	Owner:		Phone:	·#	Permit No:	
8 Alice Ct lot 21	Chris Howard	····	892-0		Permit No: 001385	
ner Address:	Lessee/Buyer's Name:	Phone:	Busines	sName:	00	
ntractor Name: Address:		Phone:			Permit Issued:	
gins Landscaping	**** Craig 879-6251***	Į.				
Use:	Proposed Use:	COST OF WOR	RK:	PERMIT FEE:		
		\$ 19,000		\$ 138.00	DEC 8 2000	
vacant/building in process	single family	FIRE DEPT. □	Annroyed	INSPECTION:	- ULO	
Andrews and an inches			Denied	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1) [
			Demen	Use Group, Type	Zanea CBL:	
		C:	`	Simon What	K-Vassa B. A21	
posed Project Description:	<u> </u>	Signature:	A CHENT STREET	Signature:	Zoning Approval:	
posed I joject resemblion.				ES DISTRICT (PLA.D.)	WY OF WILDOW	
3		Action:	Approved		Special Zone or Reviews	
4					□ Shoreland ► 4	
amendment \$2 to permit 00055	add retaining wall		Denied	İ	□ Wetland	
, all	No.				□Flood Zone Z~~ X	
	J	Signature:		Date:	Subdivision	
mit Taken By:	Date Applied For:				☐ Şite Plan maj ☐minor ☐mi	
K	- ' ' 8	Sept 8 2000 K			Augustin # 202000	
This permit application does not preclude	the Applicant(s) from meeting applicable	State and Federal rules			Zoding Appeal Uvariance	
		State and rederal rules	•		☐ Miscellaneous	
Building permits do not include plumbing	, septic or electrical work.			3# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	☐ Conditional Use	
Building permits are void if work is not sta	arted within six (6) months of the date of	issuance. False informa	-	÷	☐ Interpretation	
tion may invalidate a building permit and					☐ Approved	
				*	□ Denied	
•					Historic Preservation	
	*				Not in District or Landman	
	ş.	• •			□ Does Not Require Review	
					☐ Requires Review	
•					Action:	
		Kar ^a			Action:	
	CERTIFICATION		The street was by the easy to be a	The configuration	□Appoved	
anaby and for that I am the common of any of a		i. I have been been been de de la	h	rooped and that I have be-		
nereby certify that I am the owner of record of	* * * *				· · · · ·	
thorized by the owner to make this application					", 1	
and the second s				ive the authority to enter a	Date:	
a permit for work described in the applicatio	e nour to enforce the provisions of the c	ode(s) applicable to suc	n permit			
a permit for work described in the applicatio eas covered by such permit at any reasonable						
	·-					
	•					
eas covered by such permit at any reasonable	ADDRESS.	Sept. 8 200	00	PHONE:	- כיוכח	
	ADDRESS:	Sept 8 200	00	PHONE:	- ISSUED	
eas covered by such permit at any reasonable	ADDRESS:	Sept 8 200	00	PHONE:	PERMIT ISSUED PERMIT ISSUED WILLOW DISTRICT 2	

- A) WALL CLOSEST TO RD.

 WILL BE 4 PT AT CORNER OF DREJEWAY STREWALK

 THE WALL WILL BE LEVEL AS IT GOES UP THE HILL, SO IT

 WILL STEP UP TO 4 = T AT APPROX. EVERY B FT.

 THE WALL COING UP THE DREVEWAY WILL DEAD END AS IT WILL

 BE LEVEL GOING UP THE HILL.
- B) ZND WALL

THIS WALL WILL BE 3 FT ACROSS THE FRONT ATTACHING TO WHERE THE 1ST WALL DEAD ENDS UP DREVEWAY AND CONTENUENCE AT 3 FT 'TEL IT HITS THE GARAGE.

-) 3 5 HET. GRANTE STEPS WILL BE IN THE WALL

AT GFT OFF THE HOUSE. SPT OF RETURN ON EITHER

STOE OF STEPS WILL BE RETAINED BY WALLS.

THE WALLS ARE GOING TO BE BUILT WI DRY-LAID GRANITE WALL ROCK. BACK FILL MATERIAL WILL BE RIP RAP AND 314" CRUSHED STONE - TO A DEPTH OF AT LEAST 1.5 FT. THE CAP WILL BE MORTARIED TO PROTECT AGRENST FALLENC ROCKS.



CITY OF PORTLAND, MAINE

Department of Building Inspection

	<u>alb</u>		20 ()
Rečelved from C MS+	opher	Howard	a fee
or filtur -		/100 Dollars \$	50-
install erect for permit to alter	FU		
move demolish	Drue	Est. Cost \$	
KA CK 5549			
	Per	Inspector of buildings	2

THIS IS NOT A PERMIT

No work is to be started until PERMIT CARD is actually posted upon the premises. Acceptance of fee is no guarantee that permit will be granted. PRESERVE THIS RECEIPT. In case permit cannot be granted the amount of the fee will be refunded upon return of the receipt less \$5.00 or 10% whichever is greater.

WHITE - Applicant's Copy YELLOW - Office Copy PINK - Auditors Copy



Department of Urban Development
Joseph E. Gray, Jr.
Director

CITY OF PORTLAND

January 30, 2001

Mr. Chris Howard 106 Garsoe Drive Portland, Maine 04103

RE: 106 Garsoe Drive C/B/L: 386A-B-021

CERTIFIED MAIL: 70001670000030717434

Dear Sir or Madame,

Our records indicate that the certificate of occupancy required pursuant to building permit # 001385 has not been issued. Please be advised that the occupancy of the portion of the premises covered by the permit without the Certificate of Occupancy is a violation of Section 108.1 of the City Building Code (1999 BOCA)

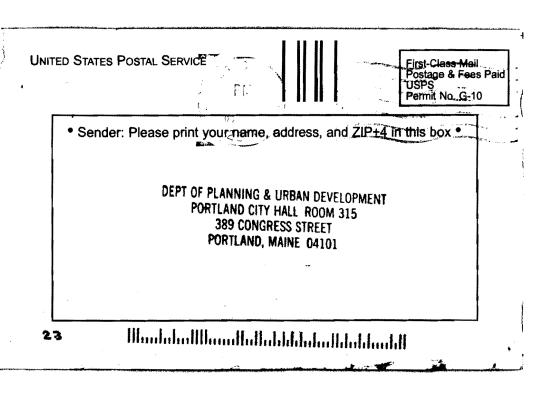
This is a notice of violation pursuant to Section 116.2 of the Code. All referenced violations shall be corrected within 30 days of the date of this notice. Our records will be reviewed again on February 14, 2001. Failure to comply will result in this office referring the matter to the City of Portland Corporation Counsel for legal action and possible civil penalties, as provided for in Section 1-15 of the Code and in Title 30-A M.R.S.A. ss 4452.

This constitutes an appealable decision pursuant to Section 121 of the Code. Please feel free to contact me at 874-8700, if you wish to discuss the matter or have any questions.

Mike Nugent

Manager of Inspection Services

389 Congress St Portland, Maine 04101 (207) 874-8700 FAX 874-8716 TTY 874-8936



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: ON DOWN	A. Received by Please Print Clearly) B. Date of Delivery C. Signature Agent Addressee D. Is delivery address different from item 1? Yes YES, enter delivery address below:
Porti me 04103	Certified Mail
Article Number (Copy from service label)	134 · 1111 111 11 · · · ·
S Form 3811, July 1999	102595-00-M-0952

r 2		MAIL REC	EIPT Coverage Provided)
TO TABLE	Postage	\$	
	Certified Fee Return Receipt Fee (Enclorsement Required) Restricted Delivery Fee		Postmark Here
₹.	(Endorsement Required) Total Postage & Fees	\$	
		Print Clearly) (to be comp $^{x}\beta B - 0$)	- '
	PS Form 3800 Tesacry C	0(5)	en Fesser e for liestructions

Please Read Application And Notes, If Any, Attached

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

ENGINE Howard

provided that the person or persons, of the provisions of the Statutes of I the construction, maintenance and u this department.

Apply to Public Works for street line and grade if nature of work requires such information.

fication inspect in must in and with an permit on procure this ding or it thereogened or described or described or described in the second or described or descri

of buildings and sa

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

ctures, and of the application on file in

OTHER REQUIRED APPROVALS

Fire Dept.

Health Dept.

Appeal Board

Other

Department Name

PENALTY FOR REMOVING THIS CARD

1-4

Justiand, Maine - Building or Use Permit Application 389 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

Location of Construction: 28 Alice Ct lot 21	Owner: Chris Howard		Phone: 892-0026		Permit No:
Owner Address:	Lessee/Buyer's Name:	Phone:	BusinessNar	me:	O01383
Contractor Name:	Address:	Phon	e:		Permit Issued:
Origins Landscaping	***** Craig 879-6251****	,			DEC 8 JUD
Past Use:	Proposed Use:	\$ 19,000		RMIT FEE: 138.00	ULO 0 1.000
vacant/building in process	single family	FIRE DEPT. □	Denied Us	SPECTION: e Group: 4.3 Type: 5/3	Zonen CBL:
		Signature:	1	nature: Tellac	K-1386A-B-021
Proposed Project Description:				ISTRICT (P.X.D.)	Zoning Approval:
3		Action:	Approved	w_{c}	Decidi Zolle of Reviews.
amendment 1/2 to permit 000555			Approved with Denied	Conditions:	Wetland
004	94	Signature:		Date:	☐ Flood Zone Z~~ ★ ☐ Subdivision
Permit Taken By: K	Date Applied For:	pt 8 2000 K			Site Plan maj Ominor Omm
This permit application does not preclude the state of the state	ne Applicant(s) from meeting applicable S	State and Federal rules			Zorfing Appeal □ Variance
 Building permits do not include plumbing, 	,	Juice and I ederal fales.			□Miscellaneous
	•	ovence Veles info			☐ Conditional Use
3. Building permits are void if work is not startion may invalidate a building permit and		suance. Faise informa-	•		☐ Interpretation ☐ Approved
					☐ Denied
					Historic Preservation Mont in District or Landmark
			-cam	TISSUED QUIREMENTS	□ Does Not Require Review □ Requires Review
			WITH RE	Onus	Action:
	CERTIFICATION		11		□Appoved
I hereby certify that I am the owner of record of		•			· · · · · · · · · · · · · · · · · · ·
authorized by the owner to make this application if a permit for work described in the application					
areas covered by such permit at any reasonable				•	Date:
		Comp. 0. 200	.0		
SIGNATURE OF APPLICANT	ADDRESS:	Sept 8 200 DATE:	PH	ONE:	- SULISSIED SAIS
					PERMIT ISSUED PERMIT ISSUED PERMIT ISSUED 2
RESPONSIBLE PERSON IN CHARGE OF WO	ORK, TITLE		PH	ONE:	NCEO DISTRICT
White-	Permit Desk Green-Assessor's Ca	naryD.P.W. PinkP	ublic File Ivor	y Card-Inspector	

1808.2 Pole buildings: Pole-type buildings shall be designed and erected in an approved manner. The poles shall be treated in accordance with AWPA C2 or C4 listed in Chapter 35.

1808.3 Wood foundations: Wood foundation systems shall be designed and installed in accordance with AFPA TR7 listed in Chapter 35. All lumber and plywood shall be treated in accordance with AWPA C22 listed in Chapter 35 and shall be identified in accordance with Section 2311.3.1.

SECTION 1809.0 STEEL GRILLAGES

1809.1 General: All steel grillage beams shall be separated with approved steel spacers and shall be entirely encased in at least 3 inches (76 mm) of concrete and the spaces between the beams shall be completely filled with concrete or cement grout. Where used on yielding soils, steel grillages shall rest on approved concrete beds not less than 6 inches (152 mm) thick.

SECTION 1810.0 CONCRETE FOOTINGS

1810.1 Concrete strength: Concrete in footings shall have a specified compressive strength of not less than 2,500 psi (17235 kPa) at 28 days.

1810.2 Design: Concrete footings shall comply with Chapter 19 and ACI 318 listed in Chapter 35.

1810.2.1 Footing seismic ties: Individual spread footings, located on soil-profile type S_2 , S_3 or S_4 , in accordance with Section 1610.3.1, and supporting buildings assigned to Seismic Performance Category D or E, in accordance with Section 1610.1.7, shall be interconnected by ties. All ties shall be capable of resisting, in tension or compression, a force equal to 25 percent of the effective peak velocity-related acceleration (A_0) times the column dead plus live load. Individual tie beams are not required when it is demonstrated that equivalent restraint will be provided by structural members within slabs on grade or reinforced concrete slabs on grade or confinement by competent rock, hard cohesive soils, very dense granular soils or other approved means.

1810.3 Thickness: The thickness of concrete footings shall comply with Sections 1810.3.1 and 1810.3.2.

1810.3.1 Plain concrete: In plain concrete footings, the edge thickness shall not be less than 8 inches (203 mm) for footings on soil; except that for occupancies of Use Group R-3 and buildings less than two stories in *height* of Type 5 construction, the required edge thickness shall be reduced to 6 inches (152 mm), provided that the footing does not extend beyond 4 inches (102 mm) on either side of the supported wall.

1810.3.2 Reinforced concrete: In reinforced concrete footings, the thickness above the bottom reinforcement shall not be less than 6 inches (152 mm) for footings on soil, nor less than 12 inches (305 mm) for footings on piles. The cover provided for reinforcement shall comply with Section 1910.6.

1810.4 Deposition: Concrete footings shall not be placed through water unless otherwise approved. Where placed under or in the presence of water, the concrete shall be deposited by approved means to ensure minimum segregation of the mix and negligible turbulence of the water.

1810.5 Protection of concrete: Concrete footings shall be protected from freezing during depositing and for a period of not less than 5 days thereafter. Water shall not be allowed to flow through the deposited concrete.

1810.6 Forming of concrete: Concrete footings shall not be cast against the earth where, in the opinion of the code official, soil conditions warrant forming. Where forming is required, forming shall be in accordance with Chapter 6 of ACI 318 listed in Chapter 35.

SECTION 1811.0 MASONRY-UNIT FOOTINGS

1811.1 Dimensions: Masonry-unit footings shall be laid in Type M or S mortar complying with Section 2104.7, and the depth shall not be less than twice the projection beyond the wall, pier or column. The width shall not be less than 8 inches (203 mm) wider than the wall supported thereon.

1811.2 Offsets: The maximum offset of each course in brick foundation walls stepped up from the footings shall be $1^{1}/_{2}$ inches (38 mm) if laid in single courses, and 3 inches (76 mm) if laid in double courses.

SECTION 1812.0 FOUNDATION WALLS

1812.1 Design: Foundation walls shall be designed to resist frost action and the structural *loads* of Chapter 16 in accordance with the provisions of this section.

1812.2 Definitions: The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

Brick ledge: A recess in the thickness of a foundation wall for bearing support of a masonry wythe. The recess is constructed from the top of the foundation wall for a certain depth and from the exterior face of a foundation wall for a certain width.

Wall

Foundation wall: A wall below the floor nearest grade which serves as a structural support for a wall, pier, column or other part of a building, or the wall of a basement that resists lateral soil load.

Retaining wall: A wall that is not laterally supported at the top, designed to resist *lateral soil load*.

1812.3 Minimum thickness: The minimum thickness of concrete and masonry foundation walls that are laterally supported at the top and bottom shall comply with Sections 1812.3.1 through 1812.3.3, or shall be designed in accordance with ACI 530/ASCE 5/TMS 402 or ACI 318 listed in Chapter 35. Foundation walls that are not laterally supported at the top and bottom and foundation walls that are not within the parameters of Table 1812.3.2(1) or Table 1812.3.2(2) shall be designed in accordance with ACI 530/ASCE 5/TMS 402 or ACI 318 listed in Chapter 35

1812.3.1 Thickness based on walls supported: The thickness of foundation walls shall not be less than the thickness of the wall supported, except that foundation walls of at least 8-inch nominal width shall be permitted to support brick-veneered frame walls and 10-inch-wide (254 mm) cavity walls provided the requirements of Section 1812.3.2 are met. Corbeling of masonry shall be in accordance with Section 2111.2.



Table 1822.3 ALLOWABLE UNIT STRESSES^a FOR TREATED ROUND TIMBER PILES, NORMAL LOAD DURATION — VALUES AT TIP OF PILE

FIELD, NOTHING TOWN DOWN THE WITHE							
Species	Compression parallel to grain (psi)	Bending (psi)	Shear horizontal (psi)	Compression perpendicular to grain (psi)	Modulus of elasticity		
Pacific Coast Douglas fir (see Section 1822.3.1)	1,250	2,450	115	230	1,500,000		
Red oak — Northern and Southern	1,100	2,450	135	350	1,250,000		
Red pine (grown in the United States)	900	1,900	85	155	1,280,000		
Southern pine — longleaf, slash, loblolly and shortleaf (see Section 1822.3.1)	1 ,200	2,400	110	250	1,500,000		

Note a. 1 psi = 6.9 kPa.

1823.2 Limitation of load: The maximum allowable *load* shall be limited by the capacity of the weakest section incorporated in the pile.

1823.3 Splices: Splices between concrete and steel or wood sections shall be designed to prevent separation both before and after the concrete portion has set, and to ensure the alignment and transmission of the total pile *load*. Splices shall be designed to resist uplift caused by upheaval during driving of adjacent piles, and shall develop the full compressive strength and not less than 50 percent of the tension and bending strength of the weaker section.

SECTION 1824.0 CAISSON PILES

1824.1 Construction: Caisson piles shall consist of a shaft section of concrete-filled pipe extending to bedrock with an uncased socket drilled into the bedrock and filled with concrete. The caisson pile shall have a full-length structural steel core or a stub core installed in the rock socket and extending into the pipe portion a distance equal to the socket depth.

1824.2 Design: The depth of the rock socket shall be sufficient to develop the full loadbearing capacity of the caisson pile with a minimum safety factor of 2, but the depth shall not be less than the outside diameter of the pipe. The design of the rock socket is permitted to be predicated on the sum of the allowable loadbearing pressure on the bottom of the socket plus bond along the sides of the socket. The minimum outside diameter of the caisson pile shall be 18 inches (457 mm), and the diameter of the rock socket shall be approximately equal to the inside diameter of the pile.

1824.3 Seismic reinforcement: All caisson piles in buildings assigned to Seismic Performance Category C, D or E, in accordance with Section 1610.1.7, shall have seismic reinforcement required by Section 1820.1.2.1.

1824.4 Material: Pipe and steel cores shall conform to the material requirements in Section 1818.0. Pipe shall have a minimum wall thickness of ${}^{3}/_{8}$ inch (10 mm) and shall be fitted with a suitable steel driving shoe welded to the bottom of the pipe. All concrete shall have a 28-day specified compressive strength (f'_{c}) of not less than 4,000 psi (27579 kPa). The concrete mix shall be designed and proportioned so as to produce a cohesive workable mix with a slump of 4 inches (102 mm) to 6 inches (152 mm).

1824.5 Structural core: The gross cross-sectional area of the structural steel core shall not exceed 25 percent of the gross area of the caisson. The minimum clearance between the structural core and the pipe shall be 2 inches (51 mm). If cores are to be spliced, the ends shall be milled or ground to provide full contact and shall be full-depth welded.

1824.6 Allowable stress: The allowable design compressive stresses shall not exceed the following: concrete, $0.33 f'_c$; steel pipe, $0.35 f_y$; and structural steel core, $0.50 f_y$.

1824.7 Installation: The rock socket and pile shall be thoroughly cleaned of all foreign materials before filling with concrete. Steel cores shall be bedded in cement grout at the base of the rock socket. Concrete shall not be placed through water except where tremie methods are approved.

SECTION 1825.0 RETAINING WALLS

1825.1 General: Walls built to retain or support the lateral pressure of earth or water or other superimposed *loads* shall be designed and constructed of masonry, concrete, steel sheet piling or other approved materials (see Section 2311.7).

1825.2 Design: Retaining walls shall be designed to resist the design *lateral soil loads* in Section 1611.0, including both *dead* and *live load* surcharges to which such walls are subjected, and to ensure stability against overturning, sliding, excessive foundation pressure and water uplift.

1825.3 Hydrostatic pressure: Unless drainage is provided, the hydrostatic head of the water pressure shall be assumed to be equal to the height of the wall.

1825.4 Coping: Masonry retaining walls shall be protected with an approved coping.

1825.5 Guards: Where retaining walls with differences in grade level on either side of the wall in excess of 4 feet (1219 mm) are located closer than 2 feet (610 mm) to a walk, path, parking lot or driveway on the high side, such retaining walls shall be provided with guards that are constructed in accordance with Section 1021.0 or other approved protective measures.

DEC. 8.2000 B:58AM

DELUCA HOFFMAN ASSOC



DELUCA-HOFFMAN ASSOCIATES, INC. CONSULTING ENGINEERS

776 MAIN STREET SUITE 8 SOUTH PORTLAND, MAINE 04106 TEL. 207 775 1121 FAX 207 879 0896

NO.817

- ROADWAY DERIGN EN'ITRONMENTAL ENGINEERING TRAFFIC STUDIES AND MANAGEMENT
- PERMITTING

- AMPORT ENGINEERING SITE PLANNING CONSTRUCTION ADMINISTRATION

MEMORANDUM

TO:

Code Enforcement

Kandi Talbot, Planner

FROM:

Chris Earle, Development Review Coordinator Assistant

Reviewed by Steve Bushey, P.E., Acting Development Review Coordinator

DATE:

September 14, 2000

RE:

28 Alice Court (Lot 21)

We have reviewed the application for amendment #2 to permit 000558 dated 9/8/00 and take no exceptions.

000620

JN1350.10/Memo9-14-28Alice

Sec. 14-428. Corner lots.

In case a dwelling house has its front yard upon the long side of a corner lot, the rear yard may be reduced to a depth not less than the width required for a side yard on the lot, provided the aggregate of the widths of both sides and depths of front and rear yards is not less than the similar aggregate of required dimensions of all yards required if the front yard were faced on the short side of the lot.

(Code 1968, § 602.19.G)

Side yard -Ift

1 Lot 21 Alier Ct, - Both Sides on The convey look Equids Aut

Existing facing long side- aggregate of yards		Required setbacks i	if facing on short side
Front yard	41' feet	Front yard	25 feet
Rear yard	20' feet	Rear yard	25 feet
Side yard -rt	40 feet	Side yard -rt	7, () feet

3 | feet is greater than **TOTALS**

30 feet

4 feet

Side yard -Ift

SEP.14.2000

3:58PM

* 776 MAIN STREET SUITE #

DELUCA HOFFMAN ASSOC

NO.543 P.2/7

ROADWAY DESIGN ENVIRONMENTAL ENGINEERING ?

TRAFFIC STUDIES AND MANAGEMENT PERMITTING

AIRPORT ENGINEERING SPTE PLANNING

CONSTRUCTION ADMINISTRATION

MEMORANDUM

TO:

Code Enforcement

SOLUTI PORTLAND, MAINE 04106 TEL, 207 775 1 [2] FAX 207 679 0896

Kandi Talbot, Planner

Daluca-Hoffman associates, inc. Consulting Engineers

FROM:

Chris Earle, Development Review Coordinator Assistant
Reviewed by Steve Bushey, P.E., Acting Development Review Coordinator

:300 A-B-021

DATE:

September 14, 2000

RE:

28 Alice Court (Lot 21)

We have reviewed the application for amendment #2 to permit 000558 dated 9/8/00 and take no exceptions.



DeLUCA-HOFFMAN ASSOCIATES, INC. CONSULTING ENGINEERS

778 MAIN STREET SUITE 8 SOUTH PORTLAND, MAINE 04106 TEL. 207 775 1121 FAX 207 879 0896

ROADWAY DESIGN
ENVIRONMENTAL ENGINEERING
TRAFFIC STUDIES AND MANAGEMENT

PERMITTING

AIRPORT ENGINEERING

SITE PLANNING
CONSTRUCTION ADMINISTRATION

MEMORANDUM

TO:

Code Enforcement

Kandi Talbot, Planner

FROM:

Chris Earle, Construction Representative

Reviewed by Steve Bushey, P.E., Acting Development Review Coordinator

DATE:

December 7, 2000

RE:

Certificate of Occupancy – 106 Garsoe Drive (Lot 21)

On December 7, 2000, the site was reviewed for compliance with the conditions of approval. My comments are:

1. Miscellaneous landscaping needs to be completed.

Stone wall along Garsoe Drive needs to be completed. 2.

Due to the weather, neither of these will be completed this year.

It is our opinion that a temporary certificate of occupancy could be issued, assuming neither Code Enforcement nor Public Works has any outstanding issues. However, these items shall be completed by June 1, 2001 and be approved prior to the issuance of a permanent certificate of occupancy.

XXNote: The address on the original permit application was 28 Alice Court. Reference ID #20000085.

Where an 8-inch (203 mm) wall is corbeled, the top corbel shall be a full course of headers at least 6 inches (152 mm) in length, extending not higher than the bottom of the floor framing.

1812.3.2 Thickness based on soil loads, unbalanced backfill height and wall height: The thickness of foundation walls shall comply with the requirements of Table 1812.3.2(1) for plain masonry and plain concrete walls or Table 1812.3.2(2) for reinforced concrete walls and reinforced masonry walls. Brick ledges shall be in accordance with Section 1812.3.2.3.

1812.3.2.1 Reinforcement requirements: Foundation walls constructed in accordance with Table 1812.3.2(2) shall comply with all of the following:

 Vertical reinforcement shall have a minimum yield strength of 60,000 psi (413700 kPa).

2. The measurement from the face of the soil side of the wall to the center of vertical reinforcement shall be 5 inches (127 mm) or more.

1812.3.2.2 Alternative reinforcement: In lieu of the reinforcement provisions in Table 1812.3.2(2), alternative reinforcing bar sizes and spacings having an equivalent cross-sectional area of reinforcement per lineal foot of wall shall be utilized, provided the spacing of reinforcement does not exceed 72 inches (1829 mm) and reinforcing bar sizes do not exceed No. 11.

1812.3.2.3 Brick ledge: The maximum width of a brick ledge shall be $3\frac{1}{2}$ inches (89 mm) from the exterior face of the foundation wall. The portion of the brick ledge that extends below grade shall be filled solid with mortar or grout between the exterior masonry wythe and the foundation wall to the top of the ground level.

1812.3.3 Rubble stone: Foundation walls of rough or random rubble stone shall not be less than 16 inches (406 mm) thick.

1812.4 Hollow masonry walls: At least 4 inches (102 mm) of solid masonry shall be provided at girder supports at the top of hollow masonry unit foundation walls.

SECTION 1813.0 WATERPROOFING AND DAMPPROOFING

1813.1 Where required: Walls or portions thereof that retain earth and enclose interior spaces and floors below grade shall be waterproofed and dampproofed in accordance with this section, with the exception of those spaces containing use groups other than residential and institutional where such omission is not detrimental to the building or occupancy.

1813.1.1 Story above grade: Where a basement is considered a story above grade and the finished ground level adjacent to the basement wall is below the basement floor elevation for 25 percent or more of the perimeter, the floor and walls shall be dampproofed in accordance with Section 1813.3 and a foundation drain shall be installed in accordance with Section 1813.5.2. The foundation drain shall be installed around the portion of the perimeter where the basement floor is below ground level. The provisions of Sections 1813.2, 1813.4 and 1813.5.1 shall not apply in this case.

1813.1.2 Underfloor space: The finished ground level of an underfloor space such as a crawl space shall not be located

below the bottom of the footings. Where there is evidence that the ground water table rises to within 6 inches (152 mm) of the ground level at the outside building perimeter or where there is evidence that the surface water does not readily drain from the building site, the ground level of the underfloor space shall be as high as the outside finished ground level, unless an approved drainage system is provided. The provisions of Sections 1813.2, 1813.3, 1813.4, 1813.5 and 1813.6 shall not apply in this case.

1813.2 Ground water table investigation: The owner or applicant shall perform a subsurface soil investigation to determine the possibility of the ground water table rising above the proposed elevation of the floor or floors below grade.

Exception: A subsurface soil investigation shall not be required where:

1. Waterproofing is to be provided;

- Satisfactory data from adjacent areas are available which demonstrate that ground water has not been a problem; or
- 3. Floodproofing is to be provided in accordance with Section 3107.0.

1813.2.1 Ground water control: Where the ground water table is lowered and maintained at an elevation not less than 6 inches (152 mm) below the bottom of the lowest floor, the floor and walls shall be dampproofed in accordance with Section 1813.3. The design of the system to lower the ground water table shall be based upon accepted principles of engineering which shall consider, but not necessarily be limited to: permeability of the soil; rate at which water enters the drainage system; rated capacity of pumps; head against which pumps are to pump; and the rated capacity of the disposal area of the system.

1813.3 Dampproofing required: Where hydrostatic pressure will not occur as determined by Section 1813.2, floors and walls for other than wood foundation systems shall be dampproofed in accordance with this section. Wood foundation systems shall be constructed in accordance with AFPA TR7 listed in Chapter 35.

1813.3.1 Floor applications: The required dampproofing materials shall be installed between the floor and the base course required by Section 1813.5.1, except where a separate floor is provided above a concrete slab.

1813.3.1.1 Floor dampproofing materials: Where installed beneath the slab, dampproofing shall consist of not less than 6-mil (.006 inch; 152 μ m) polyethylene with joints lapped not less than 6 inches (152 mm), or other approved methods or materials. Where permitted to be installed on top of the slab, dampproofing shall consist of mopped-on bitumen, not less than 4-mil (.004 inch; 102 μ m) polyethylene, or other approved methods or materials. Joints in the membrane shall be lapped and sealed in accordance with the manufacturer's installation instruc-

1813.3.2 Walls: Dampproofing materials shall be installed on the exterior surface of walls, and shall extend from the top of the footing to above ground level.

		4 k	1
			1
			1
			1
			1
			1
			1
			1
			!
			1
			1
			1
			1
			1
			1
			1
			1
			1
			1
			1
			. !
			· ·

