



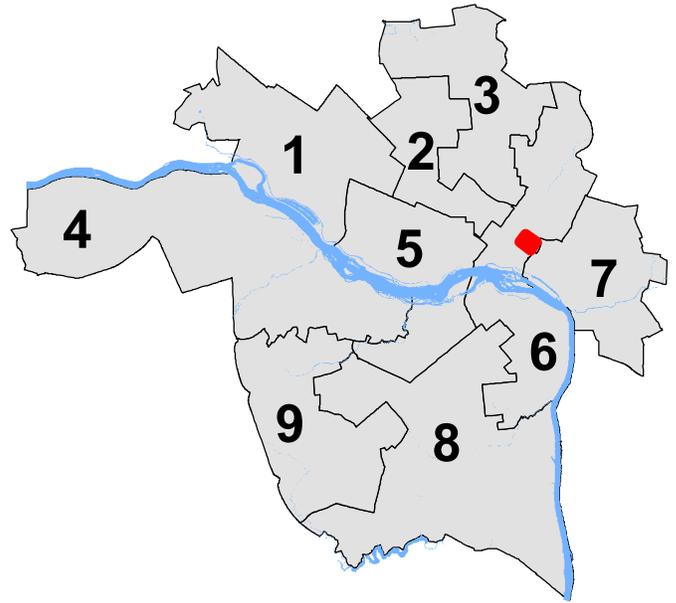
City of Richmond Department of Planning & Development Review

Encroachment

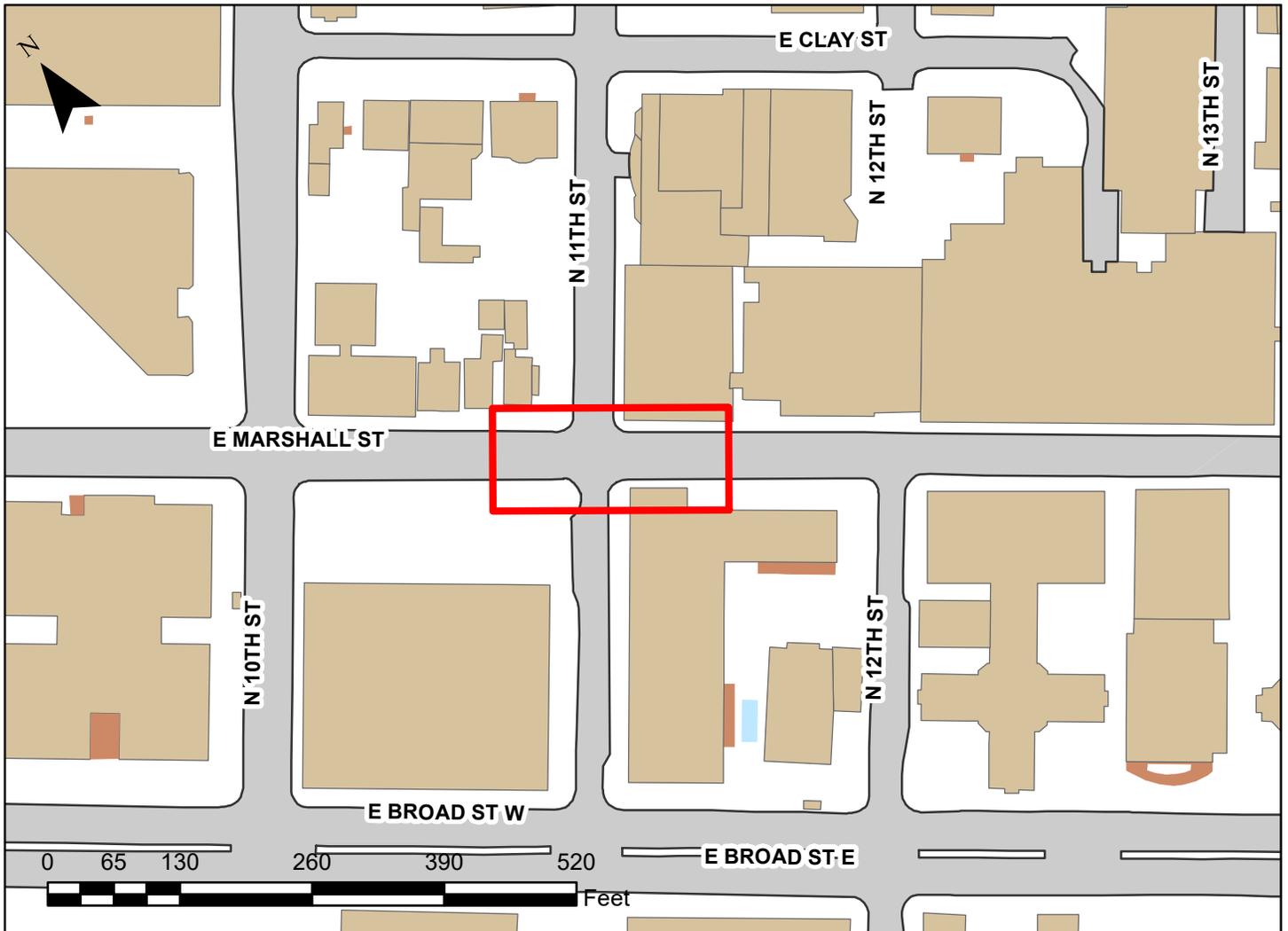
LOCATION: 1001 E Marshall St.

COUNCIL DISTRICT: 6

PROPOSAL: Review of a proposed pedestrian bridge connecting the Children's Hospital to the larger VCU Medical Center campus.



*For questions, please contact Josh Son
at 646-3741 or joshua.son@richmondgov.com*





Application for Urban Design Committee Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219 | (804) 646-6335
www.richmondgov.com/CommitteeUrbanDesign



Application Type (select one)

Location, Character, & Extent
Section 17.05
Other:

Encroachment
Design Overlay District

Review Type (select one)

Conceptual
Final

Project Information

Submission Date: _____

Project Name: _____

Project Address: _____

Brief Project Description (this is not a replacement for the required detailed narrative):

Applicant Information (a City representative must be the applicant, with an exception for encroachments)

Name: _____ Email: _____

City Agency: _____ Phone: _____

Main Contact (if different from Applicant): _____

Company: _____ Phone: _____

Email: _____

Submittal Deadlines

All applications and support materials must be filed no later than 21 days prior to the scheduled meeting of the Urban Design Committee (UDC). Please see the schedule on page 3 as actual deadlines are adjusted due to City holidays. **Late or incomplete submissions will be deferred to the next meeting.**

Filing

Applications can be mailed or delivered to the attention of "Urban Design Committee" at the address listed at the top of this page. **It is important that the applicant discuss the proposal with appropriate City agencies, Zoning Administration staff, and area civic associations and residents prior to filing the application with the UDC.**

Submittal Deadlines

The UDC is a ten member committee created by City Council in 1968 whose purpose is to advise the City Planning Commission (CPC) on the design of projects on City property or right-of-way. The UDC provides advice of an aesthetic nature in connection with the performance of the duties of the Commission under Sections 17.05, 17.06, and 17.07 of the City Charter. The UDC also advises the Department of Public Works in regards to private encroachments in the public right-of-way.



Application for Urban Design Committee Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219 | (804) 646-6335
www.richmondgov.com/CommitteeUrbanDesign



Submission Requirements

- An electronic copy (PDF preferred) of all application materials, which can be emailed, or delivered by FTP or USB.
- Three (3) copies of the application cover sheet and all support materials (see below).
- Plan sheets should be 11" x 17", folded to 8 1/2" x 11". If it is not possible to scale plans to these dimensions, please provide one set of larger, scaled plans.
- All applications must include the attached cover sheet and the following support materials, as applicable to the project, based on Review Type:

Conceptual Review:

- A detailed project narrative which includes the following: purpose of the project, project background, project budget and funding sources, description of construction program and estimated construction start date (description should also provide information on the surrounding area to provide context).
- A site plan for the project indicating site characteristics which include: building footprints, parking areas, pedestrian routes, recreation areas, open areas, and areas of future expansion.
- A set of floor plans and elevations, as detailed as possible.
- A landscaping plan which shows the general location and character of plant materials and notes any existing tree to be removed.

Final Review:

- A detailed project narrative which includes the following: purpose of the project, project background, project budget and funding sources, description of construction program, and estimated construction start date (description should also provide information on the surrounding area to provide context).
- A site plan for the project indicating site characteristics which include: building footprints, parking areas, pedestrian routes, recreation areas, open areas, and areas of future expansion.
- A set of floor plans and elevations, as detailed as possible.
- A landscaping plan that includes a complete plant schedule, the precise location of all plant materials, and a landscape maintenance analysis. The plant schedule must show number, size and type of each planting proposed. If existing trees are to be removed, their size, type, and location must be noted on the landscape plan.
- The location of all lighting units should be noted on a site plan, including wall-mounted, site, and parking lot lighting. Other site details such as benches, trash containers, and special paving materials should also be located. Include specification sheets for each item.
- Samples of all proposed exterior building materials, including but not limited to brick, mortar, shingles, siding, glass, paint, and stain colors. When an actual sample cannot be provided, a product information sheet that shows the item or a photo of an existing item may be substituted.

Review and Processing

- Once an application is received, it is reviewed by Staff, who compiles a report that is sent to the UDC.
- A copy of the report and the meeting agenda will be sent to the applicant prior to the meeting.
- At the UDC meeting, the applicant or a representative should be present or the application may be deferred to the next regularly scheduled meeting. It is also strongly suggested that a representative of the City Agency which will have final responsibility for the item be present at the meeting (if the applicant and the representative are not the same).
- Once the UDC recommends action on the application, it is automatically placed on the agenda for the next City Planning Commission (CPC) meeting. Exceptions to this are encroachment applications, recommendations for which are forwarded to the Department of Public Works.
- At the CPC meeting, the applicant or a representative should be present, or the application may be deferred to the next regularly scheduled meeting.



Application for Urban Design Committee Review

Department of Planning and Development Review
 Planning & Preservation Division
 900 E. Broad Street, Room 510
 Richmond, Virginia 23219 | (804) 646-6335
www.richmondgov.com/CommitteeUrbanDesign



Regular meetings are scheduled on the Thursday after the first Monday of each month at **10:00 a.m. in the 5th floor conference room of City Hall, 900 E. Broad Street**. Special meetings are scheduled as needed.

Meeting Schedule 2019

Submission Deadline
November 15, 2018
December 13, 2018
January 17, 2019
February 14, 2019
March 14, 2019
April 11, 2019
May 16, 2019
June 13, 2019
July 11, 2019**
August 15, 2019
September 12, 2019
October 17, 2019
November 14, 2019

UDC Meeting	CPC meeting to follow UDC
December 6, 2018	December 17, 2018
January 10, 2019	January 22, 2019 ¹
February 7, 2019	February 19, 2019 ²
March 7, 2019	March 18, 2019
April 4, 2019	April 15, 2019
May 9, 2019	May 20, 2019
June 6, 2019	June 17, 2019
July 3, 2019**	July 15, 2019
August 8, 2019	August 19, 2019 ³
September 5, 2019	September 16, 2019
October 10, 2019	October 21, 2019
November 7, 2019	November 18, 2019
December 5, 2019	December 16, 2019

¹ Monday, January 21, 2019 is a City of Richmond Holiday.

² Monday, February 18, 2019 is a City of Richmond Holiday.

³ This August CPC Meeting may be canceled. If so, the meeting would be Tuesday, September 3, 2019.

** Moved forward to account for Independence Day

The Richmond Urban Design Committee is a ten member advisory committee created by City Council in 1968. Its purpose is to advise the City Planning Commission on the design of City projects. The Urban Design Committee reviews projects for appropriateness in “location, character, and extent” and for consistency with the City’s Master Plan and forwards recommendations to the City Planning Commission. The Urban Design Committee also advises the Department of Public Works in regards to private encroachments in the public right-of-way.

For more information, please contact the Planning and Preservation Division staff at (804) 646-6335 or the Secretary to the Urban Design Committee at (804) 646-3741 or at joshua.son@richmondgov.com.

HEALTH SYSTEM AUTHORITY Children's Hospital

Urban Design Committee

Final Review

Pedestrian Bridge Connector Study

UDC Meeting: February 6, 2020

UDC Submission: January 16, 2016



The new 500,000 SF VCU Health System Children's Hospital (CH) project will provide the Commonwealth of Virginia with world class clinical care in a state-of-the-art hospital setting. The project is being built on the former Children's Eye and Ear Hospital and will physically connect to the existing outpatient Children's Pavilion at 1000 E. Broad Street. Due to the tight site footprint, we will be utilizing the existing patient access entrance points in order to allow for an Emergency Department entrance on the Ground Floor. The new building will include sixteen (16) stories of clinical and support space above grade with four (4) levels of below grade parking. The budget for the overall project is estimated at \$364M and is funded by VCU Health System. The Children's Hospital of Richmond is a service line of and wholly owned by VCU Health System.

The bridge design approach was to connect the Children's Hospital with the rest of the VCU Health campus while ensuring that privacy was maintained. This connection is critical to support the patient movement and access flows required by VCU Health. This proposed walkway will connect the new CH building to the existing Gateway building to the east and is essential for the safe, secure transport of patients and supplies between locations. The new CH will be a Level 1 Trauma Center with four levels of inpatient beds and the necessary services to support the hospital. There will be scenarios where patients will need to be transported between buildings, frequently with timing being a life or death variable. For the purposes of patient safety and continuity of care for our pediatric patients, an elevated pedestrian walkway connecting the buildings is integral to the future of the Children's Hospital of Richmond at VCU.

Construction of the bridge will require significant coordination with numerous entities. Prior to work commencing on the bridge, there is noteworthy utility relocation work that will need to occur, and we are estimating that this work will be complete by the end of 2020. Once all utility work is finalized, installation of the foundations will start. The far east pier near Gateway hospital will be the first pier to be installed and from that point, the contractor will work their way west. Each foundation will be completed prior to start of the next to minimize impacts to the surrounding area(s). The same process will be implemented for the steel structure. The bridge will be prefabricated offsite in multiple pieces and hoisted into place, which we believe will significantly minimize the impacts and present a safer working scenario. We are anticipating a completion in Summer/Fall of 2022. Our number one goal of this project is safety, and our team has been carefully studying ways we can collectively achieve this goal while constructing such a complex structure in a congested urban environment. This project is critical for enhancing the care of children and we look forward to your support.





 Children's Hospital Construction Site



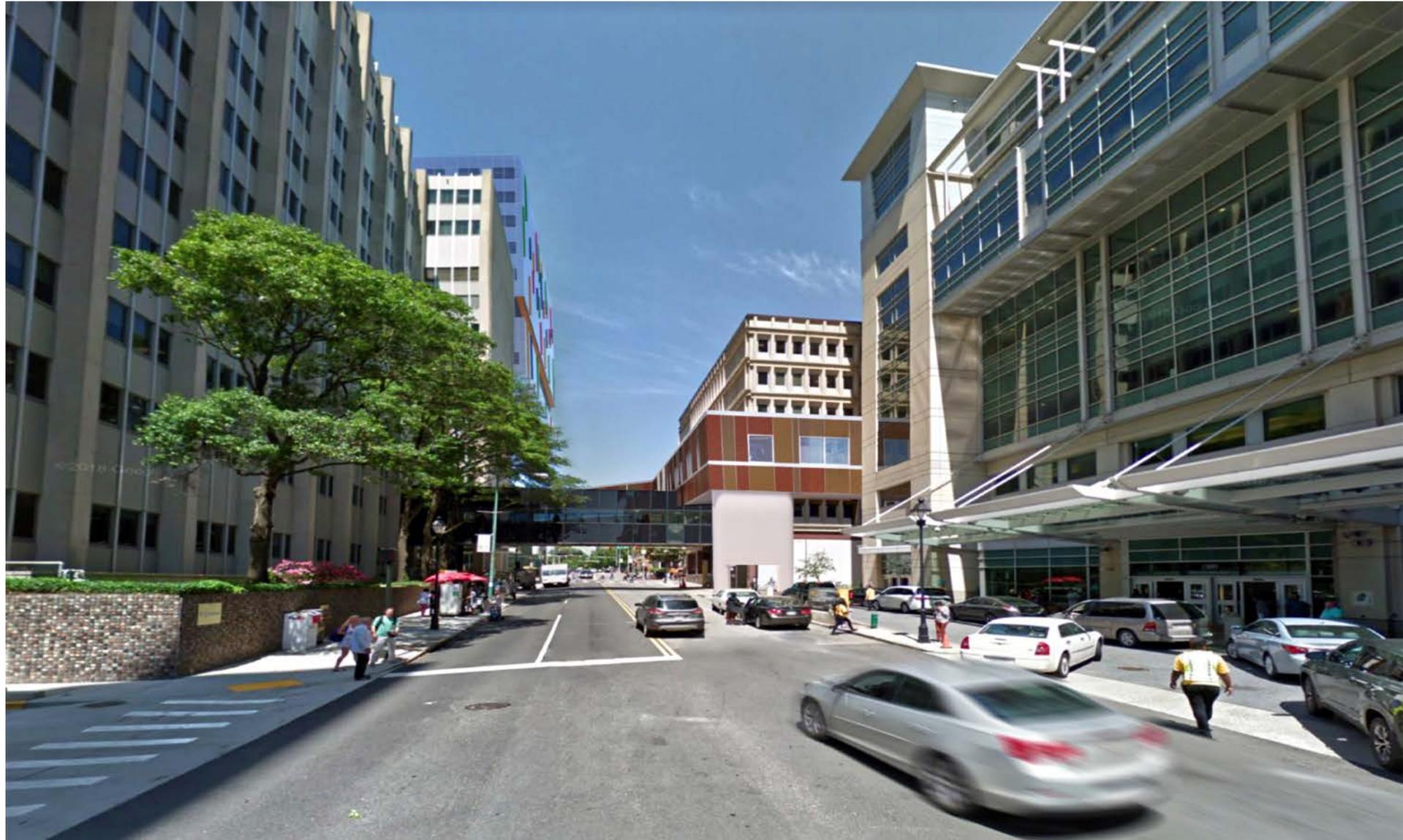






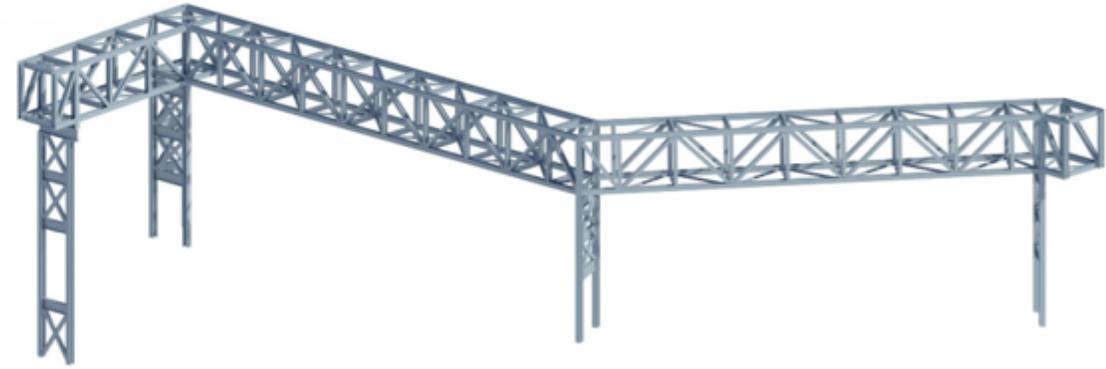






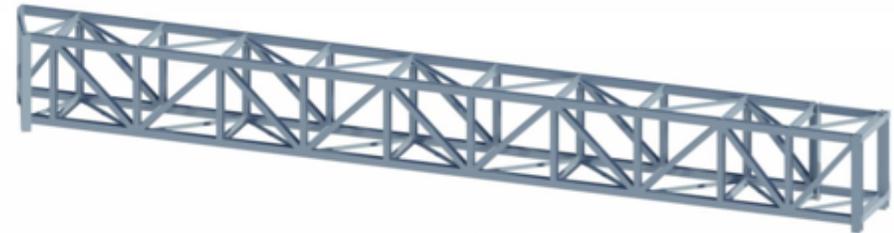
Structural Narrative | Entire Structure

The proposed Pedestrian Bridge will be a one level bridge structure connecting the Children's Hospital at level P2 to Gateway at level 3. The bridge will extend from the North East corner of the horizontal expansion of the Children's Hospital across the intersection at 11th Street and Marshall Street, and run along Marshall Street on the south side of Nelson. The bridge will cross overtop the existing pedestrian bridge between Sanger and Nelson, and it will turn 90 degrees at Gateway to make a connection to the existing stair tower between Nelson and Gateway.



Structural Narrative | Horizontal Structure

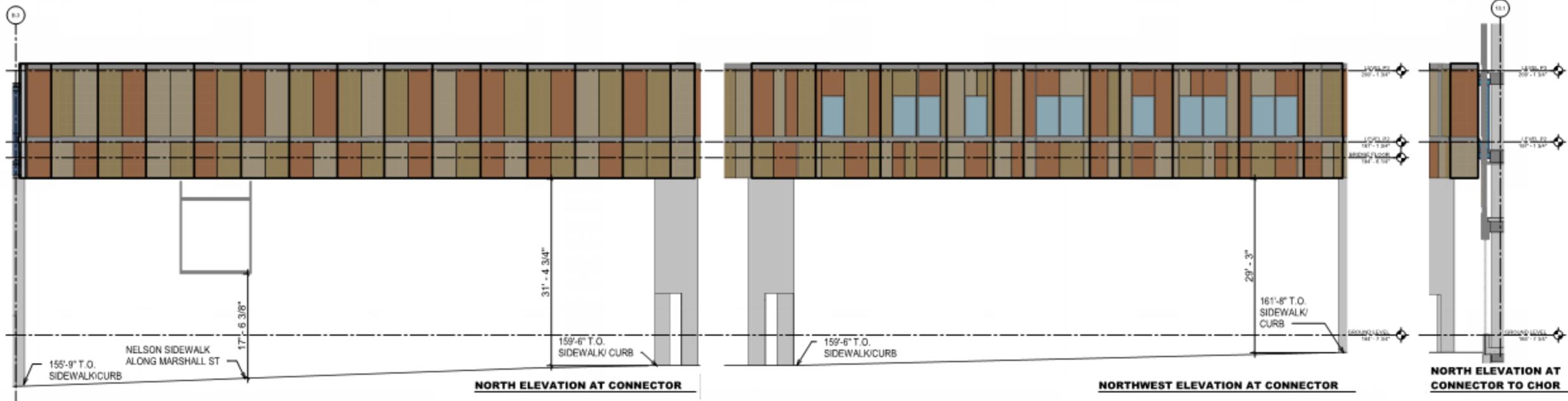
Bridge framing will consist of two parallel structure steel Warren box trusses supported on steel piers and columns. The trusses will be constructed with steel wide-flange vertical and diagonal members, as well as steel wide-flange chord members. Steel wide-flanged beams will span perpendicularly between the trusses to support the floor and roof of the bridge. The walking surface at the floor will consist of a concrete slab on composite metal deck system, while the roof of the bridge will be constructed with metal deck.



Structural Narrative | Vertical Structure

The lateral system for the bridge out of plane will consist of steel moment frames at the roof and a Combination of steel braced frames and moment frames below the bridge floors down to grade. Moment frames at grade level of each pier will maintain an adequate vertical clearance from top of grade to bottom of structural beams to allow pedestrian access below the bridge. The bridge will be structural separate from the adjacent Nelson Hall, Gateway Building, and Children's Hospital structures. Expansion joints will be provided at the interfaces between the bridge at the existing buildings.









Glazing

Product: Low-E Insulating Glass Unit
Manufacturer: Viracon
Product: VRE1-38 Insulating HS/HS
Thickness: 1" thick glass unit with 1/2" airspace

Soffit

Direct Applied Textured Coating
Manufacturer: Benjamin Moore
Color: Decorator's White
Sheen: MPI #2 - 3

Roof

Fully Adhered TPO roof membrane
Manufacturer: Carlisle SynTec Inc; Sure-Weld TPO
Color: White

Composite Metal Panel (colors to match existing perforated metal panel at CHOR Pavilion)



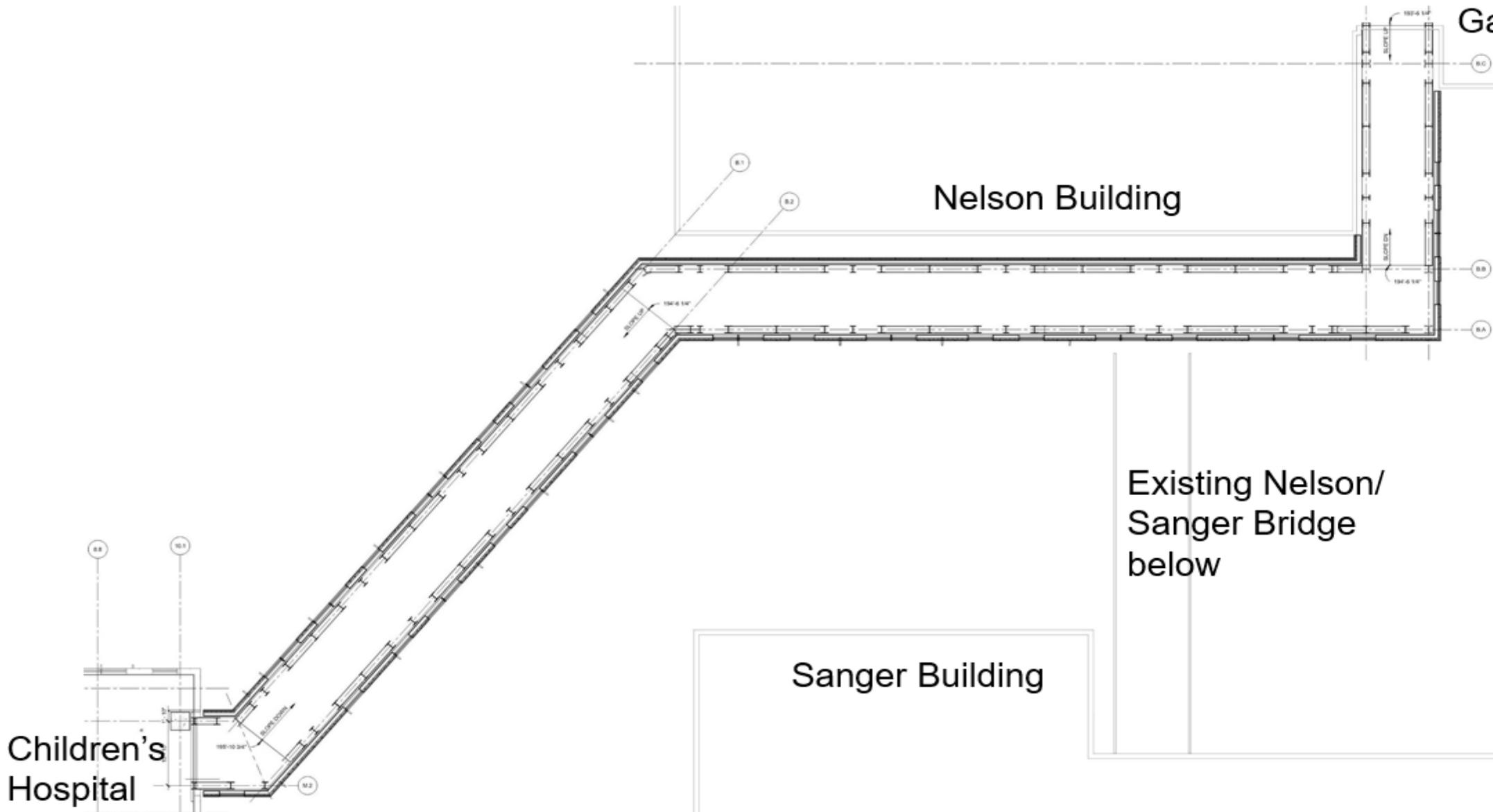
Type: 3-coat mica, Exterior, Kynar
Manufacturer: Sherwin Williams
Coating Color: Fluropon Classic II - Dark Copper
Finish: Gloss

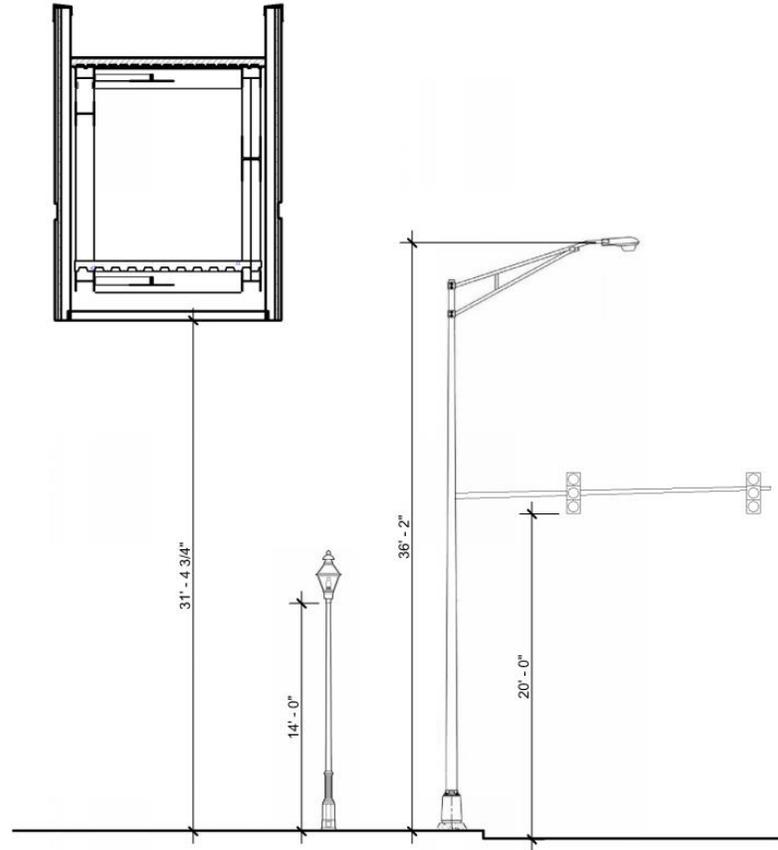


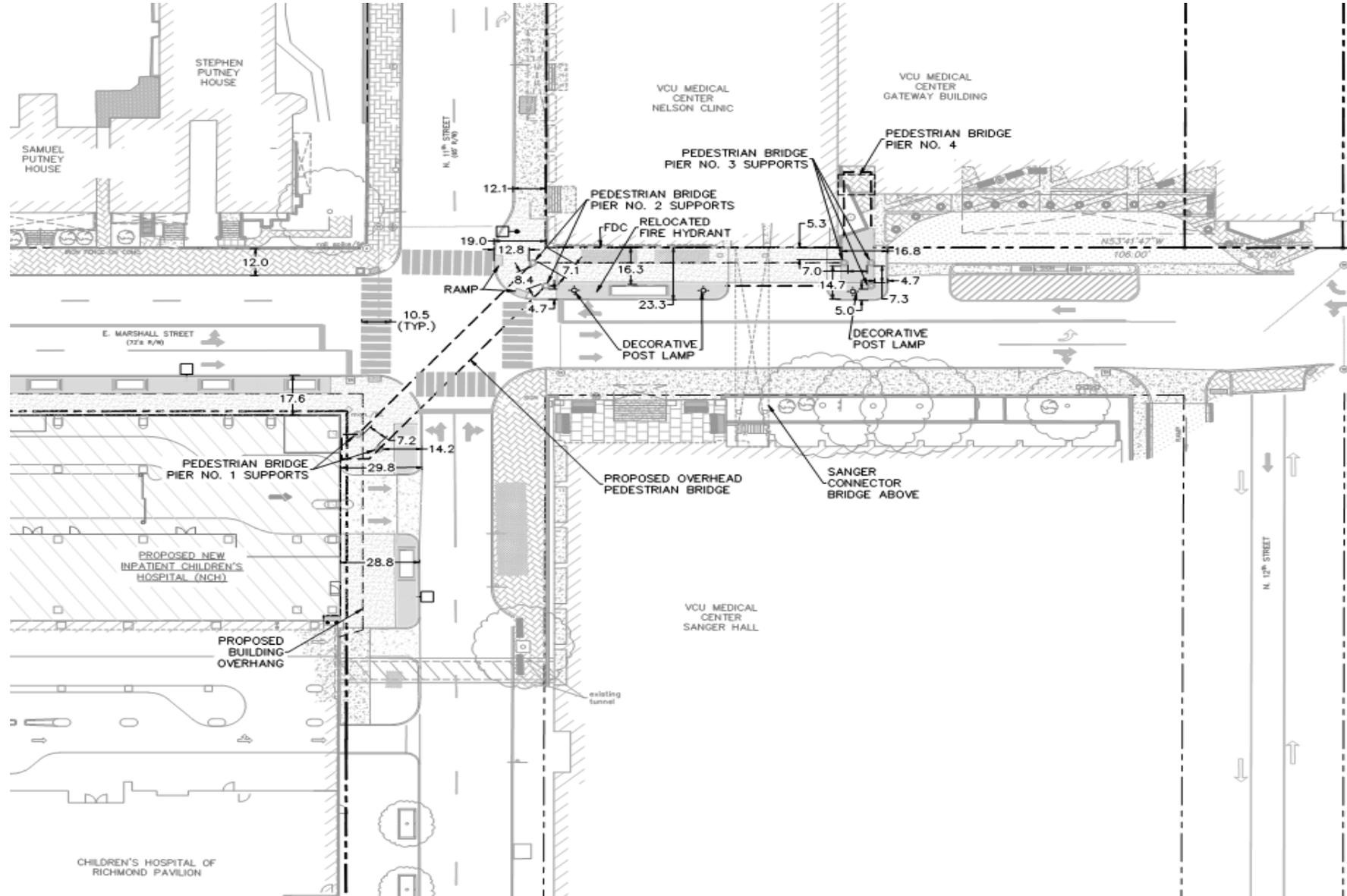
Type: 3-coat mica, Exterior, Kynar
Manufacturer: Alucobond
Coating Color: Harvest Gold Mica Cool
Finish: Gloss Level - 30



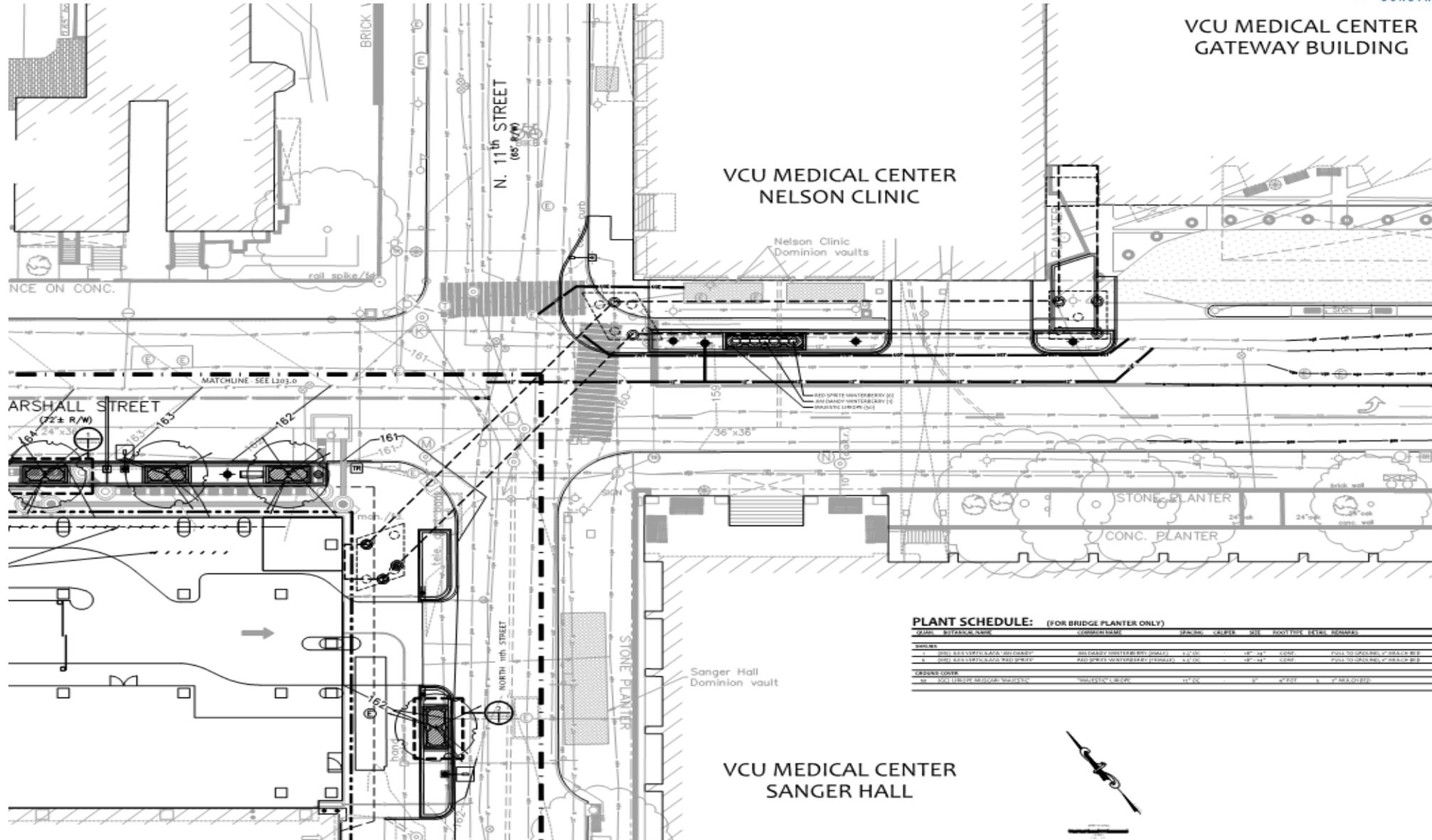
Type: 3-coat mica, Exterior, Kynar
Manufacturer: Alucobond
Coating Color: Roman Bronze Mica Cool
Finish: Gloss Level - 20







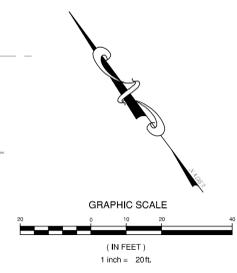
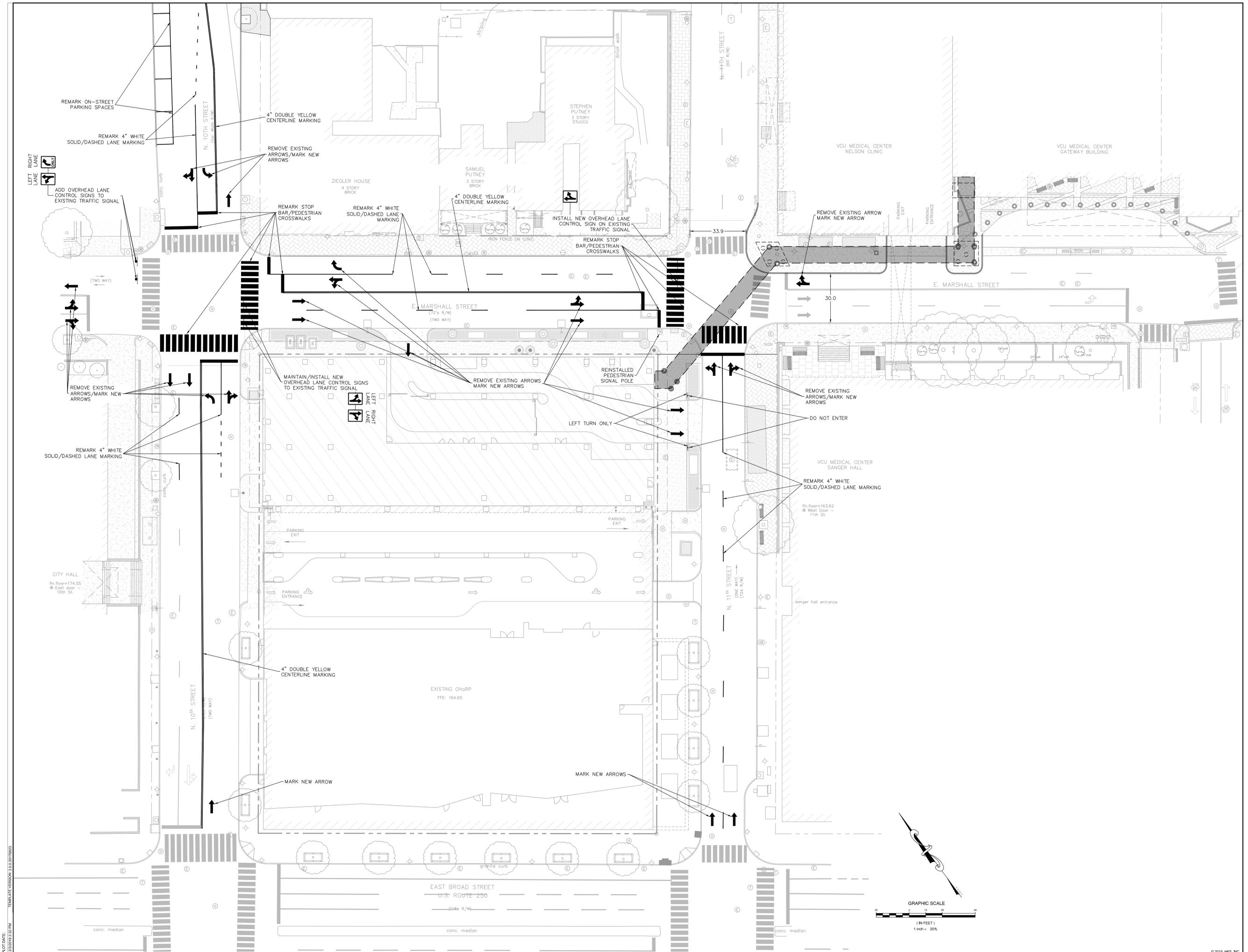
VCU MEDICAL CENTER
GATEWAY BUILDING



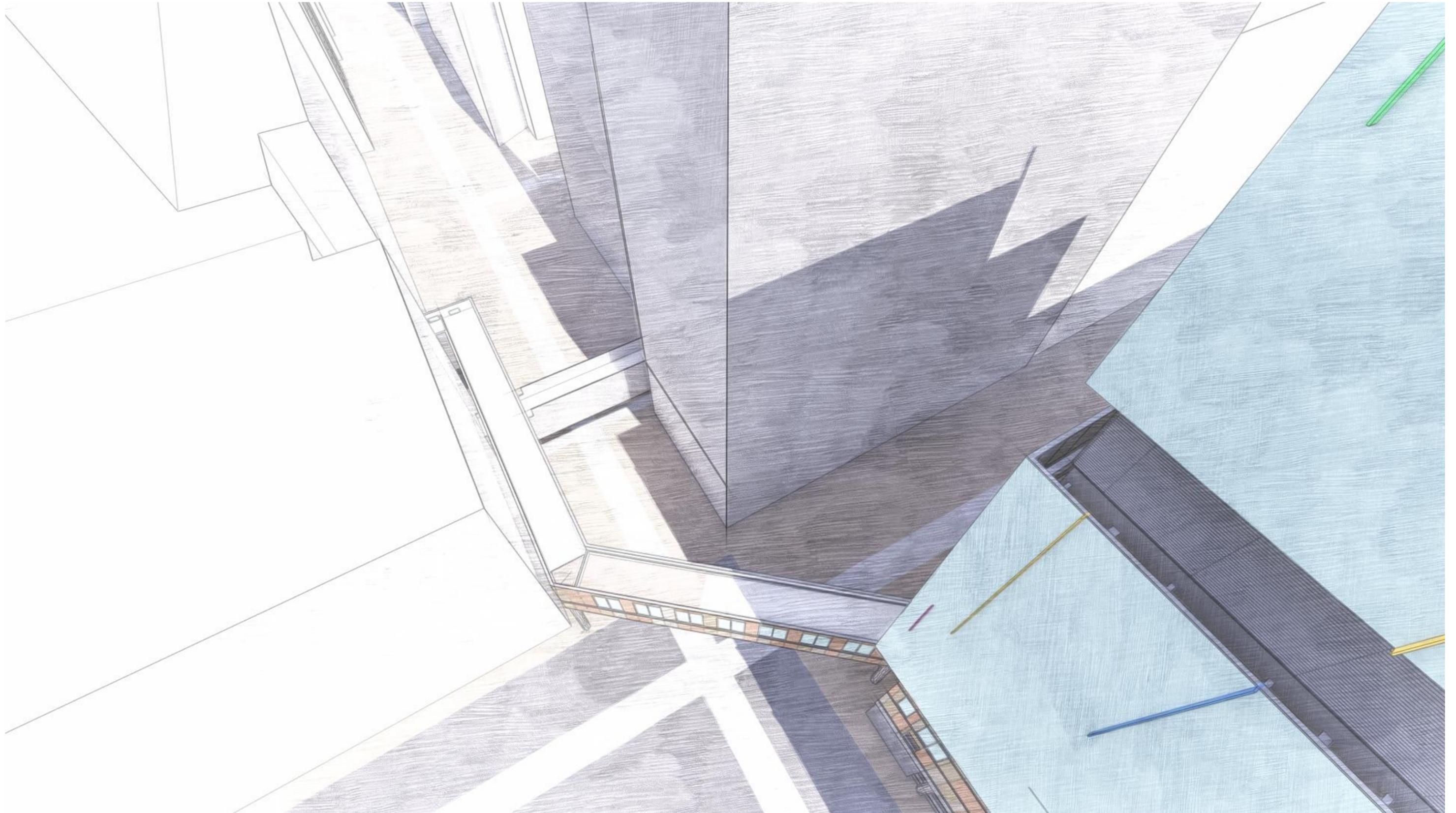
PLANT SCHEDULE: (FOR BRIDGE PLANTER ONLY)

QUAN.	BOTANICAL NAME	COMMON NAME	SPACING	CALIPER	SIZE	ROOT TYPE	DETAIL	REMARKS
SHRUBS								
1	(MS) ILEX VERTICILATA 'JIM DANDY'	JIM DANDY WINTERBERRY (MALE)	2.5' OC	-	18" - 24"	CONT.		FULL TO GROUND, 2" MULCH BED
6	(MS) ILEX VERTICILATA 'RED SPRITE'	RED SPRITE WINTERBERRY (FEMALE)	2.5' OC	-	18" - 24"	CONT.		FULL TO GROUND, 2" MULCH BED
GROUND COVER								
50	(GC) LIRIOPE MUSCARI 'MAJESTIC'	"MAJESTIC" LIRIOPE	12" OC	-	6"	4" POT	3	2" MULCH BED

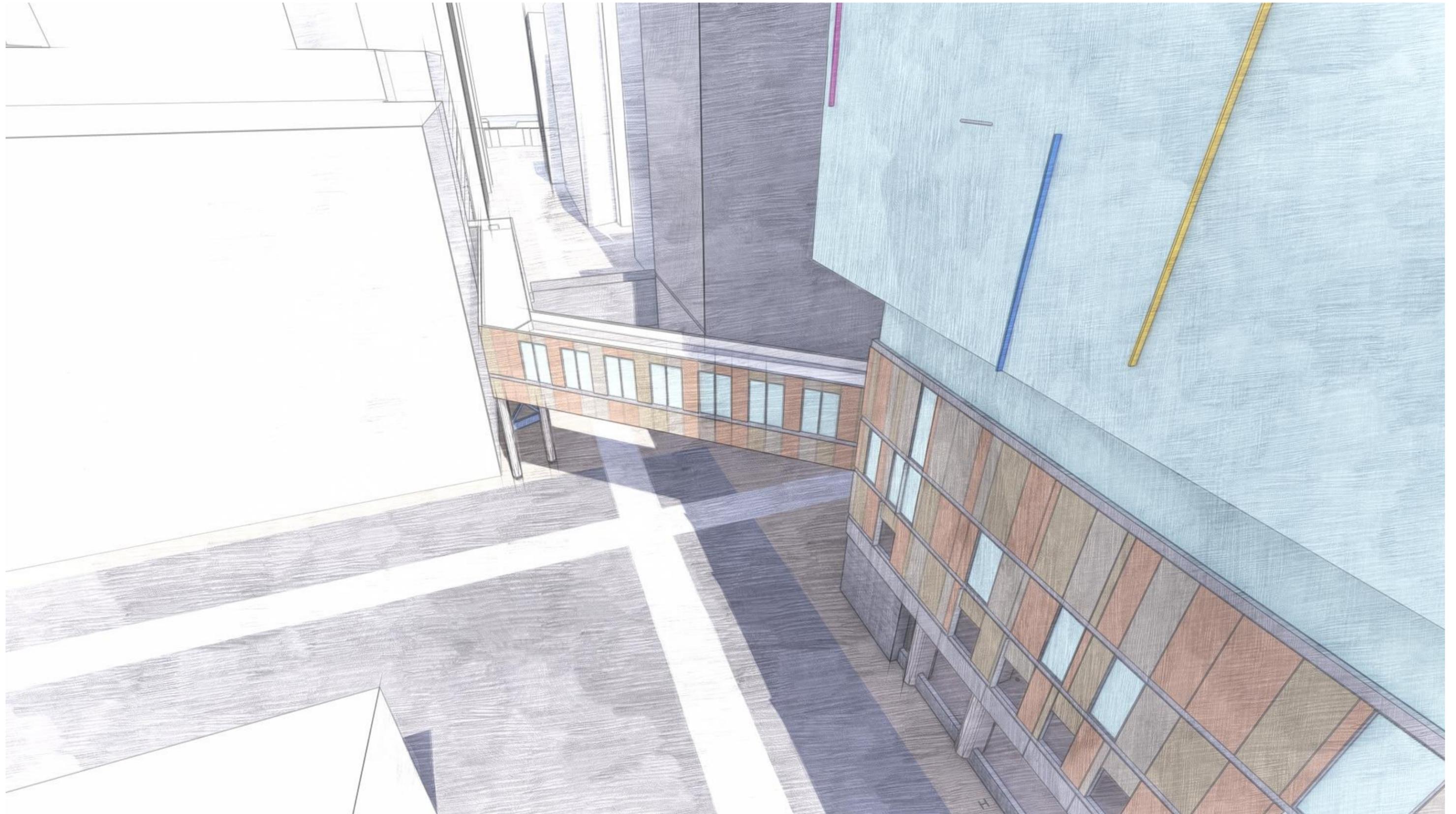
VCU Health New Children's Hospital



PROJECT: 21168.004 DATE: 12/04/19



VIEW FROM ABOVE LOOKING TOWARD THE GATEWAY BUILDING



VIEW ABOVE MARSHALL LOOKING TOWARD 11TH ST



VIEW ALONG MARSHALL LOOKING TOWARD 11TH ST

AM PEAK HOUR													
Analysis Period	Level of Service (delay in seconds per vehicle) by Approach and Movement*												
	Eastbound			Westbound			Northbound			Southbound			Intersection
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Marshall St at 10th St													
Existing 2018	B	B	B	B	B	A	C	B	B	B	C	C	B
	14.5	14.5	14.5	17.9	17.9	4.8	20.2	12.7	12.7	12.3	23.2	23.2	18.4
Background 2026**	B	B	B	B	B	A	C	B	B	B	C	C	B
	14.7	14.7	14.7	18.1	18.1	4.9	20.1	12.7	12.7	12.6	25.6	25.6	19.6
Proposed 2026 (existing config)**	B	B	B	B	B	A	C	B	B	B	C	C	C
	14.7	14.7	14.7	19.9	19.9	5.3	20.2	13.4	13.4	12.8	27.6	27.6	20.7
Proposed 2026 (Single lane WB)**	B	B	B	B	B	A	C	B	B	B	C	C	C
	14.7	14.7	14.7	19.4	19.4	4.8	20.2	13.4	13.4	12.8	27.6	27.6	20.6
Marshall St at 11th St													
Existing 2018	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	12.3	12.3			15.4	15.4	15.2	15.2	15.2				14.0
Background 2026**	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	12.2	12.2			15.4	15.4	15.5	15.5	15.5				14.2
Proposed 2026 (existing config)**	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	12.3	12.3			15.6	15.6	19.2	19.2	19.2				16.2
Proposed 2026 (Single lane WB)**	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	12.3	12.3			17.3	17.3	19.2	19.2	19.2				16.6

* Using Synchro 10

** Using Existing signal timings

MID-DAY PEAK HOUR													
Analysis Period	Level of Service (delay in seconds per vehicle) by Approach and Movement*												
	Eastbound			Westbound			Northbound			Southbound			Intersection
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Marshall St at 10th St													
Existing 2018	B	B	B	B	B	A	A	A	A	A	B	B	B
	12.0	12.0	12.0	19.7	19.7	0.0	9.8	3.9	3.9	9.9	11.9	11.9	12.7
Background 2026**	B	B	B	C	C	A	B	A	A	B	B	B	B
	12.0	12.0	12.0	20.5	20.5	0.0	10.2	3.8	3.8	10.2	12.6	12.6	13.1
Proposed 2026 (existing config)**	B	B	B	C	C	A	B	A	A	B	B	B	B
	12.0	12.0	12.0	21.2	21.2	0.0	12.2	3.9	3.9	12.2	20.0	20.0	15.5
Proposed 2026 (Single lane WB)**	B	B	B	C	C	A	B	A	A	B	B	B	B
	12.0	12.0	12.0	20.3	20.3	0.0	12.2	3.9	3.9	12.2	20.0	20.0	15.2
Marshall St at 11th St													
Existing 2018	B	B	N/A	N/A	A	A	B	B	B	N/A	N/A	N/A	B
	14.6	14.6			9.6	9.6	17.0	17.0	17.0				14.2
Background 2026**	B	B	N/A	N/A	A	A	B	B	B	N/A	N/A	N/A	B
	14.7	14.7			9.8	9.8	17.8	17.8	17.8				14.5
Proposed 2026 (existing config)**	B	B	N/A	N/A	A	A	C	C	C	N/A	N/A	N/A	B
	15.1	15.1			10.0	10.0	26.8	26.8	26.8				19.3
Proposed 2026 (Single lane WB)**	B	B	N/A	N/A	B	B	C	C	C	N/A	N/A	N/A	C
	15.2	15.2			12.8	12.8	26.8	26.8	26.8				20.3

* Using Synchro 10

** Using Existing signal timings

PM PEAK HOUR													
Analysis Period	Level of Service (delay in seconds per vehicle) by Approach and Movement*												
	Eastbound			Westbound			Northbound			Southbound			Intersection
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Marshall St at 10th St													
Existing 2018	B	B	B	C	C	A	A	A	A	B	B	B	B
	15.7	15.7	15.7	22.0	22.0	3.4	8.8	4.1	4.1	10.7	12.6	12.6	14.5
Background 2026**	B	B	B	C	C	A	A	A	A	B	B	B	B
	16.6	16.6	16.6	23.5	23.5	3.2	9.1	4.2	4.2	10.9	13.2	13.2	15.3
Proposed 2026 (existing config)**	B	B	B	C	C	A	B	A	A	B	C	C	B
	16.6	16.6	16.6	26.3	26.3	2.7	10.7	5.0	5.0	12.4	21.0	21.0	17.7
Proposed 2026 (Single lane WB)**	B	B	B	C	C	A	B	A	A	B	C	C	B
	16.6	16.6	16.6	24.8	24.8	2.7	10.7	5.0	5.0	12.4	21.0	21.0	17.5
Marshall St at 11th St													
Existing 2018	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	11.8	11.8			12.8	12.8	16.0	16.0	16.0				13.5
Background 2026**	B	B	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	B
	11.9	11.9			12.9	12.9	16.6	16.6	16.6				13.8
Proposed 2026 (existing config)**	B	B	N/A	N/A	B	B	C	C	C	N/A	N/A	N/A	B
	13.1	13.1			13.1	13.1	20.8	20.8	20.8				16.0
Proposed 2026 (Single lane WB)**	B	B	N/A	N/A	B	B	C	C	C	N/A	N/A	N/A	B
	13.3	13.3			16.1	16.1	20.8	20.8	20.8				17.1

* Using Synchro 10

** Using Existing signal timings

SIGNALIZED

- A 10.0
- B 20.0
- C 35.0
- D 55.0
- E 80.0
- F

Proposed 2026 with single lane- Marshall WB

Intersection	95th percentile queue length (ft)											
	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Marshall at 10th	80.0	80.0	80.0	128.0	128.0	3.0	28.0	74.0	74.0	42.0	483.0	483.0
Marshall at 11th	74.0	74.0	N/A	N/A	88.0	88.0	122.0	122.0	122.0	N/A		

104' to Gateway valet 196' to Broad

Proposed 2026 with single lane- Marshall WB

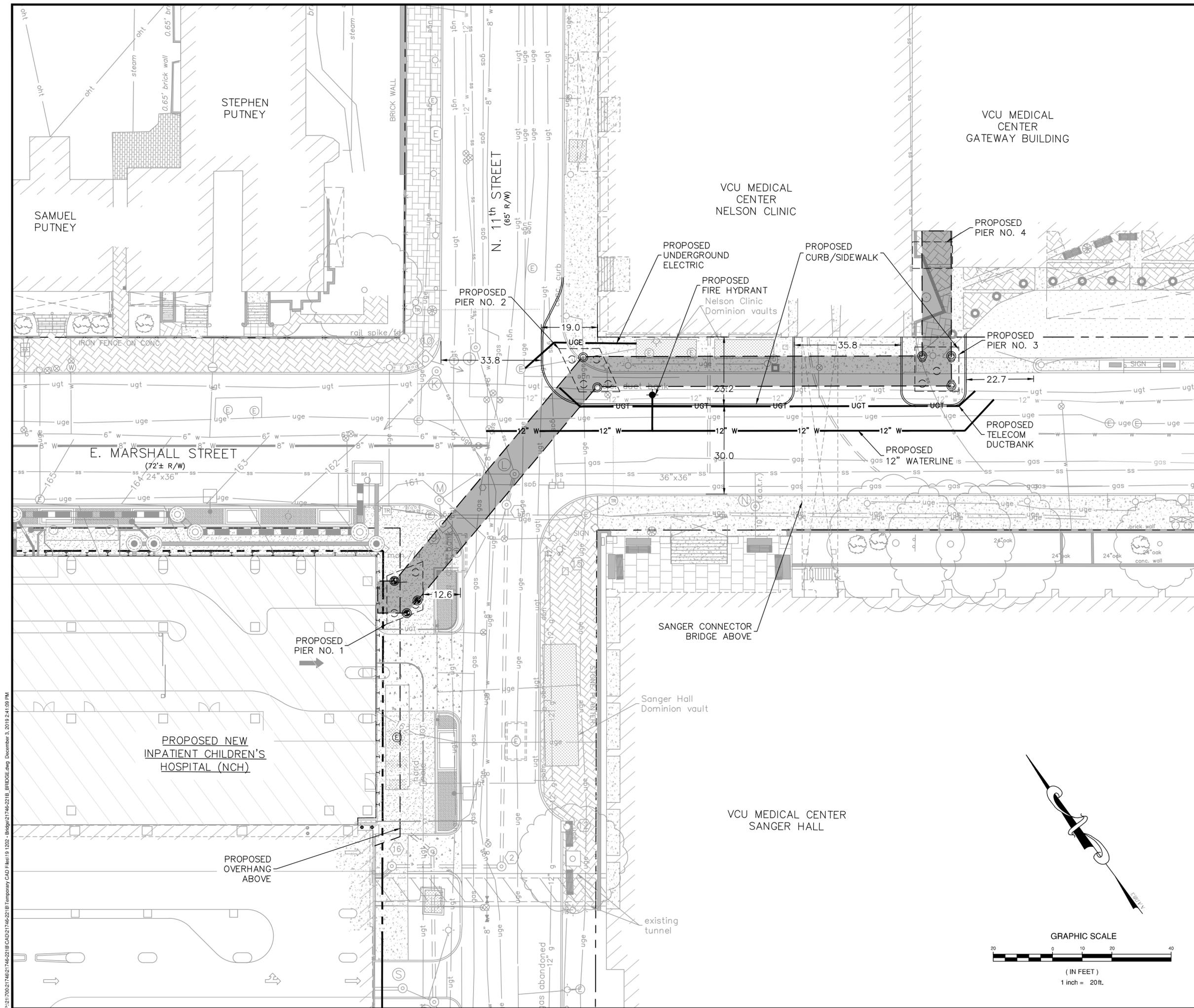
Intersection	95th percentile queue length (ft)											
	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Marshall at 10th	19.0	19.0	19.0	219.0	219.0	0.0	29.0	25.0	25.0	33.0	298.0	298.0
Marshall at 11th	88.0	88.0	N/A	N/A	137.0	137.0	226.0	226.0	226.0	N/A		

104' to Gateway valet 196' to Broad

Proposed 2026 with single lane- Marshall WB

Intersection	95th percentile queue length (ft)											
	Eastbound			Westbound			Northbound			Southbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Marshall at 10th	122.0	122.0	122.0	214.0	214.0	5.0	15.0	55.0	55.0	32.0	332.0	332.0
Marshall at 11th	76.0	76.0	N/A	N/A	107.0	107.0	144.0	144.0	144.0	N/A		

104' to Gateway valet 196' to Broad



P:\21700\21746\21746-221B\CAD\21746-221B Temporary CAD Files\19_1202 - Bridge\21746-221B_BRIDGE.dwg December 3, 2019 2:41:08 PM

Draper Aden Associates
 Engineering • Surveying • Environmental Services

1030 Wilmer Avenue, Suite 100
 Richmond, VA 23227
 804-264-2228 Fax: 804-264-8773
 www.daa.com

- Raleigh, NC
- Blacksburg, VA
- Charlottesville, VA
- Fayetteville, NC
- Northern Virginia
- Hampton Roads, VA
- Virginia Beach, VA

BRIDGE COORDINATION
VCUHS NEW CHILDREN'S HOSPITAL
 RICHMOND, VIRGINIA

REVISIONS	
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SCALE:	1" = 20'
DATE:	12/4/2019
PROJECT NUMBER:	21746-221B
EXHIBIT	

