## **Howard Johnson Plaza Hotel Pool Roof Repair**

Portland, Maine

## **Special Inspections Report**

Prepared for:

Howard Johnson Plaza Hotel 155 Riverside Street Portland. Maine 04103-1097 (603) 783-8989 Office (603) 786-9090 Fax

Prepared by:

36 1 B 34 Becker Structural Engineers, Inc. 75 York Street Portland, ME 04101 207-879-1838

February 17,2005



## **Special Inspections Final Report**

TO: Mark Heisler @ Howard Johnson Plaza Hotel

FROM: Daniel J. O'Wril, E.l. DATE/TIME: February 17,2005

Project: WO 1244: Howard Johnson Plaza Hotel Pool Roof Repair

Demolition of the existing wood roof system began in early December and our Special Inspections began on December 6,2004. The following is a summary of the work completed through the month of January.

At this time the renovation of the roof is complete with the exception of a few unpainted patches on the structural steel beams. The structural steel beams, steel roof deck, and associated connections conform to the details of the Construction Documents. The roof system-insulation, weather proof membrane, and scuppers are complete. The Skylight is installed as specified on the Construction Drawings. Overall the work performed has been satisfactory.

If you have any further questions regarding the project that are not addressed in the attached reports, please do not hesitate to call.

CC: Mike Nugent @ the City of Portland, Bob Gaudreau @ Hardy Pond Construction.

Attachments: Observation Reports 12/6/04 through 1/18/05



## FINAL REPORT OF SPECIAL INSPECTIONS

PROJECT: Howard Johnson's Plaza Ho	tel Pool Roof Replacement	
LOCATION: Portland, Maine		
PERMIT APPLICANT: Hardypond	Construction	
APPLICANT'S ADDRESS: 1039 Rivers	ide St Suite 11, Portland, 1	Maine 04103
STRUCTURAL ENGINEER OF RECORD:	Todd M. Neal, P.E B	ecker Structural Engineers, Inc
	Name	Firm
ARCHITECT OF RECORD:	Not Applicable	
	Name	Firm
GENERAL CONTRACTOR:	Robert J. Gaudreau – Ha	rdypond Construction
To the best of my information, knowledge, a and described in the Statement of Special Ins		
<b>The</b> following discrepancies that were outstandard been corrected:	anding since the last interim re	eport, Nodated,
(Use additional sheets, if necessary)	//	
Interim reports submitted to this final report considered an integral part of this final report	and numbered to form	n a basis for, and are to be
oonouted an integral part of this final repor	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TEOF MANY
	NET.	1000
Submitted By: SPECIAL INSPECTOR		AVI
Todd M. Neal, P.E.		MEAL .
NAME 2	112105	EGISTER OF
SIGNATURE DATE	Thin,	SONAL ENTITY

Special Inspector's P.E. Seal

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# SCHEDULE OF SPECIAL INSPECTION SERVICES Project: Howard Johnson's Plaza Hotel Pool Roof Replacement

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Summary of Services (Exhibit A)

	į	Summing of Sci 1885	Z	Fytant	Comments	Agent	Date	Rev
Material/Activity	Item	Service	1					
1705.2 Inspection	1.00							
UI FADI ICATOLS		Fabrication Procedures	Y			BSE	12-13-04	Oid
		Procedure Implementation	Y			BSE	12-13-04	ora
1705.3 Steel Construction	2.00							
Steel Fabrication		In-Plant-Review Part A-Fabrication/OA						9
		1. AISC	Y	Provide Certification	Conventional Steel Building Structures	BSE	02-16-05	ora
		2. AWS Quality Assurance	Y	Provide Certification		BSE	02-16-05	DIO
		Part B – Procedures Implementation						
		1. Bolts, Nuts, Washers	Z.	-			20 21 00	
		2. Structural Steel	Y	Sample	AISC A6 or A568	BSE	02-16-05	
		3. Weld Filler Material	<b>&gt;</b>	Sample	AISC ASD A3.6	BSE	07-10-02	OM
		Review Connections						
		1. Shop Bolted	z			200	10505	25
		2. Shop Welded	Y	All	In Field-Visual	BSE	1-03-03	OF THE
		3. Connection Design Calcs	z			200	20 21 00	010
		4. Shop Welder Certs	>	All		BSE	07-10-70	2
Steel Erection		Review Material Certs of Compliance						
		1. Bolts, Nuts, Washers	z			5	20 17 00	010
		2. Structural Steel	Y	All		BSE	02-16-05	
		3. Weld Filler Material	>	All		BSE	07-01-70	2
		Review Primary Steel Connections						
		Moment Connections	z					
		Shear Connections						
		1. Field Bolted	z			3		0.0
		2. Field Welded	<b>\</b>	All		BSE	cn-cn-1	On

# SCHEDULE OF SPECIAL INSPECTION SERVICES Project: Howard Johnson's Plaza Hotel Pool Roof Replacement

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Material/Activity   Item		Service	Y/N	Extent	Comments	Agent	Date	Rev
1705.3 Steel	_							
Construction								
Steel Erection								
Cont'd								
		Darion Wolded Column Splices	z					
		Keview weided Colding Spires	;					
		Review Base Metal Testing for	z					
		v, 1<1"						
		Review Secondary Steel Connections				400		9
		1. Girts	Υ	Sample		BSE	1-02-05	Orn S
		2 Steel Deck	7	All		BSE	1-05-05	Ora
		3. Review Details/Steel Frame	>	Sample		BSE	1-05-05	Olu



Project: Howard Johnson's Roof Repair

Location: Portland, Maine

Becker Job No: 1244

Date:	Observation Performed
12-06-04	Observed removal of roof sheathing. Structural Steel to be on site and
12-06-04	
10.10.01	erecting by Thursday afternoon weather pending.
12-13-04	Steel Erectors working on structure
12-21/22-	Observed repair to wood framed wall system and roof deck layout
04	
1-04-05	Structural Steel complete. Roof membrane installed
1-18-05	Structural steel painted- a few patches left.
r	



<b>OBSERVATION F</b>	REPORT			Date:	12-06-04
Structural Steel		]		Time:	11: <b>00</b> AM
				Temp:	Mld 20's
				Weather:	Overcast
Project:	Howard Johns	son's Ro	of Rep	oair	
Location:	Portland, ME				
Becker Job No:	1244				
Observation Location Existing roof from co		the exis	iting ch	iimney.	
Bolt Condition Weld Condition Anchor Bolts, Nuts, & Washers Grout/Leveling Plate Fit Up/Plumbness Metal Deck Welds Stiffener Plates Bracing Roof Membrane/ Insulation Structural Steel Pain		□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	☐ ☐☐☐☐☐ ☐☐ ☐☐ Not Applicable		Comments
H to the existing The Existing stee	chimney. The columns we cember 9, 200	e roof of the re not 04. The	memb yet ex e exis	orane was remo exposed. The st ting wood wall	ng removed from column line wed from the entire roof area eel is due to arrive on the site framing is consistent with the



## Date: 12-13-04 **OBSERVATION REPORT** Time: 3:00 PM Structural Steel Temp: 25 Weather: Overcast Project: Howard Johnson's Roof Repair Location: Portland, ME Becker Job No: 1244 **Observation Location:** Entire steel framing surrounding pool. Satisfactory Comments **Bolt Condition** Weld Condition Anchor Bolts, Nuts, &Washers Grout/Leveling Plates Fit Up/Plumbness Metal Deck Welds Stiffener Plates Bracing Roof Insuation/ Membrane $\boxtimes$ Structural Steel Paint Notes: Steel erection ongoing.



		1				
OBSERVATION F	REPORT			Date:	12-21-04/12-22-04	
Structural <b>Steel</b>				Time:	4:00 PM/12:00 PM	
				Temp:	30's	
				Weather:	Overcast/Sunny	
Project:	Howard Johns	son's Ro	of Rep	air		
Location:	Portland, ME					
Becker Job No:	1244					
Observation Locati Entire steel framing s		)l.				
Bolt Condition Weld Condition Anchor Bolts, Nuts, & Washers Grout/Leveling Plate Fit Up/Plumbness Metal Deck Welds Stiffener Plates Bracing Roof Insulation/ Membrane Structural Steel Pair			□ □□□□□□ ⊠□⊠ Not Applicable	1/2 Steel roof d	Comments  leck in place	

### Notes:

Structural steel in place, Stiffners/bracing not in place. The Steel deck did not lay flat on the wood end wall framing or at the ends of the structural steel. From inside the building, a gap was visible between the top flange of the beam and the ceiling surface as well as between the wood framed end wall and the ceiling.

The wood framed side walls were not braced as specified on the construction drawings, but adequate bracing was provided **by** attaching the wood framed wall to the steel deck.



OBSERVATION I	REPORT			Date:	1-4-05
Structural Steel				Time:	4:30 PM
				Temp: Weather:	MID 30's Overcast Drizzle
Project:	Howard Johns	on's Ro	of Repa	air	
Location:	Portland, ME				
Becker Job No:	1244				
Observation Locati Roof system and str					
being heated in p steel and wood fi	e, stiffeners in ramed walls. In roof insula	nstalled r paint Deck is tion an	applica now la d mem	1/2 Steel roof d Parapet drain n r C.D.'s. Skylig ation. Roof de- aying flat on st brane are in p	ot complete  ght framing in place. Room is ck is fastened to structural ructural steel as well as on lace. Parapet drain not



OBSERVATION F	REPORT			Date:	1-1 <b>8-05</b>
Structural Steel				Time:	4:30 PM
				Temp:	Mid Teens
				Weather:	Sunny
Project:	Howard Johns	son's Ro	of Rep	air	
Location:	Portland, ME				
Becker Job No:	1244				
Bolt Condition Weld Condition Anchor Bolts, Nuts, & Washers Grout/Leveling Plate Fit Up/Plumbness Metal Deck Welds Stiffener Plates Bracing Roof Insulation/	ion:	☐☐☐☐☐ Not Completed	□□□□□⊠ ⊠□⊠ Not Applicable		Comments
Membrane Structural Steel Pair	nt 🛛 🗆			Painting 95% c	omplete
leakage is visible painting was not sections of the st	e at the scupp complete wa teel beams. I	per loca s due t de belie	ition. M o some eves th	flark Kinney me e water drippin at the water wa	oper drain is complete. No entioned that the reason the g from the roof above <b>a</b> few as coming from some moisture gh the new roof membrane or