

Splash Pad Renovation

The following information is to help guide you with questions and information needed for multiple types of renovations.

How do you determine if a splash pad should be renovated or a full demo?

All factors below and budgeting are considerations.

Replacement of products on existing splash pad

**Pictures required of full splash pad*

- Any existing drawings?
 - Include dimensional drawings of splash pad and existing product locations
- What is the existing water supply line size?
- What is the designed flow of the feature pump and/or horsepower? (recirculation only)
- What are the sizes of supply lines from manifold to water events on splash pad? (Provide Picture)
- What product(s) are desired to be replaced?
 - Provide information: vendor cut sheet, line size, flow rate, mounting method, concrete thickness, etc
 - Provide picture with tape measure to reference dimensions of existing structure or ground sprays
- Existing mounting type:
 - Sub-surface mounting, mounting over embed, or surface mount. (Provide Picture)
- What if you have no drawings?
 - Dimensions and product line sizes need to be determined for current products
- Installation Notes: New product selected needs to be able to straddle water feed and/or mounting embed. Mounting bolts need to be 3" away any cast in pipe, structure or mounting flange bolts. Ground Spray will require an independent water supply line and cannot be combined with any other product

Mechanical System Enhancements (Adding to, upgrading, & swapping components)

**Pictures required of all components*

- Any existing drawings?
- What is the incoming water line size for domestic system? (Domestic only)
- Do they have a designed flow rate of existing splash pad? (Domestic only)
- What is what is the designed flow of the feature pump and/or horsepower? (Recirculation only)
- What is drainage system capabilities? (storm/ sanitary/ flow capacity)
- What power is available? (115volt, 230volt, 460volt, single phase, 3-phase, amps available)
- Is there an Activation bollard?
- What kind of Control Panel?
- What kind of Manifold?
- Does the system have Sequencing?
- What kind of Pumps (recirculation only)?
- What Filtration (recirculation only)?
- What type of Chemical Treatment (recirculation only)?
- Water Storage Tank (recirculation only)?
- Installation Notes: Get opening size into mechanical room for access of removal and/or replacement of equipment. (recirculation only)

Pool Renovation Options

Can I Replace or Add products in an existing pool?

What information is needed?

- Any existing drawings?
 - Including dimensional drawings of splash pad and existing product location.
 - Pool system- what is the designed flow of the feature pump and/or horsepower?
 - What are the sizes of supply lines from manifold to water events in the swimming pool? (Provide picture)
 - What product(s) are desired to be replaced?
 - What product(s) are desired to be replaced?
 - Provide information: vendor cut sheet, line size, flow rate, mounting method, concrete thickness, etc
 - Provide picture with tape measure to reference dimensions of existing structure or ground sprays
 - Existing mounting type:
 - Sub-surface mounting, mounting over embed, or surface mount. (Provide Picture)
- Installation Notes: New product selected needs to be able to straddle water feed and/or mounting embed. Mounting bolts need to be 3" away any cast in pipe, structure or mounting flange bolts.

General design considerations

- When selecting a product make sure that the splash containment falls within the pool.
- When selecting a product make sure existing concrete thickness and slope are per manufacture recommendations.
- Recommended water depths for water events:
- Ground sprays, will need to be located with no standing water. This can be at a zero depth entry area or outside of pool spraying into the pool. Underwater bubbler nozzles can be installed below water level with a maximum of 6" water depth.
- Low structures up to 24" height, will need to be located so that the water effect spray is not underwater. It is recommended that the water depth does not exceed 6" water depth.
- Low structures up to 48" height, will need to be located so that water effect spray is not underwater. It is recommended that the water depth does not exceed 12" water depth.
- Structures above 48", will need to be located so that water effect spray is not underwater. It is recommended that the water depth does not exceed 18" water depth.
- Multi-level platforms, are designed to be on a level floor with a water depth not to exceed 12". Depending on usage and access lower water depths may be desired. Any crawl through tunnel shall be above water level.

For indoor pools:

- Ceiling heights are tall enough for selected structures.
- Determine construction access for new products being retrofitted into existing space.
- Environmental considerations, (i.e. air quality and humidity based on new products selected).
- Determine if activation devises are to be used or will water activities be manual or by time clock control.

For Pools with no previous water play events:

- When adding a new water feature in an existing pool with no supply lines and/or mounting embed will require technical support and discussions. It will be critical to have as built drawings to review.
- Pool shell will need to be saw-cut for required plumbing, suction drains and feature discharges.
- Installation of plumbing from feature pump to pool.
- Repair existing pool concrete shell and apron from demo for this work.

Pool Renovation/New Builds

Swimming Pools and Wading Pool Renovation & New Pool Builds

New Splash Pad- Using Existing swimming pool water

- Verify if using pool water type of system is acceptable with local/State Health Department. Provide information on State Health Code requirements for this type of system.
- Provide as built drawings of existing swimming pool. This will allow Aquatix to validate pool system and requirements for new splash pad using pool water.
- Multiple pictures of overall existing pool area and desired splash pad area from various perspectives.
- Multiple pictures of mechanical systems. Specific pictures of pumps, filters, control panels and manifold. Take picture of each piece of equipment for model numbers, size, electrical requirements, etc.
- Get opening size into mechanical room for access of removal and/or replacement of equipment.

Considerations:

- Most states in the US do not allow using pool water for a splash pad because filtration rate requirements are not the same, and the concern about cross contamination between splash pad and pool water.
- When using pool water with a new splash pad and the elevation of both the pool and splash pad are roughly the same, drainage line from splash pad must be sized for a 1ft/sec velocity. Also drainage line from splash pad to pool will have stagnate water until splash pad is in use. For example on a splash pad that has 250 gpm flow rate, a 12" drain line from the splash pad to pool will be required.
- What power is available? (115volt, 230volt, 460volt, single phase, 3-phase, amps available)
- Do they want splash pad to be on a activator or will is simply be on a manual on/off switch?

New Splash Pad- Replacing a Swimming Pool

- Provide as built drawings of existing wading pool. This will allow Aquatix to validate existing utilities, mechanical/ restroom and infrastructure available for new splash pad.
- Multiple pictures of overall wading pool area and desired splash pad area from various perspectives.
- Multiple pictures of wading pool mechanical systems. Specific pictures of pumps, filters, control panels and manifold. Take picture of each piece of equipment for model numbers, size, electrical requirements, etc.
- What is drainage system capabilities? (storm/ sanitary/ flow capacity)
- What power is available? (115volt, 230volt, 460volt,single phase, 3-phase, amps available)
- Get opening size into mechanical room for access of removal and or replacement of equipment.

Considerations:

- Typically reuse of existing mechanical equipment systems is not recommended because the labor required for removal, cleaning, etc. along with the expected life cycle remaining of product considered for reuse does not provide best value.
- It will be required to remove entire wading pool if new splash pad is going to be located in same foot print.
- The existing wading structure can not be used as a water tank for the new splash pad.
- Elevations of remaining sidewalks, patios, restroom, etc. needs to be considered when designing new splash pad so that existing and new elevations are compatible.

New Pool build

- Need construction drawings of proposed new pool

Consideration:

- Typically new pool construction that incorporates water play elements are designed and engineered by pool contractors and/or aquatic engineers. Pre-sale work consists of supporting the pool contractor or aquatic engineer with required technical information.
- Water attractions in water would include above grade structures or underwater bubbler embed.