

**2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS**

Name of Project: **Patio Addition to the Phi Gamma Delta House**
 Address: **108 W. Cameron Ave., Chapel Hill, NC, 27514**
 Proposed Use: **Addition to existing structure**
 Owner/Authorized Agent: **Jack Haggerty, Architect; 205 W. Main St.; Carrboro NC
 919 967-5191 jack@jackhaggertyarchitect.com**

Owned By: **Private**
 Code Enforcement Jurisdiction: **Town of Chapel Hill**

LEAD DESIGN PROFESSIONAL: Jack Haggerty, Architect
 DESIGNER FIRM NAME LICENSE# TELEPHONE# E-MAIL
Architectural: Jack Haggerty, Architect Jack Haggerty 51782 / 6892 919-967-5191 jack@jackhaggertyarchitect.com
Electrical: Alamance Consulting Eng. G. Kevin Bengal 25043 336-449-4558 alamance@ace-nc.net
Fire Alarm: Alamance Consulting Eng. G. Kevin Bengal 25043 336-449-4558 alamance@ace-nc.net
Sprinkler-to be submitted under separate permit
Structural: Excel Engineering Rob Munach 19339 919-542-7578 rob@robmunachpe.com

2012 EDITION OF NC CODE FOR: X Addition
 EXISTING: Reconstruction Alteration Repair
 CONSTRUCTED ORIGINAL USE RENOVATED CURRENT USE

BUILDING DATA
Construction Type: I-A I-B I-C I-D I-E I-F I-G I-H I-I I-J I-K I-L I-M I-N I-O I-P I-Q I-R I-S I-T I-U I-V I-W I-X I-Y I-Z
 Mixed construction: No Yes Types _____
Sprinklers: Yes No NFPA 13 NFPA 13R NFPA 13D
Standpipes: No Yes Class I II III Wet Dry
Fire District: No Yes Flood Hazard Area: No Yes
Building Height: 48' Number of Stories: 4
Mezzanine: No Yes
Gross Building Area: _____

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3 rd Floor	2,372		
2 nd Floor	2,724		
1 st Floor	2,724	1,044 unhd.	
Basement	3038.5	1,044 unhd.	
TOTAL			No new htd. sq.ft.

ALLOWABLE AREA
Primary Occupancy: Assembly A-1 A-2 A-3 A-4 A-5
 Business Educational Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2 I-3 I-4
 I-3 Condition 1 2 3 4 5
 Mercantile Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Utility and Miscellaneous Parking Garage Open Enclosed Repair Garage

Secondary Occupancy: N/A
Special Uses: N/A - 419 Group R-2 but no effect on dwelling units
Special Provisions: N/A
Mixed Occupancy: N/A

ALLOWABLE HEIGHT AREA INCREASE
 NO HEIGHT OR AREA INCREASE IS REQUIRED OR REQUIRED

FIRE PROTECTION REQUIREMENTS
 Life Safety Plan Sheet #, if Provided: **A-2, PLAN**

Information below is for addition shown in drawings.

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
		REQ'D	PROVIDED (w/ REDUCTION)				
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East	27"	1					
West	30"	1					
South	70"	1					
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions		0					
Floor Construction		0					
Including supporting beams and joists							
Roof Construction							
Including supporting beams and joists							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Separation							
Party/Wall Separation							
Smoke Barrier Separation							
Tenant Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes Partial _____
 Panic Hardware: No Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ^{2,3} (SECTION 1015.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
SCREENED ENCLOSURE	2	2	250'	20'	SEE PLAN	SEE PLAN
RAISED PATIO	1	1	250'	35'		

¹ Corridor dead ends (Section 1017.3)
² Buildings with single exits (Table 1019.2), Spaces with one means of egress (Table 1015.1)
³ Common Path of Travel (Section 1014.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	AREA ¹		CALCULATED PER OCCUPANT LOAD (a+b)	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in) ^{2,3,4,5,6}	
	(a)	(b)		STAIR	LEVEL	STAIR	LEVEL
PATIO	1,044	200 GROSS	49	2"	20"	70"	

¹ See Table 1004.1.1 to determine whether net or gross area is applicable.
² See definition "Area, Gross" and "Area, Net" (Section 1002)
³ Minimum stairway width (Section 1009.1); min. corridor width (Section 1017.2); min. door width (Section 1008.1)
⁴ Minimum width of exit passageway (Section 1021.2)
⁵ See Section 1004.5 for converging exits.
⁶ The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
⁷ Assembly occupancies (Section 1025)

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Wind (I_w) 1.0
 Snow (I_s) 1.0
 Seismic (I_e) 1.0
Live Loads: Roof _____ psf
 Mezzanine _____ psf
 Floor 100 _____ psf
Ground Snow Load: 10 _____ psf
Wind Load: Basic Wind Speed 90 _____ mph (ASCE-7)
 Exposure Category B
 Wind Base Shears (for MWFRS) V_x = 1.6 V_y = 5.2 _____

SEISMIC DESIGN CATEGORY A B C D
 Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) I II III IV
Spectral Response Acceleration S_s = 21 _____ %g S₁ = 8 _____ %g
Site Classification Field Test Presumptive Historical Data
Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
Seismic base shear V_x = 2.0 V_y = 2.0 _____
Analysis Procedure Simplified Equivalent Lateral Force Modal
Architectural, Mechanical, Components anchored? _____
LATERAL DESIGN CONTROL: Earthquake _____ Wind X _____

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing capacity 2000 _____ psf
 Pile size, type, and capacity _____

PLUMBING FIXTURE REQUIREMENTS

NO OCCUPANT INCREASE

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
PARKING IN REAR OF BLDG.	8-12	9		1	1
TOTAL					

General Notes

The scope of work shall include all labor, materials, equipment, temporary services (including toilet, space heating, generators, etc.) building and other permits and fees necessary to complete the job as shown on these documents.

All Work shall conform to all applicable State and Local Codes, Regulations and Ordinances, and shall be constructed to the highest standards of craftsmanship by properly licensed and qualified Subcontractors of the respective trades. All defective work shall be reconstructed to the approval of the Architect at no cost to the Owner. It shall be the Contractor's responsibility to report any code or workmanship discrepancies to the Owner before proceeding with the Work; otherwise, it is assumed that the represented conditions are accurate and satisfactory, and that the Work can be performed as indicated in the Construction Documents.

All equipment and materials shall be installed according to manufacturers' instructions unless noted otherwise. The Contractor shall provide the owner with a one year warranty on all workmanship and materials, with such warranty beginning at the date of Substantial Completion.

If any material is discovered during excavation or demolition which is in any way considered to contain asbestos or other hazardous or toxic material, construction shall be stopped immediately and the condition reported to Owner.

Drawings shall not be scaled. If there is a discrepancy or absent dimension, contact Architect for clarification.

The Contractor shall take all reasonable precautions to minimize water entering building during construction, and that the building and site remain secure and safe at all times, providing all necessary components for construction safety, care of adjacent existing property and construction. The Contractor shall comply with all County, State and Federal Regulations regarding safety.

General Contractor shall keep job site clean, free of trash and orderly. Work area, interior and exterior, shall be cleaned at end of project.

All new construction shall be plumb, straight and square, and in proper alignment.

General Contractor shall protect all existing construction and finishes to remain, and shall repair any that are disturbed by his operations.

General Contractor shall engage qualified sprinkler contractor for design and extension of sprinklers to basement ceiling. Piping to sprinkler shall be above ceiling. Sprinkler cost and associated construction shall be included in General contractor's proposal.

General Site Notes

General Contractor shall coordinate w/ Owner on location for material storage.

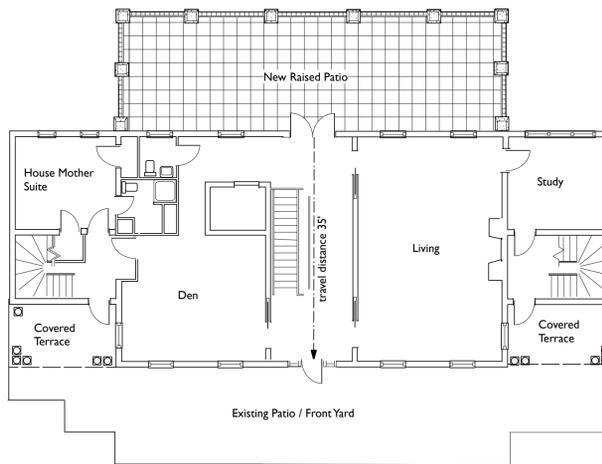
Erosion Control: Contractor shall do all that is possible to minimize soil erosion and siltation caused by his operations. He shall comply with all applicable Town of Chapel Hill regulations relating to erosion prevention and control.

Earth Excavation: Footing trenches shall extend into adequate bearing soil a minimum of 6", and be a minimum of 12" below finish grade or as indicated on drawings. Provide fences, barricades or any other safety devices around all open trenches, excavations or any other hazardous area. Protect all graded and excavated areas from traffic and erosion.

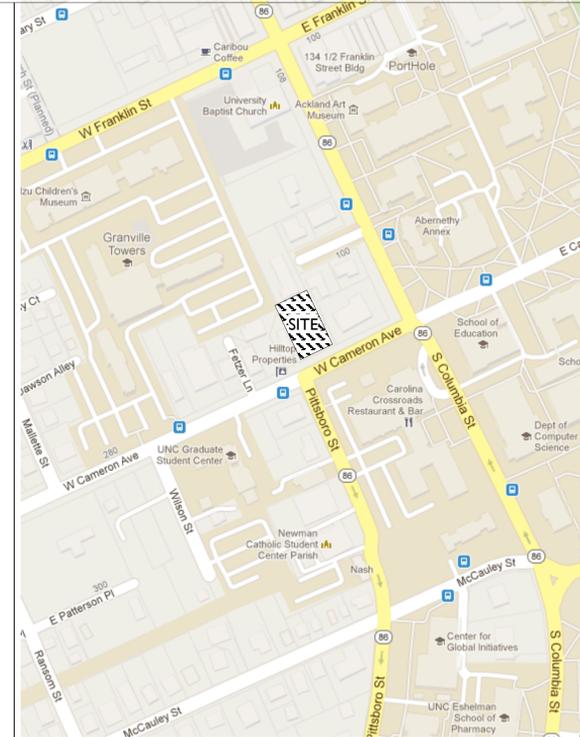
General Contractor shall protect all existing construction to remain.

Termite Treatment shall be according to N.C. State Building Code.

All plantings shall have 1 year warranty.



First Floor Life Safety Plan



Location Map

Jack Haggerty, Architect
 205 W. Main St., Ste. 213, Carrboro, NC
 27510
 919-967-5191



Project Team

Jack Haggerty, Architect - Designer
 Alamance Engineers- Plumbing, Mechanical, Electrical & Fire Alarm
 Rob Munach, P.E. - Structural Design

Sheet Index

a drawing for extension of sprinkler system will be supplied by sprinkler contractor

COVER - Appendix B

A-1 - Site Plans, New & Exist.; Demolition Plan

A-2 - Raised Patio and Screened Enclosure Plan

A-3 - Drain Plan; Reflected Ceiling Plan

A-4 - North Elevation

A-5 - West Elevation; Details

A-6 - Section and Elevation Details

S-1 - Structural Plan and Details (Excel Engineering)

P-1 - Patio Drain Plan (Alamance Consulting Engineers)

E-1 - Lighting Plan (Alamance Consulting Engineers)

E-2- Electrical Plan (Alamance Consulting Engineers)

E-3- Panel Schedule & Notes (Alamance Consulting Engineers)

FA-1- Fire Alarm Plan (Alamance Consulting Engineers)

for
construction

COVER

October 13, 2017

1 of 13

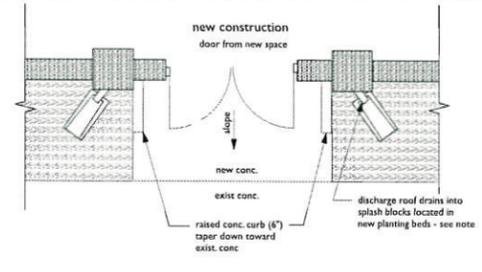
Demolition Notes

- All demolition work may not be shown. General Contractor shall coordinate demolition work with work shown on other drawings
- General Contractor shall provide means of temporary support at areas where walls are removed.
- General Contractor shall coordinate w/ fraternity representatives regarding any utility stoppage or disruptions.
- General Contractor shall provide protection and warning around any open excavations
- General Contractor shall protect existing mechanical equipment and re-install any bollards disturbed by construction
- General Contractor shall protect existing downspouts and divert temporarily from construction activity.
- General Contractor shall keep building interior secure and protected from the weather during construction.
- General Contractor shall coordinate w/ Sprinkler Contractor on any req'd demolition for installation of sprinklers.

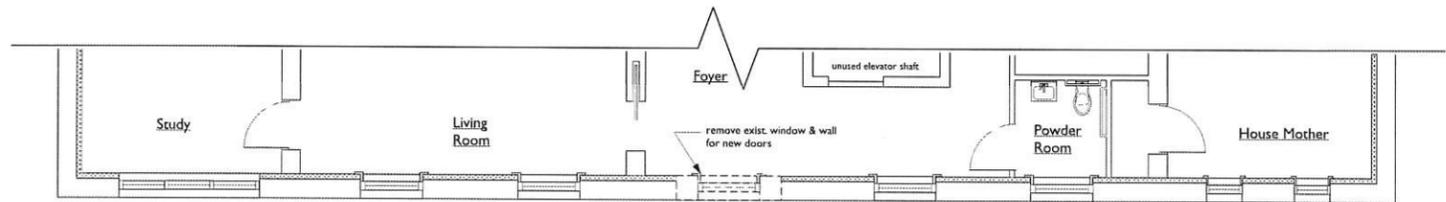
adj. - adjacent
 a.f.f. - above finished floor
 blk. - block/blocking
 cab (s) - cabinet(s)
 c/g. - ceiling
 col. - column
 cont. - continuous
 conc. - concrete
 ds. - downspout
 dtl. - detail
 dwg. - drawing
 elec. - electric
 elev. - elevation
 eq. - equal
 e.w.c. - electric water cooler

flg. - flooring
 fr. ext. - fire extinguisher
 gwb. - gypsum wall board
 ht. - height
 insul. - insulation
 lav. - lavatory
 mat. - material
 max. - maximum
 mfr. - manufacturer
 min. - minimum
 misc. - miscellaneous
 moist. resist. gwb. - moisture resistant gypsum wall board
 o.c. - on center
 opng. - opening

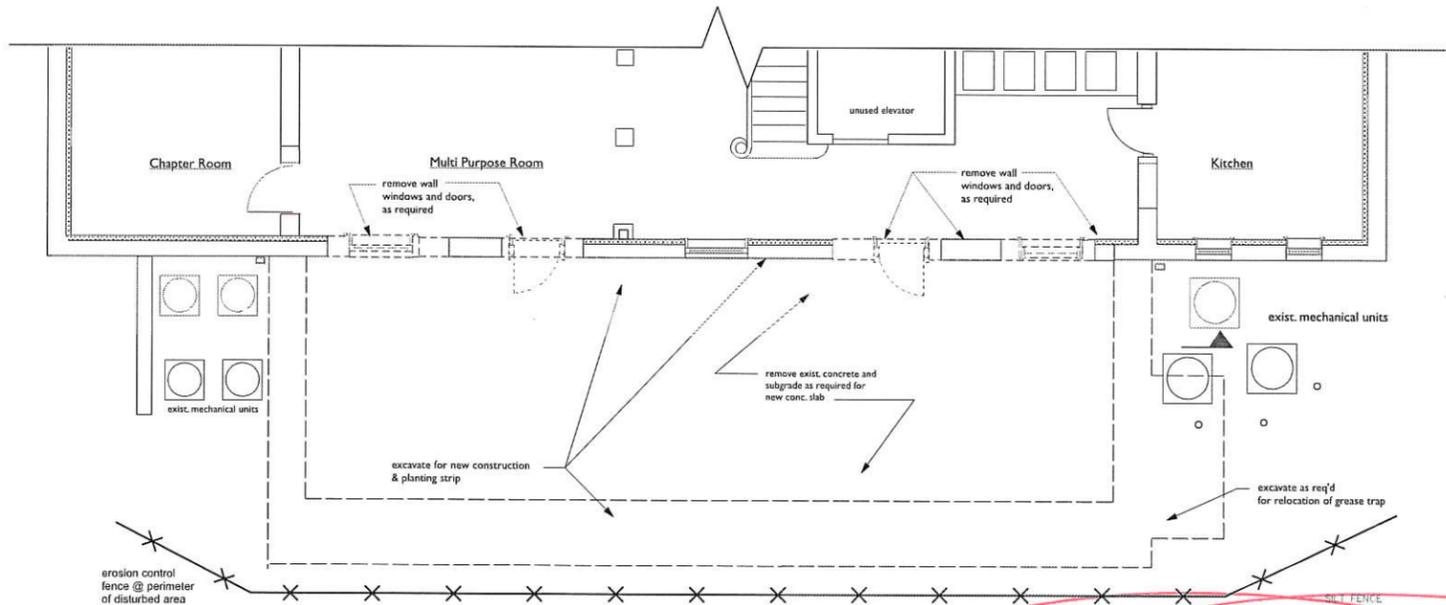
rein. - reinforcement
 r.o. - rough opening
 sch. - schedule
 s.h. - sill height
 sim. - similar
 spec (s). - specifications
 std. - steel
 t.o.p. - top of wall
 typ. - typical
 u.o.n. - unless otherwise noted
 vert. - vertical
 wd. - wood



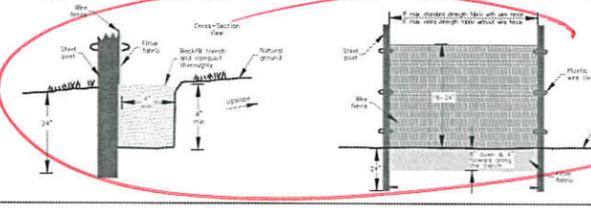
I **A-1** **Patio Drain and Walk Detail - 1/4"**
 Note - 4 roof drains are proposed in order to disperse patio stormwater run-off, w/ each roof drain draining 260 s.f.



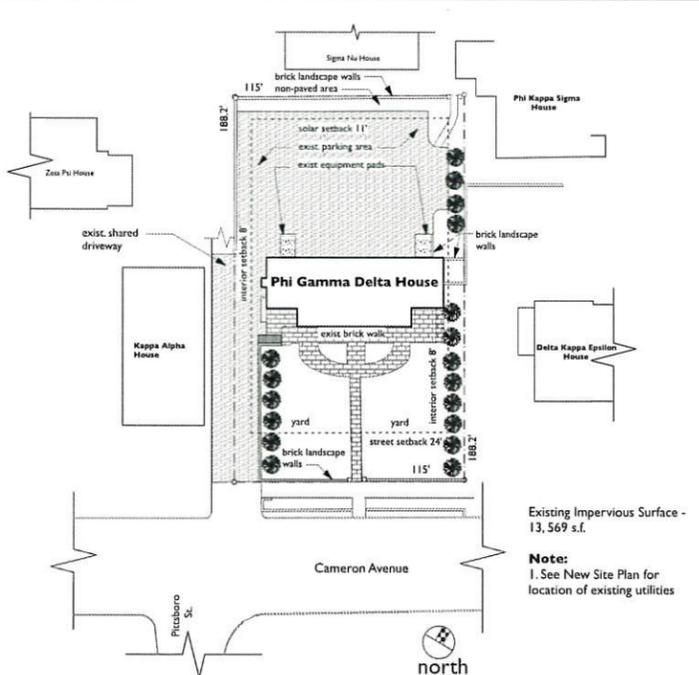
2 **A-1** **First Floor Demolition Plan- 3/16"**



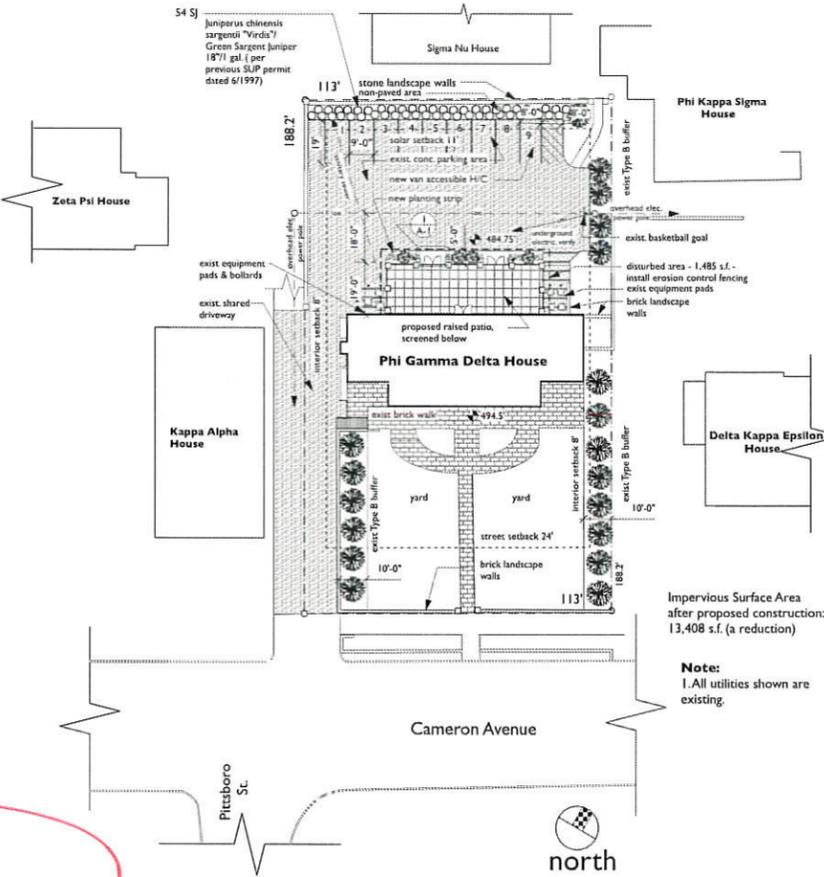
3 **A-1** **Parking Area Demolition Plan- 3/16"**



4 **A-3** **Silt Fence Detail Town of Chapel Hill - nts**
 install @ perimeter of disturbed area



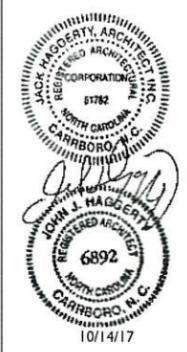
Existing Site Plan - 1" = 40'
 Lot size - 21,643 s.f.



Proposed Site Plan - 1" = 30'
 Lot size - 21,643 s.f.

Lot line location; building and drive location; landscape walls and walk locations and building footprint are taken from S.U.P. application filed with the town of Chapel Hill in 6/1997

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Phi Gamma Delta Fraternity House
 108 W. Cameron St., Chapel Hill, North Carolina

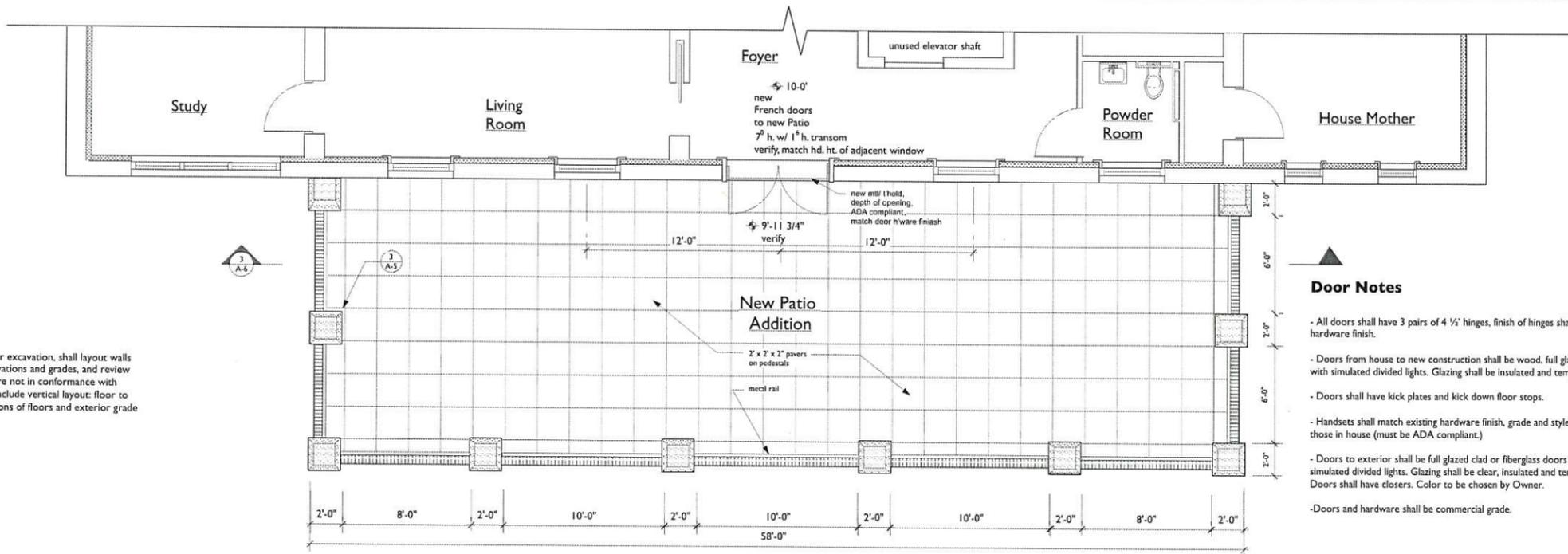
for construction

10/13/17 **A-1** 13

see attached updated details MKC

Lay-Out Note

General Contractor, prior to and after excavation, shall layout walls and openings, and proposed floor elevations and grades, and review with Architect if existing conditions are not in conformance with proposed construction. Layout shall include vertical layout: floor to floor, top of openings, finished elevations of floors and exterior grade outside of doors.



Door Notes

- All doors shall have 3 pairs of 4 1/2" hinges, finish of hinges shall match hardware finish.
- Doors from house to new construction shall be wood, full glazed, with simulated divided lights. Glazing shall be insulated and tempered.
- Doors shall have kick plates and kick down floor stops.
- Handsets shall match existing hardware finish, grade and style of those in house (must be ADA compliant).
- Doors to exterior shall be full glazed clad or fiberglass doors with simulated divided lights. Glazing shall be clear, insulated and tempered. Doors shall have closers. Color to be chosen by Owner.
- Doors and hardware shall be commercial grade.

1 First Floor Plan- 1/4"
A-2

Concrete

Concrete Slabs and Footings: Mix design for concrete shall develop a minimum strength of 3000 psi in 28 days, or as indicated in drawings.

Concrete for sidewalks shall be air-entrained type, and shall be placed on gravel or compacted subgrade with construction joints every 5' on center.

All cast-in-place concrete shall be poured continuously with no cold joints.

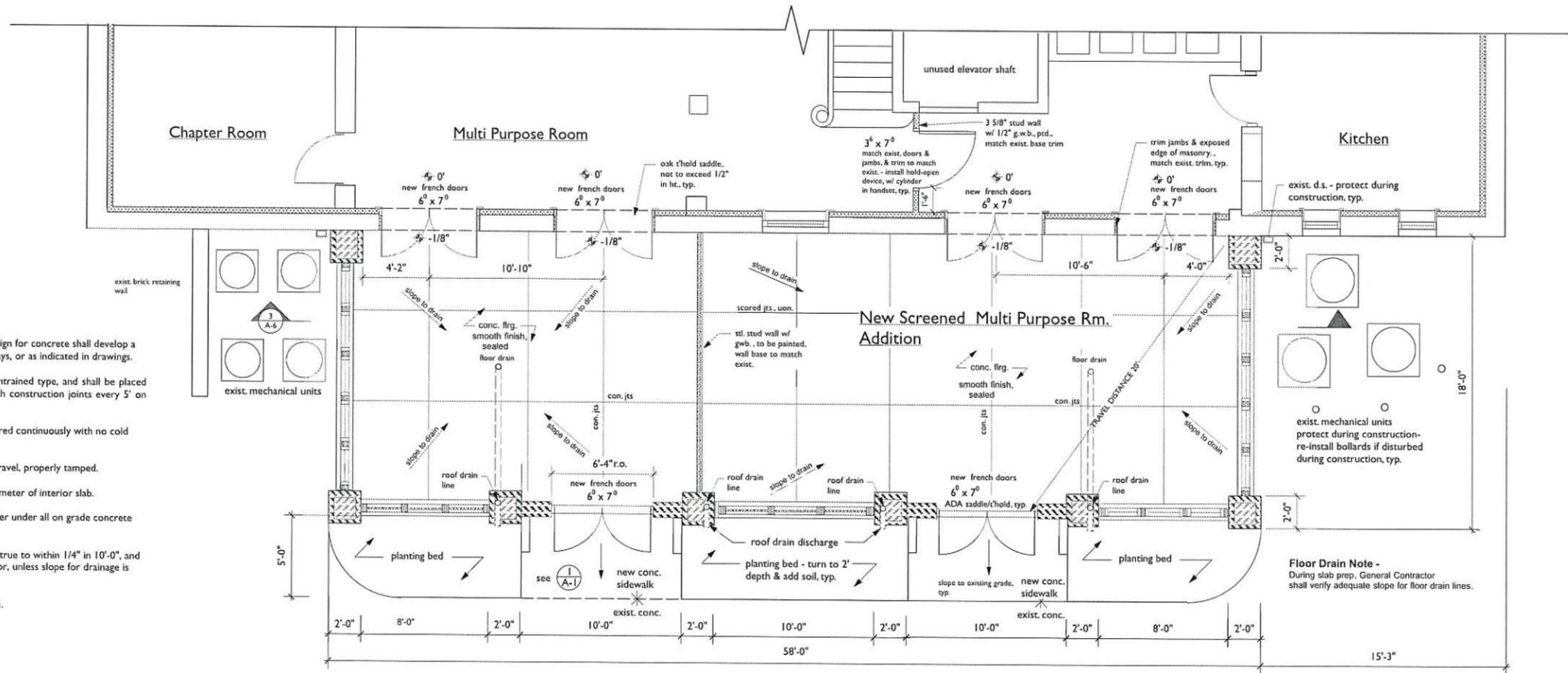
Concrete shall be placed on washed gravel, properly tamped.

Install expansion joint material @ perimeter of interior slab.

Install 12 mil. polyethylene vapor barrier under all on grade concrete slabs.

All concrete shall be poured level and true to within 1/4" in 10'-0", and not to exceed 1/2" in entire run of floor, unless slope for drainage is indicated.

Interior slab shall have broom finish.



Floor Drain Note
During slab prep, General Contractor shall verify adequate slope for floor drain lines.

2 Basement Plan- 1/4"
A-2

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**Phi Gamma Delta
Fraternity House**
108 W. Cameron St., Chapel Hill, North Carolina

for construction

10/13/17

A-2

13

Masonry

All masonry work shall comply with recommendations of the Brick Institute of America and the Carolinas Concrete Masonry Association.

Concrete Masonry Units (CMU): Provide manufacturer's standard units as indicated on Drawings. Provide units complying with ASTM C 90, Grade N-1.

Mortar for Unit Masonry: Provide commercial mortar mix, type "S", for all exposed brick and CMU masonry work.

Brick shall match brick at fraternity house in size, color and texture. Brick bond shall match that of brick at the same building. Provide sample for owner review prior to ordering.

Layout walls in advance for accurate spacing of bond patterns, with uniform joint widths and to properly locate openings.

Clean mortar from all walls as work progresses. At the end of the job clean masonry walls with stiff brushes and cleaning compound as recommended by the manufacturer.

General Contractor and Masonry Contractor shall coordinate on work to be installed in masonry - See electrical and architectural plans.

Aluminum Railing Note

Railings at Patio shall be by Superior Aluminum Products, Inc., Series 9100.

Rail height shall be 36", with double top rail and ring inserts.

Rails shall be side-mounted, with intermediate heavy-duty base mounts. All rail components shall be by Superior Aluminum Products, Inc.

Finish shall be dark bronze.

Location of anchor-verticals and bases are schematic. Manufacturer shall determine number and location of anchor verticals and mounting bases based on support required for rails and length of rail run.

Exterior Finish Notes

Brick

- Exterior brick walls shall be sealed with clear sealant.
- Sealer shall be silane/siloxane based.
- Brick shall be clean and dry before application of sealant.
- apply per manufacturer's instructions.

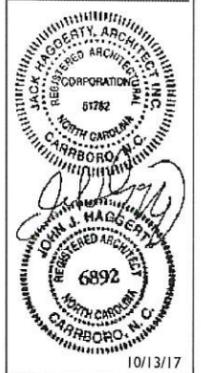
Screening Frames

- Pressure treated material shall be stained with a solid color stain.
- Prep surface and apply stain per manufacturer's recommendation.
- Color to be chosen by Owner.



I
A-4
North Elevation - 1/4"

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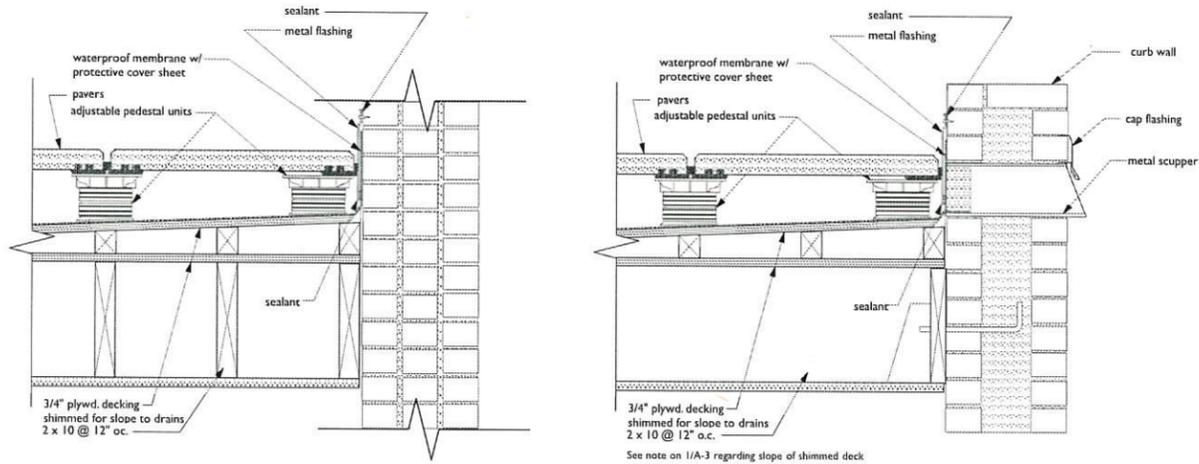


Phi Gamma Delta Fraternity House
108 W. Cameron St., Chapel Hill, North Carolina

for construction

Oct. 13, 2017
A-4

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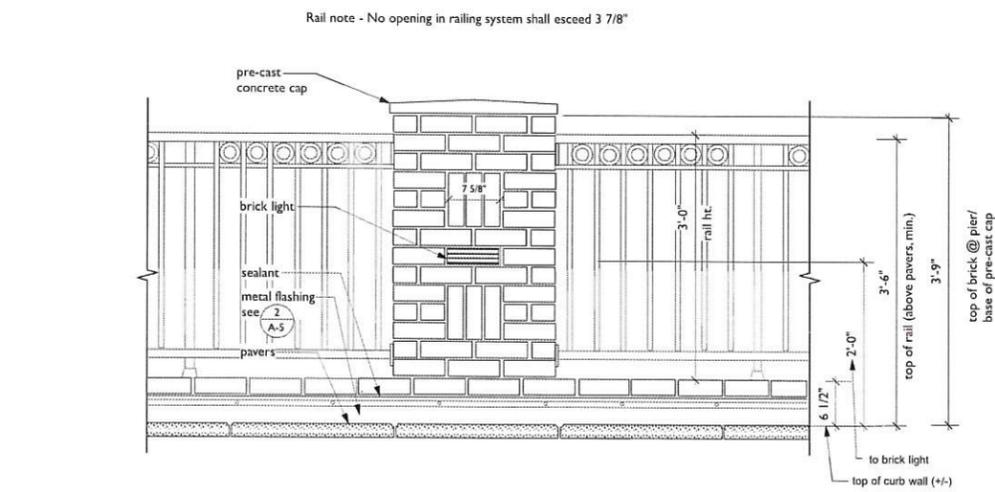


2
A-5
Flashing @ Existing House Wall - 1 1/2"

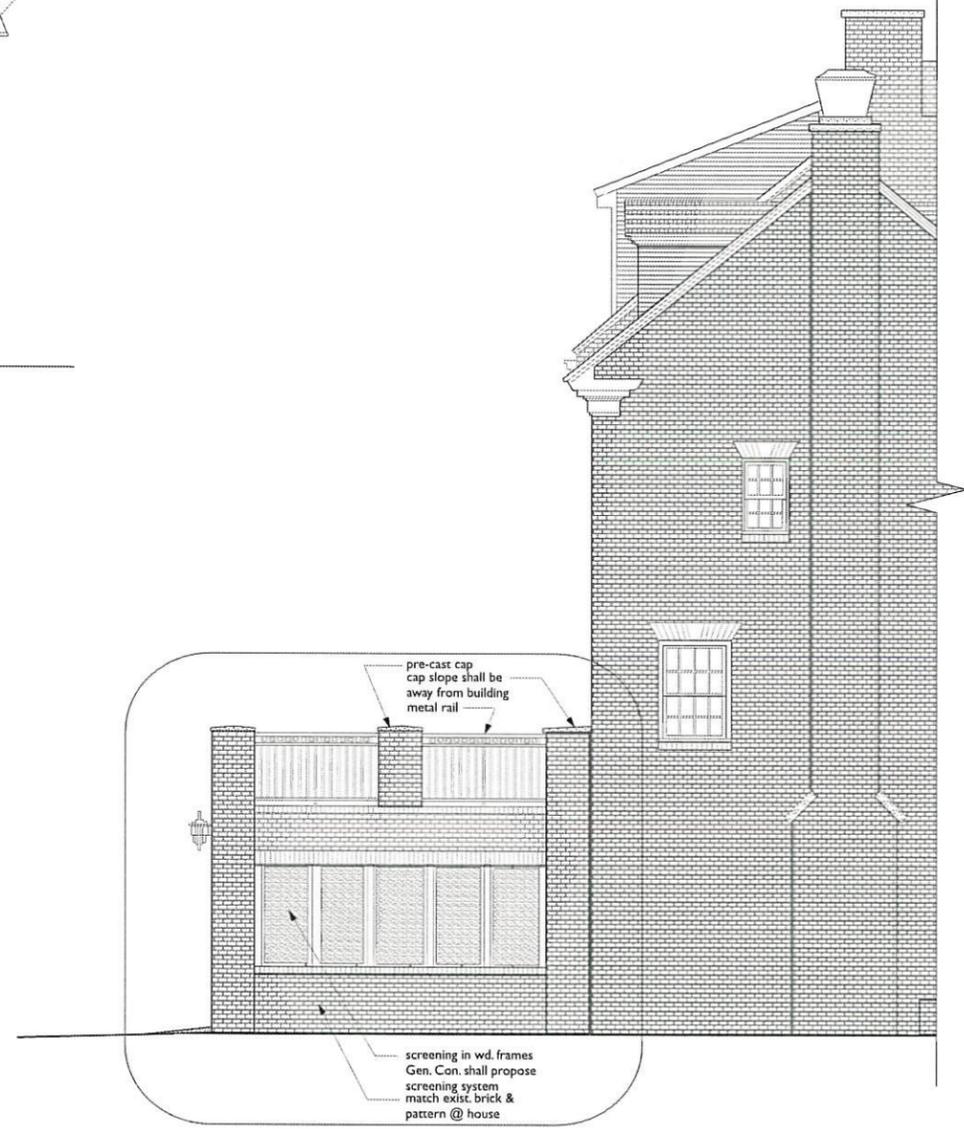
Flashing @ Patio Curb - 1 1/2"

Paver and Pedestal System shall be Terra-Stand Pedestal system by Tectura Designs and Wausau. Installation shall include all components necessary for system – spacers (3/16"), Terra-Tabs, shims, waffle reducers and pedestals and any other required components. Pavers shall be by Tectura Design Pavers, and shall be compatible with pedestal system. Color of pavers to be selected by Owner from manufacturer's standard palette, allow for two colors in checkerboard pattern. Contractor experienced with pedestal/paver system shall install system.

Waterproof Membrane Note: General Contractor shall consult with Paving/Pedestal System Contractor and Roofing Contractor on roofing membrane recommendation – type of membrane, thickness, type of protective cover sheet and required slope for membrane drainage. Roofing membrane shall be compatible with paver/pedestal system and roofing substrate. Coordinate roofing membrane installation with roof drains, scuppers and perimeter flashing to achieve water-tight installation.

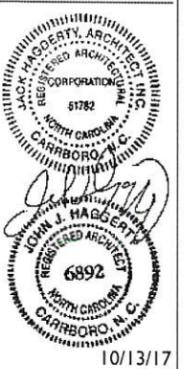


3
A-5
Piers @ Patio - 1"



1
A-5
West Elevation - 1/4"
Note: East Elevation of Raised Patio is identical to the West Elevation

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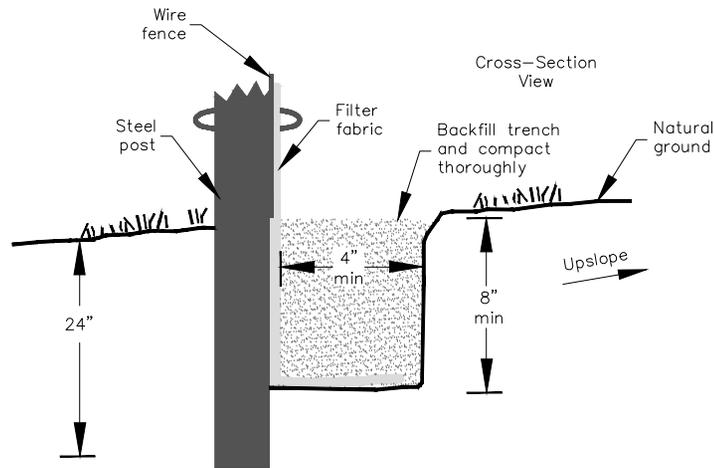
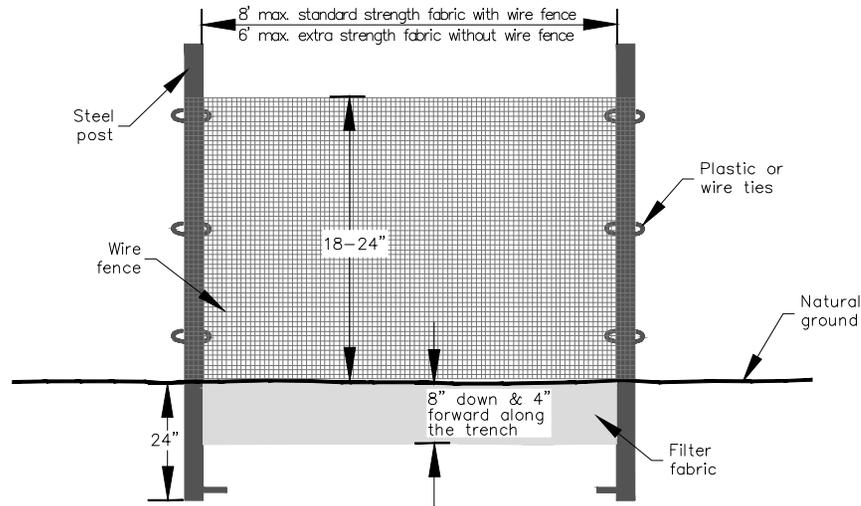
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A-5
13

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ENGINEERING DEPARTMENT
STANDARD DETAILS

SILT FENCE



GENERAL NOTES:

1. Use silt fence only when drainage area does not exceed $\frac{1}{4}$ acre and never in areas of concentrated flow.
2. Silt fence shall not be removed unless site is stabilized and inspected by Town of Chapel Hill staff.

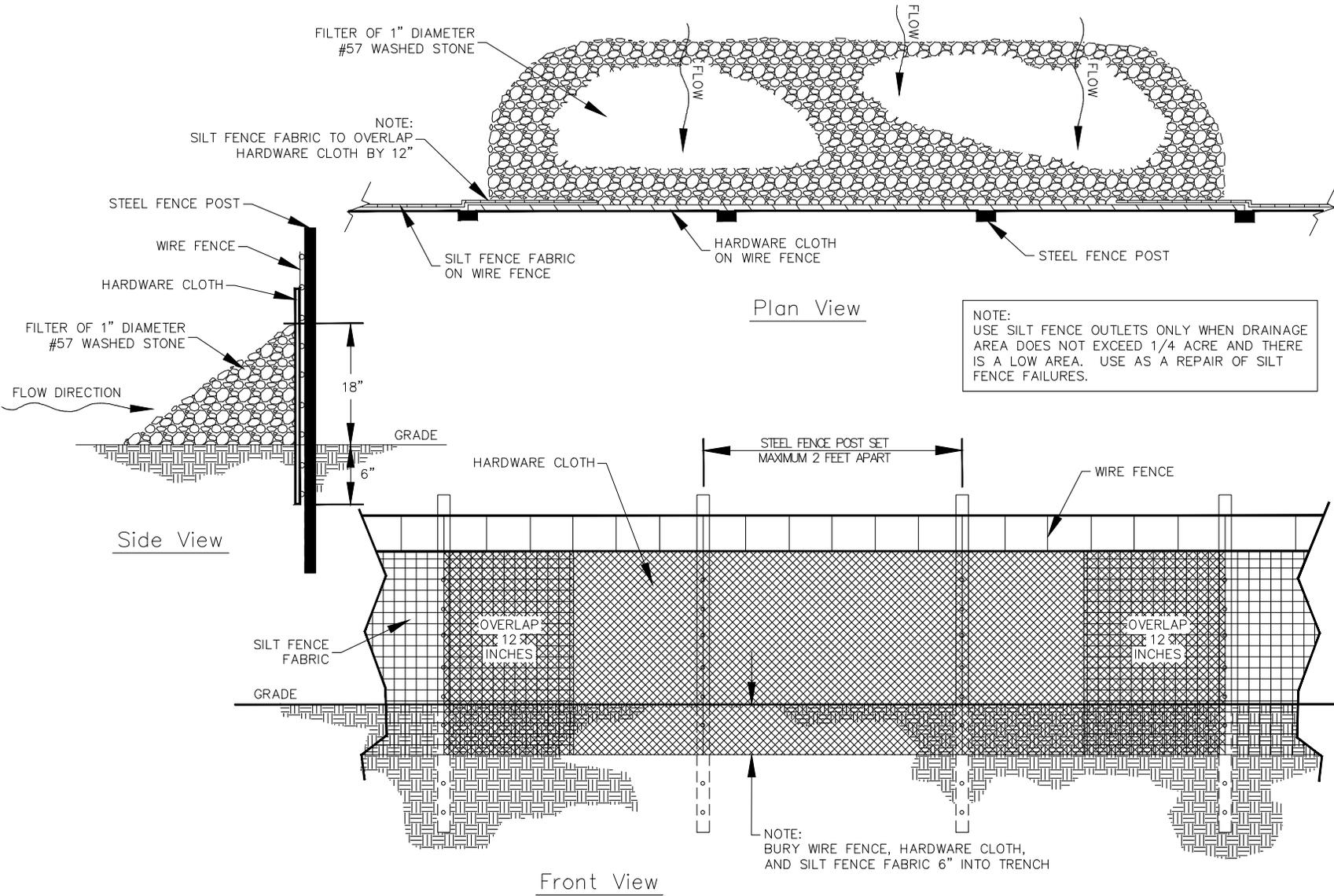
NOTE: DRAWING NOT TO SCALE

TITLE:	REVISIONS	DET. NO.
SILT FENCE	08/13 15	SD-18



ENGINEERING DEPARTMENT
STANDARD DETAILS

SILT FENCE OUTLET



NOTE: DRAWING NOT TO SCALE

TITLE:	REVISIONS	DET. NO.
SILT FENCE OUTLET	08/13 15	SD-19