

ADDENDUM 2

To Contract Documents for EYECARE MEDICAL GROUP

53 SEWALL STREET PORTLAND, ME 04102

E.M.G. - Phase 2 Addition & Renovation

This Addendum modifies, amends and supplements designated parts of the Contract Documents, Project Manual and Drawings for

E.M.G. - Phase 2 - Addition and Renovation and is hereby made a part thereof by reference and shall be as binding as though inserted in its entirety in the locations specified herein. It shall be the responsibility of the Contractor to notify all Subcontractors and Suppliers he proposes to use for the various parts of the work of any changes or modifications contained in this Addendum.

architects

Architecture ■ Interior Design ■ Planning

49 Dartmouth Street[™] Portland, Maine 04101 207-775-1059 ■ ERED AR

DAVID

www.pdtarchs.com

July 15, 2013

This Addendum modifies, amends and supplements designated parts of the Contract Documents,

Project Manual and Drawings for

E.M.G. - Phase 2 - Addition and Renovation

and is hereby made a part thereof by reference and shall be as binding as though inserted in its entirety in the locations specified herein. It shall be the responsibility of the Contractor to notify all Subcontractors and Suppliers he proposes to use for the various parts of the work of any changes or modifications contained in this Addendum.

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General Information

PART I Addendum for Civil Specifications and Drawings

PART II Addendum for Structural Specifications and Drawings

PART III Addendum for Architectural Project Manual and Drawings

PART IV Addendum for Mechanical Specifications and Drawings

PART V Addendum for Electrical Specifications and Drawings

GENERAL INFORMATION

I. None

PART I- ADDENDUM FOR CIVIL SPECIFICATIONS AND DRAWINGS:

I. REPLACE the Draft Geotechnical Report issued in Volume I, Div. 2, with the attached final Geotechnical Report.

PART II- ADDENDUM FOR STRUCTURAL SPECIFICATIONS AND DRAWINGS:

- 1. ADD ORN94 light support framing plan SKS-05.
- 2. ADD OR Nº3 light support framing plan SKS-06.
- 3. ADD typical light support detail SKS-07.
- 4. ADD typical light support detail SKS-08.
- 5. ADD typical light support details SKS-09.
- 6. CHANGE partial roof framing plan as indicated on SKS-10.
- 7. ADD detail at parapet along line-8 as indicated on SKS-II.

EYECARE MEDICAL GROUP PHASE 2 ADDITION AND RENOVATION **ADDENDUM NO. 2** July 15, 2013

PART III- ADDENDUM FOR ARCHITECTURAL PROJECT MANUALS AND DRAWINGS:

- 1. ADD soffits in Autoclave BII9 as indicated on SKA-I.
- 2. ADD soffits in Nurse BI08 as indicated on SKA-2.
- **3.** REPLACE elevation A5/A201 with SKA-3, clarifying wall lighting layout.

PART IV- ADDENDUM FOR MECHANICAL SPECFICATIONS AND DRAWINGS:

- 1. CHANGE under slab domestic water and sprinkler entrance as indicated on SKP-I.
- 2. DELETE under slab domestic water and sprinkler entrance indicated on SKP-2.

PART V- ADDENDUM FOR ELECTRICAL SPECIFICATIONS AND DRAWINGS:

None

END OF ADDENDUM

REPORT

June 27, 2013 12-0392 S

Geotechnical Engineering Services

Proposed Building Addition and Parking Lot 53 Sewall Street Portland, Maine

PREPARED FOR:

Eyecare Medical Group, P.A. Attention: Clement Berry 53 Sewall Street Portland, Maine 04102

PREPARED BY:

S.W.COLE ENGINEERING, INC. 286 Portland Road Gray, Maine 04039 207-657-2866



- · Geotechnical Engineering
- · Construction Materials Testing
- · GeoEnvironmental Services
- · Ecological Services

www.swcole.com

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13-0392 S

June 27, 2013

Eyecare Medical Group, P.A. Attn: Clement Berry 53 Sewall Street Portland, Maine 04102

Subject: Explorations and Geotechnical Engineering Services

Proposed Building Addition and Parking Lot

53 Sewall Street Portland, Maine

Dear Mr. Berry:

In accordance with our Proposal, dated May 9, 2013, we have performed subsurface explorations for the subject project in Portland, Maine. This report summarizes our findings and geotechnical recommendations and its contents are subject to the limitations set forth in Attachment A.

1.0 INTRODUCTION

1.1 Scope and Purpose

The purpose of our services was to obtain subsurface information at the site in order to develop geotechnical recommendations relative to foundations and earthwork associated with the proposed construction. Our scope of services included the making of five test boring explorations, soils laboratory testing, a geotechnical analysis of the subsurface findings and preparation of this report.

1.2 Proposed Construction

The site is located at your existing facility on Sewall Street in Portland, Maine. Based on information provided by PDT Architects (project architect), we understand development plans call for construction of an approximate 45-foot by 125-foot addition off the west side of the existing building and a 20-space parking lot in the southwest corner of the site. We understand the building addition will be one-story with foundations and columns sized for a future second story addition.

286 Portland Road, Gray, ME 04039-9586 • P: (207) 657.2866 • F: (207) 657.2840 • E: infogray@swcole.com



Based on information provided by Allied Engineering (project structural engineer), we understand column loads will approach 126-kips, wall loads 1.6-kips/lf and floor loads 40 psf. Based on foundation plans for the original building, we understand the existing building is supported on spread footing foundations with on-grade floor slabs. We understand the proposed finished floor elevation will match the existing building at elevation 37.5 feet (project datum).

2.0 EXPLORATION AND TESTING

2.1 Explorations

Five test borings (B-101 through B-105) were made at the site on May 24, 2013 by Northern Test Boring, Inc. of Gorham, Maine working under subcontract to S.W.COLE ENGINEERING, INC. (SWCE). The boring locations were selected and established in the field by SWCE using taped measurements from existing site features. The approximate exploration locations are shown on the "Exploration Location Plan" attached as Sheet 1. Logs of the explorations are attached as Sheets 2 through 7. A key to the notes and symbols used on the logs is attached as Sheet 8.

2.2 Testing

The borings were performed using a combination of solid stem auger, cased wash-boring and rod probing techniques. The soils were sampled at 2 to 5 foot samples using Standard Penetration Testing (SPT) techniques. Shelby tube sampling and in-situ Vane Shear Testing (VST) was performed in softer silty clay soils. SPT blow counts and VST results are shown on the logs.

Soil samples obtained from the explorations were returned to our laboratory for further classification and testing. Atterberg Limits and moisture content test results are noted on the logs. The results of a one-dimensional laboratory consolidation test are attached as Sheet 9.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Surficial Conditions

The site is currently developed with a single-story medical office building and associated paved areas. The site is relatively flat and level. The proposed building addition is



situated over existing paved and landscape area. The proposed parking area is situated over a undeveloped wooded area. Proposed and existing site features are shown on the "Exploration Location Plan" attached as Sheet 1.

3.2 Subsurface Conditions

Test borings B-101 and B-102 were made in the area of the proposed building addition. These test borings encountered a subsurface profile generally consisting of approximately 3 inches of asphalt pavement overlying 2 to 3 feet of compacted granular fill overlying 11 to 13 feet of hard to stiff brown silty clay overlying 8 to 20 feet of medium to soft gray silty clay overlying sand and gravel overlying refusal surfaces (probable bedrock) at depths of 34 to 36 feet below the ground surface. The gray silty clay is soft and compressible with approximately 1,800 psf of over-consolidation. Vane shear testing performed in the softer gray silty clay indicates undrained shear strengths on the order of 590 to 890 psf.

Test boring B-103 was made in an area of a future building addition contemplated as an elevated single story building with on-grade parking below connecting to the proposed west building addition. This test boring encountered a subsurface profile similar to B-101 and B-102 and was terminated on a refusal surface (probable bedrock) at a depth of about 45 feet.

Test borings B-104 and B-105 were made in the area of proposed parking. These test borings encountered dramatically different subsurface conditions. B-104 encountered 4 feet of fill overlying native stiff brown silty clay; whereas B-105 encountered 15 feet of fill with ash, clinker and brick overlying relic bay mud.

Refer to the attached logs for more detailed descriptions of the subsurface findings.

3.3 Groundwater Conditions

The soils were generally wet at depths of 2 to 3 feet. Infiltrated precipitation likely becomes perched on the relatively impervious native clay encountered at the test borings. Long term groundwater information is not available. It should be anticipated that seasonal groundwater levels will fluctuate, especially during periods of snowmelt and precipitation. Groundwater may be tidally influenced considering the proximity of the Fore River Bay.



3.4 Seismic and Frost Considerations

The 25-year Air Freezing Index for the Portland, Maine area is about 1,290-Fahrenheit degree-days, which corresponds to a frost penetration depth on the order of 4.5 feet. Based on the findings at the explorations, we interpret the site soils to correspond to Seismic Soil Site Class D according to 2009 IBC.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General Findings

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint. The principle geotechnical considerations are as follows:

- Proposed Building Addition: Spread footing foundations and a slab-on-grade floors bearing on properly prepared subgrades appear suitable for the proposed building addition. All existing pavement, structures, utilities, fill and loose, disturbed soils must be completely removed beneath the proposed building addition footprint. Footings should bear on at least 9-inches of compacted Crushed Stone wrapped in geotextile fabric overlying undisturbed native soils.
- Future Building Addition with On-Grade Parking Below: Test boring B-103, made for the future building addition, encountered a layer of silty sand with organics extending to a depth of about 5 feet below the ground surface. Footings for the future addition will need to penetrate this layer of soil and bear on undisturbed native hard brown silty clay. Additionally, the existing pavement, gravel and silty sand with organics may need to be removed and replaced with non-frost susceptible sand and gravel in order to mitigate frost action that could adversely affect low-overhead clearance for on-grade parking below the future building addition.
- Proposed Parking Area: The test borings made in the area of the proposed parking area encountered 4 to 15 feet of uncontrolled fill. The fill composition varied and contained ash, cinders and brick and may be environmentally impacted with premium handling and disposal costs. The existing fills may also require some overexcavation and replacement in order to support pavement loads.



4.2 Site and Subgrade Preparation

We recommend that site preparation begin with the construction of an erosion control system to protect adjacent drainage ways and areas outside the construction limits. As much vegetation as possible should remain outside the construction areas to lessen the potential for erosion and site disturbance.

We recommend that excavation to subgrade be completed with a smooth-edged bucket to help lessen disturbance of bearing soils. We recommend at least 9 inches of compacted Crushed Stone be provided below all footings. The Crushed Stone should be fully enveloped in non-woven geotextile, such as Mirafi 160N or equivalent.

All existing pavement, structures, utilities, disturbed soils and fills must be completely removed beneath the proposed building addition footprint until undisturbed native hard to very stiff brown silty clay soils are encountered. Overexcavation of unsuitable material should extend 1-foot laterally outward from edge of perimeter footings for every 1-foot of vertical excavation depth (1H:1V bearing splay). Excavations must not undermine existing foundations. Overexcavations should be backfilled to footing subgrade elevation with additional thickness of geotextile wrapped Crushed Stone or to slab-on-grade subgrade elevation with compacted Structural Fill.

4.3 Excavation and Dewatering

Excavation work will generally encounter pavement, sandy and clayey fill materials, and native silty clays. Care must be exercised during construction to minimize disturbance of the bearing soils. Final cuts to subgrade elevation should be performed with a smoothedged bucket to help minimize soil disturbance.

Sumping and pumping dewatering techniques should be adequate to control groundwater in excavations. Controlling the water levels to at least one foot below planned excavation depths will help stabilize subgrades during construction.

Excavations must be properly shored and/or sloped to prevent sloughing and caving of the sidewalls during construction. Temporary, unsupported soil excavations should be sloped in accordance with the OSHA trenching regulations. Care must be taken to preclude undermining adjacent structures and utilities.



4.4 Foundations

We recommend the proposed building additions be supported on spread footings founded on at least 9-inches of crushed stone wrapped in geotextile fabric bearing on hard to very stiff, undisturbed native brown silty clay.

For foundations bearing on properly prepared subgrades, we recommend the following geotechnical parameters for design consideration:

- Design Frost Depth = 4.5 feet
- Allowable Soil Bearing Pressure = 3.0 ksf or less
- Seismic Soil Site Class = D (IBC 2009)
- Base Friction Factor = 0.40
- Total Unit Weight of Backfill = 130 pcf (compacted Structural Fill)
- Passive Lateral Earth Pressure Coefficient = 3.0 (compacted Structural Fill)
- At-Rest Lateral Earth Pressure Coefficient = 0.5 (compacted Structural Fill)
- Internal Friction Angle of Backfill = 30° (compacted Structural Fill)

Based on structural loading information, laboratory consolidation testing and anticipated grades, we estimate 1/2-inch or less of total post-construction settlement with differential settlement approaching 1/2-inch or less.

4.5 Foundation Drainage

We recommend an underdrain system be installed within the 9-inches of Crushed Stone wrapped in geotextile filter fabric recommended below the perimeter spread footings. The underdrain pipe should consist of 4-inch diameter, perforated SDR-35 foundation drain pipe enveloped in 9-inches of Crushed Stone wrapped in filter fabric, such as Mirafi 160N. The underdrain pipe must be connected to a positive gravity outlet protected from freezing, clogging and backflow.

Exterior foundation backfill should be sealed with a surficial layer of clayey or loamy soil in areas that are not paved or occupied by entrance slabs. This is to reduce direct surface water infiltration into the backfill. Surface grades should be sloped away from the building for positive surface water drainage. General underdrain details are provided on Sheet 10.



4.6 Slab-On-Grade

On-grade floor slabs in heated areas may be designed using a subgrade reaction modulus of 150 pci (pounds per cubic inch) provided the slab is underlain by at least 12-inches of compacted Structural Fill placed over properly prepared subgrades. The structural engineer or concrete consultant must design steel reinforcing and joint spacing appropriate to slab thickness and function.

We recommend a sub-slab vapor retarder particularly in areas of the building where the concrete slab will be covered with an impermeable surface treatment or floor covering that may be sensitive to moisture vapors. The vapor retarder must have a permeance that is less than the floor cover or surface treatment that is applied to the slab. The vapor retarder must have sufficient durability to withstand direct contact with the sub-slab base material and construction activity. The vapor retarder material shall be placed according to the manufacturer's recommended method, including the taping and lapping of all joints and wall connections. The architect and/or flooring consultant should select the vapor retarder products compatible with flooring and adhesive materials.

The floor slab should be appropriately cured using moisture retention methods after casting. Typical floor slab curing methods should be used for at least 7 days. The architect or flooring consultant should assign curing methods consistent with current applicable American Concrete Institute (ACI) procedures with consideration of curing method compatibility to proposed surface treatments, flooring and adhesive materials.

4.7 Entrance Slabs and Sidewalks

Entrance slabs and sidewalks adjacent to buildings must be designed to reduce the effects of differential frost action between adjacent pavement, doorways, and entrances. We recommend that clean, non-frost susceptible Structural Fill 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 the bottom of the adjacent sidewalk or pavement subbase gravel at a 3H:1V or flatter slope. General details of this frost transition zone are attached as Sheet 10.



4.8 Backfill and Compaction

The on-site soils are unsuitable for use in building and paved areas, but may be reused in landscape areas. For building and paved areas, we recommend the following fill and backfill materials:

<u>Structural Fill</u>: Fill to raise site grades and backfill for foundations should be clean, non-frost susceptible sand and gravel meeting the gradation requirements for Structural Fill as given below.

Structural Fill									
Sieve Size	Percent Finer by Weight								
4 inch	100								
3 inch	90 to 100								
¼ inch	25 to 90								
#40	0 to 30								
#200	0 to 5								

Structural Fill is recommended for use as:

- Fill and backfill to raise grades in building areas
- Backfill for overexcavations
- Backfill against foundations
- Backfill within frost transition zones below entrances and sidewalks
- Minimum 12-inch thick layer below slab-on-grade

<u>Crushed Stone</u>: Crushed Stone, used beneath foundations and for underdrain aggregate, should meet the gradation requirements of MDOT Standard Specifications 703.22 "Underdrain Backfill Type C".

<u>Placement and Compaction</u>: Fill should be placed in horizontal lifts and compacted such that the desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment. Loose lift thicknesses for grading, fill and backfill activities should not exceed 12 inches. We recommend that fill and backfill in building areas be compacted to at least 95 percent of its maximum dry density as determined by ASTM D-1557. Crushed Stone should be compacted with 3 to 5 passes of a vibratory plate compactor having a static weight of at least 500 pounds.



4.9 Weather Considerations

Construction activity should be limited during wet weather and the site soils may require drying before construction activities may continue. The contractor should anticipate the need for water to temper fills in order to facilitate compaction during dry weather. If construction takes place during cold weather, subgrades, foundations and floor slabs must be protected during freezing conditions. Concrete and fill must not be placed on frozen soil; and once placed, the concrete and soil beneath the structure must be protected from freezing.

4.10 Design Review and Construction Testing

S.W.COLE ENGINEERING, INC. should be retained to review the final design and specifications to determine that our earthwork and foundation recommendations have been properly interpreted and implemented.

A soils and concrete testing program should also be implemented during construction to observe compliance with the design concepts, plans, and specifications. S.W.COLE ENGINEERING, INC. is available to provide subgrade observations for foundations as well as testing services for soils, concrete, asphalt, steel and spray-applied fireproofing construction materials.

5.0 CLOSURE

It has been a pleasure to be of assistance to you with this phase of your project. We look forward to working with you during the construction phase of the project.

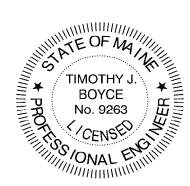
Sincerely,

S.W.COLE ENGINEERING, INC.

Timothy J. Boyce, P.E.

Senior Geotechnical Engineer

TJB:pfk



Attachment A Limitations

This report has been prepared for the exclusive use of Eyecare Medical Group, P.A. for specific application to the proposed Building Addition and Parking Lot at 53 Sewall Street, Portland, Maine. S.W.COLE ENGINEERING, INC. has endeavored to conduct the work in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

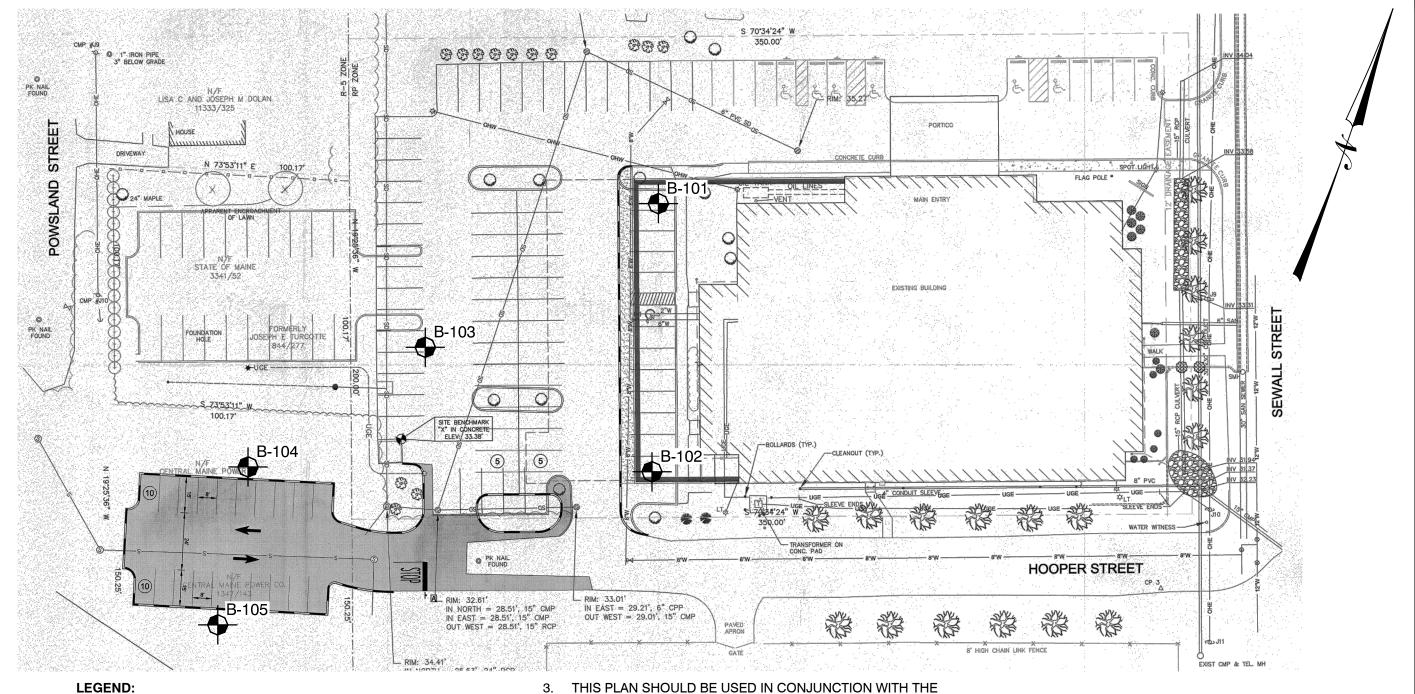
The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S.W.COLE ENGINEERING, INC.'s scope of work has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE ENGINEERING, INC. should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE ENGINEERING, INC.





APPROXIMATE BORING LOCATION

NOTES:

- EXPLORATION LOCATION PLAN WAS PREPARED FROM A 1"=20' SCALE PLAN OF THE SITE ENTITLED "SITE LAYOUT PLAN," PREPARED BY DELUCA-HOFFMAN ASSOCIATES, INC., DATED MAY 2013, AND PROVIDED AS A PORTABLE DOCUMENT FORMAT (PDF).
- 2. THE BORINGS WERE LOCATED IN THE FIELD BY TAPED MEASUREMENTS FROM EXISTING SITE FEATURES.

- ASSOCIATED S.W. COLE ENGINEERING, INC. GEOTECHNICAL REPORT.
- 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.





EYE CARE MEDICAL GROUP

EXPLORATION LOCATION PLAN

PROPOSED BUILDING ADDITION AND PARKING LOT **53 SEWALL STREET** PORTLAND, MAINE

1" =40'

Job No.: 13-0392 Scale: Sheet: Date:

06/03/2013



BORING LOG

MIKE NADEAU

B-101 **BORING NO.:** SHEET: OF

PROJECT NO.: 13-0392 DATE START: 5/24/2013

DATE FINISH: 5/24/2013

ELEVATION: NOT AVAILABLE

PJO SWC REP.:

TYPE SIZE I.D. HAMMER WT. HAMMER FALL SSA/HW 4" 140 LBS. 30" WATER LEVEL INFORMATION SS 1 3/8" 140 LBS. 30" SOILS SATURATED BELOW 14' +/-

DRILLER:

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

53 SEWALL STREET / PORTLAND MAINE

NORTHERN TEST BORINGS, INC.

CORE BARREL:

U = 3.5" SHELBY TUBE

LABORATORY TEST

LOCATION:

CASING:

SAMPLER:

DRILLING CO.:

CASING BLOWS		SAM	1PLE		SAME	PLER BI	OWS P	ER 6"	DEPTH	STDATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPIH	STRATA & TEST DATA
										3½" ASPHALT
										BROWN GRAVELLY SAND SOME SILT (FILL)
	1D	24"	10"	2.3'	5	4	4	3	3.0'	~LOOSE~
										BROWN MOTTLED DARK BROWN SILTY CLAY
	2D	24"	22"	7.0'	3	6	7	6		$W = 29.3\%$ $q_p = 8.0-9.0 \text{ KSF}$
										~HARD BECOMING
										WITH OCCASIONAL FINE SAND SEAMS
									1	STIFF~ $q_p = 5.0 \text{ KSF}$
	3D	24"	22"	12.0'	3	4	3	4		$w = 36.0\%$ $q_p = 3.0 \text{ KSF}$
				12.0				-		551672
									14.0'	
	1V	3.5 X 7	" VANE	15.6'						$S_v = 0.70 \text{ KSF} / 0.11 \text{ KSF}$ ~MEDIUM~
	1V'	3.5 X 7								$S_v = 0.78 \text{ KSF} / 0.12 \text{ KSF}$
										GRAY SILTY CLAY
	1S	24"	18"	22.0'	H)	YDRAU	LIC PU	SH		$W_1 = 36 \ W_P = 19 \ w = 38.9\%$
	2V	3.5 X 7								$S_v = 0.59 \text{ KSF} / 0.09 \text{ KSF}$
	2V'	3.5 X 7								$S_v = 0.64 \text{ KSF} / 0.12 \text{ KSF}$
	3V	3.5 X 7	" VANE	25.6'						$S_v = 1.1 \text{ KSF}$ PROBABLE SAND SEAM
										LIVERALILIC BUCLLBOD PRODE FROM 25 CLTO 24 7
										HYDRAULIC PUSH ROD PROBE FROM 25.6' TO 34.7'
										PROBABLE SAND SEAM
									34.7'	
									ľ	ADVANCED BY ROD PROBE 70 BLOWS FOR 15"
									35.9'	PROBABLE SAND AND GRAVEL
										REFUSAL AT 35.9'
										(PROBABLE BEDROCK)
AMPLE		ON!		SOIL C	LASSII	FIED B	Y:		REMAR	KS:
) = SPL) = 2" S		OON / TUBE	İ		DRII	LLER -	VISUAI	_LY		STRATIFICATION LINES REPRESENT THE 2
S = 3" SHELBY TUBE X SOIL TECH VISUALLY								I	APPROXIMATE BOUNDARY BETWEEN SOIL TYPES	

AND THE TRANSITION MAY BE GRADUAL.

BORING NO.:

B-101



BORING LOG

MIKE NADEAU

DRILLER:

BORING NO.: B-102 SHEET: 1 OF 1 PROJECT NO.: 13-0392

DATE START: 5/24/2013

DATE FINISH: 5/24/2013 ELEVATION: NOT AVAILABLE

PJO SWC REP.: WATER LEVEL INFORMATION

SIZE I.D. HAMMER WT. HAMMER FALL **TYPE** SSA / HW 4" 140 LBS. SS 1 3/8" 140 LBS. 30"

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

53 SEWALL STREET / PORTLAND MAINE

NORTHERN TEST BORINGS, INC.

SOILS SATURATED BELOW 15' +/-

CORE BARREL:

LOCATION:

CASING:

SAMPLER:

DRILLING CO.:

CASING BLOWS		SAN	IPLE		SAMF	PLER BL	OWS P	ER 6"	DEPTH	STRATA & TEST DATA		
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEFIII	SIRAIA & IESI DAIA		
1001				@ 501						2¾" ASPHALT		
									2.1'	BROWN GRAVELLY SILTY SAND WITH CLAY LAYERS	BELOW 1.7'	
	1D	24"	14"	2.3'	6	6	5	4				
	2D	24"	12"	4.3'	3	5	6	8		~HARD BECOMING	$q_p = 8.0 \text{ KSF}$	
	3D	24"	22"	7.0'	4	5	7	8		BROWN MOTTLED SILTY CLAY WITH OCCASIONAL GRAY SILT SEAMS	$q_p = 9.0 \text{ KSF}$	
	4D	24"	15"	9.0'	5	6	9	8			$q_p = 8.5 \text{ KSF}$	
											$q_p = 4.0 \text{ KSF}$	
	5D	24"	24"	12.0'	3	4	4	5		STIFF~	$q_p = 3.0 \text{ KSF}$	
						-	-				чр от то	
									15.0'			
	1V	2.5 X 5	" VANE	15.4'					15.8'	$S_v = 1.12 \text{ KSF} / 0.11 \text{ KSF} GRAYISH-BROWN SILTY CLAY}$		
	1V'	2.5 X 5	" VANE	15.8'						$S_v = 0.90 \text{ KSF} / 0.08 \text{ KSF}$ ~STIFF TO MEDIUM~		
	6D	24"	20"	17.8'	Ĥ	/DRAUI	LIC PU	SH				
										GRAY SILTY CLAY		
	1S	24"	20"	20.0'	H	/DRAUI	LIC PU	SH		$W_L = 39 \ W_P = 19 \ w = 37.0\%$		
	2V	3.5 X 7	" VANE	20.6'						$S_v = 0.83 \text{ KSF} / 0.13 \text{ KSF}$ ~MEDIUM~		
	2V'	3.5 X 7	" VANE	21.2'						$S_v = 0.89 \text{ KSF} / 0.15 \text{ KSF}$		
									23.5'			
									ļ			
	7D	24"	15"	26.0'	24	32	24	23		BROWN SAND AND GRAVEL SOME SILT		
										~VERY DENSE~		
										ADVANCED BY ROLLER CONE FROM 26' TO	34'	
									0.4.51			
									34.0'			
									ĺ			
										REFUSAL AT 34.0'		
										(PROBABLE BEDROCK)		
SAMPLE				SOIL C	LASSIF	FIED BY	/ :		REMAR	KS:		
D = SPLIT SPOON												
		Y TUBE DRILLER - VISUALLY STRATIFICATION LINES REPRESENT THE				(3)						
		TUBE		Χ		L TECH				APPROXIMATE BOUNDARY BETWEEN SOIL TYPES		
J = 3.5"	SHEL	BY TUB	E		LAB	ORATO	RY TE	ST		AND THE TRANSITION MAY BE GRADUAL. BORING NO.: B-102		



LOCATION:

DRILLING CO.:

D = SPLIT SPOON C = 2" SHELBY TUBE

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

BORING LOG

MIKE NADEAU

DRILLER:

BORING NO.: **B-103**SHEET: 1 OF 2

PROJECT NO.: 13-0392

DATE START: 5/24/2013

DATE FINISH: 5/24/2013

ELEVATION: NOT AVAILABLE

SWC REP.: PJO

WATER LEVEL INFORMATION

SOILS WET AT 2.2 ' +/SOILS SATURATED BELOW 15' +/-

 TYPE
 SIZE I.D.
 HAMMER WT. HAMMER FALL

 CASING:
 \$\$SA / HW
 4"
 140 LBS.
 30"

 SAMPLER:
 \$\$S
 1 3/8"
 140 LBS.
 30"

 CORE BARREL:

NORTHERN TEST BORINGS, INC.

53 SEWALL STREET / PORTLAND MAINE

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

DRILLER - VISUALLY

LABORATORY TEST

SOIL TECH. - VISUALLY

ASING LOWS		SAN	IPLE		SAMI	PLER BL	OWS P	ER 6"	DEPTH	STRATA & TEST DATA
PER OOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEI III	SINAIA & ILSI DAIA
										21/2" ASPHALT
									2.2'	BROWN GRAVELLY SAND SOME SILT (FILL) ~MEDIUM DENSE~
	1D	24"	12"	2.2'	5	9	10	9		GRAYISH-BROWN SILTY SAND
										WITH ORGANIC SILT AND DARK GRAY CLAY LAYERS (DISTURBED)
	2D	24"	16"	4.2'	5	2	3	2	5.0'	~LOOSE~
	0.0	0.411	00"	7.01	•		4	_	7.01	GRAYISH-BROWN SILTY CLAY WITH
	3D	24"	20"	7.0'	3	3	4	4	7.0'	FREQUENT FINE SAND SEAMS ~VERY STIFF~ q _p = 7.0 KSF
	4D	24"	14"	9.0'	3	5	7	7	-	BROWN MOTTLED DARK BROWN SILTY CLAY q_p = 8.0 KSF ~HARD BECOMING
	5D	24"	22"	12.0'	4	5	6	8		STIFF~ $q_p = 7.0 \text{ KSF}$
									14.5'	
	0.0	0.411	0.4"	47.0					=	
	6D	24"	24"	17.0'	2	2	2	2	-	GRAY SILTY CLAY $q_p = \le 0.5 \text{ KSF}$
	1V	3.5 X 7	" VANE	20.6'					-	$S_v = 0.75 \text{ KSF} / 0.13 \text{ KSF}$ ~MEDIUM~
	1V'	3.5 X 7	" VANE	21.2'						$S_v = 0.67 \text{ KSF} / 0.12 \text{ KSF}$
	2V 2V'		" VANE						=	$S_v = 0.68 \text{ KSF} / 0.13 \text{ KSF}$ $S_v = 0.78 \text{ KSF} / 0.13 \text{ KSF}$
									-	HYDRAULIC PUSH ROD PROBE 26.2' TO 43.4'
									-	
									-	

STRATIFICATION LINES REPRESENT THE

AND THE TRANSITION MAY BE GRADUAL.

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

BORING NO.:

B-103



TYPE

SSA / HW

SS

LOCATION:

CASING:

SAMPLER:

CORE BARREL:

U = 3.5" SHELBY TUBE

LABORATORY TEST

DRILLING CO.:

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

SIZE I.D. HAMMER WT. HAMMER FALL

140 LBS.

140 LBS.

53 SEWALL STREET / PORTLAND MAINE

4"

1 3/8"

NORTHERN TEST BORINGS, INC.

BORING LOG

MIKE NADEAU

DRILLER:

30"

BORING NO.: **B-103**SHEET: 2 OF 2

PROJECT NO: 13-0392

PROJECT NO.: 13-0392

DATE START: 5/24/2013

DATE FINISH: 5/24/2013

ELEVATION: NOT AVAILABLE

SWC REP.: PJO

WATER LEVEL INFORMATION SOILS WET AT 2.2' +/-

SOILS SATURATED BELOW 14' +/-

BORING NO.:

B-103

CASING		SAN	ИPLE		SAME	PLER BI	LOWS P	ER 6"	DEPTH	STRATA & TEST DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	SIRAIA & IESI DAIA
				0 201						HYDRAULIC PUSH ROD PROBE
									43.4'	PROBABLE SAND SEAM
					15	25	25	19	45.4	ADVANCED BY ROD PROBE
					19	28	40/2"		45.5'	PROBABLE SAND AND GRAVEL
										DEFLICAL AT 45 FL
										REFUSAL AT 45.5' (PROBABLE BEDROCK)
										(I NOBABLE BEBROOK)
				+						
]]				
SAMPLI		201		SOIL C	LASSI	FIED B	Y:		REMARKS:	
0 = SPL C = 2" S					DRI	IIFR -	VISUAL	ΙY	STRATIFICAT	TION LINES REPRESENT THE 5
		/ TUBE		Х			ł VISU			TE BOUNDARY BETWEEN SOIL TYPES

AND THE TRANSITION MAY BE GRADUAL.



BORING LOG

MIKE NADEAU

DRILLER:

B-104 **BORING NO.:** SHEET: 1 OF 1 PROJECT NO.: 13-0392

DATE START: 5/24/2013 DATE FINISH: 5/24/2013

ELEVATION: NOT AVAILABLE

PJO SWC REP.:

WATER LEVEL INFORMATION FILL SOILS WET AT 2.0' +/-

TYPE SIZE I.D. HAMMER WT. HAMMER FALL SSA 4" O.D. 140 LBS. 1 3/8" SS 140 LBS. 30"

DRILLER - VISUALLY

LABORATORY TEST

SOIL TECH. - VISUALLY

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

53 SEWALL STREET / PORTLAND MAINE

NORTHERN TEST BORINGS, INC.

CORE BARREL:

D = SPLIT SPOON C = 2" SHELBY TUBE

S = 3" SHELBY TUBE

U = 3.5" SHELBY TUBE

LOCATION:

CASING:

SAMPLER:

DRILLING CO.:

CASING BLOWS		SAN	/IPLE		SAMI	PLER BL	OWS F	PER 6"	PTH STRATA & TEST DATA	
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH STRATA & TEST DATA	
									GRAYISH-BROWN CLAYEY SANDY SILT	
	1D	24"	18"	2.0'	2	3	3	4	WITH ORGANICS (REWORKED FILL) ~LOOSE~	
	2D	24"	12"	4.0'	4	3	2	2	4.0'	
									BROWN MOTTLED DARK BROWN SILTY CLAY	
	3D	24"	18"	6.0'	6	5	6	7	6.0' \sim VERY STIFF \sim $q_p = 6$	6.0 KSF
									BOTTOM OF EXPLORATION AT 6.0'	
AMPLE	s.		1	SOIL C	I ASSII	FIED BY	٧٠	1	REMARKS:	

STRATIFICATION LINES REPRESENT THE

AND THE TRANSITION MAY BE GRADUAL.

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

BORING NO.:

B-104



BORING LOG

MIKE NADEAU

DRILLER:

B-105 **BORING NO.:** SHEET: 1 OF 1 PROJECT NO.: 13-0392

DATE START: 5/24/2013 DATE FINISH: 5/24/2013

ELEVATION: NOT AVAILABLE

PJO

SWC REP.: WATER LEVEL INFORMATION FILL SOILS WET AT 2' +/-

TYPE SIZE I.D. HAMMER WT. HAMMER FALL

PROJECT / CLIENT: PROPOSED BUILDING ADDITION AND PARKING LOT / EYE CARE MEDICAL GROUP

CASING: SSA 4" O.D. 140 LBS. SAMPLER: 1 3/8" SS 140 LBS. 30"

NORTHERN TEST BORINGS, INC.

53 SEWALL STREET / PORTLAND MAINE

CORE BARREL:

LOCATION:

DRILLING CO.:

CASING BLOWS		SAN	/IPLE		SAMF	PLER BI	LOWS P	ER 6"	DEPTH	CTDATA & TECT DATA
PER FOOT	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24	DEPTH	STRATA & TEST DATA
				0.00						BROWN SAND AND SILT SOME GRAVEL
	1D	24"	15"	2.0'	2	2	3	4		WITH TRACE AMOUNTS OF CLINKER, CHARCOAL, BRICK AND ASH (FILL)
	0.0	0.411	4.411	4.01		_	_	_	4.01	~LOOSE~
	2D	24"	14"	4.0'	5	5	5	5	4.0'	
										GRAY-BROWN CLAYEY SILT TRACE GRAVEL WITH ORGANICS (FILL)
	3D	24"	15"	7.0'	3	4	6	3		~LOOSE~
									-	
									-	
	4D	24"	7"	12.0'	4	4	5	5		~LOOSE~
	5D	5"	5"	12.4'	35/5"					PUSHING PIECE OF GRAVEL
									15.0'	PROVINI MERIUM TO COARDOS CAMP I COOS
	6D	24"	20"	17.0'	4	4	5	5	16.4' 17.0'	BROWN MEDIUM TO COARSE SAND ~LOOSE~ GRAY SANDY SILT SOME CLAY WITH ORGANICS (BAY DEPOSIT)
	00	24	20	17.0	-	4	3	3	17.0	GRAT SANDT SIET SOME CEAT WITH GROANICS (BAT DEFOSIT)
										BOTTOM OF EXPLORATION AT 17.0'
									-	
									<u> </u>	
SAMPLE	ES:			SOIL C	CLASSIF	FIED B	Y:		REMARI	KS:

D = SPLIT SPOON

C = 2" SHELBY TUBE

S = 3" SHELBY TUBE U = 3.5" SHELBY TUBE **DRILLER - VISUALLY** SOIL TECH. - VISUALLY

LABORATORY TEST

AND THE TRANSITION MAY BE GRADUAL.

APPROXIMATE BOUNDARY BETWEEN SOIL TYPES

STRATIFICATION LINES REPRESENT THE

BORING NO.:

B-105



KEY TO THE NOTES & SYMBOLS Test Boring and Test Pit Explorations

All stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w - water content, percent (dry weight basis)

qu - unconfined compressive strength, kips/sq. ft. - based on laboratory unconfined

compressive test

S_v - field vane shear strength, kips/sq. ft. L_v - lab vane shear strength, kips/sq. ft.

q_p - unconfined compressive strength, kips/sq. ft. based on pocket

penetrometer test

O - organic content, percent (dry weight basis)

W_L - liquid limit - Atterberg test
 W_P - plastic limit - Atterberg test
 WOH - advance by weight of hammer
 WOM - advance by weight of rods

HYD - advance by force of hydraulic piston on drill

RQD - Rock Quality Designator - an index of the quality of a rock mass. RQD is computed

from recovered core samples.

 γ_T - total soil weight γ_B - buoyant soil weight

f - fines content (percent by weight passing U.S. No. 200 Sieve)

Description of Proportions:

0 to 5% TRACE 5 to 12% SOME 12 to 35% "Y" 35+% AND

REFUSAL: Test Boring Explorations - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: <u>Test Pit Explorations</u> - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.



Consolidation Test

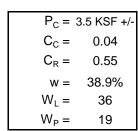
ASTM D-2435

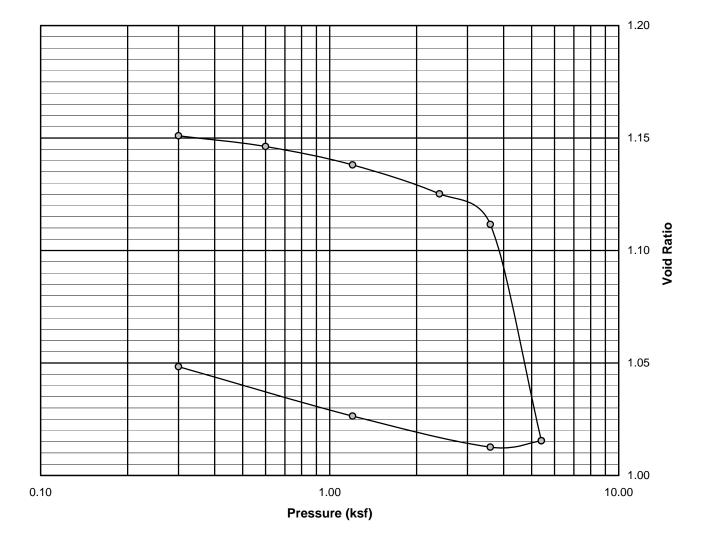
Project Name Portland - Building Addidtion and Parking

Client Eyecare Medical Group, P.A.

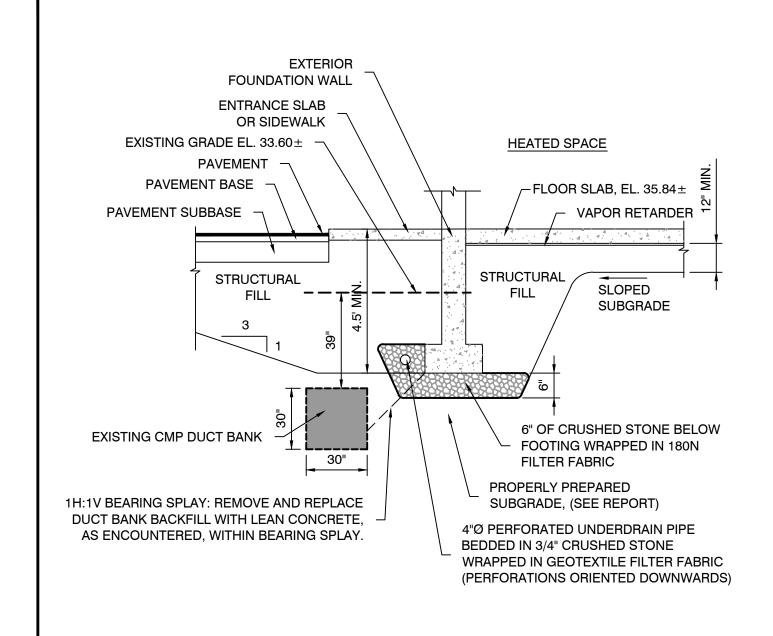
Boring B-101 Sample 1S Depth 20'-22'

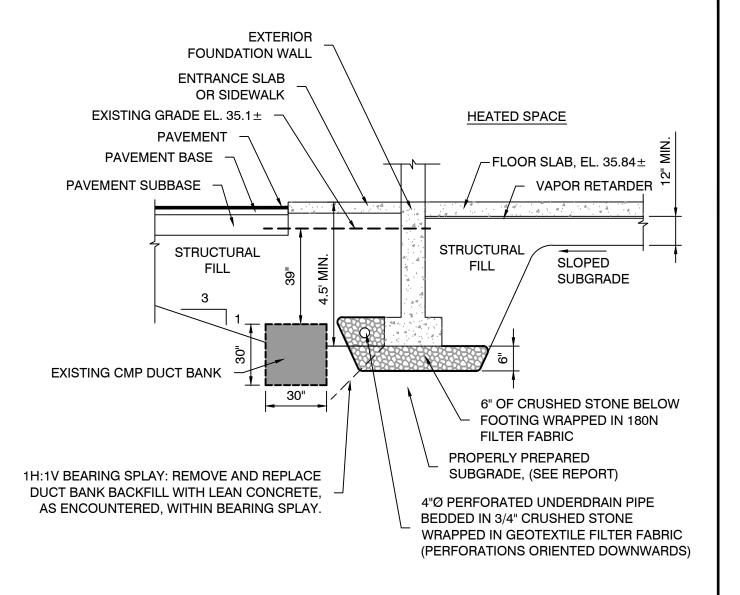
Project Number	13-0392
Lab ID	16142B
Date	6/5/2013
Date Complete	6/24/2013





Comments: EMW Reviewed By





SOUTHWEST BUILDING CORNER

NORTHWEST BUILDING CORNER

NOTE:

- 1. UNDERDRAIN INSTALLATION AND MATERIAL GRADATION **RECOMMENDATIONS ARE CONTAINED WITHIN THIS** REPORT.
- 2. DETAIL IS PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY. NOT FOR CONSTRUCTION.

				4
1	06/12/2013	REVISED STONE BEDDING AND UNDERDRAIN, ADD CMP DUCT BANK	СЕМ	
NO.	DATE	DESCRIPTION	BY	
	•			

EYE CARE MEDICAL GROUP

UNDERDRAIN DETAIL

PROPOSED BUILDING ADDITION AND PARKING LOT 53 SEWALL STREET PORTLAND, MAINE

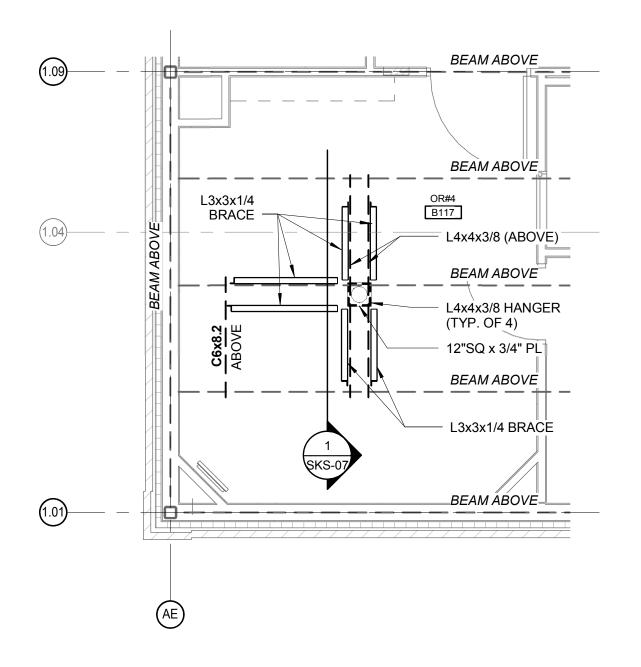
Job No.: Date:

13-0392 06/07/2013

Not to Scale Scale:

Sheet: 10





ADDENDUM-2



ARCHITECTURE INTERIOR DESIGN PLANNING

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E.M.G.-PHASE 2-ADDTION & RENOVATION

53 Sewall Street, Portland, Maine 04102

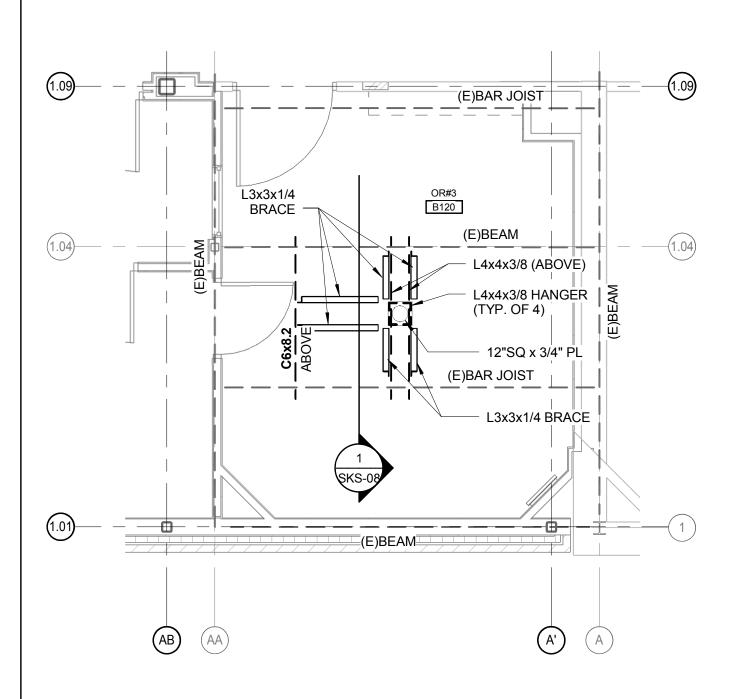
TITLE
OR#4 LIGHT SUPPORT FRAMING
PLAN

JOB#	12084	
DATE	07-12-2013	
SCALE	1/4" = 1'-0"	

SHEET **SKS-05**







ADDENDUM-2



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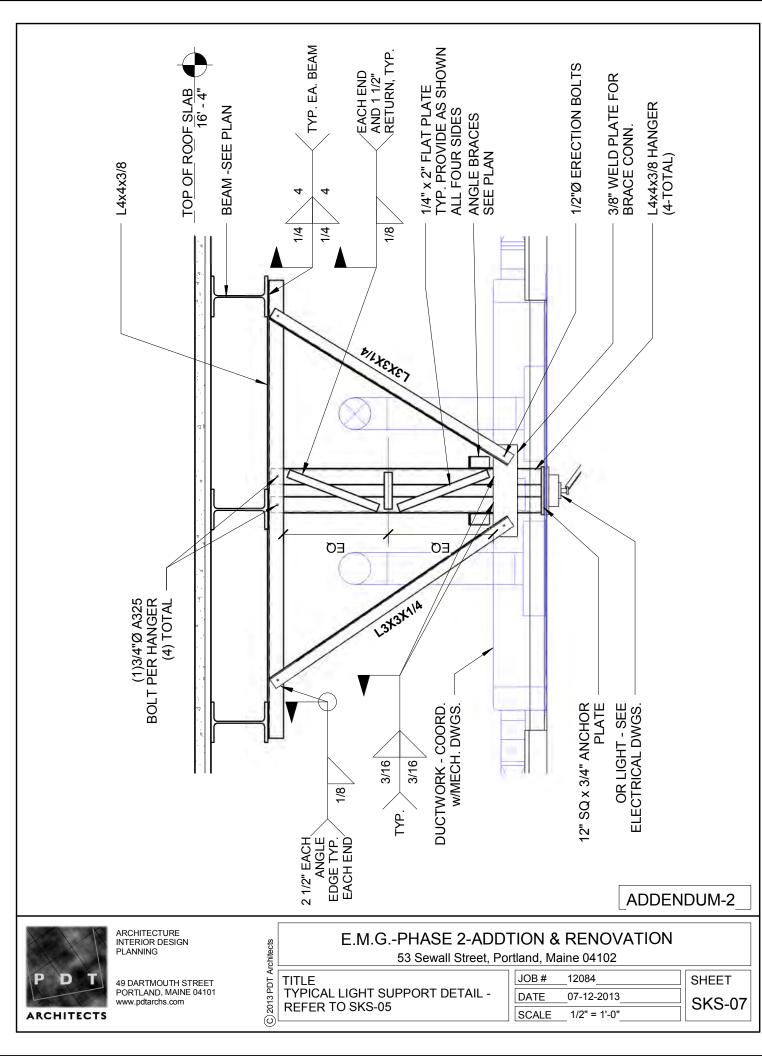
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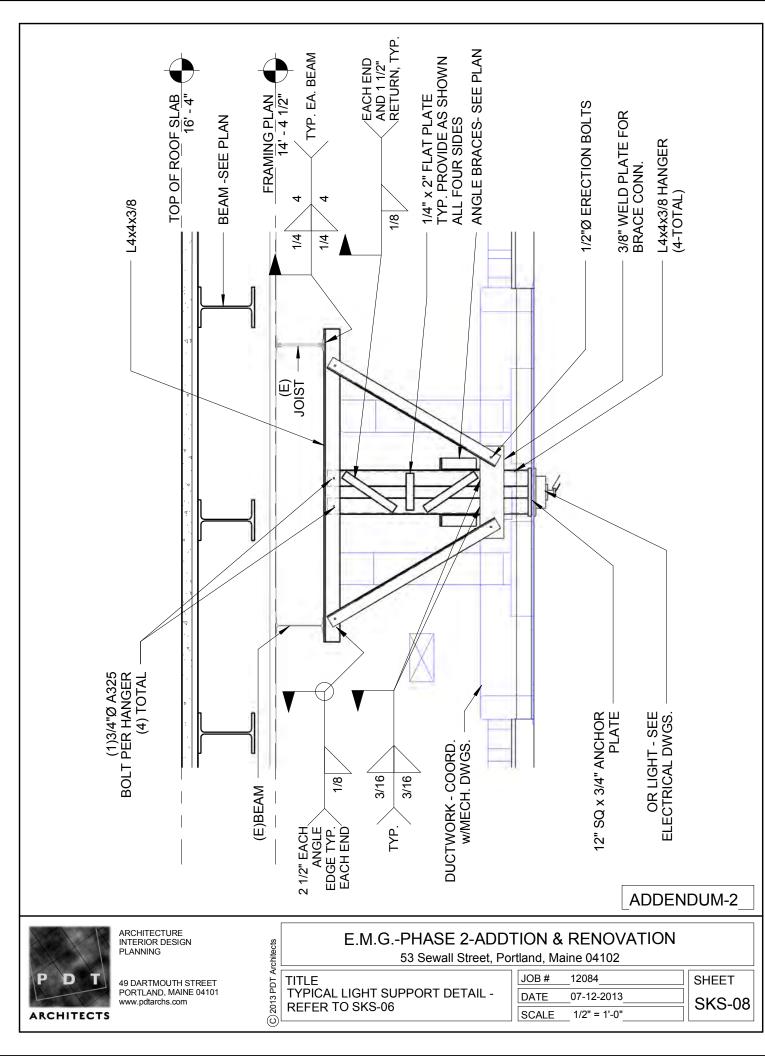
53 Sewall Street, Portland, Maine 04102

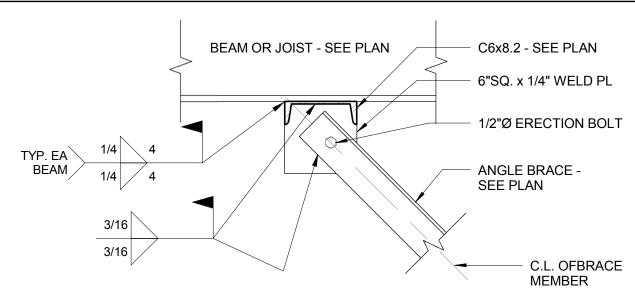
TITLE	
OR#3 LIGHT SUPPORT FRAMING	
PI AN	

]	JOB#	12084	
	DATE	07-12-2013	
	SCALE	1/4" = 1'-0"	

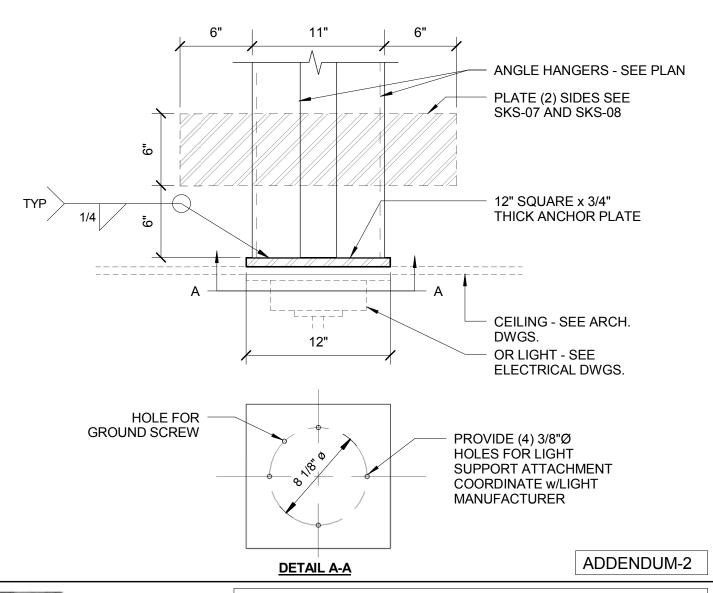
SHEET **SKS-06**







TYPICAL DETAIL OF BRACE PARALLEL TO BEAM/JOIST





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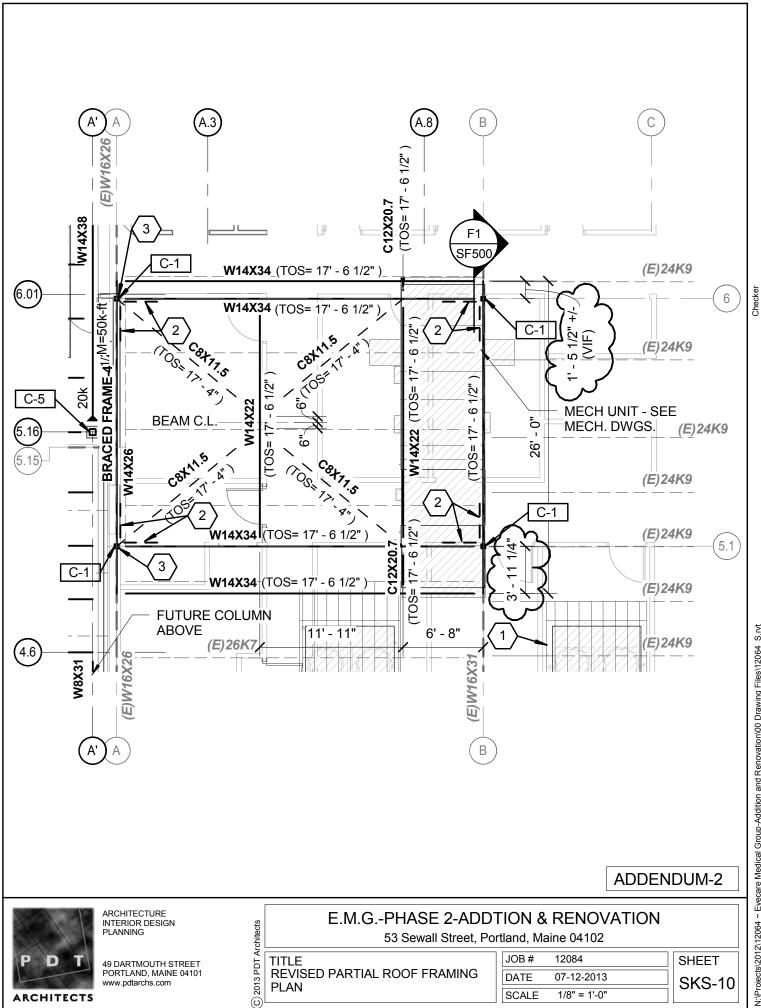
E.M.G.-PHASE 2-ADDTION & RENOVATION

53 Sewall Street, Portland, Maine 04102

TITLE
TYPICAL LIGHT SUPPORT DETAILS-
REFER TO SKS-05 AND SKS-06

-		
	JOB#	12084
	DATE	07-12-2013
	DATE	07-12-2013
	SCALE	1 1/2" = 1'-0"
J	00.122	

SHEET **SKS-09**



TITLE

PLAN

REVISED PARTIAL ROOF FRAMING

49 DARTMOUTH STREET

PORTLAND, MAINE 04101

www.pdtarchs.com

ARCHITECTS

JOB#

DATE

SCALE

12084

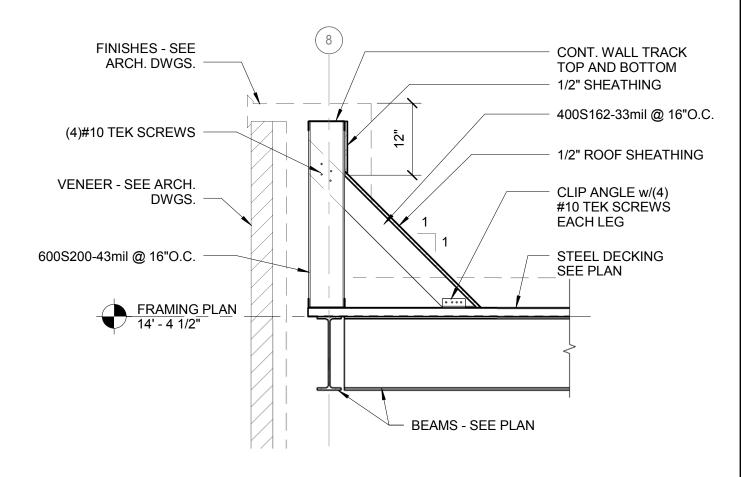
07-12-2013

1/8" = 1'-0"

N:\Projects\2012\12064 ~ Eyecare Medical Group-Addition and Renovation\00 Drawing Files\12064_S.rvt

SHEET

SKS-10



NOTE: DETAIL APPLIES ALONG LINE-8 BETWEEN LINES A AND C COORDINATE W/ARCHITECTURAL DRAWINGS

ADDENDUM-2

SHEET

SKS-11



ARCHITECTURE INTERIOR DESIGN PLANNING

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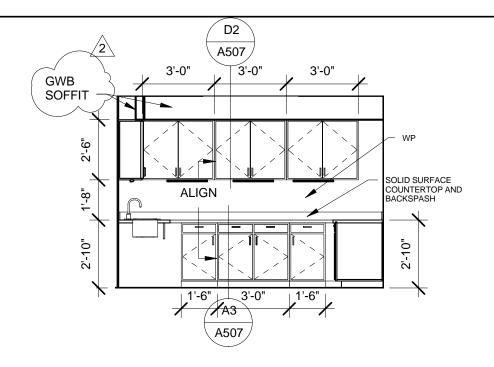
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E.M.G.-PHASE 2-ADDTION & RENOVATION

53 Sewall Street, Portland, Maine 04102

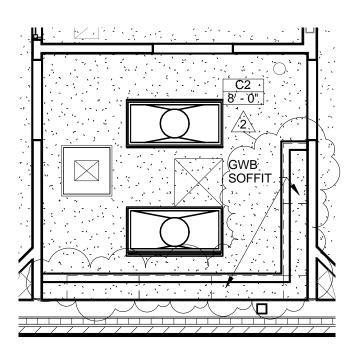
TITLE
DETAIL AT PARAPET ALONG LINE-8

JOB#	12084	
DATE	07-12-2013	
SCALE	3/4" = 1'-0"	



Autoclave South - ADD Soffit

1/4" = 1'-0"



2 CEILING PLAN "B" - Autoclave Soffits
1/4" = 1'-0"

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ADDENDUM 2

SHEET

SKA-1



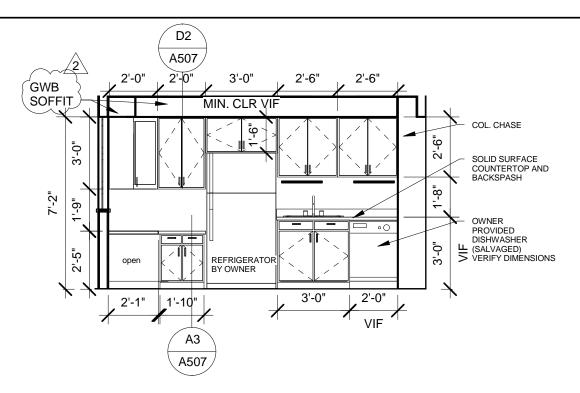
ARCHITECTURE INTERIOR DESIGN PLANNING

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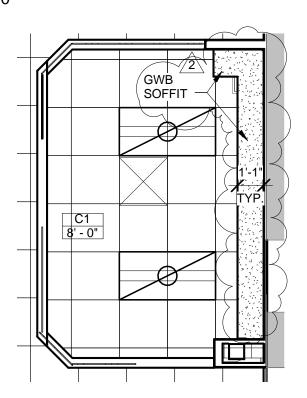
E. M. GPHASE 2-ADDITION & RENOVATION
52 Sowall Street Dortland ME 04102

53 Sewall Street, Portland, ME 04102

TITLE Add soffits at Autoclave B119	JOB#	12084
	DATE	7-15-2013 06/25/13
	SCALE	1/4" = 1'-0"



Nurse Station East - Add Soffit 1/4" = 1'-0"



CEILING PLAN "B" - Nurse Soffit 1/4" = 1'-0"

Add soffit at Nurse B108

ADDENDUM 2



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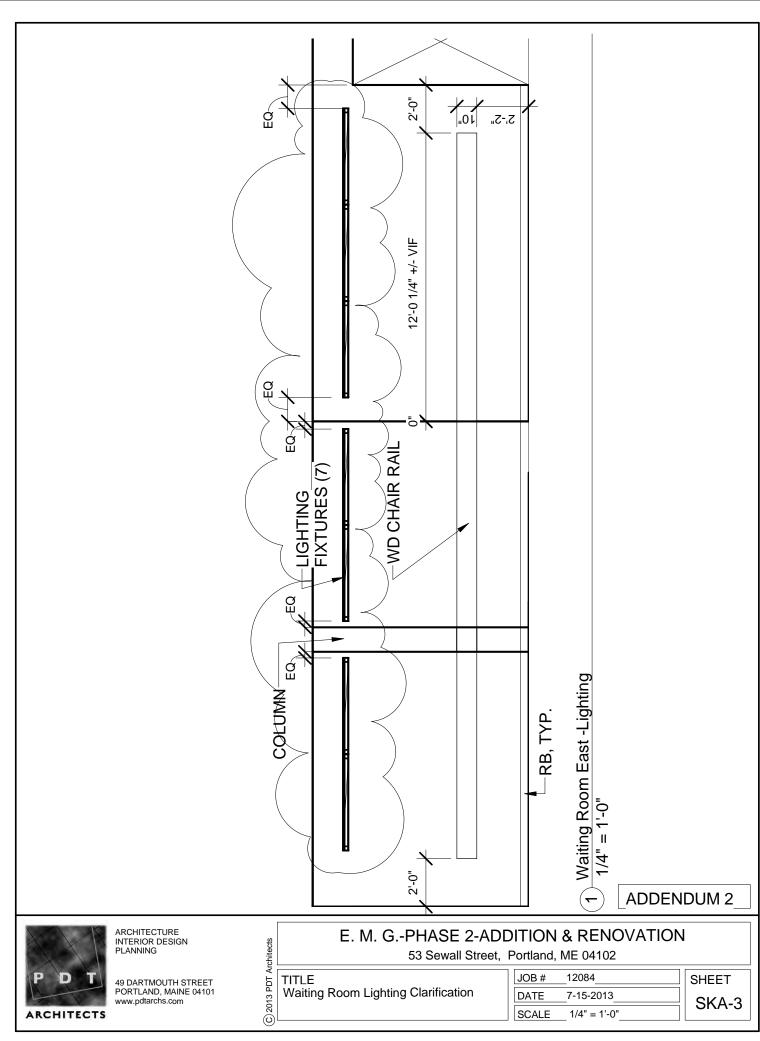
E. M. G.-PHASE 2-ADDITION & RENOVATION © 2013 PDT Architects 53 Sewall Street, Portland, ME 04102

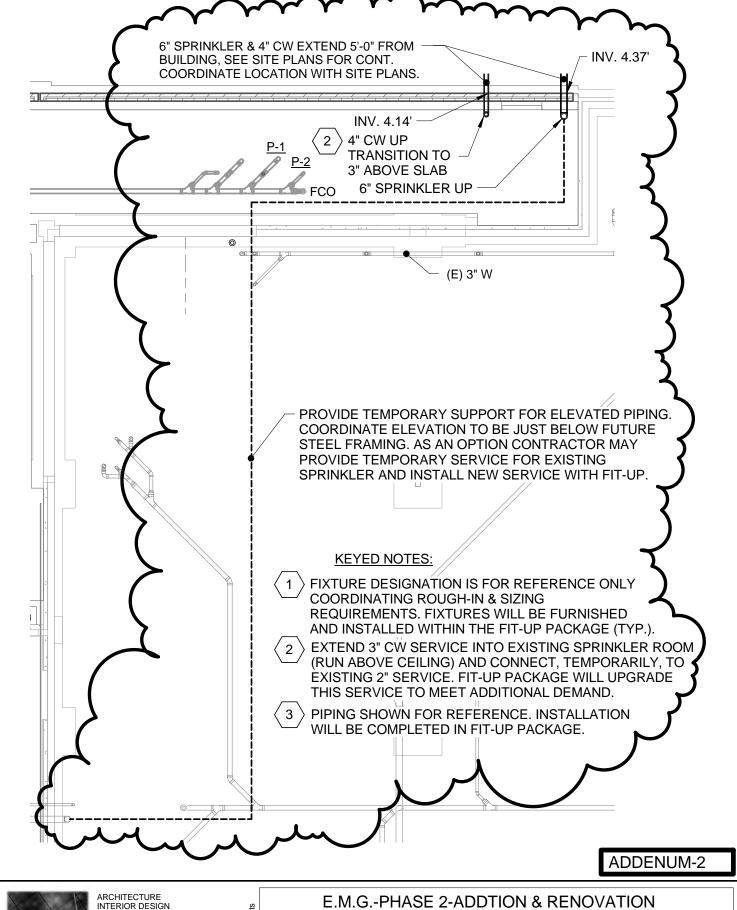
TITLE

JOB#	12084
DATE	7-15-2013
SCALE	1/4" = 1'-0"

SHEET SKA-2

ARCHITECTS







PLANNING

49 DARTMOUTH STREET PORTLAND, MAINE 04101 www.pdtarchs.com

53 Sewall Street, Portland, Maine 04102

TITLE
REVISED UNDER SLAB DOMESTIC
WATER AND SPRINKLER ENTRANCE

JOB#	12084	
DATE	07-12-2013	
SCALE	1/8" = 1'-0"	

SHEET SKP-1 N:\Projects\2012\12064 ~ Eyecare Medical Group-Addition and Renovation\00 Drawing Files\12064_M.rvt

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