

Type



Plans

GRD09-0058

Permit Number

1733

Street Number

Skillman LN

Street Name

DET

Community Code

048-091-003

APN

Guadalupe S. Chavarria, PE RCE 37970

1/2

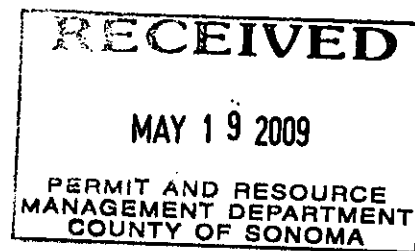
May 19, 2009

Mr. John Rainwater, Pe

PRMD

2550 Ventura Ave

Santa Rosa Ca, 95403



Subject: Landscape Grading for Two Lot subdivision formerly
1663 Skillman Lane, Petaluma CA KC Goltermann owner developer

Mr. Rainwater,

This letter addresses supplements the storm drain report for the SUSMP requirements two year storm for the proposed landscape improvements.

The proposed landscape improvements will not alter the drainage patterns or the amount of drainage from the site.

Area	Prior coefficient	Post coefficient
Lot 1 grassy berm area 0.15ac out of 2.73 ac or 5.5%	0.43	0.43
Lot 2 pond area 0.16 ac out of 3.15 ac or 5.01%	0.42	0.42

The pond area is approximately 6,993 sf for the two year storm. To fill the pond up two feet the 2 year storm will require 12 hours. After it fills the additional flows rain would then continue on its same flow patterns. The water would then be evaporated out. There will be no berm around the pond. It is important to note that this pond will be in the flood zone. It will increase holding capacity of the area therefore lessening the flood impact.

Hopefully this addresses the two year SUSMP concerns. Please call me if you have additional questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Guadalupe S. Chavarria".

Guadalupe S. Chavarria, PE

Enclosure pond calcs

Copy: KC Goltermann



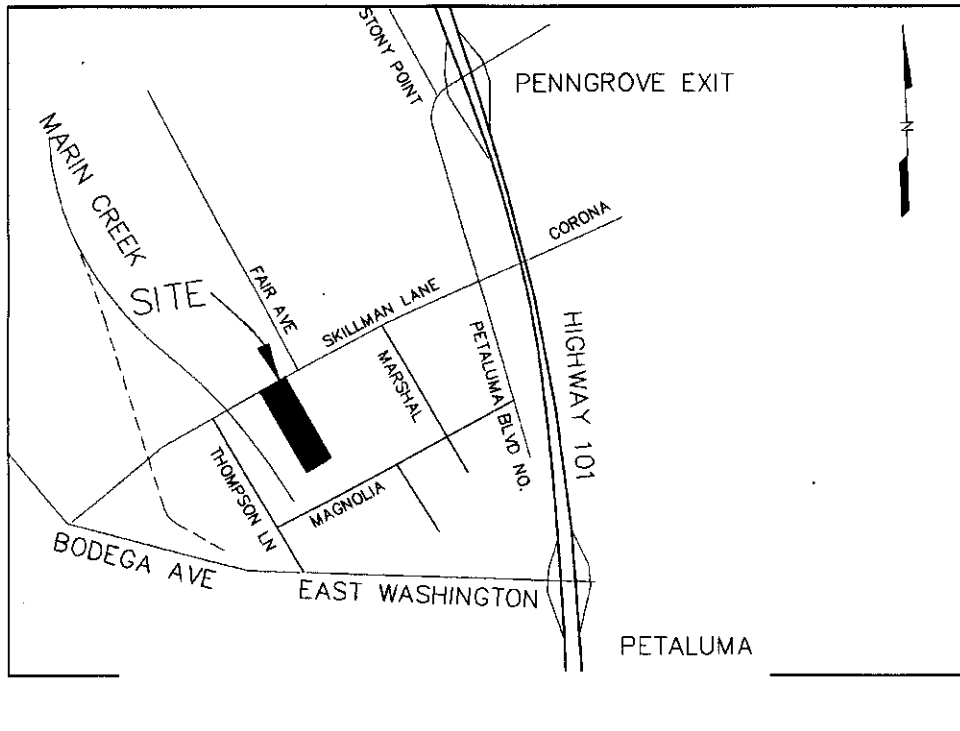
P.O. Box 1782, Windsor CA 95492

Cel 799-5432 Fax 707-838-9748

FAXED 565-1103

**Proposed
Landscape Improvements**
1733 ~~1663~~ Skillman land
Petaluma Ca

April 27, 2009
Hydrology



Guadalupe S. Chavarria, PE
Land Development Civil Engineer
CA LIC. 37970

707-799-5432
P.O. Box 1782
Windsor CA 95492

fax 707-838-9161
gchavarria1@yahoo.com

Calculations

1. 10 before and after
 2. C Determinations,
- Appendix
1. sewa rain contours

Reference:

1. SCWA Standards
2. flood control map



METHODOLOGY

Rational method using the scwa standards.

TC = 15 MIN

10 year for onsite

Waterway classification

This is a minor water waterway less than 1 square mile, 10 year

This area is part of the Marin creek watershed area. The area is mostly defined by open grassland of 2-5% slopes with wide depressions that convey storm runoff by sheet flow. There are no major or defined creeks on the east side of Marin creek.

Mapping

Field survey and applying c values for a 2 acre minimum per allowable zoning for the area..

Analysis

For this analysis I assume that the subdivision improvements are built and the analysis is about reviewing the after improvement conditions.

There were two sets of calculations done for this analysis, using the 10 year occurrence for both lots 1 and 2. The improvements for the landscaping include a landscaped berm and in ground pond

The expected runoff from the berm is not expected to increase the permeability and or change the sheet flow to the low point on lot 1. The area from the 0.14 ac with a c of 0.40 which is less than 0.43.

The expected runoff from the pond is also negligible since the pond will have 2' of freeboard with an approximate depth of 8'.

In both cases the permeability did will not be increased or the point of exit or the manner in which it leaves the property will not be altered.

The pond in lot 2 lies within the potential 100 year flood zone. All dirt from the new pond will used for building the berm area.

Time of concentrations and flows assumed 15 min as was used in the subdivision calculations

Findings

Flow rates for the proposed rates for the subdivision were not changed as shown on lots 1 and lot 2 western borders

Appendix

1. 10 year calculations existing conditions
2. hydrology map overall and onsite
3. hydrology map overall and onsite
4. 100 calculation along east street for verification

Basis of calculations

The Sonoma County Water Agency standards

Rational formula

$$Q = KCIA$$

The C appropriate runoff factor have been calculated for each typical case.

Hydraulic calculations use $k * v^2/2g$ factor.

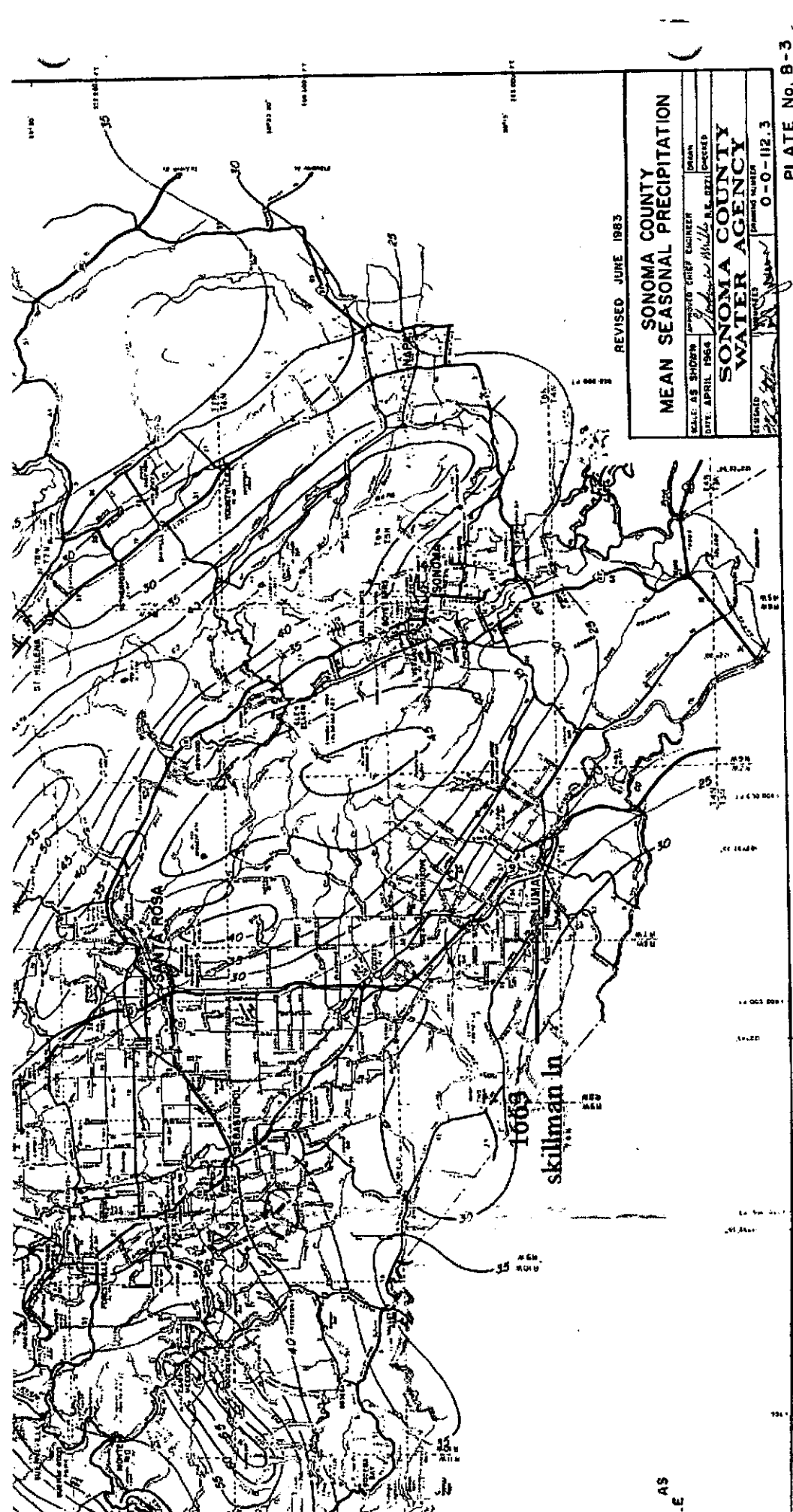
Where K is determined as follows

k values	Type of structure
0.25	Straight run with change in pipe size
0.17	Straight run with same pipe size
0.50	0 to 45 deflection with change in pipe size
0.42	0 to 45 deflection with same pipe size
0.75	45- 90 deflection with change in pipe size
0.75	45-90 deflection with same pipe size
1.00	Approaching 90 deflection
1.25	90 deflection
1.40	Drop manhole
0.35	Short radius curves (50' or shorter

In areas where the calculated flow line is less than the flow line of the pipe the flow line of the pipe plus the normal depth was used. In cases where the pipe was not full a percentage of the normal depth was estimated according to the figure 20 of hydraulic elements for circular pipes.

Santa Rosa drainage inlet capacity

Inlet capacities are provided in chart form.



REVISED JUNE 1983

SONOMA COUNTY
MEAN SEASONAL PRECIPITATION

SCALE: AS SHOWN	DESIGNED BY: CHIEF ENGINEER	DRAWN
DATE: APRIL 1984	BY: <i>[Signature]</i>	AL-REPL-000000
SONOMA COUNTY WATER AGENCY		
REVISION	DATE	BY
1	0-0-112.3	

PLATE No. 8-3

AS
-E

Hydrology/Hydraulic Calculations pond										RUNOFF VALUES USED									
MS 07-0010										CONCRETE/ROOF									
1663 SKILLMAN LANE										PERVIOUS CONC/COBBLE									
Petaluma CA										PERVIOUS ASPHALT									
Hydrology										NAT STONE NO GROUT									
STORM FREQUENCY:										Turf BLOCK									
Rain Countour:										BRICK W/O GROUT									
C= 0.35 SLOPE										PAVERS, CRUSH ROCK, GRAS									
residential PLATE B-1										GRASS/GRAVEL OVER									
G. Chavarria, PE										POROUS PLASTIC									
9-Mar-08																			

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print
Your Name:

JOHN KC GOLTERMANN

Date
Applied:

4-17-09

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY			
Site Address: 1733 SKILLMAN LN.		City: PETALUMA	
Cross-Street: FAIR AVENUE		APN: 048-091-003	Project Phone #: 707 7531111
Directions: PETALUMA BLVD. N. TO SKILLMAN		Subd. Name:	Project Fax #: 707 7652145
Describe Project: SUBDIVISION REQUIRED ROADWAY.		Living Area:	Contract Price:
Garage:		Unit #:	Lot #:
Decks:			
OWNER NAME AND ADDRESS		APPLICANT NAME AND ADDRESS	
Name: JOHN KC GOLTERMANN		Name: same as Engineer	
Mailing Address: 316 PETALUMA BLVD. SO.		Mailing Address:	
City: PETALUMA	State: CA	City:	State:
Day Ph: 707 775 2525	Fax: 707 765 2145	Day Ph: ()	Fax: ()
CONTRACTOR INFORMATION		OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)	
Company Name:		Name: Lupe Chavarria	
Address:		Address: 1210 Sunray Ct	
City:	State:	City: Windsor	State: CA
Day Ph: ()	Fax: ()	Day Ph: 431-5531	Fax: ()
		License No: C-37970	Exp. Date: 3/31/11
WORKER'S COMPENSATION DECLARATION			
I hereby affirm under penalty of perjury one of the following declarations:			
<input type="checkbox"/> I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.			
<input type="checkbox"/> I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:			
Carrier: _____			
Policy No: _____			
(This section need not be completed if the permit is for one hundred dollars (\$100) or less.)			
<input checked="" type="checkbox"/> I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.			
Exp. Date: _____ Applicant: _____			
WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.			
OWNER-BUILDER DECLARATION			
I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).):			
<input type="checkbox"/> I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.).			
<input checked="" type="checkbox"/> I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.).			
<input type="checkbox"/> I am exempt under Sec. _____, B & P.C. for this reason _____			
Date: 4-17-09 Owner: _____			
LICENSED CONTRACTOR'S DECLARATION			
I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.			
Lic. Class: _____ Lic. No.: _____			
Exp. Date: _____ Contractor: _____			
ASBESTOS DECLARATION			
Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that <input type="checkbox"/> does <input type="checkbox"/> does not contain asbestos, or that <input type="checkbox"/> no demolition is authorized by this permit.			
I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked.			
PERMITTEE SIGNATURE: _____			
316 PETALUMA BLVD. SO. PETALUMA 94952			
ADDRESS CITY ZIP			
<input type="checkbox"/> Contractor <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Other Licensed Professional			
Final Date:		Inspector:	
THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT			

JOB ADDRESS: 1733 SKILLMAN LANE

PERMIT NUMBER: 68009-0058

INSPECTION AREA: 40

FOR DEPARTMENT USE			
Zoning: AR B62 VOL	File No: MNS07-0010	Acres: 6	
Existing Use/Structures: STD AND OUTSIDE LINES			
Proposed Use/Structures: ROAD GRADING			
Zoning Min. Yard Requirements:	Front: 10	Left: 5	Right: 5
Back: 5			
NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. <input type="checkbox"/> Mitigation Required <input type="checkbox"/> Address subject to change.			
Approval for Permit Issuance:		Approval for Occupancy:	
By: _____		By: _____	
Date: _____		Date: 4/20/09	
Conditions: _____			
Sewer Connection: <input type="checkbox"/> Available <input type="checkbox"/> Fees Paid			
Approved by: _____		Date: _____	
Road Encroachment: <input type="checkbox"/> Fees Paid			
Approved by: CFC		Date: 4/20/09	
Septic System Permit/Clearance # N/R			
Approved by: TA Nguyen		Date: 4/20/09	
Flood Zone: <input type="checkbox"/> Yes <input type="checkbox"/> No 100 Year Flood Elevation: _____			
Site Review			
Drainage Review: RAINWATER		Date: 4/20/09	
Approved by: P.B. J.		Date: 4/17/09	
Fire: _____			
Approved by: _____		Date: _____	
Code Enforcement Violation <input type="checkbox"/> Yes <input type="checkbox"/> No Violation # _____			
This permit is limited to _____ days.			
Work Authorized: GRADING PER APPROVED SUBDIVISION IMPROVEMENT PLANS DATED 4/14/09 BY ENA08 LUPE CHAVARRIA P.E. MNS07-0010			
<input type="checkbox"/> Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available	
<input type="checkbox"/> No Plans Subject to Field Inspection	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available	
Plancheck Cleared By: PBM	Date: 4/20/09	Type of Construction:	Occupancy:
Permit Cleared for Issuance By: PBM	Date: 4/20/09	No. of Stories:	No. of Bedrooms:
Auto. Fire Sprinklers Req'd:		No. of Units:	Certificate of Occupancy:
Machine Space for Permit Fee			
APR 21 2009			
DISTRIBUTION: White - File - Can - Applicant - Pink - Audit Copy - Blue - Assessor - Cardstock - Inspector			

131) SPECIAL INSPECTION REQUIRED		<input type="checkbox"/> YES	<input type="checkbox"/> NO	IF YES, SEE ADDITIONAL SHEET	
INSPECTION RECORD		DATE	NAME	REMARKS	
101)	ROUGH GRADING				
103)	FOUNDATION				
	FORMS/SETBACK				
	FOOTING				
	WALLS				
106)	UFER GROUND #				
104)	CAISSONS/PIERS				
105)	SLAB				
107)	UNDERGROUND UTILITIES				
110)	MASONRY				
109)	RETAINING WALLS				
113)	FIREPLACE				
	FOOTING				
	HEARTH/PROTECTION				
	THROAT				
114)	CHIMNEY				
120)	UNDERFLOOR/UNDERSLAB				
115)	HYDRONICS				
116)	U/F ELECTRICAL				
117)	U/F MECHANICAL				
118)	U/F PLUMBING				
119)	U/F FRAMING				
139)	U/F INSULATION				
126)	SHEAR WALLS				
	<input type="checkbox"/> INTERIOR	<input type="checkbox"/> EXTERIOR			
127)	DIAPHRAGMS				
	<input type="checkbox"/> ROOF	<input type="checkbox"/> FLOOR			
134)	SIDING/SHEATHING				
125)	HOLD DOWNS				
132)	CLOSE-IN				
122)	ROUGH ELECTRICAL				
123)	ROUGH MECHANICAL				
124)	ROUGH PLUMBING				
128)	ROUGH FRAME				
160)	SMOKE DETECTORS				
139)	INSULATION				
142)	WALLBOARD				
143)	FIREWALLS				
135)	STUCCO/PLASTER				
	<input type="checkbox"/> LATH	<input type="checkbox"/> SCRATCH			
137)	ROOFING				
130)	TUB/SHOWER PAN				
162)	FIRE DAMPERS/DOORS				
164)	SUSPENDED CEILING				
	<input type="checkbox"/> ROUGH ELEC.	<input type="checkbox"/> ROUGH MECH.			
165)	EXITING - RAMPS/STAIRS				
163)	HANDRAILS/GUARDRAILS				
	CORRIDORS/DOORS				
166)	ACCESSIBILITY COMPLIANCE				
144)	WATER TANKS				
	<input type="checkbox"/> SLAB	<input type="checkbox"/> WALLS			
170)	TEMPORARY OCCUPANCY				
171)	TEMPORARY ELECTRICAL				
172)	TEMPORARY GAS				
174)	ELECTRIC METER AUTHORIZATION				
152)	PANEL BOARDS/SERVICE				
189)	SEPTIC ELECTRIC FINAL				
175)	GAS METER AUTHORIZATION				
153)	GAS PRESSURE TEST				
	HOUSE	YARD			
190)	MANUF. HOME FOUNDATION				
191)	MANUF. HOME INSTALLATION				
	CONTINUITY				
	STAIRS/SKIRTS				
	RIDGE BOLTING				
193)	MANUF. HOME COND. FINAL				
	SWIMMING POOLS				
194)	PRE-GUNITE				
195)	PRE-DECK				
196)	PRE-PLASTER/FENCE				
197)	VINYL/FIBERGLASS POOL EXCAVATION				
102)	GRADING FINAL	8/13/09	SPL		
176)	ELECTRICAL FINAL				
177)	MECHANICAL FINAL				
178)	PLUMBING FINAL				
199)	FINAL	8/13/09	SPL		
OCCUPANCY (OK TO OCCUPY)				PLAN RETENTION REQUIRED?	
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	