



METROPOLITAN
C O U N C I L



SOUTHWEST
Green Line LRT Extension

CIVIL WEST CONSTRUCTION

VOLUME 9

URBAN DESIGN / LANDSCAPE

[illegible]

WARNING: THIS RECORD MAY CONTAIN SENSITIVE SECURITY INFORMATION THAT IS CONTROLLED UNDER 49 CFR PARTS 15 AND 1520. NO PART OF THIS RECORD MAY BE DISCLOSED TO PERSONS WITHOUT A "NEED TO KNOW", AS DEFINED IN 49 CFR PARTS 15 AND 1520, EXCEPT WITH THE WRITTEN PERMISSION OF THE ADMINISTRATOR OF THE TRANSPORTATION SECURITY ADMINISTRATION OR THE SECRETARY OF TRANSPORTATION. UNAUTHORIZED RELEASE MAY RESULT IN CIVIL PENALTY OR OTHER ACTION. FOR U.S. GOVERNMENT AGENCIES, PUBLIC DISCLOSURE IS GOVERNED BY 5 U.S.C. 552 AND 49 CFR PARTS 15 AND 1520.

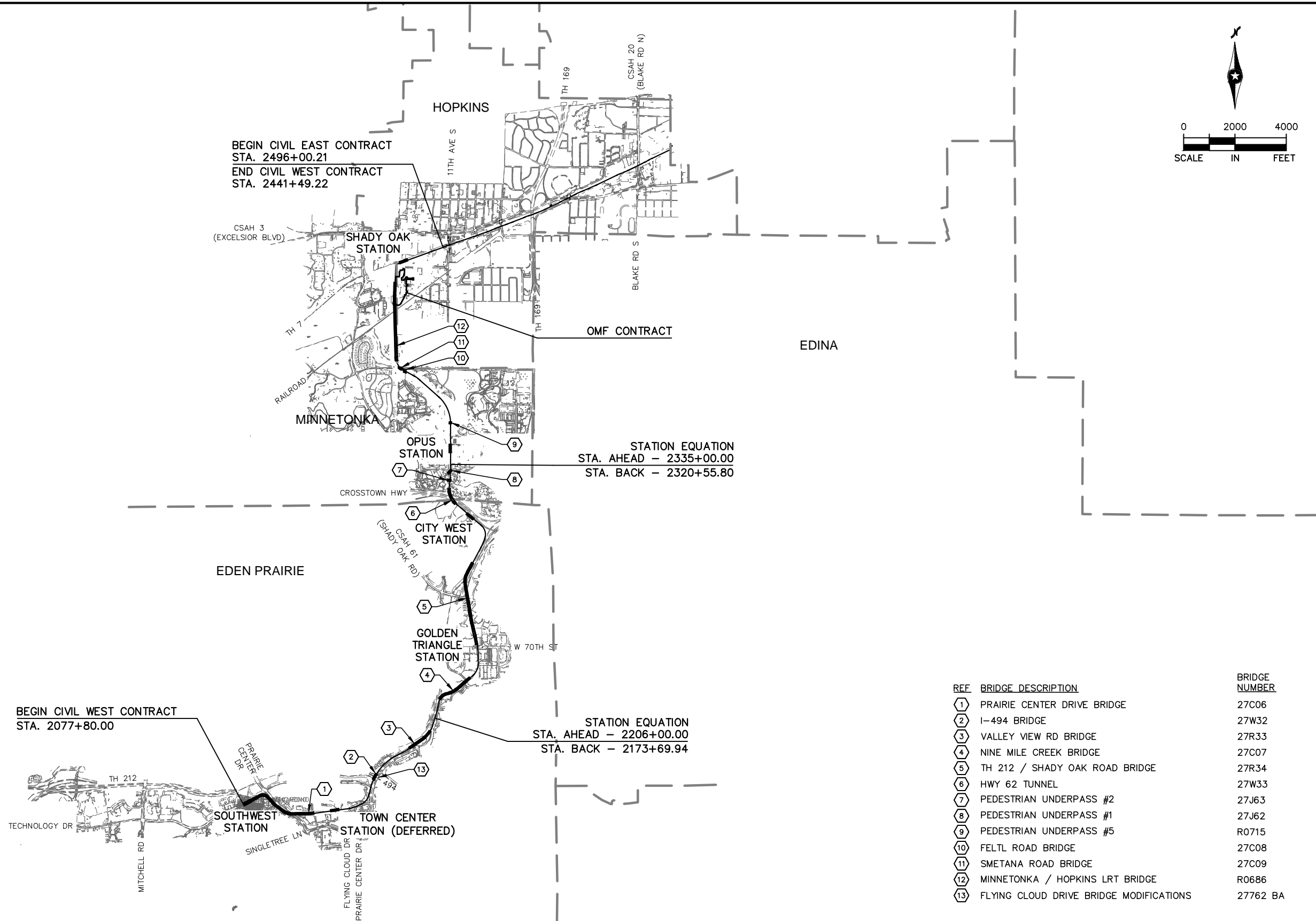
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DATE : 09/28/15

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CIVIL WEST						CIVIL WEST						CIVIL WEST											
SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV	SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV	SHT #	SHEET NAME		SHEET DESCRIPTION		STATION	STATION	REV
VOLUME 9 - URBAN DESIGN / LANDSCAPE																							
1	W0-URD-CVR-001		COVER SHEET																				
2	W0-URD-IDX-001		VOLUME INDEX OF PLAN SHEETS																				
3	W0-GEN-KEY-001		GENERAL KEY MAP																				
4	W0-GEN-NTS-001		GENERAL LEGEND AND ABBREVIATIONS SHEET 1																				
5	W0-GEN-NTS-002		GENERAL LEGEND AND ABBREVIATIONS SHEET 2																				
6	W1-LAN-LAY-001		LANDSCAPE ARCH PLAN SHEET LAYOUT SHEET 1																				
7	W2-LAN-LAY-001		LANDSCAPE ARCH PLAN SHEET LAYOUT SHEET 2																				
8	W2-LAN-LAY-002		LANDSCAPE ARCH PLAN SHEET LAYOUT SHEET 3																				
9	W3-LAN-LAY-001		LANDSCAPE ARCH PLAN SHEET LAYOUT SHEET 4																				
10	W3-LAN-LAY-002		LANDSCAPE ARCH PLAN SHEET LAYOUT SHEET 5																				
11	W0-URD-LGD-001		URBAN DESIGN NOTES AND LEGEND																				
12	W1-URD-PLN-001		SOUTHWEST STATION URBAN DESIGN PLAN 1																				
13	W1-URD-PLN-002		SOUTHWEST STATION URBAN DESIGN PLAN 2																				
14	W2-URD-PLN-001		GOLDEN TRIANGLE STATION URBAN DESIGN PLAN 1																				
15	W2-URD-PLN-002		GOLDEN TRIANGLE STATION URBAN DESIGN PLAN 2																				
16	W2-URD-PLN-003		GOLDEN TRIANGLE STATION URBAN DESIGN PLAN 3																				
17	W2-URD-PLN-004		CITY WEST STATION URBAN DESIGN PLAN 1																				
18	W2-URD-PLN-005		CITY WEST STATION URBAN DESIGN PLAN 2																				
19	W3-URD-PLN-001		OPUS STATION URBAN DESIGN PLAN 1																				
20	W3-URD-PLN-002		OPUS STATION URBAN DESIGN PLAN 2																				
21	W3-URD-PLN-003		SHADY OAK STATION URBAN DESIGN PLAN 1																				
22	W3-URD-PLN-004		SHADY OAK STATION URBAN DESIGN PLAN 2																				
23	W3-URD-PLN-005		SHADY OAK STATION URBAN DESIGN PLAN 3																				
24	W3-URD-PLN-006		SHADY OAK STATION URBAN DESIGN PLAN 4																				
25	W3-URD-PLN-007		SHADY OAK STATION URBAN DESIGN PLAN 5																				
26	W3-URD-PLN-008		SHADY OAK STATION URBAN DESIGN PLAN 6																				
27	W3-URD-PLN-009		SHADY OAK STATION URBAN DESIGN PLAN 7																				
LANDSCAPE																							
28	W0-LAN-LGD-001		LANDSCAPE NOTES AND LEGEND																				
29	29-W1-LAN-PLN-001		SOUTHWEST STATION LANDSCAPE PLAN 1																				
30	30-W1-LAN-PLN-002		SOUTHWEST STATION LANDSCAPE PLAN 2																				
31	W2-LAN-PLN-001		GOLDEN TRIANGLE STATION LANDSCAPE PLAN 1																				
32	W2-LAN-PLN-002		GOLDEN TRIANGLE STATION LANDSCAPE PLAN 2																				
33	W2-LAN-PLN-003		GOLDEN TRIANGLE STATION LANDSCAPE PLAN 3																				
34	W2-LAN-PLN-004		CITY WEST STATION LANDSCAPE PLAN 1																				
35	W2-LAN-PLN-005		CITY WEST STATION LANDSCAPE PLAN 2																				
36	W3-LAN-PLN-001		OPUS STATION LANDSCAPE PLAN 1																				
37	W3-LAN-PLN-002		OPUS STATION LANDSCAPE PLAN 2																				
38	W3-LAN-PLN-003		SHADY OAK STATION LANDSCAPE PLAN 1																				
39	W3-LAN-PLN-004		SHADY OAK STATION LANDSCAPE PLAN 2																				
40	W3-LAN-PLN-005		SHADY OAK STATION LANDSCAPE PLAN 3																				
41	W3-LAN-PLN-006		SHADY OAK STATION LANDSCAPE PLAN 4																				
42	W3-LAN-PLN-007		SHADY OAK STATION LANDSCAPE PLAN 5																				
43	W3-LAN-PLN-008		SHADY OAK STATION LANDSCAPE PLAN 6																				
44	W3-LAN-PLN-009		SHADY OAK STATION LANDSCAPE PLAN 7																				
45	W0-LAN-DTLS-001		LANDSCAPE DETAILS 1																				
46	W0-LAN-DTLS-002		LANDSCAPE DETAILS 2																				
47	W0-LAN-DTLS-003		LANDSCAPE DETAILS 3																				
48	W0-LAN-DTLS-004		LANDSCAPE DETAILS 4																				
49	W0-LAN-DTLS-005		PRELIMINARY PLANT PALETTE																				

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CIVIL WEST - VOLUME 9 GENERAL KEY MAP		SHEET 3 OF 49
DISCIPLINE: GENERAL	SHEET NAME: W0-GEN-KEY - 001	

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TRACK LINETYPES

- ROADWAY
- TRACK (LRT)
- TRACK (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- FENCE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- FENCE / RAILING
- ID ID INTRUSION DETECTION

CIVIL LINETYPES

- ROADWAY
- TRACK (LRT)
- TRACK (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- CONCRETE CURB AND GUTTER
- TRAIL
- SIDEWALK
- DRIVEWAY
- BRIDGE
- SAWCUT
- FENCE
- DELINEATED WETLAND
- WATER EDGE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- CROSSWALK
- STOP BAR
- MEDIAN NOSE

TRACK SYMBOLS

- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- PEDESTRIAN FLASHER
- AUTOMATIC GATE
- RAIL TURNOUT
- RAIL CROSSOVER (DOUBLE)
- RAIL CROSSOVER (SINGLE)
- POINT OF SWITCH (PS)
- OCS POLE FOUNDATION
- RAIL LUBRICATOR
- POINT OF INTERSECTION (PI) OF TURNOUT (TO)
- RAILROAD CURVE NUMBER

NOTE:
ALL TURNOUTS AND CROSSOVERS TO BE EQUIPPED WITH POWER SWITCH MACHINES AND SWITCH HEATERS

CIVIL SYMBOLS

- ACCESSIBLE PEDESTRIAN CURB RAMP (DESIGN VARIES)
- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- AUTOMATIC GATE
- HANDICAP PARKING STALL
- TACTILE WARNING STRIP
- TPSS BUILDING (TPSS-SW###)
- SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE

SURVEY NOTES

- THE HORIZONTAL DATUM OF THIS MAP IS BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM WHICH IS RELATED TO THE MINNESOTA STATE PLANE COORDINATE SYSTEM NAD 83 (2007) ADJUSTMENT SOUTH ZONE.
- THE PLANIMETRIC FEATURES SHOWN ON THIS MAP ARE AS PREPARED BY AERO-METRIC, INC. FROM AERIAL DATA AND IMAGERY COLLECTED IN APRIL 2012, AS SUPPLEMENTED BY FIELD SURVEYS COMPLETED BY RANI ENGINEERING.
- HORIZONTAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.14 FEET HORIZONTAL ACCURACY AT A 95% CONFIDENCE LEVEL.
- VERTICAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.10 FEET VERTICAL ACCURACY AT 95% CONFIDENCE LEVEL.

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CIVIL WEST - VOLUME 9
GENERAL
LEGEND AND ABBREVIATIONS
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: W0-GEN-NTS - 001

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ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE
AVE	AVENUE
BGN	BEGIN
BP	BEGINNING POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
BLVD	BOULEVARD
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY
C&G	CURB AND GUTTER
☉	CENTERLINE
CIR	CIRCLE
CP	CANADIAN PACIFIC
CPRAIL	CANADIAN PACIFIC RAILWAY
CS	CURVE TO SPIRAL
CSAH	COUNTY STATE AID HIGHWAY
D&U	DRAINAGE AND UTILITY
DF	DIRECT FIXATION
DR	DRIVE
DTL	DETAIL
DWY	DRIVEWAY
E	EAST
Ea	ACTUAL SUPERELEVATION (INCHES)
EB	EAST BOUND
EL or ELEV	ELEVATION
EP	END POINT
ESMT	EASEMENT
Eu	UNBALANCED SUPERELEVATION (INCHES)
EVCE	ENDING VERTICAL CURVE ELEVATION
EVCS	ENDING VERTICAL CURVE STATION
EX	EXISTING
HCRRRA	HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY
LH	LEFT HAND
LN	LANE
LRT	LIGHT RAIL TRANSIT
Lc	CURVE LENGTH (FEET)
Ls	SPIRAL LENGTH (FEET)
MIN	MINIMUM
MPH	MILES PER HOUR
MPLS	CITY OF MINNEAPOLIS
MPRB	MINNEAPOLIS PARK AND RECREATION BOARD
N	NORTH
NB	NORTH BOUND
NIC	NOT IN CONTRACT
NO	NUMBER
OMF	OPERATIONS AND MAINTENANCE FACILITY
OCS	OVERHEAD CONTACT SYSTEM
OH	OVERHEAD
PC	POINT OF CURVE
PE	PERMANENT EASEMENT
PITO	POINT OF INTERSECTION OF TURNOUT
PKWY	PARKWAY
POT	POINT ON TANGENT
PROP	PROPOSED
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS (FEET)
RD	ROAD
RL	RAIL LUBRICATOR
r	RATE OF CHANGE VERTICAL CURVE
RH	RIGHT HAND
ROW	RIGHT OF WAY
S	SOUTH
SB	SOUTH BOUND
SC	SPIRAL TO CURVE
SIG-COMM	SIGNAL COMMUNICATION
ST	STREET
ST	SPIRAL TO TANGENT
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TH	TRUNK HIGHWAY
THRU	THROUGH
TOR	TOP OF RAIL
TPSS	TRACTION POWER SUBSTATION
TRK	TRACK
TS	TANGENT TO SPIRAL
TYP	TYPICAL
UG	UNDERGROUND
V	DESIGN VELOCITY (MPH)
VC	VERTICAL CURVE
W	WEST
WB	WEST BOUND

TRAIL INDEX

ABBREVIATED NAME	FULL NAME / LOCATION
TRAIL 1	UNDER RED CIRCLE DR, LRT, AND YELLOW CIRCLE DR
TRAIL 2	FROM TRAIL 1 TO GREEN CIRCLE DR
TRAIL 3	OPUS STATION ACCESS FROM BREN RD E
TRAIL 4	FROM BREN RD W TO TRAIL 5
TRAIL 5	FROM OPUS STATION TO GREEN CIRCLE DR
TRAIL 6	FROM TRAIL 5 TO SMETANA RD
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/FROM SHADY OAK STATION TO 11TH AVE
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/WEST OF EXCELSIOR
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL LRT TRAIL/BETWEEN EXCELSIOR AND KENILWORTH TRAIL CONNECTION
MIDTOWN GREENWAY	MIDTOWN GREENWAY/EAST OF KENILWORTH TRAIL CONNECTION
TRAIL A	KENILWORTH TRAIL (SECONDARY)/BETWEEN CEDAR-ISLES CHANNEL AND 21ST STREET STATION
TRAIL B	KENILWORTH TRAIL (SECONDARY)/BETWEEN 21ST STREET STATION AND PENN STATION
TRAIL B	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL C	10' CONNECTOR TRAIL FROM CEDAR LAKE LRT REGIONAL TRAIL TO TYLER AVE.
TRAIL D	10' CONNECTOR TRAIL/BELTLINE STATION TO CEDAR LAKE LRT REGIONAL TRAIL
KENILWORTH TRAIL	KENILWORTH TRAIL (MAIN)/W LAKE ST TO PENN STATION
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/PENN STATION TO TH 394
TRAIL E	KENILWORTH TRAIL (SECONDARY)/EAST OF W LAKE ST
TRAIL F	KENILWORTH TRAIL (SECONDARY)/WEST OF CEDAR LAKE PKWY
TRAIL G	KENILWORTH TRAIL (SECONDARY)/WEST OF PENN STATION
TRAIL G	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL H	10' CONNECTOR TRAIL/EAST OF PENN STATION TO KENWOOD PKWY
TRAIL I	NOT USED
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/AT-GRADE CROSSING AT PENN STATION
TRAIL J	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL K	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL L	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL M	NOT USED
TRAIL N	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO EDGEBROOK DRIVE
TRAIL O	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO W LAKE STREET
TRAIL P	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO LOUISIANA AVE
TRAIL Q	10' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO TH 7 SERVICE ROAD
TRAIL R	20' CONNECTOR TRAIL FROM VAN WHITE STATION TO CEDAR LAKE TRAIL
TRAIL S	NOT USED
TRAIL T	8' CONNECTOR TRAIL FROM VAN WHITE STATION TO VAN WHITE MEMORIAL BLVD
TRAIL U	10' TRAIL PARALLEL TO CEDAR LAKE PKWY
LUCE LINE TRAIL	LUCE LINE REGIONAL TRAIL/ON BRIDGE OVER LIGHT RAIL
TRAIL V	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL
TRAIL W	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL

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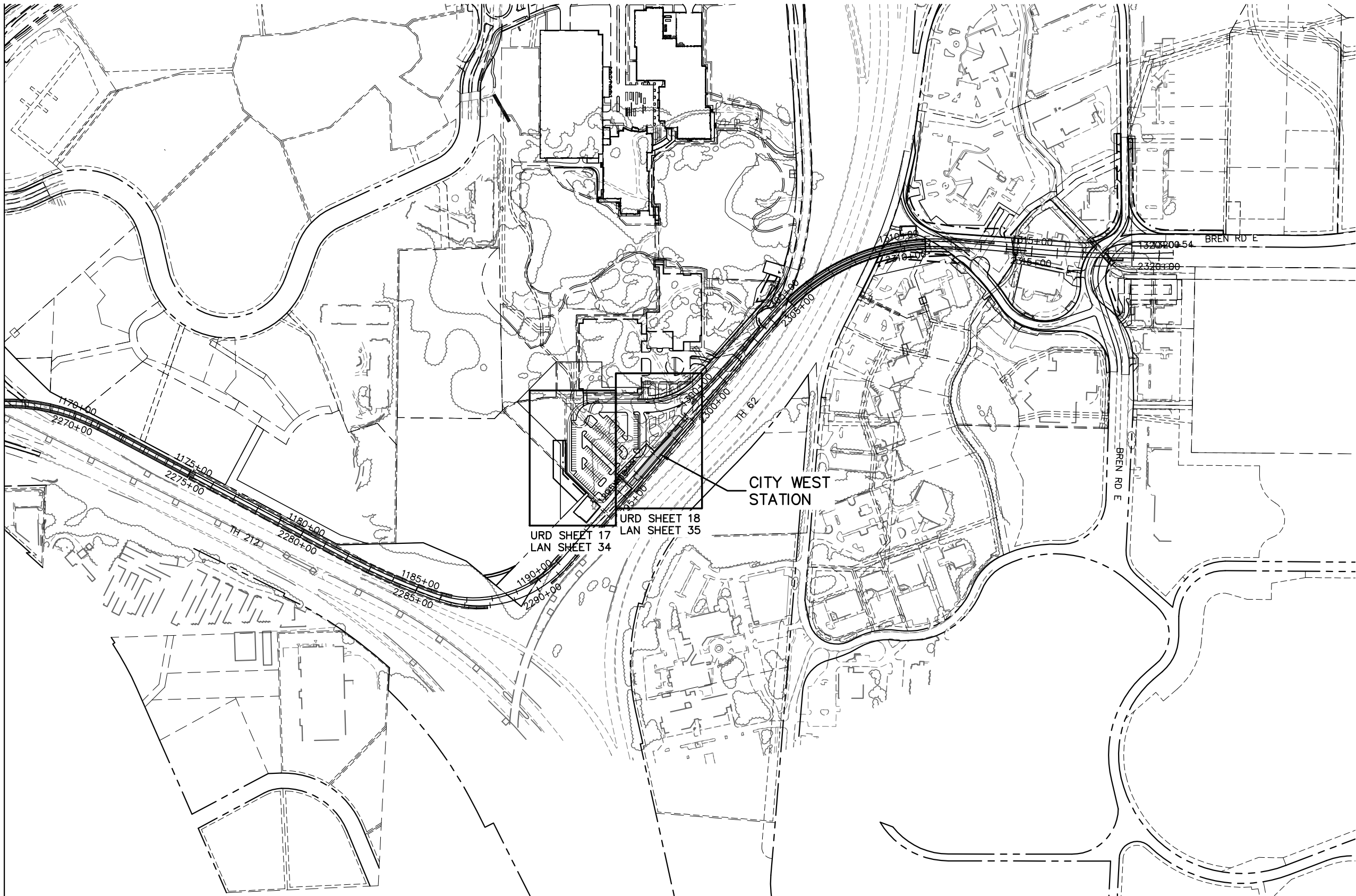
CIVIL WEST - VOLUME 9
GENERAL
LEGEND AND ABBREVIATIONS
SHEET 2

DISCIPLINE: GENERAL


SHEET NAME: W0-GEN-NTS - 002

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MATCH LINE - SHEET 2 OF 2



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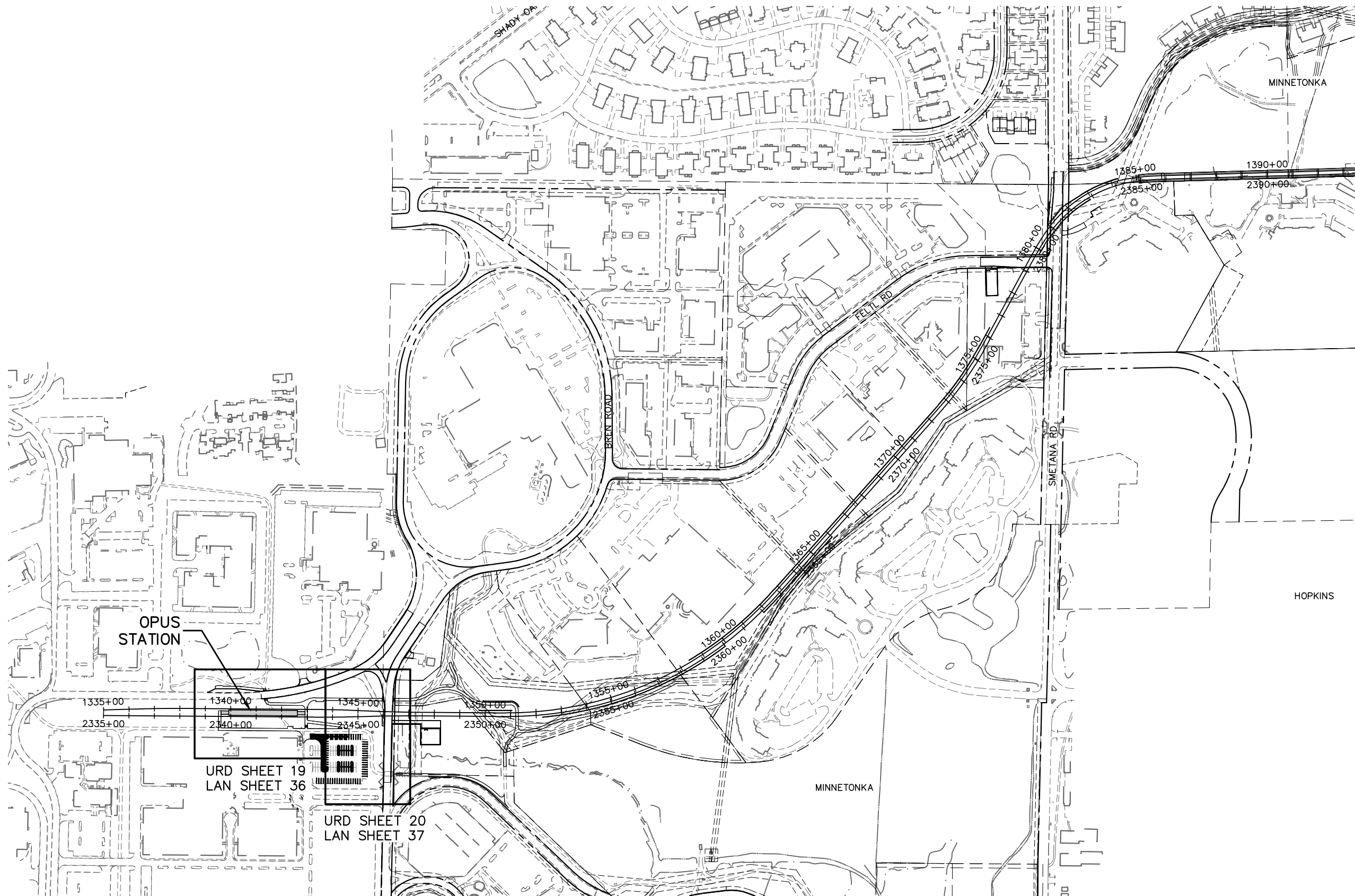
CIVIL WEST - VOLUME 9
LANDSCAPE ARCH
PLAN SHEET LAYOUT
SHEET 3

DISCIPLINE:
LANDSCAPE ARCH

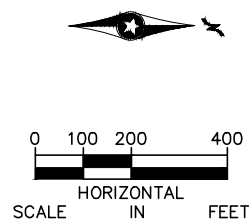
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MATCH LINE - SHEET 1 OF 2



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CIVIL WEST - VOLUME 9
LANDSCAPE ARCH
PLAN SHEET LAYOUT
SHEET 4

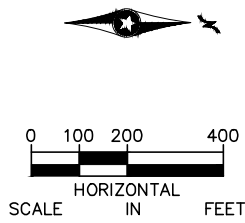
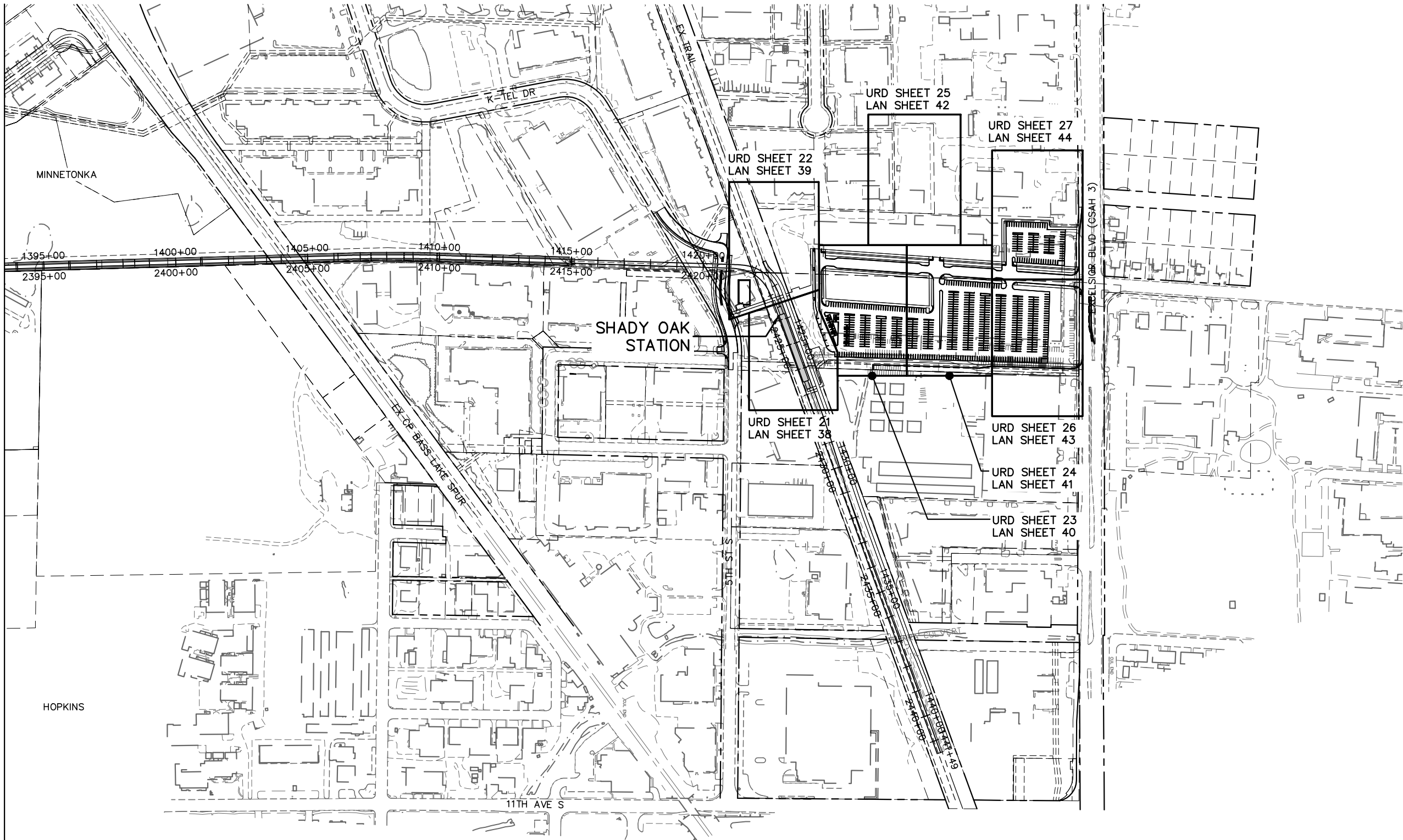
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MATCH LINE - SHEET 2 OF 2



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CIVIL WEST - VOLUME 9
LANDSCAPE ARCH
PLAN SHEET LAYOUT
SHEET 5

DISCIPLINE: LANDSCAPE ARCH
SHEET NAME: W3-LAN-LAY - 002

SHEET
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49

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GENERAL LEGEND

	ROADWAY CL
	TRACK CL
	CONCRETE CURB AND GUTTER
	RETAINING WALL
	BALLAST CURB
	TUNNEL WALL
	EX ROW
	PROP ROW
	PROP TCE
	PROP PE
	DELINEATED WETLAND
	WATER EDGE
	CROSSWALK
	TRAIL (WIDTH VARIES)
	DRIVEWAY (DESIGN VARIES)
	PEDESTRIAN RAMP (DESIGN VARIES)
	AUTOMATIC GATE
	PEDESTRIAN FLASHER
	OCS POLE
	TPSS BUILDING (TPSS-SW###)
	SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE

GENERAL LEGEND

	OVERSTORY DECIDUOUS TREE
	OVERSTORY DECIDUOUS TREE IN TREE GRATE
	ORNAMENTAL DECIDUOUS TREE
	CONIFEROUS TREE
	ROADWAY/PEDESTRIAN LIGHT

URBAN DESIGN LEGEND

	CONCRETE WALK
	WALK - SPECIAL PAVEMENT
	FENCE TYPE A
	FENCE TYPE B
	BUS SHELTER TYPE A (6'X12')
	BUS SHELTER TYPE B (4'X12')
	BENCH (6')
	BICYCLE LOOP
	TRASH AND RECYCLING RECEPTACLE
	BOLLARD

GENERAL NOTES

1. THE LINEWORK OR HATCH PATTERN SHOWN ON THE SIDEWALK IS PROVIDED TO HELP DELINEATE SIDEWALK LOCATIONS AND IS NOT INTENDED TO REPRESENT A JOINTING LAYOUT.
2. WHERE REQUIRED, ALL METAL URBAN DESIGN ELEMENTS INCLUDING FENCES, RAILINGS, AND BIKE RACKS ADJACENT TO TRACKWAY SHALL BE GROUNDED.

DRAFT-WORK IN PROCESS

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CIVIL WEST - VOLUME 9
URBAN DESIGN
NOTES AND LEGEND

DISCIPLINE: LANDSCAPE ARCH

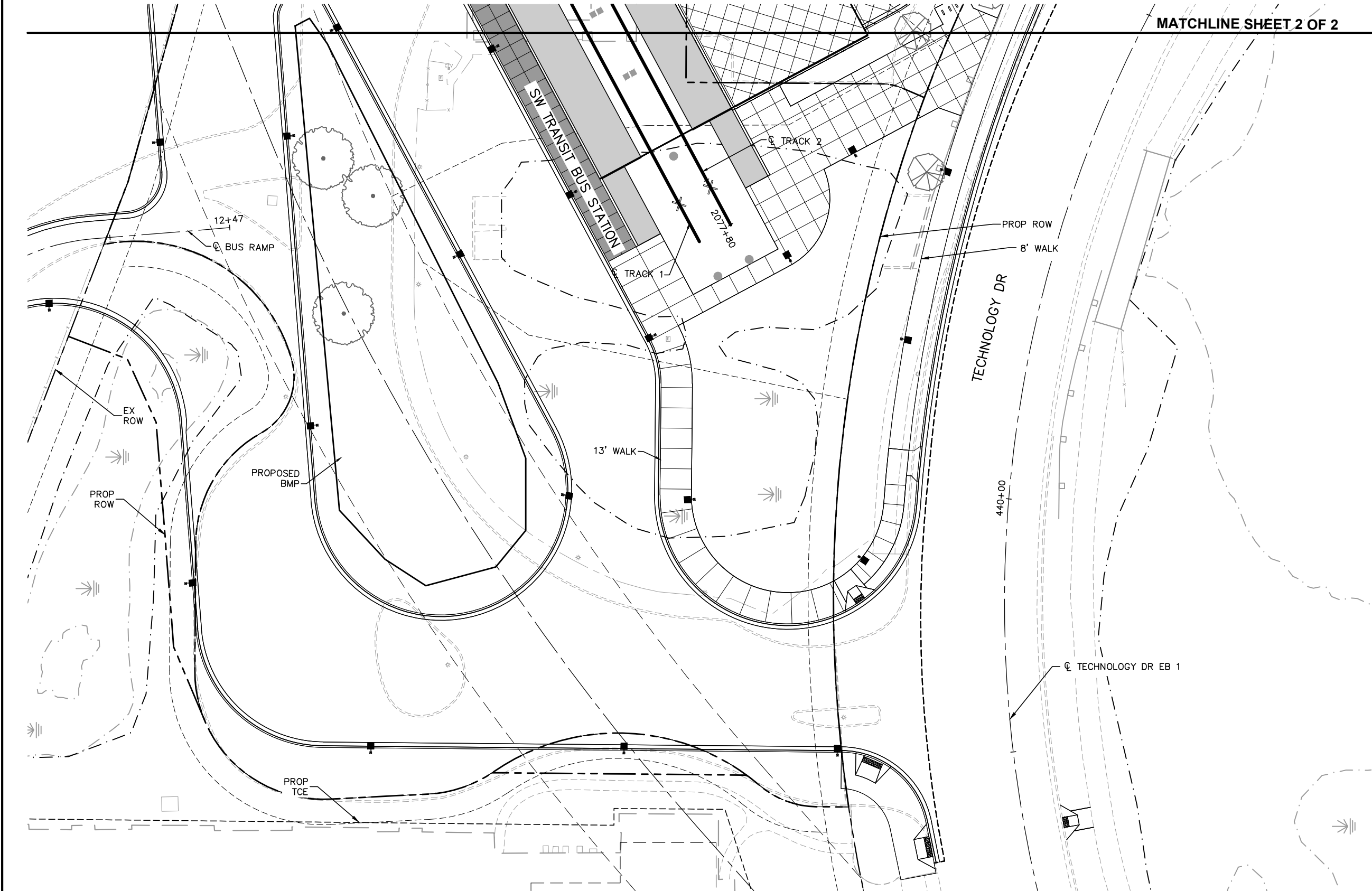
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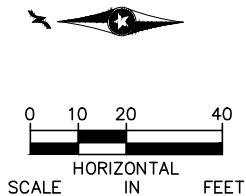
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MATCHLINE SHEET 2 OF 2

NOTES:



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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL WEST - VOLUME 9
SOUTHWEST STATION
URBAN DESIGN PLAN 1

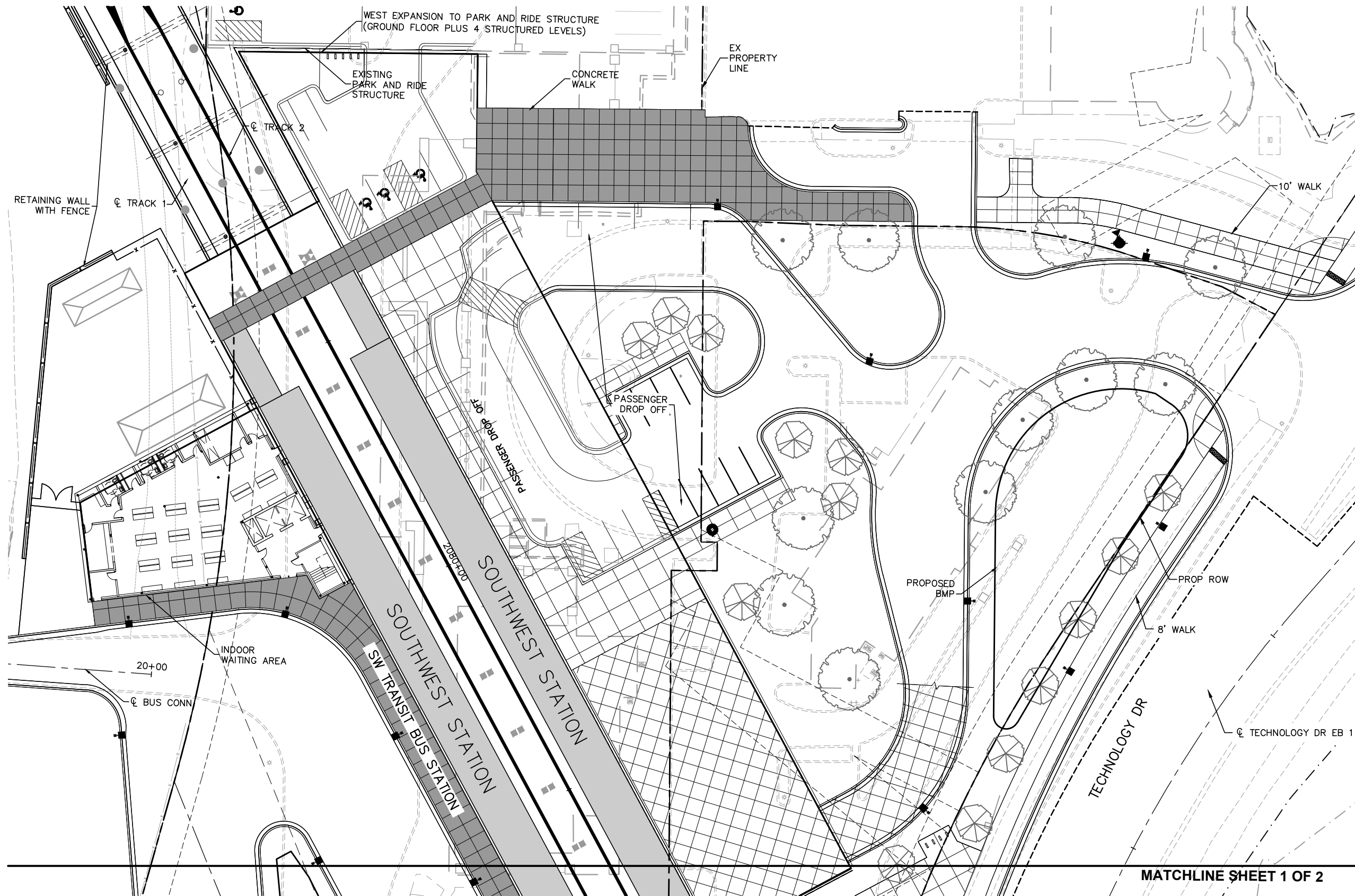
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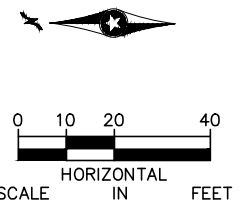
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LANDSCAPE ARCH

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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line Light Extension

CIVIL WEST - VOLUME 9
SOUTHWEST STATION
URBAN DESIGN PLAN 2

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W1-URD-PLN - 002

60% SUBMISSION - 09/28/15

SHEET
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OF
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COUNCIL

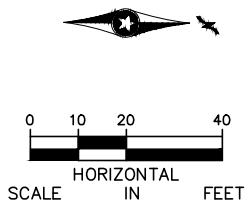
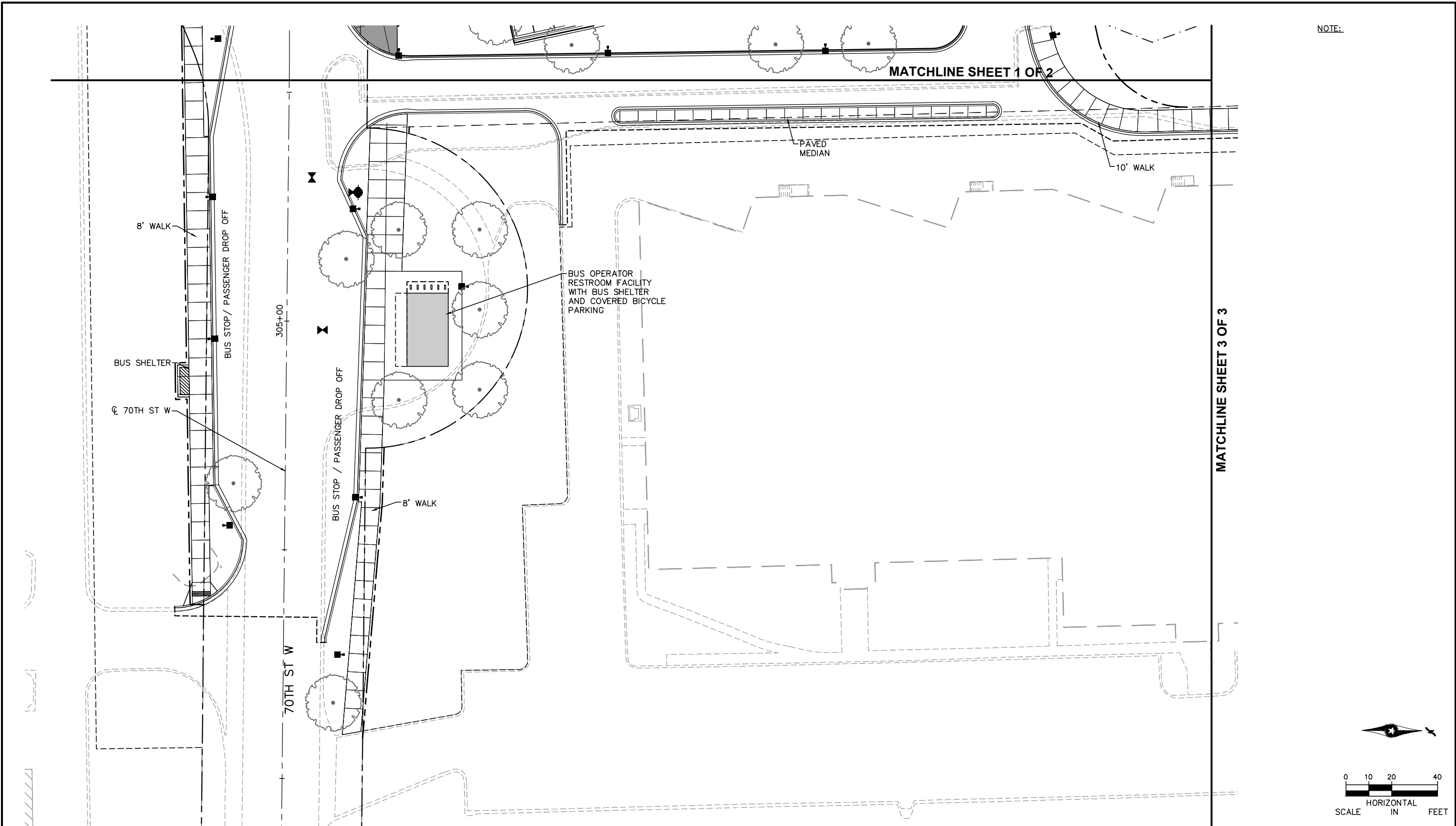
SOUTHWEST

DISCIPLINE: **LANDSCAPE ARCH**

SHEET NAME:	W2-URD-PLN - 001
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OF
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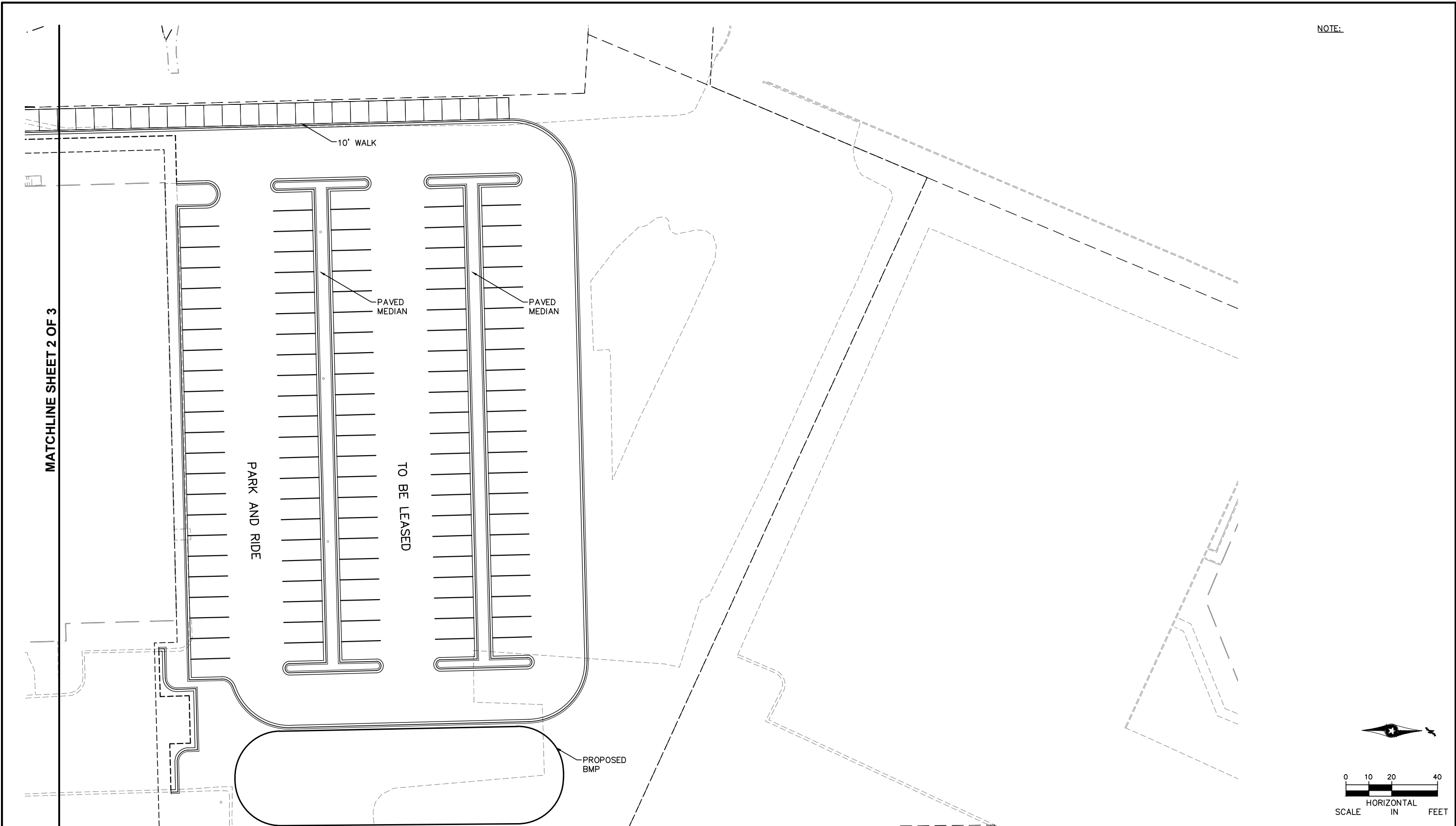
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		CIVIL WEST - VOLUME 9 GOLDEN TRIANGLE STATION URBAN DESIGN PLAN 2		SHEET 15 OF 49
		60% SUBMISSION - 09/28/15	DISCIPLINE: LANDSCAPE ARCH	

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NOTE:

MATCHLINE SHEET 2 OF 3

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

SRI
Consulting Group, Inc.

METROPOLITAN
COUNCIL

SOUTHWEST
Green Line Light Extension

60% SUBMISSION - 09/28/15

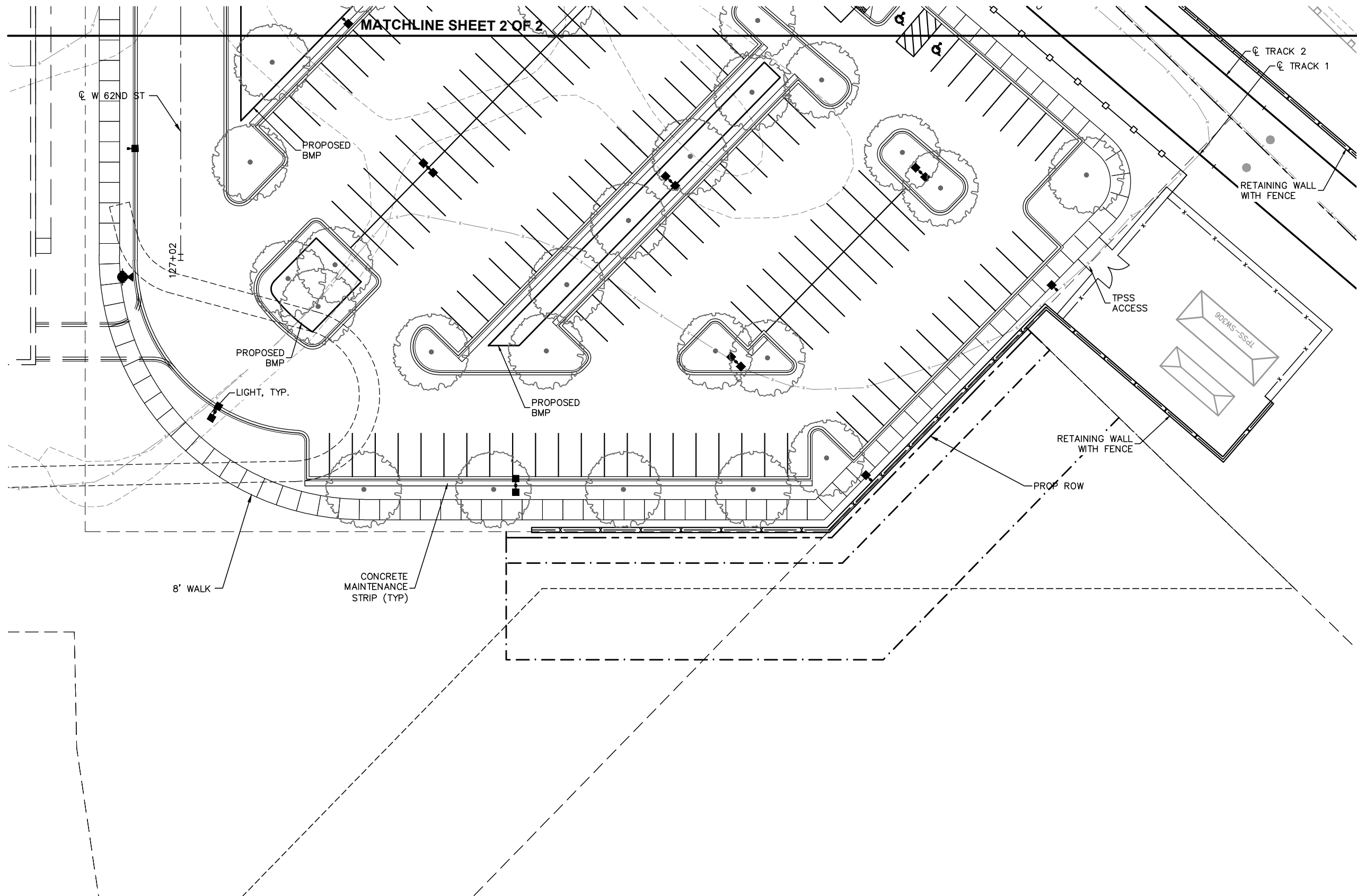
CIVIL WEST - VOLUME 9
GOLDEN TRIANGLE STATION
URBAN DESIGN PLAN 3

DISCIPLINE:
LANDSCAPE ARCH

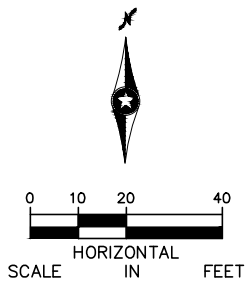
SHEET NAME:
W2-URD-PLN - 003

SHEET
16
OF
49

Sep. 21 2015 08:12 am V:\3400_ADC\CAD\SEGMENT W2\PLAN SHEETS\LANDSCAPE\W2-URD-PLN.dwg By: akrzmarzick



NOTE:



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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line Light Extension

CIVIL WEST - VOLUME 9
CITY WEST STATION
URBAN DESIGN PLAN 1

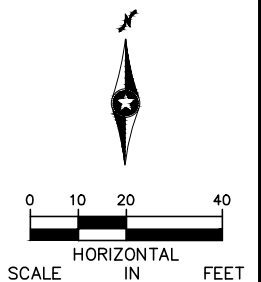
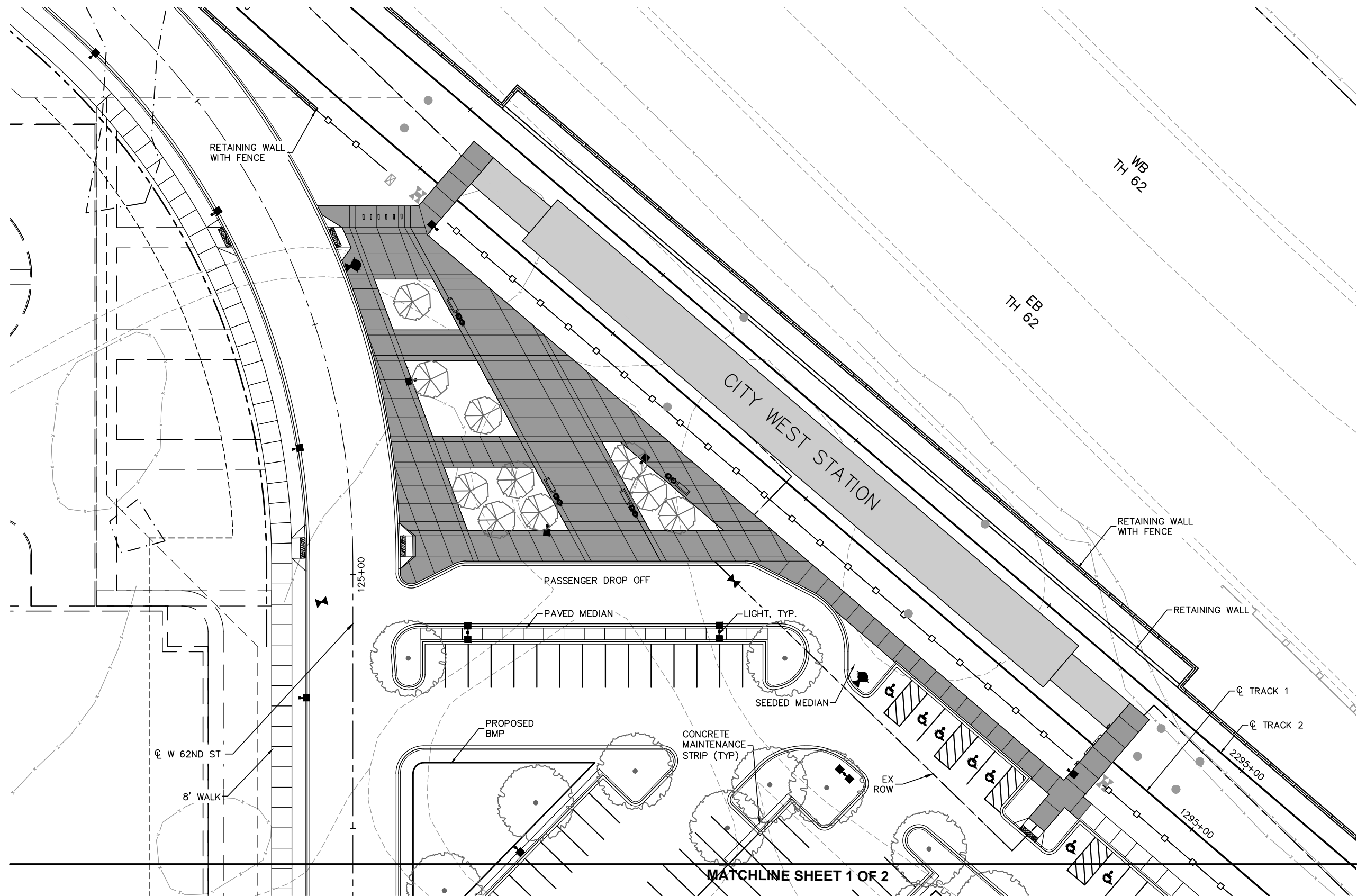
DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W2-URD-PLN - 004

SHEET
17
OF
49

60% SUBMISSION - 09/28/15

NOTE:

[illegible]

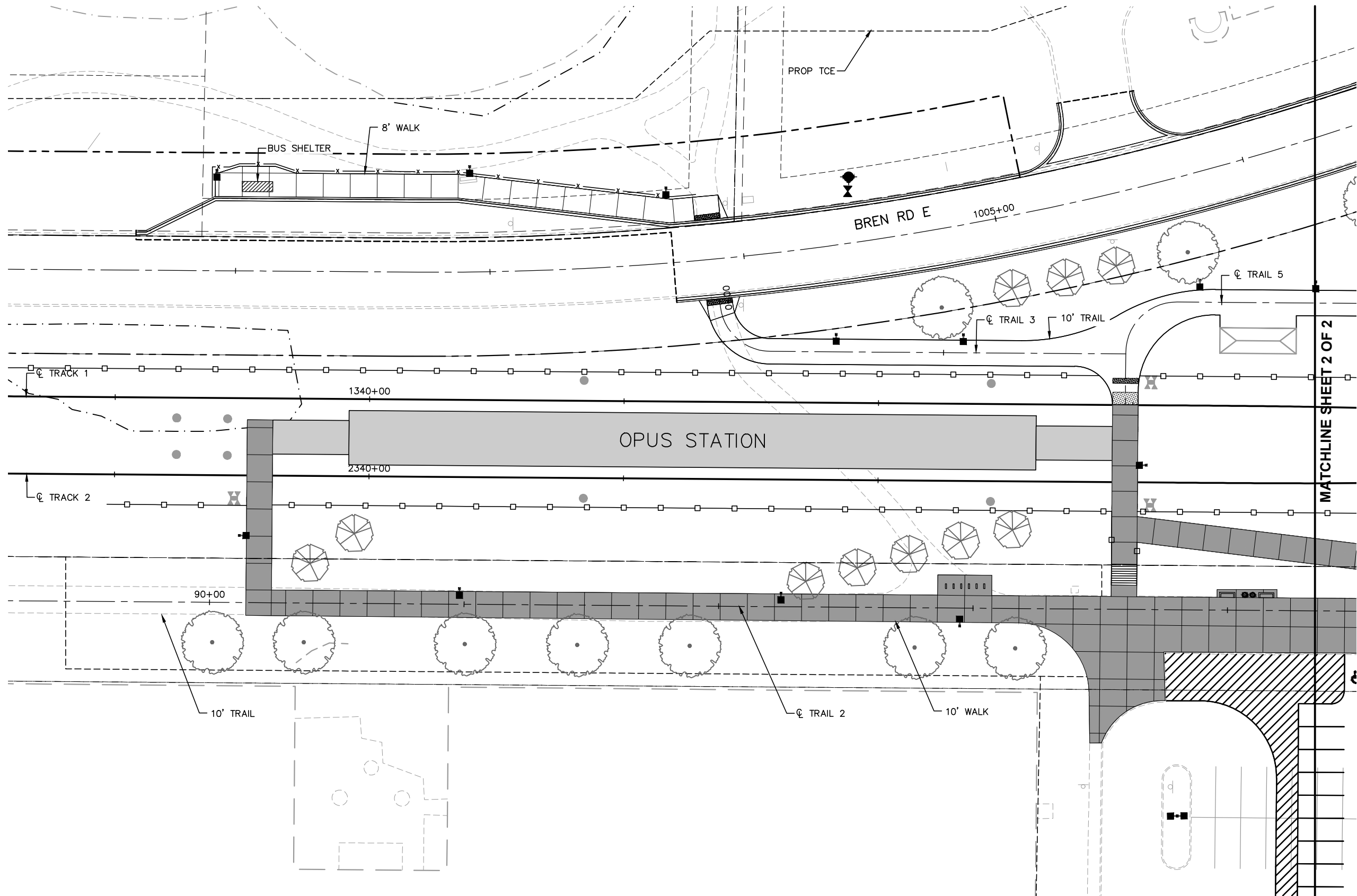
**CIVIL WEST - VOLUME 9
CITY WEST STATION
URBAN DESIGN PLAN 2**

DISCIPLINE: **LANDSCAPE ARCH**

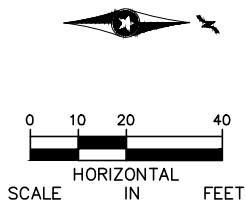
SHEET NAME:	W2-URD-PLN - 005
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SHEET
18
OF
49

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NOTE:



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60% SUBMISSION - 09/28/15



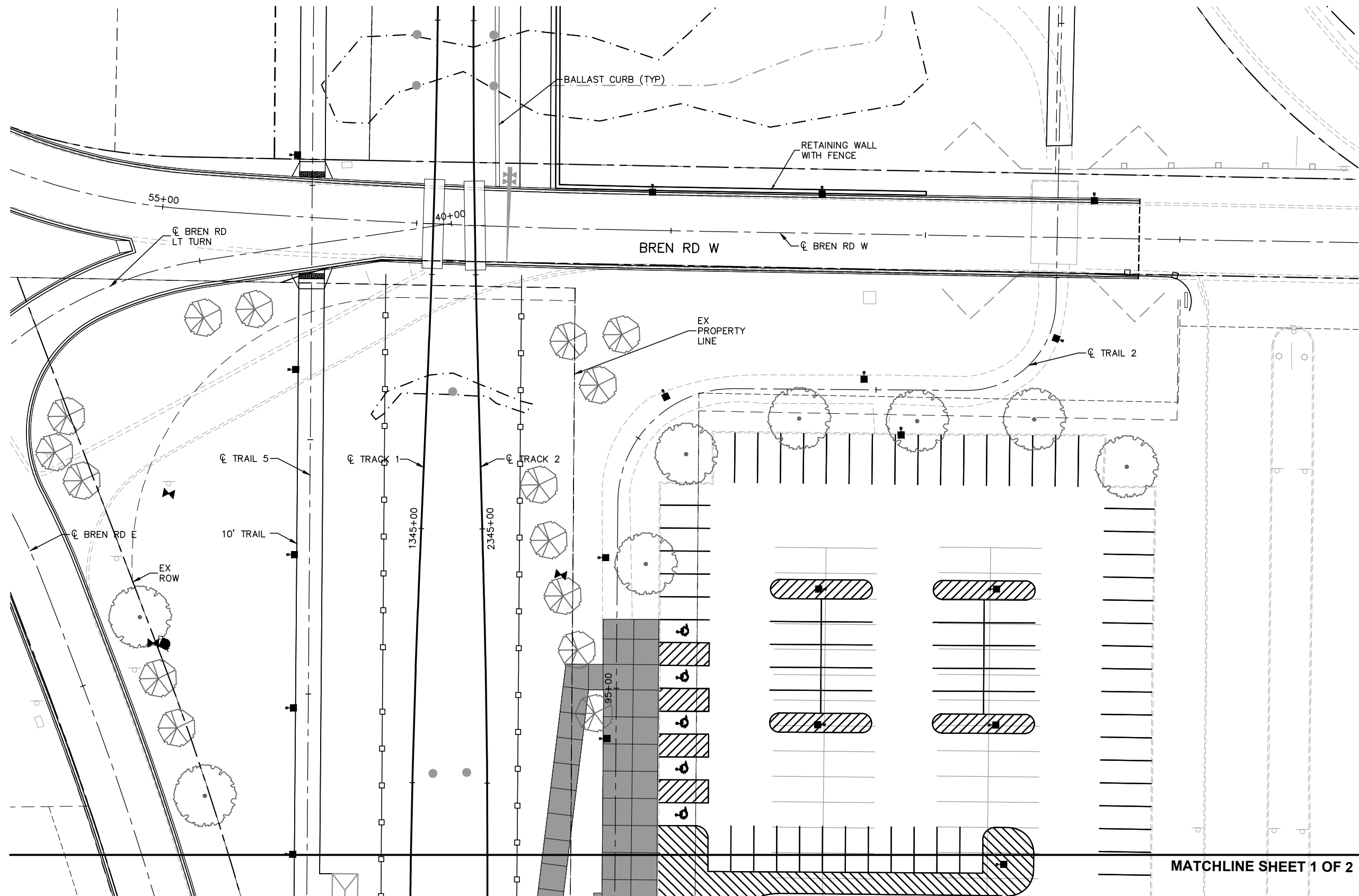
CIVIL WEST - VOLUME 9
OPUS STATION
URBAN DESIGN PLAN 1

DISCIPLINE:
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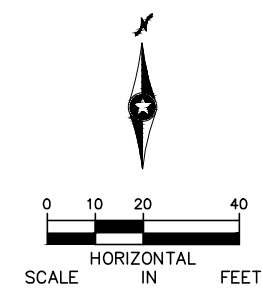
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W3-URD-PLN - 001

SHEET
19
OF
49

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NOTE:



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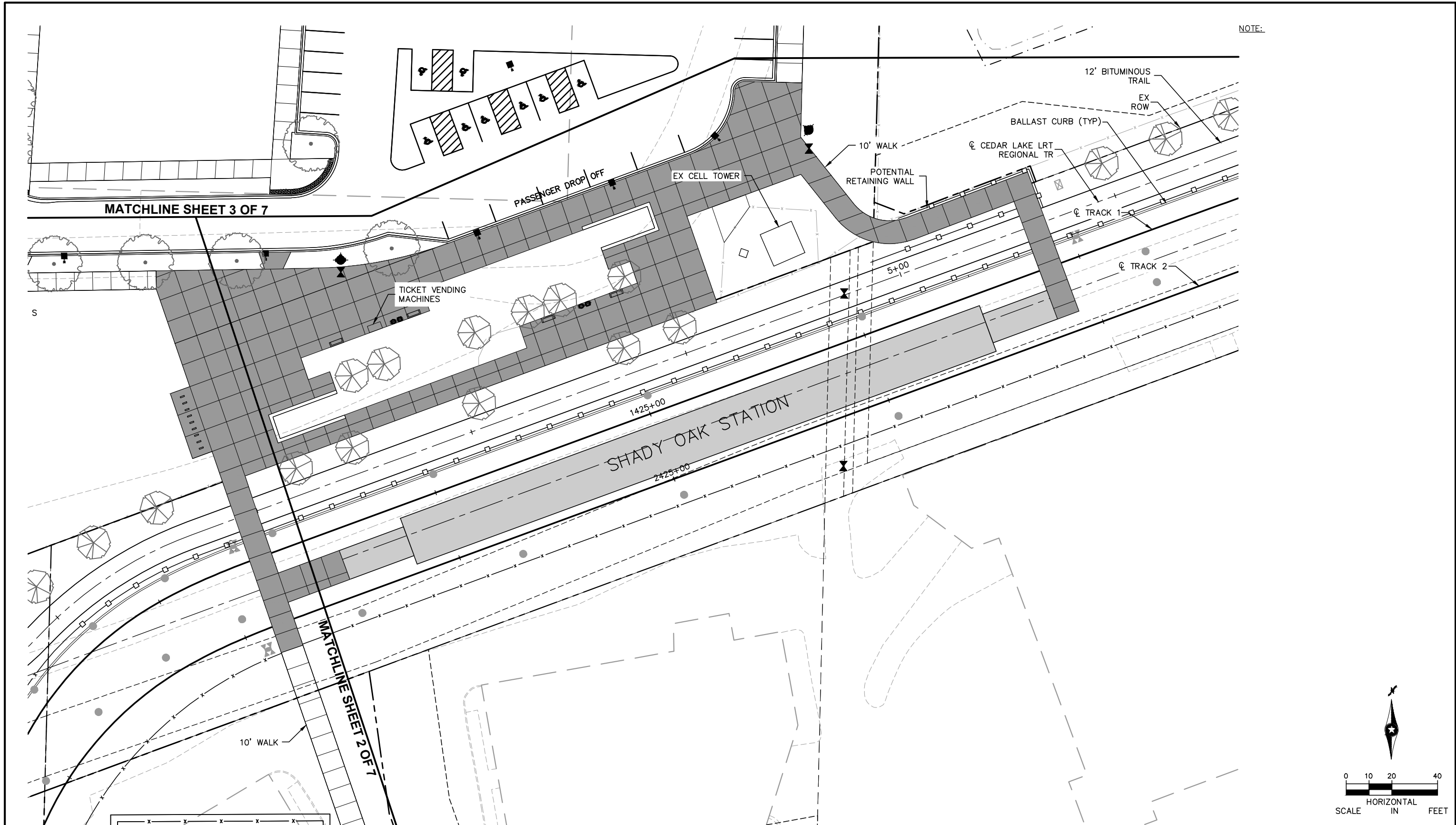
CIVIL WEST - VOLUME 9
OPUS STATION
URBAN DESIGN PLAN 2

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-URD-PLN - 002

SHEET
20
OF
49

Sep. 21 2015 08:15 am V:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-URD-PLN.dwg By: akrzmarzick



NO.	DATE	BY	CHECK/DESIGN	REVISION / SUBMITTAL

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COUNCIL

SOUTHWEST
Green Line LRT Extension

60% SUBMISSION - 09/28/15

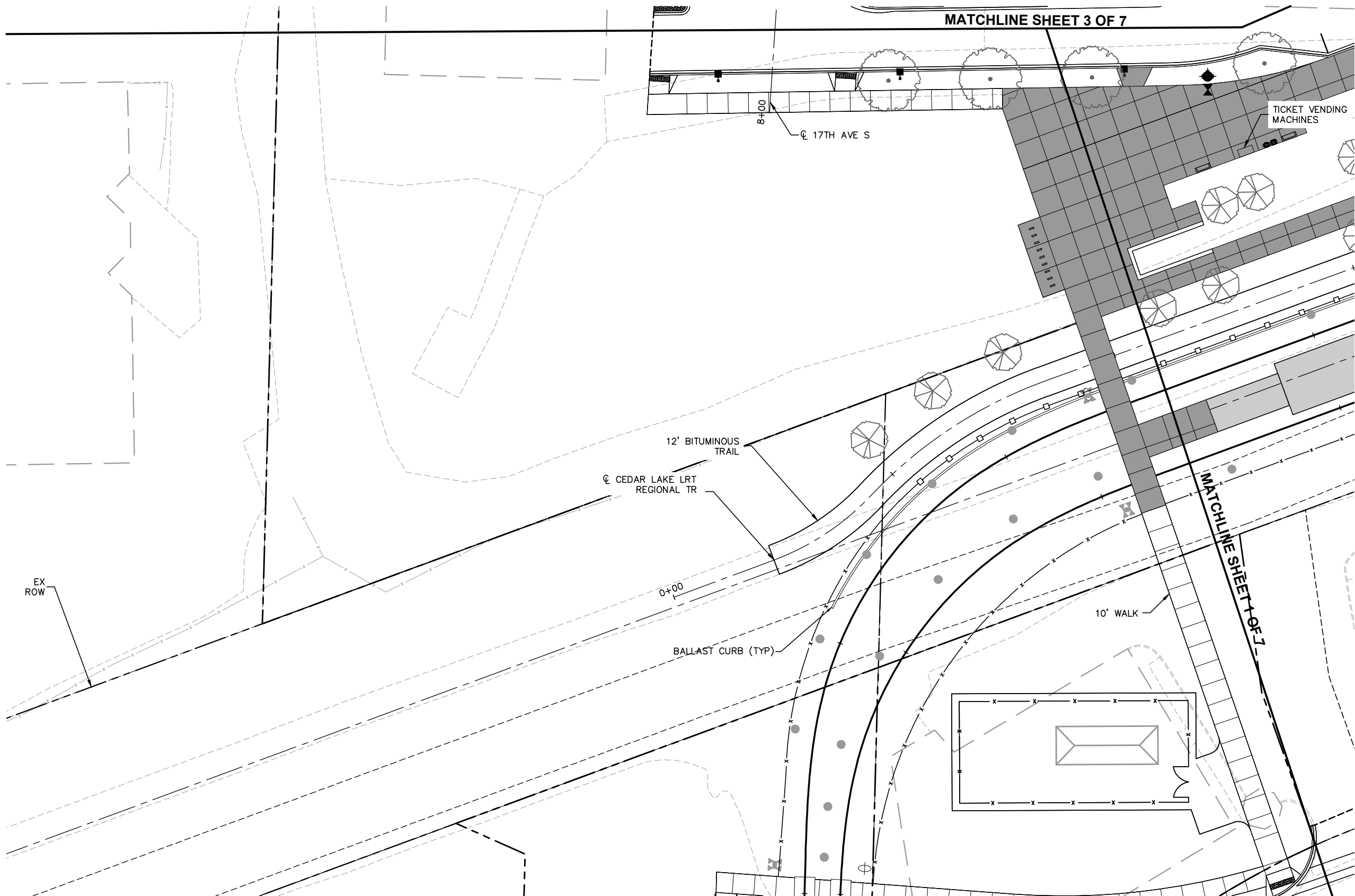
CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 1

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-URD-PLN - 003

SHEET
21
OF
49

Sep. 21 2015 08:15 am V:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-URD-PLN.dwg By: akrzmarzick



NOTE:

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 2

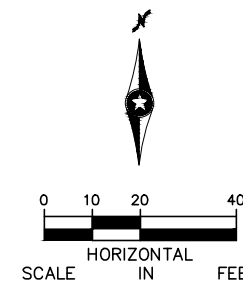
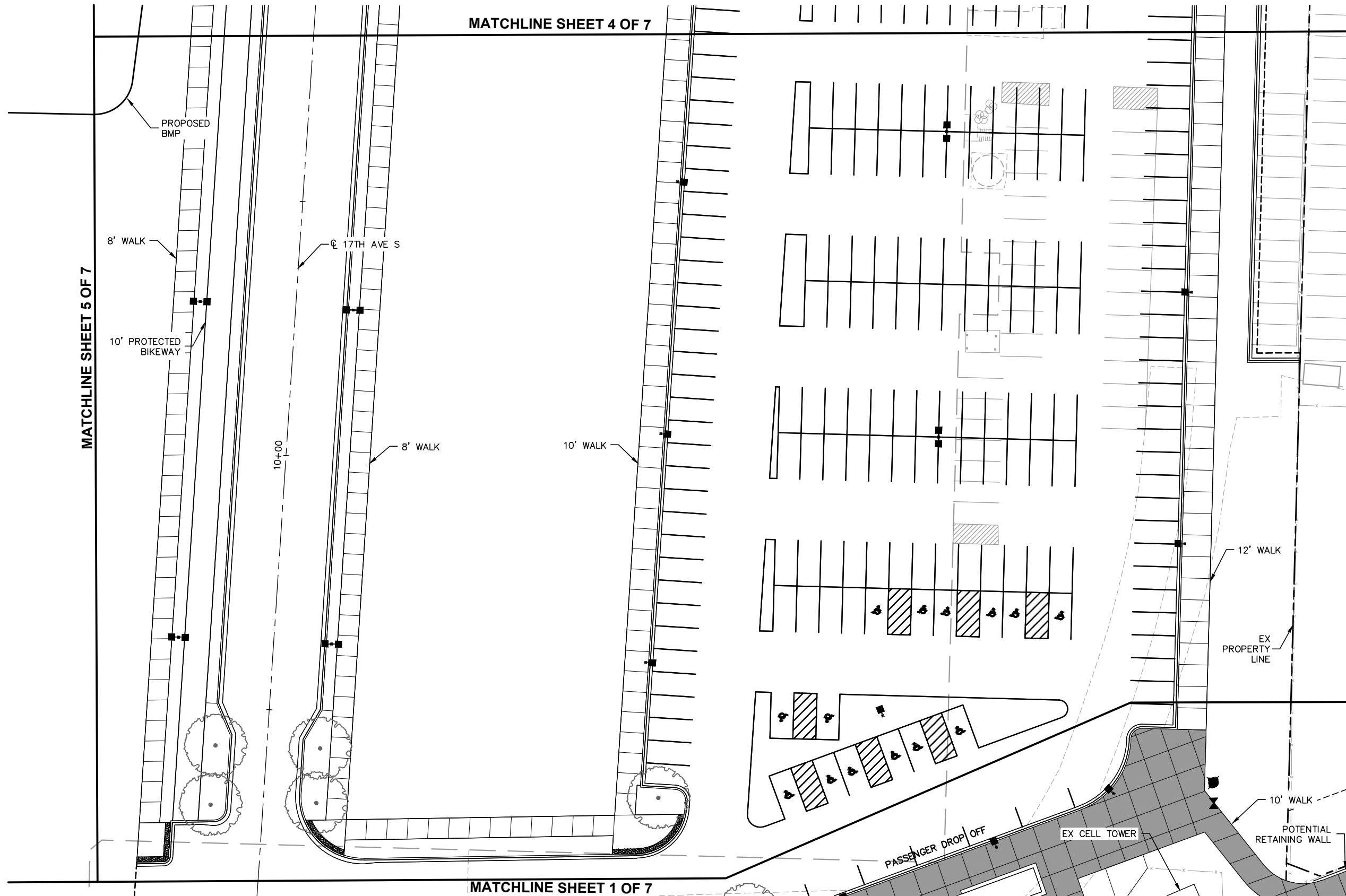
DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-URD-PLN - 004

SHEET
22
OF
49

60% SUBMISSION - 09/28/15

NOTE:

[illegible]**AECOM**

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SOUTHWEST
Green Line LRT Extension

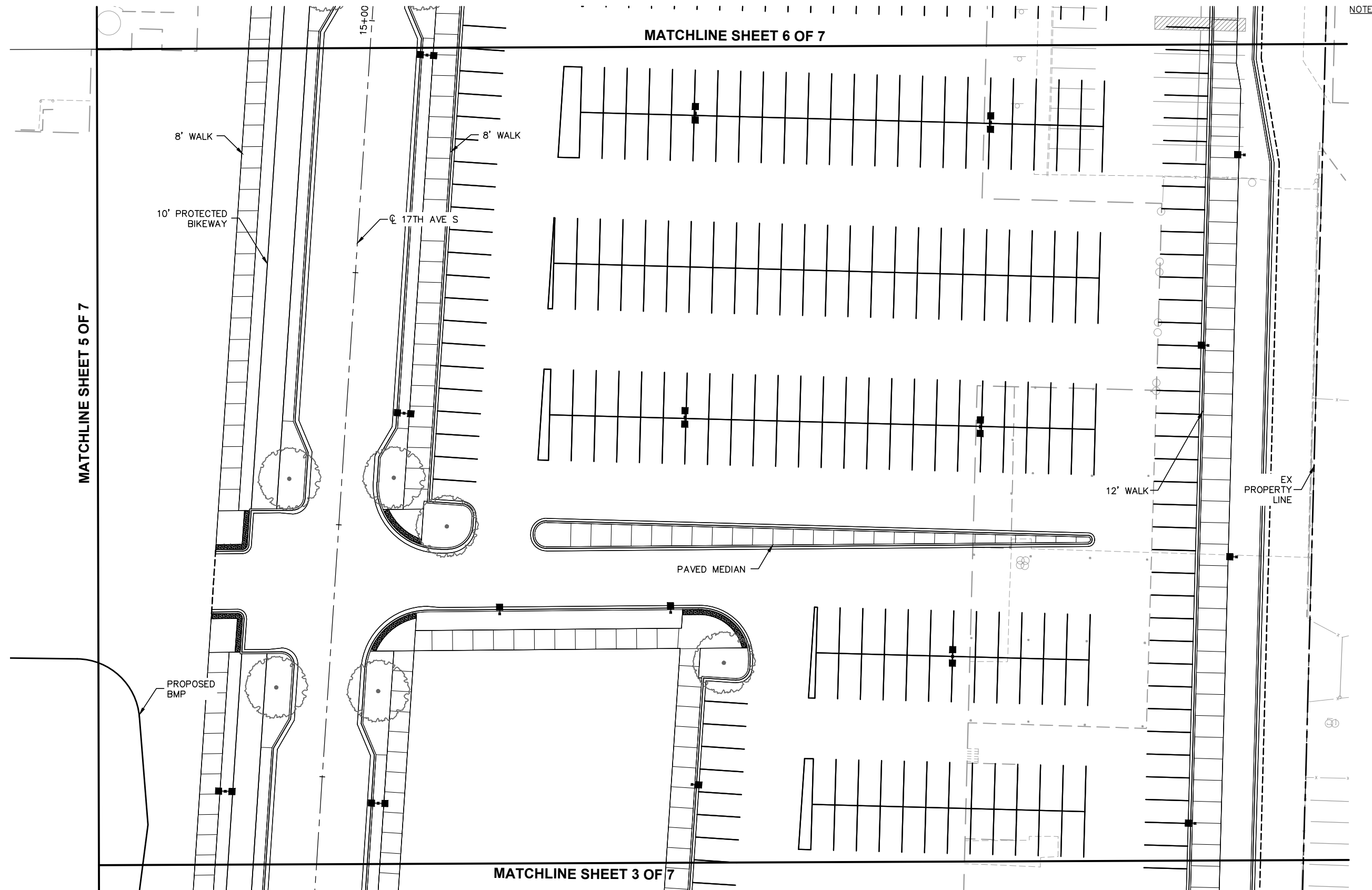


**CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 3**

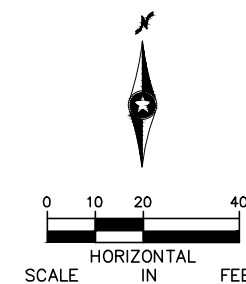
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SHEET NAME:	W3-URD-PLN - 005
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	SHEET
	23
	OF
	49



NOTE:

[illegible]

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**CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 4**

DISCIPLINE: **LANDSCAPE ARCH**

SHEET NAME:	W3-URD-PLN - 006
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	SHEET
	24
	OF
	49

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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line Light Extension

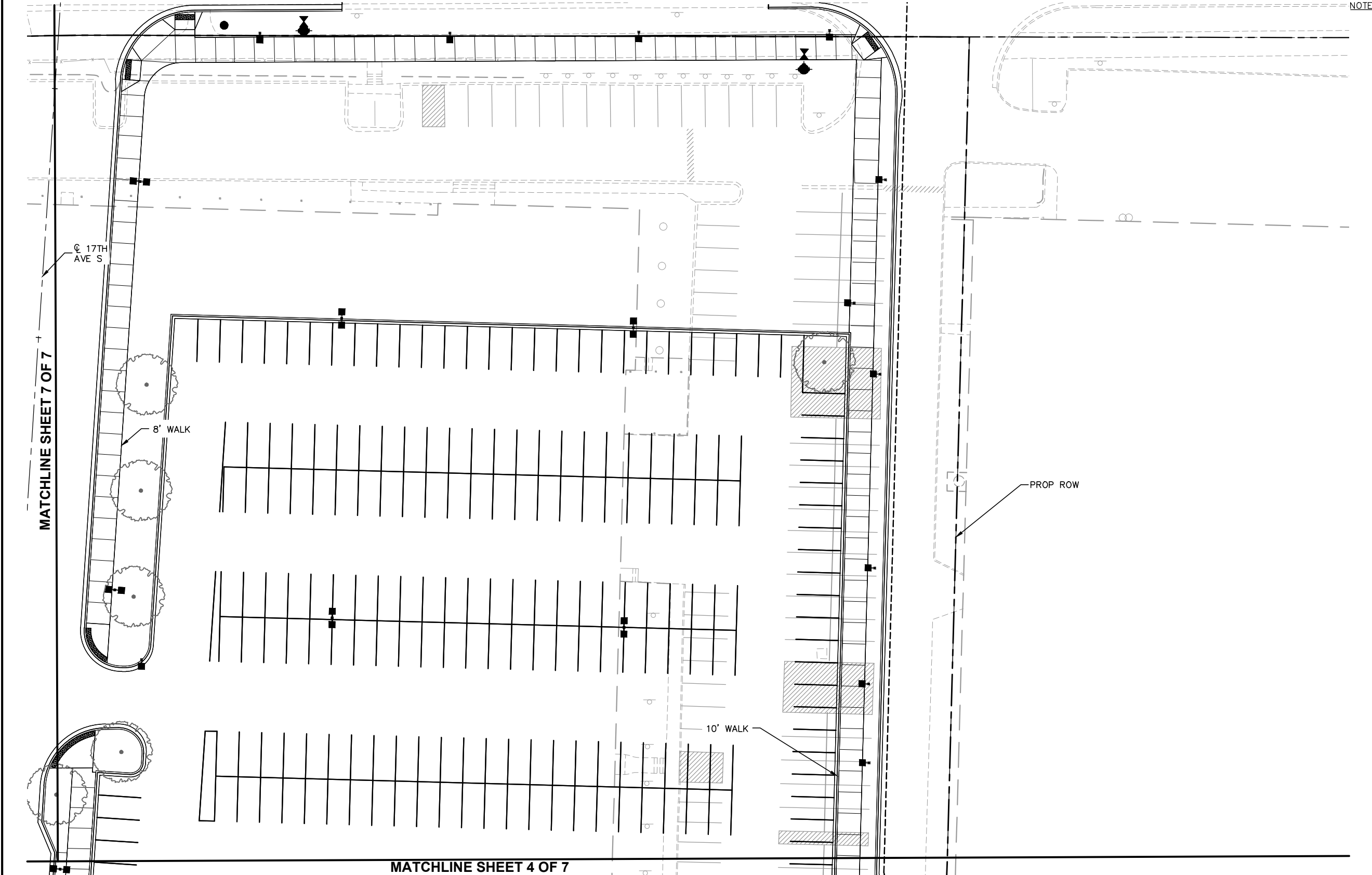
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SHADY OAK STATION
URBAN DESIGN PLAN 5

DISCIPLINE:
LANDSCAPE ARCH



SHEET NAME:
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SHEET
25
OF
49

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NO.	DATE	BY	CHECK/DESIGN	REVISION / SUBMITTAL



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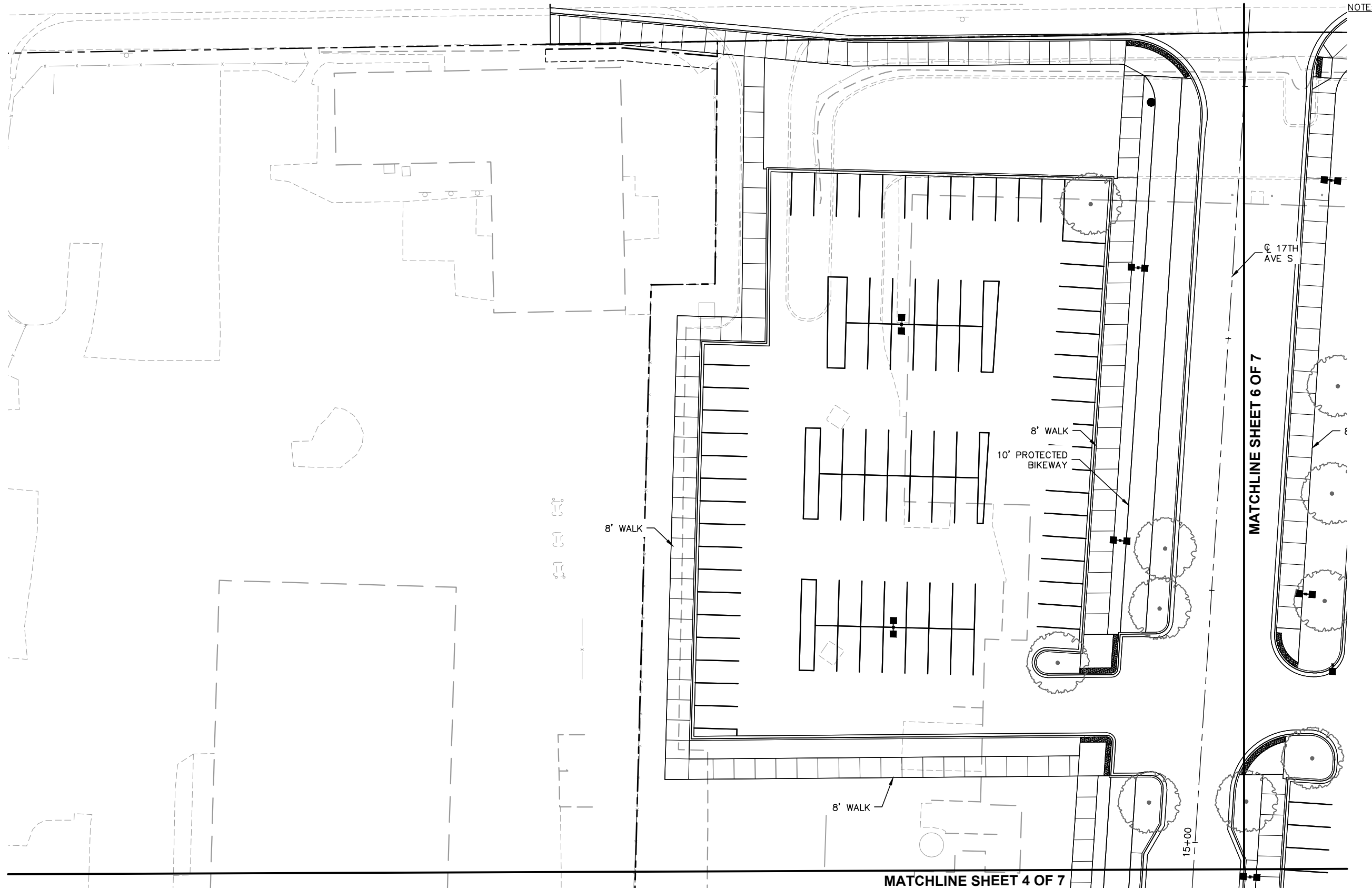
CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 6

DISCIPLINE: LANDSCAPE ARCH

SHEET NAME: W3-URD-PLN - 008

SHEET
26
OF
49

Sep. 21 2015 08:16 am V:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-URD-PLN.dwg By: akrzmarzick



NOTE:

Q 17TH
AVE S

MATCHLINE SHEET 6 OF 7

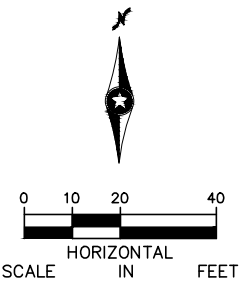
8' WALK
10' PROTECTED
BIKEWAY

8' WALK

8' WALK

MATCHLINE SHEET 4 OF 7

15+00



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CIVIL WEST - VOLUME 9
SHADY OAK STATION
URBAN DESIGN PLAN 7

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-URD-PLN - 009

SHEET
27
OF
49

Sep. 21 2015 02:09 pm v:\3400_ADC\CAD\OVERALL\PLAN SHEETS\LANDSCAPE\W0-LAN-LGD.dwg By: akrzmarzick

GENERAL LEGEND

	ROADWAY ☐
	TRACK ☐
	CONCRETE CURB AND GUTTER
	RETAINING WALL
	BALLAST CURB
	TUNNEL WALL
	EX ROW
	PROP ROW
	PROP TCE
	PROP PE
	DELINEATED WETLAND
	WATER EDGE
	CROSSWALK
	TRAIL (WIDTH VARIES)
	DRIVEWAY (DESIGN VARIES)
	PEDESTRIAN RAMP (DESIGN VARIES)
	AUTOMATIC GATE
	PEDESTRIAN FLASHER
	OCS POLE
	TPSS BUILDING (TPSS-SW###)
	SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE
	FENCE
	BUS SHELTER
	ROADWAY/PEDESTRIAN LIGHT

LANDSCAPE LEGEND

	OVERSTORY DECIDUOUS TREE
	OVERSTORY DECIDUOUS TREE IN TREE GRATE
	ORNAMENTAL DECIDUOUS TREE
	CONIFEROUS TREE
	SHRUBS AND PERENNIALS
	SOD
	SEED TYPE 1 - TURF SEED
	SEED TYPE 2 - NATIVE SEED
	SEED TYPE 3 - BMP
	SEED TYPE 4 - WETLAND RESTORATION

GENERAL NOTES

- EXISTING TURF AREAS DISTURBED DUE TO CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED WITH SOD OR SEEDED. CIVIL DRAWINGS ILLUSTRATE A TEMPORARY CONSTRUCTION EASEMENT (TCE), WHICH IDENTIFIES THE LIMITS OF CONSTRUCTION ACTIVITIES; HOWEVER, LIMITS OF ACTUAL DISTURBANCE THAT WOULD REQUIRE SOD OR SEED INSTALLATION MAY NOT COINCIDE WITH THE TCE.
- ALL EXISTING VEGETATION WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED. PROTECT EXISTING VEGETATION NOTED TO REMAIN INCLUDING TREES, SHRUBS, & OTHER PLANTINGS.

DRAFT-WORK IN PROCESS

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

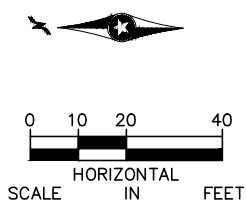
DESIGNED BY:	CHECKED BY:
DRAWN BY:	DATE:

60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 9 LANDSCAPE NOTES AND LEGEND	
DISCIPLINE: LANDSCAPE ARCH	SHEET NAME: W0-LAN-LGD - 001

SHEET

OF
XXX

[illegible]

METROPOLITAN
COUNCIL



DISCIPLINE: **LANDSCAPE ARCH**

SHEET NAME:	29 - W1-LAN-PLN - 001
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NOTES:



MATCHLINE SHEET 1 OF 2

[illegible]**AECOM**

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SOUTHWEST

Green Line LRT Extension



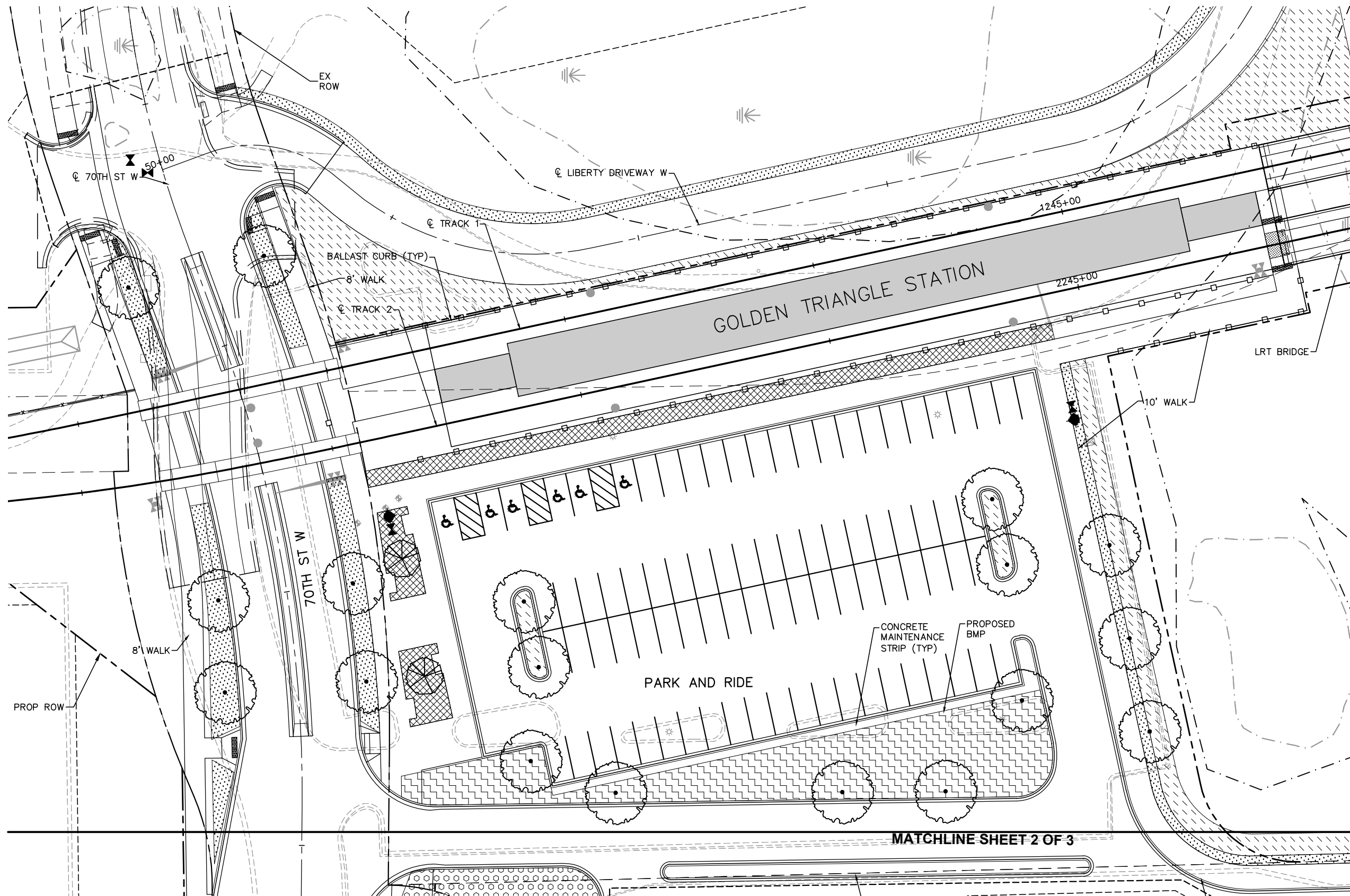
**CIVIL WEST - VOLUME 9
SOUTHWEST STATION
LANDSCAPE PLAN 2**

DISCIPLINE: **LANDSCAPE ARCH**

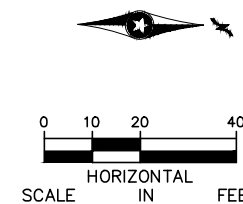
SHEET NAME:	30 - W1-LAN-PLN - 002
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SHEET
30
OF
49

Sep. 21 2015 08:19 am V:\3400_ADC\CAD\SEGMENT W2\PLAN SHEETS\LANDSCAPE\W2-LAN-PLN.dwg By: akrzmarzick



NOTE:



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COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL WEST - VOLUME 9
GOLDEN TRIANGLE STATION
LANDSCAPE PLAN 1

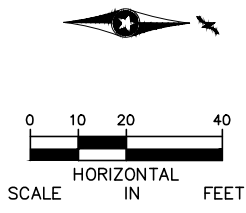
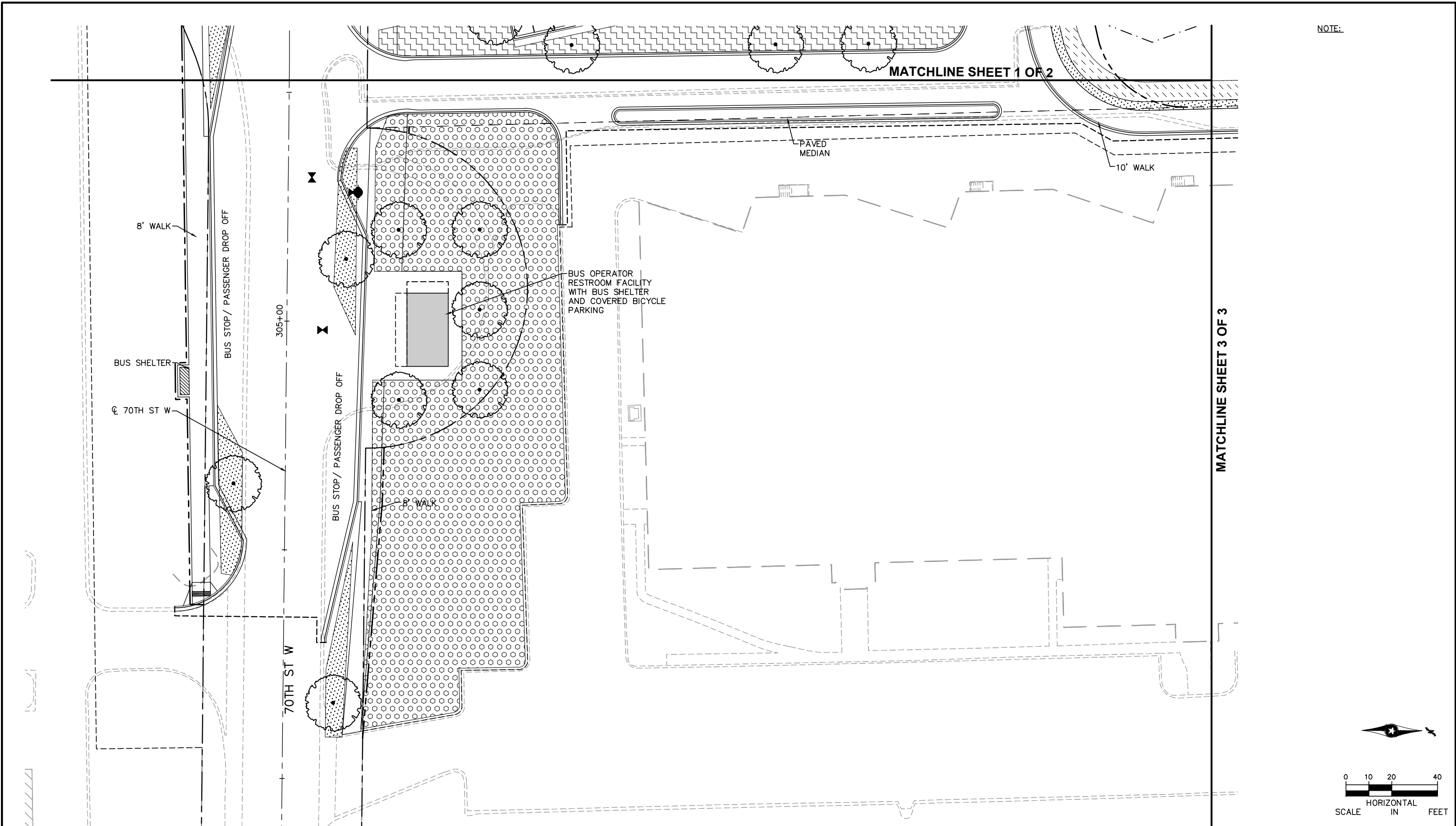
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LANDSCAPE ARCH

SHEET NAME:
W2-LAN-PLN - 001

SHEET
31
OF
49



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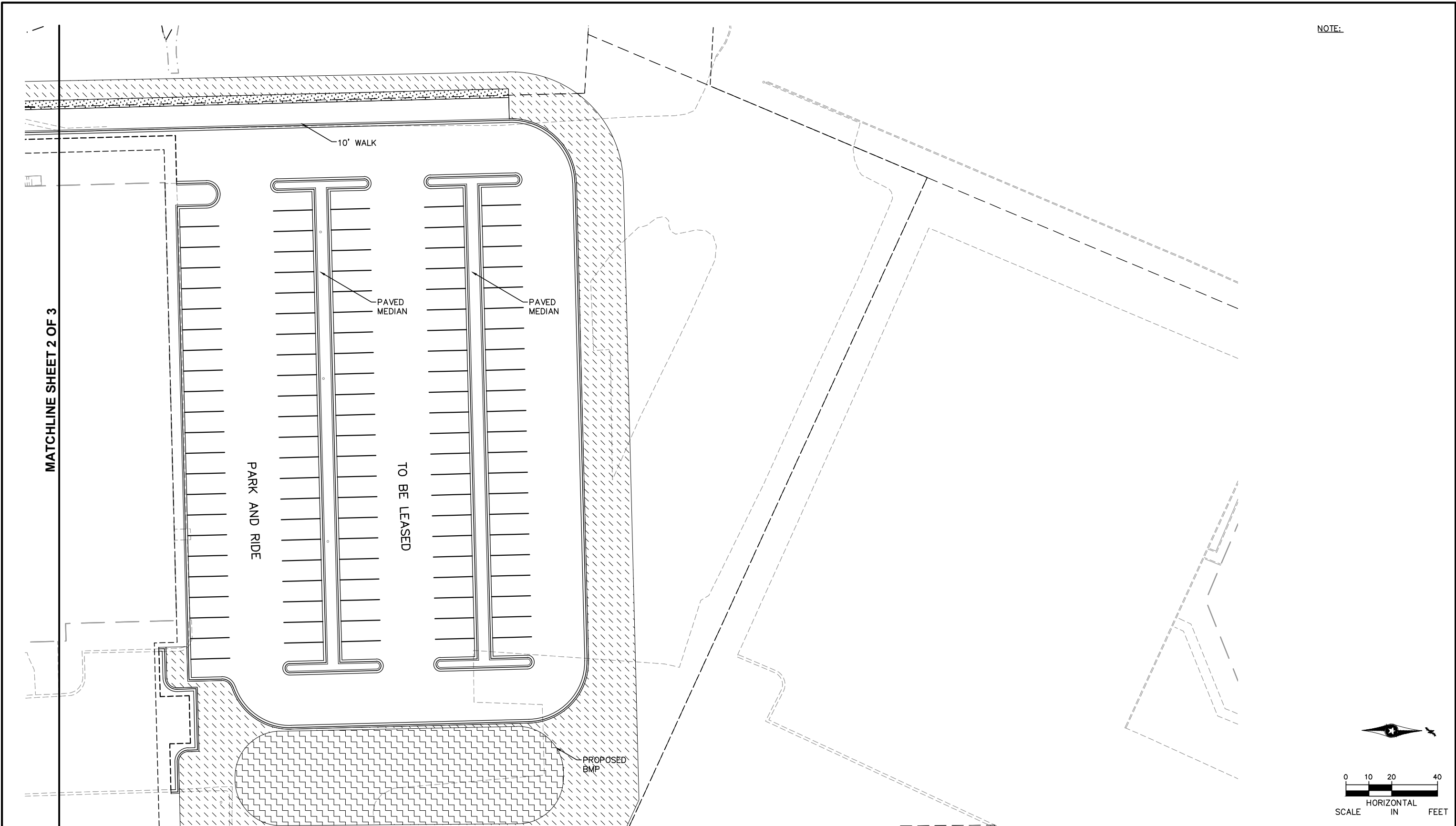
CIVIL WEST - VOLUME 9
GOLDEN TRIANGLE STATION
LANDSCAPE PLAN 2

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W2-LAN-PLN - 002

SHEET
32
OF
49

Sep. 21 2015 08:20 am V:\3400_ADC\CAD\SEGMENT W2\PLAN SHEETS\LANDSCAPE\W2-LAN-PLN.dwg By: akrzmarzick



NOTE:

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

60% SUBMISSION - 09/28/15

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

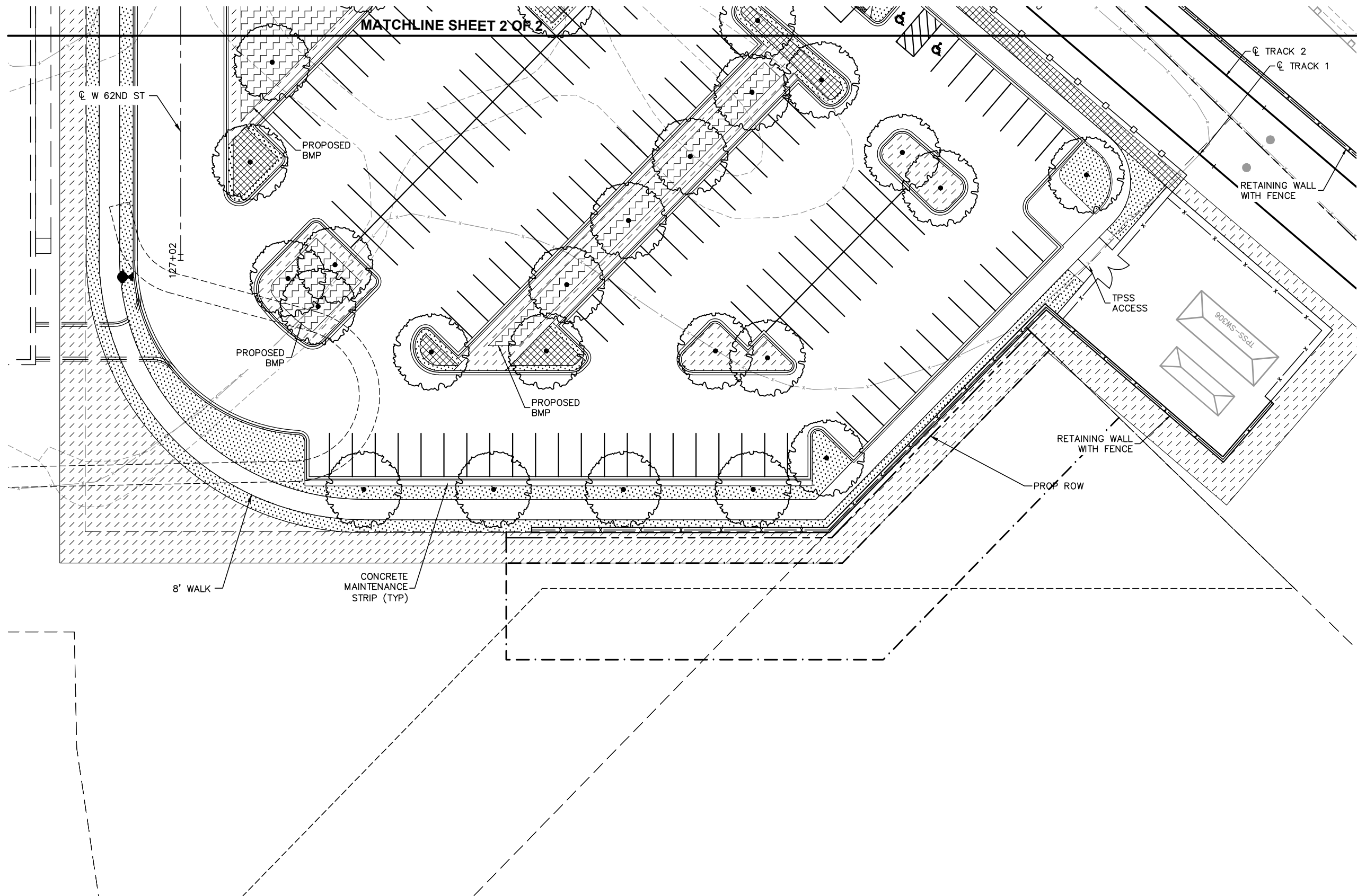
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GOLDEN TRIANGLE STATION
LANDSCAPE PLAN 3

DISCIPLINE:
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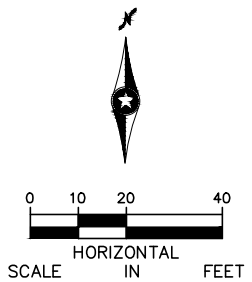
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W2-LAN-PLN - 003

SHEET
33
OF
49

Sep. 21 2015 08:20 am V:\3400_ADC\CAD\SEGMENT W2\PLAN SHEETS\LANDSCAPE\W2-LAN-PLN.dwg By: akrzmarzick



NOTE:



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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line Light Extension

CIVIL WEST - VOLUME 9
CITY WEST STATION
LANDSCAPE PLAN 1

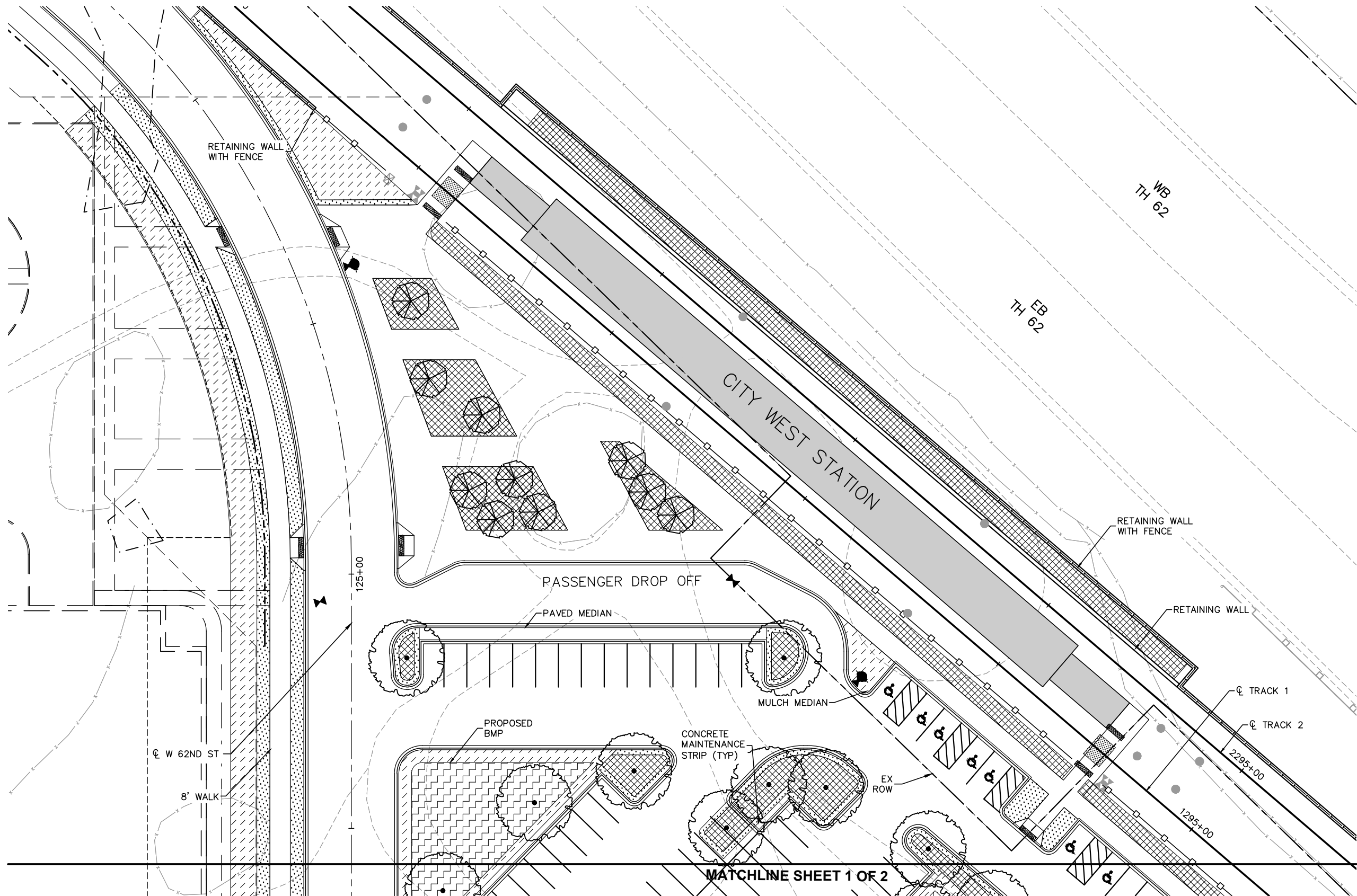
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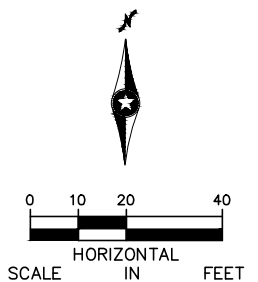
SHEET
34
OF
49

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COUNCIL

SOUTHWEST
Green Line Light Extension

CIVIL WEST - VOLUME 9
CITY WEST STATION
LANDSCAPE PLAN 2

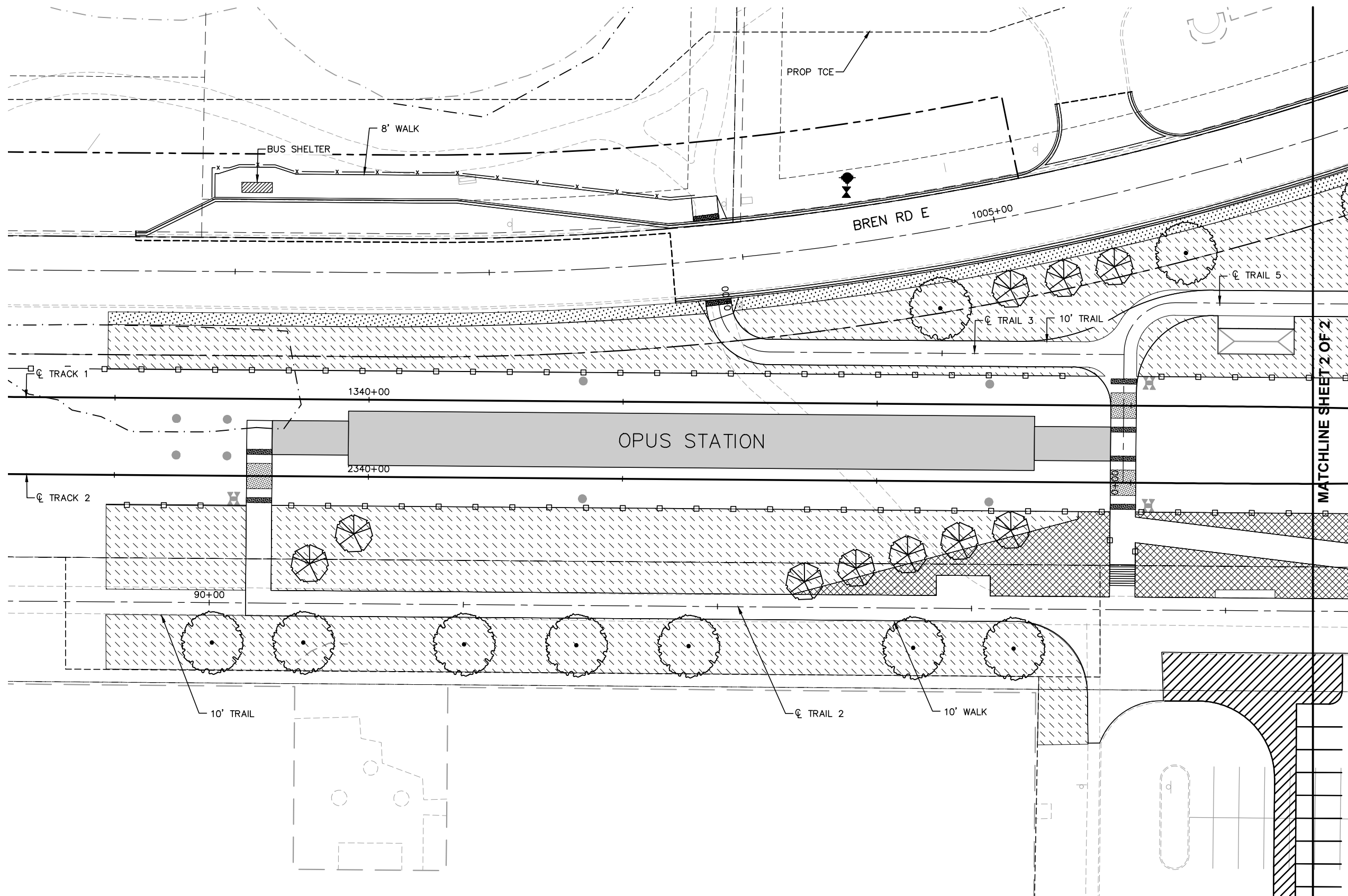
DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W2-LAN-PLN - 005

60% SUBMISSION - 09/28/15

SHEET
35
OF
49

Sep. 21 2015 08:22 am v:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-LAN-PLN.dwg By: akrzmarzick



NOTE:
1. ADJUST TREE LOCATIONS TO RETAIN EXISTING TREES EAST OF STATION.

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COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL WEST - VOLUME 9
OPUS STATION
LANDSCAPE PLAN 1

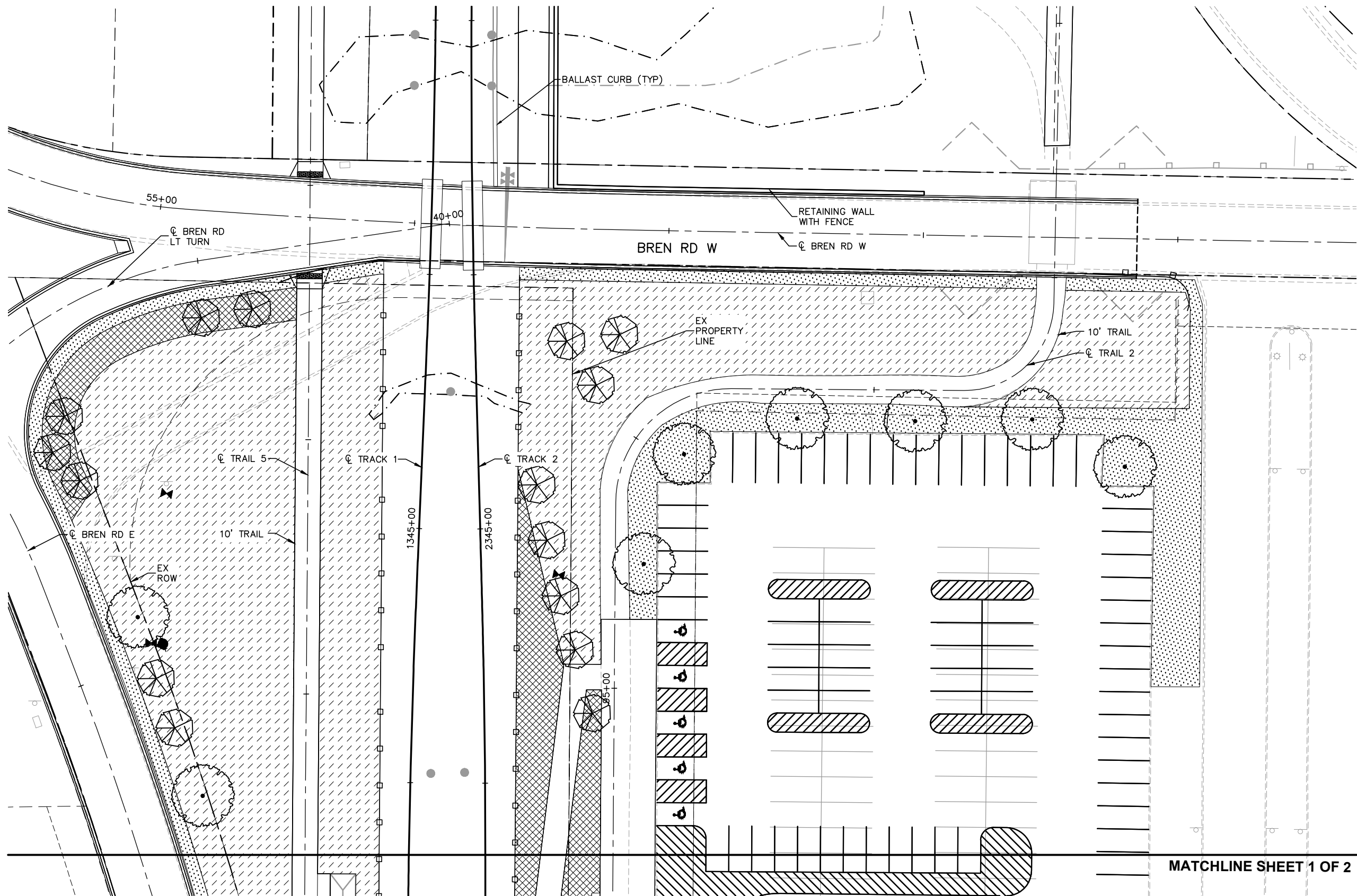
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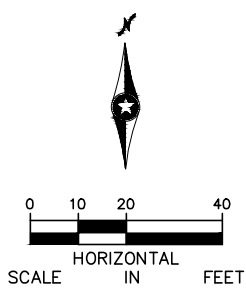
SHEET
36
OF
49

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Sep. 21 2015 08:22 am v:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-LAN-PLN.dwg By: akrzmarzick



NOTE:
1. ADJUST TREE LOCATIONS TO RETAIN EXISTING TREES AROUND PARKING LOT.



NO.	DATE	BY	CHECK/DESIGN	REVISION / SUBMITTAL



CIVIL WEST - VOLUME 9
OPUS STATION
LANDSCAPE PLAN 2

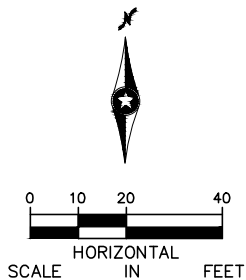
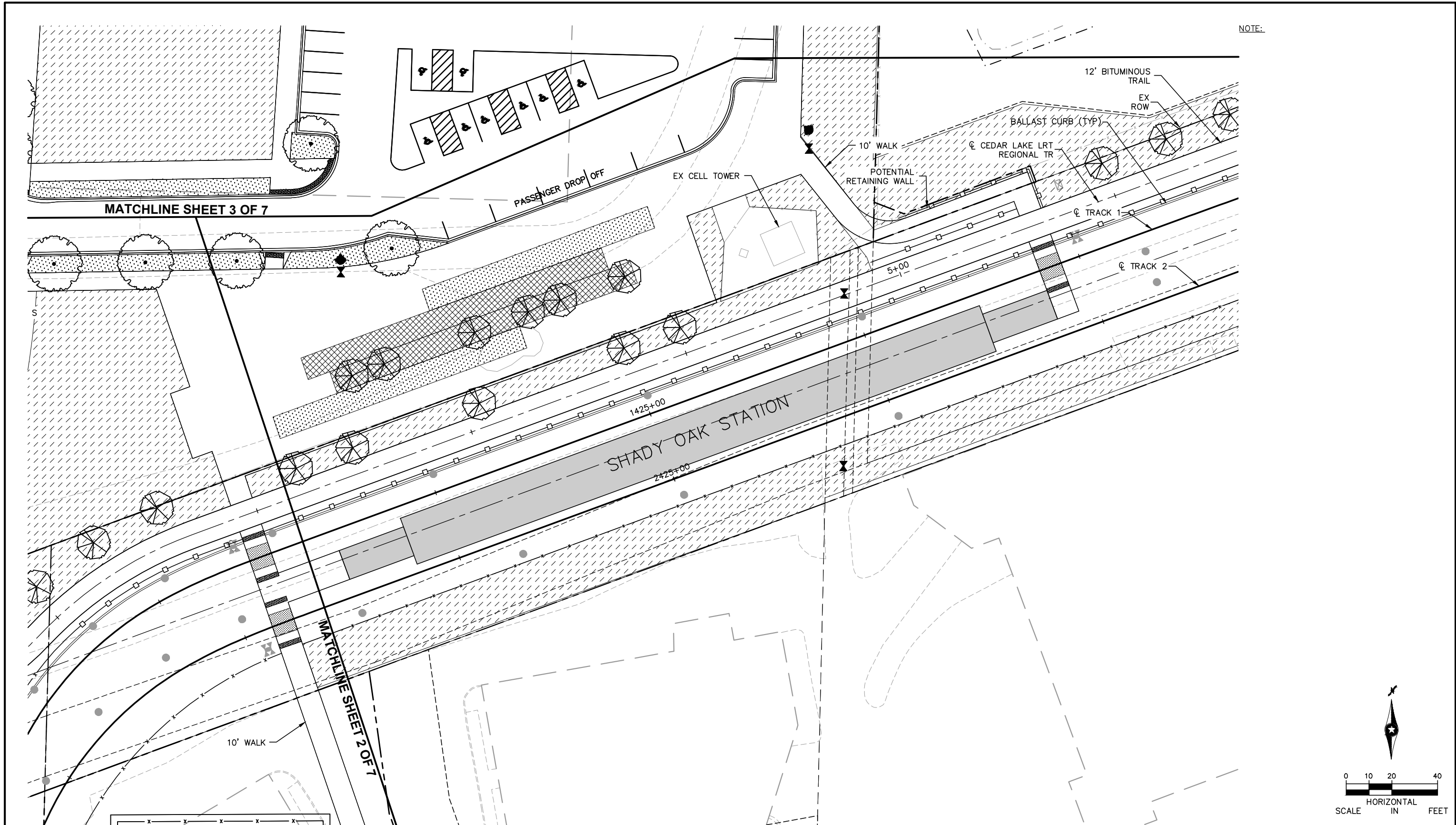
SHEET
37
OF
49

60% SUBMISSION - 09/28/15

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-LAN-PLN - 002

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Green Line LRT Extension

60% SUBMISSION - 09/28/15

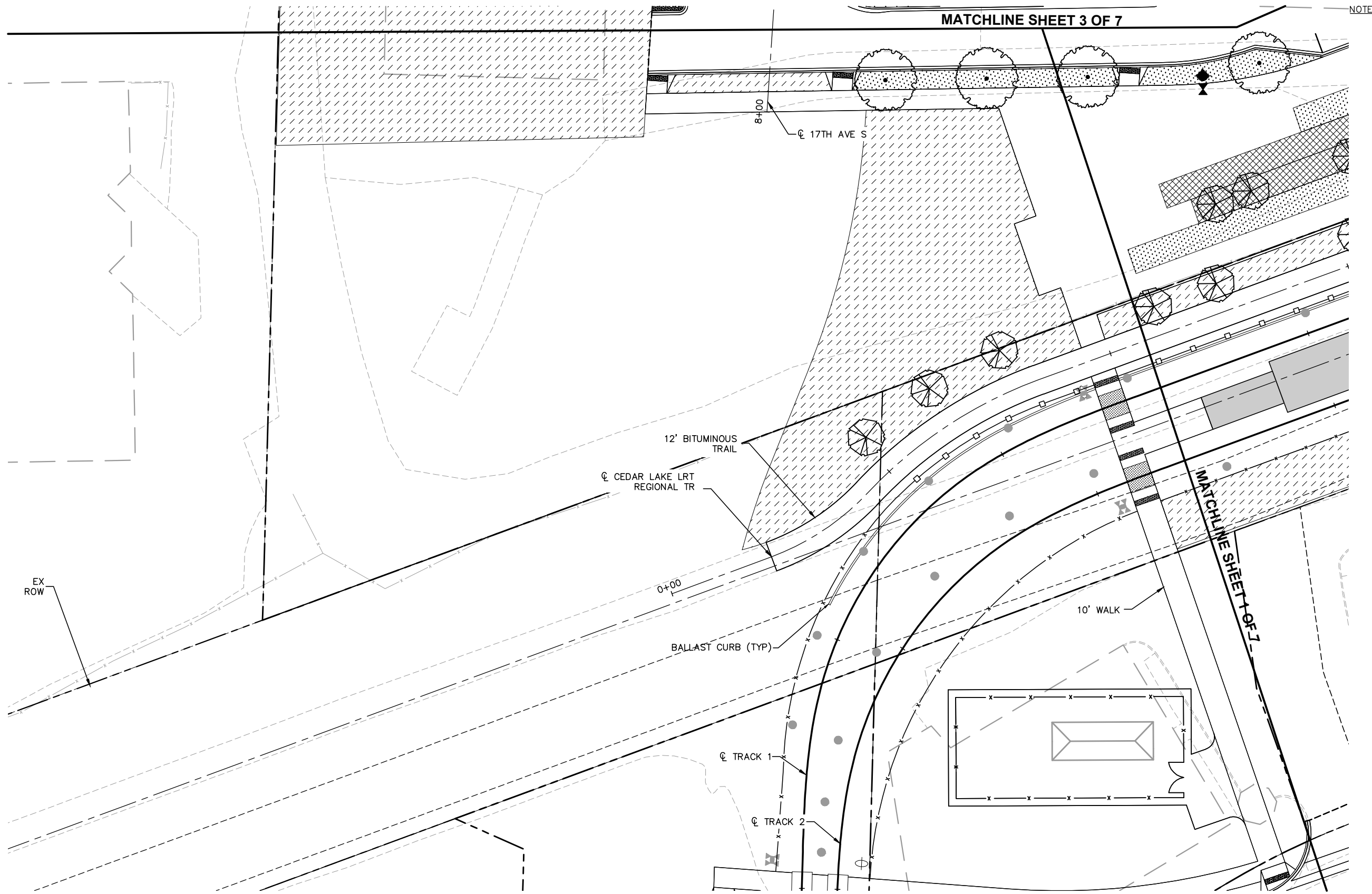
CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 1

DISCIPLINE:
LANDSCAPE ARCH

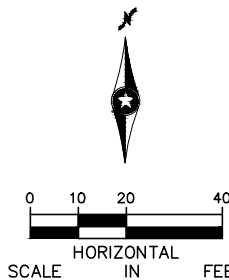
SHEET NAME:
W3-LAN-PLN - 003

SHEET
38
OF
49

Sep. 21 2015 08:23 am V:\3400_ADC\CAD\SEGMENT W3\PLAN SHEETS\LANDSCAPE\W3-LAN-PLN.dwg By: akrzmarzick



NOTE:



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

60% SUBMISSION - 09/28/15

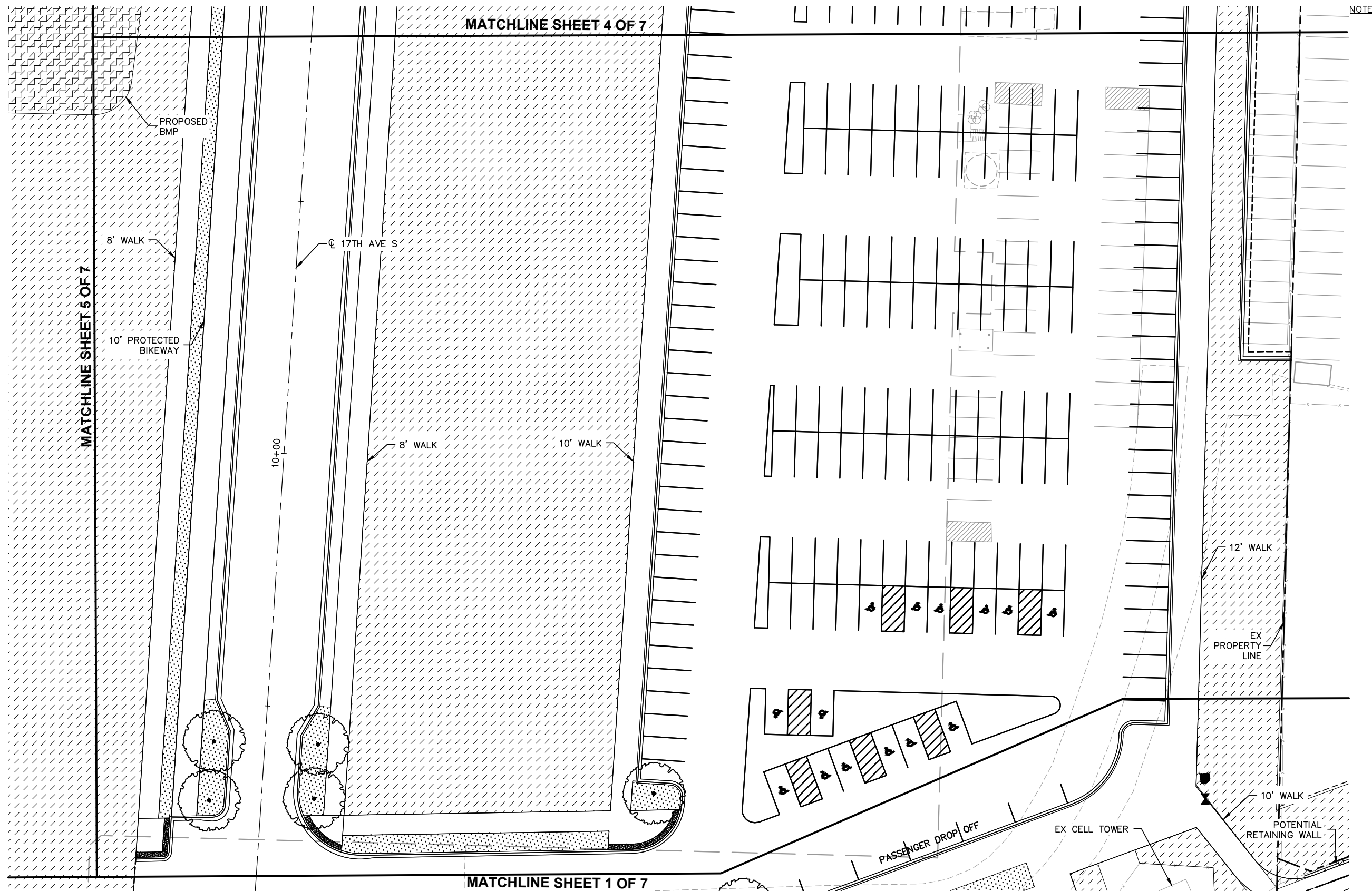
CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 2

DISCIPLINE: LANDSCAPE ARCH

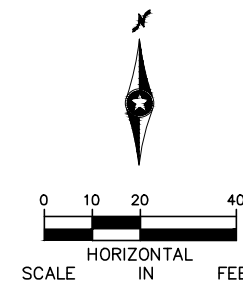
SHEET NAME: W3-LAN-PLN - 004

SHEET
39
OF
49

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NOTE:



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 3

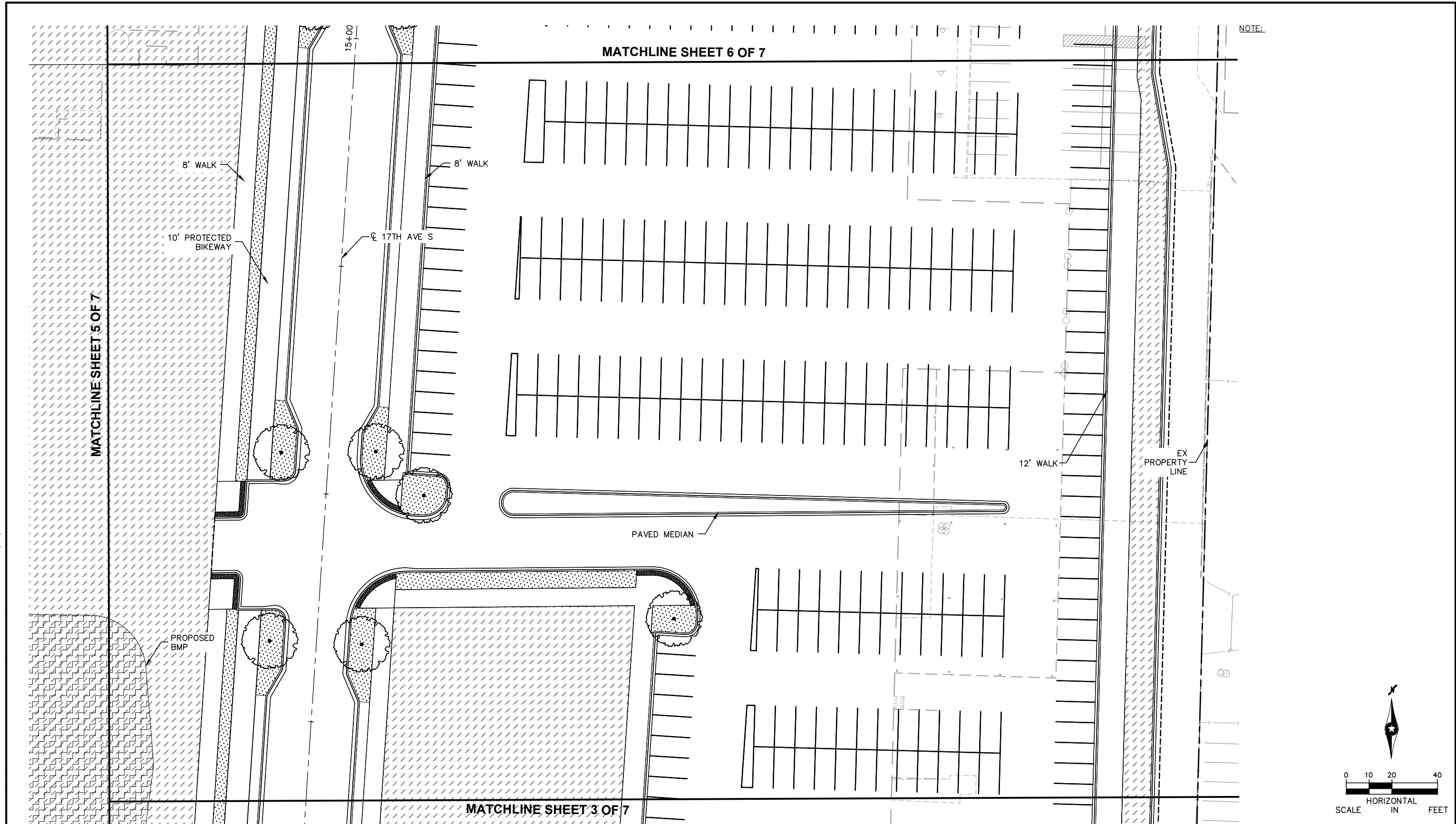
SHEET
40
OF
49

60% SUBMISSION - 09/28/15

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-LAN-PLN - 005

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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line LRT Extension

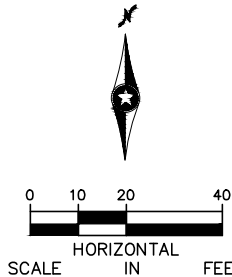
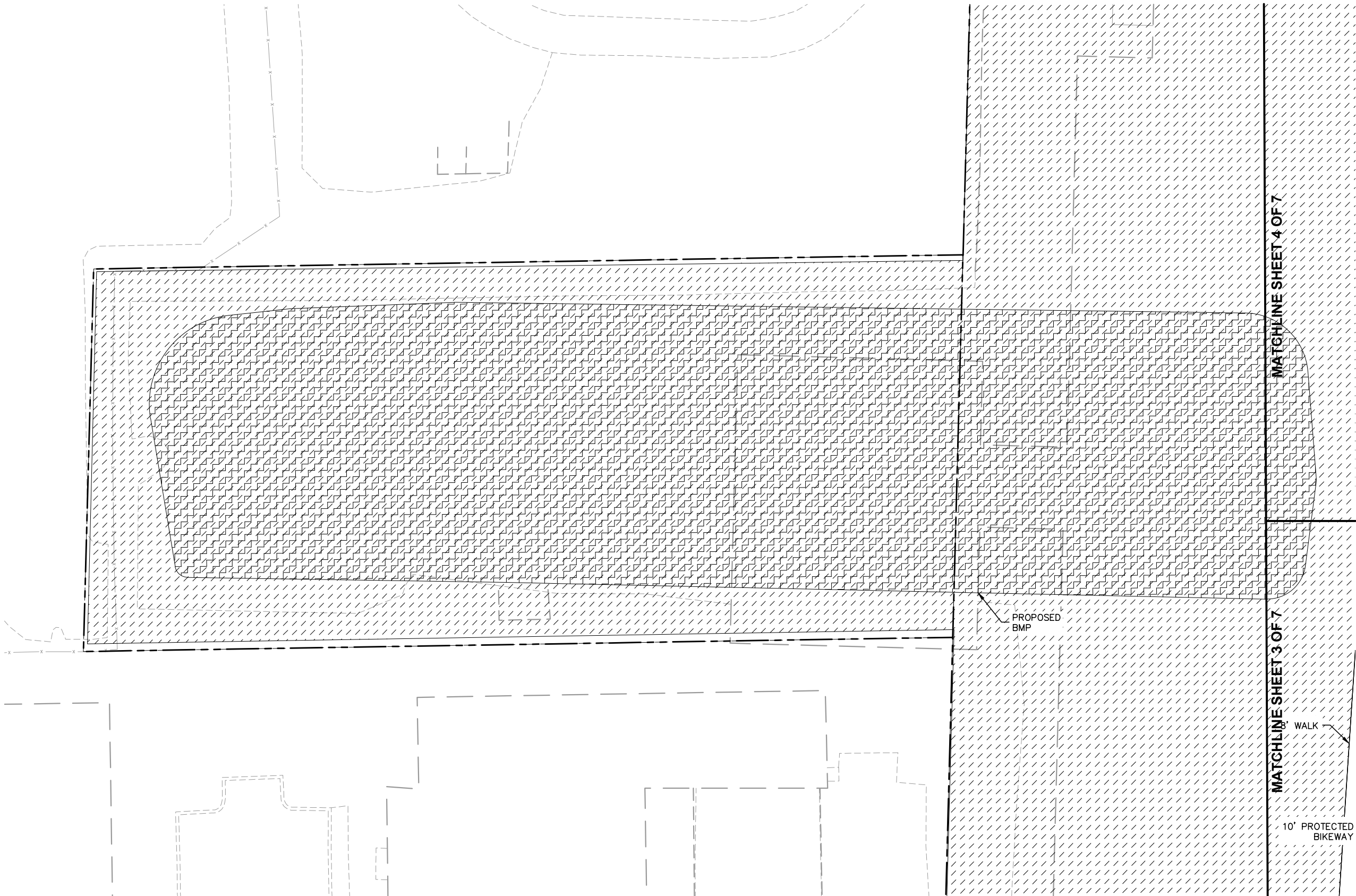
CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 4

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-LAN-PLN - 006

SHEET
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OF
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Green Line LRT Extension

CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 5

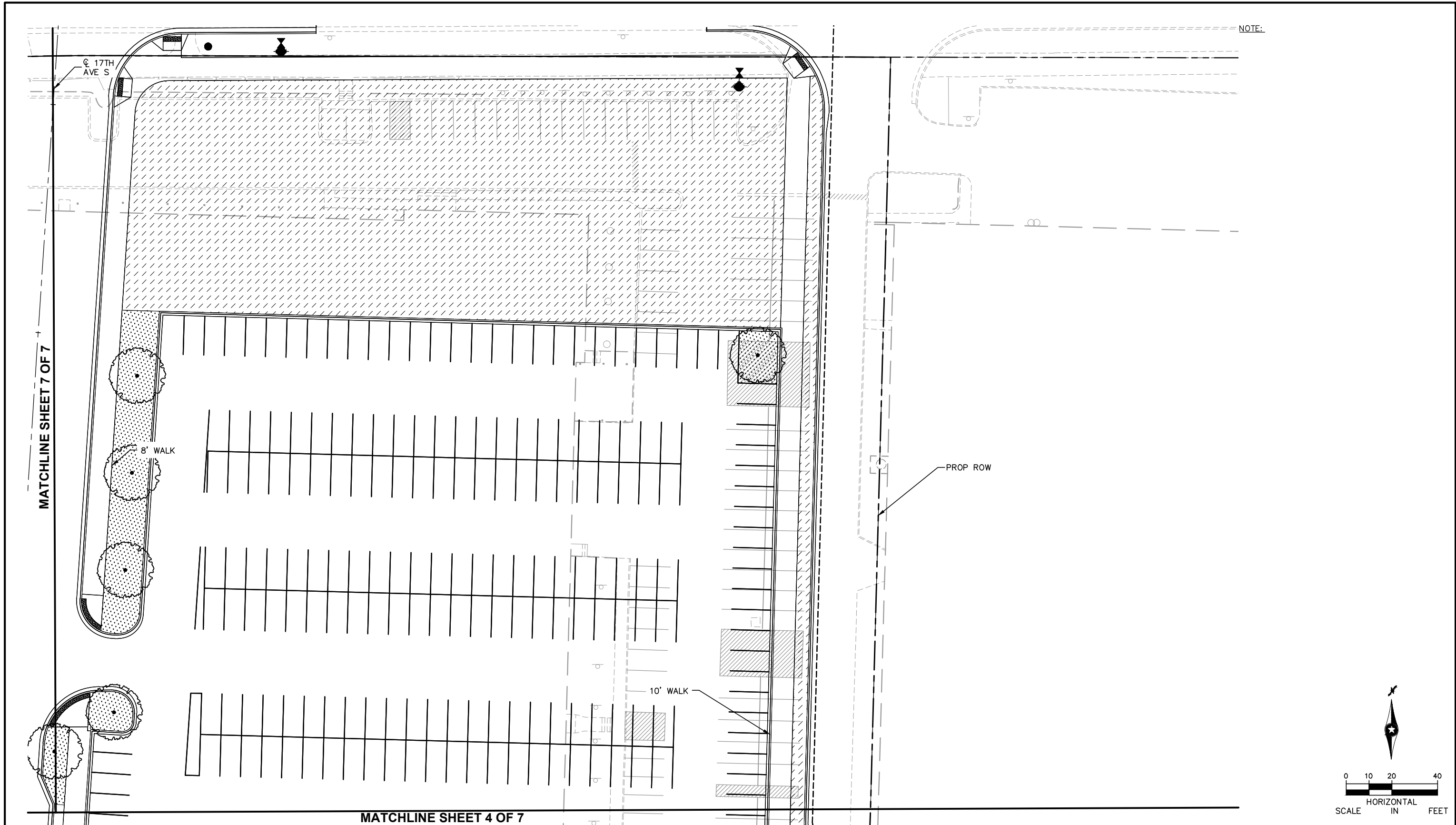
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LANDSCAPE ARCH

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OF
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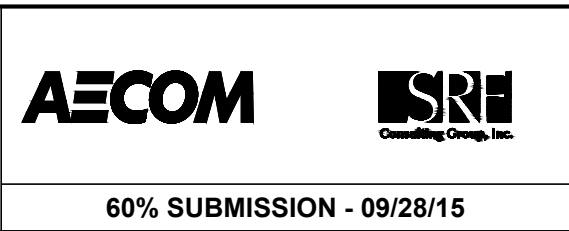
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NOTE:

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CIVIL WEST - VOLUME 9
SHADY OAK STATION
LANDSCAPE PLAN 6

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W3-LAN-PLN - 008

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OF
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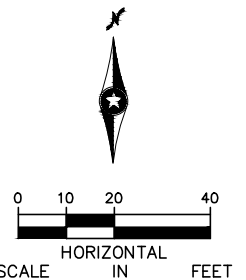
SOUTHWEST

Green Line LRT Extension

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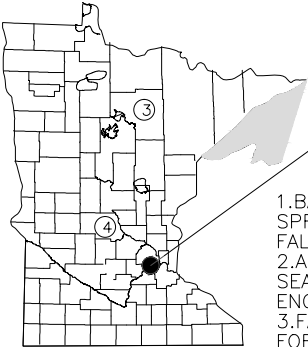
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GENERAL NOTES		
SEE SPECIAL PROVISIONS FOR SPECIFIC PROJECT REQUIREMENTS.		
REFER TO MnDOT SPECIFICATIONS 2571, 3861, AND THE "2016 INSPECTION AND CONTRACT ADMINISTRATION MANUAL FOR MnDOT LANDSCAPE PROJECTS" FOR GENERAL REQUIREMENTS.		
COMPLETE PREPARATORY WORK BEFORE STARTING INITIAL PLANTING OPERATIONS.		
ACCEPT ALL PLANT STOCK IN ACCORDANCE WITH MnDOT 3861 PRIOR TO PLANTING.		
THE CONTRACTOR WILL DEMONSTRATE COMPETENCY FOR SOIL CULTIVATION OPERATIONS IN ACCORDANCE WITH (MnDOT 2571.3D2 STEP 4)		
THE CONTRACTOR WILL DEMONSTRATE COMPETENCY FOR ALL PLANT INSTALLATION OPERATIONS IN ACCORDANCE WITH MnDOT 2571.3F1		
RODENT PROTECTION	SEE SPECIAL PROVISIONS AND STANDARD PLANTING DETAILS (C)	
FERTILIZER	SEE SPECIAL PROVISIONS	
COMPOST	MnDOT 3890 GRADE 2 UNLESS OTHERWISE SPECIFIED.	
MULCH MATERIAL	MnDOT 3882 TYPE 6 UNLESS OTHERWISE SPECIFIED.	
MASS PLANTING BEDS	PREPARE MASS PLANTING BEDS FOR PLANTS PLACED AT 6' OR LESS, UNLESS OTHERWISE SPECIFIED ON SHEETS. PLANT BEDS IN STAGGERED ROWS ON THE PERIMETER FIRST, THEN UNIFORMLY FILL IN WITH REMAINING PLANTS. USE TRIANGULAR SPACING, UNLESS SPECIFIED OTHERWISE. PROVIDE 5' RADIUS CLEAR OF SHRUBS AROUND EACH DECIDUOUS TREE AND 8' CLEAR RADIUS AROUND EACH CONIFER TREE. RADIUS WILL BE MEASURED FROM THE CENTER OF THE TREE TO THE CENTER OF THE SHRUB. NOTIFY ENGINEER OF GROSS PLANT QUANTITY SURPLUS OR DEFICIENCY IMMEDIATELY. MULCH ENTIRE MASS PLANTING BED. SEE STANDARD PLANTING DETAILS (C)	
TREE PAINTING (FROST CRACK PREVENTION)	NO PAINTING OF TREE STEMS SHALL BE REQUIRED.	
PLANTING PLAN DIMENSIONS	STATED DIMENSIONS SUPERCEDE SCALING FROM PLAN.	
WATERING GUIDELINES (MnDOT 2571.3G)	PLANT TYPE	AVERAGE GALLONS OF WATER PER APPLICATION
	MACHINE TRANSPLANTED TREES	50-100
	BALLED AND BURLAPPED TREES	20
	BARE ROOT AND CONTAINER TREES	15
	BALLED AND BURLAPPED SHRUBS	10
	BARE ROOT AND CONTAINER SHRUBS	7
	WOODY SEEDLINGS	4
	PERENNIALS AND VINES	3
	IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR AND MAINTAIN SOIL MOISTURE AT ADEQUATE BUT NOT EXCESSIVE LEVELS. THE AMOUNTS LISTED ABOVE ARE GUIDELINES, NOT REQUIREMENTS.	



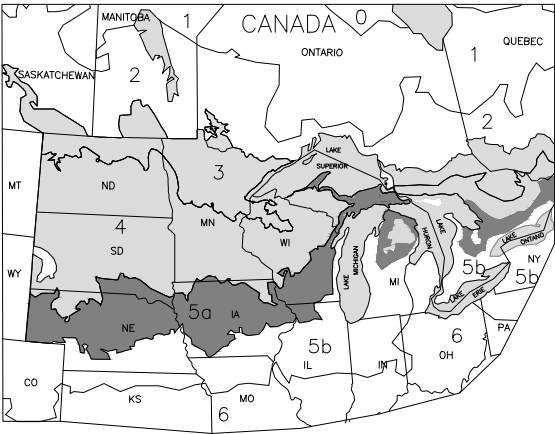
PROJECT LOCATION

- 1.BARE ROOT PERENNIALS MUST BE INSTALLED IN THE SPRING NO LATER THAN JUNE 1ST OR FOLLOW THE FALL DECIDUOUS PLANTING DATES.
- 2.ACTUAL DATES MAY CHANGE DEPENDING UPON SEASONAL CONDITIONS, AS DETERMINED BY THE ENGINEER.
- 3.FALL PLANTING IS NOT ALLOWED FOR BARE ROOT FORM OF THE FOLLOWING SPECIES: HAWTHORN, DOGWOOD, POPLAR, HACKBERRY, LINDEN, IRONWOOD, HONEYLOCUST, BIRCH, MOUNTAIN ASH, MAPLE, WILLOW, CRABAPPLE, PLUM/CHERRY, OAKS, AND SUMAC.
- 4.ALL REPLACEMENT PLANTS MUST BE INSTALLED DURING THE MONTH OF MAY DURING THE FIRST YEAR OF THE PLANT ESTABLISHMENT PERIOD.

PLANTING DATES BY ZONE						
KEY	SPRING				FALL	
	DECIDUOUS	CONIFEROUS	PERENNIALS	SEEDLINGS	DECIDUOUS	CONIFEROUS
③	APRIL 21 TO JUNE 1	APRIL 21 TO JUNE 1	MAY 1 TO JUNE 15	APRIL 21 TO JUNE 1	OCT. 1 TO NOV. 1	AUG. 25 TO SEPT. 15
④	APRIL 7 TO JUNE 1	APRIL 7 TO MAY 17	MAY 1 TO JUNE 15	APRIL 7 TO MAY 17	OCT. 10 TO NOV. 15	AUG. 25 TO SEPT. 15

PLANT INSTALLATION PERIOD

(MnDOT 2571.3F2)



ACCEPTABLE ZONES		
ZONES	LEGEND	MIN. TEMP
3		-34.4° TO -40° F
4		-28.9° TO -34.4° F
5a		-26.1° TO -28.9° F

UNACCEPTABLE ZONES	
ZONES	LEGEND
0, 1, 2, 5b and 6	

FOR ALL PLANT STOCK, DOCUMENT ACCEPTABILITY FOR HARDINESS IN THE MINNESOTA ZONE WHERE THE PROJECT SITE IS LOCATED, AS FOLLOWS:

A.PLANT STOCK CONTINUOUSLY GROWN FOR AT LEAST THE LAST TWO YEARS WITHIN THE ACCEPTABLE LIMITS SHOWN.

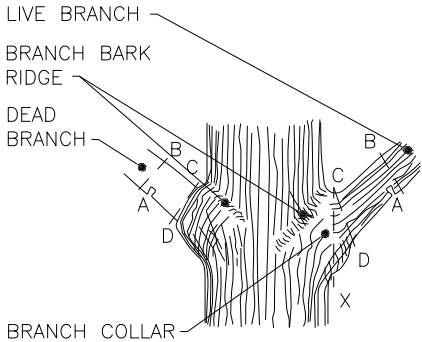
OR

B.PLANT STOCK, GROWN OUTSIDE THE ACCEPTABLE GROWING RANGE LIMITS, HAVING SEED SOURCE OR ROOT AND GRAFT STOCK ORIGINATING FROM THE ACCEPTABLE LIMITS SHOWN.

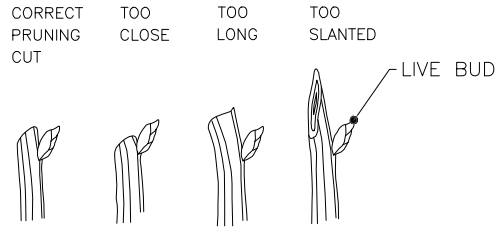
ACCEPTABLE PLANT STOCK GROWING RANGE LIMITS

SOURCE: USDA PLANT HARDINESS ZONE MAP

(MnDOT 3861.2C)



BRANCHES PRUNED AT TRUNK
(SHIGO METHOD)



BRANCHES PRUNED TO LIVE BUD
PRUNING

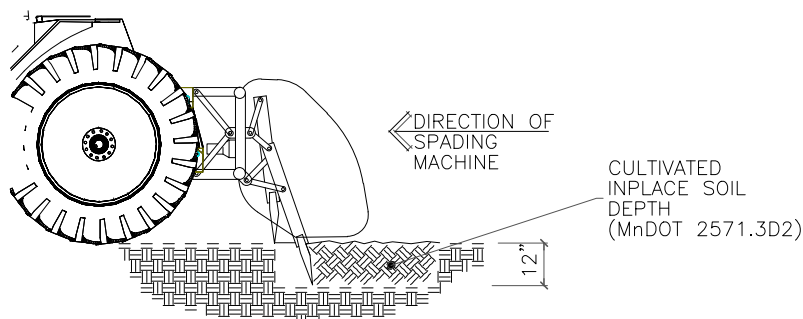
- STEPS TO PRUNING WITH PRUNING SAW:
- 1.CUT PART WAY THROUGH THE BRANCH AT POINT A.
 - 2.CUT COMPLETELY THROUGH BRANCH FROM POINT B TO A.
 - 3.AT BRANCH COLLAR CUT FROM POINT C TO D.

INCORRECT CUT FROM POINT C TO X (TOO CLOSE) WILL RESULT IN DISCONTINUOUS CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

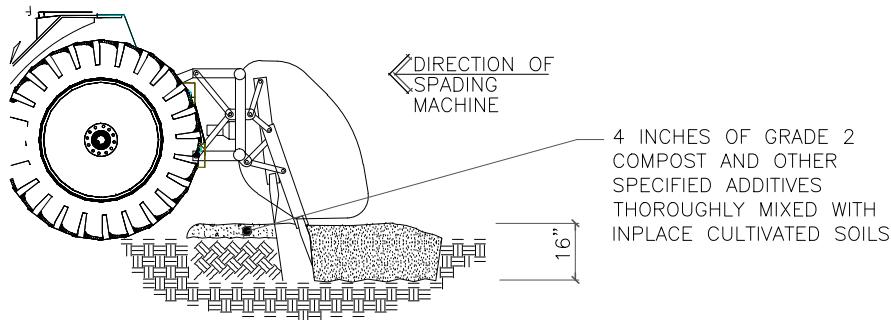
CORRECT CUT FROM POINT C TO D (LEAVING BRANCH COLLAR BUT NOT THE STUB FROM POINT B TO A) WILL RESULT IN CONTINUOUS DOUGHNUT SHAPED CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

- PRUNING NOTES:
- 1.PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
 - 2.THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
 - 3.AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
 - 4.IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.

(MnDOT 2571.3K2a9 and 2571.3E1)



PRIMARY TILLAGE - PASS 1



INCORPORATION TILLAGE - PASS 2

PLANTING SOIL

(MnDOT 2571.3D2)

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CIVIL WEST - VOLUME 9
LANDSCAPE DETAILS 1

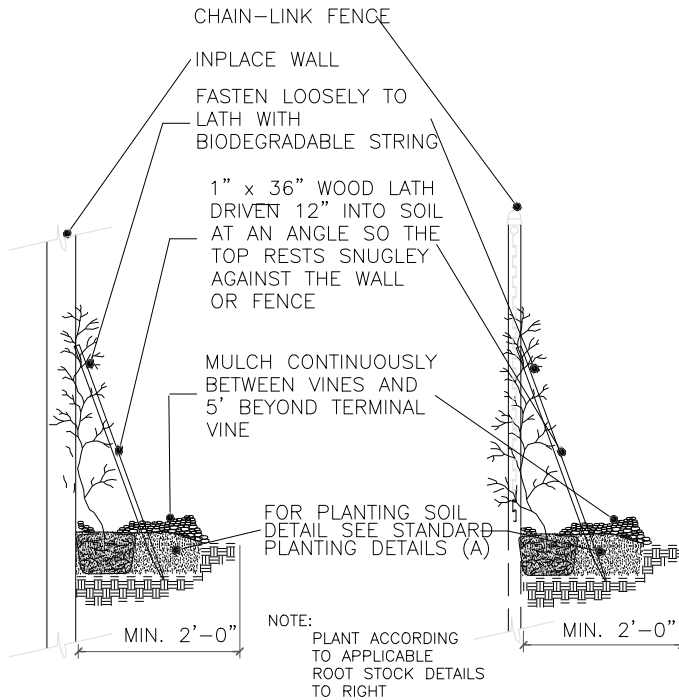
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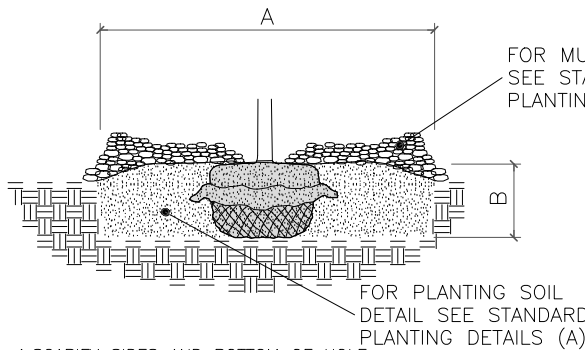
PLANTING HOLE DIMENSIONS			
HOLE DEPTH FOR B&B AND CONTAINER PLANTS SHALL NOT EXCEED MEASUREMENT FROM ROOT FLAIR TO BOTTOM OF SOIL BALL.			
PLANT TYPE	PLANT SIZE UP TO AND INCLUDING	(A) MINIMUM HOLE WIDTH	(B) APPROXIMATE HOLE DEPTH
DECIDUOUS & ORNAMENTAL TREES	3' B.R.	46"	13"
	4' B.R.	46"	14"
	5' B.R.	48"	14"
	6' B.R.	54"	15"
	7' B.R.	60"	16"
	8' B.R.	66"	19"
	0.75" B.R.	48"	12"
	1" B.R.	54"	14"
	1.25" B.R.	60"	14"
	1.5 B.R.	66"	15"
	1.75" B.R.	72"	16"
	2" B.R.	84"	19"
	4' B.B.	42"	11"
	5' B.B.	48"	12"
	6' B.B.	52"	14"
	8' B.B.	66"	16"
	10' B.B.	66"	16"
	12' B.B.	48"	16"
	1" B.B.	54"	14"
	1.25" B.B.	56"	15"
	1.5" B.B.	61"	15"
	1.75" B.B.	66"	16"
	2" B.B.	72"	16"
	2.5" B.B.	84"	19"
	3" B.B.	96"	20"
	3.5" B.B.	114"	23"
	4" B.B.	126"	25"
DECIDUOUS SHRUBS, ROSES AND PERENNIALS	12" B.R.	24"	7"
	15" B.R.	28"	8"
	18" B.R.	30"	8"
	2' B.R.	33"	9"
	3' B.R.	42"	11"
	4' B.B.	48"	12"
	5' B.B.	54"	14"
	6' B.R.	60"	14"
PERENNIAL HOLE DEPTH AND WIDTH SHALL BE BASED UPON ON-CENTER SPACING IN A CONTINUOUS TRENCH.	18" B.B.	27"	7"
	2' B.B.	30"	8"
	3' B.B.	36"	9"
	4' B.B.	42"	11"
	5' B.B.	48"	12"
	6' B.B.	54"	14"



WALL INSTALLATION

FENCE INSTALLATION

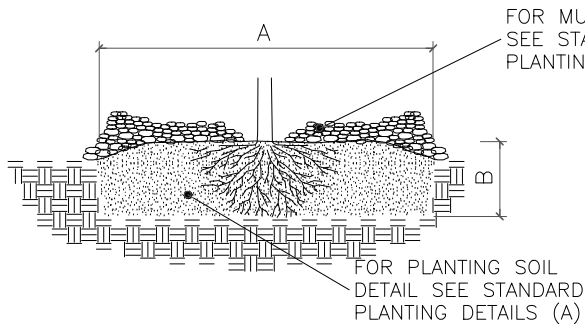
INSTALLATION OF VINES



- 1.SCARIFY SIDES AND BOTTOM OF HOLE.
- 2.PROCEED WITH CORRECTIVE PRUNING.
- 3.SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT.
- 4.SLIT REMAINING TREATED BURLAP AT 6" INTERVALS.
- 5.BACKFILL TO WITHIN APPROXIMATELY 12" OF THE TOP OF THE ROOTBALL, THEN WATER PLANT.
- 6.REMOVE THE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM THE TOP 1/3 OF THE BALL. REMOVE ALL TWINE. REMOVE OR CORRECT STEM GIRDLING ROOTS.

- 7.PLUMB AND BACKFILL WITH PLANTING SOIL.
- 8.WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
- 9.BACK FILL VOIDS AND WATER A SECOND TIME.
- 10.PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

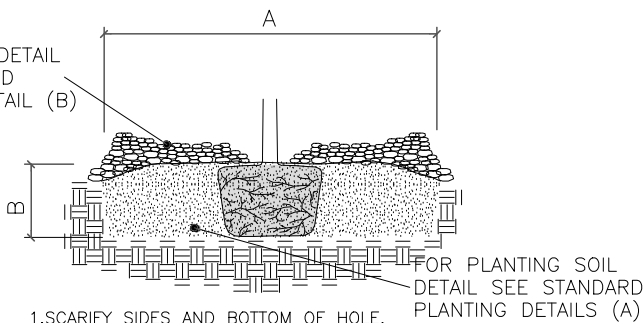
BALLED & BURLAPPED STOCK



- 1.SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
- 2.SCARIFY SIDES AND BOTTOM OF HOLE.
- 3.PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND ROOTS.
- 4.TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL.
- 5.WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
- 6.BACK FILL VOIDS AND WATER A SECOND TIME.
- 7.PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

BARE ROOT STOCK

INSTALLATION OF PLANTS

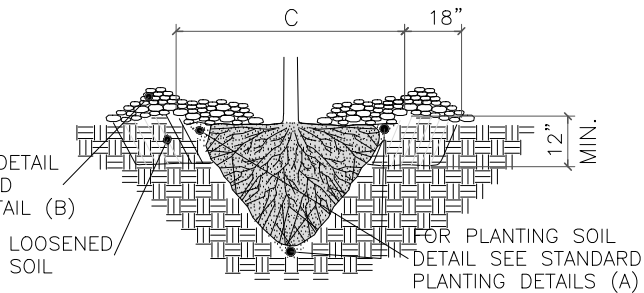


- 1.SCARIFY SIDES AND BOTTOM OF HOLE.
- 2.PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
- 3.REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.

- 4.SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE TOP OF THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE.

- 5.PLUMB AND BACKFILL WITH PLANTING SOIL.
- 6.WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANT AND FILL VOIDS.
- 7.BACK FILL VOIDS AND WATER A SECOND TIME.
- 8.PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

CONTAINER STOCK



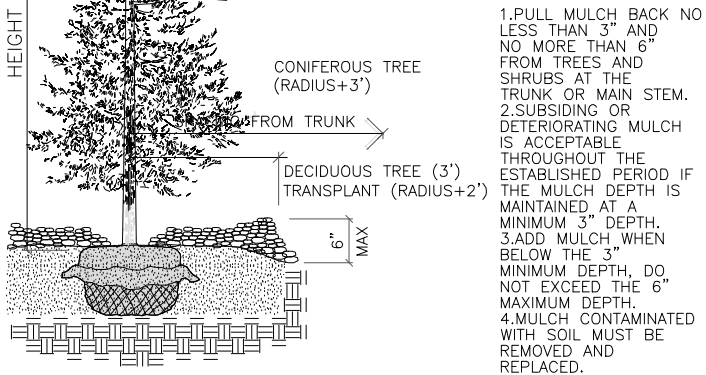
- 1.SCARIFY SIDES AND BOTTOM OF HOLE.
- 2.PROCEED WITH CORRECTIVE PRUNING.
- 3.SET PLANT ON NATIVE SOIL AT SAME DEPTH AS IT WAS PREVIOUSLY GROWN.
- 4.PLUMB AND BACKFILL WITH PLANTING SOIL.
- 5.AFTER PLANTING, LOOSEN THE SOIL IMMEDIATELY ADJACENT TO THE ROOT BALL TO A MINIMUM DISTANCE OF 18" AND A MINIMUM DEPTH OF 12".
- 6.WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANT AND FILL VOIDS.
- 7.BACK FILL VOIDS AND WATER A SECOND TIME.
- 8.PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

MINIMUM TREE SPADE SIZE REQUIREMENTS			
(C) SPADE DIAMETER SIZE	OAK TREE, CALIPER	DECIDUOUS/ ORNAMENTAL TREE,CALIPER	CONIFEROUS TREE, HEIGHT
42"	1" to 1.5"	2" to 3"	5' to 7'
60"	1.5" to 2.5"	3" to 4"	7' to 9'
78"	2.5" to 3.5"	4" to 6"	9' to 14'
85"	3.5" to 5"	6" to 8"	14' to 18'

MACHINE MOVED STOCK

PLANTING HOLE DIMENSIONS			
HOLE DEPTH FOR B&B AND CONTAINER PLANTS SHALL NOT EXCEED MEASUREMENT FROM ROOT FLAIR TO BOTTOM OF SOIL BALL.			
PLANT TYPE	PLANT SIZE UP TO AND INCLUDING	(A) MINIMUM HOLE WIDTH	(B) APPROXIMATE HOLE DEPTH
CONIFEROUS TREES	2' B.B.	36"	10"
	3' B.B.	42"	11"
	4' B.B.	51"	13"
	5' B.B.	60"	13"
	6' B.B.	66"	15"
	7' B.B.	72"	16"
	8' B.B.	81"	18"
	9' B.B.	90"	20"
	10' B.B.	102"	21"
	12' B.B.	114"	24"
	18" B.B.	24"	7"
	3' B.B.	48"	12"
CONIFEROUS SHRUBS (UPRIGHT)			
CONIFEROUS SHRUBS (SPREADING)			
	18" SPR B.B.	30"	8"
	2' SPR B.B.	36"	9"
CONTAINER GROWN PLANTS	CELLPACKS / PLUGS	6"	2.5"
	2.25" CONT.	7"	3"
	3.5" CONT.	10"	3"
	4" CONT.	11"	4"
	4.5" CONT.	13"	4"
	6"/1 QT. CONT.	15"	5.5"
	1# CONT.	18"	6"
	2# CONT.	23"	7.5"
	3# CONT.	29"	8.5"
	5# CONT.	30"	11"
	7# CONT.	37"	11"
	15# CONT.	44"	14"
	10# CONT.	45"	15"
	20# CONT.	60"	16"
	25# CONT.	72"	17"
SEEDLINGS	6" SEEDLING	15"	14"
	12" SEEDLING	18"	14"
	12" SEEDLING	23"	16"
	18" SEEDLING	30"	16"
	2' SEEDLING	36"	18"
VINES	1 YR. MED B.R.	15"	11"
	1 YR. NO. 1 B.R.	17"	14"
	2 YR. MED. B.R.	33"	12"
	2 YR. NO. 1 B.R.	42"	15"

MULCH AREA CALCULATOR	
TYPE OF PLANT	SQ. FT. PER PLANT
CONIFEROUS TREES	$\left[\left(\frac{3}{2} \times \text{HEIGHT}\right) + 3\right]^2 \times \pi$
DECIDUOUS AND ORNAMENTAL TREES	$3^2 \times \pi$
CONIFEROUS AND DECIDUOUS SHRUBS, ROSE BUSHES, PERENNIALS, ORNAMENTAL GRASS	SPACING x SPACING
VINES	SPACING x 2
MACHINE-MOVED TREES OR SHRUBS	$\left[\left(\frac{\text{SPADE DIAMETER}}{2}\right) + 1\right]^2 \times \pi$
	$\pi = 3.1416$



MULCH PLACEMENT

(MnDOT 2571.3H)

NO.	DATE	BY	CHECK/DESIGN	REVISION / SUBMITTAL

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SOUTHWEST
Green Line LRT Extension

60% SUBMISSION - 09/28/15

CIVIL WEST - VOLUME 9
LANDSCAPE DETAILS 2

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W0-LAN-DTLS - 002

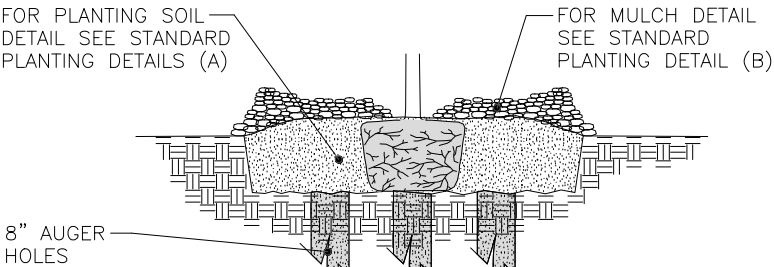
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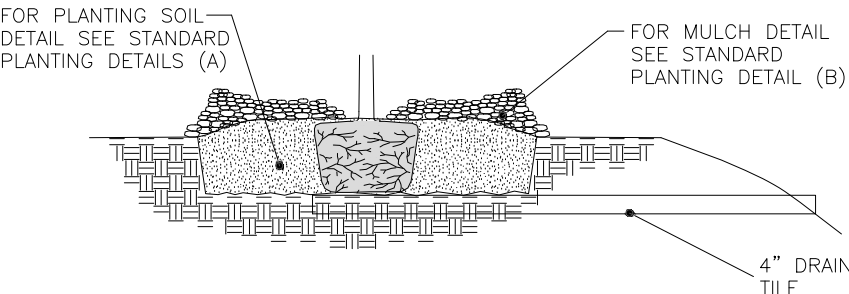
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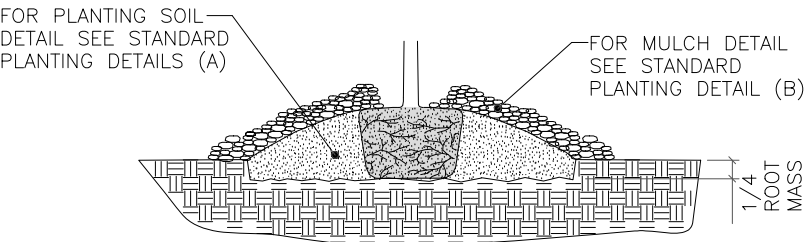
- 1.EXCAVATE HOLE OR BED TO ALLOW PLACING THE TOP OF ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
- 2.AUGER 8" DIAMETER HOLES ENTIRELY THROUGH IMPERVIOUS OR POORLY DRAINED HARD PAN SOIL LAYER TO ADEQUATELY DRAIN SUBSOIL.
- 3.TEST FOR POSITIVE DRAINAGE. RE-AUGER AN ADDITIONAL 8" IF NECESSARY FOR POSITIVE DRAINAGE.
- 4.THOROUGHLY BACKFILL AUGER HOLES WITH A UNIFORM INCORPORATED MIXTURE OF 50% SAND AND 50% INPLACE SOIL.
- 5.COMPLETE PLANTING ACCORDING TO ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL GRANULAR FILTER



- 1.EXCAVATE HOLE OR BED TO ALLOW PLACING THE TOP OF THE ROOT MASS 1"-3" HIGHER THAN FINISHED GRADE.
- 2.INSTALL 4" MINIMUM DIAMETER DRAIN TILE DAYLIGHTING AT A LOWER GRADE.
- 3.COMPLETE PLANTING ACCORDING TO ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL TILE DRAINAGE



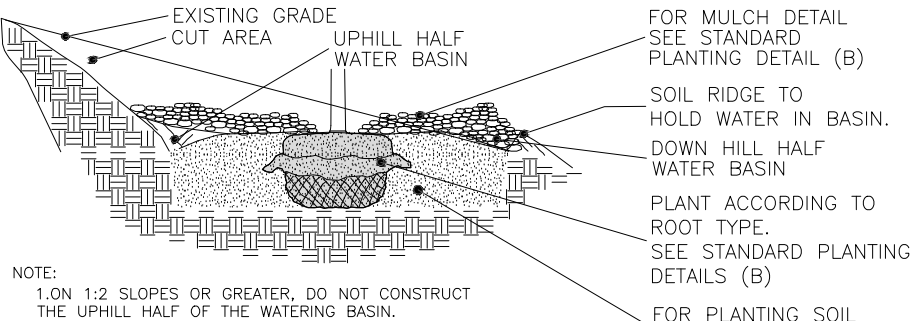
- 1.EXCAVATE HOLE OR BED 1/4 THE DEPTH OF THE ROOT MASS.
- 2.SET ROOT MASS IN HOLE.
- 3.CONSTRUCT BERM WITH PLANTING SOIL. EXTEND THE BERM BASE TO A WIDTH OF 3 TIMES THE BERM HEIGHT.
- 4.COMPLETE PLANTING ACCORDING ROOT TYPE. SEE STANDARD PLANTING DETAILS (B).

INSTALL MINI-BERM

- NOTE:
- 1.THE NEED FOR USING PLANTING DETAILS FOR POORLY DRAINED SOILS AND WHICH TYPE TO USE ARE DETERMINED BY THE CONTRACTOR, SUBJECT TO ENGINEER APPROVAL.

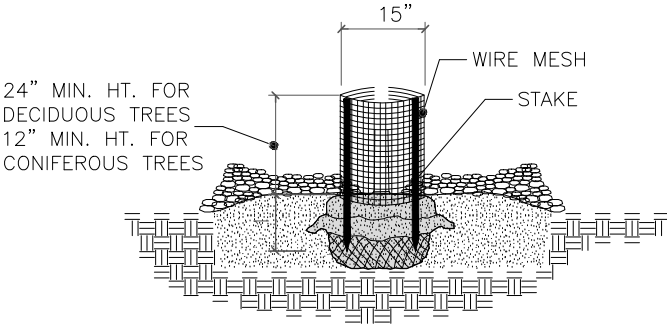
PLANTING DETAIL FOR POORLY DRAINED SOILS

(MnDOT 2571.3D2 (STEP 8))



- NOTE:
- 1.ON 1:2 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN.

PLANTING ON SLOPES

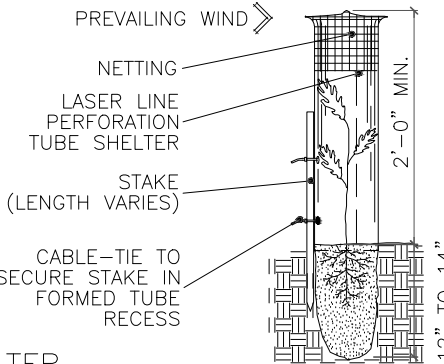


- 1.FORM A DOUBLE-LAYERED CYLINDER USING 0.25" GRID GALVANIZED WELDED WIRE MESH (HARDWARE CLOTH). OVERLAP THE CUT END 2".
- 2.DRIVE TWO 1" x 1" OPPOSING HEARTWOOD WHITE OAK STAKES INTO THE GROUND, 7" FROM THE CENTER OF THE TREE STEM.
- 3.SECURE THE MESH CYLINDER TO THE OUTSIDE OF THE STAKES, USING EITHER, SCREWS AND WASHERS OR CABLE-TIES ALONG THE OVERLAP. SPACE APPROXIMATELY 4" ON CENTER ALONG THE OVERLAP.
 - a.SCREWS SHALL BE ROUND HEAD GALVANIZED 1/8" DIA. x 3/4" LONG WITH WASHERS.
 - OR
 - b.CABLE-TIES SHALL BE NYLON, AT LEAST 8" LONG AND BETWEEN 75LB TO 120LB TENSILE STRENGTH.
- 4.EMBED THE LOWER EDGE OF THE MESH CYLINDER 1" BELOW THE SOIL SURFACE WITHOUT DISTURBING THE TREE ROOTS.
- 5.CUT EDGES WILL NOT BE PERMITTED AT THE TOP OF THE CYLINDER. STAKE WILL BE FLUSH WITH THE TOP OF THE CYLINDER.
- 6.MULCH WITHIN THE CYLINDER SHALL NOT EXCEED 3" DEPTH AND SHALL BE PULLED BACK FROM THE TRUNK AS SPECIFIED IN MULCH PLACEMENT DETAIL.
- 7.THE BOTTOM WHORL OF PINE AND LARCH BRANCHES MAY HAVE TO BE REMOVED TO PERMIT INSTALLATION OF 12" MIN. HEIGHT RODENT GUARDS.
- 8.INSTALL ON ALL DECIDUOUS, PINE AND LARCH TREES, DO NOT PLACE ON SPRUCE TREES.

RODENT PROTECTION

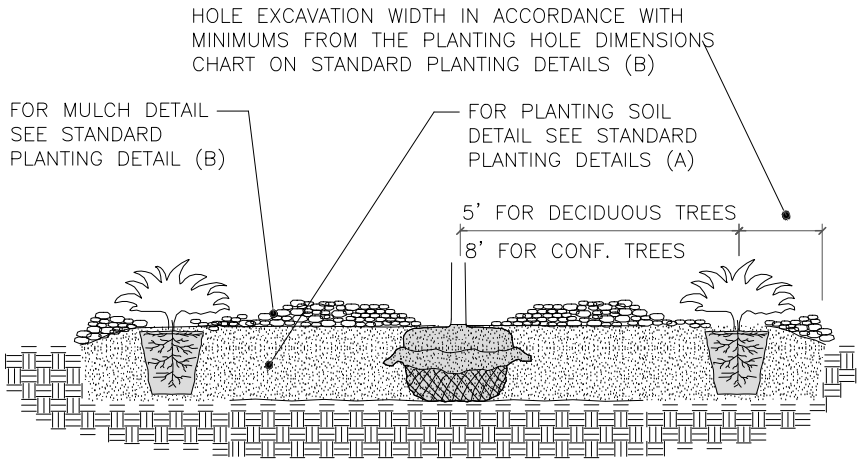
(MnDOT 2571.3I2)

- 1.USE SEAMLESS, EXTRUDED, TWIN-WALL, RIGID AND SEMI TRANSLUCENT POLYPROPYLENE TUBES WITH A LASER LINE PERFORATION AND AN OUTWARD-FLARED TOP RIM.
- 2.SECURE SHELTER WITH NYLON CABLE-TIES ATTACHED TO A 1" x 1" WHITE OAK STAKE TO PREVENT DISLODGING OR TWISTING.
- 3.EMBED THE BOTTOM OF THE TUBE A MINIMUM OF 1" BELOW THE SOIL SURFACE WITHOUT DISTURBING THE TREE ROOTS.
- 4.INSTALL A PLASTIC PHOTODEGRADABLE NETTING COVER AND SLEEVE OVER THE TOP OF THE TUBE. PULL NETTING DOWN AS SHOWN.

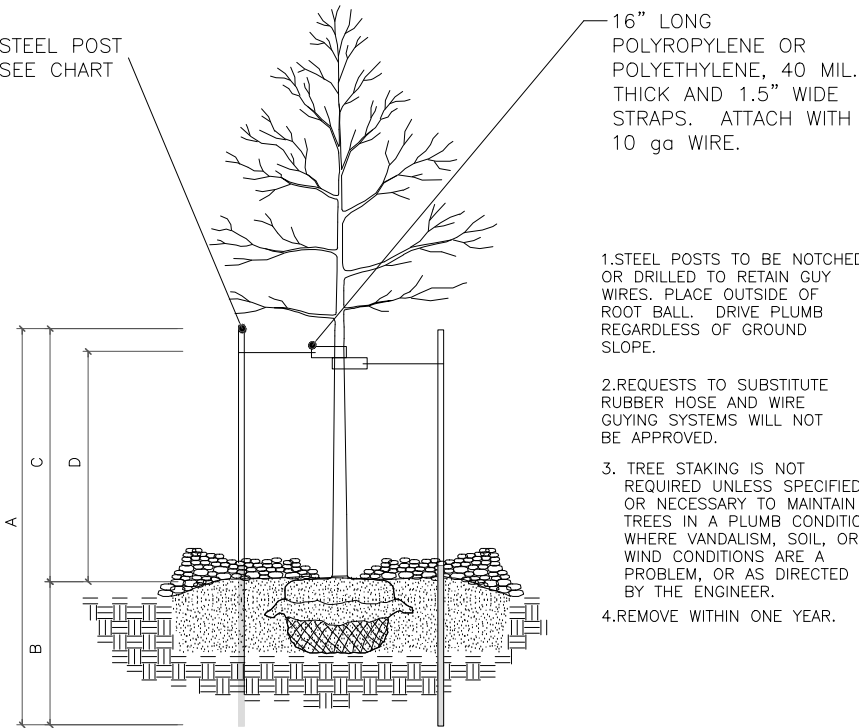


SEEDLING TREE SHELTER

(MnDOT 2571.3I4)



PLANT SPACING IN MASS BEDS



- 1.STEEL POSTS TO BE NOTCHED OR DRILLED TO RETAIN GUY WIRES. PLACE OUTSIDE OF ROOT BALL. DRIVE PLUMB REGARDLESS OF GROUND SLOPE.
- 2.REQUESTS TO SUBSTITUTE RUBBER HOSE AND WIRE GUYING SYSTEMS WILL NOT BE APPROVED.
3. TREE STAKING IS NOT REQUIRED UNLESS SPECIFIED OR NECESSARY TO MAINTAIN TREES IN A PLUMB CONDITION WHERE VANDALISM, SOIL, OR WIND CONDITIONS ARE A PROBLEM, OR AS DIRECTED BY THE ENGINEER.
- 4.REMOVE WITHIN ONE YEAR.

STEEL POST SIZING

CALIPER	STEEL POST TYPE	A	B	C	D
LESS THEN 4 INCHES	ROLLED STEEL FENCE POST (MnDOT 3403) OR APPROVED EQUAL.	7'-0"	3'-0" MIN.	4'-0"	3'-0"
GREATER THEN 4 INCHES	10', 2.2 LB. FLANGED CHANNEL STEEL SIGN POST (MnDOT 3401) OR APPROVED EQUAL.	10'-0"	4'-0" MIN.	6'-0"	5'-0"

STAKING AND GUYING

(MnDOT 2571.3I1)

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

SRI
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METROPOLITAN
COUNCIL

SOUTHWEST
Green Line LRT Extension

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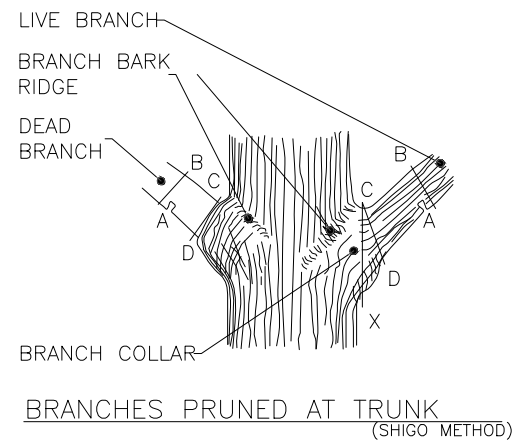
CIVIL WEST - VOLUME 9
LANDSCAPE DETAILS 3

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W0-LAN-DTLS - 003

SHEET
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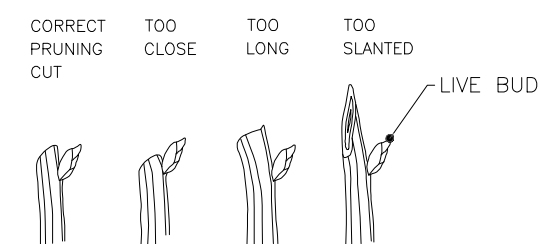
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STEPS TO PRUNING WITH PRUNING SAW:
1.CUT PART WAY THROUGH THE BRANCH AT POINT A.
2.CUT COMPLETELY THROUGH BRANCH FROM POINT B TO A.
3.AT BRANCH COLLAR CUT FROM POINT C TO D.

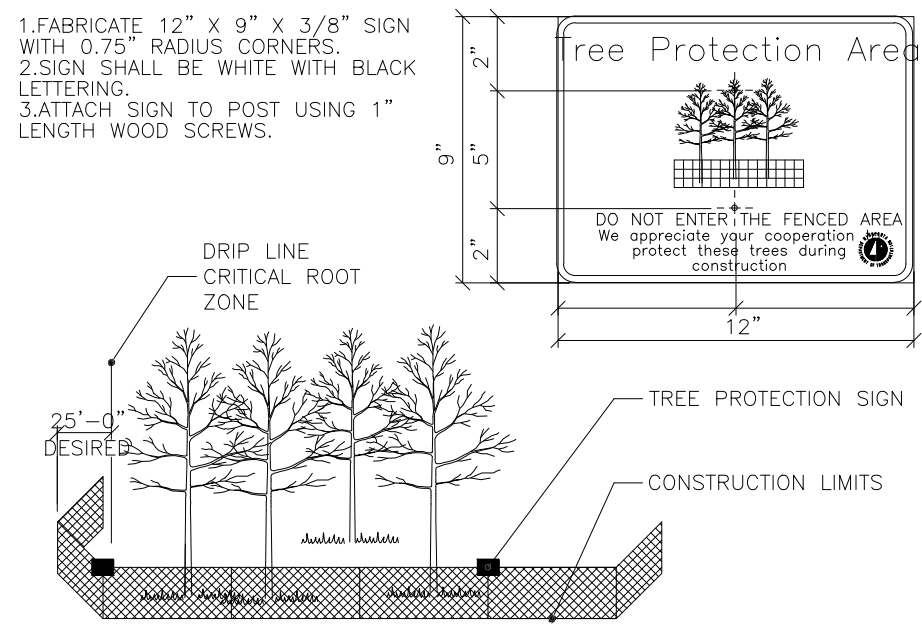
INCORRECT CUT FROM POINT C TO X (TOO CLOSE) WILL RESULT IN DISCONTINUOUS CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

CORRECT CUT FROM POINT C TO D (LEAVING BRANCH COLLAR BUT NOT THE STUB FROM POINT B TO A) WILL RESULT IN CONTINUOUS DOUGHNUT SHAPED CALLUS FORMATION AFTER ONE SEASON OF GROWTH.



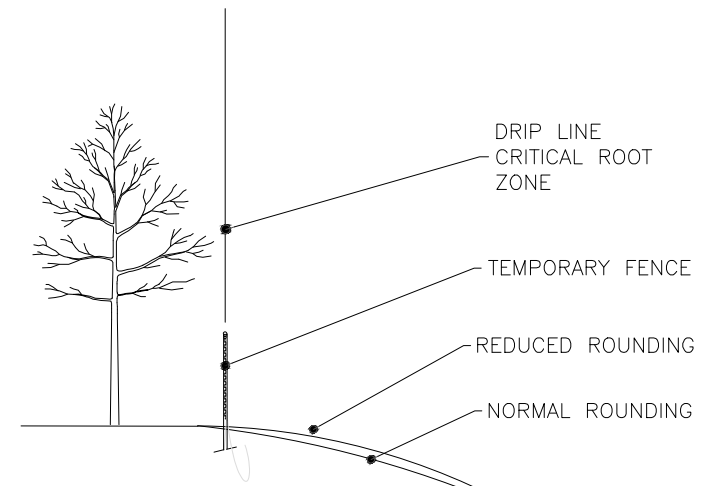
BRANCHES PRUNED TO LIVE BUD
PRUNING

PRUNING NOTES:
1.PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
2.THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
3.AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
4.IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.



1.FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIPLINE OR CONSTRUCTION LIMITS AS SPECIFIED, PRIOR TO ANY CONSTRUCTION.
2.WHEN POSSIBLE PLACE FENCE 25 FEET BEYOND THE DRIPLINE.
3.PLACE TREE PROTECTION SIGNS ALONG FENCE AT 50' INTERVALS.

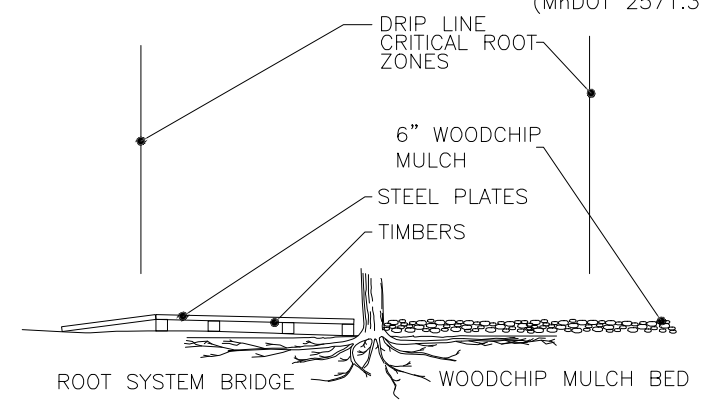
TEMPORARY FENCE



SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION LIMITS WILL BE IDENTIFIED IN THE PLAN OR BY THE ENGINEER AND WILL BE PRESERVED BY THE CONTRACTOR.

1.PLACE THE TEMPORARY FENCE.
2.REDUCE SLOPE ROUNDING WHERE ROOT ZONES ARE DISTURBED BY NORMAL SLOPE ROUNDING.
3.VARY BACKSLOPE STEEPNESS TO AVOID TREE LOSS OR UNNECESSARY ROOT DAMAGE.

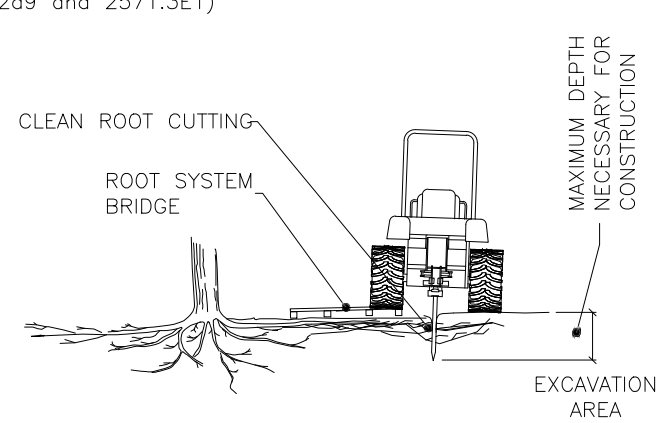
SLOPE ROUNDING



IF CONSTRUCTION VEHICLES MUST PASS OVER ROOT ZONES, THE CONTRACTOR MUST EITHER:

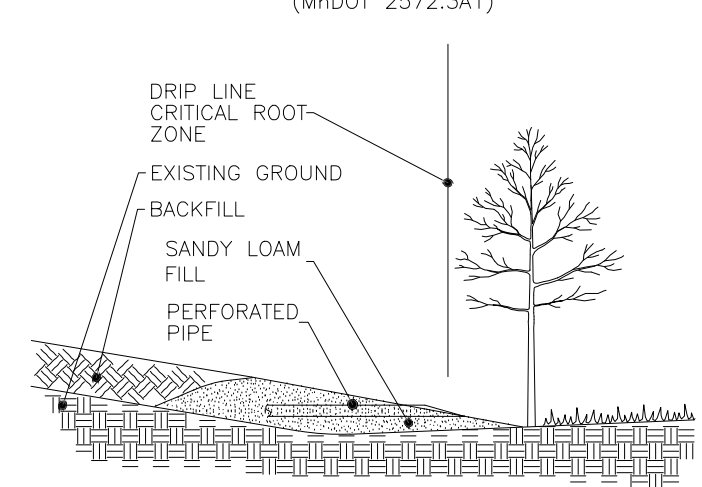
1.CONSTRUCT ROOT SYSTEM BRIDGES WITH STEEL PLATE SUPPORTED ON WOOD TIMBERS PLACED RADIALLY TO THE TREE TRUNK.
OR
2.PLACE A 6 INCH LAYER OF WOODCHIP MULCH OVER A TYPE III GEOTEXTILE (MnDOT 3733)..

OTHER VEGETATION PROTECTION MEASURES



1.WHEN DESIGNATED IN THE PLAN OR DIRECTED BY THE ENGINEER, PRIOR TO EXCAVATION, ALL TREE ROOTS WILL BE CLEANLY CUT BY A VIBRATORY PLOW OR OTHER APPROVED ROOT CUTTER.
2.THE TREE ROOTS WILL BE CUT CLEANLY TO THE MAXIMUM DEPTH NECESSARY FOR CONSTRUCTION.
3.IMMEDIATELY, AND CLEANLY CUT DAMAGED AND EXPOSED ROOTS.
4.ROOT ENDS EXPOSED BY EXCAVATION ACTIVITIES SHALL BE IMMEDIATELY COVERED WITH A 6" LAYER OF ADJACENT SOIL.

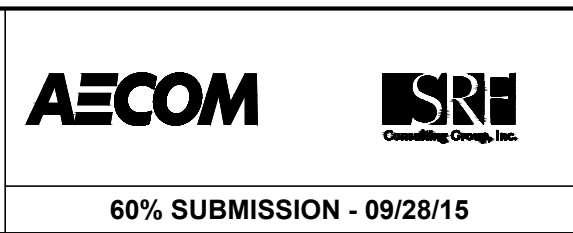
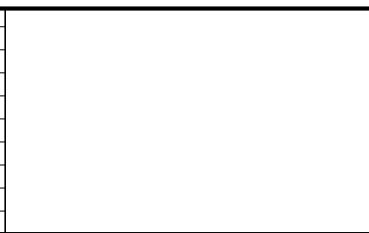
CLEAN ROOT CUTTING



1.ANY FILL REQUIRED WITHIN THE DRIPLINE OF TREES, IS UNCOMPACTED SANDY LOAM TOPSOIL (WITH A COARSE SAND COMPONENT).
2.EXCESSIVE FILL MAY REQUIRE INSTALLING PERFORATED PIPE WITH AT LEAST ONE DAYLIGHTED END OPENING AS AN AERATION SYSTEM.

SANDY LOAM TOPSOIL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL



CIVIL WEST - VOLUME 9 LANDSCAPE DETAILS 4		SHEET 48 OF 49
DISCIPLINE: LANDSCAPE ARCH	SHEET NAME: W0-LAN-DTLS - 004	

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DECIDUOUS TREES

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Acer miyabei</i> 'Morton'	STATE STREET MIYABE MAPLE	2.5" CAL.	B&B	
<i>Acer platanoides</i> 'Crimson Sentry'	CRIMSON SENTRY MAPLE	2.5" CAL.	B&B	
<i>Acer rubrum</i>	RED MAPLE	2.5" CAL.	B&B	
<i>Acer rubrum</i> 'Bowhall'	BOWHALL MAPLE	2.5" CAL.	B&B	
<i>Acer saccharum</i>	SUGAR MAPLE	2.5" CAL.	B&B	
<i>Acer x freemani</i> 'Scarsen''	SCARLET SENTINEL MAPLE	2.5" CAL.	B&B	
<i>Acer x freemani</i> 'Sienna Glen'	SIENNA GLEN MAPLE	2.5" CAL.	B&B	
<i>Celtis occidentalis</i>	COMMON HACKBERRY	2.5" CAL.	B&B	
<i>Gkinkgo biloba</i> 'Princeton Sentry'	PRINCETON SENTRY GINKGO	2.5" CAL.	B&B	
<i>Gymnocladus dioicus</i>	ESPRESSO KENTUCKY COFFEETREE	2.5" CAL.	B&B	
<i>Gleditsia tricanthos</i> 'Harve'	NORTHERN ACCLAIM HONEY LOCUST	2.5" CAL.	B&B	
<i>Gleditsia tricanthos</i> 'Imperial'	IMPERIAL HONEY LOCUST	2.5" CAL.	B&B	
<i>Gleditsia tricanthos inermis</i> 'Skycole'	SKYLINE HONEYLOCUST	2.5" CAL.	B&B	
<i>Populus tremuloides</i>	QUAKING ASPEN	#25	CONT.	
<i>Quercus bicolor</i>	SWAMP WHITE OAK	2.5" CAL.	B&B	
<i>Quercus macrocarpa</i>	BUR OAK	2.5" CAL.	B&B	
<i>Tilia americana</i> 'Redmond'	BASSWOOD	2.5" CAL.	B&B	
<i>Ulmus americana</i> 'Princeton'	PRINCETON ELM	2.5" CAL.	B&B	
<i>Ulmus davidiana japonica</i> 'Discovery'	DISCOVERY ELM	2.5" CAL.	B&B	
<i>Ulmus x 'Cathedral'</i>	CATHEDRAL ELM	2.5" CAL.	B&B	

CONIFEROUS TREES

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Picea glauca</i> 'Densata'	BLACK HILLS SPRUCE	8' HT.	B&B	
<i>Picea pungens</i>	COLORADO BLUE SPRUCE	8' HT.	B&B	
<i>Picea pungens</i> 'fastigiata'	COLUMNAR COLORADO BLUE SPRUCE	8' HT.	B&B	
<i>Pinus nigra</i>	AUSTRIAN PINE	8' HT.	B&B	
<i>Pinus sylvestris</i>	SCOTCH PINE	8' HT.	B&B	
<i>Pinus strobus</i>	EASTERN WHITE PINE	8' HT.	B&B	

ORNAMENTAL TREES

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Amalenchier</i> 'Autumn Brilliance'	AUTUMN BRILLIANCE SERVICEBERRY	6' HT.	B&B	CLUMP MULTISTEM
<i>Malus</i> 'Pink Spires'	PINK SPIRES FLOWERING CRAB	2" CAL.	B&B	SINGLE STRAIGHT LEADER
<i>Sorbus decora</i>	SHOWY MOUNTAIN ASH	2" CAL.	B&B	SINGLE STRAIGHT LEADER
<i>Syringa reticulata</i> 'Ivory Silk'	IVORY SILK JAPANESE TREE LILAC	6' HT.	B&B	CLUMP MULTISTEM
<i>Betula popuifolia</i> 'Whitespire'	WHITESPIRE BIRCH	6' HT.	B&B	CLUMP MULTISTEM

CONIFEROUS SHRUBS

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Juniperus chinensis</i> 'Maney'	MANEY JUNIPER	18" SPRD.	CONT.	
Juniperus squamata 'Blue Star'	BLUE STAR JUNIPER	#3	CONT.	
Taxus x media 'Taunton'	TAUNTON YEW	#3	CONT.	

VINES

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Parthenocissus tricuspidata</i> 'Robusta'	BOSTON IVY	#1	CONT.	SPACING PER PLANS
Clematis sp.	CLEMATIS	#1	CONT.	SPACING PER PLANS

DECIDUOUS SHRUBS



BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Amalenchier alnifolia</i> 'Regent'	REGENT SERVICEBERRY	#5	CONT.	
<i>Amalenchier canadensis</i>	SHADBLOW SERVICEBERRY	#5	CONT.	
<i>Aronia melanocarpa</i> 'Morton'	IRIQUOIS BEAUTY CHOKEBERRY	#5	CONT.	
<i>Cornus alba</i> 'Ivory Halo'	IVORY HALO DOGWOOD	#5	CONT.	
<i>Cornus racemosa</i>	GRAY DOGWOOD	#5	CONT.	
<i>Diervilla lonicera</i> 'Copper'	COPPER DWARF BUSH HONEYSUCKLE	#5	CONT.	
<i>Ilex verticillata</i> 'Afterglow'	AFTERGLOW WINTERBERRY	#5	CONT.	
<i>Ilex verticillata</i> 'Jim Dandy'	JIM DANDY WINTERBERRY	#5	CONT.	
<i>Physocarpys opufolius</i> 'Dart's Gold'	DART'S GOLD NINEBARK	#5	CONT.	
<i>Potentilla fruticosa</i> 'Gold Drop'	GOLD DROP POTENTILLA	#5	CONT.	
<i>Rhododendron</i> 'Golden Lights'	DECIDUOUS AZALEA	#5	CONT.	
<i>Rhus aromatica</i> 'Grow-Low'	GROW-LOW FRAGRANT SUMAC	#5	CONT.	
<i>Ribes alpinum</i> 'Green Mound'	GREEN MOUND ALPINE CURRANT	#5	CONT.	
<i>Rosa rugosa</i> 'Pavement Foxi'	FOXI PAVEMENT ROSE	#5	CONT.	
<i>Rosa rugosa</i> 'Pavement Purple'	PURPLE PAVEMENT ROSE	#5	CONT.	
<i>Salix purpurea</i> 'Nana'	CREEPING ARCTIC WILLOW	#5	CONT.	
<i>Sorbaria sorbifolia</i> 'Sem'	SEM FALSE SPIREA	#5	CONT.	
<i>Spiraea japonica</i> 'Alpina'	DAPHNE SPIREA	#5	CONT.	
<i>Spiraea x bumalda</i> 'Goldflame'	GOLDFLAME SPIREA	#5	CONT.	
<i>Cornus sericea</i> 'Baileyi'	RED-TWIG DOGWOOD	#5	CONT.	
<i>Syringa meyeri</i> 'Palibin'	DWARF KOREAN LILAC	#5	CONT.	
<i>Vibumum dentatum</i> 'Christom'	BLUE MUFFIN VIBURNUM	#5	CONT.	
<i>Vibumum lentago</i>	NANNYBERRY VIBURNUM	#5	CONT.	



PERENNIALS AND ORNAMENTAL GRASSES

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
<i>Ajuga reptans</i> 'Burgundy Gold'	BUGLEWEED	#1	CONT.	PLANT 24" O.C.
<i>Aster novae-angliae</i> 'Purple Dome'	PURPLE DOME ASTER	#1	CONT.	PLANT 24" O.C.
<i>Aster</i> 'Woods Glow'	WOODS GLOW ASTER	#1	CONT.	PLANT 24" O.C.
<i>Calamagrostis acutifolia</i>	FEATHER REED GRASS	#1	CONT.	PLANT 24" O.C.
<i>Calamagrostis</i> x 'Karl Foerster'	KARL FOERSTER GRASS	#1	CONT.	PLANT 30" O.C.
<i>Echinacea</i> 'Big Sky Twilight'	BIG SKY PURPLE CONEFLOWER	#1	CONT.	PLANT 24" O.C.
<i>Echinacea purpurea</i>	PURPLE CONEFLOWER	#1	CONT.	PLANT 24" O.C.
<i>Heemerocallis</i> 'Happy Returns'	HAPPY RETURNS DAYLILY	#1	CONT.	PLANT 24" O.C.
<i>Heemerocallis</i> 'Rosy Returns'	ROSY RETURNS DAYLILY	#1	CONT.	PLANT 24" O.C.
<i>Heemerocallis</i> 'Stella d' Oro'	STELLA D'ORO DAYLILY	#1	CONT.	PLANT 24" O.C.
<i>Iris sibirica</i> 'Caesar's Brother'	CAESAR'S BROTHER IRIS	#1	CONT.	PLANT 24" O.C.
<i>Miscanthus sinsensis</i> 'Purpurascens'	FLAME MAIDEN GRASS	#1	CONT.	PLANT 24" O.C.
<i>Miscanthus sinsensis</i> 'Variegatus'	VARIEGATED MAIDEN GRASS	#1	CONT.	PLANT 24" O.C.
<i>Nepeta</i> 'Walker's Low'	WALKER'S LOW CATMINT	#1	CONT.	PLANT 24" O.C.
<i>Pachysandra terminalis</i>	PACHYSANDRA	#1	CONT.	PLANT 24" O.C.
<i>Panicum virgatum</i> 'Shenandoah'	SHENANDOAH SWITCH GRASS	#1	CONT.	PLANT 24" O.C.
<i>Perovskia</i> 'Filigran'	FILIGRAN RUSSIAN SAGE	#1	CONT.	PLANT 24" O.C.
<i>Rudbeckia fulgida</i> 'Goldsturm'	GOLDSTURM BLACK-EYED SUSAN	#1	CONT.	PLANT 24" O.C.
<i>Rudbeckia hirta</i> 'Indian Summer'	INDIAN SUMMER RUDBECKIA	#1	CONT.	PLANT 24" O.C.
<i>Schizachyrium scoparium</i> 'Blue Heaven'	BLUE HEAVEN LITTLE BLUESTEM	#1	CONT.	PLANT 24" O.C.
<i>Sedum</i> x 'Autumn Joy'	AUTUMN JOY SEDUM	#1	CONT.	PLANT 24" O.C.
<i>Sporobolus heterolepis</i>	PRAIRIE DROPSEED GRASS	#1	CONT.	PLANT 24" O.C.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL







60% SUBMISSION - 09/28/15



CIVIL WEST - VOLUME 9
PRELIMINARY PLANT PALETTE

DISCIPLINE:
LANDSCAPE ARCH

SHEET NAME:
W0-LAN-DTLS - 005