United States Department of the Interior
National Park Service

National Register of Historic Places
Date listed 09/10/2009
NRIS No. 09000707
Oregon SHPO

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Historic name Memorial Coliseum

Other names/site number

2. Location

street & number 1401 N. Wheeler Avenue/ 300 N. Winning Street ☐ not for publication

city of town Portland ☐ vicinity

State Oregon code OR county Multnomah code 051 zip code 97227

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this _X_ nomination __ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property _X_ meets __ does not meet the National Register Criteria. I recommend that this property be considered significant __ nationally _X_ statewide __ locally. (__ See continuation sheet for additional comments.)

Signature of certifying official/Deputy SHPO — Date 7.21.09

Oregon State Historic Preservation Office
State or Federal agency and bureau

In my opinion, the property __ meets __ does not meet the National Register criteria. (__ See continuation sheet for additional comments.)

Signature of certifying official/Title — Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby, certify that this property is: — Signature of the Keeper — Date of Action

__ entered in the National Register
__ See continuation sheet

__ determined eligible for the National Register
__ See continuation sheet

__ determined not eligible for the National Register

__ removed from the National Register

__ other (explain:)

5. Classification

Ownership of Property
(Check as many boxes as apply)

- ___ private
- X public - Local
- ___ public - State
- ___ public - Federal

Category of Property
(Check only one box)

- X building(s)
- ___ district
- ___ site
- ___ structure
- ___ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Non-Contributing	
1		buildings
		sites
		structures
		objects
1	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

RECREATION AND CULTURE: sports facility

Current Functions
(Enter categories from instructions)

RECREATION AND CULTURE: sports facility

7. Description

Architectural Classification
(Enter categories from instructions)

MODERN MOVEMENT: International Style

Materials
(Enter categories from instructions)

foundation: CONCRETE
walls: GLASS; METAL: aluminum;
WOOD: plywood
roof: SYNTHETIC
other:

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets)

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

___ A Property is associated with events that have made a significant contribution to the broad patterns of our history.

___ B Property is associated with the lives of persons significant in our past.

X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

___ D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply)

Property is:

___ A owed by a religious institution or used for religious purposes.

___ B removed from its original location.

___ C a birthplace or grave.

___ D a cemetery.

___ E a reconstructed building, object, or structure.

___ F a commemorative property.

___ G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance
(Enter categories from instructions)

ARCHITECTURE

Period of Significance

1960

Significant Dates

1960

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

A. William Rouzie; David Pugh Sr.; W. Jack Gilstrap; other SOM architects; Hoffman Construction Company, contractor

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets)

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)

Previous documentation on file (NPS):

___ preliminary determination of individual listing (36 CFR 67 has been requested
___ previously listed in the National Register
___ previously determined eligible by the National Register
___ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey #_____
___ recorded by Historic American Engineering Record #_____

Primary location of additional data:

___ State Historic Preservation Office
___ Other State agency
___ Federal agency
X Local government
___ University
___ Other
Name of repository: Multnomah County Library

10. Geographical Data

Acreage of Property approx. 7.24 acres

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
1	10	525894	5041939	3			
2				4			

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title Kristen Minor

organization Peter Meijer Architect PC date April 21, 2009; rev. July 2009

street & number 710 NE 21st Avenue, Suite 200 telephone (503) 517-0283

city or town Portland state Oregon zip code 97232

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps: A USGS map (7.5 or 15 minute series) indicating the property's location.
A Sketch map for historic districts and properties having large acreage or numerous resources.

Photographs: Representative **black and white photographs** of the property.

Additional items: (Check with the SHPO or FPO for any additional items)

Property Owner

name City of Portland, Spectator Facilities/ Office of Management & Finance (David Logsdon, Facilities Mgr.)

street & number 1120 SW 5th Avenue, Room 1250 telephone (503) 823-6958

city or town Portland state Oregon zip code 97204

DESCRIPTION

SUMMARY

The Memorial Coliseum is a multi-purpose arena located in urban Portland, Multnomah County, Oregon. The street address is 1401 N. Wheeler Avenue, sometimes also listed as 300 N. Winning Street or 300 N. Winning Way, in Portland, Oregon. When completed in 1960, the Coliseum was not only a technological feat of engineering and operation unrivaled by any other large civic structure in the Pacific Northwest, but it was also a fully-articulated example of International-Style Modernism. The building retains its original design, materials, workmanship, and location. Though its surroundings have been altered to some extent, the building's setting is still highly urban and the building retains its original feeling and relationship to nearby geographic features such as the Willamette River. The Coliseum is under City of Portland ownership and continues many, though not all, of its associations with various local and regional events and sports teams. The building is the only large-scale public glass-walled structure of its time in the Pacific Northwest. It is therefore nominated under National Register criterion C for architectural significance. The Coliseum is notable for its advanced construction technology, but is not being nominated for its engineering significance. Because of the overall focus of the International Style on technology and the expressive use of structural materials, the engineering of the building is the underpinning for its stunning architectural form.

SETTING

The Memorial Coliseum is located on the east bank of the Willamette River, which bisects the city of Portland into east and west sections. Its square building footprint is oriented with one side parallel to the Broadway Bridge, just north of the site, and another side parallel to N. Interstate Avenue, which follows the river (see Photo 01). Its sides are almost exactly oriented to northeast, northwest, southeast, and southwest. The Coliseum is part of a larger 30-acre area known as the Rose Quarter, which also includes the Rose Garden Arena, built in 1995, four parking garages, corporate offices, and several restaurants. The nominated area consists of the above-grade building as well as its entry pavilion and the two sunken plazas on either side of the entry, and immediately surrounding area, approximately 7.24 acres in all.

The irregularly-shaped, large-scale parcels in the immediate vicinity of the Coliseum are the result of both the area's industrial history as well as the result of connecting bridgehead locations to street layouts. NE Broadway, for instance, continues from the Broadway Bridge in a northeasterly direction for about three blocks before swerving to join the more regularized and topographically oriented grid (see Figure 9). The I-5 freeway runs past the Rose Quarter in a north-south direction immediately to the east. Portland's typical 200' block street grid, for the most part, begins east of the freeway. However, prior to the start of construction on the Coliseum, a street-grid layout and a number of buildings on a smaller scale were demolished on the site. The active rail lines and industrial complexes along the river's edge, as well as Interstate Avenue paralleling the river, form the Rose Quarter's western edge.

The southern edge of the Rose Quarter is demarcated by the Steel Bridge, which carries multimodal traffic such as light rail as it connects east and west Portland. The Convention Center, with its twin glass spires, is located several blocks to the east. The overall neighborhood is dominated by transportation infrastructure such as the Interstate Avenue corridor, bridges, and the I-5 freeway; by industrial shipping infrastructure along the waterfront; and by large-scale development which is not particularly conducive to pedestrian activity.

The Memorial Coliseum's immediate surroundings on its northeastern and southeastern sides have been altered since it was constructed. Its entry plaza has been enlarged and connected to an exterior space of its neighbor, the 1995 Rose Garden Arena (see Photo 03). Parking areas originally surrounded the Coliseum on its north, east, and south; the "disgracefully tiny entrance plaza - all that could be rescued, evidently, from the traffic engineers"[1] initially was not much larger than the entry canopy itself (see Figure 5). Today a road, N. Winning Way, cuts east-west through the Rose Quarter just north of the Coliseum and creates a triangular entry area in front of the building. The edges of this area are landscaped and terraced, and the remainder - including the original entry pavilion area - is paved in concrete or concrete pavers and furnished with decorative steel light poles (see Photo 04). The structured and surface parking originally on the north and east sides of the Memorial Coliseum has, for the most part, been replaced by more open space, either paved or landscaped (see Figures 5 and 8). Parking garages now occur to the southeast, to the northeast, and a pair directly north of the building.

The site slopes up from the river towards the northeast, so the building's entry plaza occurs on the high end of the site. The entry level floor is at least 30 feet above N. Interstate Avenue along the building's southwest edge, allowing for prominent views of the building as well as opportunities from within to see out over Portland's cityscape and the Willamette River.

EXTERIOR DESCRIPTION

The Memorial Coliseum is a flat-roofed square "box," measuring 360 linear feet per side, and 80 to 100 feet in height. The Coliseum's form in plan is not clearly evident as a perfect square from the exterior, because it is so large that the sides recede from the viewer in perspective. Each facade is a long, dark, pristine rectangle capped by an abstracted white strip. Materials used on the exterior are limited to glass and aluminum walls, plywood fascia, concrete basement-level walls, and a light-colored single-ply roof surface. The other prominent feature of the building, most noticeable when the building is lit from within, is the oval, concrete seating bowl which is free-standing within the walls. Although an interior feature, the seating bowl is visible from every exterior vantage point due to the building's transparency. Including the below-grade Exhibition Hall, the building is 197,000 square feet in size (see Figures 2 and 3).

The four walls are made of modular 3.5' by 9' glass panels, each one framed with anodized aluminum. A single wall has 6 panels vertically and 96 horizontally, for a total of 576 panels. Larger scale modularity of the wall plane is created by a subtle increase in width of every fourth vertical joint between panels. These correspond to the locations of the laminated wood interior mullions. Horizontally, the lowest row of glass panels is separated from the five above by an aluminum band of about a foot in height. The glass portion of each facade is 50 feet tall, with a white acrylic-overlaid plywood fascia, 22 feet high, above it. A narrow white band of the same material holds the bottom edge of each glass wall (see Photo 05). The glass utilized in the Coliseum has a grey tint, which was a relative newcomer to the tinted-glass spectrums commercially available in 1959/1960. Green tints were conventional and readily available by the early 1950s, and various bronze tints were becoming more available as well.[2] Various tints in glass were used in order to minimize heat gain within a building without reducing the light transmission in the visible spectrum.

At the northwest side of the building, parallel to the Broadway Bridge, the ground is bermed up to meet the concrete walls of the lower-level spaces, which are recessed inwards by a few feet from the glass wall above. This concrete

[1] Allan Temko, Allan. "Portland's Great Hall of Glass"," Architectural Forum 114 (April 1961), 111.
[2] Michael Wigginton, *Glass in Architecture* (London: Phaidon Press, 1996), 89-99

base is typically in the shadow of the glass wall cantilevering out above it, and enables the glass box above to gain a visual sense of almost floating above the ground. The bermed earth serves, too, to reinforce the building's monumentality and remove it from any direct connection with the surrounding streets and sidewalks. A large service opening cut into the berm allows direct access from the building to a small parking lot at this side. The concrete seating bowl visible through the glass walls is higher at the sides and dips down in the middle at this facade (see Photo 02).

Moving clockwise around the building, the entry facade faces northeast, away from the river. At this side, there is one smaller-scale feature, which is centrally located on the building's northeast face: a thin, curving canopy set against - but not touching - the abstract, rectilinear form of the building. The canopy sits on an entry plaza, which also serves as the roof for the 52,650 square foot Exposition Hall below. The wood-framed roof of the canopy, which is supported by four tapered concrete columns, curves up gently and covers a portion of the larger entry plaza area. To the east across the plaza are the larger Rose Garden Arena and an associated parking structure. The entry facade has multiple pairs of glass doors that span the central third of the building. On either side of the entry doors, a sunken plaza one level below allows for daylight into the meeting rooms and Exhibit Hall, located directly under the entry plaza. Both of these lower-level plazas contain a Veteran's Memorial wall, which is a black granite memorial with etched names of Portlanders who died in military service. A blue-tiled fountain is at one lower plaza, and a central raised planter is in the center of the other one (see Photo 06).

The "service" side of the building is the southeast facade. The building here fronts a large parking area and parking structure, and the base level of the building includes multiple service bays for the deliveries, specialized equipment, and other items which must be set up and taken down with each various event (see Photo 07).

Finally, at the southwest facade, the building faces Interstate Avenue. The building is at its tallest here, sitting up above the street grade with a commanding view of the river. Like the northwest side of the building, the ground is bermed up to meet the concrete lower-level walls here, and the bermed area is planted with trees and ground cover. The concrete bowl inside can be seen on its longer arc, swooping up in the middle and down as it approaches the giant interior columns at each corner (see Photo 08) .

Structural System

The Coliseum's weight is supported by four cruciform-shaped, 70-foot high reinforced concrete columns, 240 feet apart in one direction and 270 feet in the other (see Photo 10). The cross-shaped columns rest on footings which are each 40 feet square and 5 feet deep, below the arena floor. At the points where the columns support the steelwork above, there are "steel hemispheres, the first such ever believed used in this type of construction. They look like halves of giant ball bearings and are about 10 inches across."[3] These half-round bearing points enable the entire structure to move under force, such as strong winds or earth movements. Four massive cantilevered steel trusses rest on the columns, crossing at the columns, and tapering as they extend outward from the columns to form a 360-foot square (see Figure 6). A network of secondary steel trusses then fills in the huge roof area to support the waterproofing layers of the roof itself. The wind forces on the great glass walls are received by 85-foot tall vertical laminated wood mullions on the interior of the walls.

[3] Ann Sullivan, "Thursday Events to Open Coliseum Doors," *The* Oregonian, November 2, 1960 (staff writer Ann Sullivan)

INTERIOR DESCRIPTION

The interior of the Coliseum is dramatically different from most arenas, due to its expansive glass walls which allow for views out (see Photo 11). Spectators can sit in the seating bowl and simultaneously view the arena floor and the weather outside. At night, the upper rows of seats afford a spectacular view of Portland. However, the Coliseum was designed to be able to black out the 80,000 square feet of window area by "the largest continuous curtain in the United States."[4] This curtain, specifically designed with and for the building by the architects, Skidmore Owings & Merrill, travels upward on lifting wires and is hidden in slots behind the last rows of seats. The black, fireproof curtain was manufactured in 15 sections and zips together. Because of the concrete bowl design, the windows could remain uncovered to let in natural light to the concourse area between the walls and the seating. Unfortunately, at this time the curtain remains in place; the curtain and the system that allows it to travel up and down needs maintenance work and repairs. Current photos taken from inside the arena therefore do not show the effect of the light coming in above the seating bowl (see Photos 12 and 14).

The concrete seating bowl, with 9,000 permanently installed padded theater-type seats initially, is formed in stepped terraces. Seats were replaced in 1978 to increase the total seating capacity in the arena from 12,666 (including portable seating) to 17,000. From the underside of the seating bowl, a series of concrete beams supported on posts radiate from the center of the oval, supporting the saw-toothed tiers of the bowl as it rises (see Photos 09 and 12; Figure 4). The top edge of the oval is not a horizontal line, but forms an undulating arc higher along the northeast (entry facade) and southwest sides of the building and lower at the other two sides. The result is particularly sculptural as well as providing excellent visibility for spectators.

The Coliseum was designed around a multipurpose arena, 120' by 248' and 80' tall. The roof structure above is hidden from view by a suspended ceiling, except in the very center of the roof, where one can look up into a square opening to view the open network of steel trusses. From the main entry level, one enters the seating bowl at mid-level, and the main arena floor is sunken one level down. The arena floor itself is proportionally longer than the seating oval, and oriented along a northwest-southeast axis (see Photos 13 and 14). Within the main arena space, the building was designed to accommodate various types of events in relatively quick succession. Hockey or on-ice shows, for example, can be scheduled the day following a convention or basketball game. Thousands of feet of pipes laid within the arena floor work to either freeze a half-inch thick layer of ice, or to warm it so it may be scraped away.

Surrounding the main floor on the lower level are eight meeting and banquet rooms, each of which features different wood paneling provided by the local timber industry. The rooms vary in size from capacity of 120 to 1,200 persons. Each room is named for the company that provided the paneling and displays a bronze plaque identifying the wood used in the room.[5] Finishes in these basement rooms include carpeting on the floors and suspended acoustical tile

[4] Goodrich Jr., Hollis, designer and editor. *Memorial Coliseum and Exhibit Hall.* (Portland, OR: Oregonian Publishing Co., 1961;) produced by Agency Lithograph.

[5] A November 2, 1960 article in the Oregonian catalogued the timber companies and their installations in the Coliseum as follows. The Pope & Talbot, Inc. Room (capacity 170) was finished in Douglas Fir tongue-and-groove panels; the US Plywood Corp. Room (cap. 370) was paneled with Palamino Samara plywood; the Weyerhaeuser Room (cap. 320) had tongue-and-groove hemlock panels; the Dwyer Lumber & Plywood Co. Room (cap. 120) had Noble Fir panels; the Simpson Logging Co. Room (cap. 220) was finished in birch plywood; the International Paper Co. Room (cap. 180) had red birch plywood; and the assembly room, sponsored by Georgia Pacific Co. (cap. 1100) was paneled with honeytone oak plywood. The Memorial Room and Chapel (cap. 240) was sponsored by Georgia