

To prepare students for lifelong success through excellence in education



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To: Board of Directors  
 From: Robert O'Donnell, Vernon Bock, Randy Brown, and Ed Poprik  
 Re: Playground Master Planning Update  
 Date: November 4, 2019

## Recommendation

The administration is recommending three final playground schematic designs for Corl Street, Radio Park, and Spring Creek that have a mix of nature-based play options and traditional equipment. Each design includes a focus on accessibility and opportunities for students to swing, slide and climb.

This recommendation comes to you after a year and a half of research, community engagement, and planning to present the best possible playground designs for all of our students. Our recommendation includes a timeline that supports initial construction to begin in early May of 2020. Per the current schedule, this will allow for playground completion prior to the beginning of school in 2020.

Itemized cost estimates are attached to this recommendation and contain a piece-by-piece list of equipment for each location. In addition, Table A provides a summary of the estimated costs. Table B provides a listing comparing the play options and equipment proposed in each site plan.

The schematic designs will be presented as final designs (design development documents) for Board approval at the Dec. 2 or 16 meeting.

## Updated site information

Beginning in the summer of 2019 and continuing this fall, basketball hoops were installed at Corl Street, Radio Park and Spring Creek on the blacktop areas. Principals have also provided additional items like balls and cornhole games for recess play at each school to enhance the students' experiences while the final plan for playgrounds are developed.

In October, the principals at Corl Street, Radio Park, and Spring Creek met with their respective PTO's and faculty members to discuss the refined plans for each playground. Some of the feedback from these sessions was incorporated into the final designs.

Swing installation is scheduled for early November at Radio Park and Spring Creek, as this has been unexpectedly delayed from late October.

As we worked through the final design process, we were hoping to repurpose some existing equipment at each site. After further analysis, we learned that refurbishing equipment would not be cost effective, with the exceptions of a climber/slide at Corl Street and the rock climbing wall at Spring Creek. The Spring Creek item will be reinstalled in early November along with the swings, while the Corl Street item will be relocated with the work this summer. Taking into consideration community desire for more climbing structures, as well as safety concerns, we replaced the dome climbers with 17-foot tree climbing structures at all three locations. Additionally, a spinner structure was added at Radio Park to accommodate the larger number of students in that building.

As we evaluated plans on a site-to-site basis, we realized the plans were not comparable given student enrollment. Therefore we are considering adding play structures at Radio Park. (Table A, 2)

If approved, construction will begin in May, and all three projects are scheduled to be completed for the beginning of the 2020-2021 school year.

### **Project phasing and clarification of Phase I and II**

When the district began the master planning process and started exploring nature based playgrounds, Metcalfe Architecture and Design, LLC developed the original plans. These conceptual drawings were high-level indications of what our playgrounds could look like and the types of things they might include.

Throughout the development, based on community input and costs, the final plans for Corl Street, Radio Park and Spring Creek took shape. Those original conceptual designs were whittled down to specific plans that could be implemented for the fall of 2020 and other possibilities that might be implemented in the future. This basically provides a Phase I, implementation for fall of 2020, and Phase II, other elements that could be included in the future.

During the process, we communicated to our communities that our playground master planning and implementation of new or updated playgrounds would begin with the three new elementary schools. Once those were complete, we would look at updating the playgrounds at the five remaining elementary schools and our three middle schools. Upon completion of Phase I at all

11 locations, the district will then evaluate our existing playgrounds and the master plan to determine what next steps (Phase II), if any, are necessary.

## Cost Estimates

Cost estimates are provided in detail as an attachment to this update. Table A provides a summary of the cost estimates. These estimates include the construction cost portion of the project which will begin in May of 2020. As in other capital projects, a contingency has been included in the estimated costs to account for omissions and changes during design and construction. During the fall of 2019, basketball hoops have been installed at all three locations and swings will be installed in early November at Radio Park and Spring Creek.

**Table A**

	Spring Creek	Corl Street	Radio Park
Construction Cost (1), (2)	\$188,132	\$229,103	\$183,433
Design Cost Est.	50,722	50,722	50,722
Contingency	19,190	23,158	18,480
Swings/Basketball Hoops (1)	45,328	2,829	60,187
Grand Total	\$ 303,371	\$305,812	\$312,822

*(1) Construction costs for Corl Street include swings, as opposed to Spring Creek and Radio Park where they are separate projects.*

*(2) The cost for the Radio Park project would increase if play structures are added as discussed.*

These estimated costs reflect the most recent changes resulting from the review of faculty/staff and PTO's with the principals at each school community. The estimates align with the budget of \$250,000 per playground, which the design team had been assigned for construction cost. The total project costs are approximately \$300,000 after adding the design cost of \$50,000.

It should be noted that the cost of making these playgrounds accessible to all students is approximately 28% of the cost of construction and equipment, or on average \$60,000 per site.

## Playground Components

Table B provides a comparison of playground components included in the proposed designs for each school. Variations are due to site constraints and input from the respective communities, as well as available opportunities to reuse equipment.

**Table B**

<b><u>Spring Creek</u></b>	<b><u>Corl Street</u></b>	<b><u>Radio Park</u></b>
Kompan Swings	Kompan Swings	Kompan Swings
Kompan Robinia Tree Climber	Kompan Robinia Tree Climber	Kompan Robinia Tree Climber
Grass Mound	Grass Mound	Grass Mound
Kompan Embankment Slide	Slide Reused	Kompan Embankment Slide
Log Stepper Slope		Log Stepper Slope
Log & Boulder Climbing Area	Log & Boulder Climbing Area	
Log Mound	Log Mound	
Black Locust Posts		Black Locust Posts
	Kompan Parkour	Kompan Parkour
		Dynamo Cone Spinner
Log Stump Seats		Log Stump Seats



	Hillside Rock Slabs	
	Balance Logs	
Wood Bench		
Climber Re-used		

### **History of playground master planning**

During the summer of 2018, district administrators under direction by the Board of Directors developed an RFP for a playground master planning effort that incorporated nature-based play. The master planning effort was to prioritize playground construction at the three elementary schools undergoing construction — Corl Street, Radio Park, and Spring Creek — while also addressing a long-range plan to update all elementary playgrounds in the future. After careful consideration, the Board of Directors chose Metcalfe Architecture and Design, LLC as the firm to lead the district’s playground master planning efforts.

The Metcalfe team began its work in the district near the end of October 2018 by conducting a playground audit at each of our elementary schools. The audit included an interview with the principal as well as a survey of the playground area and an inspection/safety audit of the existing equipment.

Our first meeting with the district Playground Master Planning Task Force and Metcalfe design team was held Jan. 16, 2019 from 6-8 p.m. in the Panorama Village board room. In attendance were 45 members representing parents, faculty and staff from each elementary and middle school, building principals, district administration, school board members, and representatives from the Finance and Facilities CAC.

At this meeting, the Metcalfe team updated the Task Force in regards to the playground audits that were conducted from their fall visits to each elementary school, and then engaged the Task Force in discussion around the types of play elementary and middle level students choose. This discussion included current engagement and future opportunities, as well as personal memories. The Metcalfe team began to generate the master plan for the playground process from the collected materials that night.

Also in mid-January, the district surveyed parents and faculty for input on the types of play opportunities they desired for their children and students at recess. During that same time period, information was collected from all elementary students in the district regarding their desire for play experiences at recess. Students were given a choice in how they provided this

information — either in writing or as a graphic organizer. Both the survey results and student feedback were provided to the Metcalfe design team, which used it to inform their master planning designs.

The evening of March 25, 2019, an evening session was held with students and parents from each elementary school in the boardroom of Panorama Village to interact with the Metcalfe team. At this meeting, parents were updated on further master planning efforts while groups of students created playground structures from provided materials. These playground structures, collected at the end of the night by the Metcalfe team, were used to inform further design efforts.

During the month of April 2019, five evening community input sessions were held in the boardroom at Panorama Village for the Metcalfe team to present initial schematic designs to each school community. Those in attendance had the opportunity to pose questions and provide input to the Metcalfe team. The Metcalfe team gathered feedback from those sessions to further refine schematic designs.

During the month of May, district administration participated in several meetings with the Metcalfe design team to incorporate traditional play opportunities into the schematic designs for the three sites under construction. This was in direct response to input from our community. We also discussed a tentative budget of \$250,000 for each site.

### **Elementary Playground Update History**

<b>Date</b>	<b>Meeting</b>	<b>Info/Discussion</b>	<b>Action</b>
August 2, 2018	RFP	Metcalfe response to SCASD RFP	
September 24, 2018	Board		Approve the contract with Metcalfe Architecture & Design, LLC for Playground Master Planning services as presented
January 21, 2019	Board	Elementary Playground Master Planning Update	
March 25, 2019	Playground Design Meeting 2	Metcalfe Design Presentation	
April 8, 2019	Board	Playground Planning Update and Implementation	

		Contract	
May 16, 2019	Joint Facilities and Finance	Playground Update	
May 20, 2019	Board	Playground Master Plan Process	
June 3, 2019	Board	Playground Master Planning	Approve contract with Metcalfe Architecture and Design for architecture and engineering services related to implementation of the playground master plan
August 5, 2019	Board	Playground Update	
August 14, 2019	Facilities and Grounds	Playground Update (not part of agenda, but asked by a Board member)	
August 19, 2019	Board	Update on Elementary and High School Projects	
September 5, 2019	Facilities and Grounds	Playground Update	
September 9, 2019	Board	Playground Update	
October 7, 2019	Board	Playground Update	

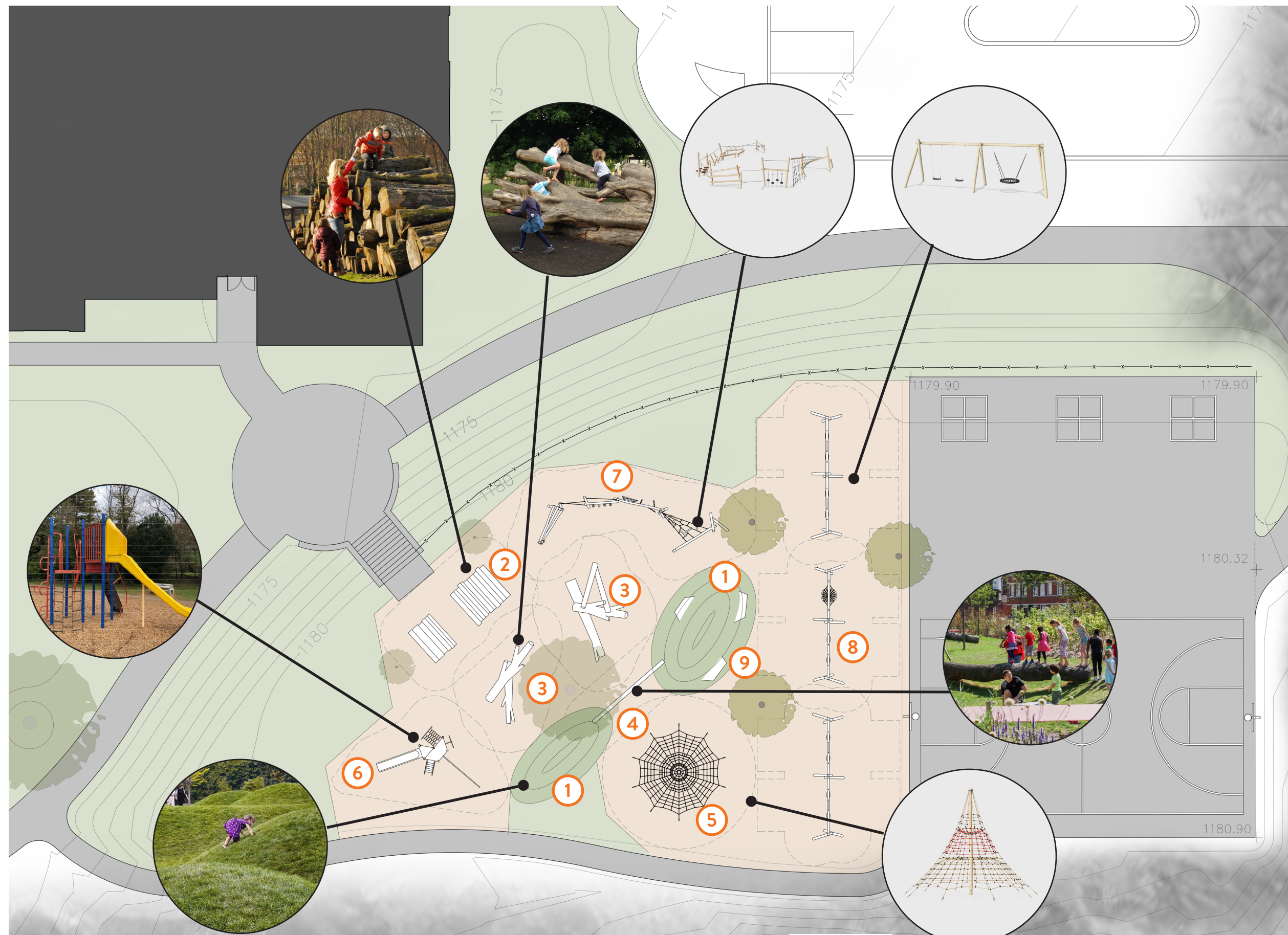
### Upcoming planned actions

Date	Meeting	Info/Discussion	Action
November 4, 2019	Board		Schematic Design update
November 7, 2019	Facilities and Grounds		Schematic Design update
November 18, 2019 (1)	Board	Design Development	
December 2 or 16, 2019 (1)	Board		Design Development

March 2020	Board		Bid Documents
April 2020	Board		Award Bids (construction begins in May 2020)

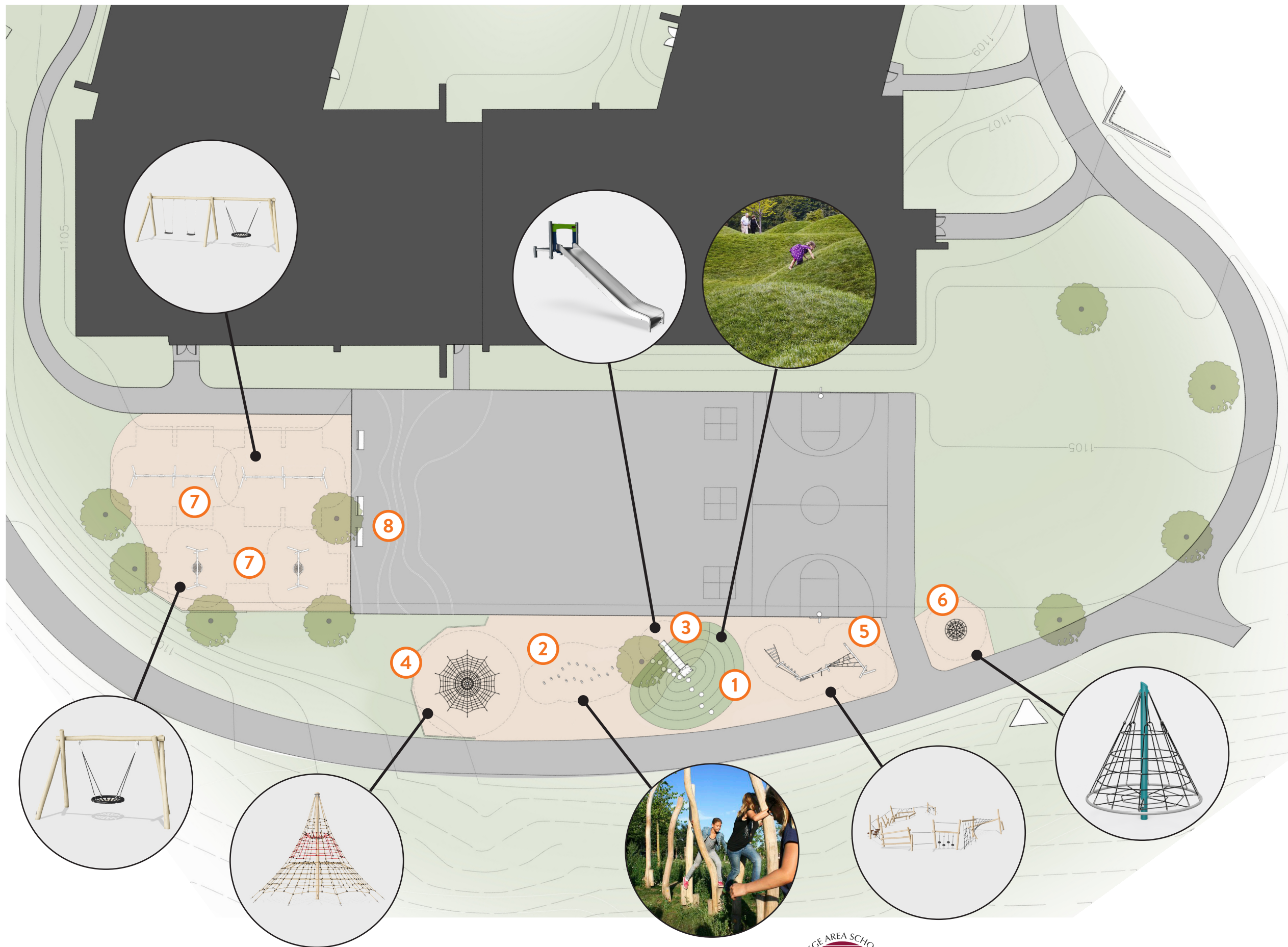
- (1) A design development update will occur on November 18 or December 2, depending upon document availability. Board action could then take place at the following meeting, December 2 or 16.

- 1 Landscape Mound**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 2 Stacked Log Mound**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 3 Log Scramble**  
- Critical Thinking, Confidence, Creativity, Collaboration
- 4 Balance Beam**  
- Mental Health, Emotional Regulation
- 5 Climber**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 6 Climber with Slide (Reused)**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit, Creativity
- 7 Parkour**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 8 Belt and Group Swings**  
- Vestibular, Proprioceptive, Ability to sit, Communication, Empathy, Social Cues
- 9 Stone Slab Seating**  
- Mental Health, Emotional Regulation





- 1 Landscape Mound**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 2 Rod Forest**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 3 Embankment Slide**  
- Vestibular, Proprioceptive, Ability to sit
- 4 Climber**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 5 Parkour**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 6 Spinner**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 7 Belt and Group Swings**  
- Vestibular, Proprioceptive, Ability to sit, Communication, Empathy, Social Cues
- 8 Shaded Seating**  
- Mental Health, Emotional Regulation





- 1 Rod Forest**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 2 Landscape Mound**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 3 Stacked Log Mound**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 4 Log Scramble**  
- Critical Thinking, Confidence, Creativity, Collaboration
- 5 Belt and Group Swings**  
- Vestibular, Proprioceptive, Ability to sit, Creativity
- 6 Climber**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 7 Climber (Reused)**  
- Critical Thinking, Confidence, Vestibular, Proprioceptive, Ability to sit
- 8 Embankment Slide**  
- Vestibular, Proprioceptive, Ability to sit, Creativity



**Spring Creek Elementary Play Area**
**10/30/2019**

ThinkGreen Landscape Architecture &amp; Construction 215.887.2595

Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			<b>Construction &amp; Implementation</b>							
			<b>1 Mobilization</b>							
			1 Mobilization - Provide on-site mobilization, layout, submittals, port-a-potty, etc.	approx 10% of project cost minus approx. previous construction and school purchases	1	ls		\$18,400.00	\$18,400.00	
			<b>Mobilization Total</b>							\$ 18,400.00
			<b>2 Site Prep</b>							
			1 Construction Entrance - Furnish, install, and remove rock construction entrance for erosion and sediment control.		1	ls		\$ 7,000.00	\$ 7,000.00	
			2 Erosion Control Allowance- Allowance to furnish, install and remove erosion control measures		1	ls		\$ 7,500.00	\$ 7,500.00	
			3 Protect Existing Equipment (#01)	n.i. equipment outside of construction fence	2	ea		\$ 100.00	\$ 200.00	
			4 Tree Protection - Provide protection for existing tree and root structures during construction	n.i. trees outside of construction fence	1	ea		\$ 200.00	\$ 200.00	
			5 Site Protection Fence - Furnish and install 4' orange		422	lf		\$ 3.00	\$ 1,266.00	
			<b>Site Prep Total</b>							\$ 16,166.00
			<b>3 Kompan Robinia Tree Climber NR0834 (#03)*</b>							
			1 Tree Climber NRO394	Costars 20% discount	1	ea		\$ 14,928.00	\$ 14,928.00	
			2 Shipping		1	ea		\$ 1,763.00	\$ 1,763.00	
			3 Install, with footings	\$6,976 / 0.9 (no discount) x 1.2	1	ea		\$ 9,301.00	\$ 9,301.00	
			<b>Kompan Robinia Tree Climber Total</b>							\$ 25,992.00
			<b>4 Black Locust Posts (#08)</b>	Per 10/15 Robi & designer email						
			1 6" to 10" diameter x 8.5' plus length		10	ea		\$ 300.00	\$ 3,000.00	
			2 6" to 10" diameter x 10.5' plus length		10	ea		\$ 360.00	\$ 3,600.00	
			3 6" to 10" diameter x 1.5' plus length		10	ea		\$ 48.00	\$ 480.00	
			4 6" to 10" diameter x 2.0' plus length		10	ea		\$ 72.00	\$ 720.00	
			5 Shipping	Includes contractor transport from Corl shipper drop	1	ea		\$ 1,960.00	\$ 1,960.00	
			6 Install including hardware purchase & assemble, footings	Allowance, pending final attachment/install detail	20	ea		\$ 310.00	\$ 6,200.00	
			<b>Black Locust Posts Total</b>							\$ 15,960.00
			<b>5 Log Stumps (#09)</b>							
			1 Log Stumps - Furnish and install 12-18" diam, 12-18" tall set on concrete foundations to frost line, on gravel drainage layer		7	ea		\$ 300.00	\$ 2,100.00	
			<b>Log Stumps Total</b>							\$ 2,100.00
			<b>6 Log Steppers on Slope</b>	revised per 10/2 Metcalfe Email						
			1 Log steppers - Furnish and install log steppers (12" - 18" diameter), anchor to hillside with rebar, lag screw to one another (or set on concrete) - TBD, detail pending		11	ea		\$ 300.00	\$ 3,300.00	
			<b>Log Steppers on Slope</b>							\$ 3,300.00



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Site Landscape

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**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

		Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
		<b>7 Wood Bench</b>							
		1 Furnish and install wood bench - Allowance		2	ea		\$ 2,000.00	\$ 4,000.00	
		<b>Wood Bench Total</b>							\$ 4,000.00
		<b>8 Log &amp; Boulder Climbing Area (#07)</b>	at 9" EWF area						
		1 Climbing Logs- Furnish and install (2) 24" x 16', (4) 18" x 10', & (1) 24"x10' climbing logs anchored together, countersunk		1	ls		\$ 7,000.00	\$ 7,000.00	
		2 Drainage Gravel - Furnish and install 6" min. (9" estimated) compacted aggregate (on top of EWF 3" Drainage Gravel) final design TBD (excavation is in EWF section)	280 sf @ 9" /27 @1.4tons/cy (under the logs)	11	tons		\$ 45.00	\$ 495.00	
		3 Geotextile Fabric - furnish and install	approx sf of zone	400	sf		\$ 0.50	\$ 200.00	
		<b>Log Climbing Area Total</b>							\$ 7,695.00
		<b>9 Log Mound #06</b>							
		1 Log Mound - Furnish and install logs (12"-18" dia., 9 long), 22' wide x 4.5' h., mounded together horizontally to form hill, lag screw logs together, rebar anchor base logs to frost line	Mound: 9'w x 4.5'h x 22'l (17 logs w. x 3.5logs h. minus 3	57	ea		\$ 250.00	\$ 14,250.00	
		2 Excavate and dispose soil - 6" depth	200sf @ 6" /27 @ 1.33	5	cy		\$ 40.00	\$ 200.00	
		3 Log Mound Drainage Gravel - Furnish and install 6" compacted aggregate base and geotextile fabric	200sf @ 6" = 100cf = 3.7cy = 5t	5	tons		\$ 45.00	\$ 225.00	
		4 Geotextile Fabric - furnish and install	22' X 9' + approx. 10%	220	sf		\$ 0.50	\$ 110.00	
		<b>Log Mound Total</b>							\$ 14,785.00
		<b>10 Engineered Wood Fiber - 9"</b>	area of log mound not included						
		1 Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal	5723sf @ 12" depth @ 1.33x	282	cy		\$ 40.00	\$ 11,280.00	
		2 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 9" depth	5723sf @ 9" depth @ 1.33x	211	cy		\$ 70.00	\$ 14,770.00	
		3 Drainage Stone - Furnish and install 3" compacted aggregate base and geotextile fabric	5723sf @ 3" depth / 27 @1.4	74	tons		\$ 45.00	\$ 3,330.00	
		4 Geotextile fabric - furnish and install- 2 layers	5723sf+approx 5% x2	12,020	sf		\$0.50	\$ 6,010.00	
		<b>9" Engineered Wood Fiber</b>							\$ 35,390.00
		<b>11 Retaining Assembly (#14)</b>							
		1 6x6 non-CCA pressure treated, heights per Schem. Grading plan: one timber high along walkway; priced as edging assembly	Excludes retaining assembly at swings and rock blocks, per 10/21/2019 instruction	52	lf		\$ 20.00	\$ 1,040.00	
		<b>Retaining Assembly Total</b>							\$ 1,040.00
		<b>12 Underdrainage at EWF and Retaining Walls</b>							
		1 Allowance - Underdrainage at low areas of EWF & retaining walls, plus discharge / connector pipes	Allowance (pending underdrainage design)	215	lf		\$36.00	\$ 7,740.00	
		<b>Underdrainage Total</b>							\$ 7,740.00
		<b>13 Grass Mound</b>	revised per 10/2 Metcalfe Email						
		1 Grass Mound - Furnish and install 6" topsoil on mound	955sf @ 6" @ 1.33x / 27	24	cy		\$ 95.00	\$ 2,280.00	
		2 Move excavated soil to mound base, compact	1/3 x 955sf x (6' extended cone minus 6") @1.33 / 27	86	cy		\$ 55.00	\$ 4,730.00	
		3 Native grass plugs on half of mound, final design TBD	450 sf	520	ea		\$ 7.00	\$ 3,640.00	
		4 Sod on mound		1	ls		\$ 700.00	\$ 700.00	
		<b>Grass Mound Total</b>							\$ 11,350.00
		<b>14 Kompan Embankment Slide*</b>	revised per 10/2 Metcalfe Email						
		1 Kompan Embankment Slide	Costars discount	1	ea		\$ 6,100.00	\$ 6,100.00	
		2 Shipping		1	ea		\$ 512.00	\$ 512.00	
		3 Install		1	ea		\$ 2,626.67	\$ 2,626.67	
		<b>Kompan Embankment Slide Total</b>							9,238.67

Spring Creek Elementary Play Area										
10/30/2019										
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Site Landscape										
Project #18758										
2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE										
			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			15 Planting							
			1 Red oak and sugar maple trees		9	ea	3" cal	\$ 875.00	\$ 7,875.00	
			2 River birch trees		4	ea	1.5"-2" cal, or 6-8' clump	\$ 650.00	\$ 2,600.00	
			3 Allowance for Grading and Reseeding - Allowance to provide labor and equipment to grade and reseed areas of the site disturbed during construction		1	ls		\$ 4,500.00	\$ 4,500.00	
			Planting Total							\$ 14,975.00
			Project Subtotal							\$188,131.67
			Design Contingency		3.0	%				\$5,644.00
			Subtotal							\$193,775.67
			Construction Contingency		5.0	%				\$9,689.00
			Subtotal							\$203,464.67
			Inflation Escalation - approx 1/2 year	Assumes school dept equipment purchase before price increase	1.0	%				\$2,035.00
			Subtotal							\$205,499.67
			Construction Bond (n.i. school dept purchases)		1.0	%				\$1,822.00
			Project Total							\$207,321.67
			Prior Installation by Others	Pending cost of purchased replacement parts						\$44,429.42
			GRAND TOTAL							\$251,751.09
			* School district to purchase all parts, accessories and delivery, and coordinate delivery to site of all play equipment (to receive discount from manufacturers).							
			Exclusions							
			Design & Engineering, Regulatory Submissions							
			Zoning/Soil Erosion & Sedim. Control/Construction Permitting & Fees							
			Lighting							
			Signage, Donor Recognition Signage							
			Irrigation							
			Phased Construction or Delays							
			Note: Items are Furnish and Install unless otherwise noted							
			Alternates							
			A Edging Assembly (#13)							
			1 6x6 non-CCA pressure treated, with rebars	Note: LF may vary according to final scope and current construction; Add \$10/LF if installing after the EWF	150	lf		\$ 20.00	\$ 3,000.00	
			Edging Assembly Total							\$ 3,000.00
			Plus mobilization, contingencies and escalation							

**Corl Street Elementary Play Area**
**10/24/2019**

ThinkGreen Landscape Architecture &amp; Construction 215.887.2595

Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			<b>Construction &amp; Implementation</b>							
			<b>1 Mobilization</b>							
		1	Mobilization - Provide on-site mobilization, layout, submittals, port-a-potty, etc.	approx 10% of construction budget (\$250k minus approx. previous construction and school purchases within budget)	1	ls		\$20,300.00	\$20,300.00	
			<b>Mobilization Total</b>							<b>\$ 20,300.00</b>
			<b>2 Site Prep</b>							
		1	Construction Entrance - Furnish, install, and remove rock construction entrance for erosion and sediment control.		1	ls		\$ 7,000.00	\$ 7,000.00	
		2	Erosion Control Allowance- Allowance to furnish, install and remove erosion control measures		1	ls		\$ 7,500.00	\$ 7,500.00	
		3	Protect Existing Equipment (#01)	as indicated, plus basketball hoop	2	ea		\$ 25.00	\$ 50.00	
		4	Tree Protection - Provide protection for existing tree and root structures during construction		3	ea		\$ 200.00	\$ 600.00	
		5	Site Protection Fence - Furnish and install 4' orange		380	lf		\$ 3.00	\$ 1,140.00	
			<b>Site Prep Total</b>							<b>\$ 16,290.00</b>
			<b>3 Demolition</b>							
		1	Demo Existing Structures - as indicated on plan	2 men, 2 day @ \$350/day = \$2600 Machine @ 2 day @ \$350/day = \$700 Dump fee = \$1000	1	ls		\$ 4,300.00	\$ 4,300.00	
			<b>Demolition Total</b>							<b>\$ 4,300.00</b>
			<b>4 Balance Logs (#10)</b>							
		1	Balance Logs - Furnish and install balance logs (12" - 18" diameter), +/- 16lf each		1	ls		\$ 2,250.00	\$ 2,250.00	
			<b>Balance Logs Total</b>							<b>2,250.00</b>
			<b>5 Log &amp; Boulder Climbing Area (#07)</b>	at 9" EWF area						
		1	Climbing Logs- Furnish and install (2) 24" x 16', (2) 24" x 14', & (2) 18"x10' climbing logs anchored together, countersunk		1	ls		\$ 7,000.00	\$ 7,000.00	
		2	Drainage Gravel - Furnish and install 6" min. (9" estimated) compacted aggregate (on top of EWF 3" Drainage Gravel) final design TBD (excavation is in EWF section)	280 sf @ 9" /27 @ 1.4tons/cy (under the logs)	11	tons		\$ 45.00	\$ 495.00	
		3	Geotextile Fabric - furnish and install	approx sf of zone	400	sf		\$ 0.50	\$ 200.00	
			<b>Log Climbing Area Total</b>							<b>\$ 7,695.00</b>
			<b>6 South Grass Mound (#8)</b>							
		1	Grass Mound - Furnish and install topsoil on mound 31' x 13' ellipse x 2'h	306sf @ 6" @ 1.33x	8	cy		\$ 95.00	\$ 760.00	
		2	Move excavated soil to mound base, compact, incl to 12" below finished grade due to existing mulch	Ellipse mound 306sf x 2.5' = 765 cf @ 1.33x = 1017cf = 38cy minus 6" topsoil	30	cy		\$ 55.00	\$ 1,650.00	
		3	Sod on mound	306sf + approx 10% waste	1	ls		\$ 700.00	\$ 700.00	
			<b>South Grass Mound Total</b>							<b>\$ 3,110.00</b>

**Corl Street Elementary Play Area**
**10/24/2019**

ThinkGreen Landscape Architecture &amp; Construction 215.887.2595

Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

		Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
	<b>7</b>	<b>North Grass Mound (#9)</b>							
		1 Grass Mound - Furnish and install topsoil on mound 34' x 20' ellipse x 3'h	518 sf @6"deep @1.33x	13	cy		\$ 95.00	\$ 1,235.00	
		2 Move excavated soil to mound base, compact, incl to 12" below finished grade due to existing mulch	Ellipse mound 518sf x 3.5' = 1813 cf @ 1.33x = 2411cf = 89cy minus 6" topsoil	76	cy		\$ 55.00	\$ 4,180.00	
		3 Sod on mound	5186sf + approx 10% waste	1	ls		\$ 750.00	\$ 750.00	
		<b>North Grass Mound Total</b>							<b>\$ 6,165.00</b>
	<b>8</b>	<b>Hillside Rock Slabs (in mound #09)</b>							
		1 Excavation - n.a. (installed during mound placement)						\$ -	
		2 3 Stone Slabs- Furnish and install 4'x6'x1.5' thk stone slabs	rough bluestone type. 3@ (4x6x1.5')=108cf = @170 / 2000	9	tons		\$ 450.00	\$ 4,050.00	
		3 Boulder Aggregate Base - Furnish and install 6" compacted aggregate base PA 2A	3@4'x6'x0.5'= 36cf = 1.33cy = 1.86 tons	2	tons		\$ 45.00	\$ 90.00	
		<b>Hillside Rock Slabs Total</b>							<b>\$ 4,140.00</b>
	<b>9</b>	<b>Log Mounds (#06)</b>							
		1 Log Mounds - Furnish and install logs (12"-18" dia., 9' long), 6ft and 10ft widths, mounded together horizontally to form hill, lag screw logs together, rebar anchor base logs to frost line	Mound: 6' w @ 4.5'h, 10' w @ 4.5'h, assume 15" logs formula: 5logsx3.5logs-3=15 logs plus 8logsx3.5logs-3=25	40	ea		\$ 250.00	\$ 10,000.00	
		2 Excavation and disposal - assumed just mulch	150sf @ 6" /27 @1.33	4	cy		\$ 20.00	\$ 80.00	
		3 Re-grading under log mound		1	ls		\$ 200.00	\$ 200.00	
		4 Log Mound Drainage Gravel - Furnish and install 6" compacted aggregate base	150sf @ 6" /27 @1.5 tons/cy	4	tons		\$ 45.00	\$ 180.00	
		5 Geotextile Fabric - furnish and install	150sf +10% x2	330	sf		\$ 0.50	\$ 165.00	
		<b>Log Mound Total</b>							<b>\$ 10,625.00</b>
	<b>10</b>	<b>Replace Playworld Challenger Stairs &amp; Climbing net, re-assemble (#01)*</b>							
		1 Playworld Challenger Stairs and Climbing Net, hardware, for existing disassembled equipment	school discount price	1	ea		\$ 3,843.00	\$ 3,843.00	
		1a Shipping allowance		1	ea		\$ 400.00	\$ 400.00	
		1b Re-assemble (remove rusted hardware), with footing for stairs (and post?)		1	ea		\$ 3,000.00	\$ 3,000.00	
		<b>Replace/Reassemble Challenger Total</b>							<b>\$ 7,243.00</b>
	<b>11</b>	<b>Kompan Swings*</b>							
		1 Combo Swings Robinia NRO912 - Robinia Double Swing Combo 2 Belt 1 Basket (#05)	Costars 10% discount	1	ea		\$ 6,039.00	\$ 6,039.00	
		1a Shipping, partial load		1	ea		\$ 588.00	\$ 588.00	
		1b Install, with footings		1	ea		\$ 3,350.00	\$ 3,350.00	
		2 Double Swings - (1) Robinia NRO924 Double Swing 4 Belts include 1 ADA harness swing (#03)	Costars 10% discount	2	ea		\$ 4,905.00	\$ 9,810.00	
		2a Shipping, partial load		2	ea		\$ 484.00	\$ 968.00	
		2b Install, with footings		2	ea		\$ 2,720.00	\$ 5,440.00	
		<b>Kompan Swings Total</b>							<b>\$ 26,195.00</b>
	<b>12</b>	<b>Kompan Parkour*</b>							
		1 Parkour 004 - Furnish Kompan Robinia Parkour 004 (#04)	Costars 10% discount	1	ea		\$ 10,179.00	\$ 10,179.00	
		1a Shipping, partial load		1	ea		\$ 994.00	\$ 994.00	
		1b Install, with footings		1	ea		\$ 5,640.00	\$ 5,640.00	
		<b>Kompan Parkour Total</b>							<b>\$ 16,813.00</b>

**Corl Street Elementary Play Area**
**10/24/2019**

ThinkGreen Landscape Architecture &amp; Construction 215.887.2595

Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

		Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
		<b>13 Kompan Robinia Tree Climber NR0834*</b>							
		1 Tree Climber NRO394	Costars 20% discount	1	ea		\$ 14,928.00	\$ 14,928.00	
		2 Shipping, partial load		1	ea		\$ 1,671.00	\$ 1,671.00	
		3 Install, with footings		1	ea		\$ 9,301.00	\$ 9,301.00	
		<b>Kompan Total</b>							25,900.00
		<b>14 Engineered Wood Fiber - 12" (#11)</b>							
		1 Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal	Assume 9" additional depth needed: 1342sf - 150sf at log mound @ 9" /27 @ 1.33x	44	cy		\$ 40.00	\$ 1,760.00	
		2 Excavation of Wood Chips - Provide labor and equipment for excavation, hauling and recycling	Assume 6" depth of chips: 1342sf @ 6" /27 @ 1.33	33	cy		\$ 20.00	\$ 660.00	
		3 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 12" depth	1342sf @ 12" depth /27 @ 1.33x	66	cy		\$ 70.00	\$ 4,620.00	
		4 Drainage Stone - Furnish and install 3" compacted aggregate base	1342sf @ 3" /27 @ 1.4tons/cy	17	tons		\$ 45.00	\$ 765.00	
		5 Geotextile fabric - furnish and install- 2 layers	1342 +5% for edge/waste x2	2,818	sf		\$0.50	\$ 1,409.00	
		<b>12" Engineered Wood Fiber Total</b>							\$ 9,214.00
		<b>15 Engineered Wood Fiber - 9"</b>	not under 150sf log mound						
		1 Excavation of Soil - Provide labor and equipment for grading, excavation, hauling and soil disposal (to 12" below top of exist mulch)	Assume 6" additional depth needed: 7741 sf @ 6" /27 @ 1.33	190	cy		\$ 40.00	\$ 7,600.00	
		2 Excavation of Wood Chips - Provide labor and equipment for excavation, hauling and recycling	Assume 6" depth of chips: 7741 sf @ 6" /27 @ 1.33	190	cy		\$ 20.00	\$ 3,800.00	
		3 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 12" depth	7741 sf @ 9" depth @ 1.33 /27	286	cy		\$ 70.00	\$ 20,020.00	
		4 Drainage Stone - Furnish and install 3" compacted aggregate base	7741 sf @ 3" /27 @ 1.4tons/cy	301	tons		\$ 45.00	\$ 13,545.00	
		5 Geotextile fabric - furnish and install- 2 layers	7741 sf +5% for edge/waste x2	16,256	sf		\$0.50	\$ 8,128.00	
		<b>12" Engineered Wood Fiber Total</b>							\$ 53,093.00
		<b>16 Retaining Assembly (#14)</b>							
		1 6x6 non-CCA pressure treated, with rebars and tiebacks, incl. drainage stone and geotextile behind wall - furnish and install	n.a. per 10/17/19 Schematic Grading Plan	0	sf		\$ 45.00	\$ -	
		<b>Retaining Assembly Total</b>							\$ -
		<b>17 Underdrainage at EWF and Retaining Walls</b>							
		1 Allowance - Underdrainage at low areas of EWF & retaining walls, plus discharge / connector pipes	Allowance (pending underdrainage design)	150	lf		\$36.00	\$ 5,400.00	
		<b>Underdrainage Total</b>							\$ 5,400.00
		<b>18 Remove Existing Mulch, Replace With Topsoil &amp; Lawn</b>	this item may be deleted if leaving existing mulch between proposed EWF and existing fence						
		Remove mulch between proposed EWF and existing fence, recycle	1675 sf @ 6" assumed / 27 @ 1.33	42	cy		\$ 20.00	\$ 840.00	
		Move excavated soil from EWF excavation to this location	1675 sf @ 2" assumed, in lieu of shipping and disposal	--			--	--	
		Import 4" topsoil	1675 sf @ 4" /27 @ 1.33	27	cy		\$ 65.00	\$ 1,755.00	
		Seeding: allowance	n.a.	1	ea		\$ 200.00	\$ 200.00	
		<b>Mulch Removal, add Topsoil and LawnTotal</b>							\$ 2,795.00

**Corl Street Elementary Play Area**
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Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

		Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
	<b>19</b>	<b>Planting</b>							
		1 Red oak and sugar maple trees		3	ea	3" cal	\$ 875.00	\$ 2,625.00	
		2 Furnish and place topsoil 6" deep (at lawn area near mounds)	200sf @ 6" @ 1.33x	5	cy		\$ 90.00	\$ 450.00	
		3 Allowance for Grading and Reseeding - Allowance to provide labor and equipment to grade and reseed areas of the site disturbed during construction		1	ls		\$ 4,500.00	\$ 4,500.00	
		<b>Planting Total</b>							<b>\$ 7,575.00</b>
		<b>Project Subtotal</b>							<b>\$229,103.00</b>
		<b>Design Contingency</b>		3.0	%				\$6,873.00
		<b>Subtotal</b>							<b>\$235,976.00</b>
		<b>Construction Contingency</b>		5.0	%				\$11,799.00
		<b>Subtotal</b>							<b>\$247,775.00</b>
		<b>Inflation Escalation - approx 1/2 year</b>	Assumes school dept equipment purchase before price increase	1.0	%				\$2,478.00
		<b>Subtotal</b>							<b>\$250,253.00</b>
		<b>Construction Bond (n.i. school dept purchases)</b>		1.0	%				\$2,008.00
		<b>Project Total</b>							<b>\$252,261.00</b>
		<b>Prior Installation by Others</b>							\$0.00
		<b>GRAND TOTAL</b>							<b>\$252,261.00</b>
		* School district to purchase all parts, accessories and delivery, and coordinate delivery to site of all play equipment (to receive discount from manufacturers).							
		<b>Exclusions</b>							
		Design & Engineering, Regulatory Submissions							
		Zoning/Soil Erosion & Sedim. Control/Construction Permitting & Fees							
		Lighting							
		Signage, Donor Recognition Signage							
		Irrigation							
		Phased Construction or Delays							
		<b>Note: Items are Furnish and Install unless otherwise noted</b>							
		<b>Alternates</b>							
		<b>A Edging Assembly (#13)</b>							
		1 6x6 non-CCA pressure treated, with rebars	Note: LF may vary according to final scope and current construction; Add \$10/LF if installing after the EWF	248	lf		\$ 20.00	\$ 4,960.00	
		<b>Edging Assembly Total</b>							<b>\$ 4,960.00</b>
		Plus mobilization, contingencies and escalation							

## Radio Park Elementary Play Area

10/30/2019

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Site Landscape

Project #18758

## 2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE

			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			<b>Construction &amp; Implementation</b>							
			<b>1 Mobilization</b>							
		1	Mobilization - Provide on-site mobilization, layout, submittals, port-a-potty, etc.	approx 10% of construction cost (minus approx. previous construction and school purchases within budget)	1	ls		\$ 15,200.00	\$ 15,200.00	
			<b>Mobilization Total</b>							\$ 15,200.00
			<b>2 Site Prep</b>							
		1	Construction Entrance - Furnish, install, and remove rock construction entrance for erosion and sediment control.		1	ls		\$ 7,000.00	\$ 7,000.00	
		2	Erosion Control Allowance- Allowance to furnish, install and remove erosion control measures		1	ls		\$ 7,500.00	\$ 7,500.00	
		3	Protect Existing Equipment (#01)	n.i. equipment outside of construction fence	2	ea		\$ 100.00	\$ 200.00	
		4	Tree Protection - Provide protection for existing tree and root structures during construction	n.i. trees outside of construction fence	0	ea		\$ 200.00	\$ -	
		5	Site Protection Fence - Furnish and install 4' orange		600	lf		\$ 3.00	\$ 1,800.00	
			<b>Site Prep Total</b>							\$ 16,500.00
			<b>3 Log Steppers on Slope</b>	revised per 10/2 Metcalfe Email						
		1	Log steppers - Furnish and install log steppers (12" - 18" diameter), anchor to hillside with rebar, lag screw to one another (or set on concrete) - TBD, detail pending	increase quantity to account for 6" risers on both sides of hill (22) or revise design to access only up one side	11	ea		\$ 300.00	\$ 3,300.00	
			<b>Log Steppers on Slope Total</b>							\$ 3,300.00
			<b>4 Log Stump Seats (#7)</b>							
		1	Log Stump Seats - Furnish and install 12-18" diam, 12-18" tall on gravel drainage layer, secure with rebar driven to frost line		11	ea		\$ 220.00	\$ 2,420.00	
			<b>Log Stump Seats Total</b>							\$ 2,420.00
			<b>5 Kompan Parkour*</b>							
		1	Parkour 004 - Furnish Kompan Robinia Parkour 004	Costars 10% discount	1	ea		\$ 10,179.00	\$ 10,179.00	
		2	Shipping, partial load		1	ea		\$ 1,161.00	\$ 1,161.00	
		3	Install, with footings		1	ea		\$ 5,360.00	\$ 5,360.00	
			<b>Kompan Parkour Total</b>							\$ 16,700.00
			<b>6 Kompan Robinia Tree Climber NR0834 (#03)*</b>							
		1	Tree Climber NRO394	Costars 20% discount	1	ea		\$ 14,928.00	\$ 14,928.00	
		2	Shipping, partial load		1	ea		\$ 1,671.00	\$ 1,671.00	
		3	Install, with footings		1	ea		\$ 9,301.00	\$ 9,301.00	
			<b>Kompan Robinia Tree Climber Total</b>							\$ 25,900.00
			<b>7 Black Locust Posts (#06)</b>							
		1	6" to 10" diameter x 8.5' plus length		7	ea		\$ 300.00	\$ 2,100.00	
		2	6" to 10" diameter x 10.5' plus length		8	ea		\$ 360.00	\$ 2,880.00	
		3	6" to 10" diameter x 1.5' plus length		7	ea		\$ 48.00	\$ 336.00	
		4	6" to 10" diameter x 2.0' plus length		8	ea		\$ 72.00	\$ 576.00	
		5	Shipping		1	ea		\$ 1,800.00	\$ 1,800.00	
		6	Install including hardware purchase & assemble, footings	Allowance, pending final attachment/install detail	15	ea		\$ 310.00	\$ 4,650.00	
			<b>Black Locust Posts Total</b>							\$ 12,342.00

**Radio Park Elementary Play Area**
**10/30/2019**

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Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

		Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
	<b>8</b>	<b>Dynamo DX-1200*</b>							
		1 Cone Spinner #0911 substitute by Ely		1	ea		\$ 11,035.00	\$ 11,035.00	
		2 Shipping		1	ea		\$ 202.00	\$ 202.00	
		3 Install, with footings		1	ea		\$ 5,500.00	\$ 5,500.00	
		<b>Dynamo DX-1200 Total</b>							<b>\$ 16,737.00</b>
	<b>9</b>	<b>Grass Mound</b>	revised per 10/2 Metcalfe Email						
		1 Grass Mound - Furnish and install 6" topsoil on mound	955sf @ 6" @ 1.33x / 27	24	cy		\$ 95.00	\$ 2,280.00	
		2 Move excavated soil to mound base, compact	1/3 x 955sf x (6' extended cone minus 6") @ 1.33 / 27	86	cy		\$ 55.00	\$ 4,730.00	
		3 Native grass plugs on half of mound, final design TBD	450 sf = 1035 plugs	520	ea		\$ 7.00	\$ 3,640.00	
		4 Sod		1	ls		\$ 700.00	\$ 700.00	
		<b>Grass Mound Total</b>							<b>\$ 11,350.00</b>
	<b>10</b>	<b>Kompan Embankment Slide*</b>	revised per 10/2 Metcalfe Email						
		1 Kompan Embankment Slide	Costars discount (10 or 20%?)	1	ea		\$ 6,100.00	\$ 6,100.00	
		2 Shipping		1	ea		\$ 512.00	\$ 512.00	
		3 Install		1	ea		\$ 2,626.67	\$ 2,626.67	
		<b>Kompan Embankment Slide Total</b>							<b>\$ 9,238.67</b>
	<b>11</b>	<b>Engineered Wood Fiber - 12" (#11)</b>							
		1 Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal	1292sf x 1.5' @ 1.33x / 27 =	96	cy		\$ 40.00	\$ 3,840.00	
		2 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 12" depth	1292sf x 1 @ 1.33 / 27 =	64	cy		\$ 70.00	\$ 4,480.00	
		3 Drainage Stone - Furnish and install 6" compacted aggregate base and geotextile fabric	1292sf x .5 / 27 @ 1.4 tons/cy =	34	tons		\$ 45.00	\$ 1,530.00	
		4 Geotextile fabric - furnish and install- 2 layers	1292sf +5% for edge/waste x2 =	2,713	sf		\$ 0.50	\$ 1,356.50	
		<b>12" Engineered Wood Fiber Total</b>							<b>\$ 11,206.50</b>
	<b>12</b>	<b>Engineered Wood Fiber - 9" (#12) (excluding Dynamo Spinner)</b>							
		1 Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal	2990 sf @ 12" @ 1.33 / 27 =	147	cy		\$ 40.00	\$ 5,880.00	
		2 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 9" depth	2990 sf x 9" @ 1.33 / 27 =	111	cy		\$ 70.00	\$ 7,770.00	
		3 Drainage Stone - Furnish and install 3" compacted aggregate base	2990 sf x 3" / 27 @ 1.4 tons/cy =	39	tons		\$ 45.00	\$ 1,755.00	
		4 Geotextile fabric - furnish and install- 2 layers	2990 sf +approx. 5% for edge/waste x2 =	6,280	sf		\$ 0.50	\$ 3,140.00	
		<b>9" Engineered Wood Fiber Total</b>							<b>\$ 18,545.00</b>
	<b>12a</b>	<b>Engineered Wood Fiber - 9" (#12) at Spinner</b>	per Metcalfe Plan rec'd 10-28-2019						
		1 Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal	403 sf @ 12" @ 1.33 / 27 =	20	cy		\$ 40.00	\$ 800.00	
		2 Mulch Safety Surface - Furnish and install Engineered Wood Fiber (EWF) at 9" depth	403 sf x 9" @ 1.33 / 27 =	15	cy		\$ 70.00	\$ 1,050.00	
		3 Drainage Stone - Furnish and install 3" compacted aggregate base	403 sf x 3" / 27 @ 1.4 tons/cy =	5.2	tons		\$ 45.00	\$ 234.00	
		4 Geotextile fabric - furnish and install- 2 layers	403 sf +approx. 5% for edge/waste x2 =	850	sf		\$ 0.50	\$ 425.00	
		<b>9" Engineered Wood Fiber Total</b>							<b>\$ 2,509.00</b>
	<b>13</b>	<b>Retaining Assembly (#14)</b>							
		1 6x6 non-CCA pressure treated, heights per Schem. Grading plan (plus 3" below grade min), with rebars and tiebacks, incl. drainage stone and	80 LF of 5.5"x5.5" timbers	37	sf		\$ 45.00	\$ 1,665.00	
		<b>Cedar Retaining Assembly Total</b>							<b>\$ 1,665.00</b>



**Radio Park Elementary Play Area**
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Site Landscape

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			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			<b>I 4 Underdrainage at EWF and Retaining Walls</b>							
		1	Allowance - Underdrainage at low areas of EWF & retaining walls, plus discharge / connector pipes (excluding 10/28/2019 spinner location)	Allowance (pending underdrainage design)	110	lf		\$ 36.00	\$ 3,960.00	
		2	Allowance at Spinner - Underdrainage at low area of EVF, plus discharge	Allowance, pending underdrainage design (Metcalf 10-28-2019 revised Spinner location)	35	lf		\$ 36.00	\$ 1,260.00	
			<b>Underdrainage Total</b>							<b>\$ 5,220.00</b>
			<b>I 5 Planting</b>							
		1	Red oak and sugar maple trees		10	ea	3" cal	\$ 750.00	\$ 7,500.00	
		2	River birch trees		4	ea	1.5"-2" cal or 6-8' clump	\$ 650.00	\$ 2,600.00	
		3	Allowance for Grading and Reseeding - Allowance to provide labor and equipment to grade and reseed areas of the site disturbed during construction		1	ls		\$ 4,500.00	\$ 4,500.00	
			<b>Planting Total</b>							<b>\$ 14,600.00</b>
			<b>Project Subtotal</b>							<b>\$183,433.17</b>
			<b>Design Contingency</b>		3.0	%				\$5,503.00
			<b>Subtotal</b>							<b>\$188,936.17</b>
			<b>Construction Contingency</b>		5.0	%				\$9,447.00
			<b>Subtotal</b>							<b>\$198,383.17</b>
			<b>Inflation Escalation - approx 1/2 year</b>	Assumes school dept equipment purchase before price increase	1.0	%				\$1,984.00
			<b>Subtotal</b>							<b>\$200,367.17</b>
			<b>Construction Bond (n.i. school dept purchases)</b>		1.0	%				\$1,546.00
			<b>Project Total</b>							<b>\$201,913.17</b>
			<b>Prior Installation by Others</b>							\$61,006.86
			<b>GRAND TOTAL</b>							<b>\$262,920.03</b>
		*	School district to purchase all parts, accessories and delivery, and coordinate delivery to site of all play equipment (to receive discount from manufacturers).							
			<b>Exclusions</b>							
			Design & Engineering, Regulatory Submissions							
			Zoning/Soil Erosion & Sedim. Control/Construction Permitting & Fees							
			Lighting							
			Signage, Donor Recognition Signage							
			Irrigation							
			Phased Construction or Delays							
			<b>Note: Items are Furnish and Install unless otherwise noted</b>							

**Radio Park Elementary Play Area**
**10/30/2019**

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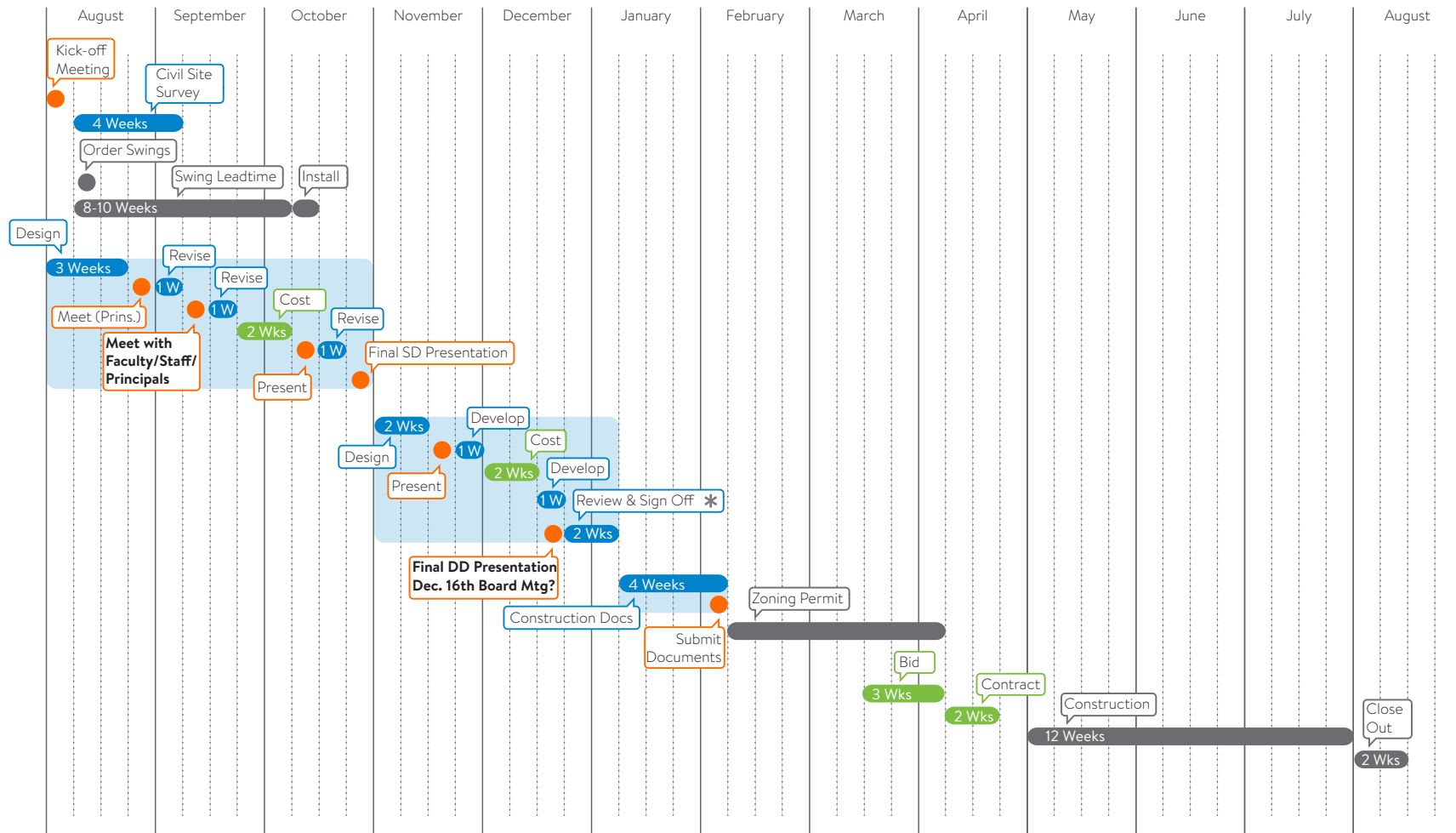
Site Landscape

Project #18758

**2019 Preliminary Opinion of Cost - SCHEMATIC DESIGN PHASE**

			Description	Notes	qnt	unit	size	unit cost	extended cost	Totals
			<b>ALTERNATES</b>							
			<b>A Bonded Engineered Wood Fiber (#19) - 3" at path to/at planters</b>	3" BEWF on 6" PA2A						
		1	Excavation - Provide labor and equipment for grading, excavation, hauling and soil disposal - 9" excavation	3080sf @ 9" /27 @1.33	114	cy		\$ 40.00	\$ 4,560.00	
		2	Bonded Engineered Wood Fiber Surface - Furnish and install Bonded Engineered Wood Fiber (BEWF) at 3" depth - ALLOWANCE COST (will require suppliers updated estimate if this Alternate moves forward)	3080sf @ 3" depth /27 @1.33	38	cy		\$ 90.00	\$ 3,420.00	
		3	PA2A Stone - Furnish and install 6" compacted aggregate base	3080sf @ 6" /27 @1.4x	80	tons		\$ 45.00	\$ 3,600.00	
		4	Geotextile fabric	n.a. with PA2A	0	sf		\$ 0.50	\$ -	
			<b>Bonded Engineered Wood Fiber Total</b>							<b>\$ 11,580.00</b>
			Add cost for grading/backfilling along sides of path, and for re-grading							
			Add mobilization, construction fencing, erosion control, seeding, contingencies, escalation, etc							
			<b>B Edging Assembly (#13)</b>							
		1	6x6 non-CCA pressure treated, with rebars - furnish and install - at base project (not including Alternates)	Note: LF may vary according to final scope and current construction; Add \$10/LF if installing after the EWF	141	lf		\$ 25.00	\$ 3,525.00	
			<b>Cedar Edging Assembly Total</b>							<b>\$ 3,525.00</b>
			Plus mobilization, contingencies and escalation							

## Phase 1 Schedule



\* No significant changes after Sign Off