Beverley Park

History and Character

Beverely Park, also known as "the Pit," is a 1.7 acre park in the Beverely Hills neighborhood.

The 1944 Long-term Recreation Plan for the City of Alexandria described the Park as:

"An undeveloped city opened property in Beverley Hills, known as the "gravel" pit of approximately 1.75 acres, is the only available property within this neighborhood for active recreation. The development of this property involves considerable engineering if the maximum use of the property is to be realized. Unfortunately, there is considerable differences in elevation which will involve a large amount grading. The area is further handicapped by its size but it is felt that in spite of these conditions steps should be taken to develop it for playground purposes..."



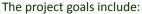
The plan called for a softball field, court area, tot area, and aparatus area, as shown in the image below. The park has only changed slightly since then and its current features and configuration has largely remained the same since the 1970's.

The Park is known as a community gathering space, where families and friends meet throughout the day. It also hosts the North Ridge Neighborhood Association's Christmas Tree Lighting, Beautification Program, and other activities. The hard top area (formally the basketball court) is known as a place for children to find and play toys left behind by other park users.

While a popular site, the park still suffers from many of the conditions cited in the 1940's park plan. The retaining walls along the park are deteriorating, the slopes are eroding and the the site is not ADA accessible. The playground structures are also over twenty years old and at the end of their useful life.

Current Project

While Beverley Park is considered a neighborhood park, it was not included in the overall Neighborhood Park Improvement Planning process because the City had already allocated funds to renovate the Park by the time the Neighborhood Park Improvement Plans began in 2014. The early allocation of funding was largely needed to address serious erosion concerns along the park's sourth and west sides.



- Preserve existing trees;
- Repair and reinforce existing retaining walls in order to preserve trees;
- Relocate ADA entrance;
- Retain existing court and add path;
- Add reforestation areas and nature play elements; and
- Reduce erosion by limiting foot traffic on the slope and re-establishing vegetation







Timeline of Project, to-date

January 2014: Completed slope study
April-November 2014: Developed park renovation

strategy and obtained community feedback

January –April 2015: Developed project cost estimates and obtained CIP

funding (\$900,000)

May-June 2015: Completed 30% Engineering Plan

review

July-November 2015: Re-evaluated design due to

extensive site impacts,

constructability concerns and cost

ncreases

November 2015: Release modified Renovation Plan

Project Schedule

Fall 2015 - Winter 2016 Complete engineering plans and

obtain plan approvals

February - June 2016 Solicit and award construction

ontract

August - December 2016 Anticipated site construction

Existing Conditions



Community Feedback

While not part of the overall planning process, staff did conduct a similar community feedback survey specific to Beverley Park and held community meetings. The results of the survey are shown below. Staff also held meetings with the North Ridge Citizens Association and conducted on-site workshops.

Approximately how far away do you live from the Park?

Value	Count		Percent
Less than 1/8 mile (less than a			
five minute walk)		38	50.7%
About 1/2 mile (about a 10-15			
minute walk)		17	22.7%
More than 1 Mile		12	16.0%
About 1 mile (about a 20-25			
minute walk)		8	10.7%

On average during which times of the day/week, do you or members of your household visit the Park. Select all that apply.

Value	Count	Per	cent
Weekends		44	58.7%
Weekdays	;	37	49.3%
After 5 pm	;	32	42.7%
11 am - 1pm	;	32	42.7%
8 - 10 am	;	31	41.3%
2 - 4 pm		29	38.7%

What activities do you do in the Park?

triidt detiritiee de yea de iii t		
Value	Count	Percent
Use the Playground	5	9 78.7%
Use the Multi-Purpose Hard		
Court	4	3 57.3%
Use the Open Turf Area	3	6 48.0%
Relax	2	8 37.3%
Picnic	2	6 34.7%
Visit Natural Areas	2	3 30.7%
Walk	2	1 28.0%
Participate in Park/Garden		
Cleanups	1:	5 20.0%
Attend Events	1:	5 20.0%
Walk Dog(s)	1:	3 17.3%
Other	1	1 14.7%

When children in your household visit the Playground what is their favorite activity?

	٠, ٠	
Count		Percent
	20	30.8%
	14	21.5%
	19	29.2%
	12	18.5%
	Count	20 14 19

From the list below, please rank the types of play equipment you would like to see in the new Playground, with 10 being the most desirable, and 1 being the least desirable.

Item	Score	Overall Ra
Swings	437	1
Slides	369	2
Climbing ladders/walls/nets	362	3
Playhouses or other "make-		
believe" elements	359	4
Crawl tunnels/tubes	281	5
Monkey bars/trapeze rings	280	6
Rotating or spinning equipment	257	7
Stepping pods/"stones"	246	8
Rockers or see-saws	223	9
Activities with moveable parts,		
games, puzzles	161	10

Which general style of equipment do you think is most appropriate for the new Playground?

Value	Count		Percent
Traditional (similar to existing,			
with many platforms)	;	31	44.9%
Abstract/Modern (typically less			
platforms)		5	7.3%
Natural (boulders, logs, earth			
forms—nature inspired)	;	33	47.8%
Natural (boulders, logs, earth	;		, .

What do you think needs improvement in the Park? Select all that apply.

i aik. Goloot all tilat apply.		
Value	Count	Percent
Park Furnishings (such as		
benches, picnic tables)	41	54.7%
Playground	32	42.7%
Picnic Area	24	32.0%
Open Turf Area	21	28.0%
Natural Areas	20	26.7%
Other	20	26.7%
Passive Use Areas	11	14.7%
Trails	10	13.3%
ADA Accessibility	9	12.0%
Park Entrances	8	10.7%
Parking	5	6.7%
Security	3	4.0%
Signage	0	0.0%

What do you think needs improvement in the

Playground? Select all that apply

riayyi ouliur Select ali tilat ap	יעין.		
Value	Count		Percent
Variety of play equipment		26	41.9%
Other		24	38.7%
Seating		21	33.9%
Protection from weather		17	27.4%
Amount of play equipment		13	21.0%
Safety Surfacing in the			
playground		11	17.7%
Age Appropriateness of play			
equipment		10	16.1%
Fencing		8	12.9%
Activities suitable for children			
with disabilities		7	11.3%
Safety of play equipment		6	9.7%
Signage		2	3.2%

Concept Plan as of December 29, 2015

- 1 Preserve existing hard court. Formerly a basketball court, the existing asphalt court is now a well-used area for unstructured play. The new park layout will slightly reduce the length and width of the court by approximately 10 feet.
- 2 Add accessible park entrance and pathway connecting pavilion, playground and hard court. The site currently does not comply with ADA. A loop pathway will connect the pavilion, playground and hard court. The accessible ramp will be located near the existing wood steps. To build the new ramp, the existing hedges on North Overlook will be removed or pruned back as needed.
- 3 Improve open lawn areas and drainage. Open lawn areas will be situated on the eastern portion of the site. The area will be re-graded and the existing storm drains will be upgraded to improve drainage. The lawn area can accommodate youth sports practices, up to ages 8.
- 4 Enhance existing maintenance driveway. The driveway located at the corner of North and South Overlook Drive is not very welcoming. This area will be enhanced with low plantings. The driveway will also be re-graded to be less steep for maintenance vehicles.
- 5 Replace and relocate pavilion. The existing pavilion is often used for birthday parties. The current structure does not comply with code and the dirt floor is often inundated with water from rain events. The new

pavilion will located away from drainage areas and have a hard floor surface.

- 6 Preserve identified native trees on slopes. The existing trees are a valuable natural resource for wildlife and include several native oaks and hickories. The trees are also providing shade and are helping to stabilize the slope. During construction, extensive tree preservation measures will be implemented.
- Remove retaining walls on the south slope and repair retaining walls on the west slope. The older walls on the south slope have deteriorated past their useful life and will be removed. Based on topography, replacement walls are not necessary. The walls on the upper west slope are in good condition and will be reinforced with additional support pilings. The lower walls are leaning profusely and rebuilding the wall in the same footprint would impact trees. Based on structural evaluations, a new wall can be built in front of the existing wall, without having to remove the existing wall, or impact vegetation.
- 8 Reduce soil erosion on the slopes. The existing slopes are prone to frequent washouts. Planting native groundcovers and grasses will help establish vegetative cover. Temporary silt fence and other erosion control practices will also help reduce siltation and slow runoff. Because foot traffic on the slope contributes to soil compaction and disturbs vegetation establishment, a permanent fence will be installed to stop access to the slope. To ensure long term erosion control, a maintenance follow up plan will be developed.

- 9 Establish a reforestation area on the west side of the park adjacent to retaining walls. By planting sapling trees at the base of the slopes, these will over time, replace trees on the slope that decline naturally.
- Add nature play features through the new reforestation area. The existing slope is well used by children for play, however, the use contributes to slope erosion. New nature play elements, such as a plank boardwalk through the reforestation area, will provide opportunities for exploration and unstructured play. A low multipurpose deck can be used as a stage for events, or imaginative play.



- 11 Create areas for congregation with picnic tables and site furnishings. The area between the court and playground will have moveable site furnishings and picnic tables. This area is the center of the park, and will provide a social gathering space, while also providing surveillance within the park for caregivers and parents. Benches will also be located along the loop path.
- 12 Renovate playground areas. Most of the play equipment is over twenty years old and will be updated with new structures for multiple age groups. The structures will have slides, climbing nets and other elements. Other equipment include more swings, a zipline, and shade sails. Both rubber and wood fiber, safety surfacing will be used.
- 13 Install Traffic Calming. The intersection of North and South Overlook is very wide and vehicles are prone to drive over the speed limit. Realigning the intersection and adding crosswalks and a stop sign can alleviate these issues. Line striping, color coating, or bollards can also be implemented as interim measures.
 - Add park security lighting. The park is closed at dark and currently unlit. Recent incidents have occurred at the park during nighttime hours. Pursuant to an approved Special Use Permit, the addition of security lighting can improve Police surveillance and park security during evening hours. Security lighting is not intended to permit nighttime use of the park, and will be designed to minimize spillover into adjacent properties. The park will continue to remain closed at dark.

2015 Neighborhood Parks Improvement Plan: Appendix



Beverley Park Slope Stabilization Study

ITEMS OF DISCUSSION

- Introduction
- Study Findings to Date
- Alternatives/Ideas
- Discussion
- Next Steps

April 14, 2014

Beverley Park

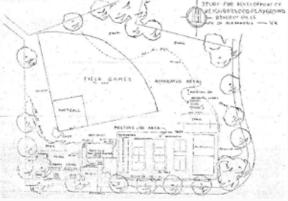




Park History



1940, Park Planning Program



1944, National Recreation Association, Alexandria Long-Term Recreation Plan



1976. Alexandria Archives. Bicentennial Collection



1963, Park Inventory, Alexandria Master Plan

(

Park History

"An undeveloped city opened property in Beverley Hills, known as the "gravel" pit of approximately 1.75 acres, is the only available property within this neighborhood for active recreation. The development of this property involves considerable engineering if the maximum use of the property is to be realized. Unfortunately, there is considerable differences in elevation which will involve a large amount grading. The area is further handicapped by its size but it is felt that in spite of these conditions steps should be taken to develop it for playground purposes..."

Exerpt, Long Term Recreation Plan for the City of Alexandria, National Recreation Association, 1944



Individualized Site Rituals

CONTRACTOR OF THE PARTY OF THE

- Christmas Tree Lighting
- Toys
- Beautification Programs
- Open Lawn Use
- Wheel Day
- Natural/Passive Open Space





5

Beverley Park Infrastructure Conditions

- Playground
- Retaining Wall(s)
- Tree Canopy
- Drainage/Slope Erosion
- Shelter
- Accessibility





Tank P

Slope Stabilization Study

- Evaluate Existing Conditions
 - Geotechnical Investigation
 - Engineering Analysis
 - Arboricultural Analysis
- Provide Recommendations and Options

7

Geotechnical Investigation N. Overlook Dive South Stope South Stope

Findings: Geotechnical Investigation



- West and south perimeter slopes
- Core sampling at top/middle/bottom of slopes
- Dense sand and clay soil profiles
- Slope stability modelling indicates stable soils
- Future work unlikely to need special techniques

9

Findings: Geotechnical Investigation



South Slope



Findings: Geotechnical Investigation





West Slope

[11]

Engineering Analysis



West Slope Retaining walls



Findings: Engineering Analysis

- Retaining walls constructed in 1960's-1980's
- Near the end of their useful life
- Exacerbating soil erosion by concentrating water flow
- Remove existing walls







Arboricultural Analysis

- Evaluate condition of 78 trees over 4 inches in caliper
- Best trees are at the top of the slopes
- Trees include native and non-native species







[14]

Findings: Arboricultural Analysis

Constitution of the second

- 3 Trees in need of immediate removal
- Many are unlikely to survive wall reconstruction
- Approximately 25
 Trees may be impacted by construction



[15]

Design Challenges

- Execute work once
- Expend funds efficiently
- Localize construction impacts
- Sustain a long-term operational solution



Slope Stabilization Alternatives

Retaining Wall & Grass Slope

West Slope: 8.5' height retaining wall w/ 3' height handrail South Slope: Grassed slope with 2H:1V grade, reinforced with erosion control blanket

Tree Removal	Removal of approximately 9 trees. Trees on the south slope to continue decline
Tree/Vegetative restoration	New tree plantings likely to be constrained by wall, erosion control fabric, and steeper slope
Open Space Impact	Playground location stays relatively the same
Drainage	Considerable drainage design for wall and playground
Relative Cost	Higher cost
Constructability	Equipment for wall installation
Long term Sustainability	Potential for vandalism, long term wall maintenance and repairs may be costly



[17]

Slope Stabilization Alternatives

Retaining Wall & Grass Slope



West Slope: 8.5' height retaining wall w/ 3' height handrail



[18]

Slope Stabilization Recommendations



Retaining Wall & Grass Slope



South Slope: Grassed slope with 2H:1V reinforced with erosion control blanket

[19]

Slope Stabilization Alternatives

Grass/Natural Slope -No Wall



South Slope. Grass	seu/ Naturai Siope, Tility Siope
Tree Removal	Removal of approximately 25 trees
Tree/Vegetative restoration	New tree plantings feasible
Open Space Impact	Playground moves to another location. Slope is useable once vegetation is established.
Drainage	Reduced concentrated runoff and erosion
Relative Cost	Lower cost
Constructability	Large amount of hauling and traffic control
Long term Sustainability	Indefinite life, slopes can be maintained at an optimum level



[20]

Slope Stabilization Alternatives

Grass/Natural Slope -No Wall







[21]

Slope Stabilization Alternatives <u>Grass/Natural Slope - No Wall</u>



South Slope: Grassed/Natural Slope, 4H:1V slope





Questions and Discussion

- Which alternative do you prefer?
- What should be the process for future public outreach?
- What is the preferred construction timing?

Think About...

- Constructability/Phasing/Impacts
- Relative Costs
- Long Term Solutions

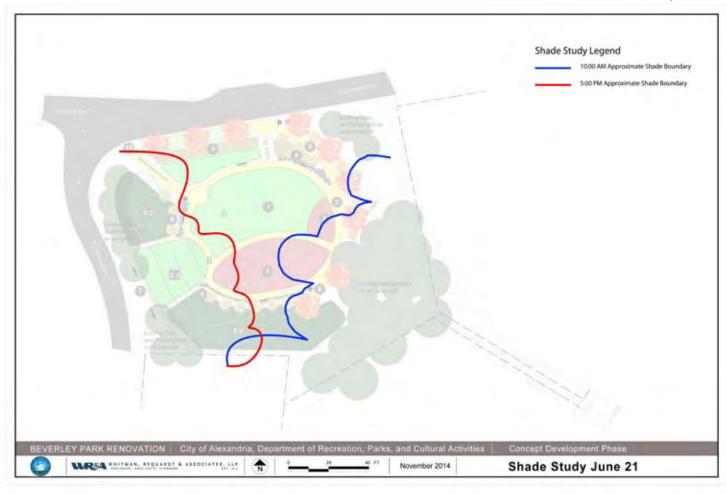
23

Next Steps

- Develop park and playground concept plan based on preferred slope stabilization
- Continue community engagement process
- Incorporate community feedback into Final Concept Plan
- Develop construction and permitting plans, phasing plans if needed
- Obtain regulatory plan approvals









Where We are Now Timeline of Project to Date

• January 2014: Completed slope/geotechnical

April-November 2014: Developed park renovation

strategy and obtained

community feedback

January –April 2015: Developed project cost

estimates and obtained CIP

funding (\$900,000)

• May-June 2015: Completed 30% Engineering Plan

review

• July-November 2015: Re-evaluated design due to

extensive site impacts,

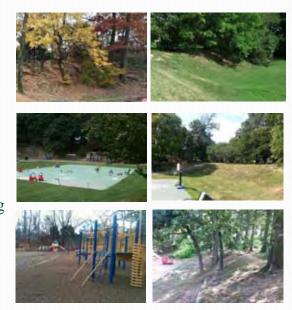
constructability concerns and cost

• November 2015: Release modified Renovation Plan



Park Plan Updates

- Preserve existing trees
- Repair and reinforce existing retaining walls in order to preserve trees
- Relocate ADA entrance
- Retain existing court and add path
- Add reforestation areas and nature play elements
- Reduce erosion by limiting foot traffic on the slope and re-establishing vegetation





Park Concept Plan November 2014 and November 2015



November 2014



November 2015

Updated Park Concept Plan November 2015





Updated Park Concept Plan November 2015

- Preserve existing hard court. Formerly a backethall court, the existing arphals court is now a well-used area for unstructured play. The new park layour will slightly neduce the length and width of the court by approximately 10 feet.
- The hew park layour will slightly reduce the length and width of the count by apprenimently 10 feet.

 Add accessible park entrance and pathway connecting pavillion, playground and hard court. The site currently does not comply with ADA. A loop pathway will connect the pavilion, playground and hard court. The accessible ramp will be located nearthe electing wood steps. To build the new samp, the existing hedges on North Oyerlook, will be removed or pruned back as needed.

 Improve open lewn areas and drainage. Open lawn areas will be situated on the estaten portion of the site. The area will be ne-gisaded and the existing storm craims will be upgraded to improve drainage. The lawn areas can accommodate junts sport a practice, up to age, 8.2.

 Enhance existing maintenance driveway. The threway located at the corner of North and South Osetbook Drives is not very velocening. This area will be enhanced with low plantings. The driveway will also be enhanced with low plantings. The driveway will also be enhanced with low plantings. The driveway will also be a specific parallel on the existing parallel in its existing parallel in the existing the second in the parallel in the existing p

- 8 Preserve identified native trees on slopes. The existing trees are a valuable natural resource for wildlife and include several native data. and hickories. The bees are also providing shade and are helping to stabilize the slope. During construction, extensive tree preservation measures will be implemented.
- manutures wet do importanted.

 Remove retaining walls on the south slope and repair retaining walls on the walls on the south slope have detainined per it their useful life and will be removed. Based on topography, replacement walls are not necessary. The walls on the topography, reprincement ware are not receivary, me was not me upper vest slope are in good condition and will be reinforced with additional support pillings. The lower mills are leaning profusely and rebuilding the wall in the same footprint would impact trees. Based on structural evaluations, a new wall can be built in front of the existing wall, without having to semove the existing wall or impact vegetation.

- to frequent washouts. Planning native groundcovers and grasses will help establish vegetative cover. Temporary silt fence and will help establish vegetative cover. Temporary silt lence and silve runnoff. (Because foot truffic on the slope contributes to soil compaction and distribs vegetation establishment, a permanent fince will be installed to stop access to the labby. To ensure long term erosion control, a maintenance follow up plan will be
- Establish a reforestation area on the west side of the park adjacent to retaining walls. By planting sopling trees at the base of the slopes, these will over time, replace trees on the slope that
- @ Add nature play features through the new reforestation area. The existing slope is well used by children for play, however, the use contributes to slope ecosion. New nature play elements, such as a plank boardwalk through the reforestation area, will provide
- This area will be enhanced with low plantange to be re-gooded to be less steep for maintenance websides.
 Replace and relocate parallies. The existing pavilion is often used for birthday parties. The current structure does not comply with code and the dirt floor is often insudated with visite floor rain events. The new pavilion will located away from disinage areas and fave a hard floor surface.

 Create areas for congregation with plenic tables and site funcionally form the surface and playground will have revealed between the court called in the constitute surface.

 Preserve identified native trees on slopes. The existing trees are a social pathering space, while also providing surveiled and a surface of the play equipment is over the court of the play equipment to over the court of the play
 - Denches will also be located along the loop path.

 Renevate playground areas. Most of the play equipment is over
 twenty years old and will be opticated with new structures for multiple
 age groups. The structures will have stides, climbing nets and other
 elements. Other equipment include more woring, a apline, and
 shade sals. Both rubber and wood fiber, safety surfacing will be used.
 lastall low cost alternatives for traffic calvining. The intersection of
 North and South Overlook Drive is very wide and vehicles are prone
 to drive over the speed limit. Low out alternatives such as the
 triping color coating, and reviercive bottlend, may help to visually
 namous the intersection and slow vehicles. Crosswalk steping will also
 help ditivers become more evene of children and pediestrians.



Retaining Wall Repairs

•Reinforce upper-tier walls with additional pilings:



 Construct new wall in front of existing mid-tier wall:



•Remove three walls on south slope:







7

Plan Feedback, 11/19/15-12/13/15





Adjusted Project Schedule

Fall 2015-Winter 2016:Compile public feedback and update concept plans. Complete engineering plans and obtain plan approvals

February-June 2016: Solicit and award construction contract

August – December Anticipated site construction



0

Beverley Park





Total Responses to 'PitPark2015' gmail account, as of 12/14/15: 15 Compiled Comments:

Subject	# of Responses	Comments
Park Lighting	8	"Installing lights whether they are low light or motion sensor (that don't go off because of squirrels) lights;" "the only additional item I would like to see addressed is lighting" "I just sent an email re: the Pit renovation plan. I wanted to add that more lighting in the area in and around the pit may be wise." "I am in hope as well with the recent activity that lights will be installed in the Pit area as well for security." "Also related to security, I the area could really use more lighting." "I would like to see lantern type LEED lighting (think Central Park) which would provide practical lighting and security - as you know it is pitch black down there at night. Something like this: https://www.pinterest.com/pin/574842339911222458/" "I also believe that public safety features should be an important consideration in this renovation. I would like to see sidewalks and motion-sensor lighting added around the perimeter, if possible" "Given the recent homicide at the Pit Park, I think lighting is imperative. The park is pitch black during nighttime hours. If we could have some form of lighting to dissuade future crimes, prostitution, teenager activity, etc. it would make the neighborhood and surrounding area much safer. PLEASE add lighting! It's not just an aesthetic issue. It's an issue of safety for adults and children who live close to the Pit."
Traffic Calming	3	"Line striping will not slow traffic. Obviously many children will be playing in this area and a speed bump or stop sign is required for pedestrian safety." "I think traffic calming measures are really important. Living close by, I frequently observe cars driving at a pretty high rate of speed." "Having cross-walks painted, and visible signage placed at the intersections of S. Overlook and N. Overlook would be highly beneficial for pedestrians. Having these in place would also make parked motorists taking children out of cars on N. Overlook feel safer. The N. Overlook/S. Overlook intersection is very wide. It has traffic coming from several directions, in addition to cars speeding down N. Overlook. It's one of the only straight, cut-thoughts in Beverley Hills from Cameron Mills to Old Dominion. Motorists take full-advantage of this. Daily, I see dozens of cars speeding down N. Overlook. It's definitely a safety hazard trying to walk to the park and across N. Overlook or S. Overlook with children."
Landscaping	3	"I think removing shrubbery and the small trees that line N. Overlook, at the front of the park, would help to make the park more transparent and create a better view into the park. This also might dissuade potential illegal activity. There would be nothing to hide behind." "I would also like to see beautiful, smart, low maintenance landscaping." "The tall hedges/trees that shroud what could and should be open pathway space at the top of the hill between the park and N. Overlook Drive should also be removed to improve safety and visibility into the park space."
Playground Comments	2	"Hopefully there will still be play structures for both young (toddler/preschool) and older (elementary) kids." "I am concerned about the safety surface on the ground. Would you be able to explain the type of surfacing you are planning to install?"
Sandbox	2	"I don't see on the new plan any place that has a sand box or just a pit with sand in it. Digging and playing around in the sand pile seems a good open-ended thing to preserve and is equally important as added features like the zip line." "keep the sandbox!",
Misc.	2	"Enhance existing maintenance driveway: no need to regrade driveway. Maintenance vehicles can easily make it down that slope." "Would it be possible to address sledding opportunities? We have such a good time down there when it snows."
Picnic Pavilion Improvements	1	"Improving the picnic shelter by including electric outlets and possibly enlarging it"
Open Area	1	"This plan reduces the open lawn area way too much. You need to change the design to push the trail way to the west and put the pavilion back in the southwest corner in order to maintain decent open area. Do no put the pavilion in the middle of the only open space left. The southwest corner is better for birthday parties and other events anyway."