CARMEL CLAY PARKS & RECREATION

# WEST PARK CORE AREA SCHEMATIC DESIGN REPORT







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# **EXECUTIVE SUMMARY**

Due to recent acquisitions and aging infrastructure, a Master Plan was developed for West Park in 2016 which identified three core areas for improvement--the Groves, the Core, and the Headwaters. Construction of the first phase, the Groves, was completed in 2019. This document presents the Schematic Design for the second phase, the Core, which includes an active recreation area with a playground, sprayground, flexible lawn space and rentable shelters. This document provides a brief summary of the project background, issues, and key influences which led to the resulting design plan.

SmithGroup kicked off the planning process with a prioritization workshop in July 2019 with Carmel-Clay Parks and Recreation (CCPR) and Williams Architects and Aquatics (Williams) to establish a project scope and budget and understand client priorities. Following the workshop, SmithGroup and Williams collaborated on three concept alternatives which were then synthesized into one consensus plan during a playground and sprayground design workshop with CCPR in October 2019.

From an overall perspective, the Schematic Design for the West Park Core area seeks to:

- Renovate the existing playground and splash pad.
- Renovate the existing shelter and restroom, and provide a family restroom.
- Create a connector road linking the newly constructed Groves to the Core Area.
- Enhance and expand the existing parking lot.

As part of the schematic design process, extensive research on the existing site conditions was performed. Regulatory agencies including the Indiana Department of Environmental Management, TriCo Regional Sewer Utility and City of Carmel Engineering were engaged to help guide design decisions.



Elementary school workshop



Design workshop with CCPR

# **1.0 INTRODUCTION**

### **1.1 PROJECT HISTORY AND BACKGROUND**

West Park is CCPR's only regional park west of U.S. 31/ Meridian Street, making this a highly popular destination and important asset for the community. The original 75 acres for West Park was purchased in 1997 and developed in three phases between 2000 and 2002 based on the 1999 West Park Site Master Plan. The park was expanded through the acquisition of adjacent property in 2003 (5 acres) and 2005 (40 acres), accounting for its current 120 acres.

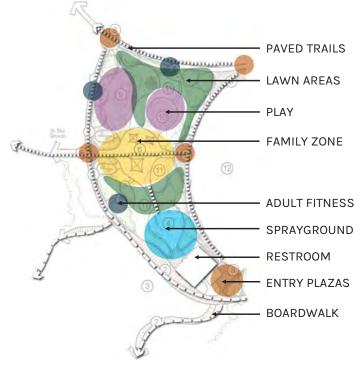
In response to aging infrastructure and expansion of the park due to recent acquisitions, a Master Plan was developed for West Park in 2016 which identified three primary areas for improvement. The first phase of the Master Plan, the Groves, was completed in 2019. SmithGroup and Williams were selected by CCPR to design the second phase to be implemented under the Master Plan, the Core Area. West Park's Core Area serves as the active recreation zone with a destination playground, sprayground, flexible lawn areas, and rentable picnic shelters.

As envisioned in the West Park Master Plan, the Core Area included a range of site elements and structures in excess of the construction budget established by CCPR and Clay Township bonding parameters. In order to establish an agreed upon scope of work in line with available funding, SmithGroup facilitated a one-day prioritization workshop in July 2019 to review existing site data, verify scope and costs for project components, and confirm owner priorities to establish a preferred scope of work to develop into construction documents.

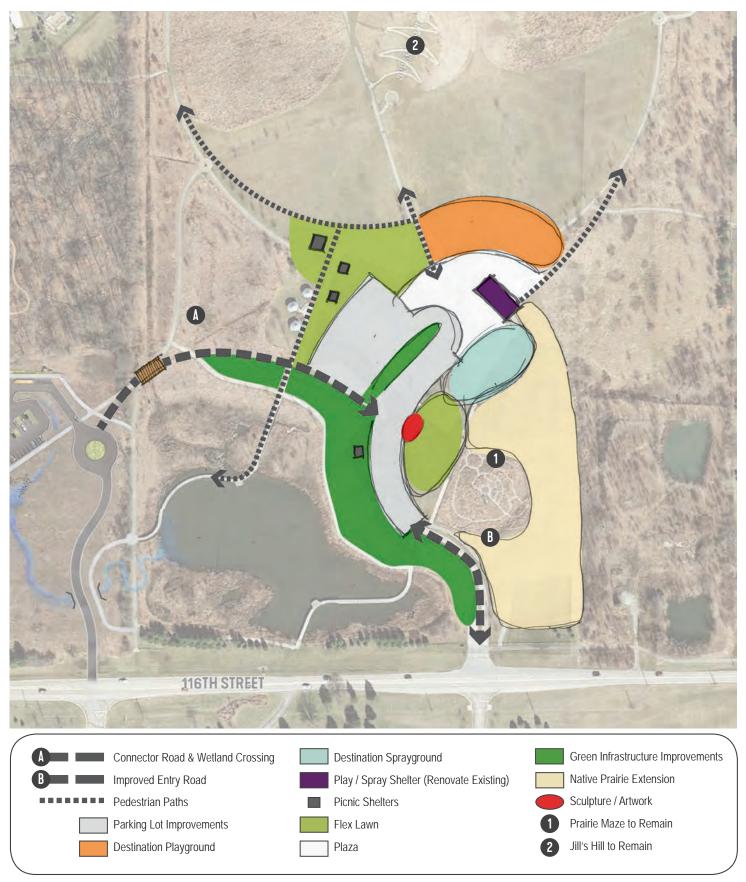
The prioritization workshop was later followed by a two-day play and spray design workshop during which three design alternatives and multiple play/spray equipment options were presented and discussed. Two local elementary schools and CCPR staff participated in the design workshop and helped to stitch the three alternatives into one consensus plan, which SmithGroup and Williams further developed into this Schematic Design Report.



Three use areas were identified in the Master Plan



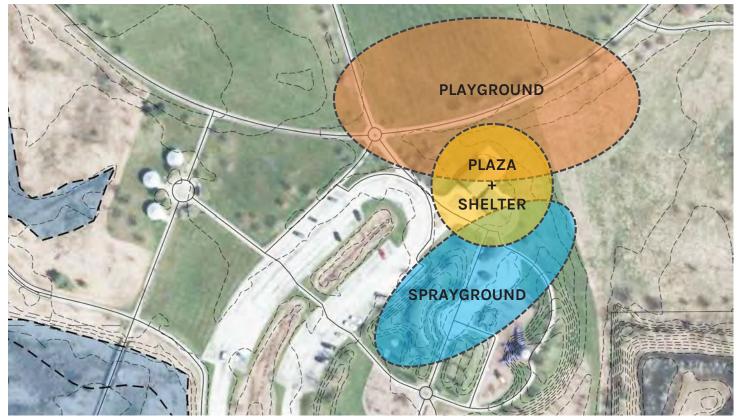
Activity core plan from the Master Plan



Core Area Improvements - Framework Diagram developed during the prioritization workshop

### **1.2 CONCEPT ALTERNATIVES**

SmithGroup and Williams explored three concept alternatives which tested different playground and sprayground layout options and thematic elements. The sketches, precedent images and text on the following pages illustrate the design intent for the three alternatives. The general location of the playground, plaza, shelter and sprayground is constant as shown in the diagram below.



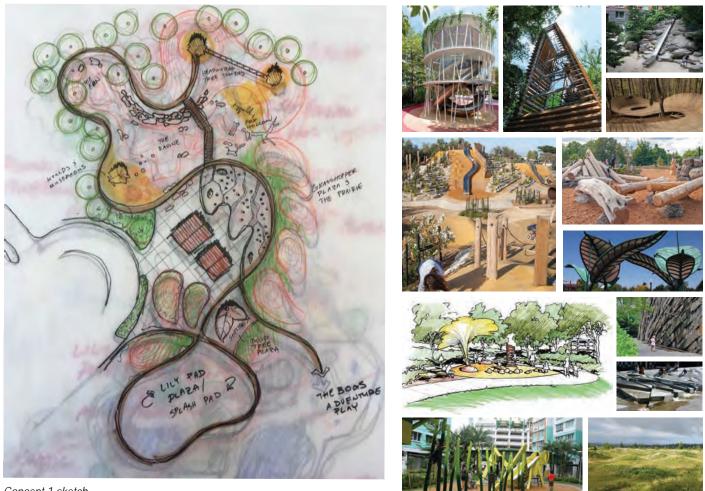
Playground and sprayground functional diagram



SmithGroup and Williams internal design charrette



### CONCEPT 1 - CONNECTING TO NATURE



Concept 1 sketch

Concept 1 precedent images

This concept is based on adventure and exploration in nature from different perspectives, big and small. The building sits at the threshold between upland and water, with "high ground" to the north and "low ground" to the south. A sinuous, story-telling path weaves through the different zones and changes form from "beach and boardwalk" to "bridge and overlook," creating a series of circuits that kids can traverse. The spaces are designed around different activities, ages and learning opportunities.

The Uplands: Headwaters Climbing tower and forest is built up as the highest part of the site. The Fen and Ravine then create a climbing experience with reference to an eroded flood zone with sinuous forms. Fox Hollow sits on the edge of the Ravine, including play logs and boulders for climbing and connecting with a bridge element. Mounds and Mushrooms then create an edge on the Ravine for 2-5 year-olds learning movement and balance. The lowest point of the uplands is Grasshopper Plaza which has oversized "grass" forms that kids can run through. The adjacent prairie beds can be formed like a leaf or the wings of a butterfly and have pollinator plants and signage for educational opportunities.

The Lowlands: Lily Pad plaza features 2-5 year-old splash play events with oversized lily pad elements for shade and sculptural tadpoles and fish. Adventure Cove has larger events, boats for imaginative play and additional water features. The Bogs and the Lake are fenced for a more adventurous experience.

### CONCEPT 2 - CELEBRATING COMMUNITY



Concept 2 sketch

Concept 2 precedent images

The expression of culture happens where people gather. Whether a village center or a barnyard, that space has a central area where people feel safe to go about their business (i.e. play!) defined by borders, edges, or ad-hoc vernacular structures. These are open-air spaces with portals, views, and other strong connections to the outside, yet a definition between wild and cultivated.

This concept is based on that organization. The interior is filled with connecting play spaces where climbing structures, play walls, and hedges form strong edges. Inside, a child feels safe to explore, wander, tinker, and create. However, these are non-continuous edges where the natural surroundings creep in.

A giant vertical structure with a protective canopy is the signature play structure—a tree of life in the garden. The tree creates a source of security and adventure at the same time. Play weaves through and around that structure, utilizing the topography of Jill's Hill as a bridge, then connecting to lower boardwalks and bridges where a "stream" weaves through play, plaza, and splash zones.

The splash play includes a blue "bowl", providing multi-seasonal interest in color and topography, while the wet features carve through lower valley.

#### CONCEPT 3- PLAYING WITH TOPOGRAPHY



Concept 3 sketch

This concept focuses on a child's journey through a series of landforms from the perspective of an insect (think "A Bug's Life"). The landforms and playground equipment distort scale and direct views as you move through the space.

An accessible route to the tallest mound provides an inclusive playground experience. As one ascends the mounds, the journey also provides a variety of tactile experiences. The lower mounds are connected by a land bridge with a tunnel below. The 2-5 play area

is located on and between these landforms. The higher mounds are connected by a suspension bridge with climbing walls forming the bridge abutments. The 5-12 play area is located on and between these landforms. The tallest/ easternmost mound would then be accentuated with a tower play structure.

Moving further north, the mounds are opposed by several depressions in the ground. Stepping stones and/or boardwalk crossings meander through these spaces as the journey continues.

Each landform would have its own identity/thematic elements. For instance, the mounds might be themed as an "ant hill" with oversized blades of grass and large ant play sculptures, a "bird's nest" with a nest structure providing a sense of enclosure for imaginative play, and a "beehive" with a large tower awaiting a swarm of kids. The depressions might take on the character of a "frog pond" with small amphibian sculptures placed along the path for kids to discover.



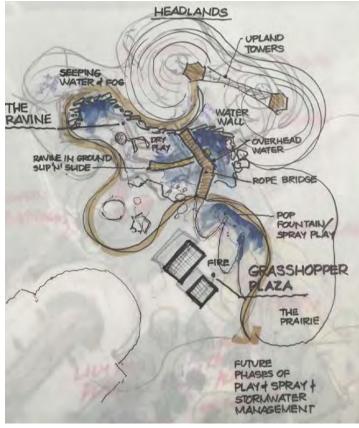
Concept 3 precedent images

6

### **1.3 CONSENSUS CONCEPTUAL PLAN**

The consensus conceptual plan was developed based on preferences expressed through the alternative review process and two elementary school workshops. During the workshops with College Wood and West Clay Elementary Schools, playground equipment images were shown to the students in order to record their reactions. The playground images shown to the right generated strong positive reactions. Images depicting the playground and sprayground adjacent to each were also positively received by the students.

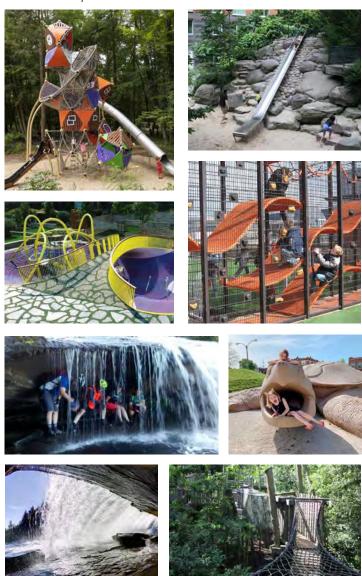
Following the student workshops, SmithGroup and Williams presented the three design concepts to CCPR for review and discussion. Overall, CCPR liked the thematic elements and layout of Concept 1 "Connecting to Nature" in combination with the playful topography and strong central community gathering space shown in concepts 2 and 3. As recorded with the students, combining play and spray into one central space was also favored by CCPR. SmithGroup and Williams responded to these comments with the consensus plan shown below which was developed during the design workshop.



Consensus conceptual plan developed during the design workshop



School workshop



Images that garnered positive reactions from students

### **1.4 SCHEMATIC DESIGN OVERVIEW**

The Schematic Design Plan further refines the vision developed during the playground and sprayground design workshop. In response to feedback gathered during the workshop, SmithGroup collaborated with Williams to show the playground and sprayground knitted together north of the central plaza. The play area is set into a landform that serves as the basis for a journey through a series of ecosystems. The central gathering plaza will also be improved with shelter and restroom renovations, and new pavement and planting beds that aesthetically tie into the Groves site design.

A variety of circulation enhancements improve access to the play/sprayground and both visually and physically connect the Core Area to the newly constructed Groves. The existing parking areas will be resurfaced and expanded to add approximately 50 stalls. The park entrance road from 116th Street to the parking lot will be reconfigured to improve vehicular circulation and gain back open space for ecological enhancements and stormwater treatment.

In addition to the renovation of existing amenities, stormwater and outflow from the sprayground will be captured and treated in a bioswale and wet prairie landscape east of the playground.

For further discussion on the Schematic Design Plan, please see Section 3 of this document.



Playground / sprayground perspective



Core Area Improvements - Schematic Design Plan

ARCHITECTS

# 2.0 SITE INVESTIGATION AND ANALYSIS

## 2.1 BACKGROUND AND EXISTING AMENITIES

Historically agricultural lands since settlement of the area, the original 75 acres for West Park was purchased in 1997 and developed in three phases between 2000 and 2002 based on the 1999 West Park Site Master Plan. The park was expanded through the acquisition of adjacent property in 2003 (5 acres) and 2005 (40 acres), accounting for its current 120 acres.

The existing amenities at West Park include trails, parking, picnic shelters, a playground, a splash pad, a play/spray shelter, a native prairie maze, wetlands, boardwalks, the Jill Perelman Pavilion, and a nature playground at the newly constructed Groves. The existing structures and playground in the Core Area were designed in an agrarian style to represent the farming history of the site. The trail system includes crushed stone, concrete and asphalt paths which tie together the existing site amenities.



Picnic shelters





Playground and splash pad



Main shelter and restrooms



Boardwalk







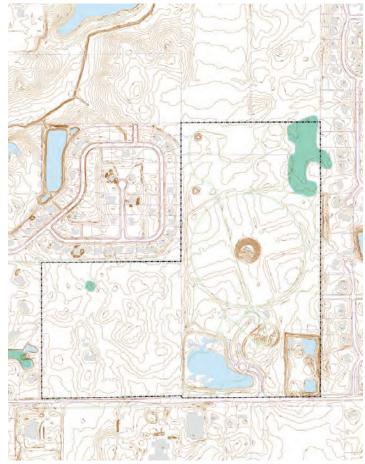


Nature playground and Jill Perelman Pavilion at the Groves

### 2.2 TOPOGRAPHY AND HYDROLOGY

West Park serves as a headwaters for regional drainage for the West Carmel area. The site is generally flat, with the exception of the man-made Jill's Hill in the center of the existing park.

The soils at West Park are primarily clay with a seasonal groundwater level shown to be as high as the existing ground surface for portions of the site. During construction of the Groves, large regions of soil were found not suitable for the construction of parking, roads and trails. The assumption for development of the Core is that all paved areas will require subgrade overexcavation or lime stabilization to provide suitable subgrades for construction.





#### Soil data

Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes Brookston silty clay loam, 0 to 2 percent slopes

Site topography

### 2.3 VEGETATION AND WETLANDS

During Master Plan development, West Park was evaluated for existing vegetation, along with educated theories on the historic vegetation patterns through the site. Pre-settlement ecosystems on site were determined to include sedge meadow/wet prairie, beech-maple woods, dry mesic woods, rough fringe and mesic prairie. Remnants of historic ecosystems can still be found in the northern woodland within both the original park and the 40 acre west expansion. While both of these areas have seen some degradation due to past development and/or farming, large trees still remain and the areas can be managed to restore the quality of these forest ecosystems.

As part of the Groves project, the existing wetlands were delineated as shown in the diagram to the right. Portions of these wetlands are mitigation areas legally designated to compensate for adverse impacts caused by off-site development projects.

Several areas with mown lawn provide flexible programming space. CCPR has also worked over several years to restore native prairie to much of the open areas of the park.



Wetland areas

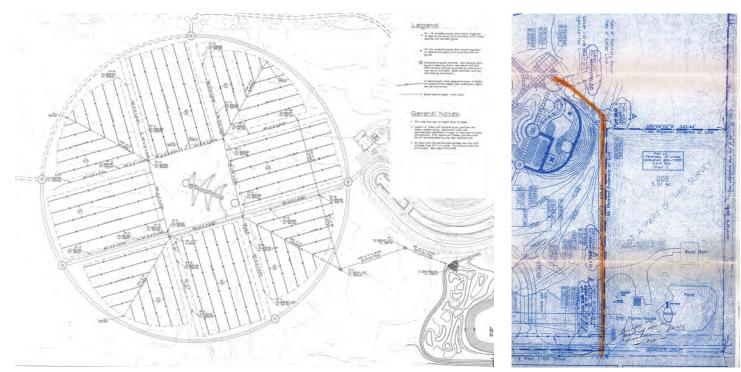


West Park vegetation includes mown lawn, wetland and native prairie



### 2.4 UTILITIES

The existing utility infrastructure includes electrical, water, stormwater and sanitary sewer. The record drawings below show that Jill's Hill includes an extensive underdrain system that connects to the detention pond. The sanitary sewer and water utilities that serve the restroom both run south to 116th Street just east of the existing playground area. The existing spray pad drains into the parking lot bioswale where it undergoes phytoremediation before entering the detention pond.



Underdrain system surrounding Jill's Hill

Water and sanitary sewer utilities

# **3.0 SCHEMATIC PLAN DEVELOPMENT**

The West Park Schematic Plan focuses on three main areas:

- The renovation of the playground, sprayground and central gathering area.
- Connecting the newly constructed Groves and Core Area.
- Treatment of stormwater and sprayground effluent through green infrastructure.

Please refer to full-size plan sheets Layout and Materials Plan CS100 and Playground and Sprayground Enlargement CS101 for additional information.

### **3.1 SITE CIRCULATION**

The Schematic Plan identifies a network of asphalt and concrete trails that improve accessibility and connect the Core Area improvements to the existing site amenities.

A culvert will be required where the connector road crosses existing wetlands between the Groves and Core Area. The walls will be visually unobtrusive and masked by wetland vegetation most of the year. The pedestrian and vehicular guardrail at the top of the crossing will match the detail at the Groves. An asphalt trail is shown south of the existing detention pond along 116th Street and is required as part of the City perimeter trail program.

Access to the Core Area site amenities will be improved through parking and entry road layout adjustments. The existing parking lot will be resurfaced and expanded to add approximately 50 paved stalls in what is currenlty a turf overflow parking area. The park entry road from 116th Street will be reconfigured to gain back open space for ecological enhancements. This will be achieved by combining the two existing one-way roads into a single two-way entrance on the east side of West Park.



Vehicular and pedestrian guardrails at the Groves



Concrete trail



Asphalt trail



Core Area Improvements - Schematic Design Plan

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### **3.2 STORMWATER AND SANITARY SEWER**

SmithGroup met with the City of Carmel Engineering Department and TriCo Regional Sewer Utility during the playground/sprayground design workshop to discuss stormwater management and sprayground discharge. There is an 8<sup>°</sup> sanitary sewer utility running north to south along the east edge of the existing playground. There is a 6<sup>°</sup> service connection into the restroom. TriCo would prefer that the sprayground effluent is not directed into the sanitary line. TriCo will issue a permit from the final bid plans and should not require additional fees because the existing building was already permitted.

Carmel Engineering stated they would prefer that the sprayground effluent is directed into the sanitary system because it comes in contact with humans. If discharged as stormwater, the sprayground water would need to be treated with sand or other comparable filtration systems. Additionally, Carmel Engineering is concerned about drainage to the south because the detention pond is currently over capacity.

The existing splash pad discharges into the parking lot bioswale for treatment before entering the detention pond. CCPR would prefer to continue treating the sprayground effluent through this green infrastructure approach.

In order to address the comments from TriCo and Carmel Engineering, SmithGroup is proposing the construction of a new bioswale and wet prairie on the east edge of the site to treat sprayground effluent and increase stormwater capacity.

Please refer to full-size drawing Utility Plan CU100 for additional information.

### **3.3 PLAZA / CENTRAL GATHERING SPACE**

The journey through landform, flora and fauna starts at Grasshopper Plaza. As you enter from the parking lot, the pavement, landscape and boulders tie into the character of the Groves. A shade structure extending into the playground mimics the wings of a butterfly. The adjacent playground and landforms take on the forms of grasses, leaves, and insects. Boulder features link the plaza to the aesthetics of the Groves.

### **3.4 SITE GRADING**

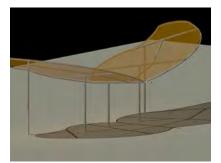
In order to reduce permitting requirements, no work is proposed within the wetland mitigation boundaries. In order to construct the connector road, less than 10,000 square feet of delineated wetlands will be impacted. Site grading will match existing topography as possible except at the playground, sprayground, and proposed bioswale and wet prairie areas.

The play/sprayground design focuses on the journey through the landforms and the corresponding ecosystems. Since West Park is relatively flat aside from Jill's Hill, the proposed landforms will need to be created. The existing groundwater elevation discourages excavation to create topography, so the dramatic landforms will need to be built up using excavated material from the new stormwater features and imported material from off site.

Please refer to full-size drawing Grading Plan CG100 for additional information.



Example of playful landforms



Butterfly inspired shade structure for the playground by SolarShade (add alternate)



The Groves plaza space

### **3.5 PLANTING DESIGN**

The planting plan includes a mixture of decorative planting beds, native landscape and flexible lawn space as shown in the schematic design plan on page 19 of this document. Turf lawn is located around the playground and shelters and will as act as an extension of these spaces. Native upland seed and wet prairie are located near the wetland crossing, adjacent to the existing detention pond and along the east edge of the site to treat sprayground effluent and stormwater. Native vegetation adjacent to the outdoor classroom space will provide learning opportunities for park visitors and students from the nearby schools.

Deciduous trees will accentuate the height of the 5-12 structure at the high point of the play area and build on the narrative of an upland forest play area.



Native upland prairie



Flexible lawn space









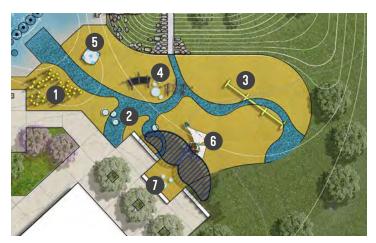
Wet prairie



Bioswale

### **3.6 PLAYGROUND**

The lower play area consists of prairie themed dry play structures and poured-in-place rubber surfacing. As you enter the playground from the plaza, large Robinia posts stained green will resemble blades of grass and distort the scale, so that kids view the space from the perspective of an insect. As you move further into the play area, swings (belt and toddler), an accessible spinner, and climbing structures fill the space. A 2-5 year-old structure is located directly north of the plaza in easy viewing range for parents. Note, several structures as indicated are currently add alternates to the base bid of the contract based on budget.

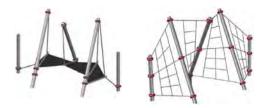


Lower prairie themed play area



Robinia posts as blades of grass (base bid)

1)



Climbing structures by Berliner (1 base bid; 1 add alternate)



6 2-5 year old play structure by Berliner (add alternate)



5 Accessible spinner by Playworld (base bid)



Music play by Playworld (5 congas; small and large cabasa) (add alternate)

Moving west and up the landform, visitors discover the Mounds and Mushrooms play area. Mounds with colors reminiscent of mushrooms create smaller landforms within the larger topography. Trampolines are built into the poured-in-place rubber play surfacing at low points. An accessible 5 foot tall embankment slide accommodates the 2-5 age group.

Moving up the sloping path, an accessible zipline can be incorporated into the topography.



8 Poured-in-place rubber mounds and 2-5 age group embankment slide (add alternate)



Mounds and mushrooms play area (add alternate)



**9** Trampolines by Berliner (add alternate)



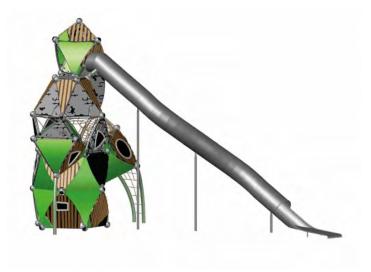


As visitors ascend from the Mounds and Mushrooms play area, they have two options to access the uplands forest play area--a concrete path or wheelchair accessible suspension bridge. A terraced parent seating area is located adjacent to the bridge abutment with views of the entire playground and sprayground.

The upland forest play area features a 25-foot tall structure with climbing elements and a slide. The pouredin-place rubber play surfacing incorporates forest themed design such as leaves and birds. A 12-foot tall embankment slide connects the upland forest play area to the lowlands play area.

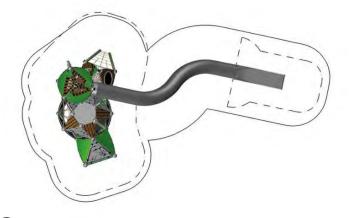


Upland forest play area





**12** Embankment slide (add alternate)



1 5-12 year old play structure by Berliner (base bid)

A series of retaining walls carve out space in the center of the playground for water play. The retaining walls can be categorized into terraced stone walls, bridge abutments, boulder creek edge, and sculpted concrete walls with built in water systems.







Boulder creek edge (base bid) 14



Retaining walls





**(15)** Sculpted concrete water walls (base bid)

### **3.7 SPRAYGROUND**

A new sprayground located seamlessly adjacent to the dry play elements will loosely maintain the linear character and natural color palette of the previous sprayground. The base ravine floor will be natural non-slip concrete.

The new location is nestled between dry play elements in the form of a sloped wet ravine between and around dry play elements. A rope bridge over this ravine completes this integration. A variety of vertical stone walls with interactive wall mounted rainfalls and waterfalls enhance the feel of this ravine.

Unlike the current spray pad, this wet play area is sloped north to south with the perimeter accessible route. The north "passive" end is an interpretive river origin experience with "Mystical Fun Embeds" and water source features flowing from outcroppings transitioning from turf lawn to wet play. This water outflows under the rope bridge and deltas to various collector outlets.

A variety of water experiences north, under and south of the rope bridge, and south progressing to water based play offer a variety of experiences within the nature and grassland based theme. "Rainfalls" are located along the east edge within the vertical and small bevel stone walls. The water can be experienced in a variety of active and passive ways by walking under or alongside wet or dry.

Throughout the sprayground are a variety of low foam geysers, medium height upstream jets, and a high overhead spray water features. Each group of features offer a variety of water experiences creating a labyrinth experience of discovery for a variety of young children, pre-teens and families.

At the top of the ravine are foam water cannons that project to the bottom of the ravine on the north end.

All water features can be custom programmed with a custom controller or manually activated to sequence water features to run at 50 to 60% capacity in various groupings for a variety of interactive experiences that can change over time.

Also, to the north is a gentle sloping fiberglass slide with themed rock work that allows a gentle safe slow descent down to the sprayground. This slide feature is included as an add alternate. This slide would appeal to younger aged elementary school children. Travel by means of gentle low flow potable water leading to a padded open terminus with a safety pad could lend itself to a child's self-guided activity within the whole nature based play approach to the entire dry and wet integrated play experience.

As with the previous spray pad, a potable water supply will be utilized and brought into the piping vault with a flange connection for attachment to the supply header. This piping vault will house the play feature control panel, supply distribution and valves, and supply pipes to play features. Power for the control and solenoid valves as well as any accent/security level lighting will be provided.

Water outflow will discharge south and ultimate discharge at the existing bioswale south of the parking drop off. This bioswale will serve to cleanse this greywater before discharging downstream. The goal is to maintain the existing potable water usage as much as possible with updated low flow water features and nozzles.

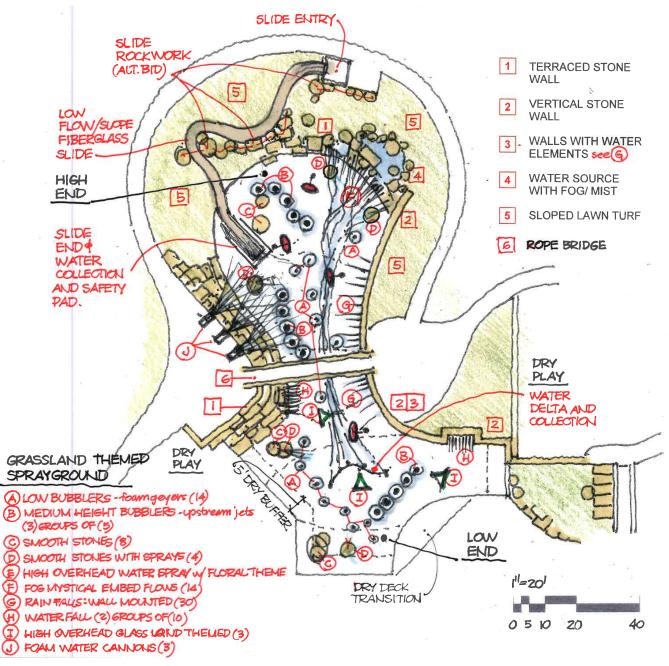






FIBERGLASS SLIDE





Sprayground illustrative plan

### **3.8 PICNIC SHELTERS**

Three rentable picnic shelters are shown near the existing silo structures on the west side of the Core Area. Prefabricated structures will be selected and enhanced to complement the aesthetic established in The Groves. Enhancements may include masonry around the column bases, similar to the East Woods at Central Park. Lawn areas will be located near the picnic shelters to provide flexible space for complementary activities.



Example of picnic shelter at Central Park East Woods (add alternate)



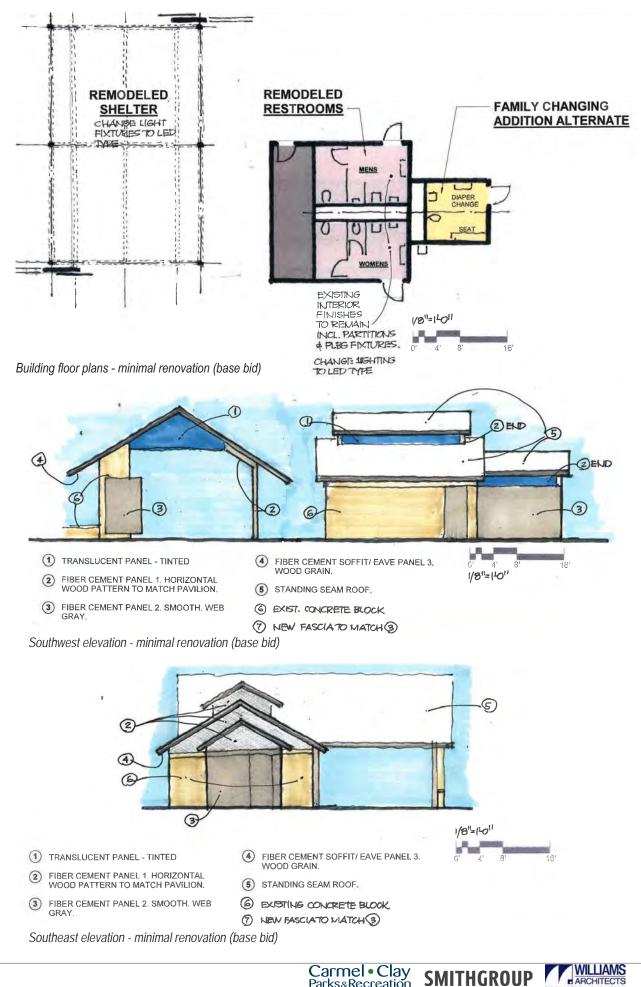
Flexible lawn adjacent to picnic shelter

### **3.9 STRUCTURES**

The existing Shelter and Restroom located between the parking drop-off and play area will be extensively remodeled on the exterior to update and unify the appearance to complement the Jill Perelman Pavilion that was recently completed this past year.

As part of the base budget, the existing roof structure of the picnic area and the existing decorative concrete masonry exterior of the restroom shall remain. Both structures will be reroofed in standing seam metal roofing. All fascias and roof overhangs will be clad in metal fascia and wood imprinted fiber cement board finish panels respectively. Above the concrete block and on the decorative Shelter Barn door will receive fiber cement panels. A Family Changing Room addition will be located adjacent to the southeast side of the existing Restrooms with similar fiber cement panels and translucent panels to match.

The restroom finishes, partitions, and plumbing fixtures shall be reused since they were recently completed. The interior and exterior lighting will be replaced with new equivalent led lighting at the existing restroom and shelter.

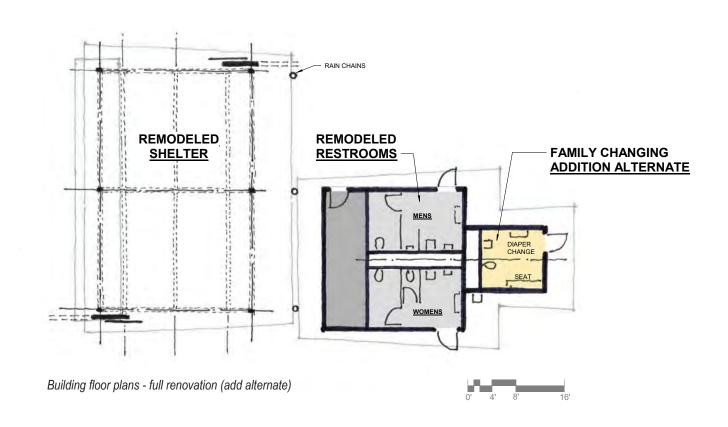


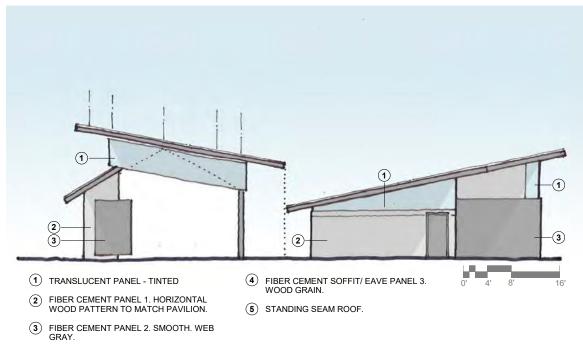
Interior finishes were recently completed in the form of toilet partitions, plumbing fixtures, and painted walls which will remain. By virtue of new roof form, interior and shelter lighting will be replaced with LED lighting.

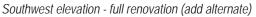
As part of more extensive exterior reworking, the Roof Structures will be altered and reshaped to unify the aesthetics with standing seam sloped metal roofing with the undersides of the entire existing Shelter being clad in wood imprinted fiber cement board finish. These new roof forms create an interpretive rain chain discharge that ultimately drains to the bioswale south of the parking lot drop-off.

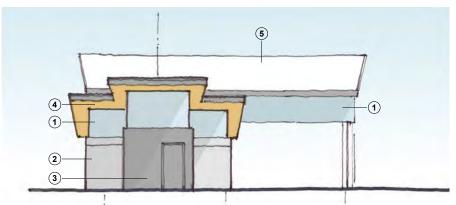
Natural diffused light in the Restrooms and a portion of the Shelter will be provided with translucent wall panels at clerestory height. New LED lighting, and any existing HVAC systems, if applicable, will utilize existing controls. Domestic water and sanitary sewer discharge will utilize existing piping as much as possible.

An existing transformer between the existing Shelter and Restroom to the north and east may need to be relocated.

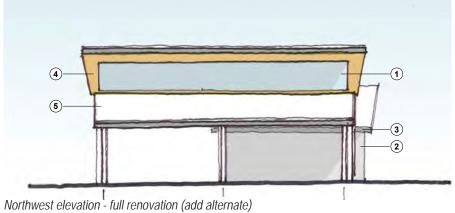








Southeast elevation - full renovation (add alternate)



# **5.0 REGULATORY AND PERMITTING SUMMARY**

### **5.1 WETLAND PERMITTING**

Implementing the schematic design for the West Park Core Area will require wetland permitting from the Indiana Department of Environmental Management (IDEM). A small area of delineated wetlands will be disturbed during construction of the connector road. Since the area of disturbance is less than 0.1 acre of wetlands, the project qualifies for a Regional General Permit (RGP) which does not require U.S. Army Corps of Engineers (USACE) notification. As part of the RGP, the Indiana Department of Natural Resources (IDNR), Division of Nature Preserves, will also need to be contacted to receive a listing of any endangered, threatened, or rare species near the project area.

### **5.2 UTILITY PERMITTING**

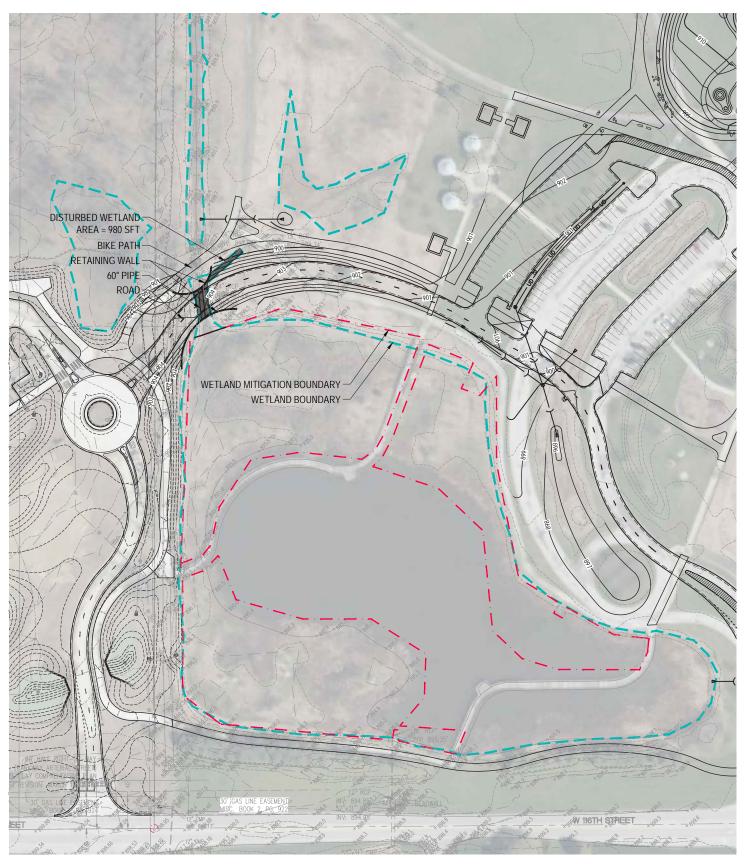
During the October 2019 playground and sprayground design workshop, SmithGroup met with the City of Carmel Engineering Department and TriCo Regional Sewer Utility. The City has concern about the drainage to the south, because the existing detention pond is currently over capacity. Additionally, the City feels that the sprayground effluent should go to the sanitary sewer system, because it comes in contact with humans. If it is to be discharged as stormwater, SmithGroup will need to show that it does not have additional contaminants and will need to treat it with sand or other comparable filtration systems.

TriCo Regional Sewer Utility would prefer that the sprayground effluent not be discharged into the sanitary sewer, so that it does not add unnecessary load on the sanitary treatment plant. TriCo will issue a permit from the final bid plans and will not require additional fees because the existing building was already permitted. Winter would be the best time to cut and cap the sanitary pipe if possible.

SmithGroup will continue discussions with the City and TriCo as the schematic plan moves into design development.

#### **5.3 BUILDING PERMITTING**

Building plan review will likely be required through the City of Carmel for the main shelter and restroom renovations, family restroom, and picnic shelters. It typically takes four to five weeks of review before a design release is issued through the local authority.



Wetland disturbance exhibit



