



**Lowell**  
North Carolina

LIVE · LOVE · LOWELL

RIVERFRONT MASTER  
PLAN

&

PUBLIC WORKS  
CONCEPTUAL DESIGN

07.20.2022



CREECH & ASSOCIATES + STEWART

## EXECUTIVE SUMMARY

IN 2021 CREECH & ASSOCIATES WAS SELECTED TO PERFORM ADVANCED PLANNING FOR THE PROPOSED RIVERFRONT PARK ON THE SITE ALONG THE SOUTH FORK RIVER. THIS PROPERTY ADJACENT TO POSTEN PARK WAS PART OF THE LOCAL INDUSTRY FOR MANY YEARS AND THE REMNANTS OF THE SITE OFFER A VARIETY OF STRUCTURES THAT CAN BE PRESERVED IN WHOLE OR PART TO BENEFIT THE PARK EXPERIENCE. THE SITE WILL BE SHARED BY THE PARK AND PUBLIC WORKS BUILDING THAT WILL OCCUPY 1/5TH OF THE TOTAL AREA. PASSIVE AND ACTIVE RECREATION COMBINED WITH 2 CONCERT VENUES AND WATERFRONT ACCESS WILL CREATE A UNIQUE AND VIBRANT EXPERIENCE FOR ALL AGES THAT WILL BRING NEW LIFE TO THIS BEAUTIFUL PROPERTY.

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THE FIRST STEP IN ANY LOGICAL DESIGN PROCESS IS TO UNDERSTAND THE CONTEXT OF YOUR CANVAS. THE INTENT OF THIS PORTION OF THE STUDY WAS TO COMPLETE A THOROUGH ANALYSIS OF THE EXISTING SITE TO PROVIDE VALUABLE INFORMATION TO GUIDE DECISION-MAKING. MUCH OF THE SAME INFORMATION WILL BE REQUIRED TO PROCEED WITH DESIGN DOCUMENTS, SO THIS INFORMATION ALSO PROVIDES DUE-DILIGENCE AND BASE MAPPING.

THE FORMER YORKSHIRE AMERICAS SITE WAS SELECTED AS THE LOCATION FOR THE PROJECT AND CONSISTS OF APPROXIMATELY 17 ACRES THAT WAS PREVIOUSLY USED AS A TEXTILE DYE MANUFACTURING PLANT FROM 1958 TO 2004. THE SITE IS LOCATED AT 1602 N. MAIN ST. IN LOWELL, NC AND IS PART OF AN ONGOING BROWNFIELD ASSESSMENT/REDEVELOPMENT PROCESS AND HAS BEEN UNDER INVESTIGATION BY DENR SINCE 1991 FOR SOIL AND GROUND-WATER CONTAMINATION. THE VARIOUS STUDIES CONDUCTED OVER SEVERAL YEARS HAVE CONCLUDED THAT THERE IS POTENTIAL SOIL CONTAMINATION UNDER SEVERAL OF THE EXISTING BUILDINGS, WHICH HAS CONTRIBUTED TO THE GROUND WATER IMPACTS NOTED THROUGHOUT THE STUDIES. ADDITIONAL OBSERVATION OF THIS AREA AND GROUND-WATER SAMPLING SHOULD CONTINUE AND BE DEFINED IN THE BROWNFIELD AGREEMENT.

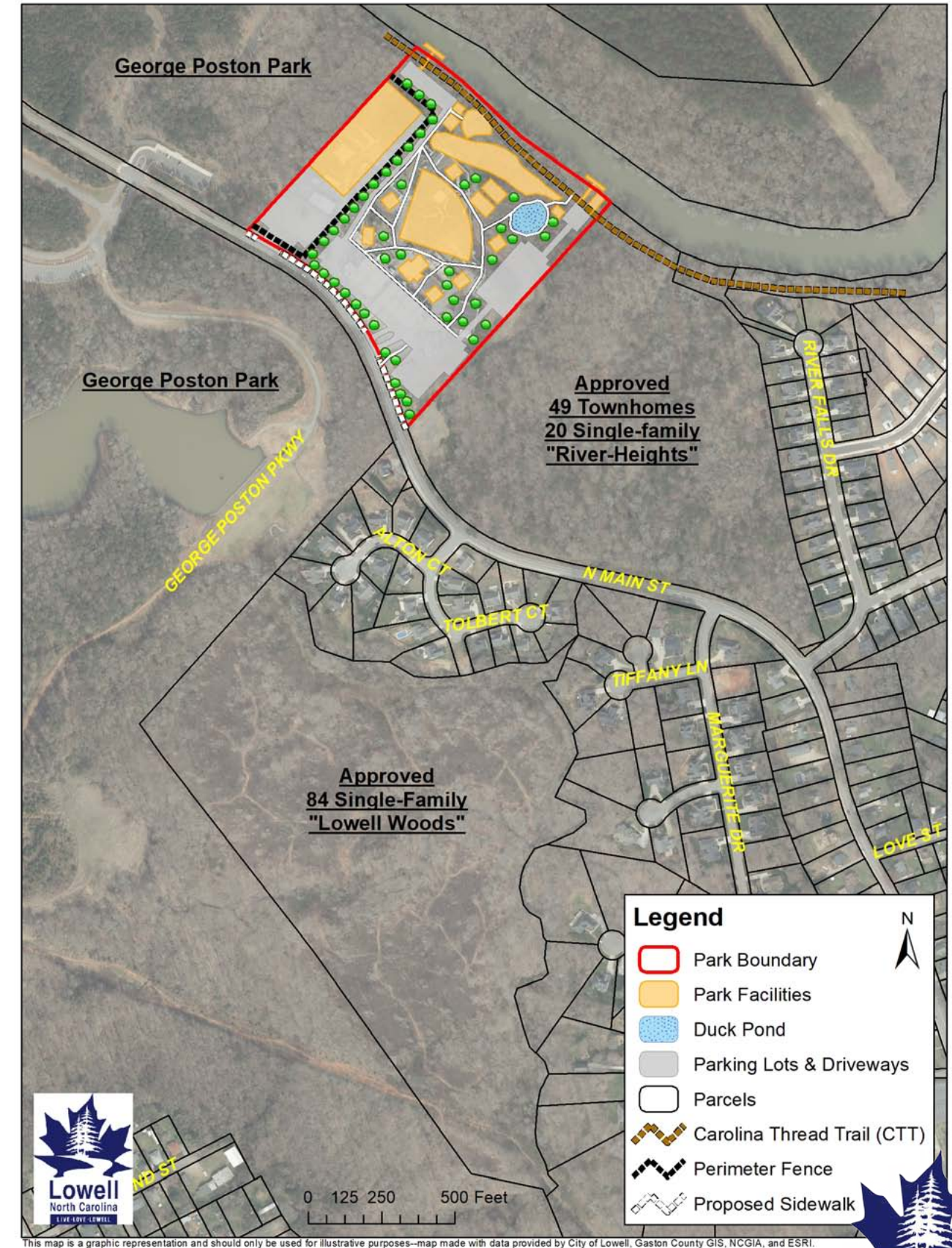
AS THE DESIGN TEAM EXAMINED THE AVAILABLE BUILDING INVENTORY RELATIVE TO DOCUMENTATION OF KNOWN CONTAMINANTS, A HANDFUL OF POTENTIAL REUSE BUILDINGS WERE IDENTIFIED. THESE BUILDINGS WERE ALSO SELECTED FOR THEIR AESTHETIC, HISTORICAL, AND LOCATIONAL ATTRIBUTES RELATED TO THE CONCEPTUAL PARK MASTER PLAN.

ADDITIONALLY, THE DESIGN TEAM EVALUATED THE TOPOGRAPHY TO FIND AREAS OF OPPORTUNITY THAT ALIGNED WITH THE PROGRAMMATIC ELEMENTS DESIRED BY THE CLIENT. A FOCUS ON MINIMAL GROUND DISTURBANCE ALSO GUIDED THE LOCATION OF ACTIVITIES AROUND THE SITE, HOPING TO AVOID POTENTIALLY CONTAMINATED SOIL AND ASSOCIATED VAPOR TRANSMISSION.

LASTLY, EXTERNAL CONNECTIONS WERE DEFINED AND ANALYZED IN HOPES TO HELP ORGANIZE INTERNAL CIRCULATION AND ACCESS TO THE VARIOUS SITE COMPONENTS.



# CONCEPT ORIGINS



This map is a graphic representation and should only be used for illustrative purposes—map made with data provided by City of Lowell, Gaston County GIS, NCGIA, and ESRI.

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# EXISTING CONDITIONS

Building Number	Building Description	Remarks
1	Administration Offices	-
2	Quality Assurance Laboratory	-
3	Shipping/Receiving/Warehouse	-
4	Grinding/Blending/Milling	-
5	Synthesis/Filterpress/Ovens	Azo Dyes
6	Boiler Room	-
7	Locker Room/Lunch Room	-
8	Warehouse	Eutectic Freeze Crystallization Processing
9	Synthesis/Liquid Packout	Acid Dyes
10	Warehouse/Whiteners	Urea Dyes
11	Training Room	Tint Department
12	Filterpress	-
13	Maintenance	-
15	Laboratory Flammable Storage	-
17	Waste Treatment Laboratory	-
18	Warehouse	Drum Storage
21	Forklift Shop	-
22	Clarifier Pump House	-
24	Sludge Filterpress	-
26	Flammable Storage	-
28	Waste Treatment Control Room	-
29	Neutralization Tank Pump House	-
30	Lift Station Switch Gear	-
31	Sludge Thickener Pump House	-
34	Waste Treatment Equipment Room	-



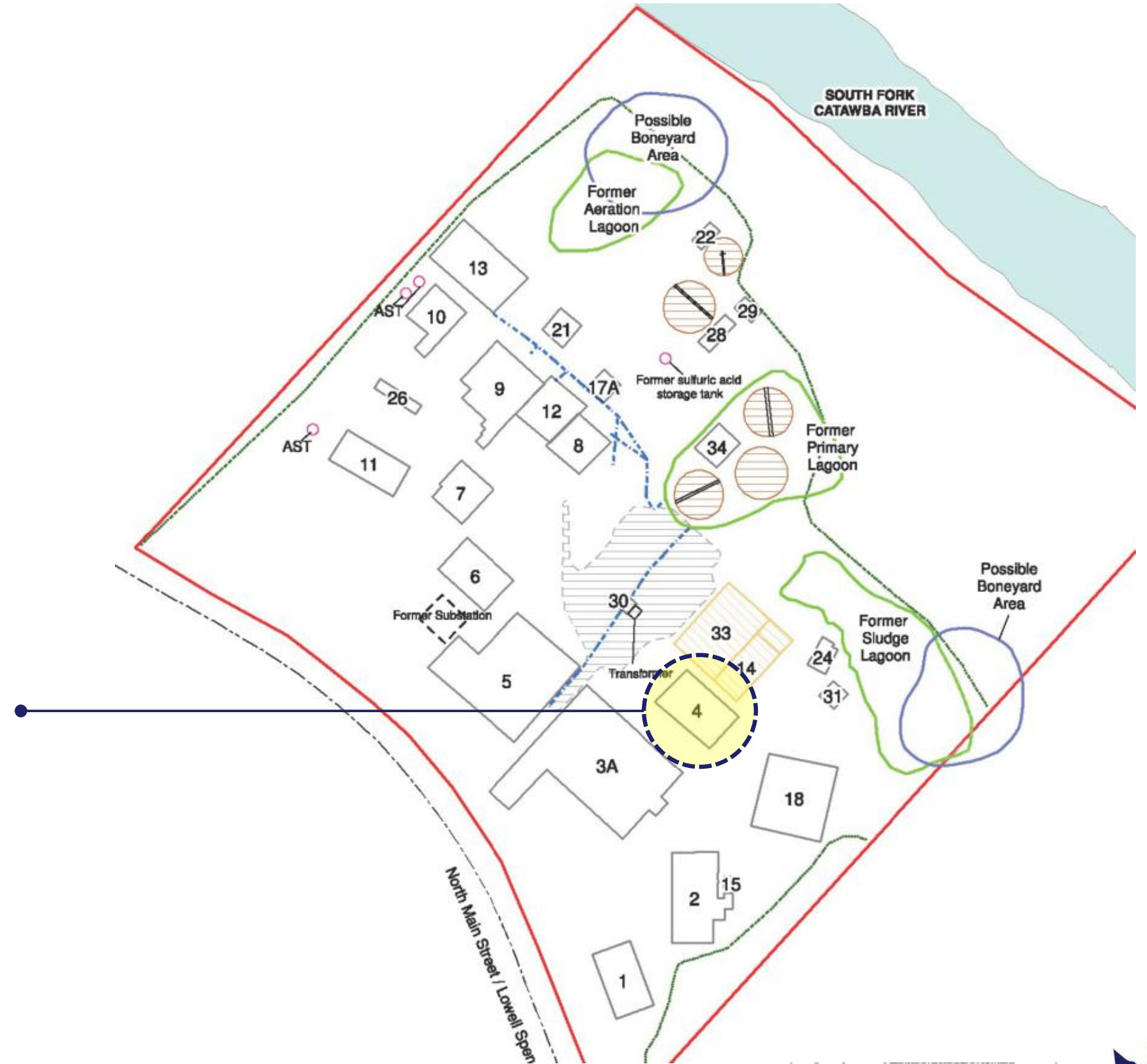
# E.C. - MILLING HOUSE



FRAMED VIEW OF SPENCER MOUNTAIN



END FACADES WITH LARGE OPENING



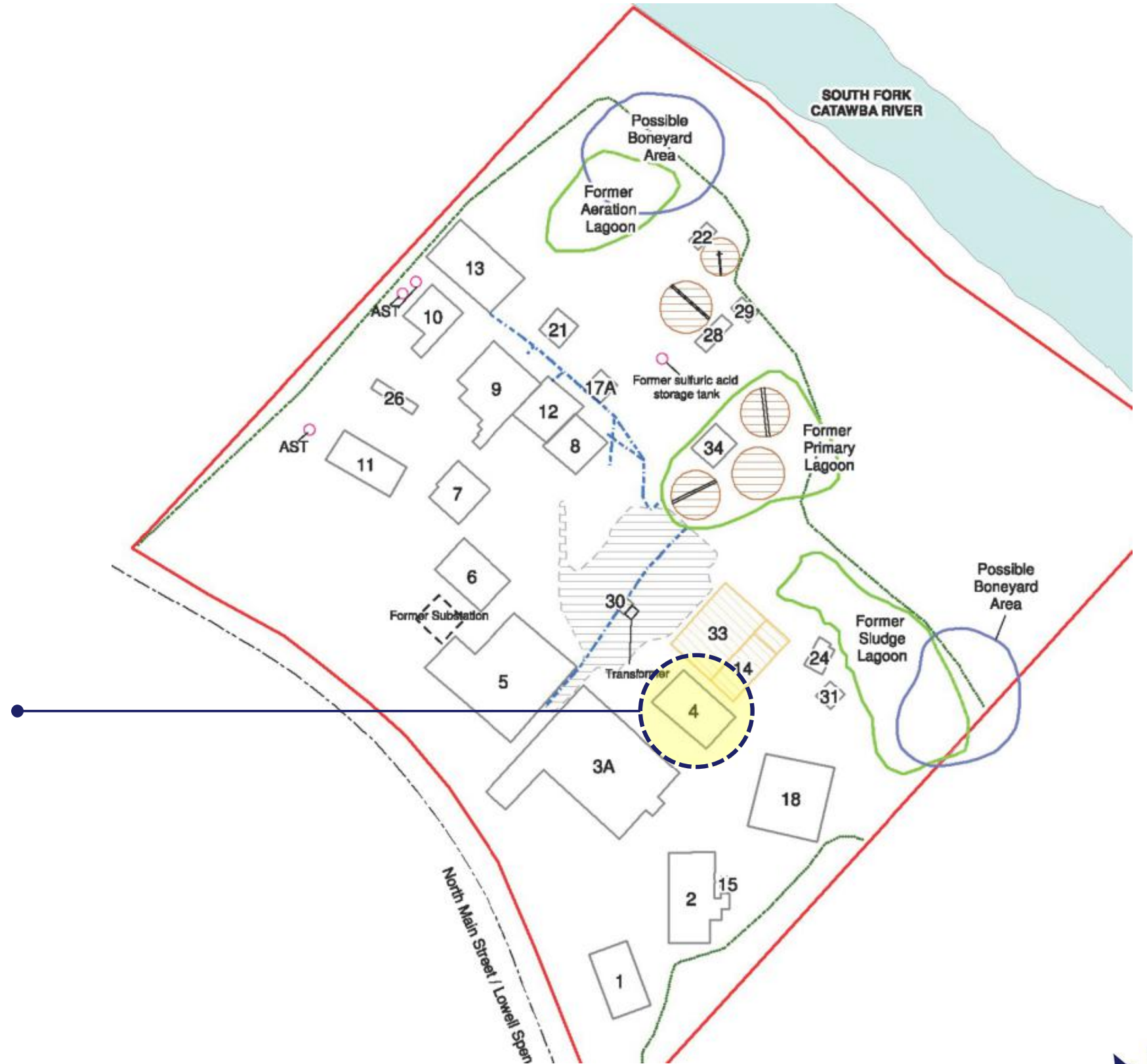
# E.C. - MILLING HOUSE



MILLING EQUIPMENT AS ART



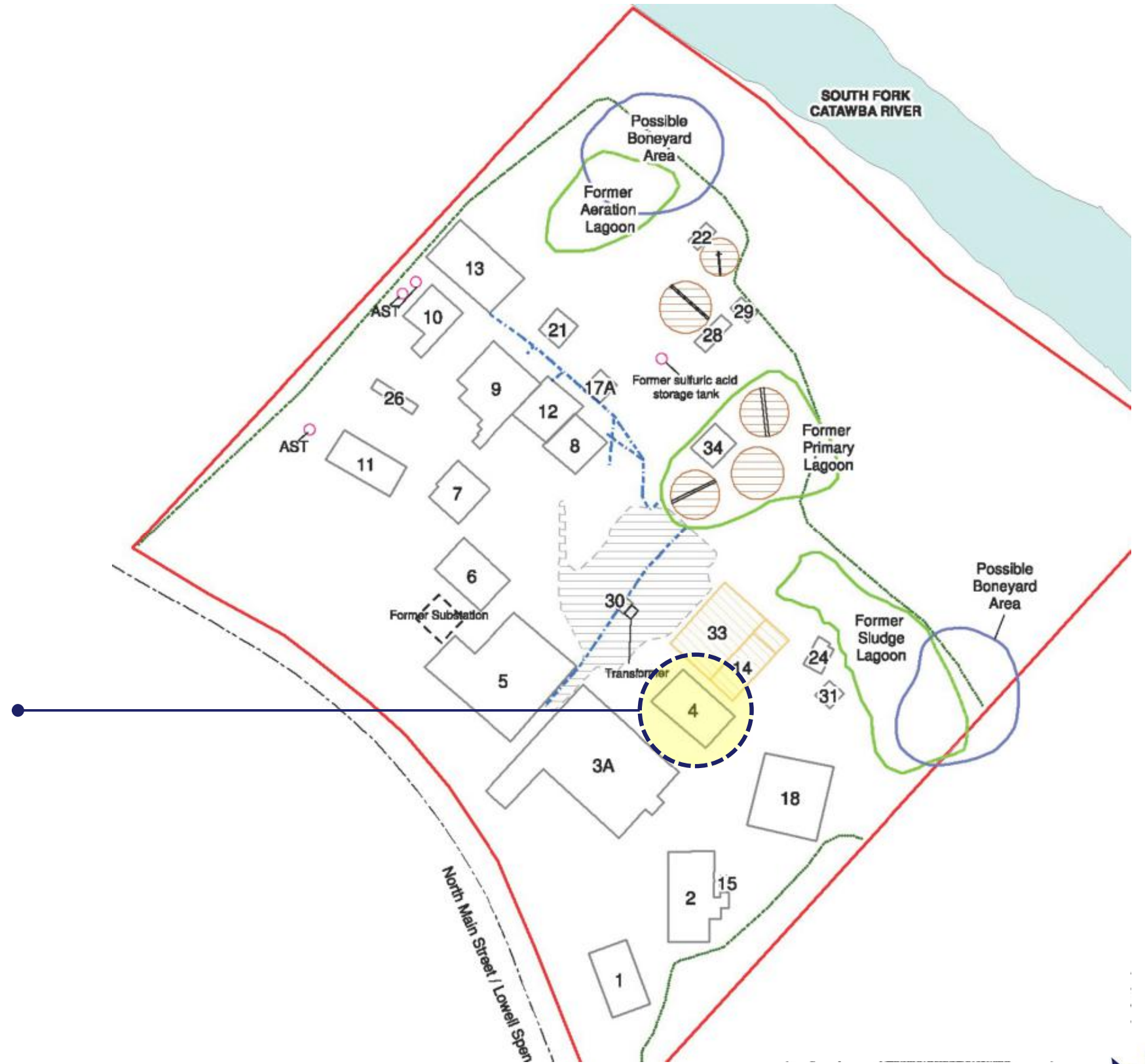
RETAINING WALL AND PLATFORM



# E.C. - MILLING HOUSE



ENVELOPE CAN BE OPENED FOR DAYLIGHT AND VIEWS





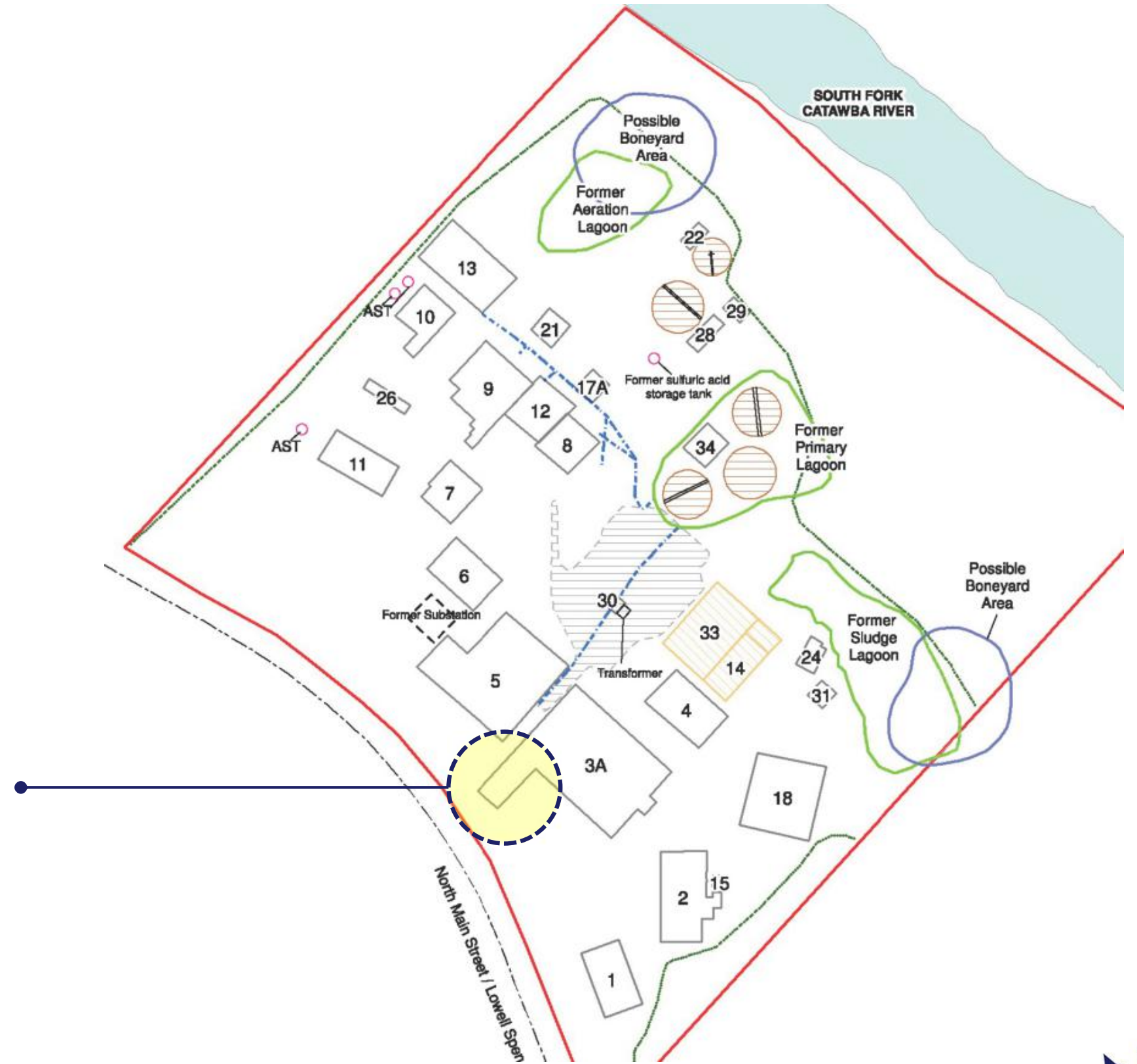
# E.C. - DOCK/STAGE



ELEVATED PLATFORM



OPEN TO LEVEL AREA



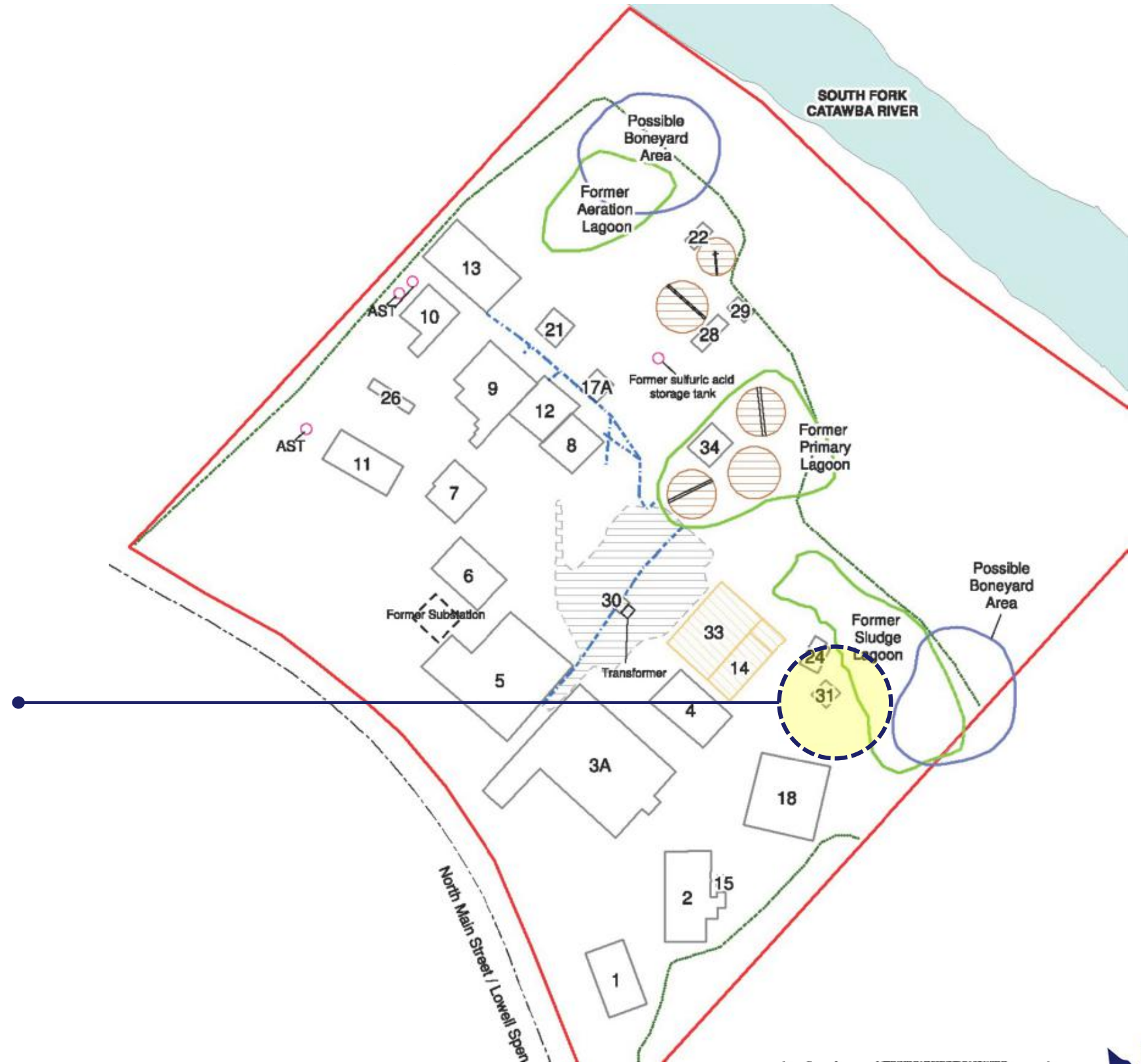
# E.C. - TOWER



ELEVATED VIEW OF MILLING HOUSE



ELEVATED VIEW OF TREE CANOPY



# BASE MAPS



ONE METHOD OFTEN EMPLOYED BY ARCHITECTS TO DISCUSS DESIGN CONCEPTS IS TO UTILIZE PRECEDENTS THAT CONVEY A SIMILAR APPROACH OR SOLUTION. THE RANGE OF PROPOSED ELEMENTS IN THE PARK DESIGN CONCEPT ARE DESCRIBED ON THE FOLLOWING PAGES WITH IMAGES INTENDED TO INSPIRE AND CREATE A COHESIVE DESIGN THROUGH PROGRAM AND MATERIAL. THERE ARE 4 CATEGORIES OF PRECEDENTS THAT PARALLEL THE PROJECT SCOPE AND OPPORTUNITY; PLAY AREAS, NETTING AND ROPES, A GRAND LAWN, AND EDUCATION.

A KEY COMPONENT OF PASSIVE PARK DESIGN IS A SIGNATURE PLAY AREA. THIS CAN OFTEN BECOME A DESTINATION IDENTIFIER FOR REGIONAL PATRONS THAT WANT TO GO BACK TO "THAT COOL PARK WITH THE TREEHOUSE PLAYGROUND". THESE AREAS CAN BE FUN AND SAFE ENVIRONMENTS THAT INSPIRE IMAGINATION AND OFFER A BACKDROP FOR FITNESS THAT RELATES TO THE OVERALL THEME. THEY CAN BE CRAFTED FOR UNIVERSAL ACCESS SO THAT PATRONS WITH DISABILITIES CAN SHARE IN THE EXPERIENCE. THEY SHOULD BE EASILY MAINTAINED AND DURABLE WITH A VARIETY OF SEATING FOR PARENTS WATCHING NEARBY. SIGNATURE PLAY AREAS HELP DEFINE WHAT MAKES A PARK SPECIAL.

AN EXTENSION OF PLAY AREAS IS THE CONCEPT OF USING NETTING AND ROPES IN A SAFE ENVIRONMENT THAT TAKES ADVANTAGE OF THE TERRAIN AND EXISTING CONDITIONS. THERE ARE A WIDE VARIETY OF EXCITING, CHALLENGING, AND SAFE NETTING FOR CHILD PLAY THAT PROVIDES A VERY UNIQUE EXPERIENCE FOR KIDS AND ADULTS. THE AREA BELOW IS PADDED FOR SAFETY AND CLEARED FROM USE AS AN ADDED PRECAUTION THAT INSTILLS CONFIDENCE TO MOVE FARTHER AWAY FROM THE EDGE. ANOTHER RELATED IDEA A LOW ROPES COURSE FOR CHILDREN THAT TRAVERSES THE HILLSIDE IN ROUTE TO THE RIVERFRONT. THIS ADDS ANOTHER SIGNATURE PARK ELEMENT TO BRING PATRONS BACK TO THE VENUE.

ONE OF THE MOST FLEXIBLE AND INEXPENSIVE SPACES FOUND IN PARK DESIGN IS THE GRAND LAWN. THIS CONSISTS OF A WELL-DEFINED EXPANSE OF GRASS THAT CAN BE USED FOR PASSIVE AND ACTIVE RECREATION, GROUP EXERCISE, OR SIMPLY LOUNGING IN THE SUN. THESE AREAS ARE OFTEN SURROUNDED WITH PAVED SURFACE AND PROVIDE SHADE ALONG THE PERIMETER TO EXTEND USER COMFORT. THE SECOND LEVEL OF EXISTING GRADE ON THIS SITE CREATES A NATURAL OPPORTUNITY FOR THIS AMENITY THAT CAN BE DEFINED BY BUILDING EDGES AND NEW SHADE STRUCTURES.

THE FOURTH CATEGORY OF EDUCATING PATRONS HAS MANY RICH OPPORTUNITIES CONNECTED TO THE INDUSTRY THAT WAS PREVIOUSLY CONDUCTED ON THIS PROPERTY. THE RANGE OF PROCESSES AND THE MACHINES DESIGNED TO EXECUTE THEM IS VISUALLY INTERESTING AND TAKES ON THE CHARACTER OF ARTIFACT IF DISPLAYED PROPERLY. IN ADDITION THE SITE PROVIDES A CANVAS FOR LEARNING ABOUT PLANT AND TREE SPECIES, NATIVE WILDLIFE, THE ECOSYSTEM OF THE RIVERFRONT AND FOREST, AND SUSTAINABILITY. THESE ITEMS ARE LOW-HANGING FRUIT THAT CAN BE EASILY IMPLEMENTED, AFFORDABLE, AND PHASED IN AS THE PARK EVOLVES OVER TIME. INCLUDING DISPLAYS ON THE FORMER INDUSTRY WILL ALSO GIVE THOSE LOCAL RESIDENTS WHO WORKED THERE TO REMINISCE AND SHARE THEIR EXPERIENCES WITH OTHERS. ALL OF THESE CATEGORIES OF PRECEDENTS WERE EMPLOYED AS DESIGN DRIVERS FOR THE PARK CONCEPTS.

An aerial site plan of a park, overlaid with a semi-transparent image of a treehouse playground. The plan shows various zones: a parking lot on the left, a large lawn area in the center, a play area with a treehouse structure on the right, and a riverfront area at the bottom. The text "PRECEDENT STUDY" is centered over the plan.

# PRECEDENT STUDY

# NETTING & ROPES



# PLAY AREAS



# LAWN



# EDUCATION





THE PARK MASTER PLAN IS A BOLD VISION FOR EXPANDED RECREATION FOR THE TOWN OF LOWELL. THE REDEVELOPMENT OF AN ABANDONED MILL FACILITY PROVIDES A UNIQUE OPPORTUNITY TO REPURPOSE AND PRESERVE A PART OF THE REGIONAL HERITAGE. KEY PARTS OF THE SPRAWLING MILL COMPLEX WILL BE RETAINED, AND THEIR FUNCTIONS REIMAGINED AS THE NEW PARK IS SHAPED WITHIN THEIR FRAMEWORK. THE PARK PROGRAM WAS DEVELOPED BY TOWN STAFF THROUGH INTERNAL VISIONING, STAKEHOLDER DISCUSSIONS, AND COMMUNITY INPUT. WHILE MOST OF THE PARK IS PASSIVE THE ENTERTAINMENT ASPECTS PROVIDE OPPORTUNITIES FOR HIGHLY PROGRAMMED EVENTS.

THE SITE IS ADJACENT TO THE SOUTH FORK RIVER. THE LAND HAS BEEN SHAPED INTO THREE DEVELOPMENT TERRACES AS THE MILL EXPANDED OVER TIME. THE PARK PLAN TAKES ADVANTAGE OF THE EXISTING TOPOGRAPHY WHICH ALLOWS DEVELOPMENT TO WORK WITHIN TIGHT GRADING CRITERIA NECESSITATED BY THE CONDITIONS OF THE BROWNFIELD REDEVELOPMENT AGREEMENT. AS A RESULT, THE PARK MAKES A STRONG PRESENTATION TO NORTH MAIN STREET WITH PLAYGROUNDS, THE RENOVATED “ DOCK STAGE”, AND ACCESSIBLE PARKING. THE MIDDLE TERRACE FEATURES THE REPURPOSED MILLING BUILDING THAT ANCHORS A NEW ACTIVITIES LAWN AND VISTAS ACROSS THE TREE CANOPY AND TO SPENCER MOUNTAIN. THE LOWER TERRACE PROVIDES AN IDEAL LOCATION FOR THE LARGE PERFORMANCE STAGE PROJECTING NORTHEAST TO THE RIVER BELOW.

THE FRONTAGE ALONG THE SOUTH FORK RIVER IS THE NORTHERN EDGE OF THE SITE; IT IS SEPARATED FROM THE DEVELOPED AREAS OF THE PARK BY MATURE HARDWOOD FORESTS AND STEEP TERRAIN. THE LOW ELEVATION BOARDWALK PROVIDES AN ACCESSIBLE PATH TO THE FISHING PIER WHILE PRESERVING THE TREE CANOPY AND MINIMIZING GRADING ALONG THE SLOPES. A STEEPER GRAVEL TRAIL ALLOWS PORTAGE OF CANOE AND KAYAK TO THE NEW LAUNCH AND ALLOWS FOR MAINTENANCE ACCESS. A RIVERSIDE MULTIUSE TRAIL WILL RUN THE EXTENT OF THE PARCEL AND WILL BE A PART OF THE CAROLINA THREAD TRAIL LINKING LOCAL PARKS, NEIGHBORHOODS, AND TOWNS ALONG THE RIVER.

The background of the page is an aerial photograph of a park site, overlaid with semi-transparent architectural drawings. These drawings include building footprints, parking lots with cars, walkways, and landscaped areas with trees. The text 'MASTER PLAN CONCEPTS' is centered over the middle of the image. The word 'MASTER PLAN' is in a large, dark serif font, and 'CONCEPTS' is in a slightly smaller, similar font below it. A vertical line is positioned to the left of the text.

# MASTER PLAN CONCEPTS

# MASTER PLAN - CONCEPT A



EXISTING MILL HOUSE TO REMAIN

EXISTING SLUDGE TOWER TO REMAIN

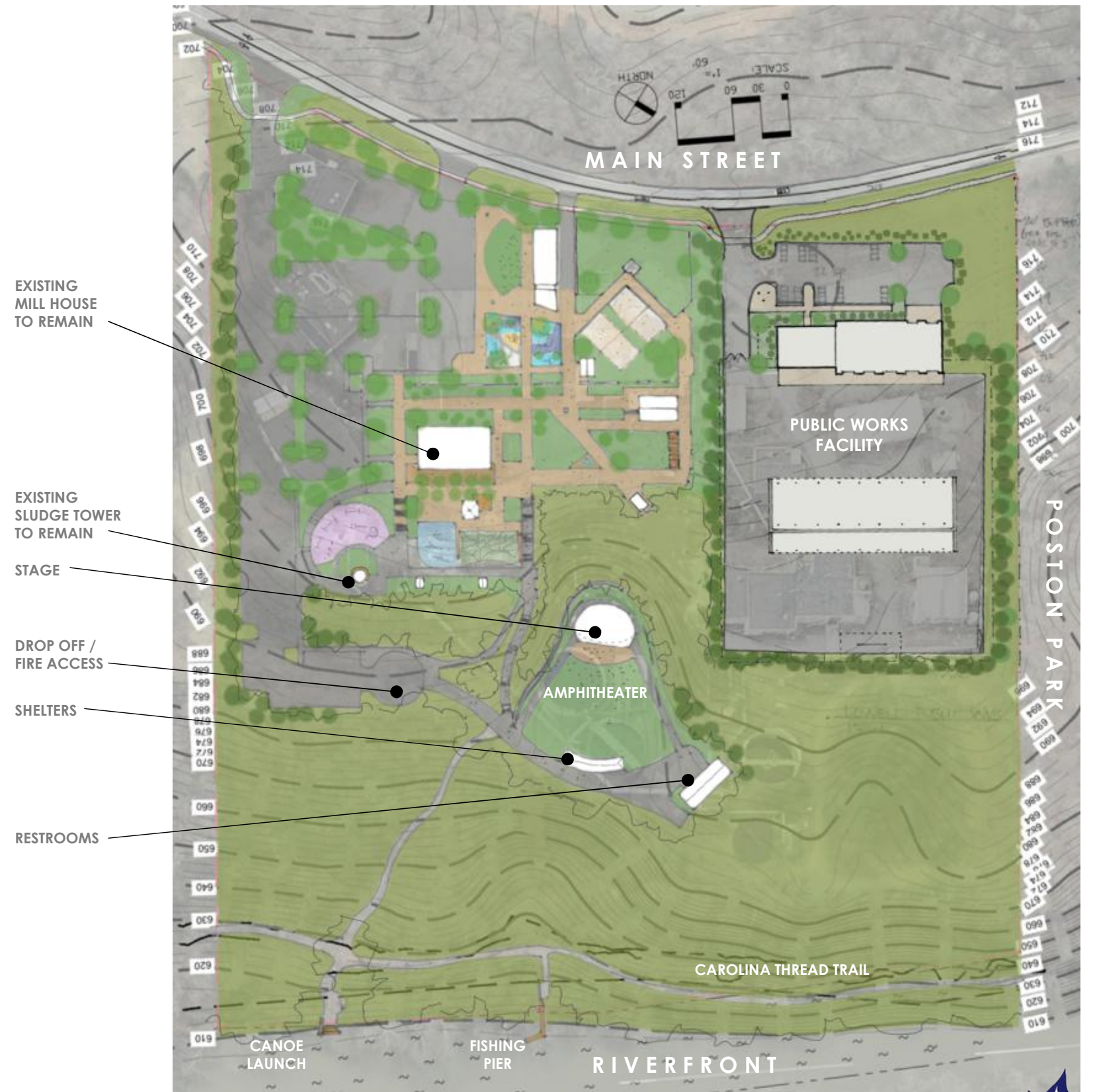
SHELTERS

DROP OFF / FIRE ACCESS

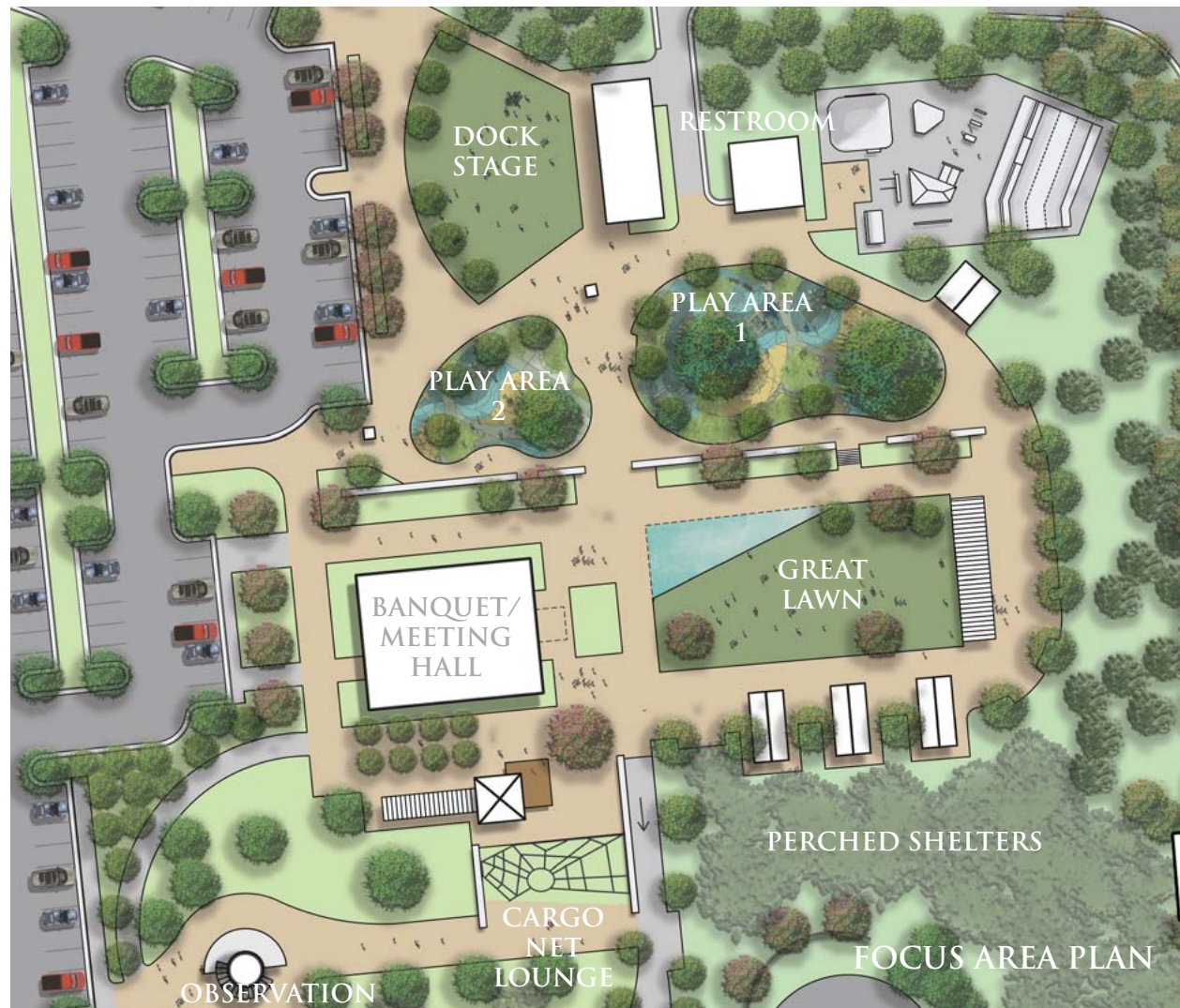
STAGE / RESTROOMS / STORAGE / SUPPORT LOT



# MASTER PLAN - CONCEPT B



# MASTER PLAN - CONCEPT C (FINAL)



SKATE PARK

EXISTING MILL HOUSE TO REMAIN

SHELTERS

BUILDING REUSE-PW STORAGE

EXISTING SLUDGE TOWER TO REMAIN

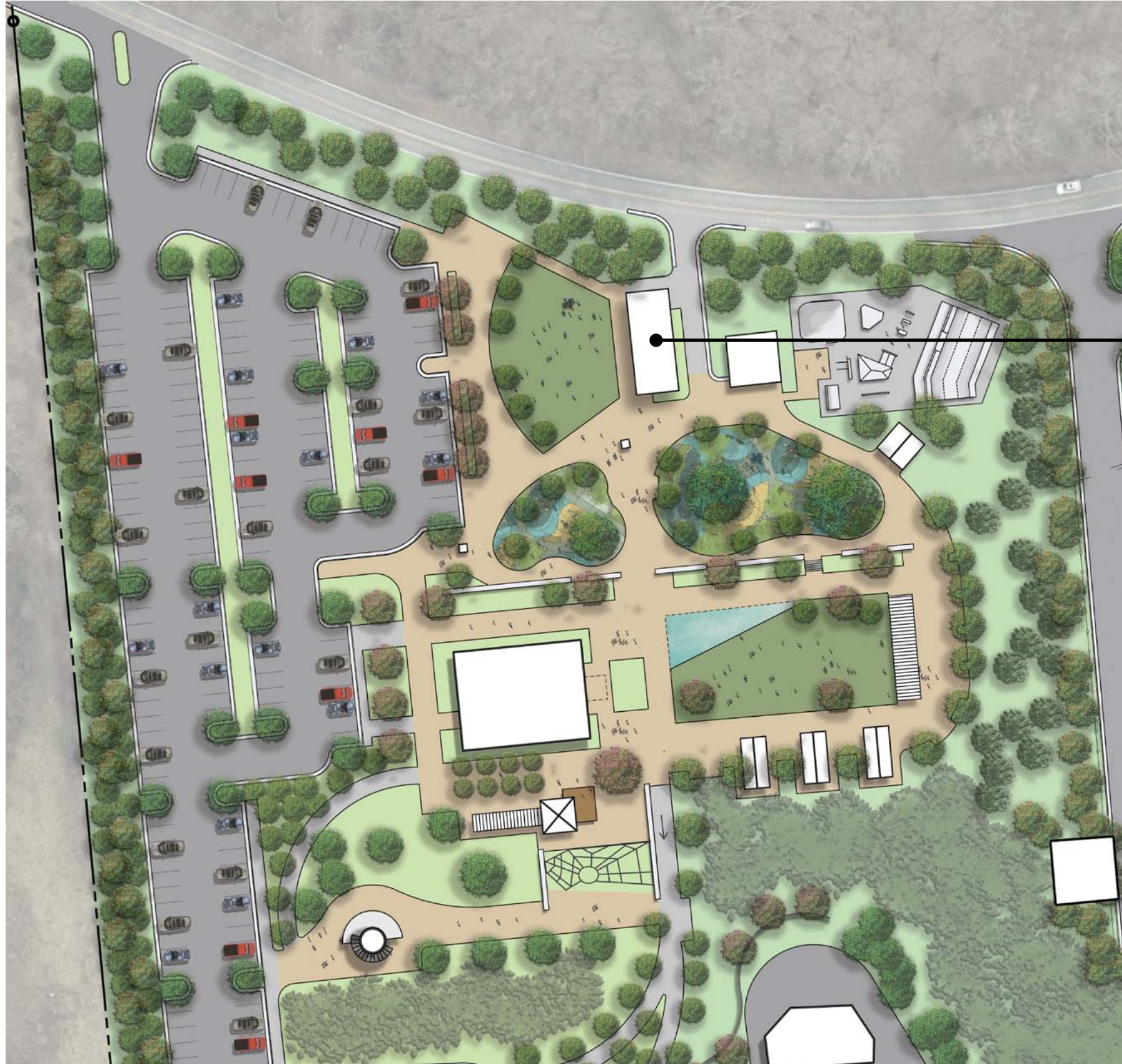
DROP OFF/FIRE ACCESS

STAGE/RESTROOMS/STORAGE/SUPPORT LOT

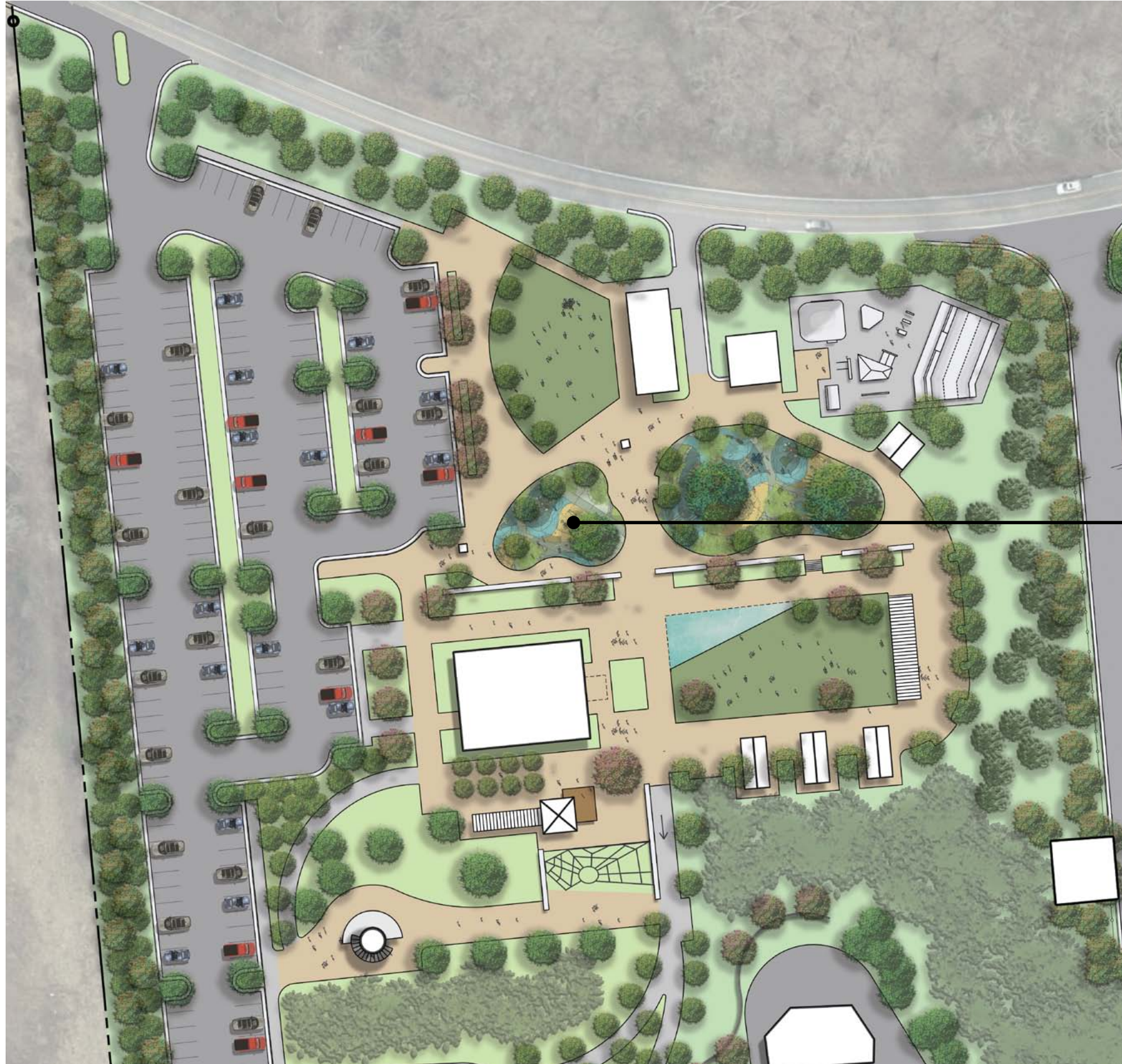
BEACH VOLLEYBALL



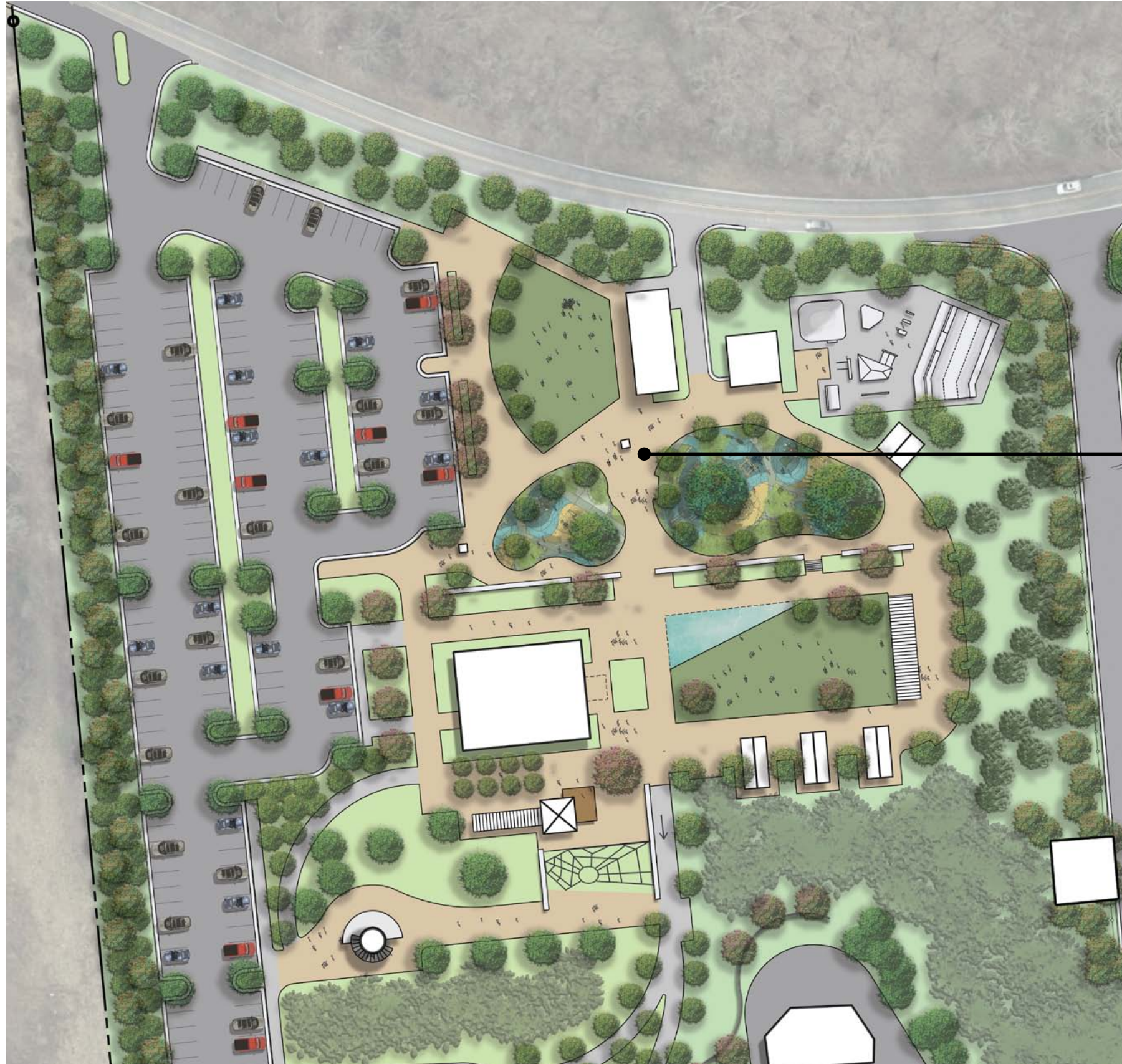
# CONCEPT C - DOCK STAGE



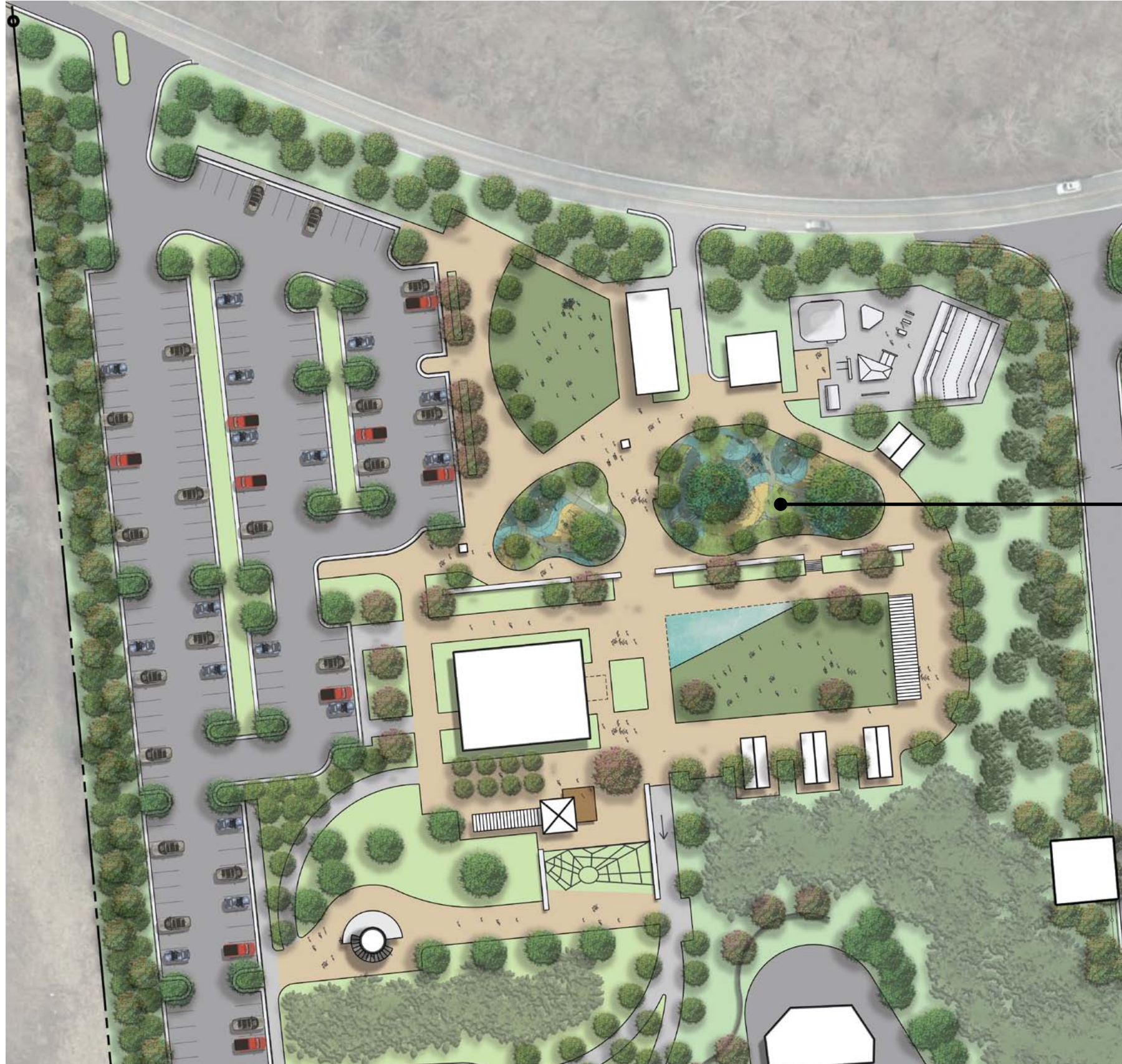
# CONCEPT C - TEEN ORIENTED PLAYGROUND



# CONCEPT C - PLAZA SEATING

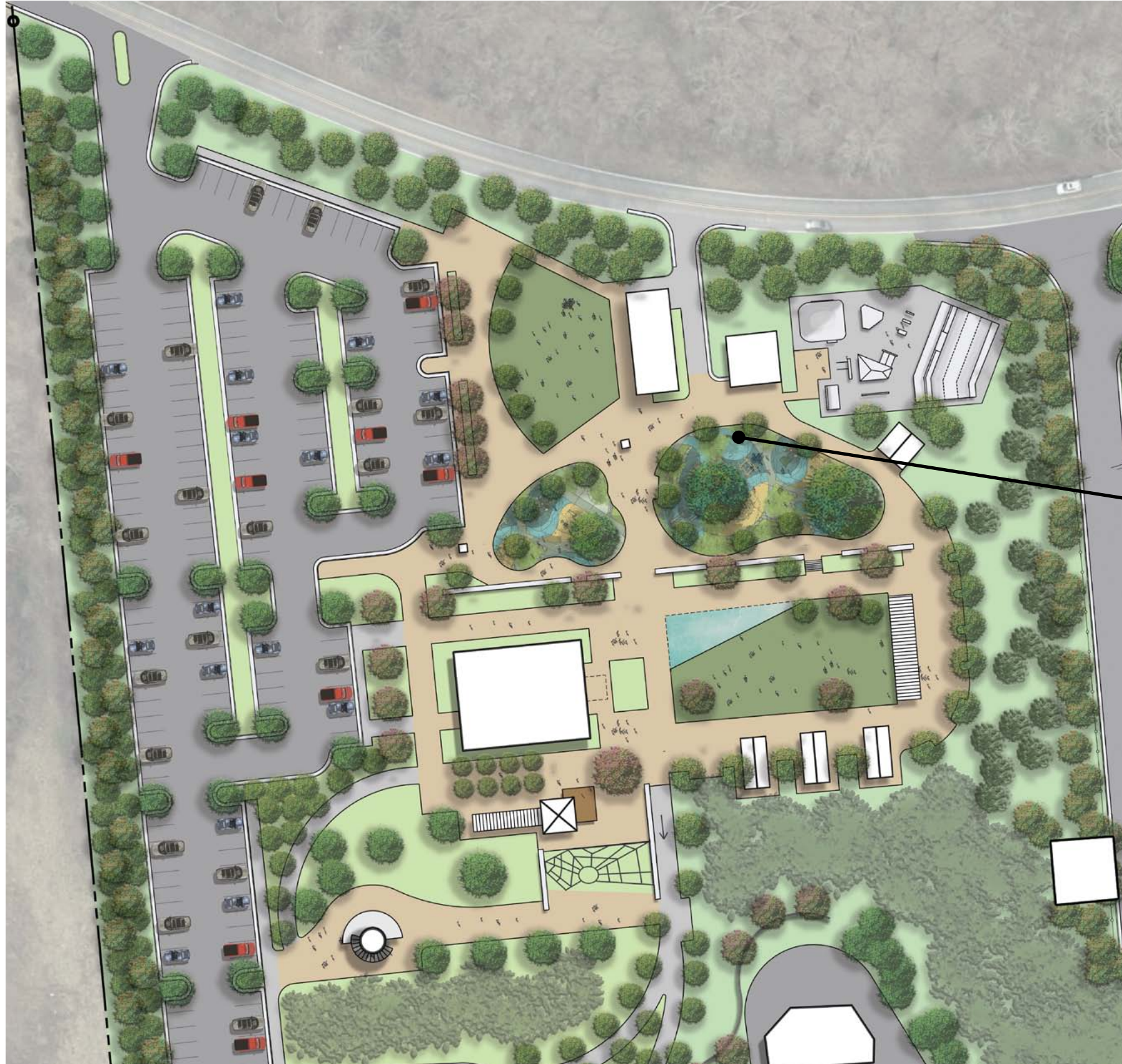


# CONCEPT C - NATURAL MATERIALS PLAYGROUND

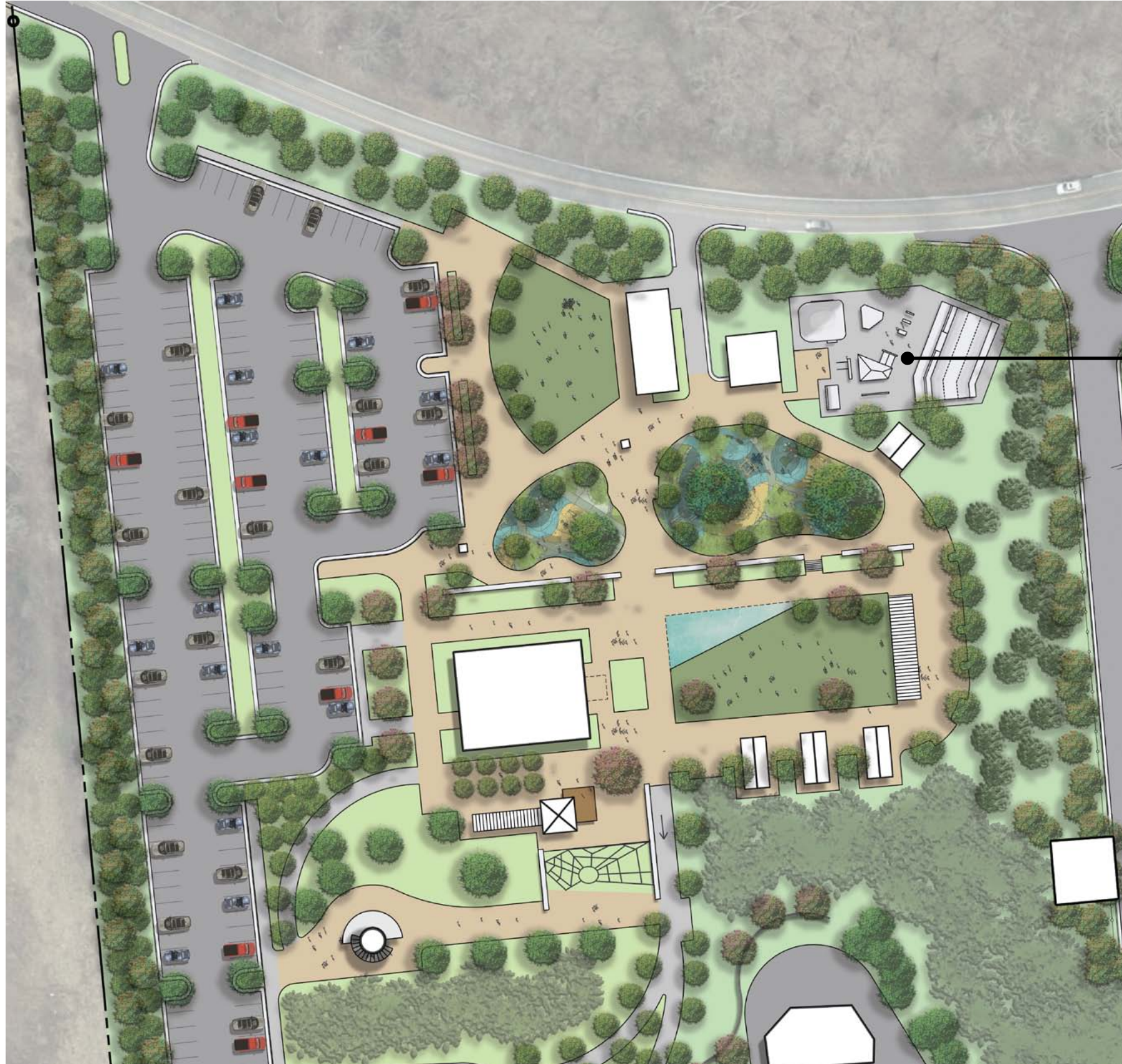




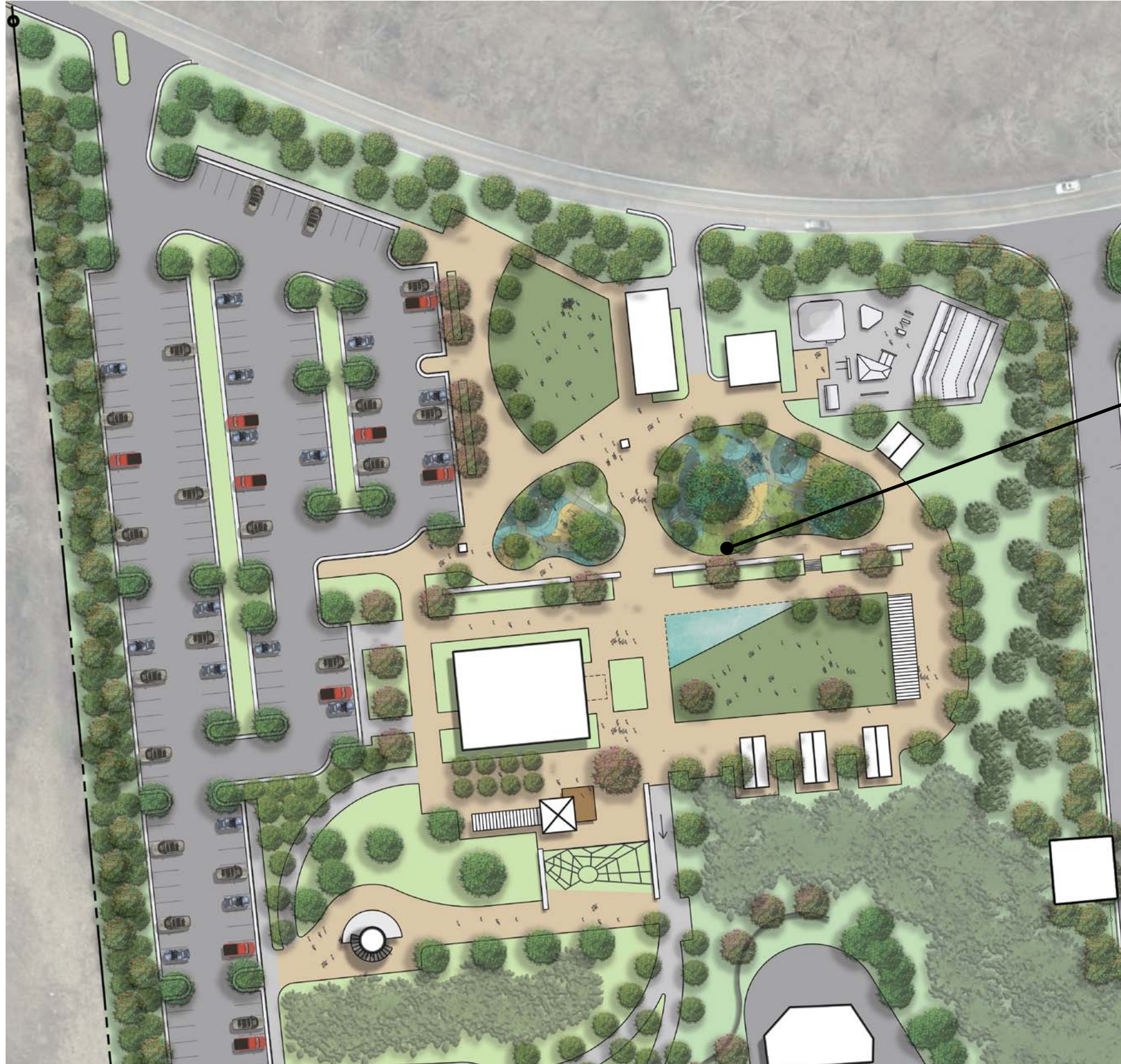
# CONCEPT C - TODDLER PLAYGROUND



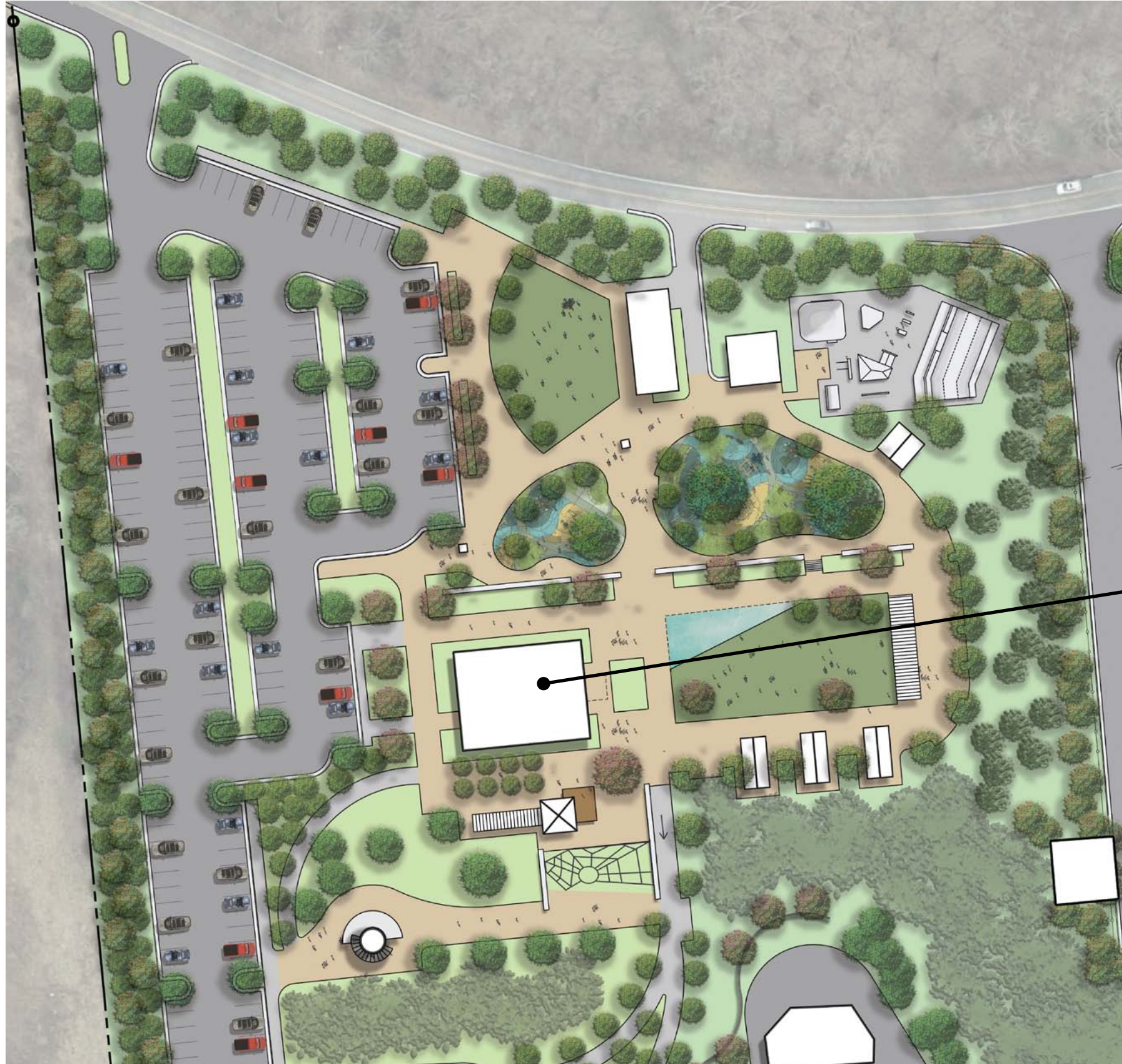
# CONCEPT C - SKATE PARK



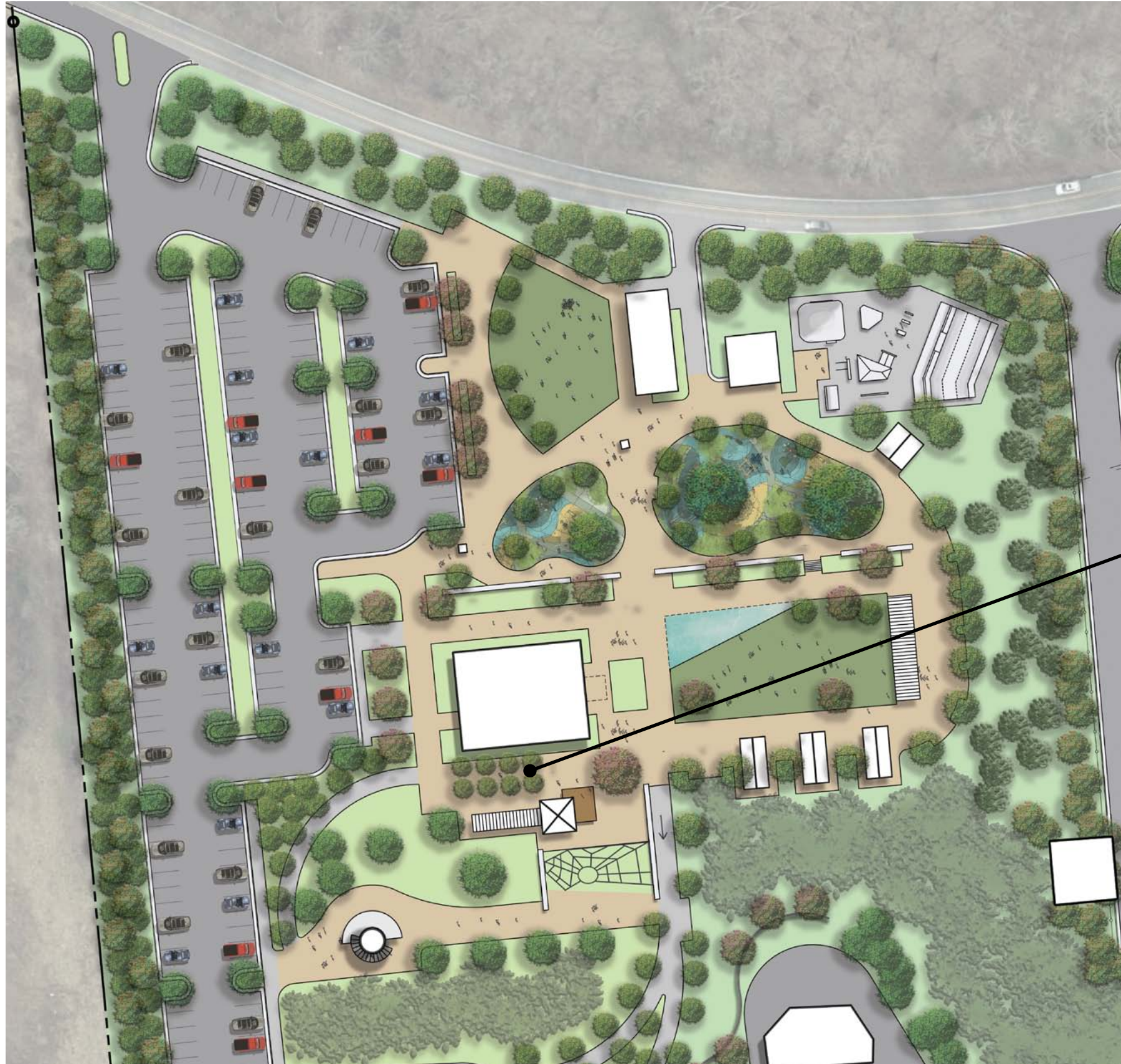
# CONCEPT C - SENSORY PLAY



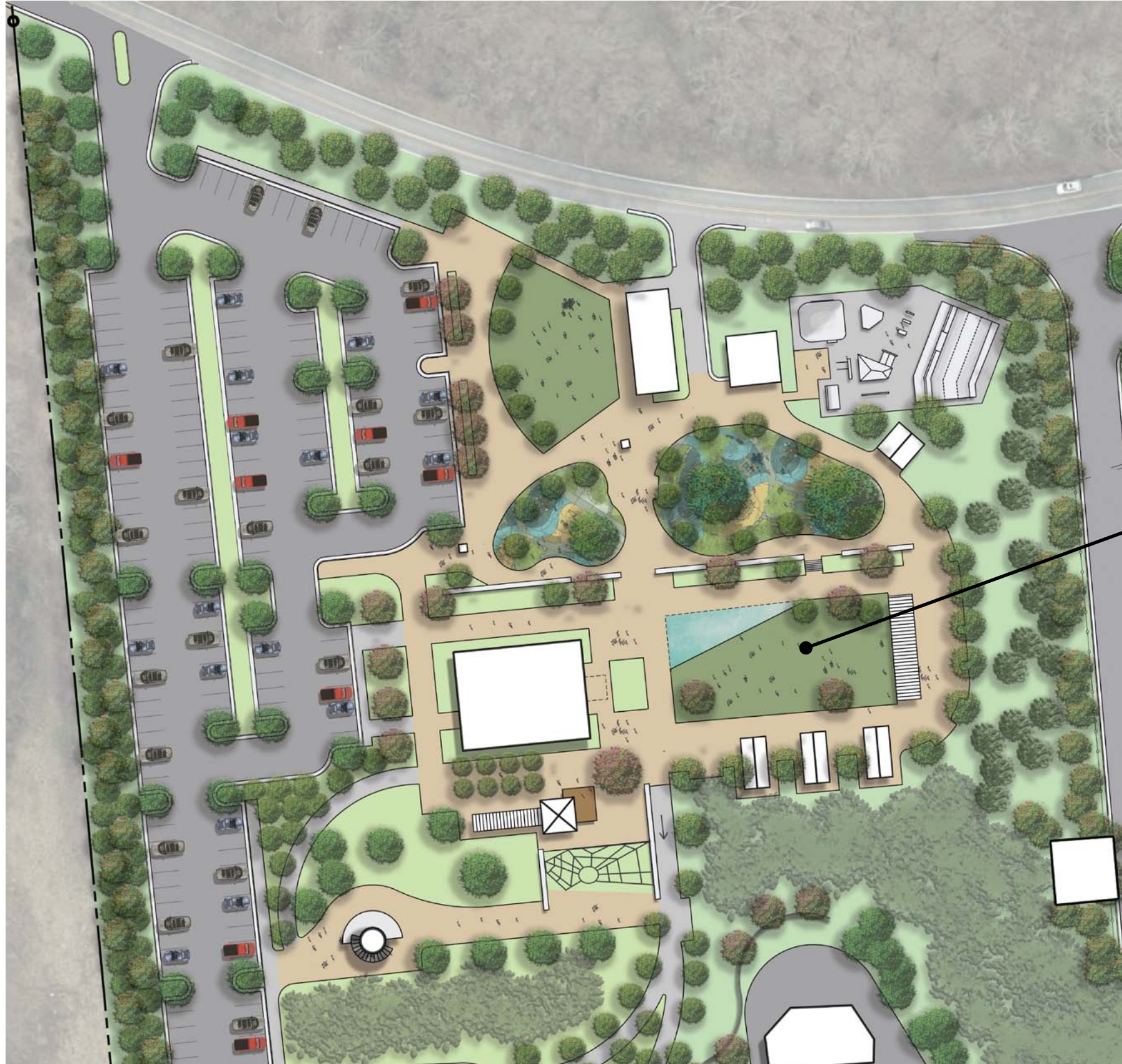
# CONCEPT C - REPURPOSED STRUCTURE



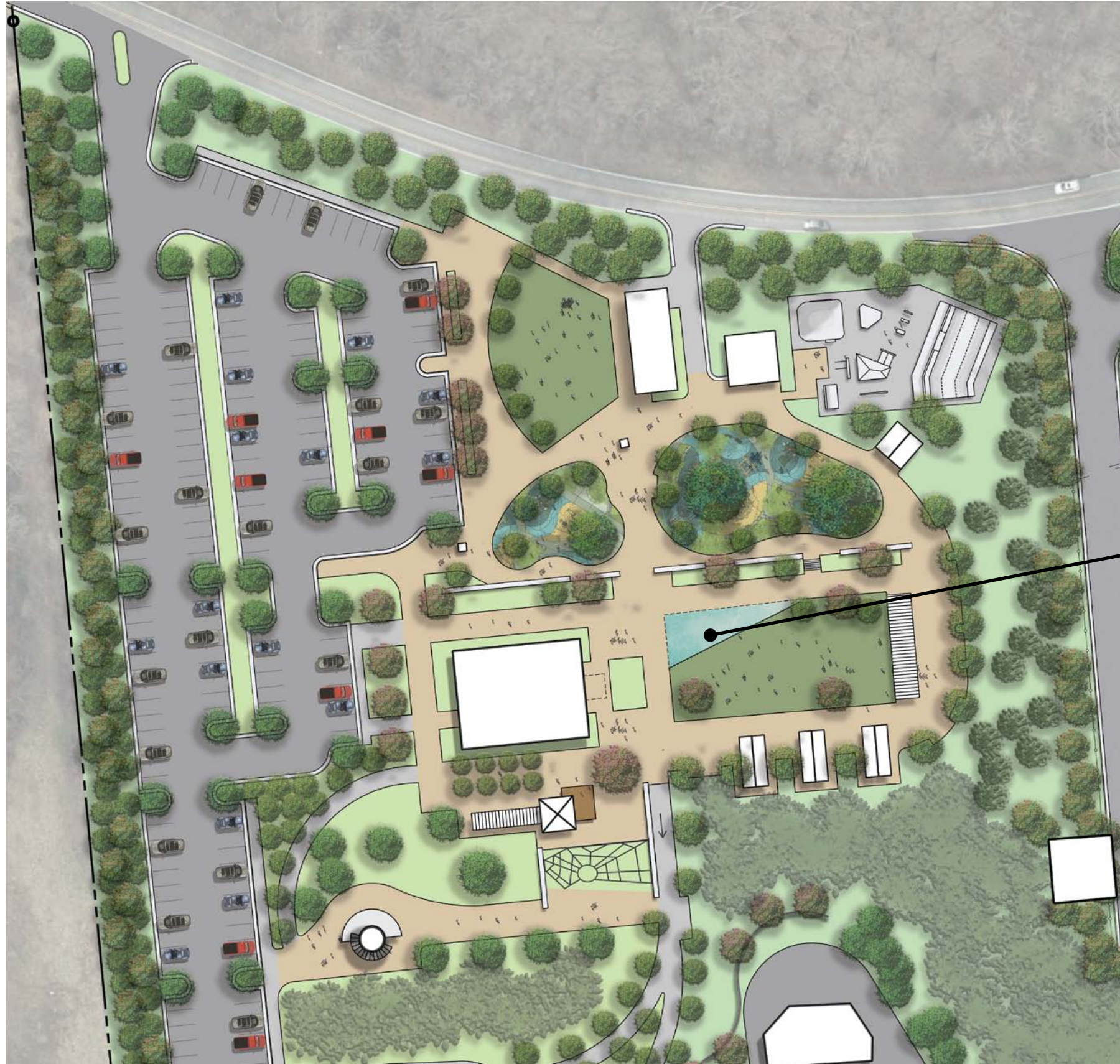
# CONCEPT C - INFORMAL DINING



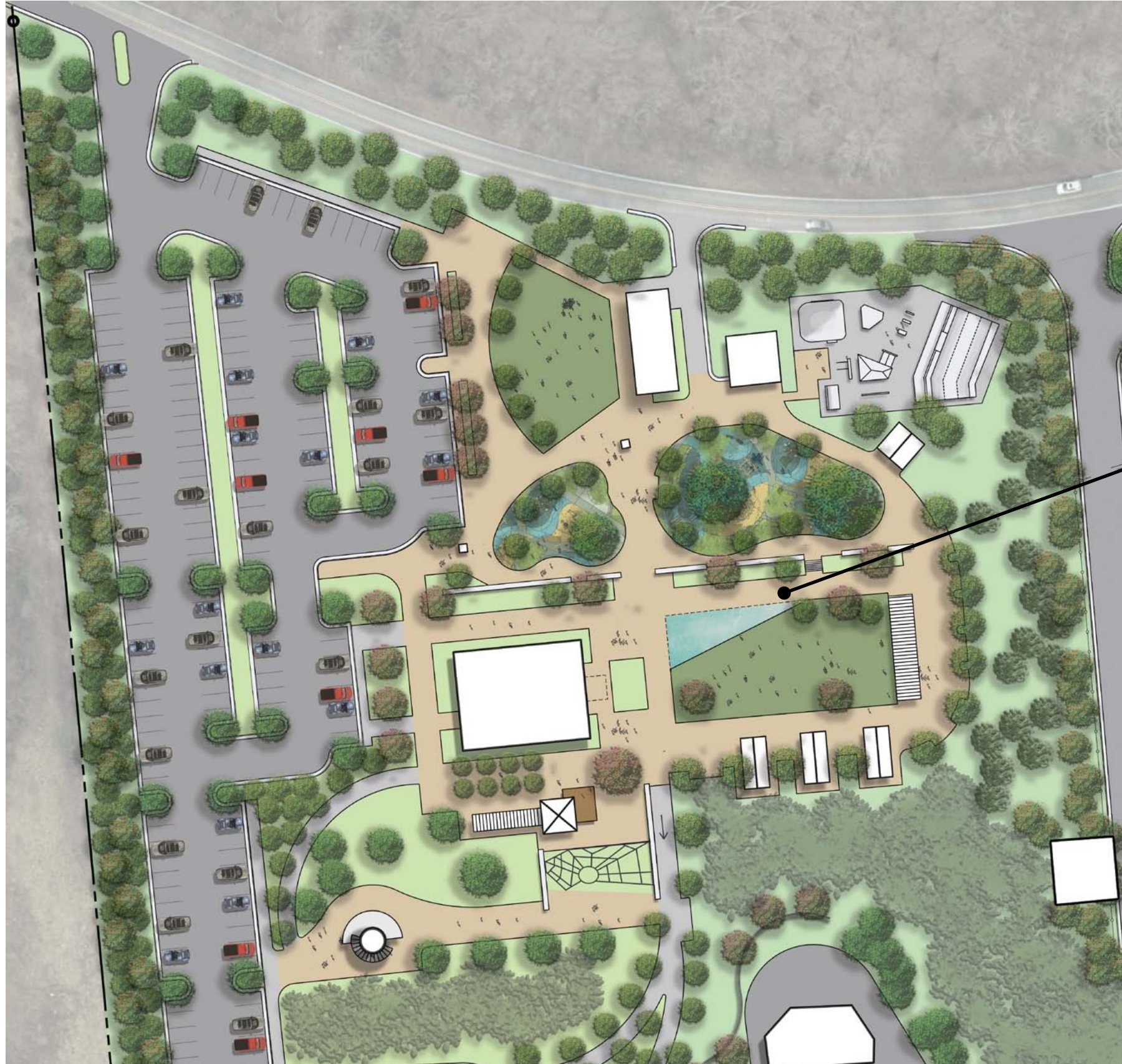
# CONCEPT C - GREAT LAWN



# CONCEPT C - SPLASHPAD

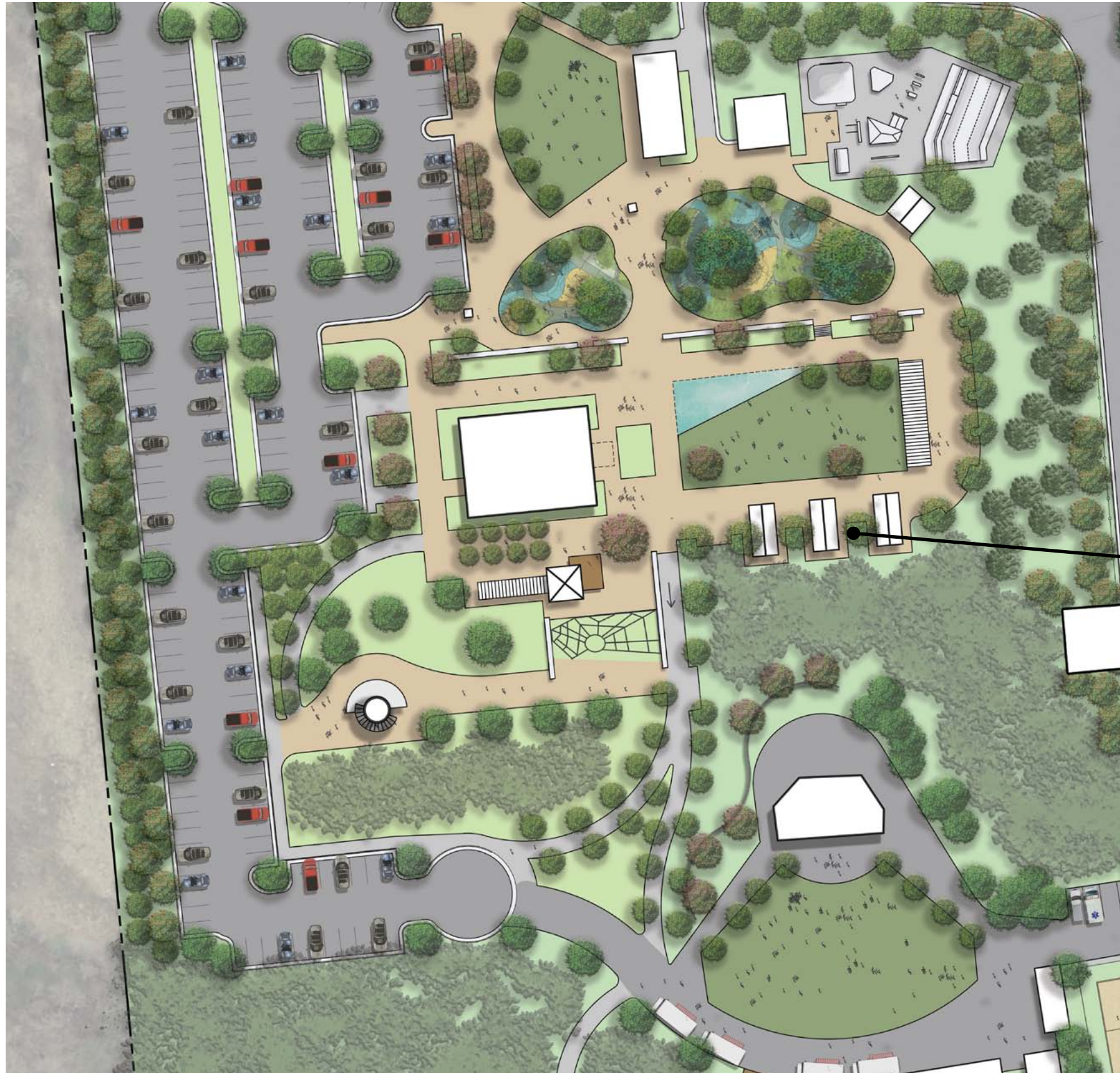


# CONCEPT C - SMALL PERFORMANCE VENUE

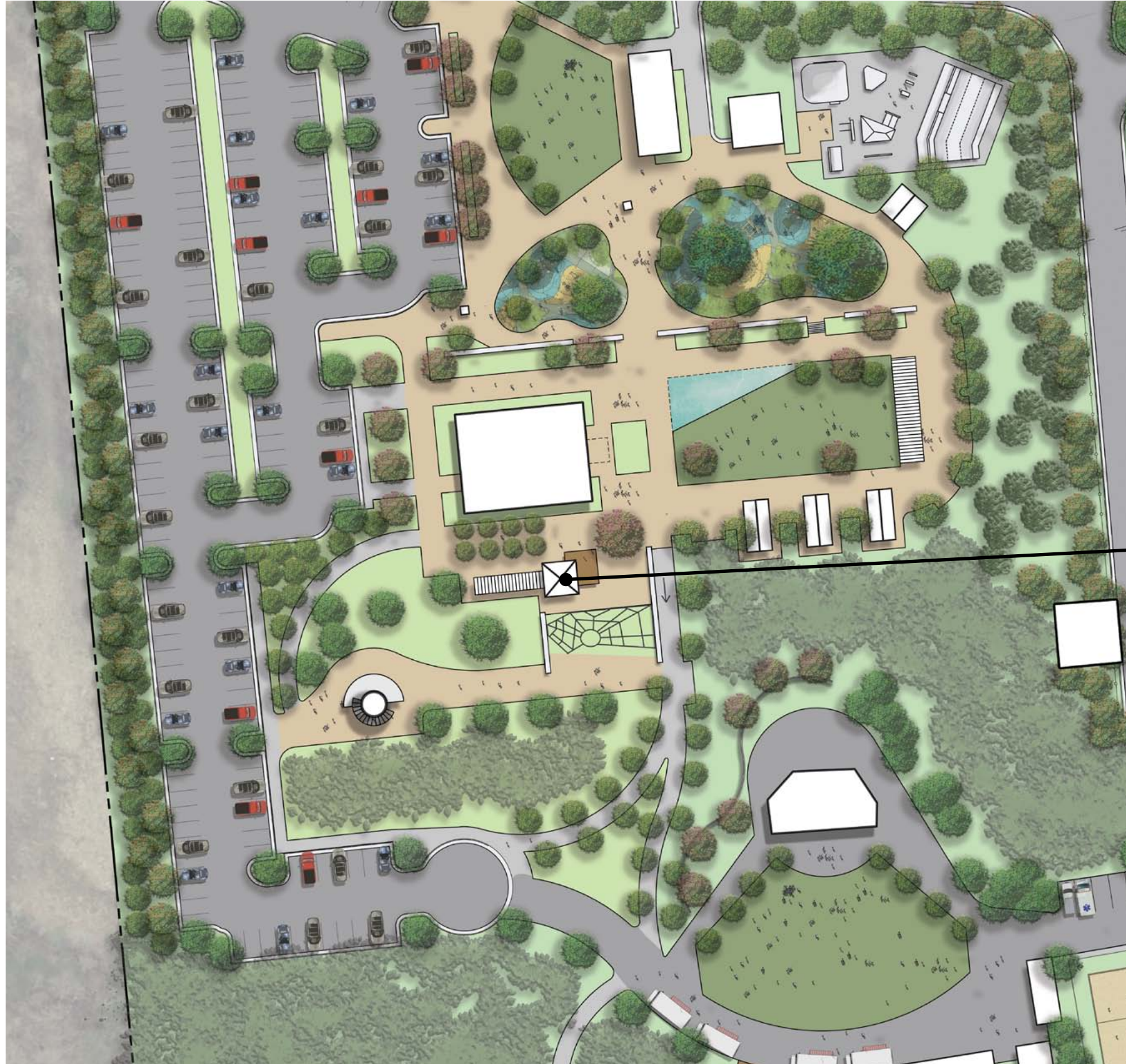




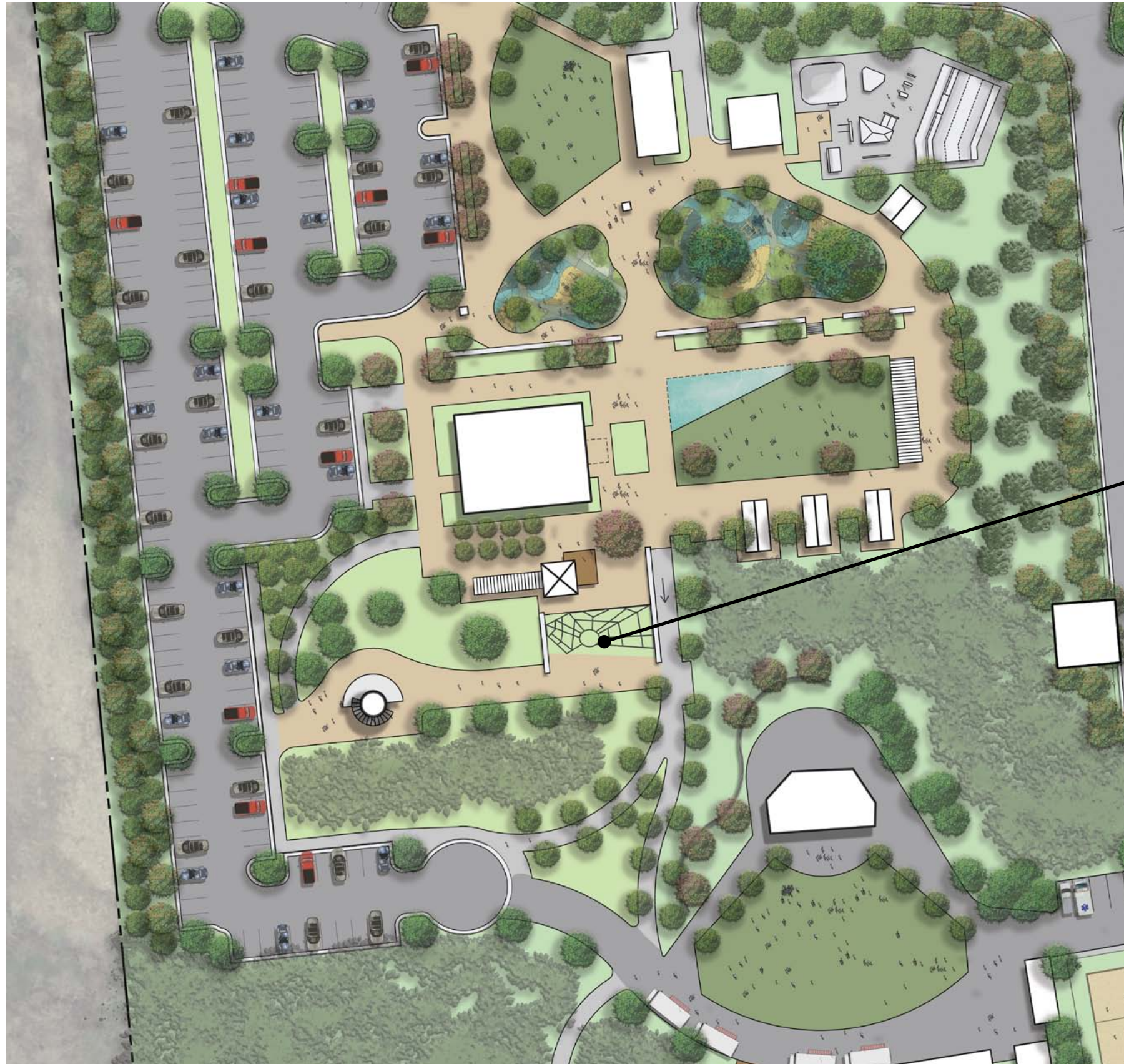
# CONCEPT C - PAVILION SHELTERS



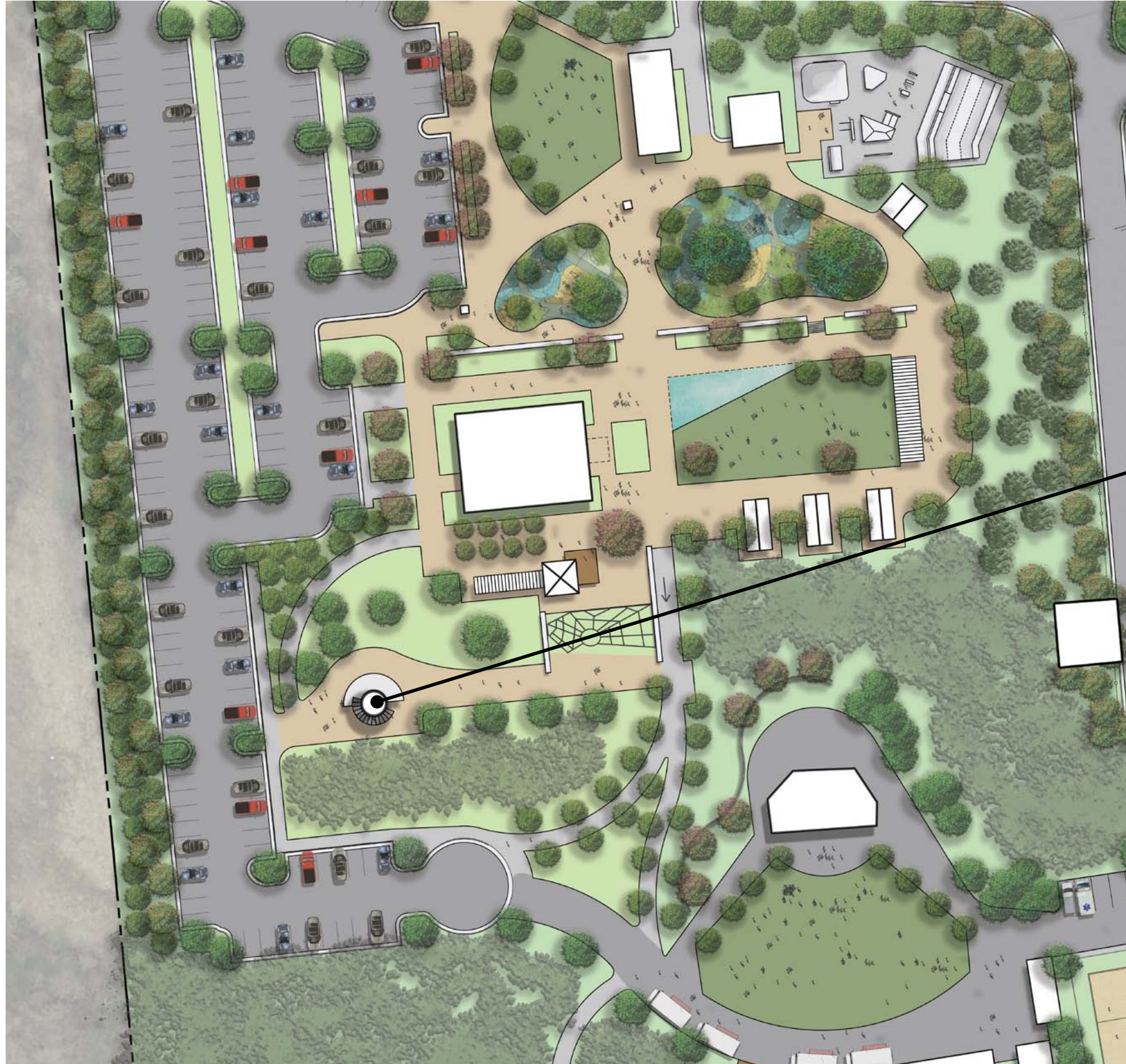
# CONCEPT C - OVERLOOK SHELTERS



# CONCEPT C - CARGO NET LOUNGE



# CONCEPT C - OBSERVATION TOWER



# CONCEPT C - AMPHITHEATER STAGE



# CONCEPT C - BEACH VOLLEYBALL



# CONCEPT C - LOW ROPES COURSE



# CONCEPT C - ROPES COURSE

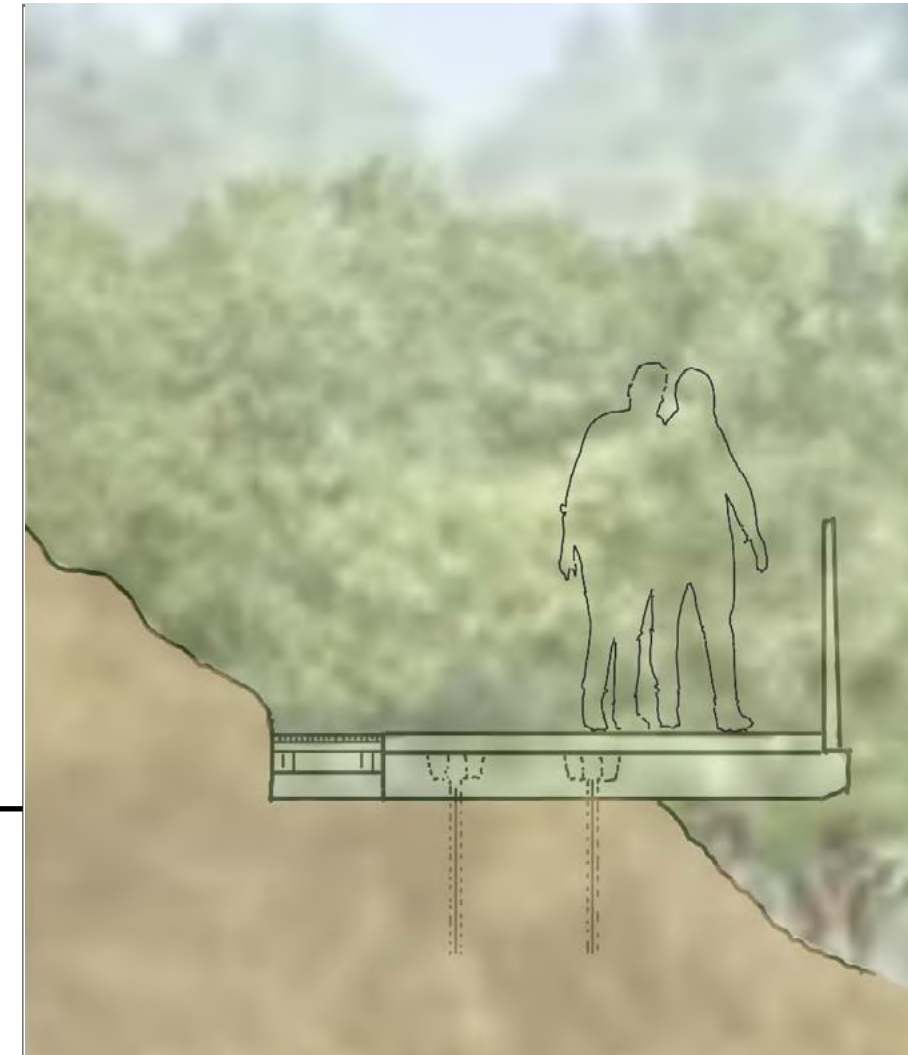




# CONCEPT C - TEEN ROPE LOUNGE



# CONCEPT C - ACCESSIBLE WALKWAY



# CONCEPT C - FISHING PIER



# CONCEPT C - CANOE/KAYAK LAUNCH



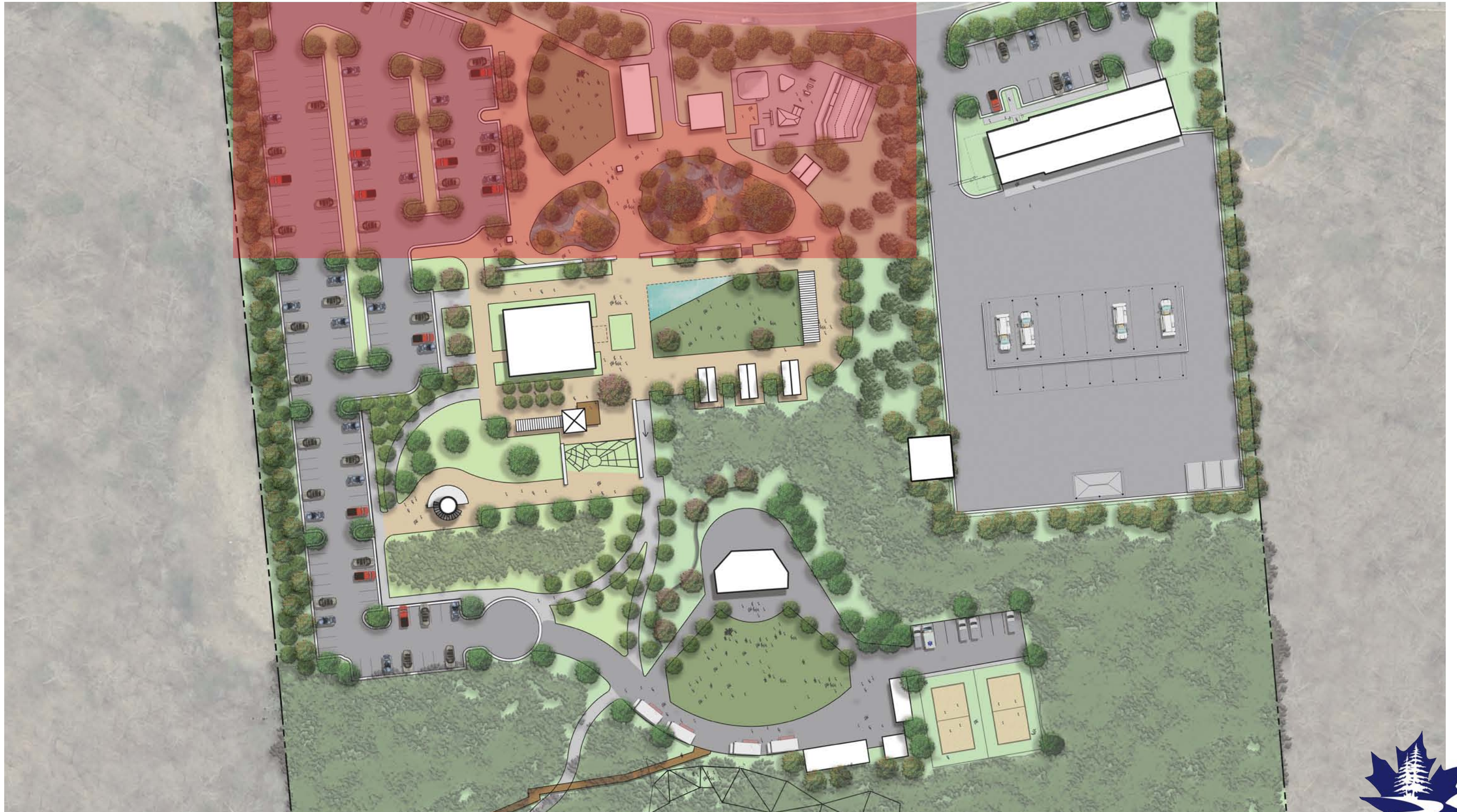
# CONCEPT C - PROGRAMMING



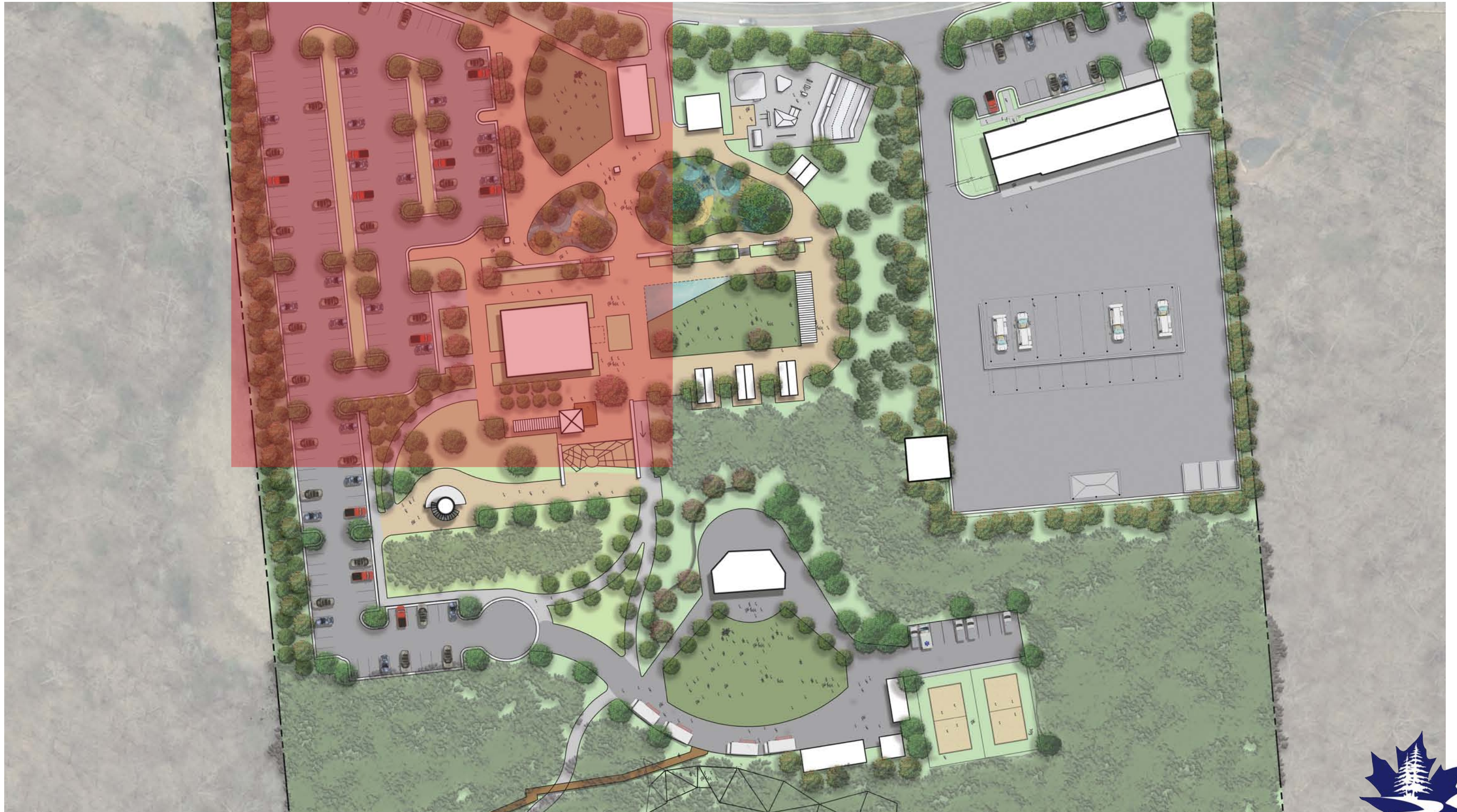
# CONCEPT C - PROGRAMMING



# PHASING - OPTION 1



# PHASING - OPTION 2





THERE ARE SEVERAL EXISTING CONDITIONS THAT INFLUENCE THE VISION OF THE PARK DEVELOPMENT THROUGH THEIR LOCATION, MATERIALITY, AND RELATIONSHIP TO GRADE. THE UPPER LEVEL OF THE SITE AT MAIN STREET AND THE LOWER LEVEL BEHIND THE LARGE WAREHOUSES CREATE 2 DISTINCT ZONES THAT MITIGATE THE SIZE OF THE LARGE PARCEL AND ADD AN ELEMENT OF HUMAN SCALE. THE KEY COMPONENT OF THE UPPER LEVEL IS THE STAGE CREATED BY AN ADAPTIVE REUSE OF THE EXISTING LOADING DOCK STRUCTURE. THIS ELEMENT CREATES A SMALL FLEXIBLE VENUE ADJACENT TO A VARIETY OF RECREATION AREAS. THE SECONDARY ELEMENT ON THE UPPER LEVEL IS THE PUBLIC WORKS FACILITY THAT IS PLACED ADJACENT TO POSTEN PARK AND EFFECTIVELY TUCKED AWAY IN THAT SITE QUADRANT. THIS FACILITY AND THE STORAGE AREA WILL BE SCREENED FROM VIEW WHILE IN THE PARK.

THE TRANSITION FROM THE UPPER TO LOWER LEVELS IS DEFINED BY A COMPRESSION THAT HAPPENS BETWEEN THE REAR OF THE LARGE WAREHOUSES AND THE MILLING HOUSE. THIS EXPERIENCE REDUCES THE SCALE OF ENTRY AND THEN EXPANDS THE VIEW ACROSS THE GREEN SPACE AND TOWARDS THE RIVERFRONT. THE MILLING HOUSE WILL BE REPURPOSED AS THE BANQUET HALL, AND A PORTION OF THE REAR WAREHOUSE WALLS WILL BE RETAINED AND PAINTED TO SERVE AS AN ARTIFACT WALL FOR AN ARTFUL DISPLAY OF THE TRADE TOOLS FOUND ON SITE. THIS FEATURE WILL BE INTEGRATED WITH HISTORICAL IMAGES AND DESCRIPTIONS OF THE ITEMS SERVING TO EDUCATE USERS ON THE PREVIOUS FUNCTIONS. THE OPEN LAWN IS DEFINED ON THE WEST END BY A TRELIS WITH SEATING AREAS, AND ON THE NORTH END BY SHELTERS THAT ARE PERCHED ON THE HILLSIDE AND TAKE ADVANTAGE OF THE ELEVATED VIEWSHED. THE MATERIAL PALETTE FOR THE NEW PARK STRUCTURES IS RESTRAINED TO STEEL, CONCRETE, AND WOOD AS THEY RELATE TO MATERIALS ON SITE WHILE ADDING SOME DESIGN FLAIR.

ANOTHER EXISTING STRUCTURE USED IN THE PARK DESIGN IS THE TOWER DRUM PREVIOUSLY USED AS A HOLDING TANK. THE SPIRAL STAIRCASE WINDS AROUND THE DRUM TO AN ELEVATED VIEWSHED THAT GIVES THE USER AN ORIENTATION OF THE CENTER PARK AREA, WITH VIEWS INTO THE MATURE TREE CANOPY AND PERHAPS TO THE RIVERFRONT. THIS SIGNATURE ELEMENT COULD ALSO BECOME A STARTING POINT FOR A ZIPLINE USING THE SLOPE TOWARDS THE RIVER IN A FUTURE PHASE. THE LARGE U-SHAPED RETAINING WALLS WILL BE EMPLOYED TO HOST A CARGO NET PLAY AREA AS ANOTHER PROGRAM ELEMENT THAT TAKES ADVANTAGE OF STRUCTURES ON SITE. THE ENTIRE COMPOSITION USES EXISTING AND NEW STRUCTURES IN A COHESIVE MANNER TO DEFINE THESE DISTINCT ZONES FOR BOTH PASSIVE AND ACTIVE RECREATION COMBINED WITH VENUES FOR ENTERTAINMENT.

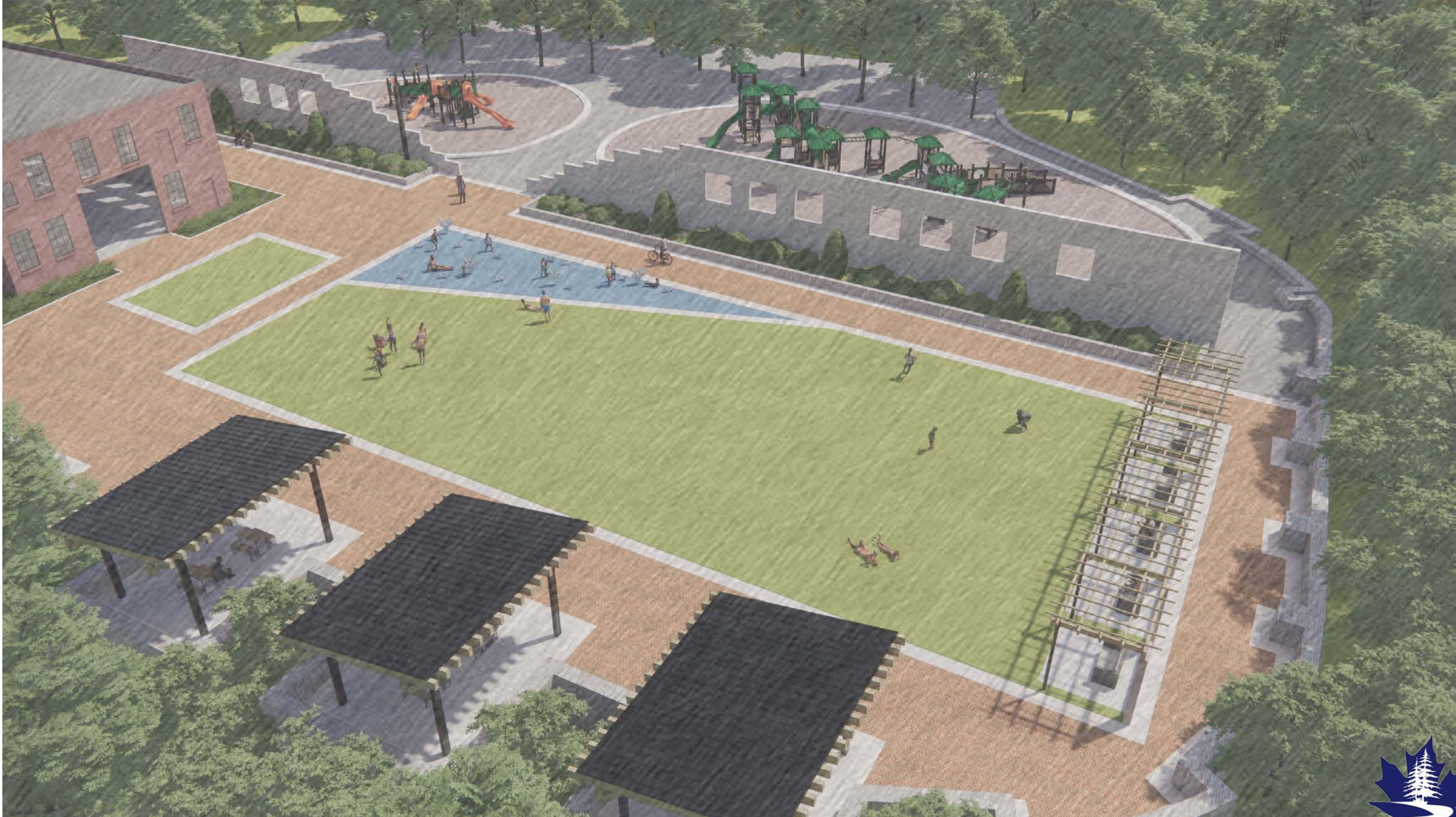


# MASTER PLAN VISIONING

VISIONING - VIEW 1



VISIONING - VIEW 2



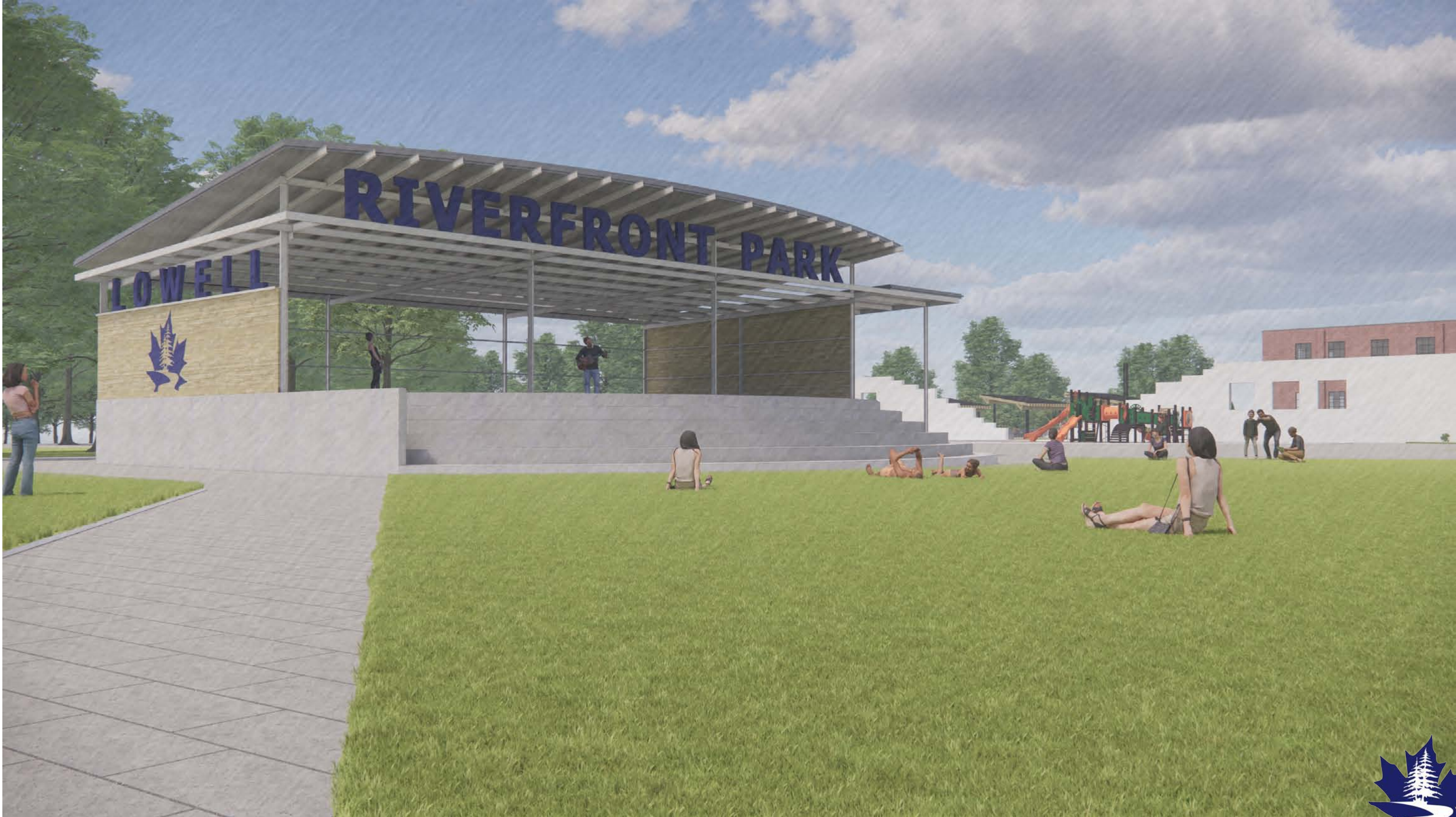
VISIONING - VIEW 3



VISIONING - VIEW 4



VISIONING - VIEW 5



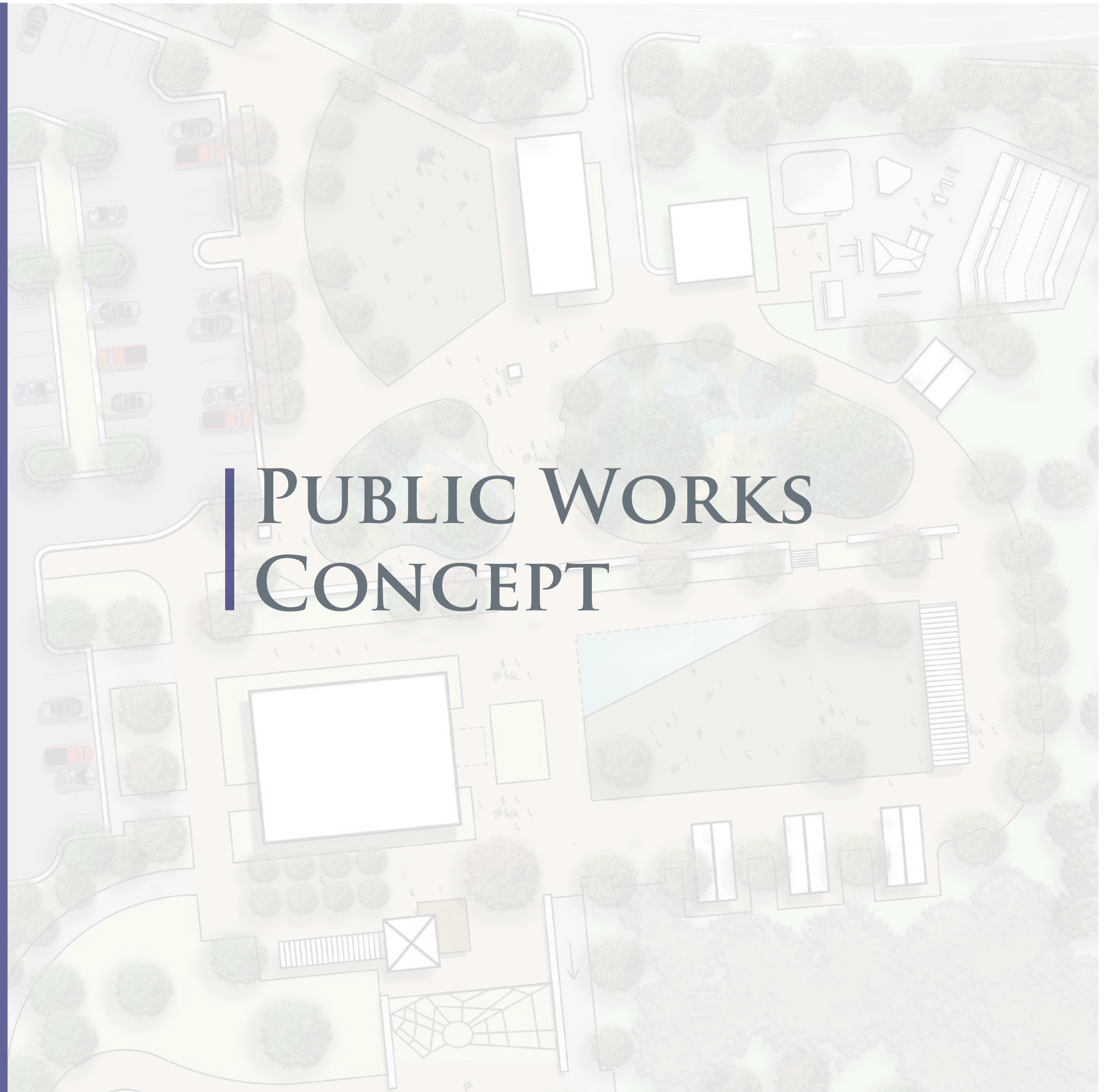
VISIONING - VIEW 6



A KEY COMPONENT OF THE PARCEL DEVELOPMENT IS A SITE FOR THE NEW PUBLIC WORKS FACILITY CURRENTLY LOCATED IN THE DOWNTOWN AREA. THE EXISTING GRADES ON SITE PRODUCE SEVERAL "TERRACE" LEVELS FROM PREVIOUS DEVELOPMENT THAT CAN BE UTILIZED TO INCREASE EFFICIENCY OF THE SLOPE. THE APRON BETWEEN THE MAIN FACILITY AND THE 8 COVERED BAYS OF EXTERIOR STORAGE FACILITATES SEMI-TRAILER DELIVERIES, AND THE VEHICLE ACCESS LOOP SLOPES ON EACH SIDE OF THE EXTERIOR STORAGE TO CREATE THE LOWER TERRACE. ADDITIONAL ITEMS IN THIS AREA INCLUDE THE REUSE OF AN EXISTING STRUCTURE FOR ENCLOSED STORAGE, A TRUCK WASH BAY, CONCRETE BINS FOR LOOSE STORAGE, AND COVERED STORAGE ATTACHED TO THE RETAINING WALL. THE ENTIRE SERVICE HAS A SECURE PERIMETER WITH ONE ACCESS GATE FOLLOWING THE PUBLIC PARKING.

THE SPACE NEEDS ANALYSIS RESULTED IN A PROGRAM OF 8,000 SQUARE FEET FOR THE FACILITY INCLUDING A SHARED LOBBY WITH UTILITIES, OFFICES, 5 EQUIPMENT BAYS, AND FIELD STAFF SUPPORT SPACES. THE LOBBY SERVES AS THE PUBLIC AREA WITH A TRANSACTION WINDOW TO THE WATER SUPERVISOR AND VISUAL ACCESS TO THE PUBLIC WORKS DIRECTOR. THE BALANCE OF THE FACILITY IS SECURED FROM PUBLIC ACCESS. THE CREW AREA IS A FLEXIBLE SPACE DESIGNED FOR A CAPACITY OF 12 STAFF THAT CAN SERVE AS A TRAINING ROOM, CONFERENCE ROOM AND BREAK ROOM. THERE ARE 3 TOUCHDOWN STATIONS FOR CREW MEMBERS AS NEEDED FOR COMPLETING WORK ORDERS. OTHER STAFF AMENITIES ALSO INCLUDE FULL HEIGHT CREW LOCKERS, 2 INDIVIDUAL SHOWER ROOMS, AND A COPY/WORK AREA.

THE 50 FOOT DEEP EQUIPMENT BAYS MAINTAIN 18 FEET OF CLEAR HEIGHT WITH ONE BAY PROVIDING DRIVE THROUGH ACCESS. AN ALTERNATE FOR ADDITIONAL MEZZANINE STORAGE ALONG THE FRONT WALL WILL INCREASE THE STORAGE FOOTPRINT BY MORE THAN 1,000 SQUARE FEET. THE SITE DESIGN ALLOWS FOR FUTURE EXPANSION ON EACH END OF THE PLAN.



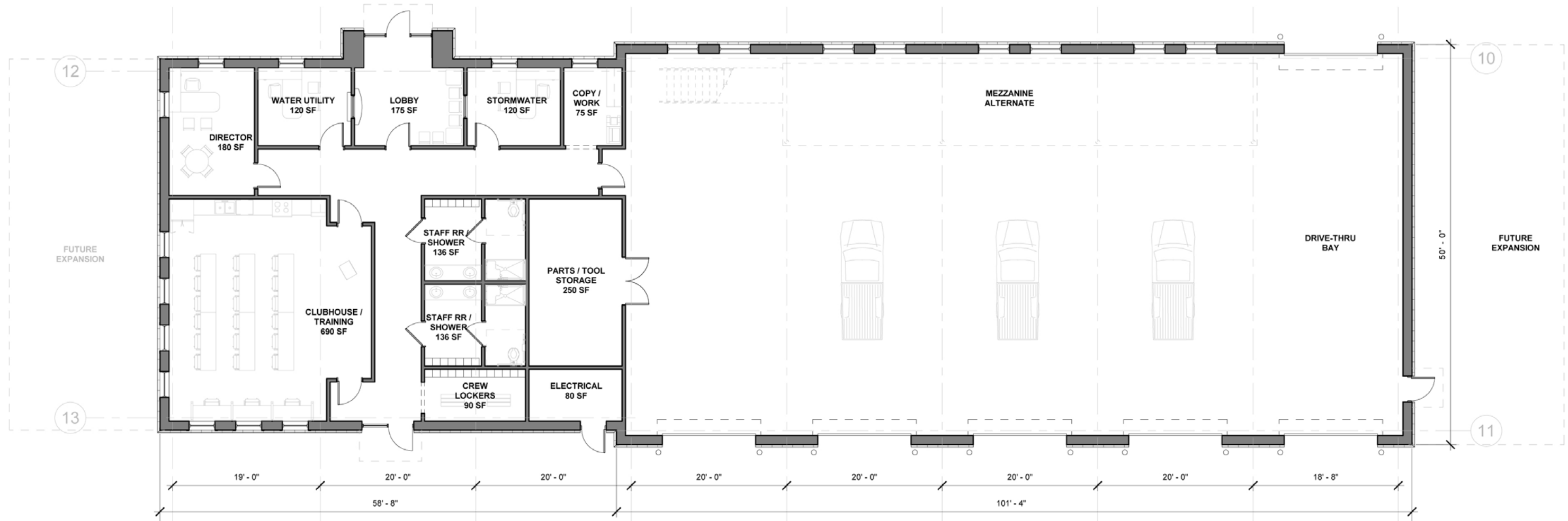
# PUBLIC WORKS CONCEPT



# PUBLIC WORKS - PROGRAM

Personnel Description	Area SqFt	Quantity	Staff	Subtotal NASF	Remarks
<b>Public Works / Field Operations</b>					
Director	180	1	1	180	private office with 2 person meeting and storage
Field Crew	-	9	9	-	space accounted for in clubhouse below
Stormwater Office	120	1	1	120	private office with 2 person meeting
Future Field Crew	-	2	2	-	future field crew personnel, space accounted for in clubhouse below
<b>Water Utility</b>					
Water Utility Supervisor	120	1	1	120	office in separate suite, with entrance from shared lobby
<b>Subtotal Net Area Square Feet (NASF)</b>				<b>420</b>	
<b>Current Staff</b>			<b>11</b>		
<b>Future Staff</b>			<b>2</b>		
<b>Total Staff</b>			<b>13</b>		
Support Area/Equip. Description	Area SqFt	Quantity	Staff	Subtotal NASF	Remarks
<b>Public Works Support</b>					
Lobby	150	1	-	150	shared lobby
Copy/Work Room	100	1	-	100	
Supply Storage	80	1	-	80	office supplies
Clubhouse	700	1	-	700	training room flexible seating for 16, break room, 2 touchdown stations
Crew Lockers	100	1	-	100	12 full height lockers and benches
Staff Restroom	140	2	-	280	unisex restroom with shower
Equipment Bays	1,000	5	-	5,000	20'x50' roll-up door bays, 1 pull through access
Sign Storage	350	1	-	350	workspace and spare sign storage
Parts/Tool Storage	250	1	-	250	free standing parts rack, wall storage bins
Attic Stock	200	1	-	200	storage for attic stock
Meter Calibration	150	1	-	150	meter equipment and calibration
<b>Support Space Subtotal</b>				<b>7,360</b>	
<b>Total Net Assignable Area Required (NASF)</b> <i>(Personnel &amp; Support Areas)</i>				<b>7,780</b>	
<b>15% Circulation (Sqft)</b>				<b>1,167</b>	
<b>TOTAL GROSS AREA REQ'D. (GSF)</b>				<b>8,947</b>	
<b>CURRENT GROSS AREA (GSF)</b>				<b>4,000</b>	
Exterior Unconditioned Space Description	Area SqFt	Quantity	Staff	Subtotal GSF	Remarks
<b>Exterior Unconditioned Space</b>					
Laydown Area	950	1	-	950	covered lean-to storage, based on existing sf
Loose Material Storage	180	3	-	540	3 exterior bins for loose materials
Covered Pole Barn	4,000	1	-	4,000	16 vehicle capacity
Truck Wash	800	1	-	800	vehicle wash with containment
<b>TOTAL GROSS AREA REQ'D. (GSF)</b>				<b>6,290</b>	

# PUBLIC WORKS - FLOOR PLAN



## FLOOR PLAN

### NARRATIVE:

THE FLOOR PLAN PROVIDES 5 WAREHOUSE BAYS AT 1,000 SF EACH WITH PULL THROUGH ACCESS ON THE END BAY. THE ADMIN SUITE IS APPROXIMATELY 3,000 GSF WITH THE LOBBY AS THE CONTROLLED PUBLIC ACCESS ZONE. THE DIRECTOR HAS VISUAL ACCESS TO THE LOBBY, AND THE UTILITY OFFICE HAS A TRANSACTION COUNTER IN THE LOBBY AS WELL. THE FLEXIBLE CLUBHOUSE / TRAINING ROOM HAS SEMINAR SEATING FOR 18 THAT CAN BE CONFIGURED FOR CONFERENCE OR DINING AS NEEDED. THE KITCHEN /BREAK AREA ALSO SHARES THIS AREA, WITH STAFF SHOWERS AND LOCKERS ACROSS THE HALL. TWO SEPARATE STAFF RESTROOMS ADDRESS THE CODE REQUIREMENT FOR FEMALE RESTROOMS. WAREHOUSE SUPPORT SPACES OPEN INTO THE BAYS, AND A MEZZANINE ALTERNATE CAN BE UTILIZED FOR SIGN STORAGE AND ATTIC STOCK. THE STANDARD SIZE FOR THE OVERHEAD COILING BAY DOORS IS 12' WIDE X 14' HIGH.

THE SITE DESIGN ALLOWS FOR FUTURE EXPANSION ON EACH END, WITH THE ADDITIONAL ADMIN CAPACITY OF 1,000 GSF, AND THE ADDITIONAL WAREHOUSE CAPACITY OF 1,000 GSF.

THE PLAN SHAPE AND ENTRY ALLOW THE ADMIN AREA TO RECEIVE AN ELEVATED EXTERIOR AESTHETIC AND REDUCED VOLUME COMPARED TO THE WAREHOUSE SECTION. BOTH WILL PRESENT AN APPEALING FACADE TO MAIN STREET AS PART OF THE OVERALL DEVELOPMENT.

# PUBLIC WORKS - MAIN STREET ELEVATION



## NARRATIVE:

THE PROPOSED MATERIAL PALETTE INCLUDES A SPLIT-FACE MASONRY BASE THAT RELATES TO THE EXISTING MILLING HOUSE STRUCTURE AND PROVIDES A DURABLE PRODUCT AT GROUND LEVEL. THE PRIMARY MATERIAL IS A VERTICALLY-ORIENTED CEMENTITIOUS SIDING THAT OFFERS BALANCE TO THE HORIZONTALITY OF THE LONG FACADE. THE RUST COLORED WINDOWS AND CANOPIES ADD VISUAL INTEREST AND RELATE TO THE EXPOSED STEEL VOCABULARY OF THE PARK ELEMENTS.

THE ADMINISTRATIVE AREA IS A LOWER VOLUME WITH THE ENTRANCE VOLUME LIFTED AND A STEEL CANOPY FOR COVER AND ACCENT.

THE WAREHOUSE HAS CLERESTORY WINDOWS TO ALLOW DAYLIGHT WITH CORRESPONDING GREEN SCREENS TO SOFTEN THE LARGE MASS AND CONTINUE THE WINDOW MODULE ACROSS THE FACADE. GUTTERS AND DOWNSPOUTS ARE ENVISIONED IN THE SAME COLOR AS THE ROOF TO DEFER ATTENTION.

THE OVERALL COLOR PALETTE IS SOFT AND CONVEYS NATURAL TONES WITH THE STEEL CANOPIES AND WINDOW FRAMES AS THE SIGNATURE ELEMENT.

# PUBLIC WORKS - MAIN STREET RENDER



THE COST ESTIMATE PORTION OF THE STUDY ENLISTED THE SERVICES OF A PROFESSIONAL COST ESTIMATOR TO PROVIDE A HIGH-LEVEL CONCEPTUAL PRICE BASED UPON THE DOCUMENTATION FROM THE DESIGN TEAM. THE COST ESTIMATE SEPARATED THE COSTS INTO FOUR MAIN CATEGORIES: PARK SITE DEVELOPMENT, PARK AMENITIES/ FEATURES, PUBLIC WORKS SITE DEVELOPMENT, AND PUBLIC WORKS STRUCTURES. EACH CATEGORY WAS THEN FURTHER REFINED USING STANDARD CONSTRUCTION DIVISIONS OF WORK. THE SUBCATAGORIES ARE BASED UPON HISTORIC COST/SF INFORMATION FOR JOBS & STUDIES OF A SIMILAR SCOPE. THE INFORMATION CONTAINED WITHIN THIS SECTION OF THE REPORT ALIGNS WITH THE DIVISIONS AND SUBDIVISIONS DESCRIBED PREVIOUSLY. A MORE DETAILED COST ESTIMATE WORKSHEET CAN BE FOUND IN THE APPENDIX SECTION OF THIS DOCUMENT.

COSTS FOR ENVIRONMENTAL CONSIDERATIONS SUCH AS ONGOING MONITORING FOR SOIL AND GROUND WATER, CONTAMINATED SOIL REMOVAL, VAPOR TRANSMISSION STUDIES, ASBESTOS ANALYSIS, AND SIMILAR ACTIVITIES HAVE BEEN EXCLUDED FROM THIS ESTIMATE BUT WOULD NEED TO BE DEFINED AND INTEGRATED INTO THE INCLUDED COSTS TO DETERMINE A GLOBAL BUDGET FOR THE PROJECT.

FURTHER REFINEMENT OF COSTS ASSOCIATED WITH THE PARK AND PUBLIC WORKS DEVELOPMENT WILL OCCUR AS THE PROJECT PROGRESSES. AS MORE INFORMATION AND DETAILS BECOME AVAILABLE, FUTURE COST ESTIMATES WILL BECOME MORE ACCURATE AND INCLUDE ACTUAL COSTS BASED UPON TRADE ESTIMATES. TYPICALLY, EARLY CONCEPTUAL COST ESTIMATES ARE SOMEWHAT INFLATED DUE TO THE LARGE AMOUNTS OF UNKNOWN INFORMATION AND THE ASSUMPTIONS MADE AT THE TIME OF THE STUDY.

IF THE COSTS ARE REVIEWED IN THE FUTURE, A TYPICAL ESCALATION FACTOR SHOULD BE ADDED PER YEAR. AN INDUSTRY STANDARD OF 3-4% SHOULD BE USED UNLESS THERE IS AN ABNORMAL INCREASE/DECREASE IN THE COST OF GOODS AND SERVICES.

PHASING CONSIDERATIONS SHOULD BE INVESTIGATED TO HELP DISTRIBUTE THE COSTS OVER SEVERAL YEARS. THIS STRATEGY MAY ALSO PROVE ADVANTAGEOUS IN TERMS OF ALIGNING WITH AVAILABLE FUNDING FROM THE BROWNFIELD PROCESS.



# COST ESTIMATE

<b>CONSTRUCTION COST SUMMARY</b>	
PARK - SITE DEVELOPMENT	\$2,718,130.00
PARK - AMENITIES/FEATURES	\$4,002,300.00
PUBLIC WORKS - SITE DEVELOPMENT	\$2,086,950.00
PUBLIC WORKS - STRUCTURES	\$1,706,000.00
<b>TOTAL PROPOSED PROJECT COST</b>	<b>\$10,513,380.00</b>

*\*Costs do not account for brownfield remediation and ongoing environmental observations activities.*

## **PARK - SITE DEVELOPMENT DETAIL**

SELECTIVE SITE DEMO	\$50,000.00
SITE PREPARATION	\$1,146,300.00
SITE PAVING	\$916,330.00
SITE IMPROVEMENTS	\$236,500.00
LANDSCAPING	\$200,000.00
SITE UTILITIES	\$169,000.00

## **PARK - AMENITIES/FEATURES DETAIL**

SITE FURNITURE	\$115,600.00
SIGNAGE	\$35,000.00
STRUCTURES	\$1,735,000.00
AMENITIES	\$2,116,700.00

## **PW - SITE DEVELOPMENT DETAIL**

SELECTIVE SITE DEMO	\$20,000.00
SITE PREPARATION	\$672,800.00
SITE PAVING	\$531,100.00
SITE IMPROVEMENTS	\$807,850.00
LANDSCAPING	\$20,000.00
SITE UTILITIES	\$35,200.00

## **PW - STRUCTURES**

STRUCTURE	\$1,600,000.00
EXISTING STORAGE RENO	\$42,000.00
NEW SHED STORAGE	\$64,000.00

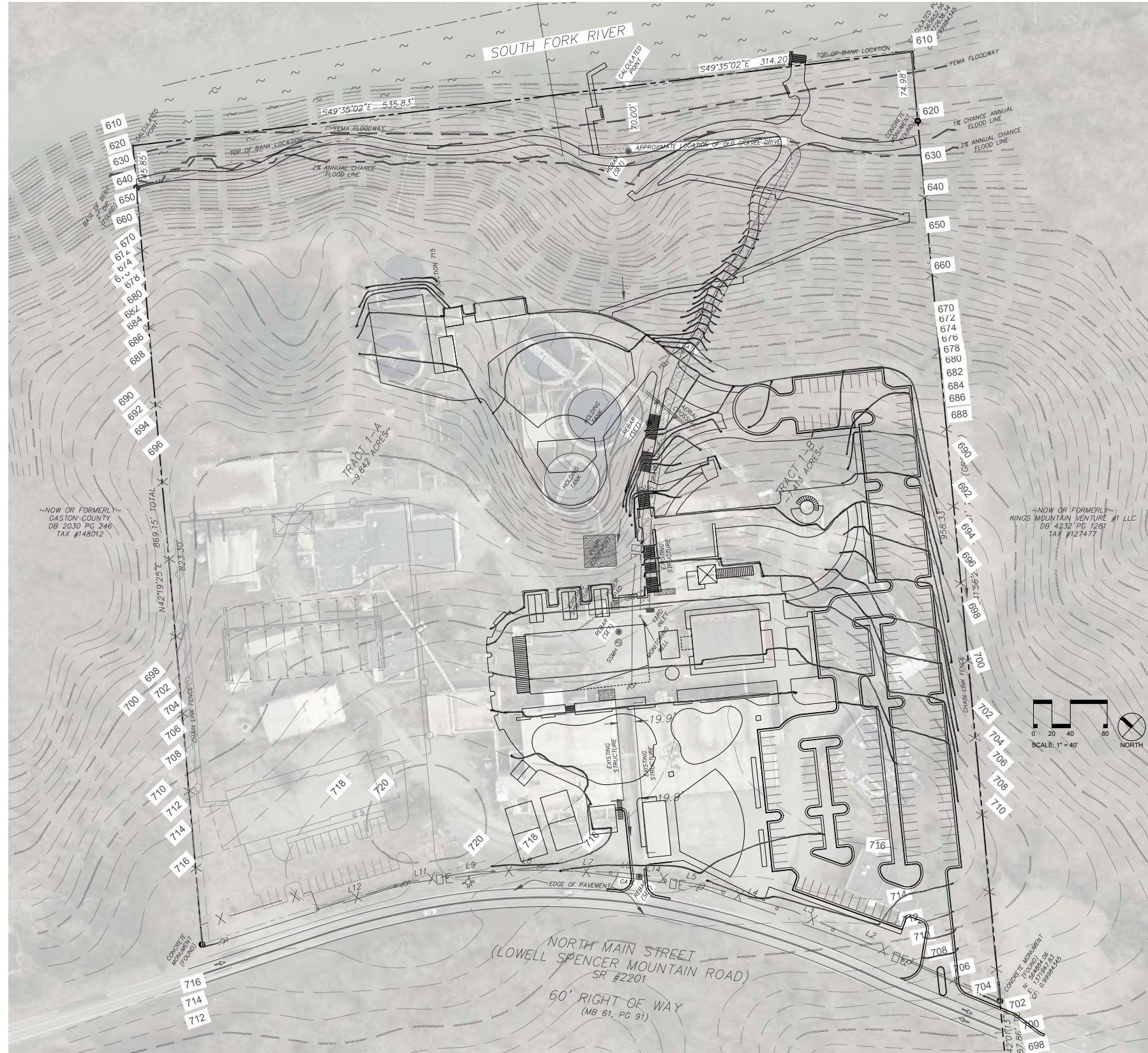
THE OVERALL APPROACH TO SITE GRADING UTILIZES THE EXISTING TOPOGRAPHY TO HELP GUIDE THE DESIGN. LARGE EXISTING LEVEL AREAS ARE ASSIGNED A LARGER PROGRAMMATIC ELEMENT, WHILE THE SMALLER LEVEL AREAS/ELEMENTS ARE DISBURSE AROUND THESE LARGER NODES AT VARIOUS ELEVATIONS. THE SITE, ADJACENT TO MAIN STREET, IS RELATIVELY FLAT AND HOUSES SEVERAL OF THE LARGE FUNCTIONAL ELEMENTS. FROM THERE, THE SITE DROPS AGAIN UNTIL LEVELING OUT AT THE SECOND FUNCTIONAL CLUSTER OF PROGRAM ELEMENTS. THESE TWO AREAS MAKE UP THE UPPER HALF OF THE SITE AND RELATE TO THE EXISTING DEVELOPED AREAS WITHIN THE SITE. SEPARATING THE UPPER DEVELOPED SITE LIES THE 710 CONTOUR. FROM THIS DATUM, THE SITE FALLS STEEPLY TO THE RIVER, WHERE LESS PROGRAM ELEMENTS WILL BE LOCATED. FUNCTIONS IN THIS AREA FOCUS ON THE SITE'S CONNECTION TO THE SOUTH FORK RIVER AND ACCESS TO IT. MEANDERING PATHWAYS TRAVERSE THE HILLSIDE SLOWLY MAKING THEIR WAY TO THE RIVER FRONT.

ANOTHER ASPECT TO THE GRADING STRATEGY IS THE IDEA THAT MINIMAL GROUND DISTURBANCE WOULD BE REQUIRED DUE TO EXISTING ENVIRONMENTAL CONDITIONS. CAREFUL CONSIDERATION OF POTENTIALLY CONTAMINATED AREAS AND EXISTING TOPOGRAPHY ALLOW FOR A NO DIG STRATEGY. FILL WOULD BE BROUGHT IN TO HELP NAVIGATE TOPOGRAPHICAL TRANSITIONS BETWEEN THE MAIN AREAS. THE NEW FILL COULD SUPPLEMENTED BY CRUSHED REMNANTS OF EXISTING STRUCTURES ON THE SITE, HELPING TO OFFSET THE FINANCIAL BURDEN OF IMPORTING FILL.

THIS SECTION ALSO PROVIDES AN OVERLAY OF EXISTING/NEW MONITOR WELLS AND BORING LOCATIONS. THE NEW LOCATIONS SHOULD BE COORDINATED WITH FUTURE DEVELOPMENT TO AVOID CONFLICT BETWEEN PARK PROGRAM AND ENVIRONMENTAL MONITORING.



# CONCEPTUAL GRADING PLAN





# CONCEPTUAL GRADING PLAN

WITH EXISTING AND PROPOSED WELLS & BORINGS



LEGEND	
	FORMER LAGOON
	MONITOR WELL
	PREVIOUS H&H SOIL BORING
	DEQ SOIL BORING
	PROPOSED MONITOR WELLS LOCATIONS
	PROPOSED SOIL BORING LOCATIONS
	ESTIMATED AREA OF GROUND WATER IMPACTS