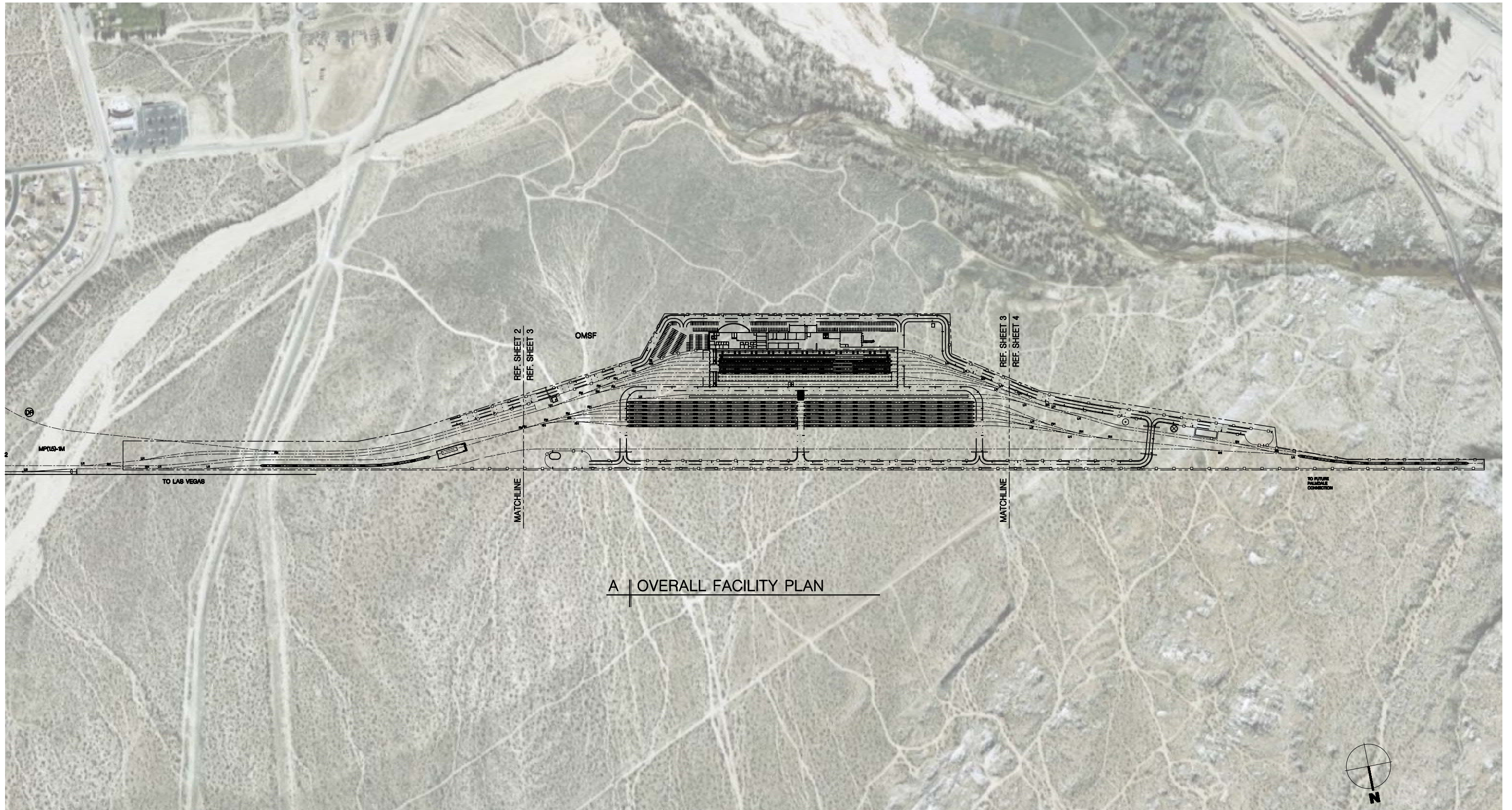


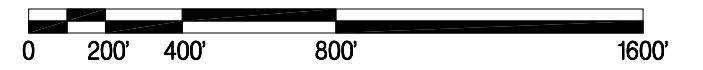
APPENDIX A-4

DETAILED MAINTENANCE FACILITY SITE PLANS AND ELEVATIONS

Victorville – Operations, Maintenance, and Storage Facility Site Option 1

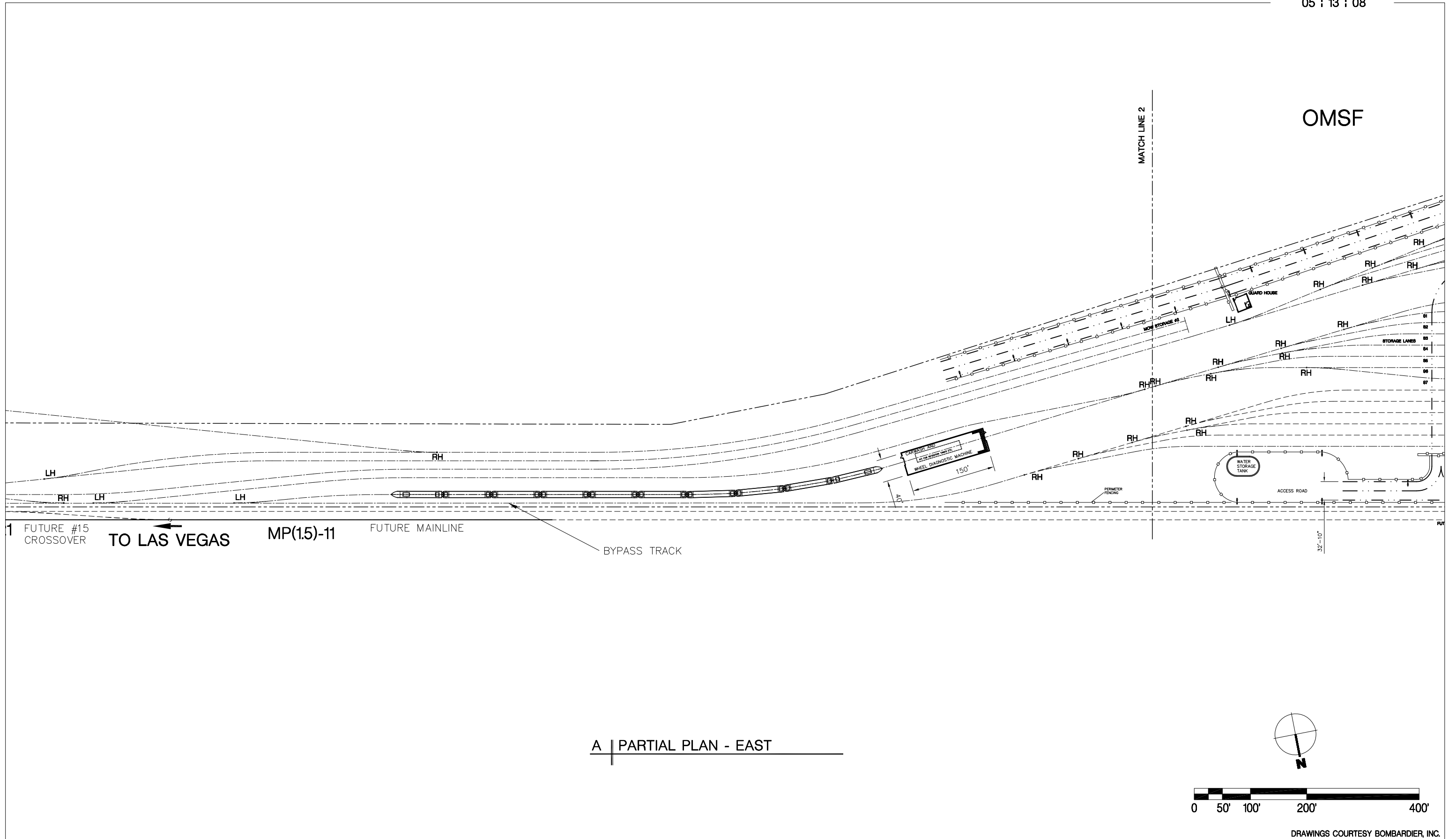


A | OVERALL FACILITY PLAN



DRAWINGS COURTESY BOMBARDIER, INC.





OMSF

MATCH LINE 2

GUARD HOUSE

MON STORAGE #8

STORAGE LINES

WATER STORAGE TANK

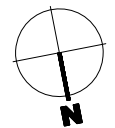
ACCESS ROAD

PERIMETER FENCING

BYPASS TRACK

1 FUTURE #15 CROSSOVER TO LAS VEGAS MP(1.5)-11 FUTURE MAINLINE

A PARTIAL PLAN - EAST

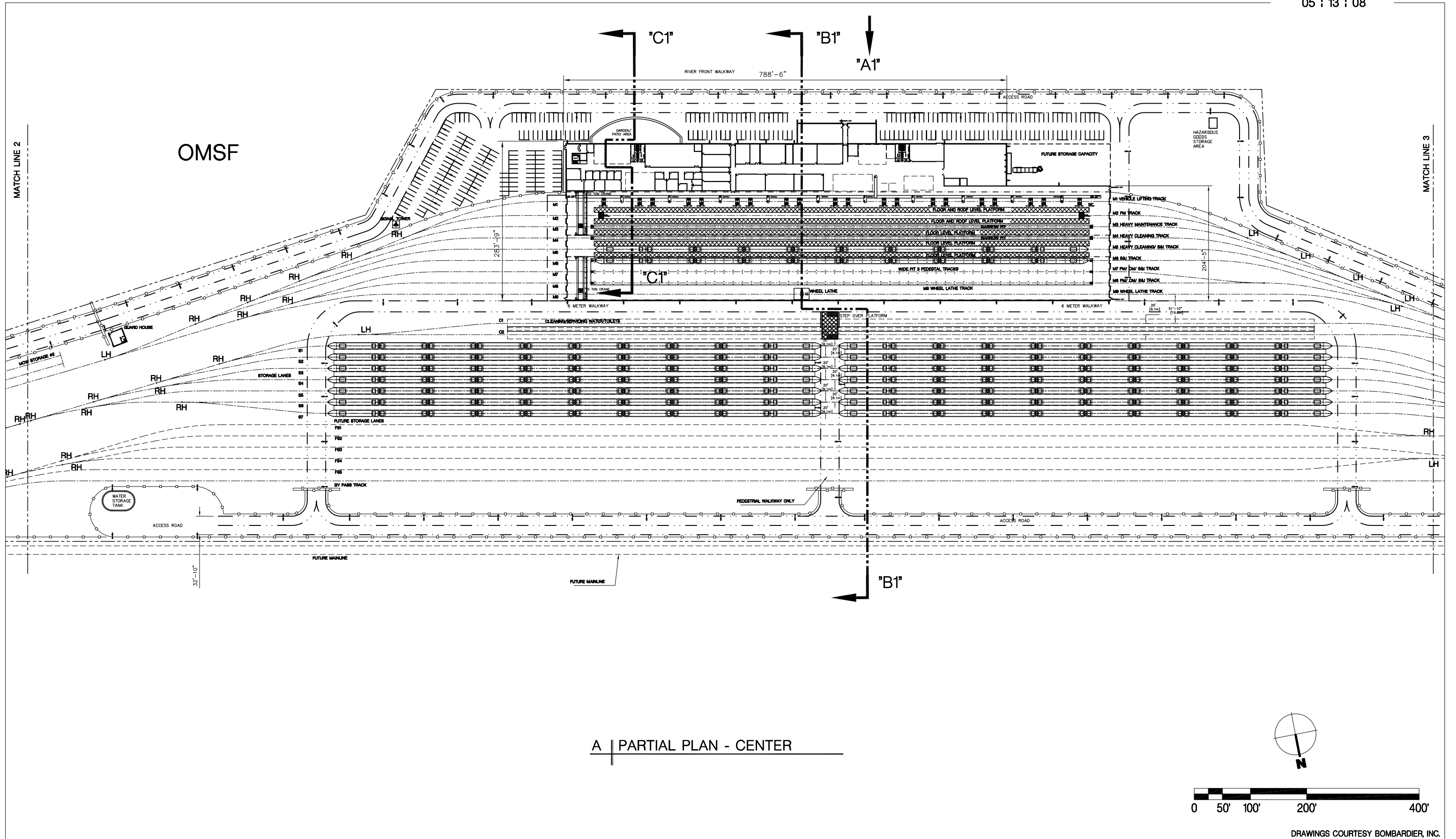


DRAWINGS COURTESY BOMBARDIER, INC.

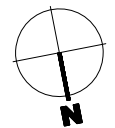


DESERTXPRESS : VICTORVILLE OMSF - SITE 1

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A | PARTIAL PLAN - CENTER

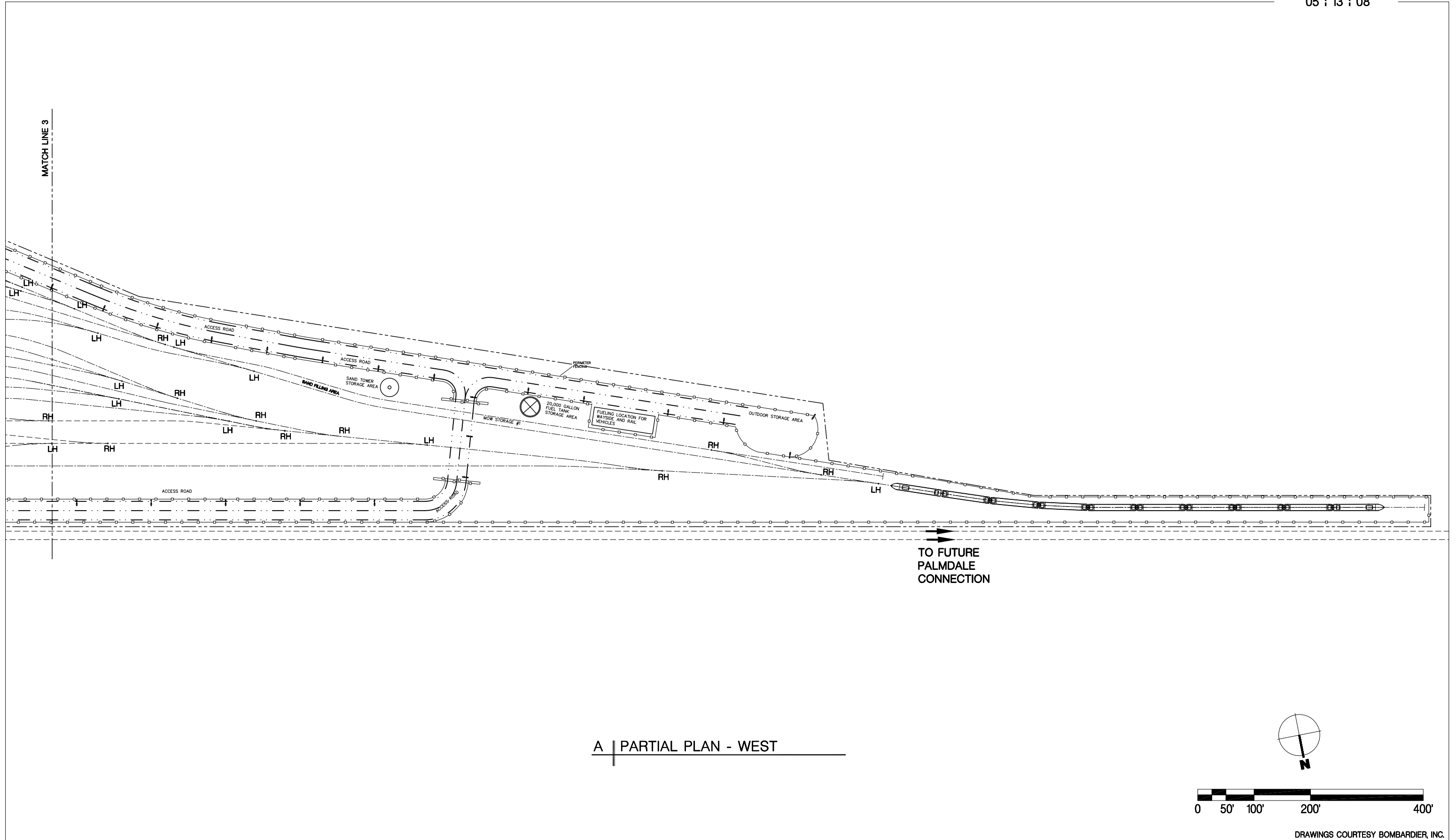


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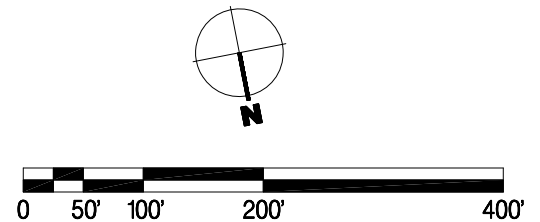


DESERTXPRESS : VICTORVILLE OMSF - SITE 1

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A | PARTIAL PLAN - WEST

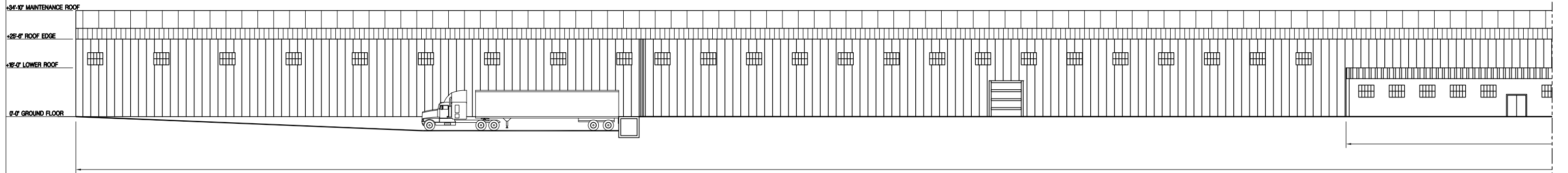


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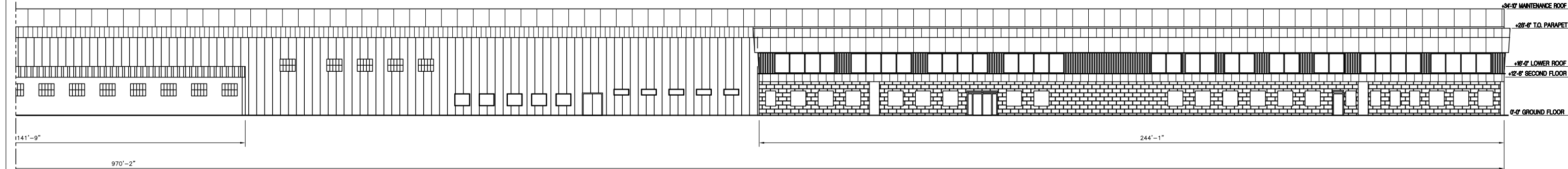


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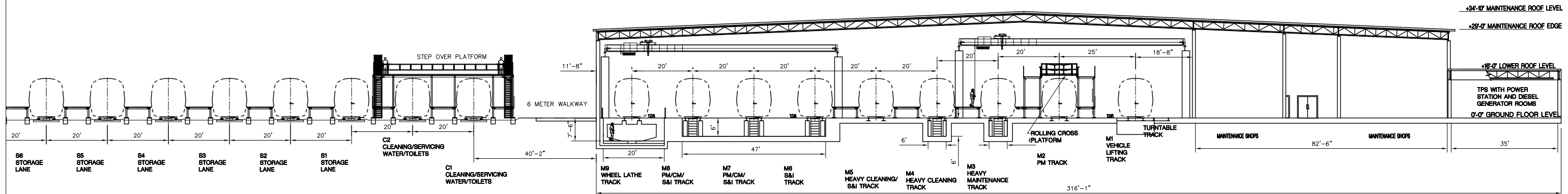
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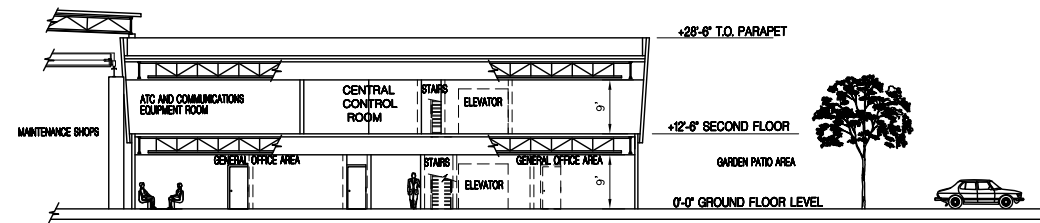
A1 | ELEVATION



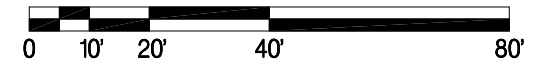
A1 | ELEVATION CONT.



B1 | SECTION



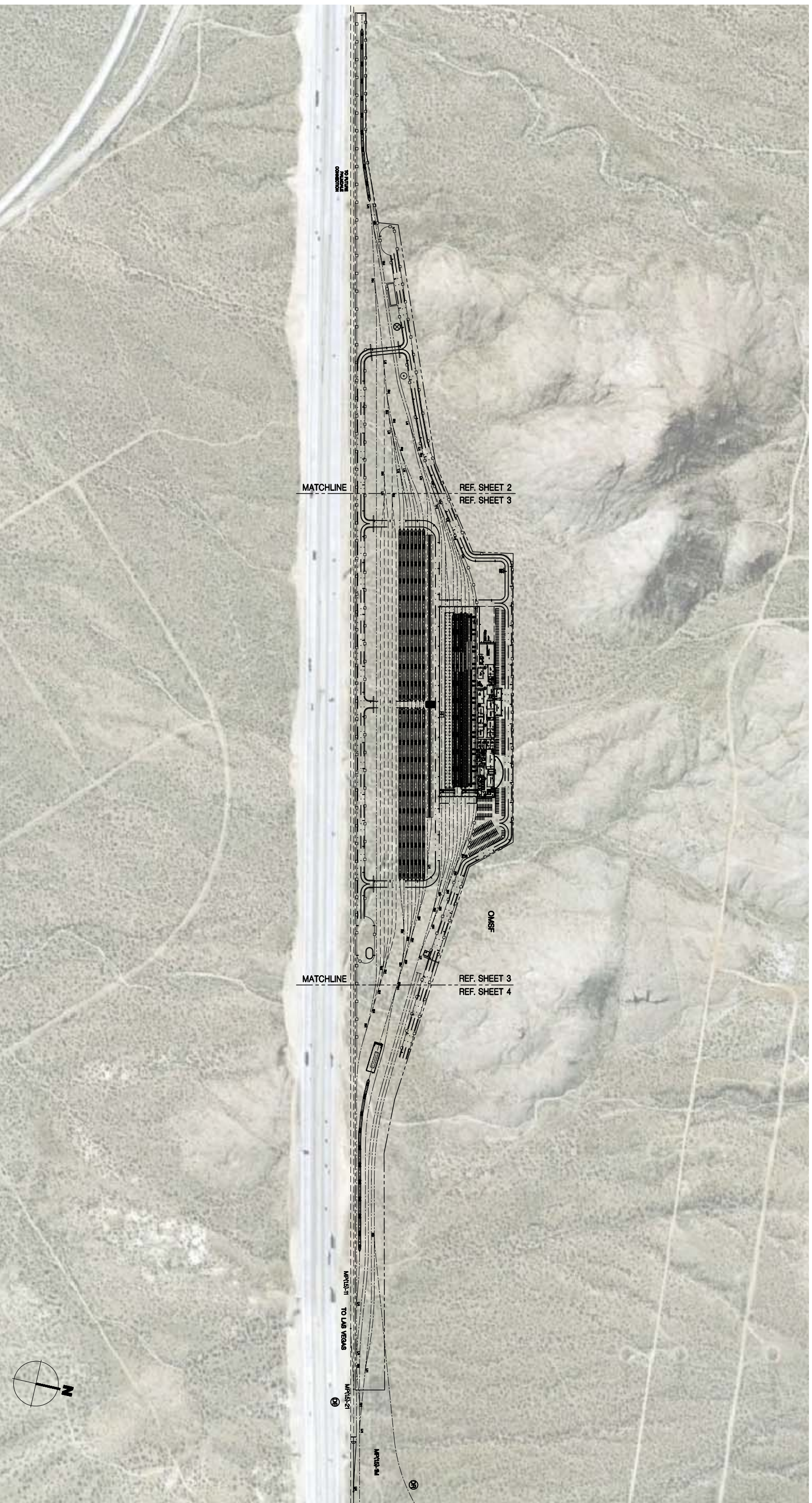
C1 | SECTION



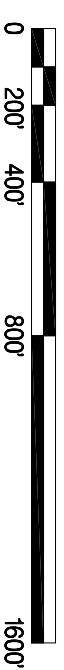
DRAWINGS COURTESY BOMBARDIER, INC.



**Victorville – Operations, Maintenance, and
Storage Facility Site Option 2**



A | OVERALL FACILITY PLAN



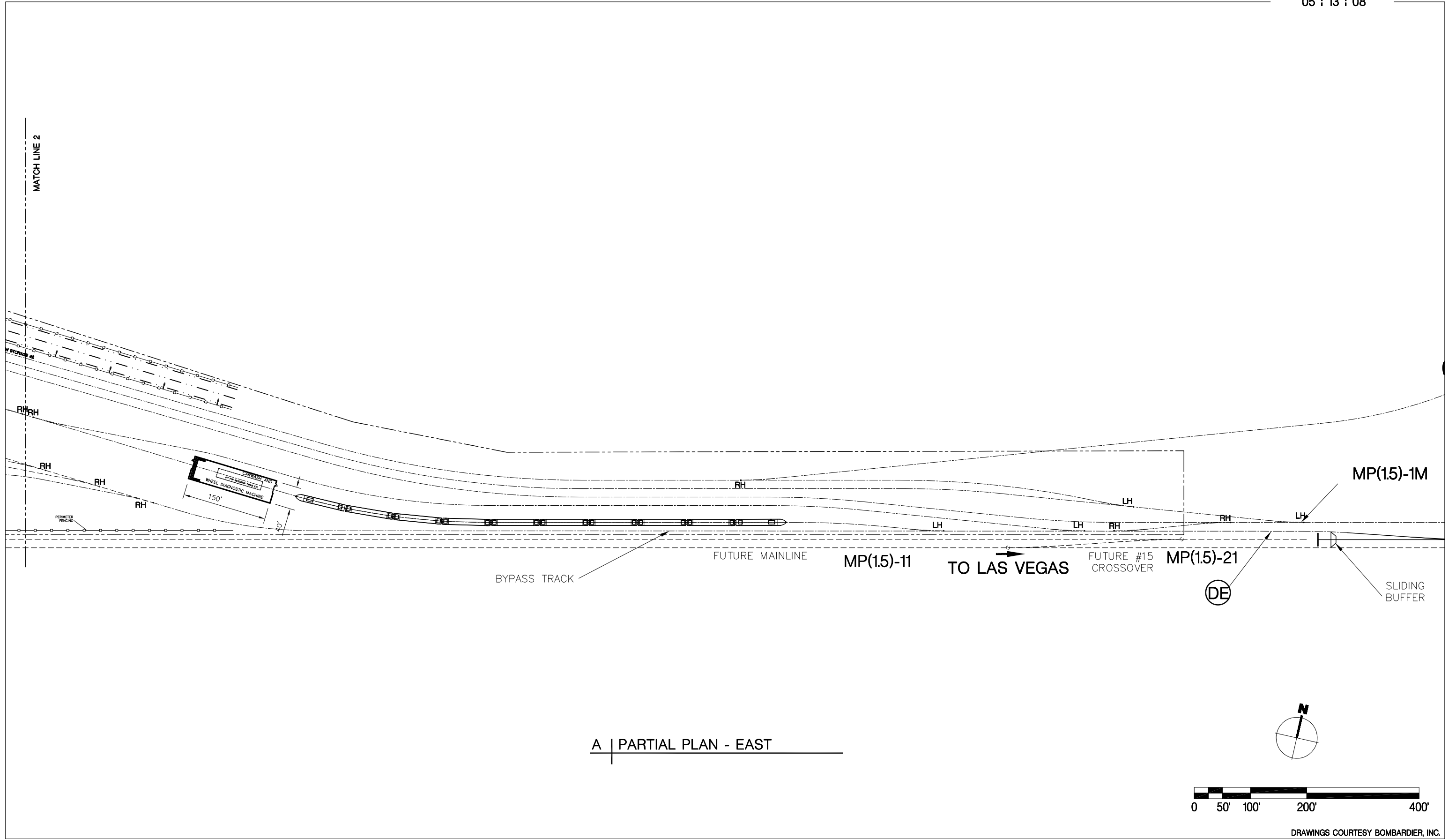
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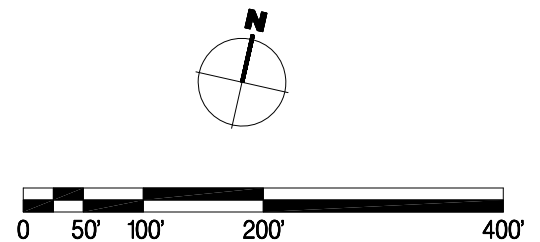
DESERTXPRESS : VICTORVILLE OMSF - SITE 2



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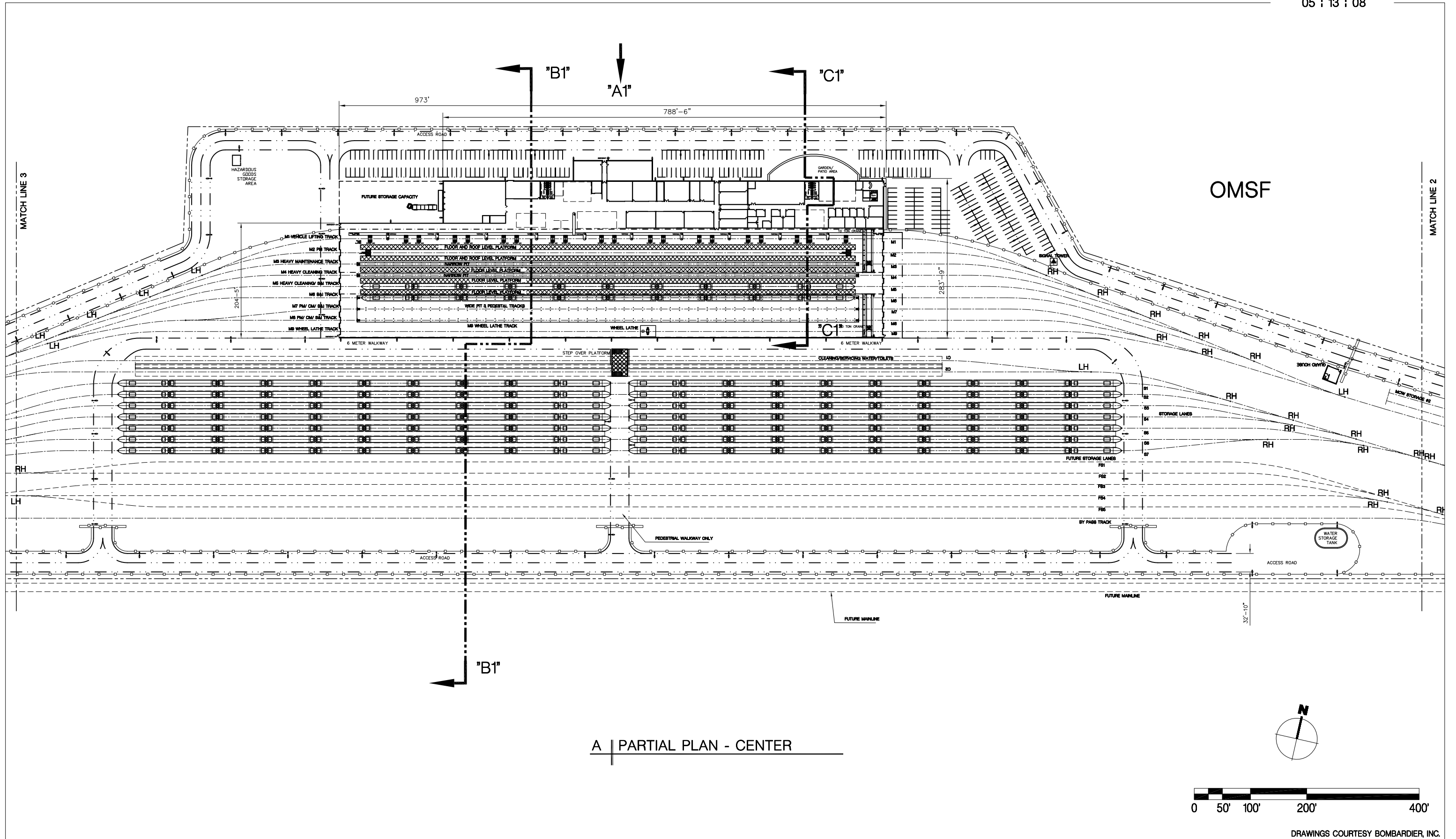


A PARTIAL PLAN - EAST

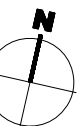


DRAWINGS COURTESY BOMBARDIER, INC.





A | PARTIAL PLAN - CENTER

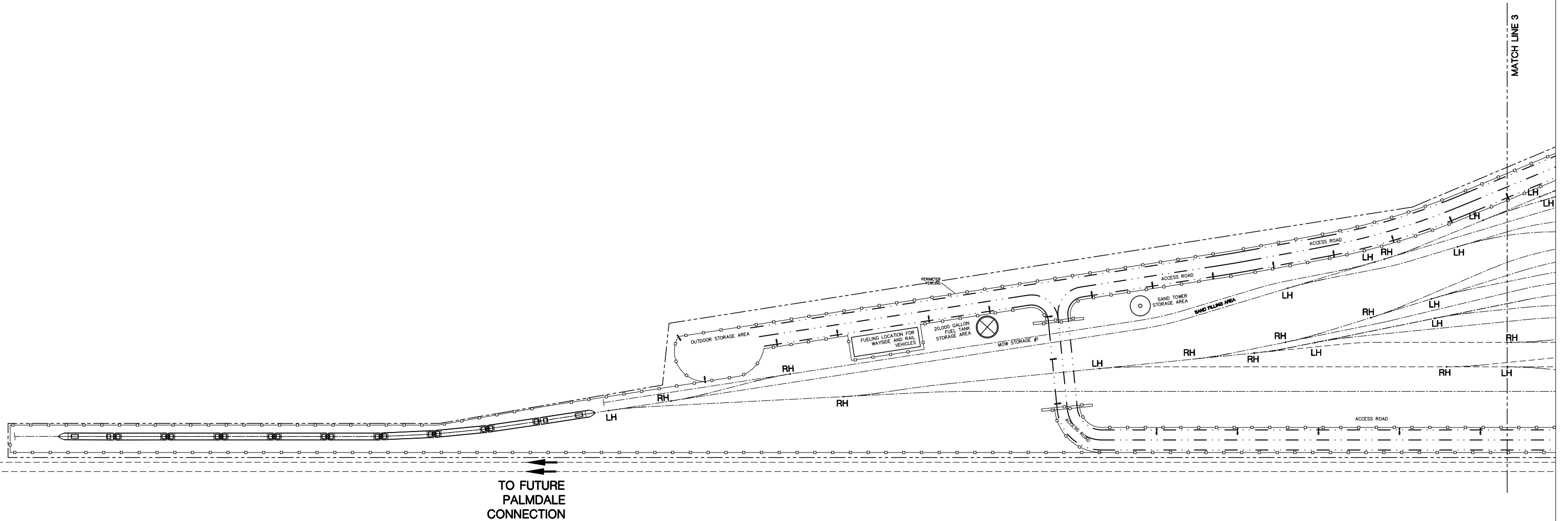


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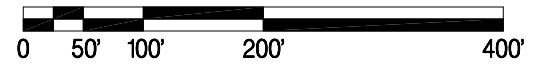
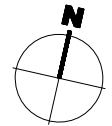
DESERTXPRESS : VICTORVILLE OMSF - SITE 2

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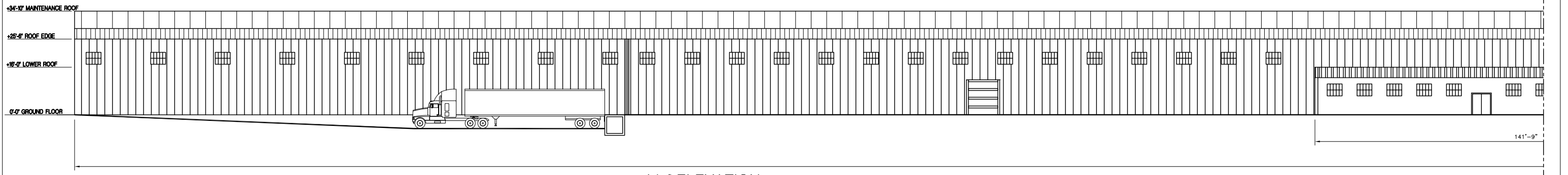
TO FUTURE PALMDALE CONNECTION

A PARTIAL PLAN - WEST

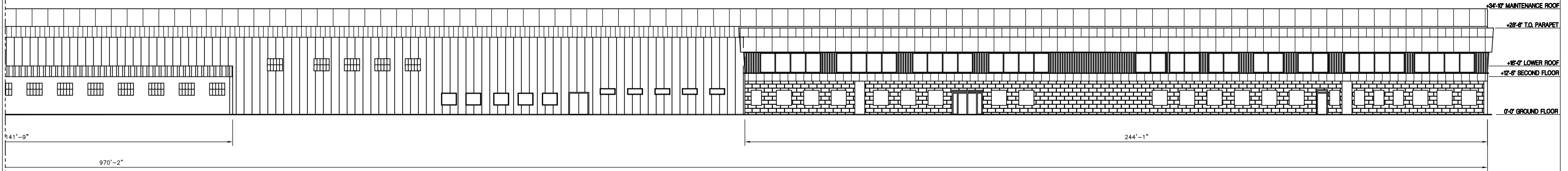


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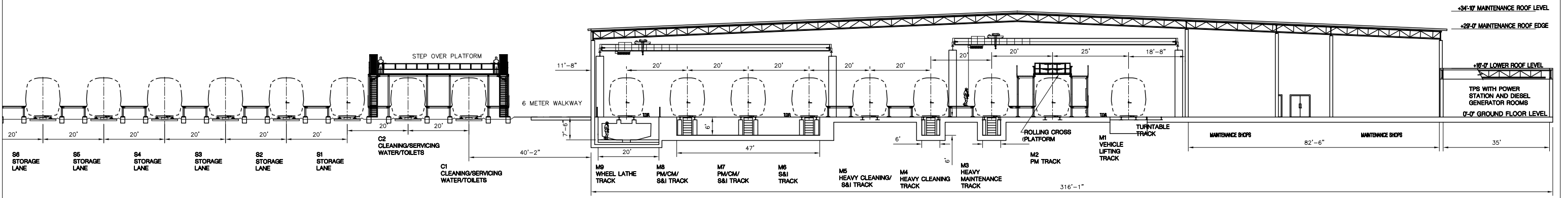




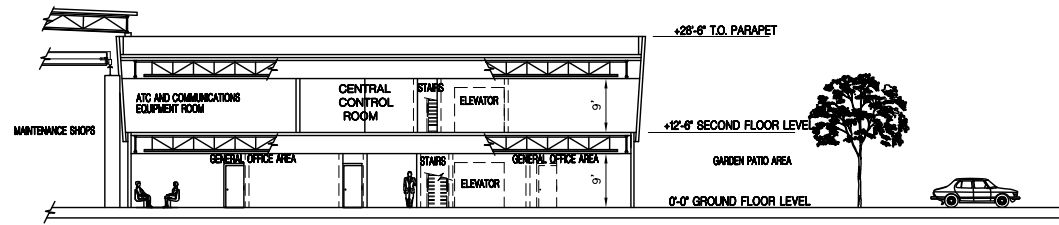
A1 | ELEVATION



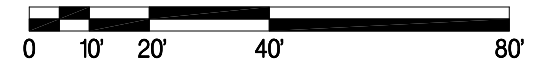
A1 | ELEVATION CONT.



B1 | SECTION



C1 | SECTION



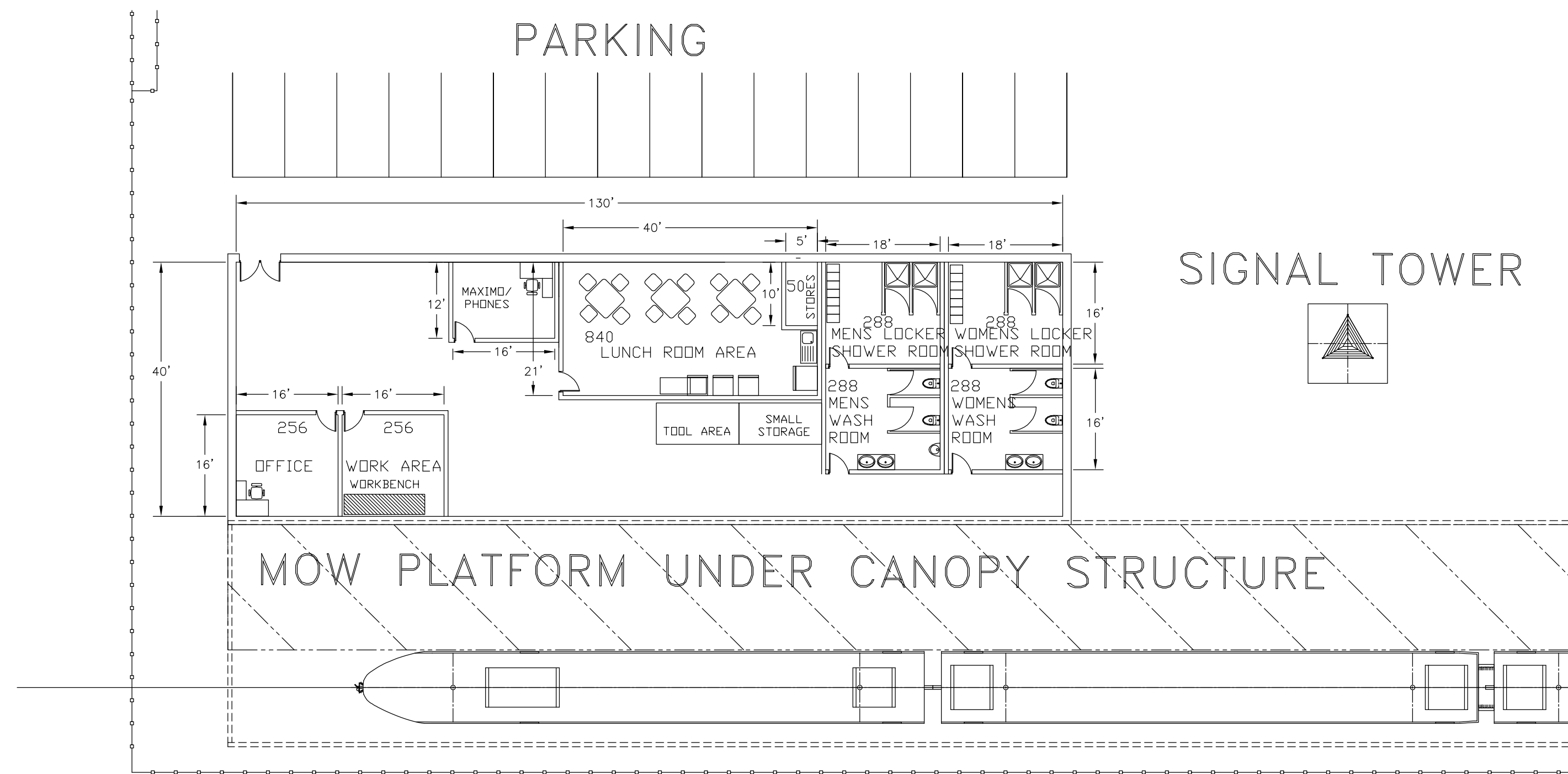
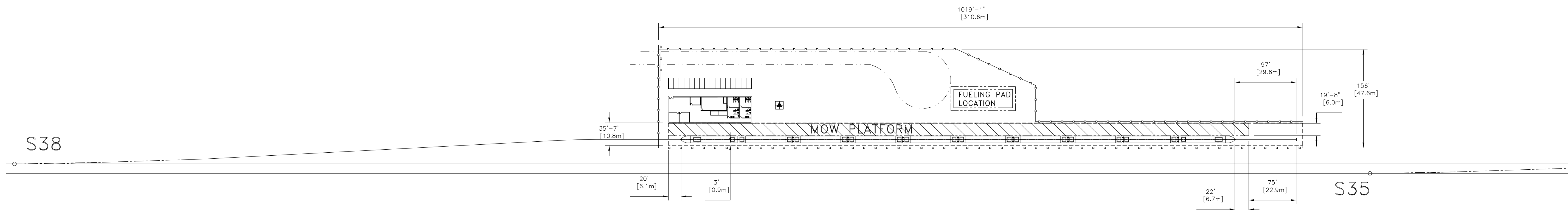
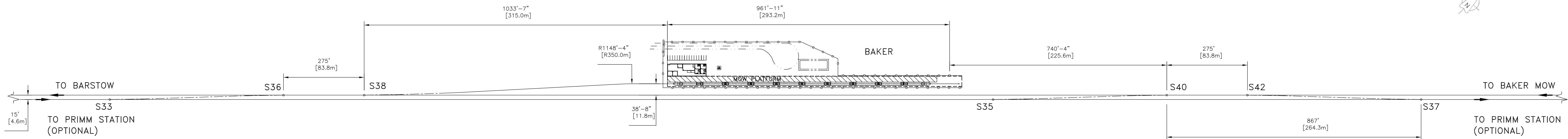
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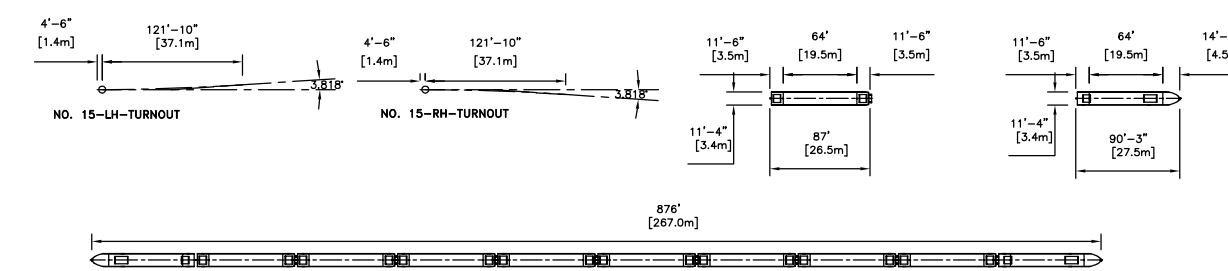
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Baker Maintenance Facility of Way



PRELIMINARY
 DATE : 2007-01-26

- NOTES:
- 1- CONCEPTION DESIGN ONLY NOT FOR CONSTRUCTION PURPOSES.
 - 2- DIMENSIONS SHOWN IN IMPERIAL AND (METRIC).



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POUCE [mm]	POUCE [mm]	MILLIMETRE [POUCE]	MILLIMETRE [mm]	DESCRIPTION DE LA REVISION / REVISION DESCRIPTION
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DATE
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DRAWN				BAKER MOW SIDING
APPROUVE	T.BURG		07/01/26	NUMERO DU DESSIN
APPROVED				C806-SWD-0701-0003-1
				FEUILLE / REVISION
				1 of 1 / 1
				SHEET / 1

**Las Vegas – Sloan Road Maintenance and
Storage Facility Site Option**



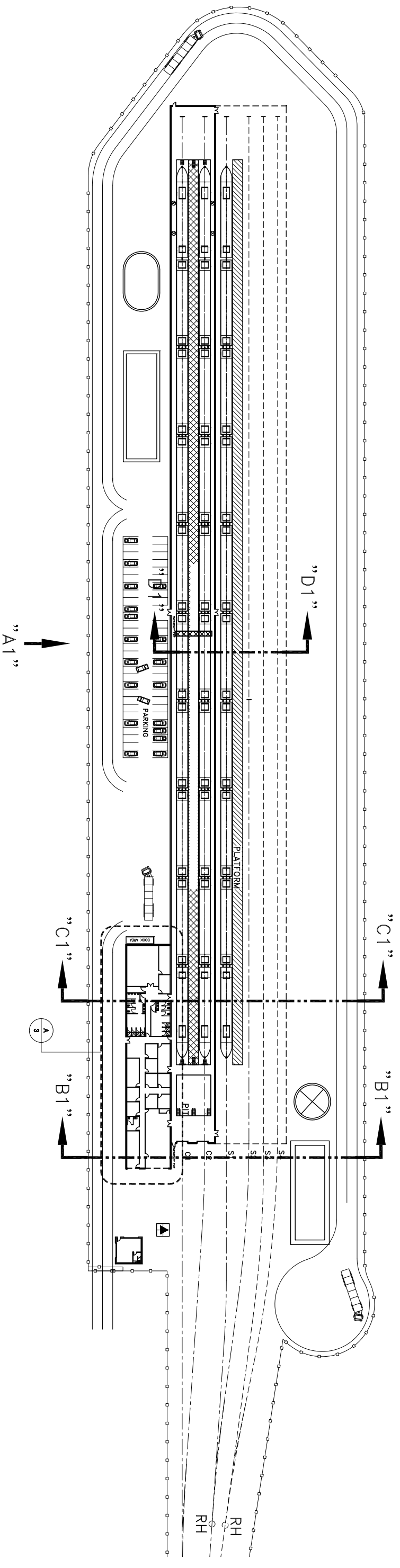
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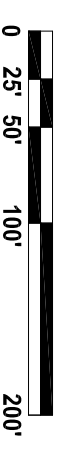
DESERTXPRESS : LAS VEGAS MSF - SLOAN ROAD



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A | OVERALL FACILITY PLAN

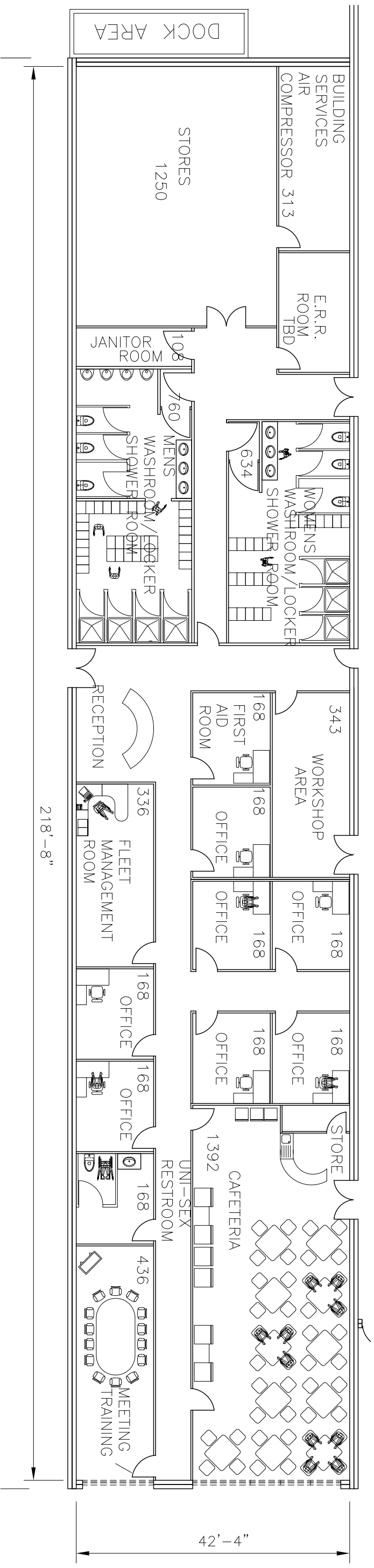


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DESERTXPRESS : LAS VEGAS MSF - SLOAN ROAD

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A | ENLARGED FACILITY PLAN

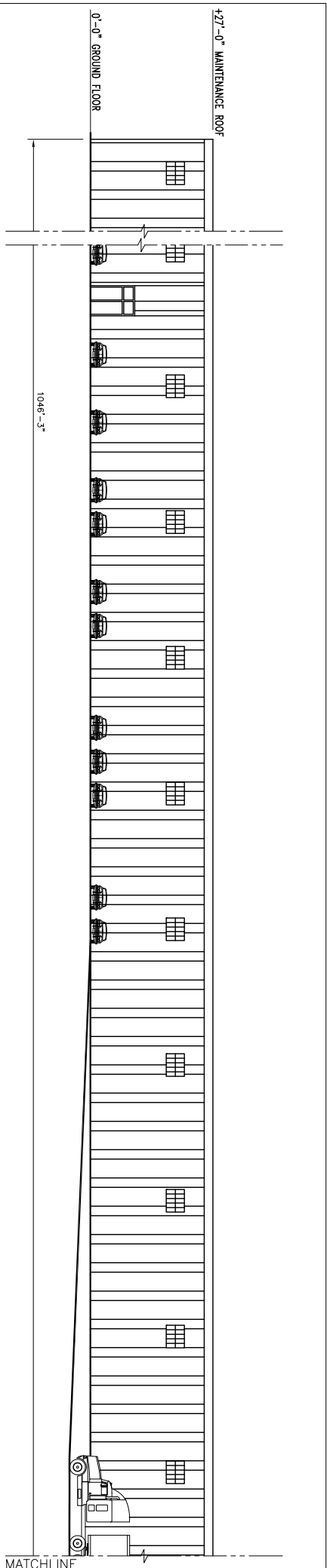


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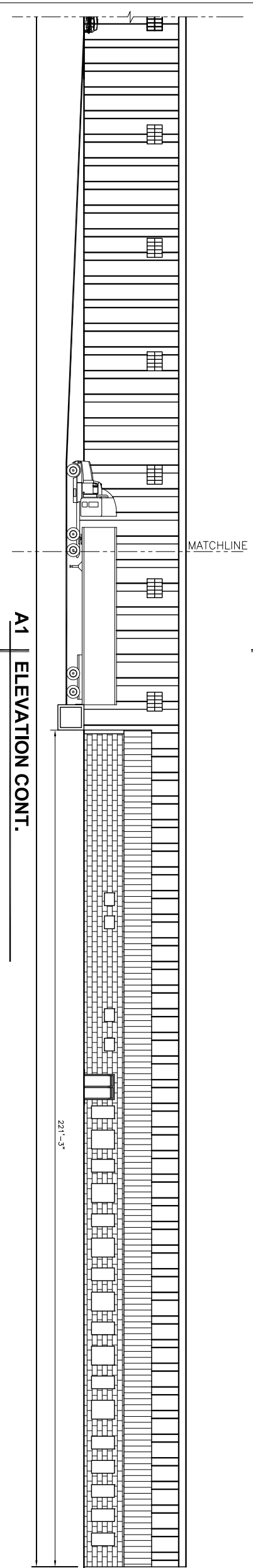


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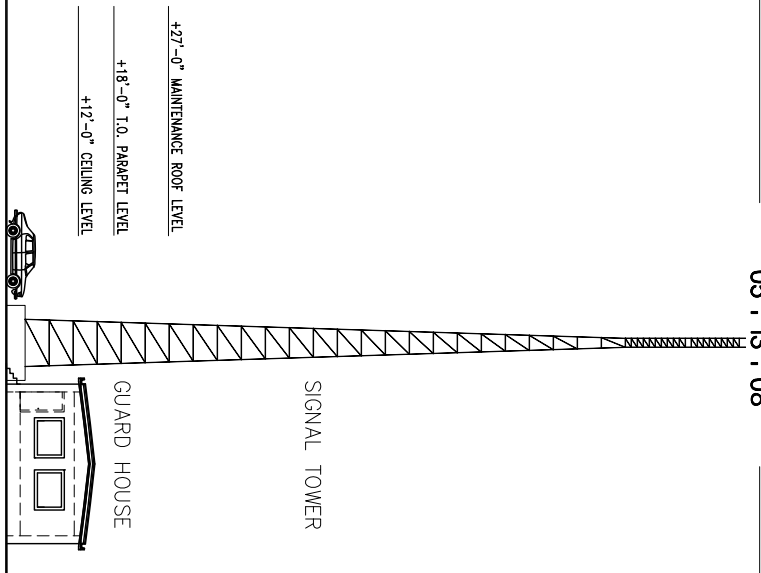
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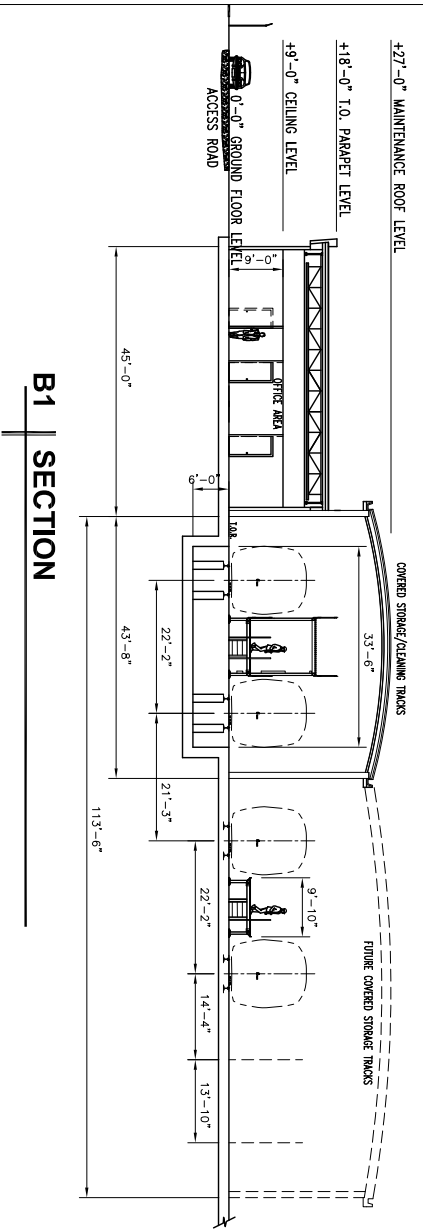
A1 | ELEVATION



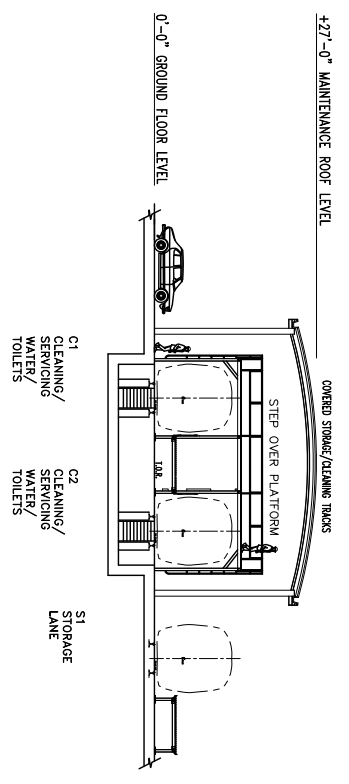
A1 | ELEVATION CONT.



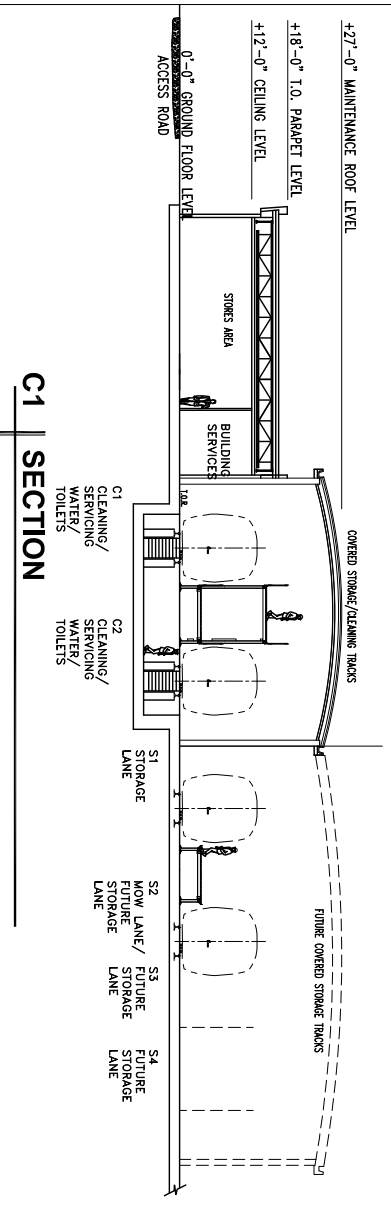
GUARD HOUSE
SIGNAL TOWER



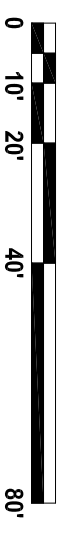
B1 | SECTION



D1 | SECTION



C1 | SECTION



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**Las Vegas – Robindale Avenue
Maintenance and Storage Facility Site
Option**

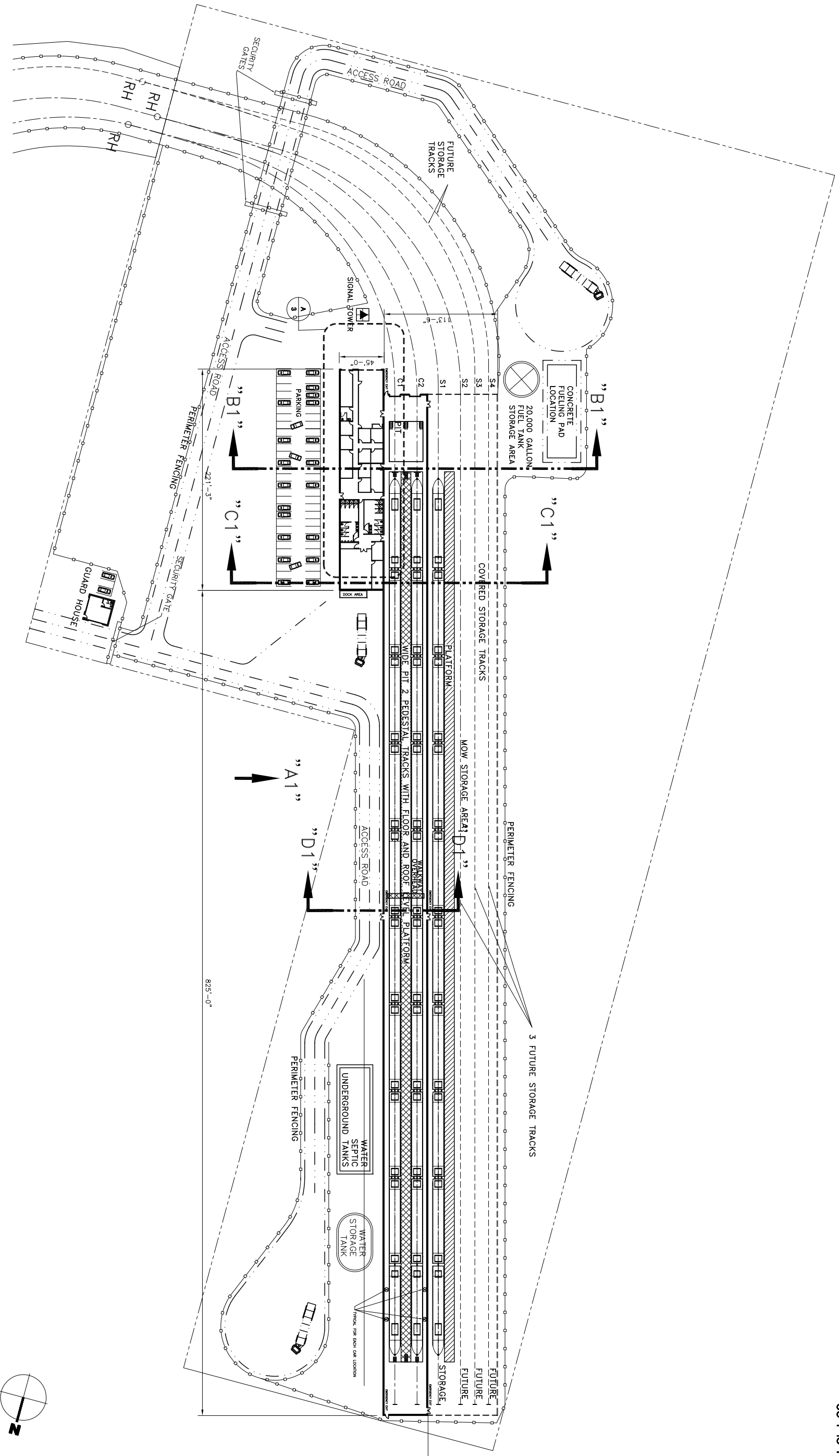


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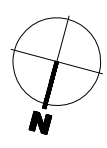
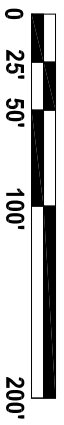
DESERTXPRESS : LAS VEGAS MSF - ROBINDALE AVENUE



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A | OVERALL FACILITY PLAN

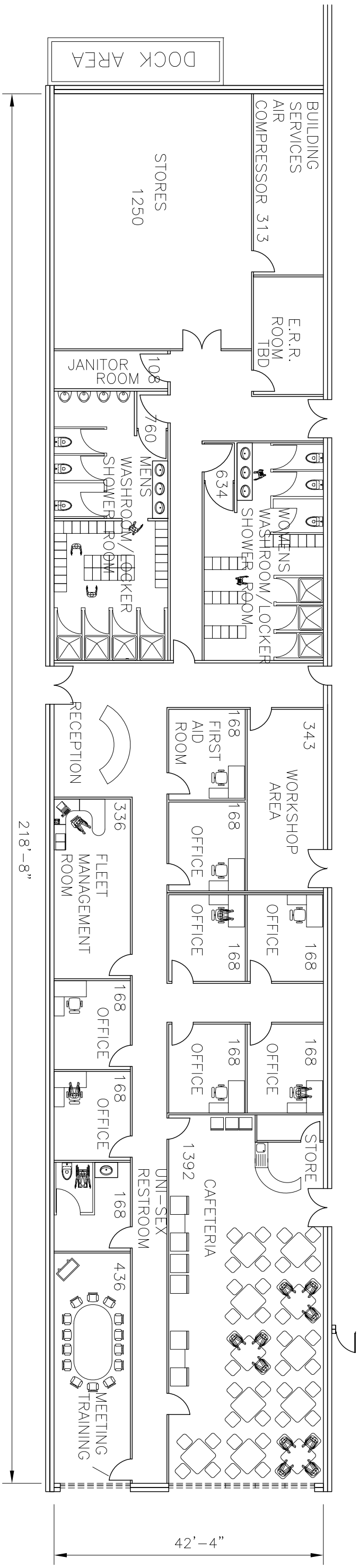


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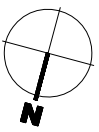


DESERTXPRESS : LAS VEGAS MSF - ROBINDALE AVENUE

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A | ENLARGED FACILITY PLAN

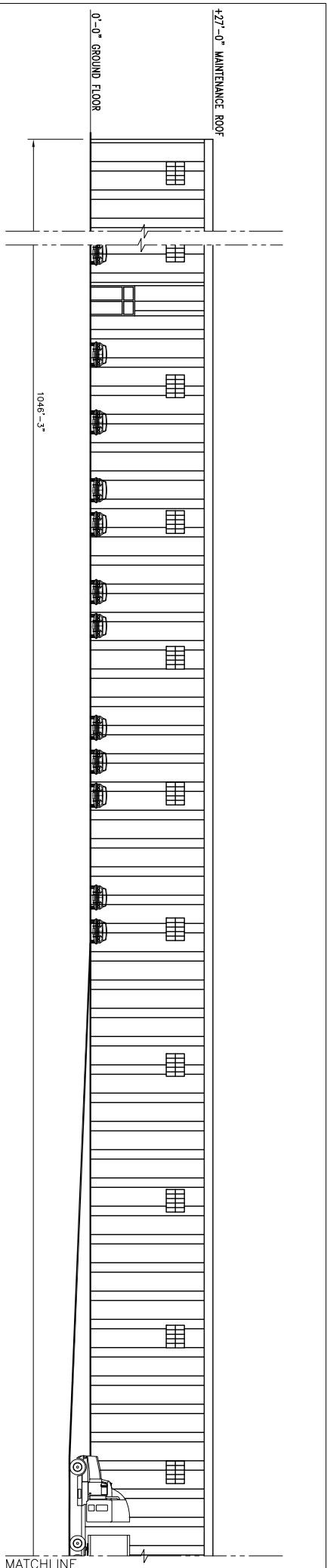


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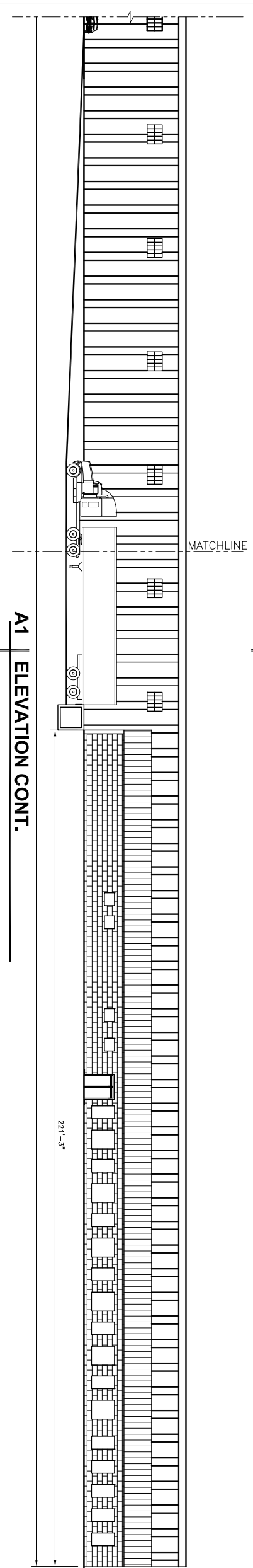


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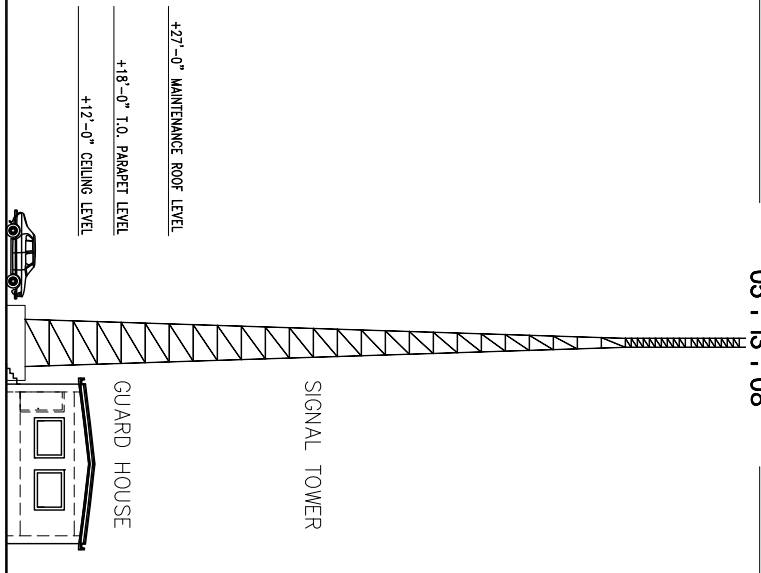
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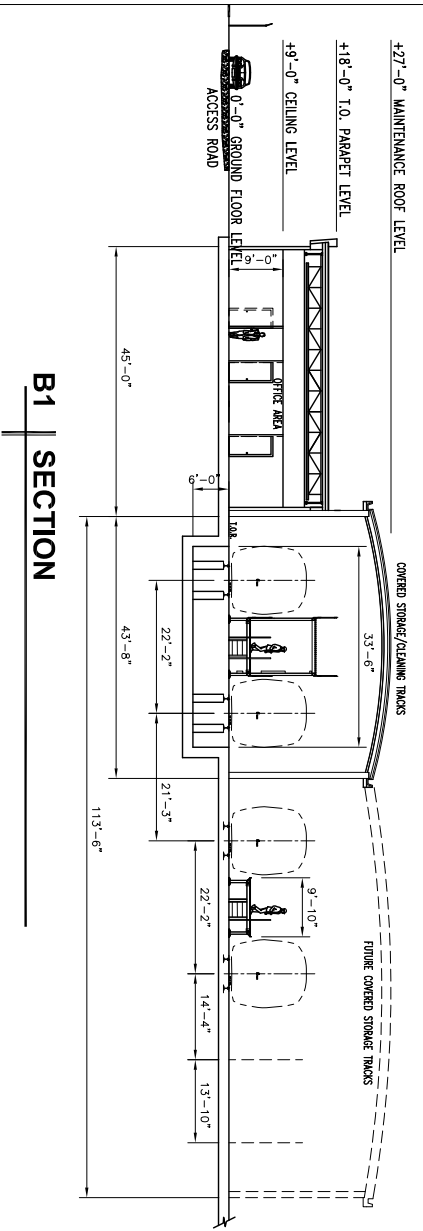
A1 | ELEVATION



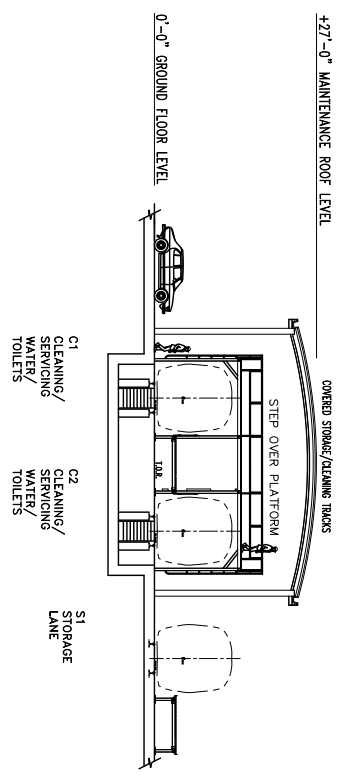
A1 | ELEVATION CONT.



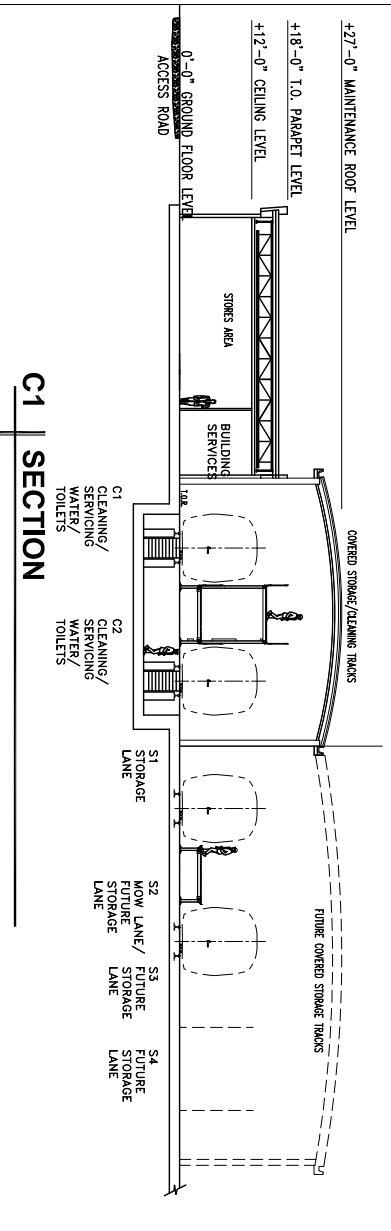
GUARD HOUSE
SIGNAL TOWER



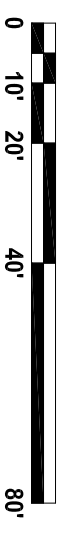
B1 | SECTION



D1 | SECTION



C1 | SECTION



DRAWINGS COURTESY BOMBARDIER, INC.

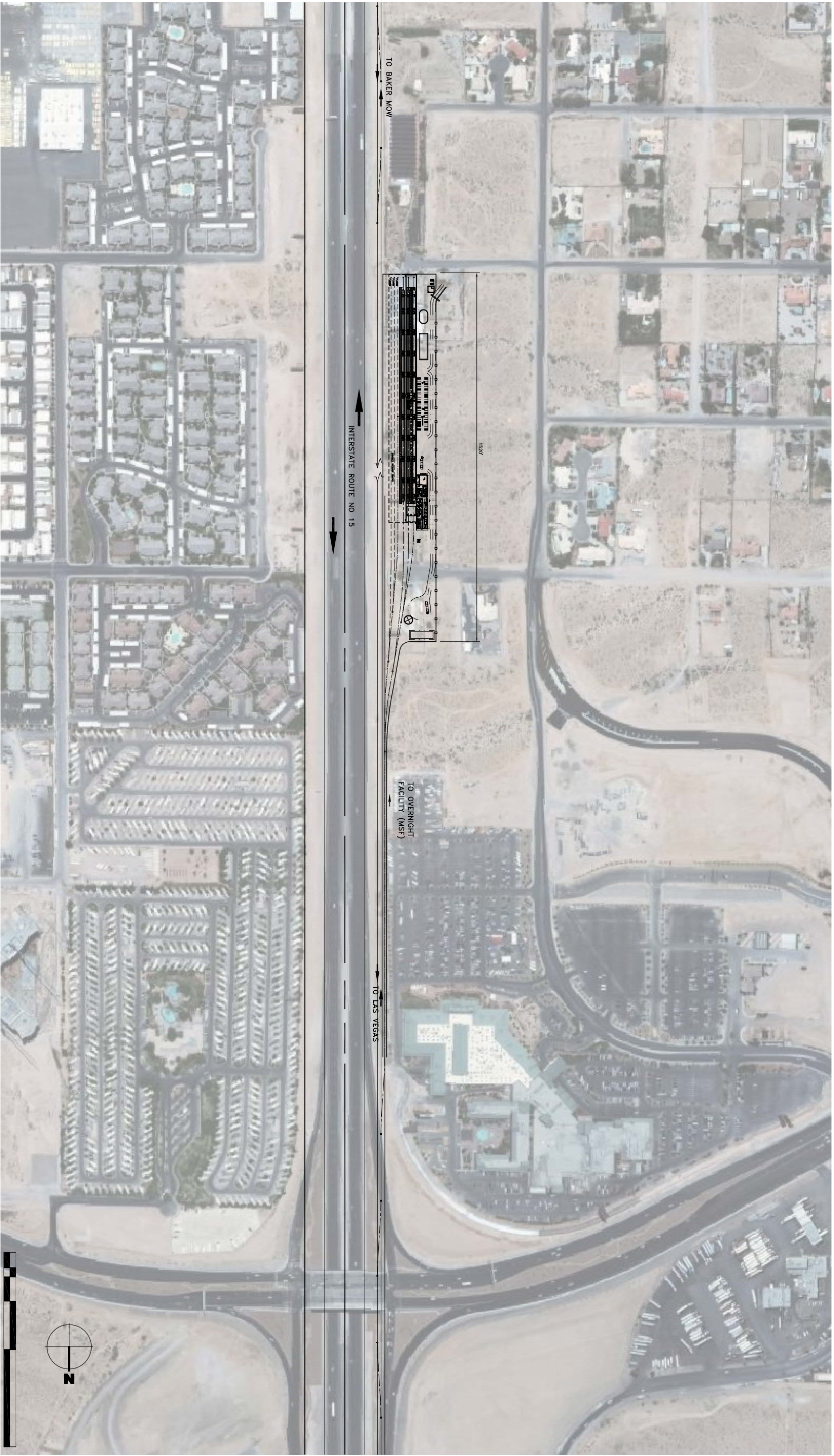


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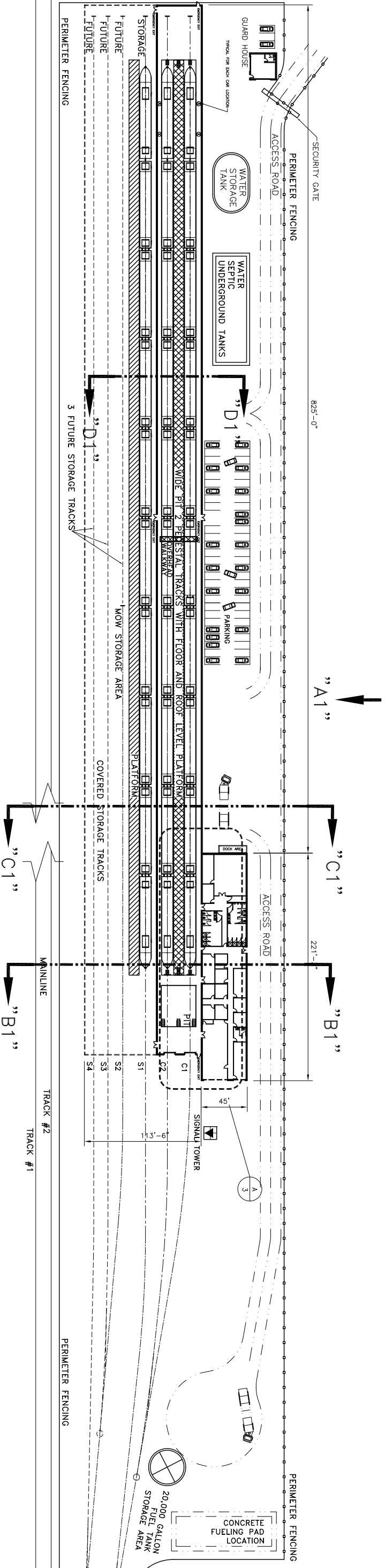


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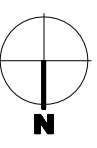
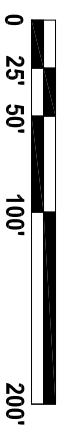
**Las Vegas – Wigwam Avenue Maintenance
and Storage Facility Site Option**



DRAWINGS COURTESY BOMBARDIER, INC.



A | OVERALL FACILITY PLAN

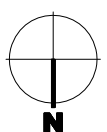
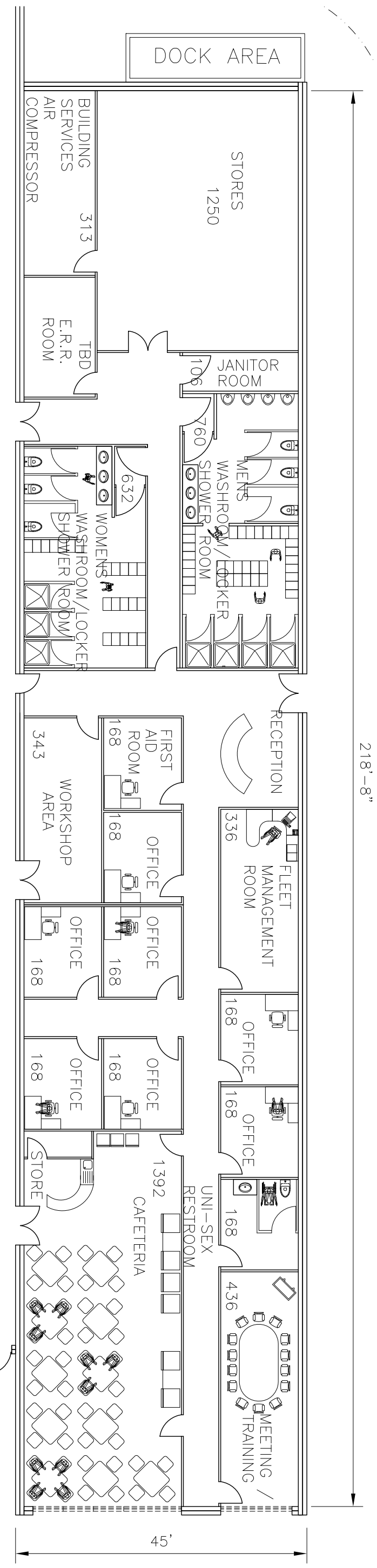


DRAWINGS COURTESY BOMBARDIER, INC.



DESERTXPRESS : LAS VEGAS MSF - WIGWAM AVENUE

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A | ENLARGED FACILITY PLAN

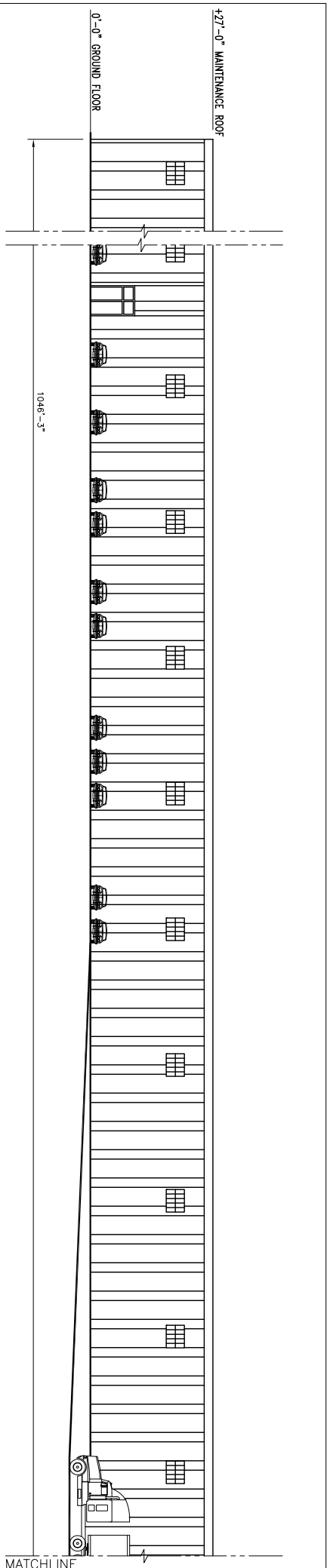
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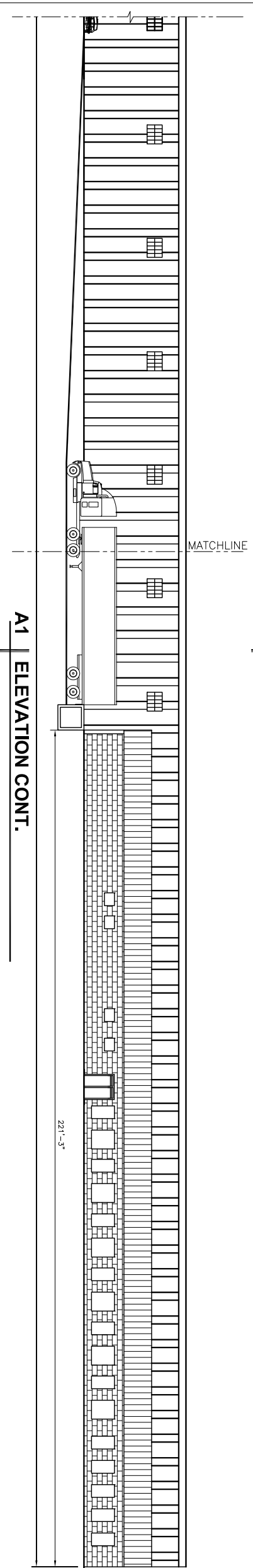
DESERTXPRESS : LAS VEGAS MSF - WIGWAM AVENUE



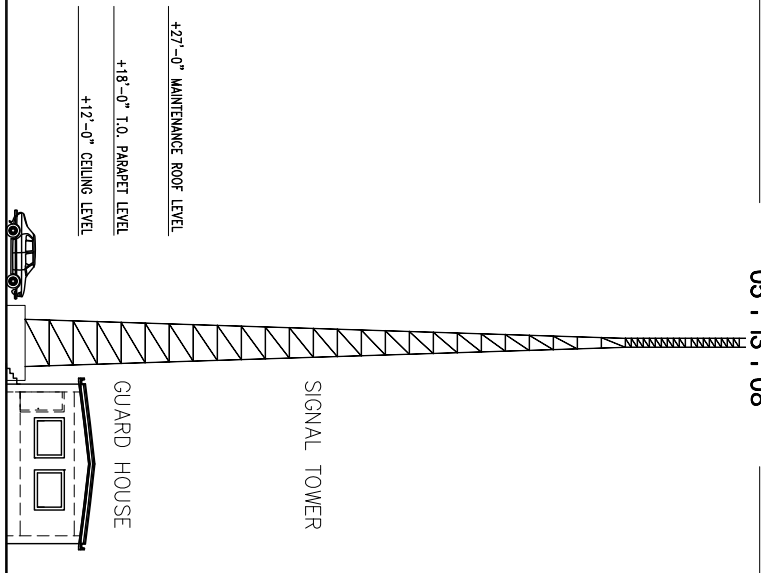
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A1 | ELEVATION

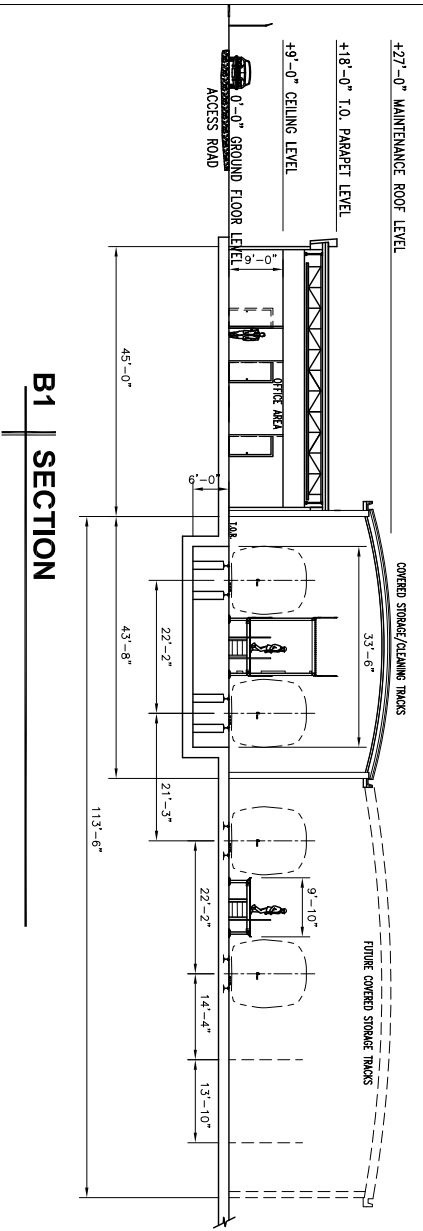


A1 | ELEVATION CONT.

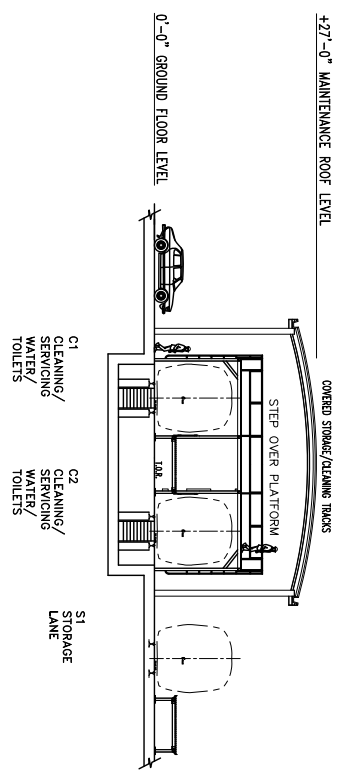


GUARD HOUSE

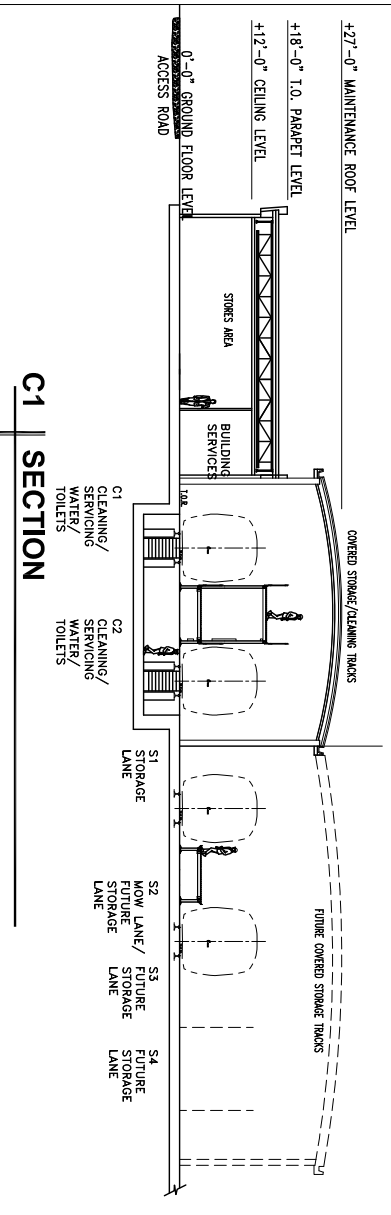
SIGNAL TOWER



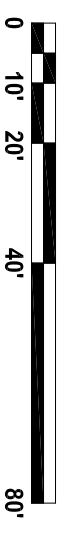
B1 | SECTION



D1 | SECTION



C1 | SECTION



DRAWINGS COURTESY BOMBARDIER, INC.



DESERTXPRESS : LAS VEGAS MSF - WIGWAM AVENUE

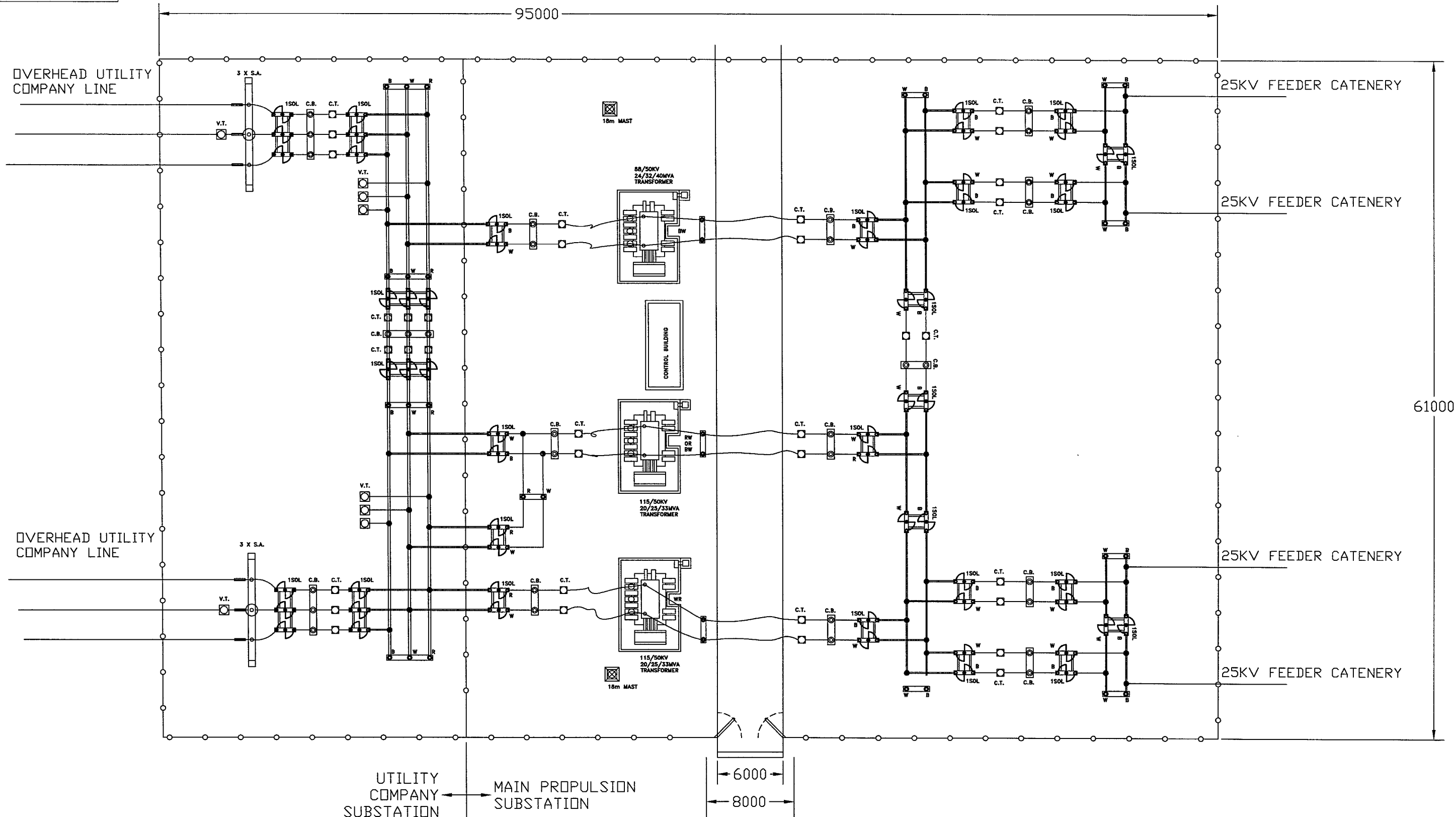


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APPENDIX A-4.1

SUBSTATION TYPICAL PLAN



UTILITY COMPANY SUBSTATION ← MAIN PROPULSION SUBSTATION

PRELIMINARY
DATE : 2007-01-23

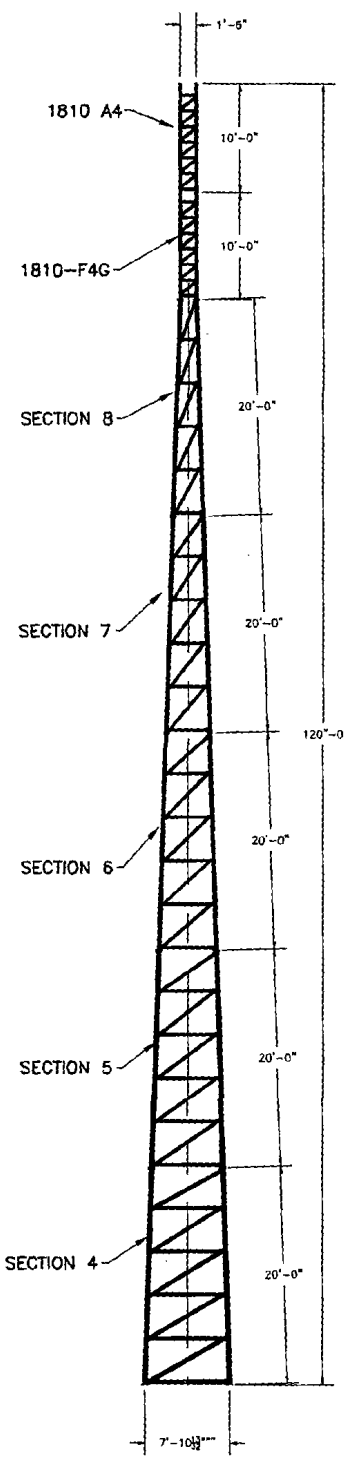
- NOTES:
- 1- CONCEPTION DESIGN ONLY NOT FOR CONSTRUCTION PURPOSES.
 - 2- DIMENSIONS SHOWN IN MILLIMETERS.

CONCU DESIGNED	CONCU DESIGNED	APPROUVE APPROVED		
DIMENSIONS		DIMENSIONS		DESCRIPTION DE LA REVISION / REVISION DESCRIPTION
POUCE []	POUCE (mm) []	MILLIMETRE [X]	MILLIMETRE (POUCE) []	DATE
<p>CE DOCUMENT AINSI QUE SON CONTENU SONT LA PROPRIETE DE BOMBARDIER INC. OU DE SES FILIALES. CE DOCUMENT CONTIENT DE L'INFORMATION CONFIDENTIELLE PROTEGEE EN DROIT. TOUTE REPRODUCTION, DISTRIBUTION, UTILISATION OU COMMUNICATION DE CE DOCUMENT OU DE SON CONTENU SANS CONSENTEMENT EXPRESS SONT STRICTEMENT INTERDITES. TOUT MANQUEMENT A CETTE REGLE EXPOSE SON AUTEUR AU VERSEMENT DE DOMMAGES.</p> <p>THIS DOCUMENT AND ITS CONTENTS ARE THE PROPERTY OF BOMBARDIER INC. OR ITS SUBSIDIARIES. THIS DOCUMENT CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION. THE REPRODUCTION, DISTRIBUTION, UTILISATION OR THE COMMUNICATION OF THIS DOCUMENT OR ANY PART THEREOF, WITHOUT EXPRESS AUTHORIZATION IS STRICTLY PROHIBITED. OFFENDERS WILL BE HELD LIABLE FOR THE PAYMENT OF DAMAGES.</p>				
DESIGN ORIGINAL DESIGN			INIT.	DATE
CONCU DESIGNED	S.FOUDA			07/01/23
DESSINE	S.PRIMEAU			07/01/23
APPROUVE	T.BURG			07/01/23
APPROUVE				
ECHELLE	TITRE	DESERT EXPRESS		
NTS	TYPICAL MAIN SUBSTATION LAYOUT			
SCALE	TITRE	NUMERO DU DESSIN		
A1	C806-SWD-0601-0001	1 of 1		
SIZE	DRAWING NUMBER	1		

APPENDIX A-4.2

TYPICAL SIGNAL TOWER ELEVATION

ASTM		*	
LEGS	2.875" x 0.276"	2.375" x 0.218"	2.0" x 10 GA
DIAGONALS	L2 1/2x2 1/2x3/16	L1 3/4 x 1 3/4 x 1/8	L3/4 x 3/4 x 1/8
GIRTS	L2 1/2x2 1/2x3/16	L1 3/4 x 1 3/4 x 1/8	L1 1/4x1 1/4x1/8
BRACE BOLTS	(4)-3/4"	(1)-5/8"	-SHOP WELDED-
SPICE BOLTS	(4)-1"	(4)-5/8"	(2)-1/2"
ANCHOR BOLTS	(4)-1" (C1018 THREADED ROD)	(4)-1/2"	GRADE 5



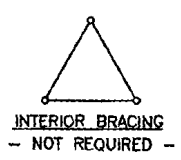
According to ANSI/EIA-222-F 1996
90 mph/78 mph + 1/2" radial ice w/ (3 second gust) per OBC AND IBC

	CaAa	Flat Plate Area	Weight	Elevation
No Ice	32 sq ft	17.78 sq ft	200 lbs	120 ft
1/2" Ice	40 sq ft	22.22 sq ft	350 lbs	120 ft
No Ice	55.5 sq ft	30.83 sq ft	350 lbs	120 ft to 90 ft
1/2" Ice	67 sq ft	37.22 sq ft	600 lbs	120 ft to 90 ft
(1)-7/8" coax Elevation 0 ft to 120 ft				
Climbing Ladder Elevation 0 ft to 100 ft				

70 mph/61 mph + 1/2" radial ice (Fastest MPH) per EIA-222-F

	CaAa	Flat Plate Area	Weight	Elevation
No Ice	33.9 sq ft	18.83 sq ft	200 lbs	120 ft
1/2" Ice	41 sq ft	22.78 sq ft	350 lbs	120 ft
No Ice	58 sq ft	32.22 sq ft	350 lbs	120 ft to 90 ft
1/2" Ice	70 sq ft	38.88 sq ft	600 lbs	120 ft to 90 ft
(1)-7/8" coax Elevation 0 ft to 120 ft				
Climbing Ladder Elevation 0 ft to 100 ft				

* PIPE LEGS 42 KSI MIN YIELD
10 GA TUBE LEGS 30 KSI MIN YIELD

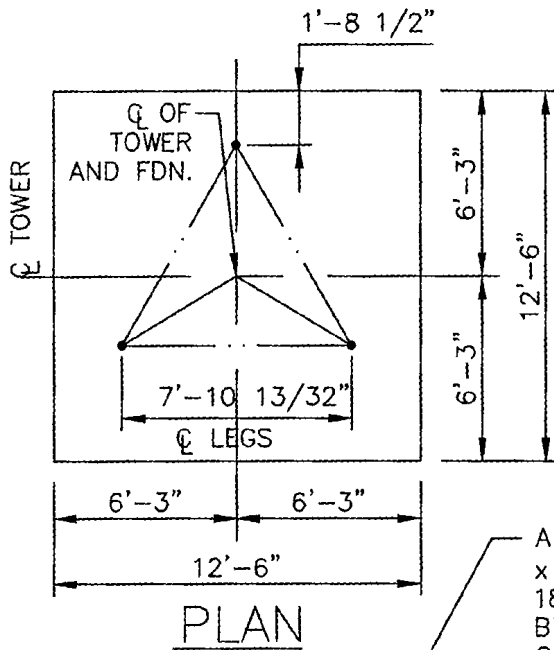


FOUNDATION REACTIONS
TOTAL MOMENT: 294 FT-KIPS
TOTAL SHEAR: 5 KIPS
TOTAL DOWNLOAD: 7 KIPS

AMERICAN TOWER COMPANY
ISO 9001-2000
P.O. Box 29 Shelby, Ohio 44875
www.amertower.com
info@amertower.com
Telephone (419) 347-1185 Since 1953 (419) F

120' STANDARD

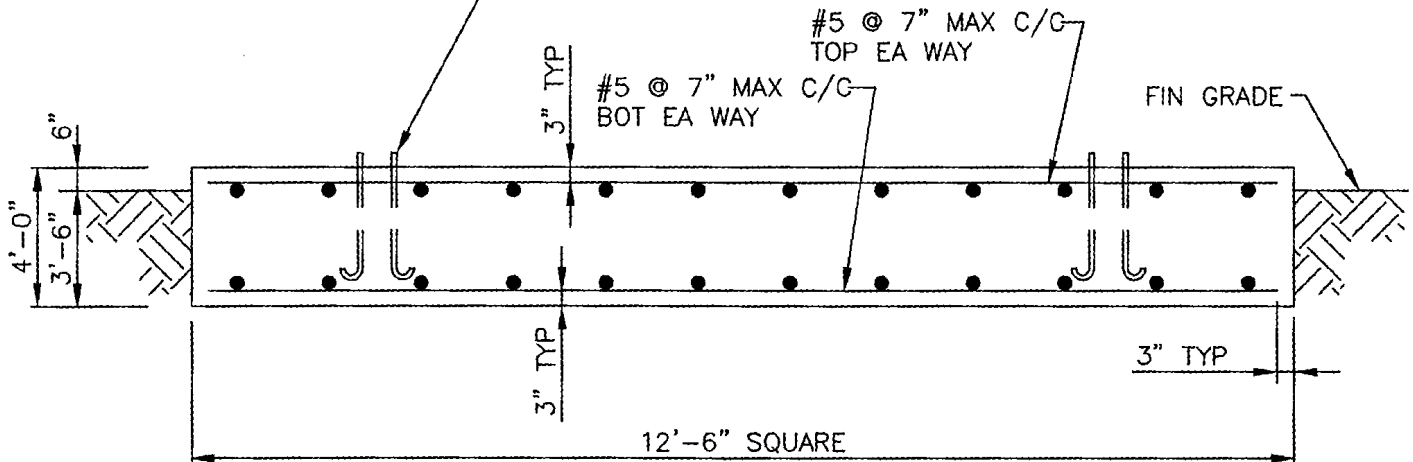
BY: DOW DATE: 12/21
DWG NO. 1060



NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS.
2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 (GRADE 60).
3. TOTAL CONCRETE = 18 CUBIC YARDS.
4. FOUNDATION DESIGN BASED UPON ASSUMED SOIL PARAMETERS AS FOLLOWS:
 ALLOW BEARING PRESSURE: 2000 PSF
 UNIT SOIL WEIGHT: 100 PCF
 WATER AND ROCK LOCATED BELOW FOOTING

ANCHOR BOLTS BY AMERICAN TOWER, 1"Ø x 3'-6" MIN EMBEDMENT INTO CONCRETE. 180° END HOOK PER ACI. SEE DRAWINGS BY AMERICAN TOWER FOR ANCHOR BOLT ORIENTATION.



FOOTING MUST BEAR ON UNDISTURBED SOIL OR COMPACTED BACKFILL.

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 P.O. Box 29 Shelby, Ohio 44875
 www.amertower.com
 info@amertower.com
 Telephone (419)347-1185 Since 1953 Fax (419) 347-1654

120' STANDARD FOUNDATION

BY: DOW

DATE: 12/21/02

DWG NO. 1060 A