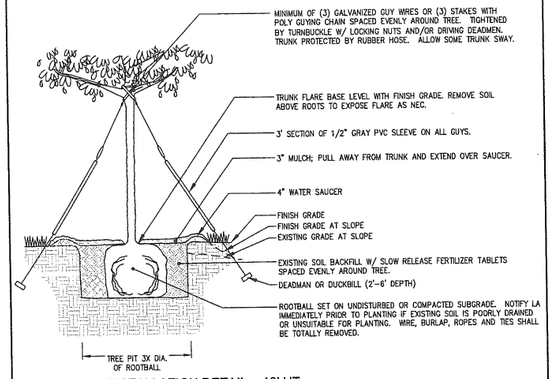
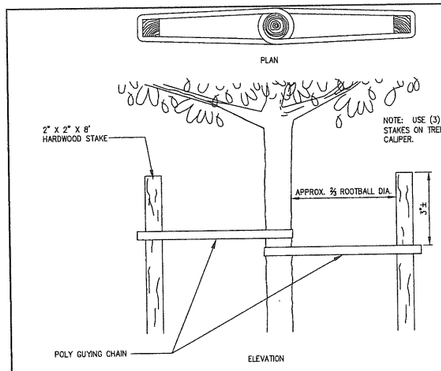
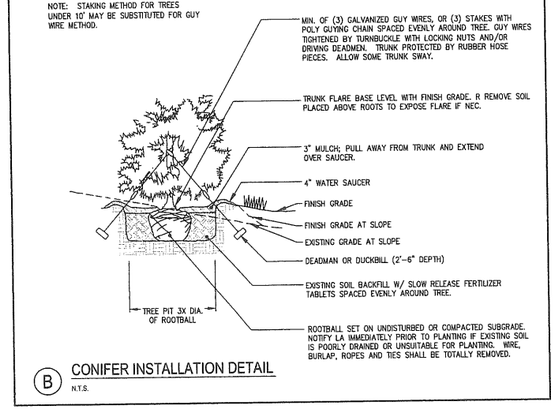


A TREE INSTALLATION DETAIL: >10' HT.
N.T.S.



D POLY GUYING DETAIL
N.T.S.



B CONIFER INSTALLATION DETAIL
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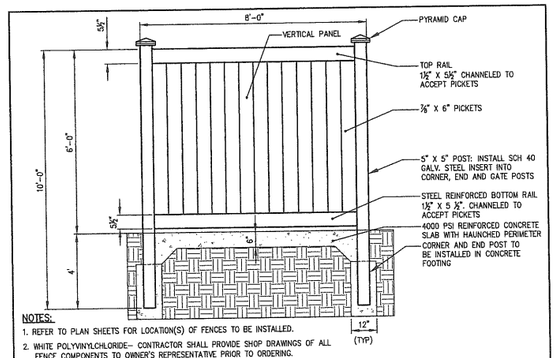
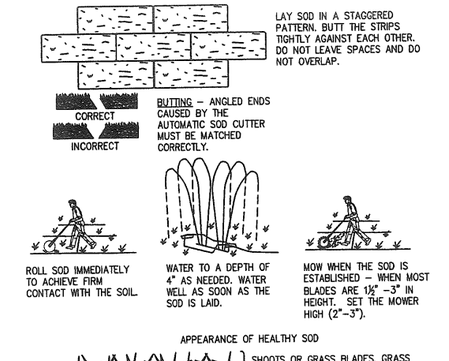


NOTES:
1. REFER TO PLAN SHEETS FOR LOCATION(S) OF FENCES TO BE INSTALLED.
2. WHITE POLYVINYLCHLORIDE– CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL FENCE COMPONENTS TO OWNER'S REPRESENTATIVE PRIOR TO ORDERING.
3. OWNER RESERVES THE RIGHT TO ALTER THE DIMENSIONS TO MEET VENDOR SUPPLIED DIMENSIONS.
4. CORNER & END POSTS AND GATE POSTS ARE TO BE SET IN FIBER REINFORCED CONCRETE. REFER TO THE CONTRACT SPECIFICATIONS.
5. DOUBLE SWING GATES SHALL HAVE IRON PINS TO SECURE SWING.

F DUMPSTER ENCLOSURE FENCE DETAIL
N.T.S.



BUTTING – ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP.

ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.

WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

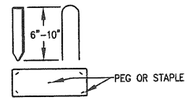
MOW WHEN THE SOD IS ESTABLISHED – WHEN MOST BLADES ARE 1½" –3" IN HEIGHT. SET THE MOWER HIGH (2"–3").

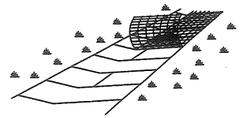
APPEARANCE OF HEALTHY SOD

SHOOTS OR GRASS BLADES. GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"–3" CUTTING HEIGHT.
THATCH – GRASS CLIPPINGS AND DEAD LEAVES, UP TO 1/2" THICK.
ROOT ZONE – SOIL AND ROOTS. SHOULD BE 1/2"–3/4" THICK, WITH DENSE ROOT MAT FOR STRENGTH.

LAY SOD ACROSS THE DIRECTION OF FLOW.

USE PEGS OR STAPLES TO FASTEN SOD FIRMLY – AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3–4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.





IN CRITICAL AREAS, SECURE SOD WITH CHICKEN WIRE OR NETTING. USE STAPLES.

G SOD PLACEMENT DETAILS
N.T.S.

SPECIFICATIONS

SITE PREPARATION
(a) INSTALL NEEDED WATER CONTROL MEASURES.
(b) GRADE SLOPES 2:1 OR FLATTER.
(c) BEFORE LAYING SOD, PROVIDE ADEQUATE DRAINAGE WHERE INTERNAL WATER MOVEMENT, ESPECIALLY AT THE TOE OF SLOPES, MAY CAUSE SEEPS OR SOIL SLIPPAGE.

SOIL PREPARATION
(a) PROVIDE THE BEST POSSIBLE SOIL CONDITIONS FOR SODDING. THE DESIRABLE SOIL TEXTURES INCLUDE SANDY LOAM, LOAM, AND SILT LOAM. WHERE DROUGHTY OR CLAYEY SOILS ARE ENCOUNTERED, CONSIDER AMENDING THEM WITH IMPORTED MATERIALS (TOPSOIL, COMPOST, SAND, ETC.) TO IMPROVE MOISTURE AND NUTRIENT RETENTION AND DRAINAGE. RESPREAD SCREENED NATIVE TOPSOIL (WHEN AVAILABLE) AFTER GRADING.

(b) IF TIME PERMITS, HAVE SOILS TESTED AND FOLLOW LIME AND FERTILIZER RECOMMENDATIONS.

(c) FILL AREAS MUST BE COMPACTED ENOUGH TO PREVENT UNEVEN SETTLING. THE ENTIRE SURFACE TO BE SODDED SHALL BE FREE FROM LARGE CLODS, STONES, OR OTHER DEBRIS. AT THIS STAGE, INCORPORATE LIME AND FERTILIZER UNIFORMLY INTO THE SURFACE SOIL AS NEEDED. IMMEDIATELY BEFORE SODDING, THE SOIL SHALL BE LOOSENED TO A DEPTH OF 1 INCH AND THOROUGHLY DAMPENED, IF NOT ALREADY MOIST. SOD SHALL NOT BE LAID ON DRY SOIL. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHENEVER PRACTICAL.

SELECTION OF SOD
(a) SELECT SOD GROWN FROM SEED OF ADAPTED VARIETIES OR TYPES AND UNDER CULTURAL PRACTICES CONDUCIVE TO HIGH QUALITY SOD FREE OF THATCH, WEED, INSECT, DISEASE, AND OTHER PEST PROBLEMS.

(b) SELECT SPECIES AND VARIETIES BEST SUITED FOR THE SITES TO BE STABILIZED.

(c) SELECT SOD AT LEAST 15 MONTHS OLD AND NO OLDER THAN 3 YEARS. CULTIVATED TURF GRASS IS USUALLY CONSIDERED READY FOR HARVEST WHEN A CUT PORTION OF SOD 3 FEET LONG BY 1 TO 1 1/2 FEET WIDE WILL SUPPORT ITS OWN WEIGHT WHEN SUSPENDED VERTICALLY FROM THE UPPER 10 PERCENT OF THE SECTION. THE MOST COMMON AGE OF SOD WHEN CUT IS 15 TO 24 MONTHS.

(d) SELECT SOD CUTS OF WIDTH AND LENGTH SUITED TO THE PROJECT AND AVAILABLE EQUIPMENT. GENERALLY, SOD PIECES ARE 12 TO 24 INCHES WIDE, AVERAGING 18 INCHES IN WIDTH. LENGTHS OF PIECES VARY FROM 4 TO 8 FEET. SOD MAY BE CUT AND ROLLED OR FOLDED IN THE MIDDLE AND STACKED ON PALLETS. FOLDED SOD IS CUT SHORTER THAN ROLLED SOD – ABOUT 3 TO 4 FEET IN LENGTH. SOD SHOULD BE CUT WITH A 1/4 TO 1/2 INCH LAYER OF SOIL. ABOUT 80 PERCENT OF ALL RHIZOMES ARE IN THE TOP 3/4 INCH OF SOIL. THE THINNER THE SOD IS CUT THE MORE QUICKLY IT WILL KNIT TO THE SITE SOIL, BUT THE SOIL LAYER MUST BE THICK ENOUGH TO HOLD CUT PIECES TOGETHER WITHOUT FALLING APART.

(e) HAVE SOD DELIVERED TO THE SITE AS SOON AS PRACTICAL AFTER LIFTING. DURING HOT WEATHER, DELIVERY SHOULD BE MADE WITHIN 6 HOURS AND MAY BE EXTENDED TO 48 HOURS DURING COOL SEASONS. IT IS GENERALLY UNWISE TO MOVE SOD DURING JULY AND AUGUST. IF MOVED DURING THIS PERIOD, SOD MAY NEED TO BE CUT THICKER AND IT WILL REQUIRE FREQUENT IRRIGATION.

ESTABLISHMENT
(a) DATES: SOD CAN BE ESTABLISHED FROM APRIL 1st TO NOVEMBER 15th (MAY VARY WITH REGION OF STATE).

(b) LAY STRIPS OF SOD AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT THE LOWEST ELEVATION. WEDGE THE EDGES AND ENDS OF THE SOD STRIPS TOGETHER AND TAMP OR ROLL. STAGGER JOINTS. LAY SO THE TOP OF THE SOIL LAYER IS FLUSH WITH THE TOP OF THE UNDISTURBED GROUND OR PAVEMENT SURFACE.

(c) USE WIRE STAPLES, FINE MESH WIRE OR WOOD PINS AND BINDER TWINE ON VERY STEEP SLOPES TO HOLD SOD IN PLACE UNTIL SECURED BY PLANT GROWTH.

(d) IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. IF UNFAVORABLE DRY WEATHER OR OTHER CONDITIONS PREVAIL, ADDITIONAL WATERING WILL SUBSEQUENTLY BE REQUIRED. IT MAY ALSO BE DESIRABLE TO IRRIGATE AREA FROM WHICH SOD IS TO BE REMOVED PRIOR TO LIFTING.

SODDED WATERWAYS
(a) CARE SHALL BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THE SPECIFICATIONS. THE SOD TYPE SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY.

(b) SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW (FIGURE 4.2). CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.

(c) AFTER ROLLING OR TAMPING, SOD SHALL BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. CHICKEN WIRE, JUTE OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

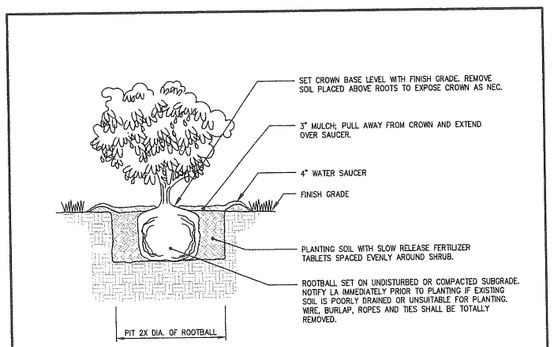
(d) ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

TIMING
WHEN SOD IS INSTALLED TO STABILIZE AREAS OF CONCENTRATED FLOW (INLETS, DIVERSIONS, DITCHES, ETC.), INSTALLATION MUST BE COMPLETED BEFORE RUNOFF IS DIRECTED TO THAT AREA.

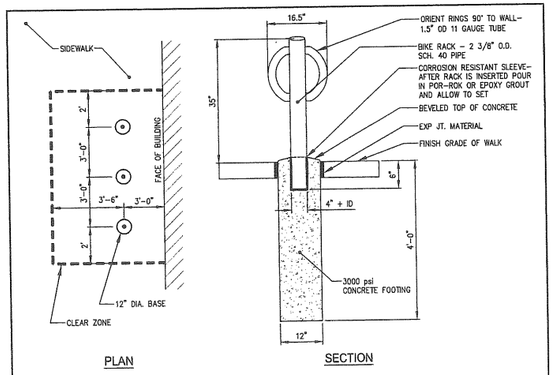
MAINTENANCE
(a) AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.

(b) NO MORE THAN 1/3 OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

(c) AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS.

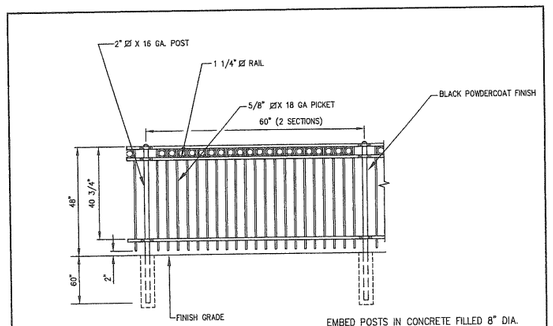


C SHRUB INSTALLATION DETAIL
N.T.S.



MFR: DERO BIKE RACKS
IN–GROUND MOUNT,
POWDER COAT FINISH
COLOR: BLACK
www.dero.com
1–800–295–4915

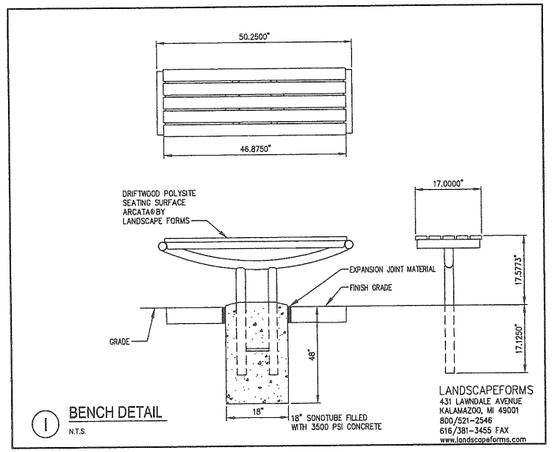
F BIKE HITCH MOUNTING DETAIL
N.T.S.



EMBED POSTS IN CONCRETE FILLED 8" DIA. SONOTUBE EXTENDING TO FROST LINE (5'–6" DEPTH). SLOPE TOP OF CONCRETE TO DRAIN.

MASTER HALCO COMMERCIAL GRADE IMPERIAL B W/RINGS

H ORNAMENTAL METAL PICKET FENCE DETAIL
N.T.S.



LANDSCAPEFORMS
431 LAWNDALE AVENUE
KALAMAZOO, MI 49001
800/521–2546
616/381–3455 FAX
www.landscapeforms.com

I BENCH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

LICENSED LANDSCAPE ARCHITECT
SHELLEY E. BRUNELLE No. 2593
STATE OF MAINE
12.09

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
LANDSCAPE AND SITE FURNISHING DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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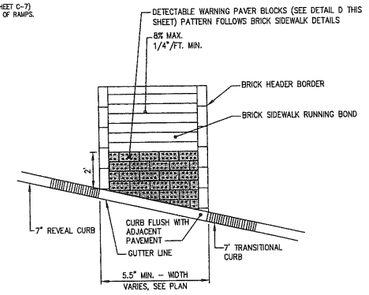
WWW.DELUCAHOFFMAN.COM

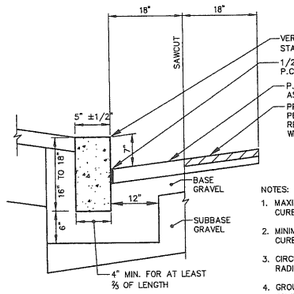
DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-12		

NOTES:
1. SEE SITE LAYOUT PLAN (SHEET C-7) FOR LOCATIONS & DIMENSIONS OF RAMPS.



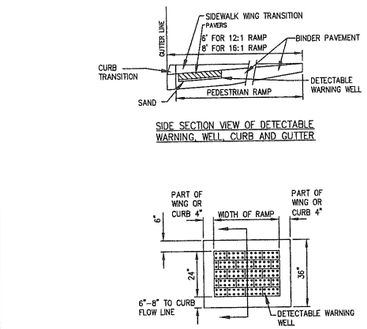
LAYOUT 1 – PLAN VIEW

(A) ADA RAMP DETAIL - WITH PAVER BLOCKS
N.T.S.



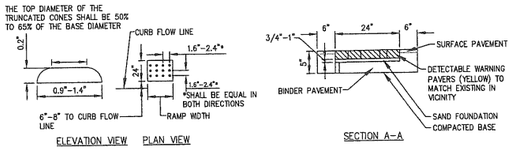
NOTES:
1. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
2. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
3. CIRCULAR CURB REQUIRED FOR RADIUS LESS THAN 50'
4. GROUT OR CAULK ALL CURB JOINTS OVER ¼" IN WIDTH. INSTALL STRIP OF FILTER FABRIC BEHIND EACH CURB JOINT.

(B) VERTICAL GRANITE CURB
N.T.S.



SIDE SECTION VIEW OF DETECTABLE WARNING, WELL, CURB AND GUTTER

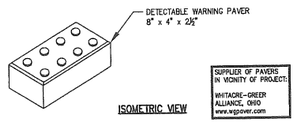
PLAN VIEW OF DETECTABLE WARNING AND WELL
PAVERS NOT DRAWN TO SCALE



ELEVATION VIEW PLAN VIEW — SECTION A–A

DOME AND DETECTABLE WARNING DETAILS

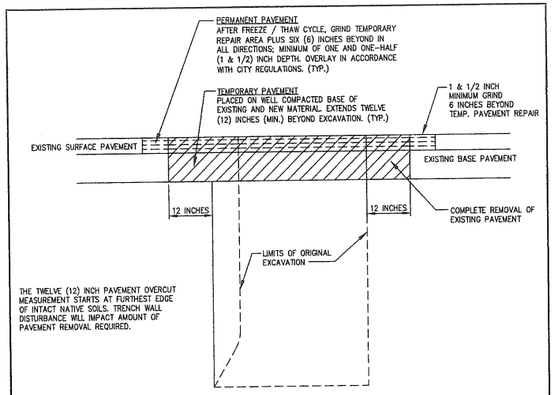
NOTE:
ALL DETECTABLE WARNING AREAS SHALL START 6 INCHES FROM THE FLOW LINE OF THE CURB AND BE 24 INCHES PARALLEL TO CURB LINE (6 TO 30" FROM FACE OF CURB) AND COVER THE COMPLETE WIDTH OF THE RAMP AREA, UNLESS OTHERWISE NOTED



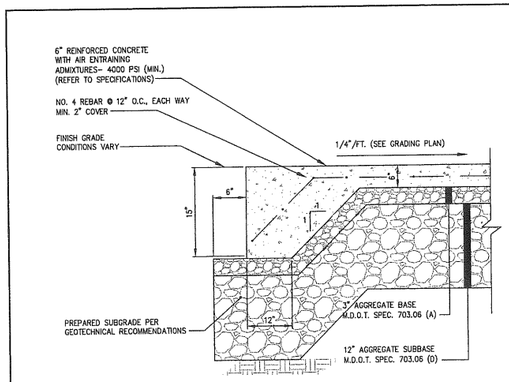
ISOMETRIC VIEW

SUPPLIER OF PAVERS IN VICINITY OF PROJECT:
WHITACRE-GREER ALLIANCE, OHIO
www.wgpaver.com

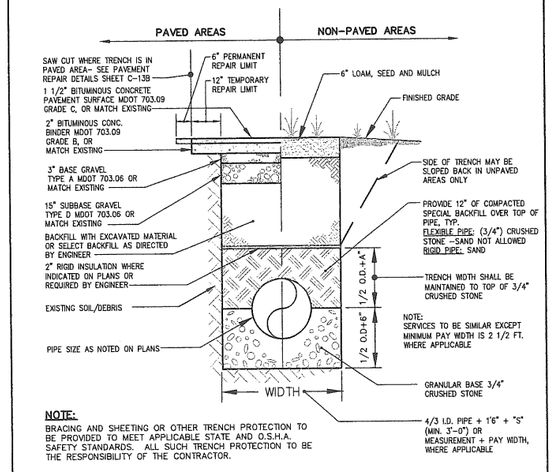
(D) DETECTABLE WARNING PAVER DETAIL
N.T.S.



(F) CROSS SECTION OF TYPICAL EXCAVATION
N.T.S.

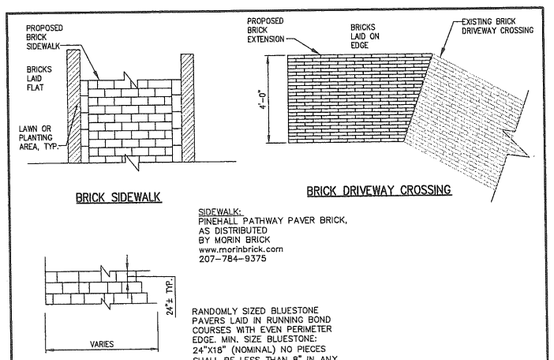


(G) REINFORCED CONCRETE PAD DETAIL
N.T.S.

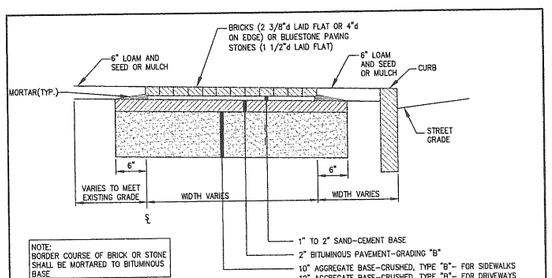


NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

(J) TYPICAL UTILITY PIPE TRENCH SECTION DETAIL
N.T.S.



(C) PAVER PATTERNS
N.T.S.

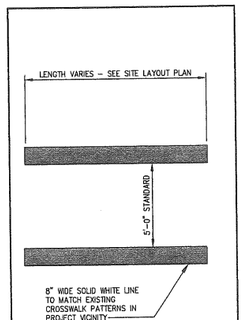


NOTE:
BORDER COURSE OF BRICK OR STONE SHALL BE MORTARED TO BITUMINOUS BASE

SECTION VIEW

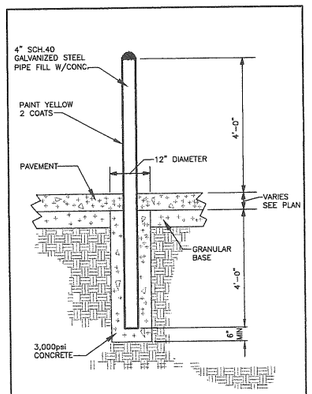
REFER TO THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES– SECTION 1– STREET DESIGN STANDARDS FOR PERTINENT INFORMATION ON SIDEWALK CONSTRUCTION.

(E) MASONRY SIDEWALK WITH BITUMINOUS BASE
N.T.S.

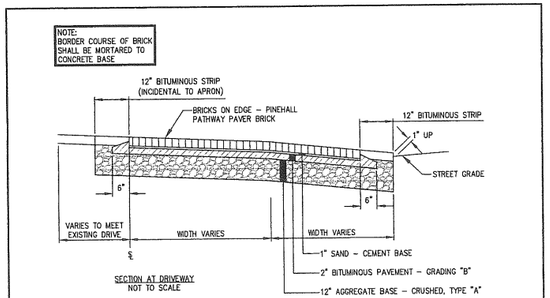


CROSSWALK STRIPING DETAIL

(H) CROSSWALK STRIPING DETAIL
N.T.S.



(I) PIPE BOLLARD DETAIL
N.T.S.



SECTION AT DRIVEWAY
NOT TO SCALE

CITY OF PORTLAND
BRICK WITH BITUMINOUS BASE
SIDEWALK AND DRIVEWAY CONSTRUCTION DETAIL

(K)
N.T.S.

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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE AND UTILITY DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04105
207.775.1121
WWW.DELUCAHOFFMAN.COM

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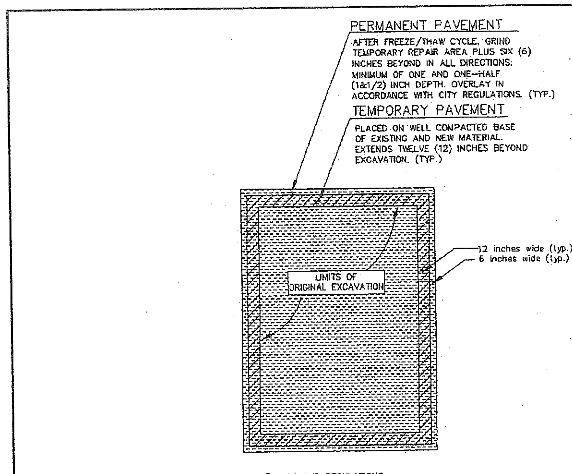
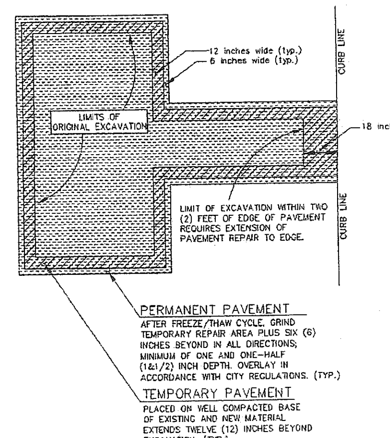
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13A		



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

(A) PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

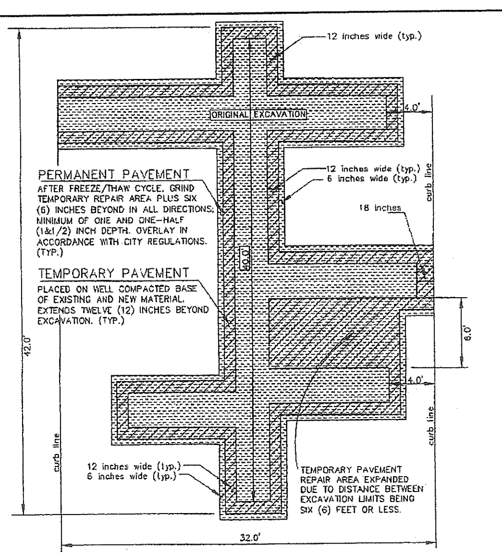
APPENDIX C1 N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

(B) PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

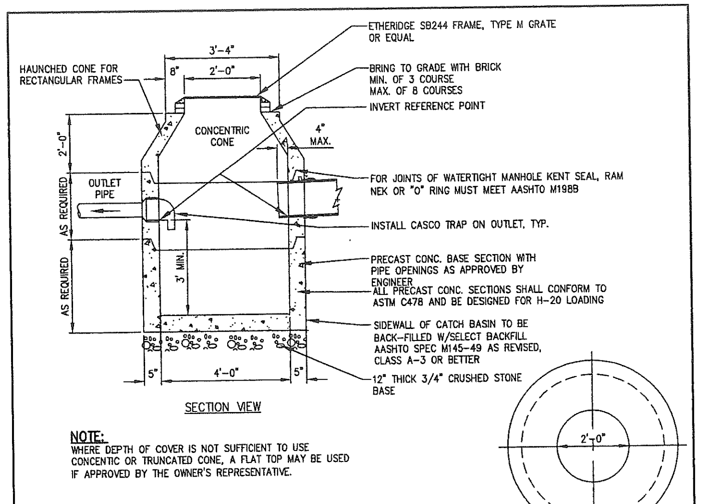
APPENDIX C2 N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

(C) PLAN VIEW OF MAJOR EXCAVATION PAVEMENT REPAIR

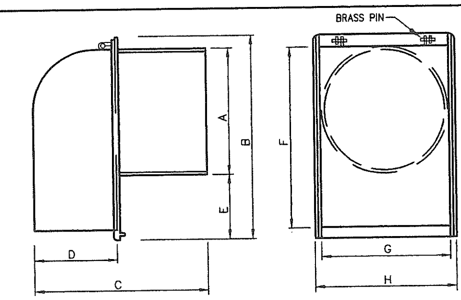
APPENDIX C3 N.T.S.



NOTE:
WHERE DEPTH OF COVER IS NOT SUFFICIENT TO USE CONCENTIC OR TRUNCATED CONE, A FLAT TOP MAY BE USED IF APPROVED BY THE OWNER'S REPRESENTATIVE.

(D) 4'-0" PRECAST CATCH BASIN DETAIL

N.T.S.



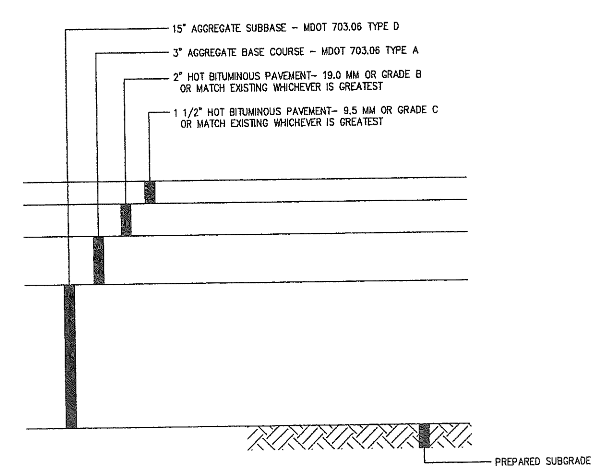
SIZE	A	B	C	D	E	F	G	H
12"	11 1/2	20	18	8	6 3/8	18	12 1/2	13 3/8
15"	14 1/2	22 1/2	23	10 1/4	5 3/4	21	14 1/4	15 3/4

NOTES:
1. INSTALL AN ETHERIDGE FOUNDRY CASCO TRAP OR EQUAL ON ALL CATCH BASIN OUTLET PIPES. SNOUT OIL & DEBRIS STOP WILL ALSO BE ACCEPTED.
2. THE CASCO TRAP IS AN ETHERIDGE STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP. TO INSTALL, THE CASCO TRAP IS INSERTED INTO THE STORM DRAIN WITH THE HOOD DOWN.

INSTALLATION OF CASCO TRAP IS INCIDENTAL TO CATCH BASIN STRUCTURE.

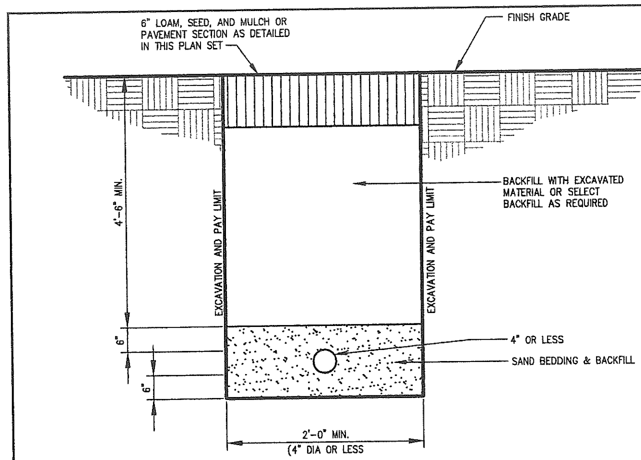
(E) ETHERIDGE FOUNDRY CASCO TRAP DETAIL

N.T.S.



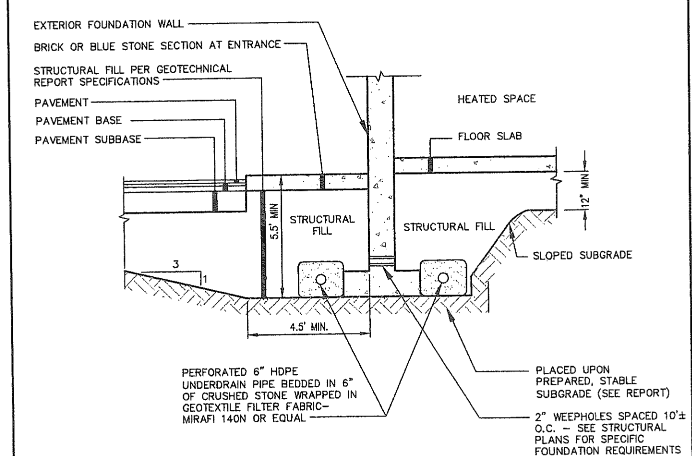
(F) TYPICAL PAVEMENT SECTION

N.T.S.



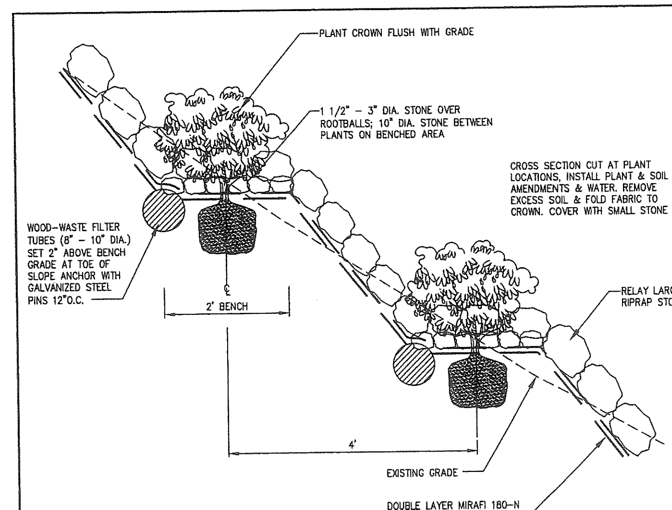
(G) WATER SERVICE TRENCH DETAIL

N.T.S.



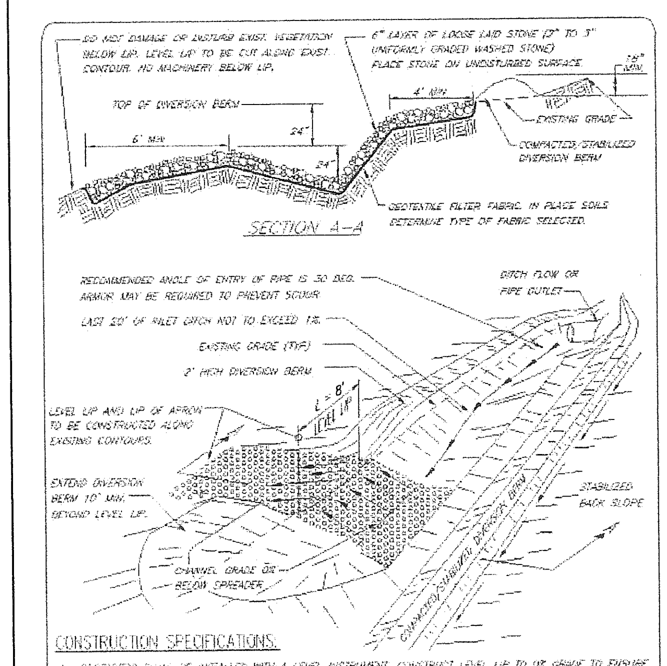
(H) BUILDING UNDERDRAIN DETAIL

N.T.S.



(I) PLANTED RIPRAP SLOPE SECTION

N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. SPREADERS SHALL BE INSTALLED WITH A LEVEL INSTRUMENT. CONSTRUCT LEVEL LIP TO 0% GRADE TO ENSURE UNIFORM SHEET FLOW. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL (NOT FILL).
2. SELECT GEOTEXTILE FABRIC BASED ON UNDISTURBED SOILS (SANDS, SILTS, CLAYS, ETC.).
3. PLACE 6" LAYER OF UNIFORMLY GRADED STONE 2" TO 3" IN DIA. RAKE TO FORM SMOOTH UNIFORM SURFACE. DO NOT FILL VOIDS IN STONE.
4. THE INLET DITCH SHALL NOT EXCEED A 1% GRADE FOR AT LEAST 20 FEET BEFORE ENTERING THE SPREADER.
5. STORM RUN–OFF CONVERTED TO SHEET FLOW ACROSS OUTLET APRON SHALL FLOW ONTO STABILIZED AREAS. RUN–OFF SHALL NOT BE RECONCENTRATED IMMEDIATELY BELOW THE POINT OF DISCHARGE.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.
7. CONSTRUCTION OF LEVEL LIP SPREADER SHALL BE FROM UPHILL SIDE ONLY. LEVEL LIP & AREA BELOW SPREADER SHALL BE AT EXISTING GRADES & UNDISTURBED BY EARTHWORK OR EQUIPMENT.
8. CONSTRUCT SPREADER WITH LIP AT EXISTING ELEVATION AS SPECIFIED.
9. DOWNGRADIENT RECEIVING AREA MUST BE NATURALLY WELL VEGETATED.
10. DISCHARGE NOT PERMITTED WITHIN 25' OF A STREAM OR WETLAND. CONSULT DEP IF STRUCTURE MUST BE WITHIN 75' OF STREAM OR WATER BODY.

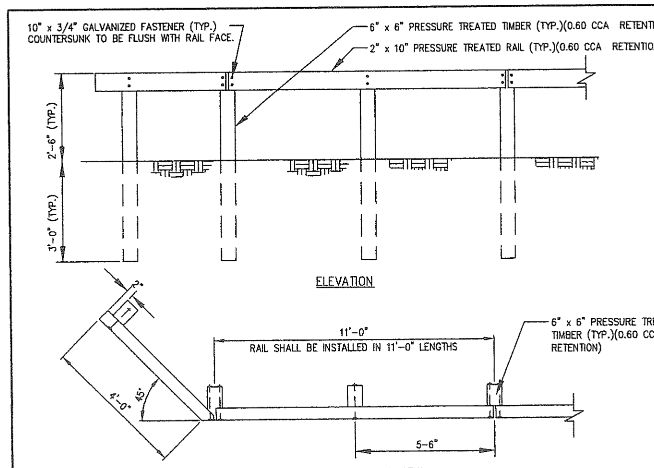
ME DEP 2003

LEVEL LIP SPREADER

FILE: LVLLIPSPRDR

(J) LEVEL LIP SPREADER

N.T.S.



(K) TIMBER GUIDERAIL DETAIL

N.T.S.

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1	12.19.08	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN R. BUSHEY No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE AND UTILITY DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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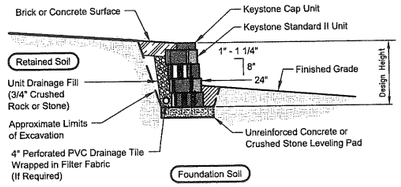
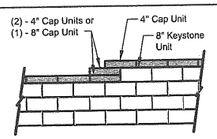
DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13B		



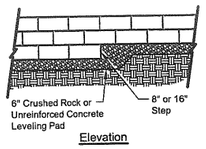
TYPICAL GRAVITY WALL SECTION
BY KEYSTONE RETAINING WALL SYSTEMS

(A) N.T.S. Standard II Unit - 1" Setback



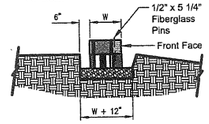
Note:
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps



Elevation

Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



Section
Leveling Pad Detail

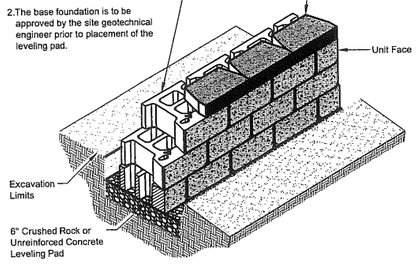
(D) TOP OF WALL STEPS AND LEVELING PAD DETAIL
N.T.S.

Base Leveling Pad Notes:

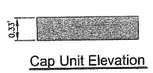
1. The leveling pad is to be constructed of crushed stone or 2,000 psi± unreinforced concrete
2. The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard II Unit	
Width:	18"
*Depth:	18"
Height:	8"
*Weight:	112 lbs

Cap Unit	
Width:	18"
*Depth:	10 1/2"
Height:	4"
*Weight:	50 lbs

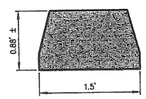


(B) STANDARD II UNIT/BASE PAD ISOMETRIC SECTION VIEW
N.T.S. * Dimensions & Weight May Vary by Region



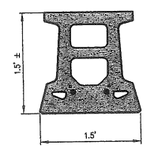
Cap Unit Elevation

Standard II Elevation



Cap Unit Plan

Straight Split
Cap Unit Option
* Dimensions & Availability Will Vary by Region



Standard II Plan

Standard II Unit
* Dimensions May Vary by Region

(C) STRAIGHT SPLIT CAP UNIT OPTION AND STANDARD II UNIT DETAIL
N.T.S.

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
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		REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
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SHEET TITLE
SITE AND UTILITY DETAILS

CLIENT
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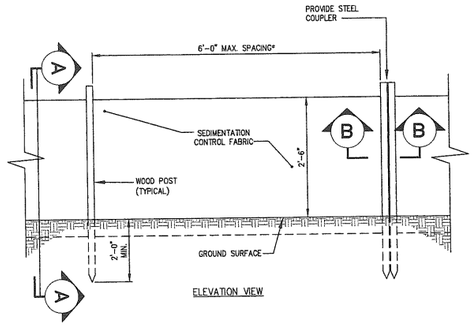
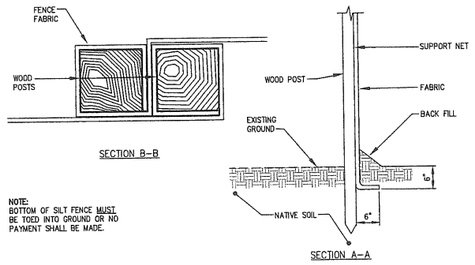


ELEVATION VIEW

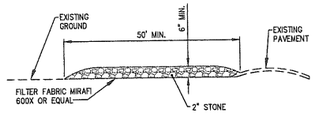
*NOTE:
THE SILT FENCE SHOULD HAVE A MINIMUM STAKING OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MINIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6" IN WHICH CASE STAKES MAY BE SPACED AT 10'.



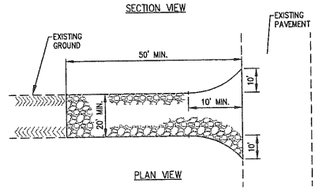
NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE.

A SILTATION FENCE DETAIL
N.T.S.

NOTE: CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES

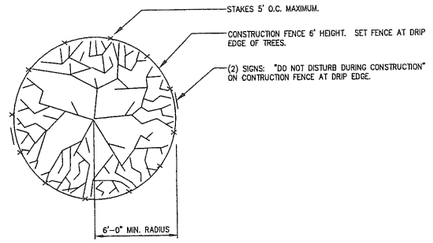


SECTION VIEW



PLAN VIEW

C STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



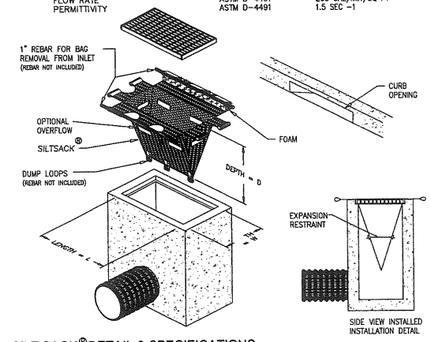
E TREE PROTECTION DETAIL
N.T.S.

SILTSACK®
SPECIFICATIONS

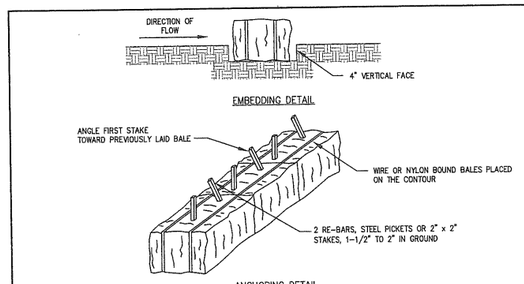
NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

HI-FLOW SILTSACK® (FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



H SILT SACK® DETAIL & SPECIFICATIONS
N.T.S.



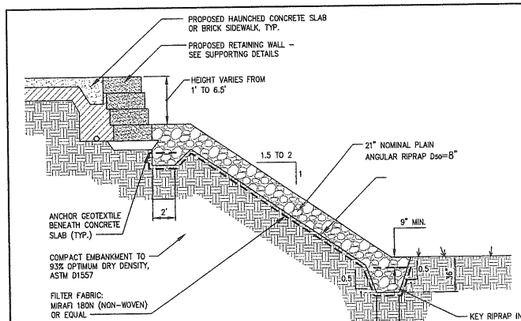
EMBEDDING DETAIL

ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS

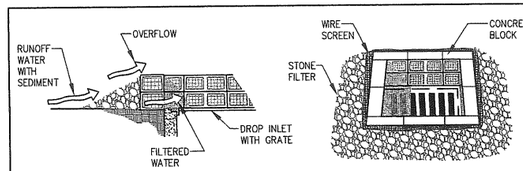
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE WAS ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION WILL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MAKE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

D STRAW OR HAYBALE BARRIER
N.T.S.



NOTE:
RIPRAP SLOPE TREATMENT SUBJECT TO REVIEW AND RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE SAMPLE OF RIPRAP FOR OWNER APPROVAL OF COLOR AND TEXTURE PRIOR TO DELIVERY TO SITE.

F RIPRAP SLOPE DETAIL
N.T.S.



SPECIFIC APPLICATION

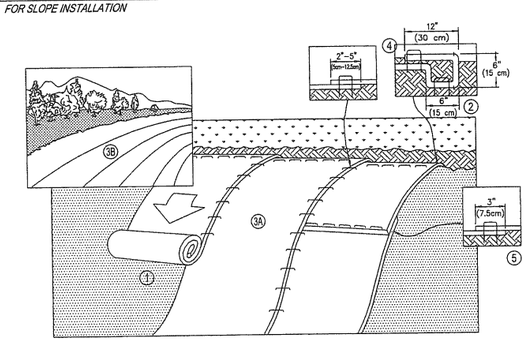
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24 INCHES HIGH.
2. WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.
3. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

I CATCH BASIN STONE SEDIMENT BARRIER DETAIL
N.T.S.

EROSIONAL CONTROL BLANKET DETAIL
FOR SLOPE INSTALLATION



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMAMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

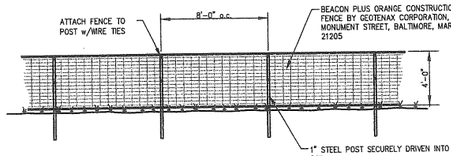
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON TEH PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIAMTE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAT BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

B EROSION CONTROL BLANKET



G ORANGE CONSTRUCTION FENCE DETAIL
N.T.S.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EROSION AND SEDIMENT CONTROL DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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FILE NAME:	2827-DET		
SHEET	C-14		

EROSION AND SEDIMENT CONTROL NOTES

The primary emphasis of the erosion/sedimentation control plan to be implemented for this project are as follows:
Development of a careful construction sequence. Rapid revegetation of denuded areas to minimize the period of soil exposure. Rapid stabilization of drainage paths to avoid fill and gully erosion. The use of onsite measures to capture sediment (hay bales/silt fence, etc.) The provisions for long term erosion/sediment and pollutant treatment by the incorporation of permanent Best Management Practices.

Description and Location of Limits of All Proposed Earth Movements

The construction of the development will require the following on–site improvements:

Demolition of existing structures.

Earthwork activity including cuts and fills to bring the building pad and landscape areas to subgrade.

Construction of utilities.

Construction of building foundations.

Erosion/Sedimentation Control Devices

The following erosion and sediment control devices will be implemented by the Contractor as part of the site development. These devices shall be installed as indicated on the plans. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, latest edition.

Siltation fence shall be installed downgradient of any disturbed areas to trap runoff borne sediments until the site is revegetated. The silt fence or erosion control mix barrier shall be installed per the details provided in the plan set and inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made immediately by the Contractor if there are any signs of erosion or sedimentation below the fence line. Proper placement of stakes and fabric into the ground is critical to the fence's effectiveness. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence, the contractor shall perform measures to reduce concentrated flows.

Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive Turf Reinforcement by North American Green or equal. Mulch application rates are provided at the end of this section. Hay mulch shall be available on site at all times in order to provide immediate temporary stabilization when necessary.

Riprap slopes, stone check dams, sod and hay bale barriers are intended to reduce runoff velocities and protect denuded soil surfaces from concentrated flows. Installation details and stone sizes are provided in the construction plan set on the erosion control detail sheets.

Construction entrance will be constructed at all access points onto the site to prevent tracking of soil onto Crescent Street or nearby streets.

Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers or a premanufactured SiltSack™ as distributed by A. H. Harris. Stone sediment barrier installation details are provided in the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

Sod is intended to serve as the primary permanent revegetative measure within the #25/ #29 development area for all denuded areas not provided with other erosion control measures, such as riprap or mulched planting beds. The #15 Crescent Street site shall receive 6" top soil, lime, fertilizer, seed and mulch at the end of construction once the site is no longer used for staging/ materials storage

Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

Crushed stone stabilized construction entrance(s) shall be placed at the site access to Crescent Street.

Siltation fence shall be installed along the downgradient side of all disturbed areas. The siltation barrier will remain in place and properly maintained until the site is acceptably revegetated. Multiple rows of silt fence may be required due to the project site's steeper grades.

Stumps, grubbings, or common excavation shall be removed from the site as the work proceeds. Temporary stockpiles shall not be allowed due to the lack of available space and the steepness of the site.

All denuded areas which have been rough graded and are not located within the building pad or pavement subbase area, shall receive temporary mulch or erosion control mesh fabric within 7 days of initial disturbance of soil.

For work which is conducted between November 1 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 3 days for all areas or immediately in advance of a predicted rainfall event.

Crescent Street and Wescott Street shall be swept to control mud and dust as necessary. A street sweeper shall be available on immediate notice.

During grubbing operations stone check dams will be installed at any evident concentrated flow discharge points.

Silt fencing with a maximum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be properly anchored a minimum of 6" per the plan detail and backfilled. Any silt fence identified by the owner or reviewing agencies as not being properly installed during construction shall be immediately repaired in accordance with the installation details.

The contractor may choose to place temporary plastic sheeting anchored with sand bags along steeper exposed slopes or foundation construction areas to protect denuded ground surface and to protect subgrade areas.

All turbid water within trenches or excavations shall be pumped into an approved sediment removal devise such as a Dirtbag or approved equal. If necessary turbid water shall be pumped into a vac truck and removed from the site and disposed of at an approved off site location.

Permanent Erosion Conlrol Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

The foundation drain pipe shall have a riprap apron and level spreader at the outlet to protect the outlet from scour and deterioration. Installation details are provided in the plan set. The apron shall be installed and stabilized immediately upon pipe installation.

All areas disturbed during construction, but not subject to other restoration (paving, riprap, planting beds, etc.) will be loamed, limed, and sodded within the proposed building site. The #15 Crescent Street site shall be used as a staging area for the project once the existing building is demolished. At the end of construction all denuded area at #15 Crescent Street shall be loamed (6" min.), limed, fertilized, mulched and seeded within 7 days of final cleanup.

Timing and Sequence of Erosion/Sedimentation Control Measures

The following construction sequence shall be required to insure the effectiveness of the erosion and sedimentation control measures are optimized. The sequence applies to all phases of construction.

For all grading activities, the contractor shall exercise extreme caution not to overexpose the site by limiting the disturbed areas.
Install crushed stone stabilized construction entrances as shown on plans.
Install perimeter siltation barriers as indicated on the plans.
Demolish the existing buildings and foundations and clear and grub areas necessary for the utilities and new building foundation areas.
Begin excavation.
Excess materials shall be removed from the site.
Perform earthwork to bring building pad to subgrade.
Begin installation of drainage appurtenances and piping and utilities
Commence additional earthwork around the building foundation as it is completed.
Complete installation of storm drainage appurtenances within landscaped areas.
Structures within the landscaped areas shall be temporarily set to subgrade and shall be reset upon placement of final loam and seeding or other surface restoration measures.
Complete all remaining earthwork operations including fine grading of slopes.
Install subbase and base gravels within sidewalk or other hardsurface areas.
Install base course paving for sidewalks.
Loam, lime, fertilize, seed or sod and mulch disturbed areas and complete all landscaping.
Install brick paving for sidewalk areas.
Remove accumulated sediment from ahead of any sediment barriers as necessary.
Once the site is stabilized, a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
Touch up grassed areas by fertilizing and regrassing as necessary.

Note: All denuded areas not subject to final paving, riprap or gravel, shall be revegetated.

For all work which will be conducted between November 1 and April 15 of the calendar year, the Contractor shall submit a schedule which will satisfy the following criteria:

Limit the amount of exposed area to those areas in which work is expected to be undertoken during the proceeding 7 days.

During the construction process, all disturbed areas shall be temporarily covered with mulch within 3 days of final grading if not otherwise available for final riprap, planting bed or sod treatment.

Once final grades have been established, the contractor may choose to dormant seed the disturbed areas prior to placement of mulch and placement of fabric netting anchored with staples.

If dormant seeding is used for temporary stabilization of the site, all disturbed areas shall receive 6" of loam and seed at an application rate of 6#/1000 s.f.

All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90 percent catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used for the site, all disturbed areas shall be revegetated with temporary seeding or permanent landscaping and sod in the spring.

The area of denuded non–stabilized construction shall be limited to the minimum area practicable. An area shall be considered to be denuded until the subbase gravel is installed in sidewalk areas, the base slab gravel is installed in building areas, or the areas of future landscape treatment have been loamed, seeded, and mulched or fully sodded. The mulch rate shall be twice the rate specified. [For example, 115#/1,000 s.f. x 2 = 230#/1,000s.f.]

The Contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions at no extra expense to the owner.

PERMANENT SEEDING PLAN - LOW MAINTENANCE- #15 & #25 CRESCENT STREET SITES

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.
2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.
3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.
4.Fertilize with pounds of N–P–K/ac. OR
20 pounds of 10 – 20 – 20 N–P–K/M Sq. Ft.
5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.
6.Seed with the following mixture:
30% Creeping Red Fescue
35% Tall Fescue
20% Perennial Ryegrass
15% Annual Ryegrass
7.Mulching instructions: Apply at the rate of tons per acre. OR
115 pounds per M. Sq. Ft.

	AmountUnit #, Tons, Etc.
8.TOTAL LIME	138 #/1000 sq. ft.
9.TOTAL FERTILIZER	20 #/1000 sq. ft.
10.TOTAL SEED	6 #/1000 sq. ft.
11.TOTAL MULCH	115 #/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to October 15 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

Fertilizer and lime requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer and lime application rates to the owner

TEMPORARY SEEDING PLAN (APPLICABLE TO BOTH #15 CRESCENT STREET ANS #25/ #29 CRESCENT STREET)

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.
2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.
3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.
4.Fertilize with pounds of N–P–K/ac. OR
20 pounds of 10 – 20 – 20 N–P–K/M Sq. Ft.
5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.
6.Seed with the following mixture:
50% Perennial Ryegrass
50% Annual Ryegrass
When using small grain as nurse crop seed it at one–half the normal seeding rate.
7.Mulching instructions: Apply at the rate of tons per acre. OR
230 pounds per M. Sq. Ft.

	AmountUnit #, Tons, Etc.
8.TOTAL LIME.	138#/1000 sq. ft.
9.TOTAL FERTILIZER	20#/1000 sq. ft.
10.TOTAL SEED	2#/1000 sq. ft.
11.TOTAL MULCH	230#/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Recommended seeding dates after August 15. For areas with slopes >10% and fall and winter erosion control areas, mulch netting shall be used per manufacturer's specifications.

Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the owner

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT MAY REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LADEN RUNOFF, TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG, WITHIN A DEWATERING SUMP.

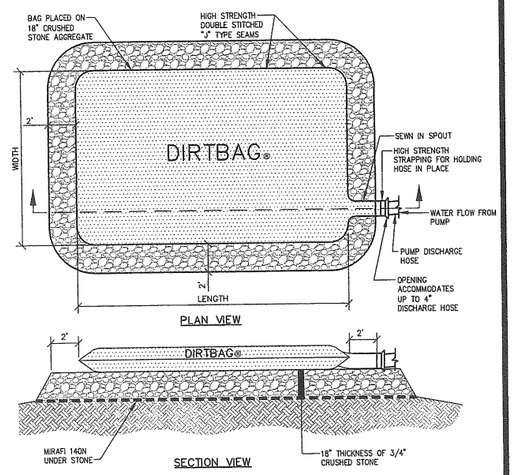
REQUIREMENTS FOR DIRTBAGS:

AT ALL TIMES THERE MUST BE AN UNUSED DIRTBAG AVAILABLE FOR EMERGENCY USE.

AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE DIRTBAG ACTIVE OR READY FOR USE. THE DIRTBAGS SHALL BE FIELD LOCATED BY THE CONTRACTOR. THE DIRTBAG SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 140N, AND 18 INCHES OF 3/4 INCH CRUSHED STONE. THE PLAN DIMENSION OF THE CRUSHED STONE PAD SHALL EXCEED THE PLAN AREA OF THE DIRTBAG BY AT LEAST TWO FEET IN ALL DIRECTIONS. THE DIRTBAG SHALL NOT BE INSTALLED ON AN UNDERLYING SLOPE OF GREATER THAN 15 PERCENT.

CONSTRUCTION DEWATERING OPERATIONS:

ALL CONSTRUCTION–DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE DIRTBAG, THE SELECTION OF THE USE OF THE DIRTBAG OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT THE SITE CONTRACTOR TO ALTER THE SELECTED OPERATION IF TURBID DISCHARGE IS OBSERVED.



A DIRTBAG DETAIL & SPECIFICATIONS
N.T.S.

REV	DATE	DESCRIPTION
		REVISIONS
7	04.02.09	RELEASED FOR BIDDING
6	03.17.09	100% PLANS – RELEASED FOR CM REVIEW
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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

STATE OF MAINE · STEPHEN R. BUSHEY No. 7429 · LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: EROSION AND SEDIMENT CONTROL NOTES
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-15		

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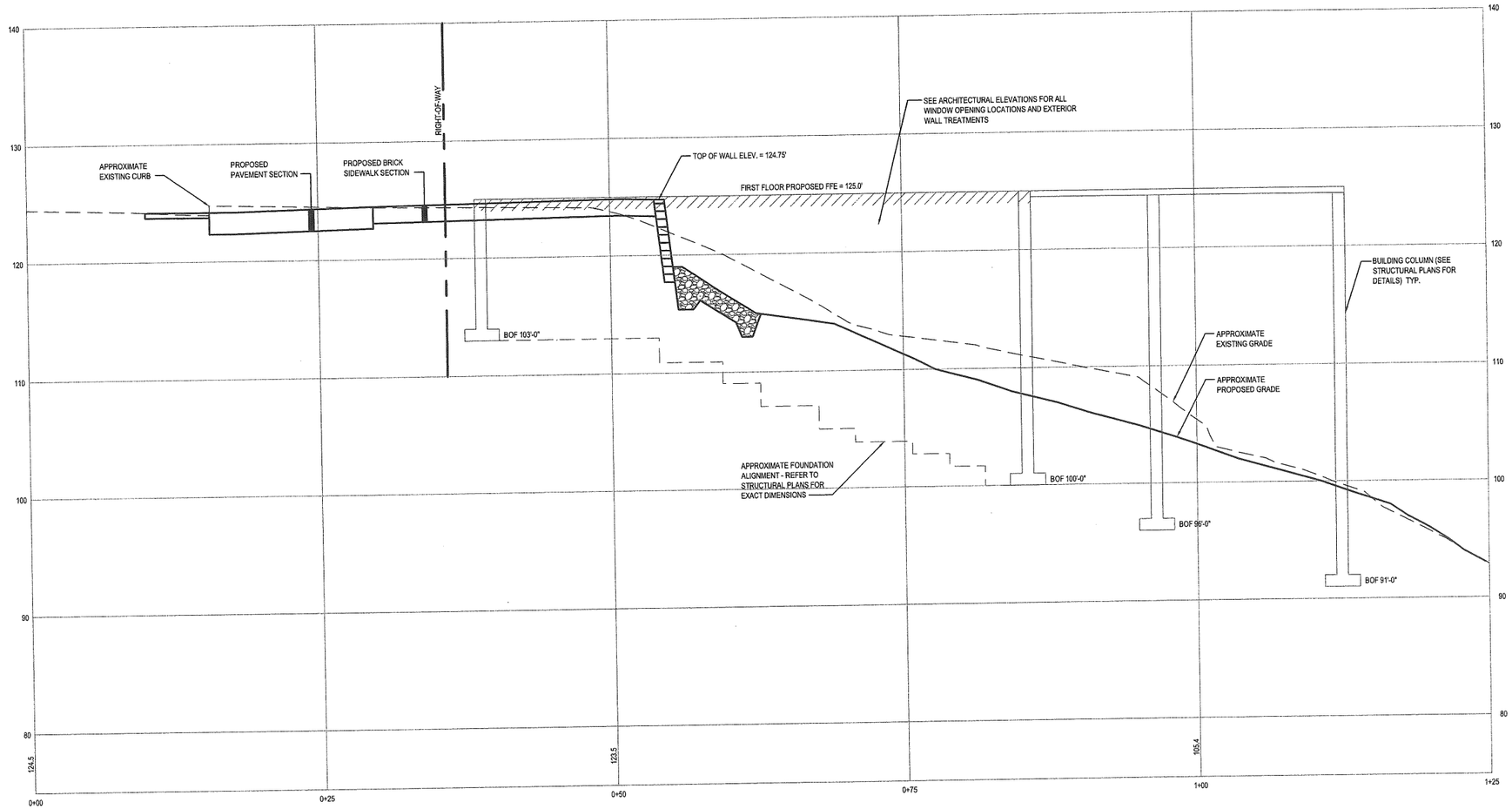


SITE CROSS SECTION

SCALE: H: 1" = 5'; V: 1" = 5'

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
1	03.17.09	100% PLANS – RELEASED FOR CM REVIEW

REVISIONS

STATE OF MAINE
STEPHEN R BUSHEY
No. 7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

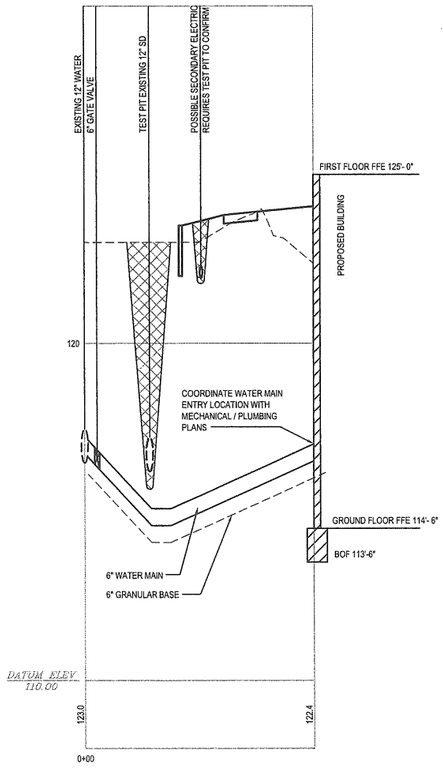
PROJECT
CRESCENT HEIGHTS

SHEET TITLE
SITE CROSS SECTION
(FOR REFERENCE ONLY)

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

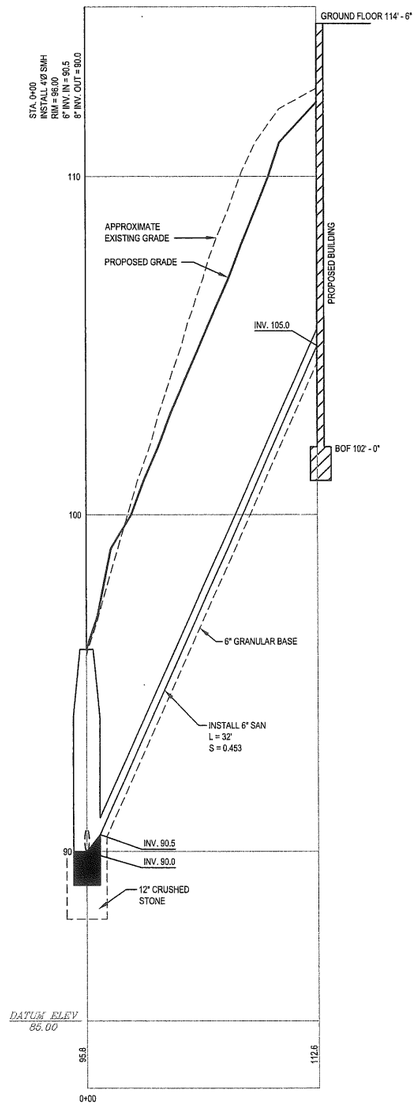
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-16		



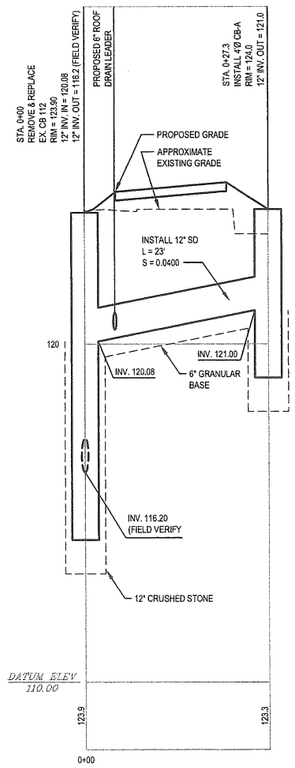
WATER MAIN PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'



SANITARY SEWER PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'



STORMDRAIN PROFILE A

SCALE: H: 1" = 10'; V: 1" = 2'

REV	DATE	DESCRIPTION
2	04.02.09	RELEASED FOR BIDDING
1	03.17.09	100% PLANS – RELEASED FOR CM REVIEW

REVISIONS

STATE OF MAINE
STEPHEN F BUSHEY
No. 7429
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
UTILITY PROFILES

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH
WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN
ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
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WWW.DELUCAHOFFMAN.COM

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FILE NAME:	2827-SP		

SHEET C-17

53-E-14

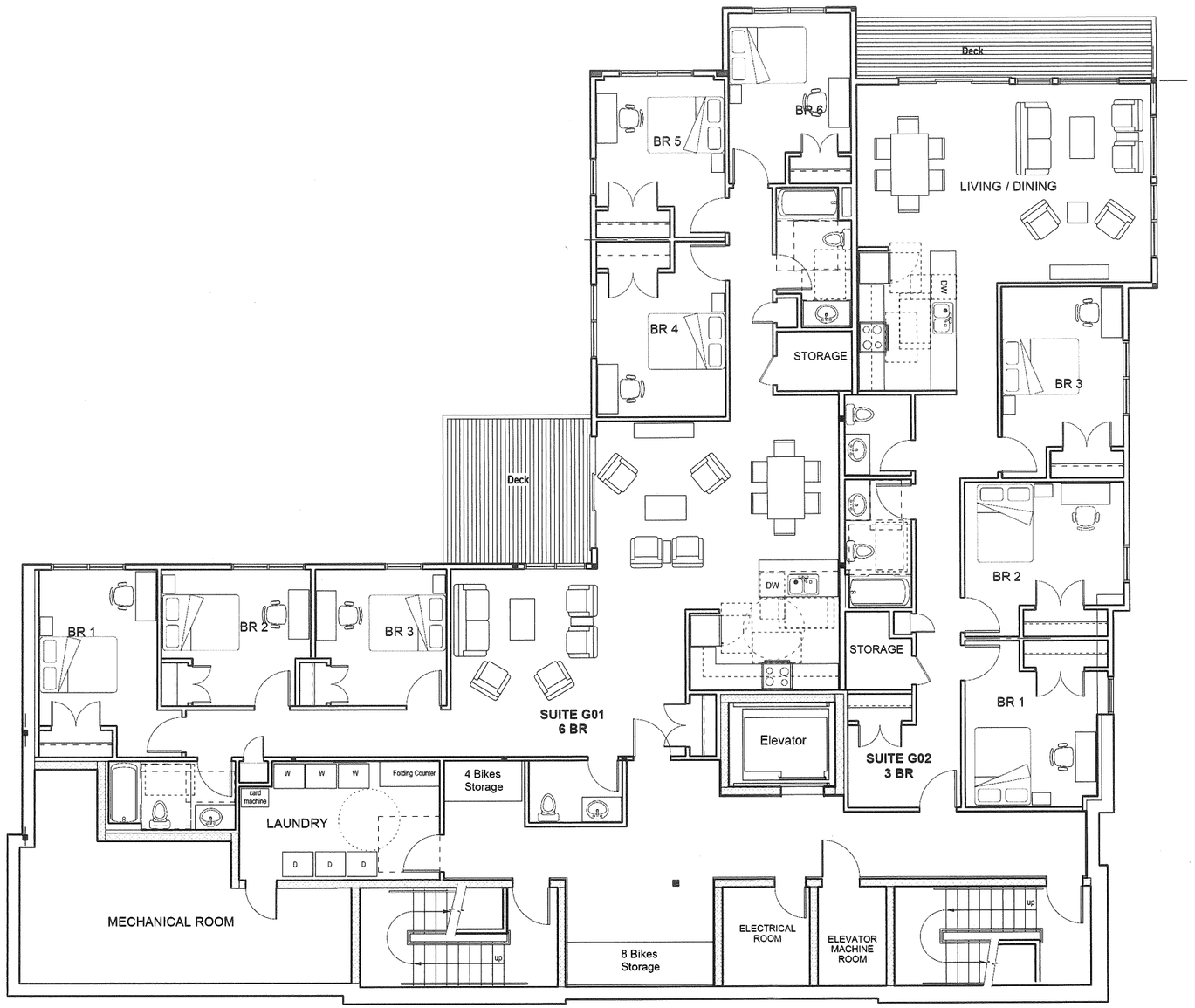
2008-0140

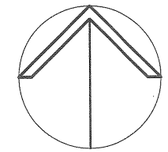
29 Chestnut St.

Crescent ~~St Apts~~. Heights

Developers Collaborative

F17





0 4 8 16

SCALE: 3/16" = 1' - 0"

Ground Floor Plan

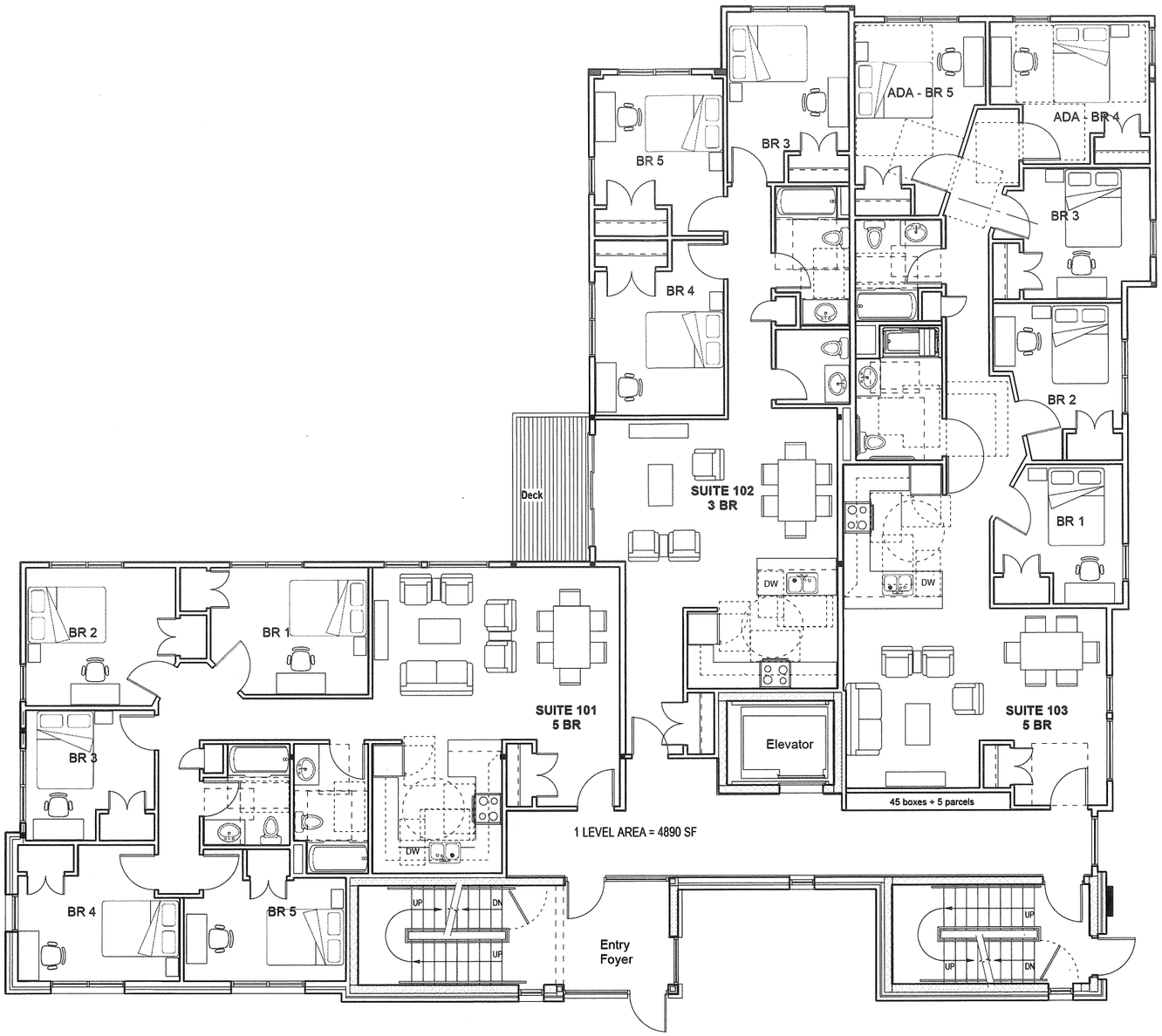
A 1.1

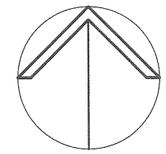
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008

F18





0 4 8 16

SCALE: 3/16" = 1' - 0"

First Floor Plan

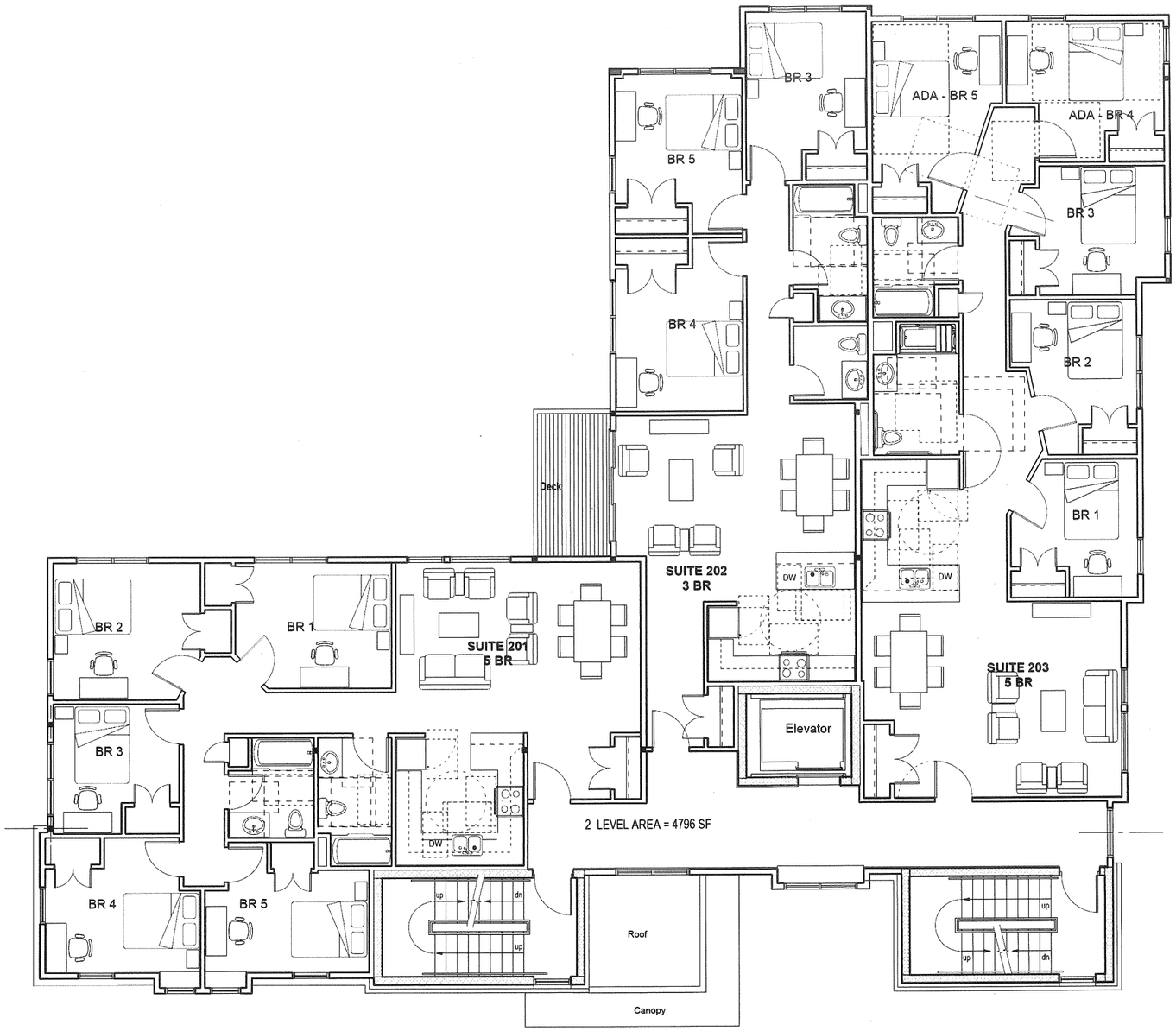
A 1.2

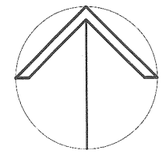
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008

F19





0 4 8 16

SCALE: 3/16" = 1' - 0"

Second Floor Plan

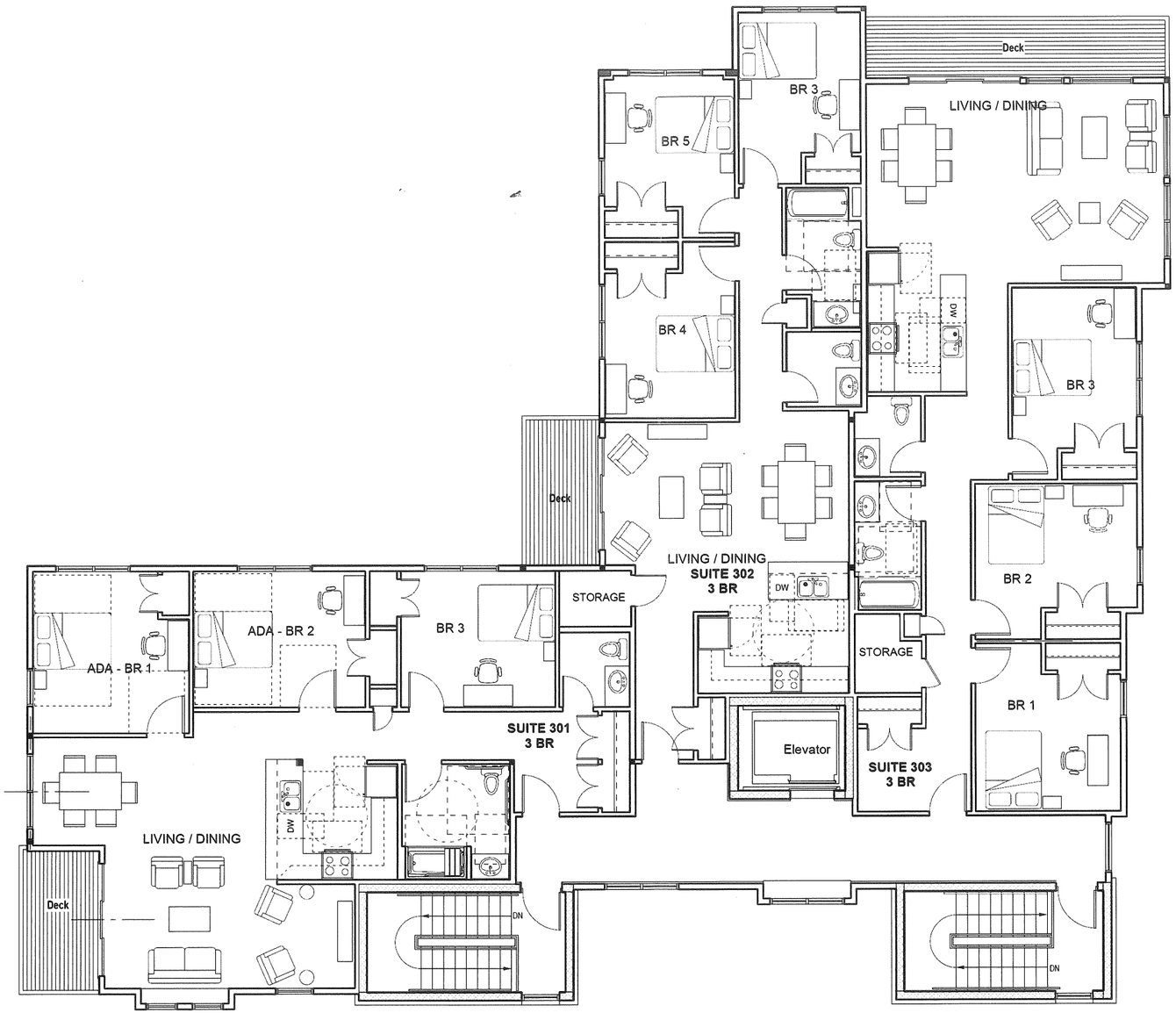
A 1.3

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008

F20



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

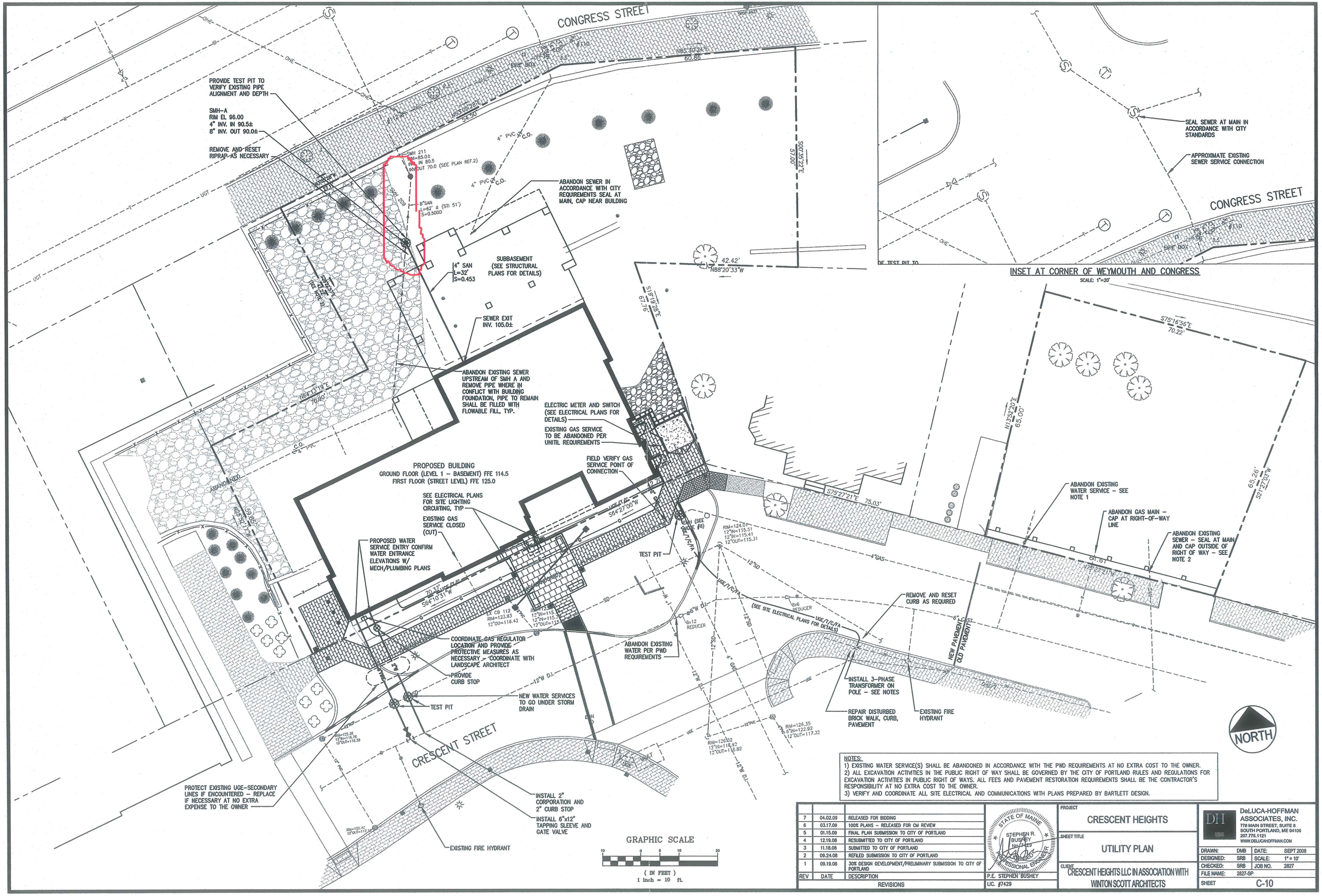
Third Floor Plan

A 1.4

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008



NOTES:
1) EXISTING WATER SERVICE(S) SHALL BE ABANDONED IN ACCORDANCE WITH THE PWD REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
2) ALL EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY SHALL BE GOVERNED BY THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. ALL FEES AND PAVEMENT RESTORATION REQUIREMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO EXTRA COST TO THE OWNER.
3) VERIFY AND COORDINATE ALL SITE ELECTRICAL AND COMMUNICATIONS WITH PLANS PREPARED BY BARTLETT DESIGN.

REV	DATE	DESCRIPTION
7	04.02.09	RELEASED FOR BIDDING
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3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
REGISTERED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
UTILITY PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-10		

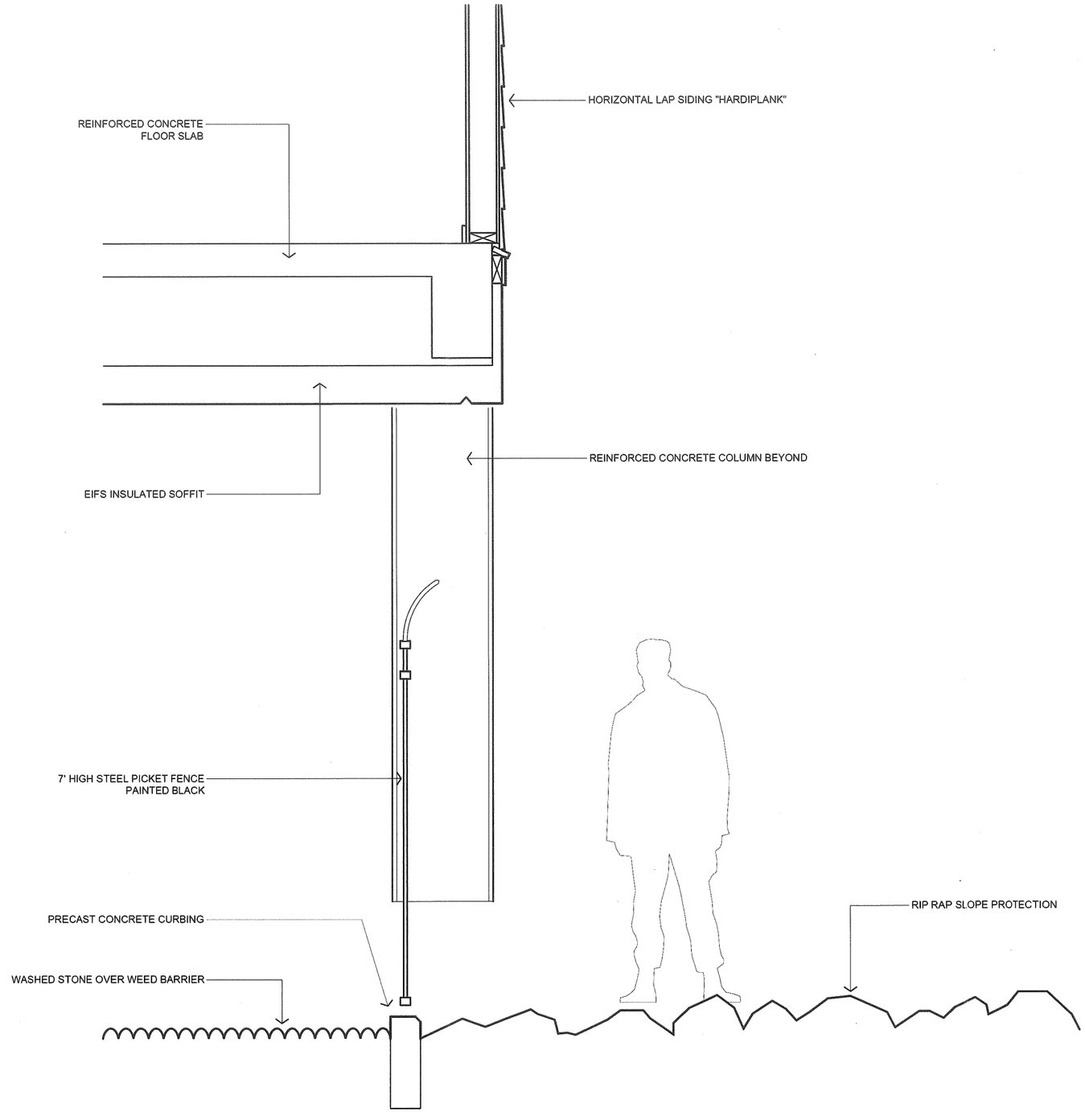
F27

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 3.1



Understory Enclosure Fence

1" = 1' - 0"

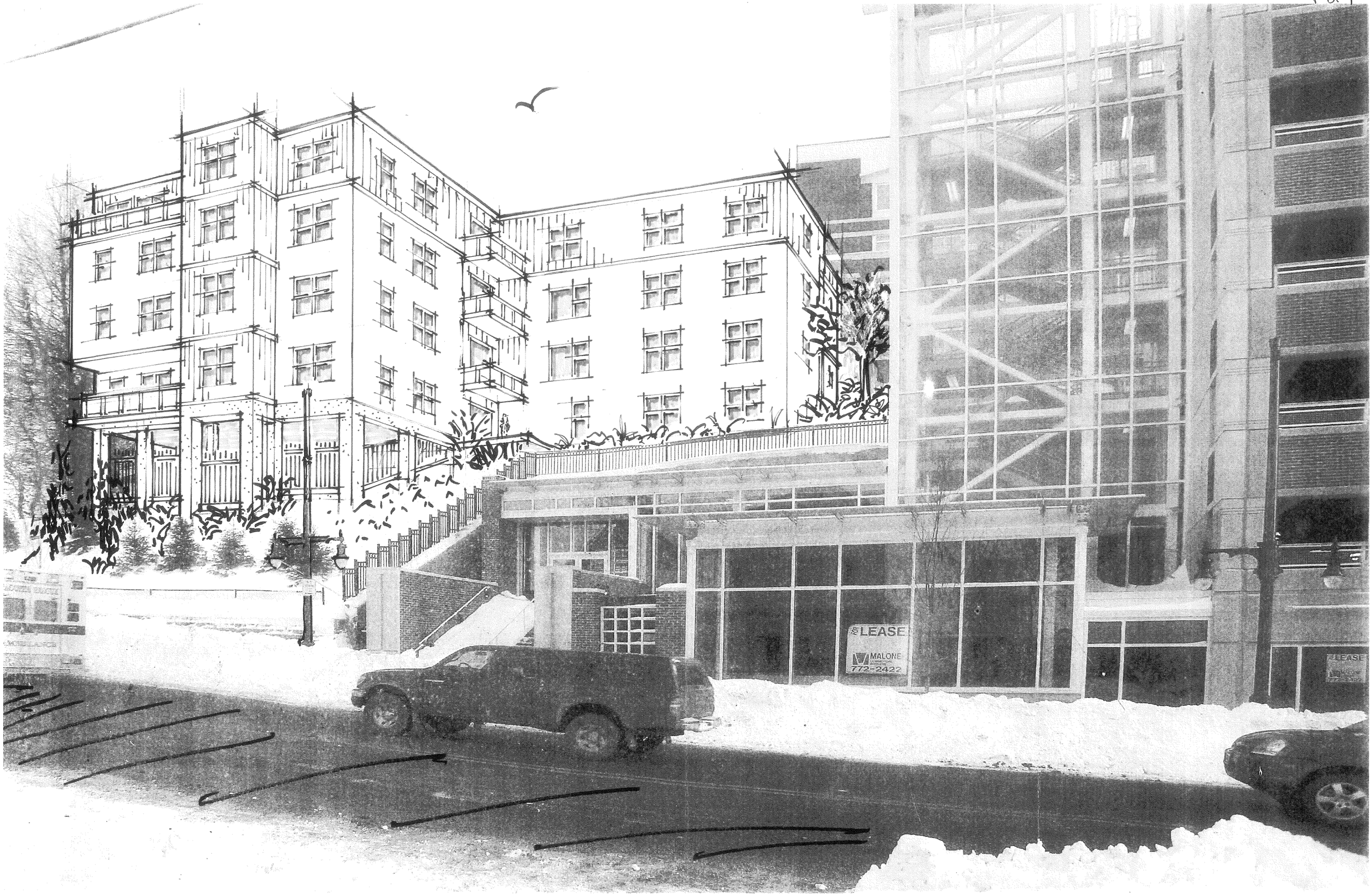
F26

CRESCENT HEIGHTS

CRESCENT STREET ELEVATION

Developers Collaborative / Winton Scott Architects

F29



F-28

PROJECT PARCEL SITE

ZONING: RESIDENTIAL - 6

PORTLAND TAX ASSESSOR'S MAP & LOT NUMBERS:

MAP	BLOCK	LOTS
53	E	4,5,6,14,15, AND PORTION OF LOT 3 (#25 & #29 CRESCENT STREET)
53	F	6 (#15 CRESCENT STREET)

OWNER/ APPLICANT:
CRESCENT HEIGHTS LLC
17 CHESTNUT STREET
PORTLAND, MAINE 04101
TEL. 207.772.7673
FAX 207.253.5183

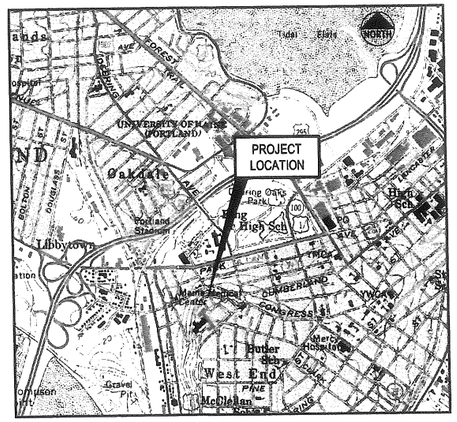
SITE DEVELOPMENT PLANS FOR CRESCENT HEIGHTS

A 44-BED LODGING HOUSE

AT #29 + #25 CRESCENT STREET

(PROJECT INCLUDES DEMOLITION AND RE-LANDSCAPING OF #15 CRESCENT STREET)

PORTLAND, MAINE



LOCATION MAP
N.T.S.

INDEX

UTILITIES

WATER
ATTN: RICO SPUGNARDI
PORTLAND WATER DISTRICT
22 DOUGLAS STREET
P.O. BOX 3533
PORTLAND, MAINE 04104
207.761.8310

SEWER
CITY OF PORTLAND
PUBLIC WORKS ENGINEERING DEPT.
55 PORTLAND STREET
PORTLAND, MAINE 04102
207-874-8840

POWER
ATTN:PAUL DUPERRE
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
207.791.1023

TELEPHONE
ATTN: SUE SERRETTE
FAIRPOINT COMMUNICATIONS
ONE DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.797.1842

NATURAL GAS
ATTN: MIKE SMITH
NORTHERN UTILITIES
1075 FOREST AVENUE
PORTLAND, MAINE 04103
207.797.8002 EXT. 6220

PERMITS

	GOVERNING BODY	STATUS
LOCAL SITE PLAN PERMIT	CITY OF PORTLAND PLANNING AUTHORITY CITY HALL, 389 CONGRESS STREET 207.874.8719	PRELIMINARY SUBMISSION 09.19.08 PRELIMINARY RESUBMISSION 11.15.08
BUILDING PERMIT	CITY OF PORTLAND CODE ENFORCEMENT OFFICE CITY HALL, 389 CONGRESS STREET 207.874.8693	TO BE FILED PRIOR TO CONSTRUCTION
STREET OPENING PERMIT	CITY OF PORTLAND PUBLIC WORKS ENFORCEMENT ENGINEERING DEPARTMENT 55 PORTLAND STREET 207.874.8801	TO BE FILED PRIOR TO CONSTRUCTION

PREPARED BY

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
207.775.1121

SURVEYOR:
Owen Haskell, Inc.
16 CASCO STREET
PORTLAND, MAINE 04101
207.774.0424

GEOTECHNICAL ENGINEER:
S.W.Cole Engineering
17 CHESTNUT STREET
PORTLAND, MAINE 04101
207.773.6800
207.773.6801 FAX
ATTN: TIM BOYCE

ARCHITECT:
Winton Scott Architects
5 MILK STREET
PORTLAND, MAINE 04101
207.774.4811
207.774.3083 FAX
ATTN: MARK WILCOX

STRUCTURAL ENGINEER:
Becker Structural Engineers
P.O. BOX 4595
PORTLAND, MAINE 04112
207.879.1838
ATTN: PAUL BECKER

ELECTRICAL ENGINEER:
Bartlett Design
942 WASHINGTON STREET
BATH, MAINE 04530
207.443.5447
ATTN: LARRY BARTLETT

MECHANICAL ENGINEER:
Mechanical Systems Engineers
10 FOREST FALLS DRIVE #10
YARMOUTH, ME 04096
207.846.1441
ATTN: ERIC PFLUGRADT

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
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REVISIONS

STATE OF MAINE — STEPHEN P. BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: COVER SHEET
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-COV		
SHEET	C-1		

G:\2827 Crescent Street Art\dwg\PERMIT\2827-COV.dwg, Layout1, 1/15/2009 12:36:29 PM, cwintermute

GENERAL NOTES:

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF ALL REGULATIONS ADMINISTERED BY THE LOCAL UTILITY COMPANIES AND THE CITY OF PORTLAND.
2. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCES, EXITS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS.
3. ALL REQUIRED AND NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL SERVICE CONNECTIONS.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-888-DIGSAFE), IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
5. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
6. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
7. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO PROJECT CONTRACT SPECIFICATIONS, AND THE CITY OF PORTLAND TECHNICAL STANDARDS, WHICHEVER IS MORE STRINGENT.
8. TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION WAS PROVIDED BY OWEN HASKELL, INC. IN JUNE 2008. BENCHMARK IS LOCATED AT CORNER OF BRAMHALL AND HILL STREETS AS SHOWN IN LOCATION MAP OF BOUNDARY SURVEY.
9. FEMA MAP COMMUNITY PANEL NUMBER 2300510013B. THE SITE IS LOCATED IN C ZONE.
10. THE PROPERTY SHOWN ON THIS PLAN MAY BE DEVELOPED AND USED ONLY AS DEPICTED IN THIS APPROVED PLAN. ALL ELEMENTS AND FEATURES OF THE PLAN AND ALL THE PROPERTY WHICH APPEARS IN THE RECORD OF THE PLANNING BOARD PROCEEDINGS ARE CONDITIONS OF THE APPROVAL. NO CHANGE FROM THE CONDITIONS OF APPROVALS IS PERMITTED UNLESS AN AMENDED PLAN IS FIRST SUBMITTED TO AND APPROVED BY THE PLANNING AUTHORITY.
11. ALL SIGNAGE SHALL CONFORM TO THE STANDARDS FOR SIZE, HEIGHT, LOCATION AND REFLECTIVITY SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
12. ALL CURB SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS AS NOTED ON THE PLANS: GRANITE AND BITUMINOUS CONCRETE CURB SHALL MEET THE REQUIREMENTS OF MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS 609.03 AND 609.04 AND CITY OF PORTLAND TECHNICAL STANDARDS.
13. ALL DIMENSIONING UNLESS OTHERWISE NOTED IS TO THE FACE OF CURB OR FACE OF BUILDING.
14. THE FACILITY IS SERVICED BY PUBLIC WATER, SEWER, NATURAL GAS AND UNDERGROUND POWER.
15. THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE CITY OF PORTLAND PUBLIC WORKS INSPECTION SERVICES DIVISION (874-8300 EXT. 8838), CODE ENFORCEMENT OFFICE AND DEVELOPMENT REVIEW COORDINATOR IN WRITING THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. A PRECONSTRUCTION MEETING MAY BE REQUIRED TO INCLUDE THE PUBLIC WORKS AUTHORITY OR DEVELOPMENT REVIEW COORDINATOR.
16. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. THE DEVELOPER, OR AN AUTHORIZED AGENT, MUST BE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.
17. WARNING SIGNS, MARKERS, BARRICADES OR FLAGMEN MUST BE EMPLOYED ON ADJACENT STREETS AS NECESSARY.
18. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED AND DISPOSED OF IN ACCORDANCE WITH THE CITY OF PORTLAND'S SOLID WASTE ORDINANCE CHAPTER 12. ALL DEMOLITION MATERIAL FROM THE PROJECT SITES SHALL BE TAKEN TO THE RIVERSIDE RECYCLING FACILITY OR AS OTHERWISE DIRECTED PENDING THE RESULTS OF A HAZARDOUS BUILDING MATERIALS SURVEY AS AUTHORIZED AND COORDINATED BY THE OWNER. ALL SALVAGED MATERIAL (SIDEWALKS, BRICKS, GRANITE CURB) NOT REUSED SHALL BE DISPOSED OF AS DIRECTED BY PORTLAND DEPT. OF PUBLIC WORKS AT NO EXTRA COST TO THE OWNER.
19. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE DEVELOPER/CONTRACTOR AT THEIR EXPENSE.
20. PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AT ALL TIMES DURING CONSTRUCTION TO INSURE INTEGRITY. IF DISTURBED THEY SHALL BE REPLACED BY A SURVEYOR REGISTERED IN THE STATE OF MAINE AT THE CONTRACTOR/DEVELOPER'S EXPENSE.
21. THE OWNER SHALL BE RESPONSIBLE TO COORDINATE THE PERFORMANCE OF A HAZARDOUS MATERIALS INSPECTION OF THE EXISTING PROPERTIES.
22. A STREET OPENING PERMIT MUST BE OBTAINED FROM THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COMPLETED IN CONFORMANCE TO THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS.
23. CONTRACTOR MUST MAINTAIN THROUGH TRAFFIC ON CRESCENT AND WESCOTT STREETS AT ALL TIMES.
24. ALL METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS IDENTIFIED HEREIN SHALL CONFORM TO THE CITY OF PORTLAND CONSTRUCTION AND TECHNICAL STANDARDS AND SPECIFICATIONS AND/OR CURRENT MDOT STANDARDS AND SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
25. SITE WORK FOR BUILDING SHALL INCLUDE GRADING THE BUILDING PAD AREA (DEFINED AS THE BUILDING FOOTPRINT PLUS 5'-0" BEYOND THE EXTERIOR WALL) TO A GRADE 18" BELOW THE GROUND FLOOR FINISH ELEVATION. ALL WORK SHALL INCLUDE EXCAVATION (INCLUDING ROCK REMOVAL AND EXISTING FOUNDATION DEMOLITION) AND BACKFILL OF ALL FOOTINGS AND FOUNDATIONS, INSTALLATION OF PERIMETER FOUNDATION DRAINS, EXCAVATION AND BACKFILL OF ALL UNDERSLAB UTILITIES AND PLACEMENT OF ALL AGGREGATES BELOW THE FLOOR SLAB AND ADJACENT THE FOUNDATION WALLS IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS.
26. RECORD DRAWINGS REQUIRE ALL BURIED UTILITIES INCLUDING, BUT NOT LIMITED TO, BENDS, APPURTENANCES, AND OTHER FEATURES TO BE LOCATED BY COORDINATE INFORMATION TO BE RECORDED BY THE CONTRACTOR AND SUPPLIED TO THE OWNER AT THE END OF THE PROJECT.

ZONING SUMMARY
ZONING: RESIDENTIAL- 6
PERMITTED USES:

RESIDENTIAL:
- SINGLE-FAMILY, TWO-FAMILY AND MULTI-FAMILY DWELLING UNIT
- HANDICAPPED FAMILY UNIT
- SINGLE-FAMILY, SINGLE-FAMILY AND MULTIPLE FAMILY COMPONENT MANUFACTURED HOUSING

OTHER:
- LODGING HOUSE
- CEMETERIES
- PARKS AND NON-COMMERCIAL RECREATION SPACE
- ACCESSORY USES INCIDENTAL TO PRINCIPLE USES
- HOME OCCUPATION
- MUNICIPAL USES
- SPECIAL NEEDS INDEPENDENT LIVING UNITS
- CONVERSION TO BED AND BREAKFAST (UP TO 4 BEDROOM)

DIMENSIONAL STANDARD	REQUIRED DIMENSION	PROVIDED DIMENSION
MINIMUM LOT SIZE	4,500 SF	13,525.8 SF
MINIMUM AREA PER ROOMING UNIT	250 SF	44 BEDS @ 250 SF = 11,000 SF
MINIMUM STREET FRONTAGE	40 FEET	113.07 FEET
MINIMUM FRONT YARD	10 FEET OR THE AVERAGE DEPTH OF THE FRONT YARDS ON EITHER SIDE.	3 FEET
MINIMUM REAR YARD	20 FEET	24 FEET
MINIMUM SIDE YARD	4 STORY-12 FEET, 5 STORY - 15 FEET THE WIDTH OF ONE SIDE YARD MAY BE REDUCED 1 FT. FOR EVERY FOOT THAT THE OTHER SIDE IS CORRESPONDINGLY INCREASED, BUT NO SIDE YARD SHALL BE LESS THAN 10 FEET.	12 FEET
MAXIMUM LOT COVERAGE	40% FOR LOTS CONTAINING 20 OR MORE UNITS; 50% FOR LOTS CONTAINING FEWER THAN 20 UNITS.	36.29%
MINIMUM LOT WIDTH	50 FEET	74 FEET
MAXIMUM STRUCTURE HEIGHT	45 FEET	45 FEET *
OPEN SPACE RATIO	20% FOR LOTS CONTAINING FEWER THAN 20 UNITS AND 30% FOR LOTS CONTAINING 20 UNITS OR GREATER.	48.70%

* COMPLIANCE WITH CODE SECTION 14-139(0)(g) RELATED TO BUILDING HEIGHT HAS BEEN CONFIRMED BY WINTON SCOTT ARCHITECTS UNDER SEPARATE CORRESPONDANCE WITH THE PORTLAND CODE ENFORCEMENT OFFICE.

BUILDING SUMMARY

FOOTPRINT:	4908 S.F.
TOTAL:	19,163 S.F.
# BEDS:	44
# UNITS	11
# STORIES:	4

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF n = 0.013 OR LESS. UNLESS A SPECIFIC PIPE MATERIAL IS CALLED FOR ON THE CONTRACT DRAWINGS. CPP AND PVC PIPING SHALL NOT BE USED IN AREAS OF EXPOSED SUNLIGHT.
2. SLOPE PROTECTION IS TO BE PROVIDED PER THE DESIGN PLANS AND MAY INCLUDE RIPRAP, SOD OR MULCH.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EARTHWORK OPERATIONS TO INSURE THAT DISTURBANCE TO THE STEEP SLOPE AREAS ARE MINIMIZED TO THE EXTENT PRACTICABLE. THE LIMITS OF CLEARING SHALL BE 1' BEYOND THE GRADING LIMITS AS SHOWN ON THE SITE LAYOUT PLAN AND AS WELL AS ON THIS PLAN SHEET.
4. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HERON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
5. ALL PAVING WITHIN THE PUBLIC R.O.W. SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC R.O.W.
6. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
7. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
8. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES AND PHYSICAL FEATURES THAT ARE OUTSIDE THE SCOPE OF WORK. THE CONTRACTOR SHALL MAINTAIN SITE STABILITY DURING CONSTRUCTION TO AVOID EROSION AND SEDIMENT TRANSPORT. CONTRACTOR SHALL RESTORE ALL AREAS TO A FINAL STABILIZED CONDITION AS DIRECTED BY DESIGN DRAWINGS.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
10. EXTERIOR GRADES AROUND PROPOSED STRUCTURE SHALL BE COORDINATED WITH FINAL BUILDING PLANS AND PROVIDE FOR ALL ACCESS OPENINGS.
11. SUBGRADE FILL PLACED BENEATH ALL PERMANENT PAVEMENT, SIDEWALK OR CONCRETE SURFACES EXCLUDING ANY BUILDING AREAS, SHALL BE GRANULAR BORROW. SUBGRADE FILL PLACED BENEATH ALL LANDSCAPE AREAS EXCEPT THOSE ADJACENT THE FOUNDATION SYSTEMS MAY BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUBGRADE CONSTRUCTION. EXCAVATED ON-SITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER EXCAVATED ONSITE MATERIALS MAY NOT BE USED AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS OR AS FOUNDATION BACKFILL. GRANULAR BORROW AND COMMON BORROW SHALL COMPLY WITH THE MDOT SPECIFICATIONS.
12. ALL FILLS SHALL BE PLACED IN LAYERS NOT MORE THAN 12" LOOSE DEPTH AND COMPACTED BY HEAVY COMPACTION EQUIPMENT. MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ASTM 1557, MODIFIED AND FIELD DENSITY ASTM D2922 (NUCLEAR METHODS).

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE STABILIZED CONSTRUCTION ENTRANCES.
3. SILT BARRIERS SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.
4. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCES AS THEY BECOME SATURATED WITH MUD TO ENSURE THAT THEY WORK AS PLANNED DURING CONSTRUCTION AND SHALL KEEP CRESCENT STREET CLEAR OF DIRT AND MUD.
5. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.
6. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITIES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST THREE (3) BUT NOT MORE THAN (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A.
7. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AS SPECIFIED ON PLANS.
8. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

UTILITY NOTES:

1. ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED BETWEEN THE SITE WORK CONTRACTOR AND DIVISION 15/16 CONTRACTOR(S). THE SITE WORK CONTRACTOR SHALL BE RESPONSIBLE TO EXTEND ALL PROPOSED UTILITIES TO WITH IN FIVE (5) FEET OF THE BUILDING TO A LOCATION COORDINATED WITH THE MECHANICAL AND ELECTRICAL SUBCONTRACTORS. THE BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES WITHIN FIVE (5) FEET AND INSIDE THE BUILDING OR UNDER SLAB.
2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH FAIRPOINT COMMUNICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.
3. ALL SANITARY SEWER WORK SHALL MEET THE STANDARDS OF THE MAINE STATE PLUMBING CODE AND CITY OF PORTLAND PUBLIC SERVICES DIVISION.
4. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER; THE TELECOMMUNICATIONS SERVICE WITH FAIRPOINT COMMUNICATIONS AND CABLE SERVICE WITH TIME WARNER CABLE. ALL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS OR UTILITY COMPANY STANDARDS, WHICHEVER IS MORE STRINGENT.
5. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE AT NO ADDITIONAL EXPENSE TO THE OWNER.
6. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
7. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
8. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.
9. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.
10. THE CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION AND PROVIDE TEMPORARY SERVICES AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE JOBSITE. TEMPORARY SERVICES SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. COORDINATE ALL TEMPORARY SERVICES WITH UTILITY COMPANY, OWNER AND AFFECTED BUSINESSES.
11. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY ELECTRICAL SERVICES IN CONDUIT TO SITE LIGHTING, COMPLYING WITH APPLICABLE CODES. COORDINATE WITH OWNER AND ARCHITECTURAL AND CMP PLANS. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONFIRM WITH CMP, CABLE AND TELEPHONE COMPANIES INDIVIDUAL UTILITY REQUIREMENTS FOR INSTALLATION AND LOCATIONS OF UTILITIES.
12. ALL SANITARY SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT. ALL SANITARY SERVICES AND APPURTENANCES TO BE ABANDONED SHALL BE PROPERLY RECORDED WITH PORTLAND PUBLIC WORKS ENGINEERING DEPARTMENT. A DIGITAL VIDEOTAPE SHALL BE MADE OF SANITARY SEWER SYSTEMS TO BE UTILIZED PRIOR TO CONSTRUCTION; UPSTREAM PIPES INTENDED FOR ABANDONMENT SHALL BE INSPECTED TO VERIFY THAT THEY NO LONGER SERVE OTHER FACILITIES.

SITE & SUBGRADE PREPARATION NOTES

EXCERPT FROM GEOTECHNICAL REPORT 08-0744 DATED OCTOBER 24, 2008 PREPARED BY S.W. COLE ENGINEERING, INC.
NOTEWELL: ALL FOUNDATION PREPARATION SHALL BE COORDINATED WITH THE STRUCTURAL DESIGN PLANS PREPARED BY BECKER STRUCTURAL ENGINEERS.

SITE PREPARATION SHOULD BEGIN WITH THE CONSTRUCTION OF AN EROSION CONTROL SYSTEM TO PROTECT ADJACENT DRAINAGE WAYS AND AREAS OUTSIDE THE CONSTRUCTION LIMITS. PROPOSED CONSTRUCTION AREAS SHOULD BE CLEARED AND GRUBBED OF ALL ORGANIC MATTER AND TOPSOIL. AS MUCH VEGETATION AS POSSIBLE SHOULD REMAIN OVER INACTIVE AREAS OF CONSTRUCTION TO LESSEN THE POTENTIAL FOR EROSION AND SITE DISTURBANCE. WE RECOMMEND THAT EXISTING FOUNDATIONS, SLABS AND BURIED UTILITIES BENEATH THE PROPOSED BUILDING FOOTING PRINT BE COMPLETELY REMOVED AND BACKFILLED WITH COMPACTED STRUCTURAL BACKFILL.

TERRACE AREA OF BUILDING PAD:
BASED ON THE SUBSURFACE FINDINGS AND OUR UNDERSTANDING OF THE PROPOSED CONSTRUCTION, WE ANTICIPATE THAT FOOTINGS ON THE UPPER TERRACE OF THE SITE, GENERALLY WITHIN THE FOOTPRINT OF THE EXISTING BUILDINGS, WILL ENCOUNTER MEDIUM DENSE TO DENSE GLACIAL TILL SOILS OR COMPACTED STRUCTURAL BACKFILL. FOR FOOTINGS IS THIS AREA, WE RECOMMEND THAT EXCAVATION BE COMPLETED WITH A SMOOTH-EDGED BUCKET AND SUBGRADES BE PROTECTED WITH 6 INCHES OF CRUSHED STONE PLACED OVER WOVEN GEOTEXTILE FABRIC SUCH AS MIRAFI 500X.

SLOPING AREA OF BUILDING PAD;
BASED ON THE SUBSURFACE FINDINGS AND OUR UNDERSTANDING OF THE PROPOSED CONSTRUCTION, WE ANTICIPATE THAT FOOTINGS ON THE SLOPING PORTION OF THE SITE WILL ENCOUNTER SURFICIAL FILLS THAT ARE UNSUITABLE FOR DIRECT FOUNDATION SUPPORT. FOR FOOTING SUBGRADES IN THE SLOPE AREA OF THE BUILDING PAD, WE RECOMMEND REMOVING THE EXISTING FILLS DOWN THE DENSE GLACIAL TILL AND BACKFILLING WITH COMPACTED STRUCTURAL FILL. REMOVING AND BACKFILLING THE UNSUITABLE SOILS WILL REQUIRE DISPLACING SOIL FROM THE SITE AND IMPORTING SUITABLE STRUCTURAL FILL. THE LIMITS OF EXCAVATION FOR UNSUITABLE FILL REMOVAL SHOULD EXTEND 1 FOOT LATERALLY OUTWARD FROM THE BUILDING FOOTPRINT FOR EACH FOOT OF EXCAVATION DEPTH, UNLESS FOOTINGS ARE FOUNDED AT THE ELEVATION OF DENSE GLACIAL TILL.

FOUNDATION DRAINAGE:
WE RECOMMEND THAT FOUNDATION UNDERDRAINS BE PROVIDED AROUND THE EXTERIOR OF PERIMETER FOUNDATIONS AS WELL AS BELOW INTERIOR PORTIONS OF BASEMENT SLABS ON THE UPSLOPE SIDE OF THE PROPOSED BUILDING. THE UNDERDRAINS MAY CONSIST OF 4-INCH DIAMETER HDPE SLOTTED UNDERDRAIN PIPE WITH FILTER SOCK ENVELOPED IN AT LEAST 6 INCHES OF UNDERDRAIN SAND AND BACKFILL WITH FREE-DRAINING SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL AS GIVEN HEREIN. THE UNDERDRAINS SHOULD BE INSTALLED AT FOOTING SUBGRADE ELEVATION AND ROUTED TO A POSITIVE GRAVITY OUTLET. ROOF DRAINS MUST BE ROUTED IN SEPARATE TIGHT-LINE PIPES.

ENTRANCE SLABS AND SIDEWALKS:
CLEAN, NON-FROST SUSCEPTIBLE SAND AND GRAVEL MEETING THE REQUIREMENTS OF STRUCTURAL FILL SHALL BE PROVIDED TO A DEPTH OF AT LEAST 4.5 FEET BELOW THE TOP OF ENTRANCE SLABS. THIS THICKNESS OF STRUCTURAL FILL SHOULD EXTEND THE FULL WIDTH OF THE ENTRANCE SLABS AND OUTWARD AT LEAST 4.5 FEET, THEREAFTER TRANSITIONING UP TO BOTTOM ADJACENT SIDEWALK OR PAVEMENT SUBBASE GRAVEL AT A 3H:1V OR FLATTER SLOPE.

ON-GRADE FLOOR SLABS:
ON-GRADE FLOOR SLABS IN HEATED SPACES MAY BE DESIGNED USING A SUBGRADE REACTION MODULUS OF 150 PCI PROVIDED THE SLAB IS UNDERLAIN BY AT LEAST 12 INCHES OF STRUCTURAL FILL OVERLYING A PROPERLY PREPARED SUBGRADE. ALL EXISTING UNSUITABLE FILLS BELOW THE SLAB IN THE SLOPING AREA OF THE SITE SHOULD BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL.

BACKFILL AND COMPACTION:
BASED ON THE SURFACE FINDINGS, THE EXISTING SURFICIAL FILLS ARE FROST SUSCEPTIBLE AND UNSUITABLE FOR REUSE AS COMPACTED STRUCTURAL FILL BENEATH THE BUILDING AREAS AND AS FOUNDATION BACKFILL.

LEGEND

EXISTING	PROPOSED
PROPERTY BOUNDARY	CONTOUR LINE
5/8"IRON ROD TO BE SET	
IRON PIPE FOUND	
MONUMENT FOUND	EDGE OF PAVEMENT
NOW OR FORMERLY	UTILITY LINE
UTILITY POLE	BUILDING
SIGN	CATCH BASIN
EXISTING MANHOLE	STORM DRAIN MANHOLE
CATCH BASIN	STORM DRAIN LINE
GRANITE CURB	FENCE
WATER VALVE	VERTICAL GRANITE CURB
HYDRANT	BOLLARD LIGHT
LIGHT POLE (UNLESS NOTED)	BRICK SIDEWALK
EXISTING BUILDING	CONCRETE PAD
EXISTING CONTOUR	BLUESTONE PAVING STONE
UNDERGROUND TELEPHONE LINE	RIPRAP
SEWER LINE	
STORM DRAIN LINE	
WATER LINE	
GAS LINE	
EDGE OF PAVEMENT	
PVC CLEANOUT	
SURVEY CONTROL POINT	
TIE BACK	
RIPRAP	
ORNAMENTAL OR WOOD FENCE	
EXISTING TREES	
BRICK SIDEWALK	

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

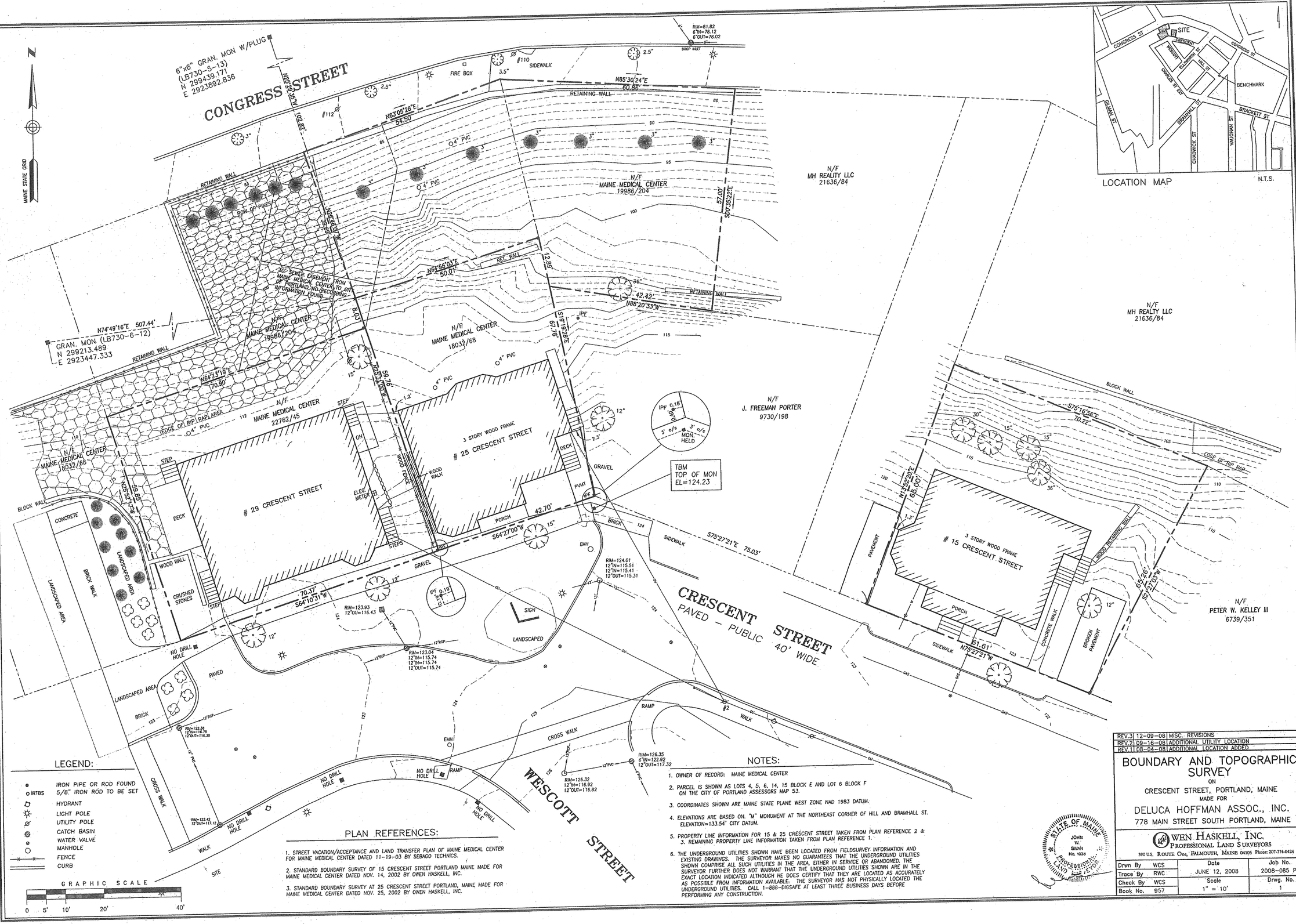
REVISIONS

STATE OF MAINE · STEPHEN BUSHEY · LICENSED · 7429 · PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: GENERAL NOTES AND LEGEND
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-GEN.		
SHEET	C-2		



LEGEND:

- IRON PIPE OR ROD FOUND
- IRTBS 5/8" IRON ROD TO BE SET
- HYDRANT
- LIGHT POLE
- UTILITY POLE
- CATCH BASIN
- WATER VALVE
- MANHOLE
- FENCE
- CURB

GRAPHIC SCALE
0 5' 10' 20' 40'

PLAN REFERENCES:

1. STREET VACATION/ACCEPTANCE AND LAND TRANSFER PLAN OF MAINE MEDICAL CENTER FOR MAINE MEDICAL CENTER DATED 11-19-03 BY SEBAGO TECHNICS.
2. STANDARD BOUNDARY SURVEY OF 15 CRESCENT STREET PORTLAND MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 14, 2002 BY OWEN HASKELL, INC.
3. STANDARD BOUNDARY SURVEY AT 25 CRESCENT STREET PORTLAND, MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 25, 2002 BY OWEN HASKELL, INC.

NOTES:

1. OWNER OF RECORD: MAINE MEDICAL CENTER
2. PARCEL IS SHOWN AS LOTS 4, 5, 6, 14, 15 BLOCK E AND LOT 6 BLOCK F ON THE CITY OF PORTLAND ASSESSORS MAP 53.
3. COORDINATES SHOWN ARE MAINE STATE PLANE WEST ZONE NAD 1983 DATUM.
4. ELEVATIONS ARE BASED ON "A" MONUMENT AT THE NORTHEAST CORNER OF HILL AND BRAMHALL ST. ELEVATION=133.54' CITY DATUM.
5. PROPERTY LINE INFORMATION FOR 15 & 25 CRESCENT STREET TAKEN FROM PLAN REFERENCE 2 & 3. REMAINING PROPERTY LINE INFORMATION TAKEN FROM PLAN REFERENCE 1.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELDSURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.

STATE OF MAINE
JOHN W. SWAN
No. 9038
PROFESSIONAL LAND SURVEYOR

REV.		
3	12-09-08	MISC. REVISIONS
2	09-16-08	ADDITIONAL UTILITY LOCATION
1	08-04-08	ADDITIONAL LOCATION ADDED

BOUNDARY AND TOPOGRAPHIC SURVEY

ON

CRESCENT STREET, PORTLAND, MAINE

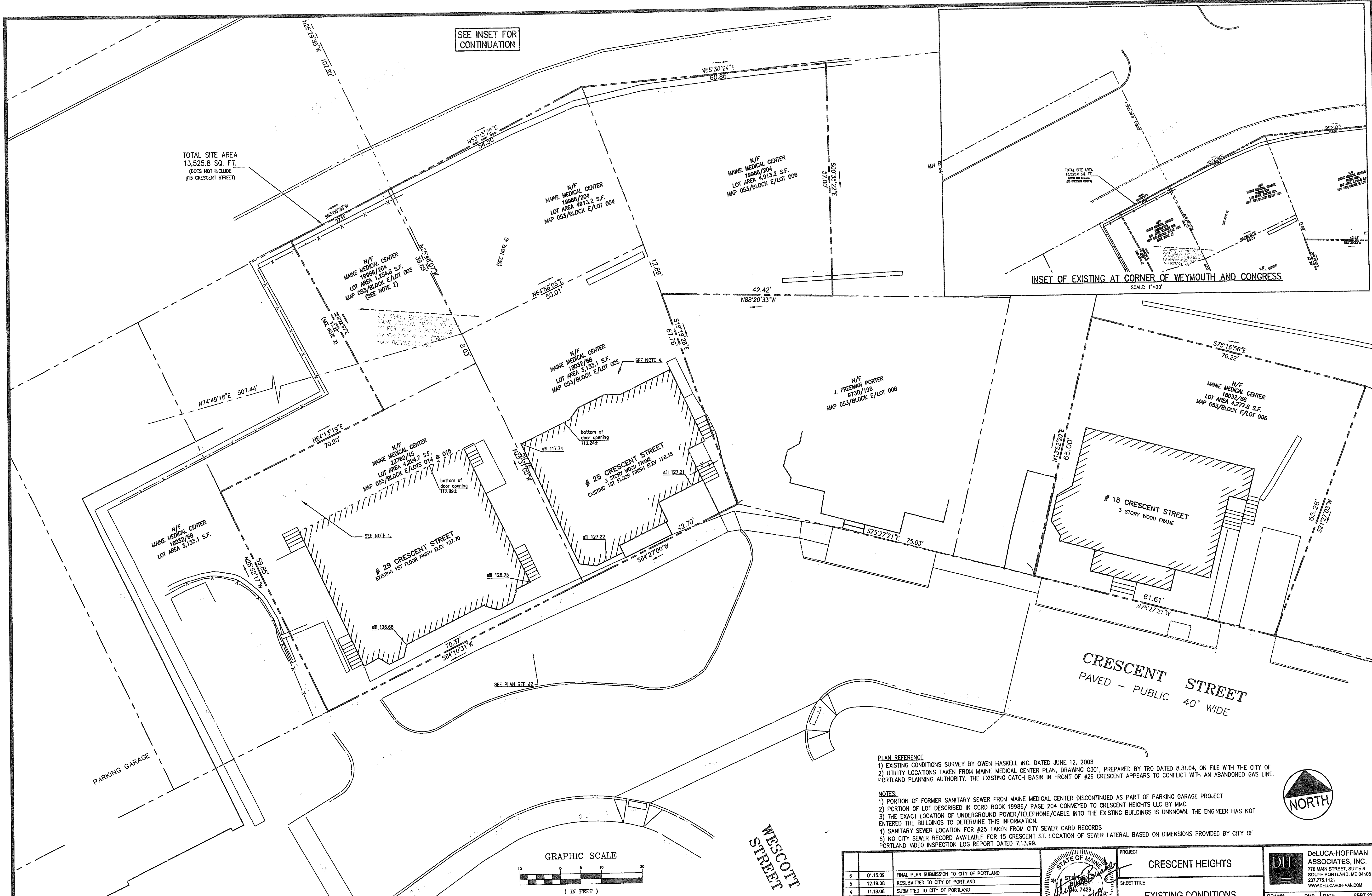
MADE FOR

DELUCA HOFFMAN ASSOC., INC.

778 MAIN STREET SOUTH PORTLAND, MAINE

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE One, FALMOUTH, MAINE 04105 Phone: 207-774-0424

Drwn By	WCS	Date	Job No.
Trace By	RWC	JUNE 12, 2008	2008-085 P
Check By	WCS	Scale	Drwg. No.
Book No.	957	1" = 10'	1



PLAN REFERENCE
1) EXISTING CONDITIONS SURVEY BY OWEN HASKELL INC. DATED JUNE 12, 2008
2) UTILITY LOCATIONS TAKEN FROM MAINE MEDICAL CENTER PLAN, DRAWING C301, PREPARED BY TRO DATED 8.31.04, ON FILE WITH THE CITY OF PORTLAND PLANNING AUTHORITY. THE EXISTING CATCH BASIN IN FRONT OF #29 CRESCENT APPEARS TO CONFLICT WITH AN ABANDONED GAS LINE.

NOTES:
1) PORTION OF FORMER SANITARY SEWER FROM MAINE MEDICAL CENTER DISCONTINUED AS PART OF PARKING GARAGE PROJECT
2) PORTION OF LOT DESCRIBED IN CCRD BOOK 19986/ PAGE 204 CONVEYED TO CRESCENT HEIGHTS LLC BY MMC.
3) THE EXACT LOCATION OF UNDERGROUND POWER/TELEPHONE/CABLE INTO THE EXISTING BUILDINGS IS UNKNOWN. THE ENGINEER HAS NOT ENTERED THE BUILDINGS TO DETERMINE THIS INFORMATION.
4) SANITARY SEWER LOCATION FOR #25 TAKEN FROM CITY SEWER CARD RECORDS
5) NO CITY SEWER RECORD AVAILABLE FOR 15 CRESCENT ST. LOCATION OF SEWER LATERAL BASED ON DIMENSIONS PROVIDED BY CITY OF PORTLAND VIDEO INSPECTION LOG REPORT DATED 7.13.99.

REV	DATE	DESCRIPTION
6	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
5	12.19.08	RESUBMITTED TO CITY OF PORTLAND
4	11.18.08	SUBMITTED TO CITY OF PORTLAND
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN BUSHEY No. 7429 LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: EXISTING CONDITIONS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-4		

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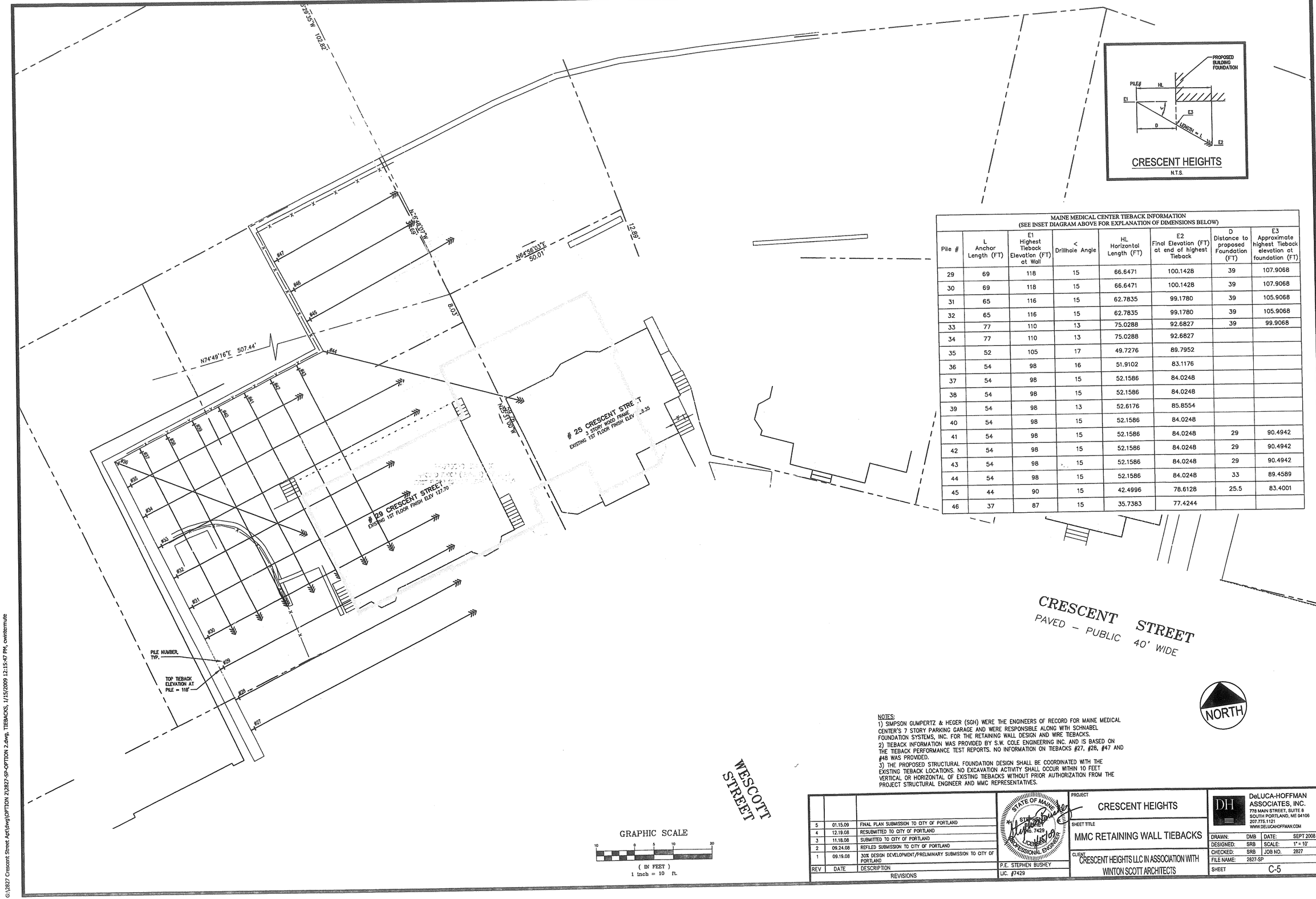

MAINE MEDICAL CENTER TIEBACK INFORMATION
(SEE INSET DIAGRAM ABOVE FOR EXPLANATION OF DIMENSIONS BELOW)

Pile #	L Anchor Length (FT)	E1 Highest Tieback Elevation (FT) at Wall	< Drillhole Angle	HL Horizontal Length (FT)	E2 Final Elevation (FT) at end of highest Tieback	D Distance to proposed Foundation (FT)	E3 Approximate highest Tieback elevation at foundation (FT)
29	69	118	15	66.6471	100.1428	39	107.9068
30	69	118	15	66.6471	100.1428	39	107.9068
31	65	116	15	62.7835	99.1780	39	105.9068
32	65	116	15	62.7835	99.1780	39	105.9068
33	77	110	13	75.0288	92.6827	39	99.9068
34	77	110	13	75.0288	92.6827		
35	52	105	17	49.7276	89.7952		
36	54	98	16	51.9102	83.1176		
37	54	98	15	52.1586	84.0248		
38	54	98	15	52.1586	84.0248		
39	54	98	13	52.6176	85.8554		
40	54	98	15	52.1586	84.0248		
41	54	98	15	52.1586	84.0248	29	90.4942
42	54	98	15	52.1586	84.0248	29	90.4942
43	54	98	15	52.1586	84.0248	29	90.4942
44	54	98	15	52.1586	84.0248	33	89.4589
45	44	90	15	42.4996	78.6128	25.5	83.4001
46	37	87	15	35.7383	77.4244		

NOTES:
1) SIMPSON GUMPERTZ & HEGER (SGH) WERE THE ENGINEERS OF RECORD FOR MAINE MEDICAL CENTER'S 7 STORY PARKING GARAGE AND WERE RESPONSIBLE ALONG WITH SCHNABEL FOUNDATION SYSTEMS, INC. FOR THE RETAINING WALL DESIGN AND WRE TIEBACKS.
2) TIEBACK INFORMATION WAS PROVIDED BY S.W. COLE ENGINEERING INC. AND IS BASED ON THE TIEBACK PERFORMANCE TEST REPORTS. NO INFORMATION ON TIEBACKS #27, #28, #47 AND #48 WAS PROVIDED.
3) THE PROPOSED STRUCTURAL FOUNDATION DESIGN SHALL BE COORDINATED WITH THE EXISTING TIEBACK LOCATIONS. NO EXCAVATION ACTIVITY SHALL OCCUR WITHIN 10 FEET VERTICAL OR HORIZONTAL OF EXISTING TIEBACKS WITHOUT PRIOR AUTHORIZATION FROM THE PROJECT STRUCTURAL ENGINEER AND MMC REPRESENTATIVES.

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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN W. BUSHEY No. 7429 Licensed PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

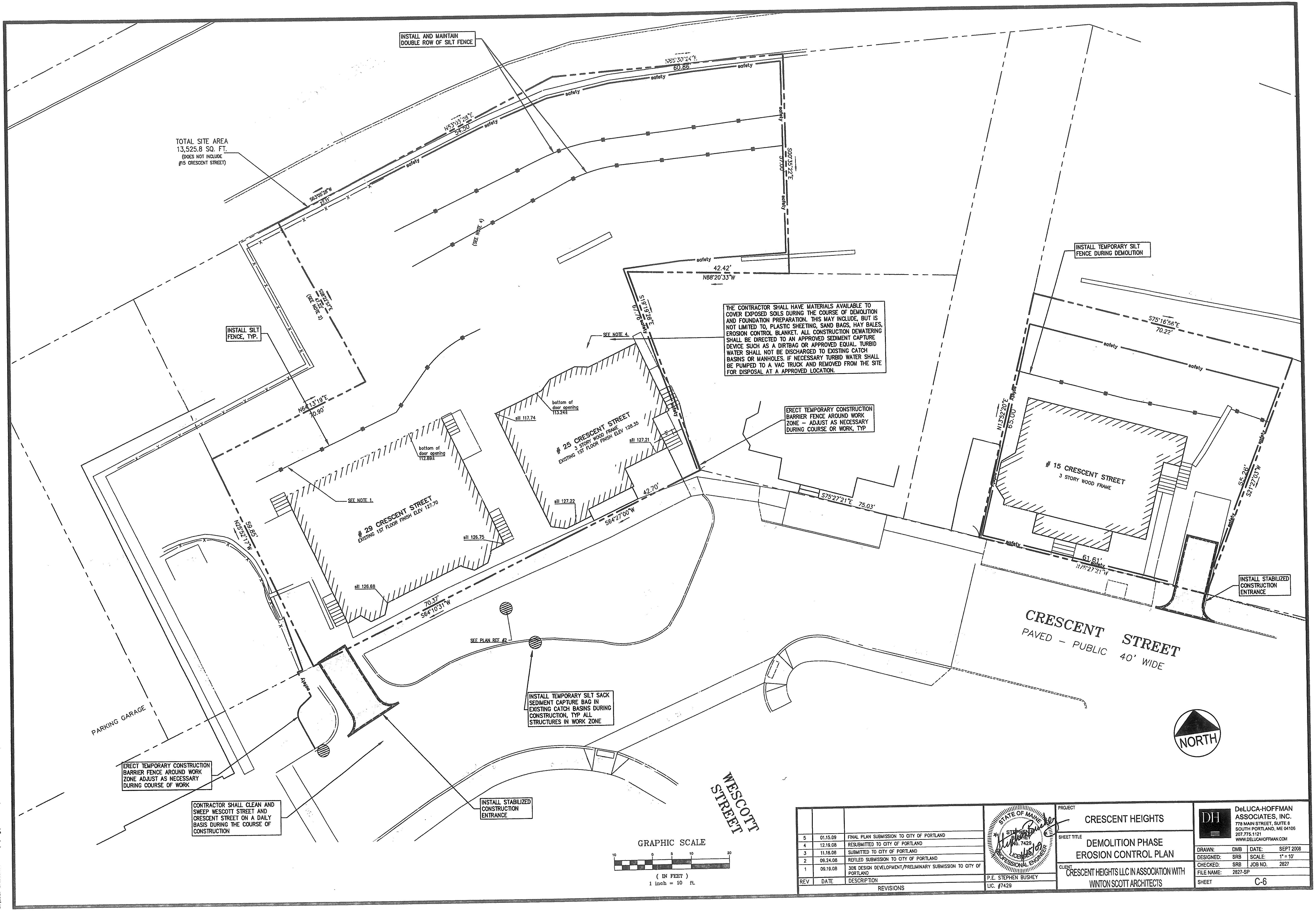
PROJECT: CRESCENT HEIGHTS

SHEET TITLE: MMC RETAINING WALL TIEBACKS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-5		


INSTALL AND MAINTAIN DOUBLE ROW OF SILT FENCE
N55°30'24"E 60.86'
N53°03'28"E 54.50'
S63°06'28"W 27.11'
S00°35'22"E 57.00'
TOTAL SITE AREA 13,525.8 SQ. FT. (DOES NOT INCLUDE #15 CRESCENT STREET)
(SEE NOTE 4)
INSTALL SILT FENCE, TYP.
S28°32'57"E 47.22' (SEE NOTE 2)
42.42' N88°20'33"W
S19°28'51"E 87.19'
SEE NOTE 4.
THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE TO COVER EXPOSED SOILS DURING THE COURSE OF DEMOLITION AND FOUNDATION PREPARATION. THIS MAY INCLUDE, BUT IS NOT LIMITED TO, PLASTIC SHEETING, SAND BAGS, HAY BALES, EROSION CONTROL BLANKET. ALL CONSTRUCTION DEWATERING SHALL BE DIRECTED TO AN APPROVED SEDIMENT CAPTURE DEVICE SUCH AS A DIRTBAG OR APPROVED EQUAL. TURBID WATER SHALL NOT BE DISCHARGED TO EXISTING CATCH BASINS OR MANHOLES. IF NECESSARY TURBID WATER SHALL BE PUMPED TO A VAC TRUCK AND REMOVED FROM THE SITE FOR DISPOSAL AT A APPROVED LOCATION.
INSTALL TEMPORARY SILT FENCE DURING DEMOLITION
S75°16'56"E 70.22'
N64°13'19"E 40.90'
bottom of door opening 113.24±
sill 117.74
25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35
sill 127.21
sill 127.22
42.70'
S64°27'00"W
ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE – ADJUST AS NECESSARY DURING COURSE OR WORK, TYP
N13°32'20"E 65.00'
15 CRESCENT STREET
3 STORY WOOD FRAME
S27°27'03"W 65.26'
S75°27'21"E 75.03'
61.61' N75°27'21"W
bottom of door opening 112.69±
SEE NOTE 1.
29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70
sill 126.75
sill 126.68
59.85' N25°52'17"W
70.37' S64°10'31"W
SEE PLAN REF #2
INSTALL STABILIZED CONSTRUCTION ENTRANCE
CRESCENT STREET
PAVED – PUBLIC 40' WIDE
INSTALL TEMPORARY SILT SACK SEDIMENT CAPTURE BAG IN EXISTING CATCH BASINS DURING CONSTRUCTION, TYP ALL STRUCTURES IN WORK ZONE
NORTH
PARKING GARAGE
ERECT TEMPORARY CONSTRUCTION BARRIER FENCE AROUND WORK ZONE ADJUST AS NECESSARY DURING COURSE OF WORK
CONTRACTOR SHALL CLEAN AND SWEEP WESCOTT STREET AND CRESCENT STREET ON A DAILY BASIS DURING THE COURSE OF CONSTRUCTION
INSTALL STABILIZED CONSTRUCTION ENTRANCE
WESCOTT STREET
GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.
safety

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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN BUSHEY No. 7429 LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY

LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: DEMOLITION PHASE EROSION CONTROL PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-6		

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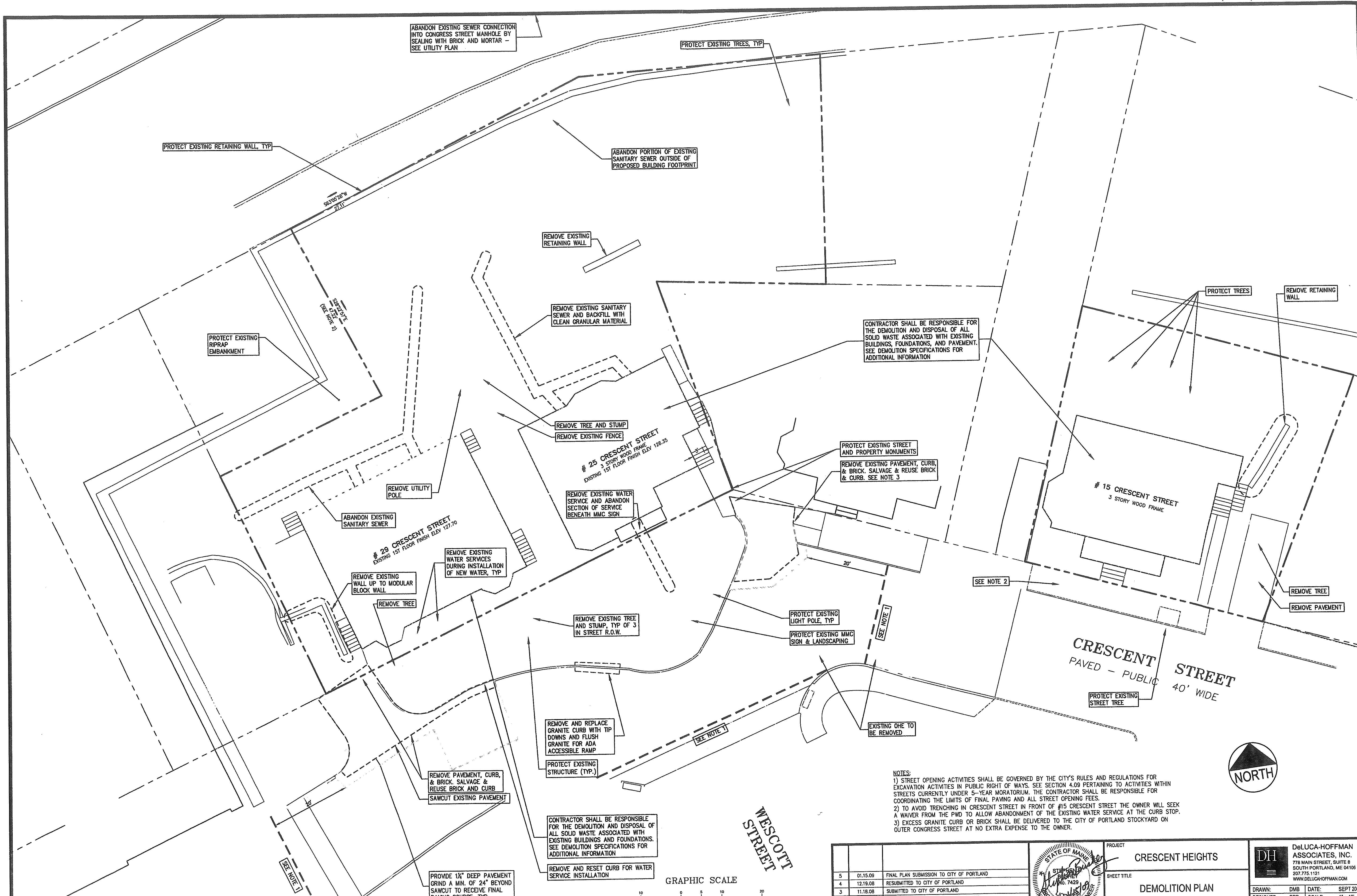

ABANDON EXISTING SEWER CONNECTION INTO CONGRESS STREET MANHOLE BY SEALING WITH BRICK AND MORTAR – SEE UTILITY PLAN
PROTECT EXISTING TREES, TYP
PROTECT EXISTING RETAINING WALL, TYP
ABANDON PORTION OF EXISTING SANITARY SEWER OUTSIDE OF PROPOSED BUILDING FOOTPRINT
S63°05'28"W 27.11'
REMOVE EXISTING RETAINING WALL
PROTECT TREES
REMOVE RETAINING WALL
REMOVE EXISTING SANITARY SEWER AND BACKFILL WITH CLEAN GRANULAR MATERIAL
PROTECT EXISTING RIPRAP EMBANKMENT
(SEE NOTE 2)
CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND DISPOSAL OF ALL SOLID WASTE ASSOCIATED WITH EXISTING BUILDINGS, FOUNDATIONS, AND PAVEMENT. SEE DEMOLITION SPECIFICATIONS FOR ADDITIONAL INFORMATION
REMOVE TREE AND STUMP
REMOVE EXISTING FENCE
25 CRESCENT STREET
3 STORY WOOD FRAME
EXISTING 1ST FLOOR FINISH ELEV 128.35
PROTECT EXISTING STREET AND PROPERTY MONUMENTS
REMOVE EXISTING PAVEMENT, CURB, & BRICK. SALVAGE & REUSE BRICK & CURB. SEE NOTE 3
15 CRESCENT STREET
3 STORY WOOD FRAME
REMOVE UTILITY POLE
REMOVE EXISTING WATER SERVICE AND ABANDON SECTION OF SERVICE BENEATH MMC SIGN
ABANDON EXISTING SANITARY SEWER
29 CRESCENT STREET
EXISTING 1ST FLOOR FINISH ELEV 127.70
REMOVE EXISTING WATER SERVICES DURING INSTALLATION OF NEW WATER, TYP
REMOVE EXISTING WALL UP TO MODULAR BLOCK WALL
REMOVE TREE
20'
SEE NOTE 2
REMOVE TREE
REMOVE PAVEMENT
REMOVE EXISTING TREE AND STUMP, TYP OF 3 IN STREET R.O.W.
PROTECT EXISTING LIGHT POLE, TYP
PROTECT EXISTING MMC SIGN & LANDSCAPING
SEE NOTE 1
CRESCENT STREET
PAVED – PUBLIC 40' WIDE
PROTECT EXISTING STREET TREE
EXISTING OHE TO BE REMOVED
REMOVE AND REPLACE GRANITE CURB WITH TIP DOWNS AND FLUSH GRANITE FOR ADA ACCESSIBLE RAMP
SEE NOTE 1
PROTECT EXISTING STRUCTURE (TYP.)
REMOVE PAVEMENT, CURB, & BRICK. SALVAGE & REUSE BRICK AND CURB
SAWCUT EXISTING PAVEMENT
20'
CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND DISPOSAL OF ALL SOLID WASTE ASSOCIATED WITH EXISTING BUILDINGS AND FOUNDATIONS. SEE DEMOLITION SPECIFICATIONS FOR ADDITIONAL INFORMATION
REMOVE AND RESET CURB FOR WATER SERVICE INSTALLATION
WESCOTT STREET
SEE NOTE 1
PROVIDE 1½" DEEP PAVEMENT GRIND A MIN. OF 24" BEYOND SAWCUT TO RECEIVE FINAL PAVING COURSE, TYP
GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.
NORTH

NOTES:

1) STREET OPENING ACTIVITIES SHALL BE GOVERNED BY THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. SEE SECTION 4.09 PERTAINING TO ACTIVITIES WITHIN STREETS CURRENTLY UNDER 5–YEAR MORATORIUM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LIMITS OF FINAL PAVING AND ALL STREET OPENING FEES.

2) TO AVOID TRENCHING IN CRESCENT STREET IN FRONT OF #15 CRESCENT STREET THE OWNER WILL SEEK A WAIVER FROM THE PWD TO ALLOW ABANDONMENT OF THE EXISTING WATER SERVICE AT THE CURB STOP.

3) EXCESS GRANITE CURB OR BRICK SHALL BE DELIVERED TO THE CITY OF PORTLAND STOCKYARD ON OUTER CONGRESS STREET AT NO EXTRA EXPENSE TO THE OWNER.

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4	12.19.08	RESUBMITTED TO CITY OF PORTLAND
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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN BUSHEY — No. 7429 — LICENSED — PROFESSIONAL ENGINEER — 1/15/09

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: DEMOLITION PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-7		

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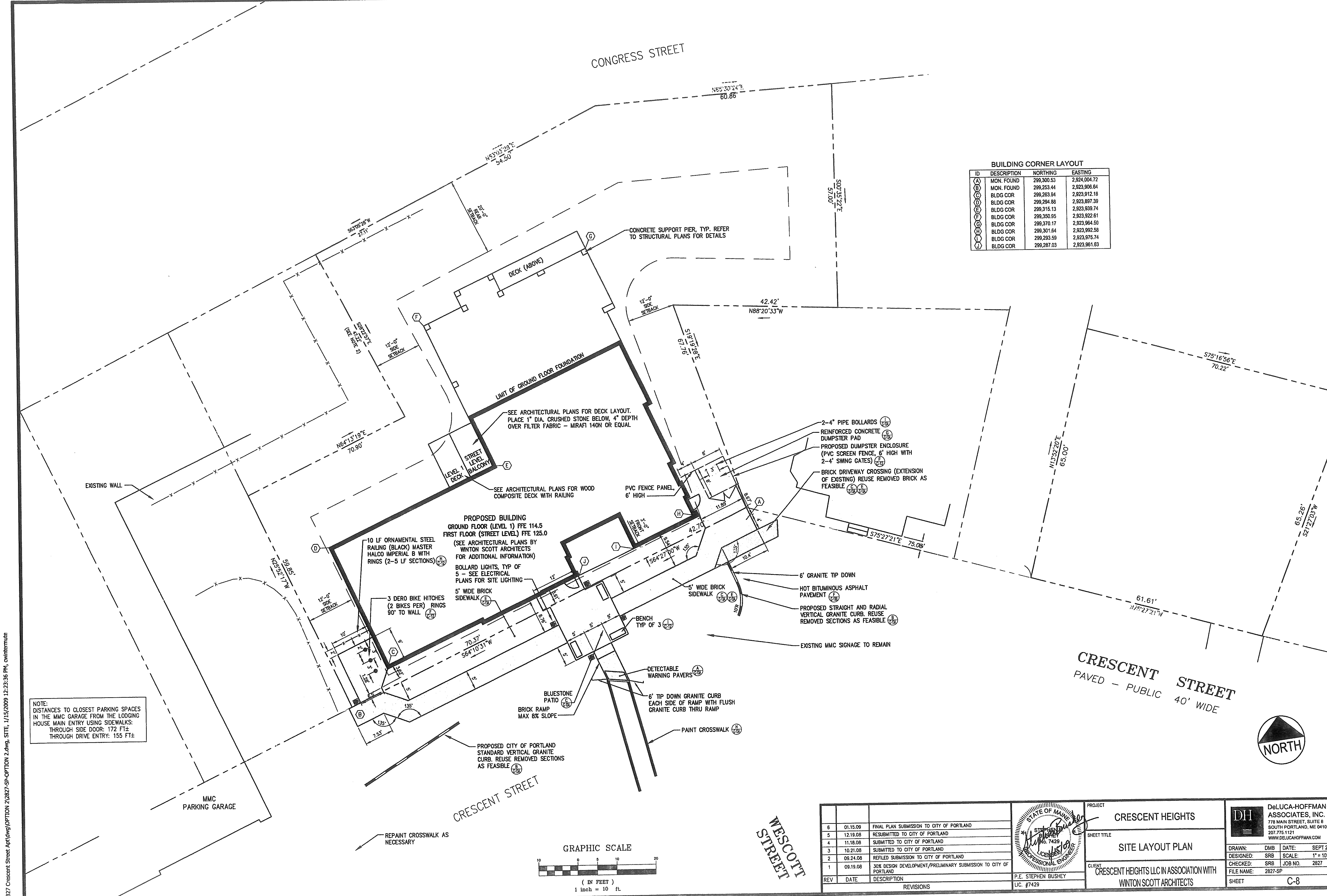

CONGRESS STREET
N85°30'24"E 60.86'
N53°03'28"E 54.50'
S63°05'28"W 27.11'
S00°35'22"E 57.00'
20'-0" REAR SETBACK
CONCRETE SUPPORT PIER, TYP. REFER TO STRUCTURAL PLANS FOR DETAILS
DECK (ABOVE)
12'-0" SIDE SETBACK
42.42'
N88°20'33"W
S19°19'28"E 67.76'
S28°22'57"E 47.22' (SEE NOTE 2)
LIMIT OF GROUND FLOOR FOUNDATION
SEE ARCHITECTURAL PLANS FOR DECK LAYOUT. PLACE 1" DIA. CRUSHED STONE BELOW, 4" DEPTH OVER FILTER FABRIC - MIRAFI 140N OR EQUAL
N64°13'19"E 70.90'
LEVEL 1 DECK
STREET LEVEL BALCONY
SEE ARCHITECTURAL PLANS FOR WOOD COMPOSITE DECK WITH RAILING
EXISTING WALL
PVC FENCE PANEL, 6' HIGH
2-4" PIPE BOLLARDS
REINFORCED CONCRETE DUMPSTER PAD
PROPOSED DUMPSTER ENCLOSURE (PVC SCREEN FENCE, 6' HIGH WITH 2-4' SWING GATES)
BRICK DRIVEWAY CROSSING (EXTENSION OF EXISTING) REUSE REMOVED BRICK AS FEASIBLE
S75°16'56"E 70.22'
N13°52'20"E 65.00'
S75°27'21"E 75.08'
65.26' S21°27'03"W
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
(SEE ARCHITECTURAL PLANS BY WINTON SCOTT ARCHITECTS FOR ADDITIONAL INFORMATION)
10 LF ORNAMENTAL STEEL RAILING (BLACK) MASTER HALCO IMPERIAL B WITH RINGS (2-5 LF SECTIONS)
BOLLARD LIGHTS, TYP OF 5 - SEE ELECTRICAL PLANS FOR SITE LIGHTING
5' WIDE BRICK SIDEWALK
3'-0" FRONT SETBACK
42.70'
S64°27'00"W
N25°52'17"W 59.85'
3 DERO BIKE HITCHES (2 BIKES PER) RINGS 90° TO WALL
6' GRANITE TIP DOWN
HOT BITUMINOUS ASPHALT PAVEMENT
PROPOSED STRAIGHT AND RADIAL VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
61.61'
N75°27'21"W
70.37'
S64°10'31"W
BENCH TYP OF 3
EXISTING MMC SIGNAGE TO REMAIN
DETECTABLE WARNING PAVERS
BLUESTONE PATIO
BRICK RAMP MAX 8% SLOPE
6" TIP DOWN GRANITE CURB EACH SIDE OF RAMP WITH FLUSH GRANITE CURB THRU RAMP
PAINT CROSSWALK
PROPOSED CITY OF PORTLAND STANDARD VERTICAL GRANITE CURB. REUSE REMOVED SECTIONS AS FEASIBLE
CRESCENT STREET
PAVED - PUBLIC 40' WIDE
NORTH
MMC PARKING GARAGE
CRESCENT STREET
WESCOTT STREET
REPAINT CROSSWALK AS NECESSARY
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

BUILDING CORNER LAYOUT

ID	DESCRIPTION	NORTHING	EASTING
A	MON. FOUND	299,300.53	2,924,004.72
B	MON. FOUND	299,253.44	2,923,906.64
C	BLDG COR	299,263.94	2,923,912.18
D	BLDG COR	299,294.88	2,923,897.39
E	BLDG COR	299,315.13	2,923,939.74
F	BLDG COR	299,350.95	2,923,922.61
G	BLDG COR	299,370.17	2,923,964.50
H	BLDG COR	299,301.64	2,923,992.58
I	BLDG COR	299,293.59	2,923,975.74
J	BLDG COR	299,287.03	2,923,961.63

NOTE:
DISTANCES TO CLOSEST PARKING SPACES IN THE MMC GARAGE FROM THE LODGING HOUSE MAIN ENTRY USING SIDEWALKS:
THROUGH SIDE DOOR: 172 FT±
THROUGH DRIVE ENTRY: 155 FT±

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REVISIONS

REV	DATE	DESCRIPTION
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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

STATE OF MAINE — STEPHEN BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER — 1/15/09

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE LAYOUT PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
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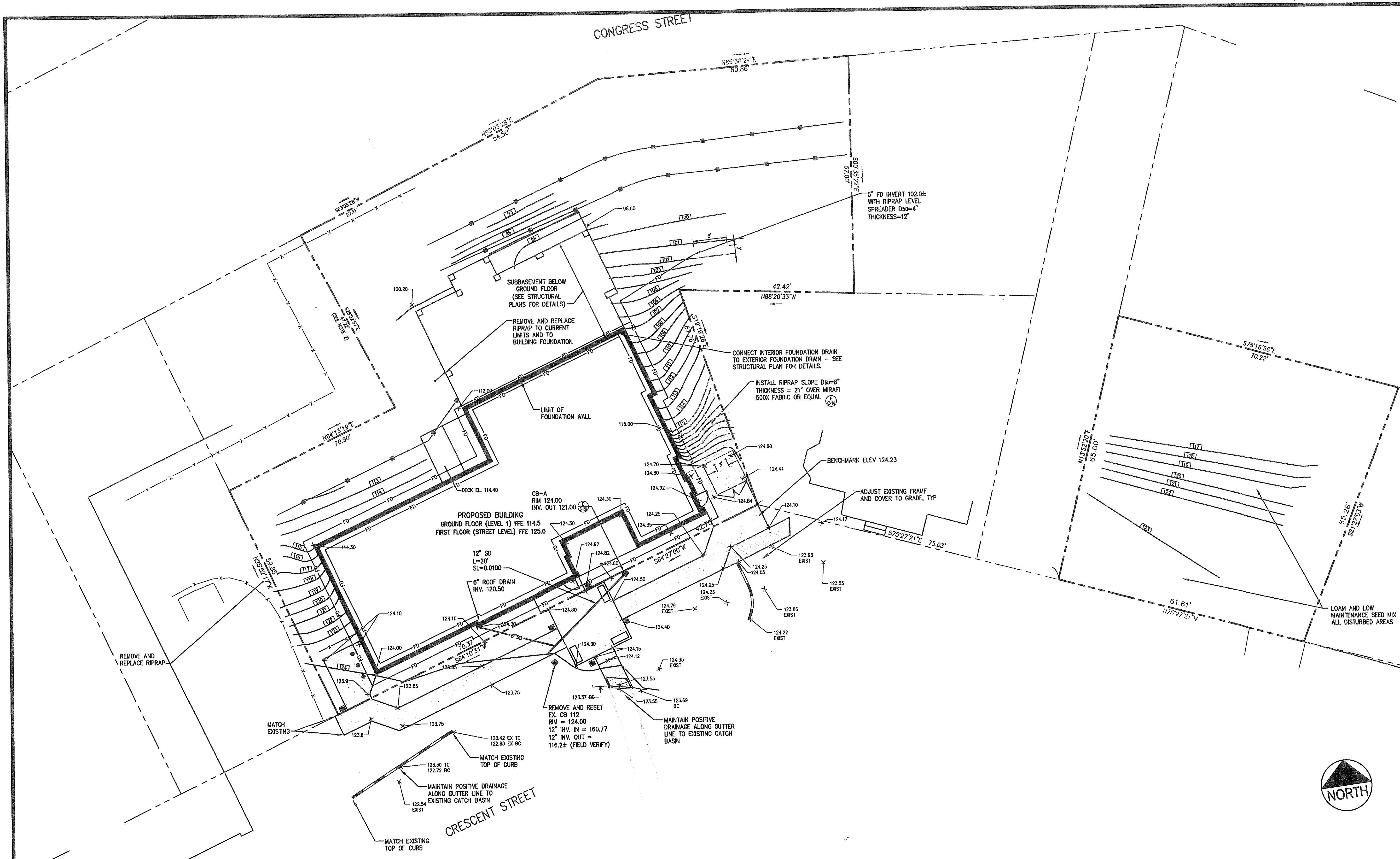
F. 9



CONGRESS STREET
N85°30'24"E
60.86
N53°03'29"E
54.50
S63°06'28"W
27.11'
S00°35'22"E
57.00'
6" FD INVERT 102.0±
WITH RIPRAP LEVEL
SPREADER D50=4"
THICKNESS=12"
98.60
100.20
SUBBASEMENT BELOW
GROUND FLOOR
(SEE STRUCTURAL
PLANS FOR DETAILS)
REMOVE AND REPLACE
RIPRAP TO CURRENT
LIMITS AND TO
BUILDING FOUNDATION
42.42'
N88°20'33"W
CONNECT INTERIOR FOUNDATION DRAIN
TO EXTERIOR FOUNDATION DRAIN - SEE
STRUCTURAL PLAN FOR DETAILS.
INSTALL RIPRAP SLOPE D50=8"
THICKNESS = 21" OVER MIRAFI
500X FABRIC OR EQUAL
S75°16'56"E
70.22'
LIMIT OF
FOUNDATION WALL
N64°13'19"E
70.90'
115.00
124.60
124.44
BENCHMARK ELEV 124.23
DECK EL. 114.40
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
CB-A
RIM 124.00
INV. OUT 121.00
ADJUST EXISTING FRAME
AND COVER TO GRADE, TYP
S75°27'21"E 75.03'
N13°52'20"E
65.00'
85.26'
S21°27'03"W
12" SD
L=20'
SL=0.0100
6" ROOF DRAIN
INV. 120.50
S64°27'00"W
N25°52'17"W
59.85
61.61'
LOAM AND LOW
MAINTENANCE SEED MIX
ALL DISTURBED AREAS
REMOVE AND
REPLACE RIPRAP
70.37'
S64°10'31"W
MATCH
EXISTING
REMOVE AND RESET
EX. CB 112
RIM = 124.00
12" INV. IN = 160.77
12" INV. OUT =
116.2± (FIELD VERIFY)
MAINTAIN POSITIVE
DRAINAGE ALONG GUTTER
LINE TO EXISTING CATCH
BASIN
123.42 EX TC
122.80 EX BC
MATCH EXISTING
TOP OF CURB
123.30 TC
122.72 BC
MAINTAIN POSITIVE DRAINAGE
ALONG GUTTER LINE TO
EXISTING CATCH BASIN
122.54
EXIST
CRESCENT STREET
MATCH EXISTING
TOP OF CURB
NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

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1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
GRADING AND DRAINAGE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-9		

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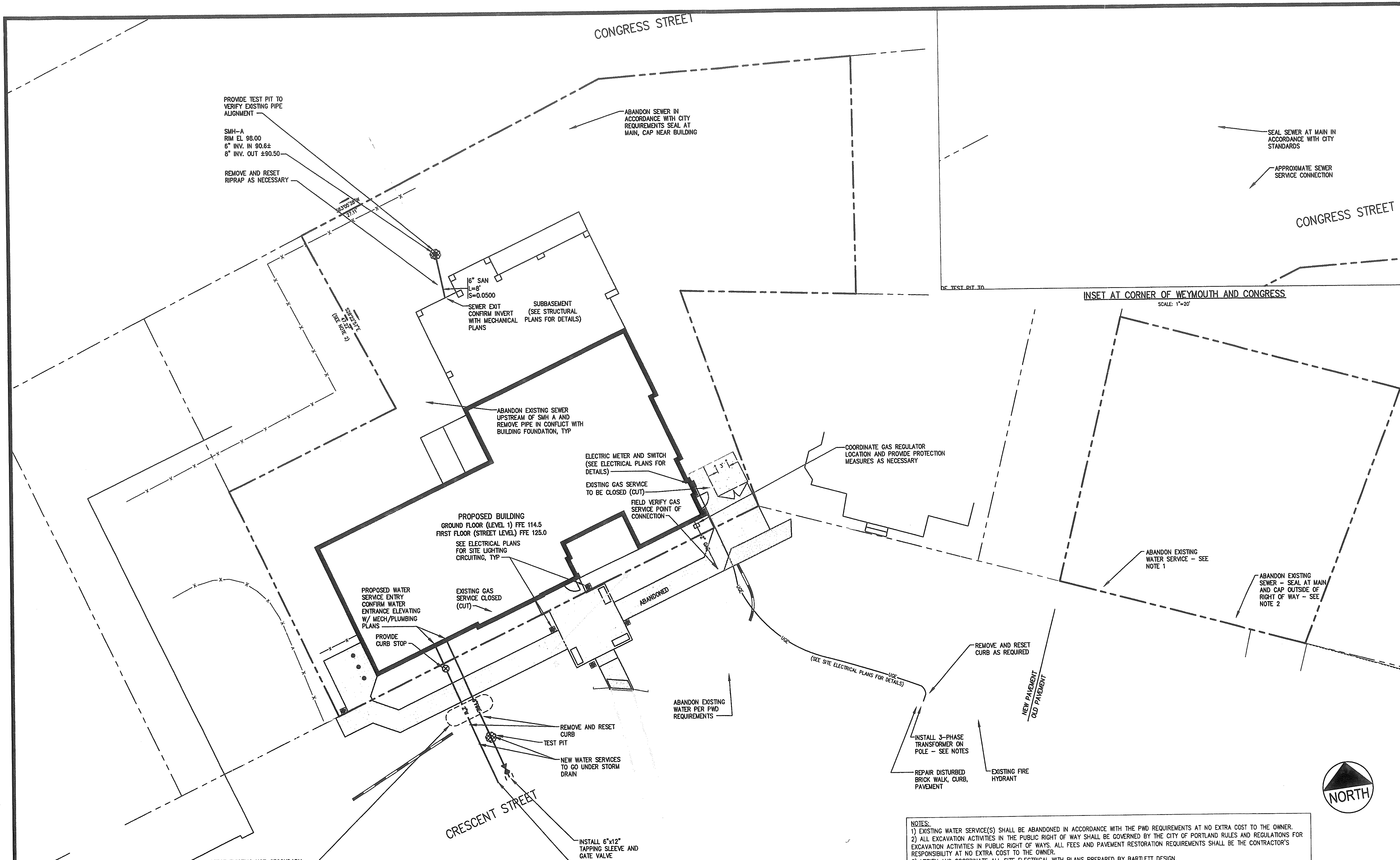
F. 16


CONGRESS STREET
PROVIDE TEST PIT TO VERIFY EXISTING PIPE ALIGNMENT
SMH-A
RIM EL 98.00
6" INV. IN 90.6±
8" INV. OUT ±90.50
REMOVE AND RESET RIPRAP AS NECESSARY
ABANDON SEWER IN ACCORDANCE WITH CITY REQUIREMENTS SEAL AT MAIN, CAP NEAR BUILDING
6" SAN
L=8'
S=0.0500
SEWER EXIT CONFIRM INVERT WITH MECHANICAL PLANS
SUBBASEMENT (SEE STRUCTURAL PLANS FOR DETAILS)
ABANDON EXISTING SEWER UPSTREAM OF SMH A AND REMOVE PIPE IN CONFLICT WITH BUILDING FOUNDATION, TYP
ELECTRIC METER AND SWITCH (SEE ELECTRICAL PLANS FOR DETAILS)
EXISTING GAS SERVICE TO BE CLOSED (CUT)
FIELD VERIFY GAS SERVICE POINT OF CONNECTION
PROPOSED BUILDING
GROUND FLOOR (LEVEL 1) FFE 114.5
FIRST FLOOR (STREET LEVEL) FFE 125.0
SEE ELECTRICAL PLANS FOR SITE LIGHTING CIRCUITING, TYP
PROPOSED WATER SERVICE ENTRY CONFIRM WATER ENTRANCE ELEVATING W/ MECH/PLUMBING PLANS
PROVIDE CURB STOP
EXISTING GAS SERVICE CLOSED (CUT)
ABANDONED
COORDINATE GAS REGULATOR LOCATION AND PROVIDE PROTECTION MEASURES AS NECESSARY
(SEE SITE ELECTRICAL PLANS FOR DETAILS)
UGE
SEAL SEWER AT MAIN IN ACCORDANCE WITH CITY STANDARDS
APPROXIMATE SEWER SERVICE CONNECTION
CONGRESS STREET
INSET AT CORNER OF WEYMOUTH AND CONGRESS
SCALE: 1"=20'
ABANDON EXISTING WATER SERVICE – SEE NOTE 1
ABANDON EXISTING SEWER – SEAL AT MAIN AND CAP OUTSIDE OF RIGHT OF WAY – SEE NOTE 2
REMOVE AND RESET CURB AS REQUIRED
NEW PAVEMENT
OLD PAVEMENT
ABANDON EXISTING WATER PER PWD REQUIREMENTS
INSTALL 3-PHASE TRANSFORMER ON POLE – SEE NOTES
REPAIR DISTURBED BRICK WALK, CURB, PAVEMENT
EXISTING FIRE HYDRANT
REMOVE AND RESET CURB
TEST PIT
NEW WATER SERVICES TO GO UNDER STORM DRAIN
CRESCENT STREET
INSTALL 6"x12" TAPPING SLEEVE AND GATE VALVE
INSTALL 2" CORPORATION AND 2" CURB STOP
PROTECT EXISTING UGE-SECONDARY LINES IF ENCOUNTERED – REPLACE IF NECESSARY AT NO EXTRA EXPENSE TO THE OWNER
EXISTING FIRE HYDRANT
NORTH
GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

NOTES:

1) EXISTING WATER SERVICE(S) SHALL BE ABANDONED IN ACCORDANCE WITH THE PWD REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
2) ALL EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY SHALL BE GOVERNED BY THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. ALL FEES AND PAVEMENT RESTORATION REQUIREMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO EXTRA COST TO THE OWNER.
3) VERIFY AND COORDINATE ALL SITE ELECTRICAL WITH PLANS PREPARED BY BARTLETT DESIGN.

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMITTED TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN BUSHEY — No. 7429 — LICENSED — PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: UTILITY PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
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DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-10		

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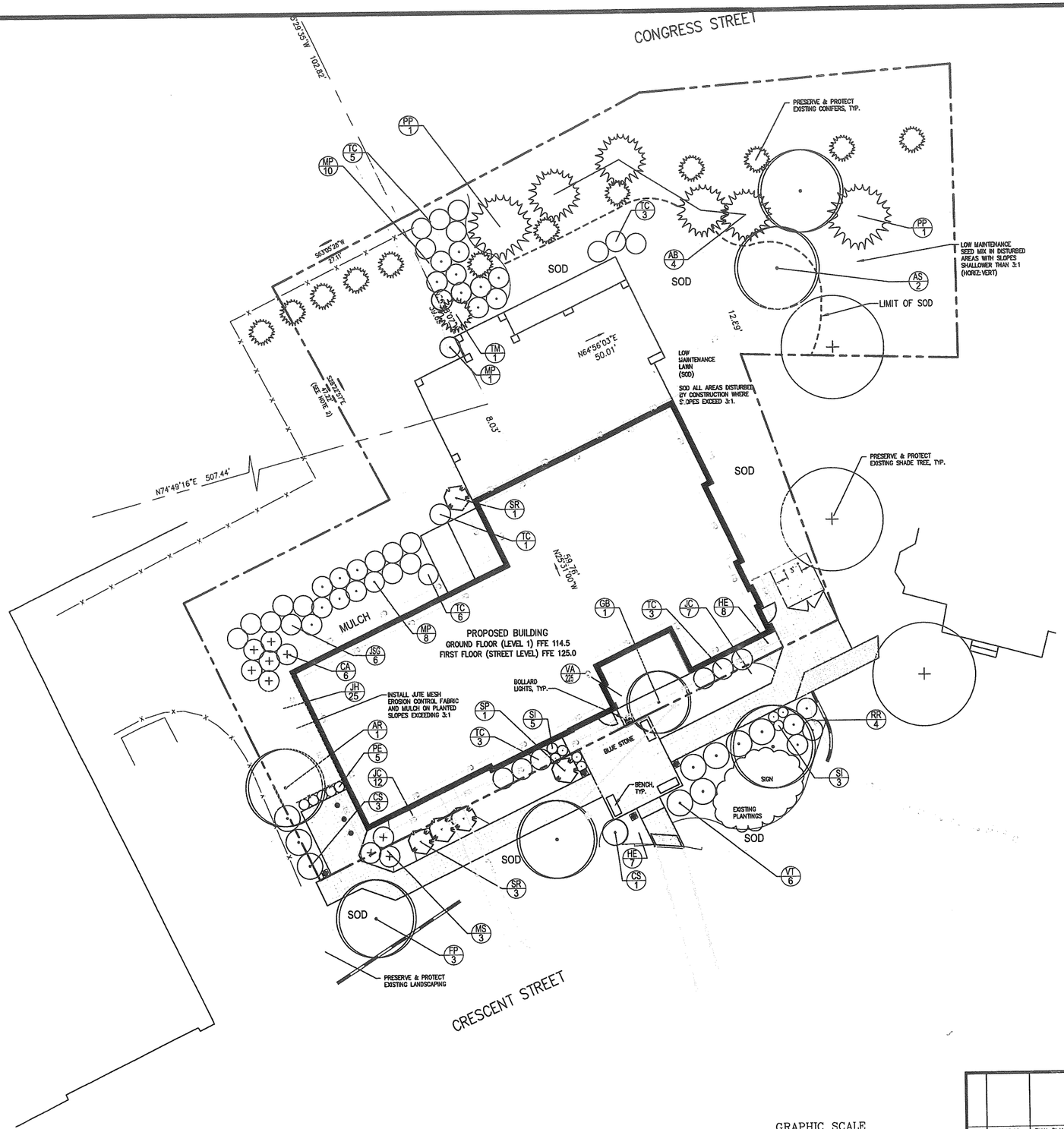

PLANT LIST

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	SPACING	REMARKS
TREES						
AB	4	Abies balsamea Balsam Fir	6-7' ht.	B&B		
AR	1	Acer rubrum 'Autumn Flame' Autumn Flame Red Maple	2 1/2-3" cal.	B&B		
AS	2	Acer saccharum 'Green Mountain' Green Mountain Sugar Maple	2 1/2-3" cal.	B&B		
FP	3	Fraxinus pennsylvanica 'Summit' Summit Ash	2 1/2-3" cal.	B&B		
GB	1	Ginkgo biloba Ginkgo Tree	2" cal.	B&B		
PP	2	Picea pungens 'Glauca' Colorado Blue Spruce	6-7' ht.	B&B		
TM	1	Taxus X media 'Hicksii' Hick's Yew	24-30" ht	B&B		
SHRUBS & ORNAMENTAL GRASSES						
CA	6	Calamagrostis acutifolia 'Karl Foerster' Karl Foerster Feather Reed Grass	full	3 gal.	4'oc	
CS	4	Cornus sericea 'Isanti' Isanti Red Twig Dogwood	24-30" ht	5 gal./B&B	5'oc	
JSG	6	Juniperus chinensis 'Sea Green' Sea Green Juniper	18-24" spr.	3 gal/B&B	4'oc	
MP	18	Myrica pensylvanica Bayberry	18-24" ht	3 gal/B&B	4'oc	
MS	3	Miscanthus sinensis 'Graziella' Silver Grass	full	3 gal.	4'oc	
RR	4	Rosa rugosa Rugosa Rose, pink	18-24"ht.	3 gal.	4'oc	
SP	1	Syringa patula 'Miss Kim' Miss Kim Lilac	30-36" ht.	B&B		
SR	4	Syringa x prestoniae 'Donald Wyman' Lilac, deep pink	30-36" ht.	B&B	4'oc	shrub form
TC	21	Taxus cuspidata 'Green Wave' Green Wave Yew	18-24" spr.	B&B/3 gal.	4'oc	
VT	6	Viburnum trilobum 'Alfredo' Alfredo American Cranberry Viburnum	24-30" ht.	B&B/3 gal.	5'oc	
GROUNDCOVER & PERENNIALS						
VA	225	Vaccinium angustifolium Low-bush Blueberry sod	sod	sq. ft.		
HE	15	Hemerocallis, mixed Daylily, red, yellow, orange mixed	3-4 ppp	1 gal.	2' oc	similar blade/plant size
JC	19	Juniperus chinensis 'Blue Chip' Blue Chip Juniper	18-24" spr.	3 gal.	4' oc	
*JH	25	Juniperus horizontalis 'Bar Harbor' Creeping Thyme	18-24" spr.	3 gal.	3' oc	on >3:1 slope
PE	5	Perennials, flowering e.g., Echinacea, Gaillardia	full	1 gal.	2' oc	
SI	8	Iris siberica 'Caesar's Brother' Siberian Iris, blue	3-4 ppp	1 gal.	2' oc	blue flower

* ALTERNATE: Low-bush Blueberry sod, 275 S.F.

LANDSCAPE LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUB/ ORNAMENTAL GRASS
- EVERGREEN SHRUB
- EXISTING TREES AND SHRUBS TO REMAIN
- EVERGREEN GROUND COVER WITH MULCH
- DECIDUOUS GROUND COVER WITH MULCH
- FLOWERING PERENNIAL GROUND COVER WITH MULCH

NORTH

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

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4	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
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1	08.29.08	30% DESIGN DEVELOPMENT

REVISIONS

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: LANDSCAPE PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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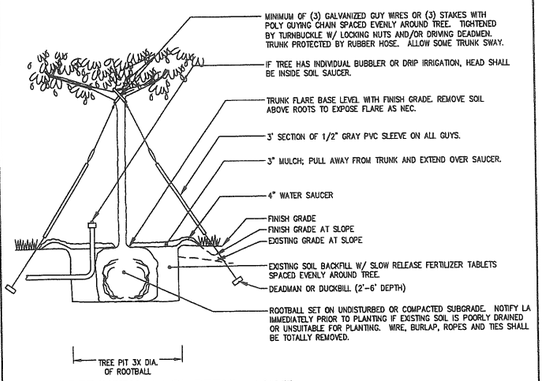
DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SEB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET C-11



A TREE INSTALLATION DETAIL: >10' HT.
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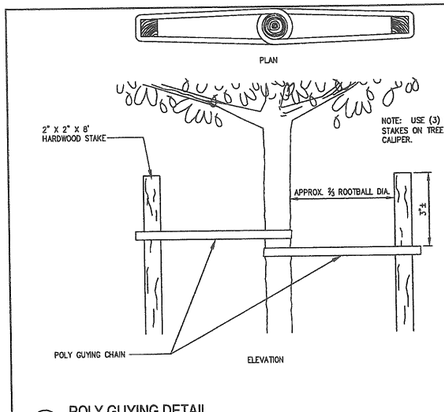

D POLY GUYING DETAIL
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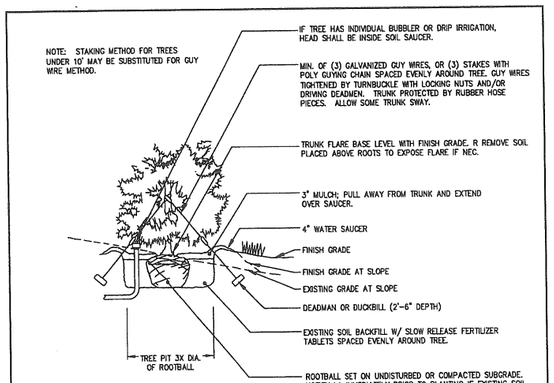

B CONIFER INSTALLATION DETAIL
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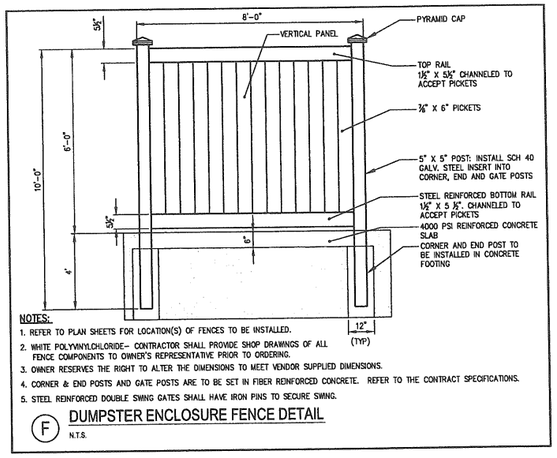
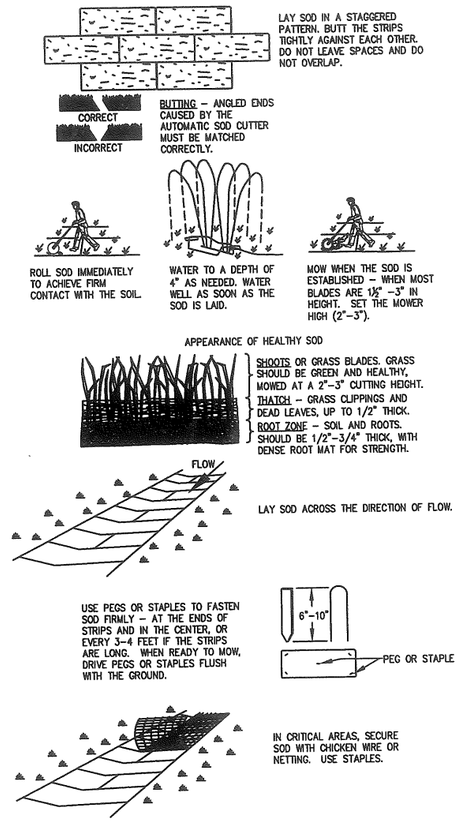


NOTES:
1. REFER TO PLAN SHEETS FOR LOCATION(S) OF FENCES TO BE INSTALLED.
2. WHITE POLYVINYLCHLORIDE– CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL FENCE COMPONENTS TO OWNER'S REPRESENTATIVE PRIOR TO ORDERING.
3. OWNER RESERVES THE RIGHT TO ALTER THE DIMENSIONS TO MEET VENDOR SUPPLIED DIMENSIONS.
4. CORNER & END POSTS AND GATE POSTS ARE TO BE SET IN FIBER REINFORCED CONCRETE. REFER TO THE CONTRACT SPECIFICATIONS.
5. STEEL REINFORCED DOUBLE SWING GATES SHALL HAVE IRON PINS TO SECURE SWING.

F DUMPSTER ENCLOSURE FENCE DETAIL
N.T.S.



G SOD PLACEMENT DETAILS
N.T.S.

SPECIFICATIONS

SITE PREPARATION
(a) INSTALL NEEDED WATER CONTROL MEASURES.
(b) GRADE SLOPES 2:1 OR FLATTER.
(c) BEFORE LAYING SOD, PROVIDE ADEQUATE DRAINAGE WHERE INTERNAL WATER MOVEMENT, ESPECIALLY AT THE TOE OF SLOPES, MAY CAUSE SEEPS OR SOIL SLIPPAGE.

SOIL PREPARATION
(a) PROVIDE THE BEST POSSIBLE SOIL CONDITIONS FOR SODDING. THE DESIRABLE SOIL TEXTURES INCLUDE SANDY LOAM, LOAM, AND SILT LOAM. WHERE DROUGHTY OR CLAYEY SOILS ARE ENCOUNTERED, CONSIDER AMENDING THEM WITH IMPORTED MATERIALS (TOPSOIL, COMPOST, SAND, ETC.) TO IMPROVE MOISTURE AND NUTRIENT RETENTION AND DRAINAGE. RESPREAD SCREENED NATIVE TOPSOIL (WHEN AVAILABLE) AFTER GRADING.

(b) IF TIME PERMITS, HAVE SOILS TESTED AND FOLLOW LIME AND FERTILIZER RECOMMENDATIONS.

(c) FILL AREAS MUST BE COMPACTED ENOUGH TO PREVENT UNEVEN SETTLING. THE ENTIRE SURFACE TO BE SODDED SHALL BE FREE FROM LARGE CLODS, STONES, OR OTHER DEBRIS. AT THIS STAGE, INCORPORATE LIME AND FERTILIZER UNIFORMLY INTO THE SURFACE SOIL AS NEEDED. IMMEDIATELY BEFORE SODDING, THE SOIL SHALL BE LOOSENED TO A DEPTH OF 1 INCH AND THOROUGHLY DAMPENED, IF NOT ALREADY MOIST. SOD SHALL NOT BE LAID ON DRY SOIL. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHENEVER PRACTICAL.

SELECTION OF SOD
(a) SELECT SOD GROWN FROM SEED OF ADAPTED VARIETIES OR TYPES AND UNDER CULTURAL PRACTICES CONDUCIVE TO HIGH QUALITY SOD FREE OF THATCH, WEED, INSECT, DISEASE, AND OTHER PEST PROBLEMS.

(b) SELECT SPECIES AND VARIETIES BEST SUITED FOR THE SITES TO BE STABILIZED.

(c) SELECT SOD AT LEAST 15 MONTHS OLD AND NO OLDER THAN 3 YEARS. CULTIVATED TURF GRASS IS USUALLY CONSIDERED READY FOR HARVEST WHEN A CUT PORTION OF SOD 3 FEET LONG BY 1 TO 1 1/2 FEET WIDE WILL SUPPORT ITS OWN WEIGHT WHEN SUSPENDED VERTICALLY FROM THE UPPER 10 PERCENT OF THE SECTION. THE MOST COMMON AGE OF SOD WHEN CUT IS 15 TO 24 MONTHS.

(d) SELECT SOD CUTS OF WIDTH AND LENGTH SUITED TO THE PROJECT AND AVAILABLE EQUIPMENT. GENERALLY, SOD PIECES ARE 12 TO 24 INCHES WIDE, AVERAGING 18 INCHES IN WIDTH. LENGTHS OF PIECES VARY FROM 4 TO 8 FEET. SOD MAY BE CUT AND ROLLED OR FOLDED IN THE MIDDLE AND STACKED ON PALLETS. FOLDED SOD IS CUT SHORTER THAN ROLLED SOD – ABOUT 3 TO 4 FEET IN LENGTH. SOD SHOULD BE CUT WITH A 1/4 TO 1/2 INCH LAYER OF SOIL. ABOUT 80 PERCENT OF ALL RHIZOMES ARE IN THE TOP 3/4 INCH OF SOIL. THE THINNER THE SOD IS CUT THE MORE QUICKLY IT WILL KNIT TO THE SITE SOIL, BUT THE SOIL LAYER MUST BE THICK ENOUGH TO HOLD CUT PIECES TOGETHER WITHOUT FALLING APART.

(e) HAVE SOD DELIVERED TO THE SITE AS SOON AS PRACTICAL AFTER LIFTING. DURING HOT WEATHER, DELIVERY SHOULD BE MADE WITHIN 8 HOURS AND MAY BE EXTENDED TO 48 HOURS DURING COOL SEASONS. IT IS GENERALLY UNWISE TO MOVE SOD DURING JULY AND AUGUST. IF MOVED DURING THIS PERIOD, SOD MAY NEED TO BE CUT THICKER AND IT WILL REQUIRE FREQUENT IRRIGATION.

ESTABLISHMENT
(a) DATES: SOD CAN BE ESTABLISHED FROM APRIL 1st TO NOVEMBER 15th (MAY VARY WITH REGION OF STATE).

(b) LAY STRIPS OF SOD AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT THE LOWEST ELEVATION. WEDGE THE EDGES AND ENDS OF THE SOD STRIPS TOGETHER AND TAMP OR ROLL. STAGGER JOINTS. LAY SO THE TOP OF THE SOIL LAYER IS FLUSH WITH THE TOP OF THE UNDISTURBED GROUND OR PAVEMENT SURFACE.

(c) USE WIRE STAPLES, FINE MESH WIRE OR WOOD PINS AND BINDER TWINE ON VERY STEEP SLOPES TO HOLD SOD IN PLACE UNTIL SECURED BY PLANT GROWTH.

(d) IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. IF UNFAVORABLE DRY WEATHER OR OTHER CONDITIONS PREVAIL, ADDITIONAL WATERING WILL SUBSEQUENTLY BE REQUIRED. IT MAY ALSO BE DESIRABLE TO IRRIGATE AREA FROM WHICH SOD IS TO BE REMOVED PRIOR TO LIFTING.

SODDED WATERWAYS
(a) CARE SHALL BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THE SPECIFICATIONS. THE SOD TYPE SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY.

(b) SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW (FIGURE 4.2). CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.

(c) AFTER ROLLING OR TAMPING, SOD SHALL BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. CHICKEN WIRE, JUTE OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

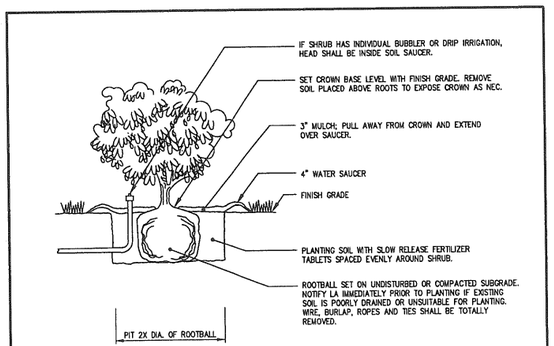
(d) ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

TIMING
WHEN SOD IS INSTALLED TO STABILIZE AREAS OF CONCENTRATED FLOW (INLETS, DIVERSIONS, DITCHES, ETC.), INSTALLATION MUST BE COMPLETED BEFORE RUNOFF IS DIRECTED TO THAT AREA.

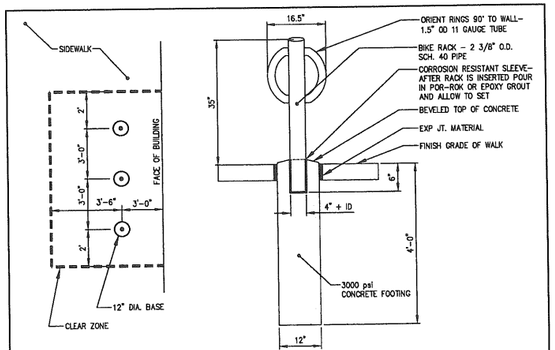
MAINTENANCE
(a) AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.

(b) NO MORE THAN 1/3 OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

(c) AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS.



C SHRUB INSTALLATION DETAIL
N.T.S.



MFR: DERO BIKE RACKS
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POWDER COAT FINISH
COLOR: BLACK
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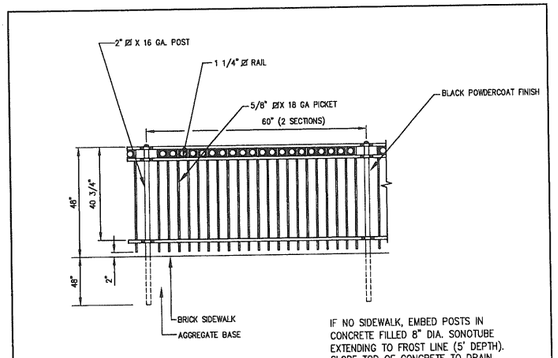
F BIKE HITCH MOUNTING DETAIL
N.T.S.



IF NO SIDEWALK, EMBED POSTS IN CONCRETE FILLED 8" DIA. SONOTUBE EXTENDING TO FROST LINE (5' DEPTH). SLOPE TOP OF CONCRETE TO DRAIN.

MASTER HALCO COMMERCIAL GRADE IMPERIAL B W/RINGS

H ORNAMENTAL METAL PICKET FENCE DETAIL
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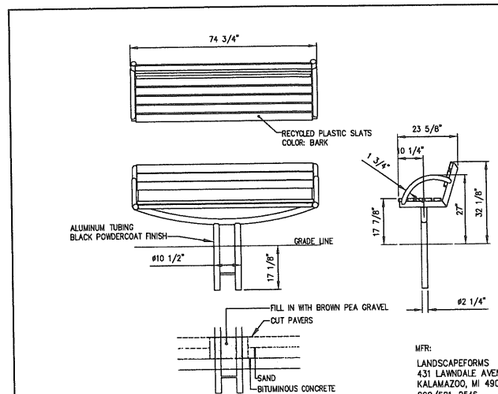

MFR:
LANDSCAPEFORMS
431 LAWNDALE AVENUE
KALAMAZOO, MI 49001
800/521–2546
616/381–3455 FAX

I BENCH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
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REVISIONS

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
LANDSCAPE AND SITE FURNISHING DETAILS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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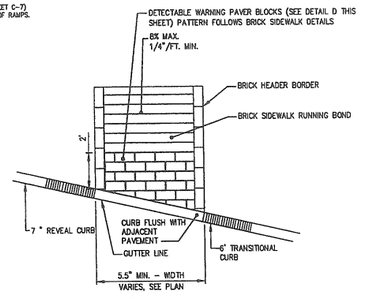
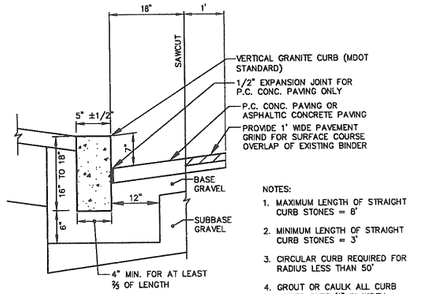
DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-12		

NOTES:
1. SEE SITE LAYOUT PLAN (SHEET C-7) FOR LOCATIONS & DIMENSIONS OF RAMPS.



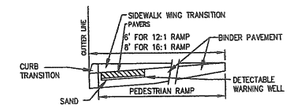
LAYOUT 1 – PLAN VIEW

(A) ADA RAMP DETAIL - WITH PAVER BLOCKS
N.T.S.

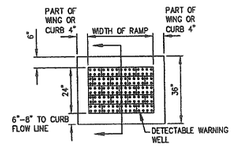


NOTES:
1. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
2. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
3. CIRCULAR CURB REQUIRED FOR RADIUS LESS THAN 50'
4. GROUT OR CAULK ALL CURB JOINTS OVER ¼" IN WIDTH. INSTALL STRIP OF FILTER FABRIC BEHIND EACH CURB JOINT.

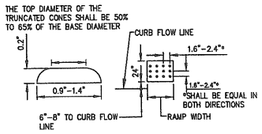
(B) VERTICAL GRANITE CURB
N.T.S.



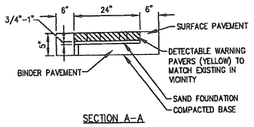
SIDE SECTION VIEW OF DETECTABLE WARNING, WELL, CURB AND GUTTER



PLAN VIEW OF DETECTABLE WARNING AND WELL
PAVERS NOT DRAWN TO SCALE

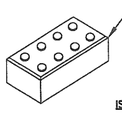


ELEVATION VIEW PLAN VIEW
DOME AND DETECTABLE WARNING DETAILS



SECTION A-A

NOTE:
ALL DETECTABLE WARNING AREAS SHALL START 6 INCHES FROM THE FLOW LINE OF THE CURB AND BE 24 INCHES PARALLEL TO CURB LINE (6 TO 30" FROM FACE OF CURB) AND COVER THE COMPLETE WIDTH OF THE RAMP AREA, UNLESS OTHERWISE NOTED

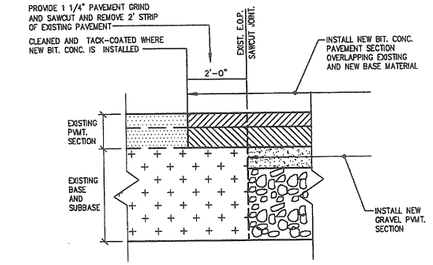


APPROXIMATE WT./PIECE	6.25 lbs.
PCS./SQ. FT.	4.5
PCS./PALLET	480
WT./PALLET	2968 lbs.
SQ. FT./PALLET	106

LOCAL PAVER REPRESENTATIVE:
MORIN BRICK
WWW.MORINBRICK.COM
207-784-9375

ISOMETRIC VIEW

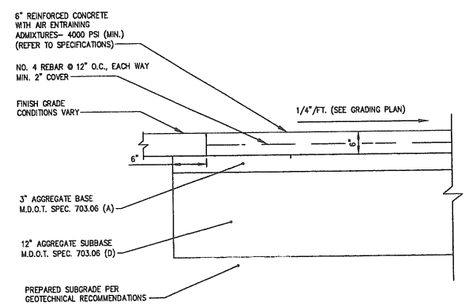
(D) DETECTABLE WARNING PAVER DETAIL
N.T.S.



NOTES:
1. APPLY TACK COAT BETWEEN BINDER AND SURFACE COURSES.
2. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION.
3. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH THE SPECIFICATIONS AND GEOTECHNICAL REPORTS PREPARED BY THE GEOTECHNICAL ENGINEER.

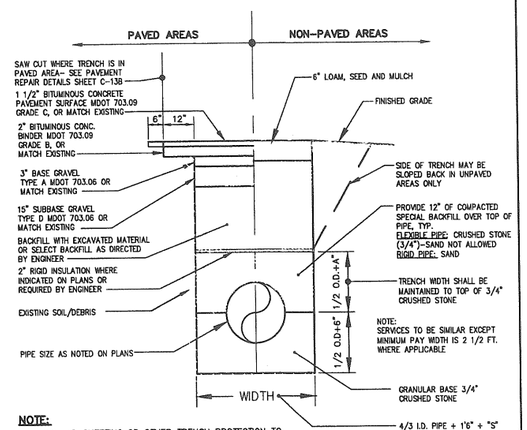
TYPICAL PAVEMENT SECTION
NEW PAVEMENT ADJACENT TO EXISTING PAVEMENT

(F)
N.T.S.



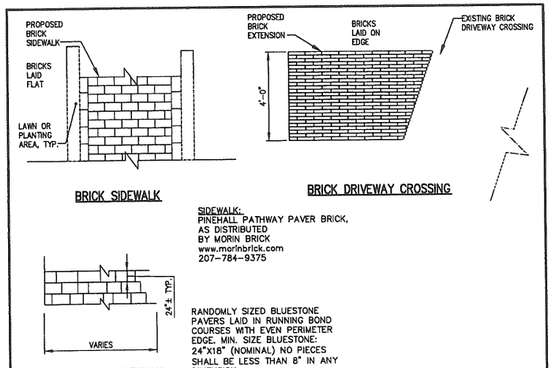
(G) REINFORCED CONCRETE PAD DETAIL
N.T.S.

TRENCH SECTION BACKFILL SCHEDULE				
TYPE OF PIPE	GRANULAR BASE MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
CONCRETE	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145-49 A-3 OR BETTER	12"	GRANULAR AASHTO M145-49 A-3 OR BETTER
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6"	GRANULAR AASHTO M145-49 A-3 OR BETTER
DUCTILE IRON	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145-49 A-3 OR BETTER	6"	GRANULAR AASHTO M145-49 A-3 OR BETTER
UNDER-DRAINS	UNDERDRAIN SAND	3/4" CRUSHED STONE	6"	MDOT 705.22 TYPE B

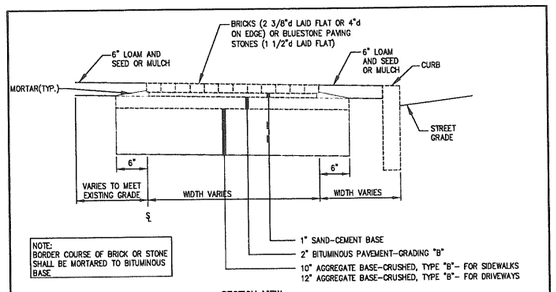


NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

(J) TYPICAL UTILITY PIPE TRENCH SECTION DETAIL
N.T.S.



(C) PAVER PATTERNS
N.T.S.

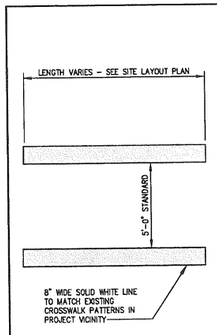


NOTE:
BORDER COURSE OF BRICK OR STONE SHALL BE MORTARED TO BITUMINOUS BASE

SECTION VIEW

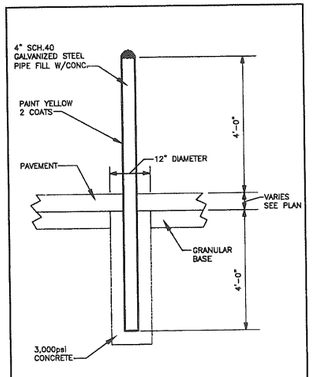
REFER TO THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES- SECTION 1- STREET DESIGN STANDARDS FOR PERTINENT INFORMATION ON SIDEWALK CONSTRUCTION.

(E) MASONRY SIDEWALK WITH BITUMINOUS BASE
N.T.S.

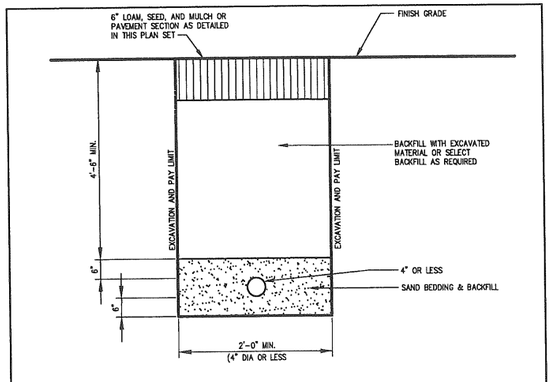


CROSSWALK STRIPING DETAIL

(H)
N.T.S.



(I) PIPE BOLLARD DETAIL
N.T.S.



(K) WATER SERVICE TRENCH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND
		REVISIONS

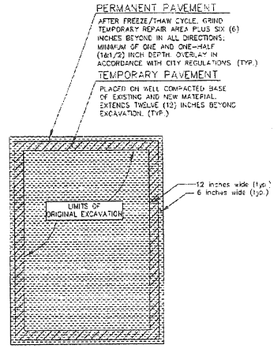
STATE OF MAINE — STEPHEN RAY BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: SITE AND UTILITY DETAILS
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13A		

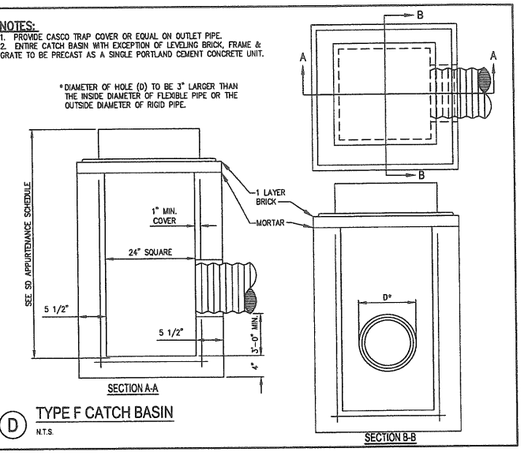


NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

A PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

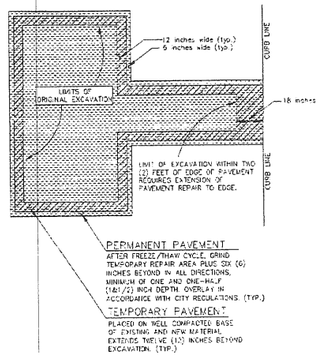
APPENDIX C1 N.T.S.

NOTES:
1. PROVIDE CASCO TRAP COVER OR EQUAL ON OUTLET PIPE.
2. ENTIRE CATCH BASIN WITH EXCEPTION OF LEVELING BRICK, FRAME & GRATE TO BE PRECAST AS A SINGLE PORTLAND CEMENT CONCRETE UNIT.



D TYPE F CATCH BASIN

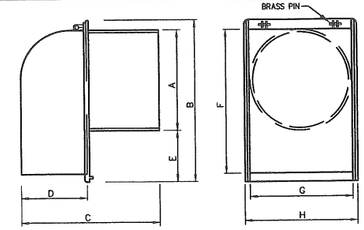
N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

B PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

APPENDIX C2 N.T.S.



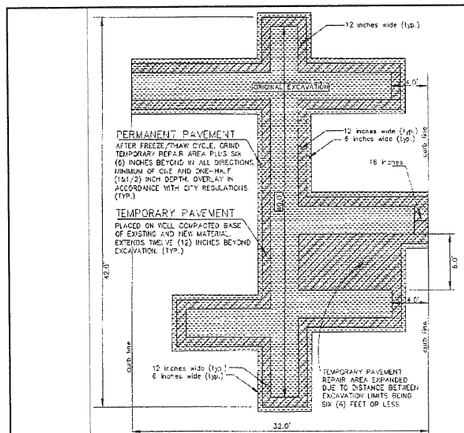
SIZE	A	B	C	D	E	F	G	H
12"	11 1/2	20	18	8	6 3/8	18	12 1/2	13 3/8
15"	14 1/2	22 1/2	23	10 1/4	5 3/4	21	14 1/4	15 3/4

NOTES:
1. INSTALL AN ETHERIDGE FOUNDRY CASCO TRAP ON ALL CATCH BASIN OUTLET PIPES.
2. THE CASCO TRAP IS AN ETHERIDGE STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP. TO INSTALL, THE CASCO TRAP IS INSERTED INTO THE STORM DRAIN WITH THE HOOD DOWN.
3. THE MASS. STANDARD 15" TRAP IS ALSO AVAILABLE.
4. SNOUT OIL & DEBRIS STOP WILL ALSO BE ACCEPTED.

INSTALLATION OF CASCO TRAP IS INCIDENTAL TO CATCH BASIN STRUCTURE.

E ETHERIDGE FOUNDRY CASCO TRAP DETAIL

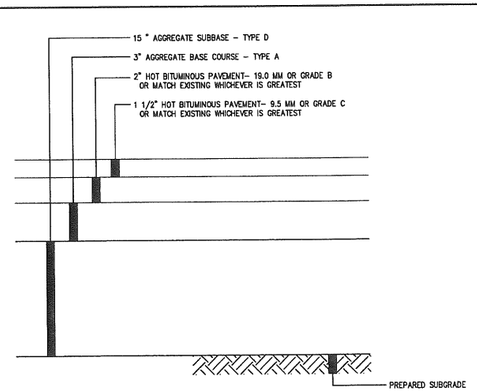
N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

C PLAN VIEW OF MAJOR EXCAVATION PAVEMENT REPAIR

APPENDIX C3 N.T.S.



E TYPICAL PAVEMENT SECTION

N.T.S.

REV	DATE	DESCRIPTION
2	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
1	12.19.08	RESUBMISSION TO CITY OF PORTLAND
		REVISIONS

STATE OF MAINE — STEPHEN R. BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE AND UTILITY DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	OCT 2008
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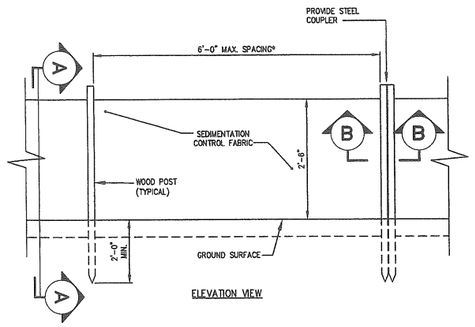
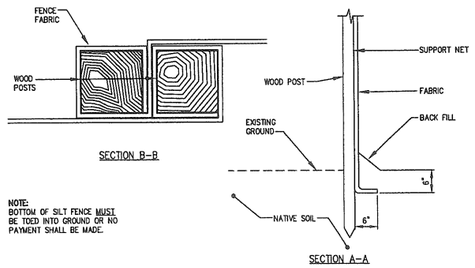
FILE NAME:	2827-DET		
SHEET	C-13B		

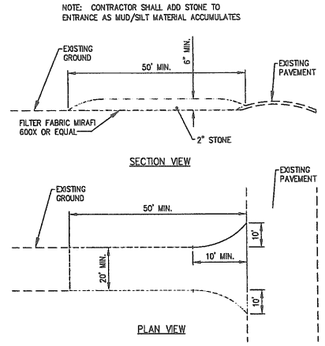


*NOTE:
THE SILT FENCE SHOULD HAVE A MINIMUM STAKING OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MINIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".

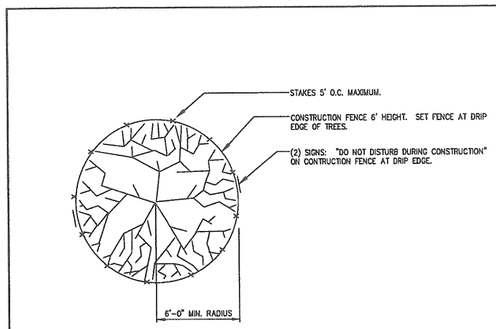


NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE.

(A) SILTATION FENCE DETAIL
N.T.S.



(C) STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



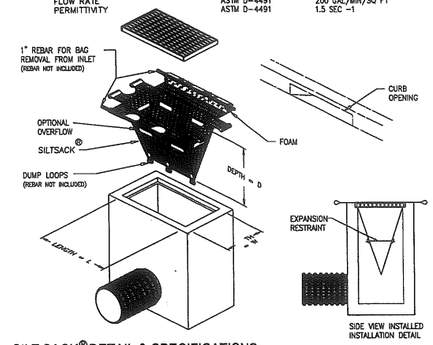
(E) TREE PROTECTION DETAIL
N.T.S.

SILTSACK®
SPECIFICATIONS

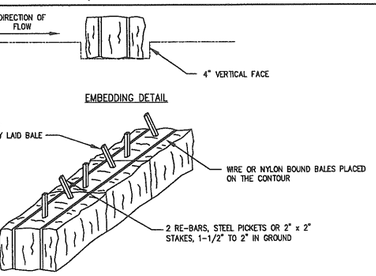
NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

HI-FLOW SILTSACK® (FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



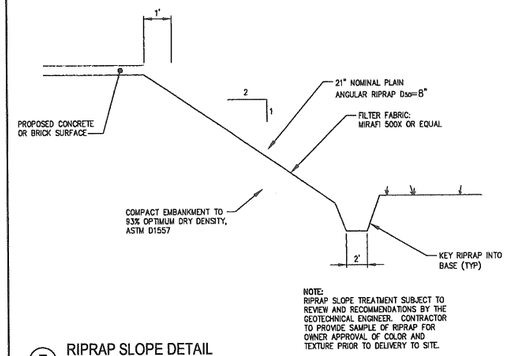
(H) SILT SACK® DETAIL & SPECIFICATIONS
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE WAS ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION WILL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MAKE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

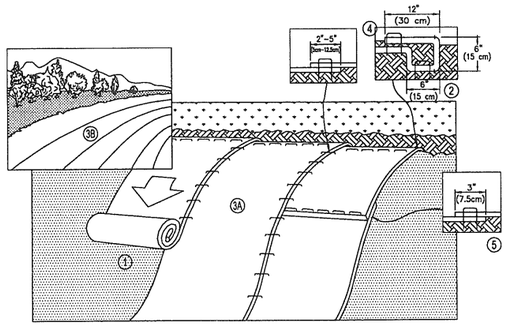
(D) STRAW OR HAYBALE BARRIER
N.T.S.



NOTE:
RIPRAP SLOPE TREATMENT SUBJECT TO REVIEW AND RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE SAMPLE OF RIPRAP FOR OWNER APPROVAL OF COLOR AND TEXTURE PRIOR TO DELIVERY TO SITE.

(F) RIPRAP SLOPE DETAIL
N.T.S.

EROSIONAL CONTROL BLANKET DETAIL
FOR SLOPE INSTALLATION



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

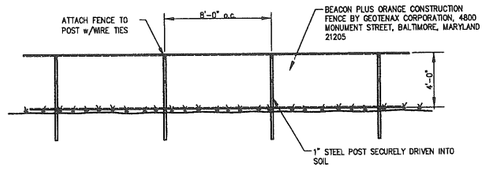
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON TEH PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAT BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

(B) EROSION CONTROL BLANKET



(G) ORANGE CONSTRUCTION FENCE DETAIL
N.T.S.

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN P. BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: EROSION & SEDIMENT CONTROL DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-14		

EROSION AND SEDIMENT CONTROL NOTES

The primary emphasis of the erosion/sedimentation control plan to be implemented for this project are as follows:
Development of a careful construction sequence. Rapid revegetation of denuded areas to minimize the period of soil exposure. Rapid stabilization of drainage paths to avoid fill and gully erosion. The use of onsite measures to capture sediment (hay bales/silt fence, etc.) The provisions for long term erosion/sediment and pollutant treatment by the incorporation of permanent Best Management Practices.

Description and Location of Limits of All Proposed Earth Movements

The construction of the development will require the following on–site improvements:

Earthwork activity including cuts and fills to bring the building pad and landscape areas to subgrade.

Construction of stormwater measures.

Construction of utilities.

Construction of building foundations including such alternatives as piles or geo–piers.

Erosion/Sedimentation Control Devices

The following erosion and sediment control devices will be implemented by the Contractor as part of the site development. These devices shall be installed as indicated on the plans. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, latest edition.

Siltation fence shall be installed downgradient of any disturbed areas to trap runoff borne sediments until the site is revegetated. The silt fence or erosion control mix barrier shall be installed per the details provided in the plan set and inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made immediately by the Contractor if there are any signs of erosion or sedimentation below the fence line. Proper placement of stakes and fabric into the ground is critical to the fence's effectiveness. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence, the barrier shall be replaced with a stone check dam.

Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive Turf Reinforcement by North American Green or equal. Mulch application rates are provided at the end of this section. Hay mulch shall be available on site at all times in order to provide immediate temporary stabilization when necessary.

Riprap slopes, stone check dams, sod and hay bale barriers are intended to reduce runoff velocities and protect denuded soil surfaces from concentrated flows. Installation details and stone sizes are provided in the construction plan set on the erosion control detail sheets.

Construction entrance will be constructed at all access points onto the site to prevent tracking of soil onto Crescent Street or nearby streets.

Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers or a premanufactured SiltSack™ as distributed by A. H. Harris. Stone sediment barrier installation details are provided in the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

Sod is intended to serve as the primary permanent revegetative measure within the #25/ #29 development area for all denuded areas not provided with other erosion control measures, such as riprap or mulched planting beds. The #15 Crescent Street site shall receive 6" top soil, lime, fertilizer, seed and mulch at the end of construction once the site is no longer used for staging/ materials storage

Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

Crushed stone stabilized construction entrance(s) shall be placed at the site access to Crescent Street.

Siltation fence shall be installed along the downgradient side of all disturbed areas. The siltation barrier will remain in place and properly maintained until the site is acceptably revegetated. Multiple rows of silt fence may be required due to the project site's steeper grades.

Stumps, grubbings, or common excavation shall be removed from the site as the work proceeds. Temporary stockpiles shall not be allowed due to the lack of available space and the steepness of the site.

All denuded areas which have been rough graded and are not located within the building pad or pavement subbase area, shall receive temporary mulch or erosion control mesh fabric within 7 days of initial disturbance of soil.

For work which is conducted between November 1 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 3 days for all areas or immediately in advance of a predicted rainfall event.

Crescent Street and Wescott Street shall be swept to control mud and dust as necessary. A street sweeper shall be available on immediate notice.

During grubbing operations stone check dams or hay bale barriers will be installed at any evident concentrated flow discharge points.

Silt fencing with a maximum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be properly anchored a minimum of 6" per the plan detail and backfilled. Any silt fence identified by the owner or reviewing agencies as not being properly installed during construction shall be immediately repaired in accordance with the installation details.

The contractor may choose to place plastic sheeting anchored with sand bags along steeper exposed slopes or foundation construction areas to protect denuded ground surface and to protect subgrade areas.

All turbid water within trenches or excavations shall be pumped into an approved sediment removal devise such as a Dirtbag or approved equal. If necessary turbid water shall be pumped into a vac truck and removed from the site and disposed of at an approved off site location.

Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

The foundation drain pipes shall have riprap aprons at their outlet to protect the outlets from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized immediately upon pipe installation.

All areas disturbed during construction, but not subject to other restoration (paving, riprap, planting beds, etc.) will be loamed, limed, and sodded within the proposed building site. The #15 Crescent Street site shall be used as a staging area for the project once the existing building is demolished. At the end of construction all denuded area at #15 Crescent Street shall be loamed (6" min.), limed, fertilized, mulched and seeded with in 7 days of final cleanup.

Timing and Sequence of Erosion/Sedimentation Control Measures

The following construction sequence shall be required to insure the effectiveness of the erosion and sedimentation control measures are optimized. The sequence applies to all phases of construction.

For all grading activities, the contractor shall exercise extreme caution not to overexpose the site by limiting the disturbed areas.
Install crushed stone stabilized construction entrances as shown on plans.
Install perimeter siltation barriers as indicated on the plans.
Demolish the existing buildings and foundations and clear and grub areas necessary for the utilities and new building foundation areas.
Begin excavation.
Excess materials shall be removed from the site.
Perform earthwork to bring building pad to subgrade.
Begin installation of drainage appurtenances and piping and utilities
Commence additional earthwork around the building foundation as it is completed.
Complete installation of storm drainage appurtenances within landscaped areas.
Structures within the landscaped areas shall be temporarily set to subgrade and shall be reset upon placement of final loam and seeding or other surface restoration measures.
Complete all remaining earthwork operations including fine grading of slopes.
Install subbase and base gravels within sidewalk or other hardsurface areas.
Install base course paving for sidewalks.
Loam, lime, fertilize, seed or sod and mulch disturbed areas and complete all landscaping.
Install brick paving for sidewalk areas.
Remove accumulated sediment from ahead of any sediment barriers as necessary.
Once the site is stabilized, a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
Touch up grassed areas by fertilizing and regrassing as necessary.

Note: All denuded areas not subject to final paving, riprap or gravel, shall be revegetated.

Due to the timing and size of the project, completion of the facilities within a summer construction season may not occur. For all work which will be conducted between November 1 and April 15 of the calendar year, the Contractor shall submit a schedule which will satisfy the following criteria:

Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 7 days.

During the construction process, all disturbed areas shall be temporarily covered with mulch within 3 days of final grading if not otherwise available for final riprap, planting bed or sod treatment.

Once final grades have been established, the contractor may choose to dormant seed the disturbed areas prior to placement of mulch and placement of fabric netting anchored with staples.

If dormant seeding is used for temporary stabilization of the site, all disturbed areas shall receive 6" of loam and seed at an application rate of 6#/1000 s.f.

All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90 percent catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used for the site, all disturbed areas shall be revegetated with temporary seeding or permanent landscaping and sod in the spring.

The area of denuded non–stabilized construction shall be limited to the minimum area practicable. An area shall be considered to be denuded until the subbase gravel is installed in sidewalk areas, the base slab gravel is installed in building areas, or the areas of future landscape treatment have been loamed, seeded, and mulched or fully sodded. The mulch rate shall be twice the rate specified. [For example, 115#/1,000 s.f. x 2 = 230#/1,000s.f.]

The Contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions at no extra expense to the owner.

PERMANENT SEEDING PLAN - LOW MAINTENANCE- #15 CRESCENT STREET SITE
Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N–P–K/ac. OR
20 pounds of 10 – 20 – 20 N–P–K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
30% Creeping Red Fescue
35% Tall Fescue
20% Perennial Ryegrass
15% Annual Ryegrass
When using small grain as nurse crop seed it at one–half the normal seeding rate.

7.Mulching instructions: Apply at the rate of tons per acre. OR
115 pounds per M. Sq. Ft.

	AmountUnit #, Tons, Etc.
8.TOTAL LIME	138 #/1000 sq. ft.
9.TOTAL FERTILIZER	20 #/1000 sq. ft.
10.TOTAL SEED	6 #/1000 sq. ft.
11.TOTAL MULCH	115 #/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to October 15 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

Fertilizer and lime requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer and lime application rates to the owner

TEMPORARY SEEDING PLAN (APPLICABLE TO BOTH #15 CRESCENT STREET ANS #25/ #29 CRESCENT STREET)
Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N–P–K/ac. OR
20 pounds of 10 – 20 – 20 N–P–K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
50% Perennial Ryegrass
50% Annual Ryegrass
When using small grain as nurse crop seed it at one–half the normal seeding rate.

7.Mulching instructions: Apply at the rate of tons per acre. OR
230 pounds per M. Sq. Ft.

	AmountUnit #, Tons, Etc.
8.TOTAL LIME	138#/1000 sq. ft.
9.TOTAL FERTILIZER	20#/1000 sq. ft.
10.TOTAL SEED	2#/1000 sq. ft.
11.TOTAL MULCH	230#/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Recommended seeding dates after August 15. For areas with slopes >10% and fall and winter erosion control areas, mulch netting shall be used per manufacturer's specifications.

Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the owner

REV	DATE	DESCRIPTION
5	01.15.09	FINAL PLAN SUBMISSION TO CITY OF PORTLAND
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN R. BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: EROSION & SEDIMENT CONTROL NOTES
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-15		

F21

CRESCENT STREET ELEVATION - SOUTH

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.1

F22

EAST ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.2

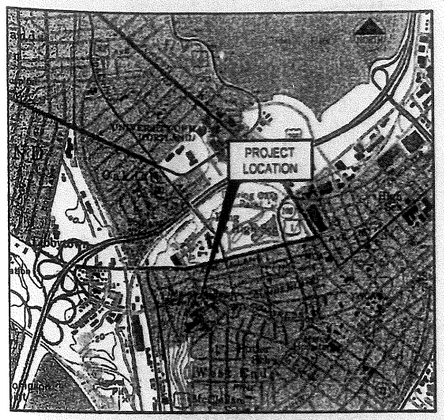
Att C

PROJECT PARCEL SITE

PORTLAND TAX ASSESSOR'S MAP & LOT NUMBERS

MAP	BLOCK	LOTS
53	E	4,5,6,14,15, AND PORTION OF LOT 3
53	F	6

SITE DEVELOPMENT PLANS
FOR
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS
PORTLAND, MAINE
#25 + #29 CRESCENT STREET



LOCATION MAP
N.T.S.

INDEX

* NOT INCLUDED IN 9.24.08 PRELIMINARY SUBMISSION

UTILITIES

WATER
ATTN:RICO SPUGNARDI
PORTLAND WATER DISTRICT
22 DOUGLAS STREET
P.O. BOX 3553
PORTLAND, MAINE 04104
207.761.8310

SEWER
CITY OF PORTLAND
PUBLIC WORKS ENGINEERING DEPT.
55 PORTLAND STREET
PORTLAND, MAINE 04102
207-874-8840

POWER
ATTN:JEFF HANSCOM
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
207.791.1023

TELEPHONE
ATT: SUE SERRETTE
FAIRPOINT COMMUNICATIONS
ONE DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.797.1642

NATURAL GAS
ATTN:MIKE SMITH
NORTHERN UTILITIES
1075 FOREST AVENUE
PORTLAND, MAINE 04103
207.797.8002 EXT. 6220

PERMITS

	GOVERNING BODY	STATUS
LOCAL SITE PLAN PERMIT	CITY OF PORTLAND PLANNING AUTHORITY CITY HALL, CONGRESS STREET	PRELIMINARY SUBMISSION 09.19.08
BUILDING PERMIT	CITY OF PORTLAND CODE ENFORCEMENT OFFICE CITY HALL, CONGRESS STREET	TO BE FILED PRIOR TO CONSTRUCTION

PREPARED BY

CIVIL ENGINEER:
DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
207.775.1121

SURVEYOR:
Owen Haskell, inc.
16 CASCO STREET
PORTLAND, MAINE 04101
207-774-0424

GEOTECHNICAL ENGINEER:
S. W. Cole Engineering
17 CHESTNUT STREET
PORTLAND, MAINE 04101
TEL. 207.773.6800
FAX 207.773.6801
ATTN: TIM BOYCE

ARCHITECT
Winton Scott Architects
5 MILK STREET
PORTLAND, MAINE 04101
TEL. 207.774.4811
FAX 207.774.3083
ATTN: MARK WILCOX

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

OWNER/ APPLICANT:
CRESCENT HEIGHTS LLC
17 CHESTNUT STREET
PORTLAND, MAINE 04101
TEL. 207.772.7673
FAX 207.253.5183

PRELIMINARY NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND
		REVISIONS

STATE OF MAINE — STEPHEN R BUSHEY — 11429 — LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: COVER SHEET
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-COV		
SHEET	C-1		

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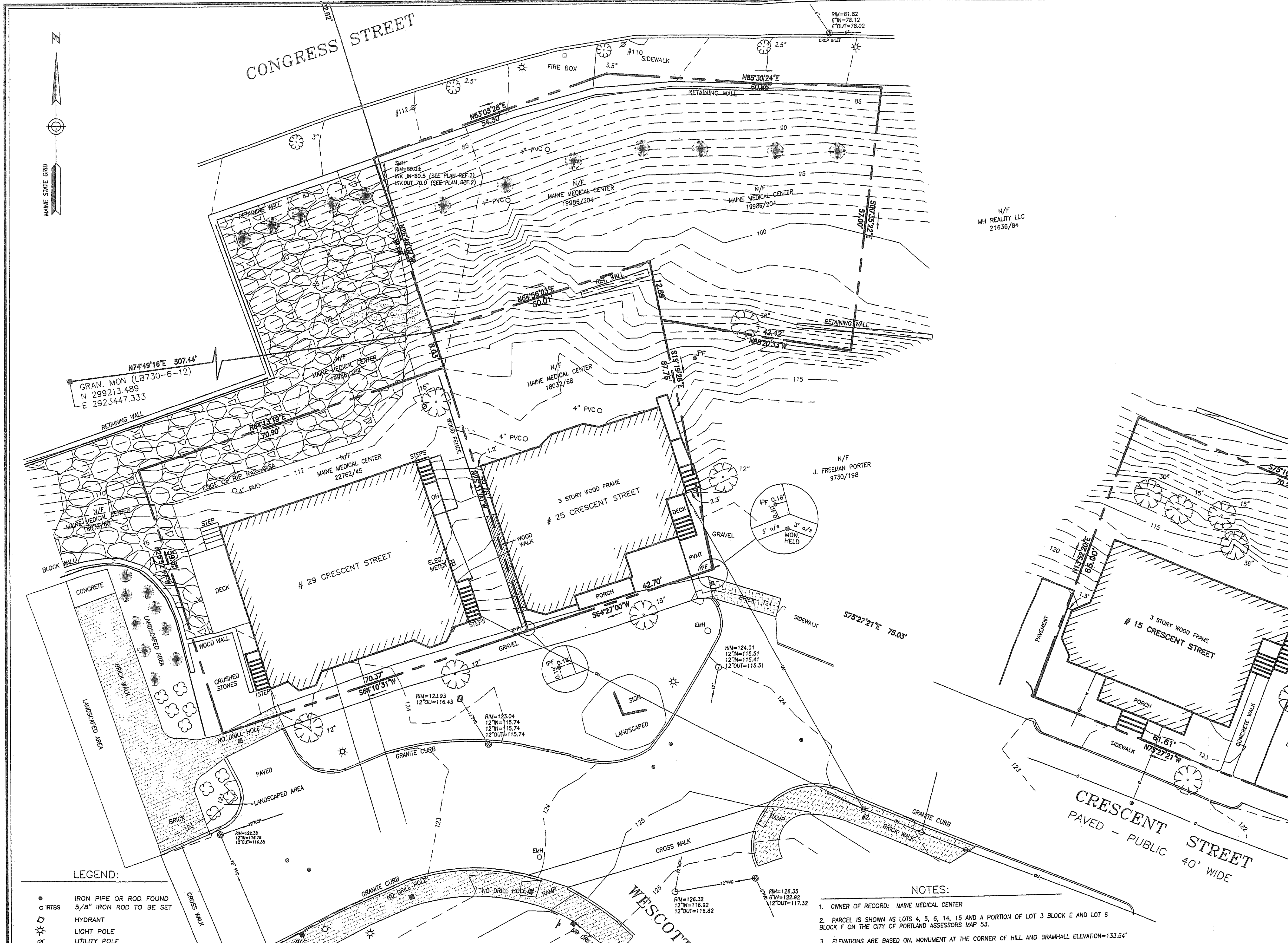
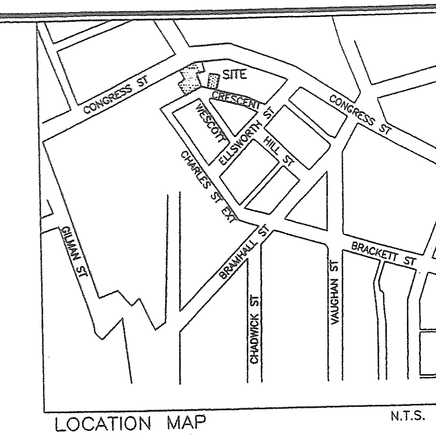
C.2





NOTES:

1. OWNER OF RECORD: MAINE MEDICAL CENTER

2. PARCEL IS SHOWN AS LOTS 4, 5, 6, 14, 15 AND A PORTION OF LOT 3 BLOCK E AND LOT 6 BLOCK F ON THE CITY OF PORTLAND ASSESSORS MAP 53.

3. ELEVATIONS ARE BASED ON. MONUMENT AT THE CORNER OF HILL AND BRAMHALL ELEVATION=133.54' CITY DATUM.

4. PROPERTY LINE INFORMATION FOR 15 & 25 CRESCENT STREET TAKEN FROM PLAN REFERENCE 2 & 3. REMAINING PROPERTY LINE INFORMATION TAKEN FROM PLAN REFERENCE 1.

5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELDSURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.

PLAN REFERENCES:

1. STREET VACATION/ACCEPTANCE AND LAND TRANSFER PLAN OF MAINE MEDICAL CENTER FOR MAINE MEDICAL CENTER DATED 11-19-03 BY SEBAGO TECHNICS.

2. STANDARD BOUNDARY SURVEY OF 15 CRESCENT STREET PORTLAND MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 14, 2002 BY OWEN HASKELL, INC.

3. STANDARD BOUNDARY SURVEY AT 25 CRESCENT STREET PORTLAND, MAINE MADE FOR MAINE MEDICAL CENTER DATED NOV. 25, 2002 BY OWEN HASKELL, INC.

REV.2	9-16-08	ADDITIONAL UTILITY LOCATION
REV.1	8-04-08	ADDITIONAL LOCATION ADDED

EXISTING CONDITIONS SURVEY

ON

CRESCENT STREET, PORTLAND, MAINE

MADE FOR

DELUCA HOFFMAN ASSOC., INC.

778 MAIN STREET SOUTH PORTLAND, MAINE

OWEN HASKELL, INC.
16 CASCO ST., PORTLAND, ME 04101 (207)774-0424
PROFESSIONAL LAND SURVEYORS

Drwn By	WCS	Date	Job No.
Trace By	RWC	JUNE 12, 2008	2008-085 P
Check By	WCS	Scale	Drwg. No.
Book No.	957	1" = 10'	1

G:\2827 Crescent Street Apt\SURVEY\DHA-8-085-091608.dwg, Model, 9/24/2008 8:38:42 AM, DDavis

CONGRESS STREET

TOTAL SITE AREA
13,525.8 SQ. FT.
(DOES NOT INCLUDE
#15 CRESCENT STREET)

GRAN. MON (LB730-6-12)
N 2992 3.489
E 2923447.333

29 CRESCENT STREET

25 CRESCENT STREET

15 CRESCENT STREET

CRESCENT STREET
PAVED - PUBLIC 40' WIDE

WESCOTT STREET

N/F MAINE MEDICAL CENTER 19986/204 LOT AREA 4,313.4 S.F.

N/F MAINE MEDICAL CENTER 19986/204 LOT AREA 4,254.8 S.F.

N/F MAINE MEDICAL CENTER 18032/68 LOT AREA 3,153.1 S.F.

N/F MAINE MEDICAL CENTER 22762/45 LOT AREA 4,024.7 S.F.

N/F MAINE MEDICAL CENTER 18032/68 LOT AREA 4,277.8 S.F.

N/F MH REALTY LLC 21636/84

N/F J. FREEMAN PORTER 9730/198

NORTH

PLAN REFERENCE
1) EXISTING CONDITIONS SURVEY BY OWEN HASKELL INC. DATED JUNE 12, 2008

2) UTILITY LOCATION TAKEN FROM MAINE MEDICAL CENTER PLAN, DRAWING C301, PREPARED BY TRO DATED 8.31.04, ON FILE WITH THE CITY OF PORTLAND PLANNING AUTHORITY

NOTES:

1) PORTION OF FORMER SANITARY SEWER FROM MAINE MEDICAL CENTER DISCONTINUED AS PART OF PARKING GARAGE PROJECT

2) PORTION OF LOT DESCRIBED IN CCRD BOOK 19986/ PAGE 204 CONVEYED TO CRESCENT HEIGHTS LLC BY MMC.

3) THE EXACT LOCATION OF UNDERGROUND POWER/TELEPHONE/CABLE INTO THE EXISTING BUILDINGS IS UNKNOWN

4) SANITARY SEWER LOCATION FOR #25 TAKEN FROM CITY SEWER CARD RECORDS

PRELIMINARY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
EXISTING CONDITIONS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-4		

CONGRESS STREET

PAVED – PUBLIC – 40' WIDE

WESCOTT STREET

29 CRESCENT STREET

25 CRESCENT STREET

15 CRESCENT STREET

3 STORY WOOD FRAME

N/F MAINE MEDICAL CENTER 19966/204

N/F MAINE MEDICAL CENTER 22762/45

N/F MH REALTY LLC 21636/84

N/F J. FREEMAN PORTER 9730/198

PROTECT EXISTING RIPRAP EMBANKMENT

GRAN. MON (LB730-6-12)
N 2992 3.489
E 2923447.333

N74°49'16"E 507.44'

REMOVE EXISTING RETAINING WALL

PORTION OF EXISTING SEWER TO BE REMOVED

REMOVE UTILITY POLE

REMOVE TREE

REMOVE EXISTING FENCE

EXISTING BUILDING AND FOUNDATION TO BE REMOVED IN ENTIRETY

PROTECT PROPERTY PIN

PROTECT EXISTING SIGN

REMOVE TREE

PROTECT EXISTING STRUCTURE (TYP.)

EXISTING BUILDING AND FOUNDATION TO BE REMOVED IN ENTIRETY

REMOVE TREE

REMOVE EXISTING WALL UP TO MODULAR BLOCK WALL

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: DEMOLITION AND REMOVAL PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
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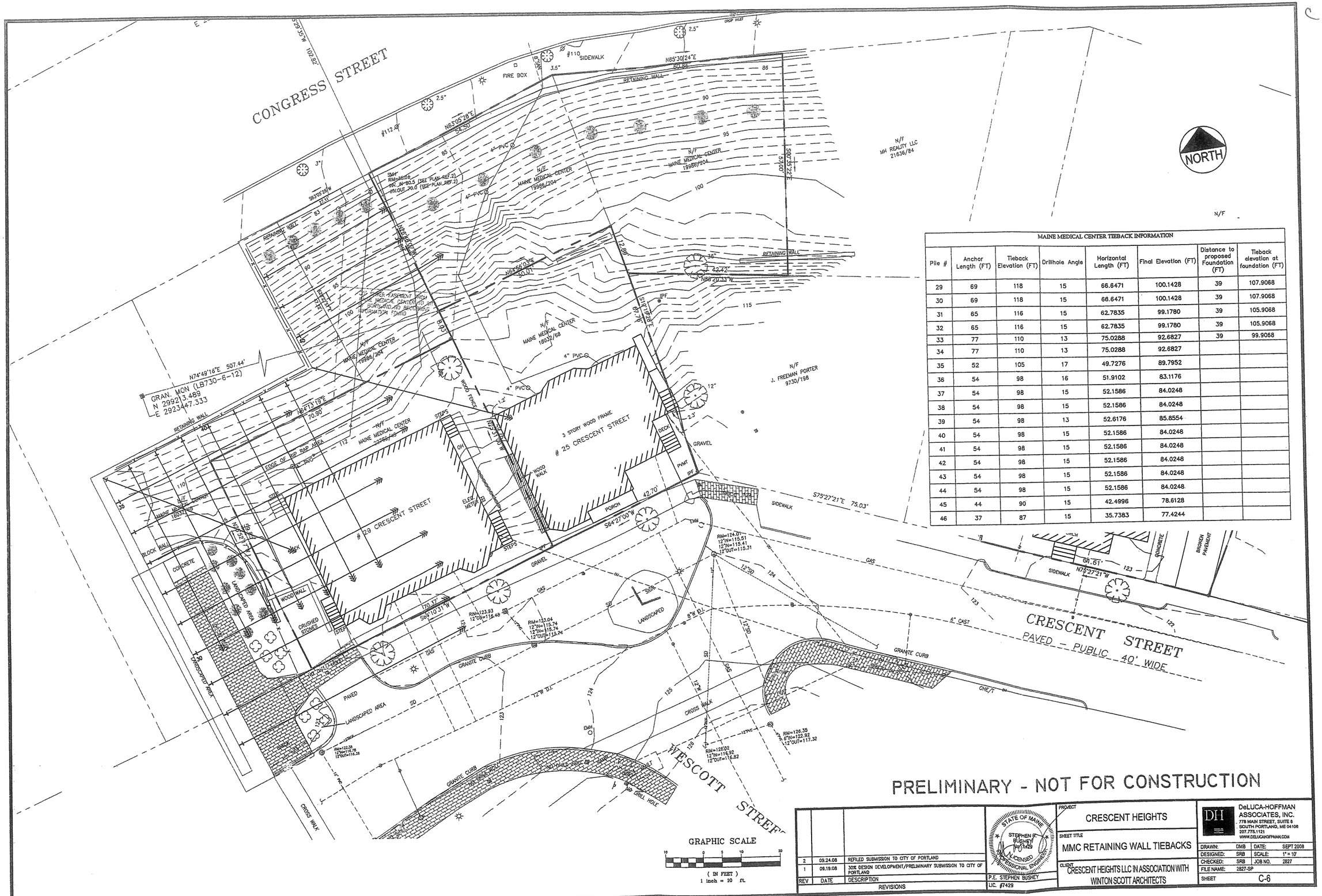
DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-5		



MAINE MEDICAL CENTER TIEBACK INFORMATION

Pile #	Anchor Length (FT)	Tieback Elevation (FT)	Drillhole Angle	Horizontal Length (FT)	Final Elevation (FT)	Distance to proposed Foundation (FT)	Tieback elevation at foundation (FT)
29	69	118	15	66.6471	100.1428	39	107.9068
30	69	118	15	66.6471	100.1428	39	107.9068
31	65	116	15	62.7835	99.1780	39	105.9068
32	65	116	15	62.7835	99.1780	39	105.9068
33	77	110	13	75.0288	92.6827	39	99.9068
34	77	110	13	75.0288	92.6827		
35	52	105	17	49.7276	89.7952		
36	54	98	16	51.9102	83.1176		
37	54	98	15	52.1586	84.0248		
38	54	98	15	52.1586	84.0248		
39	54	98	13	52.6176	85.8554		
40	54	98	15	52.1586	84.0248		
41	54	98	15	52.1586	84.0248		
42	54	98	15	52.1586	84.0248		
43	54	98	15	52.1586	84.0248		
44	54	98	15	52.1586	84.0248		
45	44	90	15	42.4996	78.6128		
46	37	87	15	35.7383	77.4244		

PRELIMINARY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN R. BUSHEY — 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

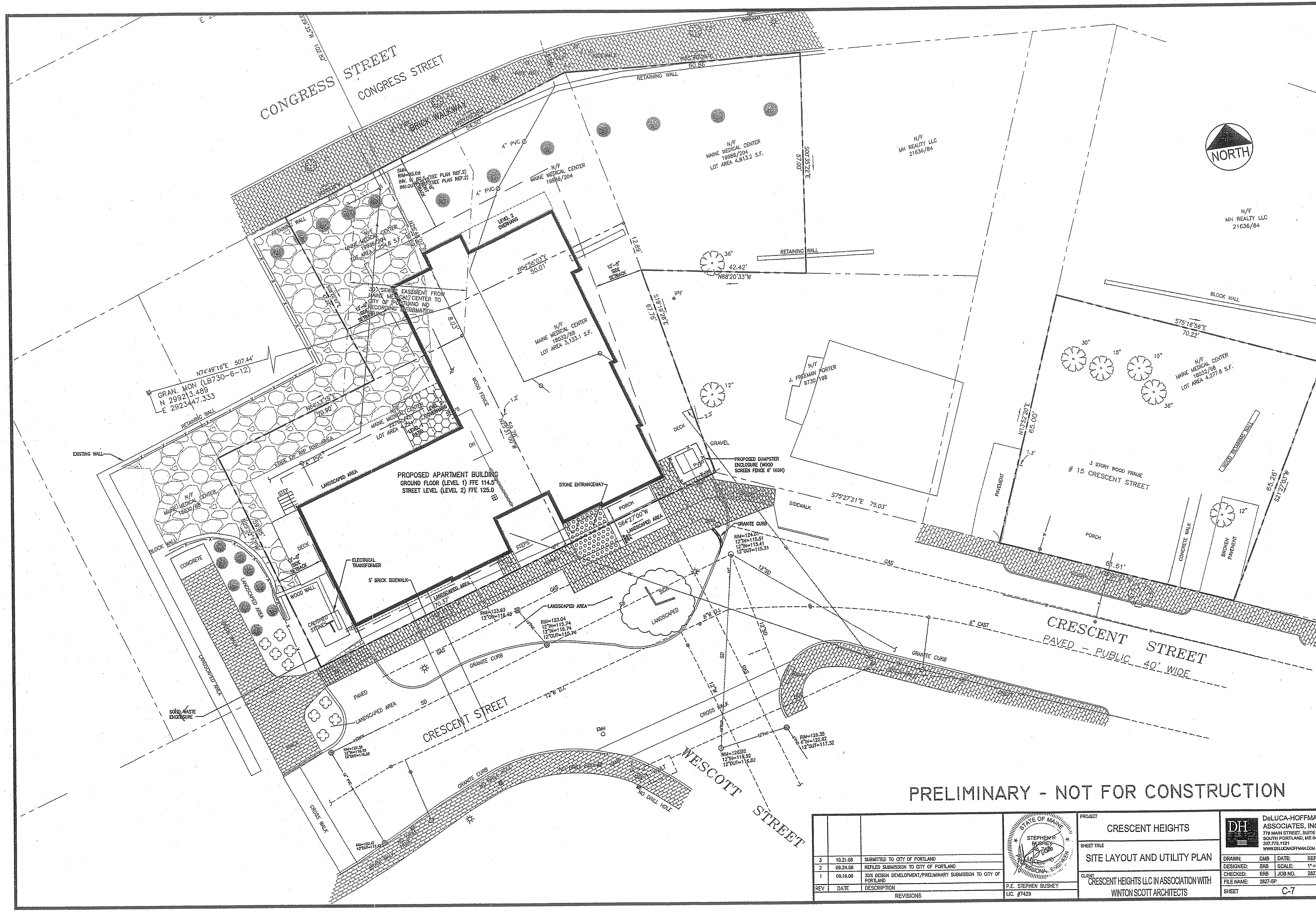
SHEET TITLE: MMC RETAINING WALL TIEBACKS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-6		

C-7



REV	DATE	DESCRIPTION
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN R BUSHEY No. 7429 LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE LAYOUT AND UTILITY PLAN

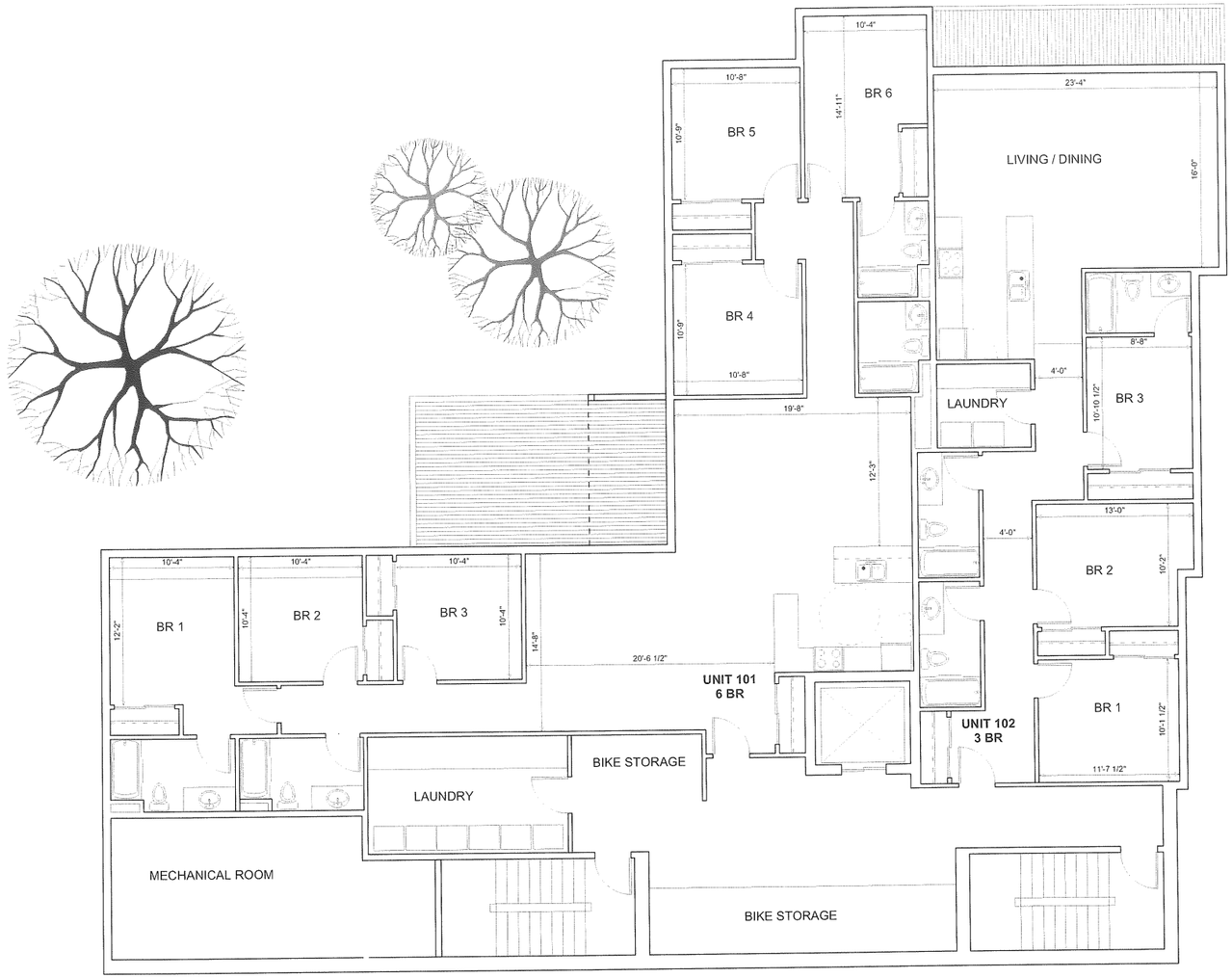
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-7		

G:\2827 Crescent Street Apt\dwg\PERMIT\2827-SP.dwg, SITE, 10/22/2008 4:33:08 PM, dbutters

C.8

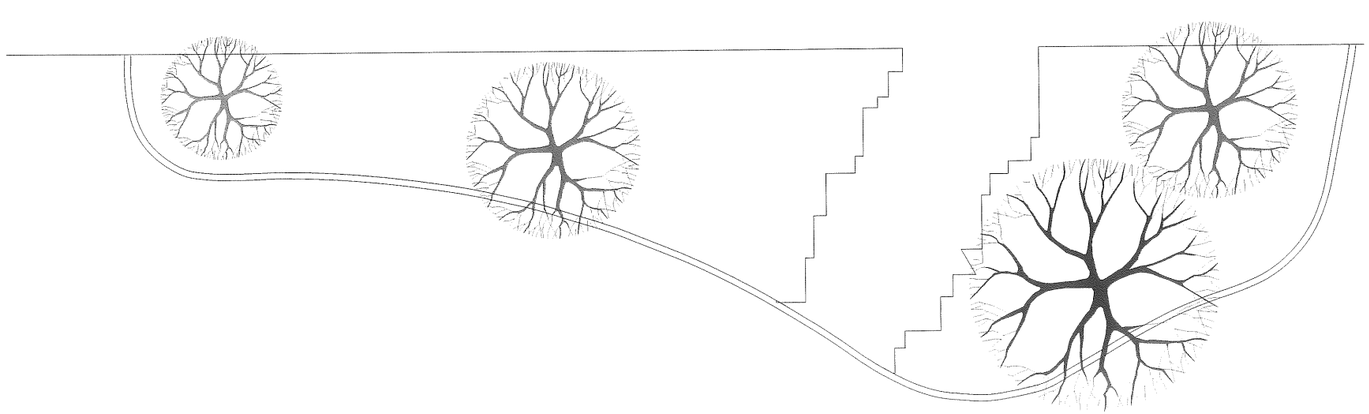


Level 1 Floor Plan

Crescent Heights
Developers Collaborative
October 21, 2008

Winton Scott Architects
5 Milk Street
Portland, Maine 04101

C.9

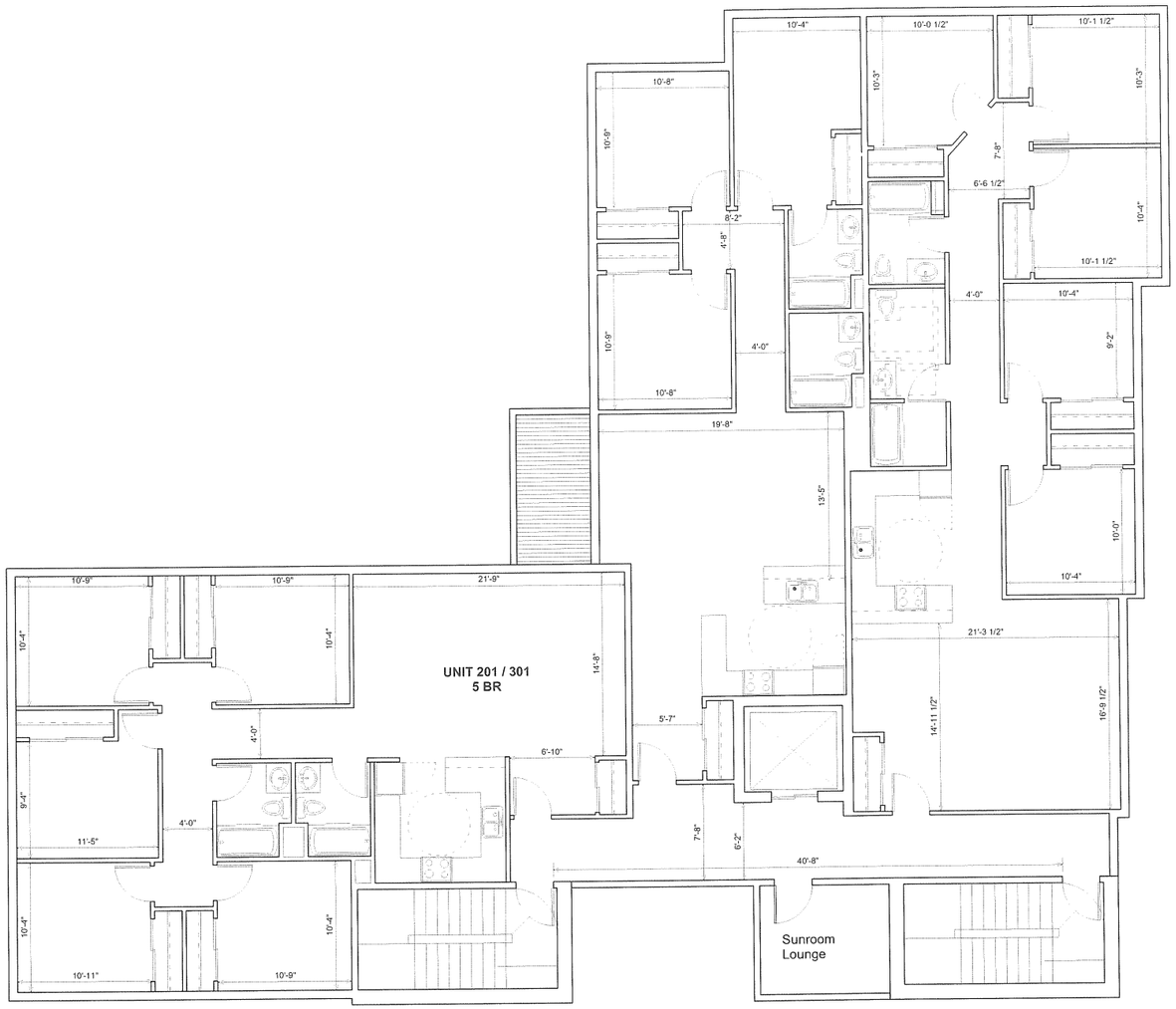


Level 2 / Ground Floor PLan

Crescent Heights
Developers Collaborative
October 21, 2008

Winton Scott Architects
5 Milk Street
Portland, Maine 04101

C.10



Level 3 Floor PLan

Crescent Heights
Developers Collaborative
October 21, 2008

Winton Scott Architects
5 Milk Street
Portland, Maine 04101

C.11

Level 4 Floor PLan

Crescent Heights
Developers Collaborative
October 21, 2008

Winton Scott Architects
5 Milk Street
Portland, Maine 04101

C.12

CRESCENT STREET ELEVATION - SOUTH

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

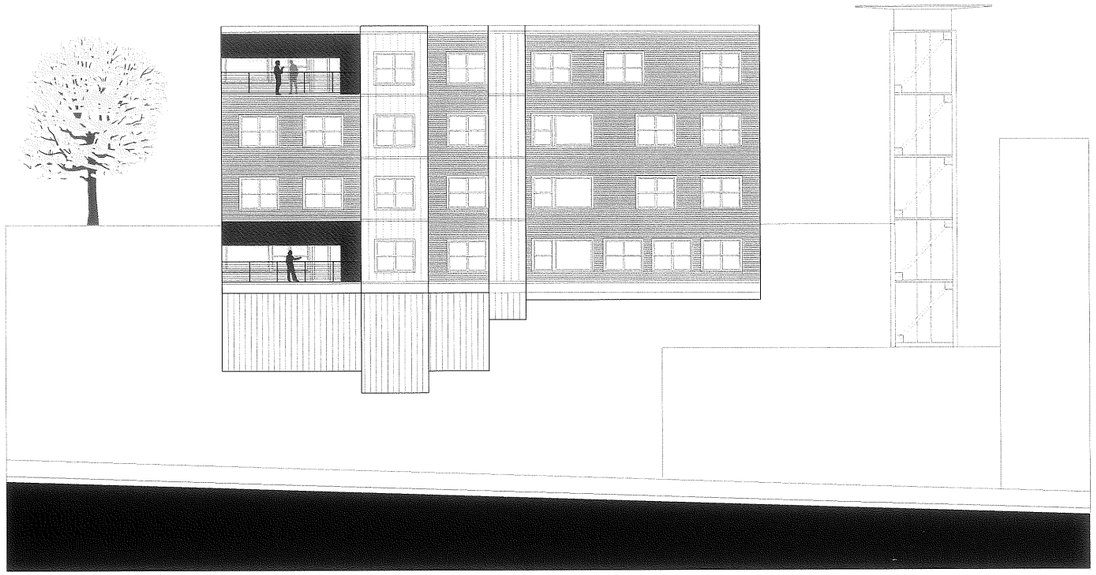
October 21, 2008

EAST ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

October 21, 2008



NORTH ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

October 21, 2008

WEST ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

October 21, 2008

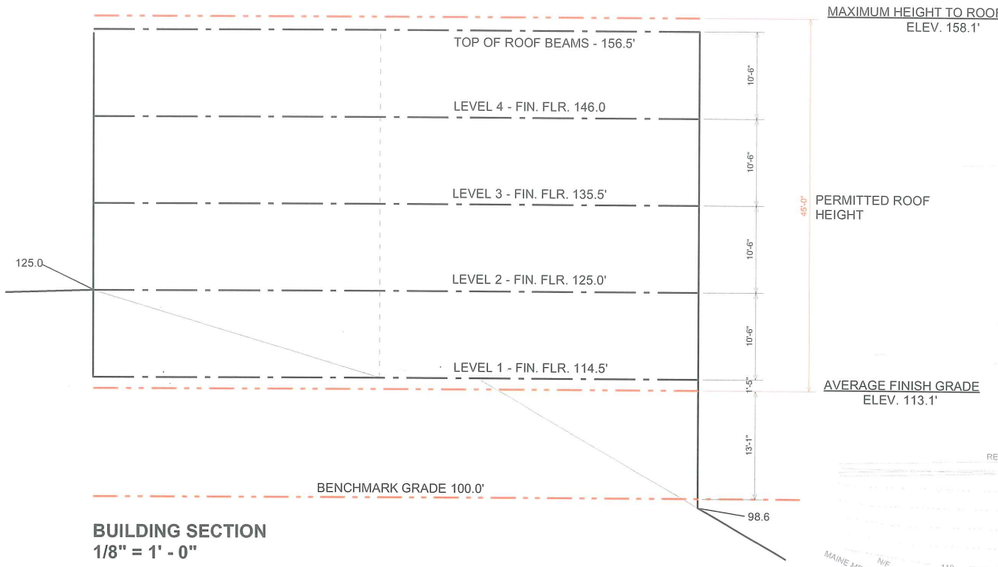
AXONOMETRIC - MAIN ENTRANCE CRESCENT STREET
3/16" = 1' - 0'

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

October 21, 2008

C.17



BUILDING SECTION
1/8" = 1' - 0"

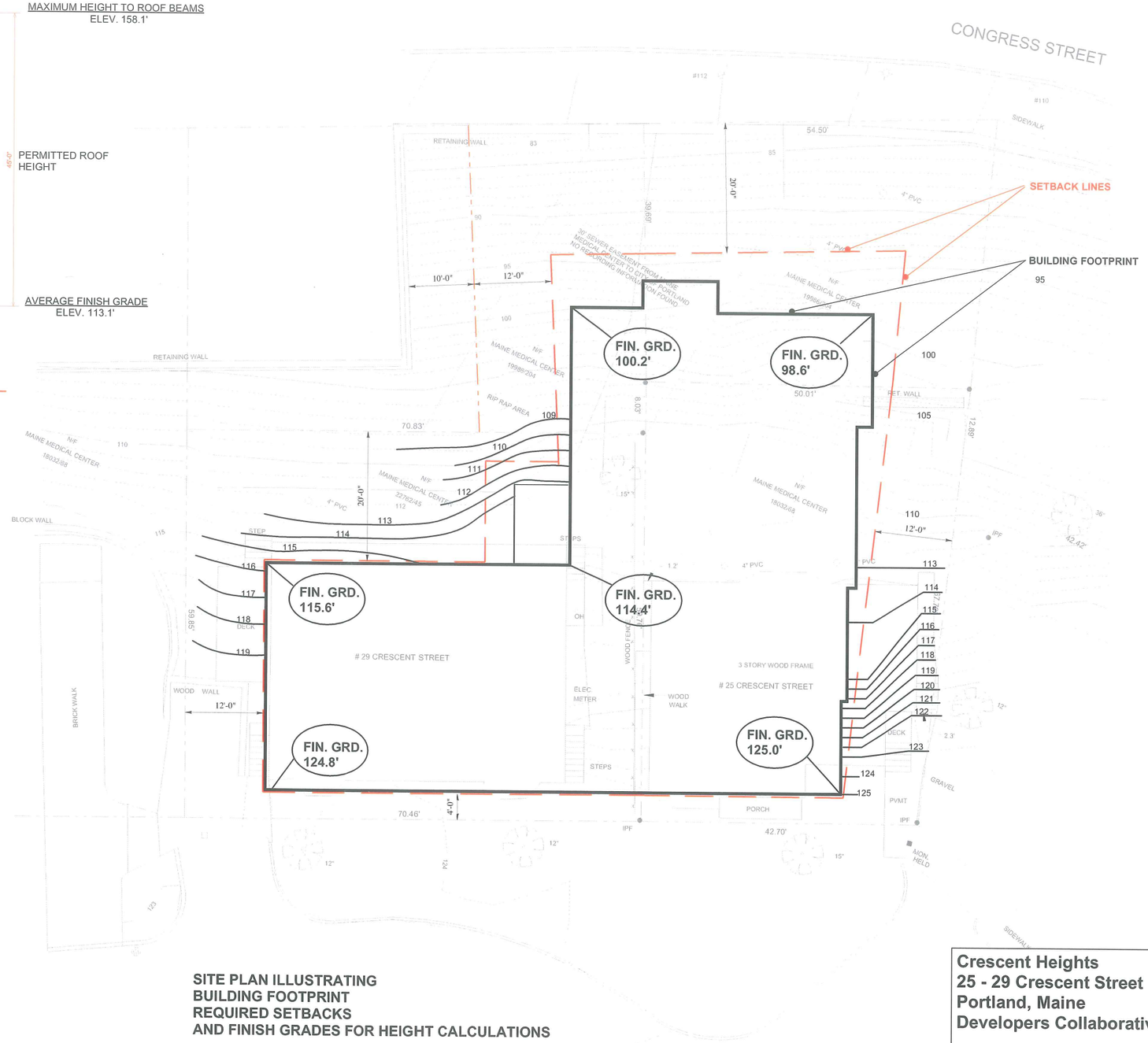
FINISH GRADE / BUILDING HEIGHT CALCULATIONS

FINISH GRADES PROPOSED AT BUILDING CORNERS:

124.8
115.6
114.4
100.2
98.6
125.0

TOTAL 678.6'

AVERAGE FINISH GRADE = 678.6 / 6 = 113.1'



SITE PLAN ILLUSTRATING
BUILDING FOOTPRINT
REQUIRED SETBACKS
AND FINISH GRADES FOR HEIGHT CALCULATIONS

1/8' = 1' - 0"

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

October 21, 2008

F24

WEST ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.4

F25

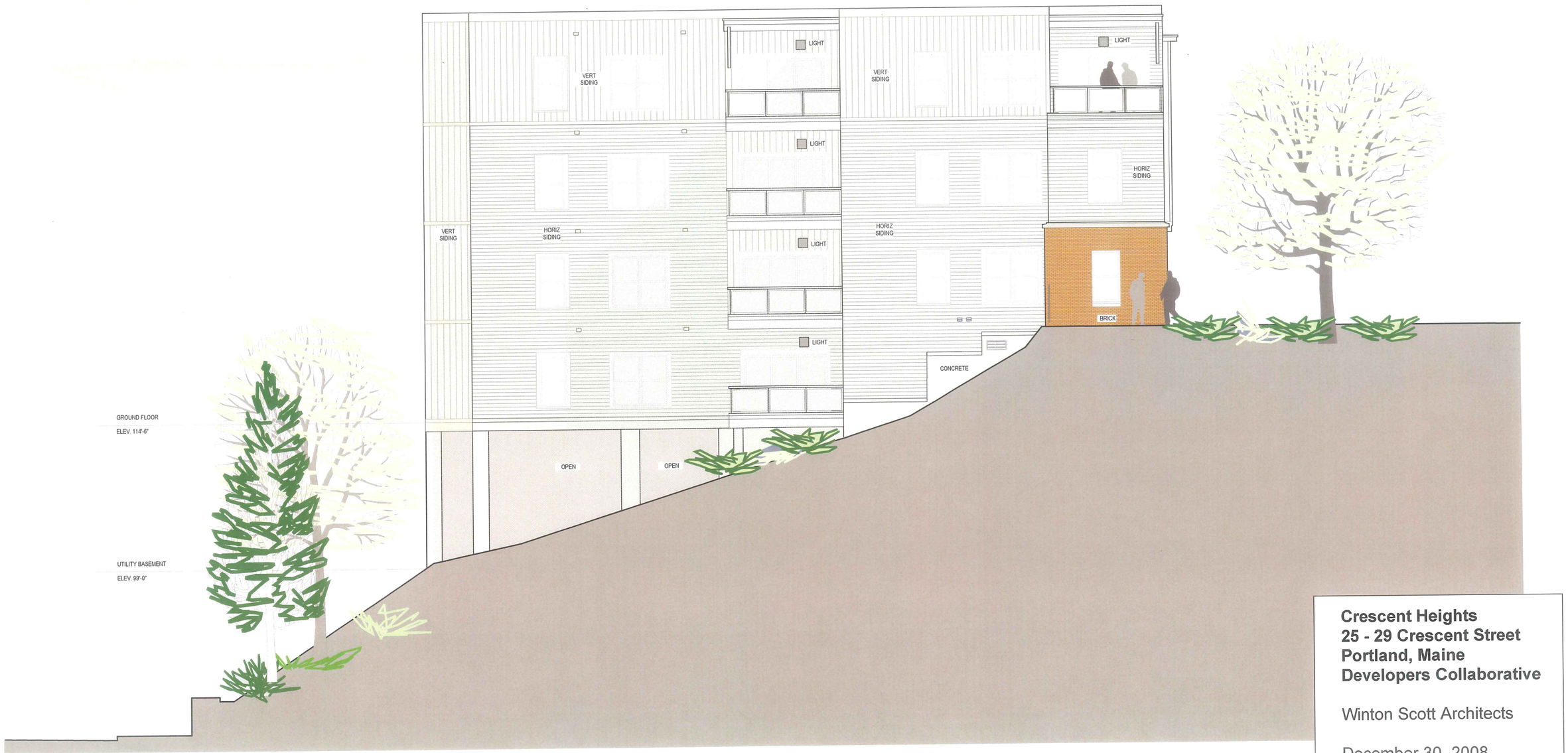
CRESCENT HEIGHTS

CONGRESS STREET ELEVATION

Developers Collaborative / Winton Scott Architects

AH E18

WEST ELEVATION



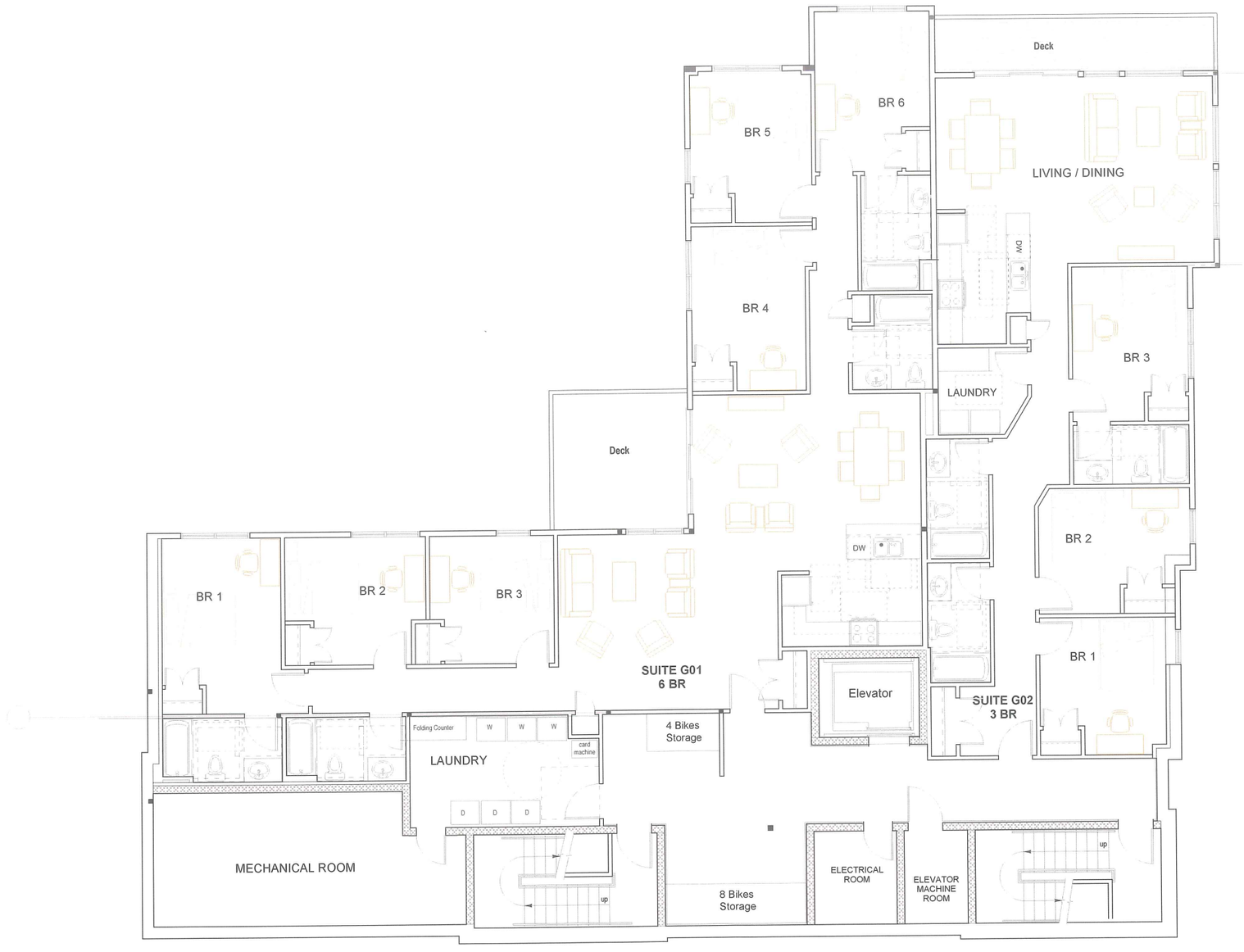
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 30, 2008

A 2.4

Att E 19



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

Ground Floor Plan

A 1.1

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

A11 E 20

NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

First Floor Plan

A 1.2

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

Att E 2

NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

Second Floor Plan

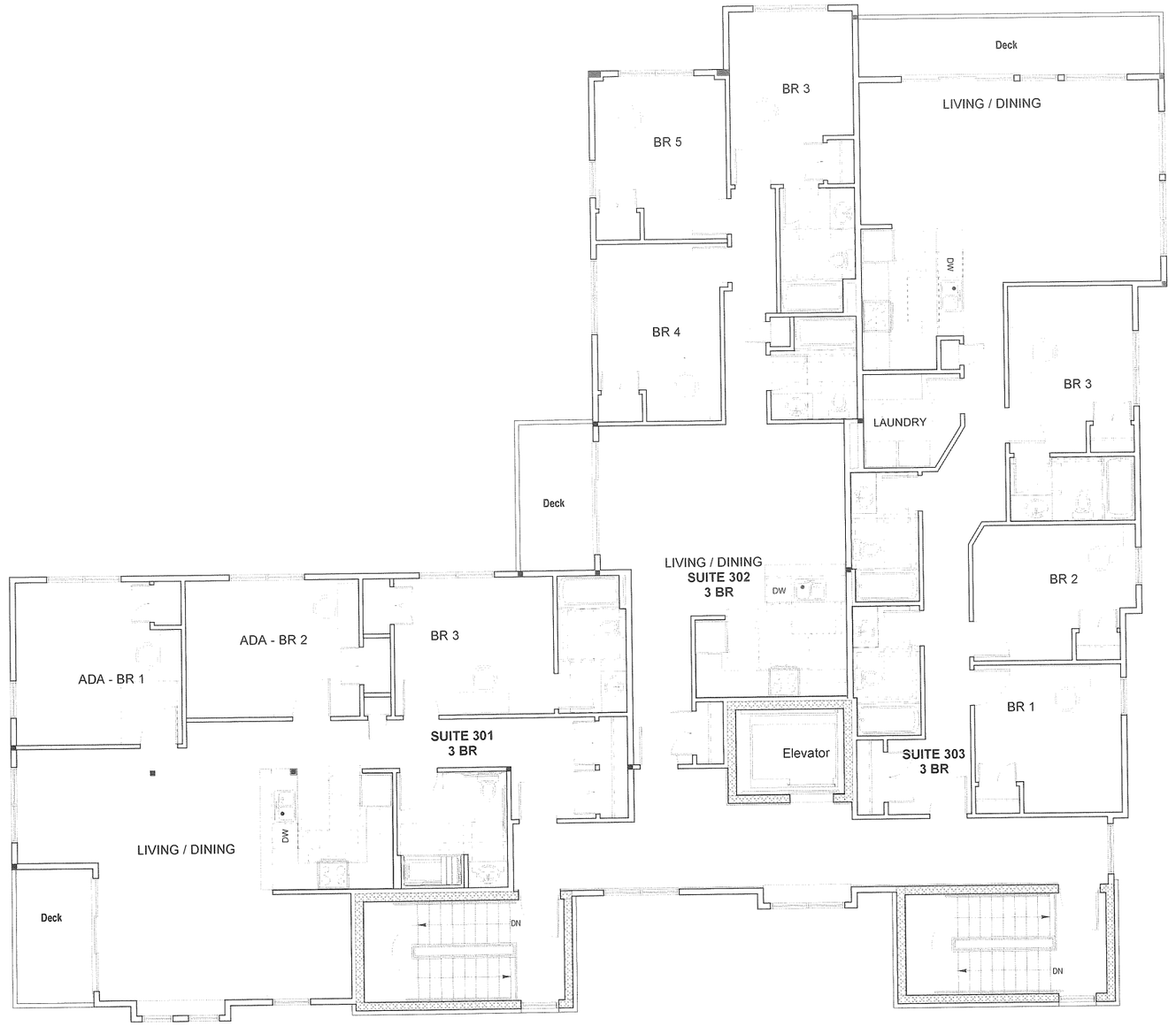
A 1.3

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

Att E22



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

Third Floor Plan

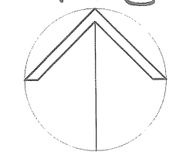
A 1.4

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

Att E 23



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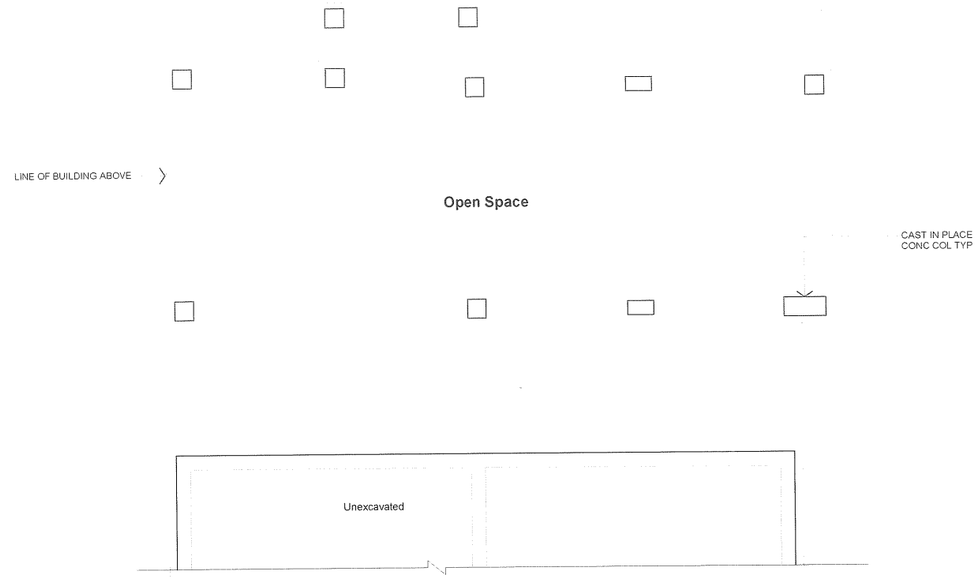


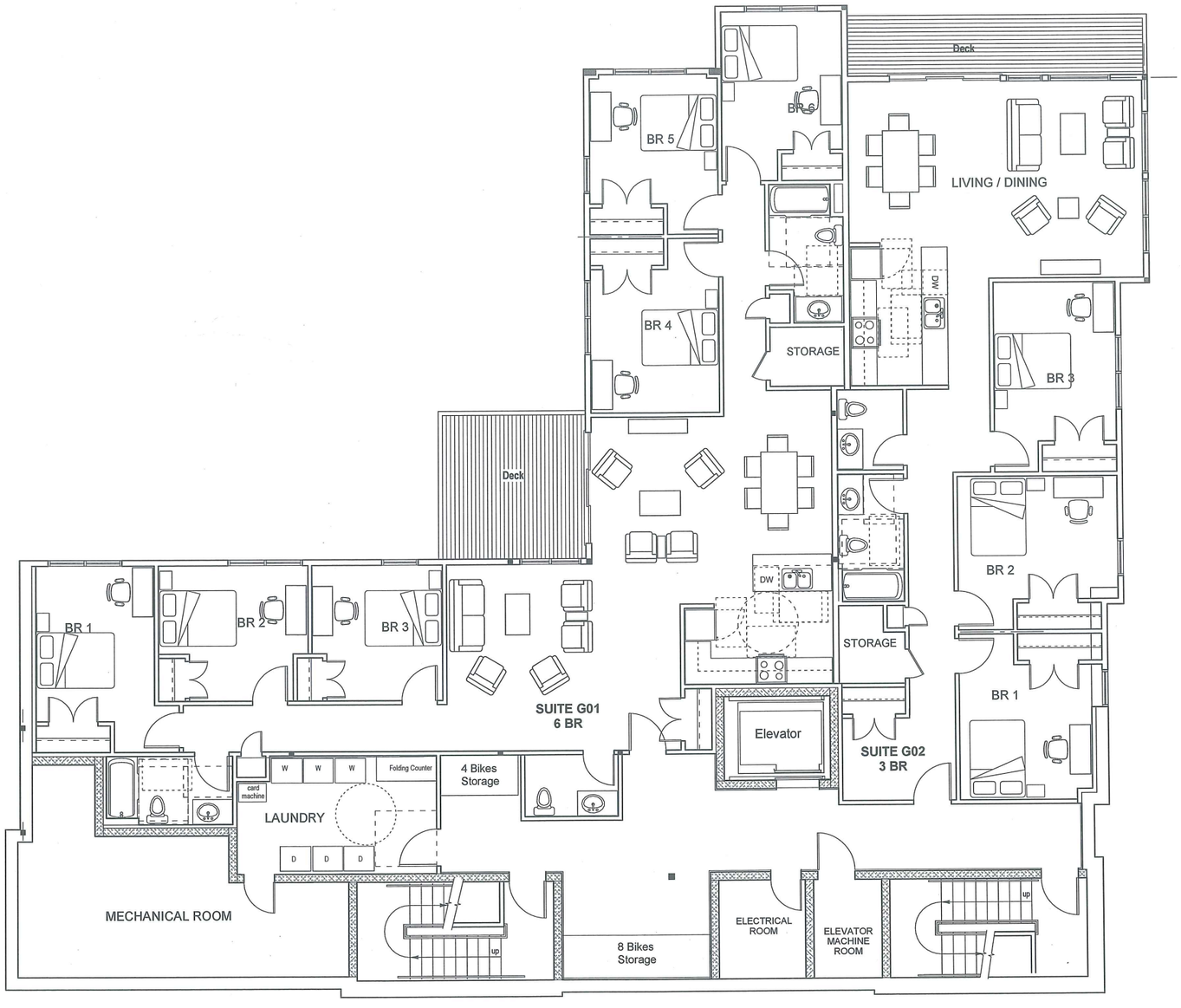
Crawlspace Plan

A 1.5

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

Barbara Barkley

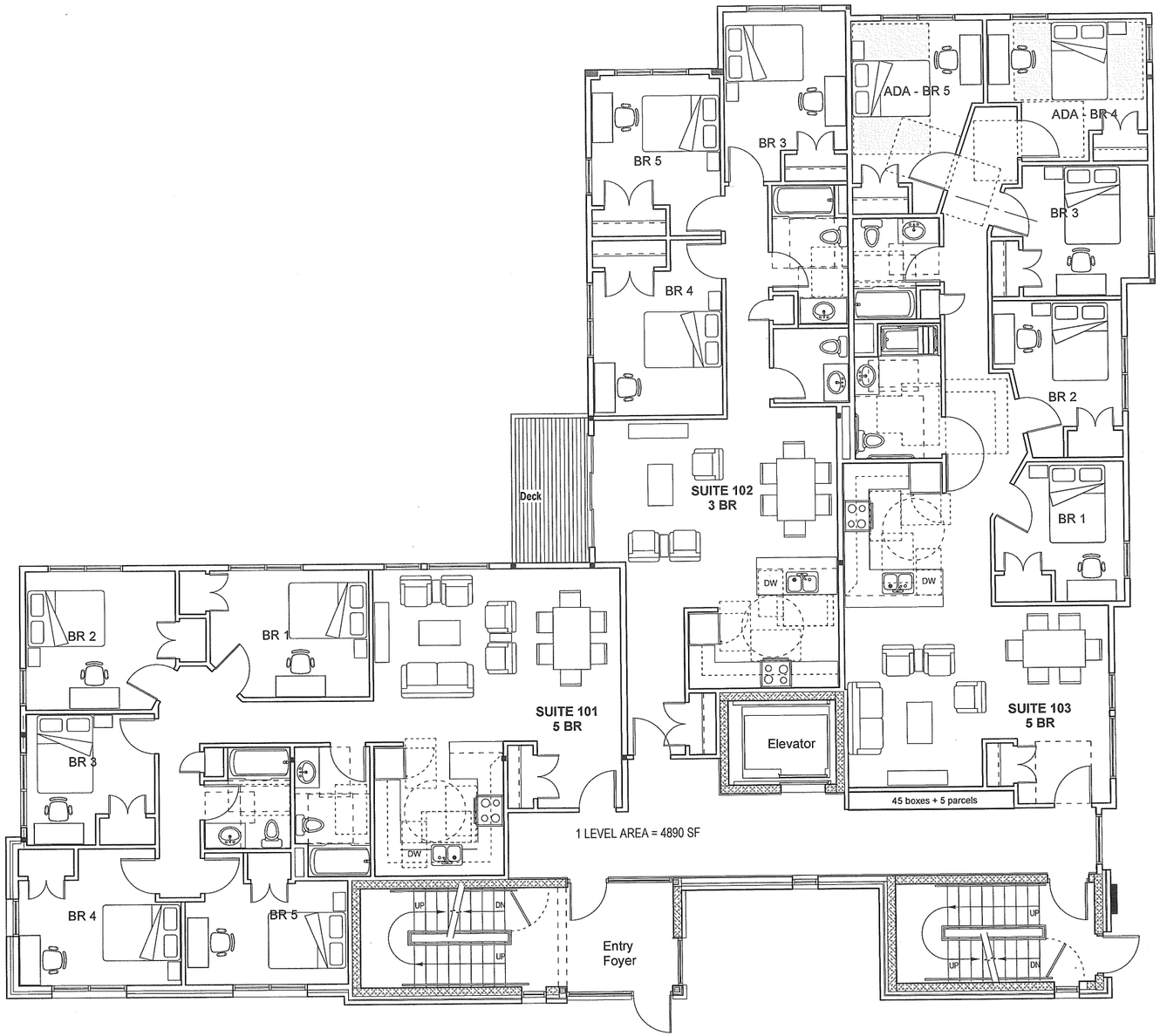
Ground Floor Plan

A 1.1

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

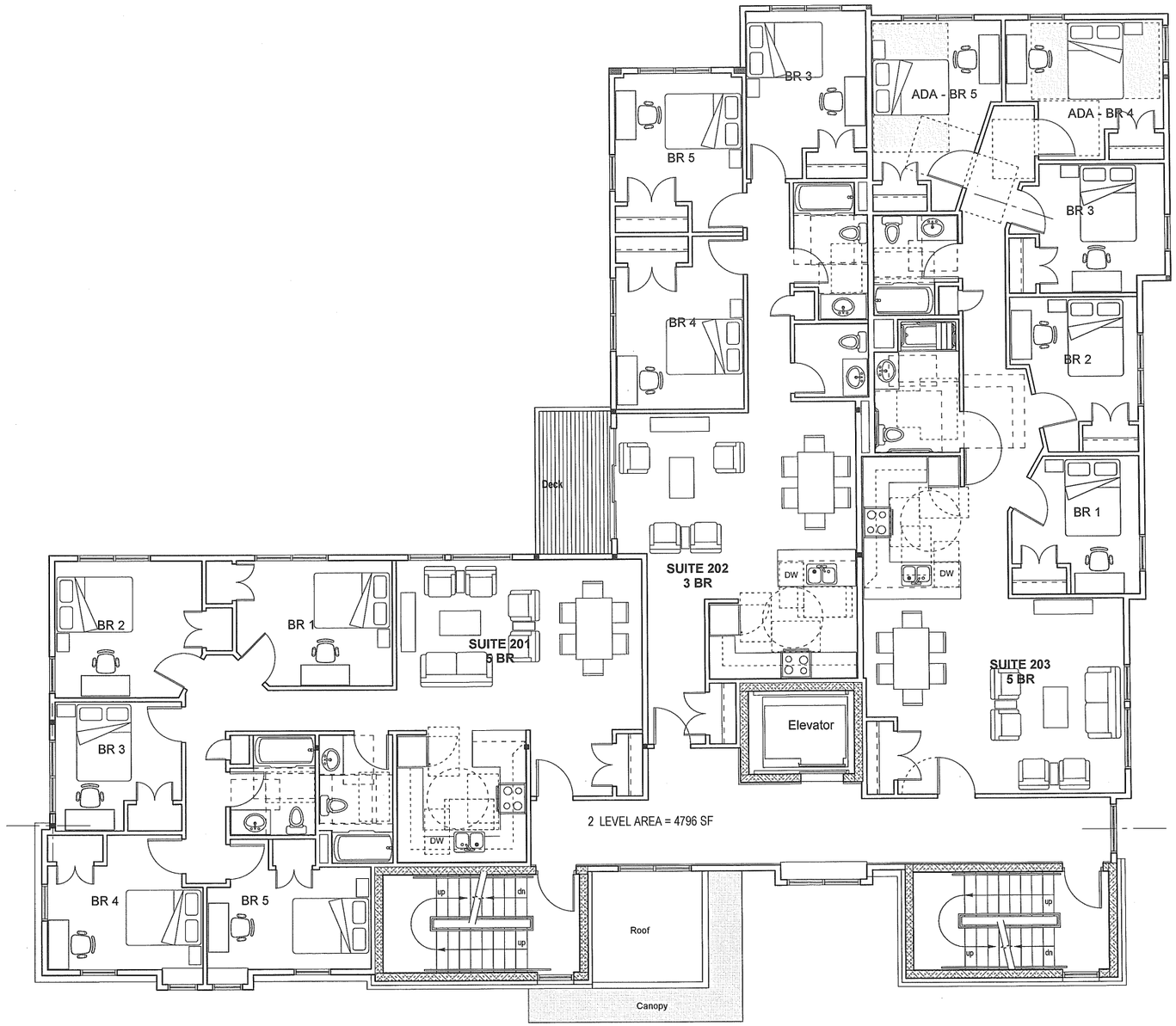
First Floor Plan

A 1.2

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

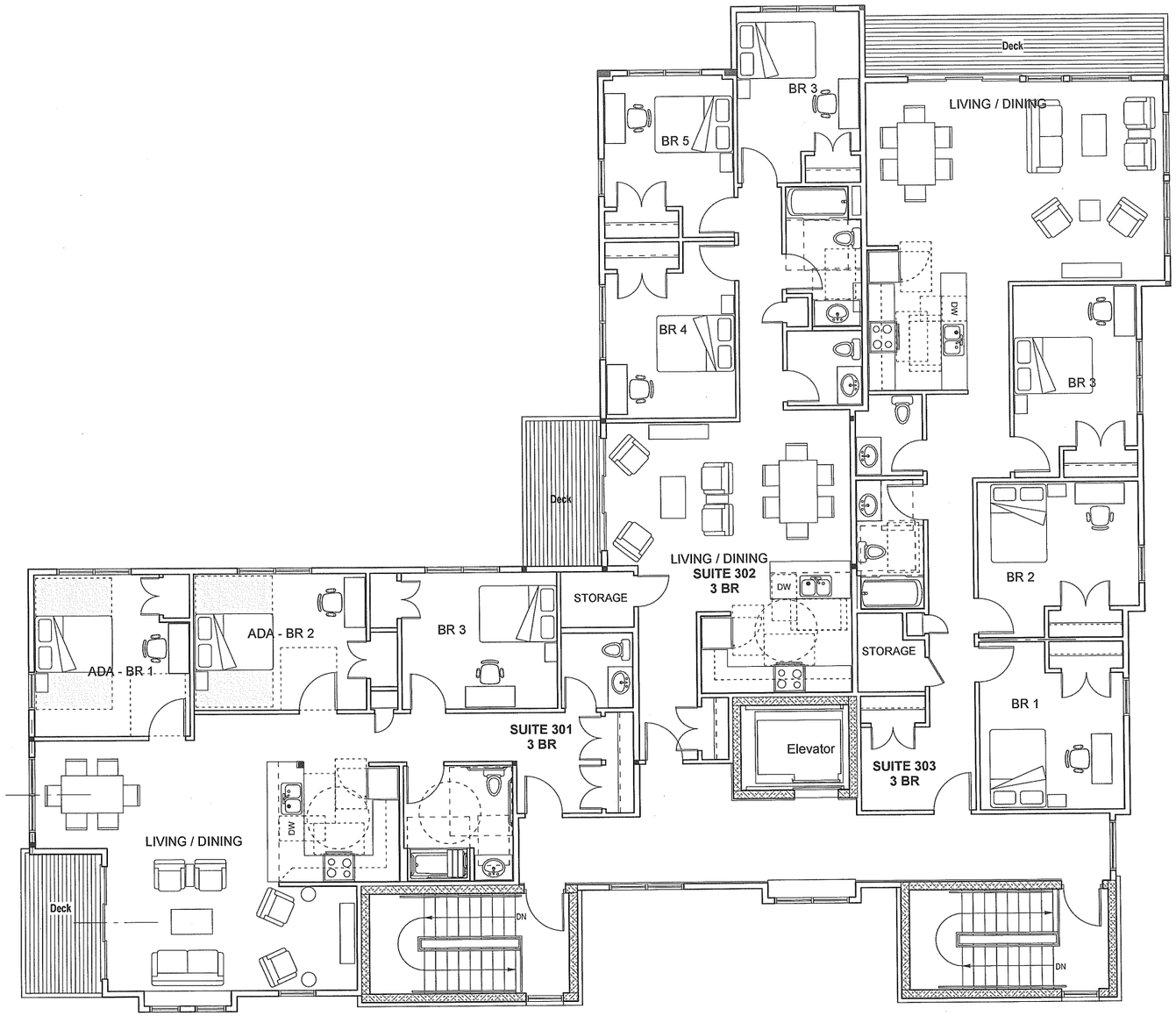
Second Floor Plan

A 1.3

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 12, 2008



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

Third Floor Plan

A 1.4

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

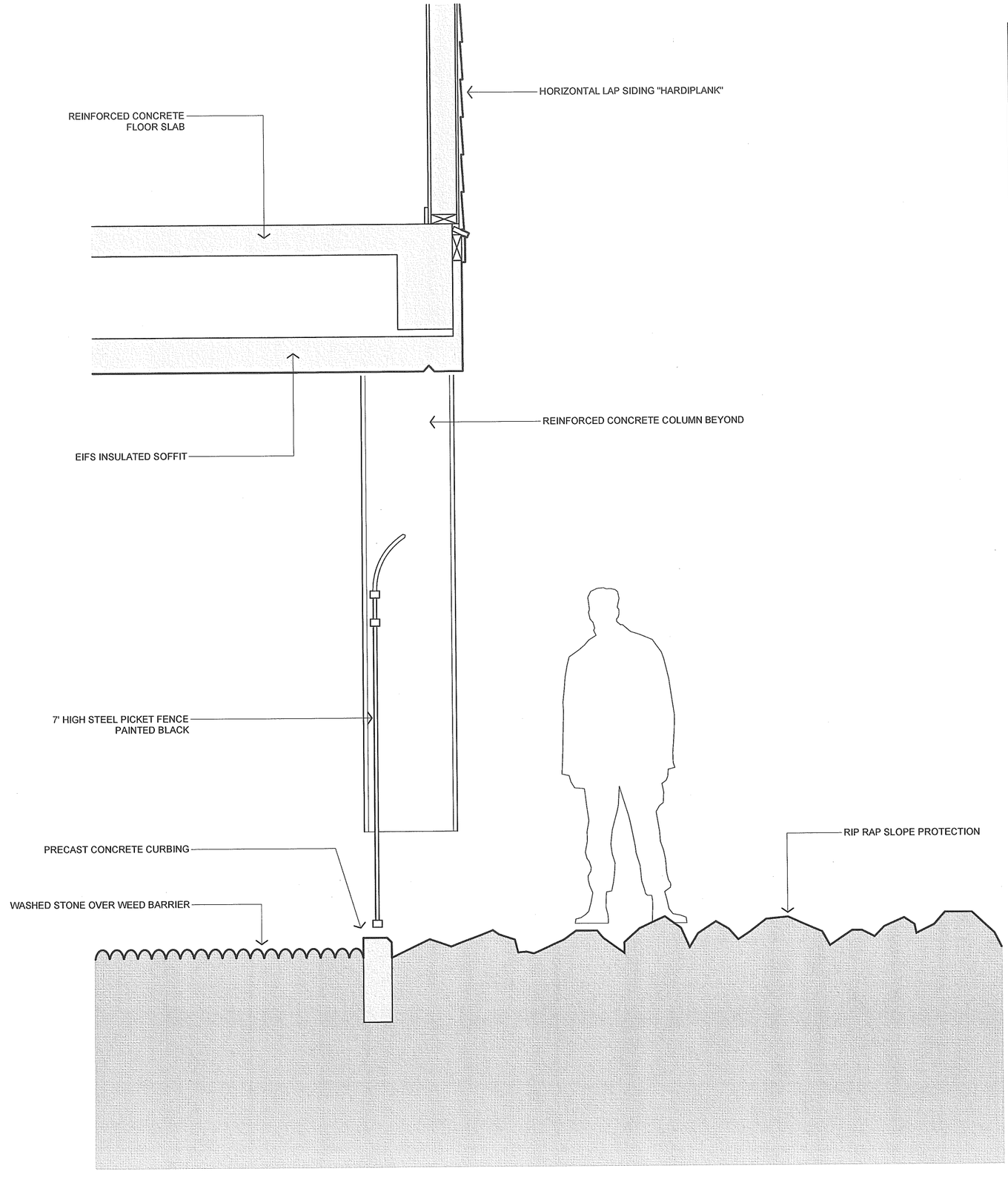
January 12, 2008

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 3.1



Understory Enclosure Fence

1" = 1' - 0"

CRESCENT STREET ELEVATION - SOUTH

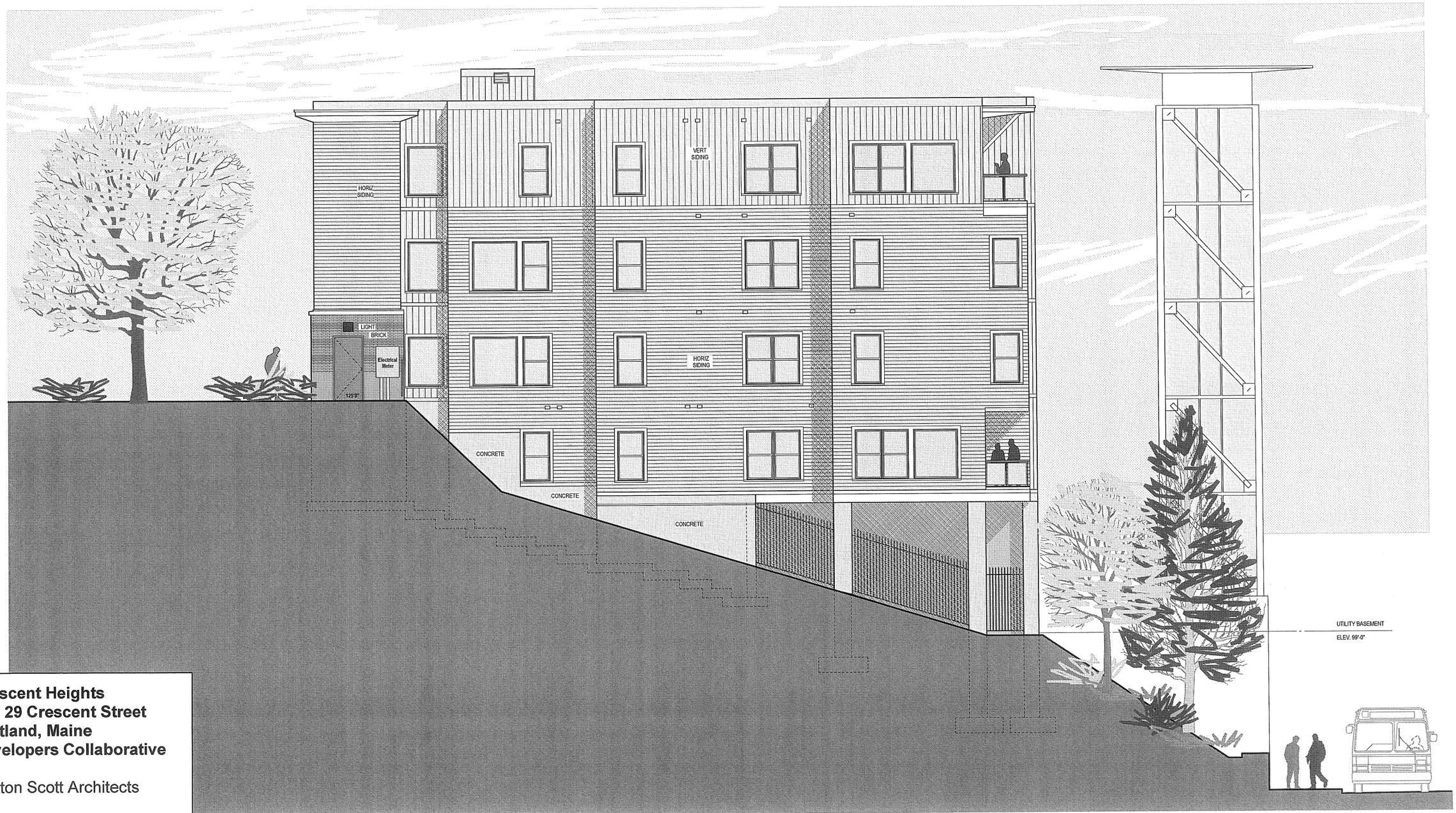
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.1

EAST ELEVATION



Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.2

NORTH ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

WEST ELEVATION

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

January 19, 2009

A 2.4

CRESCENT HEIGHTS

CONGRESS STREET ELEVATION

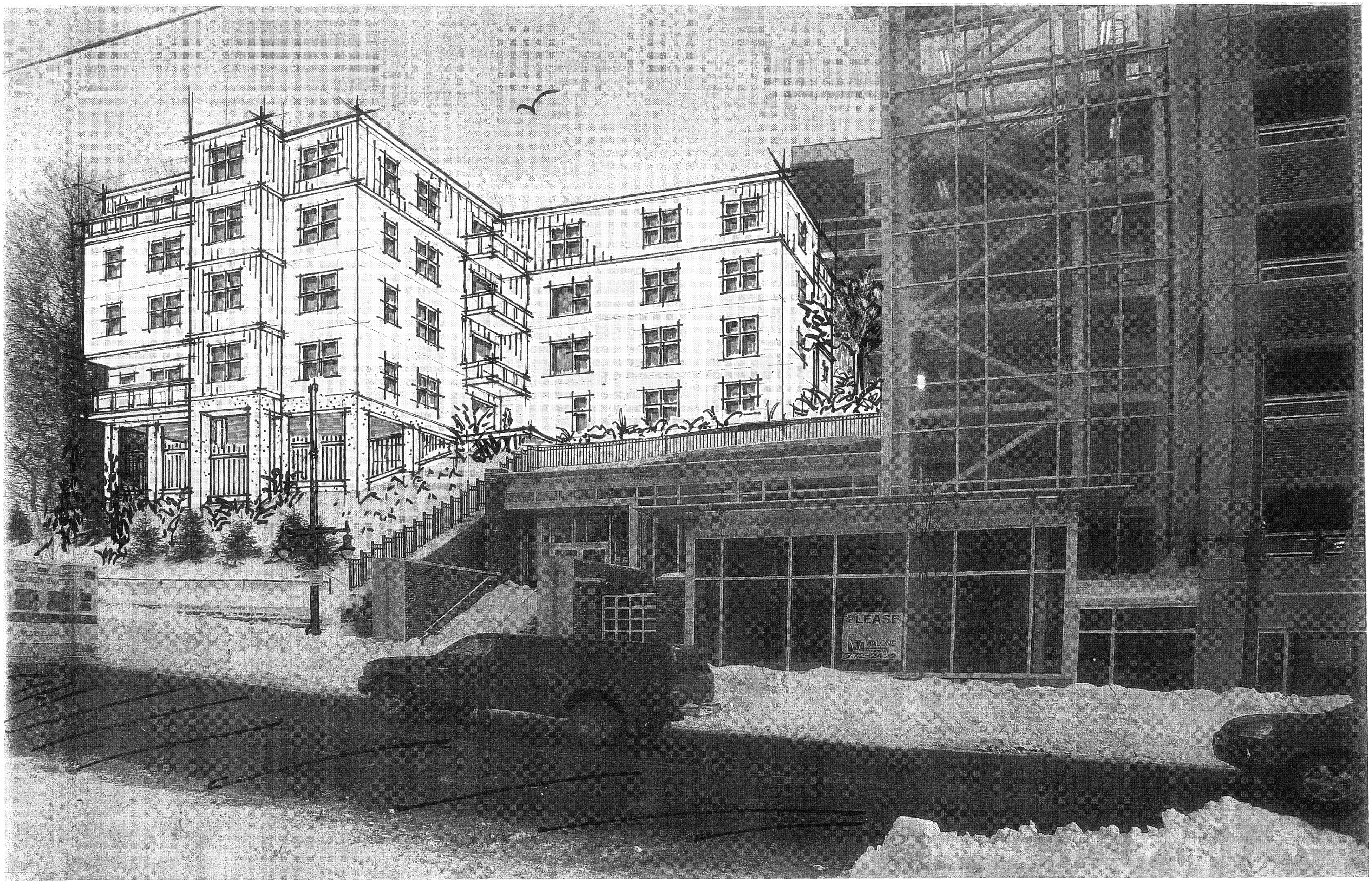
Developers Collaborative / Winton Scott Architects

CRESCENT HEIGHTS

CRESCENT STREET ELEVATION

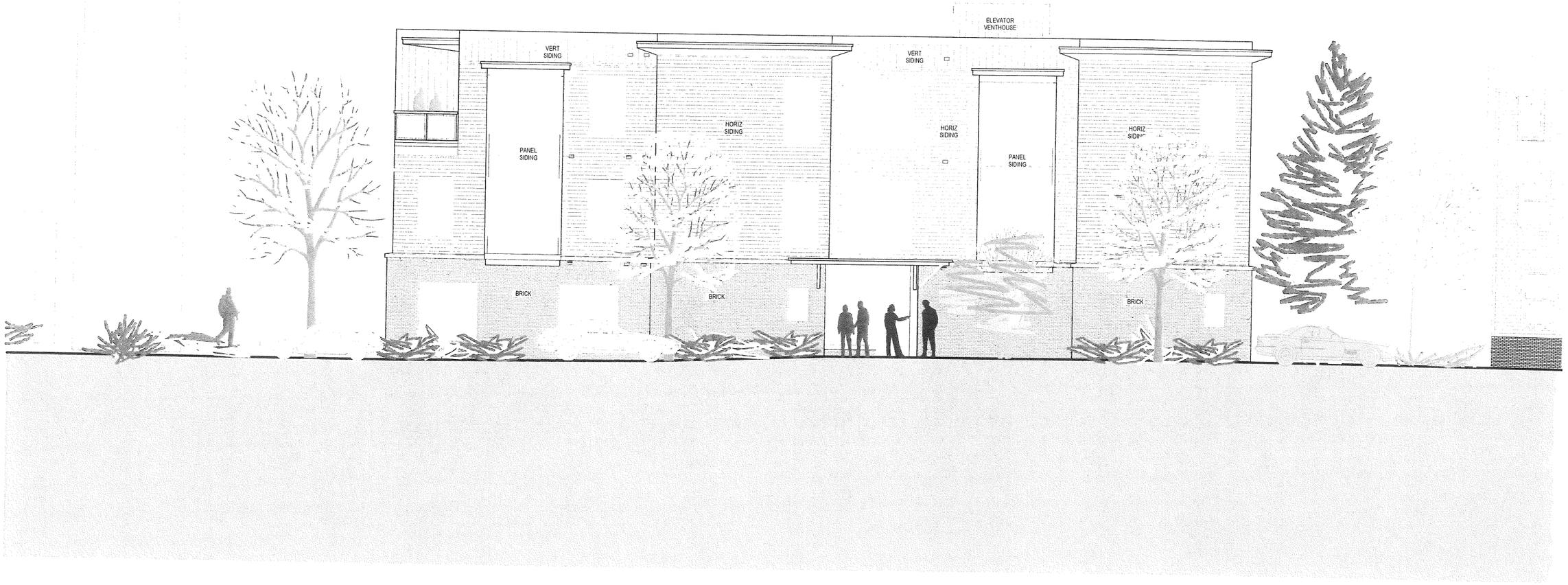
Developers Collaborative / Winton Scott Architects


LEASE
MALONE
772-2422
LEASE


LEASE
MALONE
772-2422
LEASE

Att E 15

CRESCENT STREET ELEVATION - SOUTH



Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

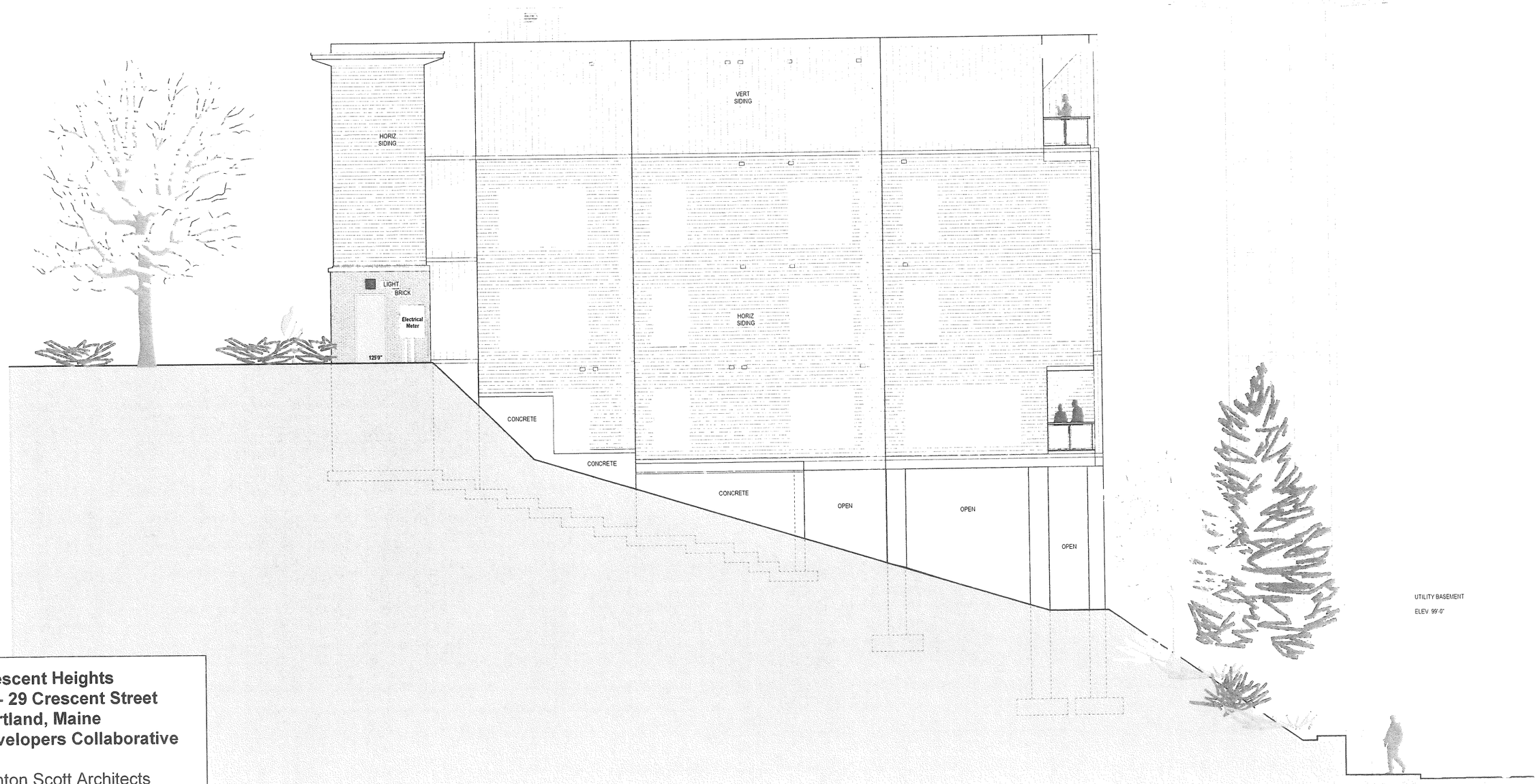
Winton Scott Architects

December 30, 2008

A 2.1

Att E 16

EAST ELEVATION



Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

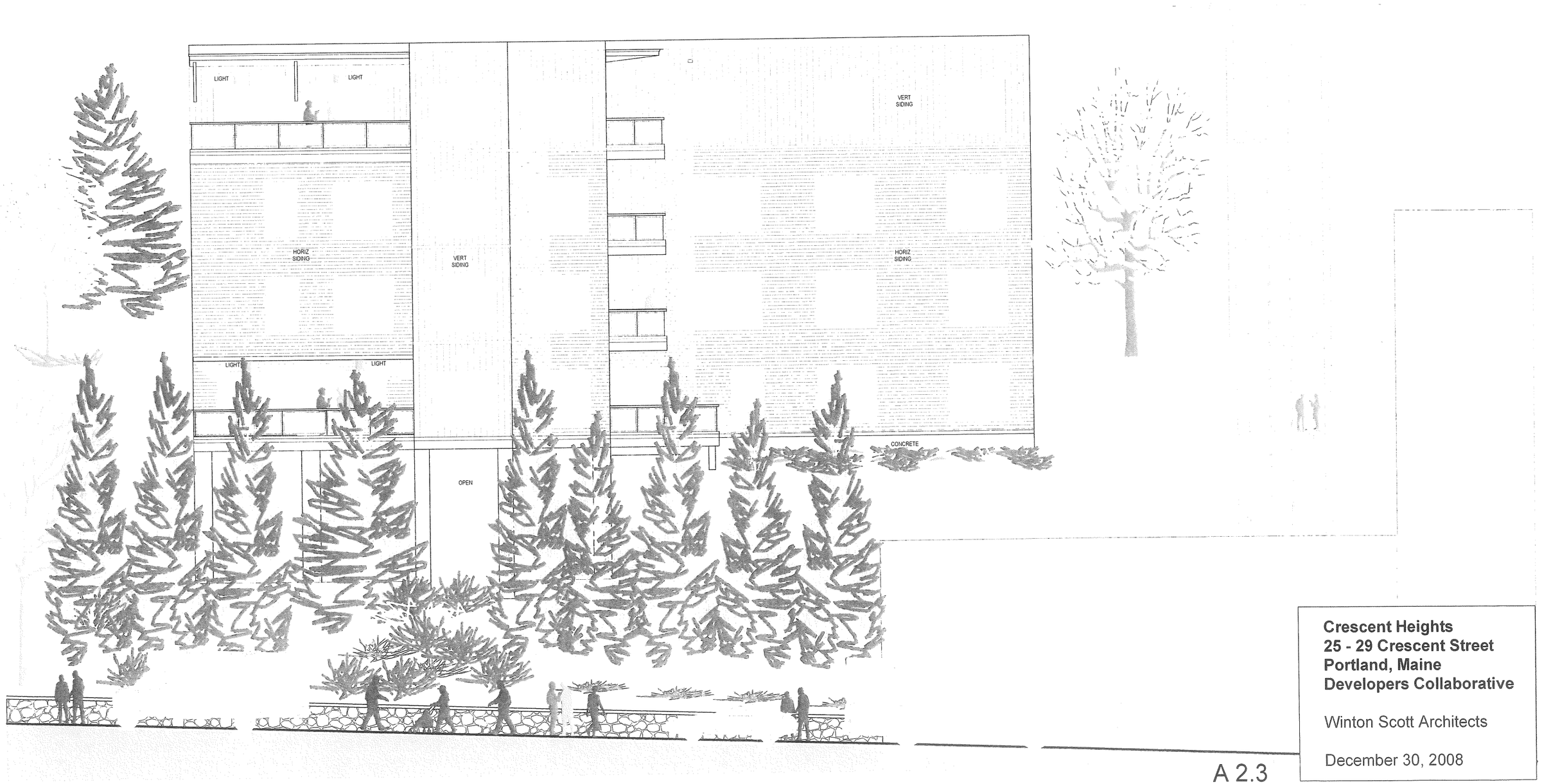
Winton Scott Architects

December 30, 2008

A 2.2

AH E 17

NORTH ELEVATION



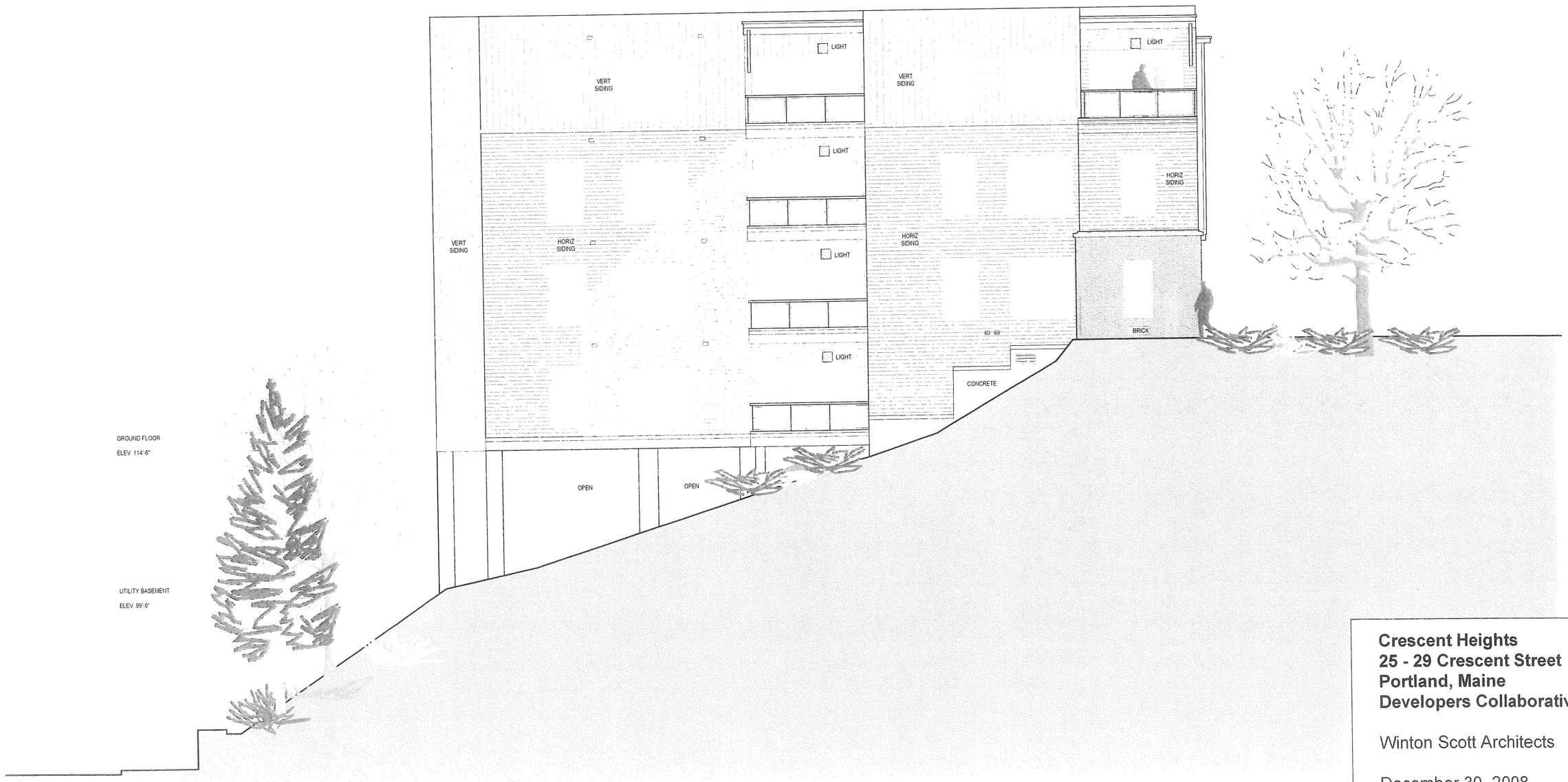
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 30, 2008

AH E 18

WEST ELEVATION



Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 30, 2008

A 2.4

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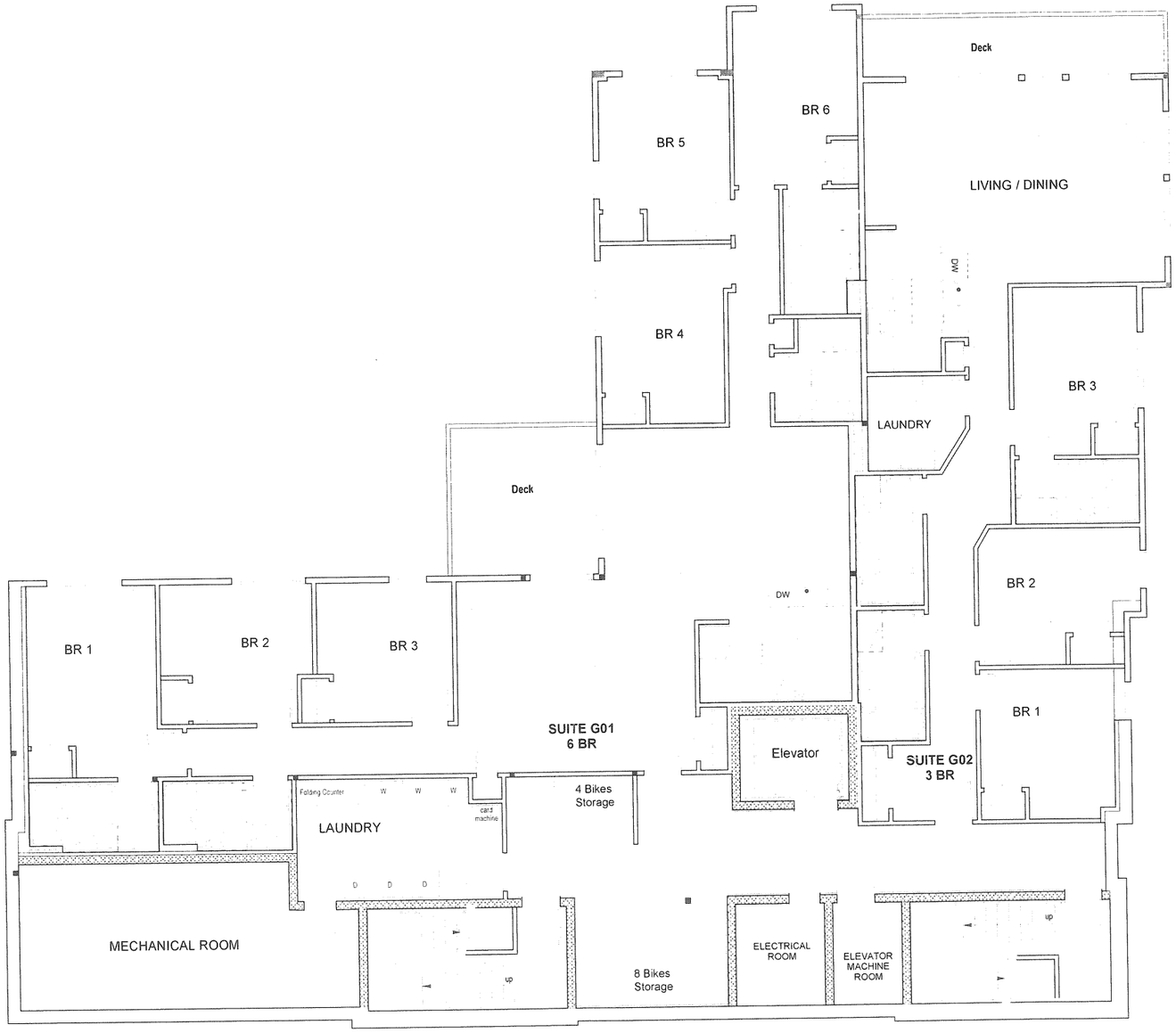


SCALE: 3/16" = 1' - 0"

Ground Floor Plan

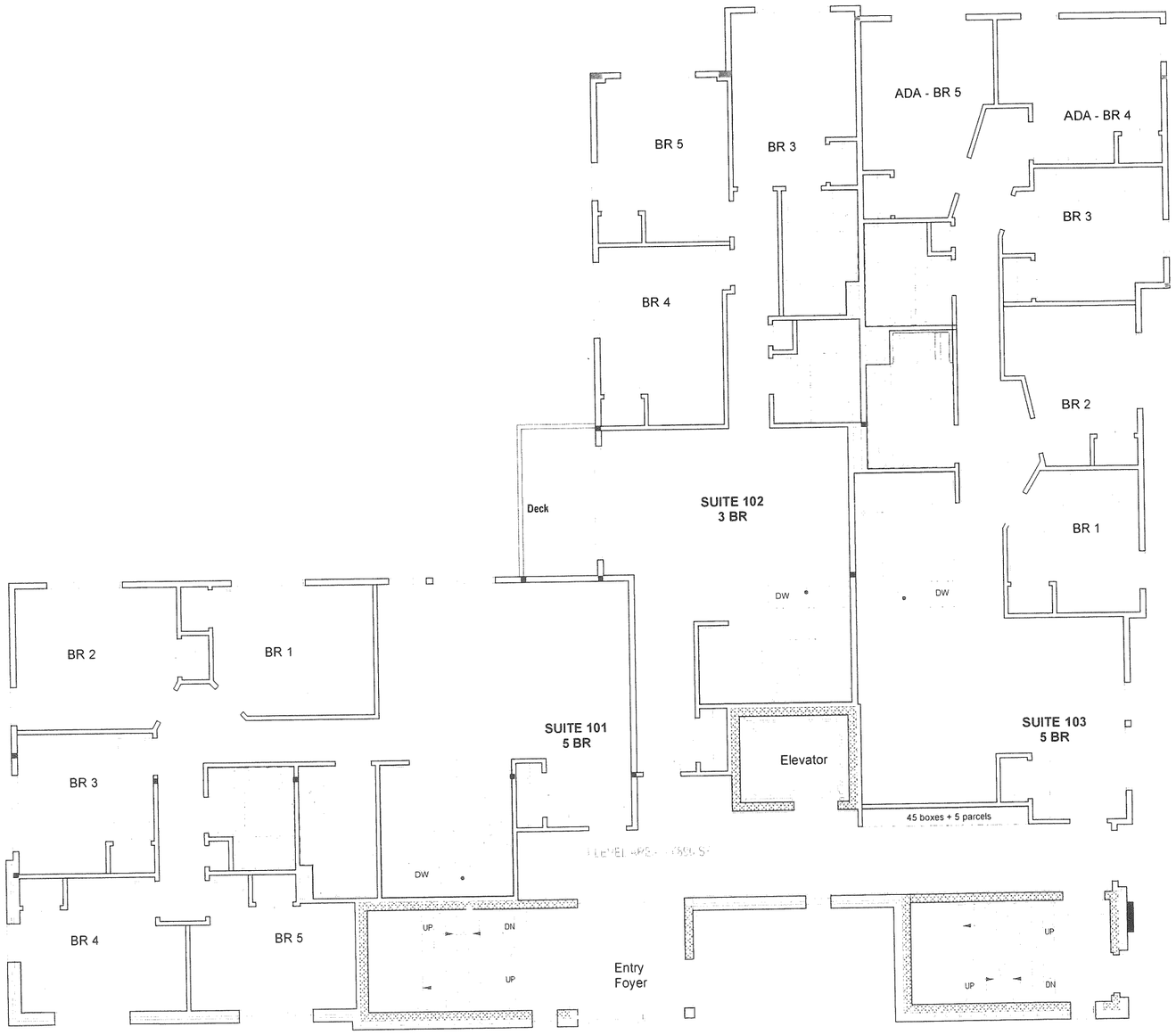
A 1.1

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

AH E 20



NORTH

0 4 8 16

SCALE: 3/16" = 1' - 0"

First Floor Plan

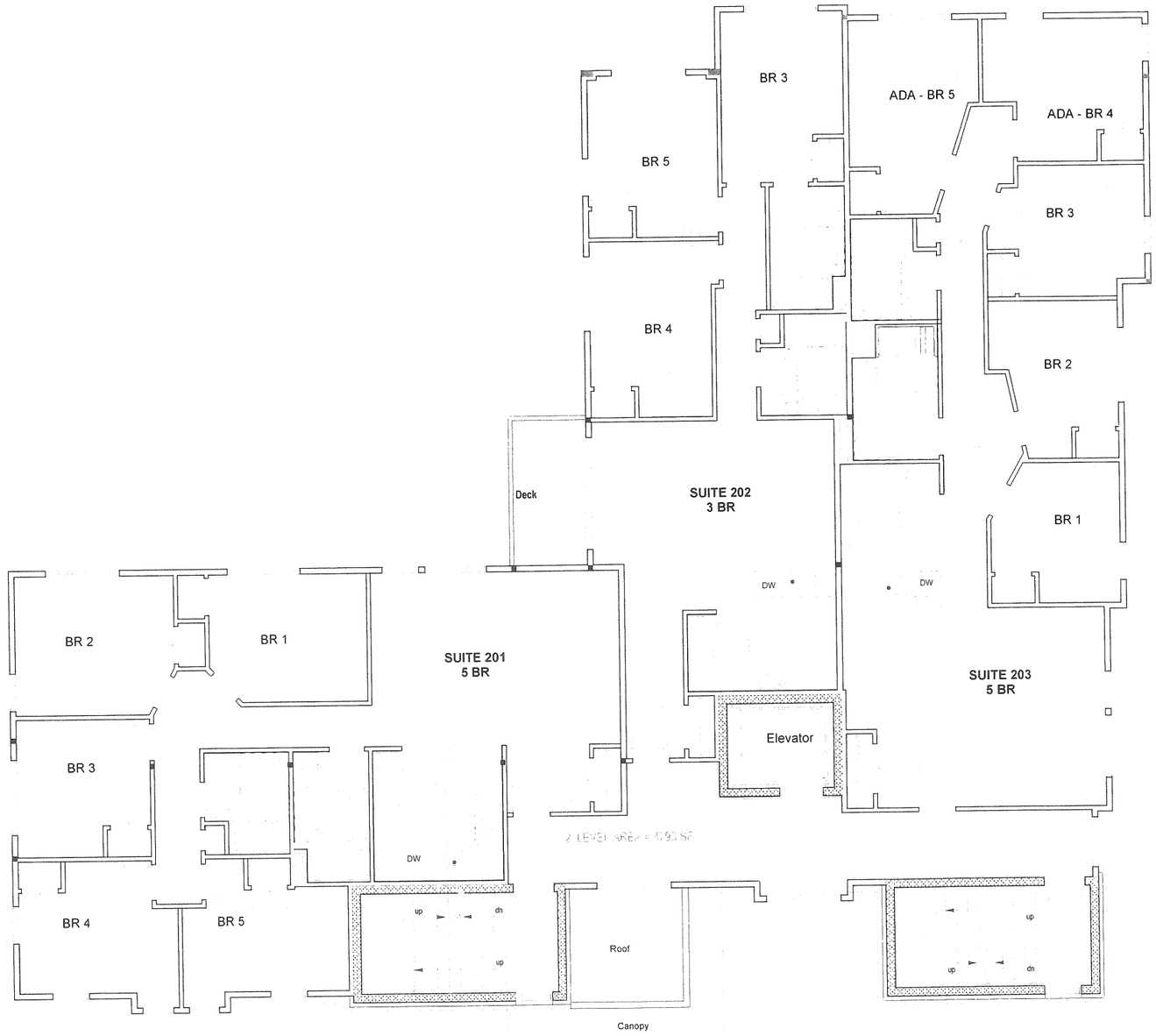
A 1.2

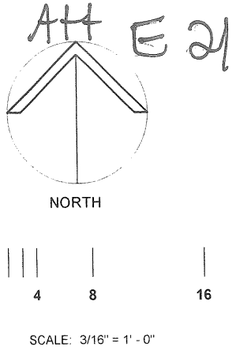
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

AH E 21





Second Floor Plan

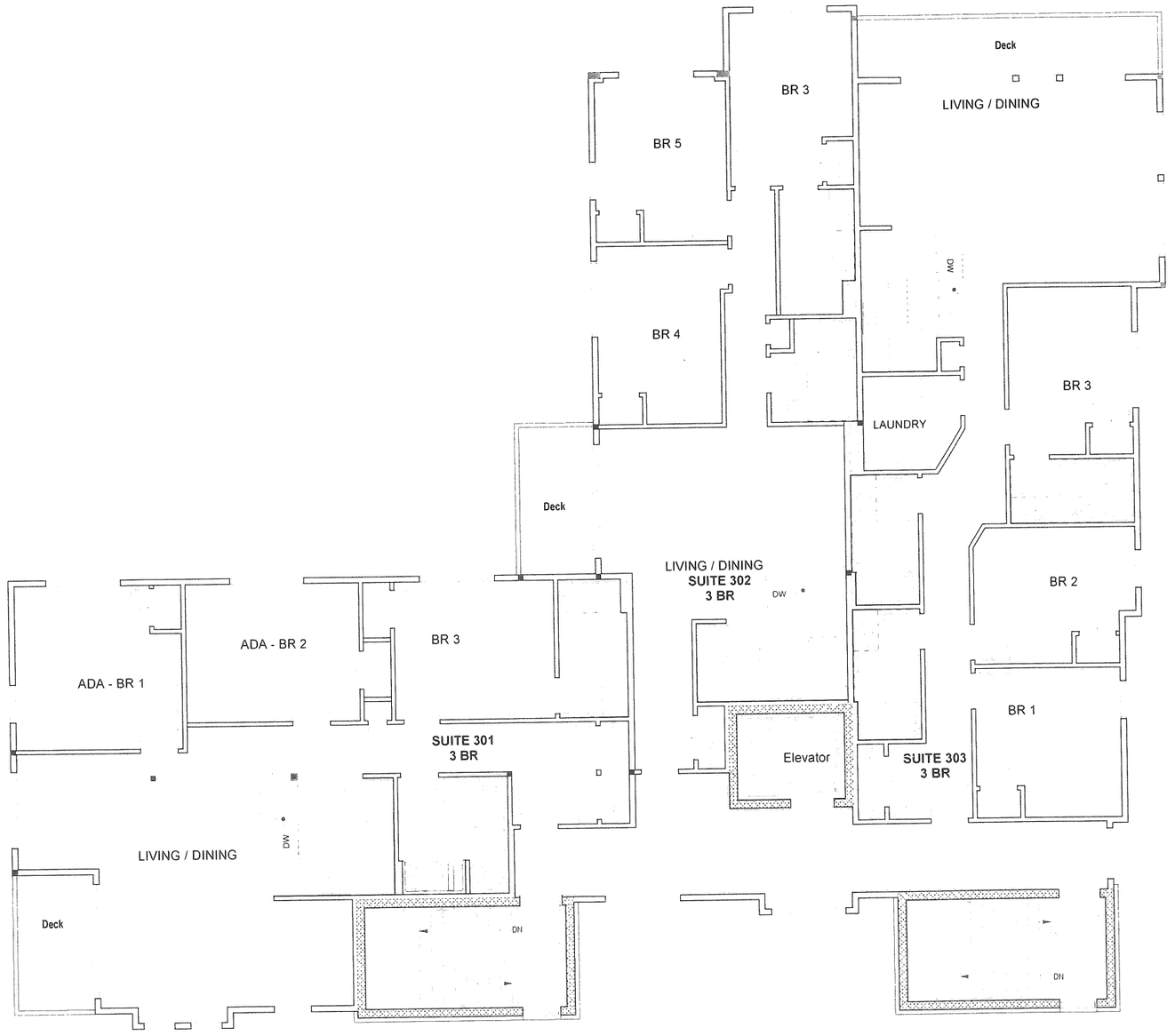
A 1.3

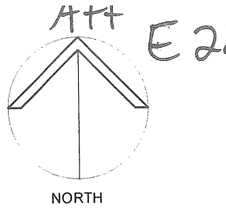
Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

Att E22





0 4 8 16

SCALE: 3/16" = 1' - 0"

Third Floor Plan

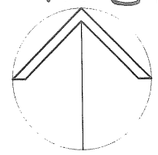
A 1.4

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

Att E 23



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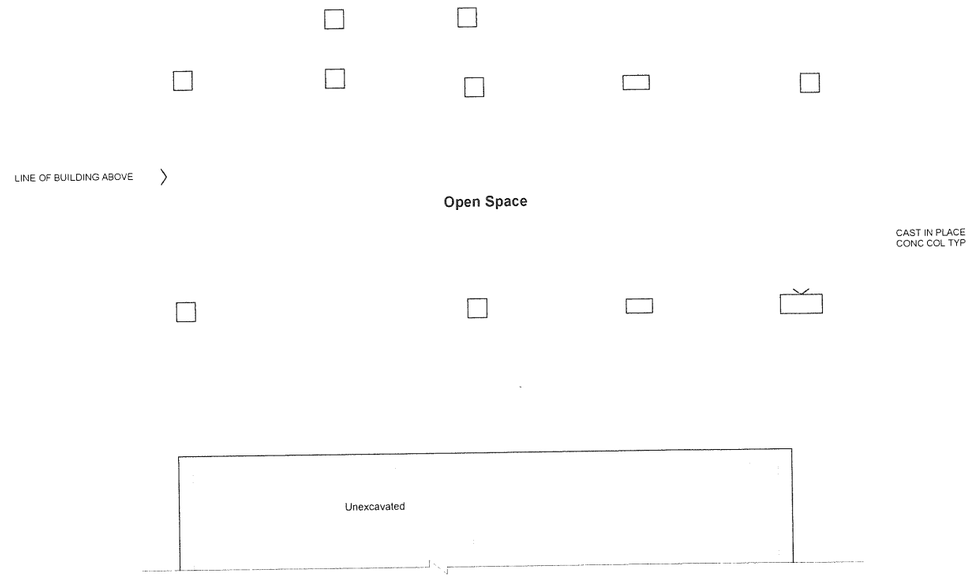


Crawlspace Plan

A 1.5

Crescent Heights
25 - 29 Crescent Street
Portland, Maine
Developers Collaborative

Winton Scott Architects

December 24, 2008

AHE1

PROJECT PARCEL SITE

ZONING: RESIDENTIAL - 6

PORTLAND TAX ASSESSOR'S MAP & LOT NUMBERS:

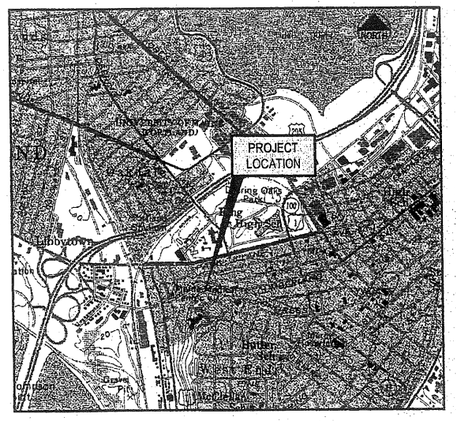
MAP	BLOCK	LOTS
53	E	4,5,6,14,15, AND PORTION OF LOT 3
53	F	6

OWNER/ APPLICANT:
CRESCENT HEIGHTS LLC
17 CHESTNUT STREET
PORTLAND, MAINE 04101
TEL. 207.772.7673
FAX 207.253.5183

SITE DEVELOPMENT PLANS FOR CRESCENT HEIGHTS

A 44-BED LODGING HOUSE

#29 + #25 CRESCENT STREET PORTLAND, MAINE



LOCATION MAP
N.T.S.

INDEX

* NOT INCLUDED WITH CURRENT SUBMISSION SET

UTILITIES

WATER
ATTN: RICO SPUGNARDI
PORTLAND WATER DISTRICT
22 DOUGLAS STREET
P.O. BOX 3533
PORTLAND, MAINE 04104
207.761.8310

SEWER
CITY OF PORTLAND
PUBLIC WORKS ENGINEERING DEPT.
55 PORTLAND STREET
PORTLAND, MAINE 04102
207-874-8840

POWER
ATTN:PAUL DUPERRE
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
207.791.1023

TELEPHONE
ATTN: SUE SERRETTE
FAIRPOINT COMMUNICATIONS
ONE DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.797.1842

NATURAL GAS
ATTN: MIKE SMITH
NORTHERN UTILITIES
1075 FOREST AVENUE
PORTLAND, MAINE 04103
207.797.8002 EXT. 6220

PERMITS

	GOVERNING BODY	STATUS
LOCAL SITE PLAN PERMIT	CITY OF PORTLAND PLANNING AUTHORITY CITY HALL, 389 CONGRESS STREET 207.874.8719	PRELIMINARY SUBMISSION 09.19.08 PRELIMINARY RESUBMISSION 11.15.08
BUILDING PERMIT	CITY OF PORTLAND CODE ENFORCEMENT OFFICE CITY HALL, 389 CONGRESS STREET 207.874.8693	TO BE FILED PRIOR TO CONSTRUCTION
STREET OPENING PERMIT	CITY OF PORTLAND PUBLIC WORKS ENFORCEMENT ENGINEERING DEPARTMENT 55 PORTLAND STREET 207.874.8801	TO BE FILED PRIOR TO CONSTRUCTION

PREPARED BY

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
DeLuca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
207.775.1121

SURVEYOR:
Owen Haskell, Inc.
16 CASCO STREET
PORTLAND, MAINE 04101
207.774.0424

GEOTECHNICAL ENGINEER:
S.W. Cole Engineering
17 CHESTNUT STREET
PORTLAND, MAINE 04101
207.773.6800
207.773.6801 FAX
ATTN: TIM BOYCE

ARCHITECT:
Winton Scott Architects
5 MILK STREET
PORTLAND, MAINE 04101
207.774.4811
207.774.3083 FAX
ATTN: MARK WILCOX

STRUCTURAL ENGINEER:
Becker Structural Engineers
P.O. BOX 4595
PORTLAND, MAINE 04112
207.879.1838
ATTN: PAUL BECKER

ELECTRICAL ENGINEER:
Bartlett Design
942 WASHINGTON STREET
BATH, MAINE 04530
207.443.5447
ATTN: LARRY BARTLETT

MECHANICAL ENGINEER:
Mechanical Systems Engineers
10 FOREST FALLS DRIVE #10
YARMOUTH, ME 04096
207.846.1441
ATTN: ERIC PFLUGRADT

PRELIMINARY NOT FOR CONSTRUCTION

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REVISED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE — STEPHEN P. BUSHEY — No. 7429 — LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: COVER SHEET
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
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CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-COV		
SHEET	C-1		

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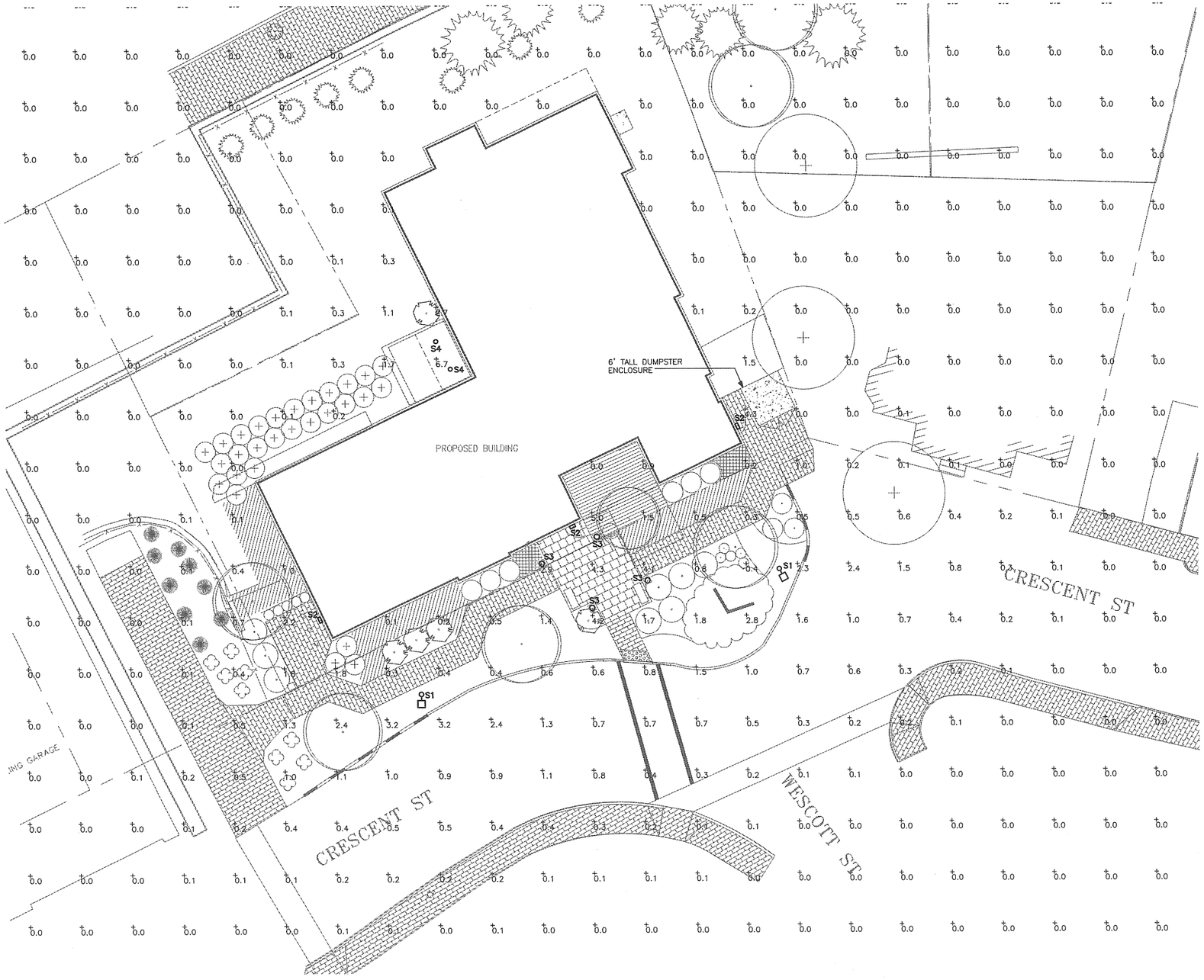

NOTES:

1. CALCULATED VALUES REPRESENT MAINTAINED FOOTCANDLE LEVELS AT GRADE.
2. FIXTURES TYPES ARE AS FOLLOWS:
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   TYPE S2 – GUTH LIGHTING, SUNDOWNER SERIES, 32W COMPACT FLUORESCENT, 2400 LUMENS, .77 LLF
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NORTH

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

FOR REVIEW ONLY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
1	02.25.09	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

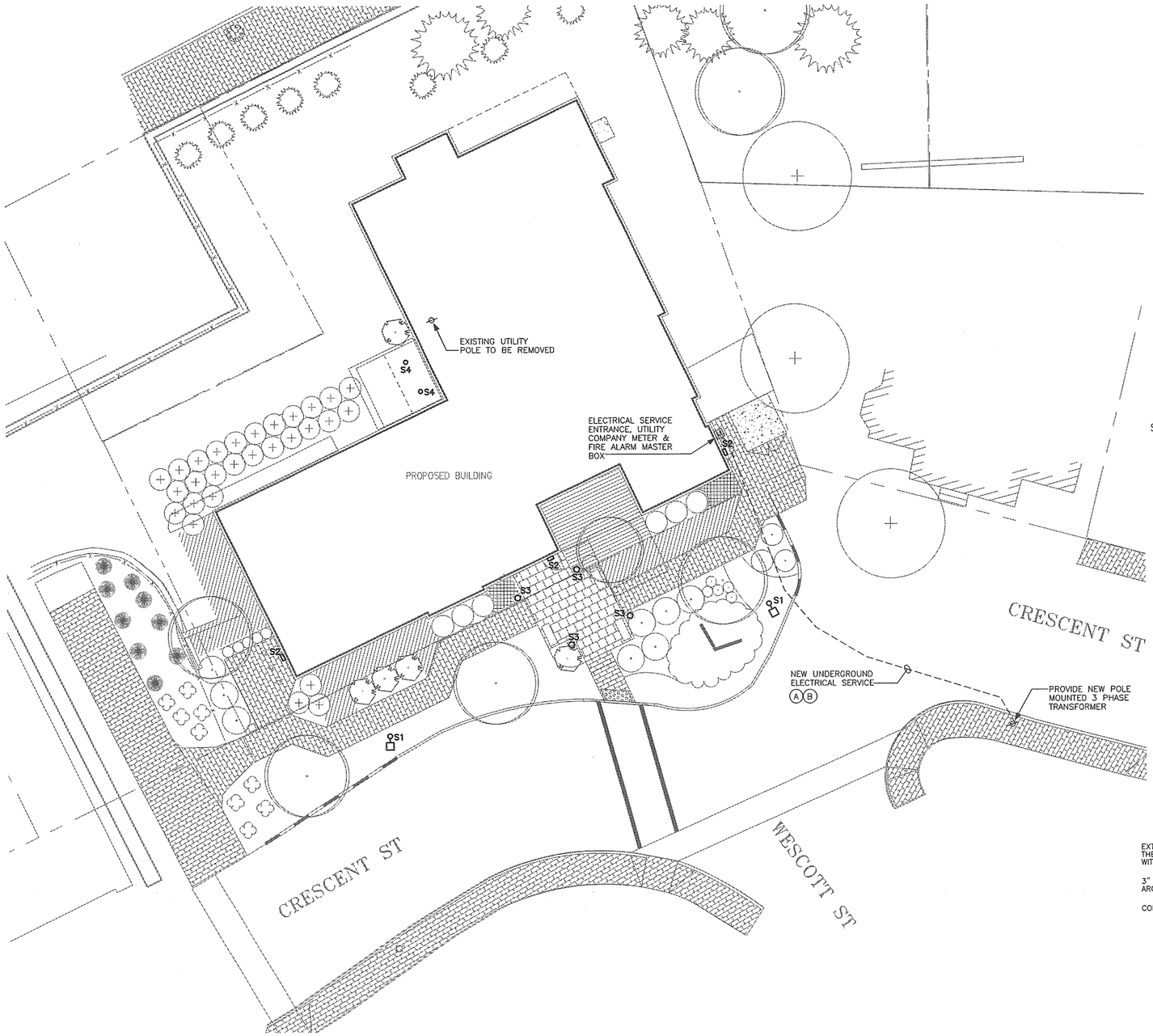
PROJECT
CRESCENT HEIGHTS

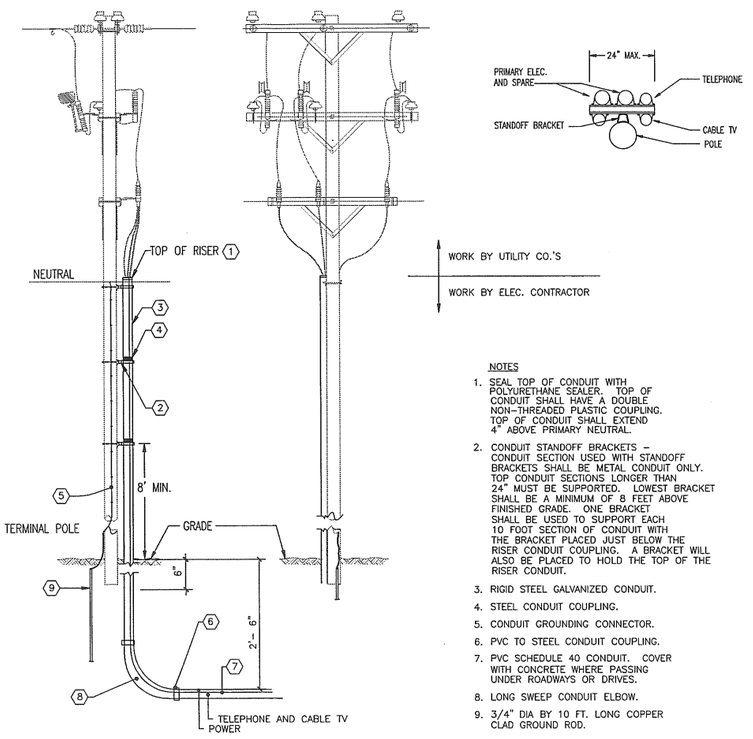
SHEET TITLE
PHOTOMETRIC LIGHTING PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	E-001		





RISER POLE DETAIL
NOT TO SCALE

NOTES

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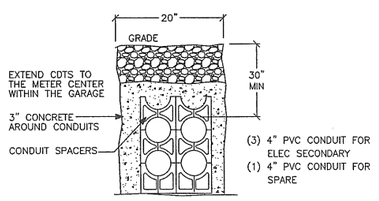
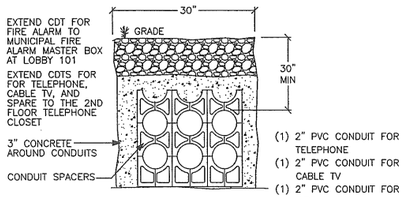


DUCT SECTION – A
NOT TO SCALE



DUCT SECTION – B
NOT TO SCALE

NORTH

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10 0 5 10 20
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P.E. STEPHEN BUSHEY
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PROJECT
CRESCENT HEIGHTS

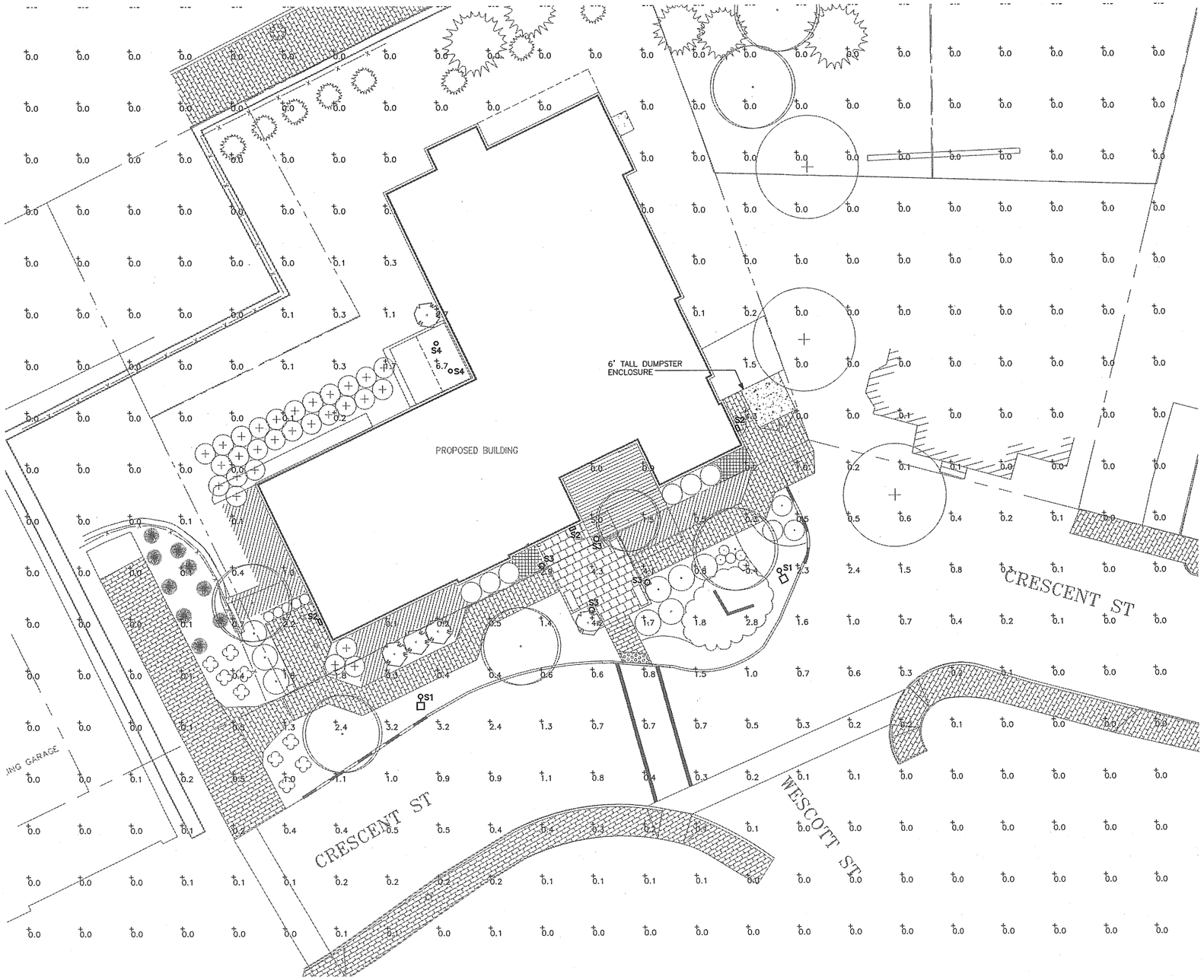
SHEET TITLE
ELECTRICAL SITE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JJC	DATE:	DEC 2008
DESIGNED:	JJC	SCALE:	1" = 10'
CHECKED:	LBB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET E-002



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CHECKED:	LEB	JOB NO.	2827
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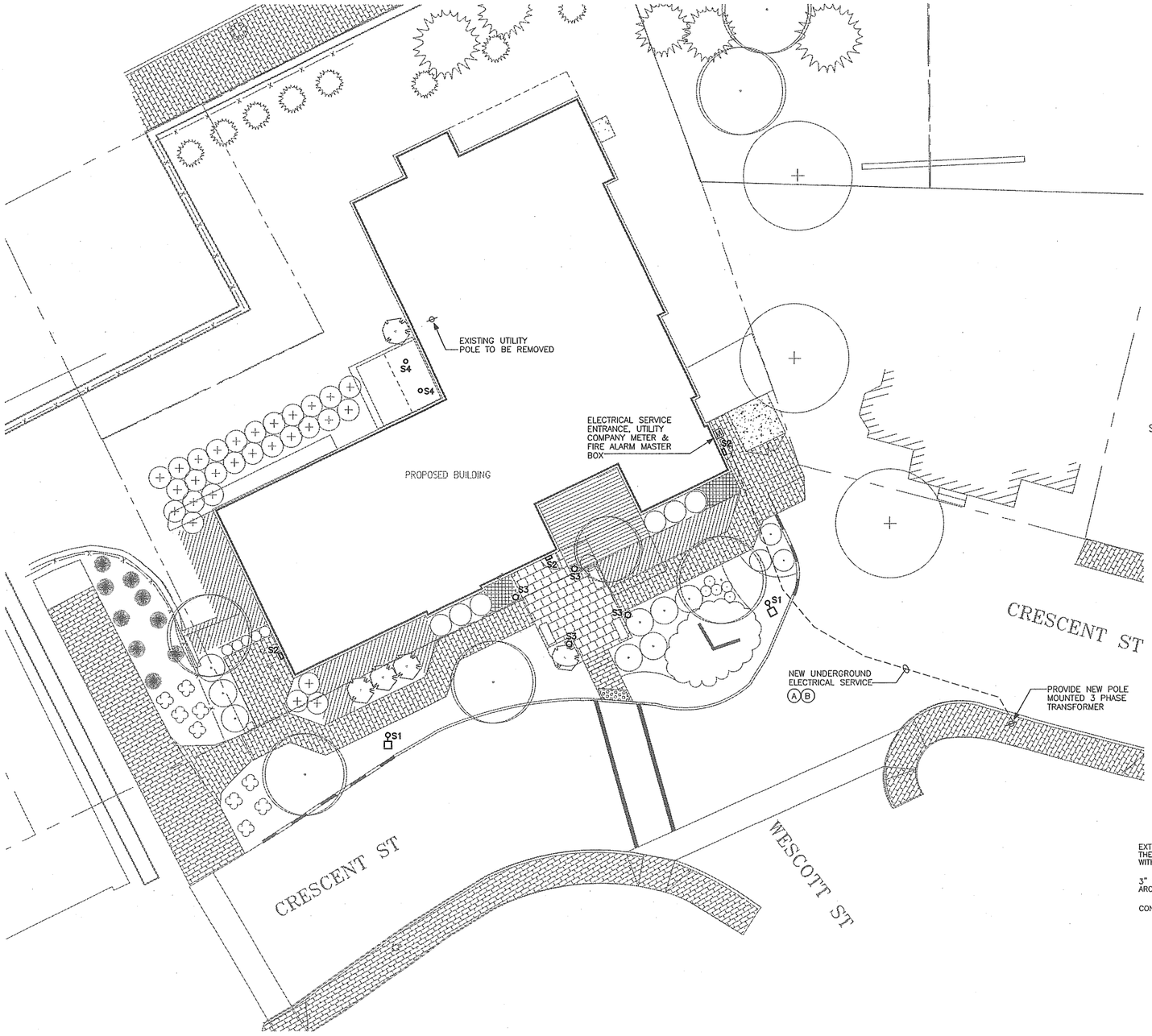
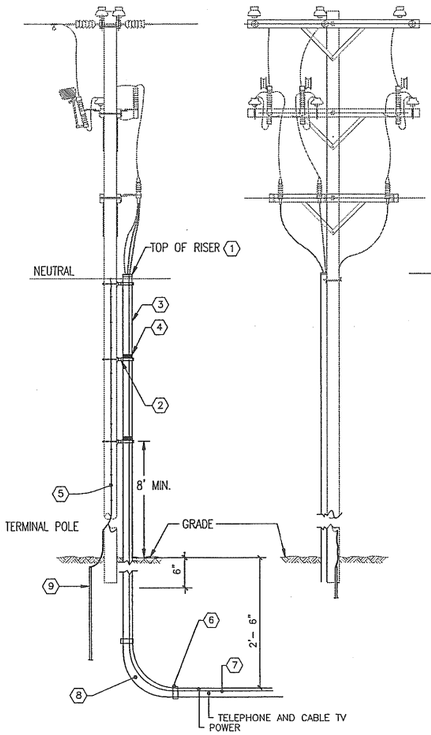
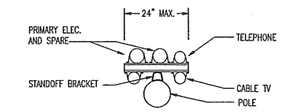
SHEET E-001





RISER POLE DETAIL

NOT TO SCALE



WORK BY UTILITY CO.'S

WORK BY ELEC. CONTRACTOR

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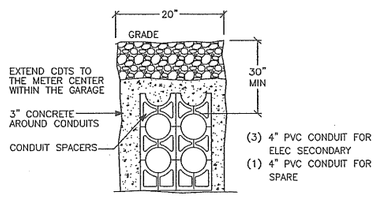
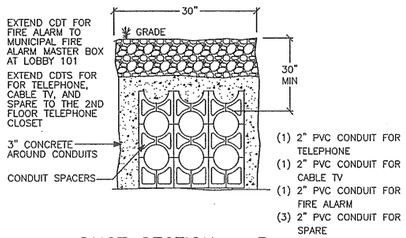


DUCT SECTION – A

NOT TO SCALE



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NOT TO SCALE

NORTH

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REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

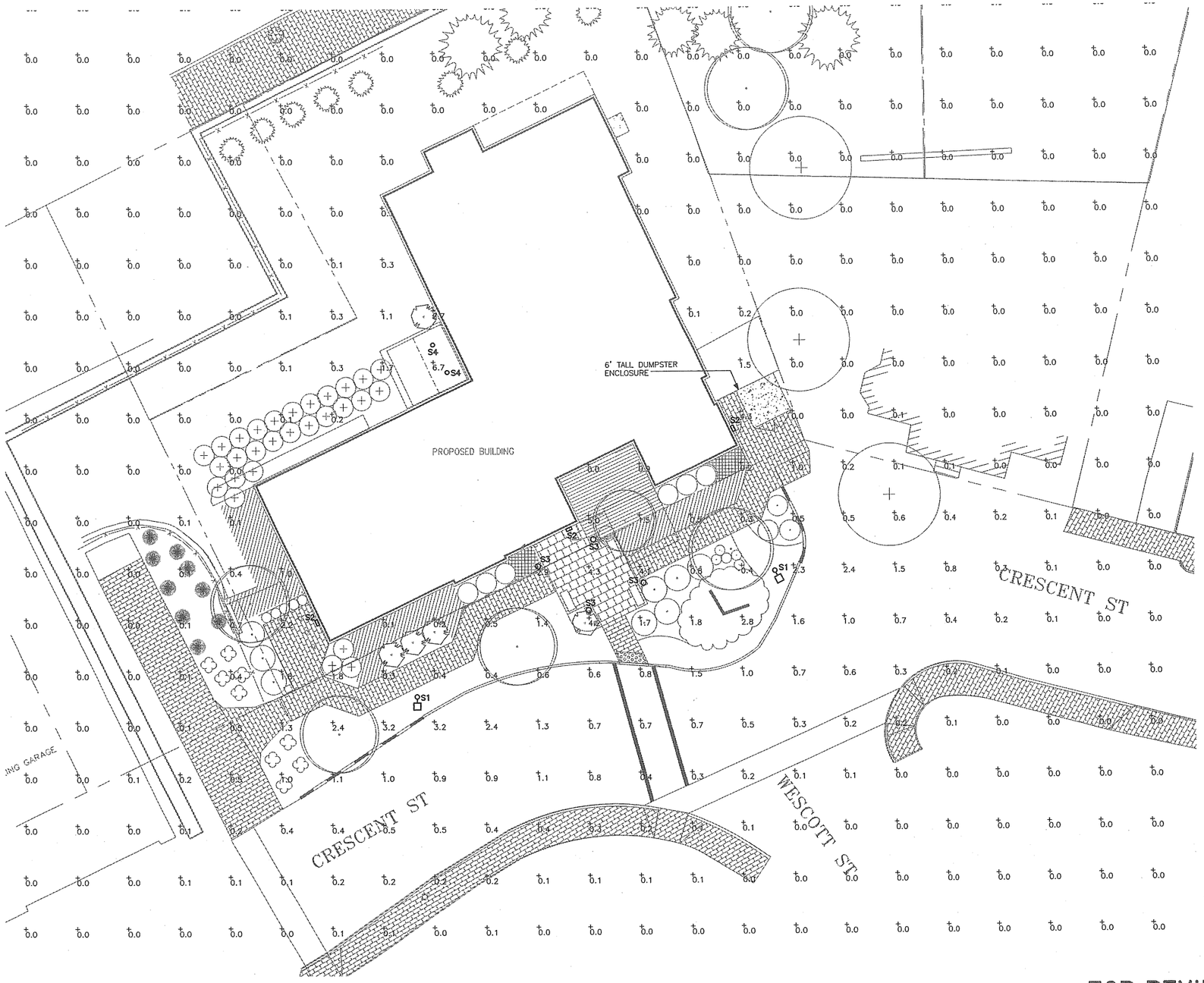
PROJECT
CRESCENT HEIGHTS

SHEET TITLE
ELECTRICAL SITE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	E-002		



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LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: PHOTOMETRIC LIGHTING PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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DESIGNED:	JLC	SCALE:	1" = 10'
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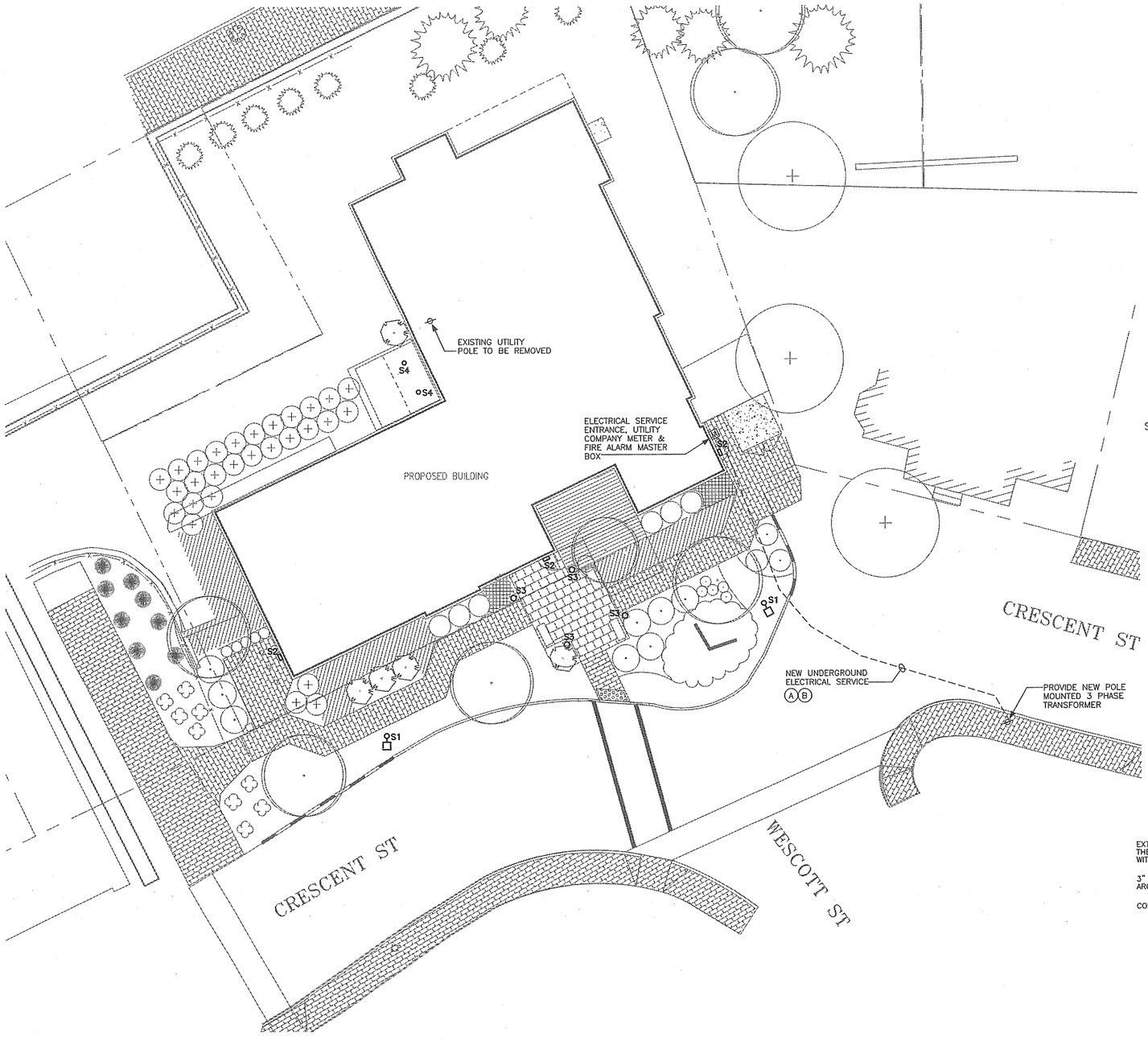
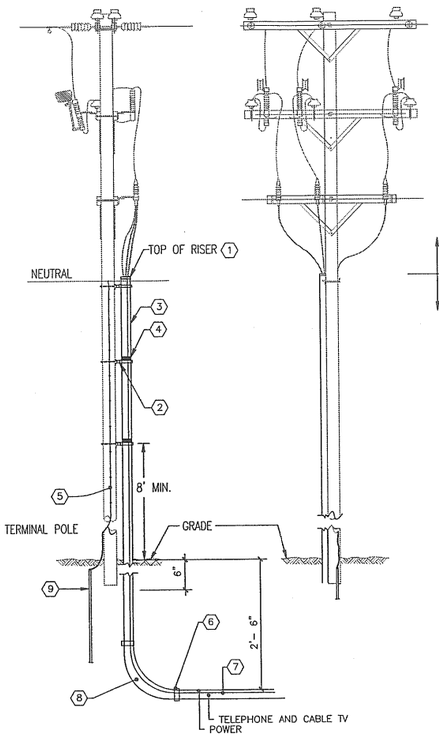
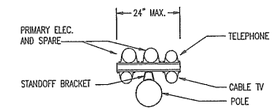
SHEET	E-001		





RISER POLE DETAIL
NOT TO SCALE



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WORK BY ELEC. CONTRACTOR

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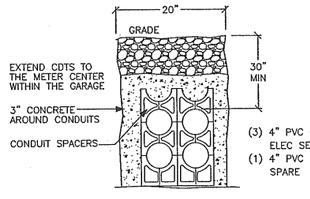
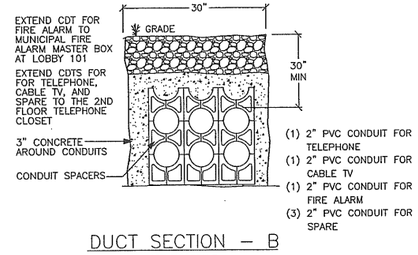


DUCT SECTION – A
NOT TO SCALE



DUCT SECTION – B
NOT TO SCALE

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

NORTH

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REV	DATE	DESCRIPTION
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REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
ELECTRICAL SITE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET E-002

Bituminous
parking area

SAILOR COURSING

RUNNING BOND

SAILOR COURSING
(MAY STAGGER)

RUNNING BOND

SAILOR COURSING

R11'-0"

BITUMINOUS SURFACES
FOR PARKING AND ENTRY

IRREGULAR ROCK
WITH SMOOTH FACE

7" X 7" X 4'-6" HIGH GRANITE
POSTS (6" ABOVE FENCE)
(TYPICAL FOR 8)

4"-0" HIGH BLACK PAINTED
ALUMINUM FENCING

"STAGE

PARCEL

"CHAPEI

S

CHESTNUT STREET LOFTS

URBAN REVITALIZATION PROJECT
BY CHESTNUT STREET LLC.
PORTLAND, MAINE

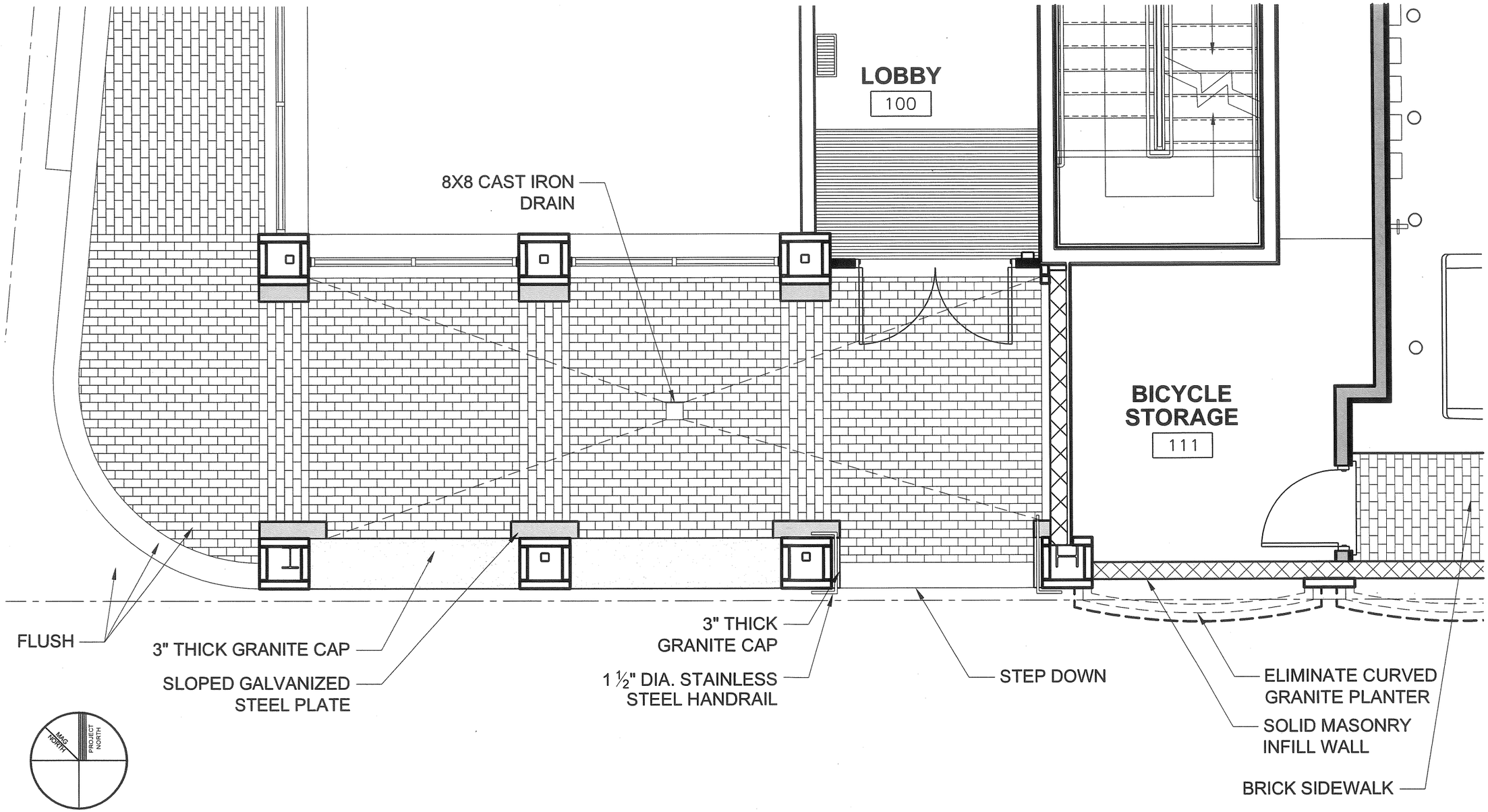
TFH ARCHITECTS
100 COMMERCIAL STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:

DATE:	05.09.07
PROJECT No.	0422
DRAWN BY:	SA
CHECKED BY:	TST
SCALE:	1/4"=1'-0"

SHEET TITLE:
COURT YARD AT
CHESTNUT STREET

SK-R-1
REVISION



CHESTNUT STREET LOFTS

URBAN REVITALIZATION PROJECT
BY CHESTNUT STREET LLC.
PORTLAND, MAINE

TFH ARCHITECTS
100 COMMERCIAL STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:

DATE:	05.09.07
PROJECT No.	0422
DRAWN BY:	SA
CHECKED BY:	TST
SCALE:	1/4"=1'-0"

SHEET TITLE:
COLONNADES AT CHESTNUT STREET ELEVATION

SK-R-2

REVISION

COLONNADE

NOTE: HORIZONTAL JOINTS BETWEEN GRANITE AND CMU TO BE RAKED 3/8" DEEP AND FILLED WITH SEALANT

CHESTNUT STREET LOFTS

URBAN REVITALIZATION PROJECT
BY CHESTNUT STREET LLC.
PORTLAND, MAINE

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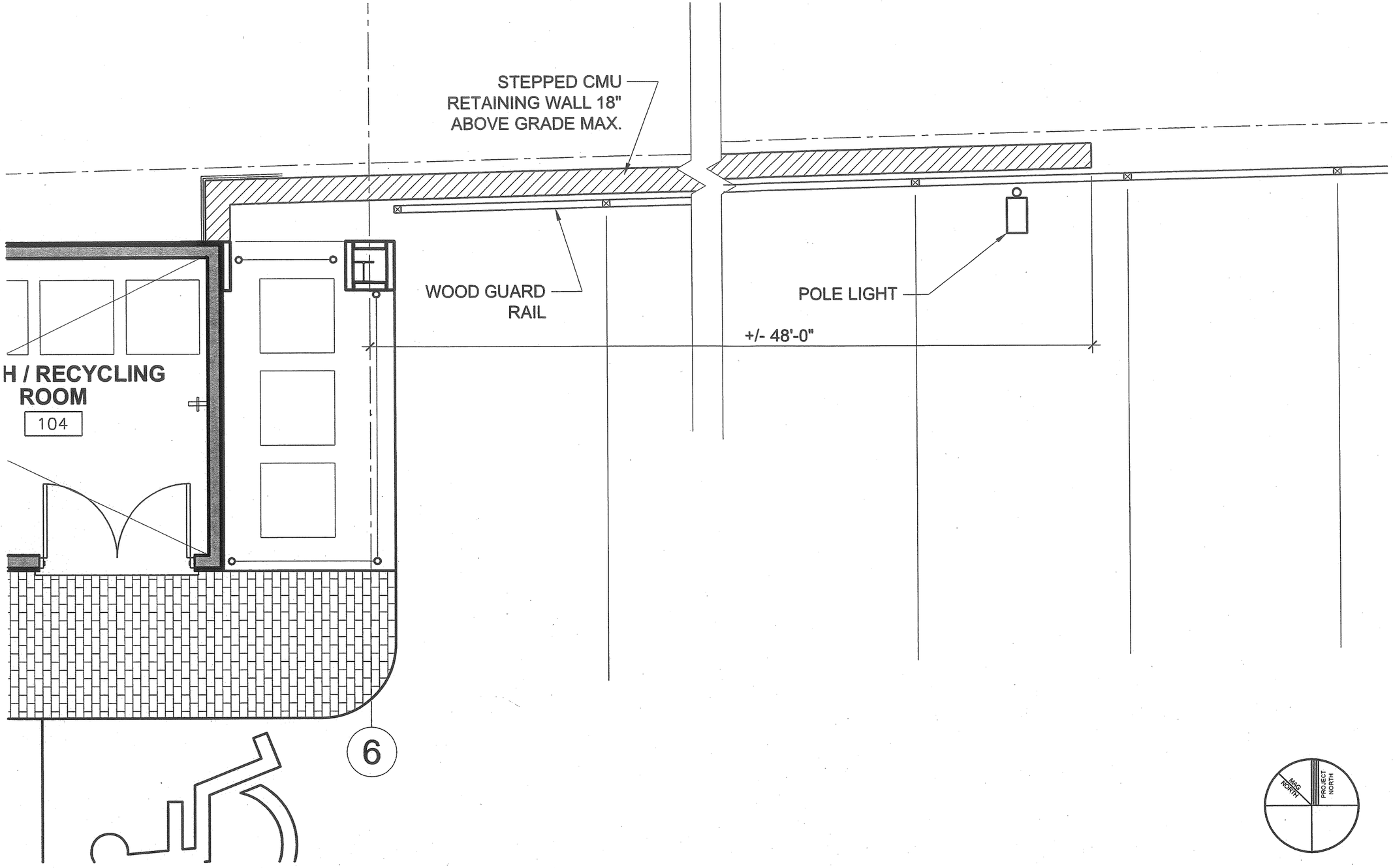
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:

DATE:	05.09.07
PROJECT No.	0422
DRAWN BY:	SA
CHECKED BY:	TST
SCALE:	1/4"=1'-0"

SHEET TITLE:
COLONNADES AT CHESTNUT STREET ELEVATION

SK-R-3
REVISION



CHESTNUT STREET LOFTS

URBAN REVITALIZATION PROJECT
BY CHESTNUT STREET LLC.
PORTLAND, MAINE

TFH ARCHITECTS
100 COMMERCIAL STREET
PORTLAND MAINE 04101
TELEPHONE 207 775 6141
ARCHITECTURE PLANNING

CONSULTANTS:

DATE:	05.09.07
PROJECT No.	0422
DRAWN BY:	SA
CHECKED BY:	TST
SCALE:	1/4"=1'-0"

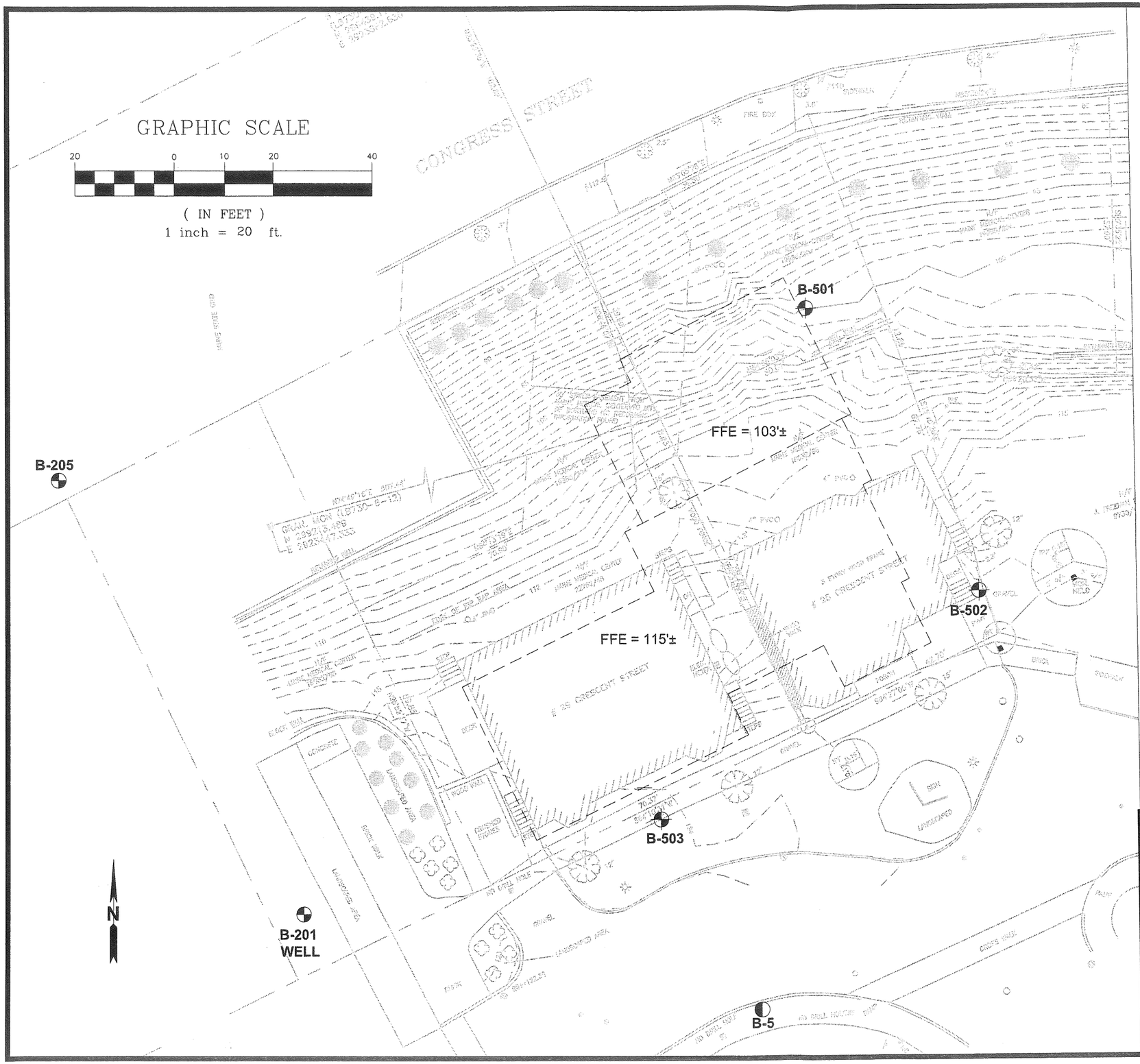
SHEET TITLE:
RETAINING WALL

SK-R-4
REVISION

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.



LEGEND

- Approximate Location of Test Borings
- Approximate Location of Test Borings made in May 2001for a Preliminary Investigation for the Proposed Women and Infants Project (SWC Project No. 01-0304)
- Approximate Location of Test Borings made in January / February 2004 for the Proposed Parking Garage Project (SWC Project No. 02-0067.1)

NOTES:

1. EXPLORATION LOCATION PLAN WAS PREPARED FROM A 1"=20' SCALE PLAN OF THE SITE ENTITLED "CRESENT STREET APARTMENTS, EXISTING CONDITONS", PREPARED BY DELUCA HOFFMAN ASSOCIATES, INC., UNDATED.
2. THE BORINGS WERE LOCATED IN THE FIELD BY TAPED MEASUREMENTS FROM EXISTING SITE FEATURES.
3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED APARTMENT BUILDING, 25 & 29 CRESENT STREET, PORTLAND, MAINE", DATED OCTOBER 24, 2008.
4. THE PURPOSE OF THIS PLAN IS ONLY TO DEPICT THE LOCATION OF THE EXPLORATIONS IN RELATION TO THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION AND IS NOT TO BE USED FOR CONSTRUCTION.

S.W.COLE ENGINEERING, INC.

DEVELOPERS COLLABORATIVE

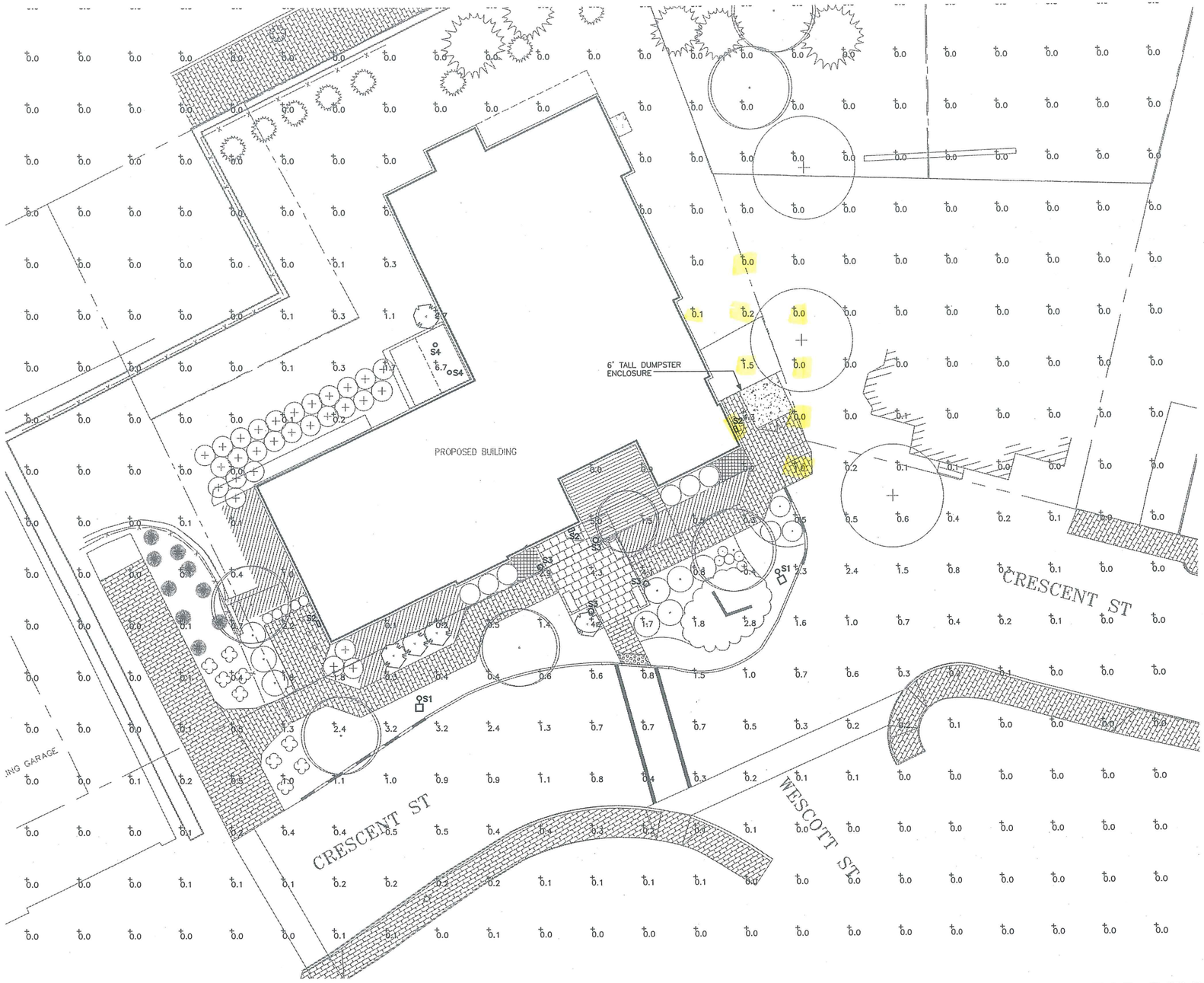
EXPLORATION LOCATION PLAN

PROPOSED APARTMENT BUILDING
22 AND 29 CRESCENT STREET
PORTLAND, MAINE

Job No. 08-0744 S
Date : 10/24/08

Scale 1" = 20'
Sheet 1

V:\2008\08-0744\08-0744 exp loc.dwg, 10/24/2008 1:21:32 PM, i:i, CEM, S.W. Cole Engineering, Inc.



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NORTH

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

FOR REVIEW ONLY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
1	02.25.09	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

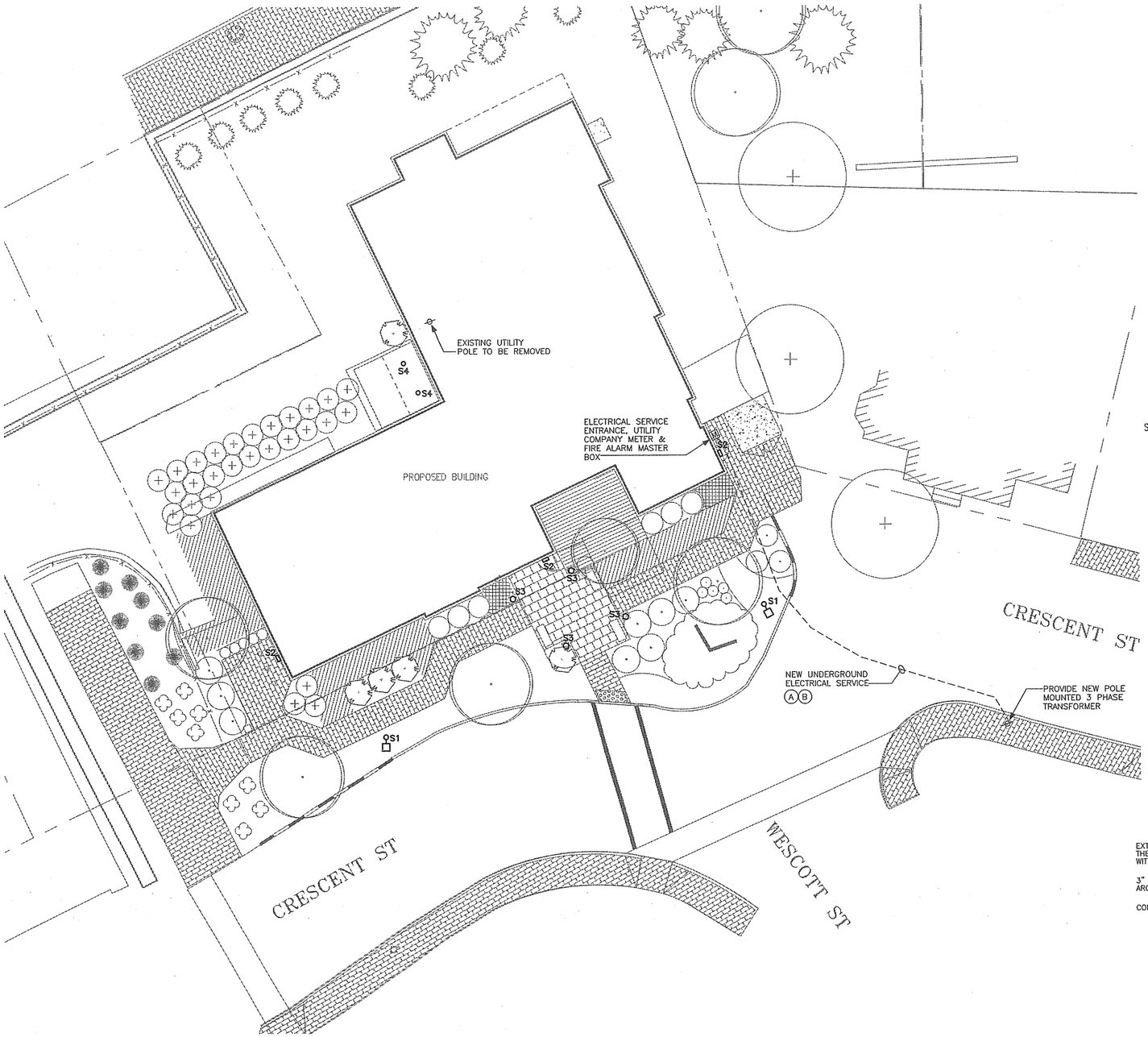
PROJECT: CRESCENT HEIGHTS

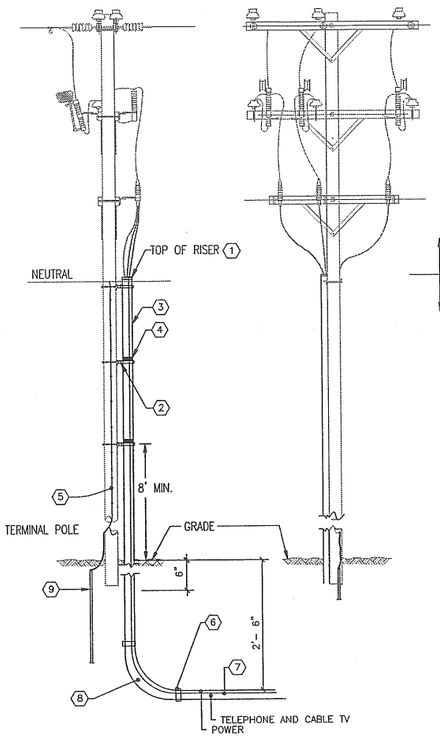
SHEET TITLE: PHOTOMETRIC LIGHTING PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

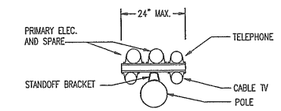
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	E-001		





RISER POLE DETAIL
NOT TO SCALE

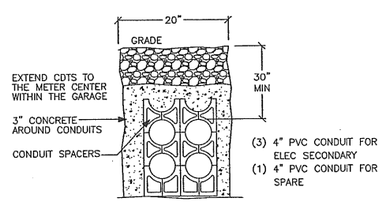


WORK BY UTILITY CO.'S

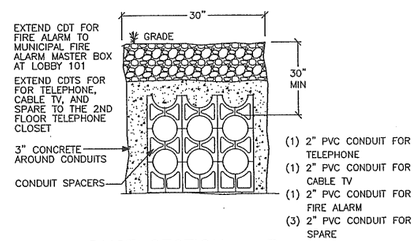
WORK BY ELEC. CONTRACTOR

NOTES

1. SEAL TOP OF CONDUIT WITH POLYURETHANE SEALER. TOP OF CONDUIT SHALL HAVE A DOUBLE NON-THREADED PLASTIC COUPLING. TOP OF CONDUIT SHALL EXTEND 4" ABOVE PRIMARY NEUTRAL.
2. CONDUIT STANDOFF BRACKETS -- CONDUIT SECTION USED WITH STANDOFF BRACKETS SHALL BE METAL CONDUIT ONLY. TOP CONDUIT SECTIONS LONGER THAN 24" MUST BE SUPPORTED. LOWEST BRACKET SHALL BE A MINIMUM OF 8 FEET ABOVE FINISHED GRADE. ONE BRACKET SHALL BE USED TO SUPPORT EACH 10 FOOT SECTION OF CONDUIT WITH THE BRACKET PLACED JUST BELOW THE RISER CONDUIT COUPLING. A BRACKET WILL ALSO BE PLACED TO HOLD THE TOP OF THE RISER CONDUIT.
3. RIGID STEEL GALVANIZED CONDUIT.
4. STEEL CONDUIT COUPLING.
5. CONDUIT GROUNDING CONNECTOR.
6. PVC TO STEEL CONDUIT COUPLING.
7. PVC SCHEDULE 40 CONDUIT. COVER WITH CONCRETE WHERE PASSING UNDER ROADWAYS OR DRIVES.
8. LONG SWEEP CONDUIT ELBOW.
9. 3/4" DIA BY 10 FT. LONG COPPER CLAD GROUND ROD.



DUCT SECTION – A
NOT TO SCALE



DUCT SECTION – B
NOT TO SCALE

NORTH

GRAPHIC SCALE

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REV	DATE	DESCRIPTION
1	02.25.09	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

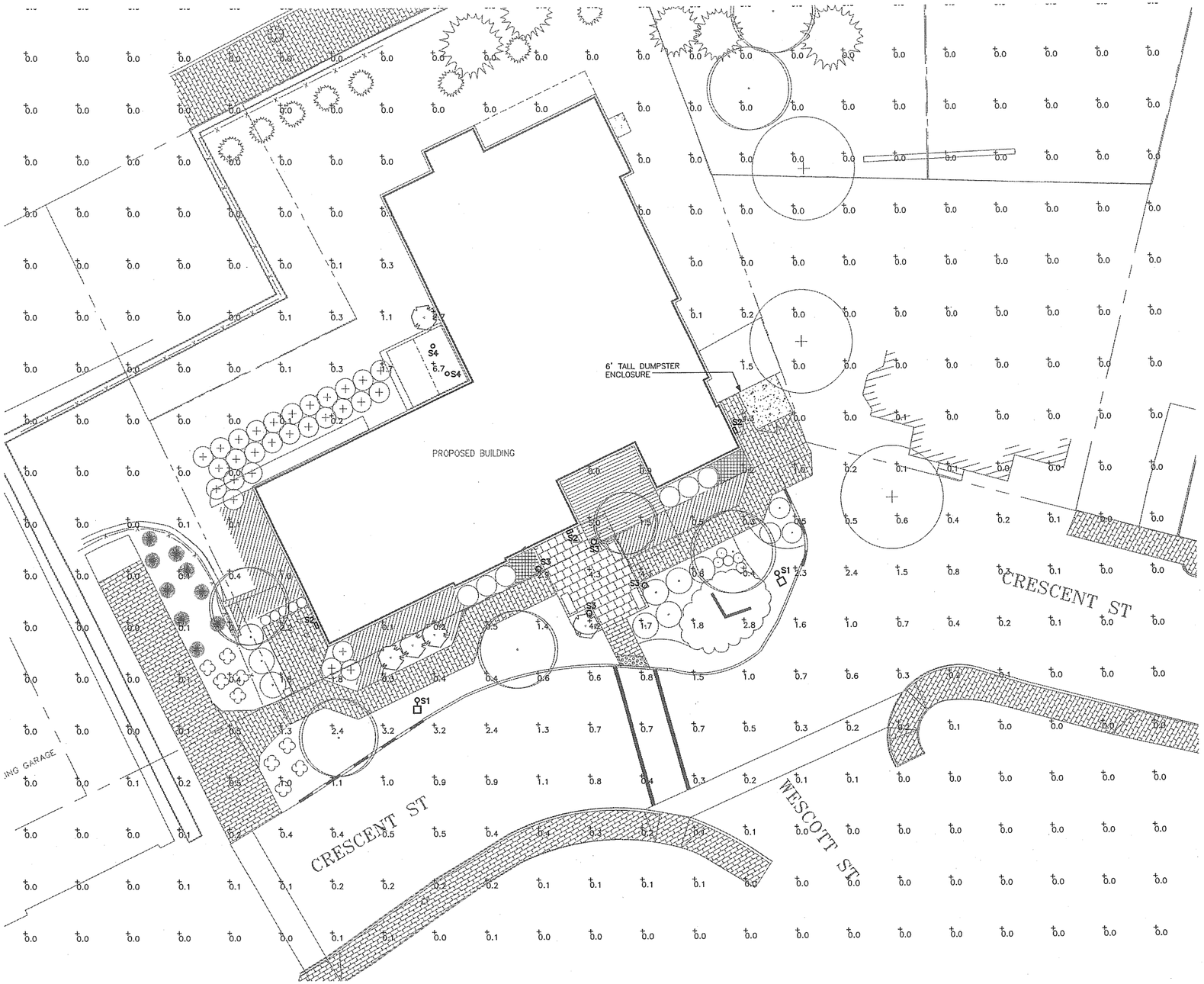
SHEET TITLE: ELECTRICAL SITE PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET: E-002



NOTES:

1. CALCULATED VALUES REPRESENT MAINTAINED FOOTCANDLE LEVELS AT GRADE.
2. FIXTURES TYPES ARE AS FOLLOWS:
   TYPE S1 – EXISTING POLE MOUNTED LIGHT
   TYPE S2 – GUTH LIGHTING, SUNDOWNER SERIES, 32W COMPACT FLUORESCENT, 2400 LUMENS, .77 LLF
   TYPE S3 – KIM LIGHTING, HIGH PERFORMANCE BOLLARD, 32W COMPACT FLUORESCENT, 2400 LUMENS, .77 LLF
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3. THE TYPE S2 LIGHTS LOCATED ON THE SOUTHWEST SIDE AND ON THE FRONT OF THE BUILDING ARE MOUNTED AT 12 FOOT ABOVE GRADE. THE TYPE S2 LIGHT LOCATED ON THE NORTHEAST SIDE OF THE BUILDING IS MOUNTED AT 9 FOOT ABOVE GRADE.

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REVISIONS

P.E. STEPHEN BUSHEY
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PROJECT: CRESCENT HEIGHTS

SHEET TITLE: PHOTOMETRIC LIGHTING PLAN

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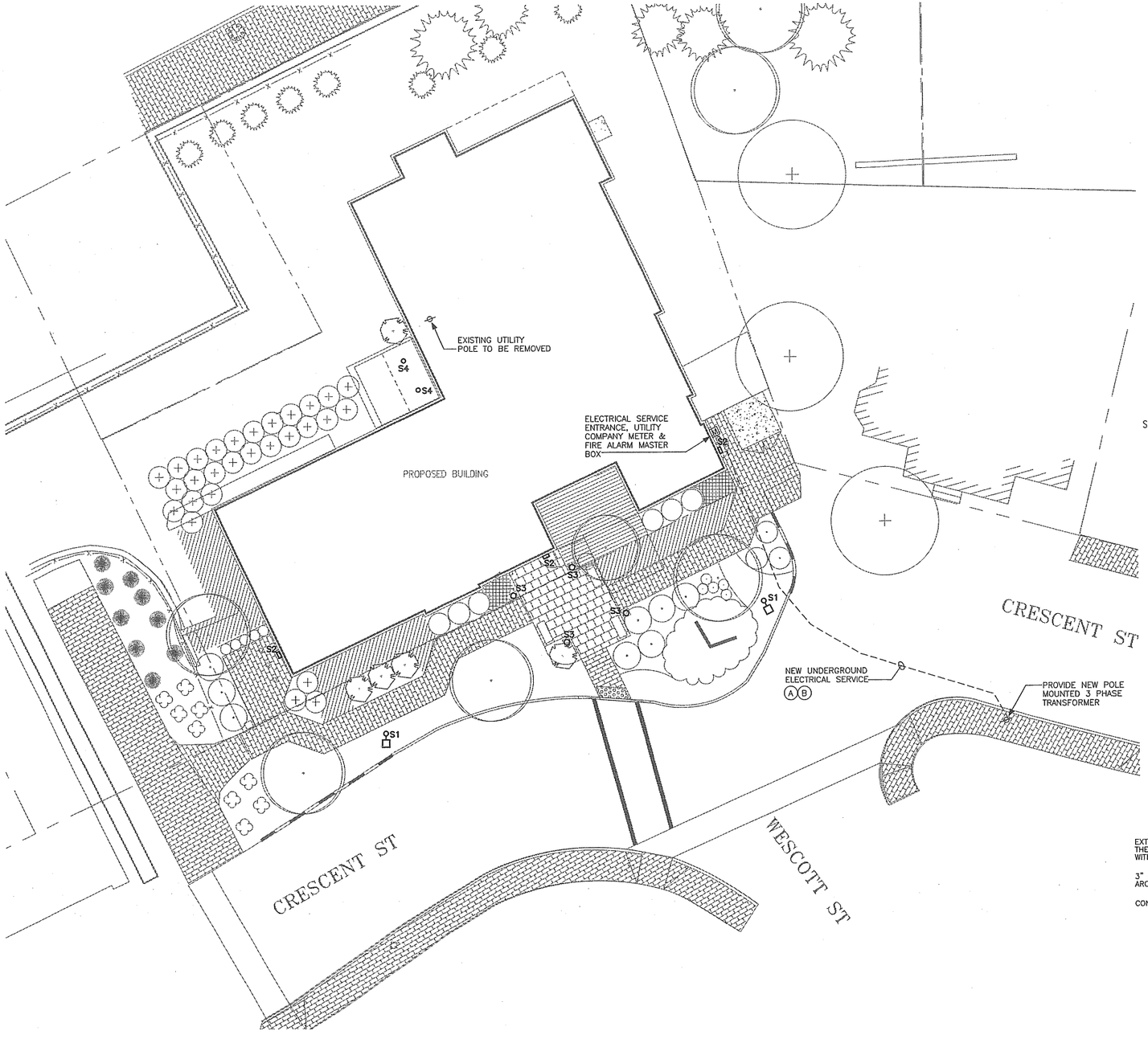

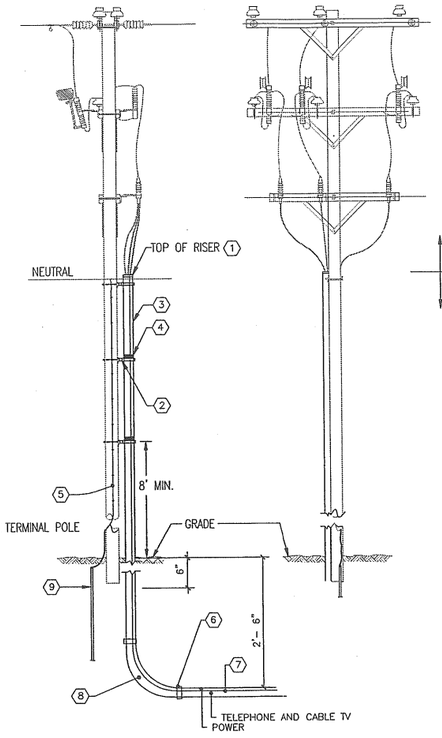

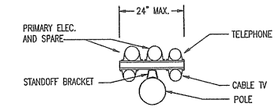

WORK BY UTILITY CO.'S

WORK BY ELEC. CONTRACTOR

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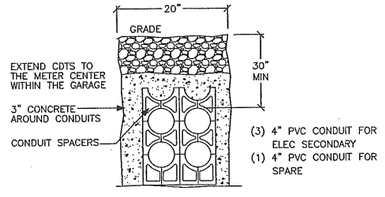
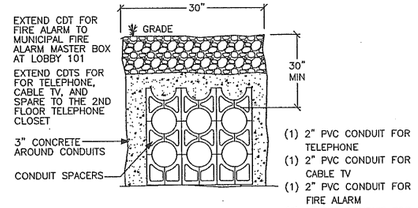
RISER POLE DETAIL
NOT TO SCALE



DUCT SECTION – A
NOT TO SCALE



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REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
ELECTRICAL SITE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
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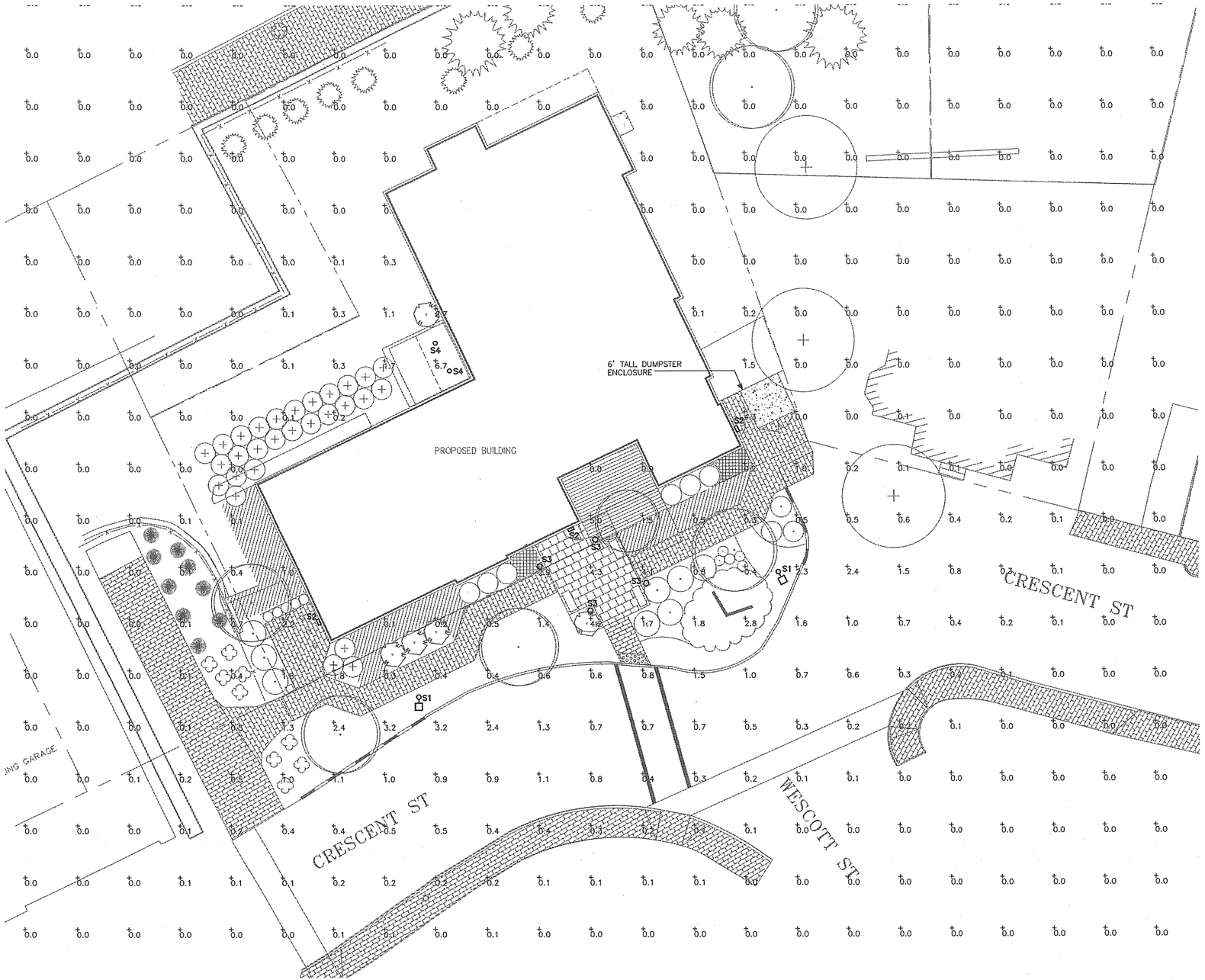
CHECKED:	LEB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET E-002



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CRESCENT HEIGHTS

SHEET TITLE
PHOTOMETRIC LIGHTING PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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207.775.1121
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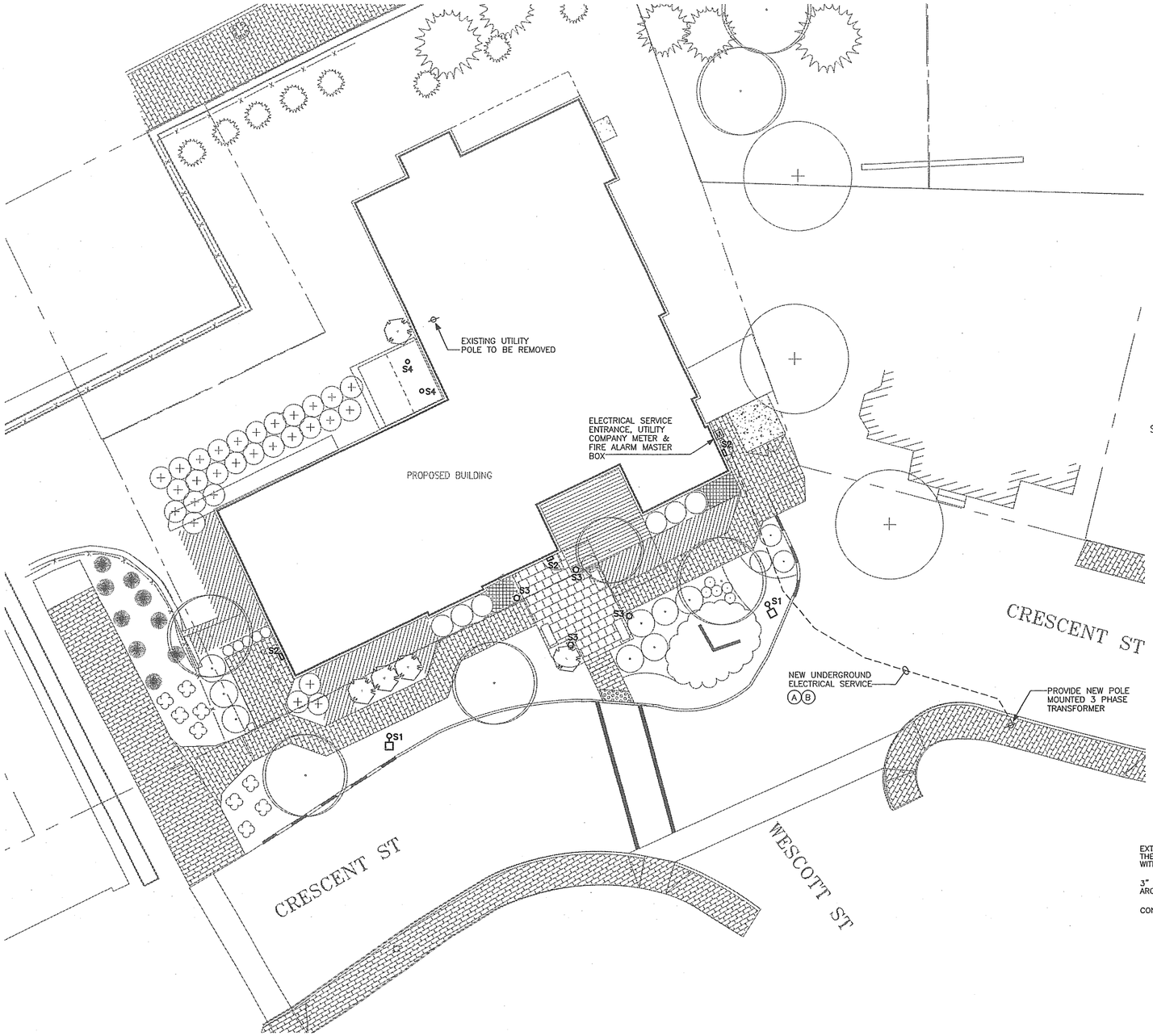

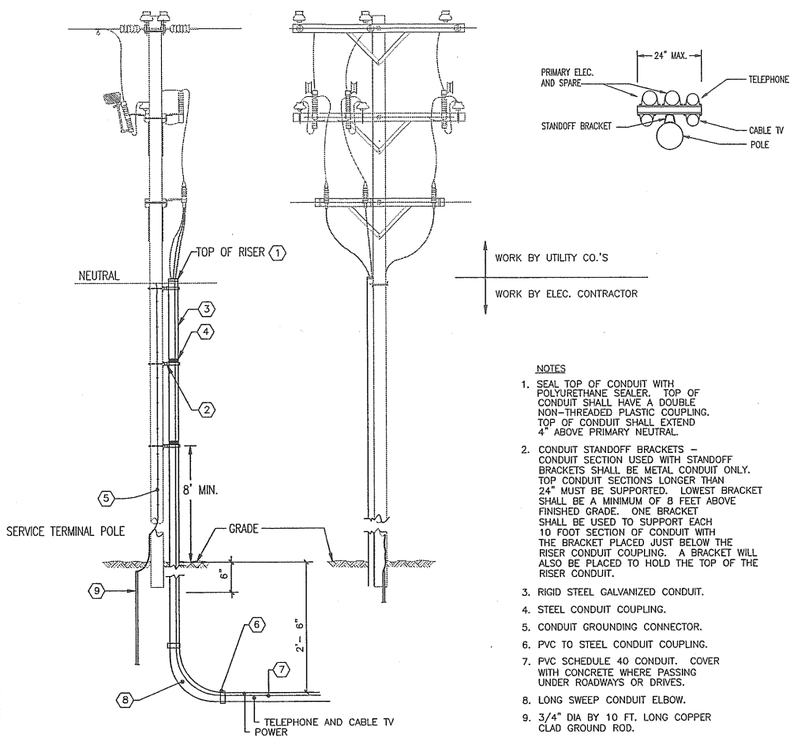

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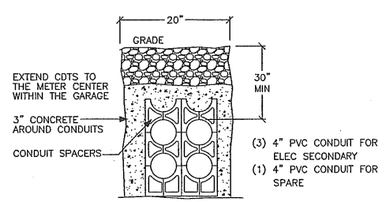
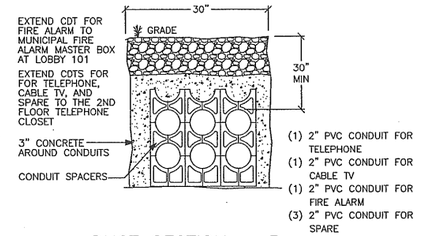


DUCT SECTION – A
NOT TO SCALE



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1	02.25.09	RESUBMISSION TO CITY OF PORTLAND

REVISIONS

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
ELECTRICAL SITE PLAN

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 6
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	JLC	DATE:	DEC 2008
DESIGNED:	JLC	SCALE:	1" = 10'
CHECKED:	LEB	JOB NO.	2827
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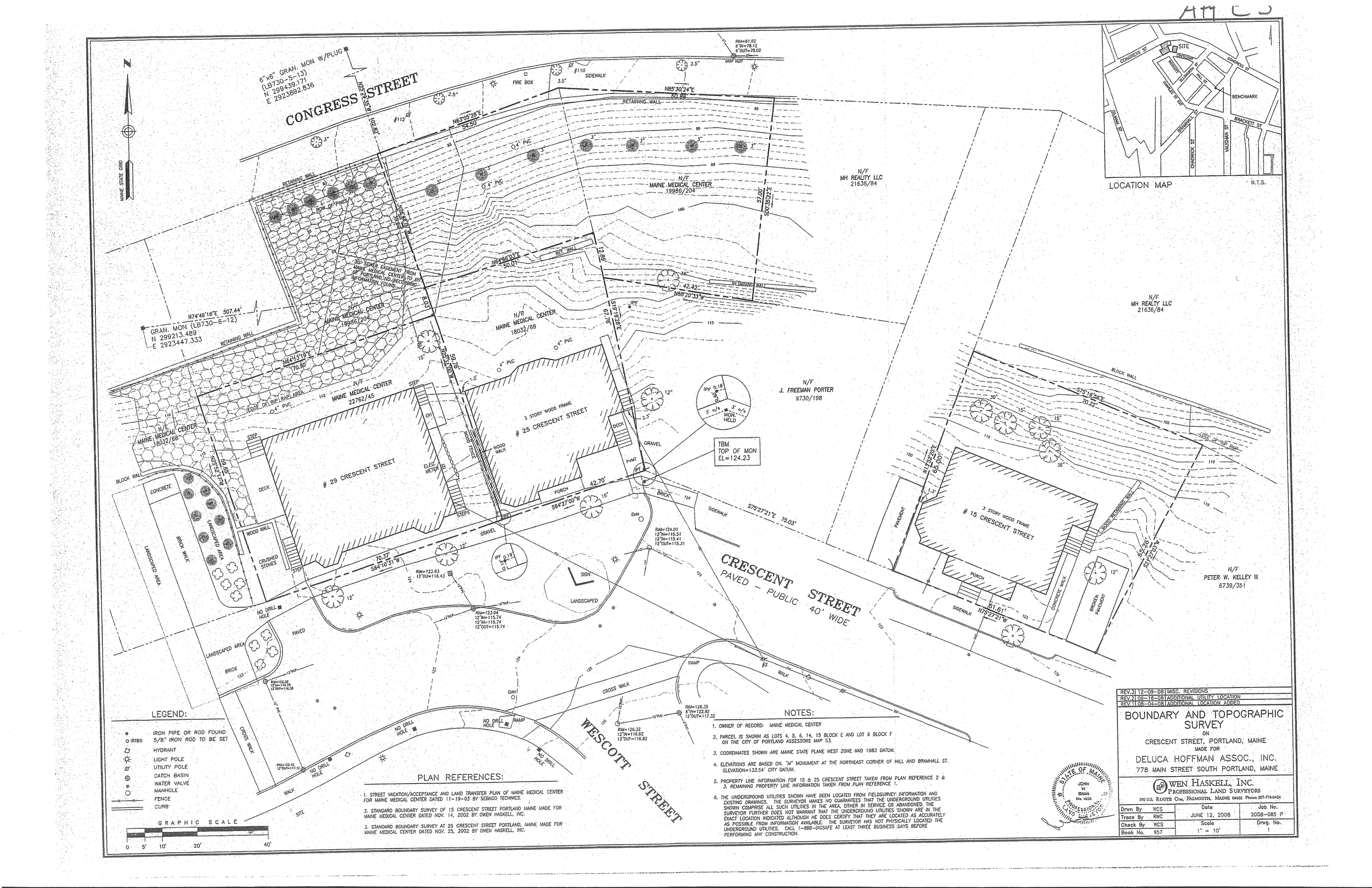
SHEET E-002



REVISIONS	
REV.3 12-09-08	MISC. REVISIONS
REV.2 09-16-08	ADDITIONAL UTILITY LOCATION
REV.1 09-04-08	ADDITIONAL LOCATION ADDED

BOUNDARY AND TOPOGRAPHIC SURVEY

ON

CRESCENT STREET, PORTLAND, MAINE

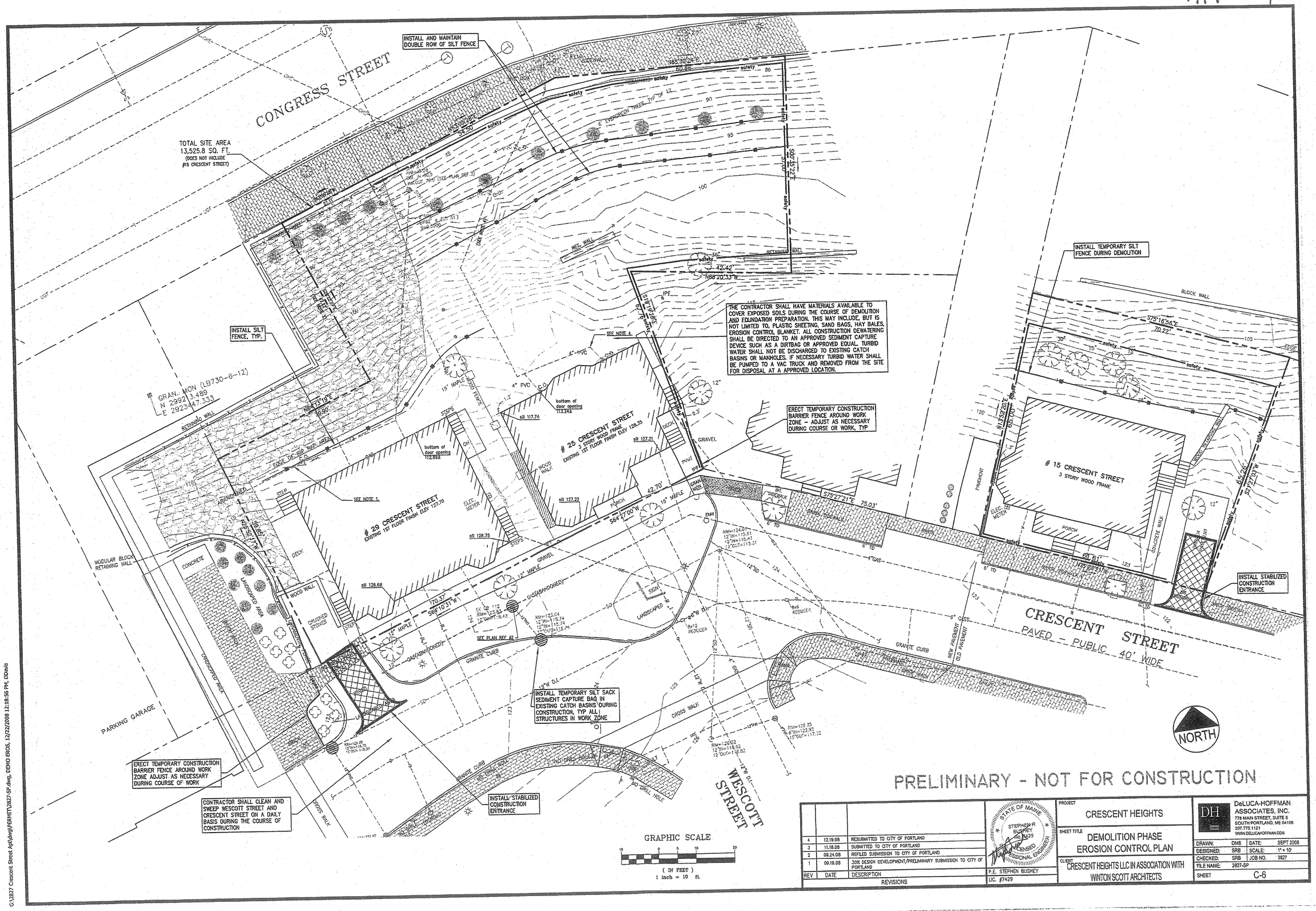
MADE FOR

DELUCA HOFFMAN ASSOC., INC.

778 MAIN STREET SOUTH PORTLAND, MAINE

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE One, FALMOUTH, MAINE 04105 Phone: 207-774-0424

Drwn By WCS	Date JUNE 12, 2008	Job No. 2008-085 P
Trace By RWC		
Check By WCS	Scale 1" = 10'	Drwg. No. 1
Book No. 957		



PRELIMINARY - NOT FOR CONSTRUCTION

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMITTED TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
No. 7429
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: DEMOLITION PHASE EROSION CONTROL PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		
SHEET	C-6		

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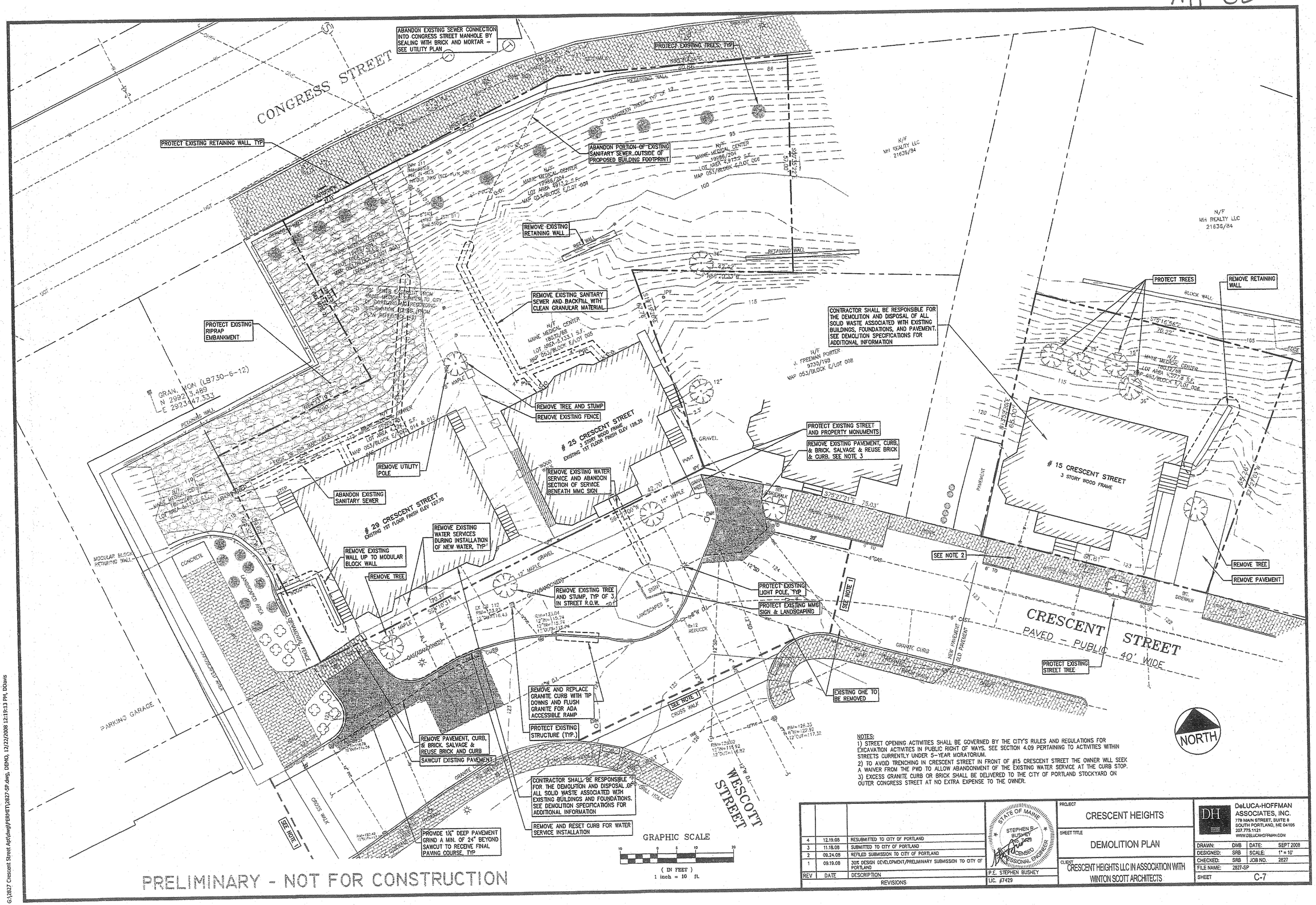
A11 E5



NOTES:
1) STREET OPENING ACTIVITIES SHALL BE GOVERNED BY THE CITY'S RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. SEE SECTION 4.09 PERTAINING TO ACTIVITIES WITHIN STREETS CURRENTLY UNDER 5-YEAR MORATORIUM.
2) TO AVOID TRENCHING IN CRESCENT STREET IN FRONT OF #15 CRESCENT STREET THE OWNER WILL SEEK A WAIVER FROM THE PWD TO ALLOW ABANDONMENT OF THE EXISTING WATER SERVICE AT THE CURB STOP.
3) EXCESS GRANITE CURB OR BRICK SHALL BE DELIVERED TO THE CITY OF PORTLAND STOCKYARD ON OUTER CONGRESS STREET AT NO EXTRA EXPENSE TO THE OWNER.

PRELIMINARY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMITTED TO CITY OF PORTLAND
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REVISIONS

STATE OF MAINE
STEPHEN B. BUSHEY
LICENSED
PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: DEMOLITION PLAN
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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SHEET	C-7		

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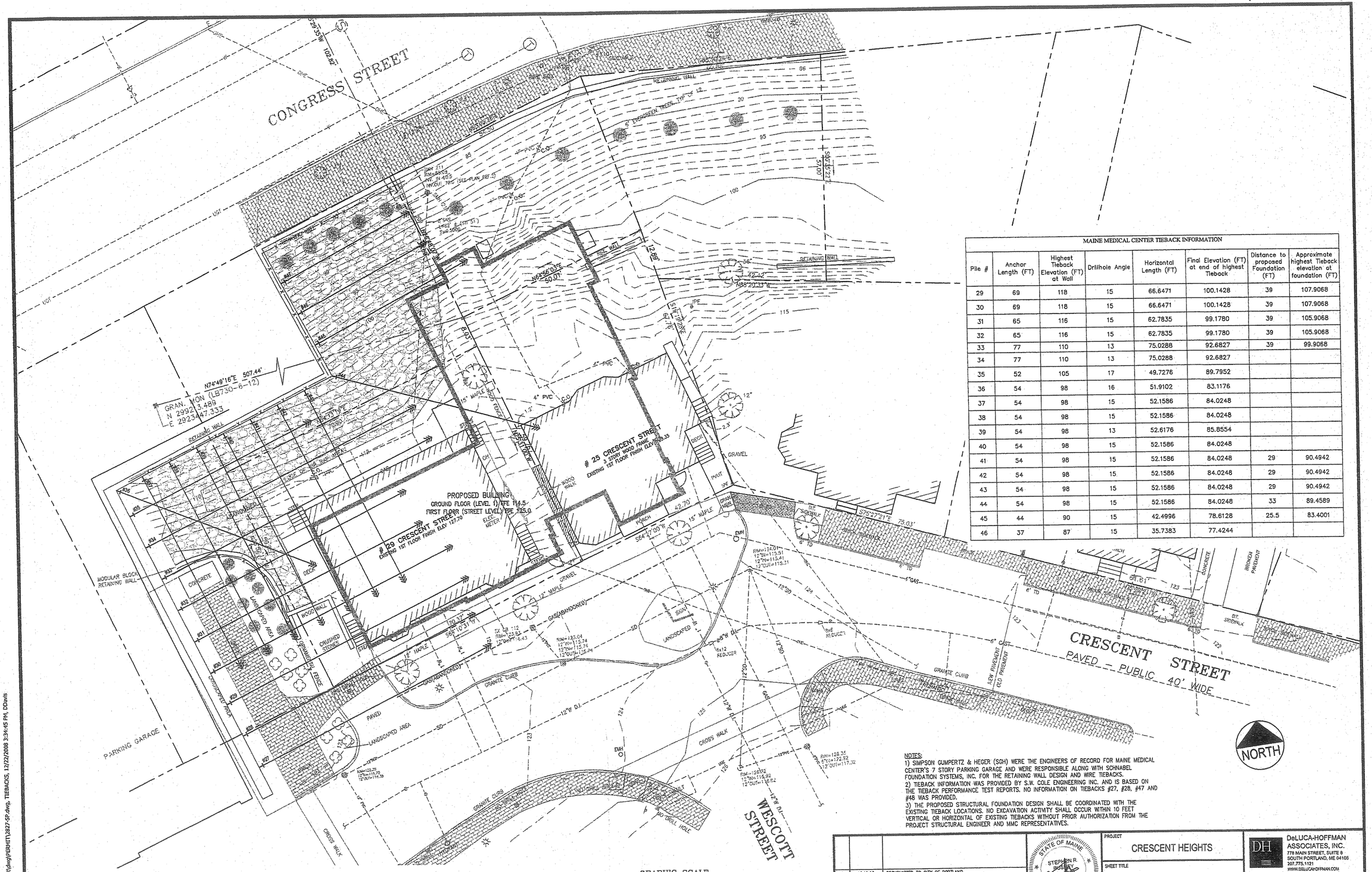

MAINE MEDICAL CENTER TIEBACK INFORMATION

Pile #	Anchor Length (FT)	Highest Tieback Elevation (FT) at Wall	Drillhole Angle	Horizontal Length (FT)	Final Elevation (FT) at end of highest Tieback	Distance to proposed Foundation (FT)	Approximate highest Tieback elevation at foundation (FT)
29	69	118	15	66.6471	100.1428	39	107.9068
30	69	118	15	66.6471	100.1428	39	107.9068
31	65	116	15	62.7835	99.1780	39	105.9068
32	65	116	15	62.7835	99.1780	39	105.9068
33	77	110	13	75.0288	92.6827	39	99.9068
34	77	110	13	75.0288	92.6827		
35	52	105	17	49.7276	89.7952		
36	54	98	16	51.9102	83.1176		
37	54	98	15	52.1586	84.0248		
38	54	98	15	52.1586	84.0248		
39	54	98	13	52.6176	85.8554		
40	54	98	15	52.1586	84.0248		
41	54	98	15	52.1586	84.0248	29	90.4942
42	54	98	15	52.1586	84.0248	29	90.4942
43	54	98	15	52.1586	84.0248	29	90.4942
44	54	98	15	52.1586	84.0248	33	89.4589
45	44	90	15	42.4996	78.6128	25.5	83.4001
46	37	87	15	35.7383	77.4244		

NOTES:
1) SIMPSON GUMPERTZ & HEGER (SGH) WERE THE ENGINEERS OF RECORD FOR MAINE MEDICAL CENTER'S 7 STORY PARKING GARAGE AND WERE RESPONSIBLE ALONG WITH SCHNABEL FOUNDATION SYSTEMS, INC. FOR THE RETAINING WALL DESIGN AND WIRE TIEBACKS.
2) TIEBACK INFORMATION WAS PROVIDED BY S.W. COLE ENGINEERING INC. AND IS BASED ON THE TIEBACK PERFORMANCE TEST REPORTS. NO INFORMATION ON TIEBACKS #27, #28, #47 AND #48 WAS PROVIDED.
3) THE PROPOSED STRUCTURAL FOUNDATION DESIGN SHALL BE COORDINATED WITH THE EXISTING TIEBACK LOCATIONS. NO EXCAVATION ACTIVITY SHALL OCCUR WITHIN 10 FEET VERTICAL OR HORIZONTAL OF EXISTING TIEBACKS WITHOUT PRIOR AUTHORIZATION FROM THE PROJECT STRUCTURAL ENGINEER AND MMC REPRESENTATIVES.

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
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REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
NO. 7429
LICENSED
PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT
CRESCENT HEIGHTS

SHEET TITLE
MMC RETAINING WALL TIEBACKS

CLIENT
CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

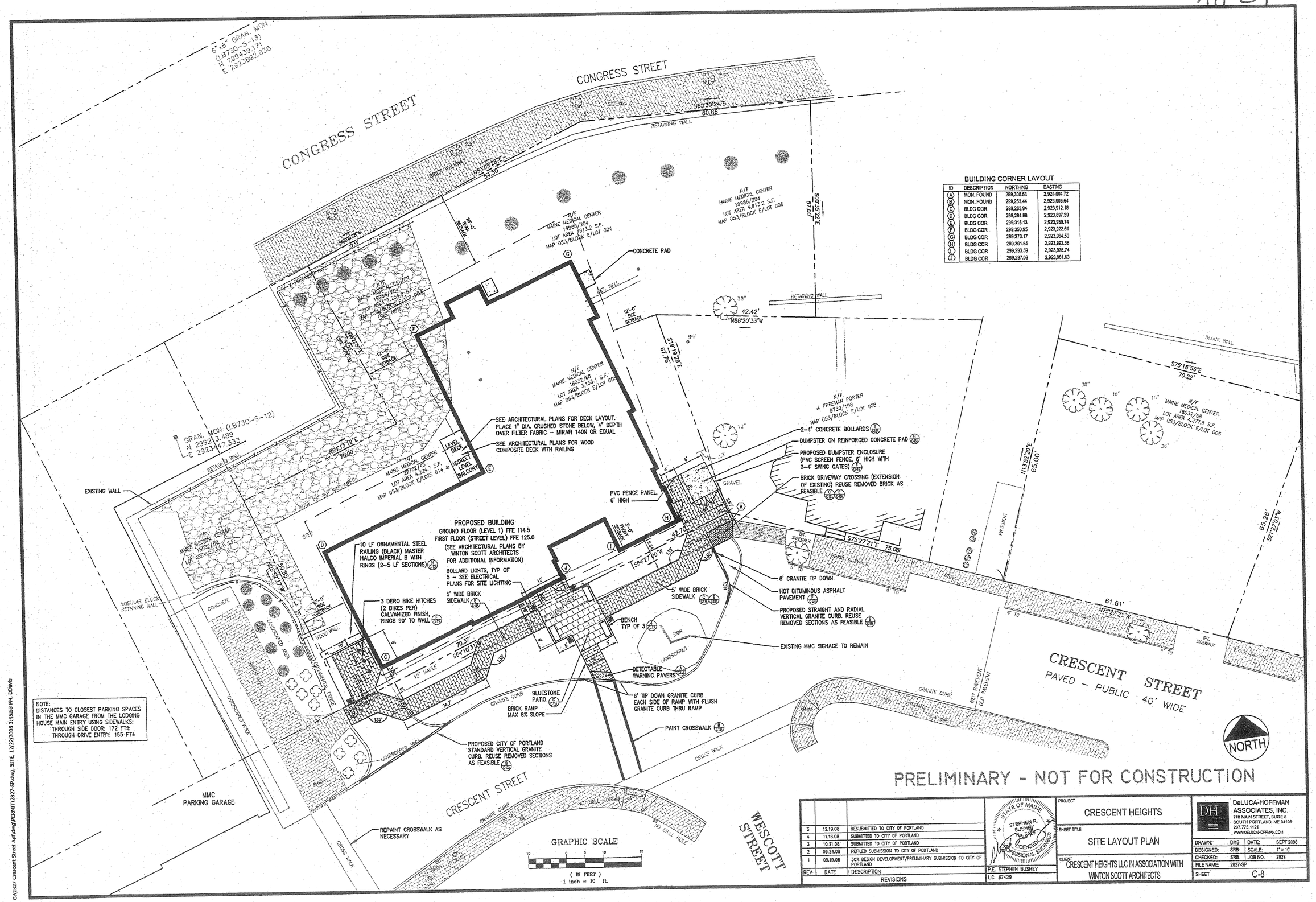
DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB	DATE:	SEPT 2008
DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-SP		

SHEET C-5

G:\2827 Crescent Street Apt\dwg\PERMIT\2827-SP.dwg, TIEBACKS, 12/22/2008 3:34:45 PM, DDavis

AH E7



REV.	DATE	DESCRIPTION
5	12.19.08	RESUBMITTED TO CITY OF PORTLAND
4	11.18.08	SUBMITTED TO CITY OF PORTLAND
3	10.21.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STEPHEN R. BUSHEY 10429 LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: SITE LAYOUT PLAN
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
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SHEET	C-8		

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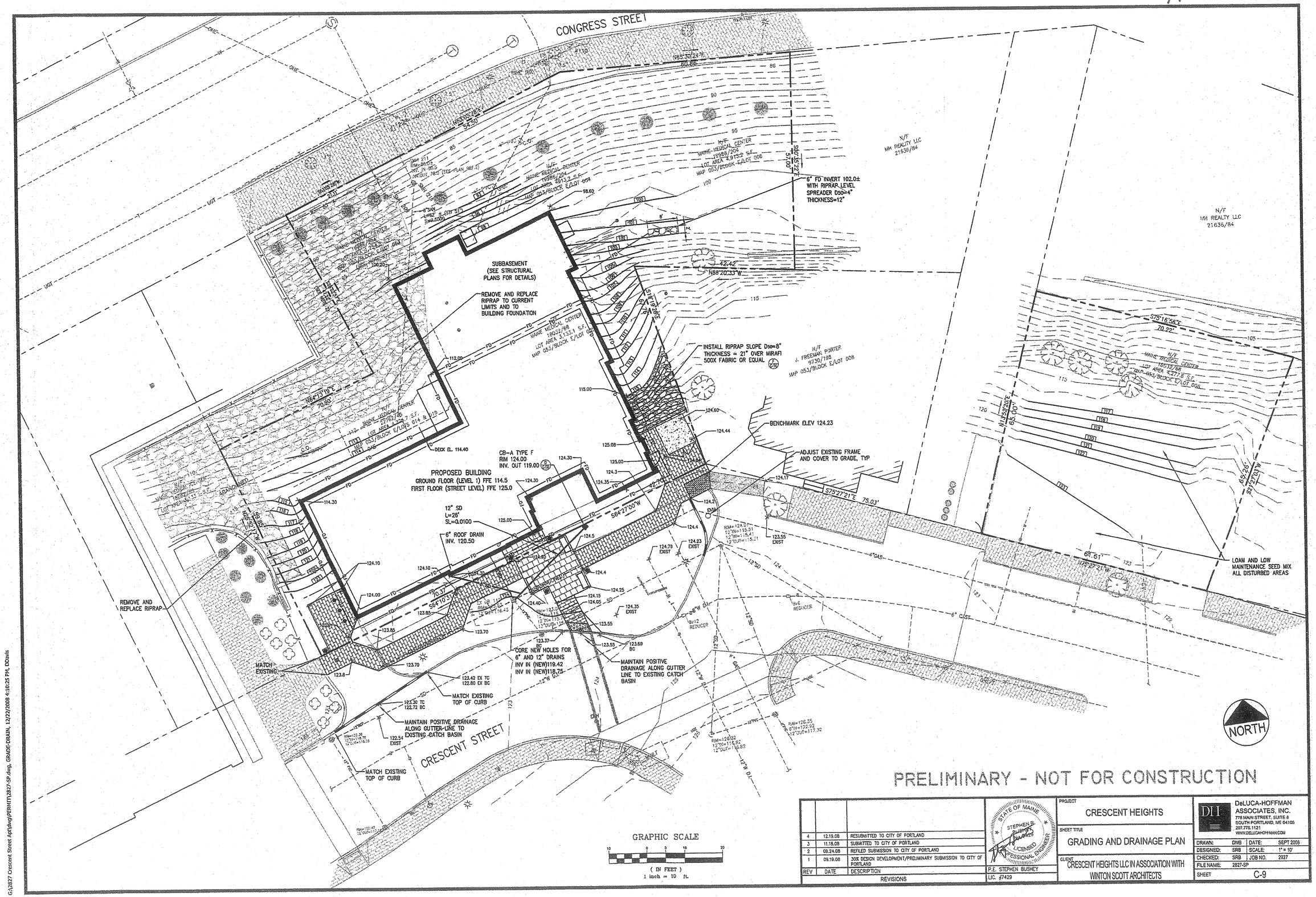

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2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN E. BUSHEY
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: GRADING AND DRAINAGE PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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DESIGNED:	SRB	SCALE:	1" = 10'
CHECKED:	SRB	JOB NO.	2927
FILE NAME:	2827-SP		
SHEET	C-9		

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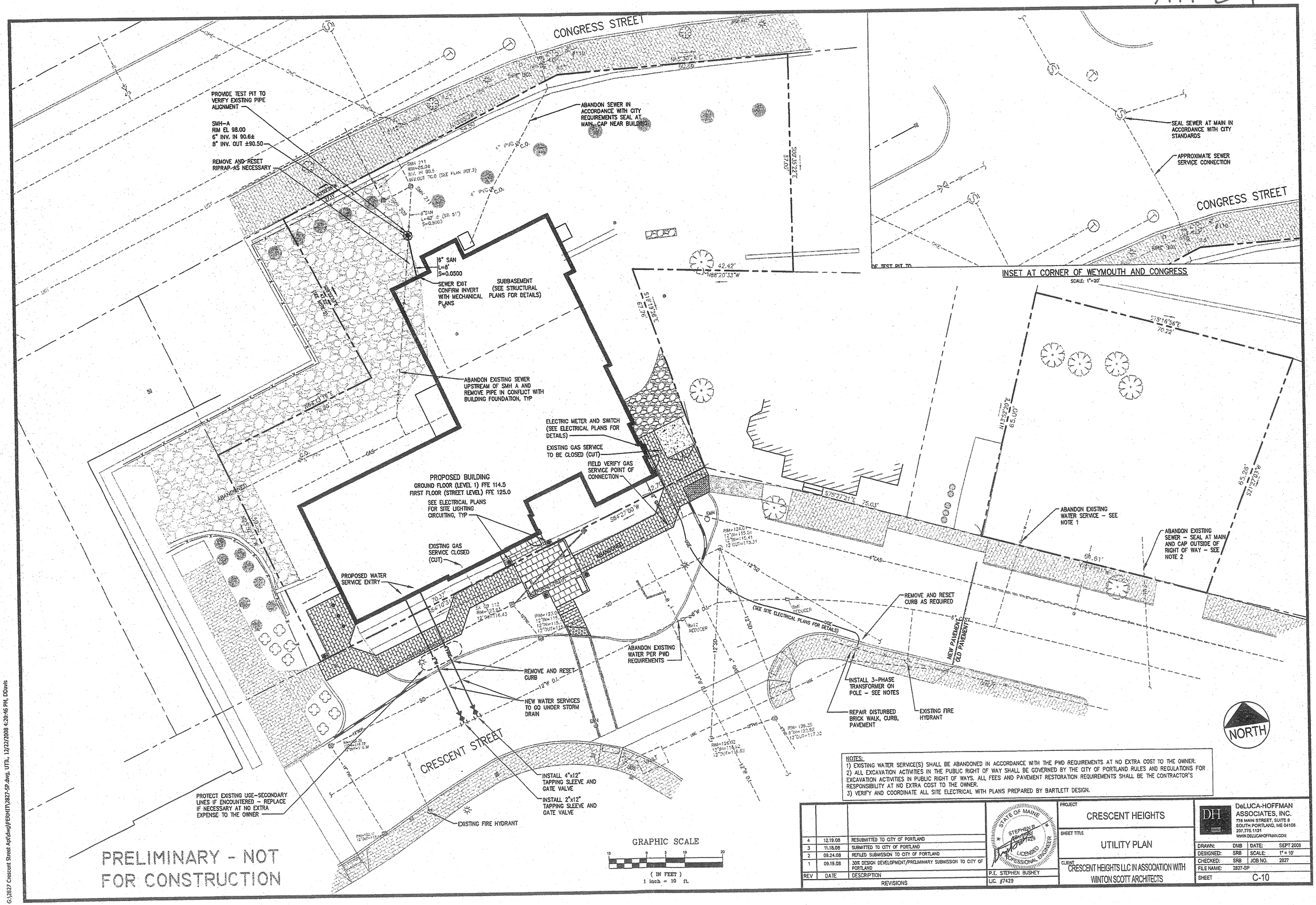

PRELIMINARY - NOT FOR CONSTRUCTION

NOTES:
1) EXISTING WATER SERVICE(S) SHALL BE ABANDONED IN ACCORDANCE WITH THE PWD REQUIREMENTS AT NO EXTRA COST TO THE OWNER.
2) ALL EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY SHALL BE GOVERNED BY THE CITY OF PORTLAND RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN PUBLIC RIGHT OF WAYS. ALL FEES AND PAVEMENT RESTORATION REQUIREMENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AT NO EXTRA COST TO THE OWNER.
3) VERIFY AND COORDINATE ALL SITE ELECTRICAL WITH PLANS PREPARED BY BARTLETT DESIGN.

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMITTED TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30R DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN R. BUSHEY 7429 LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: UTILITY PLAN
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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DRAWN:	DMB	DATE:	SEPT 2008
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FILE NAME:	2827-SP		
SHEET	C-10		

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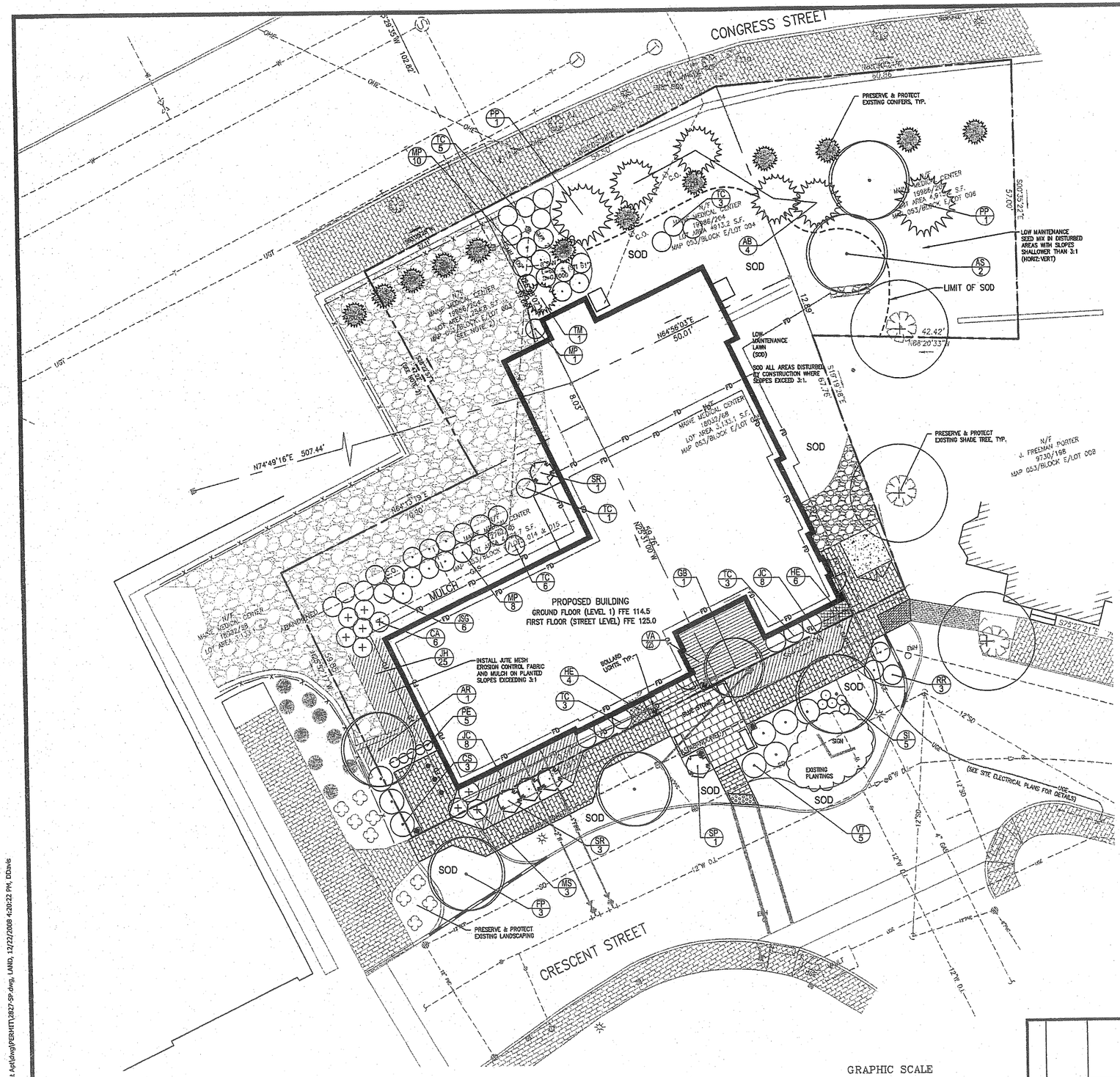

PLANT LIST

KEY	QTY	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	SPACING	REMARKS
TREES						
AB	4	Abies balsamea Balsam Fir	6-7' ht.	B&B		
AR	1	Acer rubrum 'Autumn Flame' Autumn Flame Red Maple	2 1/2-3" cal.	B&B		
AS	2	Acer saccharum 'Green Mountain' Green Mountain Sugar Maple	2 1/2-3" cal.	B&B		
FP	3	Fraxinus pennsylvanica 'Summit' Summit Ash	2 1/2-3" cal.	B&B		
GB	1	Ginkgo biloba Ginkgo Tree	2" cal.	B&B		
PP	2	Picea pungens 'Glauca' Colorado Blue Spruce	6-7' ht.	B&B		
TM	1	Taxusmedia 'Hicksii' Hick's Yew	24-30" ht	B&B		
SHRUBS & ORNAMENTAL GRASSES						
CA	6	Calamagrostis acutifolia 'Karl Foerster' Karl Foerster Feather Reed Grass	full	3 gal.	4'oc	
CS	3	Cornus sericea 'Isanti' Isanti Red Twig Dogwood	24-30" ht	5 gal./B&B	5'oc	
JSG	6	Juniperus chinensis 'Sea Green' Sea Green Juniper	18-24" spr.	3 gal/B&B	4'oc	
MP	18	Myrica pensylvanica Bayberry	18-24" ht	3 gal/B&B	4'oc	
MS	3	Miscanthus sinensis 'Graziella' Silver Grass	full	3 gal.	4'oc	
RR	3	Rosa rugosa Rugosa Rose, pink	18-24"ht.	3 gal.	4'oc	
SP	1	Syringa patula 'Miss Kim' Miss Kim Lilac	30-36" ht.	B&B		
SR	4	Syringa x prestoniae 'Donald Wyman' Lilac, deep pink	30-36" ht.	B&B	4'oc	shrub form
TC	18	Taxus cuspidata 'Green Wave' Green Wave Yew	18-24" spr.	B&B/3 gal.	4'oc	
VT	5	Viburnum triloburn 'Alfredo' Alfredo American Cranberry Viburnum	24-30" ht.	B&B/3 gal.	5'oc	
GROUNDCOVER & PERENNIALS						
VA	225	Vaccinium angustifolium Low-bush Blueberry sod	sod	sq. ft.		
HE	10	Hemerocallis, mixed Daylily, red, yellow, orange mixed	3-4 ppp	1 gal.	2' oc	similar blade/plant size
JC	16	Juniperus chinensis 'Blue Chip' Blue Chip Juniper	18-24" spr.	3 gal.	4' oc	
*JH	25	Juniperus horizontalis 'Bar Harbor' Creeping Thyme	18-24" spr.	3 gal.	3' oc	on >3:1 slope
PE	5	Perennials, flowering	full	1 gal.	2' oc	

* ALTERNATE: Low-bush Blueberry sod, 275 S.F.

LANDSCAPE LEGEND

- DECIDUOUS SHADE TREE
- ORNAMENTAL TREE
- EVERGREEN TREE
- DECIDUOUS SHRUB/ ORNAMENTAL GRASS
- EVERGREEN SHRUB
- EXISTING TREES AND SHRUBS TO REMAIN
- EVERGREEN GROUND COVER WITH MULCH
- DECIDUOUS GROUND COVER WITH MULCH
- FLOWERING PERENNIAL GROUND COVER WITH MULCH

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION
3	12.19.08	RESUBMITTED TO CITY OF PORTLAND
2	11.18.08	SUBMITTED TO CITY OF PORTLAND
1	08.29.08	30% DESIGN DEVELOPMENT

REVISIONS

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: LANDSCAPE PLAN

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
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207.775.1121
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DRAWN:	DMB
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FILE NAME:	2827-SP
DATE:	SEPT 2008
SCALE:	1" = 10'
JOB NO.	2827
SHEET	C-11

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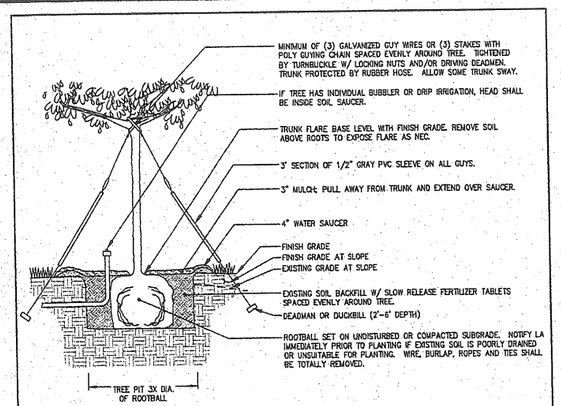

A TREE INSTALLATION DETAIL: >10' HT.
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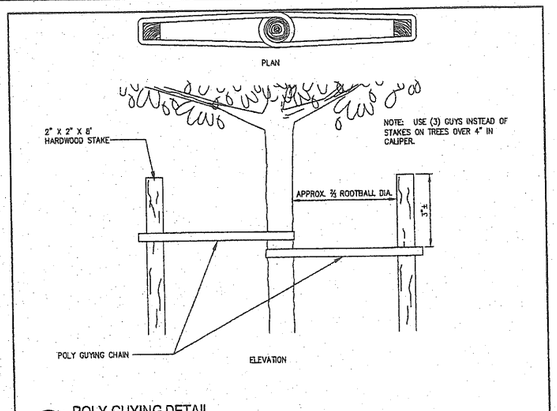

D POLY GUYING DETAIL
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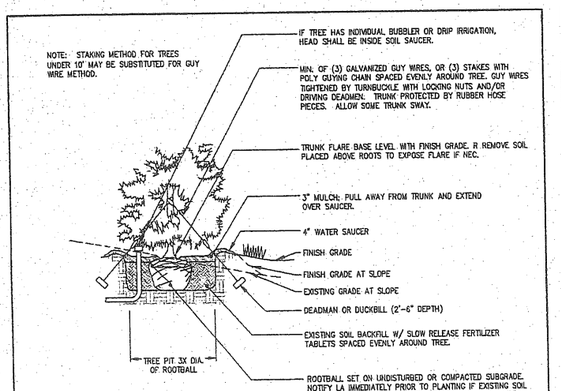

B CONIFER INSTALLATION DETAIL
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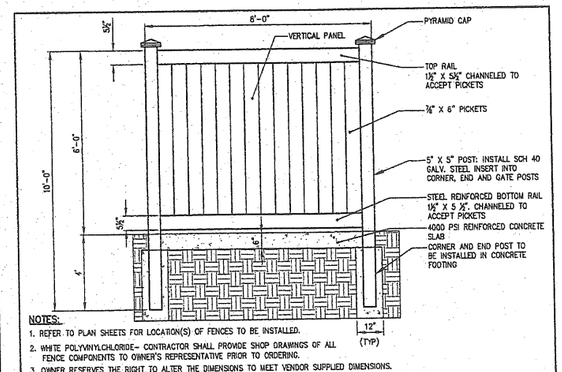
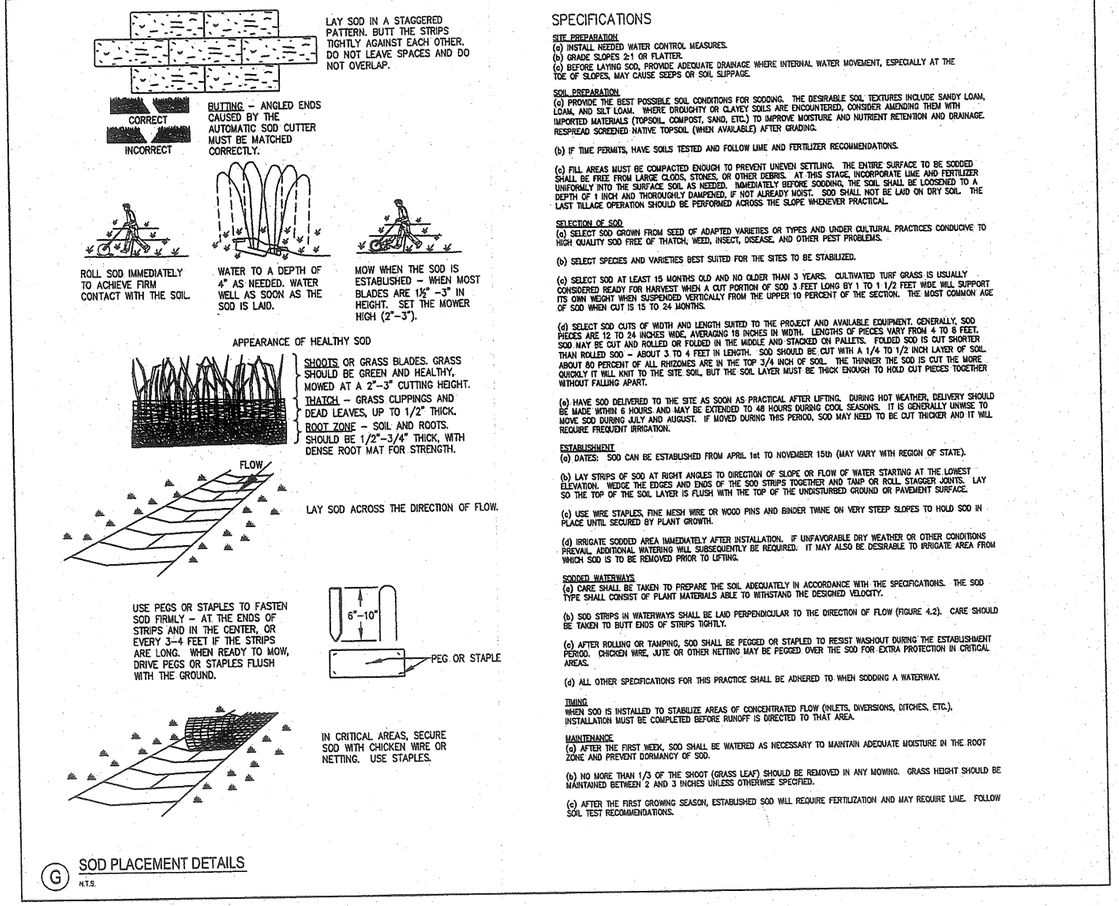


NOTES:
1. REFER TO PLAN SHEETS FOR LOCATION(S) OF FENCES TO BE INSTALLED.
2. WHITE POLYVINYLCHLORIDE- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL FENCE COMPONENTS TO OWNER'S REPRESENTATIVE PRIOR TO ORDERING.
3. OWNER RESERVES THE RIGHT TO ALTER THE DIMENSIONS TO MEET VENDOR SUPPLIED DIMENSIONS.
4. CORNER & END POSTS AND GATE POSTS ARE TO BE SET IN FIBER REINFORCED CONCRETE. REFER TO THE CONTRACT SPECIFICATIONS.
5. STEEL REINFORCED DOUBLE SWING GATES SHALL HAVE IRON PINS TO SECURE SWING.

F DUMPSTER ENCLOSURE FENCE DETAIL
N.T.S.



SPECIFICATIONS

SITE PREPARATION
(a) INSTALL NEEDED WATER CONTROL MEASURES.
(b) GRADE SLOPES 2:1 OR FLATTER.
(c) BEFORE LAYING SOD, PROVIDE ADEQUATE DRAINAGE WHERE INTERNAL WATER MOVEMENT, ESPECIALLY AT THE TOE OF SLOPES, MAY CAUSE SEEPS OR SOIL SLIPPAGE.

SOIL PREPARATION
(a) PROVIDE THE BEST POSSIBLE SOIL CONDITIONS FOR SODDING. THE DESIRABLE SOIL TEXTURES INCLUDE SANDY LOAM, LOAM, AND SILT LOAM. WHERE DROUGHTY OR CLAYEY SOILS ARE ENCOUNTERED, CONSIDER AMENDING THEM WITH IMPORTED MATERIALS (TOPSOIL, COMPOST, SAND, ETC.) TO IMPROVE MOISTURE AND NUTRIENT RETENTION AND DRAINAGE. RESPREAD SCREENED NATIVE TOPSOIL (WHEN AVAILABLE) AFTER GRADING.

(b) IF TIME PERMITS, HAVE SOILS TESTED AND FOLLOW LIME AND FERTILIZER RECOMMENDATIONS.

(c) FILL AREAS MUST BE COMPACTED ENOUGH TO PREVENT UNEVEN SETTLING. THE ENTIRE SURFACE TO BE SODDED SHALL BE FREE FROM LARGE CLODS, STONES, OR OTHER DEBRIS. AT THIS STAGE, INCORPORATE LIME AND FERTILIZER UNIFORMLY INTO THE SURFACE SOIL AS NEEDED. IMMEDIATELY BEFORE SODDING, THE SOIL SHALL BE LOOSENED TO A DEPTH OF 1 INCH AND THOROUGHLY DAMPENED, IF NOT ALREADY MOIST. SOD SHALL NOT BE LAID ON DRY SOIL. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHENEVER PRACTICAL.

SELECTION OF SOD
(a) SELECT SOD GROWN FROM SEED OF ADAPTED VARIETIES OR TYPES AND UNDER CULTURAL PRACTICES CONDUCIVE TO HIGH QUALITY SOD FREE OF THATCH, WEED, INSECT, DISEASE, AND OTHER PEST PROBLEMS.

(b) SELECT SPECIES AND VARIETIES BEST SUITED FOR THE SITES TO BE STABILIZED.

(c) SELECT SOD AT LEAST 15 MONTHS OLD AND NO OLDER THAN 3 YEARS. CULTIVATED TURF GRASS IS USUALLY CONSIDERED READY FOR HARVEST WHEN A CUT PORTION OF SOD 3 FEET LONG BY 1 TO 1 1/2 FEET WIDE WILL SUPPORT ITS OWN WEIGHT WHEN SUSPENDED VERTICALLY FROM THE UPPER 10 PERCENT OF THE SECTION. THE MOST COMMON AGE OF SOD WHEN CUT IS 15 TO 24 MONTHS.

(d) SELECT SOD CUTS OF WIDTH AND LENGTH SUITED TO THE PROJECT AND AVAILABLE EQUIPMENT. GENERALLY, SOD PIECES ARE 12 TO 24 INCHES WIDE, AVERAGING 18 INCHES IN WIDTH. LENGTHS OF PIECES VARY FROM 4 TO 8 FEET. PIECES ARE TO BE CUT AND ROLLED OR FOLDED IN THE MIDDLE AND STACKED ON PALLETS. FOLDED SOD IS CUT SHORTER THAN ROLLED SOD – ABOUT 3 TO 4 FEET IN LENGTH. SOD SHOULD BE CUT WITH A 1/4 TO 1/2 INCH LAYER OF SOIL. ABOUT 80 PERCENT OF ALL RHIZOMES ARE IN THE TOP 3/4 INCH OF SOIL. THE THINNER THE SOD IS CUT THE MORE QUICKLY IT WILL KNIT TO THE SITE SOIL, BUT THE SOIL LAYER MUST BE THICK ENOUGH TO HOLD CUT PIECES TOGETHER WITHOUT FALLING APART.

(e) HAVE SOD DELIVERED TO THE SITE AS SOON AS PRACTICAL AFTER LIFTING. DURING HOT WEATHER, DELIVERY SHOULD BE MADE WITHIN 6 HOURS AND MAY BE EXTENDED TO 48 HOURS DURING COOL SEASONS. IT IS GENERALLY UNWISE TO MOVE SOD DURING JULY AND AUGUST. IF MOVED DURING THIS PERIOD, SOD MAY NEED TO BE CUT THICKER AND IT WILL REQUIRE FREQUENT IRRIGATION.

ESTABLISHMENT
(a) DATES: SOD CAN BE ESTABLISHED FROM APRIL 1st TO NOVEMBER 15th (MAY VARY WITH REGION OF STATE).

(b) LAY STRIPS OF SOD AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT THE LOWEST ELEVATION. WEDGE THE EDGES AND ENDS OF THE SOD STRIPS TOGETHER AND TAMP OR ROLL. STAGGER JOINTS. LAY SO THE TOP OF THE SOIL LAYER IS FLUSH WITH THE TOP OF THE UNDISTURBED GROUND OR PAVEMENT SURFACE.

(c) USE WIRE STAPLES, FINE MESH WIRE OR WOOD PINS AND BINDER TWINE ON VERY STEEP SLOPES TO HOLD SOD IN PLACE UNTIL SECURED BY PLANT GROWTH.

(d) IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. IF UNFAVORABLE DRY WEATHER OR OTHER CONDITIONS PREVAIL, ADDITIONAL WATERING WILL SUBSEQUENTLY BE REQUIRED. IT MAY ALSO BE DESIRABLE TO IRRIGATE AREA FROM WHICH SOD IS TO BE REMOVED PRIOR TO LIFTING.

SODDED WATERWAYS
(a) CARE SHALL BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THE SPECIFICATIONS. THE SOD TYPE SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY.

(b) SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW (FIGURE 4.2). CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.

(c) AFTER ROLLING OR TAMPING, SOD SHALL BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. CHICKEN WIRE, JUTE OR OTHER NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

(d) ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

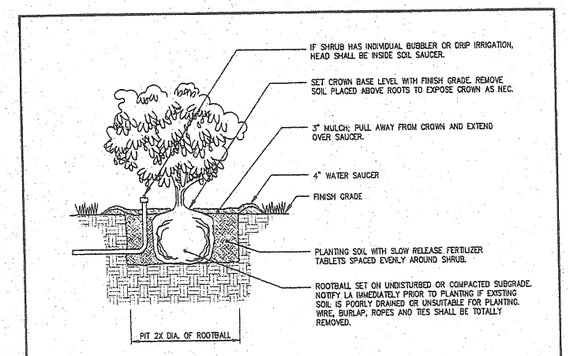
TIMING
WHEN SOD IS INSTALLED TO STABILIZE AREAS OF CONCENTRATED FLOW (INLETS, DIVERSIONS, DITCHES, ETC.), INSTALLATION MUST BE COMPLETED BEFORE RUNOFF IS DIRECTED TO THAT AREA.

MAINTENANCE
(a) AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.

(b) NO MORE THAN 1/3 OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

(c) AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS.

G SOD PLACEMENT DETAILS
N.T.S.



C SHRUB INSTALLATION DETAIL
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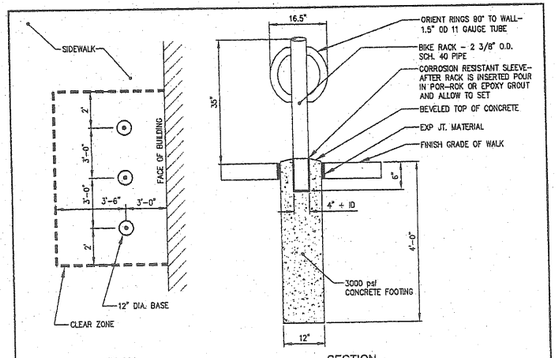

MFR: DERO BIKE RACKS
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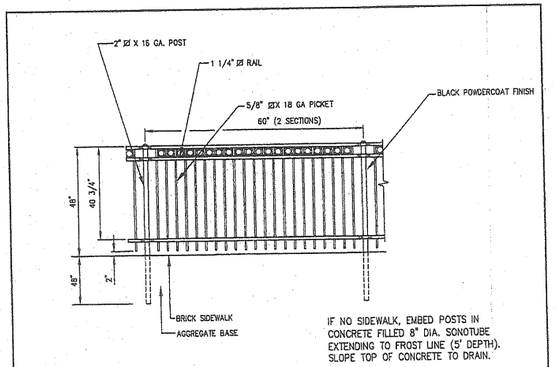
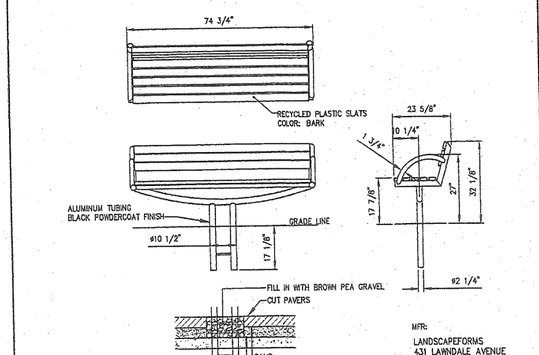
F BIKE HITCH MOUNTING DETAIL
N.T.S.



IF NO SIDEWALK, EMBED POSTS IN CONCRETE FILLED 8" DIA. SONOTUBE EXTENDING TO FROST LINE (5' DEPTH). SLOPE TOP OF CONCRETE TO DRAIN.

MASTER HALCO COMMERCIAL GRADE
IMPERIAL B W/RINGS

H ORNAMENTAL METAL PICKET FENCE DETAIL
N.T.S.



MFR:
LANDSCAPEFORMS
431 LAWNDALE AVENUE
KALAMAZOO, MI 49001
800/521–2546
616/381–3455 FAX

I BENCH DETAIL
N.T.S.

REV	DATE	DESCRIPTION
4	12.19.06	RESUBMISSION TO CITY OF PORTLAND
3	11.18.06	SUBMITTED TO CITY OF PORTLAND
2	09.24.06	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.06	SDR DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

SHELLEY E. BRUNELLE, RLA
LIC. #LAR2593

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: LANDSCAPE AND SITE FURNISHING DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
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DRAWN:	DMB	DATE:	OCT 2006
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-12		

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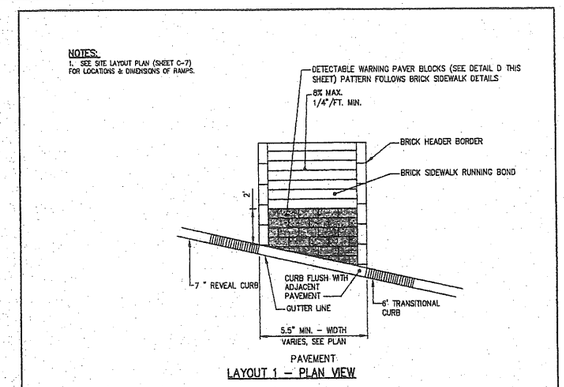
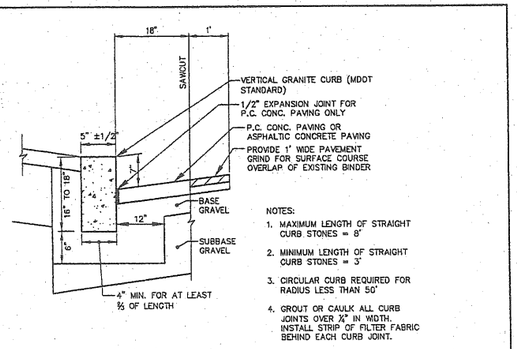


A ADA RAMP DETAIL - WITH PAVER BLOCKS
N.T.S.



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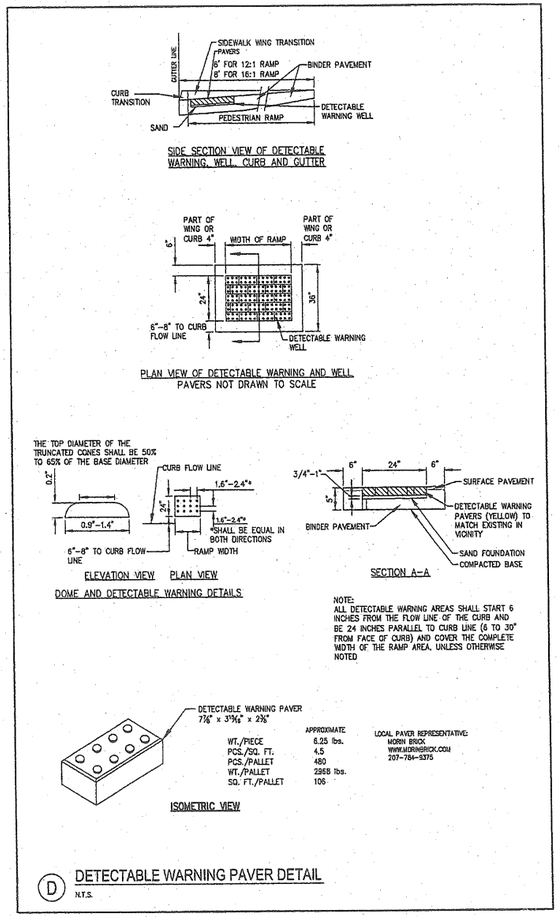

D DETECTABLE WARNING PAVER DETAIL
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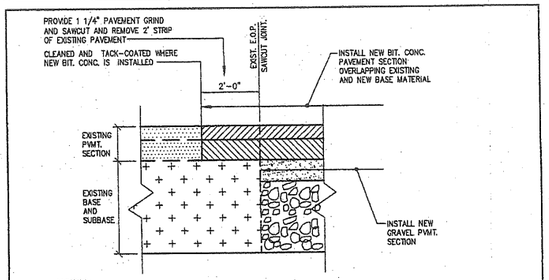

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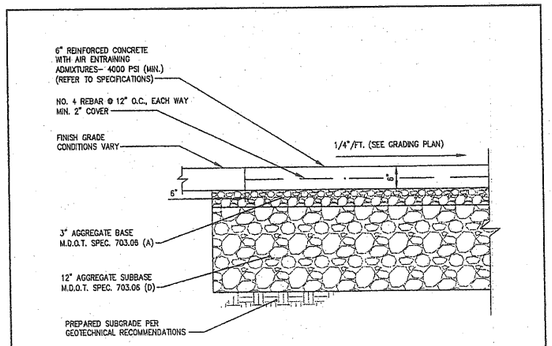
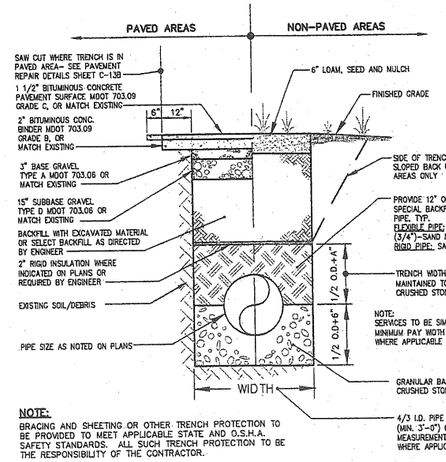


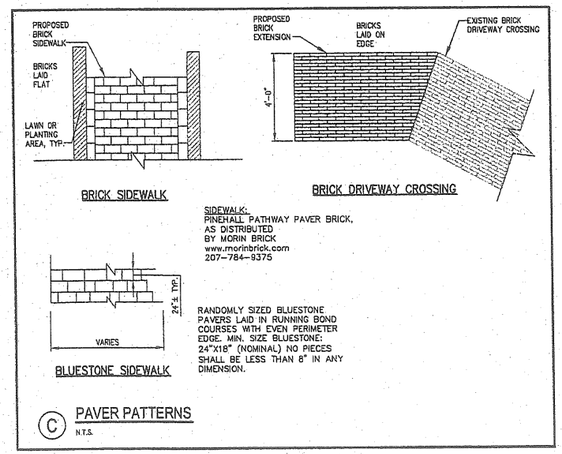
G REINFORCED CONCRETE PAD DETAIL
N.T.S.

TRENCH SECTION BACKFILL SCHEDULE

TYPE OF PIPE	GRANULAR BASE MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
CONCRETE	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145-49 A-3 OR BETTER	12"	GRANULAR AASHTO M145-49 A-3 OR BETTER
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6"	GRANULAR AASHTO M145-49 A-3 OR BETTER
DUCTILE IRON	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145-49 A-3 OR BETTER	6"	GRANULAR AASHTO M145-49 A-3 OR BETTER
UNDER-DRAINS	UNDERDRAIN SAND	3/4" CRUSHED STONE	6"	MDOT 705.22 TYPE B



J TYPICAL UTILITY PIPE TRENCH SECTION DETAIL
N.T.S.



C PAVER PATTERNS
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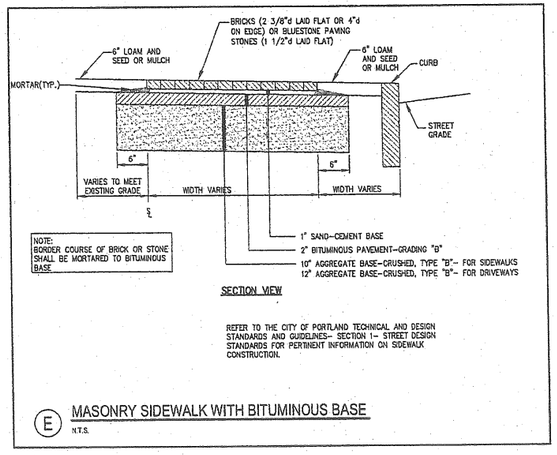

E MASONRY SIDEWALK WITH BITUMINOUS BASE
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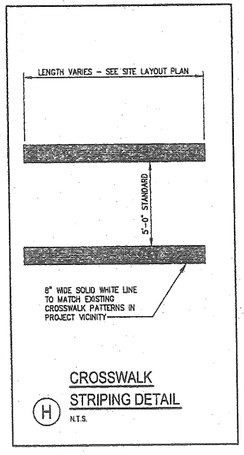

H CROSSWALK STRIPING DETAIL
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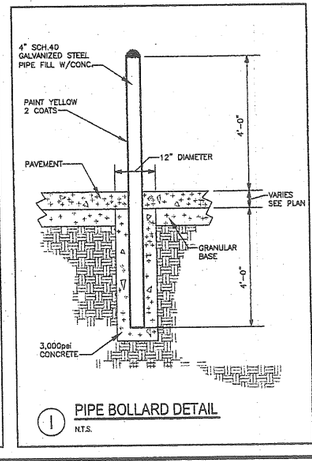

I PIPE BOLLARD DETAIL
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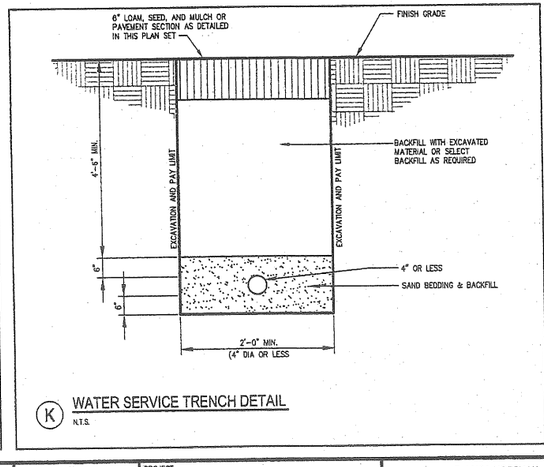

K WATER SERVICE TRENCH DETAIL
N.T.S.

REV.	DATE	DESCRIPTION
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE STEPHEN R. BUSHEY 7429 LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS
SHEET TITLE: SITE AND UTILITY DETAILS
CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
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DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SRB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13A		

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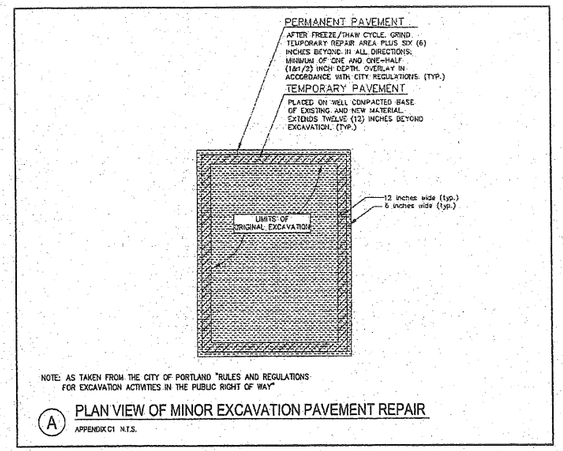
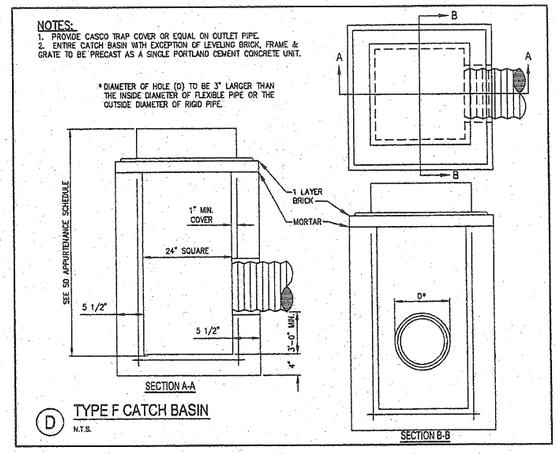


NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

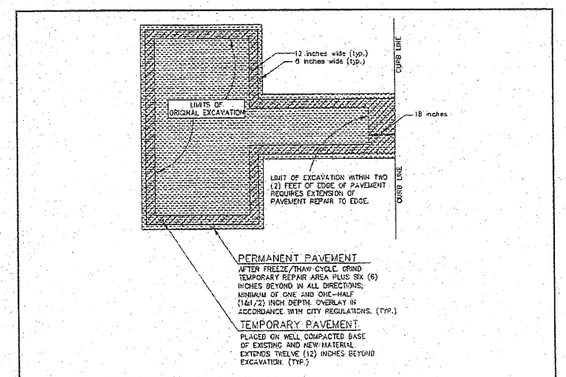
A PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

APPENDIX C1 N.T.S.



D TYPE F CATCH BASIN

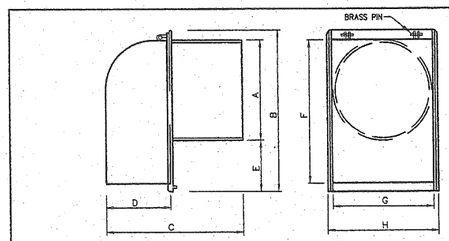
N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

B PLAN VIEW OF MINOR EXCAVATION PAVEMENT REPAIR

APPENDIX C2 N.T.S.



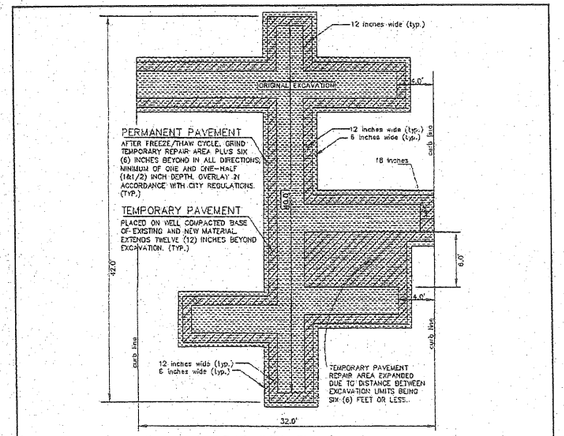
SIZE	A	B	C	D	E	F	G	H
12"	11 1/2	20	18	8	6 3/8	18	12 1/2	13 3/8
15"	14 1/2	22 1/2	23	10 1/4	5 3/4	21	14 1/4	15 3/4

NOTES:
1. INSTALL AN ETHERIDGE FOUNDRY CASCO TRAP ON ALL CATCH BASIN OUTLET PIPES.
2. THE CASCO TRAP IS AN ETHERIDGE STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP. TO INSTALL, THE CASCO TRAP IS INSERTED INTO THE STORM DRAIN WITH THE HOOD DOWN.
3. THE MASS. STANDARD 15" TRAP IS ALSO AVAILABLE.
4. SNOUT OIL & DEBRIS STOP WILL ALSO BE ACCEPTED.

INSTALLATION OF CASCO TRAP IS INCIDENTAL TO CATCH BASIN STRUCTURE.

E ETHERIDGE FOUNDRY CASCO TRAP DETAIL

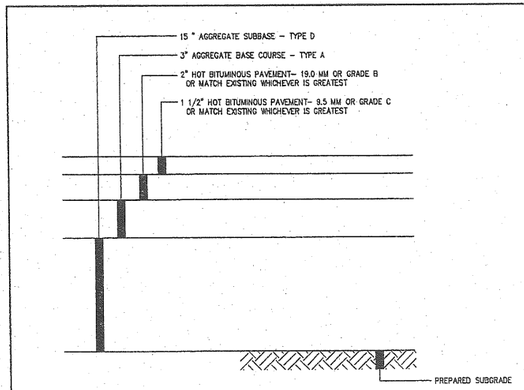
N.T.S.



NOTE: AS TAKEN FROM THE CITY OF PORTLAND "RULES AND REGULATIONS FOR EXCAVATION ACTIVITIES IN THE PUBLIC RIGHT OF WAY"

C PLAN VIEW OF MAJOR EXCAVATION PAVEMENT REPAIR

APPENDIX C3 N.T.S.



E TYPICAL PAVEMENT SECTION

N.T.S.

REV	DATE	DESCRIPTION
1	12.19.08	RESUBMISSION TO CITY OF PORTLAND
		REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
LICENSED PROFESSIONAL ENGINEER
P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: SITE AND UTILITY DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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DRAWN:	DMB	DATE:	OCT 2008
DESIGNED:	SEB	SCALE:	AS NOTED
CHECKED:	SRB	JOB NO.	2827
FILE NAME:	2827-DET		
SHEET	C-13B		

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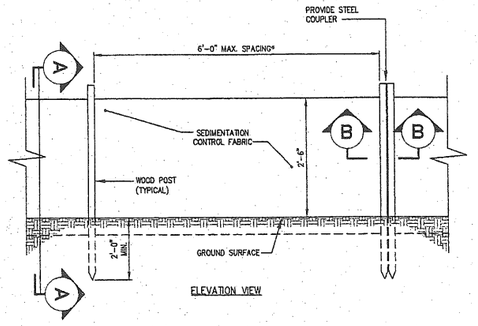
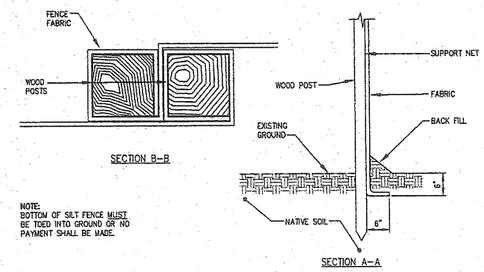
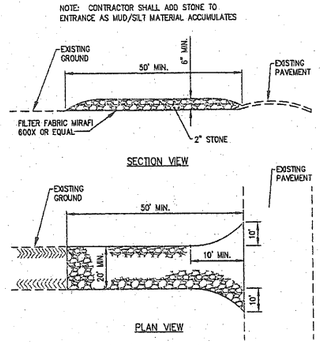


*NOTE:
THE SILT FENCE SHOULD HAVE A MINIMUM STAKING OF 6' UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT A MINIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".

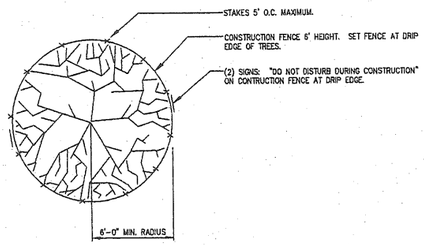


NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE.

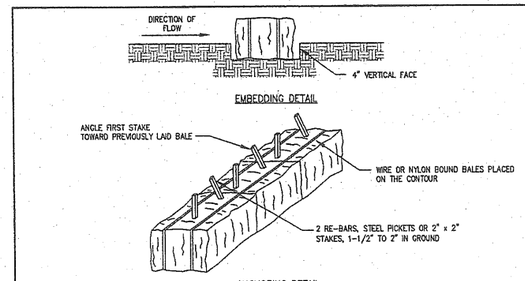
(A) SILTATION FENCE DETAIL
N.T.S.



(C) STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



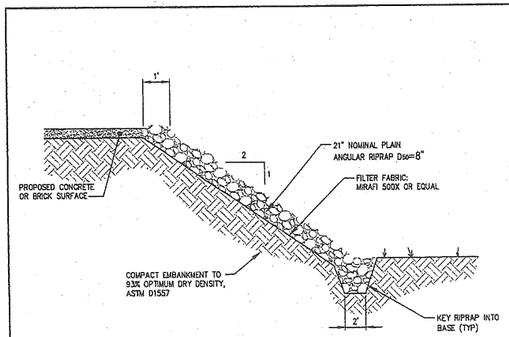
(E) TREE PROTECTION DETAIL
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE WAS ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION WILL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MAKE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

(D) STRAW OR HAYBALE BARRIER
N.T.S.



NOTE:
RIPRAP SLOPE TREATMENT SUBJECT TO REVIEW AND RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER. CONTRACTOR TO PROVIDE SAMPLE OF RIPRAP FOR OWNER APPROVAL OF COLOR AND TEXTURE PRIOR TO DELIVERY TO SITE.

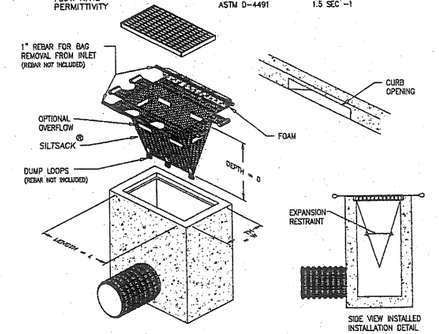
(F) RIPRAP SLOPE DETAIL
N.T.S.

SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK® WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

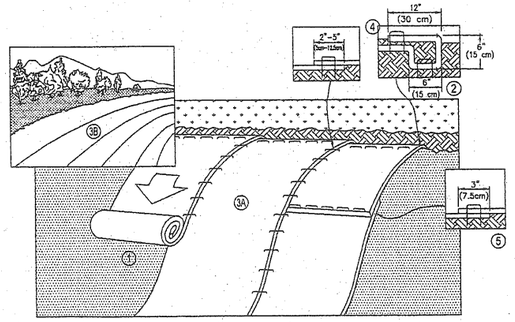
HI-FLOW SILTSACK® (FOR USE IN LOW POINTS/SAGS)
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1



(H) SILT SACK® DETAIL & SPECIFICATIONS
N.T.S.

EROSIONAL CONTROL BLANKET DETAIL FOR SLOPE INSTALLATION



(B) EROSION CONTROL BLANKET

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

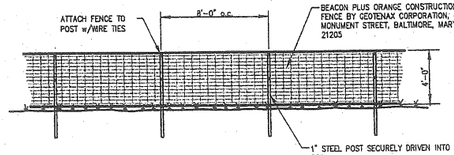
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON TEH PREVIOUSLY INSTALLED BLANKET.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXAMTE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 8" (15cm) MAT BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.



(G) ORANGE CONSTRUCTION FENCE DETAIL
N.T.S.

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
7429
LICENSED PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: EROSION & SEDIMENT CONTROL DETAILS

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

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207.775.1121
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DRAWN:	DMB
DESIGNED:	SRB
CHECKED:	SRB
FILE NAME:	2827-DET
SHEET	C-14
DATE:	SEPT 2008
SCALE:	AS NOTED
JOB NO.	2827

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EROSION AND SEDIMENT CONTROL NOTES

The primary emphasis of the erosion/sedimentation control plan to be implemented for this project are as follows:
Development of a careful construction sequence. Rapid revegetation of denuded areas to minimize the period of soil exposure. Rapid stabilization of drainage paths to avoid fill and gully erosion. The use of onsite measures to capture sediment (hay bales/silt fence, etc.) The provisions for long term erosion/sediment and pollutant treatment by the incorporation of permanent Best Management Practices.

Description and Location of Limits of All Proposed Earth Movements

The construction of the development will require the following on-site improvements:

Earthwork activity including cuts and fills to bring the building pad and landscape areas to subgrade.

Construction of stormwater measures.

Construction of utilities.

Construction of building foundations including such alternatives as piles or geo-piers.

Erosion/Sedimentation Control Devices

The following erosion and sediment control devices will be implemented by the Contractor as part of the site development. These devices shall be installed as indicated on the plans. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, latest edition.

Siltation fence shall be installed downgradient of any disturbed areas to trap runoff borne sediments until the site is revegetated. The silt fence or erosion control mix barrier shall be installed per the details provided in the plan set and inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made immediately by the Contractor. If there are any signs of erosion or sedimentation below the fence line. Proper placement of stakes and fabric into the ground is critical to the fence's effectiveness. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence, the barrier shall be replaced with a stone check dam.

Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is estabilshed. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive Turf Reinforcement by North American Green or equal. Mulch application rates are provided at the end of this section. Hay mulch shall be available on site at all times in order to provide immediate temporary stabilization when necessary.

Riprap slopes, stone check dams, sod and hay bale barriers are intended to reduce runoff velocities and protect denuded soil surfaces from concentrated flows. Installation details and stone sizes are provided in the construction plan set on the erosion control detail sheets.

Construction entrance will be constructed at all access points onto the site to prevent tracking of soil onto Crescent Street or nearby streets.

Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers or a premanufactured SiltSack™ as distributed by A. H. Harris. Stone sediment barrier installation details are provided in the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

Sod is intended to serve as the primary permanent revegetative measure within the #25/ #29 development area for all denuded areas not provided with other erosion control measures, such as riprap or mulched planting beds. The #15 Crescent Street site shall receive 6" top soil, lime, fertilizer, seed and mulch at the end of construction once the site is no longer used for staging/ materials storage

Temporary Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

Crushed stone stabilized construction entrance(s) shall be placed at the site access to Crescent Street.

Siltation fence shall be installed along the downgradient side of all disturbed areas. The siltation barrier will remain in place and properly maintained until the site is acceptably revegetated. Multiple rows of silt fence may be required due to the project site's steeper grades.

Stumps, grubbings, or common excavation shall be removed from the site as the work proceeds. Temporary stockpiles shall not be allowed due to the lack of available space and the steepness of the site.

All denuded areas which have been rough graded and are not located within the building pad or pavement subbase area, shall receive temporary mulch or erosion control mesh fabric within 7 days of initial disturbance of soil.

For work which is conducted between November 1 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 3 days for all areas or immediately in advance of a predicted rainfall event.

Crescent Street and Wescott Street shall be swept to control mud and dust as necessary. A street sweeper shall be available on immediate notice.

During grubbing operations stone check dams or hay bale barriers will be installed at any evident concentrated flow discharge points.

Silt fencing with a maximum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be properly anchored a minimum of 6" per the plan detail and backfilled. Any silt fence identified by the owner or reviewing agencies as not being properly installed during construction shall be immediately repaired in accordance with the installation details.

The contractor may choose to place plastic sheeting anchored with sand bags along steeper exposed slopes or foundation construction areas to protect denuded ground surface and to protect subgrade areas.

All turbid water within trenches or excavations shall be pumped into an approved sediment removal devise such as a Dirtbag or approved equal. If necessary turbid water shall be pumped into a vac truck and removed from the site and disposed of at an approved off site location.

Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

The foundation drain pipes shall have riprap aprons at their outlet to protect the outlets from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized immediately upon pipe installation.

All areas disturbed during construction, but not subject to other restoration (paving, riprap, planting beds, etc.) will be loamed, limed, and sodded within the proposed building site. The #15 Crescent Street site shall be used as a staging area for the project once the existing building is demolished. At the end of construction all denuded area at #15 Crescent Street shall be loamed (6" min.), limed, fertilized, mulched and seeded with in 7 days of final cleanup.

Timing and Sequence of Erosion/Sedimentation Control Measures

The following construction sequence shall be required to insure the effectiveness of the erosion and sedimentation control measures are optimized. The sequence applies to all phases of construction.

For all grading activities, the contractor shall exercise extreme caution not to overexpose the site by limiting the disturbed areas.
Install crushed stone stabilized construction entrances as shown on plans.
Install perimeter siltation barriers as indicated on the plans.
Demolish the existing buildings and foundations and clear and grub areas necessary for the utilities and new building foundation areas.
Begin excavation.
Excess materials shall be removed from the site.
Perform earthwork to bring building pad to subgrade.
Begin installation of drainage appurtenances and piping and utilities
Commence additional earthwork around the building foundation as it is completed.
Complete installation of storm drainage oppurtenances within landscaped areas.
Structures within the landscaped areas shall be temporarily set to subgrade and shall be reset upon placement of final loam and seeding or other surface restoration measures.
Complete all remaining earthwork operations including fine grading of slopes.
Install subbase and base gravels within sidewalk or other hardsurface areas.
Install base course paving for sidewalks.
Loam, lime, fertilize, seed or sod and mulch disturbed areas and complete all landscaping.
Install brick paving for sidewalk areas.
Remove accumulated sediment from ahead of any sediment barriers as necessary.
Once the site is stabilized, a 90% catch of vegetation has been obtained,
remove all temporary erosion control measures.
Touch up grassed areas by fertilizing and regrassing as necessary.

Note: All denuded areas not subject to final paving, riprap or gravel, shall be revegetated.

Due to the timing and size of the project, completion of the facilities within a summer construction season may not occur. For all work which will be conducted between November 1 and April 15 of the calendar year, the Contractor shall submit a schedule which will satisfy the following criteria:

Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 7 days.

During the construction process, all disturbed areas shall be temporarily covered with mulch within 3 days of final grading if not otherwise available for final riprap, planting bed or sod treatment.

Once final grades have been established, the contractor may choose to dormant seed the disturbed areas prior to placement of mulch and placement of fabric netting anchored with staples.

If dormant seeding is used for temporary stabilization of the site, all disturbed areas shall receive 6" of loam and seed at an application rate of 6#/1000 s.f.

All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90 percent catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used for the site, all disturbed areas shall be revegetated with temporary seeding or permanent landscaping and sod in the spring.

The area of denuded non-stabilized construction shall be limited to the minimum area practicable. An area shall be considered to be denuded until the subbase gravel is installed in sidewalk areas, the base slab gravel is installed in building areas, or the areas of future landscape treatment have been loamed, seeded, and mulched or fully sodded. The mulch rate shall be twice the rate specified. [For example, 115#/1,000 s.f. x 2 = 230#/1,000s.f.]

The Contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions at no extra expense to the owner.

PERMANENT SEEDING PLAN - LOW MAINTENANCE- #15 CRESCENT STREET SITE

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N-P-K/ac. OR
20 pounds of 10 – 20 – 20 N-P-K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
30% Creeping Red Fescue
35% Tall Fescue
20% Perennial Ryegrass
15% Annual Ryegrass
When using small grain as nurse crop seed it at one-half the normal seeding rate.

7.Mulching instructions: Apply at the rate of tons per acre. OR
115 pounds per M. Sq. Ft.

Amount	Unit #, Tons, Etc.
8.TOTAL LIME	138 #/1000 sq. ft.
9.TOTAL FERTILIZER	20 #/1000 sq. ft.
10.TOTAL SEED	6 #/1000 sq. ft.
11.TOTAL MULCH	115 #/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to October 15 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

Fertilizer and lime requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer and lime application rates to the owner

TEMPORARY SEEDING PLAN (APPLICABLE TO BOTH #15 CRESCENT STREET ANS #25/ #29 CRESCENT STREET)

Project CRESCENT HEIGHTS
Site Location Portland, Maine

1.Area to be seeded: <1 acre, OR 20M Sq. Ft.

2.Instructions on preparation of soil: Prepare a good seed bed for planting method used.

3.Apply lime as follows: #/acres, OR 138#/M Sq. Ft.

4.Fertilize with pounds of N-P-K/ac. OR
20 pounds of 10 – 20 – 20 N-P-K/M Sq. Ft.

5.Method of applying lime and fertilizer: Spread and work into the soil before seeding.

6.Seed with the following mixture:
50% Perennial Ryegrass
50% Annual Ryegrass
When using small grain as nurse crop seed it at one-half the normal seeding rate.

7.Mulching instructions: Apply at the rate of tons per acre. OR
230 pounds per M. Sq. Ft.

Amount	Unit #, Tons, Etc.
8.TOTAL LIME	138#/1000 sq. ft.
9.TOTAL FERTILIZER	20#/1000 sq. ft.
10.TOTAL SEED	2#/1000 sq. ft.
11.TOTAL MULCH	230#/1000 sq. ft.
12.TOTAL other materials, seeds, etc.	
13.REMARKS	

Recommended seeding dates after August 15. For areas with slopes >10% and fall and winter erosion control areas, mulch netting shall be used per manufacturer's specifications.

Fertilizer requirements shall be subject to actual test results of the topsoil used for the project. The Contractor shall be responsible for providing topsoil test results for pH and recommended fertilizer application rates to the owner

REV	DATE	DESCRIPTION
4	12.19.08	RESUBMISSION TO CITY OF PORTLAND
3	11.18.08	SUBMITTED TO CITY OF PORTLAND
2	09.24.08	REFILED SUBMISSION TO CITY OF PORTLAND
1	09.19.08	30% DESIGN DEVELOPMENT/PRELIMINARY SUBMISSION TO CITY OF PORTLAND

REVISIONS

STATE OF MAINE
STEPHEN R. BUSHEY
LICENSED
PROFESSIONAL ENGINEER

P.E. STEPHEN BUSHEY
LIC. #7429

PROJECT: CRESCENT HEIGHTS

SHEET TITLE: EROSION & SEDIMENT CONTROL NOTES

CLIENT: CRESCENT HEIGHTS LLC IN ASSOCIATION WITH WINTON SCOTT ARCHITECTS

DeLUCA-HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	DMB
DESIGNED:	SRB
CHECKED:	SRB
FILE NAME:	2827-DET
DATE:	SEPT 2008
SCALE:	AS NOTED
JOB NO.	2827
SHEET	C-15

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