

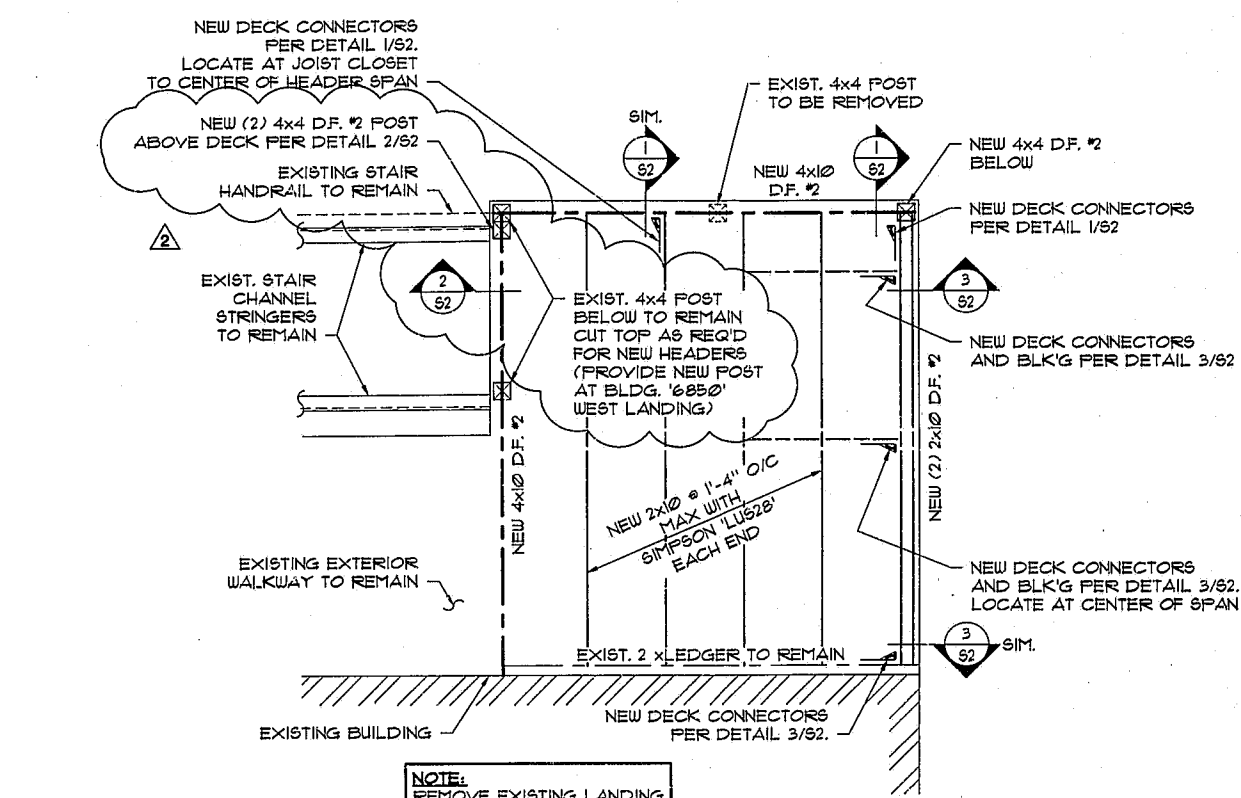
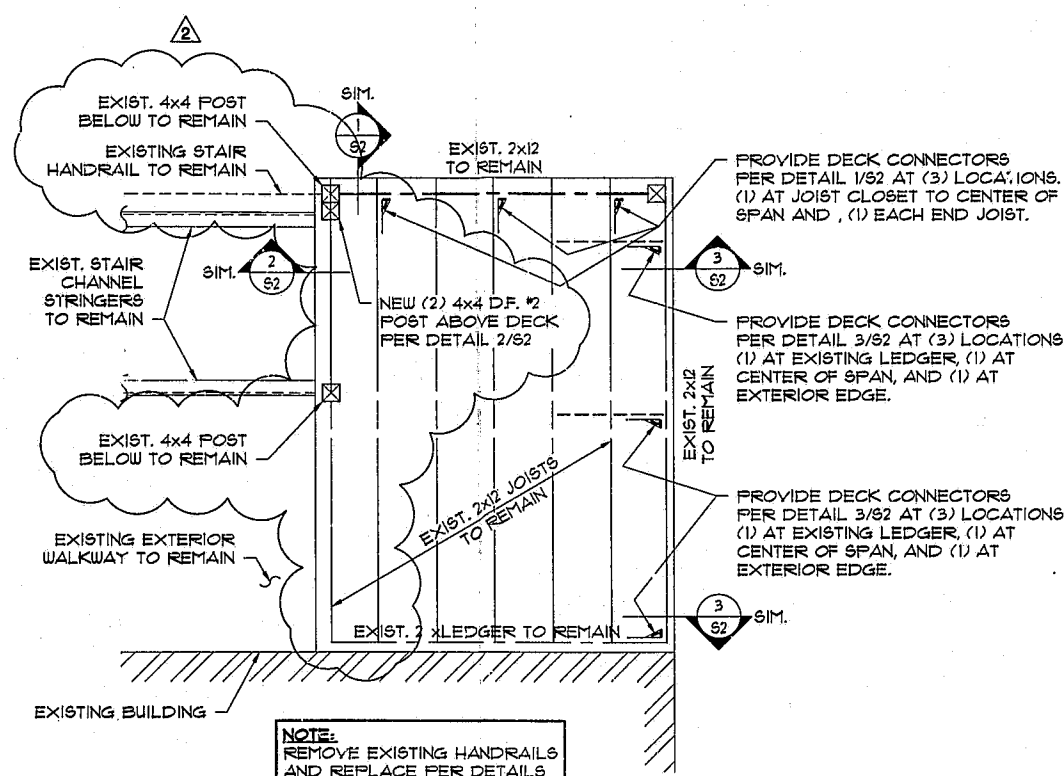
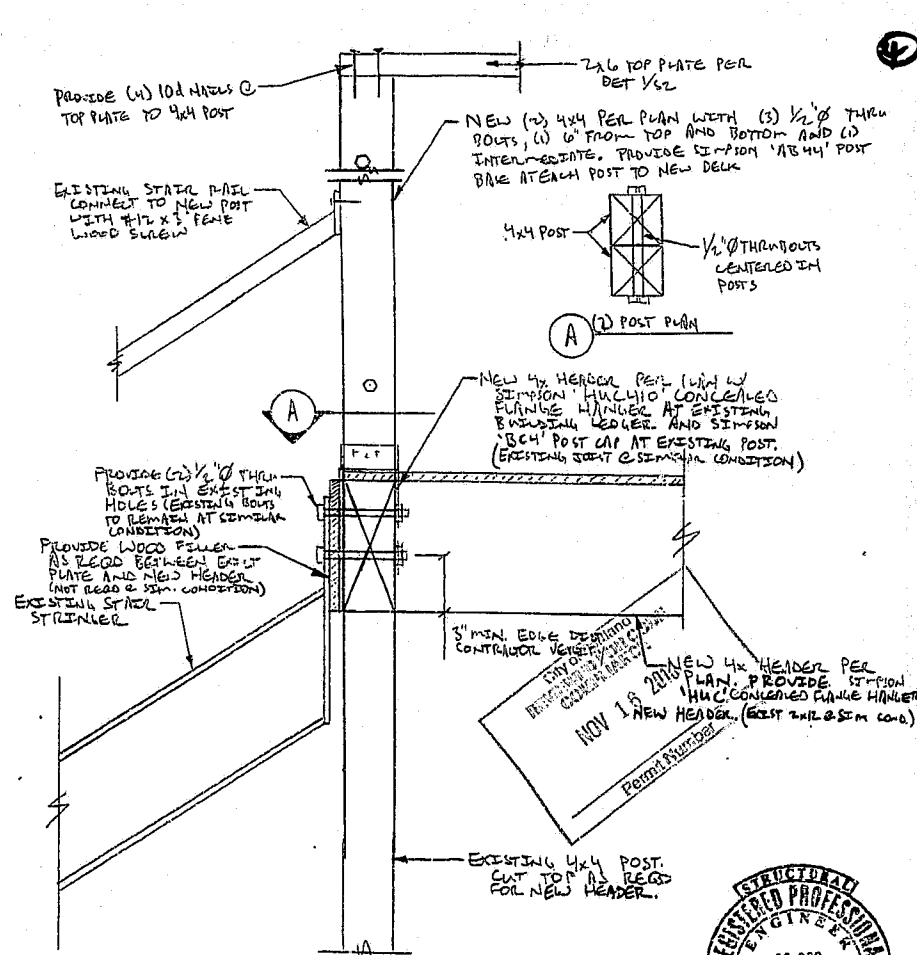
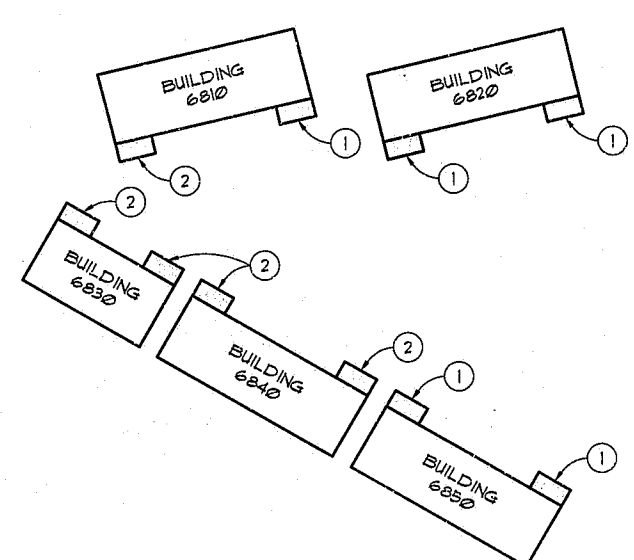
6810 SW 26TH AVE

REV-01 CO10-181683,89,90,92,94

24X

APR 8 4 2011
MICROFILMEDRev 01 CO-181683, Rev 01 CO-181689
Rev 01 CO-181690, Rev 01 CO-181692
Rev 01 CO-181694, Rev 01 CO-181695MAR 14 2011
MICROFILMED

Q

T.M. RIPPEY
CONSULTING ENGINEERS
7650 S.W. Beveland St., Suite 100
Tigard, Oregon 97223
Phone (503) 443-8900SPECIAL CREEK INSTRUCTIONS
CONSTRUCTION ADDENDUM 11/8/10
DATE: 11/8/10
JOB NO. 10161
SHEET: 011 REPLACEMENT DECK FRAMING PLAN
SCALE: 1/2"=1'-0"2 HANDRAIL REPLACEMENT DECK PLAN
SCALE: 1/2"=1'-0"3 POST/HEADER DETAIL
SCALE: 1/2"=1'-0"4 SITE PLAN
SCALE: NO SCALE

SITE PLAN KEYNOTES:

- EXISTING WOOD FRAMED DECK WITH CONCRETE TOPPING TO BE REMOVED AND REPLACED PER PLAN 1/S1.
- EXISTING WOOD FRAMED DECK TO REMAIN. REMOVE EXISTING WOOD HANDRAILS AND REPLACE PER PLAN 2/S1.

GENERAL STRUCTURAL NOTES

CODE REQUIREMENTS:
CONFORM TO THE 2009 INTERNATIONAL BUILDING CODE AS AMENDED BY THE 2010 OREGON STRUCTURAL SPECIALTY CODE, REFERENCED HEREINAFTER AS IBC.

DESIGN CRITERIA:
DESIGN WAS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE IBC. IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS WERE USED FOR DESIGN, WITH LIVE LOADS REDUCED PER IBC:
FLOOR LIVE LOAD: 100 PSF
GUARDRAIL IMPACT LOAD: 200 LBS OR 50 LB/FT
ALLOWABLE SOIL BEARING PRESSURE: 1500 PSF (ASSUMED).

EXISTING CONDITIONS:
THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO THE START OF THE WORK.

TEMPORARY CONDITIONS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL STABILITY OF THE NEW AND EXISTING STRUCTURES AND WALLS DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER THE FINAL CONFIGURATION ONLY.

CAST-IN-PLACE CONCRETE:
MIX DESIGN: PREPARE DESIGN MIXES FOR EACH TYPE OF CONCRETE. PROPORTION MIXES BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS, USING MATERIALS TO BE EMPLOYED ON THE WORK. FOR EACH CLASS OF CONCRETE REQUIRED, FURNISH CERTIFIED REPORTS OF EACH PROPOSED MIX FOR EACH TYPE OF WORK OF THIS SECTION. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, ALONG WITH TEST DATA AS REQUIRED, A MINIMUM OF TWO WEEKS PRIOR TO PLACING CONCRETE.

AD MIXTURES: AIR ENTRAINING AGENT IN ACCORDANCE WITH ASTM C260 AND WATER-REDUCING AGENT CONFORMING TO ASTM 484, USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, MAY BE INCORPORATED IN CONCRETE DESIGN MIXES. AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 SHALL BE USED IN CONCRETE MIXES FOR EXTERIOR HORIZONTAL SURFACES EXPOSED TO WEATHER. THE AMOUNT OF ENTRAINING AIR SHALL BE 5% - 7% BY VOLUME. FLY ASH SHALL CONFORM TO ASTM C 618 AND SHALL BE LIMITED TO A 15% MAXIMUM BY CEMENT WEIGHT.

CONCRETE WORK SHALL CONFORM TO ACI 301. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39, AND SHALL BE AS FOLLOWS:

FOOTINGS: $f_c = 3,000$ PSI AT 28 DAYS. (MINIMUM CEMENT CONTENT = 410 LBS)

SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE POURING. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CONCRETE EDGES UNLESS NOTED OTHERWISE.

CONCRETE REINFORCING STEEL:
REINFORCING STEEL SHALL CONFORM TO ASTM A618, GRADE 60 AND FOR DEFORMED BARS, UNLESS OTHERWISE NOTED. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A106. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A95 AND A195.

REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 LATEST EDITION ("DETAILS AND DETAILED CONCRETE REINFORCEMENT").

REINFORCING STEEL SHALL HAVE PROTECTION AS FOLLOWS:

CONDITION:	MINIMUM COVER:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"

CONCRETE ACCESSORIES:
CONCRETE SCREW ANCHORS SHALL BE "SIMPSON TITEN-ROD" OR ENGINEER APPROVED EQUIVALENT.

CARPENTRY:
SAWN LUMBER DESIGN IS BASED ON THE NATIONAL DESIGN SPECIFICATION, LATEST EDITION. SAWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. UNLESS NOTED OTHERWISE ALL LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF FABRICATION. ALL WOOD IN PERMANENT CONTACT WITH CONCRETE OR CHU SHALL BE PRESURE TREATED UNLESS AN APPROVED BARRIER IS PROVIDED. PRESURE TREAT ALL CUT ENDS OF P.T. WOOD. GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

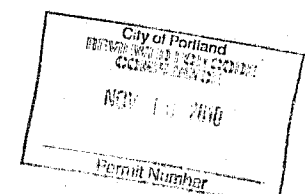
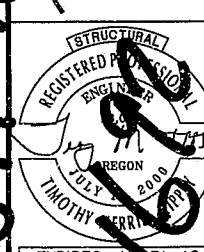
FRAMING ELEMENT	SPECIES & GRADE
POSTS AND BEAMS 4x OR SMALLER	D.F. 2 OR BETTER
EXTERIOR DECK JOISTS	D.F. 2 OR BETTER
BLOCKING	D.F. STANDARD OR BETTER

FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY (OR ENGINEER APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS AND ATTACHED PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS UNLESS NOTED OTHERWISE. HANGERS NOT SHOWN SHALL BE SIMPSON HJ OF SIZE RECOMMENDED FOR MEMBER. ALL FRAMING NAILS SHALL BE CORN NAILS. NO BOX NAILS ALLOWED. FASTENERS AND ACCESSORIES IN CONTACT WITH PRESERVATIVE TREATED WOOD MUST BE HOT DIP GALVANIZED OR HAVE Z-MAX COATING. ALL FASTENERS IN CONTACT WITH FIRE RETARDANT LUMBER MUST BE HOT-DIP GALVANIZED.

NAIL TYPE	LENGTH	DIAMETER
8d	2-1/2"	0.131"
10d	3"	0.148"
16d	3-1/2"	0.162"

SHEATHING PANELS SHALL CONFORM TO THE REQUIREMENTS OF VOLUNTARY PRODUCT STANDARD PS-1 OR APA PRG-109 PERFORMANCE STANDARDS. UNLESS NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACINGS AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

FLASHING AND WATERPROOFING:
ALL FLASHING AND WATERPROOFING SHALL BE BY OTHERS UNLESS NOTED OTHERWISE ON THE PLANS.

T.M. RIPPEY
CONSULTING ENGINEERS
7650 S.W. Beveland St., Suite 100
Tigard, Oregon 97223
Phone (503) 443-8900SPRINGCREEK APTS. - LANDING
UPGRADE AND REPLACEMENT
6640 SW LAND OUSE
PORTLAND, OR
10-181683 REV 01GENERAL NOTES:
KEY PLAN AND
FRAMING PLANS
10-181683 REV 01CONTRACTOR REMAINS
RESPONSIBLE FOR
OBTAINING ALL
NECESSARY PERMITS
AND APPROVALS
PRIOR TO
CONSTRUCTION
DATE: 09/22/10
FILE NAME: 10161
DRAWN BY: JLR
CHECKED BY: JLR
SHEET: 01 OF 2PROJECT NO.:
10282

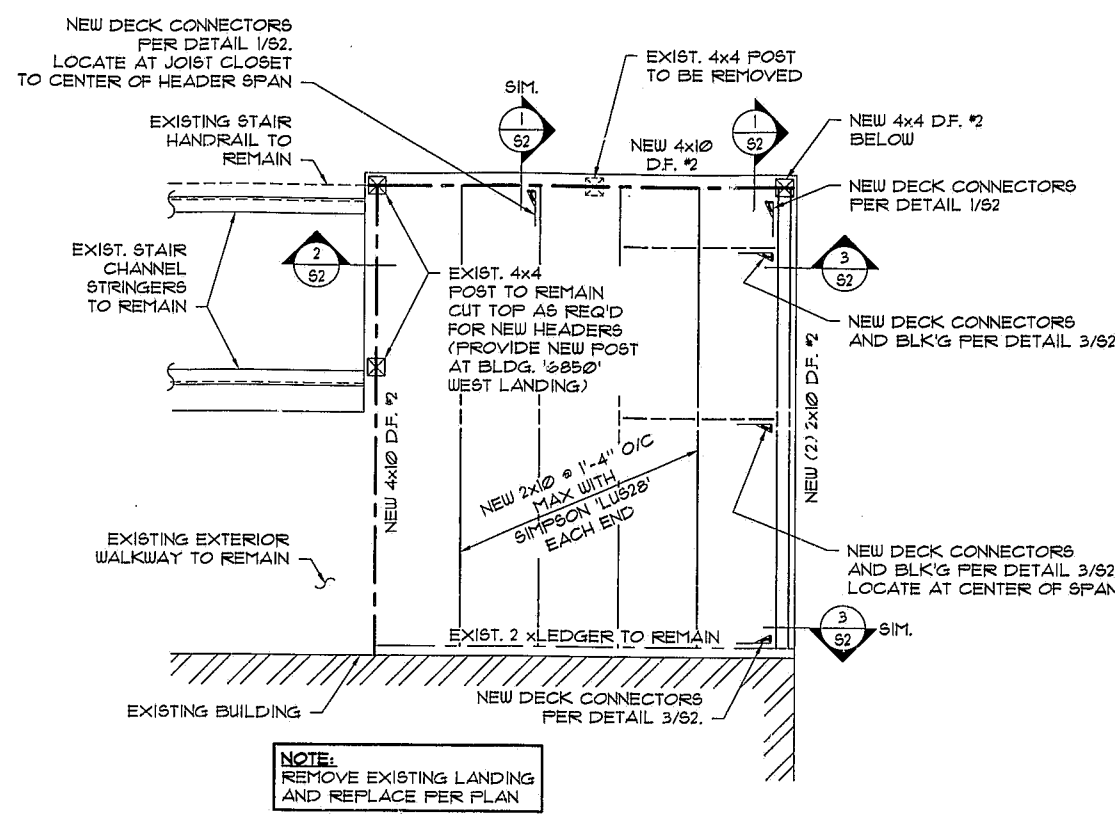
24X

MAR 07 2011
MICROFILMED

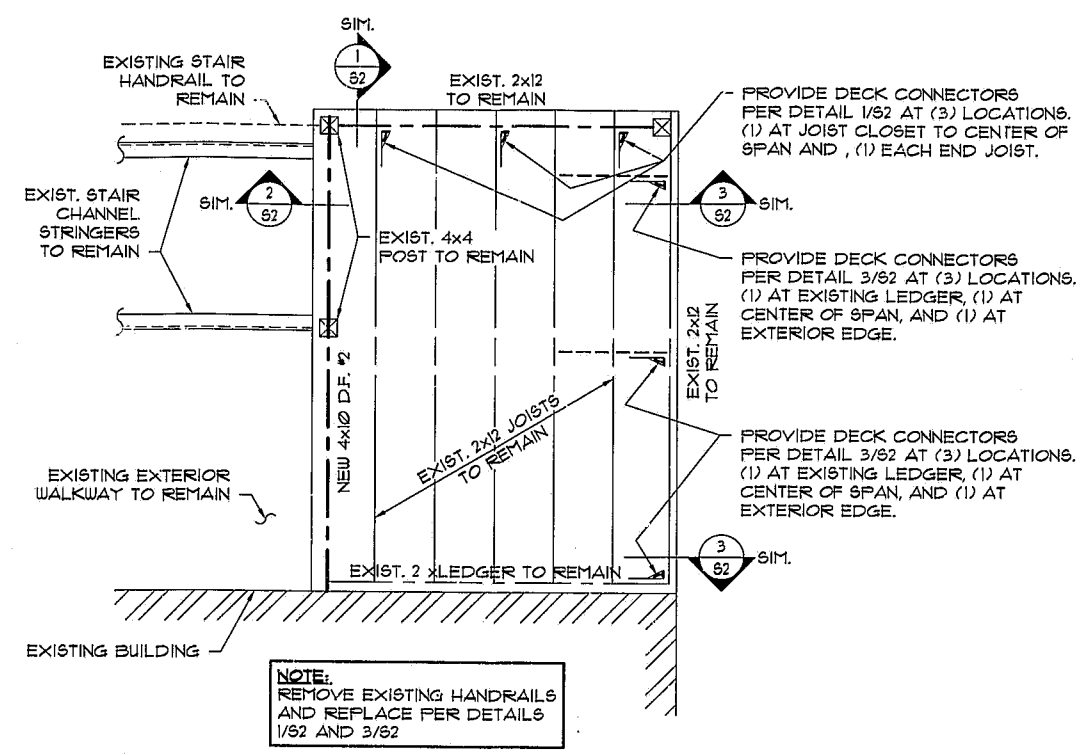
CO 10-181683, 689, 690, 694, 692

FEB 22 2011
MICROFILMED

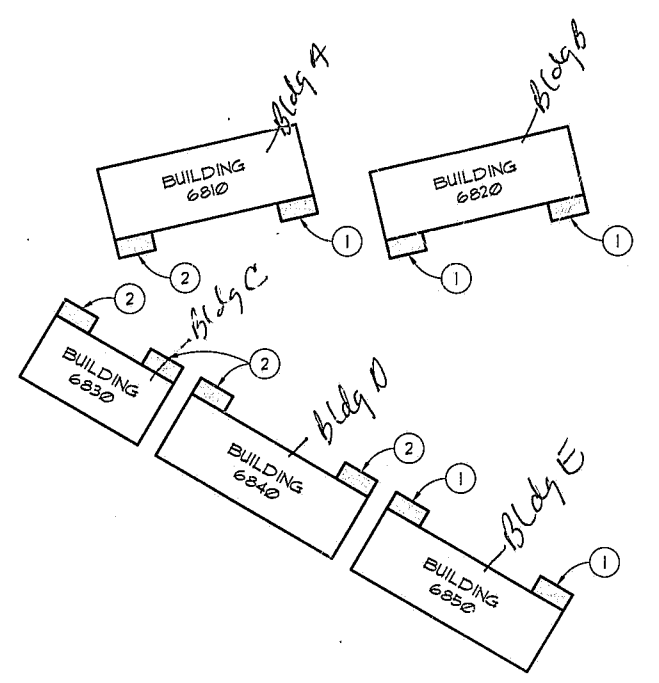
1
6



1 REPLACEMENT DECK FRAMING PLAN
SCALE: 1/2"=1'-0"



2 HANDRAIL REPLACEMENT DECK PLAN
SCALE: 1/2"=1'-0"



3 SITE PLAN
SCALE: NO SCALE

SITE PLAN KEYNOTES:

- EXISTING WOOD FRAMED DECK WITH CONCRETE TOPPING TO BE REMOVED AND REPLACED PER PLAN 1/51.
- EXISTING WOOD FRAMED DECK TO REMAIN. REMOVE EXISTING WOOD HANDRAILS AND REPLACE PER PLAN 2/51.

City of Portland
Bureau of
Development Services
By VAF Date 10/4/10
Reviewed by
Planning and Review

GENERAL STRUCTURAL NOTES

CODE REQUIREMENTS:
CONFORM TO THE 2009 INTERNATIONAL BUILDING CODE AS AMENDED BY THE 2010 OREGON STRUCTURAL SPECIALTY CODE, REFERENCED HEREFTER AS IBC.

DESIGN CRITERIA:
DESIGN WAS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE IBC. IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS WERE USED FOR DESIGN, WITH LIVE LOADS REDUCED PER IBC.

FLOOR LIVE LOAD: 100 PSF

GUARDRAIL IMPACT LOAD: 200 LBS OR 50 LB/FT

ALLOWABLE SOIL BEARING PRESSURE: 1500 PSF (ASSUMED).

EXISTING CONDITIONS:
THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO THE START OF THE WORK.

TEMPORARY CONDITIONS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL STABILITY OF THE NEW AND EXISTING STRUCTURES AND WALLS DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER THE FINAL CONFIGURATION ONLY.

CAST-IN-PLACE CONCRETE:
MIX DESIGN: PREPARE DESIGN MIXES FOR EACH TYPE OF CONCRETE. PROPORTION MIXES BY EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHODS, USING MATERIALS TO BE EMPLOYED ON THE WORK FOR EACH CLASS OF CONCRETE REQUIRED. FURNISH CERTIFIED REPORTS OF EACH PROPOSED MIX FOR EACH TYPE OF WORK OF THIS SECTION. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, ALONG WITH TEST DATA AS REQUIRED, A MINIMUM OF TWO WEEKS PRIOR TO PLACING CONCRETE.

ADMITTANCE: AIR ENTRAINING AGENT IN ACCORDANCE WITH ASTM C260 AND WATER-REDUCING AGENT CONFORMING TO ASTM A44 USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, MAY BE INCORPORATED IN CONCRETE DESIGN MIXES. AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 SHALL BE USED IN CONCRETE MIXES FOR EXTERIOR HORIZONTAL SURFACES EXPOSED TO WEATHER. THE AMOUNT OF ENTRAINED AIR SHALL BE 5% - 1% BY VOLUME. FLY ASH SHALL CONFORM TO ASTM C 618 AND SHALL BE LIMITED TO A 15% MAXIMUM BY CEMENT WEIGHT.

CONCRETE WORK SHALL CONFORM TO ACI 301. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39, AND SHALL BE AS FOLLOWS:

FOOTINGS: $f'_c = 3000$ PSI AT 28 DAYS. (MINIMUM CEMENT CONTENT = 410 LBS)

SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE POURING. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CONCRETE EDGES UNLESS NOTED OTHERWISE.

CONCRETE REINFORCING STEEL:
REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 AND FOR DEFORMED BARS, UNLESS OTHERWISE NOTED. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A106. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A182 AND A185.

REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI 318 LATEST EDITION ("DETAILS AND DETAILED CONCRETE REINFORCEMENT").

REINFORCING STEEL SHALL HAVE PROTECTION AS FOLLOWS:

CONDITION	MINIMUM COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"

CONCRETE ACCESSORIES:
CONCRETE SCREW ANCHORS SHALL BE "SIMPSON TITEN-UD" OR ENGINEER APPROVED EQUIVALENT.

CARPENTRY:
SAUN LUMBER DESIGN IS BASED ON THE NATIONAL DESIGN SPECIFICATION, LATEST EDITION. SAUN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. UNLESS NOTED OTHERWISE ALL LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 18% AT TIME OF FABRICATION. ALL WOOD IN PERMANENT CONTACT WITH CONCRETE OR CMU SHALL BE PRESURE TREATED UNLESS AN APPROVED BARRIER IS PROVIDED. PRESURE TREAT ALL CUT ENDS OF P.T. WOOD. GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS.

FRAMING ELEMENT	SPECIES & GRADE
POSTS AND BEAMS 4x OR SMALLER	D.F. 2 OR BETTER
EXTERIOR DECK JOISTS	D.F. 2 OR BETTER
BLOCKING	D.F. STANDARD OR BETTER

FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY (OR ENGINEER APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS AND ATTACHED PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS UNLESS NOTED OTHERWISE. HANGERS NOT SHOWN SHALL BE SIMPSON HJ OF SIZE RECOMMENDED FOR MEMBER. ALL FRAMING NAILS SHALL BE COMMON NAILS. NO BOX NAILS ALLOWED. FASTENERS AND ACCESSORIES IN CONTACT WITH PRESERVATIVE TREATED WOOD MUST BE HOT-DIPPED GALVANIZED OR HAVE ZMAX COATING. ALL FASTENERS IN CONTACT WITH FIRE RETARDANT LUMBER MUST BE HOT-DIPPED GALVANIZED.

NAIL TYPE	LENGTH	DIAMETER
8d	2-1/2"	Ø13"
10d	3"	Ø14"
16d	3-1/2"	Ø16"

SHEATHING PANELS SHALL CONFORM TO THE REQUIREMENTS OF VOLUNTARY PRODUCT STANDARD PS 1 OR PS 2, OR APA PRP-108 PERFORMANCE STANDARDS. UNLESS NOTED, PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER.

FLASHING AND WATERPROOFING:
ALL FLASHING AND WATERPROOFING SHALL BE BY OTHERS UNLESS NOTED OTHERWISE ON THE PLANS.

City of Portland
BUREAU OF DEVELOPMENT SERVICES
OCT 05 2010
Permit Number

T.M. RIPPEY
CONSULTING ENGINEERS
7650 SW Beaverton, Suite 100
Portland, Oregon 97223
Tel: (503) 443-3700
Fax: (503) 443-3700

REGISTERED PROFESSIONAL ENGINEER
15,000
EXPIRE 12-31-10

LANDING
UPGRADE AND REPLACEMENTS
6840 SW 26TH AVENUE
PORTLAND, OREGON 97205

GENERAL NOTES:
SEE PLAN AND
FRAMING PLAN

10-181683-CO, 10-181689-CO, 10-181694-CO, 10-181695-CO, 10-181696-CO, 10-181697-CO, 10-181698-CO, 10-181699-CO, 10-181700-CO

PROJECT No:
10282

24X

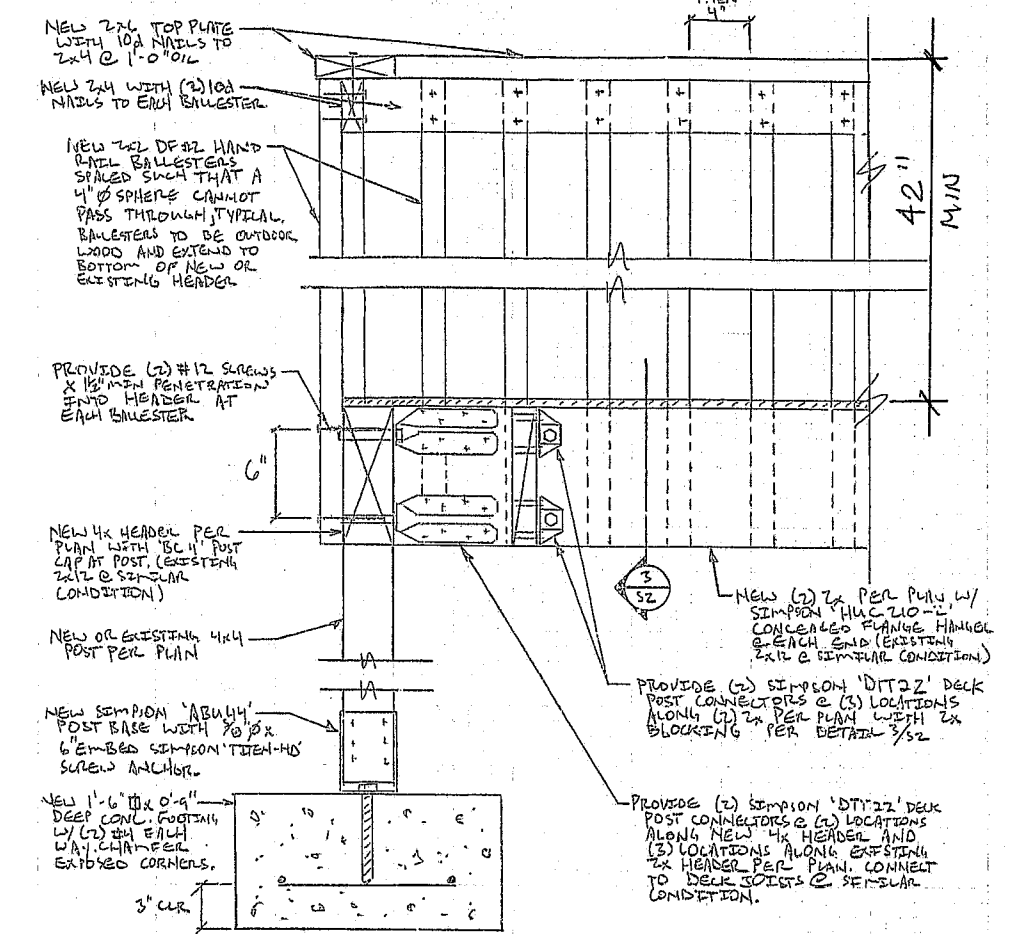
MAR 07 2011
MICROFILMED

CO 10-181683, 689, 690, 694, 692

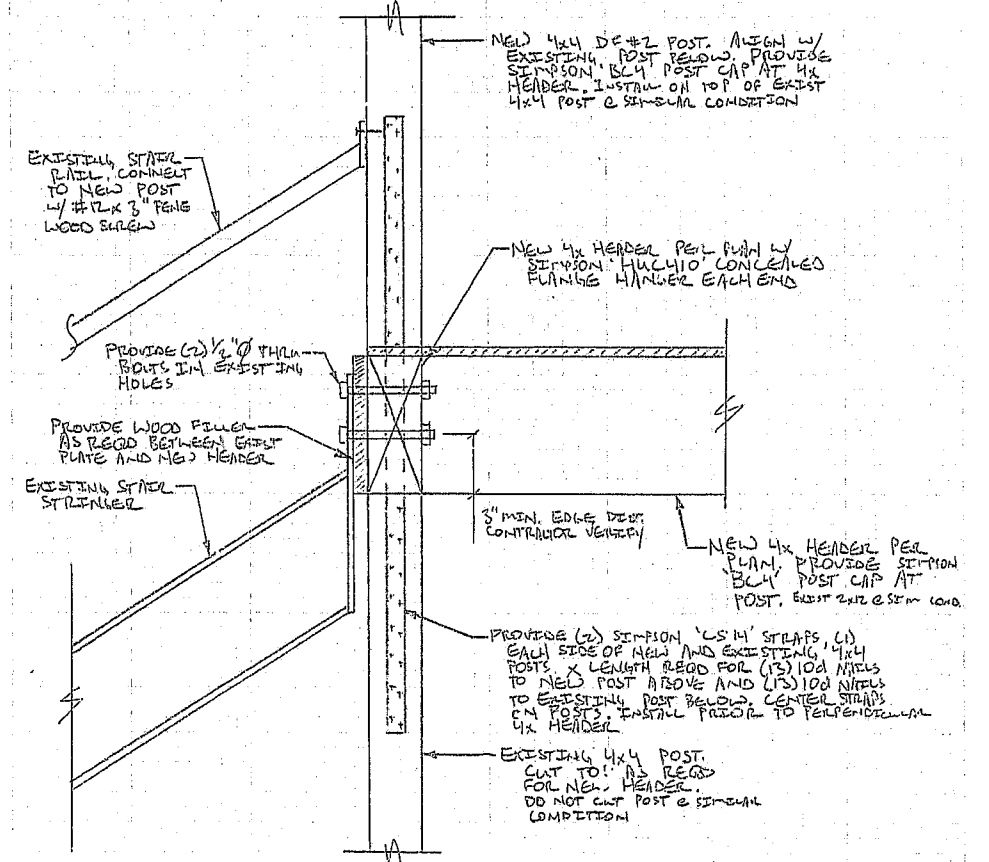
1

FEB 22 2011
MICROFILMED

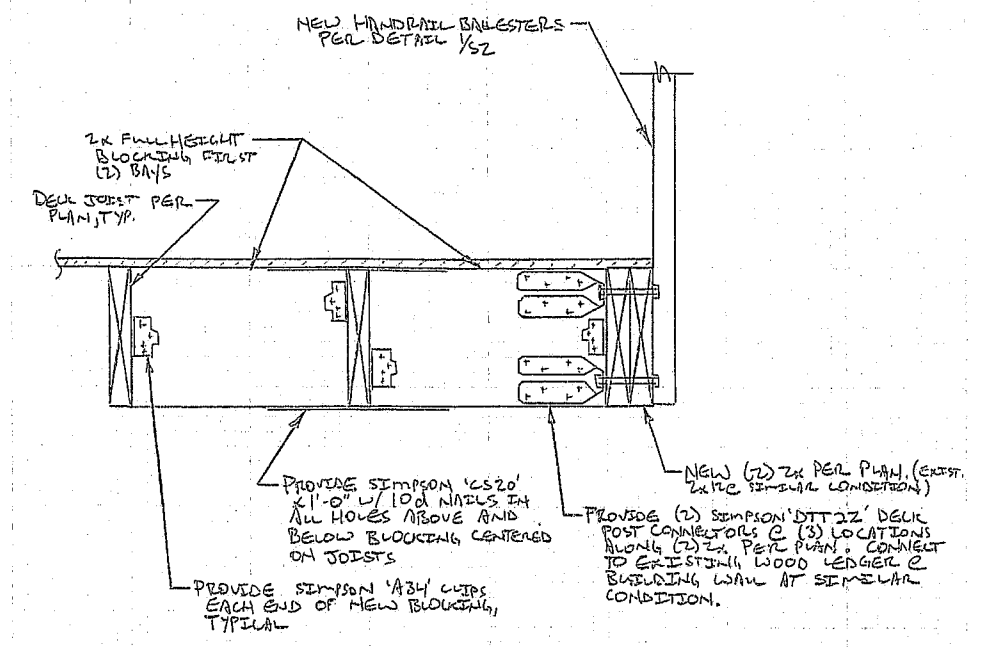
6



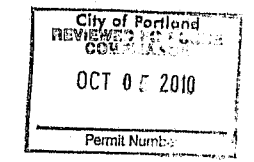
1 DECK / HANDRAIL DETAIL
SCALE: 1" = 1'-0"



2 POST / HEADER DETAIL
SCALE: 1" = 1'-0"



3 DECK SECTION
SCALE: 1" = 1'-0"



REVISIONS:

DATE: 09.22.10
FILE NAME: FILE NAME
DRAWN BY: JSC
CHKD BY: TMR
SHEET

PROJECT No: 10282

DECK FRAMING DETAILS

SPRINGCREEK ARTS - LANDING
UPGRADE AND REPLACEMENTS
6840 SW 26TH AVE.
PORTLAND, OR

EXP. 12-31-10

REGISTERED PROFESSIONAL ENGINEER
10-008
OREGON
JULY 11, 2006
TIMOTHY MERRILL RIPPY

T.M. RIPPEY
CONSULTING ENGINEERS
7650 SW Beaverton, Suite 100
Portland, Oregon 97225
Phone: (503) 443-3900
Fax: (503) 443-3700

C010-181683, 689, 690
692, 694

G

FEB 22 2011
MICROFILMED

1



Building Permit Application
City of Portland, Oregon - Bureau of Development Services
 1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6860 • www.portlandoregon.gov/bds

Type of work		
<input type="checkbox"/> New construction	<input type="checkbox"/> Addition/alteration/replacement	
<input type="checkbox"/> Demolition	<input type="checkbox"/> Other:	
Category of construction		
<input type="checkbox"/> 1 & 2 family dwelling	<input type="checkbox"/> Commercial/Industrial	<input type="checkbox"/> Accessory building
<input type="checkbox"/> Multifamily	<input type="checkbox"/> Master builder	<input type="checkbox"/> Other:
Job site information and location		
Job no.:	Job address: 6810 SW 26th Ave	
City/State/ZIP: Portland, OR 97219		
Suite/bldg./apt. no.:	Project name: Springcreek Landing Repairs	
Cross street/directions to job site:		
Subdivision:	Lot no.	Tax map/parcel no.
Description of work		
Replace entry landings per plans.		
<input type="checkbox"/> Reference RS / Combination <input type="checkbox"/> Permit no. <input checked="" type="checkbox"/> Property owner <input type="checkbox"/> Tenant		
Name:		
Address:		
City/State/ZIP:		
Phone:		FAX:
Owner installation: This installation is being made on property that I own which is not intended for sale, lease, rent, or exchange.		
Owner signature:		Date:
<input checked="" type="checkbox"/> Contractor		
Business name: J.R. Johnson Inc.		
Address: P.O. Box 17196 Portland, OR 97219		
City/State/ZIP: Portland, OR 97217		
Phone: 503 240 3388		FAX: 503 240 3424
CCB lic. no. 1026716		
Authorized signature: Jennifer Whittington		
Print name: Jennifer Whittington Date: 10/3/10		
<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Contact Person		
Business name: J.R. Johnson Inc.		
Contact name: Jennifer Whittington		
Address: P.O. Box 17196		
City/State/ZIP: Portland, OR 97217		
Phone:		FAX:
E-mail: jennec@jrjohnsoninc.com		
Authorized signature:		
Print name:		
Date:		

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no.:
Date received:
By:

Required Data: One and Two Family Dwelling

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/ypert area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data: Commercial Use

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	5,400.00
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups:	
Existing:	
New:	

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply:

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*

Please refer to fee schedule	
Fees due upon application	
Amount received	
Date received	

Sub-contractor information can be faxed to 503-823-7693.

10-18/685-CC



Building Permit Application

City of Portland, Oregon - Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6868 • www.portlandoregon.gov/bds

Type of work		
<input type="checkbox"/> New construction	<input type="checkbox"/> Addition/alteration/replacement	
<input type="checkbox"/> Demolition	<input type="checkbox"/> Other:	
Category of construction		
<input type="checkbox"/> 1 & 2 family dwelling	<input type="checkbox"/> Commercial/Industrial	<input type="checkbox"/> Accessory building
<input type="checkbox"/> Multifamily	<input type="checkbox"/> Master builder	<input type="checkbox"/> Other:
Job site information and location		
Job no.:	Job address: 6820 SW 26th Ave.	
City/State/ZIP:	Portland, OR 97219	
Suite/bldg./apt. no.:	Project name: Springcreek Apts.	
Cross street/directions to job site:		
Subdivision:		
Lot no.	Tax map/parcel no.	
Description of work		
Replace / Repair Entry Landings per plans		
<input type="checkbox"/> Reference RS / Combination		
Permit no.		
<input type="checkbox"/> Property owner		
<input type="checkbox"/> Tenant		
Name:		
Address:		
City/State/ZIP:		
Phone:	FAX:	
Owner/Installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.		
Owner signature:		
Date:		
<input checked="" type="checkbox"/> Contractor		
Business name: J.R. Johnson Inc.		
Address: P.O. Box 17196		
City/State/ZIP: Portland, OR 97219		
Phone: 503 240 3388	FAX: 503 240 3424	
CCB % no. 107676		
Authorized signature: Jennifer Whitington		
Print name: Jennifer Whitington	Date: 10/5/10	
<input type="checkbox"/> Applicant		
<input type="checkbox"/> Contact Person		
Business name:		
Contact name:		
Address:		
City/State/ZIP:		
Phone:	FAX:	
E-mail: jenne@jrjohnsoninc.com		
Authorized signature:		
Print name:		
Date:		

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no.

Date received:

By:

Required Data - One and Two Family Dwelling

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/carport area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data - Commercial Use

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	3,900.00
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups:	
Existing:	
New:	

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply.

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*

Please refer to fee schedule

Fees due upon application	
Amount received	
Date received	

Sub-contractor information can be faxed to 503-823-7693.

10-181689-01



Building Permit Application
City of Portland, Oregon - Bureau of Development Services
 1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6850 • www.portlandoregon.gov/bds

Type of work	
<input type="checkbox"/> New construction	<input type="checkbox"/> Addition/alteration/replacement
<input type="checkbox"/> Demolition	<input type="checkbox"/> Other:
Category of construction	
<input type="checkbox"/> 1 & 2 family dwelling	<input type="checkbox"/> Commercial/industrial
<input type="checkbox"/> Multifamily	<input type="checkbox"/> Accessory building
<input type="checkbox"/> Master builder	<input type="checkbox"/> Other:
Job site information and location	
Job no.:	Job address: 6830 SW 26th Ave.
City/State/ZIP: Portland, OR 97219	
Suite/bldg./apt. no.:	Project name: Springcreek Apts
Cross street/directions to job site:	
Subdivision: Lot no. Tax map/parcel no.	
Description of work	
Repair entry landings per plans	
<input type="checkbox"/> Reference RS / Combination	
<input type="checkbox"/> Property owner	Permit no. <input type="checkbox"/> Tenant
Name:	
Address:	
City/State/ZIP:	
Phone:	FAX:
Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.	
Owner signature: Date:	
<input checked="" type="checkbox"/> Contractor	
Business name: J.R. Johnson Inc.	
Address: P.O. Box 17196	
City/State/ZIP: Portland, OR 97219	
Phone: 503 240 3388	FAX: 503 240 3424
CCB no. 102676	
Authorized signature: Jennifer Whittington	
Print name: Jennifer Whittington Date: 10/5/10	
<input type="checkbox"/> Applicant	<input type="checkbox"/> Contact Person
Business name:	
Contact name:	
Address:	
City/State/ZIP:	
Phone:	FAX:
E-mail: jenne@jrjohnsoninc.com	
Authorized signature: Date:	
Print name:	

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only
Permit no.:
Date received:
By:

Required Data, One and Two Family Dwelling	
Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.	
Valuation:	
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/carport area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data, Commercial Use	
Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.	
Valuation:	2,400.00
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups:	
Existing:	
New:	

Notice
 All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701. and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply.

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*	
Please refer to fee schedule	
Fees due upon application:	
Amount received:	
Date received:	

Sub-contractor information: If faxed to 503-823-7693.

10-181690-00
 069181-01



Building Permit Application
City of Portland, Oregon - Bureau of Development Services
1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6818 • www.portlandoregon.gov/bds

Type of work		
<input type="checkbox"/> New construction	<input type="checkbox"/> Addition/alteration/replacement	
<input type="checkbox"/> Demolition	<input type="checkbox"/> Other:	
Category of construction		
<input type="checkbox"/> 1 & 2 family dwelling	<input type="checkbox"/> Commercial/industrial	<input type="checkbox"/> Accessory building
<input type="checkbox"/> Multifamily	<input type="checkbox"/> Master builder	<input type="checkbox"/> Other:
Job site information and location		
Job no.:	Job address: 6840 SW 26 th Ave.	
City/State/ZIP:	Portland, OR 97219	
Suite/bldg./apt. no.:	Project name: Springcreek Apts.	
Cross street/directions to job site:		
Subdivisor:	Lot no.	Tax map/parcel no.
Description of work		
Repair entry landings per plans.		
<input type="checkbox"/> Reference RS / Combination		
<input checked="" type="checkbox"/> Property owner		Permit no.
Name:		Tenant
Address:		
City/State/ZIP:		
Phone:		FAX:
Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.		
Owner signature:		Date:
<input checked="" type="checkbox"/> Contractor		
Business name: J.R. Johnson Inc.		
Address: P.O. Box 17196		
City/State/ZIP: Portland, OR 97217		
Phone: 503-240-3388		FAX: 503-240-3424
CGB lic. no. 10210712		
Authorized signature: Jennifer Whitton		
Print name: Jennifer Whitton Date: 10/5/10		
<input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Contact Person		
Business name:		
Contact name:		
Address:		
City/State/ZIP:		
Phone:		FAX:
E-mail: jenne@jrjohnsoninc.com		
Authorized signature:		
Print name:		Date:

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no.:

Date received:

By:

Required Data - One and Two Family Dwelling

Permit fees are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	
Number of bedrooms:	
Number of bathrooms:	
Total number of floors:	
New dwelling area:	square feet
Garage/carport area:	square feet
Covered porch area:	square feet
Deck area:	square feet
Other structure area:	square feet

Required Data - Commercial Use

Permit fees are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:	2,400.00
Existing building area:	square feet
New building area:	square feet
Number of stories:	
Type of construction:	
Occupancy groups:	
Existing:	
New:	

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply.

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misleading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees

Please refer to fee schedule

Fees due upon application	
Amount received	
Date received	

Sub-contractor information can be faxed to 503-823-7093.

10-181652-00
00-256181-01



Building Permit Application

City of Portland, Oregon - Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 • 503-823-7310 • TTY 503-823-6986 • www.portlandoregon.gov/bds

Type of work

☐ New construction

☐ Addition/allocation/replacement

☐ Demolition

☐ Other:

Category of construction

☐ 1 & 2 family dwelling

☐ Commercial/Industrial

☐ Accessory building

☐ Multifamily

☐ Master builder

☐ Other:

Job site information and location

Job no.:

Job address: 6850 SW 26th Ave.

City/State/ZIP:

Portland, OR 97219

Suite/bldg./apt. no.:

Project name: Springcreek Apts.

Cross street/directions to job site:

Subdivision:

Lot no.

Tax map/parcel no.

Description of work

Replace entry landings per owner plans.

☐ Reference RS / Combination

Permit no.

☒ Property owner

☐ Tenant

Name:

Address:

City/State/ZIP:

Phone:

FAX:

Owner installation: This installation is being made on property that I own, which is not intended for sale, lease, rent, or exchange.

Owner signature:

Date:

☒ Contractor

Business name:

J.R. Johnson Inc.

Address:

P.O. Box 17196

City/State/ZIP:

Portland, OR 97217

Phone:

503 240 3388

FAX: 503 240 3424

OCB file no.

10216716

Authorized signature:

Jennifer Whittington

Print name:

Jennifer Whittington

Date: 10/31/0

☒ Applicant

☐ Contact Person

Business name:

Contact name:

Address:

City/State/ZIP:

Phone:

FAX:

E-mail:

jenne@jrjohnsoninc.com

Authorized signature:

Date:

Print name:

This permit application expires if a permit is not obtained within 180 days after it has been accepted as complete.

Office Use Only

Permit no.:

Date received:

By:

Required Data: One and Two Family Dwelling

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:

Number of bedrooms:

Number of bathrooms:

Total number of floors:

New dwelling area:

square feet

Garage/carport area:

square feet

Covered porch area:

square feet

Deck area:

square feet

Other structures area:

square feet

Required Data: Commercial Use

Permit fees* are based on the value of the work performed. Indicate the value (rounded to the nearest dollar) of all equipment, materials, labor, overhead, and the profit for the work indicated on this application.

Valuation:

5,400.00

Existing building area:

square feet

New building area:

square feet

Number of stories:

Type of construction:

Occupancy groups

Existing:

New:

Notice

All contractors and subcontractors are required to be licensed with the Oregon Construction Contractors Board under ORS 701 and may be required to be licensed in the jurisdiction in which work is being performed. If the applicant is exempt from licensing, the following reasons apply

Statement of Fact: I certify that the facts and information set forth in this application are true and complete to the best of my knowledge. I understand that any falsification, misrepresentation or omission of fact (whether intentional or not) in this application or any other required document, as well as any misloading statement or omission, may be cause for revocation of permit and/or certificate of occupancy, regardless of how or when discovered.

Building Permit Fees*

Please refer to fee schedule

Fees due upon application

Amount received

Date received

Sub-contractor information can be faxed to 503-823-7693.

E
03-569181-01
03-181694-02



TM RIPPEY
CONSULTING ENGINEERS

7650 SW Beveland St
Suite 100
Tigard, Oregon 97223
Phone: (503) 443-3900
Fax: (503) 443-3700

STRUCTURAL CALCULATIONS

FOR

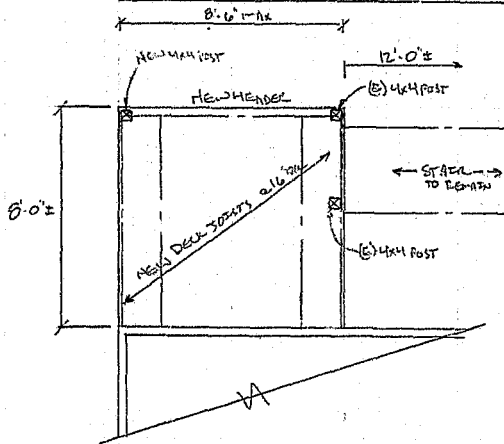
***SPRINGCREEK APARTMENTS
DECK AND HANDRAIL UPGRADES
TMR #10282***

September 22, 2010

	PAGE
CALCULATIONS	1 - 8



REPLACE (E) CONC DECK w/ NEW WOOD DECK



WS $W_{10} = 100 \text{ PSF}$

GUARDRAIL = $200 \# @ 42"$
OR $50 \#/\text{ft}$

JOISTS @ $16" \text{ O/C} \Rightarrow DL = (5 \text{ PSF}) (1.5 \text{ ft}) = 7.5 \text{ ft} \Rightarrow 5 \text{ PSF} \Rightarrow L_{27} 7 \text{ ft}$
 $W = 100 \text{ PSF} \Rightarrow W_{10} = 135 \#/\text{ft}$
SPAN = $8'-0"$

EXCEL $\Rightarrow \begin{cases} F_b = 653 \text{ PSI} \Rightarrow OK \\ F_v = 63 \text{ PSI} \Rightarrow OK \\ \Delta_{TL} = 1/134 \Rightarrow OK \end{cases}$

$\Rightarrow \boxed{2 \times 10 \text{ DECK @ } 16" \text{ O/C}}$

HEADER $\Rightarrow DL = 5 \text{ PSF} + (5 \text{ PSF}) (1.5 \text{ ft}) (1.5 \text{ ft}) / (1.5 \text{ ft}) = 8 \text{ PSF} \Rightarrow W_{10} = (8 \text{ PSF}) (4 \text{ ft}) = 32 \#/\text{ft}$
 $W = (100 \text{ PSF}) (4 \text{ ft}) = 400 \#/\text{ft}$
SPAN = $8'-0"$

EXCEL $\Rightarrow \begin{cases} F_b = 955 \text{ PSI} \Rightarrow OK \\ F_v = 87 \text{ PSI} \Rightarrow OK \\ \Delta_{TL} = 1/114 \Rightarrow OK \end{cases}$

$\Rightarrow \boxed{4 \times 10 \text{ DECK}}$

OR $\boxed{(2) 2 \times 10 \text{ DECK}}$

TMR **TM RIPPEY**
CONSULTING ENGINEERS

7650 S.W. Beveland St, Suite 100
Tigard, Oregon 97223
Phone (503) 443-3900

SPRINTLY CHECK

BY GL DATE 7/16/10

CHECKED _____ DATE _____

JOB NO. 10282

SHEET 1 OF 3

Wood Beams (Uniform Load)

w dead 7 #/ft
w live 135 #/ft
w 142 #/ft
span 8 ft

width 1.5 in
depth 9.25 in
E 1600000 psi

Sx 21.39063 in^3
Area 13.875 in^2
Ix 98.93164

Moment 1162.979 ft-lb
Shear 581.4896 lb

fb [REDACTED] psi
fv [REDACTED] psi

deflection total 1/240 [REDACTED] in
0.4 in

deflection live 1/360 [REDACTED] in
0.266667 in

deflection dead 0.006039

Camber R= [REDACTED] (Use Closest R = 800, 1000, 1200, 1400, 1600, 1800, 2000, 2400, 2500, 3000, 3500)

Deck Joists

total weight (including SW) 145.3724 #/ft

Glulam Cv = 1.278136

End Reaction Total 581.4896

End Reaction Dead 41.48958

End Reaction Live 540

1/ [REDACTED]

1/ [REDACTED]

Wood Beams (Uniform Load)

w dead 32 #/ft
w live 400 #/ft
w 432 #/ft
span 8.5 ft

width 3.5 in
depth 9.25 in
E 1600000 psi

Sx 49.91146 in³
Area 32.375 in²
Ix 230.8405

Moment 3972.566 ft-lb
Shear 1869.443 lb

fb [redacted] psi
fv [redacted] psi

deflection total [redacted] in
l/240 0.425 in

deflection live [redacted] in
l/360 0.283333 in

deflection dead 0.012678

Camber R= [redacted] (Use Closest R = 800, 1000, 1200, 1400, 1600, 1800, 2000, 2400, 2500, 3000, 3500)

Deck Header

total weight (including SW) 439.8689 #/ft

Glulam Cv = 1.167203

End Reaction Total 1869.443

End Reaction Dead 169.4429

End Reaction Live 1700

l/240 0.425 in

l/360 0.283333 in

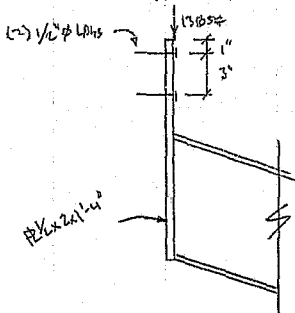
STEEL TO LANTERN CONNECTION

$$DL \Rightarrow \text{TRENDS} = (150 \text{ PCF}) (2' 6" / \text{ft}) (3' 6" / \text{ft}) = 55 \text{ T/ft}$$

$$\text{CHANNEL} = 11.5 \text{ T/ft}$$

$$LL = (100 \text{ PSF}) (3' - 6" / 2) = 185 \text{ T/ft}$$

$$\Rightarrow \text{TOTAL} = (55 \text{ T/ft} + 11.5 \text{ T/ft} + 185 \text{ T/ft}) (1' / 2) = 138 \text{ T}$$



$$(2) \text{ } 1/2" \phi \text{ LAGS IN } 3x6 \text{ WOOD} = (2) (32A) (1.15) = 758 \text{ T} < 1385 \text{ T} \Rightarrow \text{OK}$$

$$1385 \text{ T} / (2) (1.15) = 602 \text{ T} / \text{SHEAR PLATE}$$

$$(2) \text{ } 1/2" \phi \text{ THROUGH BOLT} = 597 \text{ T} / \text{BOLT} \approx 602 \Rightarrow \text{OK}$$

IN 3/4" PLATE \hookrightarrow SEE EXCEL

$$\Rightarrow (2) \text{ } 1/2" \phi \text{ THROUGH BOLT IN } 4x \text{ HEADER}$$

TMR TM RIPPEY
CONSULTING ENGINEERS

7650 S.W. Beveland St, Suite 100
Tigard, Oregon 97223
Phone (503) 443-3900

BY LM DATE 9/17/10
CHK BY _____ DATE _____
JOB NO. 10282
SHEET 4 OF _____

Lateral Design Values

Solve for:

Fyb	45000
ts	0.5
Fem	3150
Fes	87000
Re	0.036206897
D	0.5
p	3.5
Ktheta	1.25
tm	3.5
theta	90
Rd (I and Is)	5
Rd (II)	4.5
Rd (III, IIIs, IV)	4
Rt	7

Coefficients

k1	k2	k3
0.138883	0.510249	7.753887

Single Shear Yield Equations

Z	1s	2	3m	3s	4
1m	1s	2	3m	3s	4
1102.5	4350	671.2662	655.7047	749.7011	596.8603

Double Shear Yield Equations

Z	1s	2	3m	3s	4
1m	1s	2	3m	3s	4
1102.5	8700			1499.402	1193.721

SEE APPENDIX L FOR LAG SCREW ACTUAL DIAMETER

SEE NDS PAGE 72 FOR Rd

597#

HEADER POST

$$\Rightarrow A_{TOTAL} = 1870\# + 1305\# = 3255\#$$

$$= F_L = \frac{3255\#}{(3.5' \times 2.5')} = 266 \text{ PSF}$$

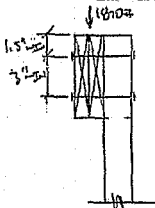
$$F_L = (266 \text{ PSF}) \times (1.15) \times (1.15) \times (.247) = 387 \text{ PSF} > 246 \text{ PSF} \Rightarrow \text{OK}$$

\Rightarrow 4x4 DPTL

CONNECT HEADER TO POST

$$\Rightarrow P_{KA} = 1870\#$$

$$\Rightarrow (2) \times \frac{3}{4}" \phi \text{ BOLTS TO POST} = (1870\#)(2) = 1774\# @ 2\frac{1}{2}" \Rightarrow 3' \text{ OK}$$



POST FOOTING

$$A_{TOTAL} = 3255\#$$

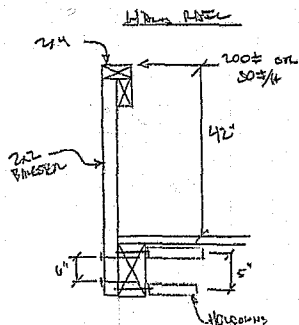
$$\Rightarrow \frac{3255\#}{1500 \text{ PSF}} = 2.17 \text{ Ft}^2 = 1.47 \text{ Ft} \times 1.47 \text{ Ft}$$

$$\Rightarrow 1' \times 6" \text{ PL} \times 0' \times 9" \text{ DEEP w/ (2) \#4 EACH WAY}$$

TMR **TM RIPPEY**
CONSULTING ENGINEERS

7650 S.W. Beveland St, Suite 100
Tigard, Oregon 97223
Phone (503) 443-3900

BY GLS DATE 9/16/10
CHK BY _____ DATE _____
JOB NO. 10262
SHEET 6 OF _____



4' SPACES MAX BETWEEN BRACKETS

→ 5 1/2" MAX SPACING

2x4 CAN SPAN 4' → 200# PER FT LOADS
DOES NOT GOVERN

⇒ 80 #/ft ⇒ (2) BRACKETS

⇒ 25 #/BRACKET

→ BRACKET DESIGN ⇒ $S_u = 5025 \text{ lb}$

⇒ $M = (25 \#)(42') = 1050 \text{ in-lb}$

⇒ $F_b = 1050 \text{ in-lb} / 5.625 \text{ in}^3 = 1867 \text{ PSI}$

$F_b = (900 \text{ PSI})(1.6)(1.5)(1.15) = 2484 \text{ PSI} > 1867 \text{ PSI} \Rightarrow \text{OK}$

⇒ 2x2 @ 5 1/2" O.C.

SCREENS TO HEMLOCK

⇒ $T = 1000 \text{ lb} / 6' = 175 \#$

#10 SCREENS = $(135 \#/\text{in})(1.5') = 203 \# > 175 \# \Rightarrow \text{OK}$

⇒ (2) #10 SCREENS @ 6" O.C.

HOLLOWAYS @ 4'-0" MAX ⇒ $M = (600 \#)(42') = 25200 \text{ in-lb}$

⇒ $T = 25200 \text{ in-lb} / 24' = 1050 \#$

STEEL 'DT22' = 1800 # = H.F.P.T.

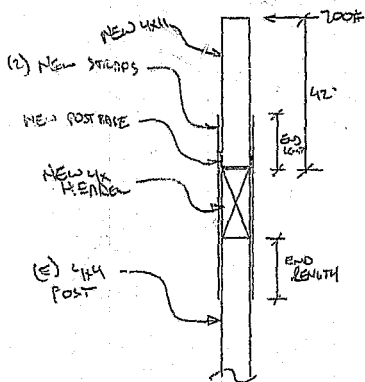
⇒ STEEL 'DT22' @ 4'-0" O.C. MAX

TMR **TM RIPPEY**
CONSULTING ENGINEERS

7650 S.W. Beveland St, Suite 100
Tigard, Oregon 97223
Phone (503) 443-3900

BY GG DATE 1/20/10
CHK BY DATE
JOB NO. 10282
SHEET 7 OF 7

NEW RAIL POST OVER (E) POST / HEAD ON



$$\Rightarrow m = (600 \times 4.2) = 2520 \text{ in-lb}$$

$$\Rightarrow F_s = (2520 \text{ in-lb}) / 7.15 \text{ ft} = 1176 \text{ lb}$$

$$F_b = (900 \text{ PL} \times 1.6)(1.5) = 2160 \text{ lb}$$

$$\Rightarrow \boxed{4 \times 4 \text{ DFL}}$$

$$\text{POST BASE} \Rightarrow \boxed{\text{SIMPSON 'BL'}} = 735 \# > 200 \#$$

STRAP

$$\Rightarrow T = 8400 \text{ in-lb} / 3.5' = 2400 \#$$

$$\Rightarrow \boxed{2 \times 4 \times 16' \text{ END LENGTH}} = 2400 \# > 2400 \#$$

TMR **TM RIPPEY**
CONSULTING ENGINEERS

7650 S.W. Beveland St, Suite 100
Tigard, Oregon 97223
Phone (503) 443-3900

BY GC DATE 7/20/10
CHECKED BY DATE
DESIGNED BY DATE
SHEET 0 OF 8