



D'HUY Engineering, Inc.



Upper Dublin Public Library

Master Plan Presentation for:

520 Virginia Drive

May 22, 2018

Design Presentation Agenda

- **Master Plan Design for 520 Virginia Drive**
 - Existing Conditions & Opportunities
 - Project Goals
 - Site Plan & Floor Plans
 - Concept Renderings
 - ... *Mike O'Rourke, GKO Architects*
- **Master Plan Cost and Information for Adaptive Reuse/Renovation of 520 Virginia Drive**
 - ... *Arif Fazil, D'Huy Engineering*
- **Questions and Discussions**

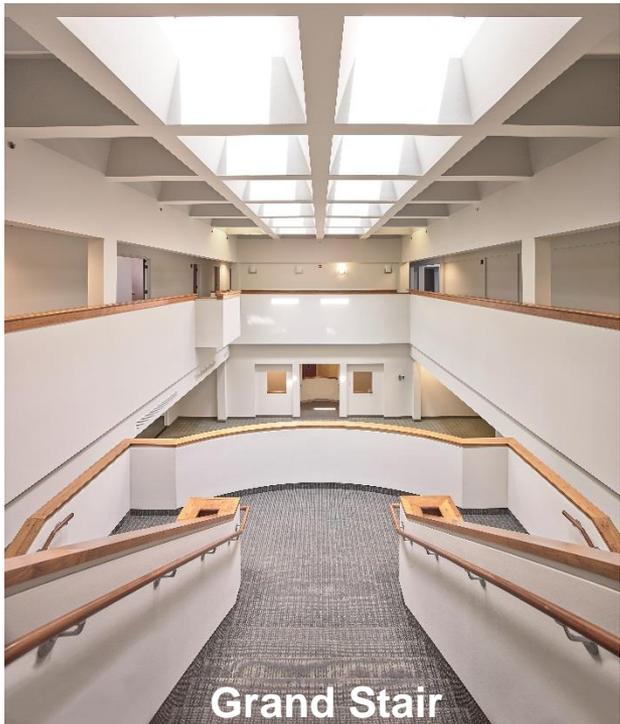
Existing Conditions & Opportunities



Entry Lobby



Great Hall



Grand Stair

Existing Conditions & Opportunities



Cafe



Auditorium



Classroom



Open Space



Offices

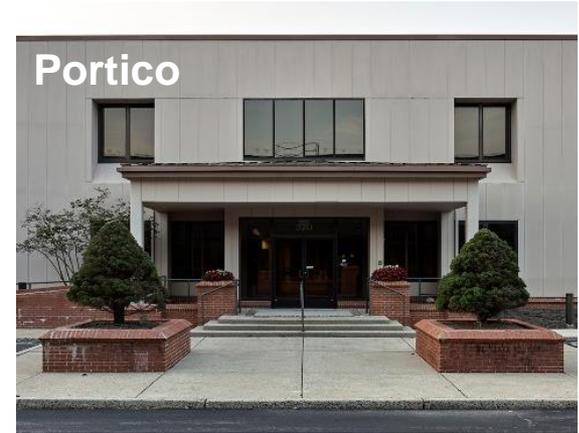
Existing Conditions & Opportunities



Entry Facade



Site Bridge



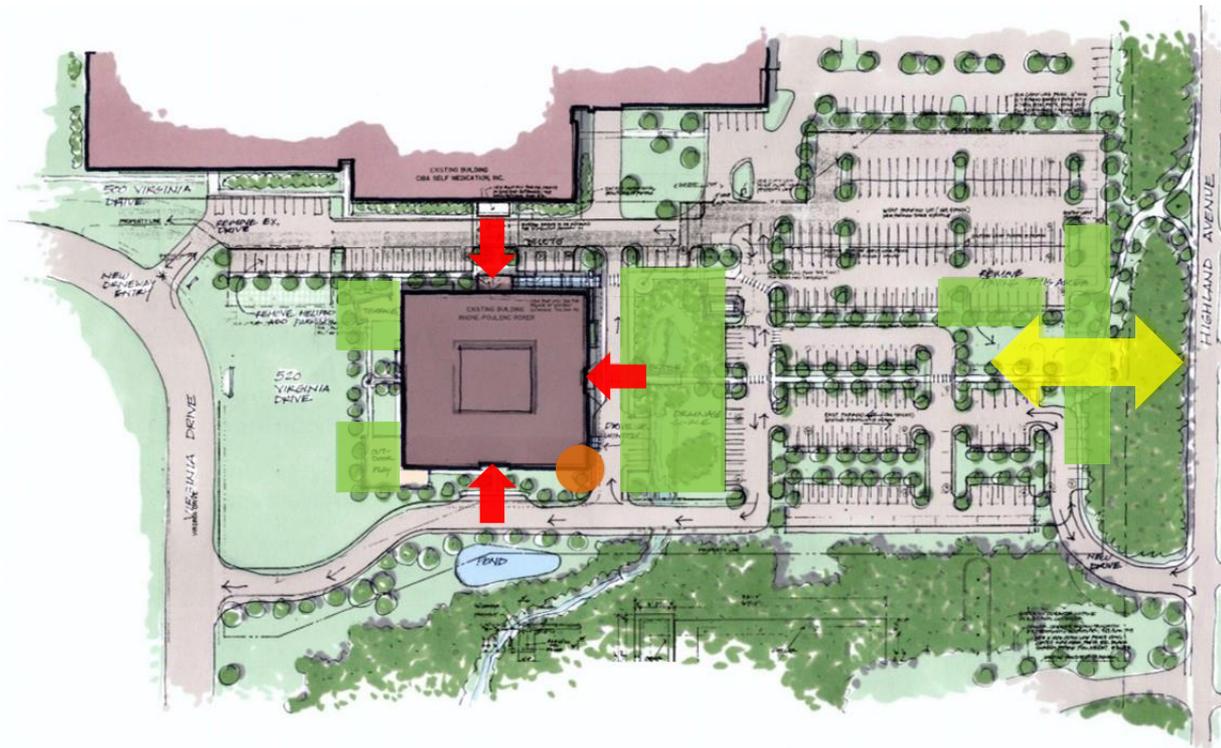
Portico



Virginia Drive Facade

Project Goals

- Master Plan - Site Considerations



Drive-up Service / book-drop window

Consider movement of patrons from parking lot to building

Consider traffic flows

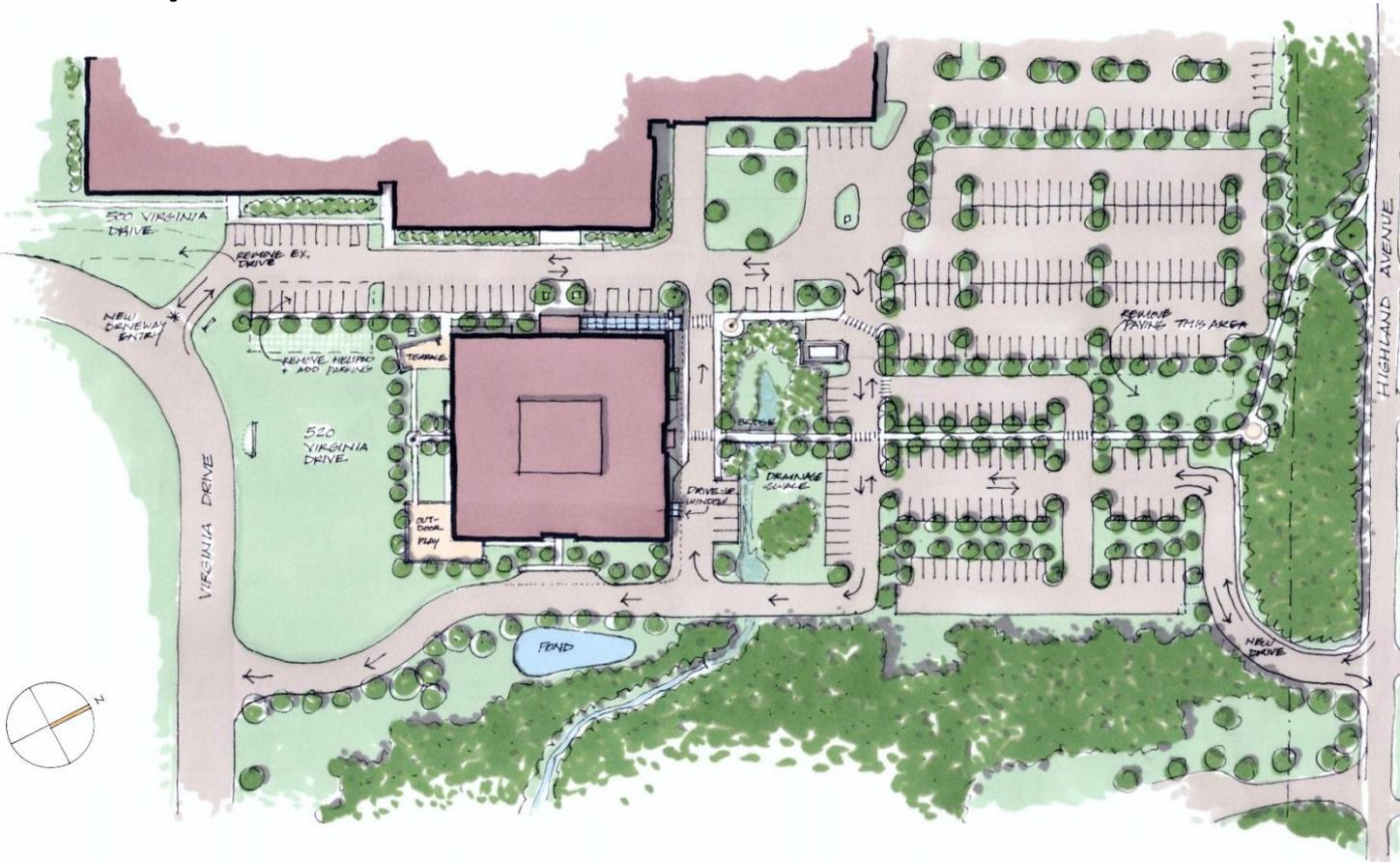
Create vehicular and pedestrian **connections to Highland Avenue**

Avoid cut-through traffic patterns

Add **landscaping** to parking lot

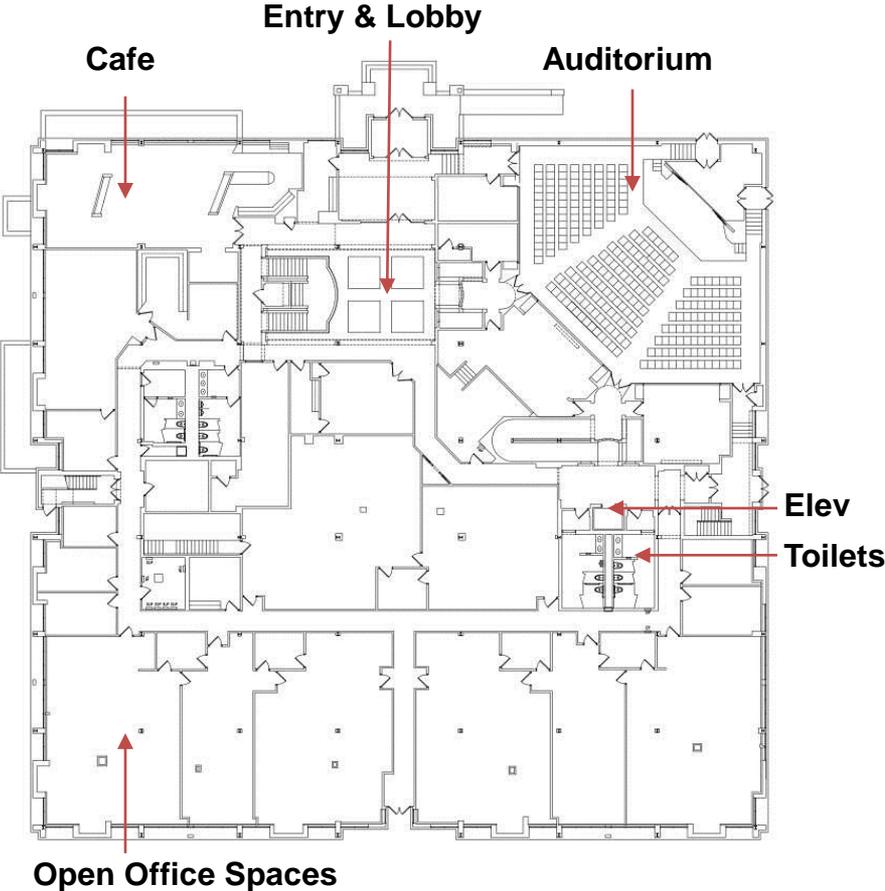
Master Plan

- Proposed Site Plan

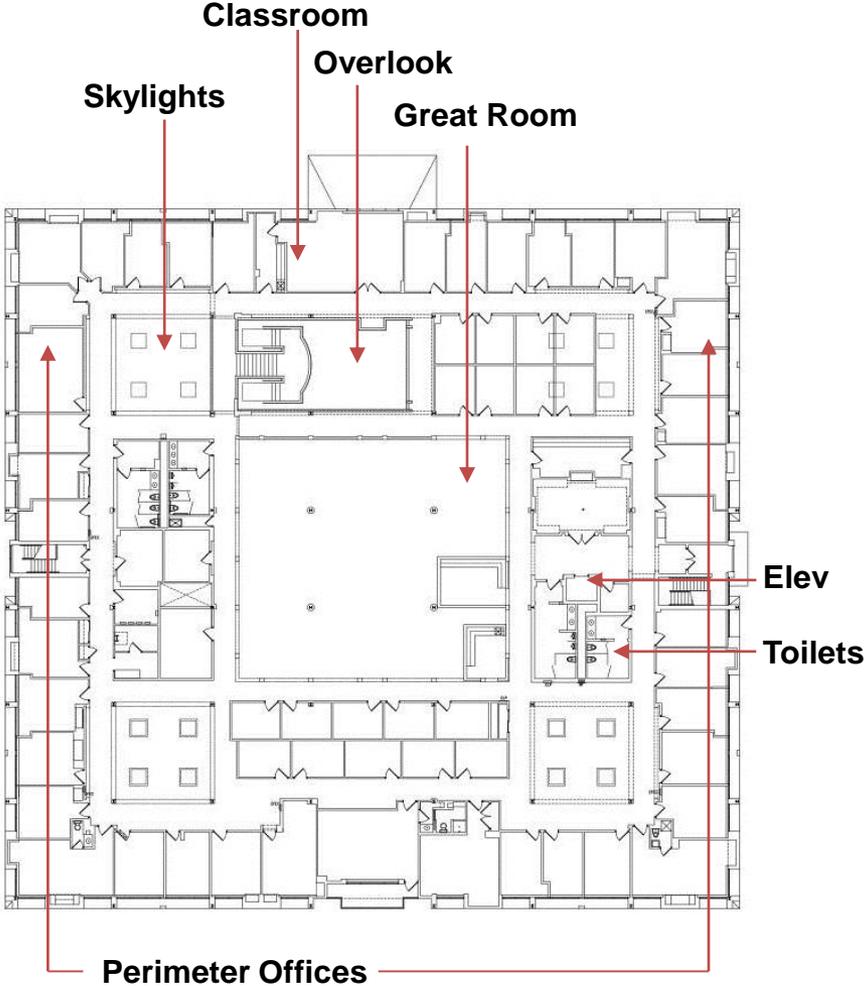


- Highland Avenue Access
- Realign Entry from Virginia Drive
- Landscaped Pathways from Parking Lot to Main Entrance
- Drive-up Book Drop
- Café Outdoor Eating Terrace
- Children's Library Outdoor Play Area
- Enhanced Site Lighting
- Improved Traffic Flows
- Barrier-Free Site Access from Parking to Building

Existing Floor Plans



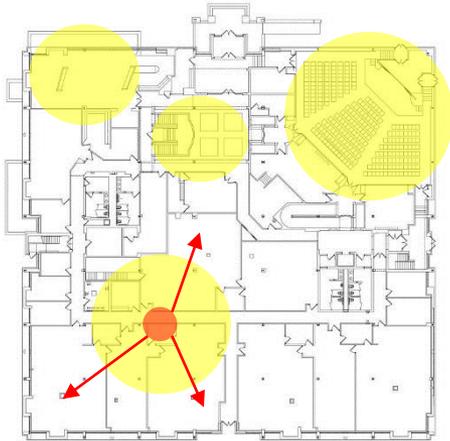
LOWER LEVEL PLAN



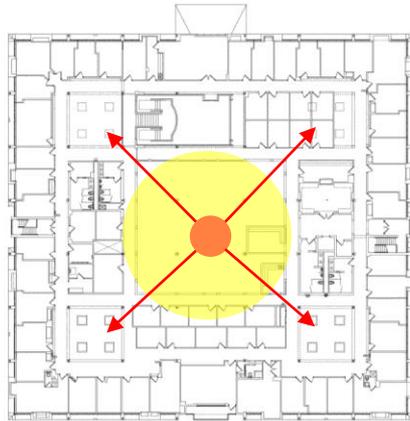
UPPER LEVEL PLAN

Project Goals

- **Master Plan Building Considerations**



Existing Lower Level



Existing Upper Level

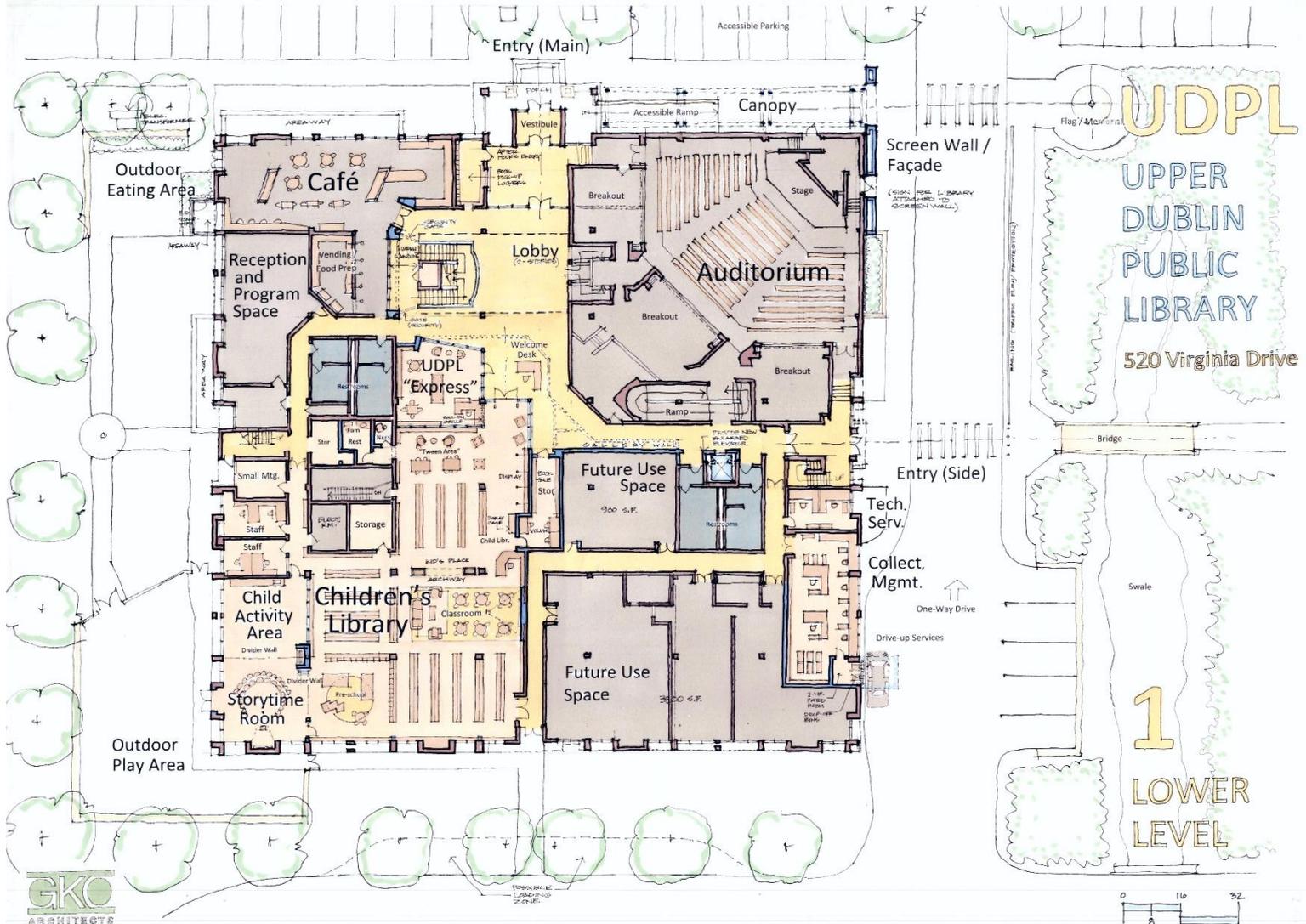
- Capitalize on many **resources** that existing building provides
- Use of **Auditorium** and **Café** for Library & Community Programs
- Use of “**Great Hall**” on Upper Level as the ‘heart’ of the Library
- Enhance the already impressive **Lobby** to orient users to the new **2-story Library Layout**
- **Open up the floor plates** by strategically removing partitions while also **utilizing existing offices** where possible for Library program spaces (i.e. conference rooms, etc.)
- Provide Natural Light and Monitoring Sight Lines for Staff

Upper Dublin Public Library

Master Plan

Proposed Lower Level Floor Plan

- Concept Plan – Children’s Library, UDPL Express, Café, Auditorium, and Collections Mgmt. on Lower Level
- Test Fit - Furniture & Stacks not Completely Finalized
- Convenient ‘Express’ Feature: books holds & book drop
- Activity on Lower Level upon entry
- Afterhours Use of Public Areas Including the Auditorium, Café, and other Program areas
- Master Plan Includes a Canopy over the Exterior Ramp
- Outdoor Areas include Dining Terrace and Play Area for Children
- Drive-up Book Drop



Proposed Renderings

- Lower Level Entry to Children’s Library



Proposed Renderings

- Children’s Library on Lower Level



Proposed Renderings

- **Upper Level Atrium** (Transition Space to Upper Level)



Upper Dublin Public Library

Master Plan

Proposed Upper Level Floor Plan

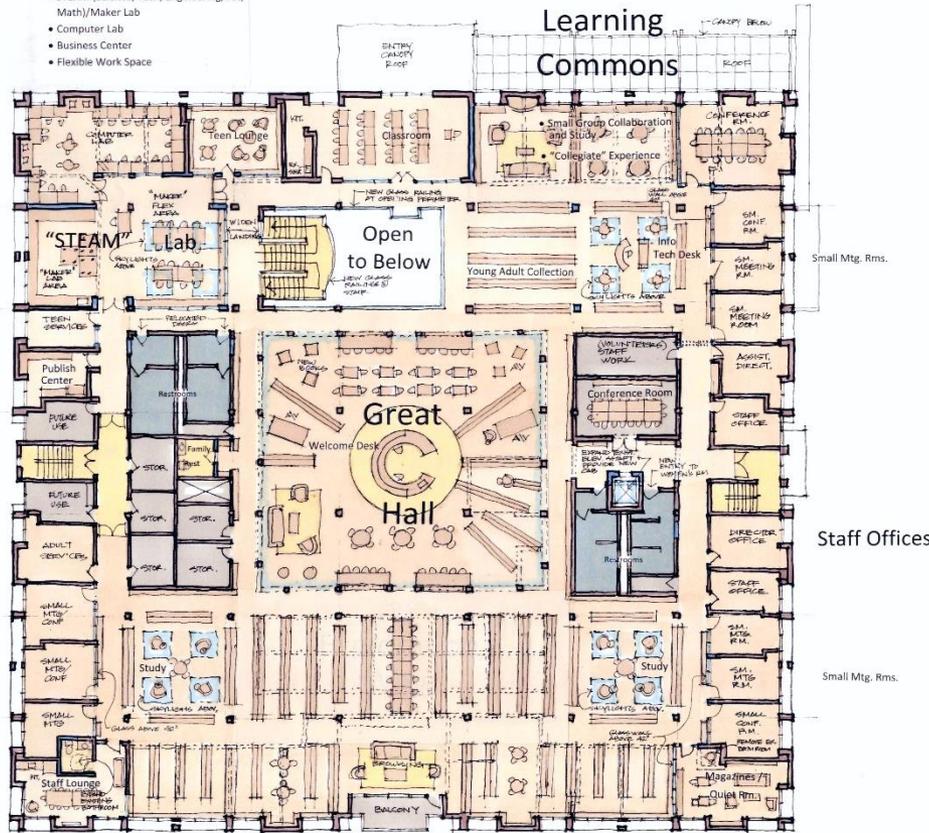
- Concept Plan – General Collection, Creation Suite, and Learning Commons on Upper Level
- Convenience
- Sky light areas
- Maker Space “Creation Suite”
- Learning Commons
- Skylights over Corner Study Areas
- Soft Furniture Browsing Area with View to Pond
- Great Hall with Natural Light
- Enhanced Elevator to Upper Level
- Multiple Conference/ Meeting Rooms
- Classroom with Kitchen Prep Area

Creation Suite

- STEAM (Science, Tech, Engineering, Art, Math)/Maker Lab
- Computer Lab
- Business Center
- Flexible Work Space

Learning Commons

- Small Group Collaboration and Study
- “Collegiate” Experience



Exploration Wing

- General Collection
- Browsing
- Reading / Study Areas
- Small Meeting Rooms

UDPL
UPPER
DUBLIN
PUBLIC
LIBRARY

520 Virginia Drive

2
UPPER
LEVEL



Proposed Renderings

- Upper Level Overlook



Proposed Renderings

- Upper Level Reading/ Stack Area

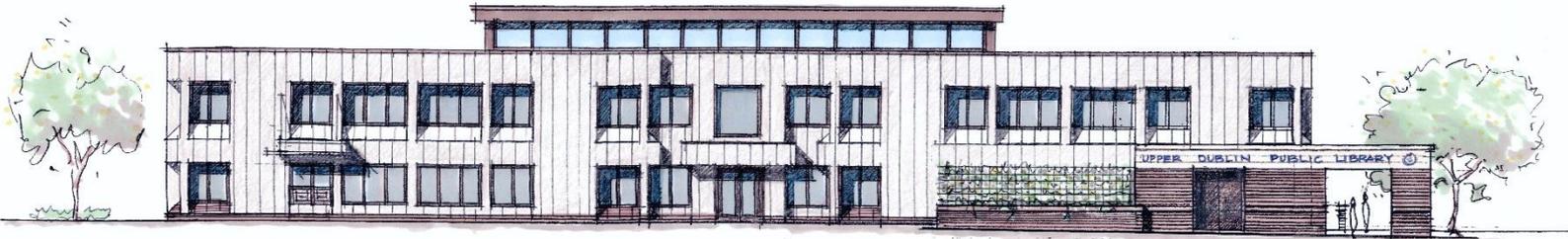


Master Plan

- Building Exterior (Future Phase)



PROPOSED ENTRY ELEVATION



PROPOSED PARKING LOT ELEVATION

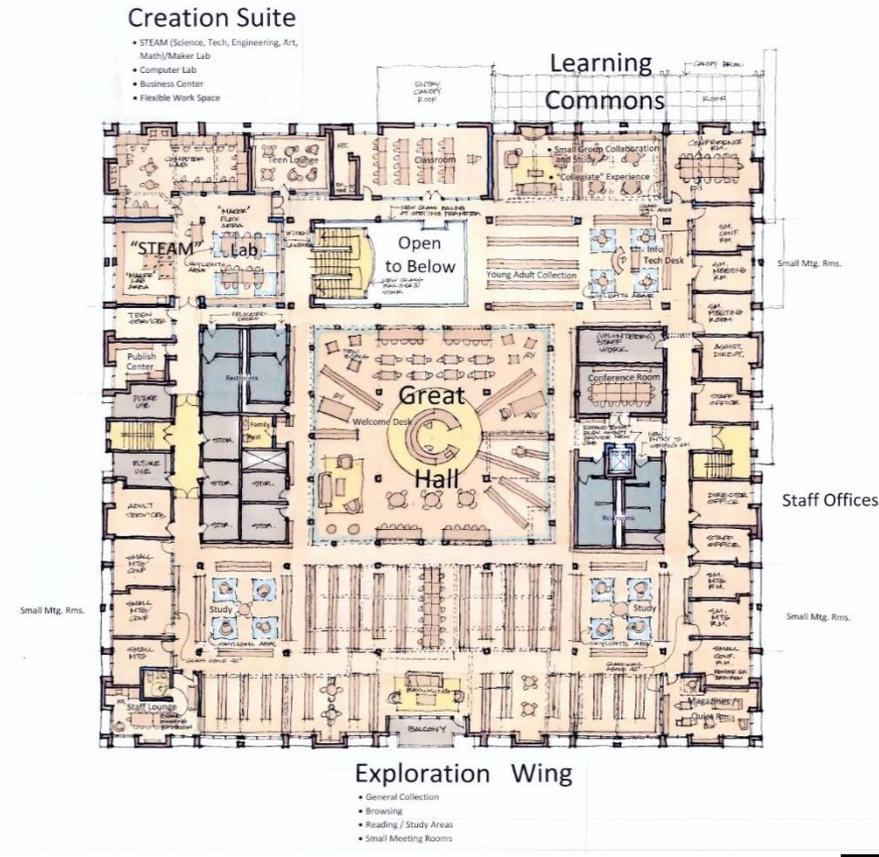
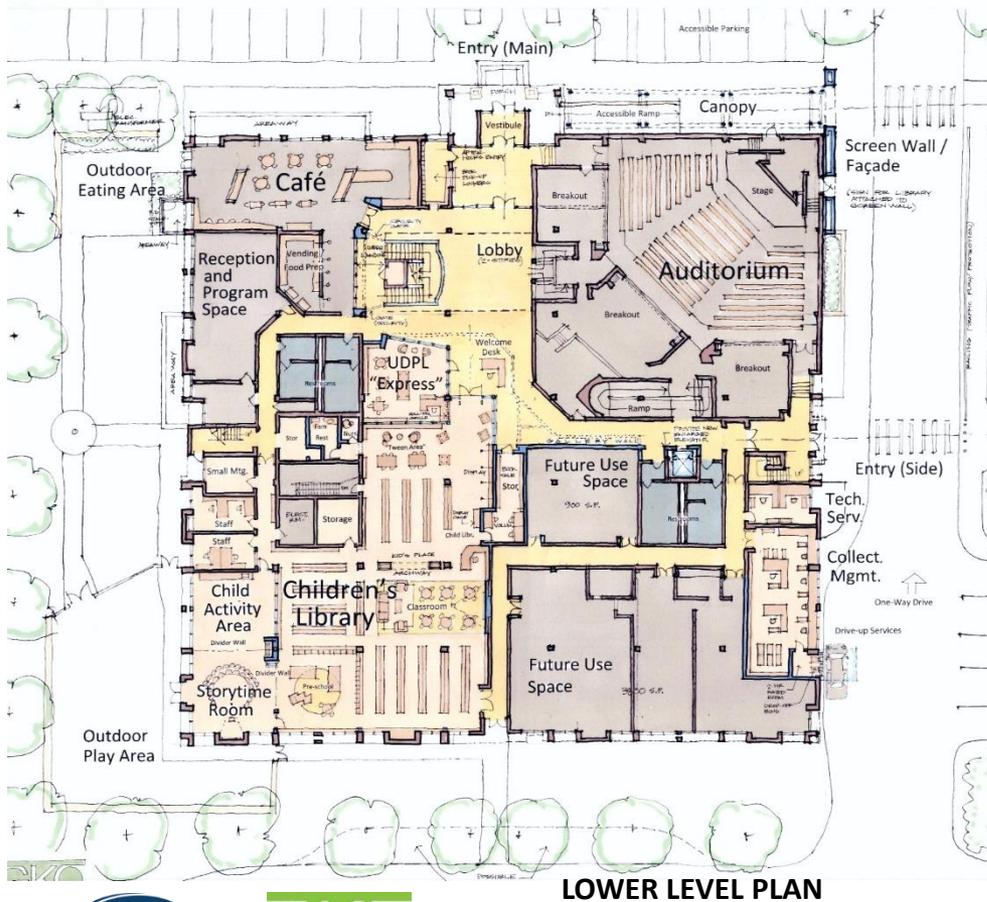
Master Plan Cost and Information for Adaptive Reuse / Renovation

- **Architectural Master Plan**
 - Lower Level
 - Upper Level
- **Square Footage Data**
- **Draft Conceptual Budget**
- **Color-Coded Plans for Draft Conceptual Budget**
 - Lower Level
 - Upper Level
 - Site Plan
- **Furniture and Technology Allowances Detail**

Upper Dublin Public Library

Master Plan Cost and Information for Adaptive Reuse / Renovation

• Architectural Master Plan



Square Footage Data

Existing Library at 805 Loch Alsh Drive

Existing Library (Lower Level Floor)

Library (Lower Level Floor): **15,327 SF** *(this includes Mech. Rm. # 152, and corridor area closets outside of your office. It does not include Mech/Elec Rm. # 143)*

Existing Program Space used by Library (Upper Level Floor)

Upper Level Floor Meeting Rooms: **4,552 SF** Meeting Rooms A, B, C and D
(and the adjacent access corridor and storage rooms)

Connecting Stair Tower: **420 SF** *(210 SF on each floor)*

“Caucus Rm” Meeting 278 **308 SF**

Lobby / Seating (outside Meeting Rms.): **1,000 SF**

Commissioner’s Meeting Rm # 271 **2,564 SF**

Partial Allocation of Upper Level Side Lobby **829 SF**

Total Square Footage **25,000 SF**
currently used by the library program

Square Footage Data

Proposed Library at 520 Virginia Drive

Lower Level Available Space	29,200 SF (+/-)
Upper Level Available Space	28,000 SF (+/-)
<hr/>	
Available Space in Entire Building	57,200 SF (+/-)

Library Master Plan

Proposed Library Square Footage

Lower Level	8,100 SF (+/-)
<ul style="list-style-type: none">• Children’s Library• UDPL “Express”• Collections Management	
Upper Level	28,000 SF (+/-)
<ul style="list-style-type: none">• General Collection• Meeting Rooms• Creation Suite• Learning Commons	
<hr/>	
Total Library Square Footage	36,100 SF (+/-)

Square Footage Data

Proposed Library at 520 Virginia Drive, *continued*

Library Building Program Areas

• Children’s Library (Lower Level)	7,275 SF
• UDPL “Express” (Lower Level)	575 SF
• 300 seat Auditorium and support spaces (Lower Level)	6,000 SF
• First Floor General Future Use Spaces (Leasable) (3300 + 900)	4,200 SF (+/-)
• First Floor Program and Reception Space	1,030 SF (+/-)
• First Floor Café and Vending Area	1,800 SF (+/-)
• First Floor Collection Management Office	1,000 SF
• Second Floor “Creation Suite” (incl. Teen Lounge)	2,400 SF
• Second floor Classroom	700 SF
• Great Hall (Upper Level)	3,700 SF
• Exploration Wing (Upper Level)	7,000 SF
• Learning Commons (Upper Level)	2,300 SF

Other Data

• Number of Small Meeting Rooms in Children’s Library (Lower Level)	1
• Number of Small Meeting Rooms on Second Floor	9
• Number of Large Assembly Rooms in Children’s Library (Upper Level)	2 (w/divider)
• Number of Large Meeting/Conference Rooms on Second Floor	2 + 1CR = 3

Upper Dublin Public Library

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Draft Conceptual Budget, *page 1 of 2*

Renovation Package	Priority Level	Description of Work and Areas	Square Footage	Cost per Square Foot	Competitive Bid		Energy Contract		Total Estimated Cost		Site Work Material & Equip. Costs
					Estimated Cost	Running Total	Estimated Cost	Running Total	Estimated Cost	Running Total	
MEP Improvements	1	MEP Improvements to the entire building. See Note #3.	57,200	\$ 73.19	\$ 650,700	\$ 650,700	\$ 3,535,845	\$ 3,535,845	\$ 4,186,545	\$ 4,186,545	
Primary Renovations Required for Library Operations, No MEP Work	2	Includes selective demolition, new partitions, and fit-out of Primary Spaces. See Note #1 and #1A.	36,100	\$ 70.85	\$ 2,557,686	\$ 3,208,386		\$ 3,535,845	\$ 2,557,686	\$ 6,744,231	
Structural Improvements	3	Allowance to perform structural improvements to accommodate increased loads on second floor spaces			\$ 79,500	\$ 3,287,886		\$ 3,535,845	\$ 79,500	\$ 6,823,731	
Boiler Replacement	4	Replace electric boilers with gas fired hi-efficiency boilers. Includes replacing hydronic pumps.				\$ 3,287,886	\$ 460,000	\$ 3,995,845	\$ 460,000	\$ 7,283,731	
Roof Repairs	5	Allowance for any required roof repairs.			\$ 175,000	\$ 3,462,886		\$ 3,995,845	\$ 175,000	\$ 7,458,731	
Parking Lot Improvements Phase 1	6	New driveway connecting the existing parking lots directly to Highland Ave., walking trail and sidewalks from Highland Ave. to the Library, and modifications to allow for a driveway to the new book drop-off location.			\$ 265,571	\$ 3,728,457		\$ 3,995,845	\$ 265,571	\$ 7,724,302	\$ 126,316
Improvements to Existing Elevator	7	Allowance to renovate the existing elevator equipment, install a new cab, and enlarge the elevator. Does not include a new piston.			\$ 200,000	\$ 3,928,457		\$ 3,995,845	\$ 200,000	\$ 7,924,302	
Small Meeting/Conference Rooms Renovations	8	Includes new flooring and painting and revise/upgrade of electrical systems of small meeting and conference rooms. Contains allowances for visual display surfaces and casework and countertops. See Notes #1 and #2.	3,520	\$ 39.79	\$ 100,625	\$ 4,029,082	\$ 39,420	\$ 4,035,265	\$ 140,045	\$ 8,064,347	
Staff Offices and Work Spaces	9	Includes new flooring and painting and revise/upgrade of electrical systems of staff offices and work spaces. Contains an allowance for casework and countertops. See Notes #1 and #2.	2,070	\$ 33.24	\$ 45,645	\$ 4,074,727	\$ 23,165	\$ 4,058,430	\$ 68,810	\$ 8,133,157	

Upper Dublin Public Library

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Draft Conceptual Budget, *page 2 of 2*

Renovation Package	Priority Level	Description of Work and Areas	Square Footage	Cost per Square Foot	Competitive Bid		Energy Contract		Total Estimated Cost		Site Work Material & Equip. Costs
					Estimated Cost	Running Total	Estimated Cost	Running Total	Estimated Cost	Running Total	
Secondary Stair Tower Renovations	10	New flooring and painting and minimal upgrades of electrical systems in the secondary stair towers. See Notes #1 and #2.	840	\$ 18.19	\$ 12,345	\$ 4,087,072	\$ 2,935	\$ 4,061,365	\$ 15,280	\$ 8,148,437	
Storage Room Renovations	11	New flooring and painting and minimal upgrades of electrical systems in the existing storage rooms. See Note #1 and #2.	630	\$ 14.51	\$ 6,950	\$ 4,094,022	\$ 2,190	\$ 4,063,555	\$ 9,140	\$ 8,157,577	
Remaining Master Plan Parking Lot Improvements	12	Improvements to Existing Parking Lots including replacing the helipad and adjacent site wall with additional parking, mill and overlay and line striping of existing lots, replacing existing site lighting with LED fixtures, three new site lights, and new lighting controls.			\$ 675,619	\$ 4,769,641	\$ 174,650	\$ 4,238,205	\$ 850,269	\$ 9,007,846	\$ 335,583
Entrance Canopy	13	Allowance for new entrance canopy.			\$ 200,000	\$ 4,969,641		\$ 4,238,205	\$ 200,000	\$ 9,207,846	
Café and Vending/Food Prep Renovations	14	Includes new flooring, ceilings, painting and revise/upgrade of electrical systems of café and vending/food prep spaces. Contains a \$150,000 allowance for food service equipment and \$40,000 allowance for casework and countertops. See Note #1.	1,800	\$198.84	\$ 315,590	\$ 5,285,231	\$ 42,325	\$ 4,280,530	\$ 357,915	\$ 9,565,761	
Auditorium and Program/Reception Space Renovations	15	Includes new flooring, ceilings, and painting, new LED lighting, and revise/upgrade of electrical systems of the auditorium and related spaces. See Note #1.	7,030	\$ 48.33	\$ 136,356	\$ 5,421,587	\$ 203,380	\$ 4,483,910	\$ 339,736	\$ 9,905,497	
Future Use Space Renovations	16	Includes new flooring, ceilings, and painting, new LED lighting, and revise/upgrade of electrical systems of the future use spaces. See Note #1.	4,200	\$ 47.32	\$ 105,225	\$ 5,526,812	\$ 93,510	\$ 4,577,420	\$ 198,735	\$ 10,104,232	
Furnishings and Technology		Allowance for Library Furnishings and Technology. See Notes #1A, #4, and #5.				\$ 5,526,812		\$ 4,577,420	\$ 1,500,000	\$ 11,604,232	

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Color Coded Plan Diagrams for Draft Concept Budget
 - Lower Level



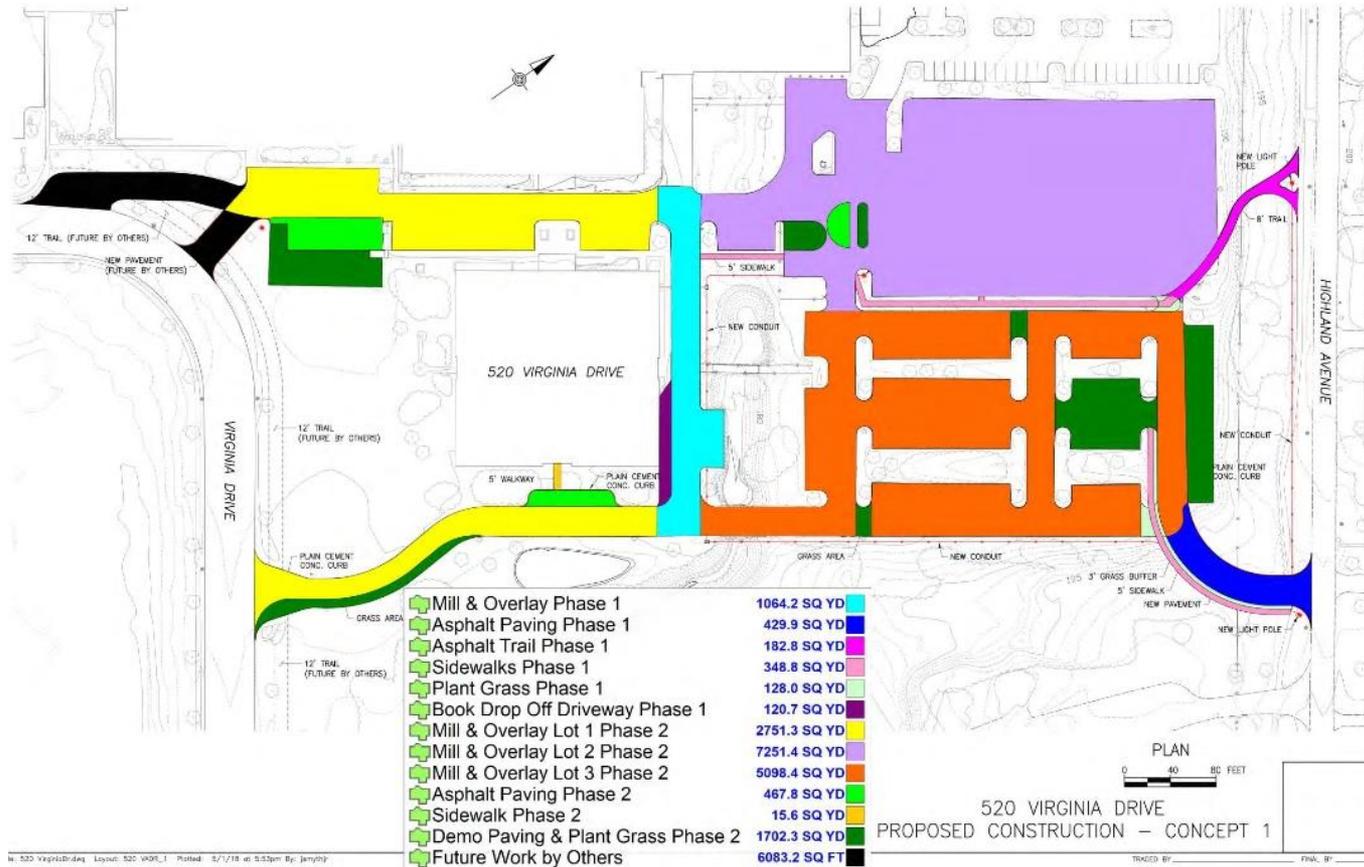
Master Plan Cost and Information for Adaptive Reuse / Renovation

- Color Coded Plan Diagrams for Draft Concept Budget
 - Upper Level



Master Plan Cost and Information for Adaptive Reuse / Renovation

- Color Coded Plan Diagrams for Draft Concept Budget
 - Site Plan



Master Plan Cost and Information for Adaptive Reuse / Renovation

• Furniture and Technology Allowances Detail

\$75,000.	Auditorium Tech – A/V System upgrade allowance
\$50,000.	Public address system for building allowance
\$353,250.	Children’s Library / Express Library furniture (7850 SF x \$45/SF)
\$78,500.	Children’s Library Technology (computers / servers and other equipment (7850 SF x \$10/SF) <i>(Note: the backbone wiring, data racks, and security (card access, intrusion detection, cameras, etc.) are already in the base construction costs).</i>
\$0.	Collections Management Staff Furniture (Reuse existing furniture)
\$10,500.	Collections Management Tech (1050 x \$10/SF)
\$108,000.	Creation Suite Furniture (2400 SF x \$45/SF)
\$24,000.	Creation Suite Tech (2400 SF x \$10/SF)
\$642,645.	General Upper Floor Level Library Furniture (14,281 SF x \$45/SF)
\$142,810.	Upper Floor Level Library Technology (computers / servers and other equipment (14,281 SF x \$10/SF) <i>(Note: the backbone wiring, data racks, and security (card access, intrusion detection, cameras, etc.) are already in the base construction costs).</i>
\$0.	Staff Office / Lounge Furniture (Reuse Existing)
	Circulation / Welcome Desk and on-floor staff stations (Included in Upper Floor Level Furniture)
	Automatic book sorting or other automated equipment (Future Phase)

\$1,484,705. Total Furnishings and Technology Budget

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Furniture and Technology Allowances Detail

- **Summary for 35,000 SF Library at 520 Virginia Drive**

\$1,125,000. 25,000 SF of Library area where new furniture is required = $25,000\text{SF} \times \$45/\text{SF}$
Note: Two-thirds of existing furniture to be reused across the square footage = 10,000 SF covered ($25,000\text{SF} + 10,000\text{SF} = 35,000\text{SF}$)

\$250,000. Allowance of \$10/SF for Library Technology items
(\$10/SF across 25,000 SF of the Library area)

\$75,000. Allowance of \$75,000 for Auditorium A/V upgrade

\$50,000. Allowance of for PA system upgrade to the building

\$1,500,000. Total Budget

Questions/ Discussion



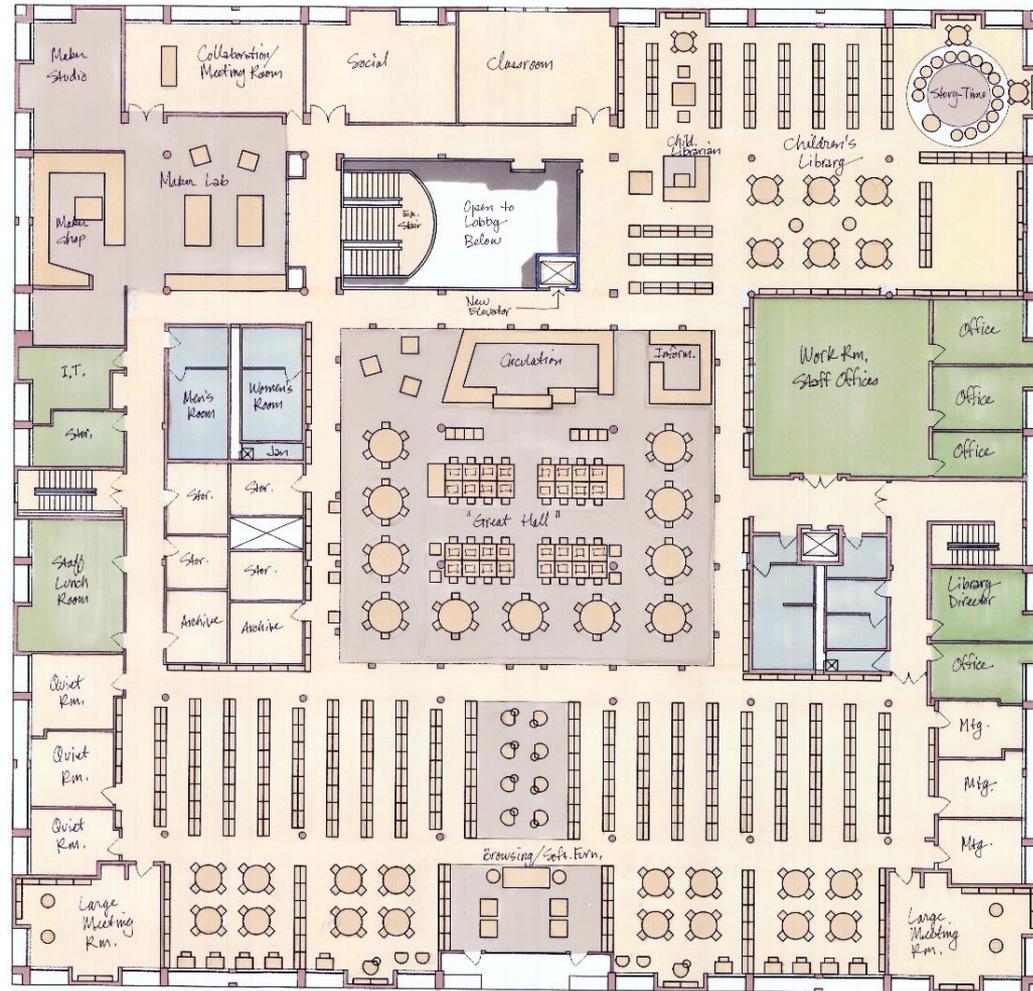
One-Story Library Test Fit Concept

Pros

- Potentially less expensive construction cost (in Phase One)
- Potentially less expensive to operate building
- Potentially fewer staff may be required

Cons

- A denser Upper Level floor plan necessitates the use of tall stack shelving which may require re-enforcement of existing floor structure
- Additional costs may be incurred if Children's Library is moved to the Lower Level in the future
- Fewer small and large conference rooms are possible as compared to a two-story concept
- Master Plan programming calls for 36,000 SF of floor space (Upper Level has 28,000 SF)
- Children's Library should comprise between 30-40% of the total Library square footage (11% shown in this test-fit)
- Intensifies need for vertical circulation to access collection & program spaces (may be challenging for families with strollers)
- No presence / activity related to Library on lower level entry floor
- Reduced large open floor space for Children's Library programming



ALTERNATE UPPER LEVEL PLAN

Upper Dublin Public Library

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Draft Conceptual Budget (overview)**

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Furnishings and Technology		Allowance for Library Furnishings and Technology. See Notes #1A, #4, and #5.				\$ 5,526,812		\$ 4,577,420	\$ 1,500,000	\$ 11,604,232	

Upper Dublin Public Library

Master Plan Cost and Information for Adaptive Reuse / Renovation

- Draft Conceptual Budget** (*summary*)

Renovation Package	Square Footage	Cost per Square Foot	Total Estimated Cost	Site Work Material & Equip. Costs
MEP Improvements	57,200	\$ 73.19	\$ 4,186,545	
Primary Renovations Required for Library Operations, No MEP Work	36,100	\$ 70.85	\$ 2,557,686	
Structural Improvements			\$ 79,500	
Boiler Replacement			\$ 460,000	
Roof Repairs			\$ 175,000	
Parking Lot Improvements Phase 1			\$ 265,571	\$ 126,316
Improvements to Existing Elevator			\$ 200,000	
Small Meeting/Conference Rooms Renovations	3,520	\$ 39.79	\$ 140,045	
Staff Offices and Work Spaces	2,070	\$ 33.24	\$ 68,810	
Secondary Stair Tower Renovations	840	\$ 18.19	\$ 15,280	
Storage Room Renovations	630	\$ 14.51	\$ 9,140	
Remaining Master Plan Parking Lot Improvements			\$ 850,269	\$ 335,583
Entrance Canopy			\$ 200,000	
Café and Vending/Food Prep Renovations	1,800	\$198.84	\$ 357,915	
Auditorium and Program/Reception Space Renovations	7,030	\$ 48.33	\$ 339,736	
Future Use Space Renovations	4,200	\$ 47.32	\$ 198,735	
Furnishings and Technology			\$ 1,500,000	