CHINQUAPIN SWIM CENTER

FEASIBILITY STUDY- TASK 1A REPORT

APRIL 15, 2014

CITY OF ALEXANDRIA VIRGINIA

HUGHES GROUP ARCHITECTS
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TASK 1A NARRATIVE

Introduction

The City of Alexandria - RP&CA has tasked a multidisciplinary team to conduct a systematic evaluation of the feasibility of supplementing the existing Chinquapin Recreation Center with the addition of a competition swim center to service year-round citywide aquatic needs. The additional amenities being evaluated include a 50 Meter Competition Pool, spectator seating, locker rooms, mechanical space and conversion of the existing pool to one focused on family recreation. The study also involves a community engagement process, in accordance with the City's Civic Engagement Framework, to enhance the level of collaboration between City Staff, City Officials and Community members throughout the entire development process of the project.

Study Methodology

As directed by the City the Feasibility Study is being developed in three parts:

Task 1A Assessment of Preliminary Viability: The task includes assessment of preliminary viability by identifying an anticipated architectural program, site constraints and opportunities and study of pre-concept options.

Task 1B Continued Assessment: The task includes continued evaluation of a range of physical design alternatives to further refine the anticipated architectural program in response to economic evaluation, demand based needs assessment and community feedback. The task includes further development of the concept options.

Task 2 Detailed Feasibility Study: Identification of a Preferred Concept Alternative based on community feedback and analysis of data collected as part of Tasks 1A and 1B. The Task includes a detailed Feasibility Study of the Preferred Alternative, further refinement of the architectural program and site/architectural design to determine the feasibility of a new competition swim center and a transformation of the existing center to a recreation-based aquatic venue. The study will also include an assessment of economic impacts of constructing and operating the proposed facility.

Physical Constraints and Opportunities

Preserving open space and the character of Chinquapin Park and minimizing impact to operations of the existing recreation center during construction are primary objectives for all proposed modifications. In addition, new aquatic components must integrate with the existing facility such that the existing and new facilities function as a unified recreation center. With the prospect of a substantial addition to the facility there is the opportunity to create a new building entry and redefine the user entry sequence to greatly improve facility control and address accessibility issues.

Program options need to be developed to satisfy unmet indoor aquatic needs for Alexandria's citizens. For this portion of the evaluation these unmet needs have been broadly identified as enhanced aquatic amenities for family recreation and facilities supporting competitive swimming for the purpose of generating pre-concept options and assessing preliminary viability. The project's $19,500,000 capital improvement budget and the goal for city facilities to recover at least 80% of annual operating cost by 2018 will be significant factors in determining the projects final program and proposed extent of modifications.

Several significant physical constraints exist on site including a Resource Protection Area (RPA) surrounding Taylor Run, an underground stormwater and sanitary pipe to the north as well as a city wide storm water management facility proposed in the north lawn. Additionally, a steep grade differential across the site may contribute to increased site development costs in optimizing the adjacency of program elements.

The existing tennis court area may need to be used as an area for expansion space and to provide the ability to consolidate parking at an elevation aligned with the building entry.

Building Code classification of the existing structure will likely require fire rated separation between existing space and building additions. As a result, configurations which minimize the amount of interface with the existing facility will likely provide more cost effective solutions.

Market Constraints and Opportunities

Based upon the application of national participation rates against the demographic make-up of Alexandria, there appears to be a significant number of aquatic users who swim more than 50 times per year residing in the city. Based upon the number of annual passes, or annual pass equivalents, sold at Chinquapin in 2012, it appears that the facility is only capturing about 20% of these core users.

There are no other publicly-operated indoor pools and there are only two private indoor aquatic facilities, the YMCA and X-Sports Fitness, located within the City of Alexandria. Furthermore, these two private facilities only have 4-lane, 25-yard pools with a maximum depth of 4 feet which severely limits their breadth of aquatic program offerings. Based upon the limited supply of indoor pool facilities and the fact that core users swim more than 50 times a year, it is likely that the needs of the core aquatic users in Alexandria are currently underserved.

Because Chinquapin is capturing a low percentage of core aquatic participants and the only other indoor aquatic facilities in Alexandria are limited in programming, it is possible that the presumed 80% of underserved core swimmers are utilizing aquatic facilities in other jurisdictions with better lane space, quality of features, and expansive fitness components.

TASK 1A NARRATIVE

Summary of Analysis and Recommendations

The following pages identify the site analysis used to develop the constraints/opportunities and the six (6) concepts generated and assessed based on the identified constraints and opportunities. Based on our initial program assumptions and evaluation of site constraints an addition and renovation to enhance indoor aquatic facilities in the area of family recreation and competitive swimming is viable within the physical constraints of the project. A more detailed analysis of program needs and construction cost will be conducted in later phases of this project to validate the preliminary assumptions and financial assessment.

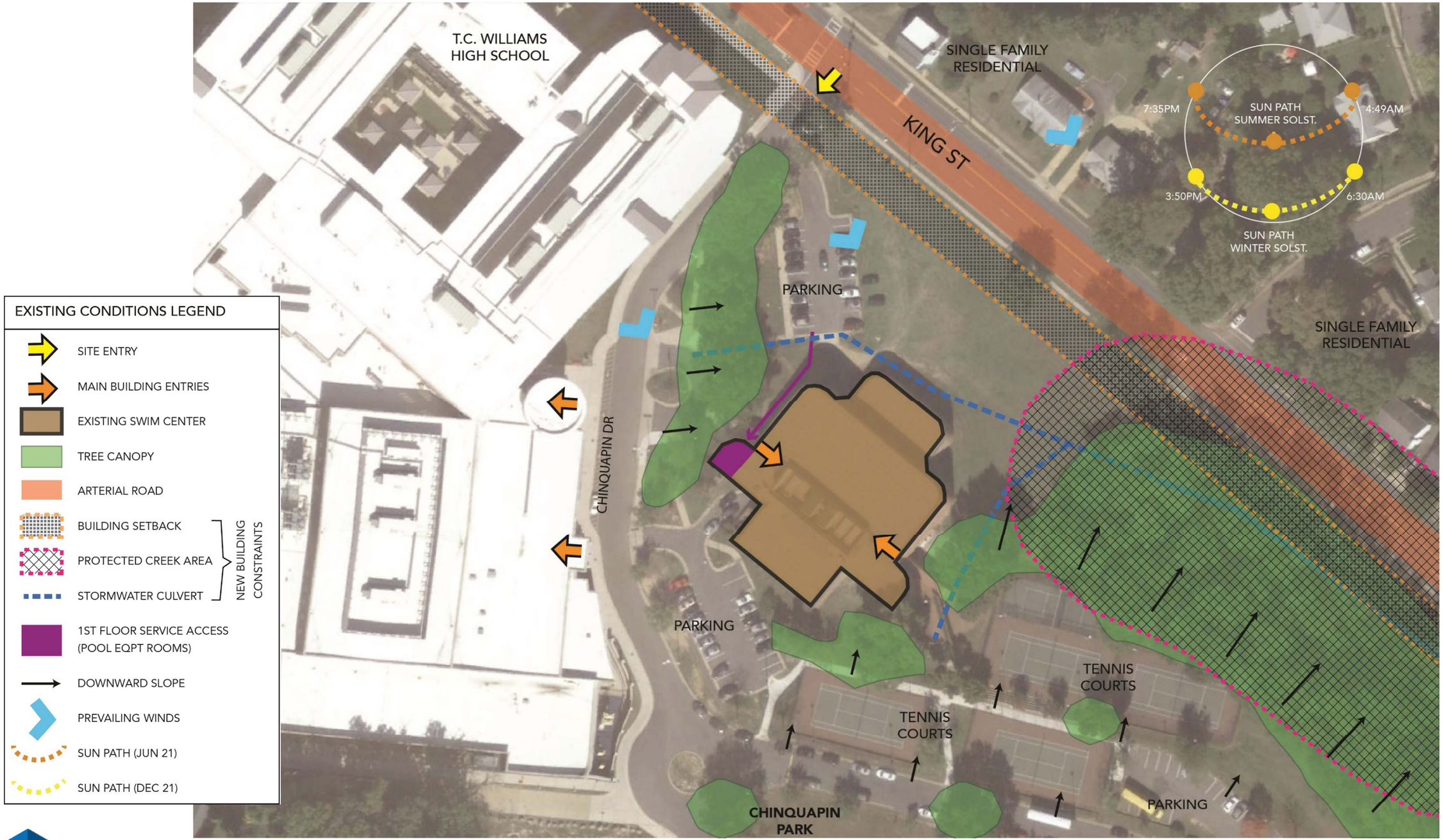
Using similar facilities located in surrounding jurisdictions as the base line for level of quality and types of finishes, the preliminary budget estimate of the projected construction cost for the concepts we have generated is consistent with the city's established budget.

The initial analysis of the market data and assumptions required to achieve RPCA's financial goals appears to indicate that there is sufficient unmet demand in the city of Alexandria to support an expanded aquatic offering at Chinquapin while achieving RPCA's financial goals. However, the preliminary financial analysis is contingent upon a significant increase in revenues from passes, daily admissions, programs, and rentals in addition to a reduction in the relative cost of operations. Verification of the underlying assumptions and quantifying demand for specific programs is a critical next step in order to validate the economic viability of any expansion.

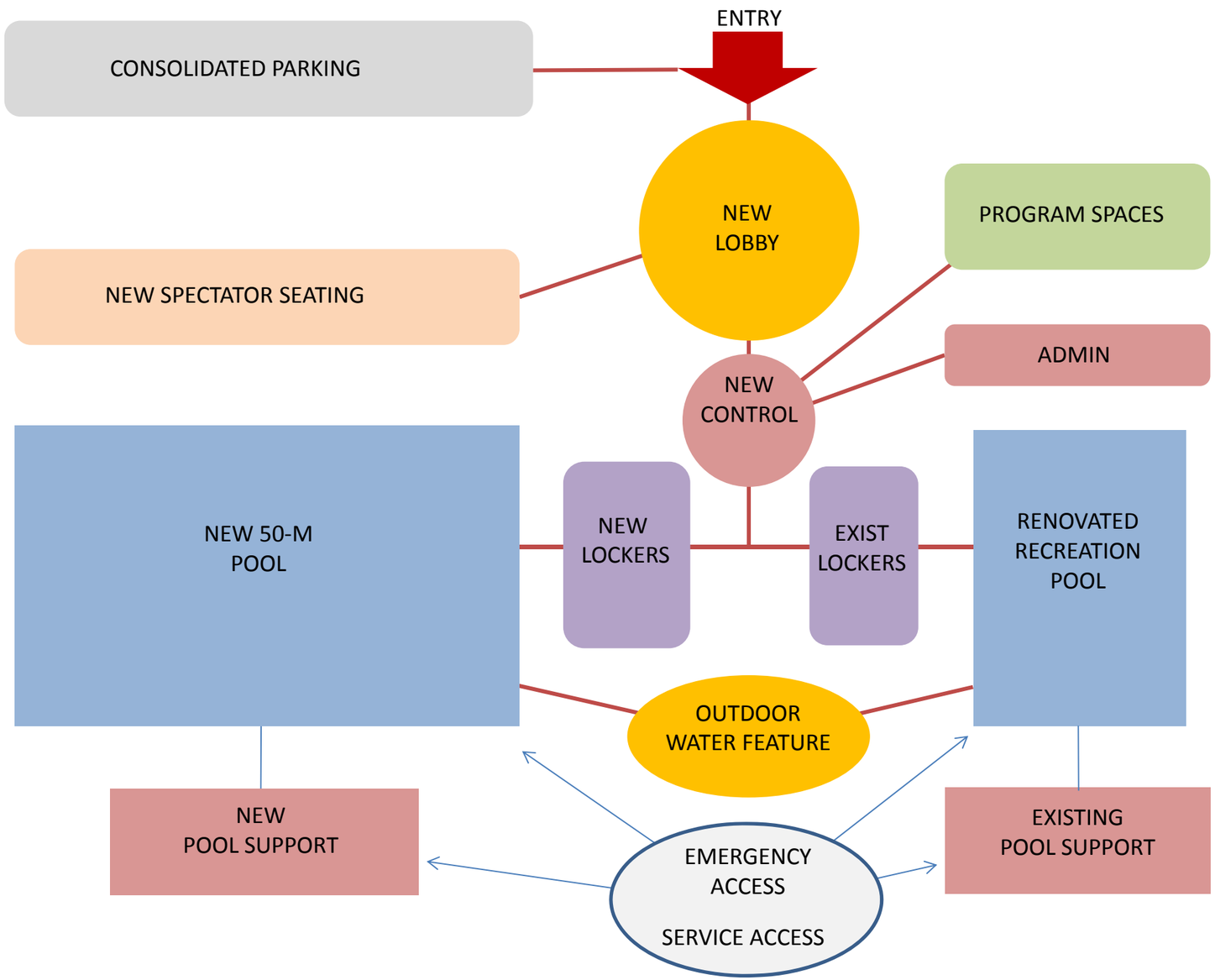
Key Findings/Constraints:

1. CIP budget limits and Cost Recovery goals as currently proposed will be significant influencing factors.
2. In order to maximize facility expansion, site reconfiguration should be minimized as much as possible.
3. Existing and proposed storm water facilities north of the building provide substantial cost barriers to building expansion to the north.
4. The RPA around Taylor Run limits available locations for expansion to the east.
5. Expansion to the west is limited by available space.
6. Achieving fiscal goals for operations is plausible based upon a preliminary analysis of market conditions and assumed improvements in operating structure.

SITE ANALYSIS: CONSTRAINTS & OPPORTUNITIES



SPACE FLOW DIAGRAM



ASSUMED PROGRAM

New Lobby / Control	2,000 SF
Administration	1,000 SF
50 Meter Pool	24,000 SF
Spectator Seating	3,200 SF
Program Space	4,300 SF
Pool Support / Equipment	2,500 SF
Locker	3,000 SF
Total	**+/- 40,000 SF**

SCHEME 1

ANALYSIS

PROS

- Central entry location from parking
- 50-m pool addition gives good presence along King Street
- Curved west infill provides new façade at the entry
- Good amenity engagement to the aquatic zones
- Good user flow at pool deck level

CONS

- Encroaches into the site constraint areas (high environmental impact)
- Cost premium on the curved west infill additions

LEGEND

Resource Protection Area (RPA)

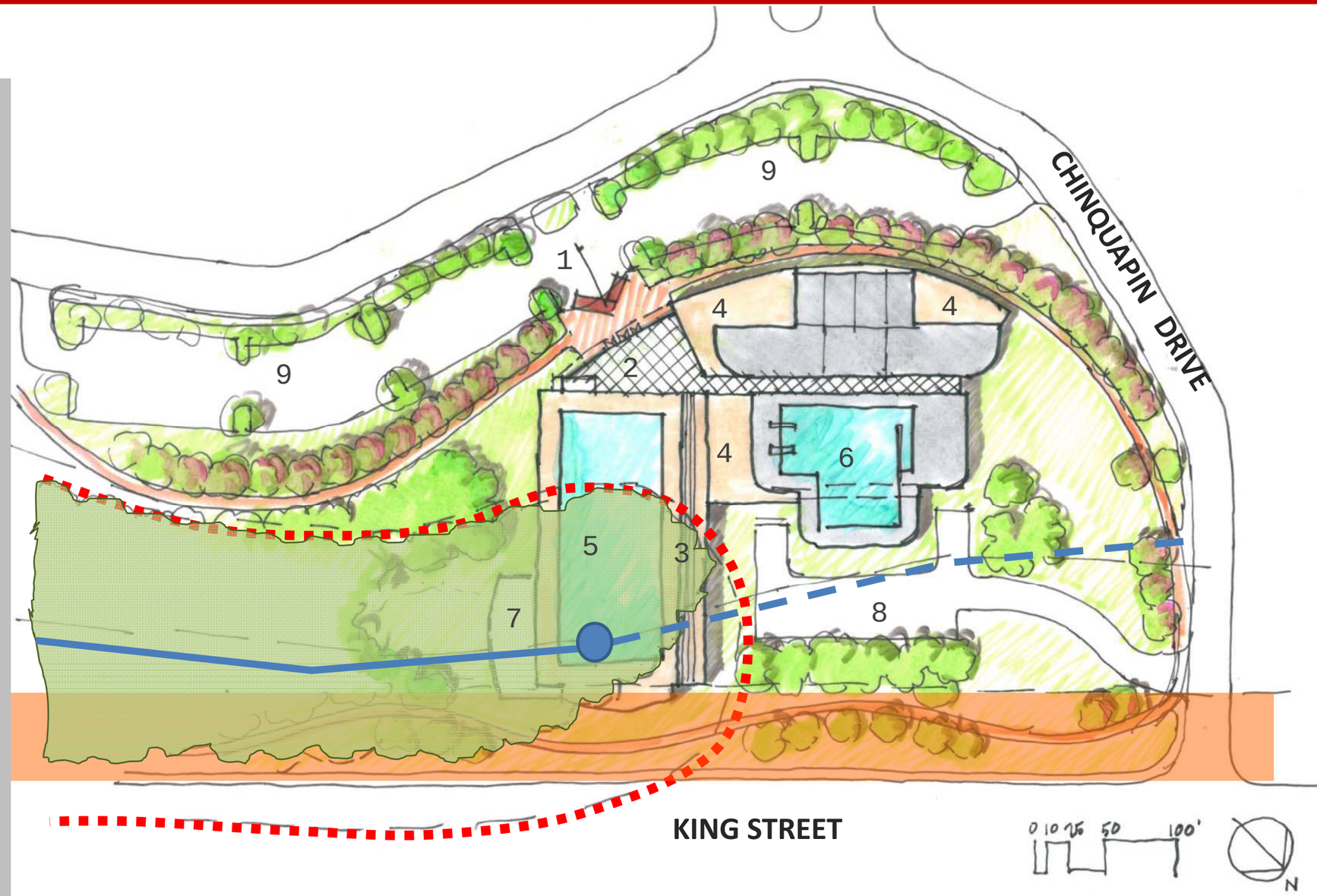
Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 STAFF /SERVICE PARKING
9 PUBLIC PARKING

NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



SCHEME 2

ANALYSIS

PROS

- Central entry location from parking
- New building image along King Street & Chinquapin Drive
- Good user flow at pool deck level

CONS

- Encroaches into the site constraint areas
- No immediate engagement of the aquatic zones at the entry
- Cost premium due to reconfiguration of existing building and additions on three sides of the existing facility

LEGEND

Resource Protection Area (RPA)

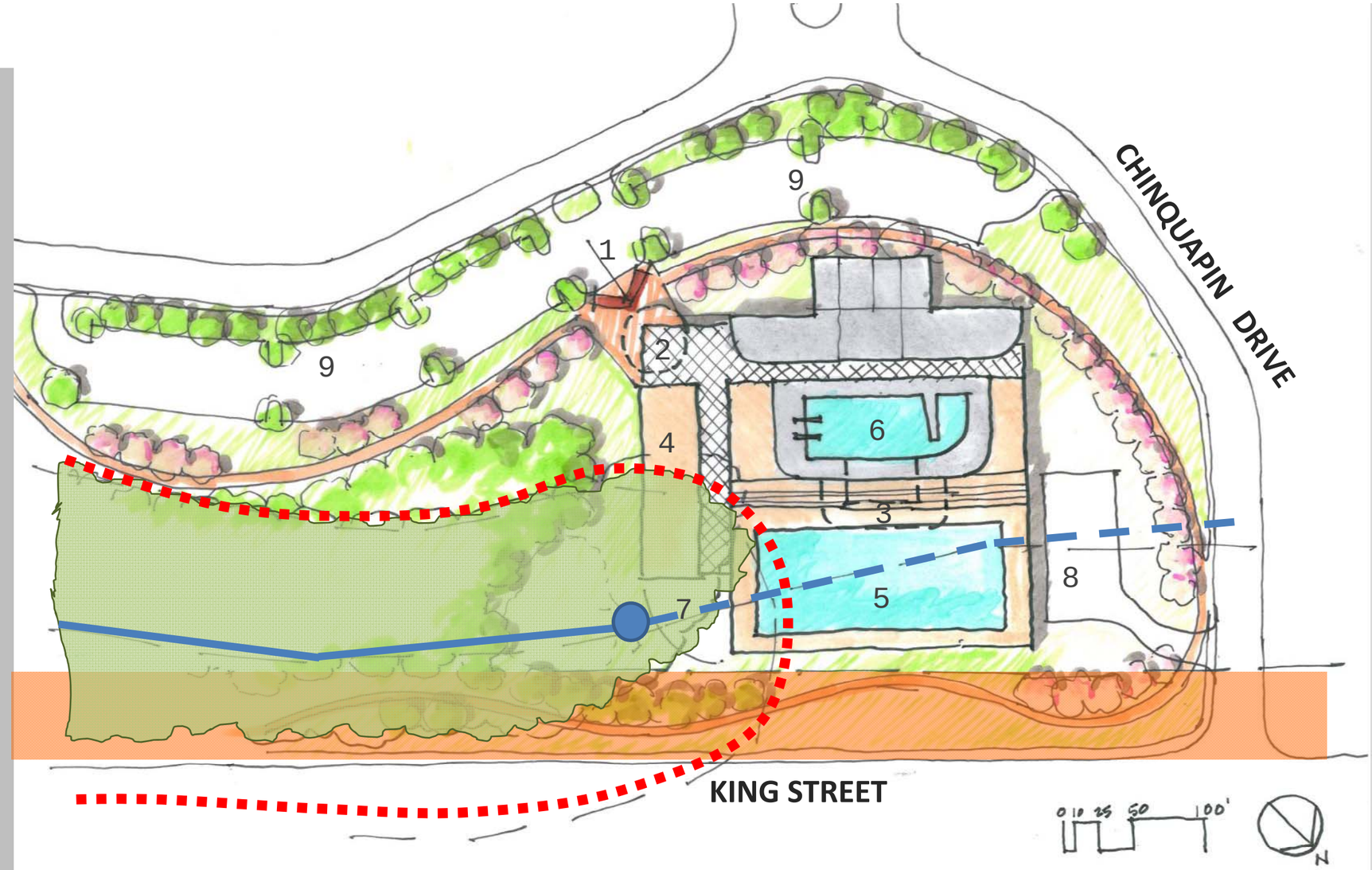
Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 STAFF /SERVICE PARKING
9 PUBLIC PARKING

NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



SCHEME 3

ANALYSIS

PROS

- Central entry location from parking
- 50-m pool addition gives good presence along King Street
- Utilizes SMW as a feature element
- Good amenity engagement to the aquatic zones
- Good user flow at pool deck level
- Minimal cost premium

CONS

- Encroaches into the site constraint areas (high environmental impact)

LEGEND

Resource Protection Area (RPA)

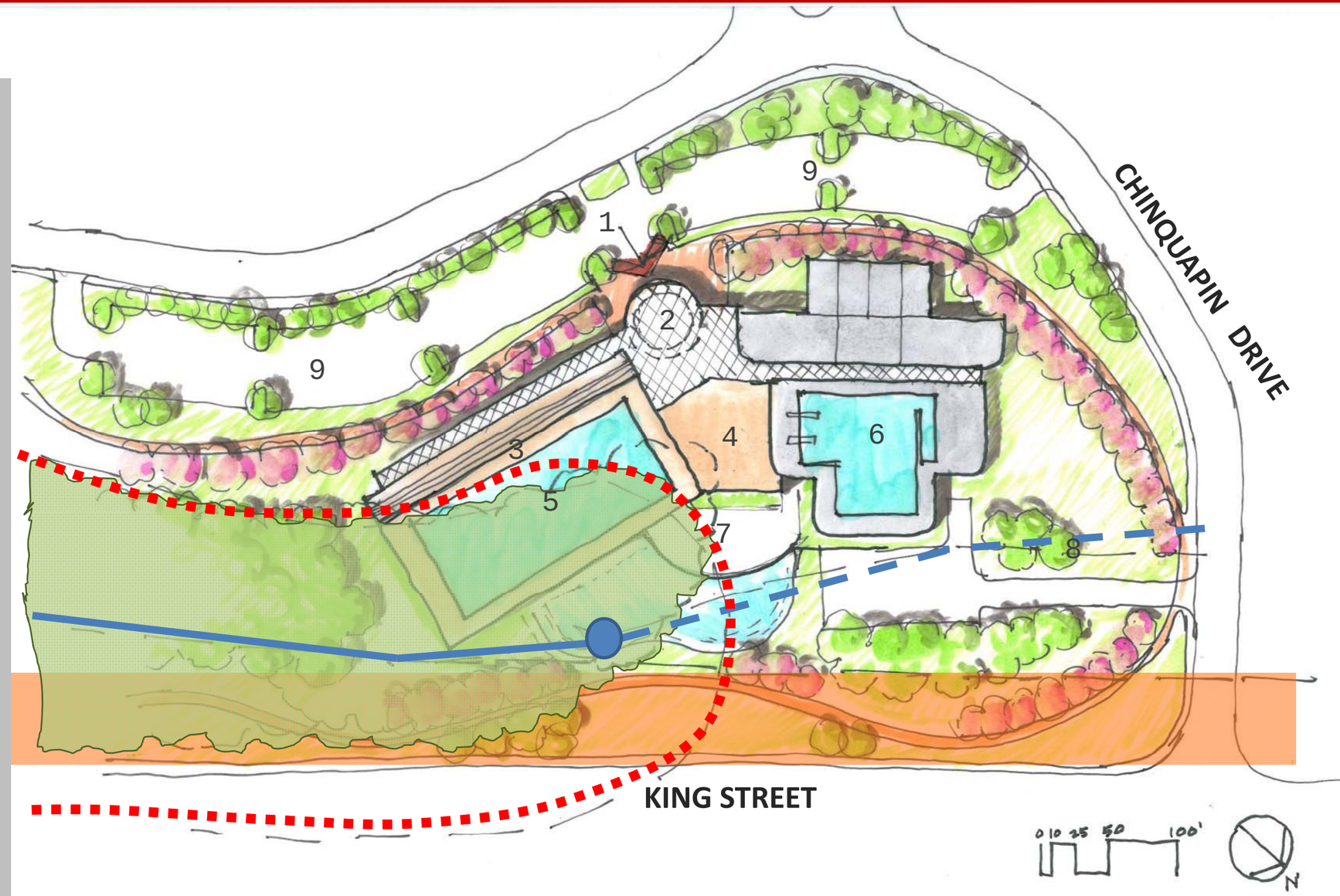
Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 STAFF /SERVICE PARKING
9 PUBLIC PARKING

NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



SCHEME 4

ANALYSIS

PROS
- Entry has good proximity to TC Williams
- Good amenity engagement to the aquatic zones

CONS
- Encroaches into some of the site constraint areas
- Pool Addition too close to site entry and encroaches into building setback criteria
- Internal space relationships are inefficient
- Service access at King Street

LEGEND

Resource Protection Area (RPA)

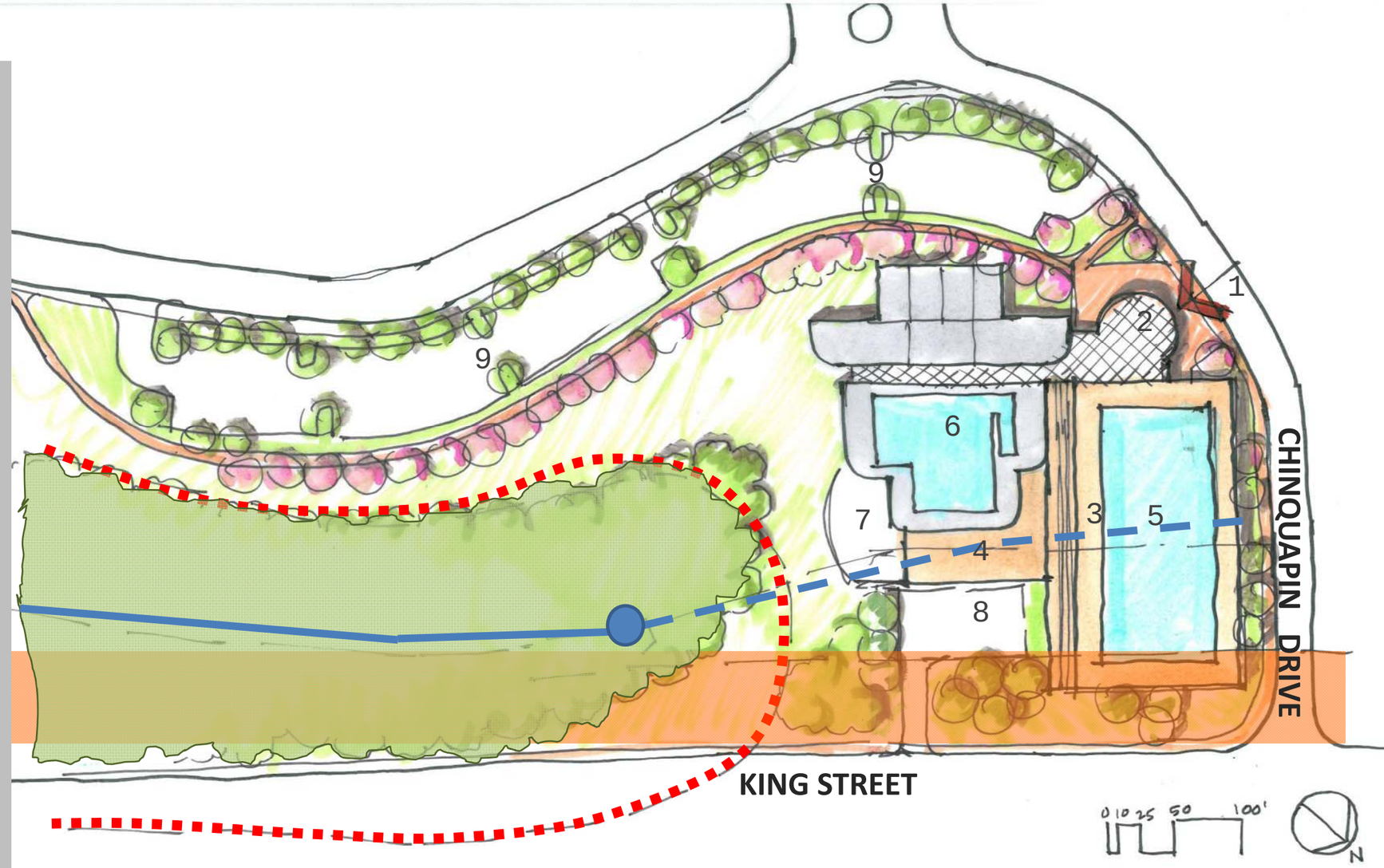
Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 SERVICE PARKING
9 PUBLIC PARKING

NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



SCHEME 5

ANALYSIS

PROS
- Good entry location
- Good amenity engagement to the aquatic zones
- Good user flow at pool deck level
- Pool addition has good park presence

CONS
- Encroaches into some of the site constraint areas

LEGEND

Resource Protection Area (RPA)

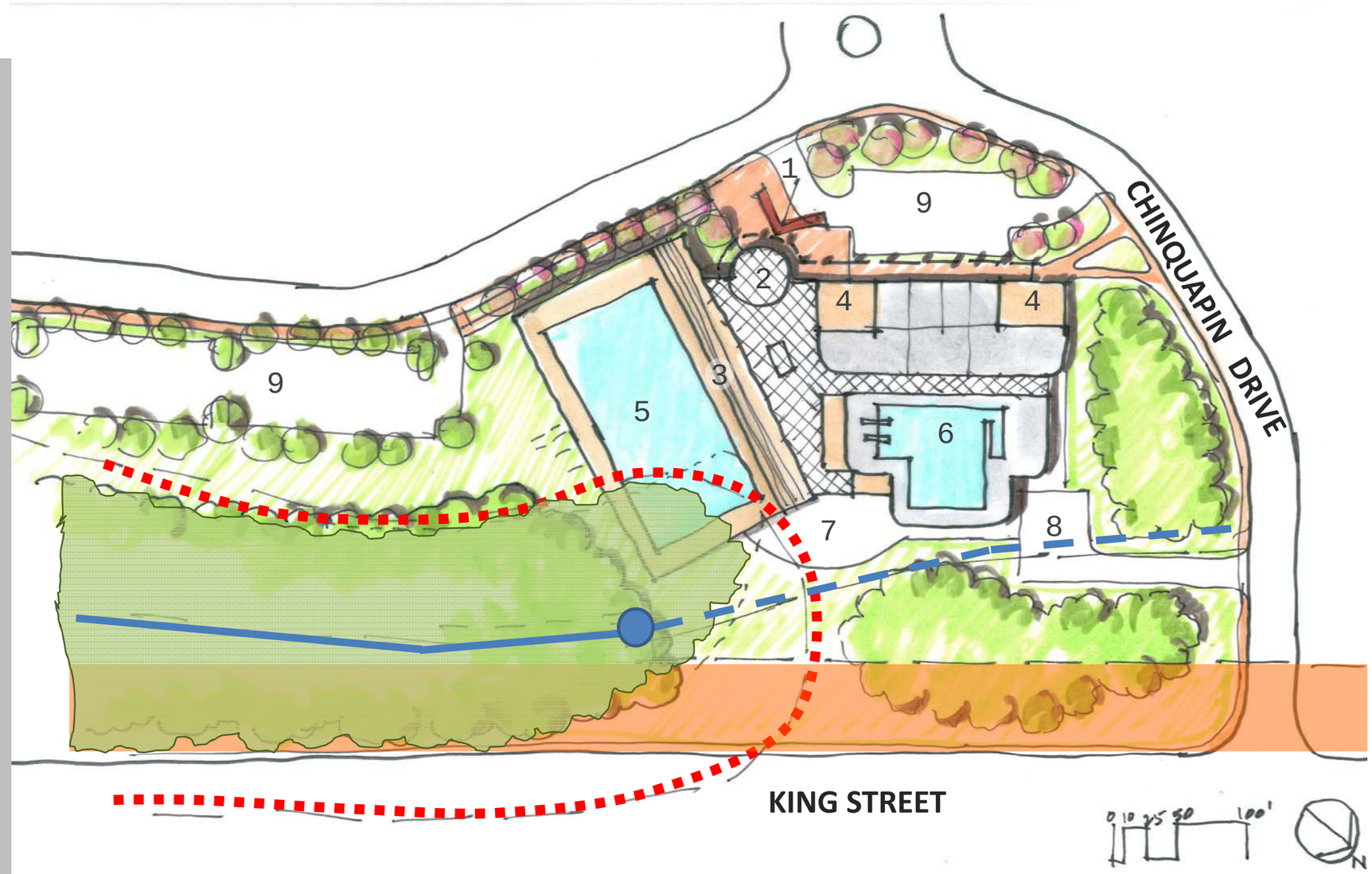
Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 SERVICE PARKING
9 PUBLIC PARKING

NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



SCHEME 6

ANALYSIS

PROS
- Good entry location
- Pool addition has good park presence
- Good amenity engagement to the aquatic zones
- Good user flow at pool deck level
- Avoid all site constraint areas

CONS
- Increased excavation cost

LEGEND

Resource Protection Area (RPA)

Storm Water (Culvert & Creek)

Existing Tree Canopy

Building Setback

1 NEW ENTRY
2 NEW LOBBY
3 SPECTATOR SEATING
4 PROGRAM SPACE
5 50-M POOL
6 EXISTING BUILDING WITH MODIFIED RECREATION POOL
7 SUN DECK
8 STAFF /SERVICE PARKING
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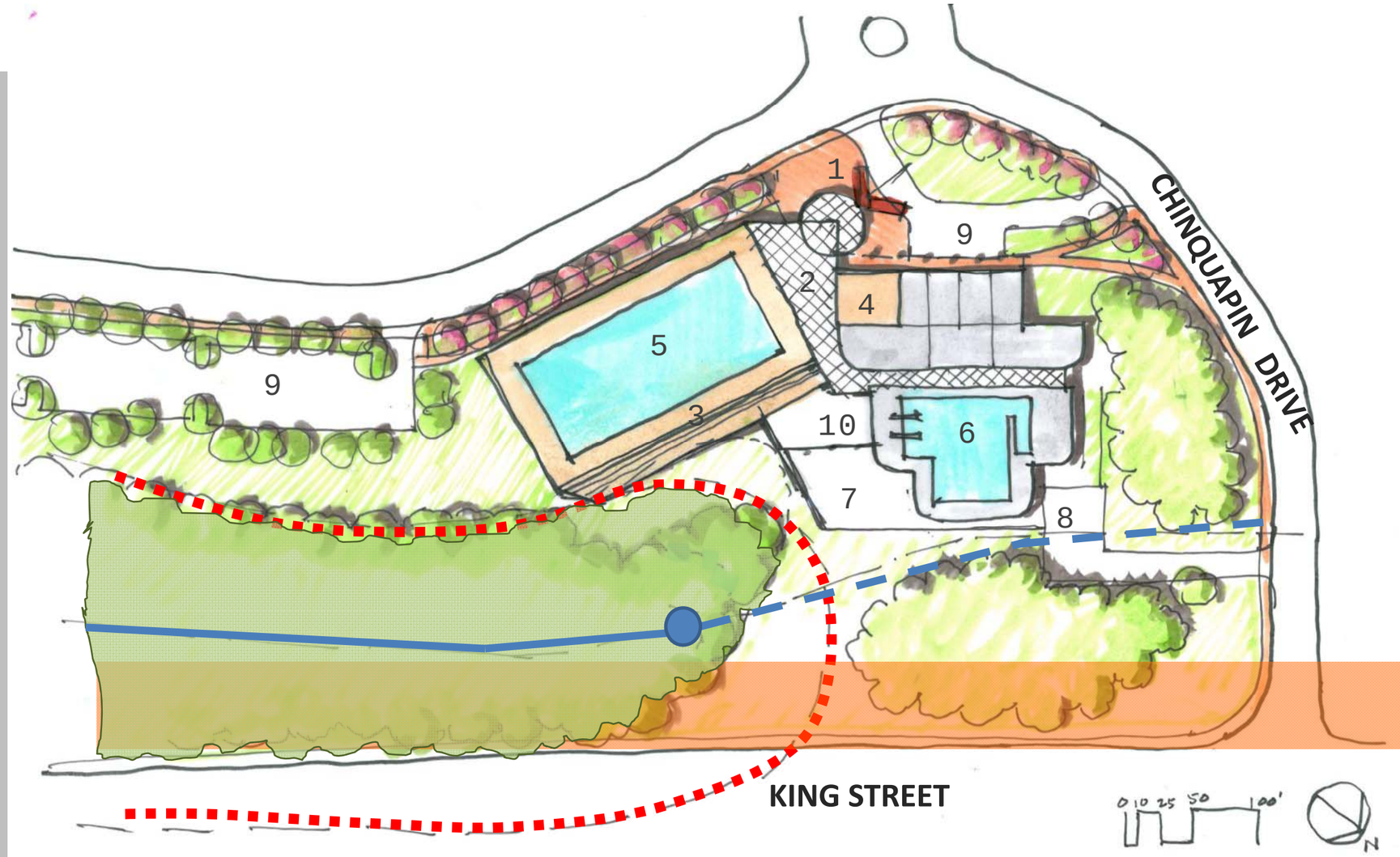
NOTE: NEW LOCKERS & POOL SUPPORT BELOW 2,3 & 4



NEXT STEP: COMMUNITY PARTICIPATION

Commitment to Working Together

Collaboration between community members and city government leads to better results than either working in a vacuum. One without the other misses out on a whole range of good ideas. More importantly, public decisions that are developed collaboratively produce better results and better stand the test of time. RP&CA is committed to using the City of Alexandria's newly adopted Civic Engagement Framework, and Concordia will guide an inclusive process for the Chinquapin Swim Center that will engage the community at-large beginning in Task 1B. The end goal is to bring all interested groups to the table and create a unified decision-making process to help select a preferred design concept to move into the implementation phase.

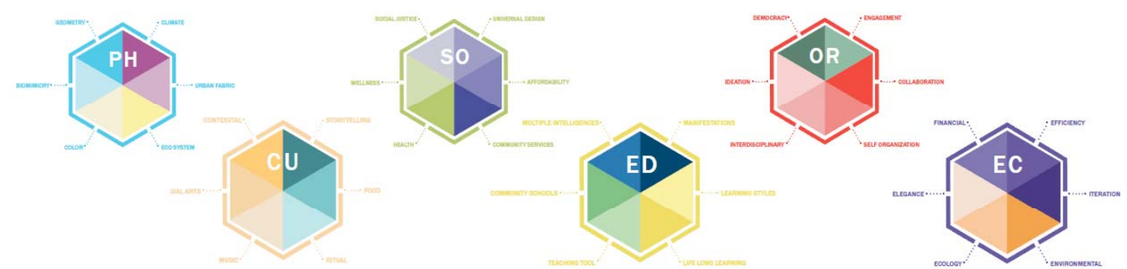
Community Driven Design

Concordia will lead the community-focused design effort for the Chinquapin Swim Center based on the Civic Engagement Framework. This Framework is a result of the What's Next Alexandria project facilitated by Concordia for the City of Alexandria. Concordia is nationally recognized as a leader in public interest design, and our work is driven by an inclusive posture with regard to citizen involvement, public support and community advocacy.

Concordia will facilitate three community meetings during the course of the Feasibility Study. The overall purpose of these meetings will be to educate user groups, constituents and representatives of the community at-large about the project parameters, hear opinions and concerns, gather data and develop a list of community issues, goals and aesthetic preferences that can be integrated into the viability analysis, building program analysis, and the development of physical design alternatives. Every effort will be made to honor the process and intent of the Civic Engagement Framework within the project budget and time constraints.

Over the past thirty years, Concordia has developed and refined an integrated approach to planning and design called the Nexus Model. The core principle of this model is systemic alignment through collaboration and engagement. Just as the human body is a system of organs that carry out individual functions while relying on each other to sustain the whole, the Nexus Model will provide a method for identifying vital components of the City of Alexandria's *physical, cultural, social, educational, organizational and economic* domains that can influence the programming framework for the Chinquapin Swim Center. This approach allows the community to help identify the project's assets and needs, help weigh the impacts of potential solutions, and help identify opportunities for improving accessibility and sharing resources. This method ensures that the users and impacted communities are at the table, resulting in more effective ownership of the outcome and a more well rounded project.

Community members participating in the **What's Next Alexandria** process



Graphic depiction of the six domains included in Concordia's Nexus Model

NEXT STEP: COMMUNITY PARTICIPATION

Principles of Civic Engagement

Alexandria's Principles of Civic Engagement were developed by those who participated from the community during the *What's Next Alexandria* process to guide the City and its residents in how Alexandrians can best participate in public dialogue for decisions that shape the city for years to come. These include respect, inclusiveness and equity, early involvement, easy participation, meaningful engagement, mutual accountability, transparency, sustained collaboration, and evaluation. Each phase of work will be evaluated to assess whether the goals are being met and Principles have been observed, and will allow for adjustments along the way.

Civic Engagement Framework

Now that the City of Alexandria has adopted its Civic Engagement Policy, the Chinquapin Swim Center will become one of the first projects to be implemented using the principles and practices of Civic Engagement. Concordia will work in concert with the City's Civic Engagement Coordinator to monitor each phase of work to ensure we deliver a consistent approach and track our performance.

The framework on the right represents an outline of each phase of work. The current scope of work continues through Phase 3 (Recommendations). Phase 4 will be contingent upon RPCA's final determination of feasibility. The framework will be refined based on community input as the project gets underway.

Civic Engagement Framework

City Department: *City of Alexandria - Recreation, Parks and Cultural Affairs Dept.*

Project: *Chinquapin Swim Center*

Goal : *Feasibility Study for $20m addition/renovation*

Overall project timeline: *Feasibility Study completed: Fall 2014*

Phase 1 Information *(Gathering, Organizing, Understanding)*
[Task 1A]

Key Principles:
- Meaningful Engagement
- Mutual Accountability
- Early Involvement
- Easy Participation
- Inclusiveness and Equity
- Respect

Engagement Activities:
- ☑ Strategic Asset Value Workshop
- ☑ Meet with Key Stakeholders

Tools:
- ☑ Existing Data and Document Review
- ☑ Strategic Asset Value (SAV) Process
- ☑ Site Concept Scenario Development
- ☑ Civic Engagement Framework

Products:
- ☑ Assessment of Basic Project Viability
- ☑ Strategic Asset Value Assessment
- ☑ Summary of Constraints
- ☑ Summary of Existing Conditions
- ☑ Functional Relationship Diagrams
- ☑ Summary of Program Needs
- ☑ Summary of Financial Assumptions
- ☑ Summary of Engagement Process

2 Options *(Discuss and Evaluate Options)*
[Task 1B]

Key Principles:
- Sustained Collaboration
- Easy Participation
- Transparency
- Inclusiveness and Equity

Engagement Activities:
- ☐ Hold Initial Public Meeting (1)
- ☐ Introduce and Develop Survey
- ☐ Tour Area Recreation Facilities
- ☐ Meet with Key Stakeholders

Tools:
- ☐ Community Asset Mapping
- ☐ Best Practices Analysis
- ☐ Demand-based Program Model
- ☐ Demographic Market Analysis
- ☐ Physical Alternatives Development

Products:
- ☐ Preliminary Program Concepts
- ☐ Physical Alternatives Analysis
- ☐ Preliminary Financial Analysis
- ☐ Initial Determination of Feasibility
- ☐ Community Value Assessment
- ☐ Draft Report of Preliminary Findings

3 Recommendations
[Task 2]

Key Principles:
- Transparency
- Easy Participation
- Sustained Collaboration
- Mutual Accountability
- Meaningful Engagement

Engagement Activities:
- ☐ Hold (2) Public Meetings
- ☐ Online Survey and Participation
- ☐ Meet with Key Stakeholders

Tools:
- ☐ Program Refinement
- ☐ Financial Modeling/Business Planning
- ☐ Capital Budgeting
- ☐ User Group Interviews

Products:
- ☐ Preferred Architectural Concept
- ☐ Outline Program Statement
- ☐ Integrated Financial Model
- ☐ 10-Year Operating Pro Forma
- ☐ Financial Results
- ☐ Operating Paradigm
- ☐ Project Budget

4 Implementation and Maintenance
[Tasks 3 & 4 - under separate contract]

Key Principles:
- Transparency
- Meaningful Engagement
- Sustained Collaboration
- Mutual Accountability
- Evaluation

Engagement Activities:
- ☐ Offer visits to project sites as needed
- ☐ Evaluate how well the plan is being carried out
- ☐ Identify someone from the City who is responsible for the work and who citizens can call
- ☐ Involve the community in carrying out the plan in each phase of the process

Tools:
- ☐ Provide a schedule of project activities to carry out the plan
- ☐ Notify community about public meetings

Products:
- ☐ Use objective measurements to determine if the community engagement in the decision-making process was successful
- ☐ Provide regular progress reports
- ☐ _____
- ☐ _____
- ☐ _____