



**GEORGE MARLTON, JD**  
PROCUREMENT DIVISION DIRECTOR

**PROCUREMENT DIVISION**  
**PUBLIC SERVICES BUILDING**  
2051 KAEN ROAD | OREGON CITY, OR 97045

REQUEST FOR QUOTES #2017-67  
North Clackamas Aquatic Park Floor Renovation and Epoxy Coating  
ADDENDUM NUMBER 1  
August 23, 2017

On August 17, 2017, Clackamas County (“County”) published Request for Quotes #2017-67 (“RFQ”). The County has found that it is in its interest to amend the RFQ through the issuance of this Addendum #1. Except as expressly amended below, all other terms and conditions of the original RFQ and subsequent Addenda shall remain unchanged.

**1. The following items are to be deleted from the Detailed Scope of Work:**

- Fill divots and cracks in existing concrete so a smooth finish is achieved.
- Apply MVS moisture vapor system per manufacturer’s specifications prior to applying the Tennant ECO Crete Resin Urethane Non-Skid Floor Coating System.

**2. The following items are to be added to the Detailed Scope of Work:**

- Skim coat entire project surface in Eco-Crete SF per manufacture’s specifications to fill divots and cracks in existing substrate so a smooth finish is achieved prior to applying the Tennant ECO Crete Resin Urethane Non-Skid Floor Coating System.
- Manufacture’s specifications for Tennant Eco-Crete SF is hereby attached and included by reference to Addendum #1.
- Overall Dimensions Plan; Drawing A1.1, dated 10-1-92 is hereby attached and included by reference to Addendum #1.

---

End of Addendum #1

# Eco-Crete™ SF

Slurry Applied Urethane with Decorative Quartz System



**System** - A three-part, cementitious-polyurethane slurry system with Quartz aggregate broadcast, applied over a urethane concrete prime coat, providing a 10 year warranty against delamination due to moisture, for resurfacing interior concrete floors in areas that require thermal shock resistance and slip resistance. System is sealed with a UV stable, chemical resistant Polyaspartic grout coat.

- **ADVANCE YOUR SUSTAINABILITY GOALS** – Utilizes renewable bean oils and environmentally friendly packaging.
- **LEED® CREDIT** – LEED Green Building Certification Program credits may be available:
  - **Indoor Environmental Quality**
  - 4.2 Low-Emitting Materials, Paint & Coatings
  - **Material and Resource**
  - 6 Rapidly Renewable Materials
- **EXTREME THERMAL STABILITY** – Steam cleanable.
- **SEAMLESS** – Hygienic finish; no grout joints

## PRIMARY APPLICATIONS

Food & Beverage Processing facilities	Chemical Process facilities
Pool Decks & Locker Rooms	Wet Processing & Packaging areas
Commercial Kitchens	Pulp and Paper

## BENEFITS

Impact & abrasion resistant surface	Anti-slip surface, meets ADA recommendations
Low odor, fast installation, fast cure	Resistant to moisture vapor transmission (MVT)
Thermal shock & chemical resistant	Resistant to fungi growth per ASTM G-21
High temperature resistant to 200°F (93.3°C)	

## SYSTEM PROPERTIES

Property	Test Method	Results
Compressive Strength	ASTM C579	8,200 psi (56.5 MPa)
Tensile Strength	ASTM C307	975 psi (6.72 MPa)
Flexural Strength	ASTM C580	2,500 psi (17.2 MPa)
Bond Strength	ASTM D-4541	100% Concrete Failure
Impact Strength	ASTM D-4226	>160 in-lb
Volatile Organic Compound, VOC	ASTM D3960	Mixed A+B+C = 0.04 lb/gal (5 g/L)
Resistance to Fungi Growth	ASTM G-21	Passes, Rating of 1
Flammability	ASTM D635	Self-extinguishing

*Testing performed at 70°F. The data shown above reflects typical results based on laboratory testing under controlled conditions. Variations from the data shown may result. Test methods are modified where applicable.*

## INSTALLATION DATA

Coverage rate @ 3/16" (4.76 mm) for 1/4" (6.35 mm) finished floor		23 ft <sup>2</sup> (2.1 m <sup>2</sup> ) per unit
Application Temperature, ambient		40-85°F (4.4-29.4°C)
Application Temperature, material		50-80°F (10-26.6°C)
Pot Life, @ 77°F (25°C)		15 minutes
Traffic, @77°F (25°C)		Light: 12 hours / Full: 24 hours
Fully Cured, @ 77°F (25°C)		7 days

## TENNANT COATINGS

For First Impressions That Last™

### GENERAL PRODUCT INFORMATION

<b>STORAGE:</b>	Materials should be stored indoors between 65°F (18°C) and 80°F (26.6°C).
<b>SHELF LIFE:</b>	6 months
<b>PACKAGING OPTIONS / PART NUMBERS:</b>	<p><b><u>Eco-Crete TC™</u></b> 1 gallon / 9014450 (1/2 gallon part A, 1/2 gallon part B) + bag C + 1/2 pint pigment</p> <p><b><u>Eco-Crete HF™</u></b> 1 gallon / 9014428 (1/2 gallon part A, 1/2 gallon part B, + bag C + 1/2 pint pigment) 10 gallon / 9014432 (1/2 gallon part A, 1/2 gallon part B, + bag C + 5 pints pigment) 500 gallon / 9014435 (1/2 gallon part A, 1/2 gallon part B, + bag C + 250 pints pigment)</p> <p><b><u>Eco-Crete™ SF</u></b> 1 gallon / 9014438 (1/2 gallon Part A, 1/2 gallon Part B, 1 bag C + 1/2 pint pigment) 10 gallons / 9014440 (5 gallons Part A, 5 gallons Part B, 10 bags C + 5 pints pigment) 500 gallons / 9014441 (250 gallons Part A, 250 gallons Part B, 500 bags C + 250 pints pigment)</p> <p><b><u>Eco-Crete™ CB</u></b> 9014446 (0.25 gallon Part A, 0.25 gallon Part B, 1 bag C + 1/2 pint pigment) <b><u>Eco-TCP™</u></b> 4 gallon / 9012532 (2 gallon Part A, 2 gallon Part B)</p>
<b>STANDARD QUARTZ BLENDS / SOLIDS – 50# BAG:</b>	For part numbers, refer to Coatings Price List or contact Tennant Customer Service for assistance. Custom blends are also available.
<b>OPTIONS:</b>	<p><i>Colors:</i> Apricot, Ginger, Orange, Sienna, Bordeaux, Crimson, Red, Yellow, Mustard, Clover, Lemongrass, Vineyard, Rainforest, Aspen, Slate, Capri, Teal, Cobalt, Blue, Navy, Ash, Smoke, Gravel, Charcoal, Flint, Black, White, Eggshell, ivory, Butter, Beige, Buff, Tan, Cappuccino, Taupe, Toffee, Brown, Blush, Plum and Loganberry.</p> <p><i>Cove:</i> A seamless, smooth transition can be created between the flooring and wall using Eco-Crete CB.</p>

**LIMITATIONS:** *Contamination (Fisheyes):* Product may not adhere if oil, silicones, mold release agents or other contaminants are present.

*Outgassing:* Blisters may result if sand is not broadcast into the slurry.

*Movement:* Moving joints and cracks will reflect through the installed system. 7 day old concrete can be coated, but any shrinkage cracks that form may show in the Eco-Crete.

*UV/Light Stability:* This product is not light stable and will yellow/amber over time unless topcoated with optional UV resistant topcoat.

*Product Stability:* Part A and Part B resins must not be allowed to freeze. If you suspect product has frozen, please call Tennant technical support.

**IMPORTANT: READ AND FOLLOW ALL PRECAUTIONS AND INSTRUCTIONS BEFORE PROCEEDING.**

**PLEASE SEE SAFETY DATA SHEET (SDS) FOR HANDLING PROCEDURES.  
USE PRODUCT AS DIRECTED.  
KEEP OUT OF THE REACH OF CHILDREN.**

### PRELIMINARY FLOOR INSPECTIONS

**CHECK THE TEMPERATURE AND HUMIDITY:** Floor temperature should be between 40°F (4.4°C) and 85°F (29.4°C) and material temperature should be between 50°F (10°C) and 80°F (26.6°C) for Eco-Crete SF. Humidity must be less than 80%. **DO NOT** coat unless floor temperature is more than five degrees over the current, local dew point.

### BARE CONCRETE

**CHECK THE CONCRETE:** Concrete must be structurally sound and free of curing membrane, paint and/or other sealer with no standing water. If you suspect that the concrete has been previously sealed, call Tennant Company Tech Support for further instructions.

### APPLICATION EQUIPMENT

<input type="checkbox"/> Protective clothing	<b>For optional cove Eco-Crete CB:</b>
<input type="checkbox"/> Spiked shoes	Chalk line
<input type="checkbox"/> Mortar mixer – (Baugh, Imer or Kol mixer)	Duct tape
<input type="checkbox"/> Mixing pail	Cove strips
<input type="checkbox"/> Slow speed drill (500 rpm or less)	Paint brushes
<input type="checkbox"/> Cam/Gauge rake	4" (106.6 mm) Roller Frame with covers
<input type="checkbox"/> Porcupine roller	<input type="checkbox"/> Trowel (stainless steel), 3/8" (9.5 mm) or 1/2" (12.7 mm) radius cove trowel
<input type="checkbox"/> Loop roller	Putty Knife
<input type="checkbox"/> Trowel (stainless steel), 4"x12" (101.6 x 304.8 mm) Pool Trowel, Notch Trowel and Margin Trowel	
<input type="checkbox"/> Flat squeegee	
<input type="checkbox"/> 1/4" Nap roller	
<input type="checkbox"/> Roller assembly	
<input type="checkbox"/> Jiffy® Mixer Blade [Tennant Part #: 08643-1 (small unit) / 08643-5 (large unit)]	
<b>For optional topcoat Eco-HTS 100:</b>	
<input type="checkbox"/> Application Tray	<input type="checkbox"/> 3/8" (10 mm) Medium Nap Roller

**ASSEMBLE EQUIPMENT:** Due to the limited pot life of the material, all application equipment, etc. should be ready for immediate use. (Clean roller with tape to remove any residual lint.)

## PREPARATION

Detergent scrub and rinse with clean water to remove surface dirt, grease, oil and contaminants.

*Steel shot blast (minimum shot size of 330) to a minimum surface profile of CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #310.2R. Use magnetic broom to remove excess shot, sweep to remove large debris and vacuum to remove fine dust.*

*Scarify:* Sweep to remove large debris and vacuum to remove fine dust.

Key-in all termination points, drains and joints that may move with a 1/4" (6.35 mm) by 1/4" (6.35 mm) cut.

Patch all depressions, divots and stress cracks in concrete with Eco-Crete SF. For areas thicker than 1/4", use Eco-Crete HF.

**JOINTS:** Fill all static (non-moving) cracks or control joints with an Epoxy Joint Filler. Cracking of the resurfacer will occur over joints that are overlaid and later move. Because resurfacers are not flexible, joints that might move should be honored (cut) after the installation and filled with Eco-PJF or Eco-EJF. Isolation joints must be honored and filled with a flexible material designed for this purpose.

## APPLICATION – DIVOTS / FLOOR REPAIRS - ECO-CRETE™ HF

**COVERAGE RATE:** Coverage rate will depend upon application thickness. For use in sloping floors, repairing gouges, and large impact damage.

To achieve a nominal 1/4" (6.35 mm) finished floor, set the rake at 3/16" (9.5 mm) or use a 3/16" V-Notched trowel to spread materials.

Pour out 0.50 gallons Eco-Crete HF Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MORTAR MIXER.** Begin mixing.

**ADD 1/2 PINT PIGMENT TO PART A** and mix for about 15 seconds.

Pour out 0.5 gallons Eco-Crete SF Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mortar mixer.

**MIX FOR 30 SECONDS** or until thoroughly blended using the mortar mixer.

**POUR ONE ECO-CRETE SF PART C** into the liquid mixture in the mortar mixer. Blend thoroughly until all particles are wetted out, normally about two minutes. **NOTE:** *It is critical to use the same mixing sequence to ensure color consistency throughout the entire application.*

**POTLIFE AT 75°F:** *Mix only enough material, which can be raked, porcupine and loop rolled in a 15-minute period.*

**POUR THE MIXED MATERIAL** onto floor.

**CAM/GAUGE RAKE** material over desired area.

**USE HAND TROWELS** to finish along edges and drains.

**USE PORCUPINE ROLLER** to release any entrained air as well as work resins to the surface.

**IMMEDIATELY ROLL THE ECO-CRETE HF** with a loop roller to remove gauge rake marks and level material. **NOTE:** *Late or heavy rolling may induce pinholes. In cool conditions, a smoothing trowel may need to be used prior to porcupine rolling to remove rake marks.*

**LAY ABUTTING EDES WITHIN 10 MINUTES** to ensure a clean edge. A “wet edge” installation is imperative during large placements to avoid lines and ridges in the finished floor.

#### APPLICATION – URETHANE CONCRETE PRIMER - ECO-CRETE TC™

Pour out 0.50 gallons (1.89 litres) Eco-Crete Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MIXING CONTAINER.**

Pour out 0.50 gallons (1.89 litres) Eco-Crete Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mixing pail, and mix for 15 seconds. **POTLIFE:** *Mix only enough material that can be applied within a 15-minute period.*

**GRADUALLY ADD ALL CONTENTS OF A BAG OF ECO-CRETE TC FILLER** into the liquid mixture and blend thoroughly until all particles are wetted out, normally about 2 minutes.

**APPLY PRIMER TO FLOOR SURFACE OR AS A PRIMER FOR COVE BASE** using a paint brush or roller that will receive cove. Allow primer to dry slab (surface) and air temperature must be 60°F or greater. Product must be kept between 60°F and 75°F at time of mixing. Colder or warmer temperatures can significantly retard or advance working and cure times respectively. Apply materials at 15-20 mils (80 – 107 ft<sup>2</sup>/gal) as a skim coat.

#### APPLICATION - OVERLAY - ECO-CRETE™ SF

**COVERAGE RATE:** Coverage rate will depend upon application thickness. A one bag mix will nominally cover (finished floor): 23 ft<sup>2</sup> (2.1 m<sup>2</sup>) @ 1/4" (6.35 mm)

To achieve a nominal ¼" (6.35 mm) finished floor, set the rake at 3/16" (9.5 mm).

Pour out 0.50 gallons Eco-Crete SF Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MORTAR MIXER.** Begin mixing.

**ADD ½ PIGMENT TO PART A** and mix for about 15 seconds.

Pour out 0.5 gallons Eco-Crete SF Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mortar mixer.

**MIX FOR 30 SECONDS** or until thoroughly blended using the mortar mixer.

**POUR ONE ECO-CRETE SF PART C** into the liquid mixture in the mortar mixer. Blend thoroughly until all particles are wetted out, normally about two minutes. **NOTE:** *It is critical to use the same mixing sequence to ensure color consistency throughout the entire application.*

**POTLIFE AT 75°F:** *Mix only enough material, which can be raked, porcupine and loop rolled in a 15-minute period.*

**POUR THE MIXED MATERIAL** onto floor.

**CAM/GAUGE RAKE** material over desired area.

**USE HAND TROWELS** to finish along edges and drains.

**USE PORCUPINE ROLLER** to release any entrained air as well as work resins to the surface.

**IMMEDIATELY ROLL THE ECO-CRETE SF** with a loop roller to remove gauge rake marks and level material. **NOTE:** *Late or heavy rolling may induce pinholes. In cool conditions, a smoothing trowel may need to be used prior to porcupine rolling to remove rake marks.*

**LAY ABUTTING EDGES WITHIN 10 MINUTES** to ensure a clean edge. A “wet edge” installation is imperative during large placements to avoid lines and ridges in the finished floor.

#### **APPLICATION –TRACTION – BROADCAST QUARTZ OR SILICA SAND**

**IMMEDIATELY BROADCAST COLORED QUARTZ OR SILICA SAND** in the area to excess. Do not dump or pile the aggregate. Gently scatter it onto the floor by hand tossing so as to cover the wet resin completely. A mechanical blower may be used to scatter the granules. A coverage rate of 0.75 pounds (0.35 kg) per ft<sup>2</sup> (0.09 m<sup>2</sup>) is recommended.

**ALLOW SYSTEM TO CURE APPROXIMATELY 6-8 HOURS** to withstand foot traffic.

**THOROUGHLY SWEEP AND VACUUM** to remove loose colored quartz / silica sand granules from surface.

#### **APPLICATION – ECO-TCP**

Pour out equal amounts of materials into a measuring container. Then mix for 15 seconds. **POTLIFE:** *Mix only enough material that can be applied within a 30-minute period.*

Do not apply Polyaspartic thicker than 10 mils (160 sf/gal) as improper curing or a haze may form.

#### **APPLICATION – COVE – ECO- CRETE CB**

Pour out 0.25 gallons -Crete Part A into a measuring container. Then, **POUR THE MEASURED PART A INTO THE MORTAR MIXER.** Begin mixing.

**ADD ONE POWDER PIGMENT BAG TO PART A** and mix for about 15 seconds.

Pour out 0.25 gallons (0.95 litres) Eco-Crete Part B into a measuring container that is separate from the one used with the Part A. Then, **ADD THE MEASURED PART B TO THE PART A** already in the mortar mixer. **POTLIFE:** *Mix only enough material that can be applied within a 15-minute period.*

**POUR ONE BAG PART C** into the mortar mixer. Mix until uniform (approximately one minute). The resin needs to completely wet out the sand.

**POUR THE MIXED MATERIAL** along wall or at the base of equipment pads.

**USE COVE TROWELS** to apply, compact and finish material.

**ALLOW COATING TO DRY 24 HOURS** at 75°F (24°C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full coating properties take 14 days to develop.

#### **AUTHORIZED INSTALLER**

Tennant Company warrants its Specialty Surface Coatings only when installed by Authorized Tennant installers who have participated and completed product knowledge and training.

Non-Approved Installers who do not meet the required training criteria assume full liability for the application and warranty.

For a list of Authorized Installers, please contact Tennant Coatings Company for the local Manufacturer Representative. (800) 228-4943

#### **TECHNICAL SUPPORT**

For any preparation or application questions, please call Tennant technical support at 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).



## DISPOSAL

Dispose of all excess material, packaging and other waste in accordance with federal, state and local regulations.

## MAINTENANCE GUIDELINES

**Allow floor coating to cure at least one week before cleaning by mechanical means (e.g., sweeper, scrubber, disc machine).**

**Care:** Proper maintenance will increase the life and help maintain the appearance of your new Tennant floor coating. Sweep and scrub your new coating regularly, as dirt and dust are abrasive and can quickly dull the finish, decreasing the life of your coating. Remove spills quickly as certain chemicals may stain and could possibly permanently damage the finish.

**Use soft nylon brushes or white pads on your new floor coating. Any brush more abrasive than a soft nylon or white pad can cause premature loss of gloss.**

**Detergent:** Tennant has a full range of detergents--general purpose to heavy duty--for your cleaning needs. For assistance in determining which detergent is right for your facility or for additional technical information call: 800-228-4943, option 4 (US & Canada), 800-832-8935 (International).

**Caution:** Avoid scratching or gouging the surface. All floor coatings will scratch if heavy objects are dragged across the surface.

Do not drop heavy or pointed items on the floor as this may causing chipping or concrete popouts in the case of a weak cap.

Rubber tires can permanently stain the floor coating from plasticizer migration. Plexiglass® between the tire and the floor coating can prevent discoloration.

Rubber burns from quick stops and starts can heat the coating to its softening temperature, causing permanent marking.

**Repair:** Repair gouges or scratches or chip outs as soon as possible to prevent moisture or chemical contamination.

## CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

### **EXCLUSIONS**

**THIS WARRANTY IS VOID FOR APPLICATIONS WHERE SUBSTRATUM FAILURE, HYDROSTATIC PRESSURE, OR SEVERE OR ABNORMAL USE OCCURS SUCH AS DRAGGING OF PALLETS, MACHINERY OR OTHER HEAVY OBJECTS. THIS WARRANTY IS VOID IF BOND INHIBITING CONTAMINANTS ARE FOUND IN THE CONCRETE OR WHERE THE PRODUCT IS APPLIED TO IMPROPER SUBSTRATES AND/OR WITHOUT PROPER APPLICATION/PREPARATION PER TENNANT COATING TECHNOLOGIES SPECIFICATIONS. WARRANTY IS VOID IF THE TOPCOAT IS NOT PROPERLY MAINTAINED AND/OR IF CONCRETE CONDITIONS CHANGE AFTER THE APPLICATION OF ECO-MVS OR TOPCOAT. IN NO EVENT SHALL TENNANT COATING TECHNOLOGIES BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF USE OF TENNANT COATING TECHNOLOGIES' ECO-MVS, INCLUDING BUT NOT LIMITED TO, DAMAGES TO STRUCTURE, CONTENTS OF STRUCTURES, OR ARISING FROM FACILITY SHUT DOWN. THE ONLY REMEDY OF THE USER OR BUYER, AND THE ONLY LIABILITY OF TENNANT COATING TECHNOLOGIES FOR ANY AND ALL CLAIMS, LOSSES, INJURIES, OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE) SHALL BE REPLACEMENT OF THE PRODUCT, OR, AT THE ELECTION OF TENNANT COATING TECHNOLOGIES, RETURN OF THE PURCHASE PRICE. IT IS EXPRESSLY UNDERSTOOD THAT THIS WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, RIGHTS OR OTHER REMEDIES.**

Tennant Company warrants its Specialty Surface Coatings to be free from defective manufacture, improper formulation, and defective ingredients. Warranty covers replacement of materials only.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

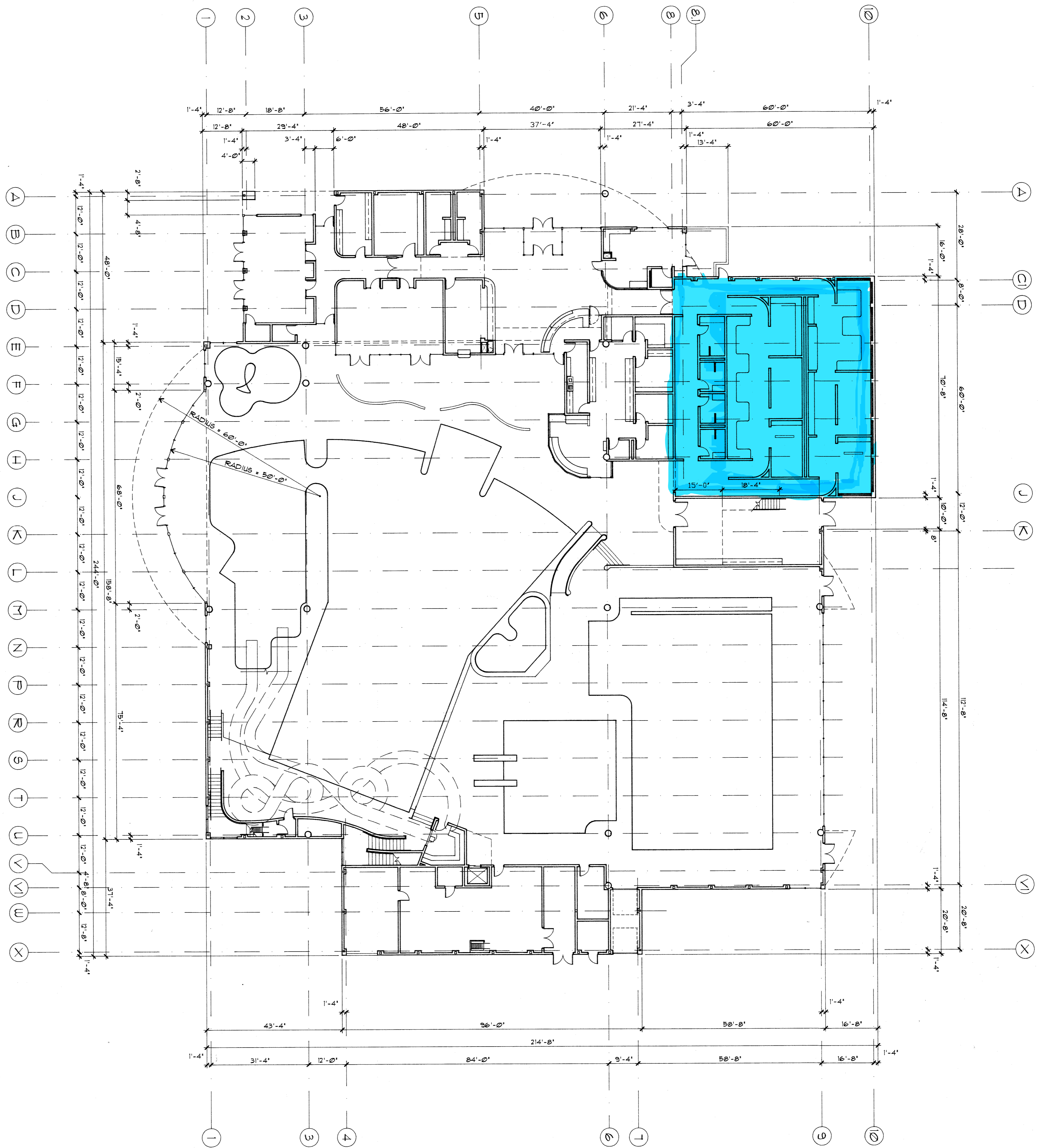
In no event shall Tennant or Seller be liable for any incidental, consequential, or special damages arising out of the use of Tennant Specialty Surface Coatings. **THE ONLY REMEDY OF THE USER OR BUYER, AND THE ONLY LIABILITY OF TENNANT AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES, OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE) SHALL BE REPLACEMENT OF THE PRODUCT OR, AT THE ELECTION OF TENNANT OR SELLER, RETURN OF THE PURCHASE**

**PRICE.**



**No representative of Tennant has authority to give any other warranty or assume other liability.** The presence of a Tennant employee during the application of Tennant's Specialty Surface Coatings does not extend or alter the warranty or limitations in any manner whatsoever.

OVERALL DIMENSIONS PLAN  
1/16" = 1'-0"



	DRAWN	BDH
	CHECKED	
	DATE	10-01-92
	PROJECT	9120

OVERALL DIMENSIONS PLAN  
 SYMBOLS, ABBREVIATIONS  
 GENERAL NOTES

**Robertson / Sherwood / Architects PC**  
 132 EAST BROADWAY - SUITE 540 • EUGENE, OREGON 97401 • (503) 342-8077 FAX (503) 345-4302

**INDOOR AQUATICS CENTER**  
 NORTH CLACKAMAS PARKS AND RECREATION DISTRICT