

Design of Interior Space Takoma Park Maryland Library





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I. INTRODUCTION

In the fall of 2014, The Lukmire Partnership Architects was retained to prepare a study to determine if the Takoma Park Library can be improved by either re-arranging the internal layout or by expanding it. The study team worked with the Library staff to:

- understand the services offered by the library
- calculate the collection currently housed
- calculate the collection expected to be housed in the future
- understand the staffing and to review the constraints the library building has placed upon the services desired by the community and/or placed upon the staff when delivering current services.

The study, analyzed the collection, number of patron seats, technology available, staff work areas, the mechanical system, and the physical condition of the library.

The library was originally constructed in 1955 and was approximately 5,000 SF. In 1968 a 20 foot wide addition was constructed across the rear of the library and a small area (currently the Young Adult and Reference area) constructed adjacent to the entrance adding 2,680 SF to the library. While no further additions or modifications have been made in subsequent years, the adjacent Community Center was constructed in 2005 and two of its rooms, both currently used as computer labs, were put under the administrative control of the library. Including the Community Center rooms, the library currently encompasses 9,400 SF.

The library site is defined as the building itself, a landscaped area between it and Philadelphia Avenue to the South and East and a shared parking lot with the Community Center to the West. The North side of the library abuts the Community Center. Therefore, any possible expansion to the library would need to be on the South and East sides. However, a potential constraint to expanding to the east is a glass and tile mosaic wall covering the entire exterior East wall. It is an important piece of public art and its preservation is important, but, fortunately, it was assembled in pieces and can be removed and reinstalled.

The original 1955 library was an important example of "modern architecture" when constructed. Designed by Ronald Senseman, AIA it was a simple "L" shaped building with high windows allowing for shelving below. The original design indicated that the library would be expanded to the south through the current children's room adding another 2,000 SF of space. The library had simple lines, a flat roof, and an overhang defining the entrance. Subsequent additions (including a "flood wall") have altered the architectural expression and the original building is now

unrecognizable. However, it is thought that any proposed modifications or additions should be taken into consideration in the spirit of the original library design.





Original Library



Existing Library



Existing Library



Mosaic Wall



II. STUDY PROCESS

The study team took a highly participatory approach to its investigation and development of improvement options. The process used was:

- Met with Library Director to discuss goals
- Met with Director and entire staff to discuss the library mission, the building and the positive and negative aspects of the building as it relates to their ability to deliver services, operational constraints, and environmental conditions
- Collect any existing conditions studies and drawings to prepare existing conditions documents
- Held a public meeting to announce the project as a follow up to the Community Needs Assessment and Visioning Report prepared in January 2014 by Providence Associates of Arizona, a Library Planning Consulting firm.
- Met with maintenance personnel to understand the existing mechanical and electrical systems and to discuss their operation and maintenance history
- Met with Director to gather information about the existing and projected printed collection, use of technology in the library, seating, programs offered and the staffing
- Toured the library numerous times to observe physical conditions, library usage, and code compliance of the existing library
- Prepared a space needs program that reflected the ability to house the collection, provide technology expected by the library users, provide seating, and provide appropriate workstations for the staff
- Researched the site conditions including the purpose of the flood wall, storm water management systems constructed during the construction of the community center
- Developed five improvement options including the simple rearrangement of the existing space and 4 expansion options
- Presented all options to the library and representatives of the City. Based on the presentation identified 3 viable options for improving the library
- Presented the options at a public meeting to gain feedback
- Prepared additional graphics illustrating the options and then developed a cost estimate for construction of the options
- Prepared a final Report

III. EXISTING CONDITIONS

A. Architecture:

Floor Plan - The existing library is a traditional "L" shaped layout with a children's wing in one part of the "L" and an adult wing in the other. Located between is the circulation desk, staff area and support spaces including restrooms and mechanical rooms. This basic arrangement works well, but as the new space needs program has illustrated, the existing library is too small to accommodate it's needs.

Code Compliance- the library meets current life safety codes, but does not meet current codes for restroom accessibility or the number of plumbing fixtures. In addition the current arrangement of the book stacks violates ADA standards for aisle width and the lack of turn around space at the end of aisles. Upgrading the library to meet both of these code issues will decrease the amount of public library space and will cause expansion and relocation of the restrooms.

Construction- The existing library is constructed of masonry walls with a brick veneer, and wood structure holding up the roof. Interior walls are either plaster or gypsum board. The original drawings do not illustrate any insulation in the walls of the original structure. However, it is known that the windows are not thermally broken and the glass is not insulated glass, so the exterior envelope is not expected to meet current energy standards.

Exterior – The exterior of the library is basically solid brick with high 8' and 4.5' long clerestory windows on the South and East elevations. The West elevation faces the parking lot and is basically a solid brick wall. Dense landscaping currently hides this elevation from view. The elevations have not materially changed from the original and the exterior expression remains of an "international style".

Interior Finishes- The interior finishes were last upgraded in 1990, twenty-five years ago, and are worn and the color scheme is dated. The floor is carpeted and there is a suspended acoustic tile ceiling. New surface energy efficient light fixtures were installed within the last five years, but the quality of lighting is low. Furniture- The library shelving is 84' high which is higher than most contemporary libraries, which use 66' high shelving, so that patrons and staff can see throughout the library. However, in order to house the large collection owned by the library it appears that the shelving must remain at 84". The existing shelving appears to be in good shape and can be reused in any space upgrade. The tables and chairs were replaced two years ago and can be reused in any renovation. Staff furniture is a collection of twenty-five year old furniture of varying sizes and conditions and should be replaced with contemporary modular workstations.









Interior



- B. Mechanical System:
 - 1. Existing HVAC System

HVAC for the existing Takoma Park Library is provided by two (2) independent systems: One (1) a roof top unit (RTU) with DX cooling and gas fired heating and, two (2) a twinned split system air handling (AHU) unit with DX cooling and gas fired heating.

The RTU is a constant volume unit that was installed in 2011 and is in good working condition. The unit serves the administrative offices, the periodical area, and the adult reading section. The supply air is delivered to the various spaces through metal ductwork connected to ceiling mounted diffusers. The constant volume system was modified to provide variable air volume (VAV) boxes in the administrative area to provide minimal zoning temperature control. A single return air grill is located in the center part of the library and has been partially blocked with cardboard to limit the airflow returning to the RTU.

The air handling unit is a twinned gas fired furnace unit with DX cooling and was manufactured in 1994. The AHU serves the children's room. It was installed in 1994, so the equipment is at the end of its useful life. In this system, the supply air is ducted to four ceiling diffusers in the children's room. The air is returned to the unit through four small transfer openings high on the children's room wall to a return wall grill located in the corridor wall outside of the mechanical room.

Unit No.	Area Served	Total CFM	Outdoor Air CFM	Cooling Capacity MBH	Heating Capacity MBH
RTU-1	Adult Reading/ Admin	6,800	NA	120	140
AHU-1	Children's Room	3,000	NA	60	70

The capacity of each system is as follows:

The restrooms are served by exhaust fans to meet code required ventilation. The reference room is served by an electric cabinet unit heater that is not operated by the library personnel, since the unit was reported and witnessed to not be in good working order. The mechanical room is served by electric unit heaters for freeze protection. The HVAC systems installed in the building are controlled by standalone controls.

The AHU serving the children's room was installed in 1994, so the equipment is at the end of its useful life. The RTU system was installed in 2011, so it is in good working condition.



AHU-1 serving the Children's Room



RTU-1 Serving Adult Reading, Admin., & Periodicals



Condensing Units serving AHU-1

C. Summary

The original library was constructed 60 years ago and the last addition built 45 years ago. The only major improvement to the building infrastructure in the last 45 years has been to install a new roof top mechanical unit serving the adult area. The Children's Room is still served by an old system and the Reference/YA area has a non-operable fan coil. It is assumed that the roof was replaced at some time but, it is not known when. The library is not energy efficient since it has no wall insulation and the windows are not thermally broken. While there is plenty of electrical power, it is not distributed throughout the library making the use of personal electronic devices dependent on the battery life of the equipment.

In conversations with maintenance personnel, fixes to problems in the library have been characterized as "bandaids" to extend the life of a system. Therefore, it is clear that, at some time, the library building will need to be brought up to current codes and its systems and building envelop be made energy efficient. While the library building is not falling apart, the existing systems continue to require maintenance, the envelope does not meet energy standards, the restrooms are antiquated and do not meet standards and shelving does not meet ADA requirements.

It is the recommendation of this report that, if at all possible, the library be brought up to contemporary standards in the next few years. Waiting will only increase the costs of upgrades.

IV. SPACE NEEDS

A space needs program has been developed that represents the amount of space the library needs to house the collection, provide appropriate electronic technology, provide space to offer library programs, to accommodate staff needs, and to meet current codes. The analysis illustrates the need for approximately 14,370 SF of space. Since the existing library, together with the two rooms in the community center occupy only 9,430SF, it is the recommendation of the report that the library needs to be expanded by 4,940 SF.



Space Program Summary

SUBTOTAL PUBLIC AREA (NSF)						8,355
SUBTOTAL MEETING AREA (NSF)						1,403
SUBTOTAL STAFF AREA (NSF)						1,737
SUBTOTAL ALL AREAS (NSF)						11,495
TOTAL W/ 1.25 BLDG GROSSING FAC includes mech/ elect rooms, walls, circulation	TOR	(GSF)				14,369
EXISTING LIBRARY Rm A & B & office in COMMUNITY CEN Total	TER					7,718 1,710 9,428
Seating PC's (includes computer rms A&B Multi purpose Rm / children	Adult 28 24	Ref 0 4	Period 6 0	YA 10 2	Children 12 2 40	Total 56 32 40
Total Seats plus Computers	52	4	6	12	54	128

	PUBLIC AREA			No Rea'd	Subtotal NSF	Seats	PC's	Net SF
1.00		ENTRY AREA						146
	1.01	Entrance & Lobby	80	1	80			
	1.02	New book display	20	1	20			
	1.03	Public Information, bulletin board handouts	10	1	10			
	1.04	Vending / sitting area	120	0	0			
	1.06	Book drop	36	1	36			
	1.07				0			
2.00		SERVICE DESK AREA						145
	2.01	Circulation/ Reference w/ 3 work stations	135	1	135			
	2.02	Self check - 2	15	0	0	Future?		
	2.03	Reserves @ 1 SFS @ 60 "	10	1	10			
	2.03				0			
3.00		REFERENCE & SERVICE DESKS				0	4	431
	3.01	Service (Ref, other) Desks w/ 1 WS	45	0	0			
	3.02	Ready Reference	20	1	20			
	3.03	Reference Collection	261	1	261			
	3.04	Catalog PAC's	25	4	100			
	3.05	copier & counter	50	1	50			
	3.06							
4.00		PERIODICALS				6	0	225
	4.01	Magazines & Newspapers @ 175 titles	127	1	127			
	4.02	Lounge chairs	9	2	18			
	4.03	4 person tables	80	1	80			
	4.04	carrels	0	0	0			
	4.05							
5.00		ADULT COLLECTION				28	24	3,380
	5.01	Adult Collection			1920			
	5.02	4 person tables	80	4	320			
	5.03	Group Study Rooms - 4 capacity	100	1	100			
	5.04	carrels	25	2	50			
	5.05	lounge chairs	12	6	72			
	5.06	PC Workstations-	25	4	100			
	5.07	computer rooms - capacity 10	400	2	800			
	5.08	Printers / copier	9	2	18			
	5.09							
6.00		NON PRINT COLLECTION				0	0	107
	6.01 6.02	Audio-Visual Collection	107	1	107			

7.00		YOUNG ADULT				10	2	257
1.00	7.01	Young Adult Collection				10	4	207
	7.02	lounge chairs booth etc	9	2	18			
	7.03	4 person tables	80	1	80			
	7.04	PC workstations - 2	25	2	50			
	7.04	Printers	9	1	9			
	7.05	Group Study- 4 capacity	100	1	100			
	7.06							
8.00		CHILDRENS COLLECTION				12	2	1,813
	8.01	Children's Collection Area			1558			
	8.02	Program Space @ 40 children			0	see 10.01		
	8.03	Program Preparation & Storage Room			0	see 10.01		
	8.05	Stroller storage	0	1	0			
	8.06	Tutoring Room - capacity 4	0	1	0			
	8.07	4 person tables, adjustable	80	2	160			
	8.08	lounge chairs	9	4	36			
	8.09	PC workstations	25	2	50			
	8.10	Printers	9	1	9			
	8.11	Family Restroom	60	1	64			
9.00		BUILDING SUPPORT						180
	9.01	Data / Communications Room	100	1	100			
	9.02	Building Storage	80	1	80			
	9.03							
10.00		MEETING ROOMS						1,220
	10.01	Multi-Purpose Room @ 40 people	800	1	800			
	10.02	Storage	100	1	100			
	10.03	Public Restrooms	160	2	320			
		SUBTOTAL PUBLIC AREAS (page 2)						947
		SUBTOTAL PUBLIC AREAS (page 3)						5,737
		SUBTOTAL PUBLIC AREAS						6,684
		SUBTOTAL PUBLIC AREA (1.25 Circ. Factor)						8,355
		SUBTOTAL MEETING ROOM (1.15 Circ.Factor)						1,403

		STAFF AREAS	Size	No Req'd	Subtotal NSF		Net SF
20.00	Offices	3					110
	20.01	Director	110	1	110		
	20.02						
21.00	Staff N	lodular Workstations					396
	21.01	Manager children & youth services	36	1	36		
	21.02	Children and youth librarian (P/T)	36	1	36	share w/ 21.09	
	21.03	children library associate	36	1	36		
	21.04	Manager Reference & Adult Services	36	1	36		
	21.05	Adult & reference Library Associate (P/T)	36	1	36		
	21.06	Instructional Associates (3 share one space)	36	1	36		
	21.07	Manager Technical Services	36	1	36		
	21.08	Library Associate	36	2	72		
	21.09	Library Associates ((P/T)	36	2	72		
	21.10						
22.00	Workro	oom					175
	22.00	General workspace	150	1	150		
	22.01	counter workstations-shelvers & volunteers					
	22.02	supply storage	25	1	25		
	22.03				0		
	22.04				0		
22.00	Staff C	Conference Room					100
	22.01	Conference - capacity 4	100	1	100		
	22.02						
23.00	Staff L	ounge					214
	24.01	Lounge /kitchenette- table + chairs	150	1	150		
	24.02	Toilet	64	1	64		
	24.03						
	24.04						
24.00	Suppo	rt					395
	25.01	Closed stack storage & gift books	100	1	100		
	24.02	Book storage for seasonal, etc material	295	1	295		
	24.03						
		SUBTOTAL STAFF AREAS					1,390
		SUBTOTAL W/ 1.25 CIRC. FACTOR					1.737

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PUBLIC SHELVING ALLOCATION

V. OPTIONS TO UPGRADE THE LIBRARY

After exploring a number of options, the design team was asked to study three of the approaches to upgrading the library. These three options were thought to be representative of the range of options available to the City. They are:

- Renovate and rearrange the existing library to determine if the existing library can accommodate the collection, technology, reading areas and staff through a more efficient layout
- Renovate the library and expand it to the South leaving the mosaic wall undisturbed.
- Renovate the library and expand in small increments along the South and East facades with the expectation that the mosaic wall will be relocated.

Similarities: All of the options assume that:

- The restrooms will need to be enlarged and sized to meet ADA standards
- A family restroom will need to be added in conformance with Assembly Use Group building codes
- Access to the library will be both from the community center as well as through a front door
- All options integrate the computer room functions, currently in the community center, into the library
- There should be an architectural element at the parking lot announcing that there is an entry into the library directly from the parking lot.
- The mechanical / electrical rooms should remain close to their present location since all utilities enter the library at that location. Similarly, the library receiving area should also remain with access from the parking lot.
- Minimum disruption to the existing landscape and major trees should be achieved although one tree will need to be removed.
- The flood wall must remain although it could be incorporated into the exterior wall of the library instead of being a freestanding wall.
- There should be views into the library as well as views from the library into the landscape. The library should announce itself by allowing residents to see into the library.
- The library will follow sustainable design principles and should achieve a minimum of a Silver LEED rating.

A. Option 1: Renovate and rearrange the existing Library

This option assumes that the interior of the library will be upgraded, organized efficiently and will meet current codes within the existing walls. Needless to say, maintaining the existing library shell, while making sure the facility meets current codes will result in a loss of usable space. That being said, the layout can be improved by integrating the two adjacent rooms of the community center (computer room and senior room) into the library and by removing the walls around the current periodical room. These changes will visually open the library enabling patrons to better understand its layout, the staff to be able to monitor patron activity, and the library to appear "larger".

However, modifying the library to meet codes will result in a loss of usable space for either materials, seating or staff. The staff is already overcrowded and work in substandard sized workstations, so the only variables left to downsize are the collection and seating. As contemporary libraries are becoming places to study, collaborate, and learn, a smaller library will significantly limit the services that can be offered. In fact, rearranging the library to become code compliant will be taking a step backwards. While the renovated facility would become a more pleasant place to be, it would become a "lesser" library.

While the physical environment of the Library will be greatly improved, this option is less viable an option than others if the City wants to provide library services at its current level since code upgrades will result in less public area than currently exists.



Option 1: Floor Plan



Entry from Parking Lot. Add Entry element and covered walkway

Option 1





B. Option 2: Renovate the library and expand it to the South leaving the mosaic wall undisturbed.

This option adds approximately 3,840 SF to the existing library to create a 13,150 SF facility. It retains the existing library shell and adds space between the library and Philadelphia Ave and also incorporates the space from the community center creating an integrated library. There will be two entrances, one from the community center direction and one from the "street" and parking lot. Midway between the circulation desk has the ability to monitor people entering and leaving the library.

The entry from the community center direction passes two glass enclosed computer rooms and a small group study room. The staff area and mechanical equipment rooms remain in their relatively same location although both are enlarged. New restrooms are added in the center of the library. The expansion to the south enables the children's room to be enlarged, adds adult reading, group study room Young Adult area and a combination program room/quiet study room.

The new facades are primarily glass enabling natural light to flood the library and providing views both into and out of the library. It is hoped that the library would become a "beacon" and provide a civic landmark on Philadelphia Ave. In this case the mosaic remains in its present location.

A new entry feature and covered walkway is proposed from the parking lot to the entry door shared by the community center and library.

In this case the flood wall could either be rebuilt as a separate wall or integrated into the exterior wall of the library.



Option 2 illustrating area to be added in yellow











B. Option 3: Renovate the library and expand in small increments along the South and East facades with the expectation that the mosaic will be relocated.

This option adds approximately 4,460 SF to the existing library to create a 13,780 SF facility. It retains the existing library design concept and literally, extends the arms of the existing "L" shaped library, basically following the original master plan. Between the two wings a new front entry and program space/quiet study room is proposed. This creates a "saw tooth" front façade which will reduce the scale of the library as enabling it to stay away from several major trees. In this case the mosaic would be relocated to the new end wall facing the intersection of Philadelphia Avenue and Grant Avenue.

There will be two entrances, one from the community center direction and one from the "street" and parking lot. Midway between is the circulation desk which has the ability to monitor people entering and leaving the library. The existing staff area is expanded to accommodate the staff in individual small workstations. Both the children's area and adult area are simply expanded from their existing wings into the site. Between the two collection areas is a new entry, program/ quiet study room, and Young Adult area. The mosaic wall mounted on the end wall of the current adult wing would be removed and reinstalled on the new end wall, or if desired to be placed someplace else, would be reinstalled at that location.

A new entry feature and covered walkway is proposed from the parking lot to the entry door shared by the community center and library.

In this case the flood wall could either be rebuilt as a separate wall or integrated into the exterior wall of the library.



Option 3 illustrating area to be added in yellow









Option 3

D. Site Planning Approach

Both expansion options will require the removal of one tree and the careful protection of the two large trees close to Philadelphia Avenue. However, the critical issue will be the design response to the latest statewide environmental regulations. It is our understanding that the library was built in a 100 year flood plain. In response, significant stormwater measures were undertaken during the construction of the community center to respond to this condition. The floor level of the library is at approximately elevation 210. Two, approximately 72" under ground pipes were installed between the library and lower level parking deck at approximately elevation 195, 15 feet below the floor of the library. Storm water that may enter those pipes are directed to a large concrete tank (300' x 20' x 7.5') under the on-grade parking level for the police, and from there, leave the concrete tank through two 72" pipes and, then into the storm sewer in Maple Avenue. In addition an existing 48" RCI stormwater pipe is carrying stormwater from an inlet at the parking lot entrance in a southeast direction. It is expected that the storm water management system was sized to accommodate the entire site so that minimal additional measures will need to be taken if the library is expanded.





Existing trees

E. Proposed HVAC System

Based on the age and style of the existing equipment serving the library, it is recommended to replace the HVAC systems in all three options. This includes the demolition of two condensing units located at grade, a twinned air handling unit, a rooftop unit, and associated ductwork, grilles, and diffusers.

Two options are considered appropriate for the renovation and/or the expansion options : a Variable Refrigerant Volume System (VRV) and a Variable Air Volume System (VAV).

System 1: Variable Refrigerant Volume (VRV) System:

Provide a VRV system with dedicated outdoor air units to serve the library spaces and the administrative areas. A 30 ton variable refrigerant volume (VRV) system would be provided to simultaneously heat and cool the various spaces. The VRV system utilizes heat recovery boxes to transfer energy within the building to minimize energy consumption.

VRV technology is recognized as the most energy efficient and most easily maintained mechanical system. The new system would consist of outdoor heat pumps (condensing units), cassette style units for smaller spaces and concealed high static ducted indoor air handling units for larger spaces.

Fresh air would be delivered to the building for ventilation via a new 3,000 CFM, 12 ton, gas fired DX cooling package roof top unit with energy recovery. The unit would be mounted on the roof where the existing RTU is located above the mechanical room.

Advantages:

- Easy to maintain and operate
- Minimal mechanical room floor space requirements.
- Quiet operation.
- System is extremely energy efficient by utilizing energy recovery in the VRV system heat recovery boxes and via the heat recovery wheel in the energy recovery unit providing ventilation air.
- The control system is extremely user friendly and is included with the package

Disadvantages:

- Cassette units utilize washable filters, which are not as efficient as traditional filters.
- Condensate drain pipe coordination and routing
- Installed system cost is not the lowest.
- May require structural roof reinforcement to support the roof mounted energy recovery unit.



Typical VRV Cassette Type Indoor Unit Mounted in Ceiling Grid



Typical Outdoor VRV Recovery Unit Mounted on the Roof

System 2: Variable Air Volume System (VAV):

Provide a VAV system with a rooftop unit mounted on the roof where the existing RTU is located above the mechanical room. An RTU with a capable of generating 13,000 CFM with a 36 ton cooling capacity would utilize DX cooling and electric heat. Shut off style VAV boxes with electric reheat coils would be provided throughout the library to provide zone control.

Shut off style VAV boxes with electric reheat coils would be provided throughout the library to provide zone control. The supply air would be delivered through metal ductwork connected to ceiling diffusers. A ducted system would be used to return the air to the RTU.

Advantages:

- Minimal mechanical room floor space requirements.
- Quiet operation.
- Lower initial cost
- Less outdoor equipment

Disadvantages:

- Less energy efficient compared with a VRV system
- May require structural roof reinforcement to support the RTU.
- Less zone control.

VI. COST

While it is obvious that Option 1: Renovate the Existing Library will be the least expensive of the options, that approach will result in decreasing library services due to the need to meet current codes which will take more space in the existing library. That being said, there are a number of common items that are recommended, regardless of which option is chosen:

- Upgrade the restrooms and layout to meet current building codes
- Replacement of the HVAC system
- Replacement of the lighting in the library
- Addition of power outlets throughout the library
- Replacement of windows to use thermally broken frames and insulated glass
- Replacement of finishes
- Replacement of tables, chairs, and staff workstations
- Replacement of the service desk
- Integration of the two community center spaces into the library

In summary, the project cost for each of the options include the construction cost, permit fees (if required), Professional fees, furniture, equipment, and owners costs, Typically, one would add about 20% to the construction cost to determine the total project cost. In summary, the rounded construction costs (detailed take-offs are included in the appendix) for the three options are:

Option	Description	Size	Cost	
1	Renovate the existing library	9,314 SF	\$1.4 million	(\$102.50/SF)
2	Renovate the library & expand to the south	13,150 SF	\$2.3 million	(\$168.50/SF)
3	Renovate & expand the two wings	13,780 SF	\$2.6 million	(\$186.50/SF)

To these construction costs the following additional "Project Costs" should be added to develop a project budget.

Construction Contingency @ 10% for issues that arise during construction A/E Fees @10% Geotechnical Investigation for soil conditions Testing & Inspections allowance during construction Reproduction of documents and advertising Interior Design @ 1.60/SF Move & Temporary Facility cost City Personnel costs

Appendix

Cost Estimates

CONST	CONSTRUCTION COST ESTIMATE DATE: 29-Jan-15					SHEET	1	of	4	
PROJE	СТ				BASIS OF ESTIMATE					
	TAKOMA	PARK LIBRARY				CONCEPT		Г	x	
LOCATI	ION					SCHEMAT	IC	Ē		
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ARCHIT	ECT				50% CONST DOC					
	THE LUKN	IIRE PARTNERSH	IP INC			100% CON	IST DOC	Ē		
DRAWI	NG NO:	ESTIMATOR			CHECKED B	Y				
			GSL							
					QUANTITY					
TITLE	OPTION 1: RENOV	ATE EXISTING	LIBRAF	RY	TOTAL	PERCENT	COST			
						τοται	PER SE			
						101712		┰╴╏		
1.00	GENERAL CONDITIC	NS			\$146,700	10.4%	\$10.65	4		
2.00	SITEWORK				\$15,000	1.1%	\$1.09	4		
2.00	DEMOLITION				\$101,890	7.2%	\$7.39	4		
3.00	CONCRETE				\$0	0.0%	\$0.00	4		
4.00 MASONRY					\$0	0.0%	\$0.00	4		
5.00	5.00 METALS				\$0	0.0%	\$0.00	1		
6.00 WOOD & PLASTICS					\$0	0.0%	\$0.00	1		
7.00	THERMAL & MOISTU	RE PROTECTION			\$174,000	12.3%	\$12.63			
8.00	DOORS & WINDOWS	3			\$76,110	5.4%	\$5.52			
9.00	FINISHES				\$64,220	4.5%	\$4.66	1		
10.00	SPECIALTIES-				\$8,000	0.6%	\$0.58			
11.00	EQUIPMENT				\$0	0.0%	\$0.00			
12.00	FURNISHINGS				\$0	0.0%	\$0.00			
13.00	SPECIAL CONSTRUC	CTION			\$0	0.0%	\$0.00			
14.00	CONVEYING SYSTE	MS			\$0	0.0%	\$0.00			
15.00	MECHANICAL				\$261,000	18.5%	\$18.94			
16.00	ELECTRICAL				\$144,000	10.2%	\$10.45			
17.00	SECURITY / AUDIO-\	/ISUAL			\$0	0.0%	\$0.00			
	SUBTOTAL				\$990 920	70.1%	\$71 91	1		
	OVERHEAD & PROF	T @ 10%			\$99,020	70.170	\$7.19	1 1		
					\$1,090,002		\$79.10	1 1		
	BONDS @ 1 25%				\$13,625		\$0.99	1		
	SUBTOTAL				\$1 103 637		\$80.09	1		
	INSURANCE @ 5%				\$55 182		\$4 00	1 1		
					\$1 158 819		\$84.09	1		
	DESIGN CONTINGEN	JCY @ 15%			\$173 823		\$12.61	1		
	SUBTOTAL CONSTR	UCTION COST			\$1,332,642		\$96 71	1 1		
	000101120011011				\$1,002,012		\$00 11 1	1 1		
	ESCALATION TO MI	DPOINT OF CONS	T @ 3%	/YR	\$79,959		\$5.80		2 yrs	
	TOTAL CONSTRUCT	ION COST			\$1,412,600		\$102.51	1 F		
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INTERIOR DESIGN @ 1.60/sf				\$22 UV			┥┟			
FURNISHINGS @ \$25/SF			Ψ <u>2</u> 2,0 4 0 \$2 <i>11</i> 500			┥┟				
	MOVE & TEMPORARY LIBRARY				ψ0-++,000			┥┟		
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	SUBTOTAL PROJEC	T COSTS			\$687,568] [
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CONSTRUCTION COST	CONSTRUCTION COST ESTIMATE DATI				SHEET	2	of	4	
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TAKOM	A PARK LIBRARY			CONCEPT					
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		GSL							
				QUANTITY				TOTAL	
TITLE OPTION 1: REN	OVATE EXISTING	LIBRAR	NO	UNIT	PER	TOTAL		COST	
			UNITS	MEAS	UNIT				
1.00 GENERAL CON	DITIONS				1		-	\$146.700	
Project Manager			6	MON	\$7,900	\$47,400		÷ · • ; · • •	
Field Superinten	dent		6	MON	\$7,500	\$45,000			
Laborer			6	MON	\$2,800	\$16,800			
Trailer- office			6	MON	\$300	\$1,800			
Trailer - storage			6	MON	\$400	\$2,400			
			_			1			
Temp toilets			6	MON	\$100	\$600			
General- tools et	iC		6	MON	\$450	\$2,700	_		
Clean up & pund	n list		1	LS	\$10,000	\$10,000			
Disposai			1	LS	\$10,000	\$10,000			
IVIISC				L5	\$10,000	\$10,000	-		
2.00 SITEWORK							-	\$15,000	
Site Developmer	nt allowance		0	LS	\$50.000	\$0	1	φ10,000	
Storm water mar	nagement allowance	е	0	LS	\$50,000	\$0			
Excavation, grac	ling		0	LS	\$50,000	\$15,000			
2.00 DEMOLITION				_				\$101,890	
Clerestory windo	ws- 12@8x3,		12	windows	\$100	\$1,200			
CMU walls			400	SF	\$6	\$2,400			
Gyp board walls			400	SF	\$5	\$2,000			
Doors			20	EA	\$25	\$500			
Cellings			9300	SF	\$1 ¢1	\$10,695			
lighting			9300		ې ا د ک	\$10,695	-		
H\/AC evetem ev	nuiniment & ductwo	rk	9300	SF	ወጋ \$5	\$46 500			
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	-		-						
3.00 CONCRETE								\$0	
foundations			0	SF	\$8	\$0			
slab			0	SF	\$7	\$0			
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4.00 MASONRY	4.00 MASONRY			05	#00	\$ 0		\$0	
Exterior brick & s	stud walls		U	SF	\$20	\$U	-		
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CONST	RUCTION COST E	STIMATE	DATE:	1/29/2015		SHEET	3	of	4
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LOCAT	ION					SCHEMATIC	;		
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ARCHI	TECT					50% CONST	DOC		
	THE L	UKMIRE PARTNE	ERSHIP	INC		100% CONS	T DOC		Х
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			GSL	1					
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	Misc steel lintels.	etc		0	LS	\$5,000	\$0	┥┝	
	Canopy to entry to	o community cente	er	0	LS	\$15.000	\$0	1 F	
				-				1	
6.00	WOOD & PLAST	ICS							\$0
	wood blocking			0	LF	\$2.90	\$0		
	misc blocking at r	oof		0	LS	\$1,000	\$0] [
7.00	THERMAL & MO	STURE PROTEC	TION						\$174,00
	Wall insulation			0	SF	\$3	\$0	┥┟	
	New roof			0	SF	\$8	\$0	┥┝	
	Exterior glass wal	IS		2900	SF	\$60	\$174,000	┥┝	
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0.00	Replace evicting	Windows		200	QE	¢15	\$13.050		\$70,11
	3 X 7 SWC			7	FA	\$900	\$6,300	┥┠	
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	3X7 w vision glas	SS		5	EA	\$1,200	\$6,000	┥┟	
	3X7 Pair			1	PR	\$1,800	<i></i>	1	
	Storefront entry			2	EA	\$2,500	\$5,000	1	
	interior glass in H	M frame		1000	SF	\$40	\$40,000	7	
	Sliding glass inter	ior doors		144	SF	\$40	\$5,760] [
9.00	FINISHES								\$64,22
	Gypsum board wa	alls		2,160	SF	\$6.00	\$12,960	⊣ L	
	SAT ceiling			9,000	SF	\$3.00	\$27,000	┥┝	
	Gyp bd ceiling			100	SF	\$5	\$500	┥┝	
	Gyp bd bulkeads			0	SF	\$7.00	\$0	┥┝	
	furred Gyp bd on	СМО		0	SF	\$3	\$0	┥┝	
				1033		৯৩৭ ©11	\$35,122 \$4,400	┥┝	
				400	ог ог	Φ11 Φ14	φ4,400 ¢4,400	┥┝	
				400 600		য়। হু	- 04,400 \$1 800	┥┝	
	rubber base			1000		φ3 \$2	\$2,000	┥┝	
	paint			9.300	SF	\$1.20	\$11.160	┥┝	
				-,		÷	÷:,,:::::	<u>1</u>	
10.00	SPECIALTIES					· · · · · · · · · · · · · · · · · · ·			\$8,000
	Toilet room specialties			2	RMS	\$4,000	\$8,000	┥┝	
14.00					l	L			
11.00									
								┥┝	
						1	1	1 1	

CONSTR	CONSTRUCTION COST ESTIMATE DATE		1/29/2015		SHEET	4	of	4
PROJEC				BASIS OF E			г	v
		ART		ŀ	^			
LOOAN	TAKOMA PARK, MD.				DESIGN D	EV	-	
ARCHIT	ECT				50% CONS	ST DOC		
	THE LUKMIRE PART	NERSHIP	P INC		100% CON	IST DOC		
DRAWIN	NG NO: ESTIMATO	R GSL		CHECKED B	ŝΥ			
				QUANTITY				TOTAL
TITLE	OPTION 1: RENOVATE EXIST	ING LIBI	NO	UNIT	PER	TOTAL		COST
			UNITS	MEAS	UNIT			
12.00	FURNISHINGS				1			\$0
13.00	SPECIAL CONSTRUCTION							0\$
15.00	Relocate Mosaic wall		0	IS	\$25,000	\$0		ΨΟ
			•		<i><i><i><i></i></i></i></i>	<u> </u>	1	
							1 1	
14.00	CONVEYING SYSTEMS			-				\$0
						\$0		
						\$0		
15.00								¢261.000
15.00	MECHANICAL W/ VAV System				r – –			φ261,000
	mechanical system- VAV system	n	9 000	SF	\$25	\$225,000	1	
	mechanical system- VRV system	n	9.000	SF	\$35	\$315.000	1	
	plumbing system		9,000	SF	\$4	\$36,000		
	Sprinkler system		0	SF	\$3.00	\$0		
				ļ				
16.00	ELECTRICAL						-	\$144,000
	distribution		0.000	<u>е</u> г	¢6	\$54,000	┥┝	
	power		9,000	SF	φ0 \$5	\$45,000	┥┝	
	lighting		9.000	SF	\$4	\$36.000		
			,				1 [
	FA		9,000	SF	\$1	\$9,000		
17.00	SECURITY / AUDIO-VISUAL					**		\$0
						\$0	┥┝	
							┥┝	
							1	
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CONSTRUCTION COST ESTIMATE DATE: 29-Jan-15				SHEET	1	of	4	
PROJECT	BASIS OF ES	TIMATE						
ТАКОМА Р	PARK LIBRARY		CONCEPT X					
LOCATION				SCHEMAT	IC			
TAKOMA F	PARK, MD.			DESIGN D	EV			
ARCHITECT				50% CONS	ST DOC			
THE LUKM	IRE PARTNERSH	IIP INC		100% CON	IST DOC			
DRAWING NO:	ESTIMATOR		CHECKED B	Y				
		GSL						
			QUANITY					
TITLE OPTION 2- EXPANE	DLIBRARY		TOTAL	PERCENT	COST			
	3,838 SF			TOTAL	PER SF			
1.00 GENERAL CONDITIO	NS		\$211,000	9.1%	\$15.31			
2.00 SITEWORK			\$115.000	5.0%	\$8.35	┥┝─		
2.00 DEMOLITION			\$127,670	5.5%	\$9.26			
3.00 CONCRETE			\$57,570	2.5%	\$4.18	1		
4.00 MASONRY		1	\$0	0.0%	\$0.00	1		
5.00 METALS		1	\$92,922	4.0%	\$6.74	1		
6.00 WOOD & PLASTICS		Ì	\$2,450	0.1%	\$0.18			
7.00 THERMAL & MOISTU	RE PROTECTION		\$204,704	8.8%	\$14.86			
8.00 DOORS & WINDOWS			\$112,910	4.9%	\$8.19	1		
9.00 FINISHES			\$81,660	3.5%	\$5.93	1 🗆		
10.00 SPECIALTIES-			\$8,000	0.3%	\$0.58			
11.00 EQUIPMENT			\$0	0.0%	\$0.00			
12.00 FURNISHINGS			\$0	0.0%	\$0.00			
13.00 SPECIAL CONSTRUC	TION		\$0	0.0%	\$0.00			
14.00 CONVEYING SYSTEM	14.00 CONVEYING SYSTEMS				\$0.00			
15.00 MECHANICAL	\$409,600	17.6%	\$29.72					
16.00 ELECTRICAL			\$204,800	8.8%	\$14.86	↓		
17.00 SECURITY / AUDIO-V	ISUAL		\$0	0.0%	\$0.00	↓		
SUBTOTAL			\$1,628,286	70.1%	\$118.16			
OVERHEAD & PROFI	Г@10%		\$162,829		\$11.82			
SUBTOTAL			\$1,791,115		\$129.98			
BONDS @ 1.25%			\$22,389		\$1.62			
SUBTOTAL			\$1,813,504		\$131.60			
INSURANCE @ .5%			\$90,675		\$6.58			
SUBTOTAL			\$1,904,179		\$138.18			
DESIGN CONTINGEN	CY @ 15%		\$285,627		\$20.73	I L		
SUBTOTAL CONSTRU	JCTION COST		\$2,189,806		\$158.91			
ESCALATION TO MID	POINT OF CONS	T @ 3%/YR	\$131,388		\$9.53	2	yrs	
TOTAL CONSTRUCT	ON COST		\$2.321.194		\$168.45	īΕ		
			<i> </i>		•••••	; F		
		ገ%	\$232 110			┥┝─		
			\$232,119			┥┝		
GEOTECHNICAL INV	STIGATION		\$6,000			┥┝		
TESTING & INSPECT	ONS ALLOWANC	E	\$25,000			1		
REPRODUCTION		· =	\$7.500			1 -		
INTERIOR DESIGN @	1.60/sf		\$22.048			1 -		
FURNISHINGS @ \$25	/SF		\$344.500			1 -		
MOVE & TEMPORARY	Y LIBRARY					1		
SUBTOTAL PROJECT	\$869 287							
		I	<i>\\</i> 000,207			∙		
TOTAL PROJECT COST			\$3,190,481					

CONSTRUCTION COST ESTIMATE DATE:		1/29/2015		SHEET	2	of	4		
PROJECT				BASIS OF ESTIMATE					
TAKOMA	A PARK LIBRARY								
LOCATION					SCHEMATIO	C			
TAKOMA	A PARK, MD.				DESIGN DE	EV			
ARCHITECT					50% CONS	T DOC			
THE LUP	MIRE PARTNERS	SHIP INC			100% CONS	ST DOC		Х	
DRAWING NO:	ESTIMATOR			CHECKED B	Y				
		GSL						TOTAL	
			NO			TOTAL		TOTAL	
IIILE	0 000 OF		NO	UNIT	PER	TOTAL		COST	
	3,838 SF		UNITS	MEAS	UNIT		1		
1.00 GENERAL COND	DITIONS							\$211,000	
Project Manager			6	MON	\$7,900	\$47,400			
Field Superintenc	lent		12	MON	\$7,500	<u>\$90,0</u> 00			
Laborer			12	MON	\$2,800	\$33,600			
Trailer- office			8	MON	\$300	\$2,400			
Trailer - storage			8	MON	\$400	\$3,200			
Temp toilets			8	MON	\$100	\$800			
General- tools etc	<u>, </u>		8	MON	\$450	\$3,600			
Clean up & punch	n list		1	LS	\$10,000	\$10,000			
Disposal			1	LS	\$10,000	\$10,000			
Misc			1	LS	\$10,000	\$10,000			
								<u>Ф</u> 445.000	
2.00 SITEVUORK			4		\$50,000	\$50,000	1	\$115,000	
Sile Developmen	t allowance	-	1		\$50,000	\$50,000			
Excavation gradi	agement allowance	5	1		\$50,000	\$30,000			
	ng		I	LS	\$50,000	\$15,000			
2.00 DEMOLITION								\$127,670	
Clerestory window	ws- 12@8x3,		12	windows	\$100	\$1,200			
CMU walls			1680	SF	\$6	\$10,080			
Gyp board walls			660	SF	\$5	\$3,300			
Doors			20	EA	\$25	\$500			
Ceilings			9300		\$1	\$10,695			
floor finisnes			9300	SF	\$1	\$10,695			
	uinimont ^o ducture	rla	9300		ቅጋ ድር	⇒∠1,900 \$46,500	$\left \right $		
HVAC System eq		IK	9300	55	φo	\$46,500			
exterior brick wall	S		2100	SF	\$8	\$16,800			
3.00 CONCRETE				1				\$57,570	
foundations			3838	SF	\$8	\$30,704			
slab			3838	SF	\$7	\$26,866			
				l				¢o	
4.00 MASUNKY			0		¢00	¢0		ΨŪ	
			U	Sr	⊅ ∠∪	ΦU	+		
							+		
				1					

CONSTRUC	CTION COST ESTIMATE	DATE:	1/29/2015		SHEET	3	of	4	
PROJECT	PROJECT			BASIS OF ESTIMATE					
	TAKOMA PARK LIBRAR	RY		1	CONCEPT		_		
LOCATION					SCHEMATIC	,	-		
	TAKOMA PARK, MD.			4	DESIGN DEV		-		
ARCHITECT					50% CONST		-	V	
		ROULL	INC		100% CONS	IDUC		^	
	NO. ESTIMATOR	GSI			, 1				
		OOL						ΤΟΤΑΙ	
TITLE			NO		PER	TOTAL		COST	
	3.838 SF		UNITS	MEAS	UNIT				
	0,000 01		onno	ME/ (0	U.I.I		Г		
5.00 ME	ETALS			T			_	\$92,922	
ste	eel frame		3838	SF	\$19	\$72,922	┥╽		
Mis	sc steel lintels, etc		1	LS	\$5,000	\$5,000	╡╽		
Ca	nopy to entry to community cente	r	1	LS	\$15,000	\$15,000			
0.00 14/0								 	
0.00 VV(UUU & PLASTICS		500		\$2.00	¢1 450		\$∠,45U	
WO	sc blocking at roof		100		 \$1.000	φ1,450 \$1.000	┥┝		
1113			I		φ1,000	φ1,000	-		
7.00 TH	IERMAL & MOISTURE PROTECT						-	\$204 704	
Wa	all insulation		0	SF	\$3	\$0	П	φ201,701	
Ne	ew roof		3838	SF	\$8	\$30,704			
Ext	terior glass walls		2900	SF	\$60	\$174,000	1 1		
	5					. ,	1 1		
8.00 DC	OORS & WINDOWS							\$112,910	
Re	place existing Windows		290	SF	\$45	\$13,050			
3 X	K 7 SWC		7	EA	\$900	\$6,300			
3 X	K 7 HM		0	EA	\$1,200	\$0			
3X ⁻	7 w vision glass		5	EA	\$1,200	\$6,000			
3X ⁻	7 Pair		1	PR	\$1,800		┥╽		
Sto	orefront entry		2	EA	\$2,500	\$5,000	-		
inte	erior glass in HM frame		1920	SF	\$40	\$76,800	┥╽		
Slic	ding glass interior doors		144	SF	\$40	\$5,760	┥┝		
								© 01 660	
9.00 FIN			2 160	SE	\$6.00	\$12,060	Г	ΨΟ1,00U	
SA SA			12 500	SF	\$3.00	\$37,500	┥┝		
Gv	n bd ceiling		600	SF	\$5	\$3,000			
Gy	/p bd bulkeads		0	SF	\$7.00	\$0	┥┢		
furi	red Gyp bd on CMU		0	SF	\$3	\$0	1 t		
Ca	irpet		1330	SY	\$34	\$45,220] [
CT	walls		400	SF	\$11	\$4,400] [
СТ	Floors		400	SF	\$11	\$4,400	ļ[
VC	CT flooring		600	SF	\$3	\$1,800] [
rub	bber base		1000	LF	\$2	\$2,000] [
pai	int		13,000	SF	\$1.20	\$15,600] [
10.00				L	L		Ц	A	
10.00 SP	PECIALTIES				A (A C A	AA A A A A A A A A 		\$8,000	
	liet room specialties		2	RMS	\$4,000	\$8,000	┥┝		
11.00 50				I	L		Ц		
11.00 EQ				1	1				
							┥┟		
				1			┥┟		
				1			_ L		

CONSTRUCTION COST ESTIMATE	DATE:	1/29/2015		SHEET	4	of	4
PROJECT		BASIS OF E	г	V			
	KARY			SCHEMAT		-	X
TAKOMA PARK. MD.				DESIGN D	EV	-	
ARCHITECT				50% CONS	ST DOC	F	
THE LUKMIRE PART	NERSHIP	P INC		100% CON	IST DOC		
DRAWING NO: ESTIMATO	R		CHECKED B	Ϋ́			
			QUANTITY				TOTAL
TITLE	F	NO	UNIT	PER	TOTAL		COST
3,838 SF		UNITS	MEAS	UNIT			
12.00 FURNISHINGS				1			\$0
						┝─┤	
13.00 SPECIAL CONSTRUCTION							\$0
Relocate Mosaic wall		0	LS	\$25,000	\$0		
	_						¢0
14.00 CONVEYING SYSTEMS	-				02	<u> </u>	\$0
					\$0 \$0		
					~ ~~	1	
15.00 MECHANICAL w/ VAV System							\$409,600
					^		
mechanical system- VAV system	m	12,800	SF	\$25 \$25	\$320,000		
nechanical system- VRV system	m	12,800	SF SF	\$25 \$4	\$320,000 \$51,200		
Sprinkler system		12,800	SF	\$3.00	\$38,400		
				,,,,,	<i>+, </i>	i t	
16.00 ELECTRICAL	_					1	\$204,800
distribution		12 800	SF	\$6	\$76 800	╏┝	
power		12,800	SF	\$5	\$64.000		
lighting		12,800	SF	\$4	\$51,200		
						[
FA		12,800	SF	\$1	\$12,800	╎╎	
							¢0
17.00 SECURITY / AUDIO-VISUAL					¢Ω		2 0
					ψυ		
						[
						[

CONSTRUCTION COST ESTIMATE DATE: 29-Jan-15				SHEET	1	of	4
PROJECT	BASIS OF ES	TIMATE					
ТАКОМА	PARK LIBRARY			CONCEPT		Г	х
LOCATION				SCHEMAT	IC		
ТАКОМА	PARK, MD.			DESIGN D	EV		
ARCHITECT				50% CONS	ST DOC		
THE LUK	MIRE PARTNERSH	IP INC		100% CON	IST DOC		
DRAWING NO:	ESTIMATOR		CHECKED B	Y			
		GSL					
			QUANTITY				
TITLE OPTION 3- EXPAN			TOTAL	PERCENT	COST		
4,465 S	F			TOTAL	PER SF		
1.00 GENERAL CONDITION	ONS		\$211.000	8.2%	\$15.31	┥┝	
2.00 SITEWORK			\$115.000	4.5%	\$8.35		
2.00 DEMOLITION			\$128,970	5.0%	\$9.36		
3.00 CONCRETE			\$66,975	2.6%	\$4.86		
4.00 MASONRY			\$38,400	1.5%	\$2.79	1	
5.00 METALS			\$104,835	4.1%	\$7.61] [
6.00 WOOD & PLASTICS			\$2,450	0.1%	\$0.18] [
7.00 THERMAL & MOIST	URE PROTECTION		\$255,900	10.0%	\$18.57		
8.00 DOORS & WINDOW	S		\$127,610	5.0%	\$9.26	ļĽ	
9.00 FINISHES			\$84,600	3.3%	\$6.14		
10.00 SPECIALTIES-			\$8,000	0.3%	\$0.58		
11.00 EQUIPMENT			\$0	0.0%	\$0.00	╎┝	
12.00 FURNISHINGS			\$0	0.0%	\$0.00	┥┝	
13.00 SPECIAL CONSTRU	13.00 SPECIAL CONSTRUCTION			1.0%	\$1.81	┥┝	
14.00 CONVEYING SYSTE	\$0	0.0%	\$0.00	┥┝			
15.00 MECHANICAL	\$422,400	16.4%	\$30.65	┥┝			
16.00 ELECTRICAL			\$211,200	8.2%	\$15.33	┥┝	
17.00 SECURITY AUDIO-	VISUAL		۵ 0	0.0%	\$0.00	┥┝	
SUBTOTAL			\$1,802,340	70.1%	\$130.79		
OVERHEAD & PROF	FIT @ 10%		\$180,234		\$13.08		
SUBTOTAL			\$1,982,574		\$143.87		
BONDS @ 1.25%			\$24,782		\$1.80	╎┝	
SUBTOTAL			\$2,007,356		\$145.67	┥┝	
INSURANCE @ .5%			\$100,368		\$7.28	┥┝	
			\$2,107,724		\$152.96	┥┝	
			\$316,159		\$22.94	┥┝	
SUBTOTAL CONSTR			\$2,423,003		\$175.90	łĿ	
ESCALATION TO MI	DPOINT OF CONS	ST @ 3%/YR	\$145,433		\$10.55	2	' yrs
TOTAL CONSTRUC	TION COST		\$2,569,316		\$186.45	╵┝	
OTHER PROJECT COSTS						ן ו	
CONSTRUCTION CO	ONTINGENCY @ 1	0%	\$256,932				
A/E FEES @ 10%			\$256,932] [
GEOTECHNICAL IN	VESTIGATION		\$6,000] [
TESTING & INSPEC	TIONS ALLOWANC	CE	\$25,000			ļΓ	
REPRODUCTION			\$7,500			ļĹ	
INTERIOR DESIGN	@ 1.60/sf		\$22,048			\downarrow	
FURNISHINGS @ \$2	25/SF		\$344,500			↓ L	
MOVE & TEMPORAL	RY LIBRARY						
SUBTOTAL PROJE	CT COSTS		\$918,911			1 F	
			\$3 488 227			ı H	
			ψ0, 4 00,221			1 L	

CONSTRUCTION COST ESTIMATE DATE: 1			1/29/2015		SHEET	2	of	4		
PROJEC	Т				BASIS OF ESTIMATE					
	TAKOMA	PARK LIBRARY				CONCEPT				
LOCATIC	DN					SCHEMATIC	C			
	TAKOMA	PARK, MD.				DESIGN DE	EV			
ARCHITE						50% CONS	T DOC			
	THE LUK	MIRE PARTNERS	SHIP INC			100% CONS	ST DOC		Х	
DRAWIN	G NO:	ESTIMATOR			CHECKED B	Y				
			GSL							
				No	QUANITY	555			IOTAL	
IIILE (JPTION 3- EXPAI			NO	UNIT	PER	TOTAL		COST	
	4,465 S	F		UNITS	MEAS	UNIT				
1.00 0	GENERAL COND	TIONS							\$211,000	
	Project Manager			6	MON	\$7,900	\$47,400		<i>\\\</i> 211,000	
F	Field Superintende	ent		12	MON	\$7,500	\$90,000			
Ĺ	_aborer			12	MON	\$2,800	\$33,600			
						. ,				
Т	Trailer- office			8	MON	\$300	\$2,400			
Т	Trailer - storage			8	MON	\$400	\$3,200			
	5						,			
Т	Temp toilets			8	MON	\$100	\$800			
(General- tools etc			8	MON	\$450	\$3,600			
(Clean up & punch	list		1	LS	\$10,000	\$10,000			
Γ	Disposal			1	LS	\$10,000	\$10,000			
Ν	Visc			1	LS	\$10,000	\$10,000			
2.00 5	SITEWORK								\$115,000	
5	Site Development	allowance		1	LS	\$50,000	\$50,000			
5	Storm water mana	gement allowance	e	1	LS	\$50,000	\$50,000			
E	Excavation, gradin	g		1	LS	\$50,000	\$15,000			
2 00 F						1		-	\$128 970	
2.00 2	Clerestory window	s- 12@8x3 13@4	5x3	25	windows	\$100	\$2 500	T	<i>Q</i> 120,010	
(CMU walls			1680	SF	\$6	\$10.080			
	Gyp board walls			660	SF	\$5	\$3,300			
	Doors			20	EA	\$25	\$500			
C	ceilings			9300	SF	\$1	\$10,695			
f	loor finishes			9300	SF	\$1	\$10,695			
li	ighting			9300	SF	\$3	\$27,900			
F	HVAC system equ	ipjment & ductwo	rk	9300	SF	\$5	\$46,500			
	exterior brick walls			2100	SE.	¢g	\$16,800			
)		2100	51	ψυ	φ10,000			
3.00 0	CONCRETE				1			-	\$66 975	
f	oundations			4465	SF	\$8	\$35,720		<i>\\\\\\\\\\\\\</i>	
S	slab			4465	SF	\$7	\$31,255			
						<i>.</i>	, <u>200</u>			
4.00 N	MASONRY								\$38,400	
E	Exterior brick & stu	ud walls		1920	SF	\$20	\$38,400		. ,	
								1		

CONSTRUCTION COST	ESTIMATE	DATE: 1/29/	/2015		SHEET	3	of	4
PROJECT			BASIS OF ES	STIMATE				
TAK	OMA PARK LIBRAF	RY			CONCEPT		Г	
LOCATION					SCHEMATIC	;		
TAK	oma Park, MD.				DESIGN DE	/		
ARCHITECT					50% CONST	DOC		
THE	LUKMIRE PARTNE	RSHIP INC			100% CONS	T DOC		Х
DRAWING NO:	ESTIMATOR			CHECKED B	Y			
		GSL		<u></u>				
			_	QUANTITY				TOTA
TITLE OPTION 3- EXP		N	0	UNIT	PER	TOTAL		COST
4,46	5 SF	UN	ITS	MEAS	UNIT		_	
					l	1		\$104.83
5.00 METALS		14	65	SE	¢10	¢84.835	\mathbf{T}	φ104,0
Misc steel lintels	etc	44	1		\$5,000	\$5,000	┥┝	
Canony to entry	to community cente	yr	י 1		\$15,000	\$15,000	┥┝	
		/1	'	L0	φ10,000	ψ13,000	┥┝	
	TICS				I			\$2 450
wood blocking		5(00	I F	\$2.90	\$1 450		φ2,400
misc blocking at	roof		1	<u> </u>	\$1,000	\$1,000	┥┝	
mice breening at					\$1,000	\$1,000	1 F	
7.00 THERMAL & MC	STURE PROTEC	TION						\$255.90
Wall insulation		16	00	SF	\$3	\$4.800	\Box	<i><i><i>q</i>_00,00</i></i>
New roof			00	SF	\$8	\$36.000	1 F	
Exterior glass walls			85	SF	\$60	\$215,100	1	
						. ,	1	
8.00 DOORS & WINE	OWS				•			\$127,6 ⁻
Replace existing	Windows	4	50	SF	\$45	\$20,250		
3 X 7 SWC		1	4	EA	\$900	\$12,600] [
3 X 7 HM		()	EA	\$1,200	\$0] [
3X7 w vision gla	SS	6	6	EA	\$1,200	\$7,200	7 F	
3X7 Pair		2	2	PR	\$1,800		1	
Storefront entry			2	EA	\$2,500	\$5,000	1 F	
interior glass in I	IM frame	19	20	SF	\$40	\$76,800	1 F	
Sliding glass inte	rior doors	14	14	SF	\$40	\$5,760] [
9.00 FINISHES					_	_		\$84,60
Gypsum board w	valls	2,1	60	SF	\$6.00	\$12,960	╡┟	
SAT ceiling		13,	000	SF	\$3.00	\$39,000	╡┟	
Gyp bd ceiling		78	30	SF	\$5	\$3,900	┥┟	
Gyp bd bulkeads		()	SF	\$7.00	\$0	╡┝	
turred Gyp bd or	CMU	()	SF	\$3	\$0	┥┝	
Carpet		14	00	<u>SY</u>	\$34	\$47,600	┥┝	
CT walls		40	00	SF	\$11	\$4,400	┥┝	
CT Floors		4(00	SF	\$11	\$4,400	╡┟	
VCT flooring		78	30	SF	\$3	\$2,340	┥┟	
rubber base		10	00	LF	\$2	\$2,000	┥┟	
•		13,	000	SF	\$1.20	\$15,600	┥┝	
paint								
paint								A ~ ~ ~ ·
paint 10.00 SPECIALTIES	1-101		<u>,</u> 1	D.V.C	.		+	\$8,000
paint 10.00 SPECIALTIES Toilet room spec	ialties		2	RMS	\$4,000	\$8,000	┥┟	\$8,00(

CONSTRUCTION COST ESTIMATE	DATE:	1/29/2015		SHEET	4	of	4	
PROJECT			BASIS OF ESTIMATE					
TAKOMA PARK LIBR	RARY			CONCEPT			Х	
				SCHEMAT	IC			
	NERSHIP			100% CON				
	R		CHECKED B	Y				
	GSL							
			QUANTITY				TOTAL	
TITLE OPTION 3- EXPAND LIBRARY	,	NO	UNIT	PER	TOTAL		COST	
4,465 SF		UNITS	MEAS	UNIT				
			-	-				
12.00 FURNISHINGS			1				\$0	
			l				\$25.000	
Relocate Mosaic wall		1	IS	\$25,000	\$25,000		Ψ20,000	
				φ20,000	<i>\\</i> 20,000			
14.00 CONVEYING SYSTEMS							\$0	
					\$0			
					\$0			
							¢ 400, 400	
15.00 MECHANICAL w/ VAV System							\$422,400	
mechanical system- VAV system	m	13 200	SE	\$25	\$330,000			
mechanical system- VRV system	m	13,200	SF	\$25 \$25	\$330,000			
plumbing system		13,200	SF	\$4	\$52,800			
Sprinkler system		13,200	SF	\$3.00	\$39,600			
16.00 ELECTRICAL							\$211,200	
		10.000		* ~	A7 0.000			
distribution		13,200	SF	\$6 ¢5	\$79,200			
power lighting		13,200		\$5 ⊈⊿	300,000 \$52,800			
iigiiuiig		13,200	55	Ψ 4	⊅ 3∠,600			
FA		13.200	SF	\$1	\$13.200			
	†	,	<u> </u>	Ψ·	÷:•, _ 00			
17.00 SECURITY / AUDIO-VISUAL				-			\$0	
					\$0			