FIELD REPORT – LYNNWOOD RECREATION CENTER – FIELD REPORT
REPORT #03

Job No. 10-100622B1

City of Lynnwood
Parks, Recreation & Cultural Arts
PO Box 5008
Lynnwood WA, 98046-5008

Date: September 13th, 2013

Attn: Keith Skore (City of Lynnwood)
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Rich Kerns (Queen City Roofing)
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Job Site Address:
18900 44th Avenue West
Lynnwood WA, 98036

Weather: Sun  Temp.: ~80°F
Contractor(s): Holmberg, Queen City Roofing  Foreman: Anton Woody, Rich Kerns  Workers On-Site: ~5/QCR
Contact w/: Keith Skore (City of Lynnwood), Anton Woody (General Contractor, Holmberg), Rich Kerns (Foreman, QCR),
Mark Puetz (Superintendent QCR)
Location(s) of Work: Natatorium roof.
Materials: Hot Stuff Type IV asphalt, John Manville GlasPly IV plysheet, Karnak 108 primer.
Project Conditions Photo:

Photo of the Lynnwood Recreation Center building taken facing southeast.

Foreword:
At the request of Keith Skore (Project Manager, City of Lynnwood) this writer was onsite to review the installation of the temporary roof at the Natatorium Roof as performed by Queen City Roofing. A handwritten copy of Field Notes #03 was reviewed with Keith Skore (City of Lynnwood) and Anton Woody (GC, Holmberg) and is left in the onsite job trailer for storage. The following items were observed, noted and/or discussed regarding the roof.
Roof System Description:

Roof Replacement Assembly:

<table>
<thead>
<tr>
<th>Layer</th>
<th>Specified Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>(E) Roof Structure</td>
<td>(E) metal deck, (E) concrete deck.</td>
</tr>
<tr>
<td>Vapor Retarder Layer</td>
<td>2-Ply John Mansville Type IV set in Type IV Hot Asphalt,</td>
</tr>
<tr>
<td></td>
<td>Glaze coat of Type IV Hot Asphalt</td>
</tr>
<tr>
<td>Insulation</td>
<td>Rigid Polyiso Insulation and Tapered Polyiso Insulation ¼&quot;</td>
</tr>
<tr>
<td></td>
<td>per foot.</td>
</tr>
<tr>
<td>Coverboard</td>
<td>DensDeck Prime Coverboard mechanically fastened.</td>
</tr>
<tr>
<td>Adhesive</td>
<td>UltraPly TPO bonding Adhesive</td>
</tr>
<tr>
<td>TPO Roofing</td>
<td>Firestone UltraPly TPO, (fully adhered)</td>
</tr>
</tbody>
</table>

Running Punch List/Action Items:
(Items will be removed and updated as addressed)

Observations:

3.1 Queen City Roofing is installing the vapor retarder layer and temporary roof at the Natatorium Roof. Southwest of the Natatorium Roof an asphalt kettle is being fed Type IV asphalt and is observed as having a temperature reading of approximately 550°F. The hot pipe is wrapped and a piece of plywood is in place between the building and the hot pipe. Singly ply membrane is in place under the kettle.

3.1a Queen City Roofing is installing the vapor retarder layer and temporary roof at the Natatorium Roof. The temporary roof consists of an asphalt glaze-coat over two plies of Type IV asphaltic ply sheets adhered to the primer-applied concrete deck.

Overview of the Natatorium Roof taken facing south.
3.2 The concrete deck has been coated with asphalt primer, which is observed as turning up vertical surfaces. Per conversation with Rich (Foreman, QCR) hot asphalt is utilized to infill small areas of spalling found at the surface of the concrete prior to laying the ply sheets.

3.2a John Manville Type IV Plysheet is rolled into moppings of hot asphalt in a two ply configuration.

3.2b At the curb on the north side of the roof the field plies turn up the curb approximately 5-inches and approximately 10-inches at HVAC unit curbs.

3.2c Baseflashing plies are set in a mopping of hot asphalt to achieve two layers of plysheet at the HVAC unit curb perimeter.
3.3 At the southwest corner of the Natatorium Roof an area of deflection is observed and marked in red keel. Per conversation with Rich (Foreman, QCR) this area will be repaired during the workday.

3.3a The area of deflection is cut and sliced to lay flat. The area is infilled with hot asphalt and a patch of plysheet is applied over the affected area.

3.4 Karnak roof cement is applied at voids and the top terminating edge of the temporary roof/vapor retarder layer.

3.5 Hot asphalt is mop applied over the two-ply as part of the temporary roof/vapor retarder installation. The hot asphalt appears to be continuous to provide a complete glaze-coat.
3.6 Single-ply membrane is placed under the existing membrane and laps over the new vapor retarder layer. Weights are then placed over as a means of night seal.

3.7 Recommend that the roof to the south of the Natatorium Roof (where new ductwork is staged) is monitored. At this time, it appears that dunnage is placed under new ducts. Be aware that Extruded polystyrene has been known to chemically affect (burn) single ply membrane.

Overview of the roof to the south of the Natatorium Roof.
3.8 The overview below is taken at this writer’s departure from the site inspection and depicts progress of the installation of the vapor retarder layer.

Overview of the Natatorium Roof taken facing south.

New Problems/Solutions:

3.9 At the existing HVAC curb on the west side of the roof there are fasteners protruding from the concrete. It is recommended that the masonry fasteners be removing prior to the installation of new roofing.
Incomplete/Unaddressed/Problematic Issues from Previous Reports:
(Items will be updated and removed as addressed) Items are site specific and will be updated accordingly.

2.4 Per Wether Holt recommendation, the existence of a vapor retarder layer should be verified at the adjacent roof located south of the Natatorium Roof. If the adjacent roof was installed without a vapor barrier there is a possibility that water vapor may transfer over into the new roof assembly and damage the components. Per conversation with Anton Woody (GC, Holmberg) this is out of the scope of his contract but the construction team is aware of this issue.

Update FR#03 – 09/13/2013: Item is unresolved

Overview of the separator curb at the south end of the Natatorium Roof taken facing south.

1.11 Recommended the installation of a night seal. Per conversation with Rich Kerns, (Foreman, QCR) the roof should be allowed to dry prior to the installation of a new vapor retarder layer.

Update FR#02 – 09/12/2013: Item is unresolved

Update FR#03 – 09/13/2013: Item is closed. The temporary roof is installed during this site visit and measures are taken to prevent vapor transfer from the adjacent roof.

Overview of the Natatorium Roof taken facing south.

Signatures on page 1
1.12 At the concrete curb to the east it is recommend that the substrate be corrected prior to the installation of the new vapor retarder layer.

**Update FR#02 – 09/12/2013:** Item is unresolved. Item is discussed with Anton Woody (GC, Holmberg) and per conversation will be repaired by removing high spots and infilling spalling with self-leveling grout.

**Update FR#03 – 09/13/2013:** Item is closed. Per conversation with Anton Woody (GC, Holmberg) these areas were either chipped free with a spade bit and/or infilled with self leveling grout. The vapor retarder layer is installed over.
Recommend verifying the presence of a vapor retarder layer over the deck south of Natatorium Roof.

-Legend-
- Problem Item
- Installed through Vapor Retarder
- Installed through TPO Membrane

-End of Report-