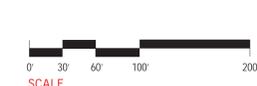


ESTIMATED COSTS (NEAR-TERM)

PROJECT ELEMENT	COST RANGE
MAIN CROSSING	\$ 9.8 - 11.3 M
NORTH LANDING	\$ 1 - 1.5 M
SOUTH LANDING	\$ 3 - 4.2 M
TOTAL	\$ 13.8 - 17.0 M

NEAR-TERM VISION PLAN



PEDESTRIAN/BICYCLE BRIDGE
 KNOXVILLE SOUTH WATERFRONT REDEVELOPMENT AREA
LAWRIE AND ASSOCIATES CRJA WILBUR SMITH ASSOCIATES S&ME SANDERS PACE ARCHITECTURE

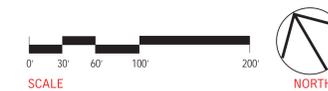




ESTIMATED COSTS (LONG-TERM)

PROJECT ELEMENT	COST RANGE
MAIN CROSSING	\$ 9.8 - 11.3 M
NORTH LANDING	\$ 4.5 - 5 M
SOUTH LANDING	\$ 3 - 4.2 M
TOTAL	\$ 17.3 - 20.5 M

LONG-TERM VISION PLAN



PEDESTRIAN/BICYCLE BRIDGE
 KNOXVILLE SOUTH WATERFRONT REDEVELOPMENT AREA
LAWRIE AND ASSOCIATES CRJA WILBUR SMITH ASSOCIATES S&ME SANDERS PACE ARCHITECTURE





CITY OF KNOXVILLE

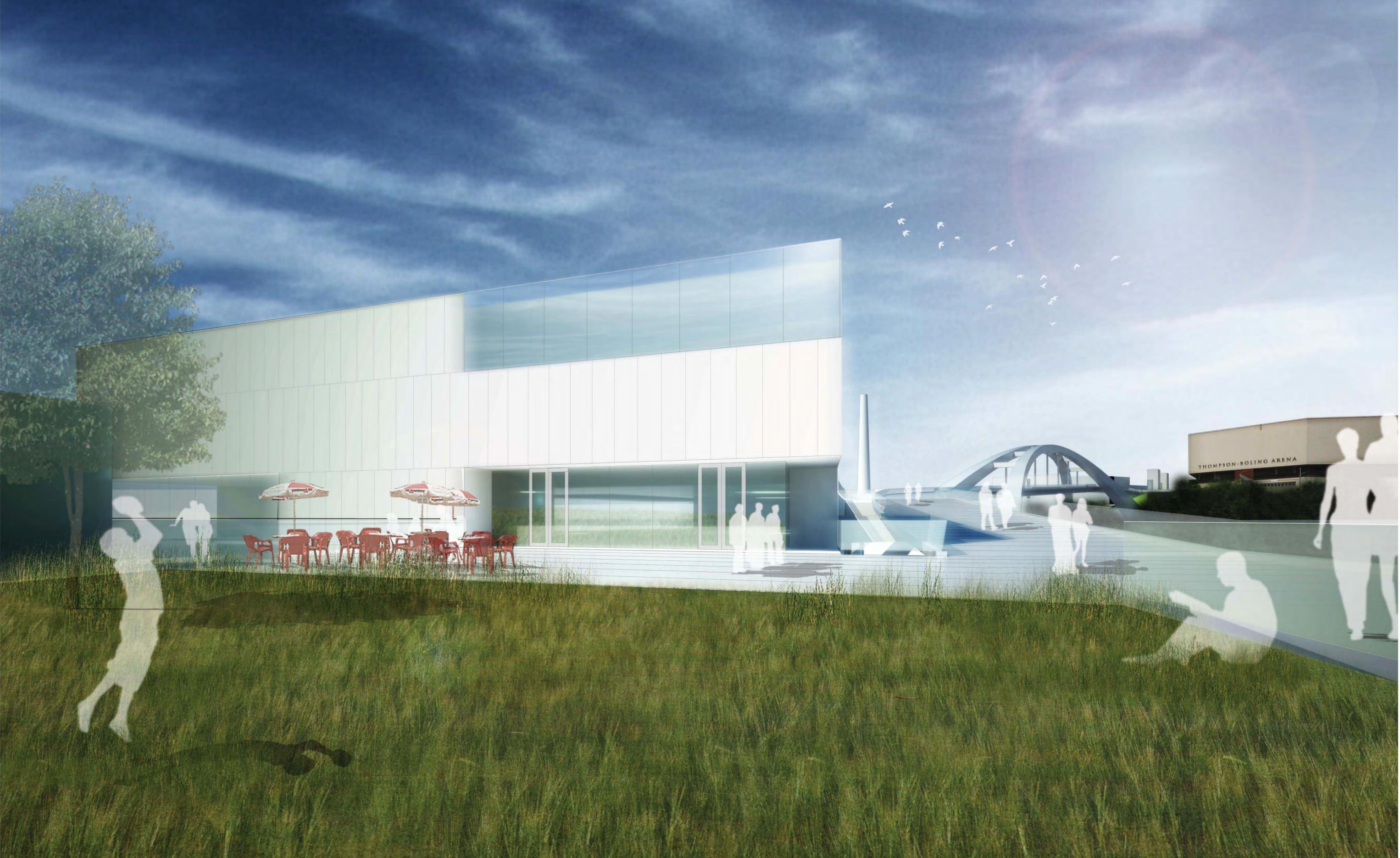
PEDESTRIAN/BICYCLE BRIDGE
KNOXVILLE SOUTH WATERFRONT REDEVELOPMENT AREA
LAWRIE AND ASSOCIATES CRJA WILBUR SMITH ASSOCIATES S&M SANDERS PACE ARCHITECTURE



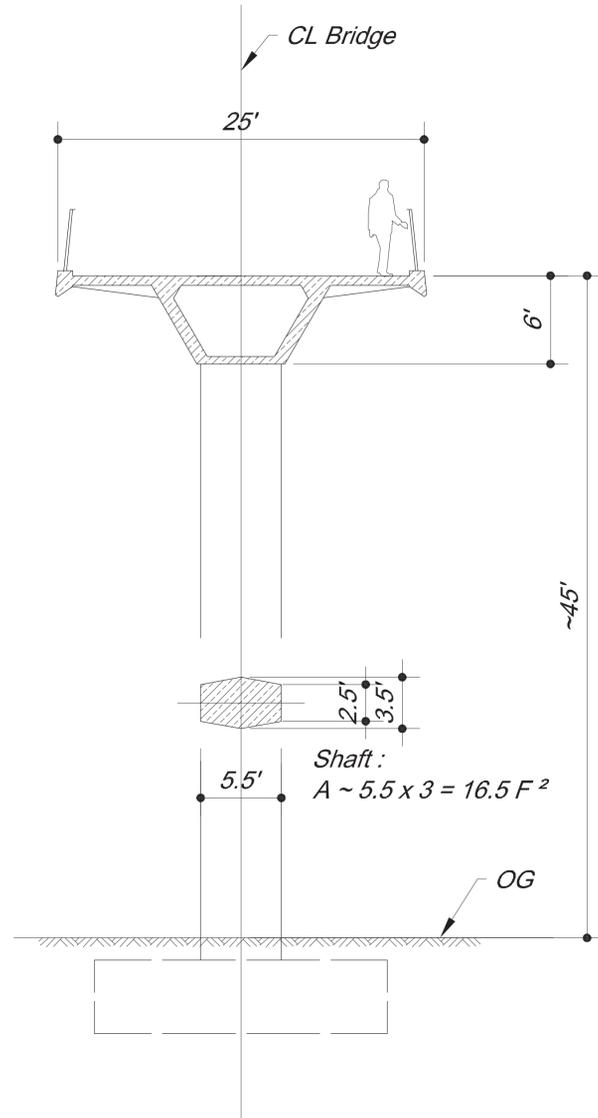




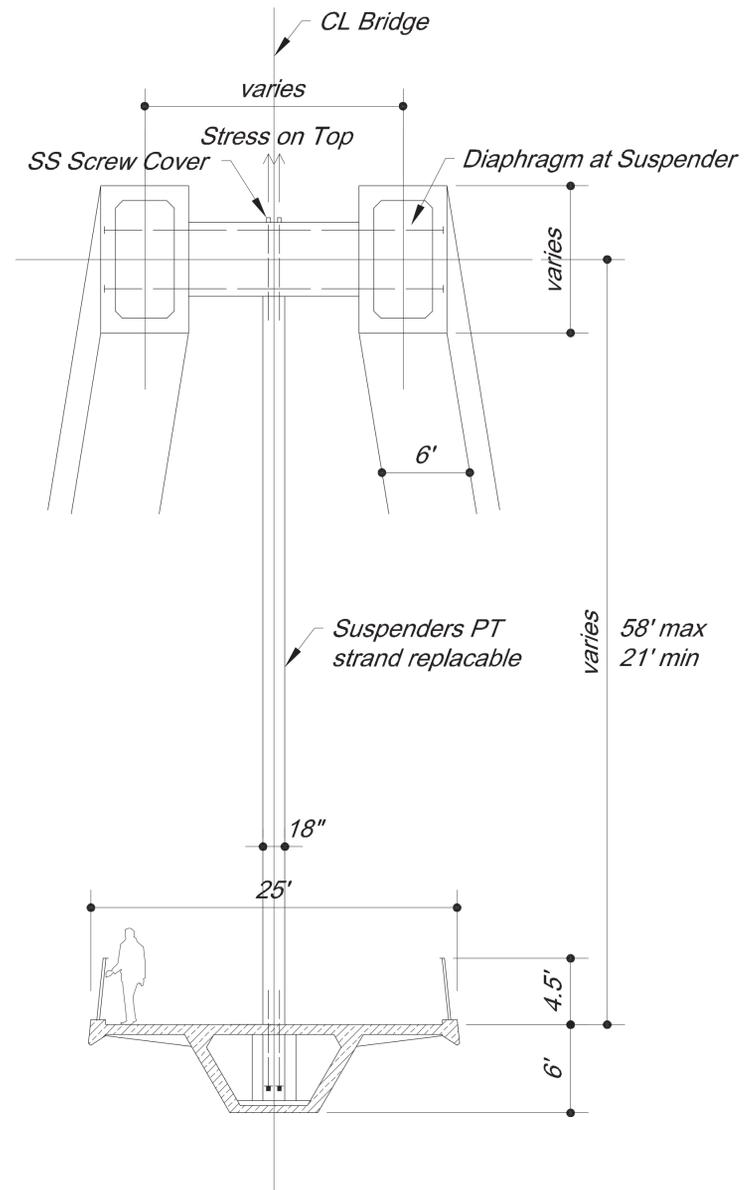




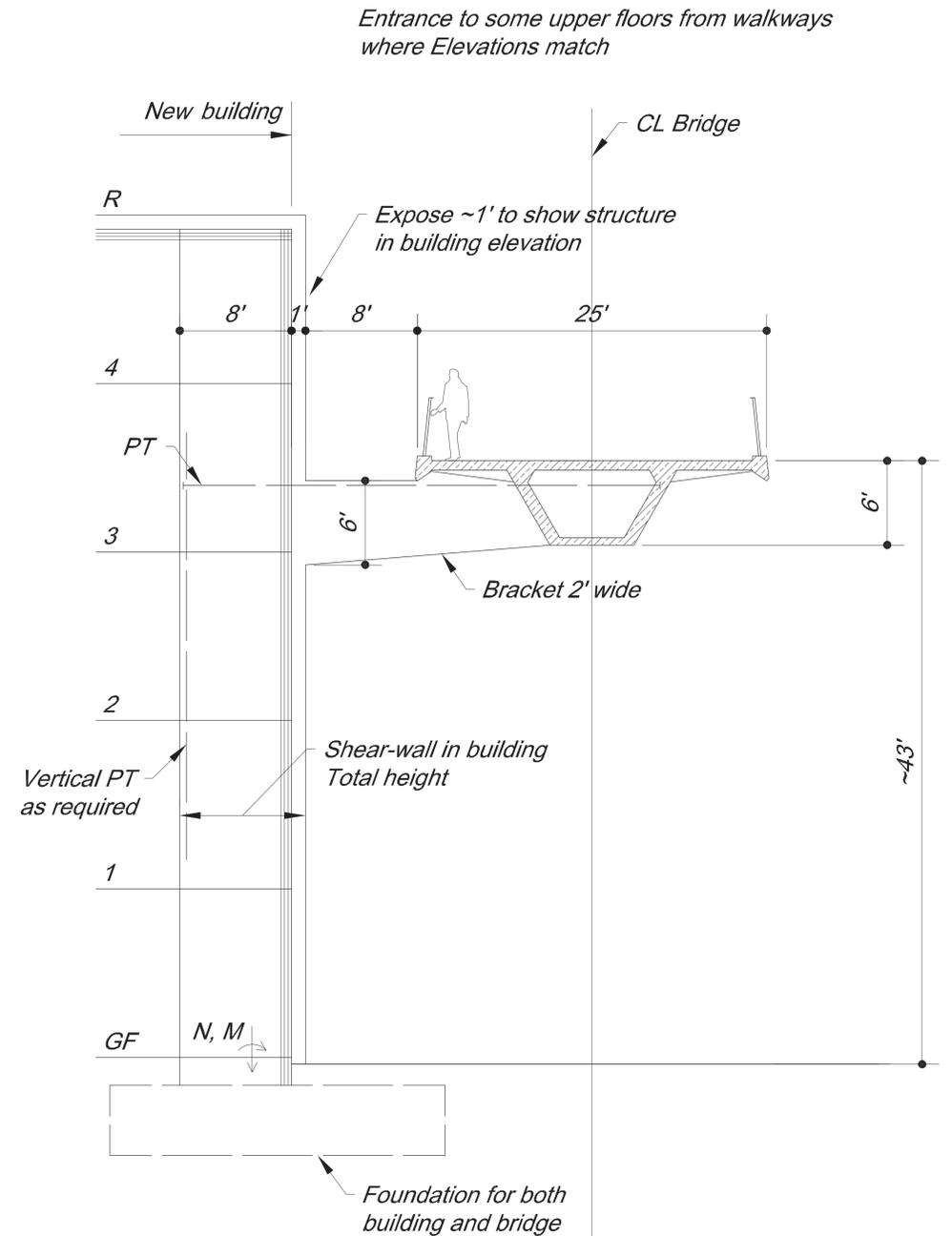
BRIDGE SECTIONS



SECTION AT NORTH LANDING
SCALE 1/4" = 1'-0"



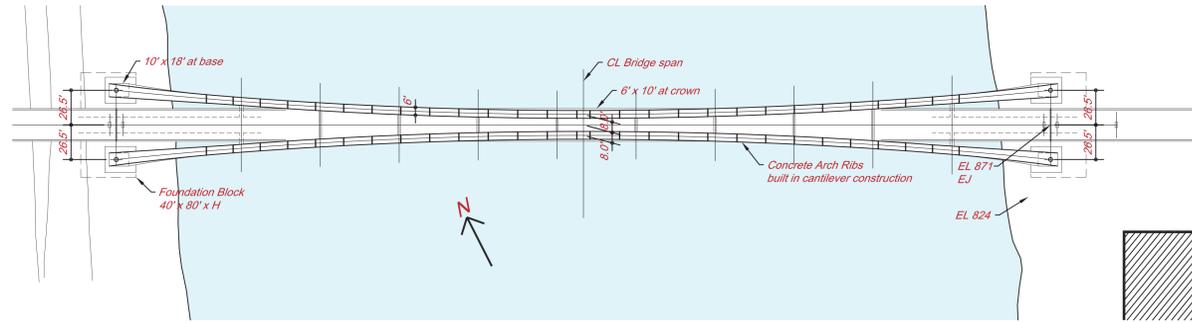
SECTION AT BRIDGE
SCALE 1/4" = 1'-0"



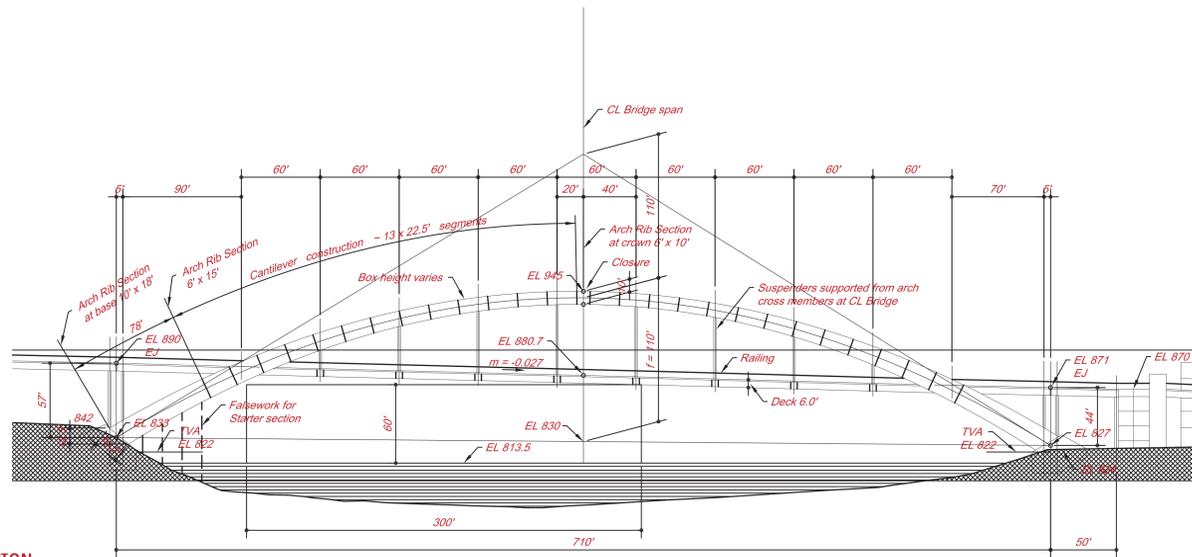
SECTION AT SOUTH LANDING
SCALE 1/4" = 1'-0"

Entrance to some upper floors from walkways where Elevations match

BRIDGE OVERVIEW

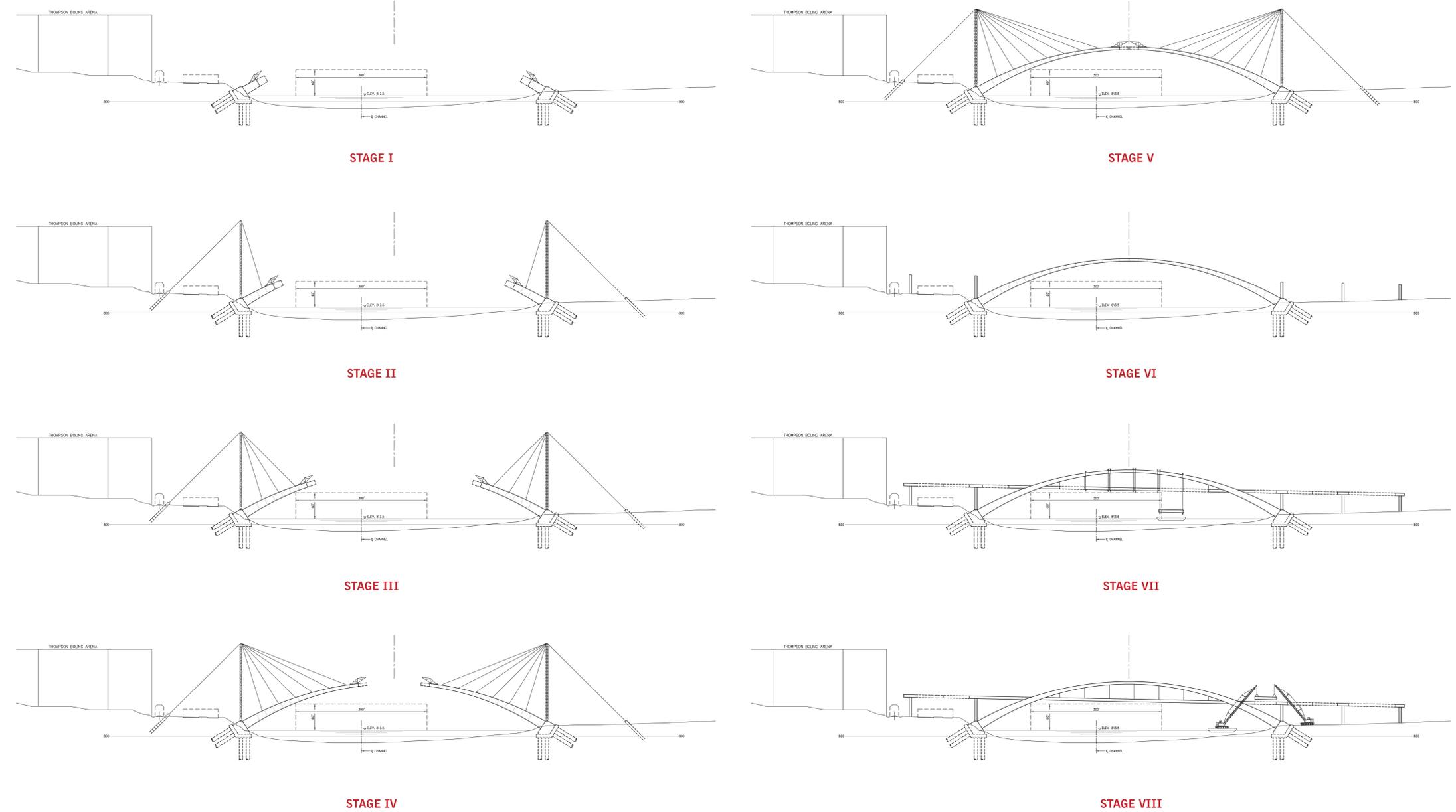


BRIDGE PLAN
1" = 50'-0"



BRIDGE ELEVATION
1" = 50'-0"

BRIDGE CONSTRUCTION SEQUENCE



STAGE I

STAGE V

STAGE II

STAGE VI

STAGE III

STAGE VII

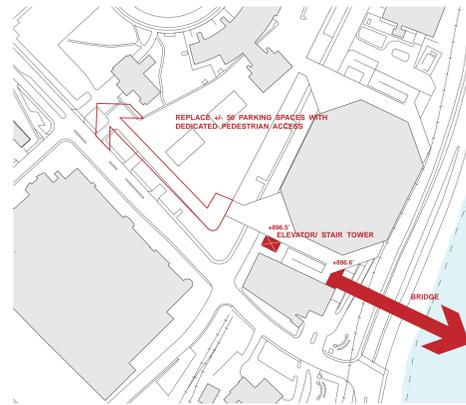
STAGE IV

STAGE VIII



NORTH LANDING PHASING

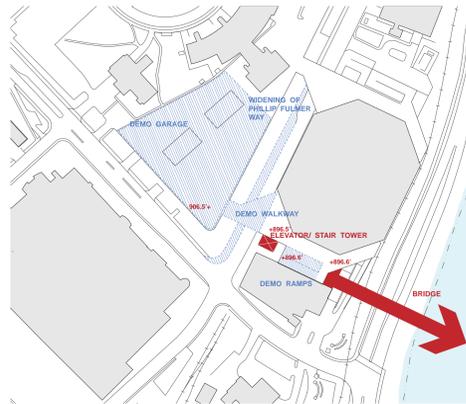
- MINIMIZE DISTURBANCE TO EXISTING FACILITIES
- CONNECT TO EXISTING STRUCTURE BETWEEN ARENA AND PAVILION
- CONSTRUCT ELEVATOR FOR UNIVERSAL ACCESS FROM PUBLIC R.O.W.



SITE PLAN DIAGRAM
N-01.1
NEAR TERM PROPOSAL

NORTH LANDING PHASING

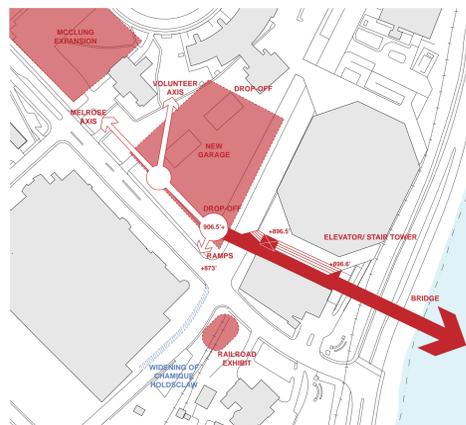
- PRESERVE BRIDGE ACCESS DURING DEMOLITION OF FACILITIES
- EXTEND BRIDGE TOWARD GARAGE



SITE PLAN DIAGRAM
N-01.2
MID-TERM PROPOSAL

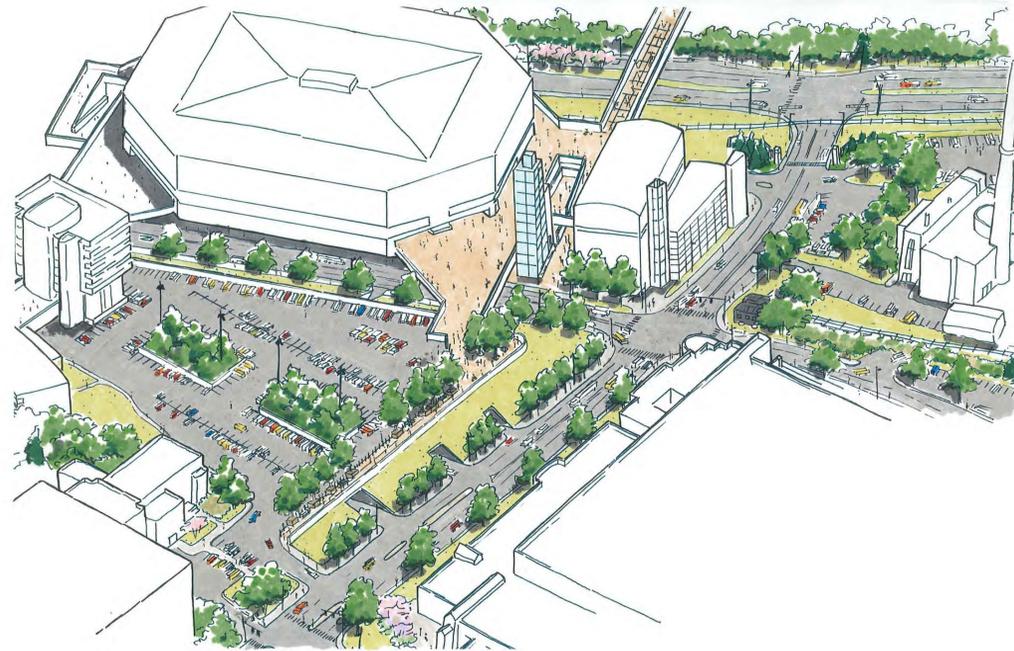
NORTH LANDING PHASING

- INTEGRATE BRIDGE APPROACH INTO PLANNED IMPROVEMENTS

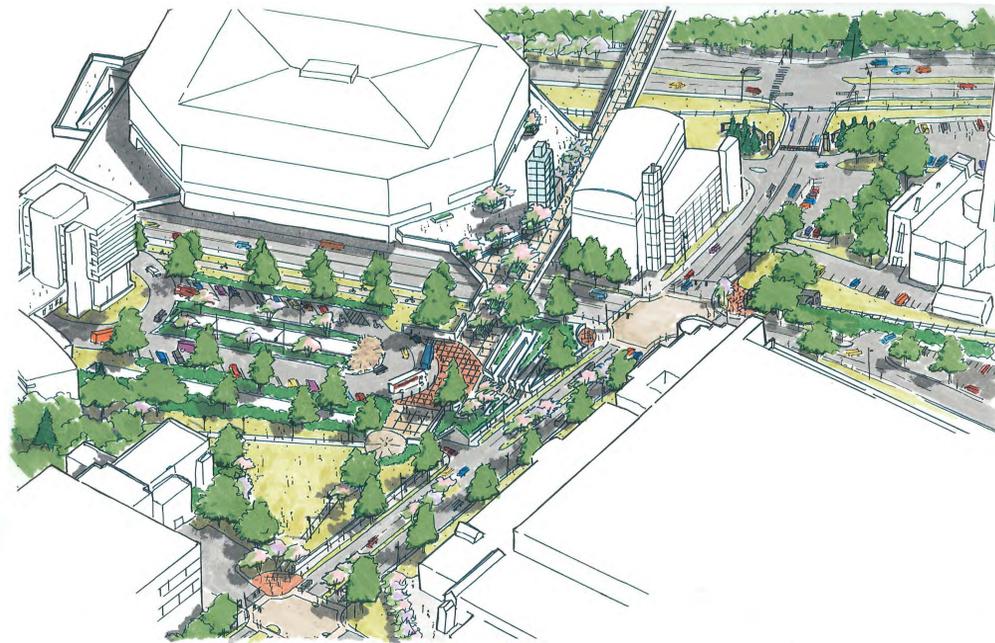


SITE PLAN DIAGRAM
N-01.3
LONG-TERM PROPOSAL

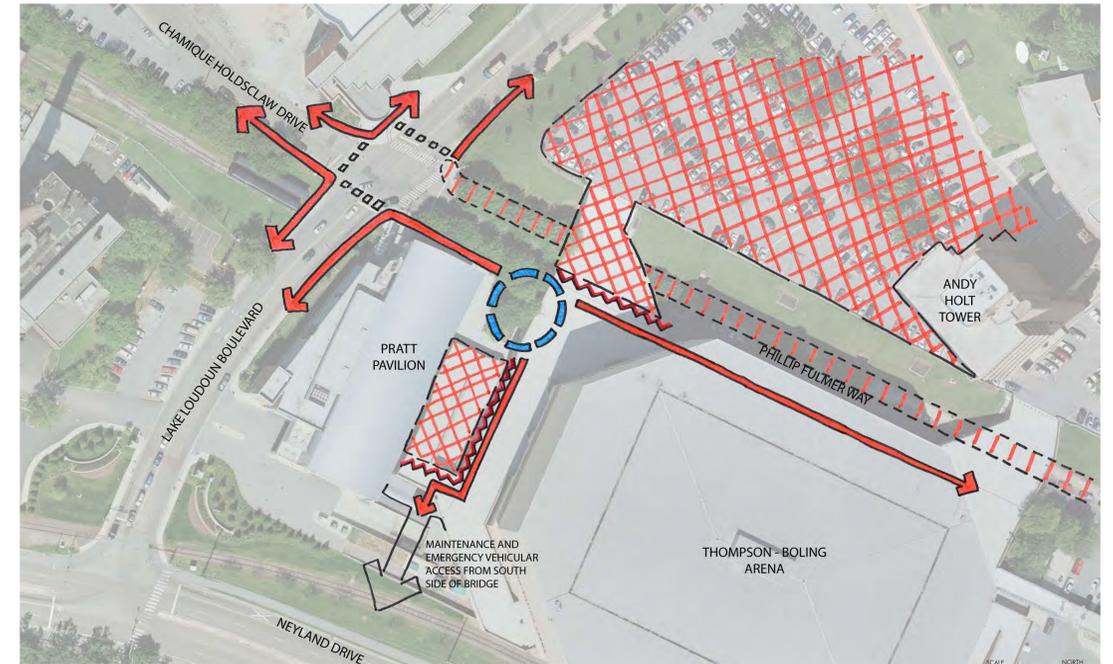
CONCEPTUAL PHASING PLAN
NORTH LANDING



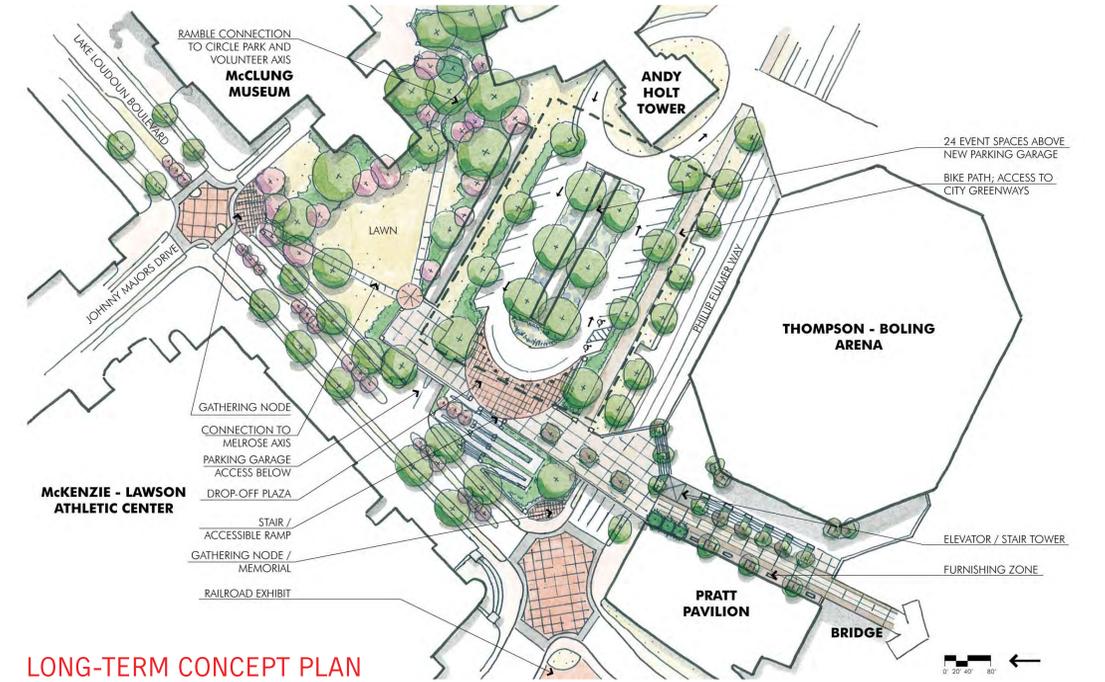
NEAR-TERM CONCEPT PERSPECTIVE



LONG-TERM CONCEPT PERSPECTIVE

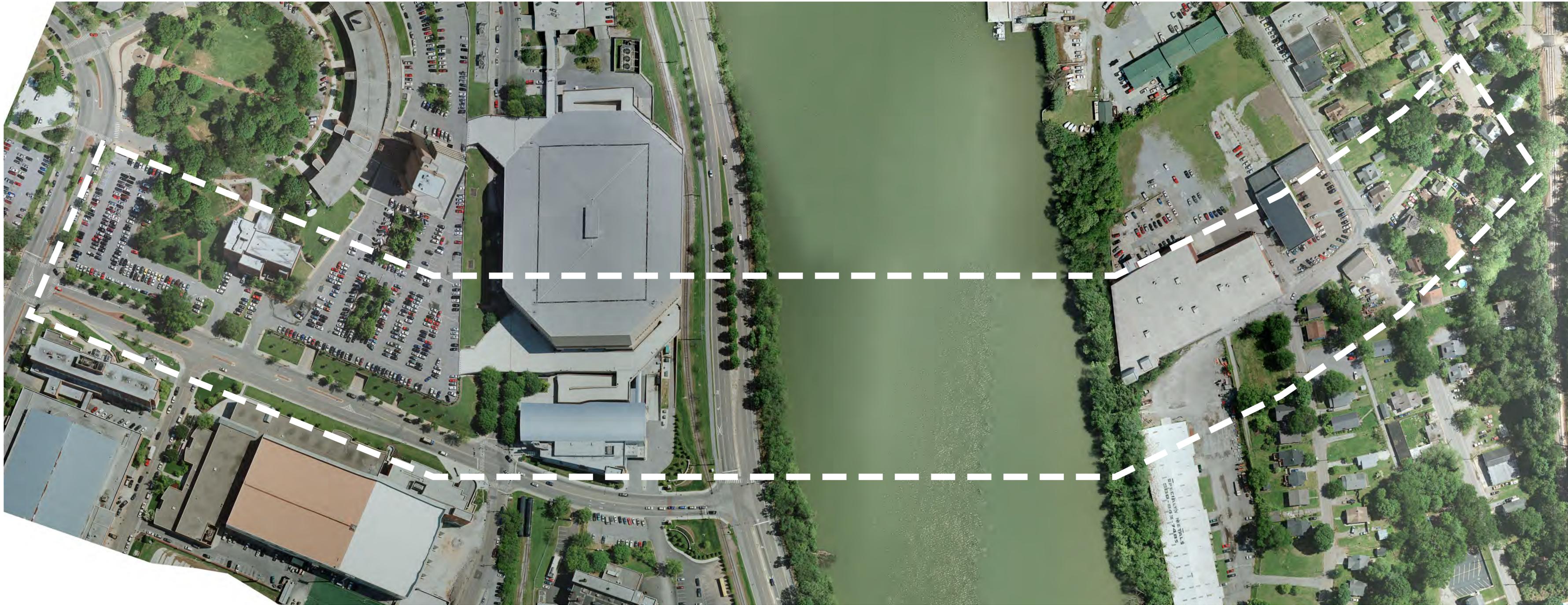


MID-TERM DEMOLITION IMPACT



LONG-TERM CONCEPT PLAN





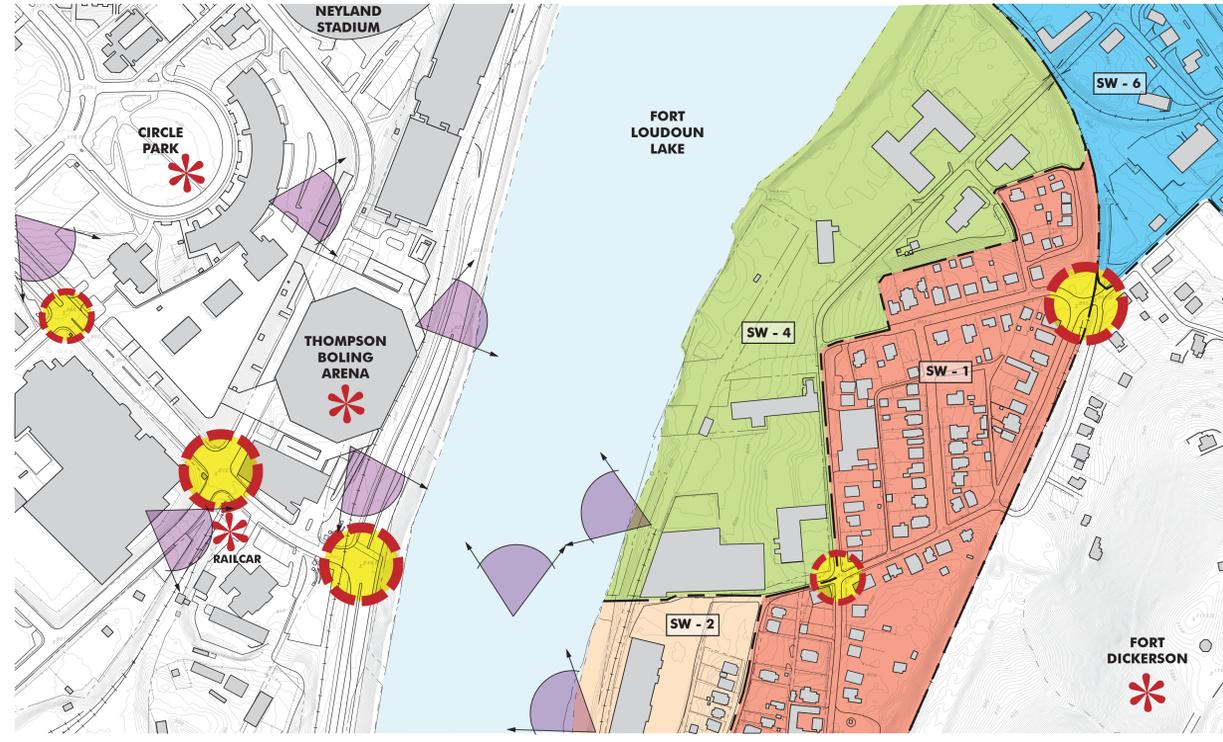
PROJECT BOUNDARY



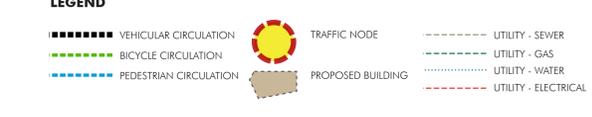
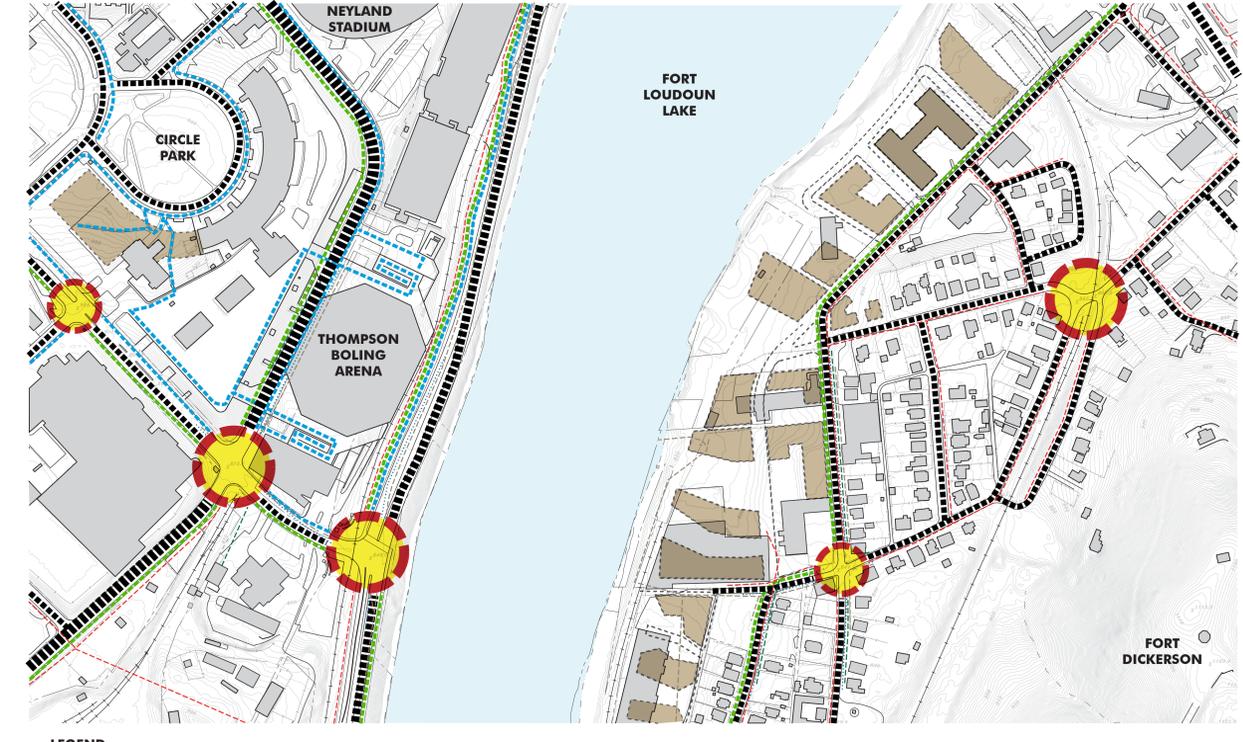
PEDESTRIAN/BICYCLE BRIDGE
KNOXVILLE SOUTH WATERFRONT REDEVELOPMENT AREA
LAWRIE AND ASSOCIATES CRIA WILBUR SMITH ASSOCIATES S&ME SANDERS PACE ARCHITECTURE



NATURAL FEATURES ANALYSIS

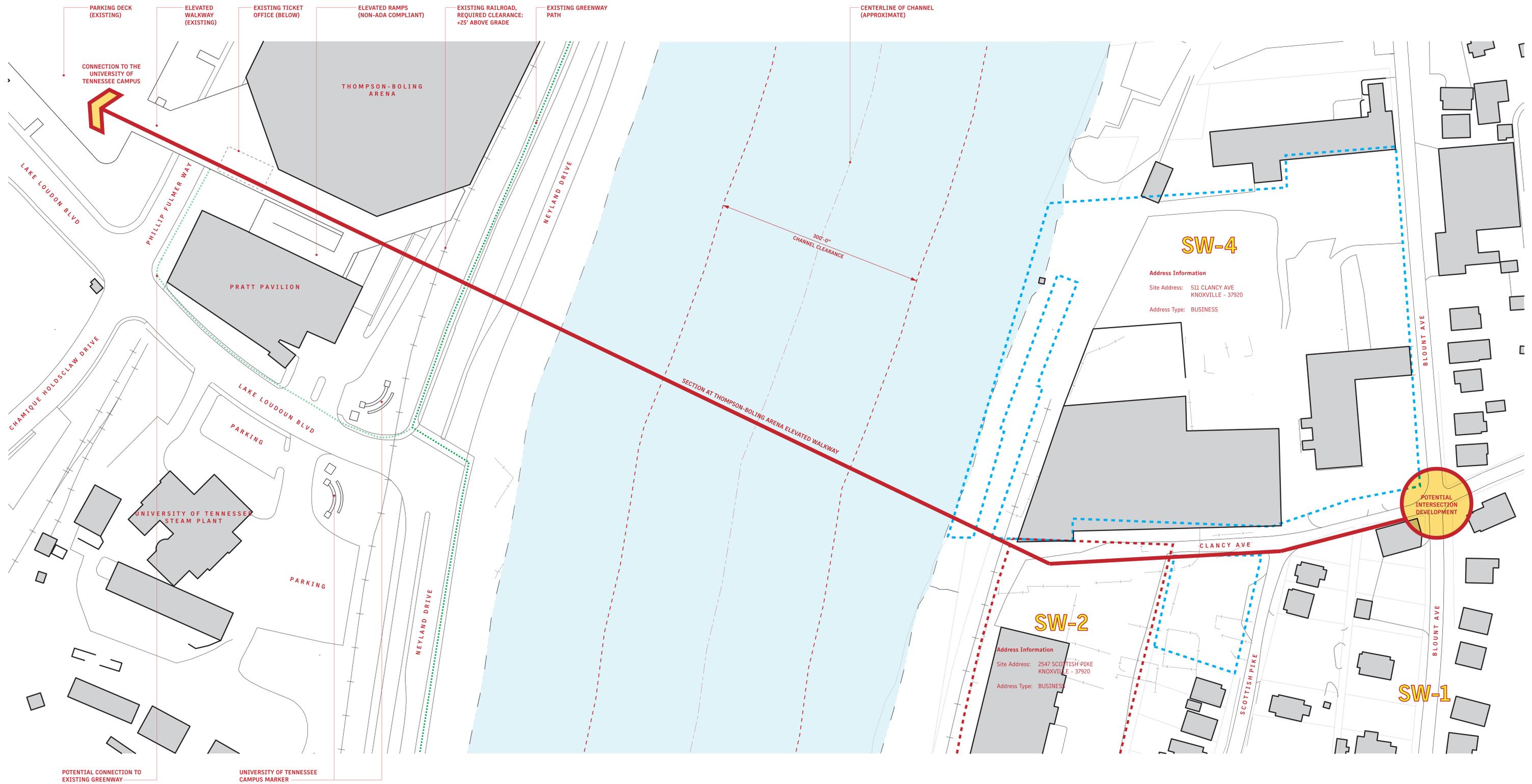


IMAGEABILITY ANALYSIS



CULTURAL ANALYSIS

FOCUSED EXISTING CONDITIONS ANALYSES



PARKING DECK (EXISTING)

ELEVATED WALKWAY (EXISTING)

EXISTING TICKET OFFICE (BELOW)

ELEVATED RAMPS (NON-ADA COMPLIANT)

EXISTING RAILROAD, REQUIRED CLEARANCE: +25' ABOVE GRADE

EXISTING GREENWAY PATH

CENTERLINE OF CHANNEL (APPROXIMATE)

CONNECTION TO THE UNIVERSITY OF TENNESSEE CAMPUS

THOMPSON-BOLING ARENA

PRATT PAVILION

UNIVERSITY OF TENNESSEE STEAM PLANT

LAKE LOUDOUN BLVD

PARKING

PARKING

NEYLAND DRIVE

NEYLAND DRIVE

SECTION AT THOMPSON-BOLING ARENA ELEVATED WALKWAY

300'-0" CHANNEL CLEARANCE

SW-4

Address Information
 Site Address: 511 CLANCY AVE
 KNOXVILLE - 37920
 Address Type: BUSINESS

POTENTIAL INTERSECTION DEVELOPMENT

CLANCY AVE

SW-2

Address Information
 Site Address: 2547 SCOTTISH PIKE
 KNOXVILLE - 37920
 Address Type: BUSINESS

SW-1

SCOTTISH PIKE

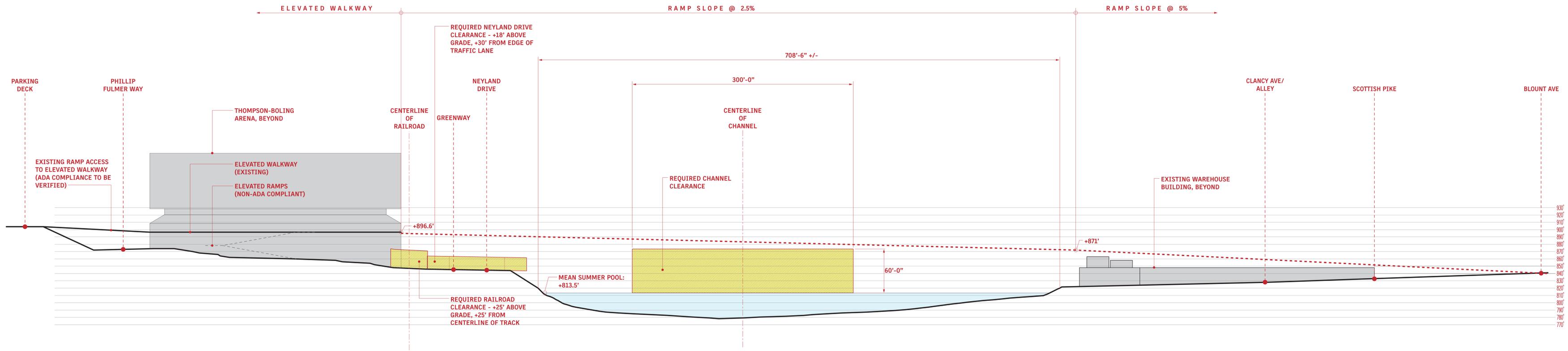
BLOUNT AVE

POTENTIAL CONNECTION TO EXISTING GREENWAY

UNIVERSITY OF TENNESSEE CAMPUS MARKER

SITE PLAN
 SCALE : 1" = 40'-0"



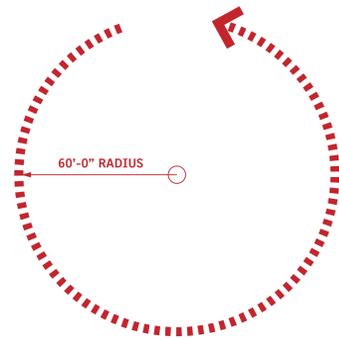


SECTION AT THOMPSON-BOLING ARENA ELEVATED WALKWAY
SCALE : 1" = 40'-0"

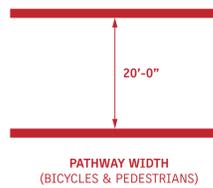
CRITICAL DESIGN GUIDELINES FOR BRIDGE CONNECTORS



DESIGN SPEED (BICYCLE)

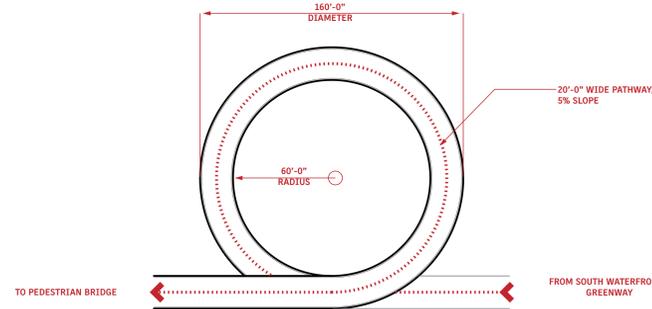


REQUIRED TURNING RADIUS (BASED ON DESIGN SPEED)

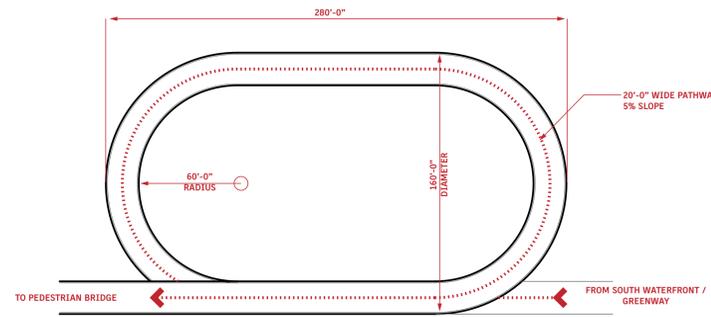
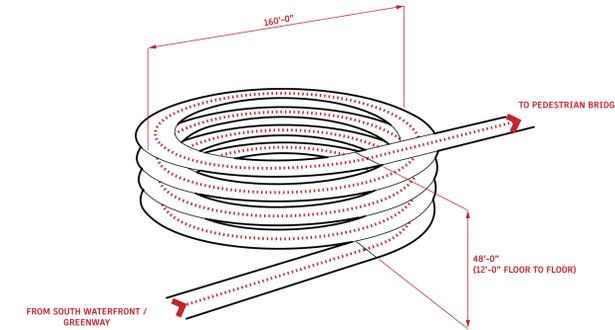


RAMP REQUIREMENTS

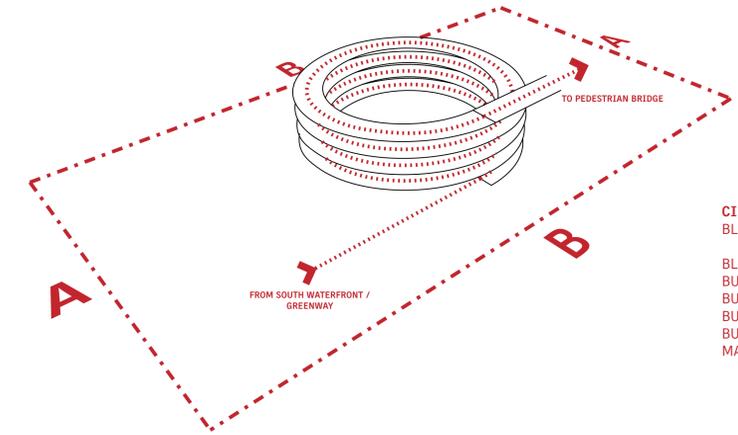
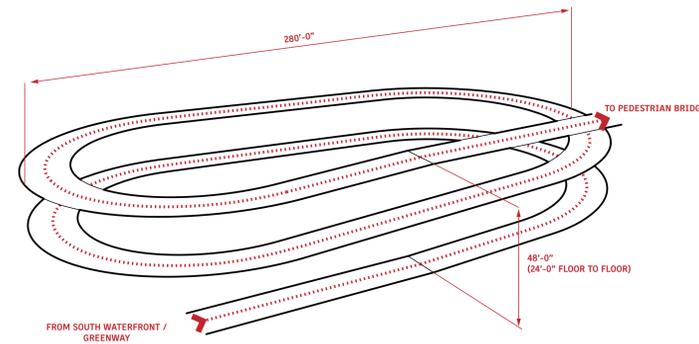
PRELIMINARY STUDIES OF BRIDGE CONNECTORS AT SOUTH WATERFRONT



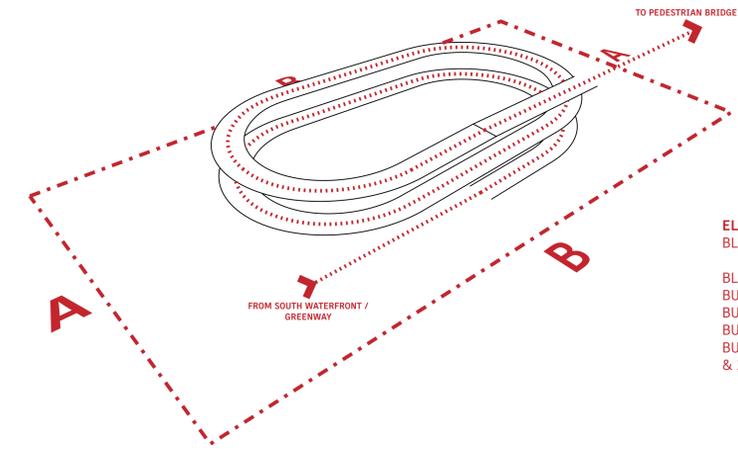
CIRCULAR CONNECTOR



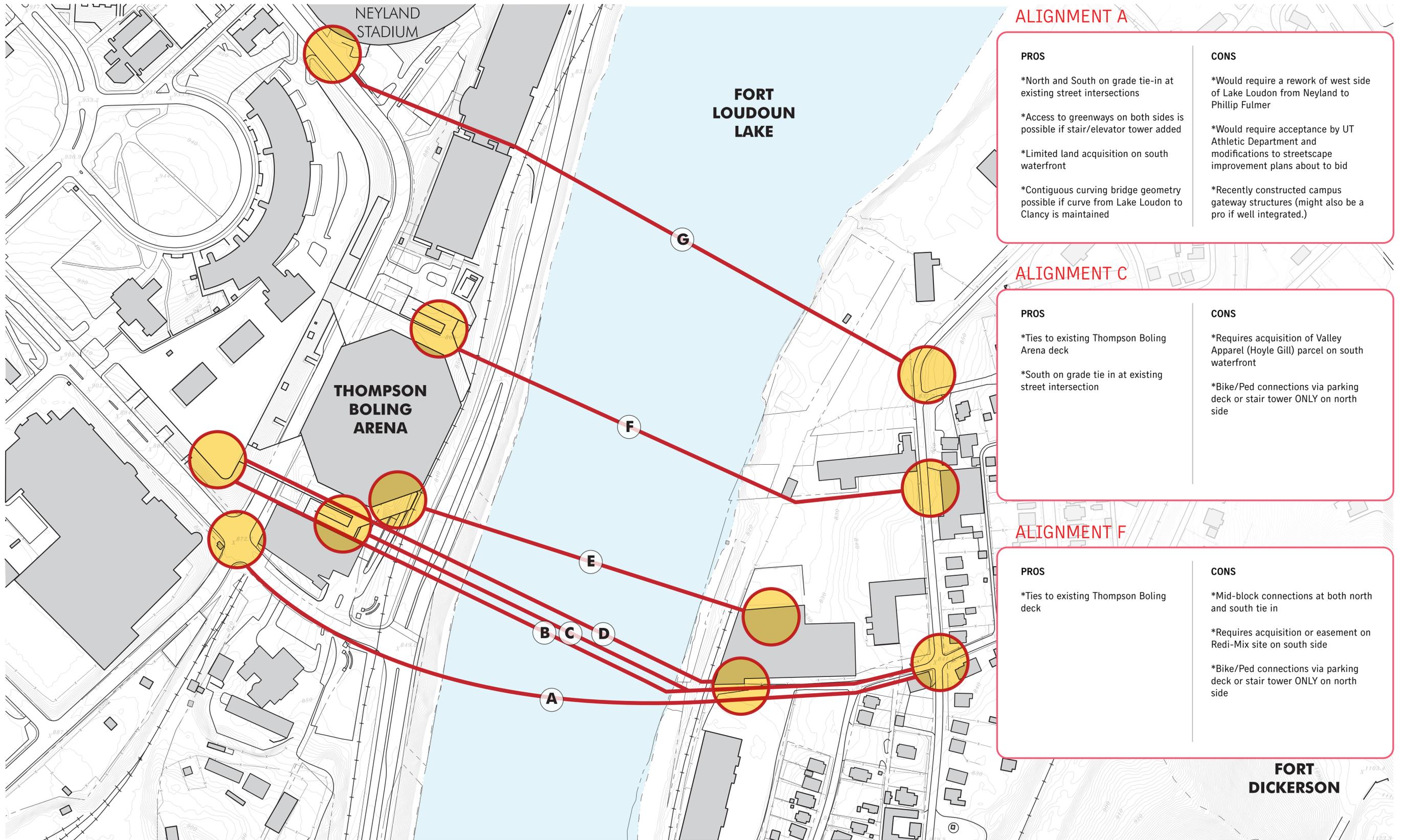
ELLIPTICAL CONNECTOR



CIRCULAR CONNECTOR SITE ANALYSIS:
 BLOCK SIZE: A = 250'-0" B = 450'-0"
 A+A+B+B = 1400'
 BLOCK AREA: 112,500 SF (130,680 SF MAX)
 BUILDING SIZE: 20,106.2 SF
 BUILDING COVERAGE: 18% (70% MAX)
 BUILDING HEIGHT MIN: 25'-0" & 2 STORY MIN
 BUILDING HEIGHT MAX: 40'-0" & 3 STORY MAX PLUS 10'-0" & 1 STORY MAX AT SETBACK +10'-0"



ELLIPTICAL CONNECTOR SITE ANALYSIS:
 BLOCK SIZE: A = 250'-0" B = 450'-0"
 A+A+B+B = 1400'
 BLOCK AREA: 112,500 SF (130,680 SF MAX)
 BUILDING SIZE: 39,306.2 SF
 BUILDING COVERAGE: 35% (70% MAX)
 BUILDING HEIGHT MIN: 25'-0" & 2 STORY MIN
 BUILDING HEIGHT MAX: 40'-0" & 3 STORY MAX PLUS 10'-0" & 1 STORY MAX AT SETBACK +10'-0"



ALIGNMENT A

PROS	CONS
*North and South on grade tie-in at existing street intersections	*Would require a rework of west side of Lake Loudon from Neyland to Phillip Fulmer
*Access to greenways on both sides is possible if stair/elevator tower added	*Would require acceptance by UT Athletic Department and modifications to streetscape improvement plans about to bid
*Limited land acquisition on south waterfront	*Recently constructed campus gateway structures (might also be a pro if well integrated.)
*Contiguous curving bridge geometry possible if curve from Lake Loudon to Clancy is maintained	

ALIGNMENT C

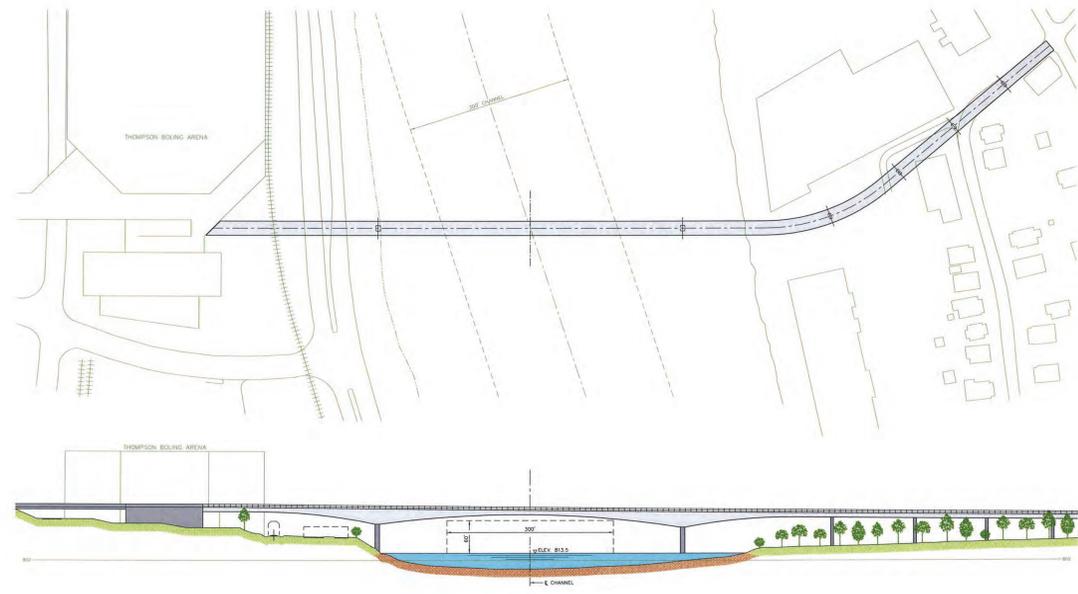
PROS	CONS
*Ties to existing Thompson Boling Arena deck	*Requires acquisition of Valley Apparel (Hoyle Gill) parcel on south waterfront
*South on grade tie in at existing street intersection	*Bike/Ped connections via parking deck or stair tower ONLY on north side

ALIGNMENT F

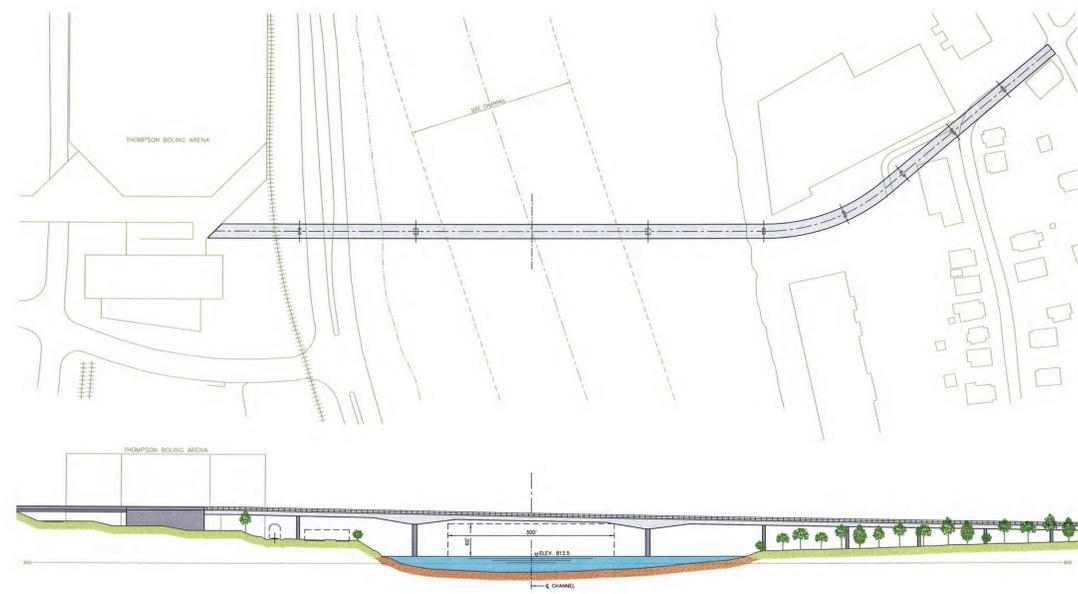
PROS	CONS
*Ties to existing Thompson Boling deck	*Mid-block connections at both north and south tie in
	*Requires acquisition or easement on Redi-Mix site on south side
	*Bike/Ped connections via parking deck or stair tower ONLY on north side

ALTERNATE BRIDGE ALIGNMENTS

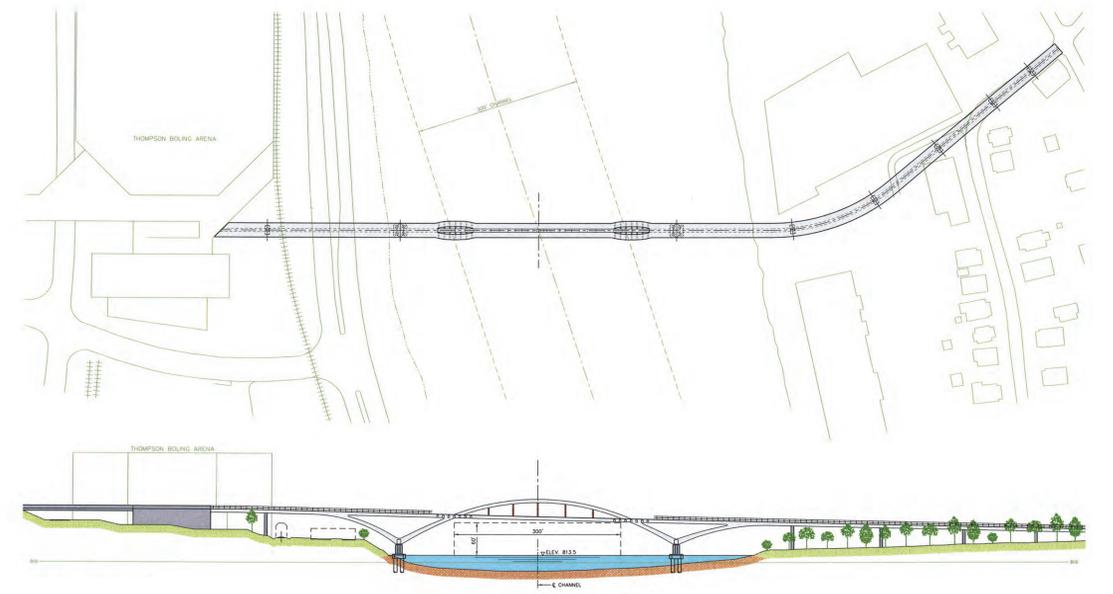




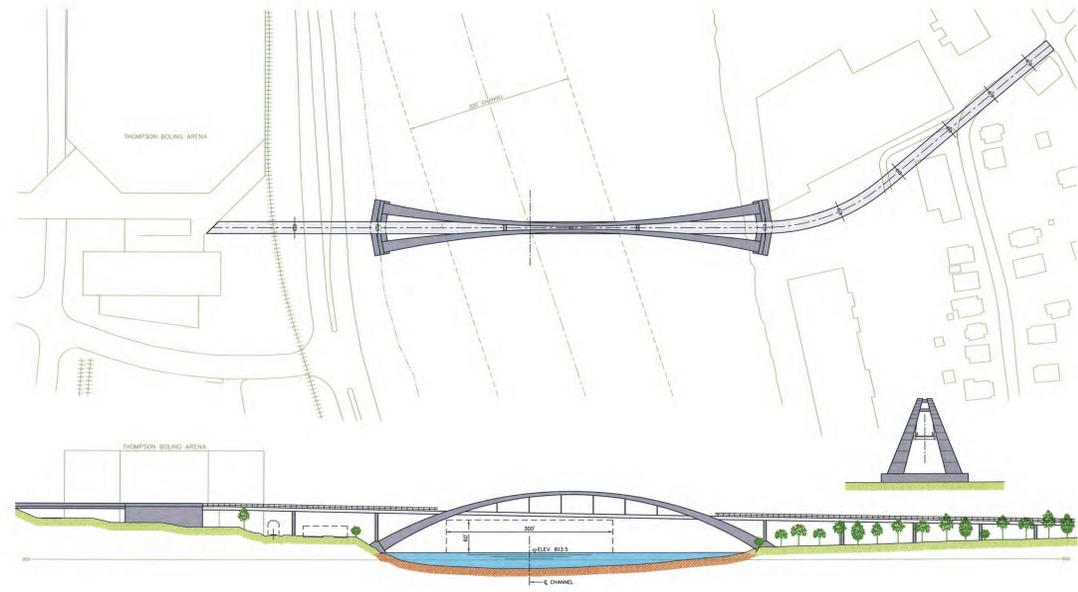
OPTION 01 : HAUNCHED BOX GIRDER
SCALE : 1" = 120'-0"



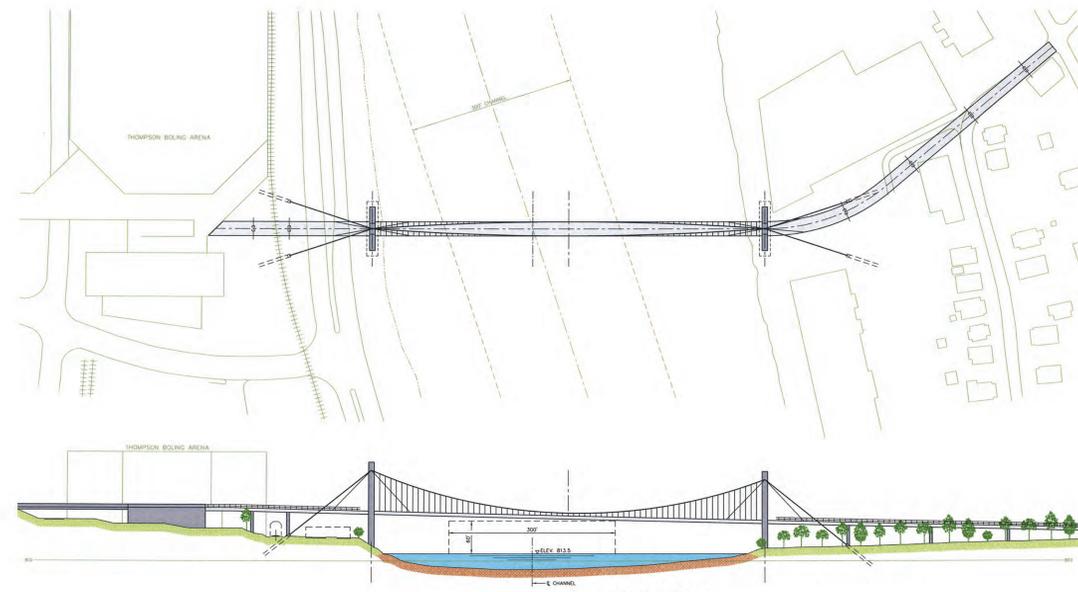
OPTION 02 : BOX GIRDER TAPERED HAUNCHED
SCALE : 1" = 120'-0"



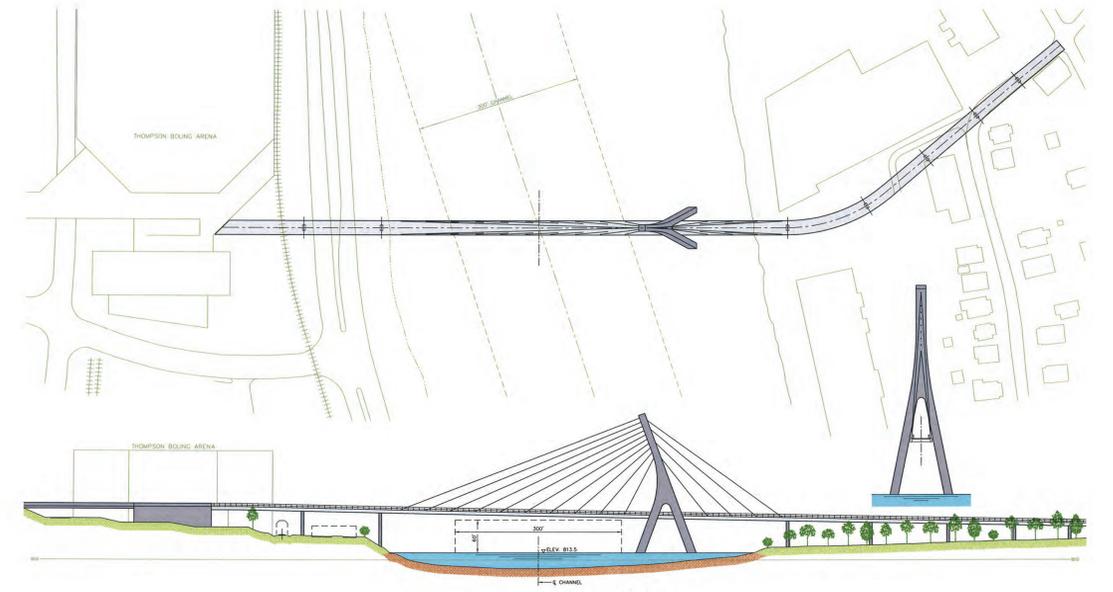
OPTION 03 : 500-FT ARCH
SCALE : 1" = 120'-0"



OPTION 04 : LONG SPAN ARCH
SCALE : 1" = 120'-0"

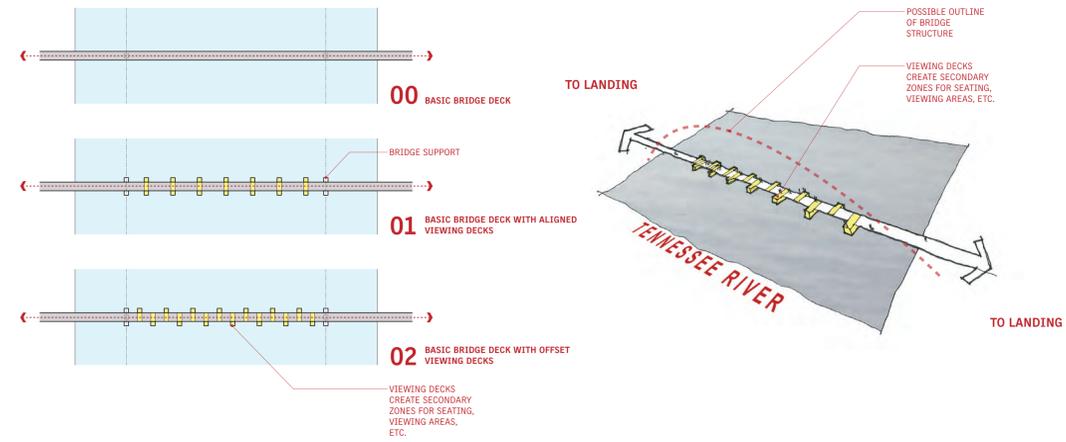


OPTION 05 : SUSPENSION BRIDGE
SCALE : 1" = 120'-0"

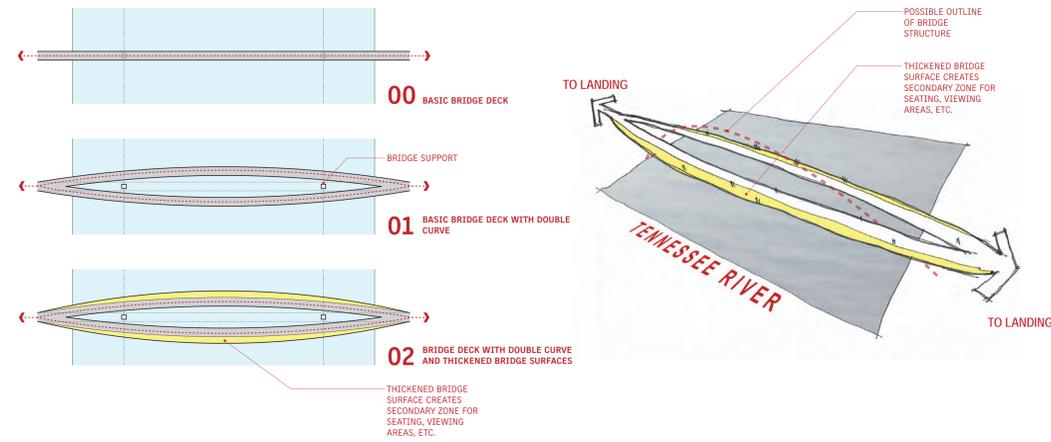


OPTION 06 : CABLE-STAYED BRIDGE
SCALE : 1" = 120'-0"

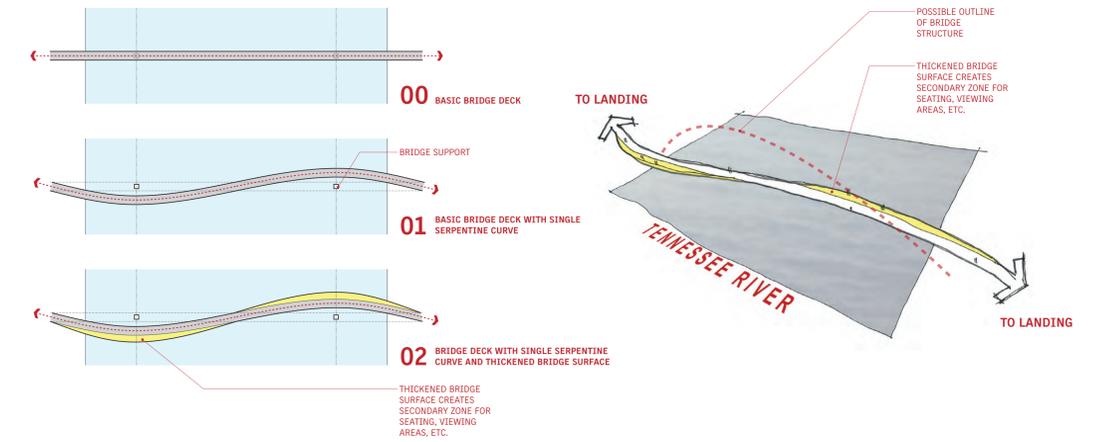
CONCEPTUAL BRIDGE DECK STUDIES



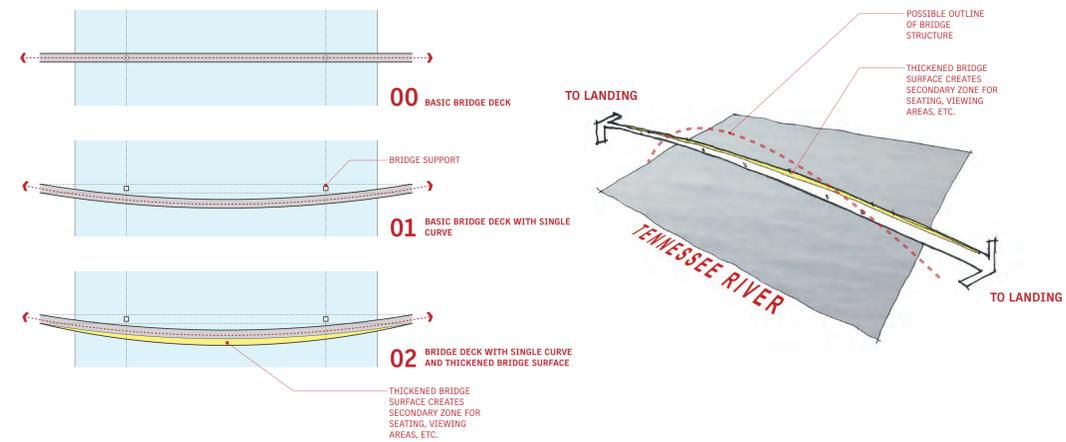
BRIDGE DECK 01 : STRAIGHT



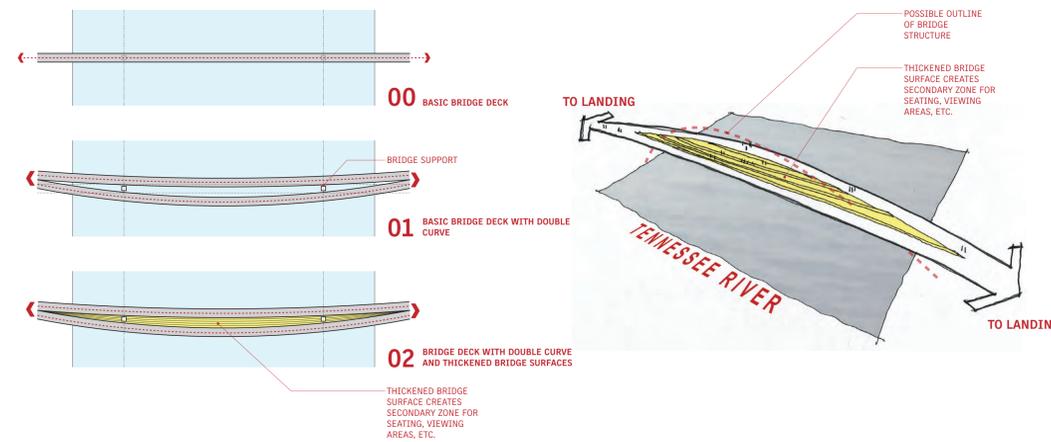
BRIDGE DECK 03 : DOUBLE CURVE (TWO DIRECTIONS)



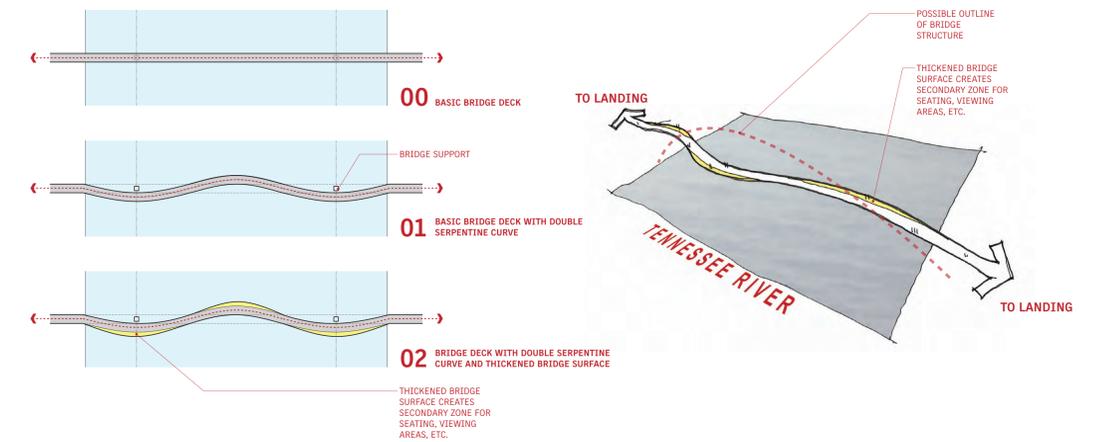
BRIDGE DECK 05 : SINGLE SERPENTINE CURVE



BRIDGE DECK 02 : SINGLE CURVE



BRIDGE DECK 04 : DOUBLE CURVE (ONE DIRECTION)



BRIDGE DECK 06 : DOUBLE SERPENTINE CURVE





MAIN CROSSING CONCEPT REVISED - SKETCH PERSPECTIVE

LANDING PRECEDENTS

LANDING PRECEDENTS
LANDING TYPE: ELLIPTICAL RAMP
 BRIDGE: BIG FOUR PEDESTRIAN BRIDGE
 LOCATION: LOUISVILLE, KY



LANDING DURING CONSTRUCTION

USER GROUPS:



COMPLETED LANDING

LANDING PRECEDENTS
LANDING TYPE: AT-GRADE EXTENSION
 BRIDGE: WALNUT STREET PEDESTRIAN BRIDGE
 LOCATION: CHATTANOOGA, TN



VIEW OF PEDESTRIAN BRIDGE AND LANDING

USER GROUPS:



VIEW FROM PARK BELOW LANDING

LANDING PRECEDENTS
LANDING TYPE: SPIRAL RAMP
 BRIDGE: PFLUGER PEDESTRIAN BRIDGE
 LOCATION: AUSTIN, TX



BRIDGE EXTENSION WITH SPIRAL RAMP BEYOND

USER GROUPS:

* DESIGN SPEED NOT MAINTAINED



INTERIOR VIEW OF SPIRAL RAMP

LANDING PRECEDENTS
LANDING TYPE: SWITCHBACK RAMP
 BRIDGE: MON WHARF SWITCHBACK (PROPOSED)
 LOCATION: PITTSBURGH, PA



VIEW FROM PARK BELOW LANDING

USER GROUPS:

* DESIGN SPEED NOT MAINTAINED

LANDING PRECEDENTS
LANDING TYPE: TOWER
 BRIDGE: FREIGHT HOUSE PEDESTRIAN BRIDGE
 LOCATION: KANSAS CITY, MO



NIGHT VIEW OF BRIDGE AND TOWER LANDING

USER GROUPS:



TOWER LANDING FROM PARKING LOT



SITE PLAN SCALE 1" = 200'



SITE PLAN SCALE 1" = 200'



SITE PLAN SCALE 1" = 200'



SITE PLAN SCALE 1" = 200'



SITE PLAN SCALE 1" = 200'

LANDING OPTION STUDIES

NORTH LANDING OPTIONS

LANDING TYPE: AT-GRADE EXTENSION

STRUCTURED LENGTH: 560 FT.

PROPERTY ACQUISITION:
EXISTING NON-COMPLIANT THOMPSON
BOLING ARENA RAMPS

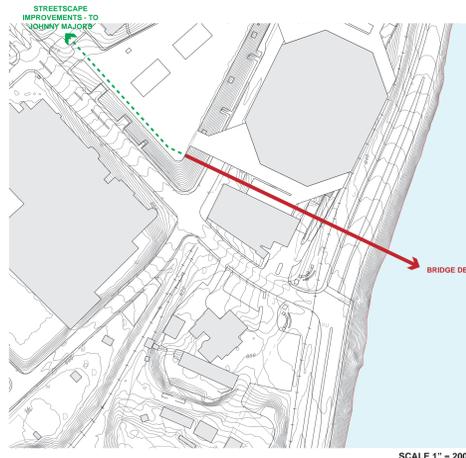
ADVANTAGES:
* UTILIZATION OF EXISTING
STRUCTURE
* DIRECT CONNECTION TO CAMPUS
* ACCOMMODATES ALL USER GROUPS

DISADVANTAGES:
* NO DIRECT CONNECTION TO
GREENWAY
* ACCESS TO BRIDGE VIA EXISTING
PARKING DECK / IMPACTS CAMPUS
PARKING

USER GROUPS :



N-01



NORTH LANDING OPTIONS

LANDING TYPE: AT-GRADE EXTENSION

STRUCTURED LENGTH: 560 FT.

PROPERTY ACQUISITION:
RIGHT OF WAY AT UNIVERSITY STEAM
PLANT PROPERTY

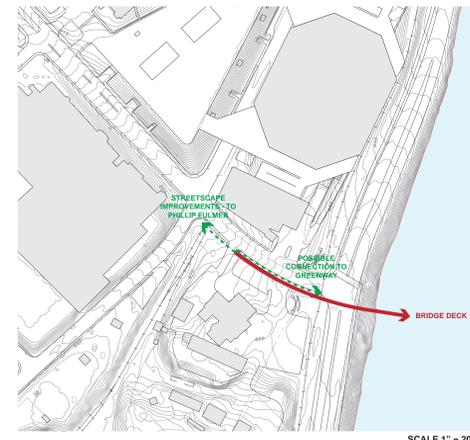
ADVANTAGES:
* DIRECT CONNECTION TO CAMPUS
* ACCOMMODATES ALL USER GROUPS
* AT-GRADE LANDING CONNECTING TO
EXISTING INTERSECTION

DISADVANTAGES:
* NO DIRECT CONNECTION TO
GREENWAY
* IMPACTS RECENT CAMPUS
IMPROVEMENTS AT LAKE LOUDOUN
BLVD & CAMPUS PARKING

USER GROUPS :



N-02



NORTH LANDING OPTIONS

LANDING TYPE: SWITCHBACK RAMP

STRUCTURED LENGTH: 600 FT.

PROPERTY ACQUISITION:
NEYLAND RIGHT OF WAY ONLY

ADVANTAGES:
* NO WORK ON CAMPUS PROPERTY
* DIRECT ACCESS TO GREENWAY

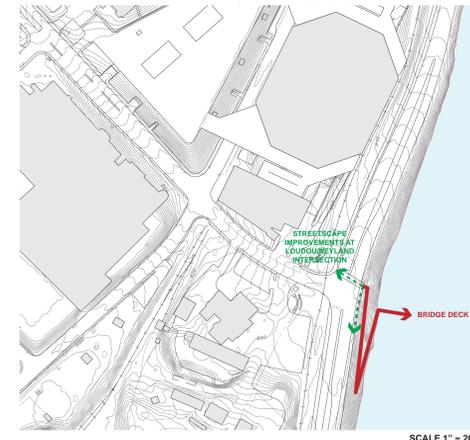
DISADVANTAGES:
* NO DIRECT ACCESS TO CAMPUS
* SWITCHBACK LIMITS BIKE USAGE

USER GROUPS :



* DESIGN SPEED NOT MAINTAINED

N-03



NORTH LANDING OPTIONS

LANDING TYPE: TOWER

STRUCTURED LENGTH: 40 FT.

PROPERTY ACQUISITION:
NEYLAND RIGHT OF WAY ONLY

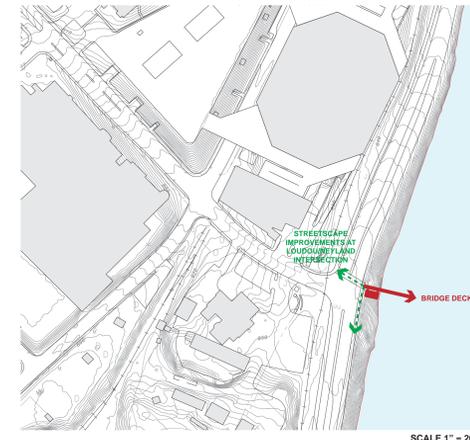
ADVANTAGES:
* NO WORK ON CAMPUS PROPERTY
* DIRECT ACCESS TO GREENWAY

DISADVANTAGES:
* NO DIRECT ACCESS TO CAMPUS
* BICYCLISTS MUST DISMOUNT

USER GROUPS :



N-04



SOUTH LANDING OPTIONS

LANDING TYPE: ELLIPTICAL RAMP

STRUCTURED LENGTH: 1000 FT.

PROPERTY ACQUISITION:
HOYLE GILL PARCEL

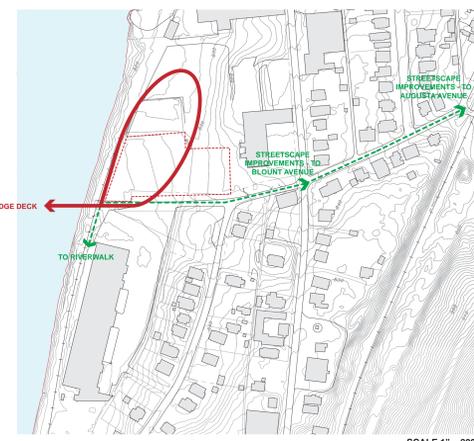
ADVANTAGES:
* ACCOMMODATES ALL USER
GROUPS
* DIRECT ACCESS TO WATER

DISADVANTAGES:
* SUBSTANTIAL PROPERTY
ACQUISITION
* NO DIRECT ACCESS TO BLOUNT
AVE

USER GROUPS :



S-01



SOUTH LANDING OPTIONS

LANDING TYPE: AT-GRADE EXTENSION

STRUCTURED LENGTH: 1000 FT.

PROPERTY ACQUISITION:
MULTIPLE SMALL PARCELS

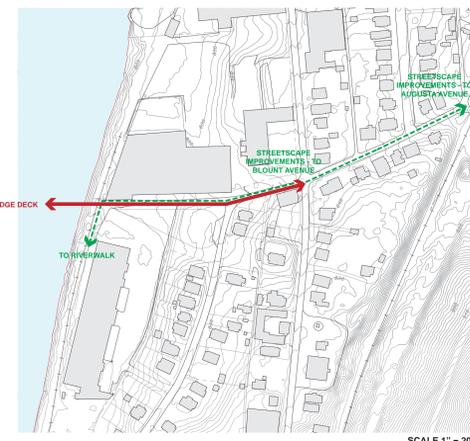
ADVANTAGES:
* ACCOMMODATES ALL USER GROUPS
* AT-GRADE LANDING CONNECTING TO
EXISTING INTERSECTION
* DIRECT CONNECTION TO BLOUNT AVE

DISADVANTAGES:
* LONG SPAN OF EXTENSION -
MULTIPLE PARCEL ACQUISITION

USER GROUPS :



S-02



SOUTH LANDING OPTIONS

LANDING TYPE: SWITCHBACK RAMP

STRUCTURED LENGTH: 1000 FT.

PROPERTY ACQUISITION:
BILL TAYLOR PARCEL

ADVANTAGES:
* DIRECT ACCESS TO WATERFRONT

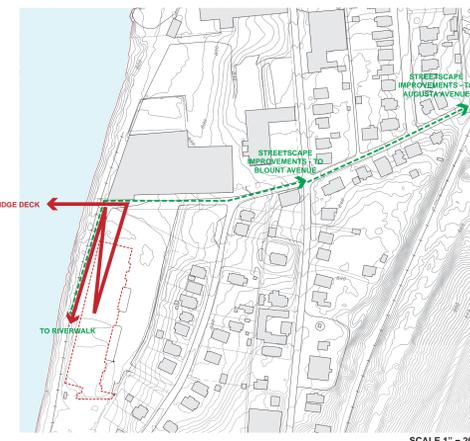
DISADVANTAGES:
* NO DIRECT CONNECTION TO
BLOUNT AVENUE
* SWITCHBACK LIMITS BIKE USAGE
* SUBSTANTIAL PROPERTY
ACQUISITION

USER GROUPS :



* DESIGN SPEED NOT MAINTAINED

S-03



SOUTH LANDING OPTIONS

LANDING TYPE: SPIRAL RAMP

STRUCTURED LENGTH: 1000 FT.

PROPERTY ACQUISITION:
BILL TAYLOR PARCEL

ADVANTAGES:
* LIMITED PROPERTY ACQUISITION
* DIRECT ACCESS TO WATERFRONT

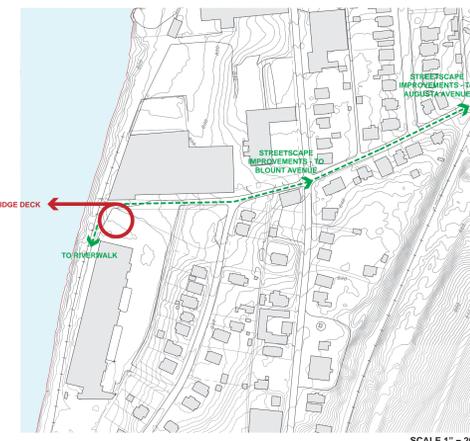
DISADVANTAGES:
* NO DIRECT CONNECTION TO
BLOUNT AVENUE
* NARROW RADIUS LIMITS BIKE
USAGE

USER GROUPS :



* DESIGN SPEED NOT MAINTAINED

S-04



SOUTH LANDING OPTIONS

LANDING TYPE: TOWER

STRUCTURED LENGTH: 40 FT.

PROPERTY ACQUISITION:
RIGHT OF WAY ONLY

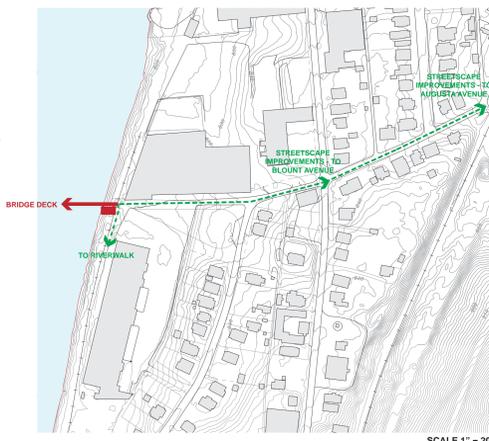
ADVANTAGES:
* LIMITED PROPERTY ACQUISITION
* LOWEST FRONT-END COST
* DIRECT ACCESS TO WATERFRONT

DISADVANTAGES:
* NO DIRECT CONNECTION TO
BLOUNT AVENUE
* BICYCLISTS MUST DISMOUNT

USER GROUPS :



S-05



POSSIBLE SOUTH WATERFRONT DEVELOPMENT SCENARIO

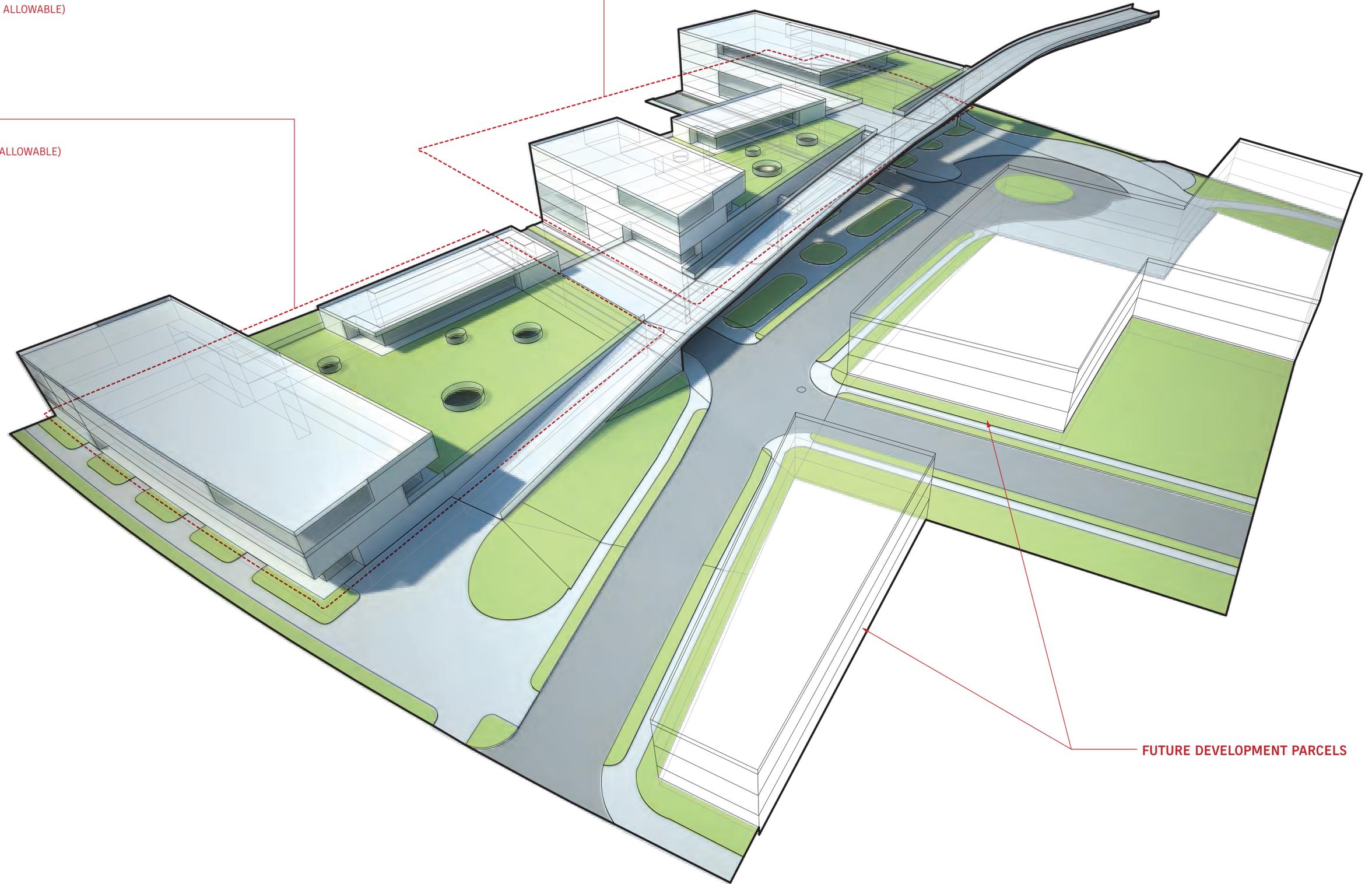
DEVELOPMENT PARCEL B

LOT SIZE: 69,591 SQUARE FEET (1.68 ACRE - 3 ALLOWABLE)
BUILDING AREA: 204,910 SQUARE FEET
FLOOR AREA RATIO: 2.94 (3 ALLOWABLE)
BUILDING COVERAGE: 34% (70% ALLOWABLE)*
OPEN AREA: 66% (30% MINIMUM)*

DEVELOPMENT PARCEL A

LOT SIZE: 34,010 SQUARE FEET (.82 ACRE - 3 ALLOWABLE)
BUILDING AREA: 82,242 SQUARE FEET
FLOOR AREA RATIO: 2.42 (3 ALLOWABLE)
BUILDING COVERAGE: 47% (70% ALLOWABLE)*
OPEN AREA: 53% (30% MINIMUM)*

*OPEN AREA INCLUDES OCCUPIABLE ROOF GARDEN



FUTURE DEVELOPMENT PARCELS

NORTH LANDING OPTIONS

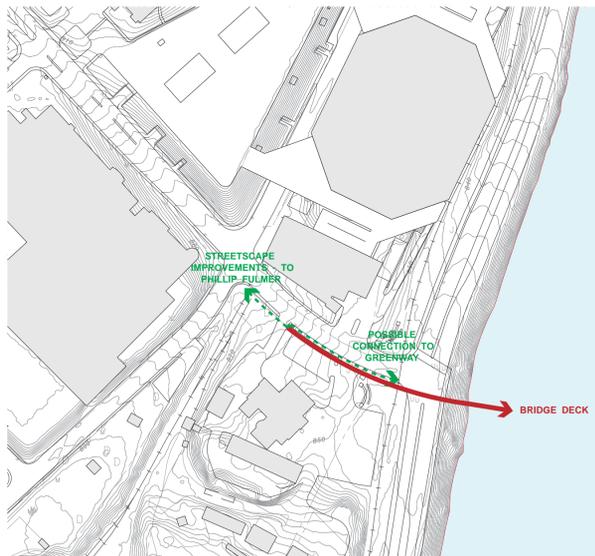
LANDING TYPE: AT-GRADE EXTENSION

STRUCTURED LENGTH: 560 FT.

PROPERTY ACQUISITION:
RIGHT OF WAY AT UNIVERSITY STEAM
PLANT PROPERTY

ADVANTAGES:
* DIRECT CONNECTION TO CAMPUS
* ACCOMMODATES ALL USER GROUPS
* AT-GRADE LANDING CONNECTING TO
EXISTING INTERSECTION

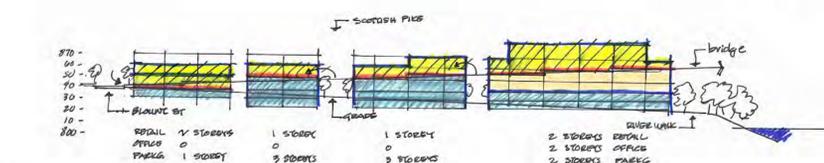
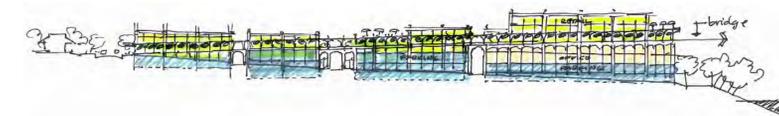
DISADVANTAGES:
* NO DIRECT CONNECTION TO
GREENWAY
* IMPACTS RECENT CAMPUS
IMPROVEMENTS AT LAKE LOUDOUN
BLVD & CAMPUS PARKING



N-02



NORTH LANDING PERSPECTIVE



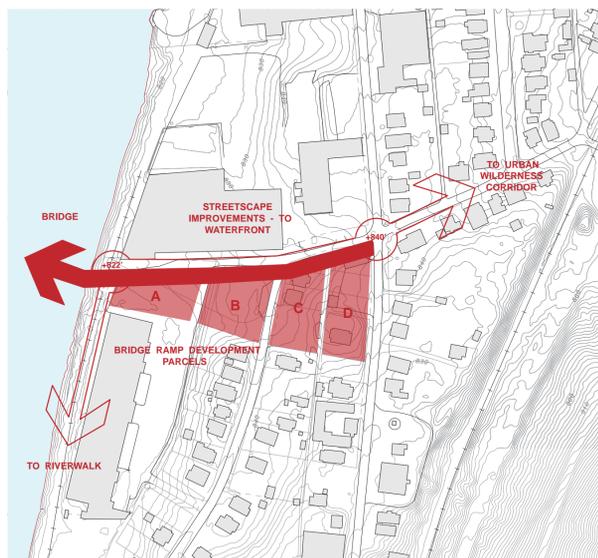
SOUTH LANDING ELEVATION

SOUTH LANDING

- EXTEND BRIDGE SURFACE TO
INTERSECTION OF BLOUNT + CLANCY

- IMPROVE STREETSCAPES ALONG
CLANCY FROM THE RIVER TO
AUGUSTA AVENUE

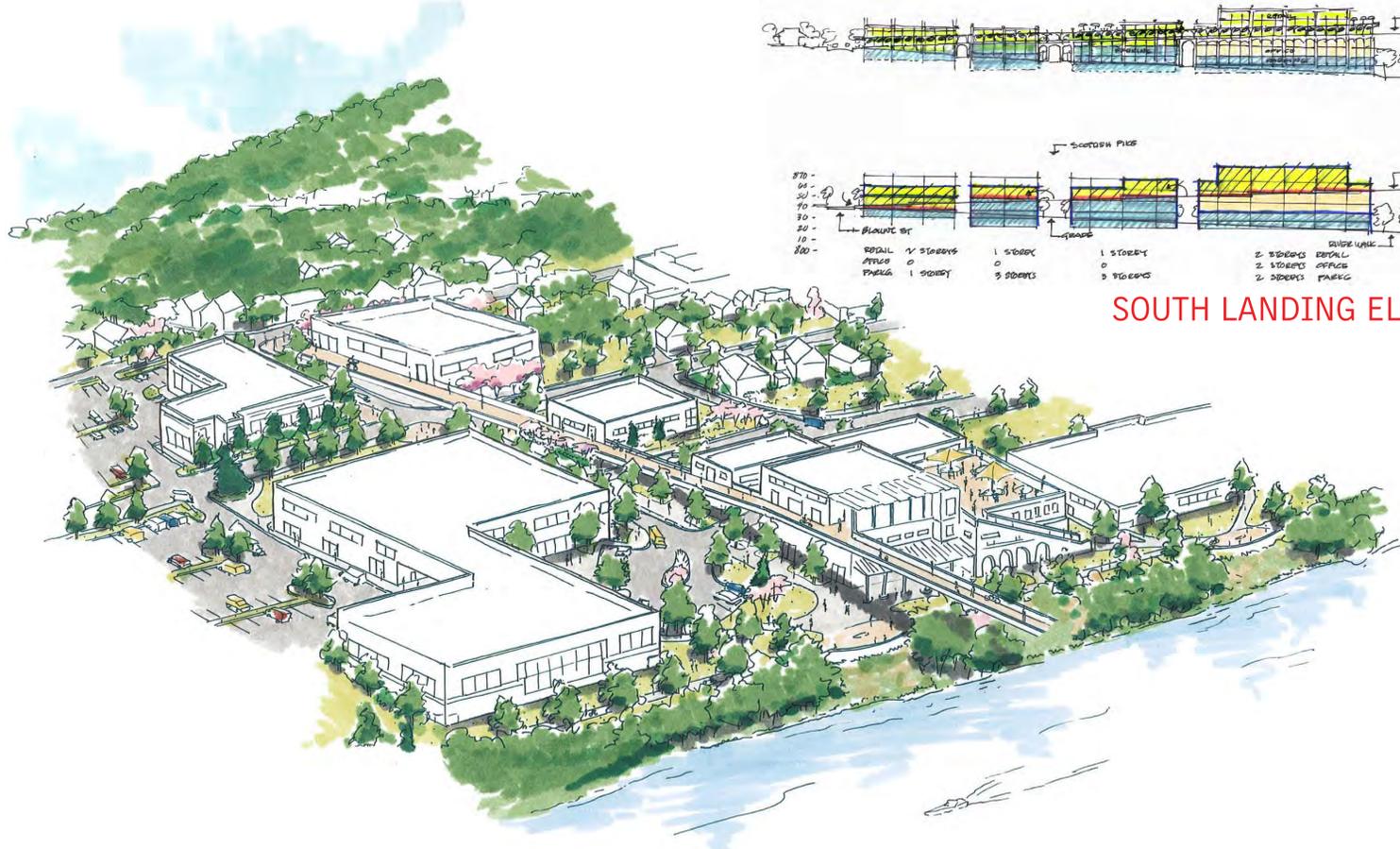
- IDENTIFY PRIVATE DEVELOPMENT
PARCELS ALONG SOUTHWEST EDGE OF
BRIDGE



SITE PLAN DIAGRAM

S-02

NEAR-TERM PROPOSAL



SOUTH LANDING PERSPECTIVE

ALTERNATE LANDING CONCEPTS

