

FIELD REPORT – LYNNWOOD RECREATION CENTER – FIELD REPORT
REPORT #10

Job No. 10-100622B1

Date: October 14th, 2013
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City of Lynnwood
Parks, Recreation & Cultural Arts
PO Box 5008
Lynnwood WA, 98046-5008

Job Site Address:
18900 44th Avenue West
Lynnwood WA, 98036

Attn:	Keith Skore (City of Lynnwood)	Phone: 425-670-5240	Email: kskore@ci.lynnwood.wa.us
Cc:	Anton Woody (Holmberg)	Phone: 206-730-0385	Email: anton@holmbergco.com
	Mark Puetz (Queen City Roofing)	Phone: 206-272-0127	Email: markpuetz@comcast.net
	Rich Kerns (Queen City Roofing)	Phone: 206-272-0127	Email: richkerns@comcast.net

Weather: Sun/ Part Clouds **Temp.:** ~50°F

Contractor(s): Holmberg, Queen City Roofing **Foreman:** Anton Woody, Rich Kerns **Workers On-Site:** ~4/QCR
Contact w/: Keith Skore (City of Lynnwood), Anton Woody (General Contractor, Holmberg) Rich Kerns (Queen City)

Location(s) of Work: Southeast & Southwest of the Natatorium Roof

Materials: Hot Stuff Type IV asphalt, Johns Manville GlasPly IV plysheet, Karnak 108 primer, Firestone TPO, Firestone UltraPly Adhesive, ¼-inch DensDeck, polyiso insulation (both organic and glass faced).

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 work performed at the Natatorium. Hand-written copy of Field Notes #10 was reviewed with Keith Skore (City of Lynnwood), Rich Kerns, (Foreman, QCR) 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.

Signed: Chris Northern, Field Inspector
Sent: October 17, 2013

Reviewed By: George Hopkins, Inspector Supervisor

Roof System Description:

Roof Replacement Assembly:

Layer	Specified Products
(E) Roof Structure	(E) metal deck, (E) concrete deck.
Vapor Retarder Layer	2-Ply Johns Manville Type IV set in Type IV Hot Asphalt, Glaze coat of Type IV Hot Asphalt
Insulation	Rigid Polyiso Insulation and Tapered Polyiso Insulation ¼.” per foot.
Coverboard	DensDeck Coverboard mechanically fastened.
Adhesive	UltraPly TPO bonding Adhesive
TPO Roofing	Firestone UltraPly TPO, (fully adhered)

Running Punch List/Action Items:

(Items will be removed and updated as addressed)

Observations:

10.1 Queen City Roofing is installing new roofing at the west and south sides of the air handling unit that is located at the west side of the Natatorium roof.



Overview of the Natatorium Roof taken facing south

10.2 An asphalt kettle is staged below the southwest corner of the Natatorium Roof. TPO membrane and polyethylene sheeting is in place below the kettle which is observed at a heat of approximately 480°F. Plywood is in place between the building and the hot pipe.



Continued from Item 10.2 on the previous page.

10.2b A plysheet is turned up against the new tapered insulation as a means of night seal. Per conversation with Rich Kerns (Foreman, QCR) the areas to the north of this location of work are to be roofed in during this week.



10.2c Insulation is set into moppings of hot asphalt and is walked in to promote adhesion. The tapered insulation appears to be offset at the joints from layers below.



10.2d The asphalt mop is cleaned over a piece of scrap insulation prior to the crew taking lunch. Per conversation with Rich Kerns, DensDeck coverboard is to be set in moppings of hot asphalt and TPO membrane is to be fully adhered and welded at the day's location of work during this workday.



10.3 At the existing sleepers to the north and south of the roof replacement unsupported TPO membrane appears to be welded over the through bolt openings in the baseflashing. Per conversation with Rich Kerns, this is a work in progress in some locations. Item is noted as an observation.



10.4 At the north side of the Natatorium Roof, it is recommended that steel draw-bands are installed at the through roof penetrations. Sealant appears to be installed and per conversation with Rich Kern, (Foreman, QCR) this is a work in progress. The copper through roof penetrations are temped over with duct tape and polyethylene sheeting as a means to prevent water intrusion into the building and existing roof. Item is noted as an observation.



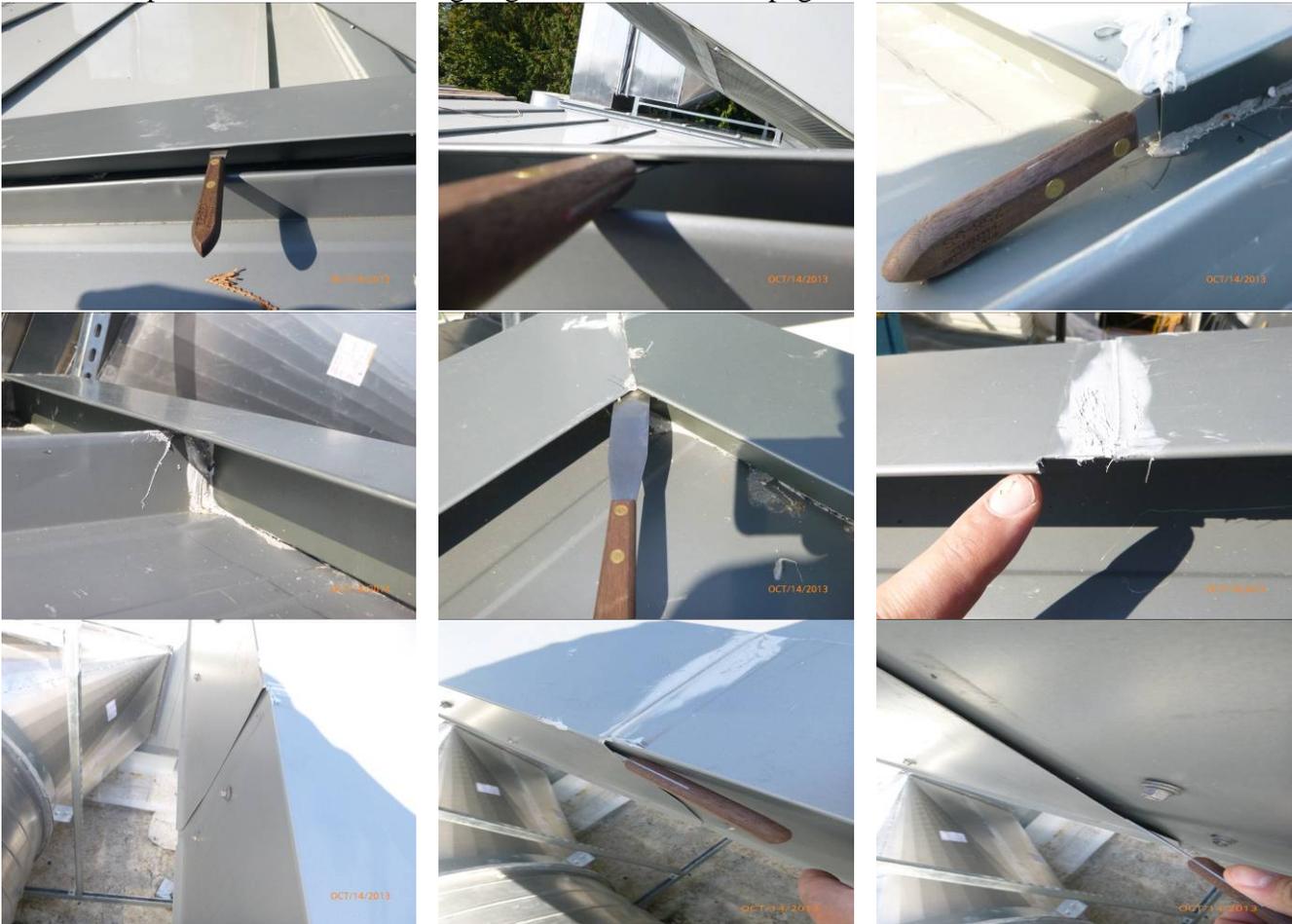
10.5 At the sawcut at the upper east metal roof, the metal panel does not turn up in a vertical leg. It appears that sealant is utilized as the main defense against water intrusion at most transitions in this area of work. Duct tape that was installed as a part of the night seal is still in place. This is a previously noted Problems and Solutions Item (Item 8.8 on pages below) and will be updated. It is recommended that transitions in the sheet metal re-installation be integrally flashed with sheet metal vertical legs.



Continued from item 10.5 on the previous page.



10.5a Several voids are present in the re-installation of the sheet metal fascia and metal roof panels. This will be updated in Item 8.8 in Ongoing Problems Items on pages below.



Signatures on page 1

10.6 As an existing condition, at the roof areas to the southeast of the Natatorium Roof, sealant does not appear to be applied at the tops of through roof penetration flashings.



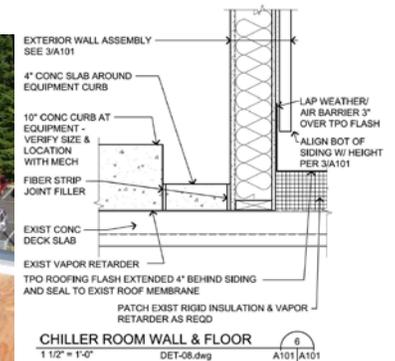
10.7 As an existing condition, this writer is unable to verify how the structural corner is flashed. What is visually accessible is portions of termination bar secured with gasketed fasteners with sealant applied at the top edge. It is recommended that the termination at the top edge of the TPO baseflashing (that will tie into the new roofing) is continuous.



10.8 At the chiller room roof, rebar and other form-work is in place above the previously installed vapor barrier. This appears to be work performed to accommodate the new chiller room which is to be a concrete slab poured over the previously installed vapor retarder layer. Recommend that care be taken to prevent damage to the vapor retarder layer.



Overview of the chiller room roof taken facing west.



New Problems/Solutions:

10.9 The HVAC unit at the southwest corner of the Natatorium roof has voids in the existing sealant. Per conversation with the construction team, this is a know condition that actively leaks. Sealant appears to have been applied in profusion as a means of mitigating the problem. It is recommended that this situation be addressed to prevent water intrusion into the new roof areas that surround this unit.



Incomplete/Unaddressed/Problematic Issues from Previous Reports:

(Items will be updated and removed as addressed)

8.4 At the tops of screen wall supports (west elevation of the Natatorium Roof, typical of all large screen wall supports) through holes are observed at the top plates. Some holes appear to be infilled with metal. Recommend that all locations where water will enter are infilled or capped as needed to prevent water from funneling into the column and throughout the roof system below.

Update FR#09 – 10/03/2013: Item is unresolved.

Update FR#10 – 10/14/2013: Item is unresolved. Per conversation with Keith Skore, these locations were temporarily sealed with duct tape in the interim.



8.5 Recommend that any sheet metal sharps, fasteners and other debris are removed from the new vapor retarder layer to prevent damage.

Update FR#09 – 10/03/2013: Item is unresolved

Update FR#10 – 10/14/2013: Item is unresolved.



8.6 The night seal at the north end of the Natatorium roof is insufficient in some locations allowing water into the existing roof assembly. The roof to the north was previously observed as wet along with the existing roof that was removed to the south.

Update FR#09 – 10/03/2013: Item is unresolved

Update FR#10 – 10/14/2013: Item is unresolved.



8.7 The absence of a night seal at the chiller room roof allowed water to migrate into the existing roof to the east. The roof to the east was previously observed as wet along with the existing roof that was removed to the west.

Update FR#09 – 10/03/2013: Item is unresolved

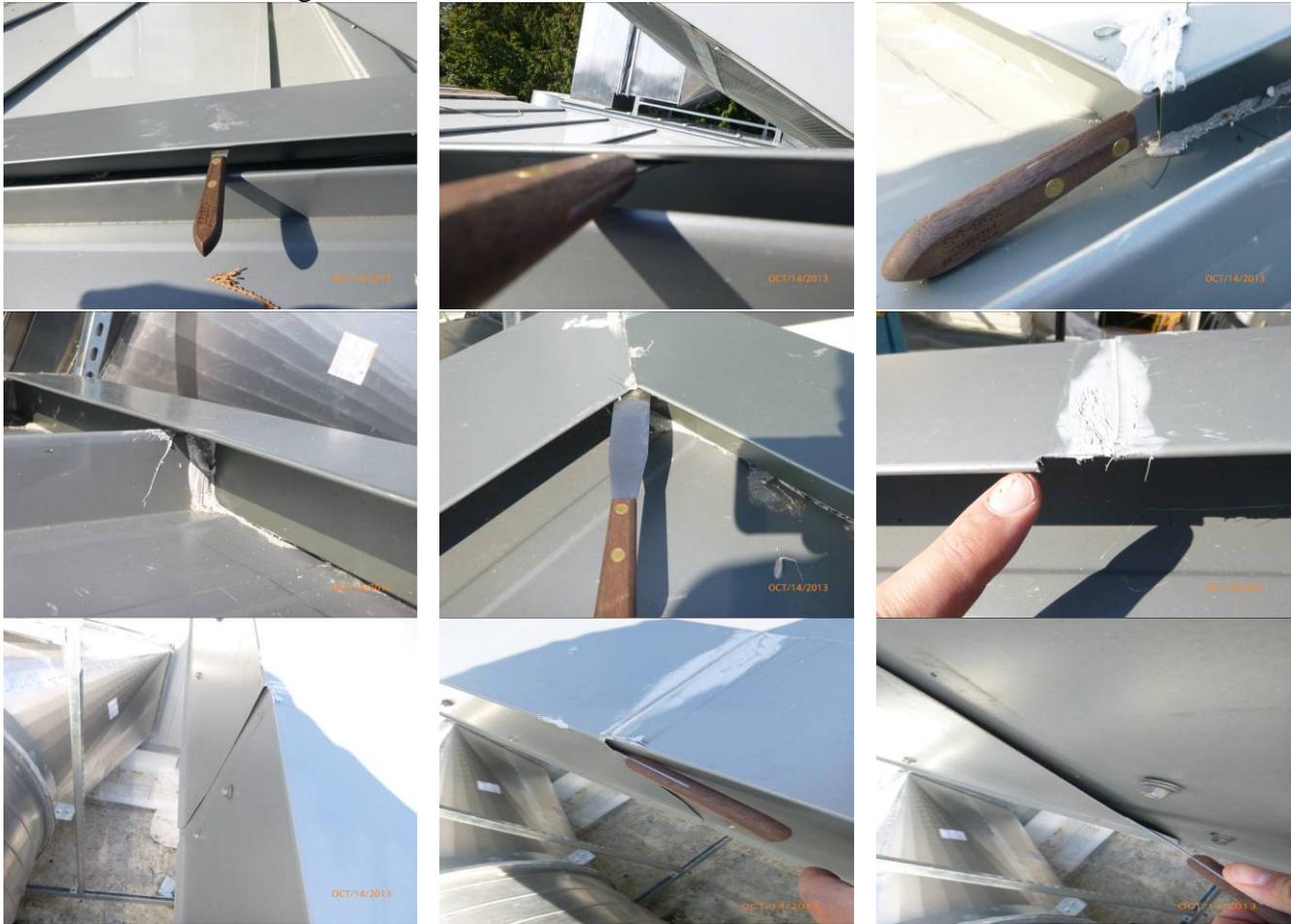
Update FR#10 – 10/14/2013: Item is unresolved.



8.8 The sheet metal re-installation at the sawcut in the roof above is ongoing. This writer is unable to verify if the metal panel is notched into a vertical leg behind the flashing enclosure at the fascia. Sealant is observed bleeding out from underneath the roof panel. This area will be further reviewed in dry conditions.

Update FR#09 – 10/03/2013: Item is unresolved

Update FR#10 – 10/14/2013: Item is unresolved. Item is updated to reflect more generally observed conditions during this site visit.



5.6 The roof drain overflow at the northwest corner of the Natatorium Roof is plugged. This writer cannot verify why the roof drain is plugged during this site visit. Recommend that the overflow is unplugged in the event of a heavy rain and that the drains are protected from debris entering and clogging the drainage pipes.

Update FR#08 – 10/02/2013: Item is unresolved

Update FR#09 – 10/03/2013: Item is unresolved

Update FR#10 – 10/14/2013: Item is unresolved.



5.8 The vapor retarder layer at the Natatorium Roof is damaged in general. The construction team has been aware that construction sequencing would more than likely damage the vapor retarder layer. Per conversation with Rich Kerns (Foreman, QCR) the temporary roof/ vapor retarder layer is to be repaired with moppings of hot asphalt and plysheet as needed during construction.

Update FR#08 – 10/02/2013: Item is unresolved

Update FR#09 – 10/03/2013: Item is unresolved.

Update FR#10 – 10/14/2013: Item is unresolved.



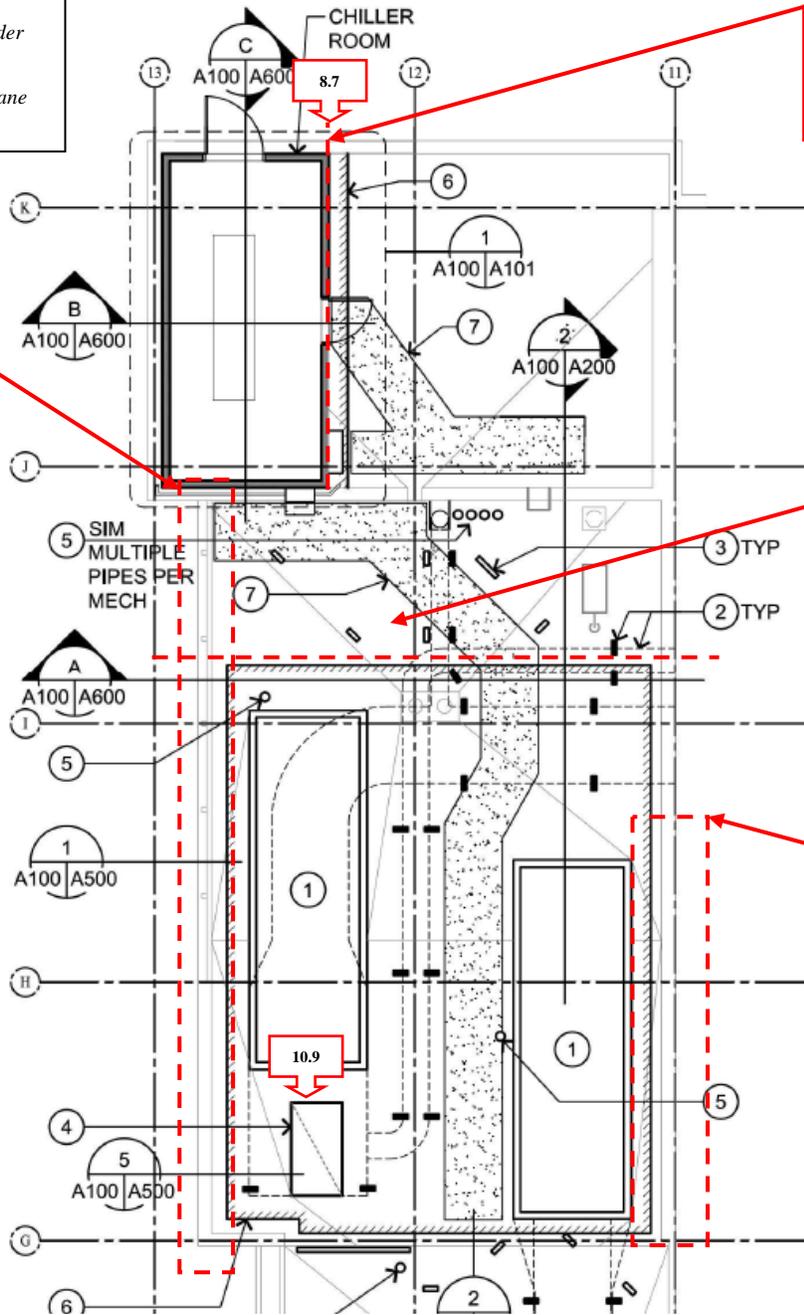
Roof Progress Plan / Locator Map:

**Please note that areas or locations denoted are approximate.*

LEGEND:

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

Item 8.4: Infill holes in top plates at screen wall structure.



East of this line (approx.) the remainder of the Natatorium roof is wet and damaged as an existing condition.

North of this line (approx.) the remainder of the Natatorium roof is wet and damaged as an existing condition.

Problems Item 8.8 – sheet metal re-installation at the upper steep slope roof to accommodate new HVAC.

-End of Report-