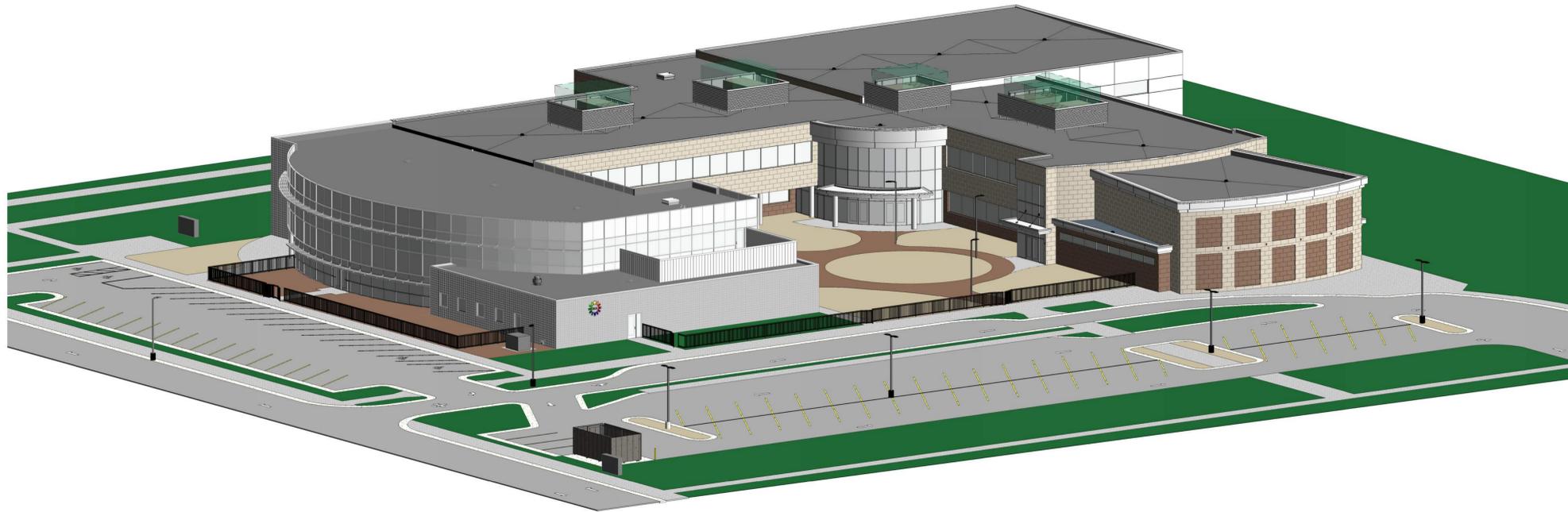


ISTHMUS MONTESSORI ACADEMY



BUILDING CODE

- Building Regulations: 2015 IBCB with WI Amendments - LEVEL 2 ALTERATION
ICC / ANSI A117.1 - 2009
- Use Group/Occupancy: Educational Group E - School (305.1)
Educational Group E - Daycare (305.2)
Business Group B - Administrative Offices (304.1)
- Non-Separated Occupancies: (508.3)
- Type of Construction: Type II-B (602.2)
- Protection of Elements: As determined by tabular values (Table 601 & Table 602)
(Group E / Type II-B)
Structural frame 0 hr
Ext. bearing wall 0 hr where X ≥ 30' (all locations)
Int. bearing walls 0 hr
Ext. non-bearing walls 0 hr where X ≥ 30' (all locations)
Int. non-bearing walls 0 hr
Floor construction 0 hr
Roof construction 0 hr
- Allowable Height & Area: As determined, allowed by tabular values:
Group E is most restrictive use type
Type of construction is II-B
Building is Fully Sprinklered, Two stories
75' max. height (Table 504.3)
3 Stories max. (Table 504.4)
43,400 sq. ft. max. w/o modifications (Table 506.2)
Actual building information:
Height = 28' 4"
2 Stories above grade plane
First Floor:
Existing = 14,466 sq. ft.
Addition = 27,432 sq. ft.
TOTAL = 41,898 sq. ft.
Second Floor:
Existing = 9,939 sq. ft.
Addition = 17,003 sq. ft.
TOTAL = 26,942 sq. ft.
- Sprinkler system: NFPA-13 - (903.3.1.1) and as required by Local Ordinance
- Fire Extinguishers: Type: 2A (General Building) - existing to remain
Distance to Extinguisher: 75'
Floor Area / Extinguisher: 11,250 sq. ft.
Minimum Rating: Class B
Type: K (Kitchen Area) - existing to remain
Distance to Extinguisher: 30'
- Number of Occupants: As determined by tabular values (Table 1004.1.2)
See Code Plan for calculations by room / area
- Exit: Exit width = 0.3 inches per person at stairways (1005.3.1)
Exit width = 0.2 inches per person at other egress components (1005.3.2)
Accessible means of egress provided per (1009.1)
Spaces with one exit or exit access doorway (Table 1006.2.1) - Group E = 49 max. occupant load / room
75' Maximum common path of egress travel (Table 1006.2.1)
Minimum number of exits = 2 (Table 1006.3.1)
Exit access doorway configuration (1007.1.1)
Exit signs provided as required (1013)
44" min. at corridors (Table 1002.2)
Corridors not required to be rated (Table 1002.1) - Group E
32" min. clear at exit doors
50' Maximum dead end corridor (1002.4, Exception #2)
250' Maximum exit access travel distance (Table 1017.2) - Group E fully sprinklered
- Accessibility: Provided per IBC Chapter 11 and ICC A117
- Plumbing: 500' maximum travel distance to toilet facilities. (See Code sheet on A011 for detailed info.)
- Parking: (76) parking stalls (72 standard, 4 accessible)
(Table 1106.1) - (3) Accessible stalls are required. (4) are provided.
(1106.5) - (1) Van Accessible stall is required. (1) is provided.
- Marking Identification: Fire Walls, Fire Barriers, Fire Partitions, Smoke Barriers and Smoke Partitions shall be permanently identified with stenciling (703.6) except in areas where gypsum board ceilings are provided.
1. Located in concealed floor, floor/ceiling or attic spaces.
2. at intervals not exceeding 30' measured horizontally.
3. Letters to be not less than 0.5" in height.

ISTHMUS MONTESSORI ACADEMY
 1802 PANKRATZ STREET, MADISON, WI
ISTHMUS MONTESSORI ACADEMY
 1802 PANKRATZ STREET
 MADISON, WI 53704

Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

BID PACKAGES

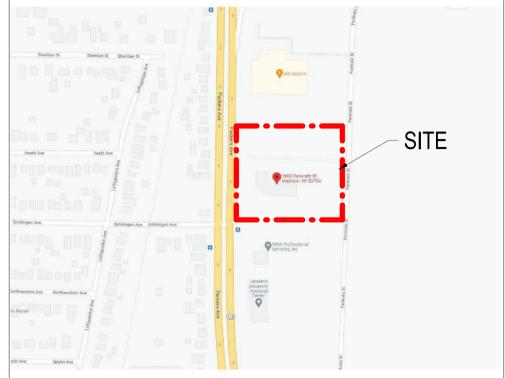
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Sheet Title
COVER SHEET

Project Number: 20210400
Sheet Number

G001

SITE LOCATION MAP



1802 PANKRATZ STREET, MADISON, WI

PROJECT DIRECTORY

DESIGN-BUILDER ICONICA, INC. 901 DEMING WAY MADISON, WISCONSIN 53717 PHONE: (608) 664-3500 FAX: (608) 664-3535	OWNER ISTHMUS MONTESSORI ACADEMY 1802 PANKRATZ STREET MADISON, WI 53704
CIVIL ENGINEER MSA PROFESSIONAL SERVICES, INC. 1702 PANKRATZ STREET MADISON, WI 53704 PHONE: (608) 242-7779	LANDSCAPE DESIGNER MSA PROFESSIONAL SERVICES, INC. 1702 PANKRATZ STREET MADISON, WI 53704 PHONE: (608) 242-7779

SHEET INDEX

UDC / PLAN COMMISSION #	SHEET #	SHEET TITLE
General	G001	COVER SHEET
Code	A011	FIRST FLOOR CODE PLAN
	A012	SECOND FLOOR CODE PLAN
Civil & Landscaping	C100	EXISTING SITE & REMOVALS PLAN - EAST
	C101	EXISTING SITE & REMOVALS PLAN - WEST
	C102	PROPOSED SITE LAYOUT - EAST
	C103	PROPOSED SITE LAYOUT - WEST
	C104	PROPOSED SITE DIMENSIONS - EAST
	C105	PROPOSED SITE DIMENSIONS - WEST
	C106	GRADING PLAN - EAST
	C107	GRADING PLAN - WEST
	C108	UTILITY PLAN - EAST
	C109	UTILITY PLAN - WEST
	C110	EROSION CONTROL PLAN - EAST
	C111	EROSION CONTROL PLAN - WEST
	C112	LANDSCAPE PLAN - EAST
	C113	LANDSCAPE PLAN - WEST
	C114	FIRE ACCESS PLAN
	C200	UTILITY SERVICE DETAILS
	C201	STORM SEWER & POND DETAILS
	C202	EROSION CONTROL DETAILS
	C203	STREET DETAILS
	C204	MISCELLANEOUS DETAILS
	C205	MISCELLANEOUS DETAILS
	C206	CURB RAMP GRADING DETAILS
	C207	CURB RAMP GRADING DETAILS
	C208	VEHICLE TURNING MOVEMENT DETAIL
Demolition	AD201	FIRST FLOOR PLAN DEMOLITION
	AD202	SECOND FLOOR PLAN DEMOLITION
14-Presentation	Z401	NORTHWEST PERSPECTIVE
Architectural	A001	ABBREVIATIONS, SYMBOLS AND NOTES
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	A201	OVERALL FIRST FLOOR PLAN
	A201A	FIRST FLOOR PLAN - AREA A
	A201B	FIRST FLOOR PLAN - AREA B
	A202	OVERALL SECOND FLOOR PLAN
	A202B	SECOND FLOOR PLAN - AREA B
	A202E	SECOND FLOOR PLAN - AREA E
	A207	ROOF PLAN
	A301	BUILDING ELEVATIONS
	A301A	BUILDING ELEVATIONS
	A302	BUILDING ELEVATIONS
	A302A	BUILDING ELEVATIONS
	A303	EXISTING BUILDING PHOTOS
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A530		MISC DETAILS
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A550		FLASHING DETAILS AND SCHEDULE
A600		ENLARGED SECOND FLOOR PLAN
A610		ENLARGED STAIR PLANS
A620		ENLARGED PLANS
A630		INTERIOR ELEVATIONS
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A801B		FIRST FLOOR REFLECTED CEILING PLAN - AREA B
A801C		FIRST FLOOR REFLECTED CEILING PLAN - AREA C
A802B		SECOND FLOOR REFLECTED CEILING PLAN AREA-B
A802E		SECOND FLOOR REFLECTED CEILING PLAN AREA-E
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	I701	FINISH SCHEDULES
Plumbing	P201	ABBREVIATIONS, SYMBOLS AND NOTES
	P200B	FIRST FLOOR AREA B UNDERFLOOR PLUMBING
	P201A	FIRST FLOOR AREA A PLUMBING
	P201B	FIRST FLOOR AREA B PLUMBING
	P801	PLUMBING TYPICAL DETAILS
	P701	SCHEDULES
	P902	AREA B PLUMBING DWV RISERS
	P911	AREA A PLUMBING SUPPLY RISERS
	P912	AREA B PLUMBING SUPPLY RISERS
	P2021B	FIRST FLOOR AREA B PLUMBING DEMOLITION
Mechanical	M001	ABBREVIATIONS, SYMBOLS AND NOTES
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	M201B	FIRST FLOOR AREA B MECHANICAL
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	M701	MECHANICAL SCHEDULES
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	MD201B	FIRST FLOOR AREA B MECHANICAL DEMOLITION
	ME801	FIRST FLOOR AREA B - REFLECTED CEILING PLAN
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	E100P	SITE PHOTOMETRICS
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	E201B	FIRST FLOOR AREA B - DEMOLITION
	E201BL	FIRST FLOOR AREA B LIGHTING
	E201BP	FIRST FLOOR AREA B POWER
	E501	ELECTRICAL DETAILS
	E701	ELECTRICAL SCHEDULES

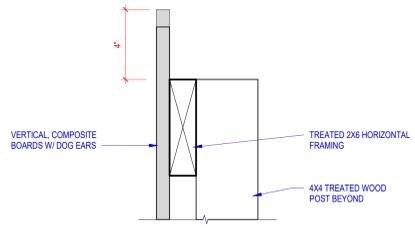
Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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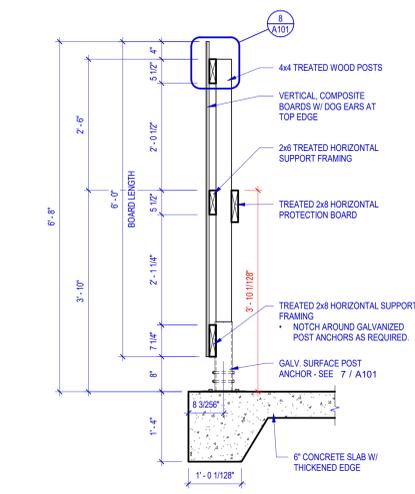
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SITE PLAN DETAILS

Project Number: 20210400
 Sheet Number

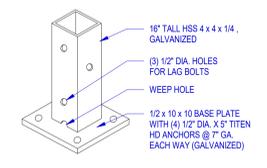
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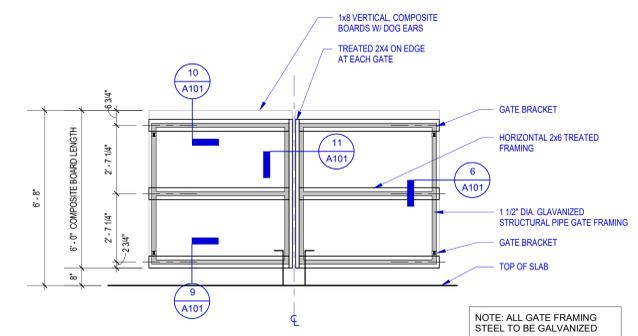
8 DUMPSTER ENCLOSURE - CAP DETAIL
 3" = 1'-0"



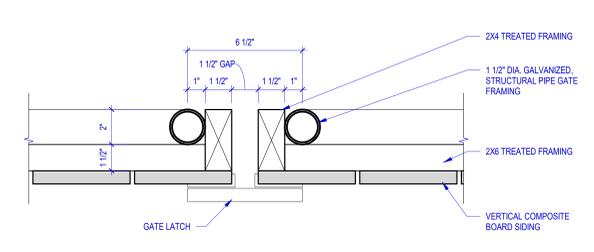
4 SECTION @ DUMPSTER ENCLOSURE
 3/4" = 1'-0"



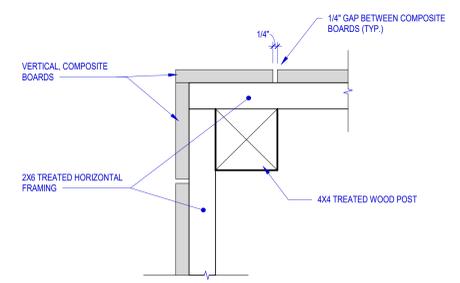
7 DUMPSTER ENCLOSURE - POST BRACKET
 1/4" = 1'-0"



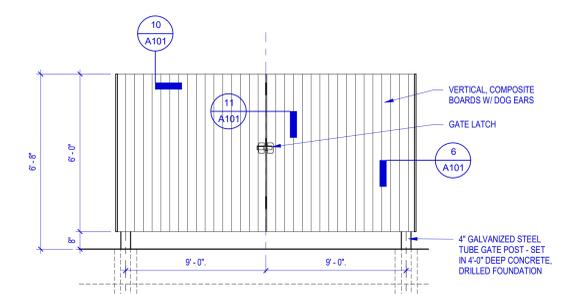
3 DUMPSTER ENCLOSURE INTERIOR GATE ELEVATION
 3/8" = 1'-0"



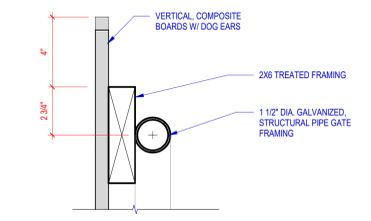
11 DUMPSTER ENCLOSURE - LATCH DETAIL
 3" = 1'-0"



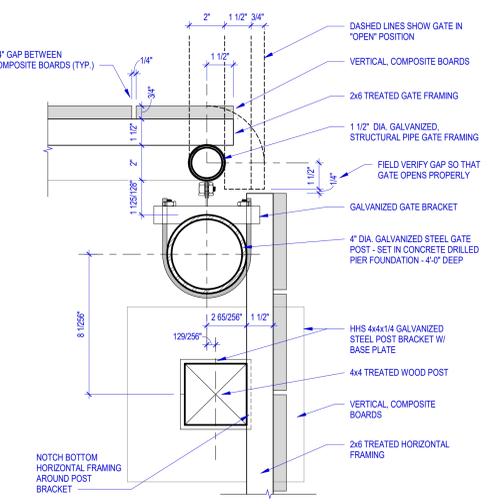
5 CORNER POST DETAIL
 3" = 1'-0"



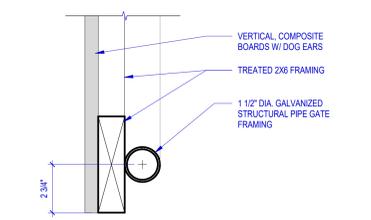
2 DUMPSTER ENCLOSURE EXTERIOR GATE ELEVATION
 3/8" = 1'-0"



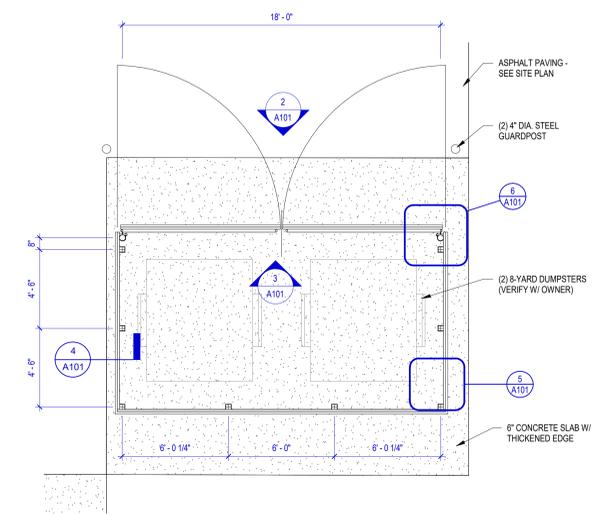
10 GATE FRAMING DETAIL AT TOP
 3" = 1'-0"



6 DUMPSTER ENCLOSURE - GATE POST DETAIL
 3" = 1'-0"



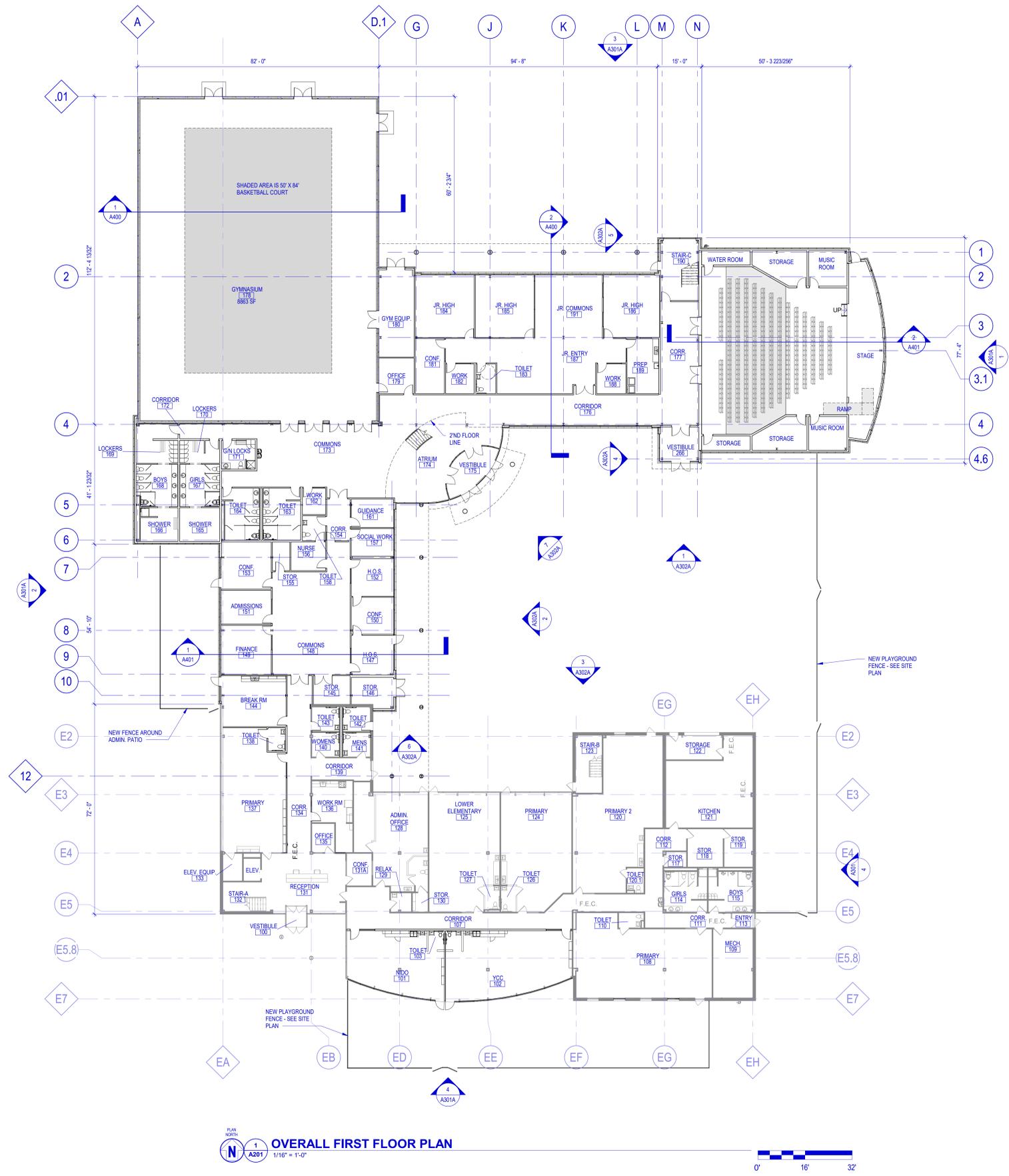
9 GATE FRAMING DETAIL AT BASE
 3" = 1'-0"



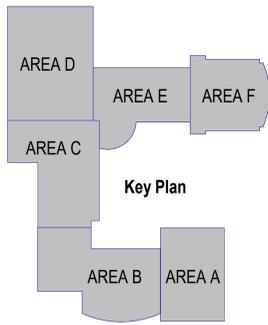
1 DUMPSTER ENCLOSURE PLAN
 1/4" = 1'-0"

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 MADISON, WI 53704



OVERALL FIRST FLOOR PLAN
 1/16" = 1'-0"



ISSUE DATES:

Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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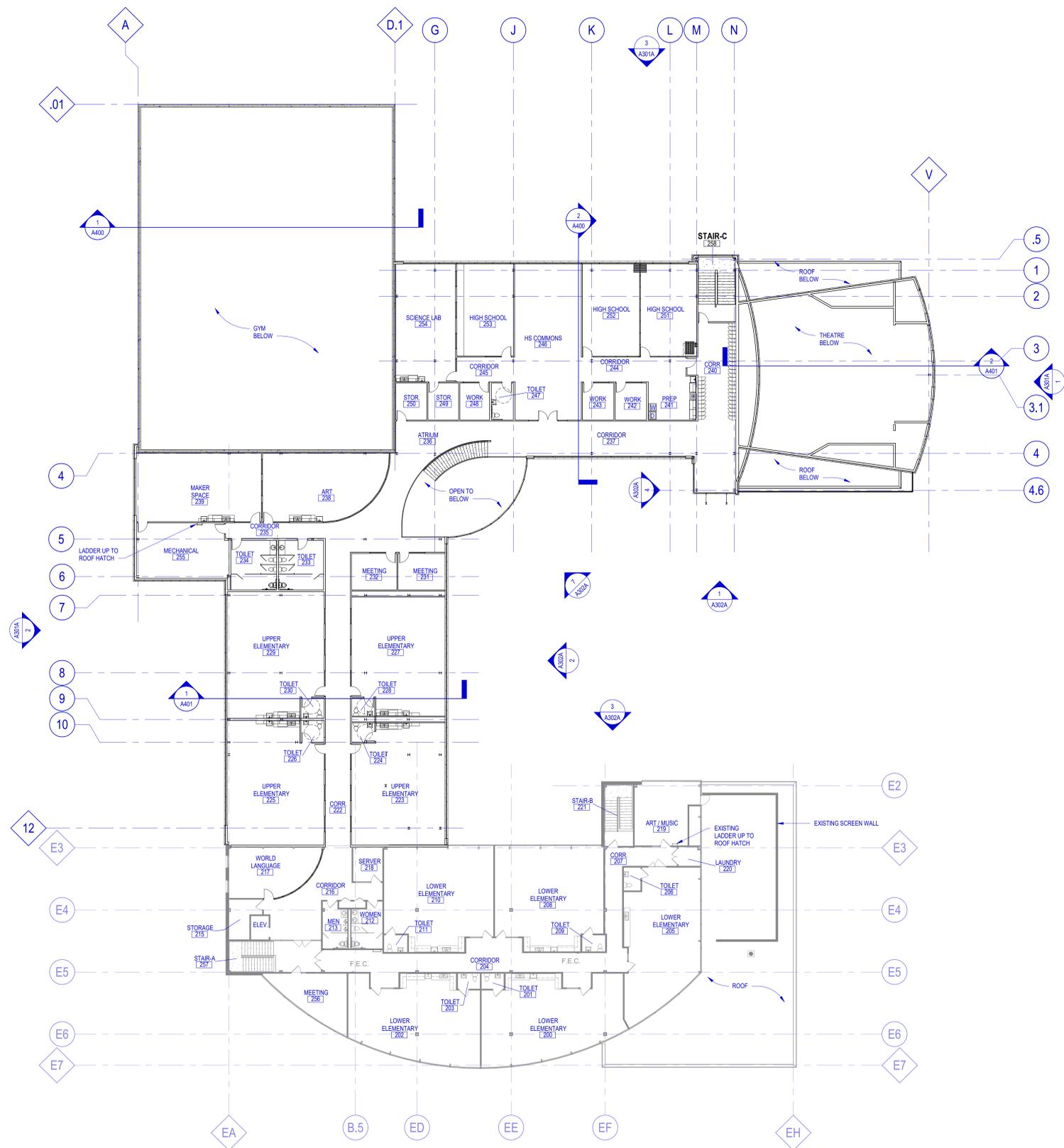
Sheet Title
OVERALL FIRST FLOOR PLAN

Project Number: 20210400
 Sheet Number

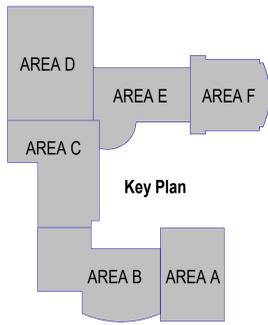
A201

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 MADISON, WI 53704



PLAN NUMBER: **1 A202**
SECOND FLOOR PLAN
 1/16" = 1'-0"



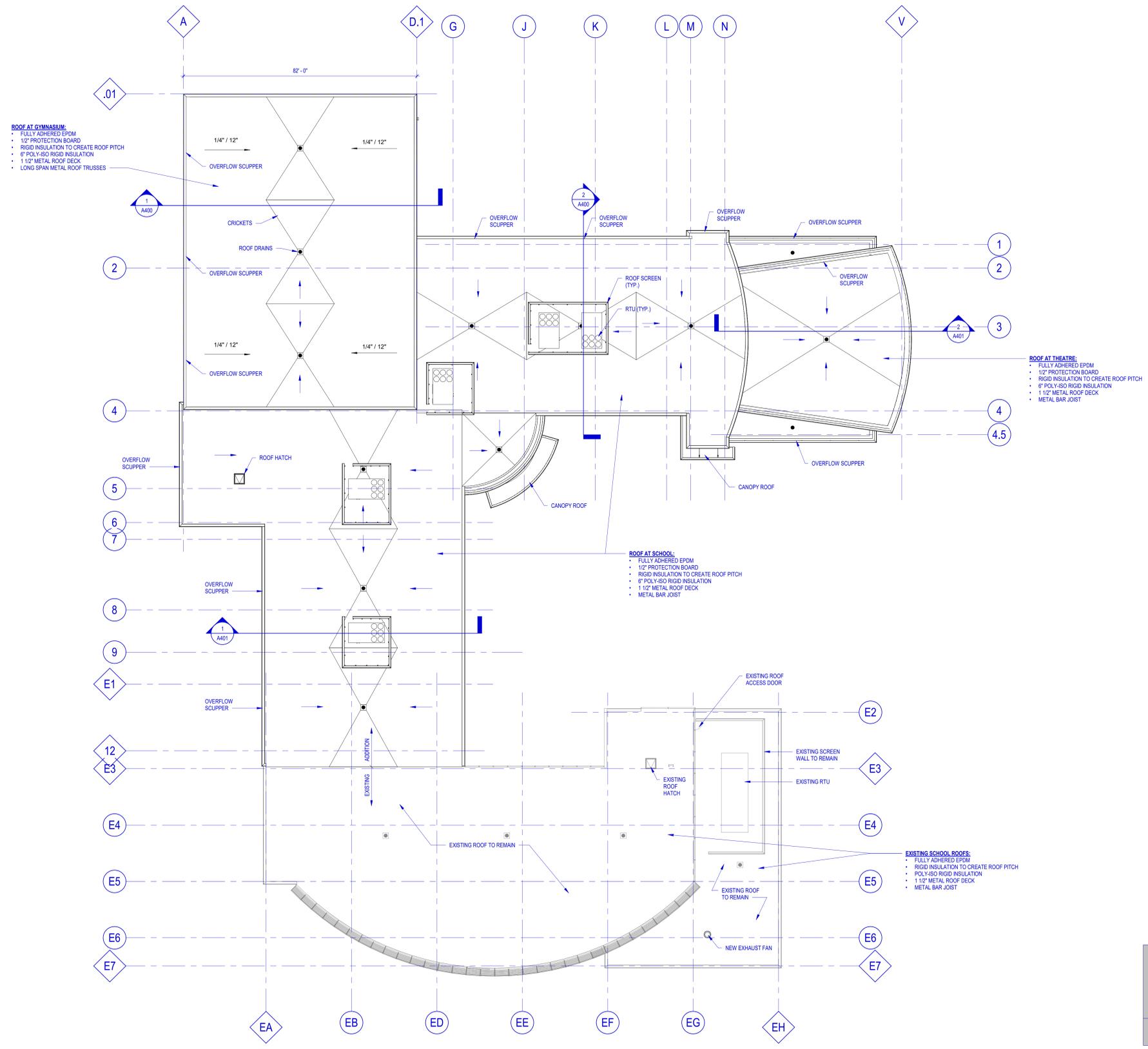
Issue	Description	Date
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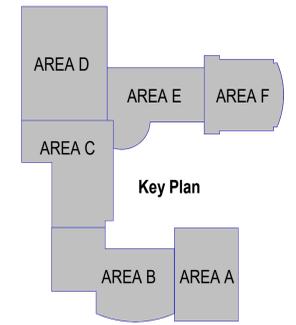
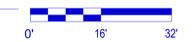
Sheet Title
OVERALL SECOND FLOOR PLAN

Project Number: 20210400
 Sheet Number

A202



PLAN NORTH
ROOF PLAN
 1/16" = 1'-0"



Issue	Description	Date
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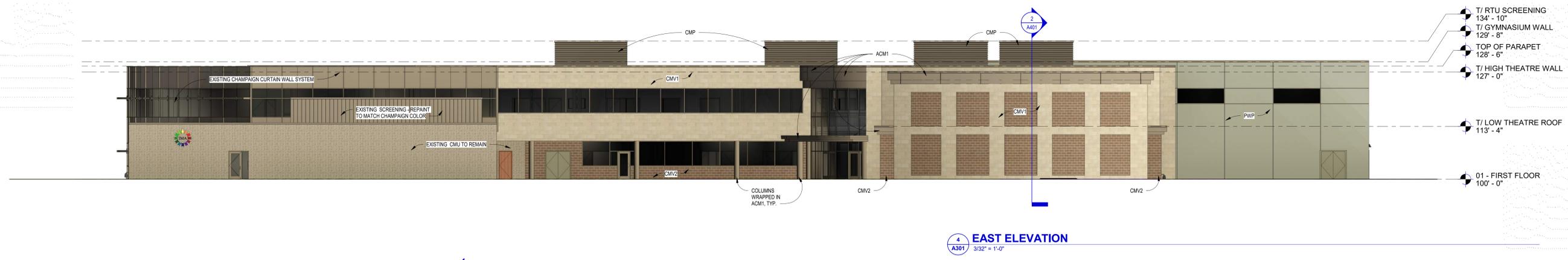
Sheet Title
ROOF PLAN

Project Number: 20210400
 Sheet Number

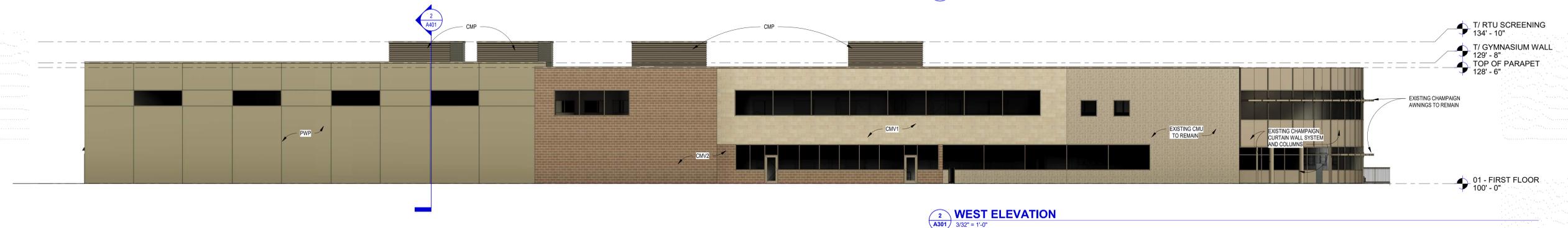
A207

EXTERIOR MATERIAL LEGEND

CMV1	CONCRETE MASONRY VENEER MANUF: BUCKLEBROCK CORP PRODUCT: HONEY STONES - LIMESTONE 12"x24" PANELS FINISH: SILVERDALE URL: https://bucklebrock.com/products/silverdale-panels/	EXTERIOR DOOR PAINT COLORS: SHERWIN WILLIAMS - SW XXXX (EXTERIOR HOLLOW METAL DOORS - MATCH PRECAST PANEL AT GYMNASIUM)
CMV2	CONCRETE MASONRY VENEER MANUF: COUNTY MATERIALS PRODUCT: HERITAGE COLLECTION - SMOOTH NF 4"x8"x16" FULL VENEER FINISH: COFFEE URL: https://www.countymaterials.com/en/products/masonry/heritage-collection-designer-concrete-brick/gc-tab-0	WALL PARAPET PREFINISHED METAL COPING: MATCH EXISTING CHAMPAIGN CURTAIN WALL SYSTEM
CMP	STEEL CORRUGATED METAL PANEL (RTU SCREENING) MANUF: CMG PRODUCT: ULTRA - RIB WALL PANEL FINISH: MATCH PREFINISHED CHAMPAIGN FLASHING COLOR	CURTAIN WALL GLAZING: 1" GREY INSULATED LOW-E TEMPERED (TO MATCH EXISTING) 1/4" GREY TEMPERED OUTBOARD LITE 12" AIR SPACE 1/4" CLEAR TEMPERED SOLARBAN 60 LOW-E (#3) INBOARD LITE
PWP	PRECAST INSULATED CONCRETE WALL PANEL MANUF: TSD FINISH: EXPOSED AGGREGATE CONCRETE (TAN)	FENCING: Aluminum Commercial Grade MANUF: Alumi-Guard Commercial PRODUCT: Asst 3-Rail Design COLOR: Black
ACM1	ALUMINUM COMPOSITE MATERIAL PANEL MANUF: ALPOLC FINISH: CMR CHAMPAGNE (MATCH EXISTING ACM PANELS)	NOTES: ALL FENCING NOT SHOWN IN ELEVATIONS FOR CLARITY. SEE SITE PLAN AND PERSPECTIVE VIEWS



4 EAST ELEVATION
 A301 3/32" = 1'-0"



2 WEST ELEVATION
 A301 3/32" = 1'-0"



3 NORTH ELEVATION
 A301 3/32" = 1'-0"



1 SOUTH ELEVATION
 A301 3/32" = 1'-0"

Issue	Description	Date
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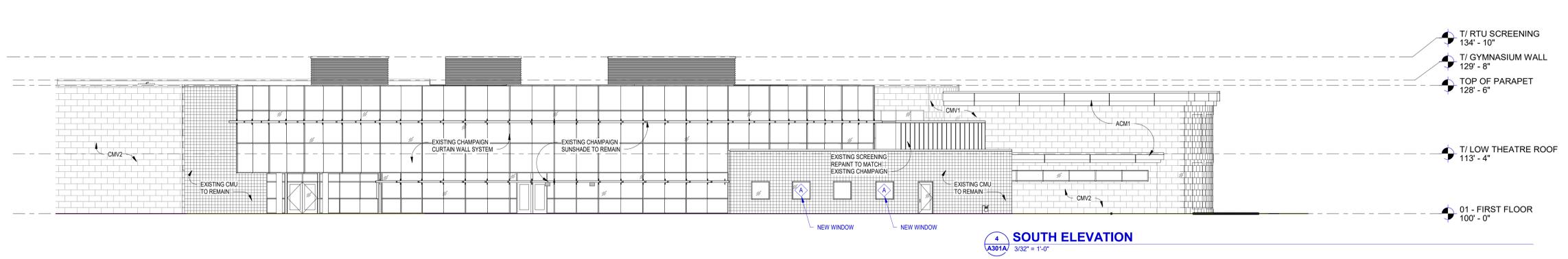
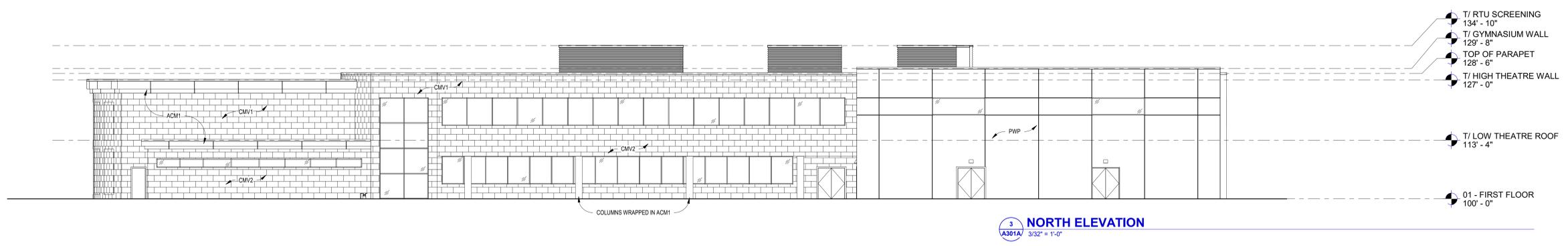
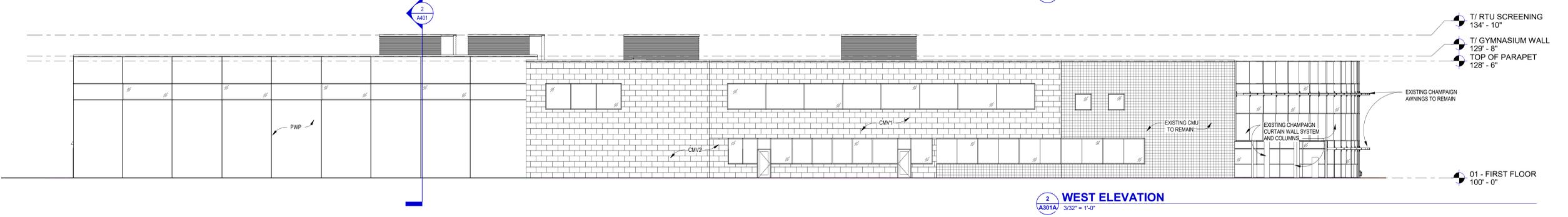
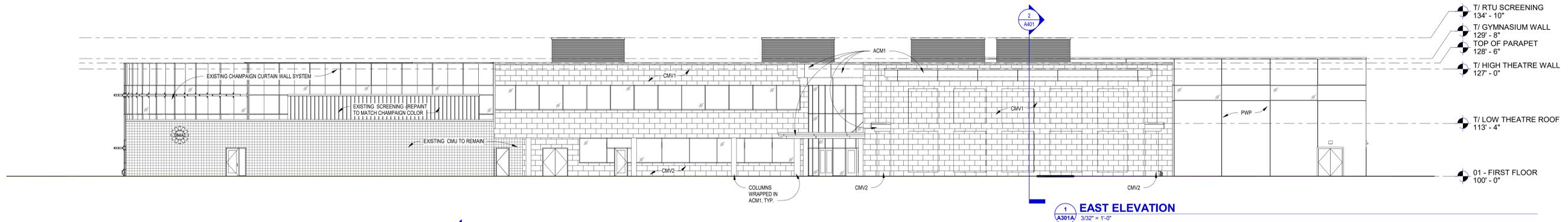
Sheet Title
BUILDING ELEVATIONS

Project Number: 20210400
 Sheet Number

A301

EXTERIOR MATERIAL LEGEND

<p>CMV1  CONCRETE MASONRY VENEER MANUF: BUECHEL STONE CORP. PRODUCT: HONEY STONES - LIMESTONE 12"x24" PANELS FINISH: SILVERDALE URL: https://buechelstone.com/products/silverdale-panels/</p> <p>CMV2  CONCRETE MASONRY VENEER MANUF: COUNTY MATERIALS PRODUCT: HERITAGE COLLECTION - SMOOTH NF 4"x6"x16" FULL VENEER FINISH: COPPEE URL: https://www.countymaterials.com/en/products/masonry/heritage-collection-designer-concrete-brick/gc-lab-0</p> <p>CMP  STEEL CORRUGATED METAL PANEL (RTU SCREENING) MANUF: CMS PRODUCT: ULTRA - RIB WALL PANEL FINISH: MATCH PREFINISHED CHAMPAIGN FLASHING COLOR</p> <p>PWP  PRECAST INSULATED CONCRETE WALL PANEL MANUF: T&B FINISH: EXPOSED AGGREGATE CONCRETE (TAN)</p> <p>ACM1  ALUMINUM COMPOSITE MATERIAL PANEL MANUF: ALPOLIC FINISH: CHAMPAGNE (MATCH EXISTING ACM PANELS)</p>	<p>EXTERIOR DOOR PAINT COLORS: SHERWIN WILLIAMS - SW XXXX (EXTERIOR HOLLOW METAL DOORS - MATCH PRECAST PANEL AT GYMNASIUM)</p> <p>WALL PARAPET PREFINISHED METAL COPING: MATCH EXISTING CHAMPAIGN CURTAIN WALL SYSTEM</p> <p>CURTAIN WALL GLAZING: 1" GREY INSULATED LOW-E TEMPERED (TO MATCH EXISTING) 1/4" GREY TEMPERED OUTBOARD LITE 1/2" AIR SPACE 1/4" CLEAR TEMPERED SOLARBAN 60 LOW-E (R3) INBOARD LITE</p> <p>FENCING: Aluminum Commercial Grade MANUF: Alumi-Guard Commercial PRODUCT: Ascot 3-Rail Design COLOR: Black</p> <p>NOTES: ALL FENCING NOT SHOWN IN ELEVATIONS FOR CLARITY. SEE SITE PLAN AND PERSPECTIVE VIEWS</p>
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Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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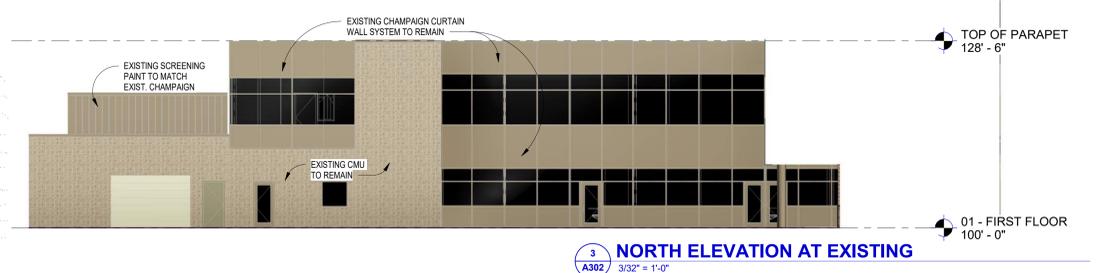
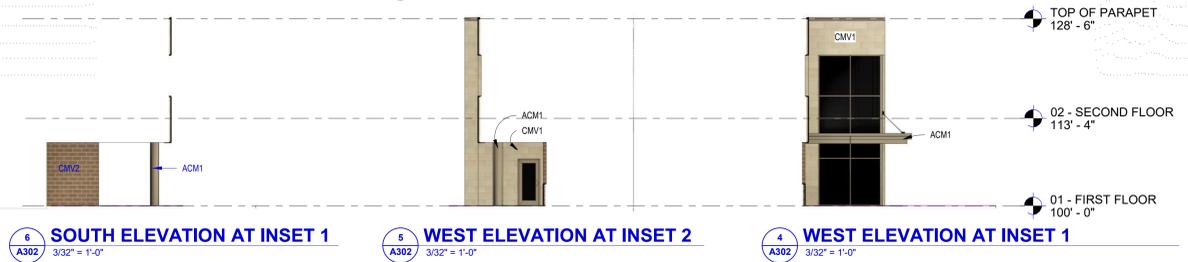
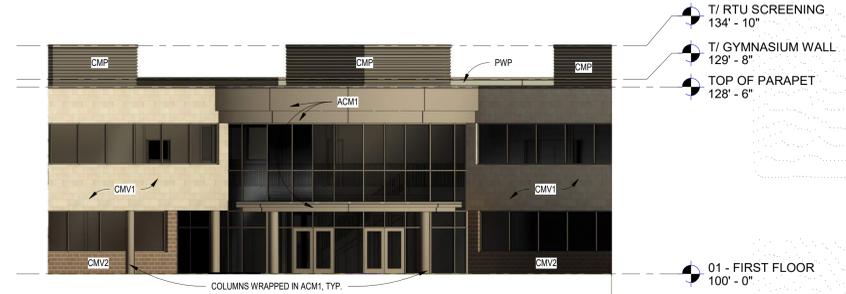
Sheet Title
BUILDING ELEVATIONS

Project Number: 20210400
 Sheet Number

A301A

EXTERIOR MATERIAL LEGEND

<p>CMV1  CONCRETE MASONRY VENEER MANUF: BUCHEL STONE CORP PRODUCT: HONEY STONES - LIMESTONE 12"x24" PANELS FINISH: SILVERDALE URL: https://bucchelstone.com/products/silverdale-panels/</p> <p>CMV2  CONCRETE MASONRY VENEER MANUF: COUNTY MATERIALS PRODUCT: HERITAGE COLLECTION - SMOOTH NF 4"x8"x16" FULL VENEER FINISH: COFFEE URL: https://www.countymaterials.com/en/products/masonry/heritage-collection-designer-concrete-brick#gsc.tab=0</p> <p>CMP  STEEL CORRUGATED METAL PANEL (RTU SCREENING) MANUF: CMG PRODUCT: ULTRA - RIB WALL PANEL FINISH: MATCH PREFINISHED CHAMPAIGN FLASHING COLOR</p> <p>PWP  PRECAST INSULATED CONCRETE WALL PANEL MANUF: TSO FINISH: EXPOSED AGGREGATE CONCRETE (TAN)</p> <p>ACM1  ALUMINUM COMPOSITE MATERIAL PANEL MANUF: ALPOLIC FINISH: CMR CHAMPAGNE (MATCH EXISTING ACM PANELS)</p>	<p>EXTERIOR DOOR PAINT COLORS: SHERWIN WILLIAMS - SW XXXX (EXTERIOR HOLLOW METAL DOORS - MATCH PRECAST PANEL AT GYMNASIUM)</p> <p>WALL PARAPET PREFINISHED METAL COPING: MATCH EXISTING CHAMPAIGN CURTAIN WALL SYSTEM</p> <p>CURTAIN WALL GLAZING: 1" GREY INSULATED LOW-E TEMPERED (TO MATCH EXISTING) 1/4" GREY TEMPERED OUTBOARD LITE 1/2" AIR SPACE 1/4" CLEAR TEMPERED SOLARBAN 60 LOW-E (R3) INBOARD LITE</p> <p>FENCING: Alumi-Commercial MANUF: Alumi-Guard Commercial PRODUCT: Asort 3-Rail Design COLOR: Black</p> <p>NOTES: ALL FENCING NOT SHOWN IN ELEVATIONS FOR CLARITY. SEE SITE PLAN AND PERSPECTIVE VIEWS</p>
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ISSUE DATES:

Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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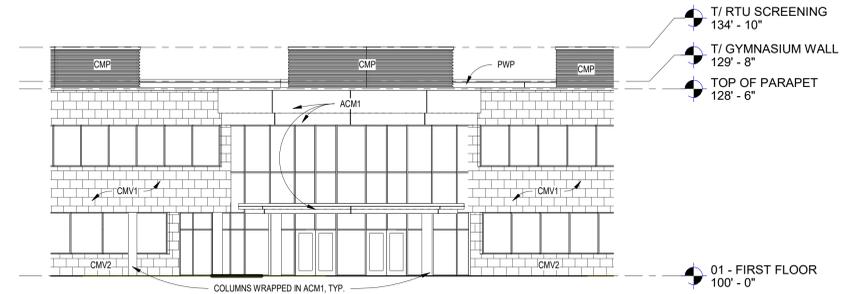
Sheet Title
BUILDING ELEVATIONS

Project Number: 20210400
 Sheet Number

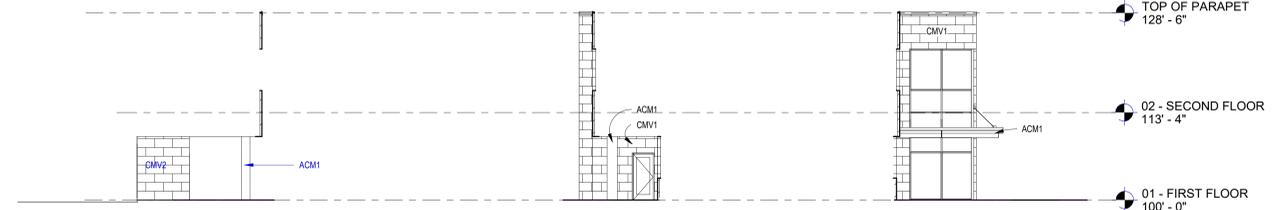
A302

EXTERIOR MATERIAL LEGEND

CMV1	CONCRETE MASONRY VENEER MANUF: BUECHEL STONE CORP. PRODUCT: HONEY STONES - LIMESTONE 12"x24" PANELS FINISH: SILVERDALE URL: https://buechelstone.com/products/silverdale-panels/	EXTERIOR DOOR PAINT COLORS: SHERWIN WILLIAMS - SW XXXX (EXTERIOR HOLLOW METAL DOORS - MATCH PRECAST PANEL AT GYMNASIUM)
CMV2	CONCRETE MASONRY VENEER MANUF: COUNTY MATERIALS PRODUCT: HERITAGE COLLECTION - SMOOTH NF 4"x8"x16" FULL VENEER FINISH: COFFEE URL: https://www.countymaterials.com/en/products/masonry/heritage-collection-designer-concrete-bricks#gsc.tab=0	WALL PARAPET PREFINISHED METAL COPING: MATCH EXISTING CHAMPAIGN CURTAIN WALL SYSTEM
CMP	STEEL CORRUGATED METAL PANEL (RTU SCREENING) MANUF: CMG PRODUCT: ULTRA - RIB WALL PANEL FINISH: MATCH PREFINISHED CHAMPAIGN FLASHING COLOR	CURTAIN WALL GLAZING: 1" GREY INSULATED LOW-E TEMPERED (TO MATCH EXISTING) 1/4" CLEAR TEMPERED OUTBOARD LITE 1/2" AIR SPACE 1/4" CLEAR TEMPERED SOLARBAN 60 LOW-E (#9) INBOARD LITE
PWP	PRECAST INSULATED CONCRETE WALL PANEL MANUF: TBO FINISH: EXPOSED AGGREGATE CONCRETE (TAN)	FENCING: Aluminum Commercial Grade MANUF: Alum-Guard Commercial PRODUCT: Ascot 3-Rail Design COLOR: Black
ACM1	ALUMINUM COMPOSITE MATERIAL PANEL MANUF: ALPOLIC FINISH: CMR CHAMPAGNE (MATCH EXISTING ACM PANELS)	NOTES: ALL FENCING NOT SHOWN IN ELEVATIONS FOR CLARITY. SEE SITE PLAN AND PERSPECTIVE VIEWS



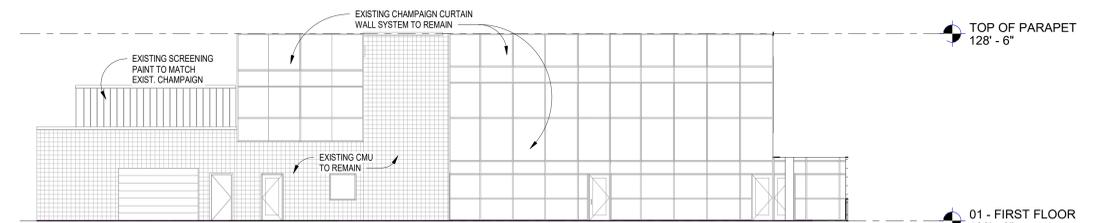
7 ELEVATION AT LOBBY ENTRANCE A302A
3/32" = 1'-0"



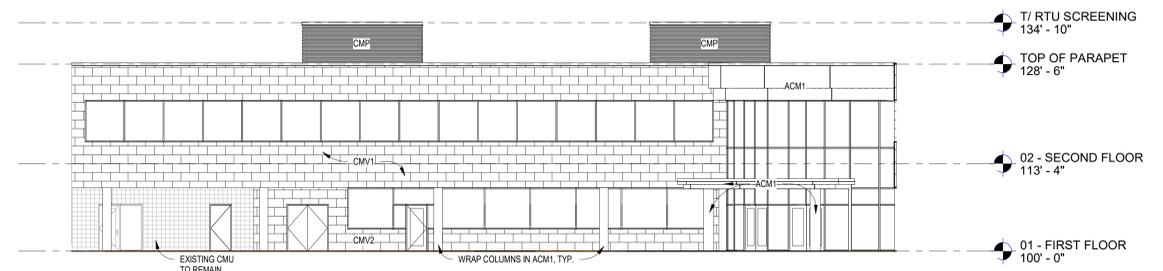
6 SOUTH ELEVATION AT INSET 1
3/32" = 1'-0"

5 WEST ELEVATION AT INSET 2
3/32" = 1'-0"

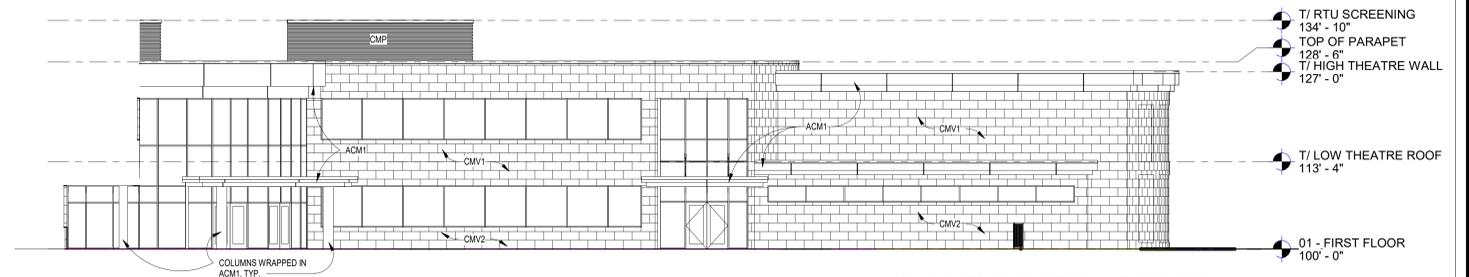
4 WEST ELEVATION AT INSET 3
3/32" = 1'-0"



3 NORTH ELEVATION AT EXISTING
3/32" = 1'-0"



2 EAST ELEVATION AT ADDITION
3/32" = 1'-0"



1 SOUTH ELEVATION AT ADDITION
3/32" = 1'-0"

Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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Sheet Title
BUILDING ELEVATIONS

Project Number: 20210400
Sheet Number

A302A



EXISTING BUILDING / SITE



ISTHMUS MONTESSORI ACADEMY

1802 PANKRATZ STREET, MADISON, WI
 ISTHMUS MONTESSORI ACADEMY
 1802 PANKRATZ STREET
 MADISON, WI 53704

ISSUE DATES:		
Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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Sheet Title
EXISTING BUILDING PHOTOS

Project Number: 20210400
 Sheet Number

A303



1 NORTH WEST VIEW FROM PANKRATZ ST.
A304 12" = 1'-0"



2 SOUTH EAST VIEW FROM PACKERS AVE.
A304 12" = 1'-0"

ISTHMUS MONTESSORI ACADEMY

1802 PANKRATZ STREET, MADISON, WI
 ISTMUS MONTESSORI ACADEMY
 1802 PANKRATZ STREET
 MADISON, WI 53704

ISSUE DATES:		
Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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Sheet Title
PERSPECTIVES

Project Number: 20210400
 Sheet Number

A304



1 NORTH WEST AERIAL VIEW
A305 12" = 1'-0"



2 SOUTH WEST AERIAL VIEW
A305 12" = 1'-0"

ISTHMUS MONTESSORI ACADEMY
1802 PANKRATZ STREET, MADISON, WI

ISTHMUS MONTESSORI ACADEMY
1802 PANKRATZ STREET
MADISON, WI 53704

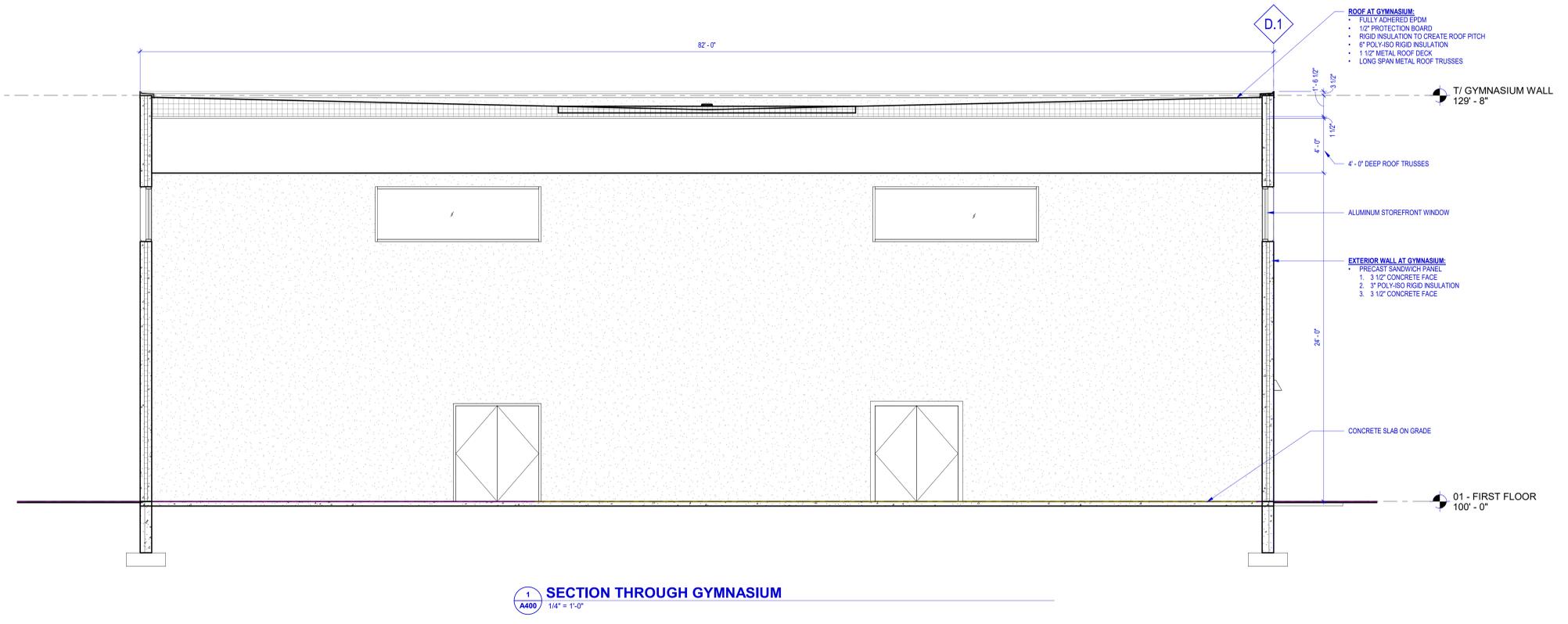
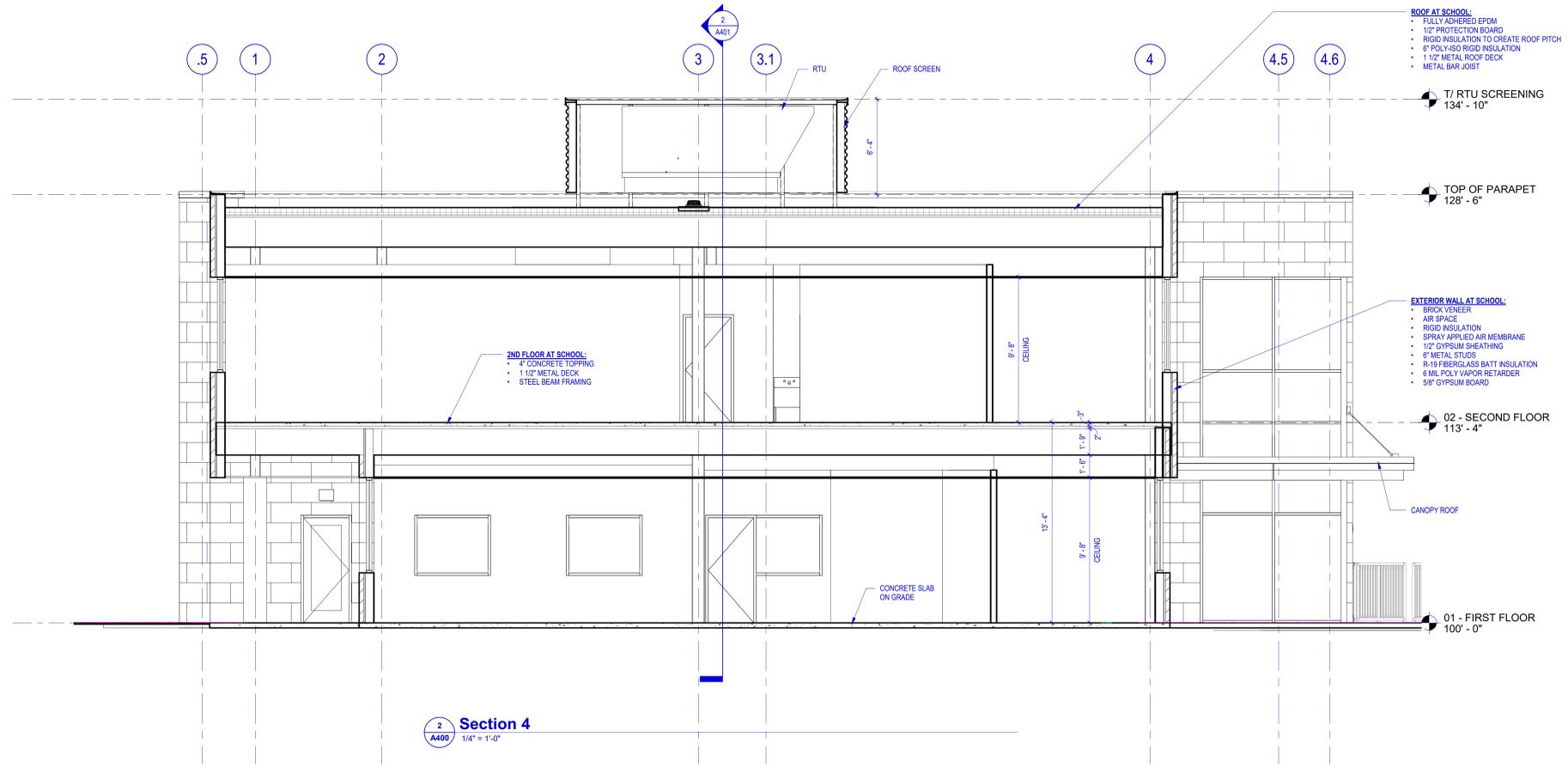
ISSUE DATES:		
Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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Sheet Title
PERSPECTIVES

Project Number: 20210400
Sheet Number

A305



ISSUE DATES:

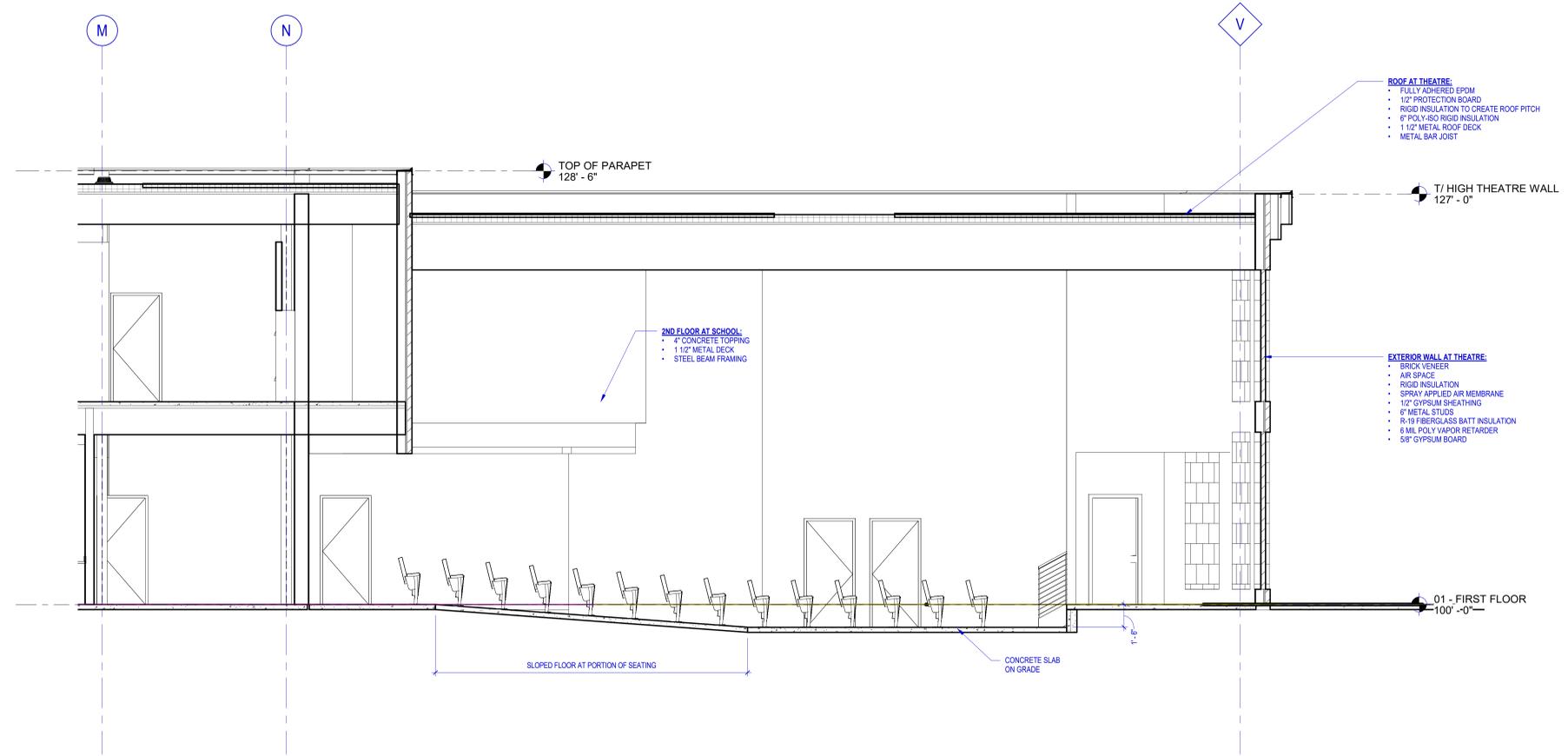
Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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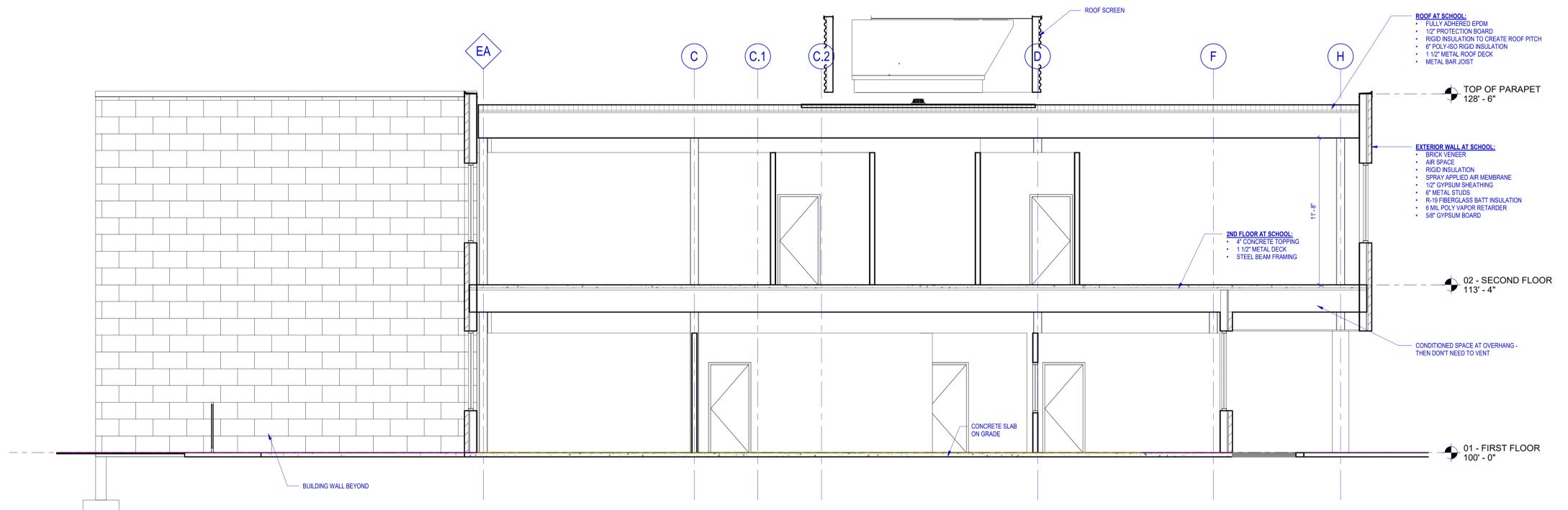
Sheet Title
BUILDING SECTIONS

Project Number: 20210400
 Sheet Number

A400



2 BUILDING SECTION AT THEATRE
 A401 1/4" = 1'-0"



1 BUILDING SECTION AT ADDITION 2
 A401 1/4" = 1'-0"

ISSUE DATES:

Issue	Description	Date
UDC	UDC / PLAN COMMISSION	03-14-22

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Sheet Title
BUILDING SECTIONS

Project Number: 20210400
 Sheet Number

A401

SITE PHOTOMETRIC SCHEDULE				
Calculation Points Name	Average	Maximum	Minimum	
Parking Lot North	3 fc	6 fc	0 fc	
Parking Lot Central	2 fc	7 fc	0 fc	
Parking Lot South	2 fc	6 fc	0 fc	
East of Parking Lot	0 fc	1 fc	0 fc	
West of Parking Lot	1 fc	2 fc	0 fc	
South of Parking Lot	0 fc	1 fc	0 fc	
Property Line	0 fc	0 fc	0 fc	
Bus Pull-Up Area	0 fc	3 fc	0 fc	
YCCNDO Room Exterior	1 fc	2 fc	0 fc	
Theater North Personnel Door	29 fc	56 fc	7 fc	
Gymnasium West Exterior Wall	0 fc	0 fc	0 fc	
North Classroom Exterior	18 fc	51 fc	3 fc	
Gymnasium North Exterior Wall	6 fc	43 fc	0 fc	
Theater East Exterior Wall	0 fc	1 fc	0 fc	
West Classroom Exterior	0 fc	0 fc	0 fc	
Courtyard Interior	14 fc	27 fc	0 fc	
Courtyard Island	4 fc	19 fc	2 fc	

SITE LIGHTING FIXTURE SCHEDULE								
TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	VOLTAGE	WATTS	LAMP	MOUNTING	NOTES
C	EXTERIOR WALL LIGHT	LITHONIA	OVFL LED 2RH 40K 120 WH HP17	120 V	20 W	LED	WALL	
E	EXTERIOR WALL LIGHT	LITHONIA	WDGE2 LED P3 40K 80CRI VW MVOLT SRM DNAXD	120 V	23 W	LED	WALL	
F	EXTERIOR CANOPY LIGHT	LITHONIA	VCVL LED V4 P3 40K 80CRI TSE MVOLT SRM	120 V	43 W	LED	SURFACE	
G	UPLIGHT/DOWNLIGHT WALL SCONCE	WAC LIGHTING	WS-W205A-L	120 V	30 W	LED	WALL	PROVIDE 4000K COLOR TEMPERATURE.
H	DOWNLIGHT WALL SCONCE	WAC LIGHTING	WS-W205A-L	120 V	36 W	LED	WALL	PROVIDE 4000K COLOR TEMPERATURE.
S1	PARKING LOT POLE LIGHT	LITHONIA	KAD LED 40C 530 R5 MVOLT DWXHD	120 V	71 W	LED	POLE	PROVIDE MANUFACTURER'S MOUNTING ACCESSORIES AS REQUIRED. PROVIDE LIGHT POLE, MODEL SSS1684-4-BH, AS MANUFACTURED BY HAPCO, OR EQUAL.

TYPE S1 LIGHT FIXTURES ARE POLE-MOUNTED IN THE PARKING LOT AT 18'-0" AFG.

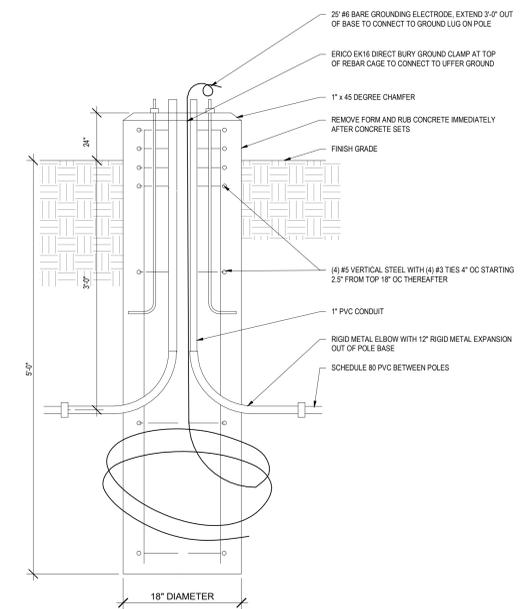
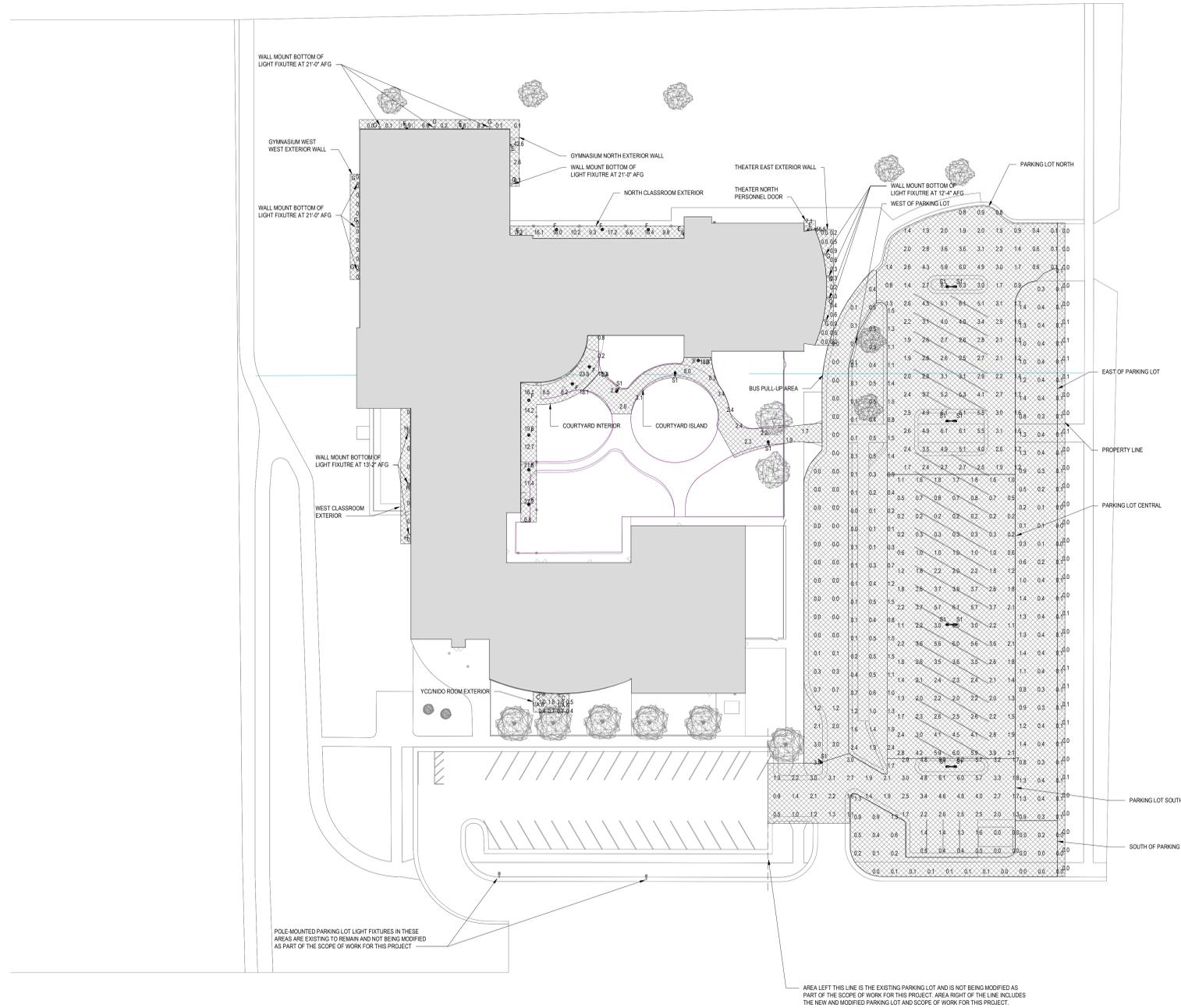
TYPE C LIGHT FIXTURES ARE SURFACE-MOUNTED UNDER THE CANOPY AWNING AT 6'-4" AFG.

TYPE E LIGHT FIXTURES ARE WALL-MOUNTED AT 8'-6" AFG.

TYPE F LIGHT FIXTURES ARE SURFACE-MOUNTED UNDER CANOPY AREAS AT 9'-6" AFG.

TYPE G LIGHT FIXTURES ARE WALL-MOUNTED AT HEIGHTS SHOWN ON THIS DRAWING.

TYPE H LIGHT FIXTURES ARE WALL-MOUNTED AT HEIGHTS SHOWN ON THIS DRAWING.



TRUE PLAN NORTH NORTH
1 SITE ELECTRICAL PHOTOMETRICS
 1" = 30'-0"

2 POLE BASE DETAIL
 NONE



Isthmus Montessori Academy
 1802 Penitentiary St., Madison, WI 53704
Isthmus Montessori Academy
 1802 Penitentiary St.
 Madison, WI 53704

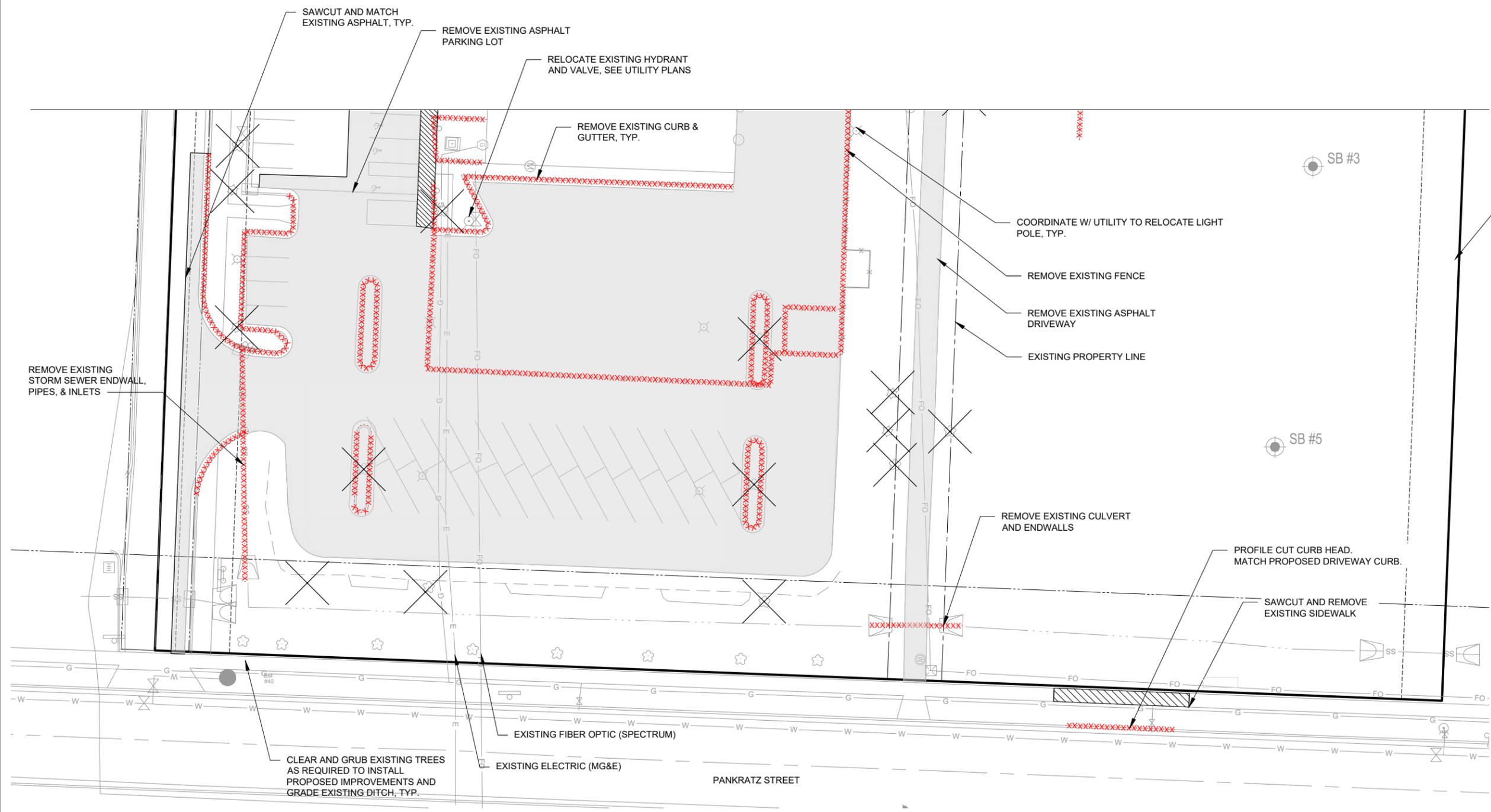
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Issue	Description	Date
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Sheet Title
SITE PHOTOMETRICS

Project Number: 20210400
 Sheet Number

E100P



LEGEND

- | | | | | | | | | | | | |
|---------|-----------------------|-----------|------------------------|-----------|----------------|----------------------|----------------------------------|-------------------------|--------------|--|--------------------|
| —●— | BOUNDARY LINE | —W— | WATER LINE W/SIZE | N - NORTH | □ | CURB INLET (INL) | ☐ | AIR CONDITIONER | ▨ | CONCRETE DRIVEWAY/SIDEWALK REMOVAL | |
| - - - - | PROPERTY LINE | —G— | GAS LINE | S - SOUTH | ⊙ | MANHOLE | ☐ | POWER POLE | ▩ | GRAVEL DRIVEWAY REMOVAL | |
| —+— | RIGHT-OF-WAY LINE | - x - x - | FENCE LINE | E - EAST | ⌋ | ROOF DRAIN | — | UTILITY POLE GUY ANCHOR | — | UNDERGROUND UTILITY REMOVAL (INCLUSIVE TO UTILITY BID ITEMS) | |
| —E— | UNDERGROUND ELECTRIC | — | CONTOUR LINE | W - WEST | ⊠ | ELECTRIC TRANSFORMER | ⊙ | LIGHT POLE | XXXXX | CURB AND GUTTER REMOVAL | |
| —T— | UNDERGROUND TELEPHONE | — | PARKING STRIPE | ◇ | BUSH | ⊠ | TELEPHONE PEDESTAL, FIELD VERIFY | ⊙ | GROUND LIGHT | ✕ | TREE/STUMP REMOVAL |
| —O— | OVERHEAD ELECTRIC | — | BENCHMARK | ☼ | DECIDUOUS TREE | ⊠ | TELEPHONE MANHOLE | ⊙ | SIGN | | |
| —SAN— | SANITARY SEWER | ● | FOUND 1 1/4" IRON PIPE | ⊙ | HYDRANT | ⊠ | HANDHOLE | ⊙ | FLAGPOLE | | |
| —SS— | STORM SEWER | ◆ | FOUND 3/4" IRON REBAR | ⊙ | WATER VALVE | ⊙ | ELECTRIC METER | | | | |
| | | () | RECORD INFORMATION | ⊙ | CURB STOP | ⊙ | GAS METER | | | | |
| | | | | ⊙ | STORM MANHOLE | | | | | | |

BENCHMARK TABLE				
ID	DESC.	NORTHING	EASTING	ELEVATION
CP #1	MAG NAIL	499,154.20	829,494.02	881.49
CP #2	MAG NAIL	499,270.25	829,177.70	883.71
CP #3	BARN SPIKE	499,171.78	828,991.64	881.19
CP #4	MAG NAIL	498,930.81	829,176.37	882.25
BM #40	TSOH	498,903.39	829,444.67	882.22

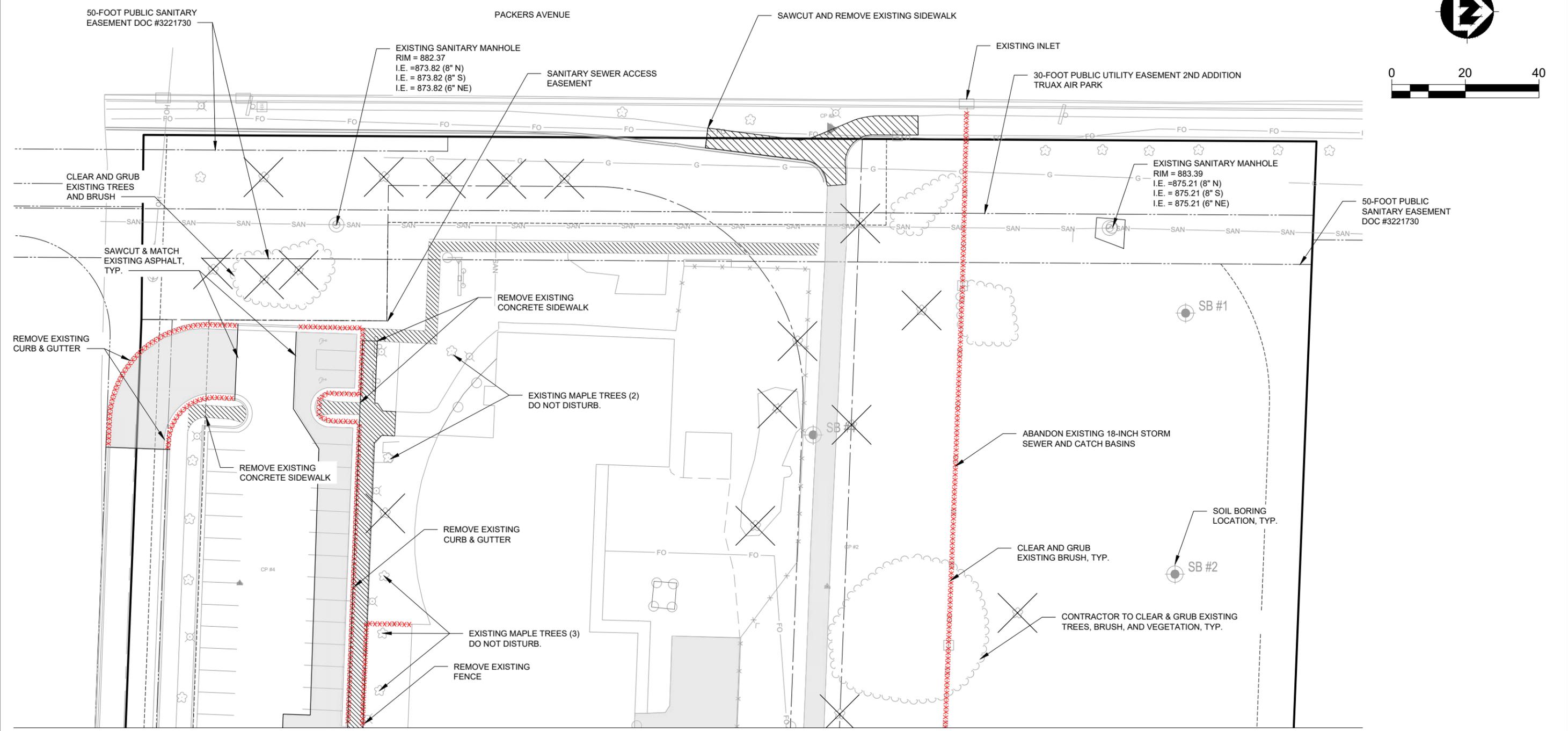
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3/11/2022 12:05 PM	LPS	-	-	-	-
	DESIGNED BY: BJK	-	-	-	-
	CHECKED BY: Init	-	-	-	-

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ISTHMUS MONTESSORI ACADEMY EXPANSION
 ISTHMUS MONTESSORI ACADEMY
 MADISON, WISCONSIN

EXISTING SITE & REMOVALS PLAN - EAST

PROJECT NO.
21586000
 SHEET
C100



LEGEND

- | | | | | | |
|-----------------------------|--------------------------|--------------------|------------------------------------|---------------------------|--|
| — BOUNDARY LINE | —W— WATER LINE W/SIZE | N - NORTH | ▭ CURB INLET (INL) | ☐ AIR CONDITIONER | ▨ CONCRETE DRIVEWAY/SIDEWALK REMOVAL |
| - - - PROPERTY LINE | — GAS LINE | S - SOUTH | ⊕ MANHOLE | ☐ POWER POLE | ▨ GRAVEL DRIVEWAY REMOVAL |
| - - - RIGHT-OF-WAY LINE | - x - x - FENCE LINE | E - EAST | ⌋ ROOF DRAIN | → UTILITY POLE GUY ANCHOR | — UNDERGROUND UTILITY REMOVAL (INCLUSIVE TO UTILITY BID ITEMS) |
| - - - UNDERGROUND ELECTRIC | — CONTOUR LINE | W - WEST | ⊠ ELECTRIC TRANSFORMER | ⊗ LIGHT POLE | XXXXX CURB AND GUTTER REMOVAL |
| - - - UNDERGROUND TELEPHONE | — PARKING STRIPE | ⊙ BUSH | ⊠ TELEPHONE PEDESTAL, FIELD VERIFY | ⊗ GROUND LIGHT | — TREE/STUMP REMOVAL |
| - - - OVERHEAD ELECTRIC | ● BENCHMARK | ⊙ DECIDUOUS TREE | ⊠ TELEPHONE MANHOLE | ⊗ SIGN | |
| — SAN — SANITARY SEWER | ● FOUND 1 1/4" IRON PIPE | ⊙ SANITARY MANHOLE | ⊠ HANDHOLE | ⊗ FLAGPOLE | |
| — SS — STORM SEWER | ◆ FOUND 3/4" IRON REBAR | ⊙ HYDRANT | ⊠ GAS METER | | |
| | () RECORD INFORMATION | ⊙ WATER VALVE | | | |
| | | ⊙ CURB STOP | | | |
| | | ⊙ STORM MANHOLE | | | |

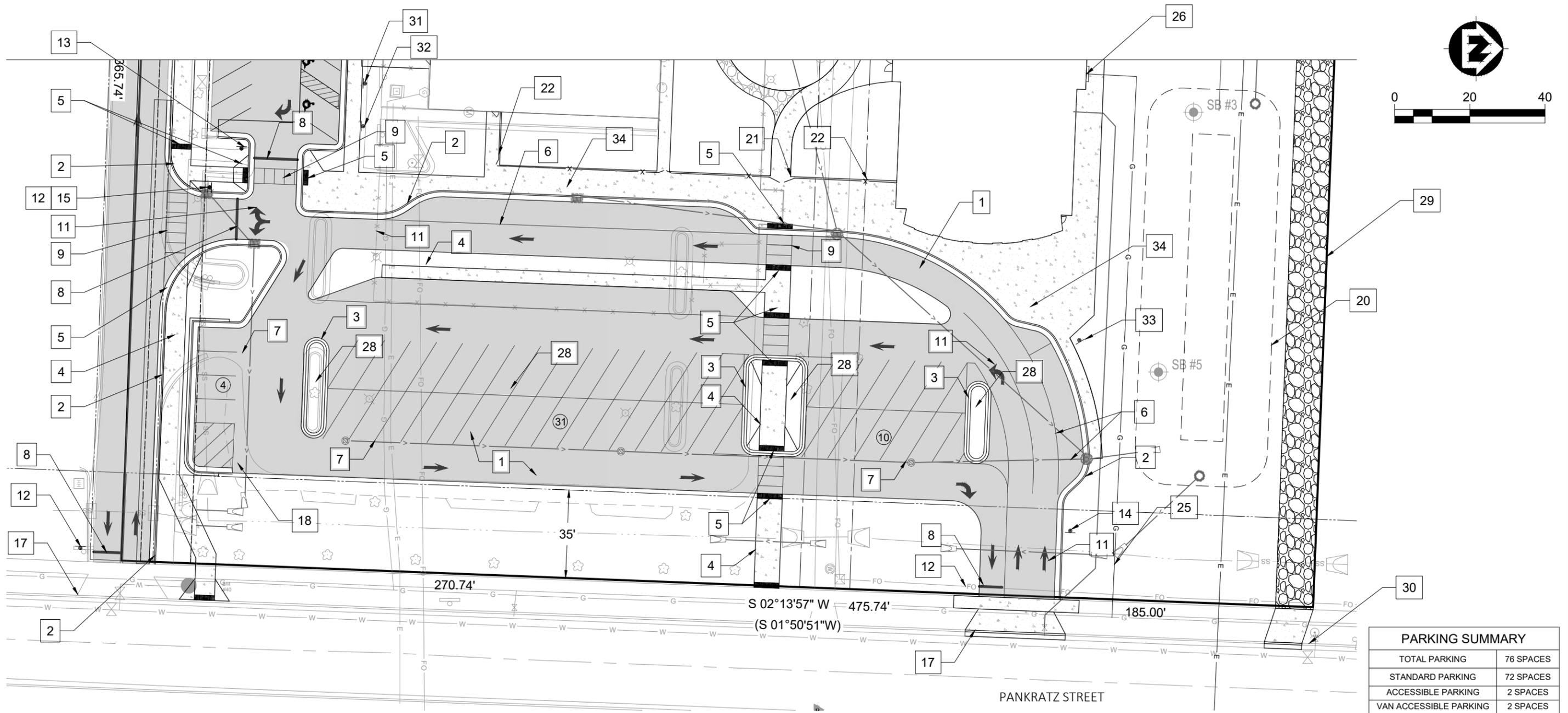
BENCHMARK TABLE				
ID	DESC.	NORTHING	EASTING	ELEVATION
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CP #2	MAG NAIL	499,270.25	829,177.70	883.71
CP #3	BARN SPIKE	499,171.78	828,991.64	881.19
CP #4	MAG NAIL	498,930.81	829,176.37	882.25
BM #40	TSOH	498,903.39	829,444.67	882.22

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
3/11/2022 12:05 PM	LPS				
	DESIGNED BY: BJK				
	CHECKED BY: Init				

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 ISTHMUS MONTESSORI ACADEMY
 MADISON, WISCONSIN

EXISTING SITE & REMOVALS PLAN - WEST
 PROJECT NO. 21586000
 SHEET C101



PARKING SUMMARY	
TOTAL PARKING	76 SPACES
STANDARD PARKING	72 SPACES
ACCESSIBLE PARKING	2 SPACES
VAN ACCESSIBLE PARKING	2 SPACES

LAND USE SUMMARY	
TOTAL AREA	4.91 ACRES
EXISTING BUILDING	0.32 ACRES
PROPOSED BUILDING	0.63 ACRES
ASPHALT PAVEMENT	1.13 ACRES
CONCRETE PAVEMENT	0.46 ACRES
LANDSCAPING	0.25 ACRES
STORM WATER POND	0.17 ACRES
GRASS	1.95 ACRES

LEGEND

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> 1. ASPHALT PARKING LOT/DRIVEWAY 2. CONCRETE CURB AND GUTTER, 30-INCH 3. CONCRETE CURB AND GUTTER, 24 INCH 4. CONCRETE SIDEWALK, 5-INCH 5. DETECTABLE WARNING FIELD 6. PAVEMENT MARKING, EPOXY, 4" YELLOW 7. PAVEMENT MARKING, EPOXY, 6" WHITE 8. PAVEMENT MARKING, EPOXY, STOP BAR, 18" WHITE 9. PAVEMENT MARKINGS, EPOXY, LADDER CROSSWALK, 24" WHITE 10. PAVEMENT MARKING, EPOXY, ACCESSIBLE PARKING SYMBOL, YELLOW | <ul style="list-style-type: none"> 11. PAVEMENT MARKING, EPOXY, ARROW SYMBOL (VARIOUS), YELLOW 12. SIGN, STOP 13. SIGN, YIELD 14. SIGN, BUSES ONLY 15. SIGN, DO NOT ENTER 16. BICYCLE RACK PAD, 20' X 19'. SEE SPACING DETAIL. 17. CONCRETE DRIVEWAY, 6-INCH 18. DUMPSTER ENCLOSURE, 16' X 20'. SEE ARCHITECTURE PLANS FOR ENCLOSURE DETAILS. 19. NOT USED 20. STORM WATER / BIOFILTRATION LOCATIONS 21. FENCE | <ul style="list-style-type: none"> 22. FENCE GATE 23. ELECTRIC TRANSFORMER AND CONCRETE PAD 24. PROPOSED ELECTRIC SERVICE 25. NATURAL GAS SERVICE 26. NATURAL GAS METER 27. LANDSCAPING 28. PARKING LOT POLE LIGHT 29. SANITARY SEWER EASEMENT ACCESS ROAD, SEE TYPICAL SECTION 30. PROFILE CUT EXISTING CURB AND GUTTER FOR EASEMENT ACCESS ROAD 31. ACCESSIBLE PARKING SIGN 32. ACCESSIBLE PARKING SIGN W/ VAN LOADING PLAQUE 33. SIGN, FIRE LANE, NO PARKING 34. FIRE LANE, CONCRETE SIDEWALK, 7-INCH THICK |
|--|---|---|

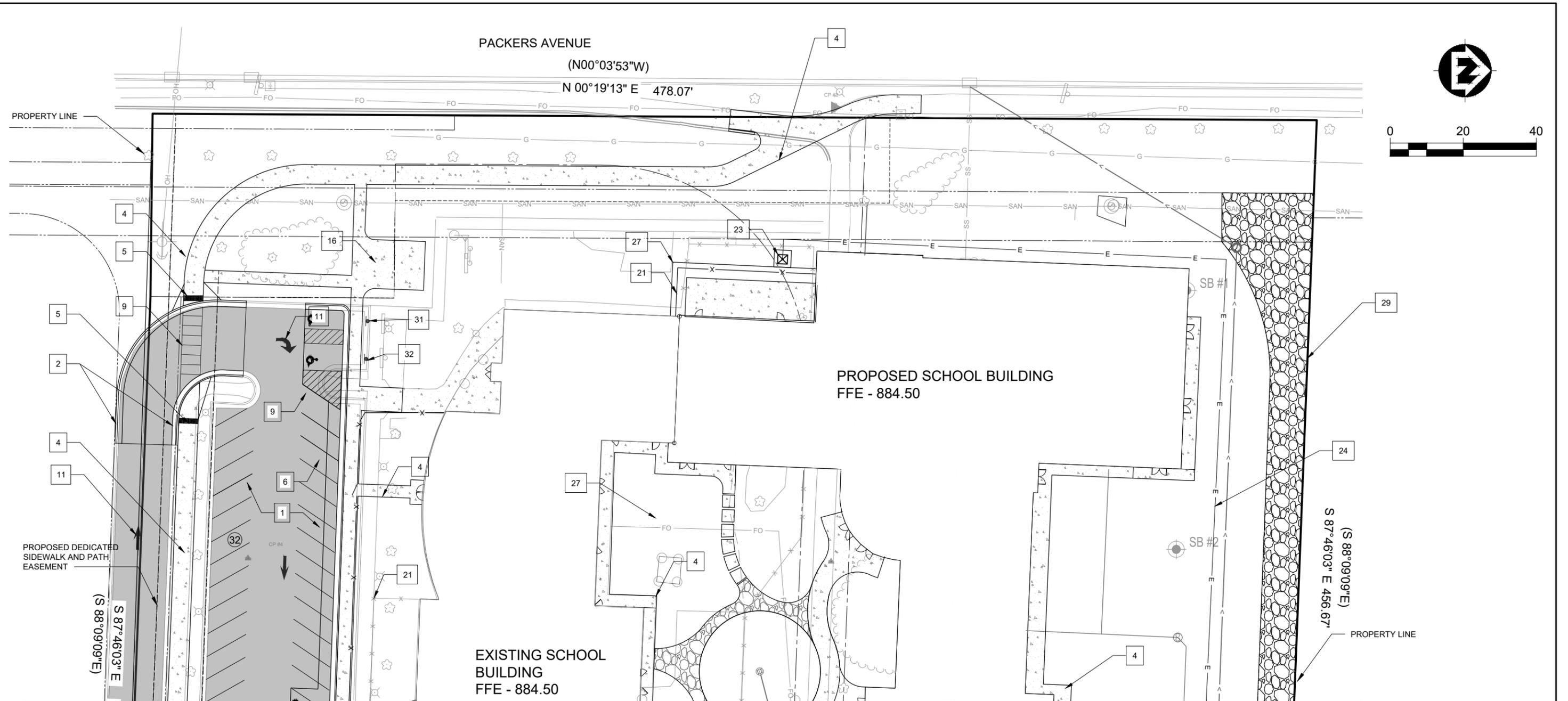
PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
	LPS				
	BJK				
	Init				

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ISTHMUS MONTESSORI ACADEMY EXPANSION
 ISTHMUS MONTESSORI ACADEMY
 MADISON, WISCONSIN

PROPOSED SITE LAYOUT - EAST

PROJECT NO.	21586000
SHEET	C102



LEGEND

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> 1. ASPHALT PARKING LOT/DRIVEWAY 2. CONCRETE CURB AND GUTTER, 30-INCH 3. CONCRETE CURB AND GUTTER, 24 INCH 4. CONCRETE SIDEWALK, 5-INCH 5. DETECTABLE WARNING FIELD 6. PAVEMENT MARKING, EPOXY, 4" YELLOW 7. PAVEMENT MARKING, EPOXY, 6" WHITE 8. PAVEMENT MARKING, EPOXY, STOP BAR, 18" WHITE 9. PAVEMENT MARKINGS, EPOXY, LADDER CROSSWALK, 24" WHITE 10. PAVEMENT MARKING, EPOXY, ACCESSIBLE PARKING SYMBOL, YELLOW | <ul style="list-style-type: none"> 11. PAVEMENT MARKING, EPOXY, ARROW SYMBOL (VARIOUS), YELLOW 12. SIGN, STOP 13. SIGN, YIELD 14. SIGN, BUSES ONLY 15. SIGN, DO NOT ENTER 16. BICYCLE RACK PAD, 20' X 19'. SEE SPACING DETAIL. 17. CONCRETE DRIVEWAY, 6-INCH 18. DUMPSTER ENCLOSURE, 16' X 20'. SEE ARCHITECTURE PLANS FOR ENCLOSURE DETAILS. 19. NOT USED 20. STORM WATER / BIOFILTRATION LOCATIONS | <ul style="list-style-type: none"> 21. FENCE 22. FENCE GATE 23. ELECTRIC TRANSFORMER AND CONCRETE PAD 24. PROPOSED ELECTRIC SERVICE 25. NATURAL GAS SERVICE 26. NATURAL GAS METER 27. LANDSCAPING 28. PARKING LOT POLE LIGHT 29. SANITARY SEWER EASEMENT ACCESS ROAD, SEE TYPICAL SECTION 30. PROFILE CUT EXISTING CURB AND GUTTER FOR EASEMENT ACCESS ROAD 31. ACCESSIBLE PARKING SIGN 32. ACCESSIBLE PARKING SIGN W/ VAN LOADING PLAQUE |
|--|--|---|

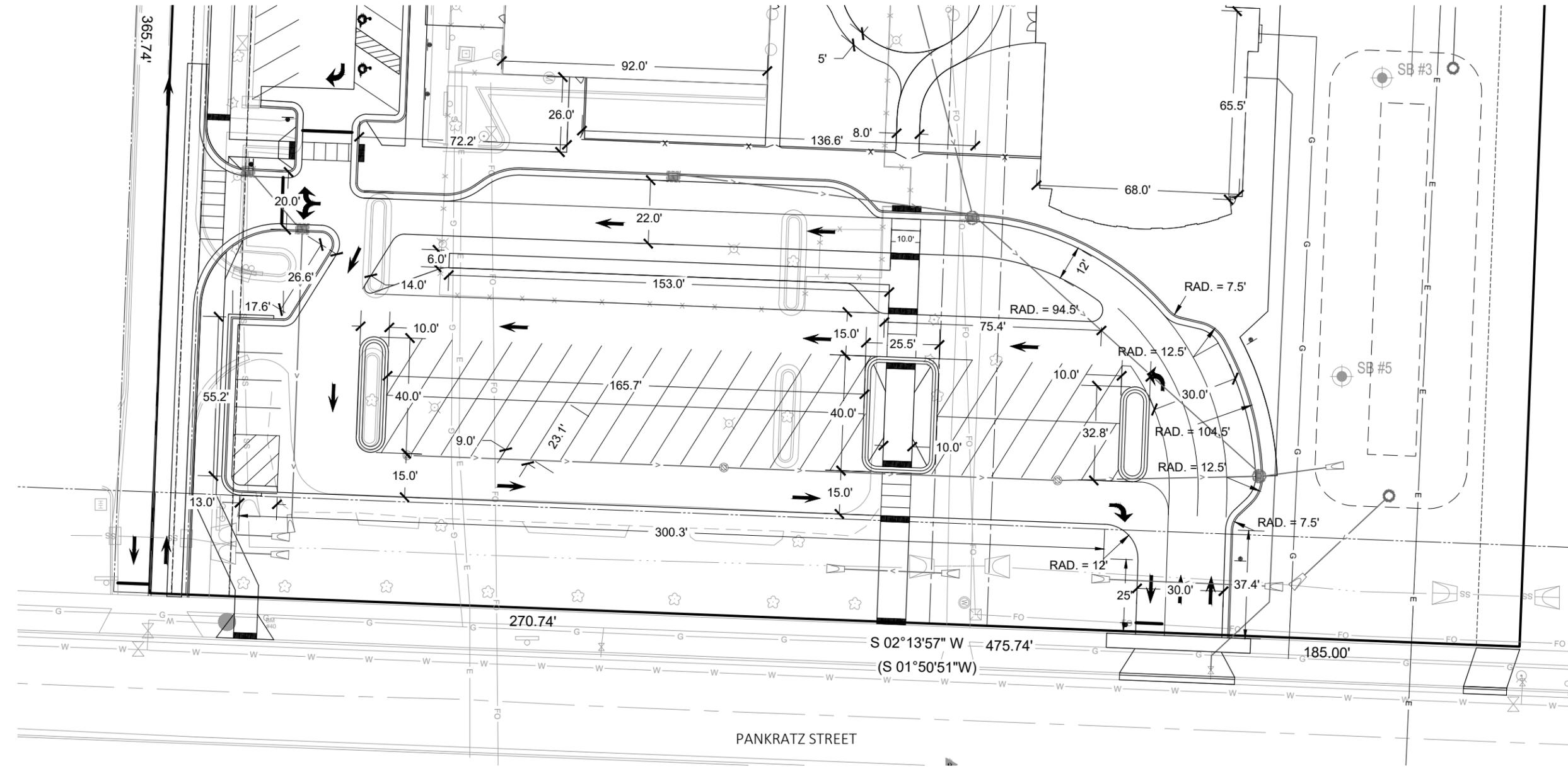
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PROPOSED SITE LAYOUT - WEST

PROJECT NO.
21586000
 SHEET
C103



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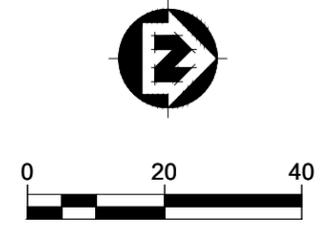
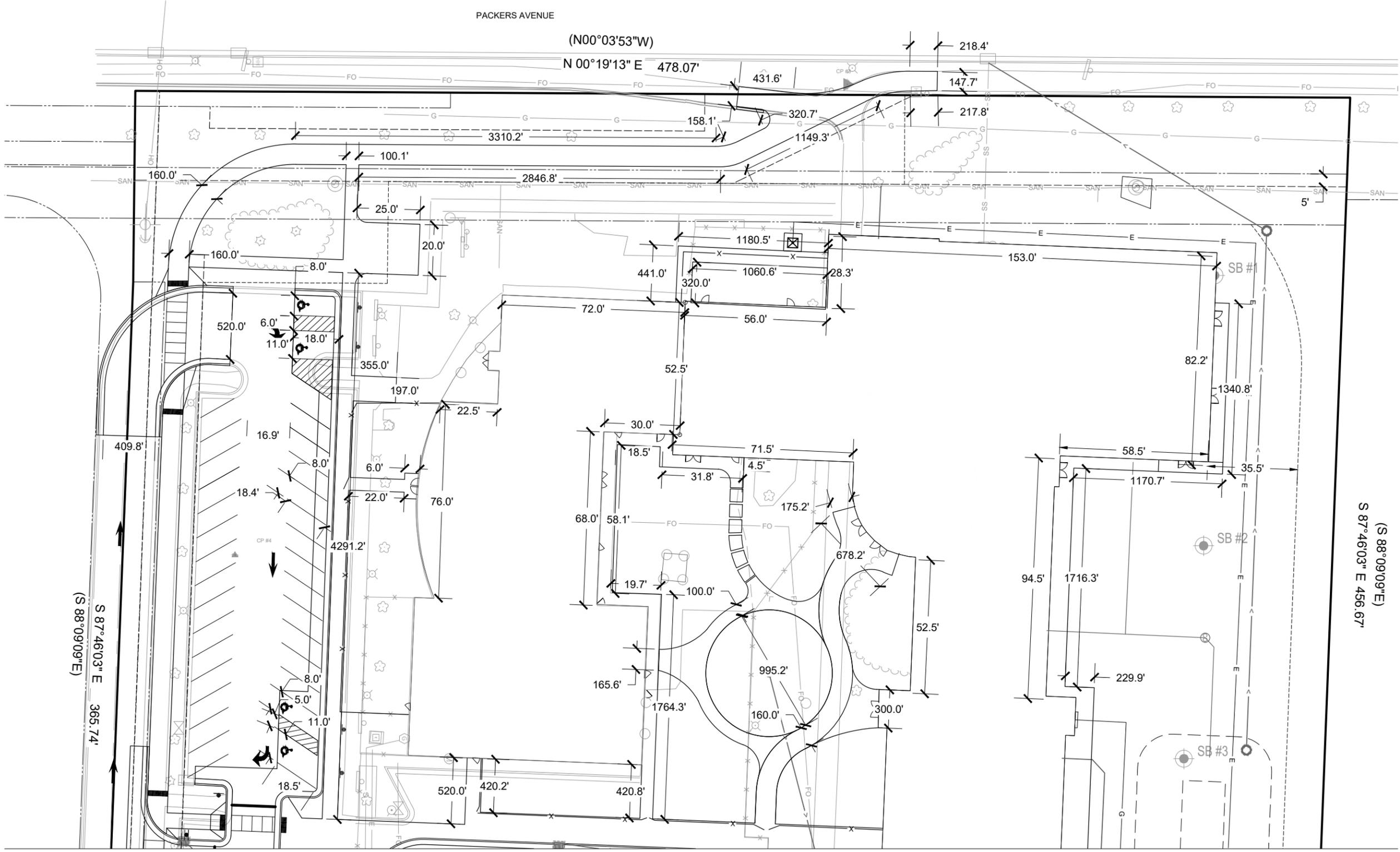
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PROPOSED SITE DIMENSIONS - EAST

PROJECT NO.
21586000
 SHEET
C104

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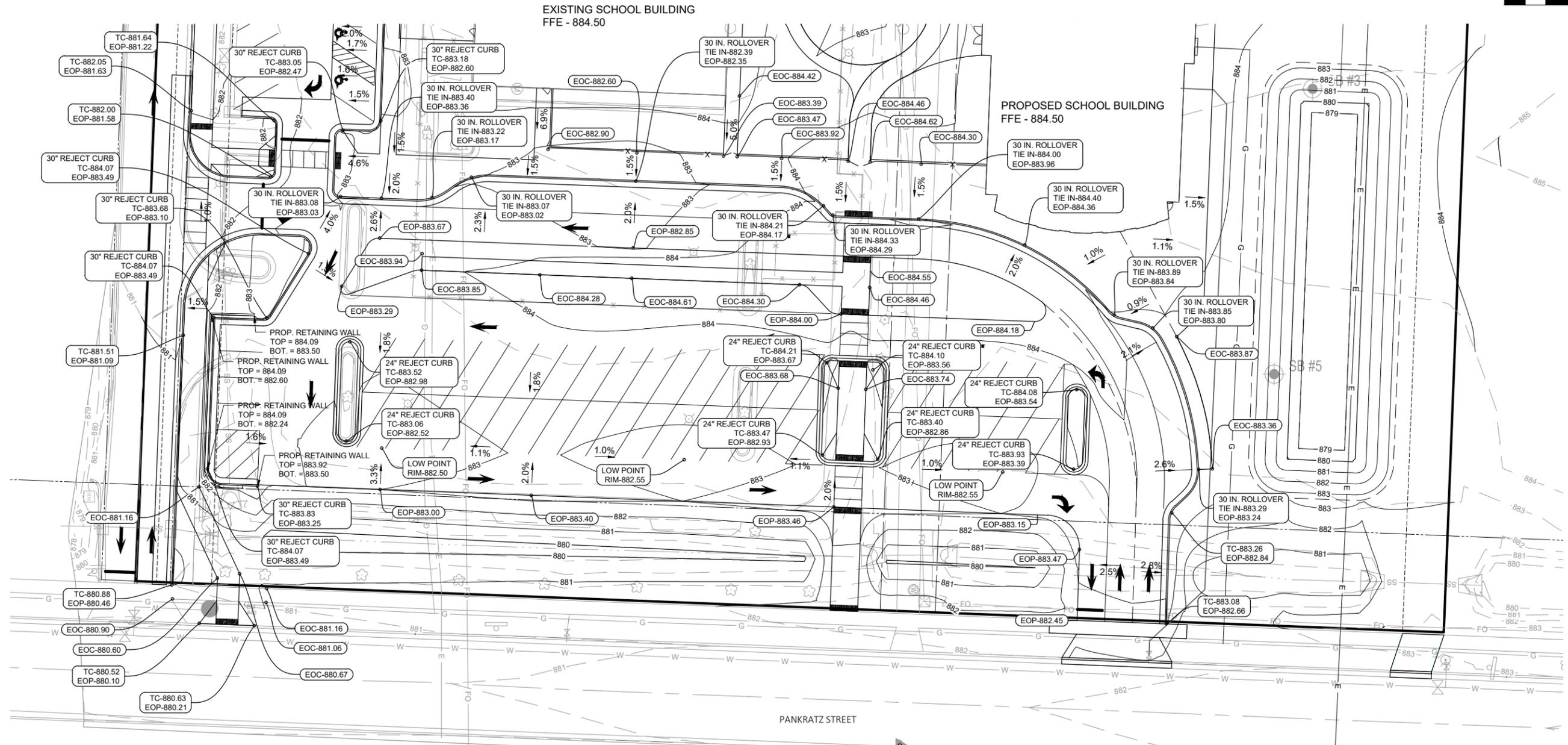
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PROPOSED SITE DIMENSIONS - WEST

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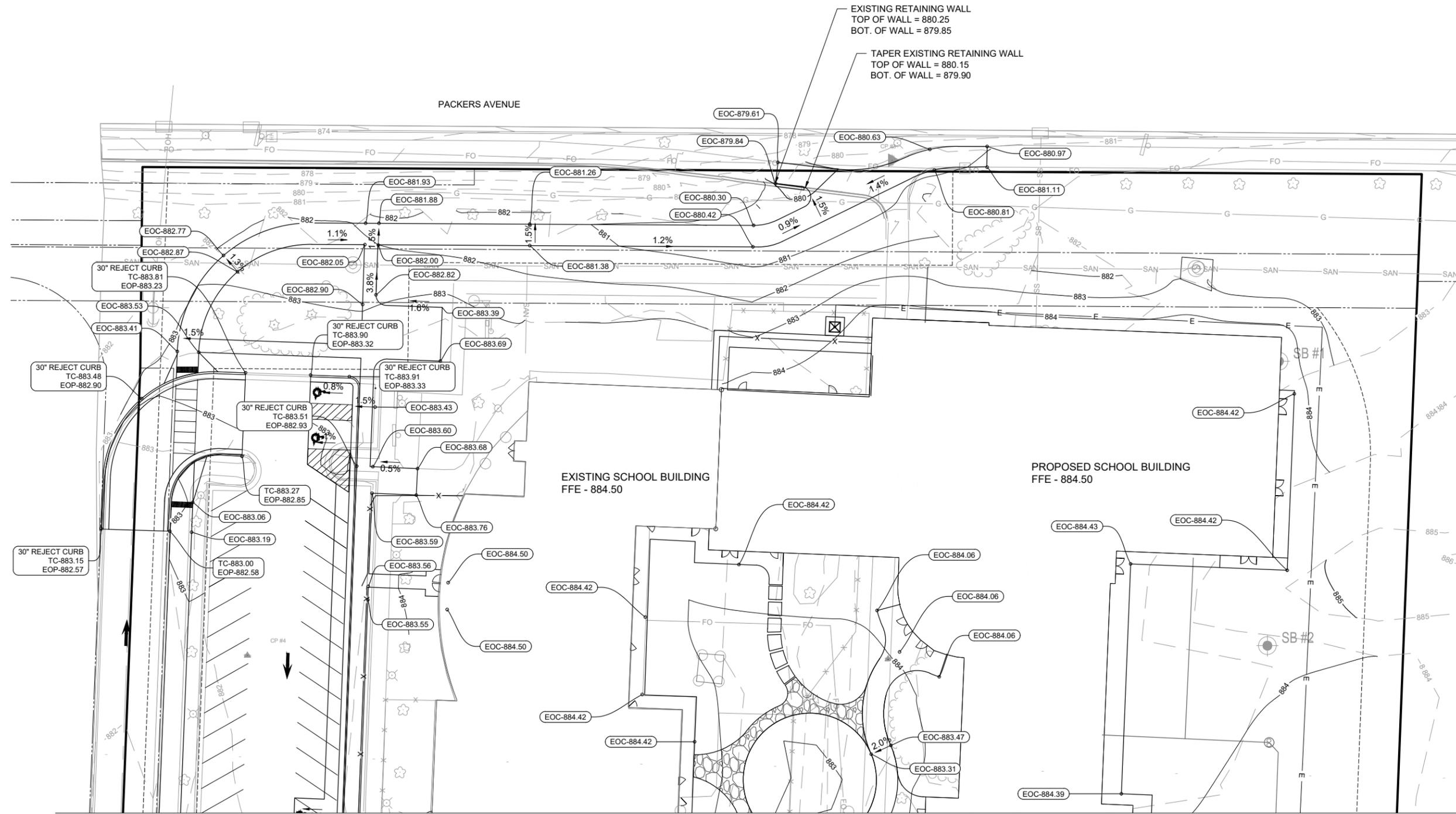
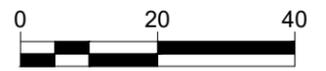


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GRADING PLAN - EAST

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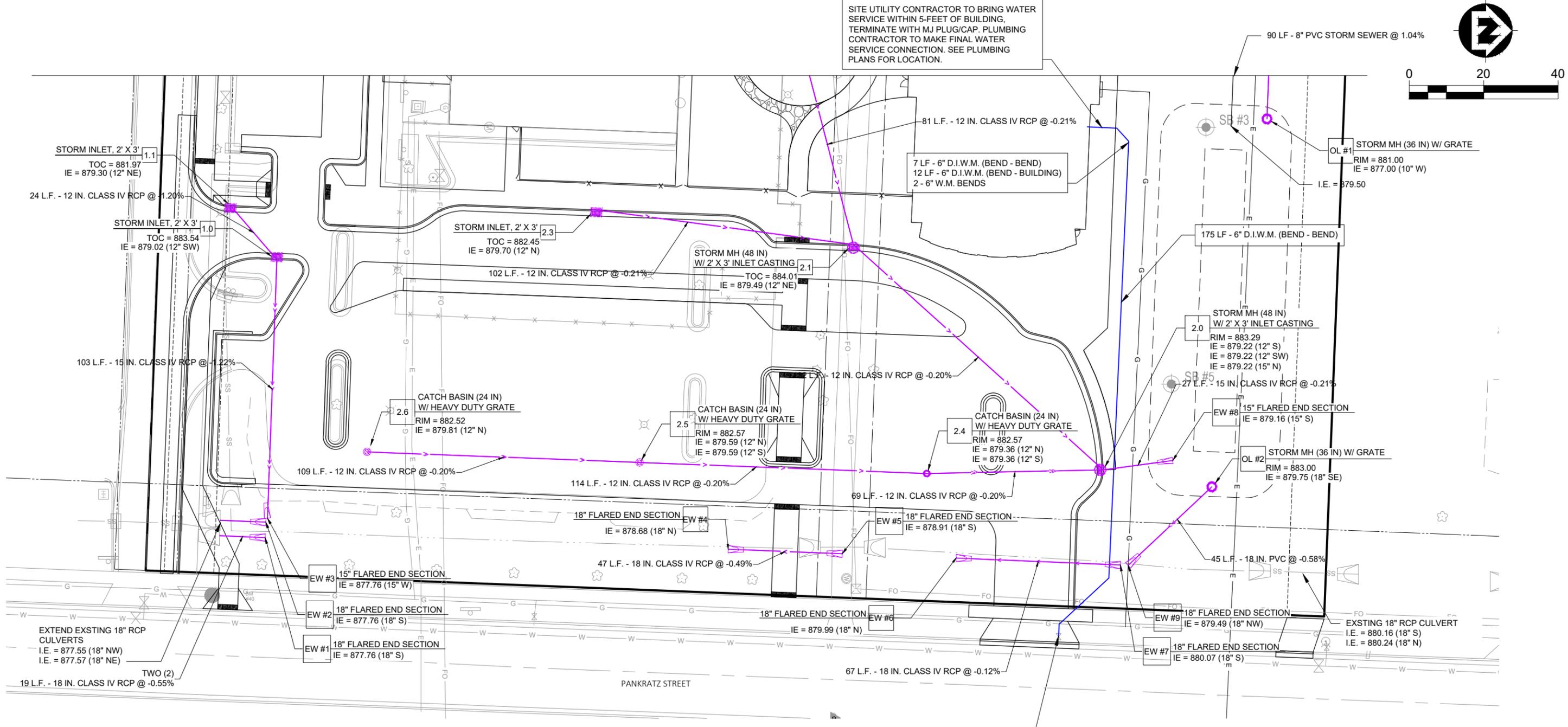
GRADING PLAN - WEST

PROJECT NO. 21586000
 SHEET C107

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SITE UTILITY CONTRACTOR TO BRING WATER SERVICE WITHIN 5-FOOT OF BUILDING, TERMINATE WITH MJ PLUG/CAP. PLUMBING CONTRACTOR TO MAKE FINAL WATER SERVICE CONNECTION. SEE PLUMBING PLANS FOR LOCATION.



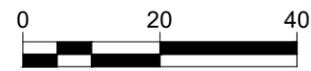
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UTILITY PLAN - EAST

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CONNECT TO EXISTING SANITARY MAIN.
1 - UTILITY LINE LOCATE (ULO)
I.E. APPROX. = 874.80

CONNECT TO EXISTING STORM INLET
I.E. = 876.30

PACKERS AVENUE

21 LF - 6" SANITARY LATERAL @ 2.00%

127 L.F. - 10 IN. PVC @ -0.20%

STORM MH (36 IN)
RIM = 882.60
IE = 876.56 (10" E)
IE = 876.56 (10" SW)

SITE UTILITY CONTRACTOR TO BRING SANITARY SEWER SERVICE
WITHIN 5- FEET OF BUILDING, TERMINATE WITH CAP. PLUMBING
CONTRACTOR TO MAKE FINAL CONNECTION. SEE PLUMBING PLANS
FOR LOCATION, TYP.
I.E. = 875.22

SITE UTILITY CONTRACTOR TO BRING STORM SEWER WITHIN
5- FEET OF BUILDING, TERMINATE WITH CAP. PLUMBING
CONTRACTOR TO MAKE FINAL CONNECTION. SEE PLUMBING
PLANS FOR LOCATION, TYP.
I.E. = 881.50

68 LF - 8" PVC STORM SEWER @
1.04%

PROPOSED SCHOOL
BUILDING
FFE - 884.50

CATCH BASIN (24 IN)
W/ LIGHT DUTY GRATE
RIM = 882.72
IE = 879.66 (12" E)

62 LF - 8" PVC STORM SEWER @
1.04%

STORM CLEAN OUT
RIM = 883.25
I.E. = 880.47

EXISTING SCHOOL BUILDING
FFE - 884.50

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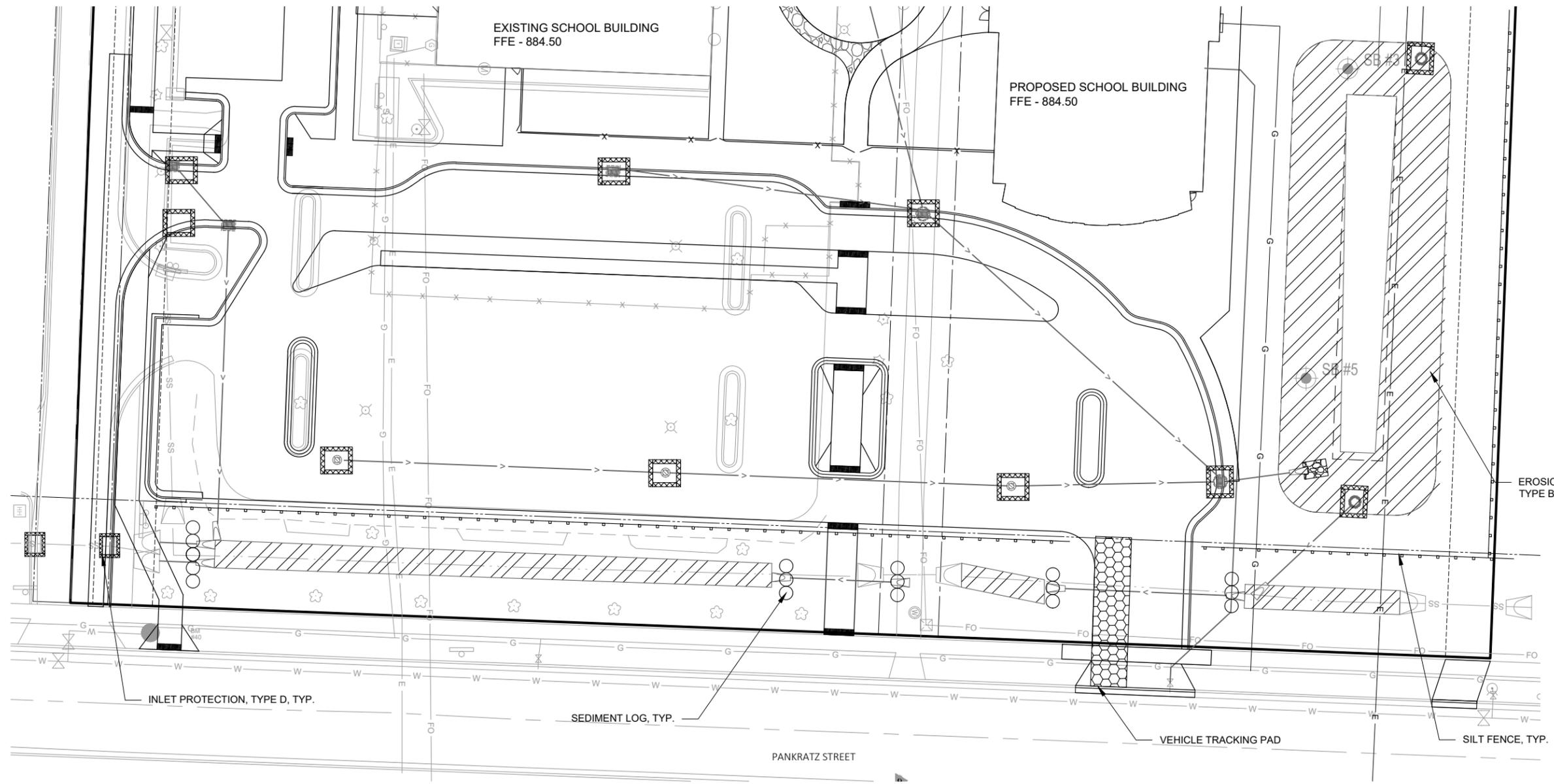
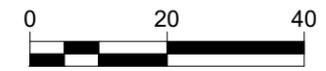
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UTILITY PLAN - WEST

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SHEET
C109

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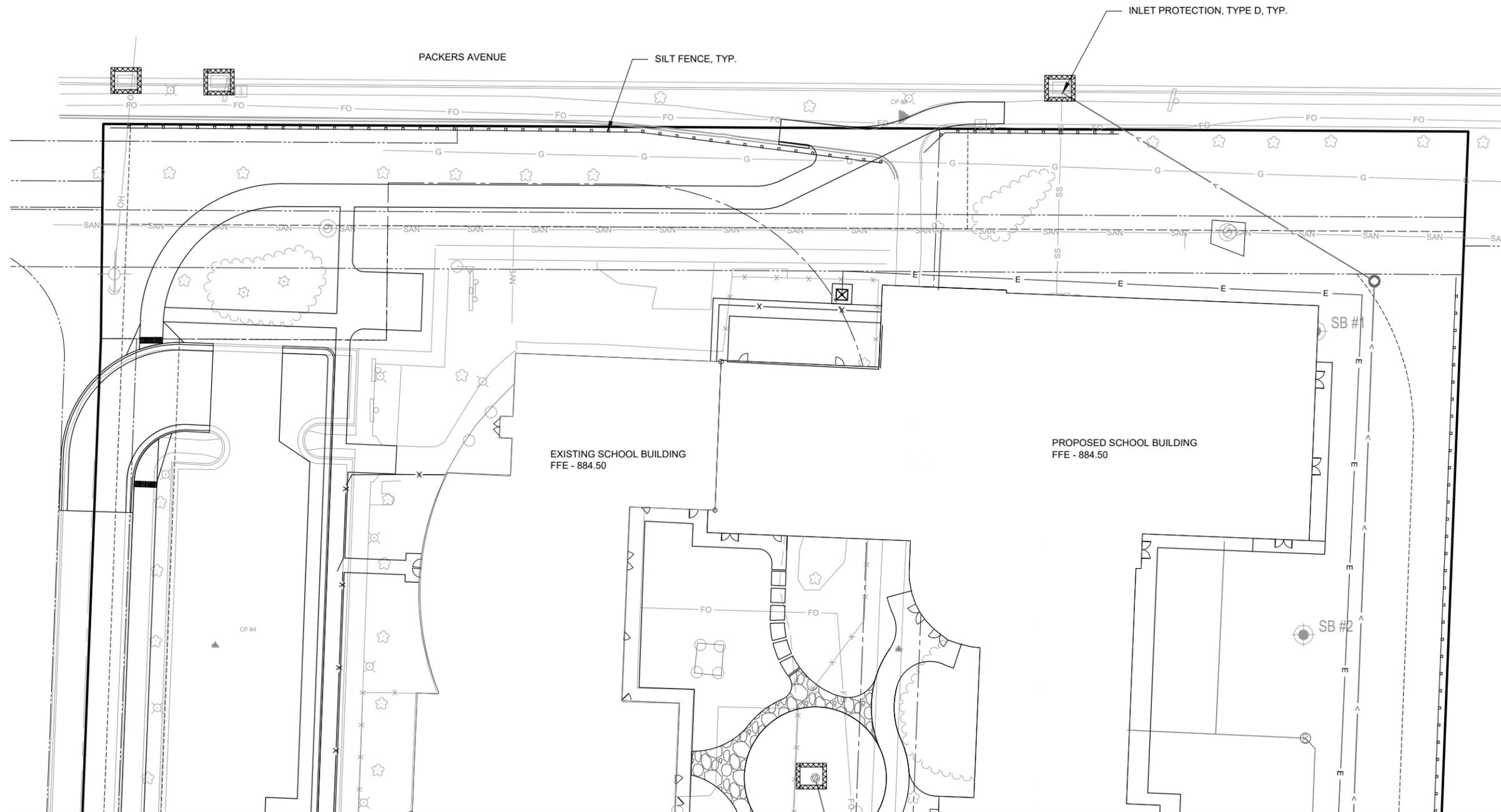
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EROSION CONTROL PLAN - EAST

PROJECT NO.
21586000
 SHEET
C110

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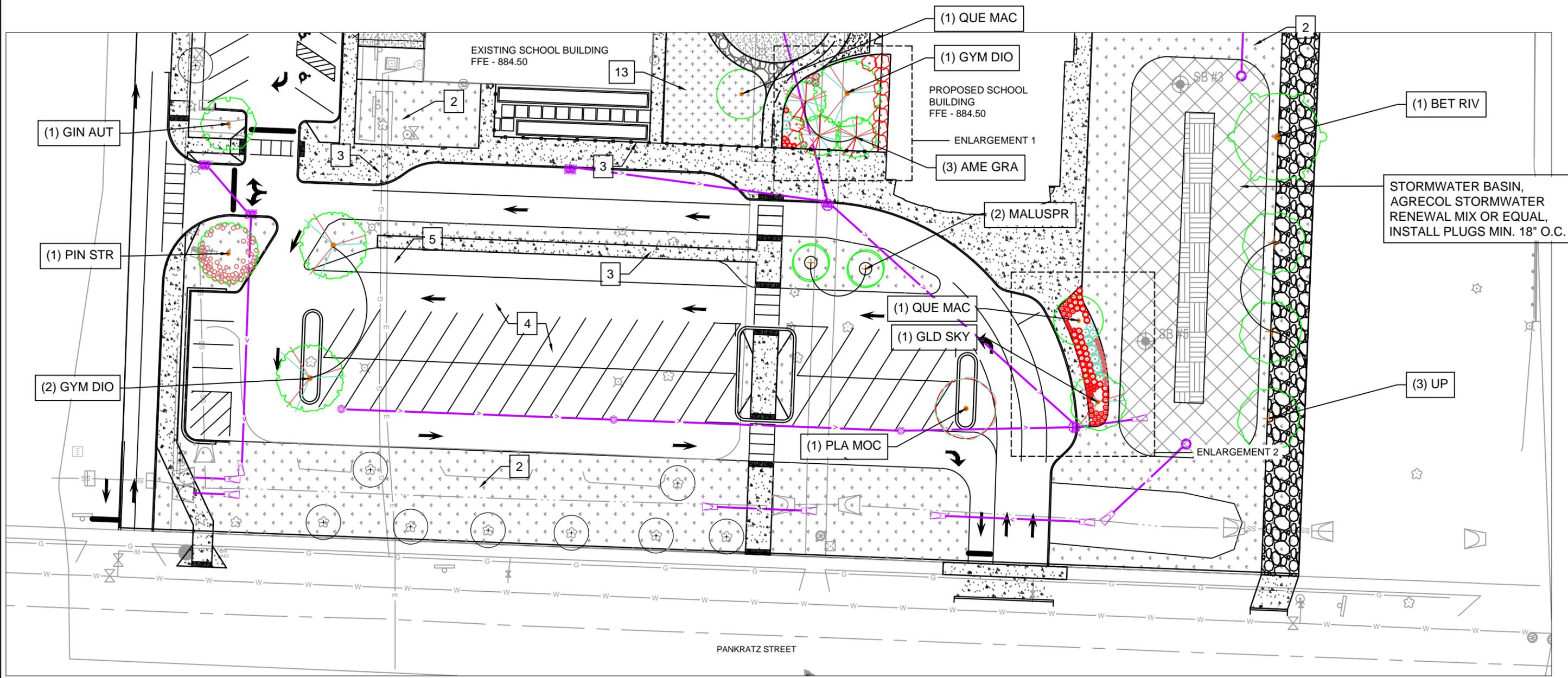
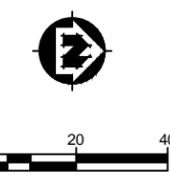


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EROSION CONTROL PLAN - WEST

PROJECT NO.
21586000
 SHEET
C111



LEGEND

- | | | |
|-----------------------------|---|-----------------------------------|
| 1. EXISTING TREE, TO REMAIN | 7. GARDEN | 13. PLAY SURFACING (MULCH/GRAVEL) |
| 2. LAWN | 8. FENCE | 14. STAMPED CONCRETE |
| 3. CONCRETE SIDEWALK | 9. DUMPSTER ENCLOSURE, 16' X 20'. SEE ARCHITECTURE PLANS FOR ENCLOSURE DETAILS. | 15. CRUSHED GRAVEL |
| 4. ASPHALT PAVEMENT | 10. STORM WATER / BIOFILTRATION LOCATIONS | |
| 5. LAMP POLE | 11. ELECTRIC TRANSFORMER AND CONCRETE PAD | |
| 6. BIKE RACKS | 12. PLAY SURFACING (UNITARY) | |

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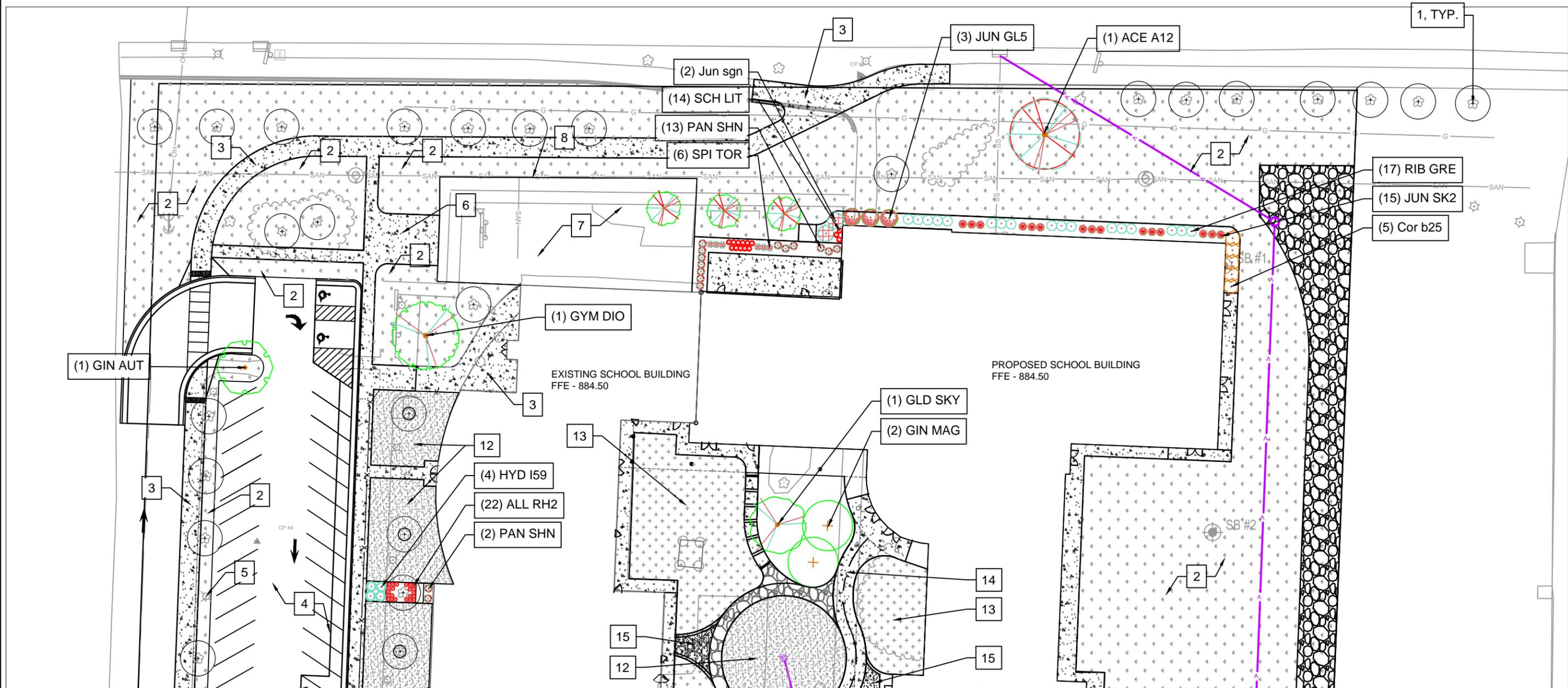
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LANDSCAPING PLAN - EAST

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 SHEET
C112

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LEGEND

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> 1. EXISTING TREE, TO REMAIN 2. LAWN 3. CONCRETE SIDEWALK 4. ASPHALT PAVEMENT 5. LAMP POLE 6. BIKE RACKS | <ul style="list-style-type: none"> 7. GARDEN 8. FENCE 9. DUMPSTER ENCLOSURE, 16' X 20'. SEE ARCHITECTURE PLANS FOR ENCLOSURE DETAILS. 10. STORM WATER / BIOFILTRATION LOCATIONS 11. ELECTRIC TRANSFORMER AND CONCRETE PAD 12. PLAY SURFACING (UNITARY) | <ul style="list-style-type: none"> 13. PLAY SURFACING (MULCH/GRAVEL) 14. STAMPED CONCRETE 15. CRUSHED GRAVEL |
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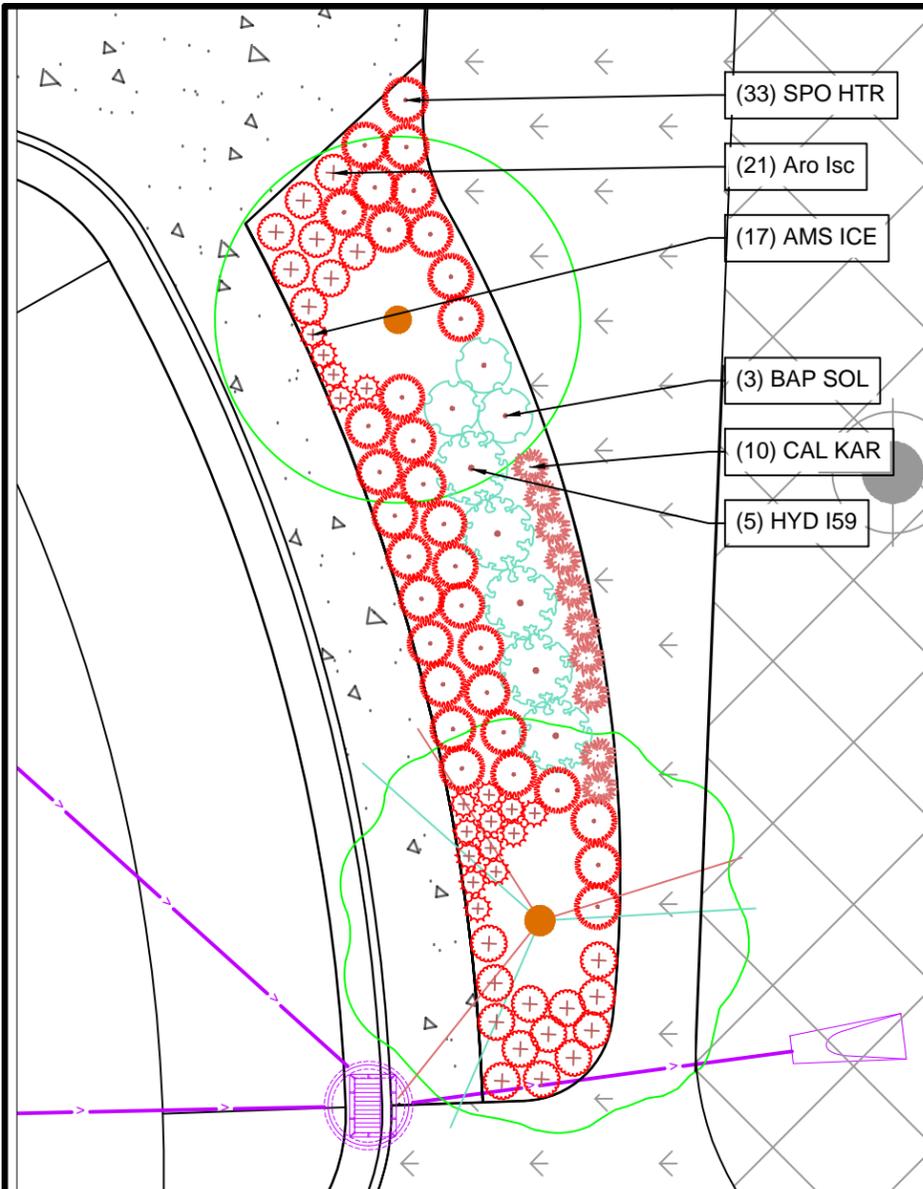


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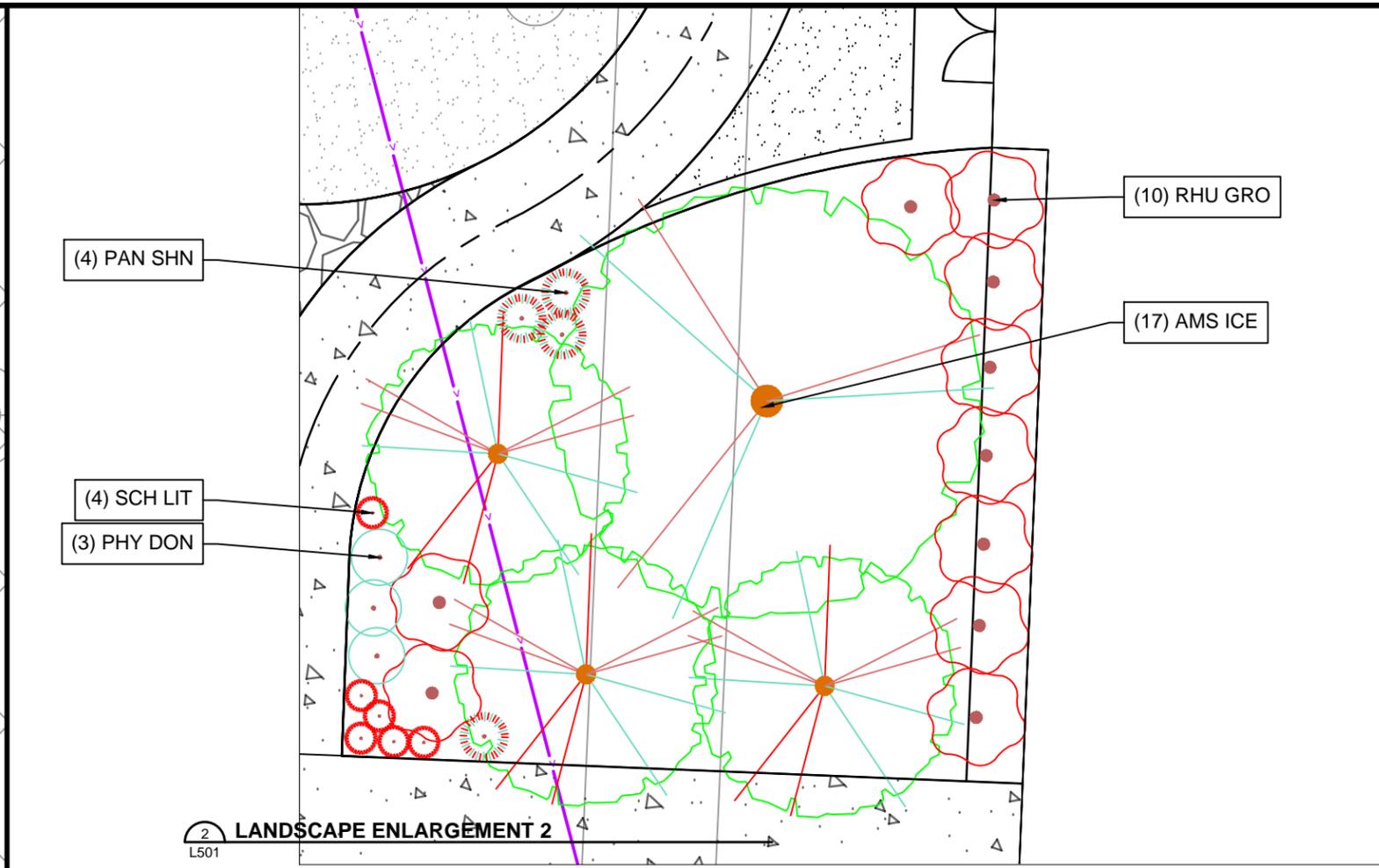
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LANDSCAPING PLAN - WEST

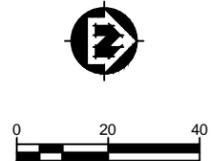
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C113



1 LANDSCAPE ENLARGEMENT 1
L501



2 LANDSCAPE ENLARGEMENT 2
L501



TREES		PLANT SCHEDULE					
Code	Botanical	Common	Size	Container	Notes	Quantity	Points Ea. Total
ACE A12	ACER X FREEMANII 'JEFFSRED'	AUTUMN BLAZE/ U-00AE MAPLE	2.5" CAL	B&B		1	35 35
GIN MAG	GINKGO BILOBA 'MAGYAR'	MAGYAR MAIDENHAIR TREE	2.0" CAL	B&B		2	15 30
MALUSPR	MALUS 'PROFUSION'	PROFUSION CRABAPPLE	1.5" CAL	B&B		2	15 30
QUE MAC	QUERCUS MACROCARPA	BURR OAK	3" CAL	B&B		2	35 70
BET RIV	BETULA NIGRA	RIVER BIRCH	8"	B&B	MultiStem	1	15 15
GIN AUT	GINKGO BILOBA 'AUTUMN GOLD' TM	MAIDENHAIR TREE	2" CAL	B&B		2	35 70
GLD SKY	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST	2.5" CAL	B&B		2	35 70
GYMDIO	GYMNOCLADUS DIDICA 'ESPRESSO'	KENTUCKY COFFEETREE	2.5" CAL	B&B		4	35 140
PLA MOC	PLATANUS X ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION! LONDON PLANE TREE	2.5" CAL	B&B		1	35 35
UP	ULMUS X 'MORTON GLOSSY' TM	TRIUMPH ELM	2.5" CAL	B&B		3	35 105
AME GRA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	'AUTUMN BRILLIANCE' SERVICEBERRY	6"	B&B	MultiStem	3	15 45
MAL PRA	MALUS X 'PRAIRIFIRE'	PRAIRIFIRE CRAB APPLE	1.5" CAL	B&B		3	15 45
PIN STR	PINUS STROBUS	WHITE PINE	6"	B&B		1	35 35
SHRUBS							
Code	Botanical	Common	Size	Container		Quantity	Points Ea. Total
Aro lsc	ARONIA MELANOCARPA 'U'CONNAM165' TM	LOW SCAPE MOUND BLACK CHOKEBERRY	3 GAL	POT		21	3 63
Cor b25	CORNUS SERICEA 'BAILEY'	RED TWIG DOGWOOD	3 GAL	POT		5	3 15
Hyd 159	HYDRANGEA PANICULATA 'SMHPLQF' TM	LITTLE QUICK FIRE PANICLE HYDRANGEA	3 GAL	POT		9	3 27
PHY DON	PHYSCARPUS OPUULIFOLIUS 'DONNA MAY' TM	LITTLE DEVIL NINEBARK	3 GAL	POT		3	3 9
RHU GRO	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	3 GAL	POT		10	3 30
RIB GRE	RIBES ALPINUM 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT	3 GAL	POT		17	3 51
SPI TOR	SPIRAEA BETULIFOLIA 'TOR'	BIRCHLEAF SPIREA	3 GAL	POT		6	3 18
Jun sgn	JUNIPERUS CHINENSIS 'SARGENTII'	SARGENT JUNIPER	3 GAL	POT		2	4 8
JUN SK2	JUNIPERUS SCOPULORUM 'SKYROCKET'	SKYROCKET JUNIPER	5'	B&B		15	10 150
JUN GL5	JUNIPERUS VIRGINIANA 'GLAUCA'	EASTERN RED CEDAR	5'	B&B		3	10 30
PERENNIALS							
Code	Botanical	Common	Size	Container		Quantity	Points Ea. Total
ALL LR2	ALLIUM LUSITANICUM 'SUMMER BEAUTY'	SUMMER BEAUTY ORNAMENTAL ONION	1 GAL	POT		22	2 44
AMS ICE	AMSONIA X 'BLUE ICE'	BLUE ICE BLUESTAR	1 GAL	POT		17	2 34
BAP SOL	BAPTISIA X 'SOLAR FLARE'	SOLAR FLARE FALSE INDIGO	1 GAL	POT		3	2 6
CAL KAR	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	1 GAL	POT		10	2 20
PAN SHN	PANICUM VIRGATUM 'SHENANDOAH'	SWITCH GRASS	1 GAL	POT		19	2 38
SCH LIT	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM GRASS	1 GAL	POT		20	2 40
SPO HTR	SPOROBOLUS HETEROLEPIS 'TARA'	PRAIRIE DROPSEED	1 GAL	POT		33	2 66

SUBTOTAL PROPOSED PLANTINGS 1374
EXISTING TREES (32) 480
TOTAL 1854

DEVELOPED AREA 94,530 SF
POINTS REQUIRED 1580

- NOTES:**
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITH TURF - INCLUDING ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS.
 - CONTRACTOR SHALL PROTECT ALL EXISTING TREES NOT CALLED OUT FOR REMOVAL. SEE EROSION CONTROL PLAN SHEET
 - ALL LANDSCAPE PLANTING AREAS ADJOINING TURF TO HAVE METAL EDGING, UNLESS OTHERWISE NOTED.
 - IN ALL AREAS TO RECEIVE PLANTINGS OR SEED CONTRACTOR TO REMOVE ANY EXISTING GRAVEL OR OTHER BASE MATERIAL TO SUBGRADE. SCARIFY SUBGRADE AND BACKFILL WITH TOPSOIL TO FINISH GRADE PRIOR TO PLANTING OR SEEDING. SEE DETAILS FOR SEEDING ALONG PAVEMENT EDGE.

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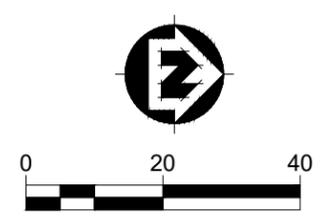
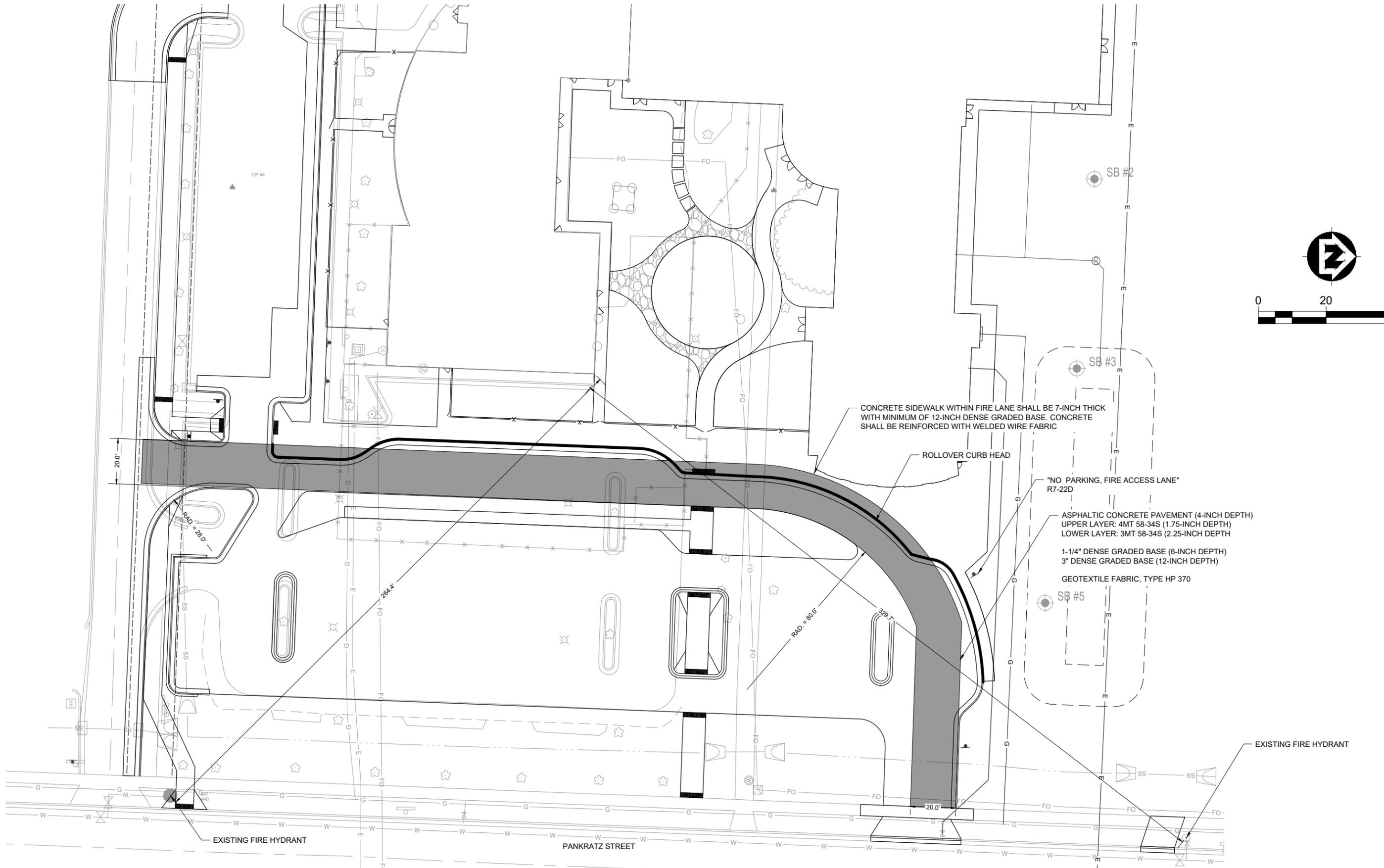
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LANDSCAPING PLAN - ENLARGEMENTS
AND SCHEDULE

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21586000
SHEET
C209

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CONCRETE SIDEWALK WITHIN FIRE LANE SHALL BE 7-INCH THICK WITH MINIMUM OF 12-INCH DENSE GRADED BASE. CONCRETE SHALL BE REINFORCED WITH WELDED WIRE FABRIC

ROLLOVER CURB HEAD

"NO PARKING, FIRE ACCESS LANE" R7-22D

ASPHALTIC CONCRETE PAVEMENT (4-INCH DEPTH)
UPPER LAYER: 4MT 58-34S (1.75-INCH DEPTH)
LOWER LAYER: 3MT 58-34S (2.25-INCH DEPTH)

1-1/4" DENSE GRADED BASE (6-INCH DEPTH)
3" DENSE GRADED BASE (12-INCH DEPTH)

GEOTEXTILE FABRIC, TYPE HP 370

EXISTING FIRE HYDRANT

EXISTING FIRE HYDRANT

PANKRATZ STREET

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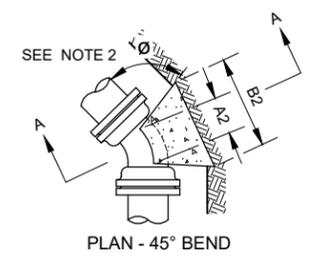
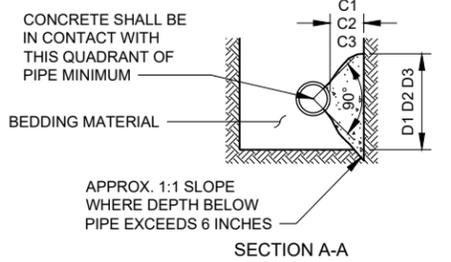
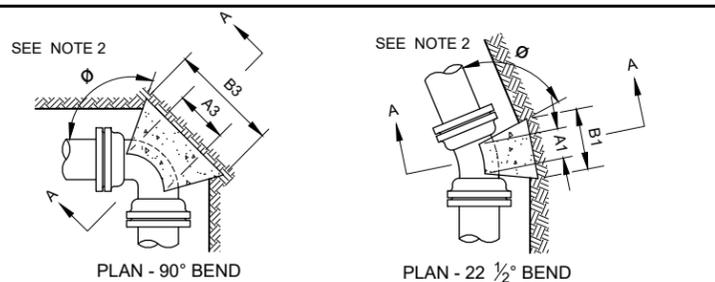
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FIRE ACCESS PLAN

PROJECT NO.
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SHEET
C114

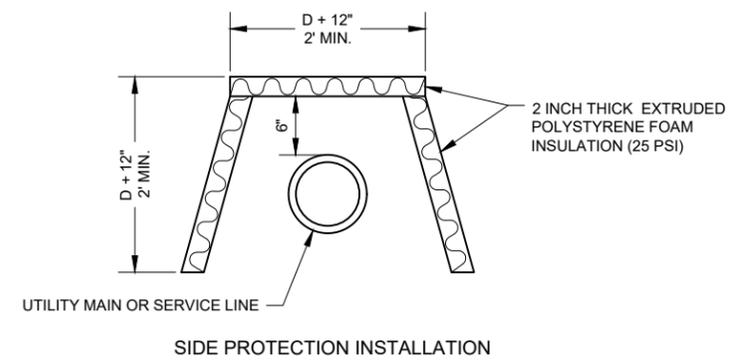
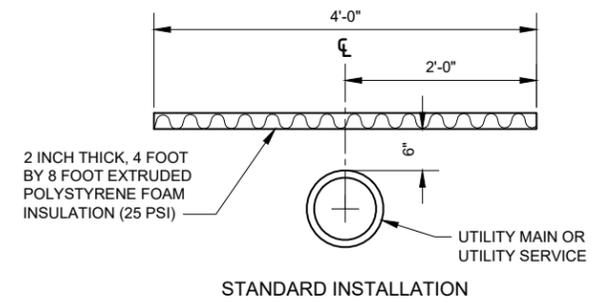
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- NOTES:**
- DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND AN EARTH RESISTANCE OF 2 TONS PER SQ. FT. INFORM THE ENGINEER IF PRESSURES EXCEED 150 PSI, OR ON-SITE SOIL DOES NOT MEET THIS CONDITION.
 - DIMENSION C1 C2 C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø EQUAL TO OR LARGER THAN 45°.
 - DIMENSION A1 A2 A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE MECHANICAL JOINT.
 - BUTTRESS TO BE POURED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
 - ALL BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
 - CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
 - IN ADDITION TO BUTTRESS, ALL JOINTS SURROUNDING BENDS SHALL BE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS.

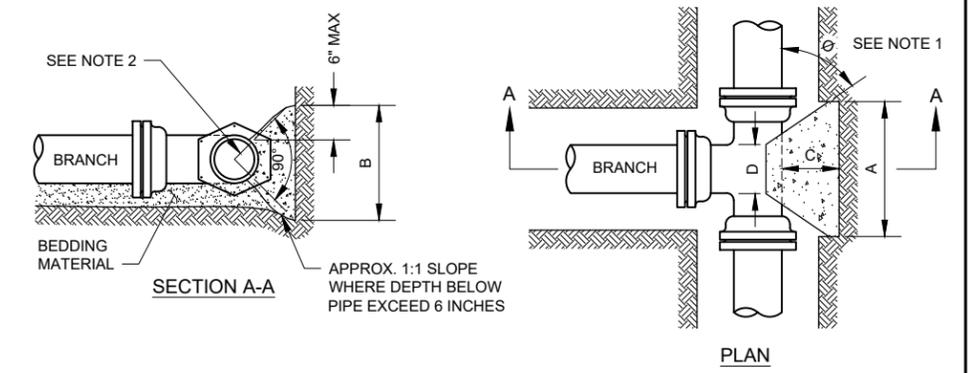
PIPE SIZE	BUTTRESS DIMENSIONS					
	22 1/2° BENDS		45° BENDS		90° BENDS	
	B1	D1	B2	D2	B3	D3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
10"	1'-2"	1'-2"	1'-7"	1'-7"	2'-3"	1'-10"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"

BUTTRESS FOR BENDS DETAIL
NO SCALE



- GENERAL NOTES:**
- THE SIDE PROTECTION INSTALLATION SHALL BE USED WHERE FROST WILL PENETRATE BELOW THE PIPE INVERT.

PIPE INSULATION DETAIL
NO SCALE

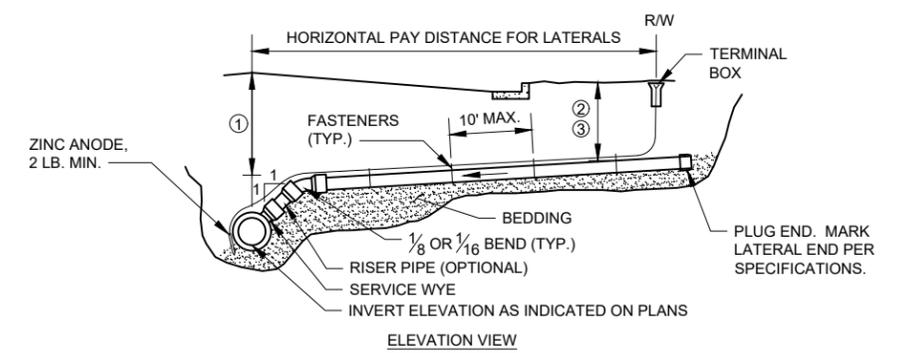


- NOTES:**
- DIMENSION 'C' SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø GREATER THAN OR EQUAL TO 45°.
 - CONCRETE SHOULD BEAR ON THIS QUADRANT OF PIPE AT A MINIMUM.
 - DIMENSION 'D' SHOULD BE AS LARGE AS POSSIBLE BUT CONCRETE SHOULD NOT INTERFERE WITH MECHANICAL JOINTS.
 - BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ. FT. AND A WATER PRESSURE OF 150 PSI. INFORM THE ENGINEER IF ON-SITE SOIL DOES NOT MEET THIS CONDITION OR PRESSURES EXCEED 150 PSI.
 - BUTTRESS TO BE PLACED AGAINST FIRM UNDISTURBED SOIL, OR DISTURBED SOIL COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY, ASTM D1557.
 - CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH OF 2000 PSI.
 - ALL POURED BUTTRESSED FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
 - IN ADDITION TO BUTTRESSES, ALL JOINTS SURROUNDING TEES SHALL BE RESTRAINED WITH WEDGE ACTION RESTRAINING GLANDS.

BUTTRESS DIMENSIONS				
DIA.	A	B	C	D
6"	1'-3"	1'-0"		
8"	1'-6"	1'-4"		
10"	1'-10"	1'-8"	SEE NOTE NO. 1	SEE NOTE NO. 3
12"	2'-3"	2'-0"		
16"	3'-2"	2'-6"		
20"	4'-0"	3'-0"		
24"	5'-3"	3'-4"		

DIA. = BRANCH DIAMETER

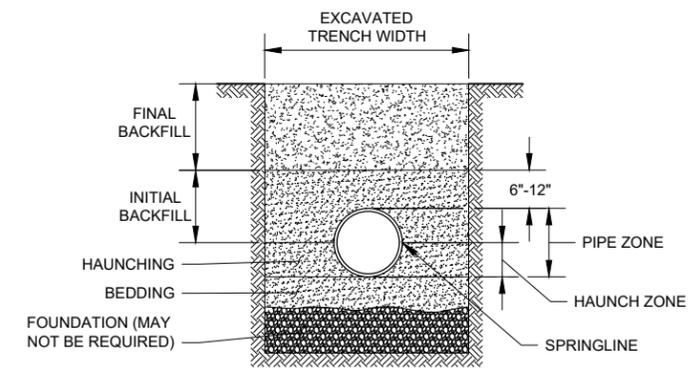
BUTTRESS FOR TEES DETAIL
NO SCALE



- NOTES FOR LATERAL INSTALLATION:**
- MINIMUM DEPTH OF COVER UNDER ROADWAY = 7 FEET.
 - MINIMUM DEPTH OF COVER UNDER GRASS AREAS = 5 1/2 FEET.
 - MINIMUM DEPTH OF COVER UNDER GRASS AREAS WITH FROST PROTECTION = 3 FEET 6 INCHES.
 - LATERAL SLOPES SHALL BE 1/8 INCH PER FOOT MINIMUM AND 1/2 INCH PER FOOT MAXIMUM.

- NOTES FOR TRACER WIRE INSTALLATION:**
- THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE.
 - NO. 12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED WITH THE NON-CONDUCTIVE SERVICE. PIPE TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER MAIN OR AS DETERMINED BY THE ENGINEER OR OWNER. TRACER WIRE INSTALLATION REQUIRES ACCESS POINTS AT LEAST EVERY 300 FEET.
 - TRACER WIRE SHALL BE RESTRAINED BY CABLE-TIES, TAPE, OR BY NON-CORROSIVE FASTENER APPROVED BY THE OWNER, INSTALLED EVERY 10 FEET ALONG SERVICE. DO NOT WRAP TRACER WIRE AROUND THE PIPE.
 - TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATED IN A FLUSH MOUNTED TERMINAL BOX WITH A CAST IRON LOCKABLE TOP. SPLICES IN TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT OR COMPRESSION-TYPE CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION. TERMINAL BOX SHALL BE VALVCO, OR APPROVED EQUAL.

SANITARY SEWER LATERAL DETAIL
NO SCALE



- GENERAL NOTES:**
- DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO ASTM D2321.
 - CLASS II EMBEDMENT MATERIAL SHALL BE CLEAN, COARSE-GRAINED SOILS WITH LITTLE TO NO FINES. NO PARTICLES LARGER THAN 1 1/2 -INCHES SHALL BE USED IN THE PIPE EMBEDMENT.
 - WHERE HYDRAULIC GRADIENT EXISTS USE A WELL-GRADED MIXTURE TO MINIMIZE MIGRATION OF FINES FROM ADJACENT SOIL.
 - CLASS II MATERIAL IS SUITABLE AS A FOUNDATION AND FOR REPLACING OVER- EXCAVATED AND UNSTABLE TRENCH BOTTOM. INSTALL AND COMPACT IN 6-INCH MAXIMUM LAYERS.
 - INSTALL AND COMPACT BEDDING IN 6-INCH MAXIMUM LAYERS. LEVEL FINAL GRADE BY HAND. MINIMUM DEPTH 4 INCH (6 INCH IN ROCK CUTS.)
 - INSTALL AND COMPACT HAUNCHING IN 6-INCH MAXIMUM LAYERS. WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.
 - INSTALL AND COMPACT INITIAL BACKFILL TO A MINIMUM OF 6 INCH ABOVE PIPE CROWN.
 - EMBEDMENT COMPACTION:
MINIMUM DENSITY 85% STANDARD PROCTOR. USE HAND TAMPERS OR VIBRATORY COMPACTORS.
 - EMBEDMENT INCLUDES BEDDING, HAUNCHING, AND INITIAL BACKFILL.

CLASS II - FLEXIBLE PIPE EMBEDMENT DETAIL
NO SCALE

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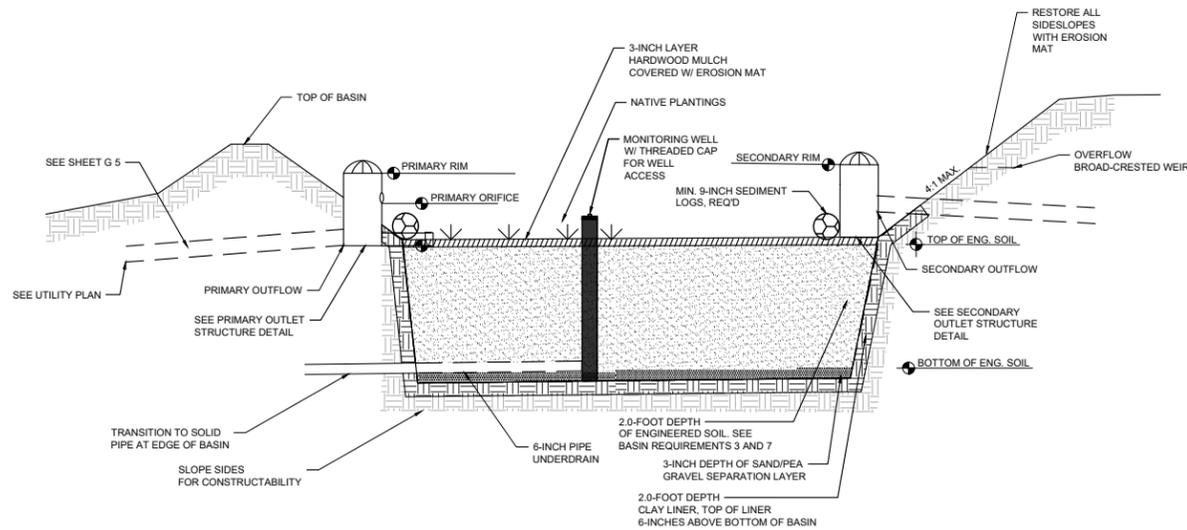
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ISTHMUS MONTESSORI ACADEMY
MADISON, WISCONSIN

UTILITY SERVICE DETAILS
PROJECT NO. 21586000
SHEET C200

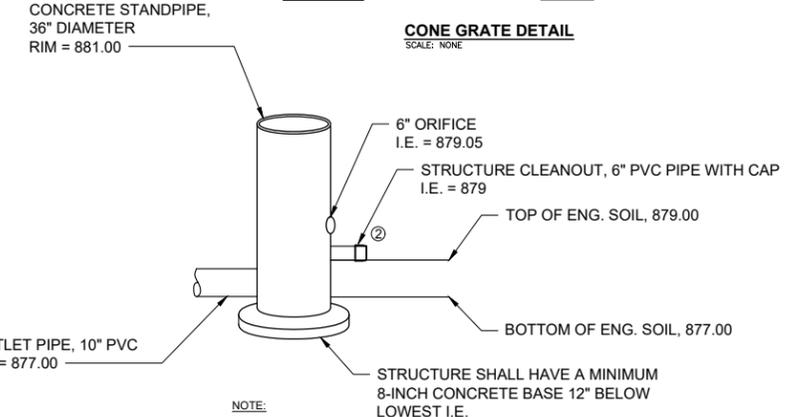
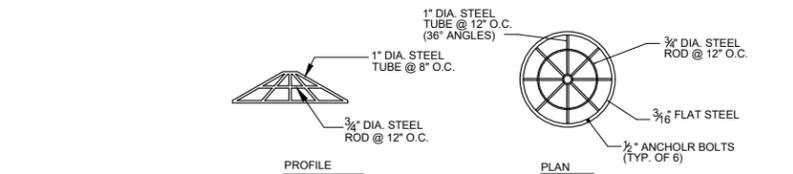
BIOFILTRATION BASINS CONSTRUCTION REQUIREMENTS



ELEVATION TABLE	ELEVATION
TOP OF BASIN	883.50
BROAD-CRESTED WEIR	883.25
TOP OF ENG. SOIL	879.00
BOTTOM OF ENG. SOIL	877.00
PRIMARY RIM	881.00
PRIMARY INFLOW (10")	878.00
PRIMARY OUTFLOW (10")	877.00
PRIMARY ORIFICE (6")	879.05
SECONDARY RIM	883.00
SECONDARY INFLOW (18")	879.50
SECONDARY OUTFLOW (18")	879.50

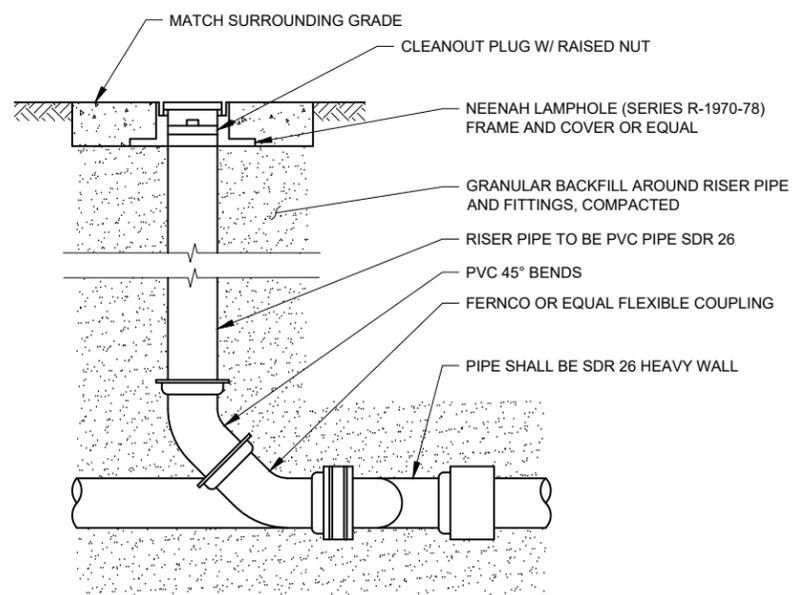
1 BIO-INFILTRATION BASIN DETAIL
NTS

- PRIOR TO EXCAVATING OF THE BIOFILTRATION BASINS, ALL UPSTREAM AREAS SHALL BE RESTORED, 70% OF THE TURF SEED GERMINATED, AND ALL HARD SURFACE AREAS PAVED.
- AFTER ALL UPSTREAM AREAS ARE STABILIZED PER THE REQUIREMENTS ABOVE, THE BASINS SHALL BE EXCAVATED TO ELEVATIONS AS SHOWN. A 3-INCH LAYER OF CLEAN SAND OR PEA GRAVEL, AND A 2.0-FOOT LAYER OF ENGINEERED SOIL SHALL BE PLACED. TWO 6-INCH DIAMETER OBSERVATION WELLS SHALL BE INSTALLED TO THE BOTTOM OF THE NO. 2 CLEAR STONE. THE OBSERVATION WELL SHALL BE SET ON A FLAT, SMOOTH, 1' X 1' PIECE OF TREATED WOOD OR SOLID BLOCK. THE WELL SHALL BE PERFORATED AND HAVE A SCREW CAP AT THE SURFACE FOR ACCESS WITH A 2" BY 2" TOP NUT. CONTRACTOR SHALL FABRICATE AND SUPPLY THE OWNER WITH A TOOL TO OPEN THE WELL.
- THE ENGINEERED SOIL SHALL BE COMPOSED OF 70%-80% SAND/GRANULAR FILL AND 20%-30% COMPOST CONFORMING TO WDNR CPS S100. PLEASE NOTE, THE SAND/COMPOST COMPOSITION FOR THIS PROJECT IS SLIGHTLY CHANGED TO ACCOMMODATE THE NATIVE PLANTINGS.
- THE BIOFILTRATION BASINS SHALL BE EXCAVATED WITH ONLY WIDE-TRACKED CONSTRUCTION EQUIPMENT. ACTIVITY WITHIN THE BASINS SHALL BE MINIMIZED PRIOR TO EXCAVATION AND ELIMINATED AFTER EXCAVATION TO CONTROL UNNECESSARY COMPACTION OF SOILS.
- AFTER INITIAL EXCAVATION AND FINAL GRADING, THE BIOFILTRATION BASINS SHALL BE SECURED SO NO OTHER CONSTRUCTION EQUIPMENT USES THE AREA.
- PLANTINGS - THE BIOFILTRATION BASINS SHALL BE RESTORED WITH THE FOLLOWING BULB PLANTINGS AT AN APPROXIMATE SPACING OF 18-INCHES ON CENTER:
650-675 EA. - COMMON OAK SEDGE, 240-260 EA. LAVENDER ANISE HYSSOP, 160-180 EA. LITTLE BLUE STEM, 400-425 EA. BLACK EYED SUSAN.
CONTRACTOR SHALL SUBMIT PROPOSED PLANT LAYOUT TO OWNER AND ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE SIDE SLOPES OF THE BASINS SHALL BE SEEDED WITH A TURF LAWN MIX.
- CONTRACTOR SHALL WEED THE BIOFILTRATION BASINS ONCE AFTER PLANTS HAVE BEEN INSTALLED. THIS WEEDING SHALL OCCUR ONE MONTH AFTER PLANT INSTALLATION, BY SEPTEMBER 15 (YEAR 1) OR BY JUNE 15 (YEAR 2).
- AFTER THE BULBS ARE PLANTED, COVER THE BOTTOM AND SIDES OF THE BASIN WITH CLASS I, TYPE A EROSION MAT.
- CONTRACTOR SHALL WATER THE BIOFILTRATION BASINS WEEKLY THRU THE FIRST GROWING SEASON UNTIL THE PLANTS ARE ESTABLISHED. WATERING IS ONLY REQUIRED IF THE EQUIVALENT OF 0.50" OF RAIN DOES NOT FALL AT THE SITE WEEKLY.
- REFER TO WDNR CONSERVATION PRACTICE STANDARD: BIORETENTION FOR INFILTRATION (1004) FOR MAINTENANCE REQUIREMENTS ON THE BIORETENTION AREA.

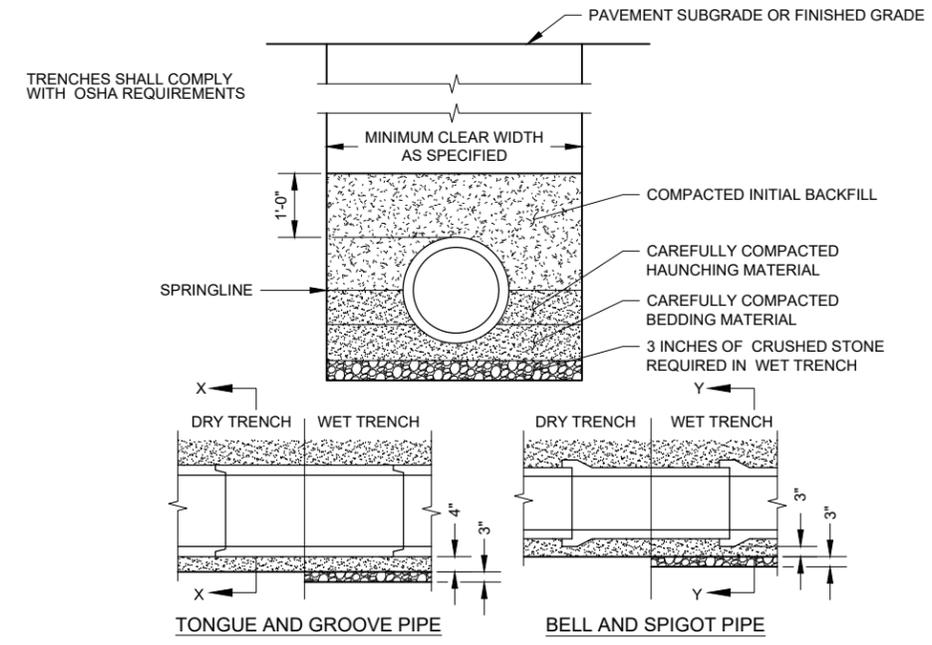


- NOTE:
- THE GRATE FOR THIS OUTLET STRUCTURE SHALL BE EITHER A NEENAH HIGH CAPACITY GRATE OR CONE GRATE AS DETAILED ABOVE. SEE PLAN FOR EXACT ELEVATIONS AND I.E.
 - INSTALL A 6" PVC PIPE AT THE TOP OF ENG. SOIL. PIPE TO BE CAPPED AND ONLY REMOVED FOR MAINTENANCE. APPROX. 3 FEET IN LENGTH.

2 PRIMARY OUTLET STRUCTURE DETAIL
NTS

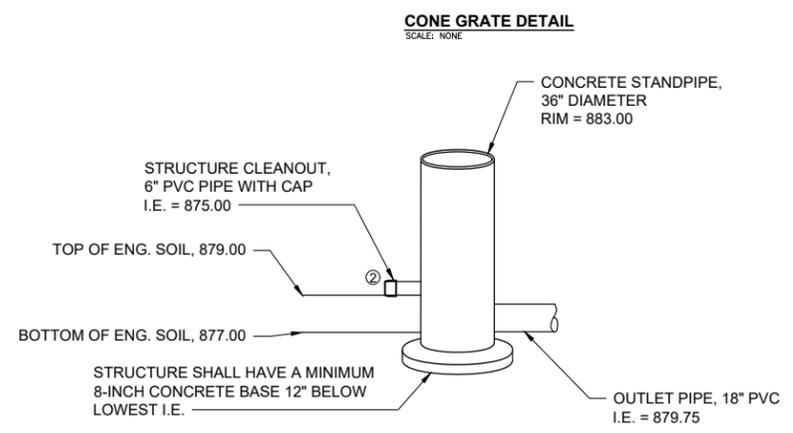
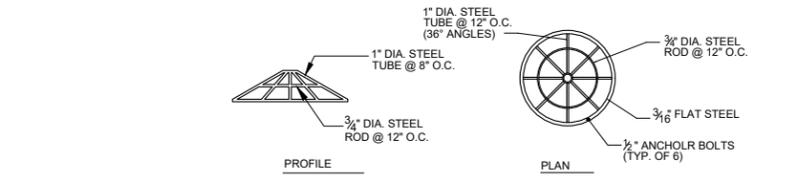


STORM SEWER CLEANOUT
NO SCALE



- GENERAL NOTES:
- BEDDING AND HAUNCHING MATERIAL SHALL BE WELL-GRADED 3/4 TO 1/4 INCH CRUSHED STONE OR OTHER NON-COHESIVE MATERIAL NOT SUBJECT TO MIGRATION AND FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
 - BEDDING MATERIAL TO BE PLACED BEFORE SETTING PIPE, 4 INCH MINIMUM UNDER BARREL WITH 3 INCH MINIMUM UNDER BELL.
 - INITIAL BACKFILL SHALL BE DENSELY COMPACTED, NON-COHESIVE FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
 - IN ROCK OR OTHER UNCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6-INCHES AND REFILLED WITH GRANULAR MATERIAL.

CLASS "B" EMBEDMENT FOR RIGID PIPE DETAIL
NO SCALE



- NOTE:
- THE GRATE FOR THIS OUTLET STRUCTURE SHALL BE EITHER A NEENAH HIGH CAPACITY GRATE OR CONE GRATE AS DETAILED ABOVE. SEE PLAN FOR EXACT ELEVATIONS AND I.E.
 - INSTALL A 6" PVC PIPE AT THE TOP OF ENG. SOIL. PIPE TO BE CAPPED AND ONLY REMOVED FOR MAINTENANCE. APPROX. 3 FEET IN LENGTH.

2 SECONDARY OUTLET STRUCTURE DETAIL
NTS

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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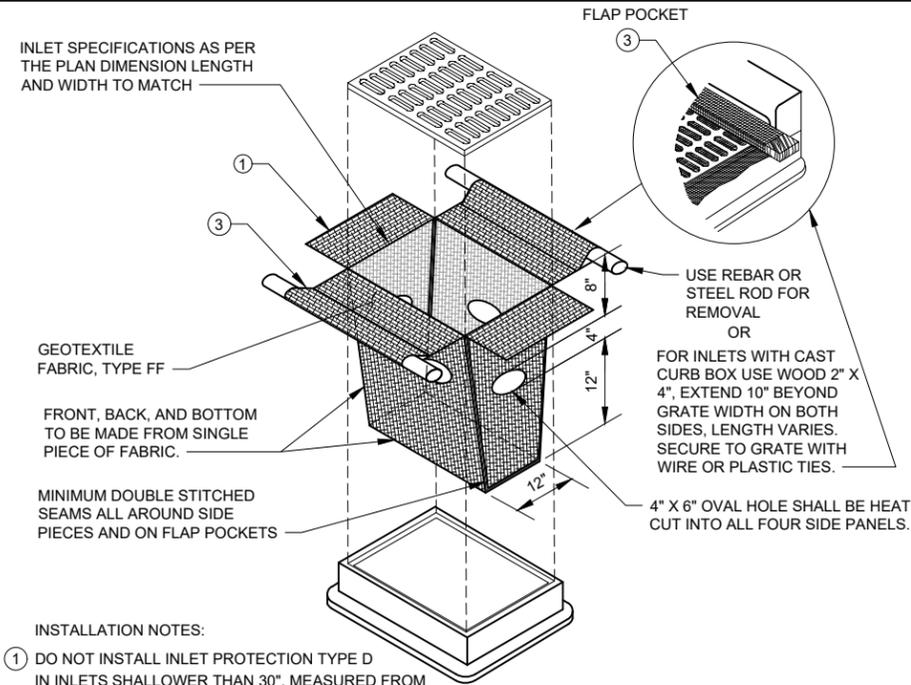
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MADISON, WISCONSIN

STORM SEWER & POND DETAILS
PROJECT NO. 21586000
SHEET C201

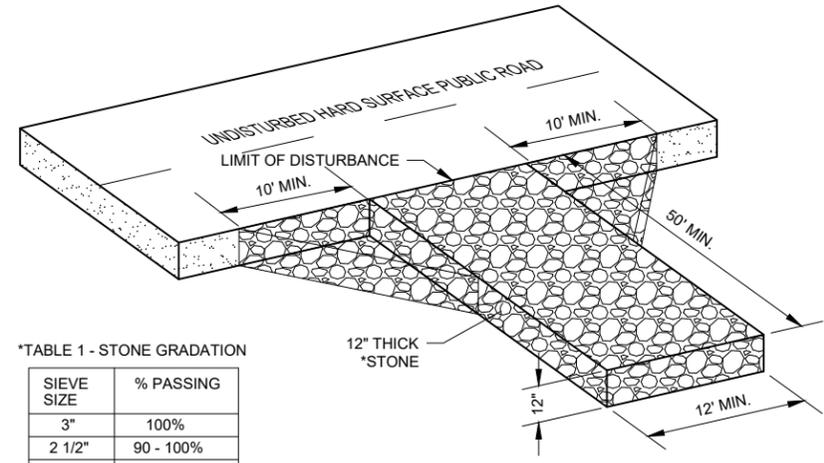
**CONSTRUCTION SITE
EROSION CONTROL REQUIREMENTS**

- SECTION NR216.46 OF WISCONSIN STATE ADMINISTRATIVE CODE IDENTIFIES REQUIREMENTS FOR CONSTRUCTION SITE AND POST-CONSTRUCTION EROSION CONTROL. IT IS THE INTENT OF THESE PLANS TO SATISFY THESE REQUIREMENTS. THE METHODS AND STRUCTURES USED TO CONTROL EROSION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL IMPLEMENT AN APPROPRIATE MEANS OF CONTROLLING EROSION DURING SITE OPERATION AND UNTIL THE VEGETATION IS RE-ESTABLISHED. ADJUSTMENTS TO THE CONTROL SYSTEM SHALL BE MADE AS REQUIRED.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WISCONSIN DNR'S CONSERVATION PRACTICE STANDARDS. THESE STANDARDS ARE PERIODICALLY UPDATED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REFERENCE THE MOST RECENTLY RELEASED STANDARD.
- THIS INFORMATION IS ONLY ONE PART OF THE OVERALL EROSION CONTROL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY ALSO BE SHOWN ON THE CONTRACT DRAWINGS AND IN THE ACCOMPANYING SPECIFICATIONS.
- ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE OWNER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
- THE AREA OF EROSION CONTROL ELEMENTS BY GRUBBING, EXCAVATION, TRENCHING, BORROW AND FILL OPERATIONS AT ANY ONE TIME SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING. ALL DISTURBED AREAS SHALL BE TREATED WITH PERMANENT STABILIZATION MEASURES WITHIN 3 WORKING DAYS OF FINAL GRADING.
- ALL EROSION CONTROL MEASURES AND STRUCTURES SERVING THE SITE MUST BE INSPECTED AT LEAST WEEKLY OR WITHIN 24 HOURS OF THE TIME 0.5 INCHES OF RAIN HAS OCCURRED. ALL NECESSARY REPAIR AND MAINTENANCE WILL BE DONE AT THIS INSPECTION TIME.
- ALL EROSION CONTROL DEVICES AND/OR STRUCTURES SHALL BE PROPERLY INSTALLED PRIOR TO CLEARING AND GRUBBING OPERATIONS WITHIN THEIR RESPECTIVE DRAINAGE AREAS. THESE SHALL BE PROPERLY MAINTAINED FOR MAXIMUM EFFECTIVENESS UNTIL VEGETATION IS RE-ESTABLISHED.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY INSTALLED PRIOR TO ANY SOIL DISTURBANCE.
- ANY SLOPES STEEPER THAN 3H:1V SHALL BE STAKED WITH EROSION CONTROL FABRIC UNLESS INDICATED ON THE PLAN.
- ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH, OR A TACKING AGENT MAY BE REQUIRED TO PROTECT NEARBY RESIDENCES AND WATER RESOURCES.
- CHANNELIZED RUNOFF ENTERING THE PROJECT SITE FROM ADJOINING LANDS SHALL BE DIVERTED THROUGH NATURALLY OR ARTIFICIALLY EROSION-RESISTANT CONVEYANCES. IF CHANNELIZED RUNOFF CANNOT BE DIVERTED, SITE BEST MANAGEMENT PRACTICES MUST ACCOUNT FOR THE ADDITIONAL FLOW RATES AND EROSION POTENTIAL THAT SUCH RUNOFF PRESENTS.
- THE CONTRACTOR SHALL TAKE ALL POSSIBLE PRECAUTIONS TO PREVENT SOILS FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEEPED AND/OR SCRAPED (NOT FLUSHED) PERIODICALLY TO REMOVE SOIL, DIRT, AND/OR DUST.
- EROSION CONTROLS SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF TEMPORARY STOCKPILES. ANY SOIL STOCKPILE THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING. ALL STOCK PILES SHALL BE PLACED AT LEAST 75 FEET FROM STREAMS OR WETLANDS.
- ADDITIONAL EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) SHALL INCLUDE THE FOLLOWING:
 - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - DISCHARGE OF TRENCH WATER OR DEWATERING EFFLUENT MUST BE PROPERLY TREATED TO REMOVE SEDIMENT IN ACCORDANCE WITH THE WDNR CONSERVATION PRACTICE STANDARD 1061 - DEWATERING OR A SUBSEQUENT WDNR DEWATERING STANDARD PRIOR TO DISCHARGE INTO A STORM SEWER, DITCH, DRAINAGEWAY, OR WETLAND OR LAKE.
- ALL DRAINAGE CULVERTS, STORM DRAIN INLETS, MANHOLES, OR ANY OTHER EXISTING STRUCTURES THAT COULD BE DAMAGED BY SEDIMENTATION SHALL BE PROTECTED ACCORDING TO THE VARIOUS METHODS PROVIDED IN THE PRINTED CONSERVATION PRACTICE STANDARDS.
- ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- THE FIRST SIX WEEKS AFTER INITIAL STABILIZATION, ALL NEWLY SEEDED AND MULCHED AREAS SHALL WATERED WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
- WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY BMP'S SUCH AS SILT FENCES, STRAW BALES, AND SEDIMENT TRAPS SHALL BE REMOVED AND THESE AREAS STABILIZED.
- ALL TEMPORARY BEST MANAGEMENT PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED.
- ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH SEED AND MULCH UNLESS OTHERWISE SPECIFIED. A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE APPLIED TO ALL AREAS TO BE SEEDED OR SODDED.



- INSTALLATION NOTES:**
- DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
 - TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
 - THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION, TYPE D
NO SCALE
CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE

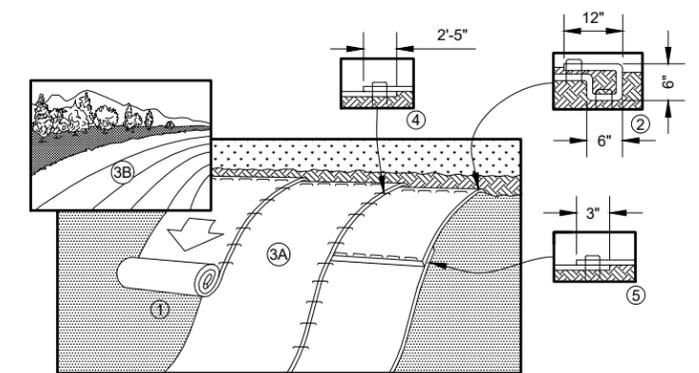


***TABLE 1 - STONE GRADATION**

SIEVE SIZE	% PASSING
3"	100%
2 1/2"	90 - 100%
1 1/2"	25 - 60%
3/4"	0 - 20%
3/8"	0 - 5%

- NOTES:**
- TRACKING PAD WIDTH SHALL BE AT LEAST THE FULL WIDTH OF THE EGRESS POINT OR 12' WIDE MINIMUM.
 - TRACKING PAD LENGTH SHALL BE 50' FOR CONSTRUCTION SITES, 30' FOR SINGLE FAMILY RESIDENTIAL, OR AS SPECIFIED IN THE CONTRACT DOCUMENTS. LENGTH OF TRACKING PAD MAY NEED TO BE INCREASED OR ADDITIONAL SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BY THE CONTRACTOR IF SEDIMENT TRACK-OUT OCCURS.
 - GEOTEXTILE FABRIC TYPE R SHALL BE INSTALLED BETWEEN THE STONE AND SUBGRADE ON SITES WHERE HIGH GROUND WATER IS OBSERVED.
 - CONTRACTOR SHALL CLEAN STREET/ROADWAY ADJACENT TO ALL CONSTRUCTION ACCESS POINTS AT THE END OF EACH WORKDAY OR MORE FREQUENTLY IF REQUESTED.

STONE TRACKING PAD
NO SCALE



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5 CM-12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

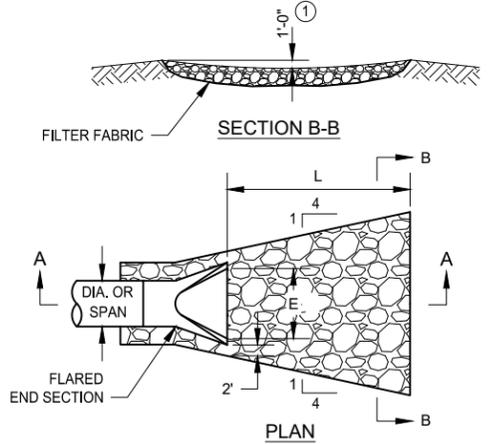
EROSION CONTROL BLANKET DETAIL
NO SCALE

**TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS**

DIA. OF ROUND PIPE (IN.)	L (FT.)	12"	18"	24"
		DEPTH RIPRAP (CU.YDS.)	DEPTH RIPRAP (CU.YDS.)	DEPTH RIPRAP (CU.YDS.)
12	8	2.8	4.1	5.5
15	8	2.9	4.4	5.8
18	10	3.9	5.9	7.8
21	10	4.2	6.3	8.4
24	12	5.5	8.3	11.0
27	12	5.8	8.7	11.6
30	14	7.3	10.9	14.5
36	16	9.2	13.8	18.3
42	18	10.9	16.3	21.7
48	20	12.9	19.4	25.8

**TABLE OF QUANTITIES
RIPRAP AT HERCP OUTLETS
OR BOXES OF EQUIVALENT SPAN WIDTH**

SPAN OF HERCP (IN.)	L (FT.)	LIGHT	MEDIUM	HEAVY
		d50=6"	d50=9"	d50=12"
22	10	3.9	5.9	7.8
30	12	5.5	8.2	10.9
38	14	7.2	10.8	14.3
45	16	9.2	13.7	18.3
53	18	10.9	16.3	21.7
60	20	12.7	19.0	25.4



- NOTES:**
- PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.
 - LIGHT RIPRAP SHALL BE UNDERLAIN WITH TYPE R FABRIC. MEDIUM AND HEAVY SHALL BE UNDERLAIN W/ TYPE HR FABRIC.
 - ① FOR PIPES GREATER THAN OR EQUAL TO 30" USE 1.5'.

RIP RAP AT OUTLETS
NO SCALE

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
	LPS				
	DESIGNED BY: BJK				
	CHECKED BY: Init				

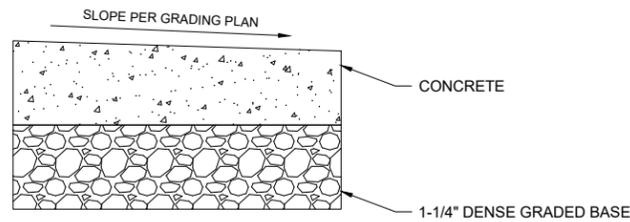
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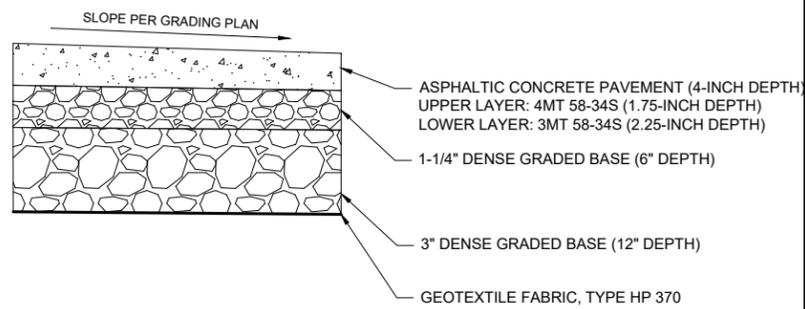
EROSION CONTROL DETAILS

PROJECT NO. 21586000
SHEET C202

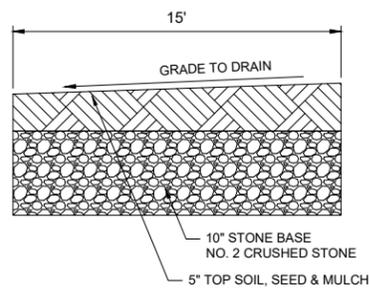


- GENERAL NOTES:
1. CONCRETE SIDEWALK SHALL BE 5-INCH THICK WITH A MINIMUM OF 5-INCH OF DENSE GRADED BASE.
 2. CONCRETE FOR DUMPSTER PAD SHALL BE 7-INCH THICK WITH A MINIMUM OF 8-INCH OF DENSE GRADED BASE. CONCRETE SHALL ALSO BE REINFORCED WITH WELDED WIRE FABRIC.
 3. CONCRETE FOR SIDEWALK FIRE LANE SHALL BE 7-INCH THICK WITH A MINIMUM OF 12-INCH DENSE GRADED BASE. CONCRETE SHALL ALSO BE REINFORCED WITH WELDED WIRE FABRIC.
 4. SLOPE FOR CONCRETE SIDEWALK SHALL NOT EXCEED 2% CROSS SLOPE.

CONCRETE SIDEWALK TYPICAL SECTION
NOT TO SCALE

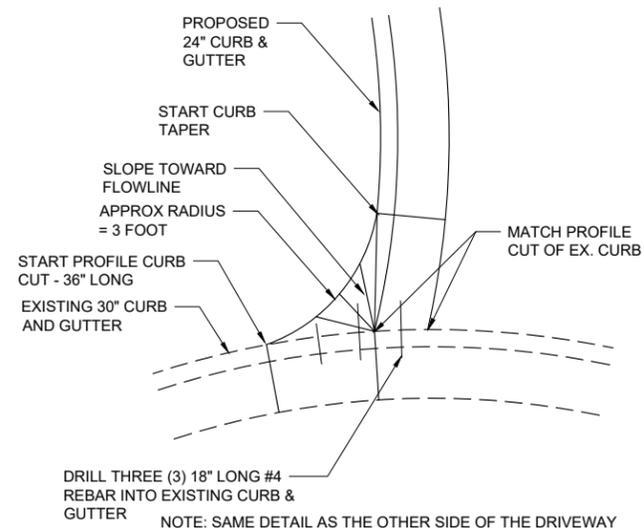


ASPHALTIC CONCRETE PAVEMENT TYPICAL SECTION
NOT TO SCALE

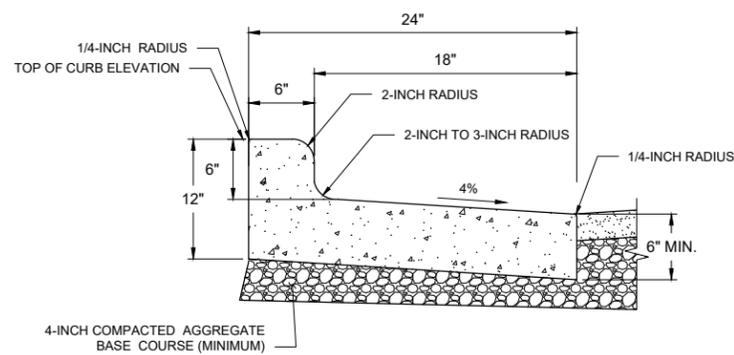


- GENERAL NOTES:
1. SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF MADISON STANDARD SPECIFICATIONS.
 2. SIDE SLOPES SHALL BE TOPSOILED, SEEDED, & MULCHED ON ACCORDANCE WITH CITY OF MADISON STANDARD SPECIFICATIONS.

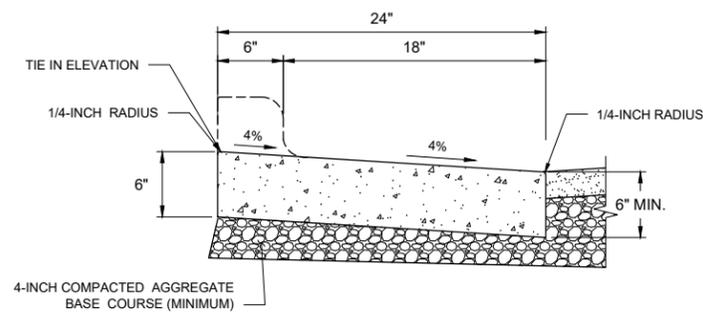
SANITARY SEWER EASEMENT ACCESS TYPICAL SECTION
NOT TO SCALE



CURB CONNECTION DETAIL
NO SCALE

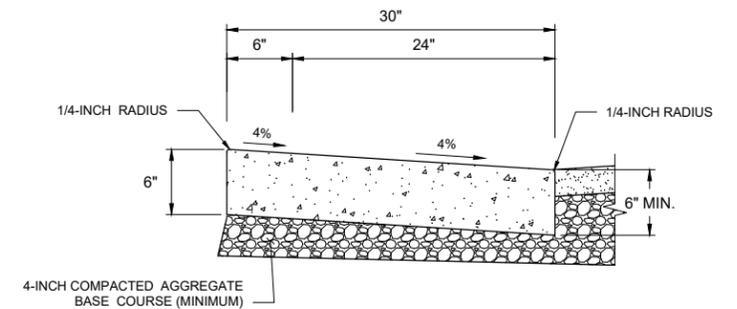


STANDARD SECTION

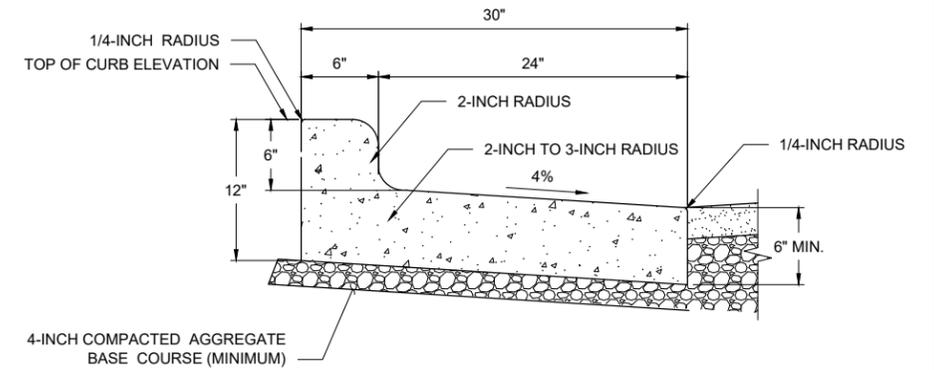


ROLLOVER SECTION

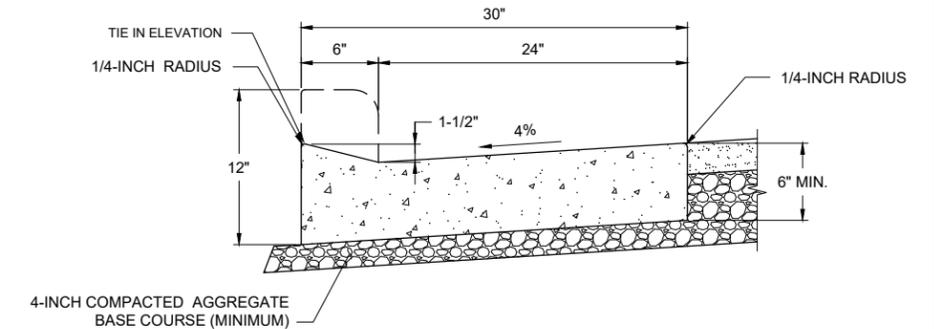
24" CURB AND GUTTER, REJECT DETAIL
NO SCALE



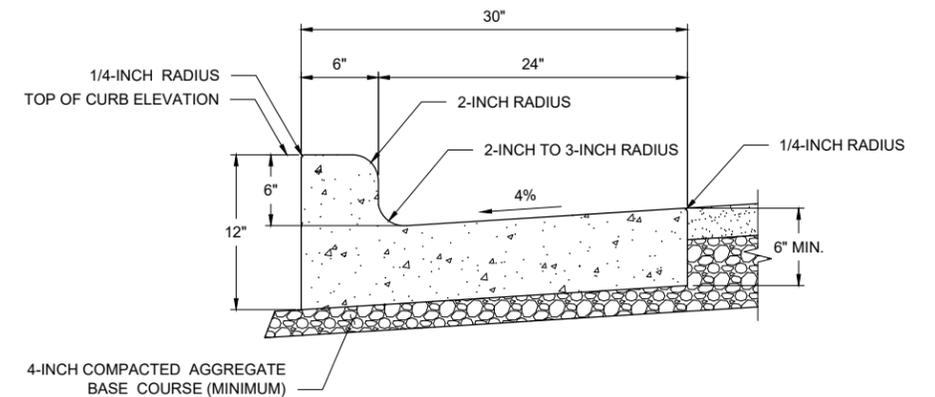
REJECT, ROLLOVER SECTION



REJECT SECTION



STANDARD, ROLLOVER SECTION



STANDARD SECTION

TYPE L CURB AND GUTTER DETAIL
NO SCALE

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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	DESIGNED BY: BJK				
	CHECKED BY: Init				

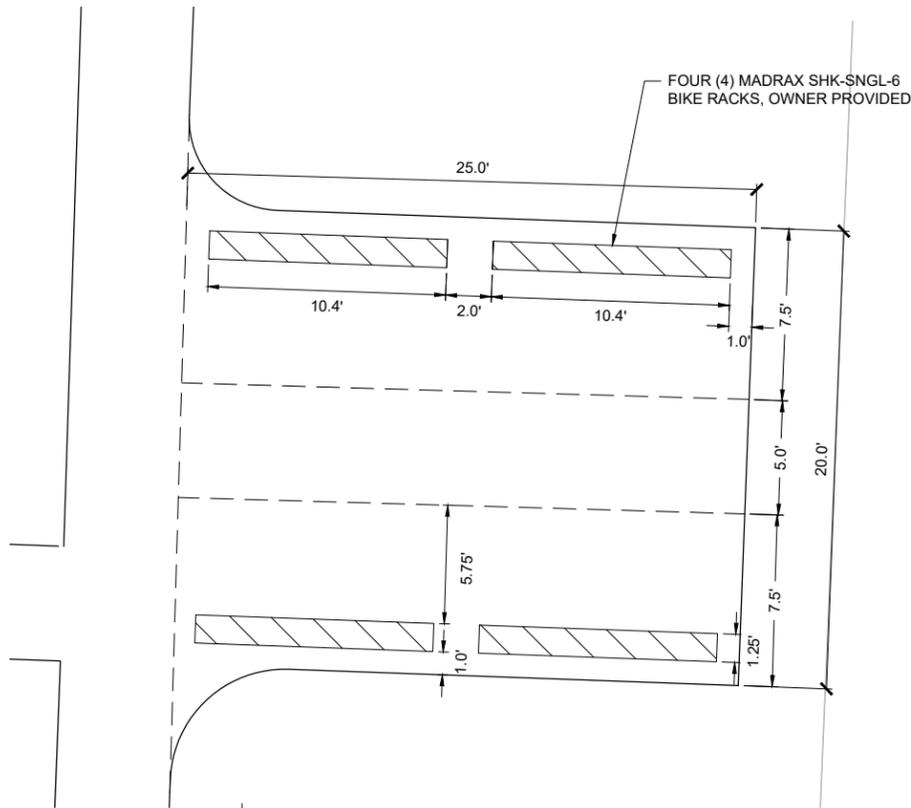


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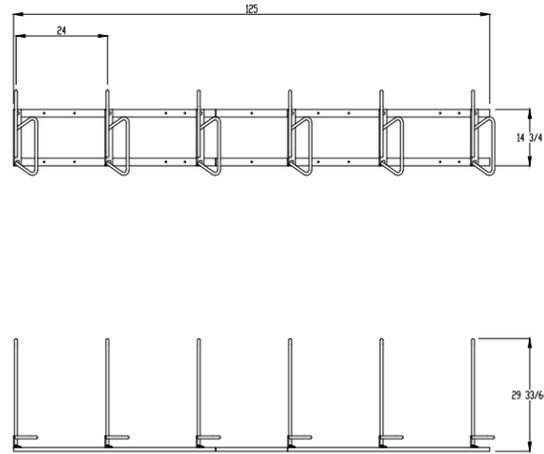
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MADISON, WISCONSIN

STREET DETAILS

PROJECT NO.
21586000
SHEET
C203

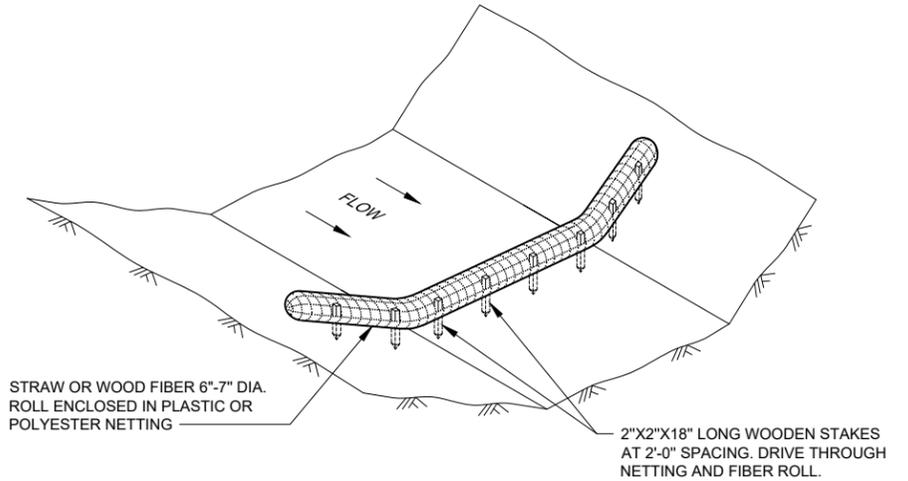


BIKE PARKING PAD SPACING DETAIL
1" = 4'

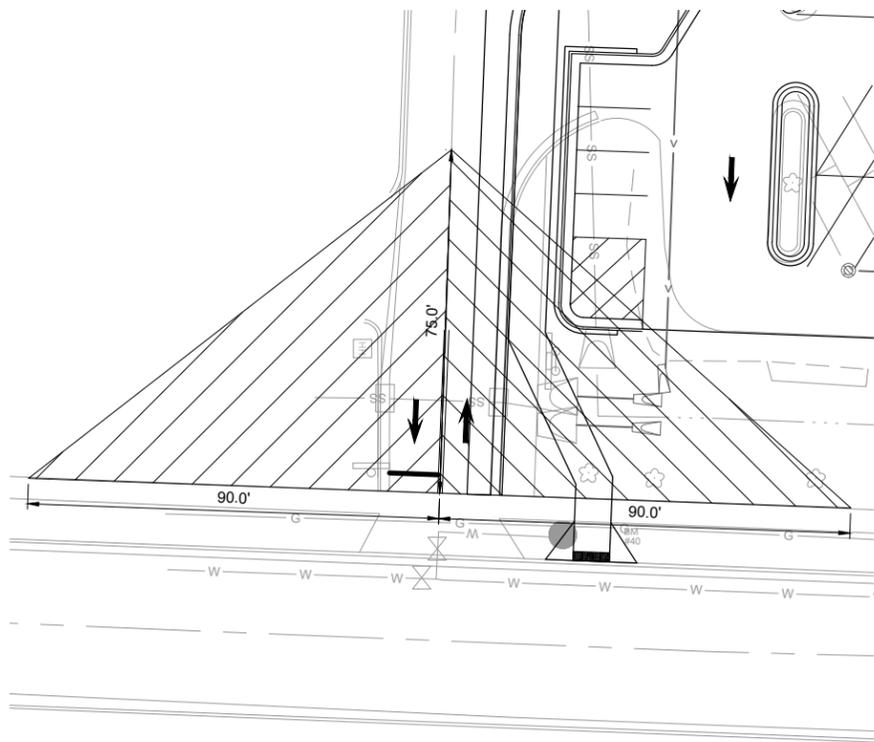


- GENERAL NOTES:
 1. BIKE RACK SHALL BE MADRAX SHK-SNG-6, OWNER PROVIDED.
 2. TOTAL OF FOUR (4) BIKE RACKS REQUIRED

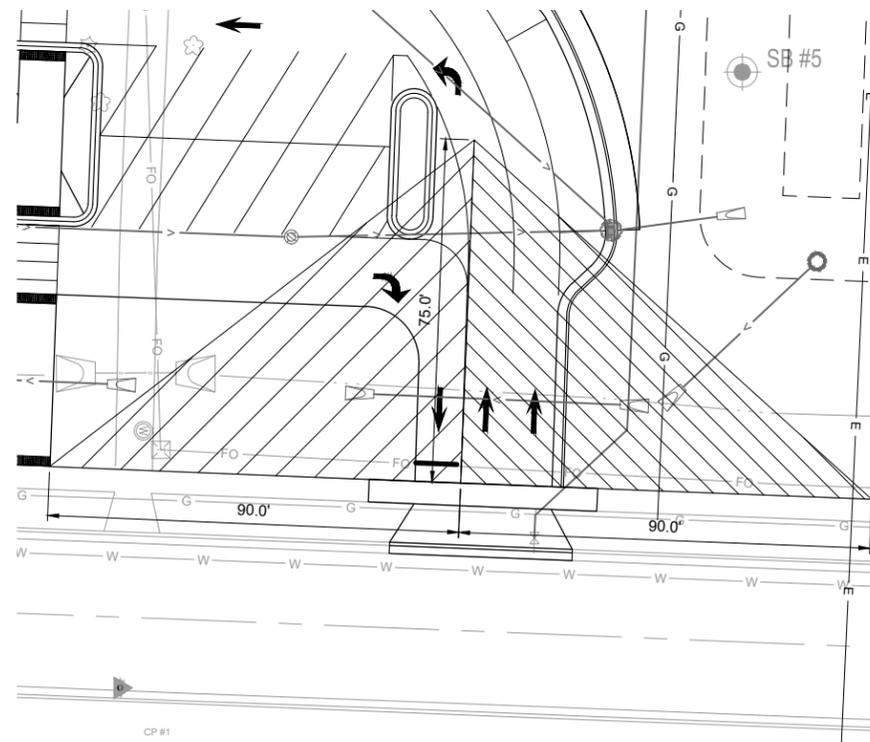
BIKE RACK DIMENSIONING DETAIL
NO SCALE



SEDIMENT LOG DETAIL
NO SCALE



SOUTH DRIVEWAY VISION TRIANGLES DETAIL
1" = 20'



NORTH DRIVEWAY VISION TRIANGLES DETAIL
1" = 20'

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
	LPS				
	BJK				
	Init				

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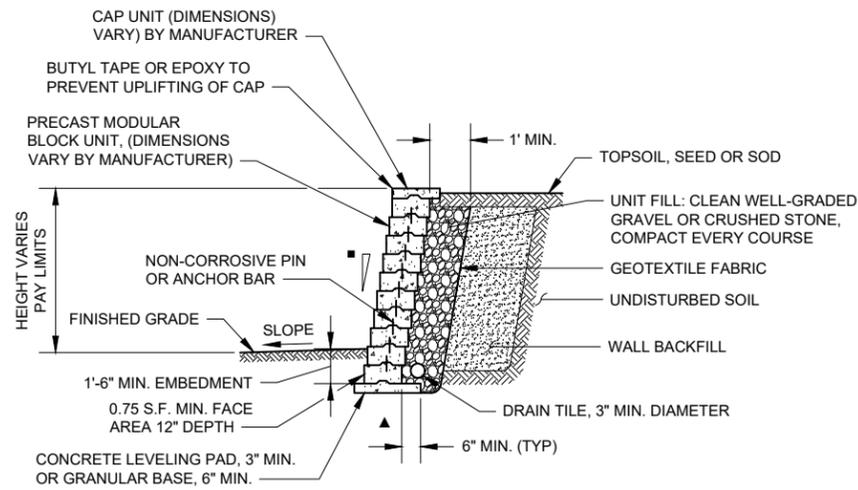


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MISCELLANEOUS DETAILS

PROJECT NO.
21586000
SHEET
C204

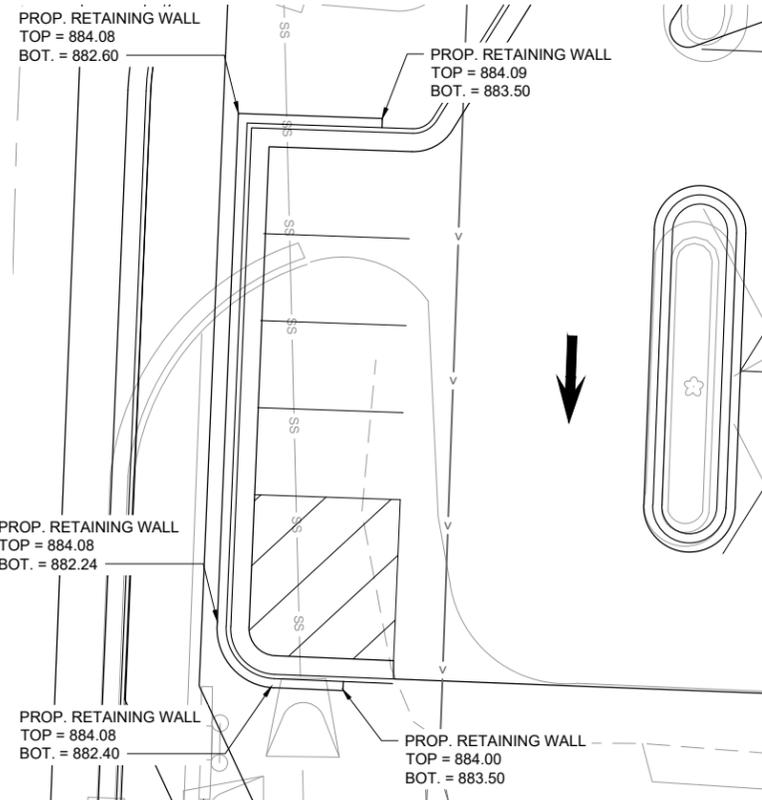


- NOTES:
- PAYMENTS SHALL BE BASED ON EXPOSED FACE ONLY.
 - SLOPE WALL TERMINALS NECESSARY TO BLEND INTO ADJACENT TERRAIN.

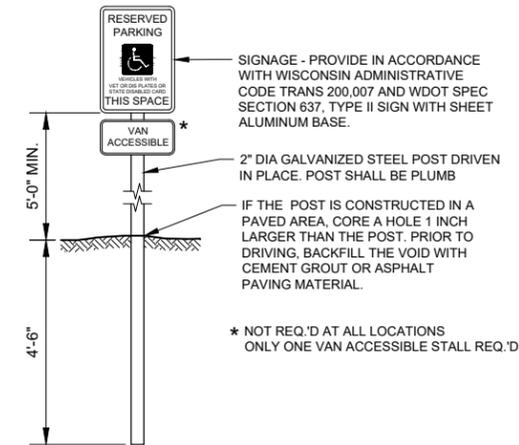
TABLE OF EXTERNAL STABILITY SAFETY FACTORS	
SLIDING	≥ 1.5
OVERTURNING	≥ 2.0
GEOGRID LONG TERM STRENGTH	≥ 1.5
GEOGRID CONNECTION STRENGTH	≥ 1.5
GLOBAL ROTATION	≥ 1.3
BEARING CAPACITY	≥ 2.0

SEGMENTAL RETAINING WALL DETAIL
NO SCALE

- SETBACK VARIES BY MANUFACTURER. MAXIMUM FRONT FACE SLOPE FROM VERTICAL IS 1 HORIZONTAL TO 4 VERTICAL.
- BASE SOIL PARAMETERS: SEE GEOTECHNICAL REPORT INCLUDED IN PROJECT MANUAL.

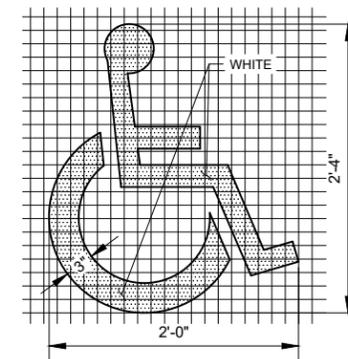


NORTH DRIVEWAY VISION TRIANGLES DETAIL
20'

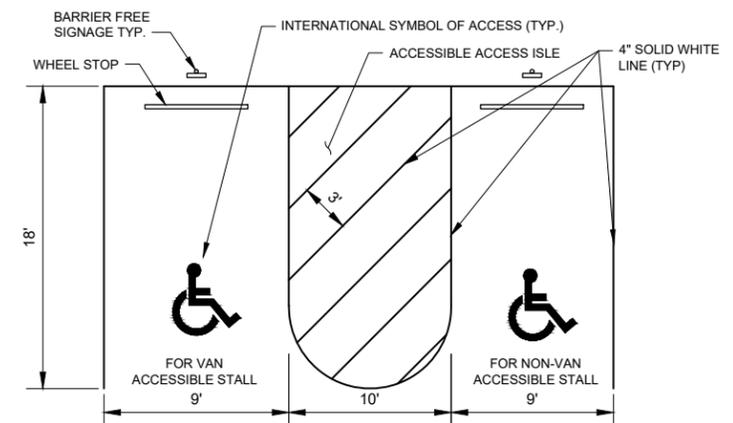


BARRIER FREE SIGNAGE
NO SCALE

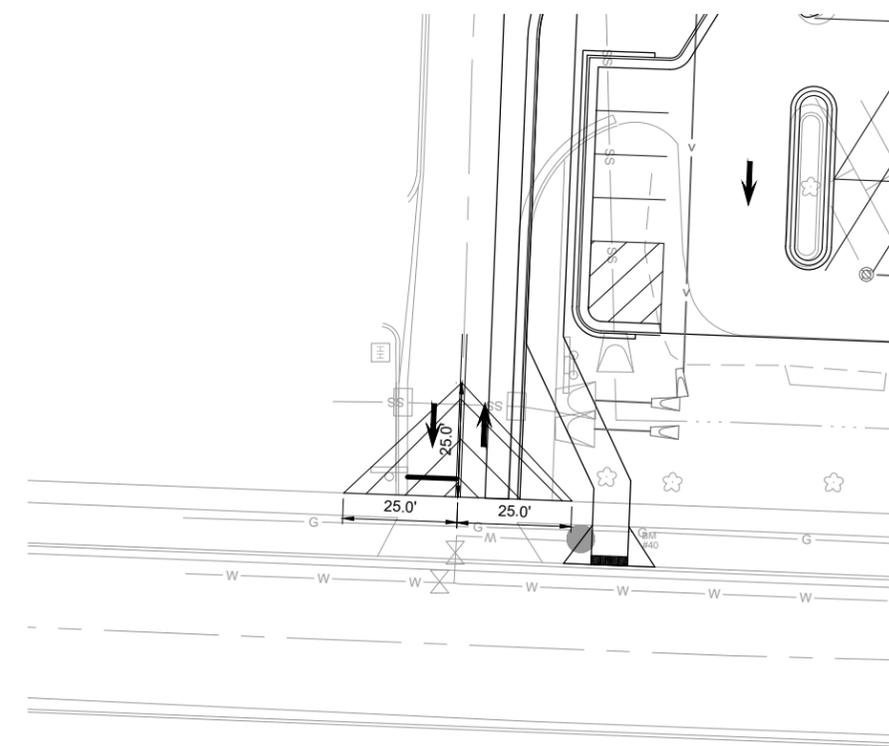
- GENERAL NOTES:
- DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
 - A DETAILED DRAWING OF THE DISABLED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.
 - WDOT SPEC. MEANS THE STATE OF WISCONSIN STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, AS AMENDED BY THE MOST CURRENT INTERIM SUPPLEMENTAL SPECIFICATION.
 - PROVIDE DISABLED PARKING STALLS AT LOCATIONS SHOWN ON THE DRAWINGS. STALL AND ACCESS ISLE DIMENSIONS SHALL BE AS SHOWN ON THE DETAIL UNLESS INDICATED OTHERWISE ON THE DRAWING.
 - PROVIDE A DISABLED SYMBOL AND BARRIER FREE SIGNAGE FOR EACH STALL SHOWN ON THE DRAWING.
 - PROVIDE WHEEL STOPS WHEN SHOWN ON THE DRAWINGS.
 - THE MAXIMUM SURFACE SLOPE, ACROSS STALLS OR ACCESSIBLE ROUTES, IN ANY DIRECTION, SHALL BE 2%.



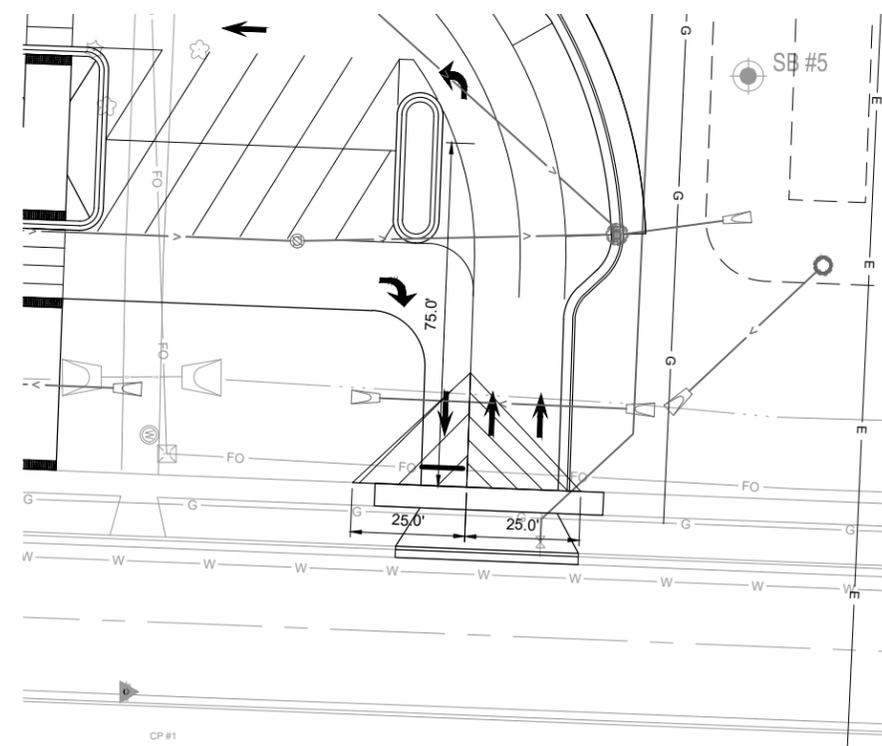
INTERNATIONAL SYMBOL OF ACCESS
NO SCALE



ACCESSIBLE PARKING STALL
NO SCALE



SOUTH DRIVEWAY VISION TRIANGLES DETAIL
1" = 20'



NORTH DRIVEWAY VISION TRIANGLES DETAIL
1" = 20'

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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	BJK				
	Init				

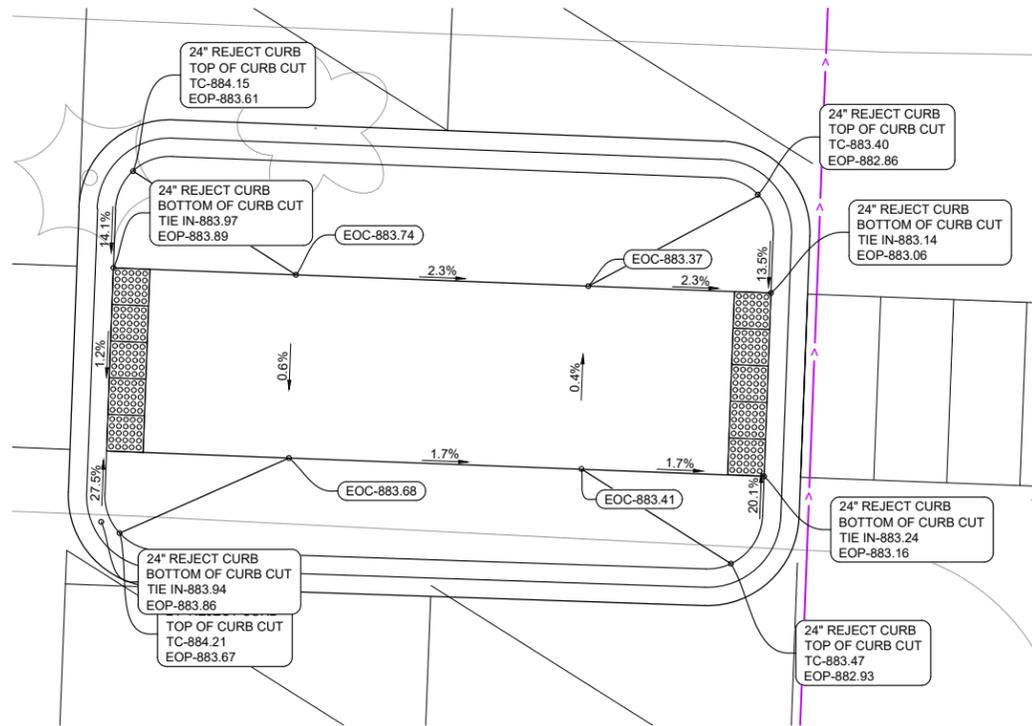


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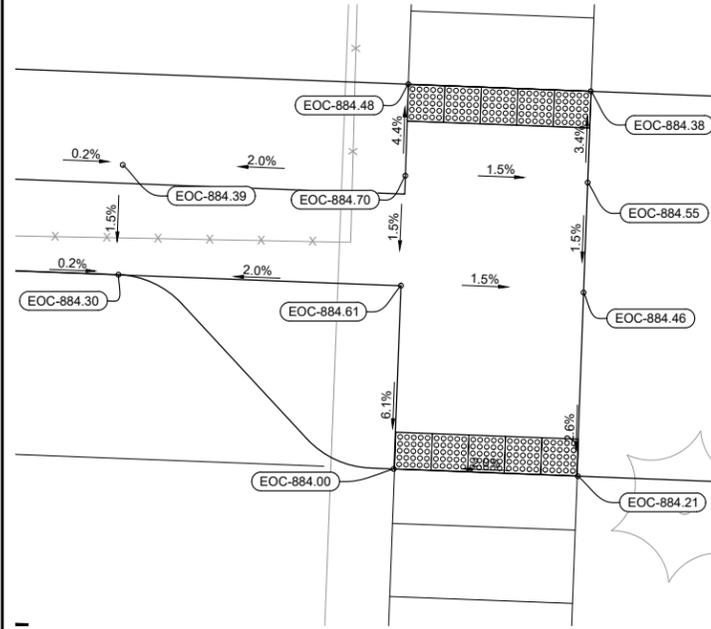
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MISCELLANEOUS DETAILS

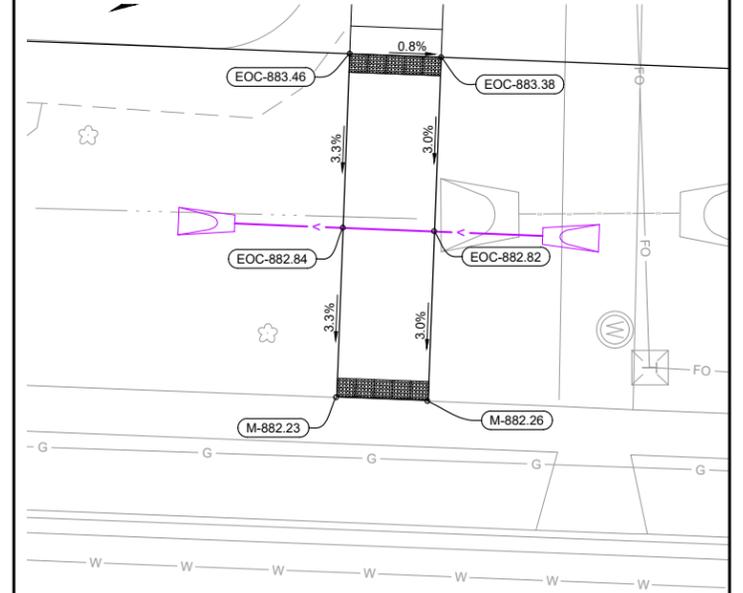
PROJECT NO.
21586000
SHEET
C205



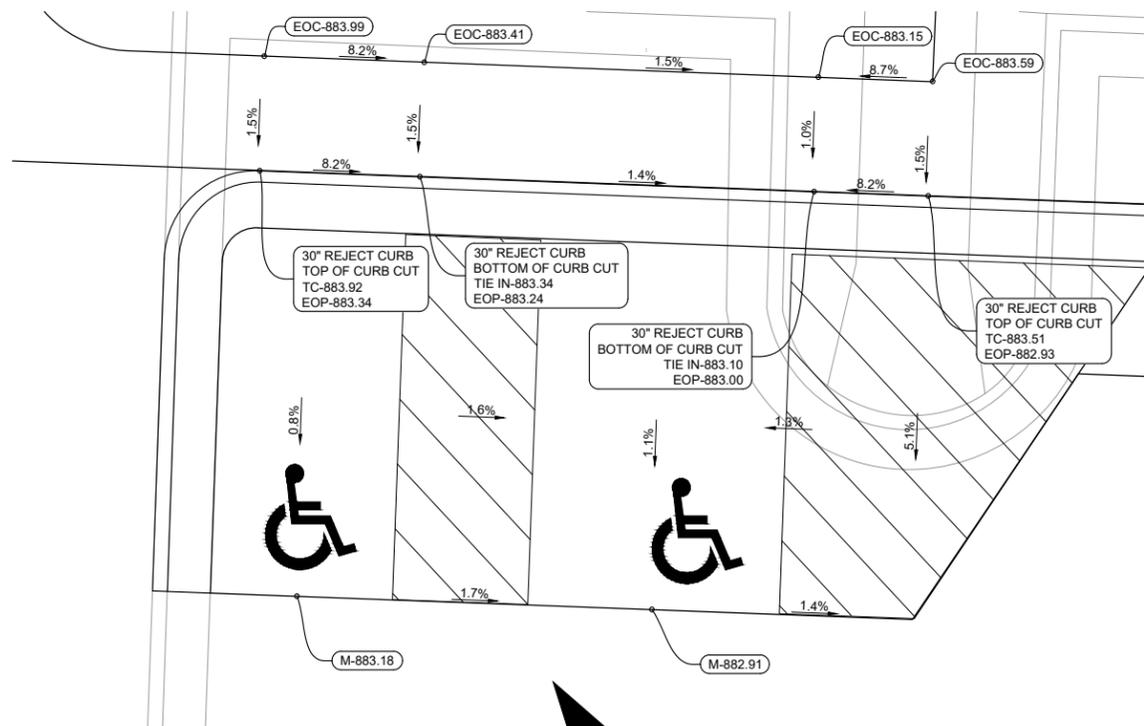
CURB RAMP #8 DETAIL
1" = 5'



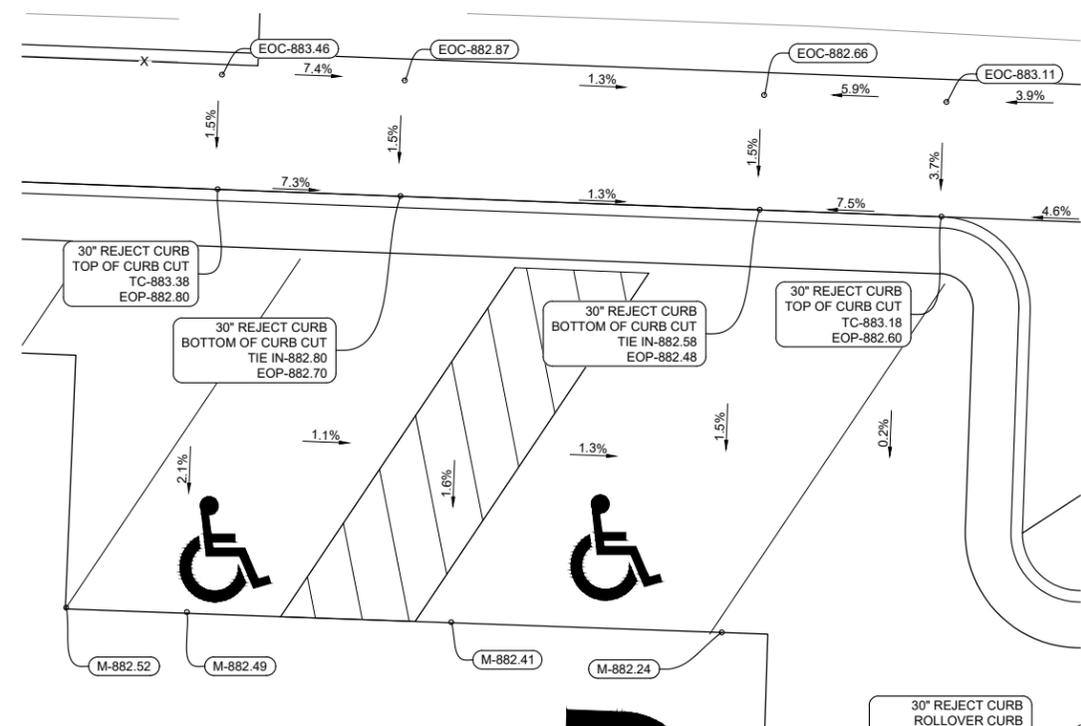
CURB RAMP #9 DETAIL
1" = 5'



CURB RAMP #10 DETAIL
1" = 5'



ACCESSIBLE PARKING #1 DETAIL
1" = 4'



ACCESSIBLE PARKING #1 DETAIL
1" = 4'

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY:
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	BJK				
	Init				

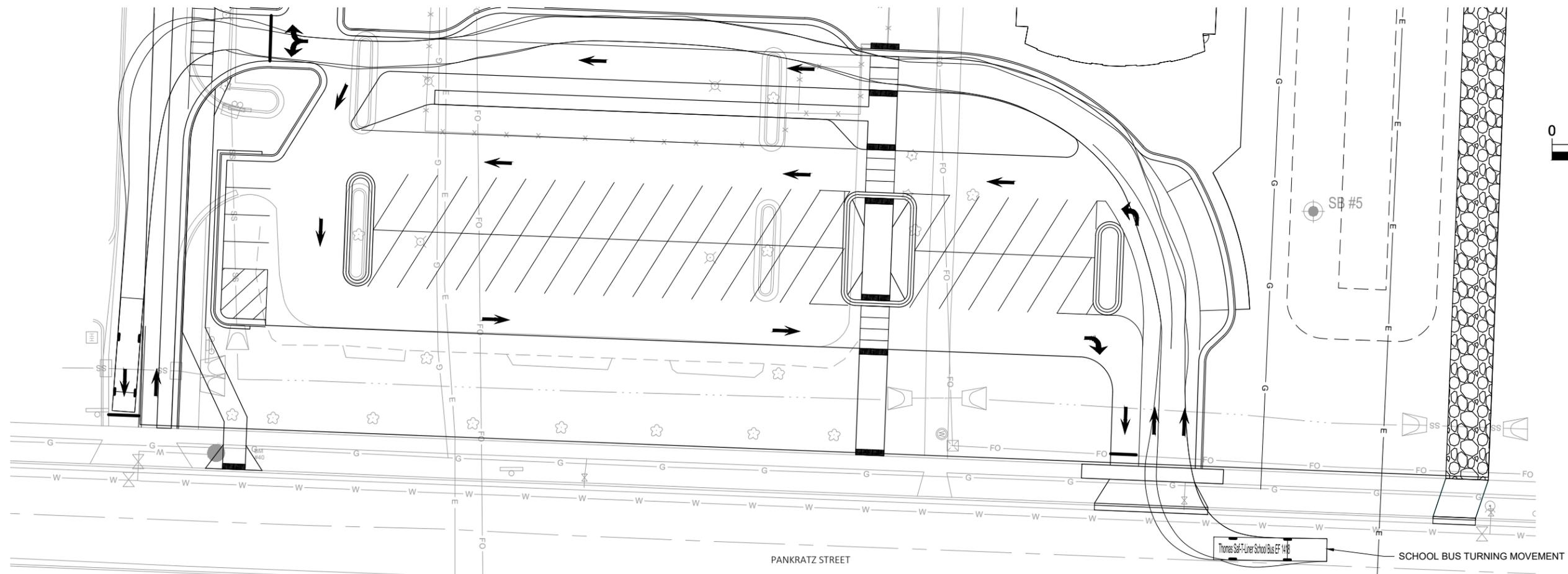
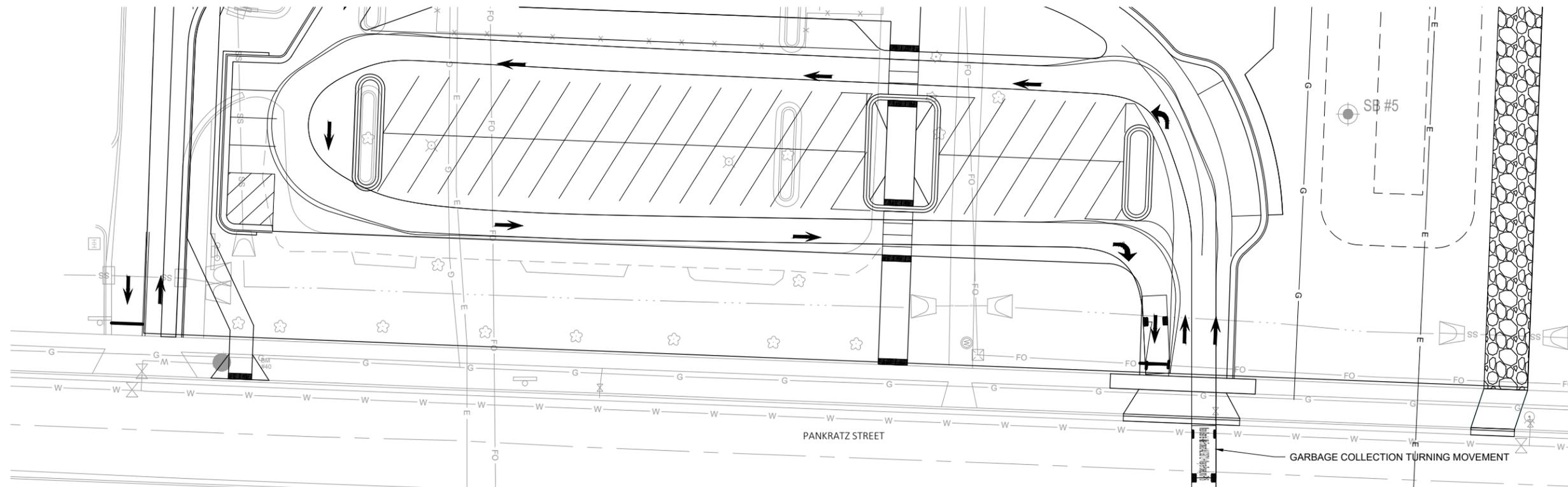
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CURB RAMP GRADING DETAILS

PROJECT NO.
21586000
SHEET
C207



PROJECT DATE:	NO.	DATE	REVISION	BY
DRAWN BY: LPS				
DESIGNED BY: BJK				
CHECKED BY: Init				
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 MADISON, WISCONSIN

VEHICLE TURNING MOVEMENT DETAIL

PROJECT NO.
21586000
 SHEET
C208



City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703-2506
 Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: fire@cityofmadison.com

Project Address:

Contact Name & Phone #:

FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system? If non-sprinklered , fire lanes extend to within 150-feet of all portions of the exterior wall? If sprinklered , fire lanes are within 250-feet of all portions of the exterior wall?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs? a) Is the fire lane a minimum unobstructed width of at least 20-feet? b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet? c) Is the minimum inside turning radius of the fire lane at least 28-feet? d) Is the grade of the fire lane not more than a slope of 8%? e) Is the fire lane posted as fire lane? (Provide detail of signage.) f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.) g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes: a) Is the gate a minimum of 20-feet clear opening? b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet? If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6 If yes, see IFC 3206.6 for further requirements.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane? If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet? f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants? <i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i> a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants? b) Is there at least 40' between a hydrant and the building? c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane? d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb? e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A

Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2015 Edition Chapter 5 and Appendix D**; please see the codes for further information.

OVFL 2RH

2-Head LED Security Floodlight

Performance & Value Combined

The OVFL 2RH LED security floodlight provides more light at an attractive cost providing the best combination of performance and value. Delivering 1,770 lumens, at only 20 inputs watts, the OVFL 2RH replaces up to (1) 150W par incandescent lamp offering 87% energy savings. The standard photocell offers a no-hassle, cost effective solution for any application requiring reliable dusk-to-dawn security lighting. This compact form features two heads allowing for more flexibility in application versus traditional single head solutions.

- Replaces: Up to (1) 150W PAR lamp
- Lumens: 1,770
- Input Watts: 20W
- Voltage: 120V
- Color Temperature: 4000K
- Expected Service Life: Approximately 10 years (35,000 hours¹)
- Mounting: Easily mounts to ceiling or wall on a recessed junction box
- Ideal for residential and commercial applications



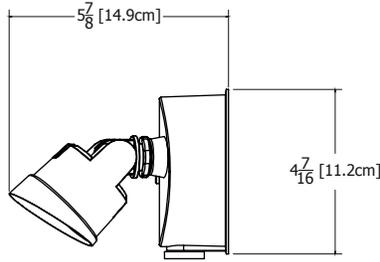
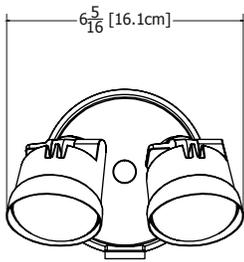
¹ LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.

OVFL LED 2HR Floodlight

Ordering Information

EXAMPLE: OVFL LED 2RH 40K 120 PE DDB HP17

OVFL					
Series	Lightheads	Color Temperature	Voltage	Control Options	Finish
OVFL LED LED Floodlight	2RH 2 Heads, Round	40K 4000K ¹	120 120V	PE PE 120V Button Photocell	DDB HP17 Dark Bronze WH HP17 White



Need more out of your LED luminaires?

You replace

150W PAR
Incandescent
150 Watts

You save

\$52 per year or 87%
energy savings²

You win

Luminaire pays for
itself in less than
1 year!

Notes

- 1 Correlated Color Temperature (CCT) shown is nominal per ANSI C78,377-2008.
- 2 Based on 10 hours operation per day and energy costs of \$.11 per kWh. Savings from energy only, not including maintenance costs.



Visit www.lithonia.com for more information



WEDGE2 LED

Architectural Wall Sconce

Visual Comfort Optic



Catalog Number

Notes

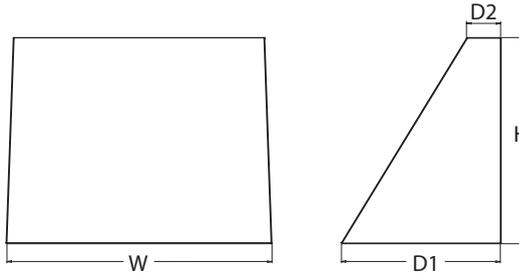
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Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

- Depth (D1):** 7"
- Depth (D2):** 1.5"
- Height:** 9"
- Width:** 11.5"
- Weight:** 13.5 lbs
(without options)



Introduction

The WEDGE2 LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WEDGE family provides additional energy savings and code compliance.

WEDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WEDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

WEDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P0	P1	P2	P3	P4	P5	P6
WEDGE1 LED	Visual Comfort	4W		--	750	1,200	2,000	--	--	--	--
WEDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WEDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WEDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	--	7,500	8,500	10,000	12,000	--	--
WEDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WEDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WEDGE2 LED	P1 ¹	P1SW	27K 2700K	VF Visual comfort forward throw	MVOLT	Shipped included SRM Surface mounting bracket
	P2 ¹	P2SW	30K 3000K		347 ³	
	P3 ¹	P3SW	35K 3500K	VW Visual comfort wide	480 ³	ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ⁷
	P4 ¹	Door with small window (SW) is required to accommodate sensors. See page 2 for more details.	40K 4000K	Shipped separately		
	P5 ¹		50K ² 5000K		AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.	

Options	Finish
E4WH Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD Dark bronze
E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)	DBLXD Black
E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min)	DNAXD Natural aluminum
PE⁴ Photocell, Button Type	DWHXD White
DS⁵ Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DSSXD Sandstone
DMG⁶ 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DDBTXD Textured dark bronze
BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DBLBXD Textured black
BAA Buy America(n) Act Compliant	DNATXD Textured natural aluminum
Standalone Sensors/Controls (only available with P1SW, P2SW & P3SW)	DWHGXD Textured white
PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.	DSSTXD Textured sandstone
PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching	
PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	
PIR1H3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.	
Networked Sensors/Controls (only available with P1SW, P2SW & P3SW)	
NLTAIR2 PIR nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights.	
NLTAIR2 PIRH nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.	



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WEDGE2 LED
Rev. 01/18/22

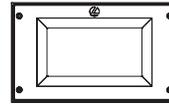
Accessories

Ordered and shipped separately.

WDGEAWS DDBXD	WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE2P8BW DDBXD U	WDGE2 surface-mounted back box (specify finish)

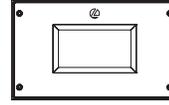
NOTES

- 1 P1-P5 not available with sensors/controls. Sensors/controls only available with P1SW, P2SW and P3SW.
- 2 50K not available in 90CRI
- 3 347V and 480V not available with E4WH, E10WH, E20WC or DS.
- 4 PE not available in 480V or with sensors/controls
- 5 DS option not available with E4WH, E10WH, E20WC or sensors/controls.
- 6 DMG option not available with sensors/controls
- 7 Not qualified for DLC. Not available with emergency battery backup or sensors/controls



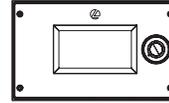
Default configuration with no sensors/controls.

Power Packages: P1, P2, P3, P4, P5



Small Window (SW) configuration

Power Packages: P1SW, P2SW, P3SW



Configuration with sensors/controls

Power Packages: P1SW, P2SW, P3SW

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1 / P1SW	10W	VF	1,166	119	0	0	0	1,209	123	0	0	0	1,251	128	0	0	0	1,256	128	0	0	0	1,254	128	0	0	0
		VW	1,197	122	0	0	0	1,241	126	0	0	0	1,284	131	0	0	0	1,289	131	0	0	0	1,286	131	0	0	0
P2 / P2SW	15W	VF	1,878	129	1	0	0	1,947	134	1	0	0	2,015	139	1	0	0	2,023	139	1	0	0	2,019	139	1	0	0
		VW	1,927	133	1	0	0	1,997	137	1	0	0	2,067	142	1	0	0	2,075	143	1	0	0	2,071	143	1	0	0
P3 / P3SW	23W	VF	2,908	129	1	0	0	3,015	134	1	0	0	3,119	138	1	0	0	3,132	139	1	0	0	3,126	139	1	0	0
		VW	2,983	132	1	0	0	3,093	137	1	0	0	3,200	142	1	0	0	3,213	143	1	0	0	3,206	142	1	0	0
P4	35W	VF	4,096	117	1	0	1	4,247	121	1	0	1	4,394	126	1	0	1	4,412	126	1	0	1	4,403	126	1	0	1
		VW	4,202	120	1	0	0	4,357	125	1	0	1	4,508	129	1	0	1	4,526	129	1	0	1	4,517	129	1	0	1
P5	48W	VF	5,567	115	1	0	1	5,772	119	1	0	1	5,972	123	1	0	1	5,996	124	1	0	1	5,984	124	1	0	1
		VW	5,711	118	1	0	1	5,921	122	1	0	1	6,127	126	1	0	1	6,151	127	1	0	1	6,139	127	1	0	1

Electrical Load

Performance Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1 / P1SW	10W	0.082	0.049	0.043	0.038	--	--
	13W	--	--	--	--	0.046	0.033
P2 / P2SW	15W	0.132	0.081	0.072	0.064	--	--
	18W	--	--	--	--	0.056	0.041
P3 / P3SW	23W	0.195	0.114	0.100	0.088	--	--
	26W	--	--	--	--	0.079	0.058
P4	35W	0.302	0.175	0.152	0.134	--	--
	38W	--	--	--	--	0.115	0.086
P5	48W	0.434	0.241	0.211	0.184	--	--
	52W	--	--	--	--	0.157	0.119

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647
E10WH	VF	1,658
	VW	1,701
E20WC	VF	2,840
	VW	2,913

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.03
10°C / 50°F	1.02
20°C / 68°F	1.01
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91



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WDGE2 LED
Rev. 01/18/22

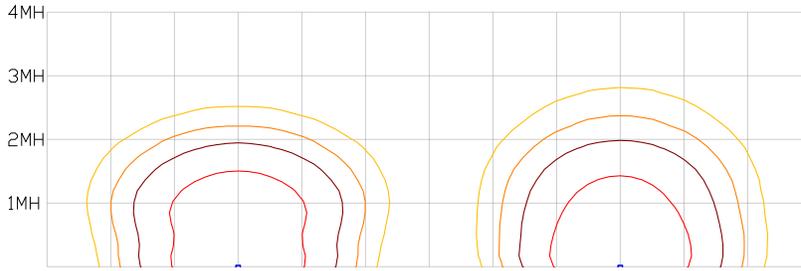
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 10ft
Grid = 10ft x 10ft



WDGE2 LED P3 40K 80CRI VW

WDGE2 LED P3 40K 80CRI VF

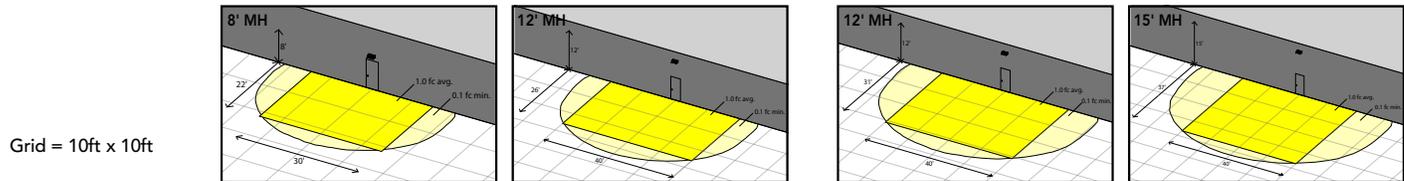
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E10WH or E20WC and VF distribution.



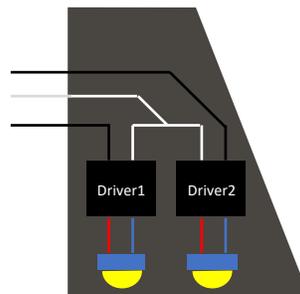
WDGE2 LED xx 40K 80CRI VF MVOLT E10WH

WDGE2 LED xx 40K 80CRI VF MVOLT E20WC

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



Motion/Ambient Sensor (PIR, PIRH)

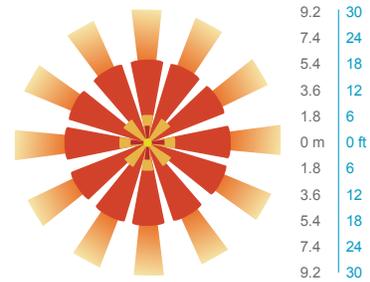
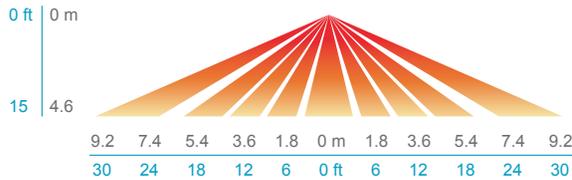
Motion/Ambient sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

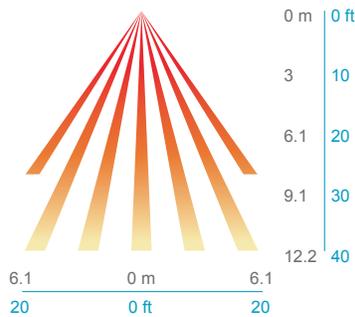
PIR

HIGH VIEW

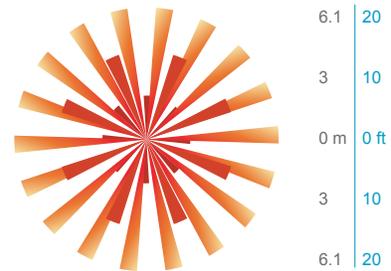


PIRH

SIDE VIEW



TOP VIEW



Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 1fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec



NLTAIR2 PIR – nLight AIR Motion/Ambient Sensor

D = 7"

H = 11"

W = 11.5"



PBBW – Surface-Mounted Back Box Use when there is no junction box available.

D = 1.75"

H = 9"

W = 11.5"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficiency LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



VCVL LED Architectural Luminaire



Catalog Number

Notes

Type

TYPE F

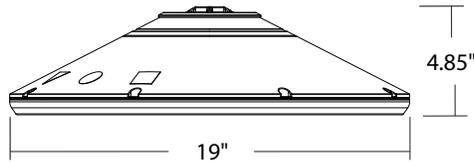
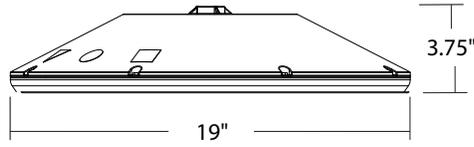
Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Diameter: 19"

Height: 3.75"
(4.85" with Up-Light)

Weight 18 lbs
(max, with no options):



A+ Capable options indicated by this color background.

Introduction

The VCVL LED, Visually Comfortable Versatile Luminaire, is designed to bring glare control, optical performance and energy savings into one package. The recessed lens design of VCVL LED minimizes high angle glare, while its precision molded acrylic lens eliminates LED pixilation and delivers uniform distribution. The dedicated up-light module option reduces the contrast between the luminaire and the ceiling creating a more visually comfortable environment.

Ordering Information

EXAMPLE: VCVL LED V4 P4 40K 70CRI T5M MVOLT AC6 DNAXD

VCVL LED								
Series	LED Light Engines	Package	Color temperature	Color Rendering Index	Distribution	Voltage	Mounting	
VCVL LED	V4 ¹ 4 Light Engines	P1 ¹	30K 3000 K	70CRI	TSE Concentrated	MVOLT	Shipped included PM Pendant mount standard (24-inch length supply leads) SRM Surface mount (24-inch length supply leads) ARM Arm mount (use RSXWBA accessory to mount to a wall) Shipped separately AC6 Aircraft cable with white 6' cord (adjustable, max 6') HCS Male cast hook with black 5' cord (sealed, no plug)	
		P2 ¹	35K 3500 K	80CRI				
	V8 ¹ 8 Light Engines	P3 ¹	40K 4000 K		T5M Medium	347		120
		P4 ¹	50K 5000 K		T5W Wide	480		208
		P5 ¹			T5R ² Rectangular			240
		P6 ¹						277
		P7 ¹						347
						480		

Options	Finish (required)
Shipped installed UPL1 Up-Light: 500 lumens UPL2 Up-Light: 700 lumens E8WC Emergency battery backup, Certified in CA Title 20 MAEDBS (8W, -20°C min) ^{3,4,5} E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min) ^{3,4,5} HA High ambient (50°C, only P1-P4) SF Single fuse (120V, 277V, 347V) DF Double fuse (208V, 240V, 480V) SPD10KV 10KV Surge Pack LDS36 36in (3ft) lead length LDS72 72in (6ft) lead length LDS108 108in (9ft) lead length DMG External 0-10V leads (no controls) ⁶ Shipped Separately WG Wire Guard	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black
Standalone Sensors/Controls² PIR Motion/ambient sensor for 8-15' mounting heights PIRH Motion/ambient sensor for 15-30' mounting heights PIR3FC3V Motion/ambient sensor for 8-15' mounting heights, pre programmed to 3fc and 35% light output PIRH3FC3V Motion/ambient sensor for 15-30' mounting heights, pre programmed to 3fc and 35% light output PIR3FC3V924 UL924 Listed motion/ambient sensor for emergency circuit for 8-15' mounting heights, pre programmed to 3fc and 35% light output ⁷ PIRH3FC3V924 UL924 Listed motion/ambient sensor for emergency circuit for 15-30' mounting heights, pre programmed to 3fc and 35% light output ⁷ Networked Sensors/Controls² NLTAIR2 PIR nLIGHT AIR Wireless enabled motion/ambient sensor for 8-15' mounting heights NLTAIR2 PIRH nLIGHT AIR Wireless enabled motion/ambient sensor for 15-30' mounting heights NLTAIR2 PIR924 nLIGHT AIR Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 8-15' mounting heights ⁸ NLTAIR2 PIRH924 nLIGHT AIR Wireless enabled, UL 924 Listed motion/ambient sensor for emergency circuits for 15-30' mounting heights ⁸	



Ordering Information Cont.

Accessories

Ordered and shipped separately.

VCPGSRM U	Surface mount kit, with no Up-Light
VCPGUSR U	Surface mount kit, with Up-Light
VCPGWG U	Wire guard
SLVSQ	Quick mount pendant swivel kit, square
SLVRD	Quick mount pendant swivel kit, round
RSXWBA DWXHD U	RSX WBA wall bracket (specify finish)
VCVLSC12	Safety cable 120"
VCVLSC240	Safety cable 240"

NOTES

- 1 P1-P6 not available with V8. P7 not available with V4.
- 2 Not available with P7.
- 3 Not available with 347V, 480V, AC6 or HC5.
- 4 E8WC and E10WH only rated up to 35°C ambient.
- 5 E8WC & E10WH only available with P1-P4 packages.
- 6 DMG option not available with AC6, HC5 and standalone or networked sensors/controls.
- 7 Power interruption delay >30 milliseconds required for operation. Refer sequence of operations on page 4 for more details.
- 8 Power interruption delay >200 milliseconds required for operation. Refer sequence of operations on page 4 for more details.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	Watts	Distribution Type	30K (3000K, 70 CRI)		35K (3500K, 70 CRI)		40K (4000K, 70 CRI)		50K (5000K, 70 CRI)	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P1	27W	TSE	3,581	135	3,670	138	3,815	144	3,876	146
		TSM	3,620	136	3,710	140	3,856	145	3,917	147
		TSW	3,592	135	3,681	139	3,827	144	3,888	146
		TSR	3,464	130	3,550	134	3,690	139	3,749	141
		LANE	3,507	132	3,594	135	3,736	141	3,796	143
P2	34W	TSE	4,577	135	4,691	138	4,876	144	4,954	146
		TSM	4,626	136	4,741	140	4,928	145	5,007	147
		TSW	4,591	135	4,705	139	4,891	144	4,968	146
		TSR	4,427	130	4,537	134	4,716	139	4,791	141
		LANE	4,482	132	4,594	135	4,775	141	4,851	143
P3	43W	TSE	5,808	134	5,952	137	6,187	143	6,286	145
		TSM	5,870	135	6,015	139	6,253	144	6,353	146
		TSW	5,825	134	5,970	138	6,205	143	6,304	145
		TSR	5,617	130	5,757	133	5,984	138	6,079	140
		LANE	5,688	131	5,829	134	6,059	140	6,155	142
P4	56W	TSE	7,391	131	7,575	135	7,874	140	7,999	142
		TSM	7,470	133	7,656	136	7,958	141	8,085	144
		TSW	7,414	132	7,597	135	7,898	140	8,023	143
		TSR	7,149	127	7,326	130	7,615	135	7,737	137
		LANE	7,238	129	7,418	132	7,711	137	7,834	139
P5	82W	TSE	10,189	124	10,442	127	10,854	132	11,027	134
		TSM	10,298	125	10,553	128	10,970	134	11,145	136
		TSW	10,220	124	10,473	128	10,887	133	11,060	135
		TSR	9,855	120	10,099	123	10,498	128	10,665	130
		LANE	9,978	121	10,226	124	10,629	129	10,799	131
P6	108W	TSE	12,878	120	13,197	123	13,719	127	13,937	129
		TSM	13,015	121	13,338	124	13,865	129	14,086	131
		TSW	12,917	120	13,237	123	13,760	128	13,979	130
		TSR	12,455	116	12,764	119	13,268	123	13,480	125
		LANE	12,611	117	12,924	120	13,435	125	13,649	127
P7	122W	TSE	15,503	125	15,887	128	16,515	133	16,778	135
		TSM	15,668	126	16,057	129	16,691	135	16,957	137
		TSW	15,549	125	15,935	129	16,564	134	16,828	136

Up-light Lumen Output

Up-light Option	Watts	Lumens
UPL1	6.5W	519
UPL2	8.5W	715

Lumen Multiplier for 80CRI

CCT	Multiplier
30K	0.926
35K	0.945
40K	0.967
50K	0.965

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.03
10°C / 50°F	1.02
20°C / 68°F	1.01
25°C / 77°F	1
30°C / 86°F	0.99
40°C / 104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LMF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.97	0.94	0.89

Electrical Load

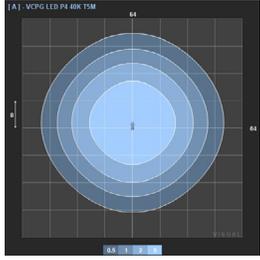
Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	27W	0.22	0.13	0.12	0.10	0.08	0.06
P2	34W	0.28	0.16	0.14	0.13	0.10	0.08
P3	43W	0.37	0.21	0.18	0.16	0.13	0.09
P4	56W	0.48	0.28	0.24	0.21	0.16	0.12
P5	82W	0.68	0.40	0.35	0.30	0.24	0.18
P6	108W	0.91	0.52	0.45	0.39	0.32	0.23
P7	124W	1.03	0.59	0.51	0.44	0.37	0.27



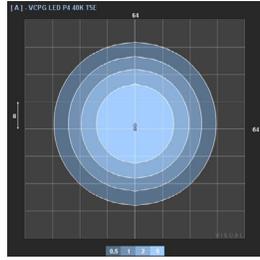
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the [Lithonia Lighting VCVL LED homepage](#).
Tested in accordance with IESNA LM-79 and LM-80 standards

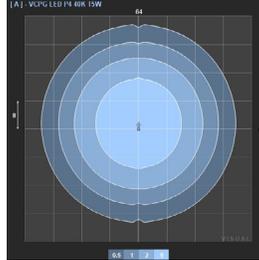
VCVL LED V4 P4 T5M 40K



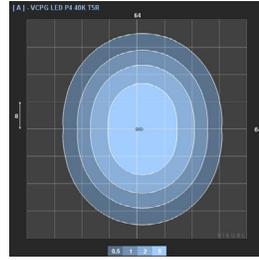
VCVL LED V4 P4 T5E 40K



VCVL LED V4 P4 T5W 40K



VCVL LED V4 P4 T5R 40K



Control/Sensor Options

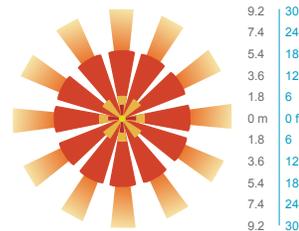
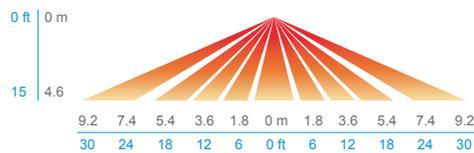
Motion/Ambient Sensor (PIR, PIRH)

Motion/Ambient sensor (Sensor Switch MSOD) is integrated into the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

Networked Control (NLTAIR2)

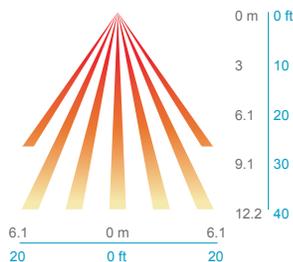
nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

PIR HIGH VIEW

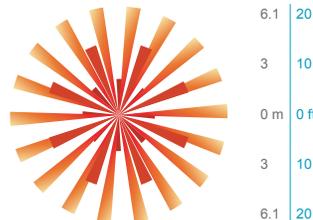


PIRH

SIDE VIEW



TOP VIEW



Motion/Ambient Sensor Default Settings

Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR3FC3V or PIRH3FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 3fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec

Sequence of Operations for UL924 Listed Controls/Sensors (PIR3FC3V924, PIRH3FC3V924, NLTAIR2 PIR924, NLTAIR2 PIRH924)

The UL924 listed control/sensor ("device") is designed to provide full light output for 90 minutes following power loss ("Egress Mode"), ignoring both manual and automatic dimming/occupancy/daylight control signals during this time. The sequence of operations is as follows:

- Normal condition: device can dim and turn off the luminaire as normal, in response to automatic and manual control.
- Utility power fails, and luminaire loses power.
- Backup power source activates, transfer switch moves the emergency circuit powering the luminaire onto the backup source, and luminaire regains power.
- The device detects this power interruption, if it is >30ms (for PIR3FC3V924, PIRH3FC3V924) or >200ms (for NLTAIR2 PIR924, NLTAIR2 PIRH924).
- The device ignores all dimming commands and controls the driver to full light output for 90 minutes.
- The device resumes normal dimming controls after 90 minutes.

These UL924 listed controls/sensors are not intended for use with Non-interruptible central emergency power systems. The power interruption, when transferring from normal utility power to emergency backup power, is required for the controller to activate its Egress Mode and provide full light output.



Mounting, Options & Accessories



AC6 – Aircraft Cable

D = 19"
H = 12" - 72"



HC5 – Hook & Cord

D = 19"
H = 8" (no up-light)
or 9.2" (with up-light)



PM – Pendant Mount
(compatible with 3/4 NPT,
pendant stem provided
by others)

D = 19"
H = 4.1" (no p-light)
or 5.3" (with up-light)



**PIR & PIRH – Motion/
Ambient sensor**

D = 19"
H = 4.6" (no up-light)
or 5.6" (with up-light)



SRM – Surface Mount

D = 19"
H = 4.1"



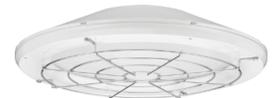
**SRM – Surface Mount
with Up-Light**

D = 19"
H = 5.3"



ARM – Arm Mount

L = 28"
W = 19"
H = 8"



WG – Wire guard

D = 19"
H = 4.9" (no uplight)
or 5.9" (with up-light)

FEATURES & SPECIFICATIONS

INTENDED USE

The sleek styling and versatility offered by VCVL and VCVL Ultimate (VCVLX) makes them ideal for wide range of applications such as commercial offices, retail spaces, school gymnasiums, large conference rooms or any large open areas. And with VCVL's array of mounting options, you can install them in any building style or architectural design.

CONSTRUCTION

Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED driver is separated from the heat generating light engines and mounted in direct contact with the casting to promote low operating temperatures, higher lumen maintenance and long life. The housing is completely sealed against moisture and environmental contaminants (IP66) and is suitable for hose-down application.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS

Light guide technology provides a diffused light source, reducing glare from direct view of the LEDs. The light source is recessed into the luminaire, further reducing the high angle glare from the luminaire. A combination of precision molded micro prismatic acrylic lenses and back reflectors provide five different photometric distributions that allow you to create uniform distribution, no matter the application. Up-light option comes with a dedicated light engine and custom optic designed to efficiently spread light on to the ceiling, thus reducing the cave effect.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L89/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%, and a minimum 6.0 KV surge rating. When ordering the SPD10KV option, a separate 10kV (5kA) surge protection device is installed within the luminaire which meets a minimum Category C low operation (per ANSI/IEEE C62.41.2). Luminaire is 0-10V dimmable down to 10% or lower.

INSTALLATION

Standard configuration accepts a rigid or free-swinging 3/4" NPT stem for pendant mounting. Aircraft cable and hook & cord options allow the luminaire to be suspended from the ceiling and come with a cord for easy wiring. The surface mount option attaches to a 4x4" recessed or surface mount outlet box using a quick-mount kit (included); kit contains galvanized steel luminaire and outlet box plates and a full pad gasket. Kit has an integral mounting support that allows the luminaire to hinge down for easy electrical connections. Luminaire and plates are secured with set screws. Supply leads are 24" in length as standard. Longer supply leads are available as additional options. PM and SRM can withstand up to a 3.0 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. IP66 rated for outdoor applications. PIR options are rated for wet location. Rated for -40°C minimum ambient.

BUY AMERICAN

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Fixture Type: _____

Catalog Number: _____

Project: _____

Location: _____

Rubix

Single & Double Wall Mount 3000K

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
<input type="radio"/> WS-W2504 Single	<input type="radio"/> 3000K 90	16W	750	<input type="radio"/> AL Brushed Aluminum
<input type="radio"/> WS-W2505 Double		30W	1400	<input type="radio"/> BK Black
				<input type="radio"/> BZ Bronze
				<input type="radio"/> GH Graphite
				<input type="radio"/> WT White

Example: **WS-W2504-AL**

DESCRIPTION

Available in single and twin light configurations, this die-cast aluminum LED wall luminaire is Wet Location listed for a broad range of exterior lighting applications. Designed with asquare profile, this version of Rubix mounts upwards or downwards.

FEATURES

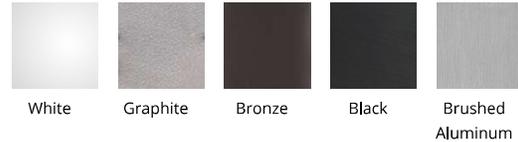
- 2504 Single, 2505 Double
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

Construction:	Die-cast Aluminum
Power:	30W, 16W
Input:	120-277 VAC, 50/60Hz
Dimming:	ELV: 100-15% , 0-10V: 100-10%
Light Source:	Integrated LED
Rated Life:	70000 Hours
Mounting:	Mounts directly to junction box, Can be mounted on wall in all orientations
Finish:	Electrostatically Powder Coated: White, Graphite, Bronze, Black, Brushed Aluminum
Operating Temp:	-40°F to 122°F (-40°C to 50°C)
Standards:	ETL, cETL, Wet Location Listed, IP65, Title 24 JA8-2019 Compliant



FINISHES:



LINE DRAWING:



WS-W2504, WS-W2505

Fixture Type: _____

Catalog Number: _____

Project: _____

Location: _____

Rubix

Single & Double Wall Mount 3000K

Model & Size	Color Temp & CRI	Watt	Lumens	Finish
<input checked="" type="radio"/> WS-W2504 Single <input type="radio"/> WS-W2505 Double	<input checked="" type="radio"/> 3000K 90	<input checked="" type="radio"/> 16W <input type="radio"/> 30W	<input checked="" type="radio"/> 750 <input type="radio"/> 1400	<input checked="" type="radio"/> AL Brushed Aluminum <input type="radio"/> BK Black <input type="radio"/> BZ Bronze <input type="radio"/> GH Graphite <input type="radio"/> WT White

Example: **WS-W2504-AL**

DESCRIPTION

Available in single and twin light configurations, this die-cast aluminum LED wall luminaire is Wet Location listed for a broad range of exterior lighting applications. Designed with asquare profile, this version of Rubix mounts upwards or downwards.

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Standards:	ETL, cETL, Wet Location Listed, IP65, Title 24 JA8-2019 Compliant



FINISHES:



LINE DRAWING:

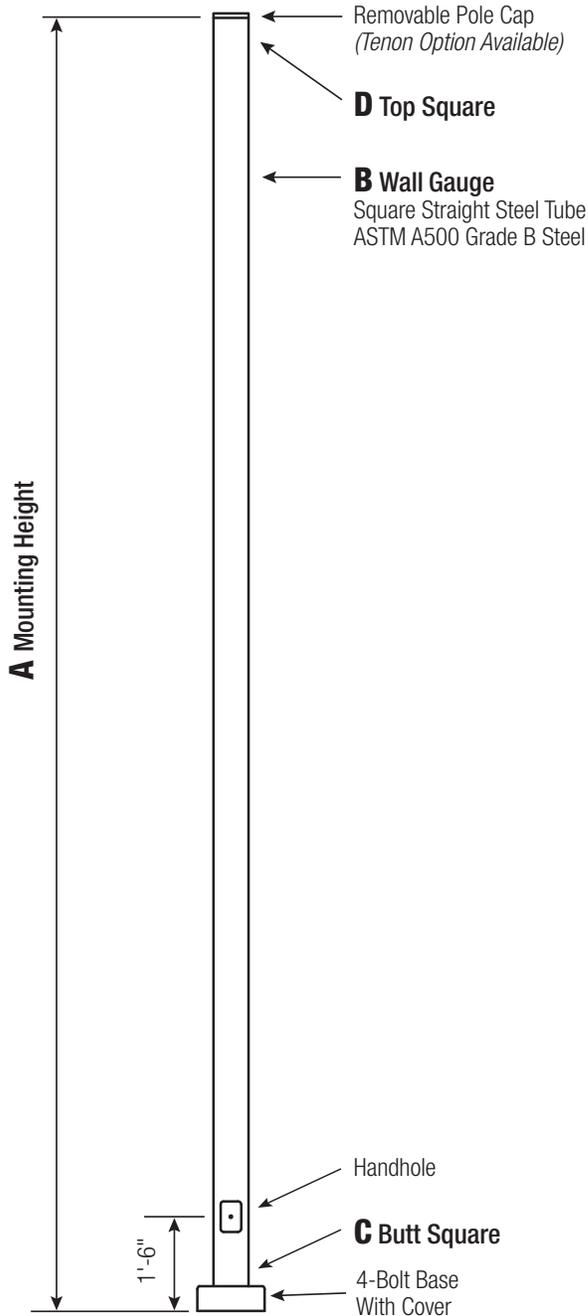


WS-W2504, WS-W2505

SSS

Square Straight Steel Pole No Arm — 4-Bolt Base

TYPE S1



Powder Coated, Galvanized or Powder Coated over Galvanized Finish Per Customer Specification.

C BUTT SQ.	D TOP SQ.	F BOLT CIR. DIA.	G BASE SQ.	H BOLT PROJ.	I BOLT SIZE
4 (11 Gauge)	4	8 - 9	8	3.75	.75 x 17 x 3
4 (7 Gauge)	4	8 - 9	8	3.75	.75 x 30 x 3
5 (11 Gauge)*	5	10 - 12	11	4.875	.75 x 30 x 3
5 (7 Gauge)	5	10 - 12	11	4.875	1 x 36 x 4
6	6	11 - 13	12.5	4.875	1 x 36 x 4

*Requires the use of oversized washers (provided).

Dimensions in Inches

Pole

Pole shaft shall be weldable-grade, cold-rolled, commercial quality carbon steel tubing conforming to ASTM A500 Grade B. Options include 11 gauge and 7 gauge. All welds shall conform to AWS D1.1 using ER70S-6 electrodes.

Base Style

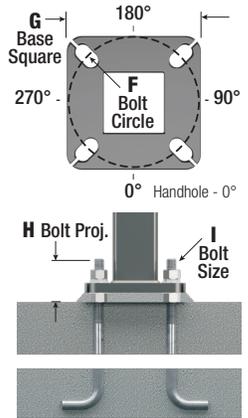
4-Bolt Steel Plate Base Flange of fabricated hot rolled carbon steel conforming to ASTM A36 or equivalent (36 ksi minimum yield) with 2-piece Base Cover and attaching hardware.



Anchorage

Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55. Ten inches (10") of threaded end will be galvanized per ASTM A153.

Kits will contain eight (8) Hex Nuts, four (4) Lock Washers, and eight (8) Flat Washers (all components Galvanized Steel). A paper bolt circle template will be provided.



Handhole

Reinforced, 3" x 5" Handhole with cover, stainless steel screw and backbar. A grounding provision incorporating a tapped 1/2"-13NC hole will be provided.



Base Cover

Square ABS plastic Base Covers are standard on all SSS poles specified in BA-Black, BM-Dark Bronze and BH-White. SSS poles specified in all other colors will be manufactured of metal materials. Custom specification of SSS square metal style Base Covers in BA, BM and BH powder coated finishes is available.



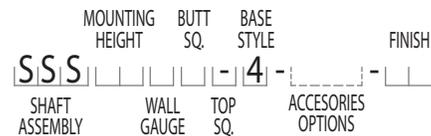
Vibration Damper

If determined necessary by Hapco, or if specified by the customer, a first and/or second mode vibration damper will be provided.

A Mtg. Hgt.	B Wall Gauge	C Butt Sq.	TOTAL Lum. Weight	MAXIMUM EPA						CATALOG NUMBER
				90	100	110	120	130	140	
10	11	4	320	25.2	20.0	18.6	15.3	12.7	10.6	SSS10B4-4**
12	11	4	285	20.6	16.2	14.9	12.1	9.9	8.2	SSS12B4-4**
14	11	4	255	17.0	13.2	12.1	9.7	7.8	6.3	SSS14B4-4**
15	11	4	245	15.5	11.9	10.9	8.6	6.8	5.4	SSS15B4-4**
15	7	4	305	23.4	18.4	17.0	13.8	11.4	9.4	SSS15D4-4**
16	11	4	235	14.0	10.7	9.7	7.6	5.9	4.6	SSS16B4-4**
16	7	4	290	21.5	16.8	15.5	12.5	10.2	8.4	SSS16D4-4**
18	11	4	215	11.3	8.4	7.6	5.7	4.3	3.2	SSS18B4-4**
18	7	4	265	18.0	13.9	12.8	10.2	8.2	6.6	SSS18D4-4**
20	11	4	200	9.1	6.5	5.8	4.2	2.9	1.9	SSS20B4-4**
20	11	5	235	14.1	10.3	9.2	6.8	4.9	3.4	SSS20B5-4**
20	7	4	240	15.1	11.5	10.5	8.2	6.5	5.0	SSS20D4-4**
20	7	5	330	26.3	20.3	18.6	14.8	11.9	9.6	SSS20D5-4**
22	11	4	200	7.2	4.9	4.2	2.8	1.7	0.8	SSS22B4-4**
22	11	5	215	11.4	8.0	7.1	4.9	3.2	1.9	SSS22B5-4**
22	7	4	225	12.7	9.5	8.6	6.6	5.0	3.7	SSS22D4-4**
22	7	5	300	22.4	17.1	15.6	12.2	9.6	7.5	SSS22D5-4**
25	11	4	200	4.7	2.8	2.2	1.0	-	-	SSS25B4-4**
25	11	5	200	8.0	5.1	4.3	2.4	1.0	-	SSS25B5-4**
25	7	4	205	9.7	6.9	6.2	4.4	3.1	2.0	SSS25D4-4**
25	7	5	260	17.7	13.2	11.9	9.0	6.7	4.9	SSS25D5-4**
28	11	4	200	2.6	1.0	-	-	-	-	SSS28B4-4**
28	11	5	200	5.1	2.6	1.9	-	-	-	SSS28B5-4**
28	7	4	200	7.1	4.8	4.1	2.6	1.5	-	SSS28D4-4**
28	7	5	235	13.9	9.9	8.8	6.3	4.3	2.7	SSS28D5-4**
30	11	5	200	3.4	1.1	-	-	-	-	SSS30B5-4**
30	7	4	200	5.6	3.5	2.9	1.6	-	-	SSS30D4-4**
30	7	5	215	11.7	8.0	7.0	4.7	2.9	1.5	SSS30D5-4**
30	7	6	275	19.2	13.7	12.2	8.7	5.9	3.8	SSS30D6-4**
35	7	5	200	6.9	4.0	3.1	1.2	-	-	SSS35D5-4**
35	7	6	220	12.6	8.0	6.8	3.9	1.6	-	SSS35D6-4**
39	7	6	200	8.2	4.2	3.1	0.6	-	-	SSS39D6-4**

Catalog Number System

The catalog number for Hapco poles utilizes the following identification system.



Catalog Number Example -

SSS 20 D 5 - 4 - BA

Square Straight Steel, 20' Mounting Height, 7 Gauge, 5" Butt Square, No Taper, 4-Bolt Base, Black Powder Coat Finish.

EPA Notes:

Effective Projected Area (EPA) in square feet. EPA's calculated using wind velocity (mph) indicated in accordance with 2009 AASHTO LTS-5 using a 25-year design life. Maximum EPA is based on the luminaire weight shown. Increased luminaire weight may reduce the maximum EPA. If weight is exceeded, or if other design life or code is required, please consult the factory.

Mounting Options

Side Drill Mount

Includes removable pole cap.

NOTE: A luminaire drilling template must be supplied at time of order.

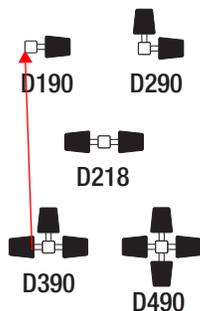


Tenon Mount

For Tenon Mount applications specify both Tenon diameter and length.



Drill Mount Options

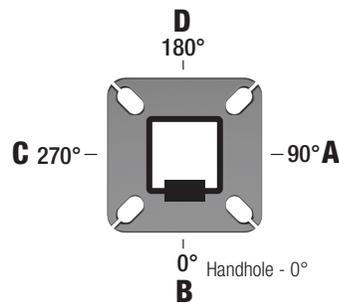


Electrical Box



Note: GFI Options must be specified in Accessories.

Pole Orientation



SSS	HEIGHT	GAUGE	BUTT SQ.	TOP SQ.	BASE STYLE	MOUNTING OPTIONS	ELECTRICAL BOX*	ACCESSORIES/OPTIONS*	FINISH
		10 = 10' 12 = 12' 14 = 14' 16 = 16' 18 = 18' 20 = 20' 22 = 22' 25 = 25' 28 = 28' 30 = 30' 35 = 35' 39 = 39'	B = 11 Gauge D = 7 Gauge	4 = 4" 5 = 5" 6 = 6"	"-" = No Taper	4 = 4-Bolt Base	DRILL MOUNT D000 - No Drilling D190 - Std. "A" D290 - Std. "A" & "D" D218 - Std. "A" & "C" D390 - Std. "A", "D", & "C" D490 - Std. "A", "B", "C", & "D" DCUS - Custom* TENON T204 - 2-3/8" O.D. x 4" T304 - 2-7/8" O.D. x 4" T356 - 3-1/2" O.D. x 6" T406 - 4" O.D. x 6" TCUS - Custom Tenon**	FA - 30" Up, "D" FB - 30" Up, "B" FC - 30" Up, "A" FD - 30" Up, "C" FE - 36" Up, "D" FF - 36" Up, "B" FG - 36" Up, "A" FH - 36" Up, "C" FI - 24" Up, "D" FK - 24" Up, "A" FL - 24" Up, "C" FZ - Custom**	C12 - Threaded 1/2" Coupling** C34 - Threaded 3/4" Coupling** C10 - Threaded 1" Coupling** EHH - Extra Handhole** GF1 - Duplex GFI Receptacle (WR) with Cover GF2 - Duplex GFI (WR) with In-Use Cover LAB - Less Anchor Bolts LPC - Less Pole Cap PAB - Pre-shipped Anchor Bolts VD1 - Vib. Damper - 1st Mode VD2 - Vib. Damper - 2nd Mode

EC to provide as required based on site lighting design.

* Specify Number and Orientation
** Specify O.D. and Height

* GFI Receptacle Options Available (Specify in Accessories)

** Specify Height and Orientation

* Add all that apply (Example: CPL-LAB-VD1)

** Specify Location

* Provide RAL # or Sample Color Chip



KAD LED LED Area Luminaire



Buy American

Catalog
Number

Notes

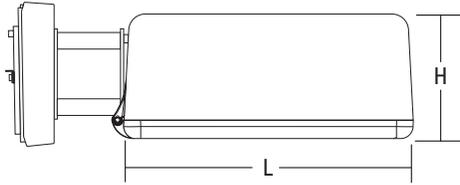
Type

TYPE S1

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.2 ft ² (0.11 m ²)
Length:	17-1/2" (44.5 cm)
Width:	17-1/2" (44.5 cm)
Height:	7-1/8" (18.1 cm)
Weight (max):	36 lbs. (16.4 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a **shaded background**. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability¹
- This luminaire is part of an A+ Certified solution for ROAM®2 or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a **shaded background**¹

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

EC to provide mounting brackets as required.

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: KAD LED 40C 1000 40K R5 MVOLT SPD04 DDBXD

KAD LED	Series	LEDs	Drive current	CCT	Distribution	Voltage	Mounting ³
KAD LED	20C ¹	20 LEDs	530 530 mA ¹	30K 3000 K	R2 Type II	MVOLT ³ 277 ⁴	Shipped included SPUMBAK__ Square pole universal mounting adaptor ⁶ 04 4" arm RPUMBAK__ Round pole universal mounting adaptor ⁶ 06 6" arm SPD__ Square pole 09 9" arm ⁵ RPD__ Round pole 12 12" arm ⁶ WBD__ Wall bracket ² WWD__ Wood pole or wall Shipped separately DAD12P Degree arm (pole) DAD12WB Degree arm (wall) KMA Mast arm external fitter
	30C ¹	30 LEDs	700 700 mA	40K 4000 K	R3 Type III	120 ⁴ 347 ^{1,3}	
	40C	40 LEDs	1000 1000 mA	50K 5000 K	R4 Type IV	208 ^{4,5} 480 ^{1,3}	
	60C	60 LEDs			R5 Type V ²	240 ^{4,5}	

Options						Finish (required)							
Shipped installed						Shipped separately ¹⁷							
PER5	NEMA twist-lock five-wire receptacle only (no controls) ^{7,8,9}		PIR1FC3V	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{3,10,11,12,13}		PNMTDD3	Part night, dim till dawn ^{3,11,16}	WG	Wire guard	DDBXD	Dark bronze	DDBTXD	Textured dark bronze
PER7	Seven-wire receptacle only (no controls) ^{7,8,9}		PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{3,10,11,12,13}		PNMT5D3	Part night, dim 5 hrs ^{3,11,16}			DBLXD	Black	DBLTXD	Textured black
SF	Single fuse (120, 277, 347V) ⁴		BL30	Bi-level switched dimming, 30% ^{3,9,10,11}		PNMT6D3	Part night, dim 6 hrs ^{3,11,16}			DNAXD	Natural aluminum	DNATXD	Textured natural aluminum
DF	Double fuse (208, 240, 480V) ⁴		BL50	Bi-level switched dimming, 50% ^{3,9,10,11}		PNMT7D3	Part night, dim 7 hrs ^{3,11,16}	HS	Houseside shield ¹⁷	DWHXD	White	DWHGXD	Textured white
PIR	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc ^{3,10,11,12,13}												
PIRH	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc ^{3,10,11,12,13}												



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Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photozell - SSL twist-lock (120-277V) ¹⁸
DLL347F 1.5 CUL JU	Photozell - SSL twist-lock (347V) ¹⁸
DLL480F 1.5 CUL JU	Photozell - SSL twist-lock (480V) ¹⁸
DSHORT SBK U	Shorting cap ¹⁸
KADLEDHS 20C U	Houseside shield for 20 LED unit
KADLEDHS 30C U	Houseside shield for 30 LED unit
KADLEDHS 40C U	Houseside shield for 40 LED unit
KADLEDHS 60C U	Houseside shield for 60 LED unit
KMA DDBXD U	Mast arm adaptor (specify finish)
KADWG U	Wire guard accessory
PUMBAK DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)

For more control options, visit [DTL](#) and [ROAM](#) online.

*Round pole top must be 3.25" O.D. minimum.

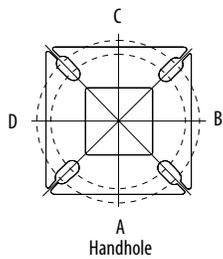
NOTES

- 20C or 30C LED are not available with 530 Drive Current and 347V or 480V.
- Any Type 5 distribution, is not available with WBA.
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V,240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- 9" or 12" arm is required when two or more luminaires are oriented on a 90° drilling pattern.
- Available as a separate combination accessory: PUMBAK (finish) U.
- Mounting must be restricted to ±45° from horizontal aim per ANSI C136.10-2010. Not available with motion sensor.
- Photozell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included.
- PIR and PIR1FC3V specify the [SensorSwitch SBGR-10-ODP](#) control; PIRH and PIRH1FC3V specify the [SensorSwitch SBGR-6-ODP](#) control. Dimming driver standard. Not available with PER5 or PER7.
- Maximum ambient temperature with 347V or 480V is 30°C.
- Reference Motion Sensor table.
- Reference PER table on page 3 to see functionality.
- Requires an additional switched circuit with same phase as main luminaire power. Supply circuit and control circuit are required to be in the same phase.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7 or PNMT options.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, PER5, PER7, BL30 or BL50.
- Also available as a separate accessory; see Accessories information.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.

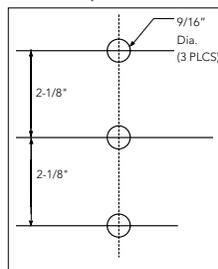
Drilling

Template #5

HANDHOLE ORIENTATION



Top of Pole



Tenon Mounting Slipfitter**

Tenon O.D.	Single Unit	2 at 180°	2 at 90° †	3 at 120°	3 at 90° †	4 at 90° †
2-3/8"	T20-190	T20-280	T20-290	T20-320 †	T20-390	T20-490
2-7/8"	T25-190	T25-280	T25-290	T25-320	T25-390	T25-490
4"	T35-190	T35-280	T35-290	T35-320	T35-390	T35-490

** For round pole mounting (RPDXX) only. † Requires 9" or 12" arm.

Pole drilling nomenclature: # of heads at degree from handhole (default side A)				
DM19	DM28	DM29	DM39	DM49
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20C	530 mA	35W	R2	4,140	1	0	1	118	4,446	1	0	1	127	4,473	1	0	1	128
			R3	4,123	1	0	1	118	4,427	1	0	1	126	4,455	1	0	1	127
			R4	4,128	1	0	1	118	4,433	1	0	1	127	4,460	1	0	1	127
			R5	4,381	2	0	1	125	4,704	3	0	1	134	4,734	3	0	1	135
	700 mA	45W	R2	5,271	1	0	1	117	5,660	1	0	1	126	5,696	1	0	2	127
			R3	5,250	1	0	2	117	5,637	1	0	2	125	5,672	1	0	2	126
			R4	5,256	1	0	2	117	5,644	1	0	2	125	5,679	1	0	2	126
			R5	5,578	3	0	1	124	5,990	3	0	1	133	6,027	3	0	1	134
	1000 mA	73W	R2	7,344	1	0	2	101	7,886	2	0	2	108	7,935	2	0	2	109
			R3	7,314	1	0	2	100	7,854	1	0	2	108	7,903	1	0	2	108
			R4	7,322	1	0	2	100	7,863	1	0	2	108	7,912	1	0	2	108
			R5	7,771	3	0	1	106	8,345	3	0	1	114	8,397	3	0	1	115
30C	530 mA	53W	R2	6,166	1	0	2	116	6,621	1	0	2	125	6,663	1	0	2	126
			R3	6,141	1	0	2	116	6,594	1	0	2	124	6,635	1	0	2	125
			R4	6,148	1	0	2	116	6,602	1	0	2	125	6,643	1	0	2	125
			R5	6,525	3	0	1	123	7,006	3	0	1	132	7,050	3	0	1	133
	700 mA	69W	R2	7,817	2	0	2	113	8,395	2	0	2	122	8,447	2	0	2	122
			R3	7,785	1	0	2	113	8,360	2	0	2	121	8,412	2	0	2	122
			R4	7,794	1	0	2	113	8,370	1	0	2	121	8,422	1	0	2	122
			R5	8,272	3	0	2	120	8,883	3	0	2	129	8,938	3	0	2	130
	1000 mA	108W	R2	10,755	2	0	2	100	11,549	2	0	2	107	11,621	2	0	2	108
			R3	10,711	2	0	2	99	11,502	2	0	2	106	11,574	2	0	2	107
			R4	10,724	2	0	2	99	11,515	2	0	2	107	11,587	2	0	2	107
			R5	11,381	3	0	2	105	12,221	4	0	2	113	12,297	4	0	2	114
40C	530 mA	71W	R2	8,156	2	0	2	115	8,758	2	0	2	123	8,812	2	0	2	124
			R3	8,122	2	0	2	114	8,722	2	0	2	123	8,776	2	0	2	124
			R4	8,132	1	0	2	115	8,732	1	0	2	123	8,786	1	0	2	124
			R5	8,630	3	0	2	122	9,267	3	0	2	131	9,325	3	0	2	131
	700 mA	94W	R2	10,286	2	0	2	109	11,045	2	0	2	118	11,114	2	0	2	118
			R3	10,244	2	0	2	109	11,000	2	0	2	117	11,069	2	0	2	118
			R4	10,256	2	0	2	109	11,013	2	0	2	117	11,081	2	0	2	118
			R5	10,884	3	0	2	116	11,688	4	0	2	124	11,761	4	0	2	125
	1000 mA	141W	R2	13,923	2	0	2	99	14,951	2	0	2	106	15,045	2	0	2	107
			R3	13,866	2	0	3	98	14,890	2	0	3	106	14,983	2	0	3	106
			R4	13,882	2	0	3	98	14,907	2	0	3	106	15,000	2	0	3	106
			R5	14,733	4	0	2	104	15,821	4	0	2	112	15,920	4	0	2	113
60C	530 mA	103W	R2	11,996	2	0	2	116	12,882	2	0	2	125	12,963	2	0	2	126
			R3	11,947	2	0	2	116	12,829	2	0	2	125	12,909	2	0	2	125
			R4	11,961	2	0	2	116	12,844	2	0	2	125	12,925	2	0	2	125
			R5	12,694	4	0	2	123	13,632	4	0	2	132	13,717	4	0	2	133
	700 mA	137W	R2	14,927	2	0	2	109	16,029	3	0	3	117	16,130	3	0	3	118
			R3	14,866	2	0	3	109	15,964	2	0	3	117	16,063	2	0	3	117
			R4	14,884	2	0	2	109	15,982	2	0	3	117	16,082	2	0	3	117
			R5	15,796	4	0	2	115	16,962	4	0	2	124	17,068	4	0	2	125
	1000 mA	216W	R2	19,328	3	0	3	89	20,754	3	0	3	96	20,884	3	0	3	97
			R3	19,248	3	0	3	89	20,669	3	0	4	96	20,799	3	0	4	96
			R4	19,271	3	0	3	89	20,693	3	0	4	96	20,823	3	0	4	96
			R5	20,452	4	0	2	95	21,962	4	0	2	102	22,099	4	0	2	102

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **KAD LED** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	KAD LED 60C 1000			
	1.0	0.91	0.86	0.76
	KAD LED 40C 1000			
	1.0	0.93	0.88	0.79
KAD LED 60C 700				
1.0	0.98	0.97	0.94	

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*For use when motion sensor is used as dusk to dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)	
		Wire 4/Wire5	Wire 4/Wire5	Wire 6/Wire7	
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wires Capped inside fixture
ROAM	✗	✓	Wired to dimming leads on driver	⚠	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	✗	⚠	Wires Capped inside fixture	⚠	Wires Capped inside fixture
Future-proof*	✗	⚠	Wired to dimming leads on driver	✓	Wires Capped inside fixture
Future-proof* with Motion	✗	⚠	Wires Capped inside fixture	✓	Wires Capped inside fixture

- ✓ Recommended
- ✗ Will not work
- ⚠ Alternate

*Future-proof means: Ability to change controls in the future.

Electrical Load

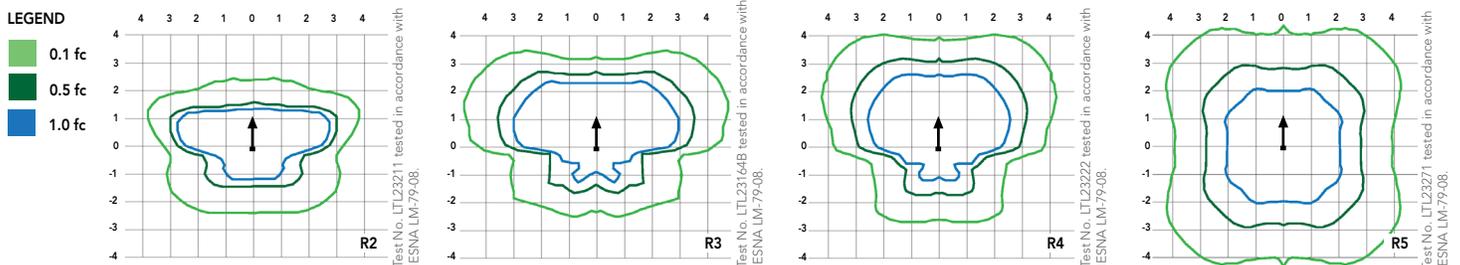
Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
20	530	35	0.30	0.18	0.16	0.15	-	-
	700	45	0.39	0.23	0.20	0.18	0.15	0.12
	1000	73	0.61	0.35	0.31	0.27	0.22	0.17
30	530	53	0.44	0.26	0.23	0.20	-	-
	700	69	0.58	0.34	0.29	0.26	0.21	0.16
	1000	108	0.90	0.52	0.46	0.40	0.32	0.24
40	530	71	0.60	0.35	0.32	0.29	0.21	0.16
	700	94	0.79	0.46	0.41	0.36	0.27	0.20
	1000	141	1.18	0.68	0.59	0.52	0.42	0.30
60	530	103	0.87	0.50	0.44	0.39	0.29	0.22
	700	137	1.15	0.66	0.58	0.51	0.40	0.29
	1000	216	1.81	1.04	0.92	0.81	0.63	0.47

NOTE: All ratings in this table are for a nominal system operated at 25°C ambient temperature. Current and power specifications in this table do not include branch circuit derating specified in the National Electrical Code. Please observe all applicable electrical codes and ratings.

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [KAD LED homepage](#).

Isofootcandle plots for the KAD LED 60C 1000 40K. Distances are in units of mounting height (20').



FEATURES & SPECIFICATIONS

INTENDED USE

The energy savings and long life of the KAD LED area luminaire make it a reliable choice for illuminating streets, walkways, parking lots, and surrounding areas.

CONSTRUCTION

Single-piece die-cast, aluminum housing with contoured edges has a 0.12" nominal wall thickness. Die-cast door frame has an impact-resistant, tempered glass lens that is fully gasketed with one piece tubular silicone.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

OPTICS

Precision-molded refractive acrylic lenses are available in four distributions. Light engines are available in standard 4000K, 3000K or 5000K (70 CRI) configurations.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to a metal-core circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

INSTALLATION

Included universal mounting block and extruded aluminum arm facilitate quick and easy installation using nearly any existing drilling pattern. Stainless steel bolts fasten the luminaire to the mounting block securing it to poles or walls. The KAD LED can withstand up to a 1.5 G vibration load rating per ANSI C136.31. The KAD LED also utilizes the standard K-Series (Template #5) for pole drilling.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



COMMERCIAL OUTDOOR

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