INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
	ROADWAY GROUP
1	TITLE
2–3	VICINITY / TOTAL OWNERSHIP MAP
4	PROJECT CLEARANCE SUMMARY
5 & 6	LEGEND & GENERAL NOTES
7	SURVEY CONTROL
8–10	TYPICAL SECTIONS & DETAILS
11–13	PEDESTRIAN / BICYCLE RAILING DETAILS
14–17	ROADWAY SUMMARY
18	BOX CULVERT SUMMARY
19–29	DEMOLITION PLANS
30	ILLUMINATION MATERIALS LIST
31–37	UTILITIES
38	SEEPAGE BED DETAILS
39–50	PLAN / PROFILE
51–55	ELIJAH DRAIN STRUCTURE
56	SIGN ERECTION SPECIFICATIONS
57–60	SIGNING & PAVEMENT MARKING PLAN
61–69	CONSTRUCTION TRAFFIC CONTROL PLANS
70	STORMWATER POLLUTION PREVENTION PLAN
1-43	ITD STANDARD DRAWINGS

IDAHO

TRANSPORTATION DEPARTMENT

PLAN AND PROFILE OF PROPOSED

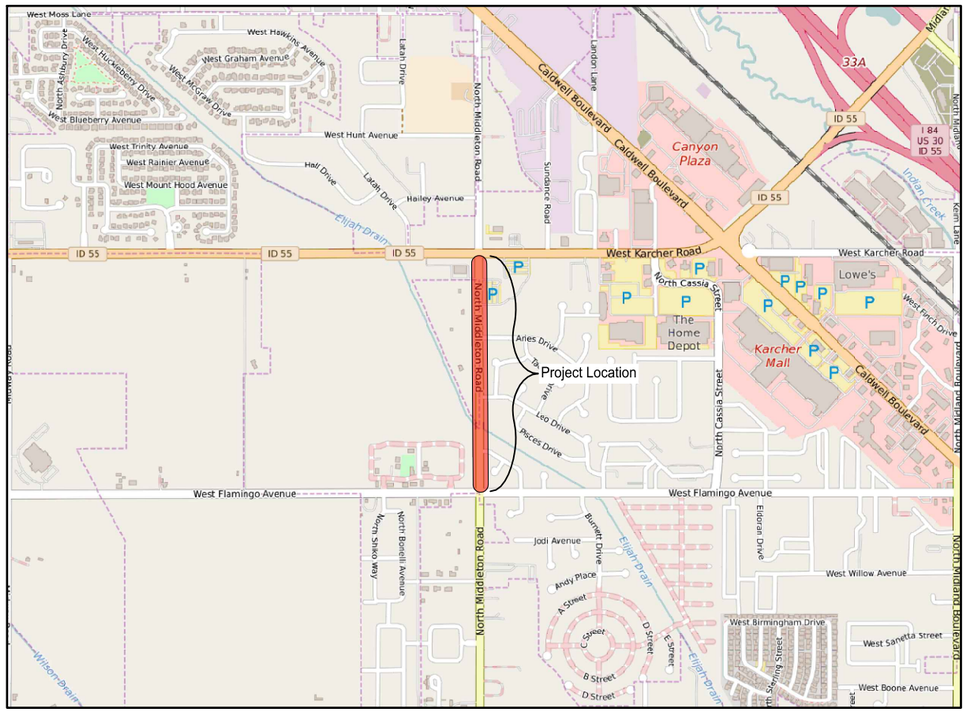
MIDDLETON RD; SH 55 TO FLAMINGO AVE, NAMPA

FEDERAL AID PROJECT NO. A024(229)

KEY NO. 24229

CANYON COUNTY

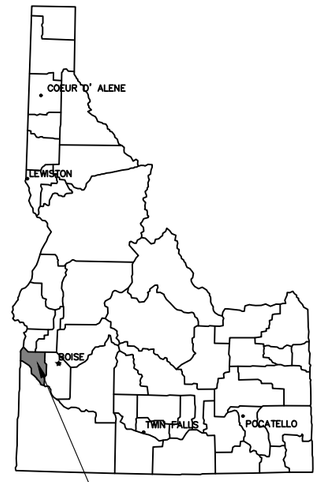
November, 2025



VICINITY MAP SCALE

0.25 0 0.25 0.5 mi

Horizontal



A024(229)
MIDDLETON RD, SH 55 TO
FLAMINGO AVE, NAMPA
M.P. 4.006 TO M.P. 4.507
SEGMENT CODE 004542

DESIGN DESIGNATION	
ADT (2023)	13,320
ADT (2044)	23,450
DHV (2023)	1,180
DHV (2044)	1,830
D	55/45%
V	35 MPH
TRUCKS:	
ADT (2023)	290
ADT (2044)	520
DHV (2023)	30
DHV (2044)	40

REVISIONS			
NO.	DATE	BY	DESCRIPTION

THE DIMENSIONS SHOWN ON THE PLANS SHALL BE ATTAINED WITHIN LIMITS OF PRECISION THAT GOOD CONSTRUCTION PRACTICES WILL PERMIT

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME
MIDDLETON.DWG

DRAWING DATE:
August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

TITLE

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

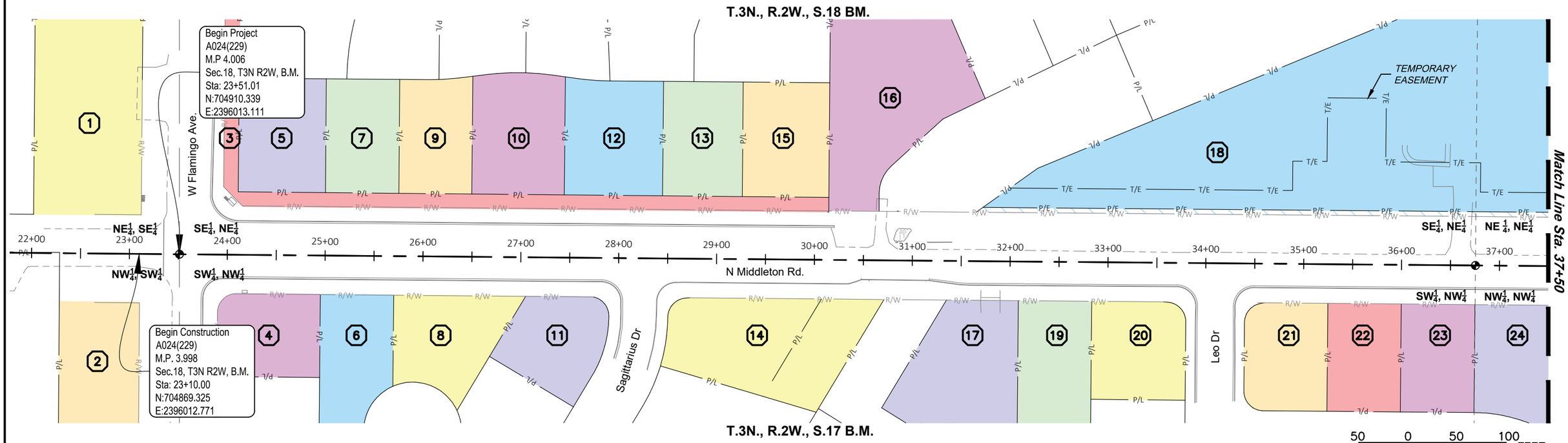
KEY NUMBER 24229

SHEET 1 OF 70

Approved for Advertising

12/16/2025

Date Approved



Parcel No.	Parcel I.D. No.	Record Owner	Total Ownership Assessed Ac.	Right of Way		Remainder		Easement*	
				Req'd. Ac.	Exist Ac.	Left Ac.	Right Ac.	Perm. Ac.	Temp. Ac.
1	*Info Only	Blackmon Danny, Blackmon Moriah	0.680 Ac.						
2	*Info Only	Boyd Dennis And Neva Family Trust	0.240 Ac.						
3	*Info Only	Brassy Cove Property Owners Association	1.820 Ac.						
4	*Info Only	Giron Ricardo, Ramirez Sara Padilla	0.200 Ac.						
5	*Info Only	Osborn Gerald And Ana Living Trust	0.240 Ac.						
6	*Info Only	Khan Humera, Khan Mohammadullah	0.220 Ac.						
7	*Info Only	Osborn Gerald And Ana Living Trust	0.200 Ac.						
8	*Info Only	Ramirez Jeffrey A, Ramirez Kim A H/W	0.240 Ac.						
9	*Info Only	Nguyen Minh Tien, Nguyen Aisa	0.200 Ac.						
10	*Info Only	Keeney Dolan, Keeney Elisabeth	0.270 Ac.						
11	*Info Only	Kengle Micah William, Kengle Rebekah	0.210 Ac.						
12	*Info Only	Hamid Trust	0.270 Ac.						
13	*Info Only	Mountain West Ira Inc Fbo Phyllis Bl	0.220 Ac.						
14	*Info Only	Rodriguez Reymundo	0.420 Ac.						
15	*Info Only	Graf Paul Fenwick	0.230 Ac.						
16	*Info Only	Sunnyvale Owners Association Inc	0.630 Ac.						
17	*Info Only	Wachs Gabriella	0.340 Ac.						
18	*Info Only	Degrange Michelle N	5.060 Ac.					0.112 Ac.	0.684 Ac.
19	*Info Only	Barnett Louis E, Higgins-Barnett Margaret A	0.230 Ac.						
20	*Info Only	Maltby Daniel A, Maltby Theresa C	0.220 Ac.						
21	*Info Only	Van Cleef Janet K, Van Cleef Larry D	0.210 Ac.						
22	*Info Only	Deschene Timothy, Deschene Alicia	0.190 Ac.						
23	*Info Only	Zambrano Rosa D	0.190 Ac.						
24	*Info Only	Carnahan Lynn K	0.220 Ac.						

* PERMANENT AND TEMPORARY EASEMENTS SHOWN ARE EXISTING EASEMENTS THAT WERE ACQUIRED PRIOR TO THE INITIATION OF PROJECT NO. A024(229).

Note:

1. TOTAL OWNERSHIP AREAS SHOWN REPRESENT THE AREAS WITHIN THE PARCELS ABUTTING THE ROADWAY AS DETERMINED FROM ASSESSOR'S FIELD DATA SHEETS AND REPORTS. THE OWNERSHIP PARCELS WERE NOT SURVEYED AND SAID AREAS ARE APPROXIMATE.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME Middleton Total Ownership Map.dwg

DRAWING DATE: 5/8/2024

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

VICINITY / TOTAL OWNERSHIP MAP

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

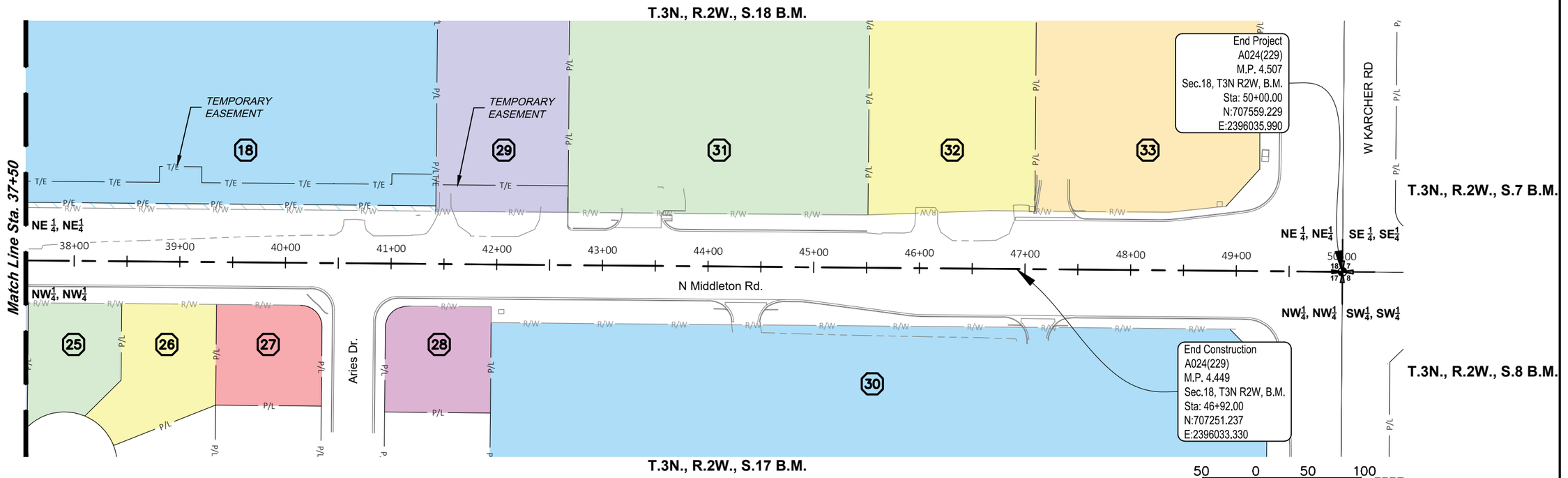
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 2 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



Parcel No.	Parcel I.D. No.	Record Owner	Total Ownership Assessed Ac.	Right of Way		Remainder		Easement*	
				Req'd. Ac.	Exist Ac.	Left Ac.	Right Ac.	Perm. Ac.	Temp. Ac.
18	*Info Only	Degrange Michelle N	5.060 Ac.					0.112 Ac.	0.684 Ac.
25	*Info Only	Jackson Wendy D, Jackson James W	0.200 Ac.						
26	*Info Only	Ertman Kenneth Scott	0.260 Ac.						
27	*Info Only	Tuft Jeffrey B, Tuft Judy K H/W	0.220 Ac.						
28	*Info Only	Dodgson Gregory, Dodgson Patricia	0.230 Ac.						
29	*Info Only	Parker Byron J, Parker Dixie L	1.320 Ac.						0.072 Ac.
30	*Info Only	Karcher Church Of The Nazarene Inc	13.400 Ac.						
31	*Info Only	Safeguard Storage Llc	3.590 Ac.						
32	*Info Only	Barwa Llc @@, Kaur Daman Prett	2.330 Ac.						
33	*Info Only	Karcher Medical Aspen Hills Llc	1.140 Ac.						

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Note:

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME Middleton Total Ownership Map.dwg
DRAWING DATE: 5/8/2024

IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

VICINITY / TOTAL OWNERSHIP MAP
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 3 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

CLEARANCES

	CLEARED UNDER PROJECT NO.	APPROVAL DATE
PROJECT STANDARDS		
CONCEPT APPROVAL ☐ AASHTO ☐ 3R ☐ 1R ■ STATE ☐ PM ☐ OTHER	A024(229)	07/01/2024
DESIGN EXCEPTIONS:	N/A	N/A
	N/A	N/A
PUBLIC HEARING WAIVER	A024(229)	06/23/2025
PUBLIC HEARING DATE (Latest hearing date held or scheduled for opportunity)	N/A	N/A
DESIGN APPROVAL	A024(229)	06/23/2025
RECLAMATION PLAN APPROVAL NO(S)	N/A	N/A
AIRPORT	N/A	N/A
R/W CERTIFICATE: Issued by ■ HQ ☐ DISTRICT	A024(229)	06/16/2025
TRIBAL LANDS: ☐ AGREEMENT REQUIRED ☐ SPECIAL PROVISIONS FOR CONTRACT PROPOSAL	N/A	N/A
BRIDGE PS & E	N/A	N/A
ENVIRONMENTAL DECISION: TYPE ■ CAT-EX ☐ FONSI ☐ ROD	A024(229)	06/12/2025
ENVIRONMENTAL RE-EVALUATION	A024(229)	**12/01/2025**

PERMITS

			EXPIRATION DATE
IDAHO DEPARTMENT OF WATER RESOURCES PERMIT NO(S)	S63-20985	09/17/2021	NONE
ARMY CORPS OF ENGINEERS 404 PERMIT NO(S)	NWW-2021-00425	08/19/2025	03/14/2026
OTHER BUREAU OF RECLAMATION (BOR)	21-07-11-L5562	11/29/2021	NONE

DEQ SECTION 401 WATER QUALITY CERTIFICATION	■ YES	☐ NO
NPDES GENERAL PERMIT/SWPPP REQUIRED:	☐ YES	■ NO
THIRD PARTY INSPECTION REQUIRED	☐ YES	■ NO
POLLUTION PREVENTION PLAN	■ YES	☐ NO

AGREEMENTS (List Appropriate Name)

LOCAL: CITY	N/A	N/A	
COUNTY	N/A	N/A	
HIGHWAY DISTRICT	N/A	N/A	
ROAD CLOSURE AND MAINTENANCE	N/A	N/A	
STATE/LOCAL CONSTRUCTION CITY OF NAMPA	A024(229)	**08/22/2025**	
IRRIGATION DISTRICT(S): Crossing Agreement Required ☐ YES ■ NO	COVERED IN BOR PERMIT		
(Signatures Required on either Structure Drawing or Bridge Sheet)	APPROVAL DATES		AGREEMENT NO.
UTILITIES: List all Utilities shown on plans — RETAIN & PROTECT	UTILITY HEARING WAIVER	AGREEMENT	
Co. CABLE ONE (SPARKLIGHT) – WEST VALLEY ■	09/24/2024	N/A	N/A
Co. CENTURY LINK / LUMEN ☐	09/20/2024	N/A	N/A
Co. IDAHO POWER ■	08/14/2024	N/A	N/A
Co. INTERMOUNTAIN GAS ☐	10/01/2024	N/A	N/A
Co. ZAYO FIBER GROUP ■	08/07/2024	N/A	N/A
Co. TDS TELECOM – MERIDIAN (NO UTILITY MAPS PROVIDED) ☐	09/03/2024	N/A	N/A
Co. ☐	N/A	N/A	N/A

RAILROAD List all Railroads encroached upon	AGREEMENT FOR	AGREEMENT EFFECTIVE DATE	AGREEMENT NO.
Co.	N/A	N/A	N/A
Co.	N/A	N/A	N/A

ACCESS CONTROL DETERMINATION
FROM FORM ITD-606 (SUBMITTED FOR CHANGE ONLY)

Approved by Assistant Chief Engineer (Dev.): N/A
Date

PROJECT NO.	LOCATION	TYPE OF CONTROL
A024(229)	M.P. 4.006 – M.P. 4.507	LOCAL

DESCRIPTION OF CONTROL TYPE:

NOTES

Materials For This Project Shall Be Obtained From Approved Contractor Furnished Sources.

Class A Compaction is Specified.

Apply Tack Coat To Concrete And Asphalt Surfaces That New Pavement Will Abut.

ESTIMATION BASIS

Tack: CSS-1 (50% Dilute) For Tack On New HMA Estimated @ 0.08 gal/sy
CSS-1 (50% Dilute) For Tack On Old HMA Estimated @ 0.18 gal/sy
(All Tack Is Incidental To Paving)

Paving: PG 64-28 Asphalt Cement For Class SP-3 Superpave Plantmix At 5.6% By Weight Of Mix And 0.5% Anit-Strip By Weight of Asphalt

Aggregates: 1/2" Aggregate For SP-3 Estimated @ 145 lbs/cf Superpave Plantmix Pavement Including Asphalt And Additive.

3/4" Aggregate Type B For Base Estimated @ 135 lbs/cf Including 7.0% Water

Granular Subbase Estimated @ 135 lbs/cf

Smoothness: 10' Straight Edge

* LPA PROJECTS – Date entered by Roadway Design when project sent to P.S. & E.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT
DESIGN CHECKED W.J. BARTON		PARAGON CONSULTING, INC.
DETAILED J. JONES	CADD FILE NAME Middleton Summary Sheets.dwg	
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025	

PROJECT NO.	PROJECT CLEARANCE SUMMARY
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 4 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

LEGEND

EXISTING	PROPOSED	
F/O		FIBER OPTIC
G		GAS
W		WATER
SS		SANITARY SEWER
IRR	IRR	IRRIGATION
C	C	ELECTRICAL CONDUIT
OHP		OVERHEAD POWER
OHP/C		OVERHEAD POWER & COMMUNICATIONS
UGP		UNDERGROUND POWER
T		UNDERGROUND TELEPHONE
SD	SD	STORM DRAIN PIPE
		DAYLIGHT CUT SLOPE
		DAYLIGHT FILL SLOPE
		EDGE OF SHOULDER
		EDGE OF PAVEMENT
P/L		PROPERTY LINE
T/E		TEMPORARY EASEMENT
P/E		PERMANENT EASEMENT
	10+00	CENTER LINE & STATIONING
	SAW	SAWCUT LINE
		VERTICAL CURB & GUTTER
		ROLLED CURB & GUTTER
TB		TOP OF BANK
TOE		TOE OF SLOPE
GB		GRADE BREAK
X		FENCE BARBWIRE
□	□	FENCE CEDAR
⊠	⊠	FENCE VINYL
		FENCE ROD IRON
	XX	FENCE MESH WIRE
		POWER POLE
		FIRE HYDRANT
	⊠	UTILITY BOX
		MAIL BOX
		TREE
		SIGN
		MANHOLE
	MW	MONITORING WELL
WV	WV	WATER VALVE
IR		IRRIGATION VALVE
		CATCH BASIN
		SPRINKLER HEAD
SCO		SANITARY CLEAN OUT
		LUMINAIRE
		BRASS OR ALUMINUM CAP MONUMENT
		5/8" IRON PIN
		TEMPORARY BENCH MARK
		BMP INLET PROTECTION
		BMP PERIMETER PROTECTION

DEMOLITION GENERAL NOTES

1. *Stationing Locations For Existing Concrete Removal And Construction Is Approximate. Contractor Shall Remove Indicated Areas At Existing Concrete Construction Joints.*
2. *All Curb And Gutter Stations And Offsets Are To Top Back Curb Unless Otherwise Noted.*
3. *Contractor Shall Saw-Cut A Neat And Straight Line At All Match Points.*
4. *Approximate Locations Of Some Known Existing Underground Utilities Are Shown Hereon. Contact The Appropriate Utility Company To Determine Exact Locations Of All Existing Utilities Prior To Beginning Work. Call Dig Line At (208) 342-1585.*
5. *Contractor Shall Repair Sprinkler Systems Damaged Or Removed Due To Construction Activities. Payment Shall Be Under Item CONTINGENCY AMOUNT-LANDSCAPE / SOD / SURFACE / SPRINKLER SYSTEM.*
6. *Contractor Shall Restore All Landscaping To "Equal To" Or "Better Than" The Existing Condition Before Construction Activities. Contractor Shall Record Existing Landscape Condition Before And After Construction For Final Approval By The Engineer.*

IMPROVEMENTS GENERAL NOTES

1. *Stationing Locations For Existing Concrete Removal And Construction Is Approximate. Contractor Shall Remove Indicated Areas At Existing Concrete Construction Joints.*
2. *Contractor Shall Saw-Cut A Neat And Straight Line At All Match Points.*
3. *Contractor Shall Match Into All Existing Hard Surface Elevations.*
4. *Approximate Locations Of Some Known Existing Underground Utilities Are Shown Hereon. Contact The Appropriate Utility Company To Determine Exact Locations Of All Existing Utilities Prior To Beginning Work. Call Dig Line At (208) 342-1585.*
5. *Contractor Shall Expose All Utilities Potentially Impacted By Pole Foundation Construction Or Junction Box Installation And Coordinate With The Engineer Prior To Any Adjustments To The Design Location Of Poles And Junction Boxes.*
6. *Contractor Shall Repair Sprinkler Systems Damaged Or Removed Due To Construction Activities. Payment Shall Be Under Item CONTINGENCY AMOUNT-LANDSCAPE / SOD / SURFACE / SPRINKLER SYSTEM.*
7. *Subsequent To Construction Activities, Contractor Shall Install Sod Or Other Appropriate Landscaping In All Disturbed Or Damaged Areas Or As Directed By The Engineer.*
8. *Contractor Shall Restore All Landscaping To "Equal To" Or "Better Than" The Existing Condition Before Construction Activities. Contractor Shall Record Existing Landscape Condition Before And After Construction For Final Approval By The Engineer.*
9. *All Slopes Shown Are At Curb Flow Line Or Back Of Walk Grade.*

ILLUMINATION GENERAL NOTES

1. *Contractor Shall Verify And Check All Dimensions And Details Shown On The Drawings Prior To The Start Of Construction. Contractor Shall Bring Any Discrepancies To The Attention Of The Engineer For Clarification.*
2. *The Location Of Existing Utilities Are Approximate. Contractor Will Field Verify The Exact Utility Locations Before Construction Begins. Contractor Shall Bring Any Conflicts To The Attention Of The Engineer.*
3. *Refer To The City Of Nampa Division 1100 Traffic Specifications And Standard Drawings (Included In The Contract Special Provisions) For All Applicable Installations On This Project.*
4. *All Materials And Equipment Needed To Construct This Project Must Be Approved By The Engineer.*
5. *Contractor Shall Coordinate With The Engineer For An On-Ground Illumination Fixture Pre-Inspection Before Standing Any Lighting Fixture Structure. (Aerial Illumination Fixture Inspections Are Not Practical).*
6. *All Street Lights Shall Have 25-Foot Luminaire Arms.*

INTERCONNECT & LIGHTING GENERAL NOTES

1. *Each Junction Box Cluster Shall Include One S-40T ADA Junction Box For Electrical And One S-45T ADA Junction Box With Riser For Fiber Optic Communications Unless Otherwise Noted. Both Junction Boxes Will Have A 6" Concrete Apron As Shown On City Of Nampa Standard Drawing N-1105B.*
2. *Conduits Between Junction Box Clusters Shall Include Two 2" RPC Conduits Ran Between Communication Junction Boxes And Two 2" RPC Conduits Ran Between Electrical Junction Boxes.*
3. *Contractor Shall Repair And/or Replace All Sod And Sprinkler Systems Damaged Due To Conduit And Junction Box Work. Repairs Shall Be Paid Under Their Respective Items.*
4. *Stationing For ADA Junction Box Pairs Are Approximate. Place Apron And ADA Junction Box Pairs At Back Of Curb When Location Has No Sidewalk Or A Detached Sidewalk. Place At Back Of Sidewalk If Location Has Sidewalk Attached To Curb.*
5. *All Work Associated With Tying Into Existing Junction Boxes Is Incidental To Conduit Item.*
6. *See Section 1101.06.F. Fiber Optic Interconnect Cable In The City Of Nampa Specifications And The Special Provisions For Fiber Optic Requirements.*

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME Middleton Summary Sheets.dwg

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

LEGEND & GENERAL NOTES

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 5 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

PAVEMENT MARKING GENERAL NOTES

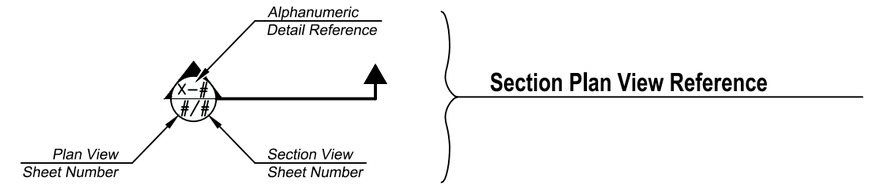
1. *Broken (Skip) Stripe Shall Be 12' Solid Line Followed By 38' Gap.*
2. *Dotted Stripe Shall Be 3' Solid Line Followed By 9' Gap.*
3. *All Dimensions Are To Edge Of Pavement, Lip Of Gutter Or Center Of Stripe(s).*
4. *All Stop Bars Are 2' In Width.*

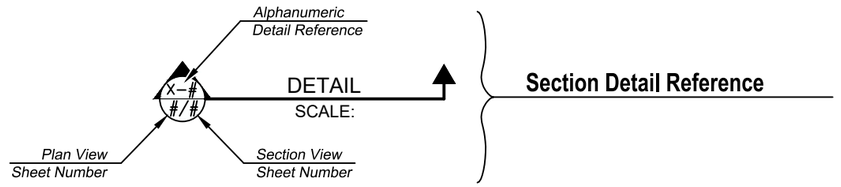
CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. *Contractor Shall Maintain Continuous Access To The Private And Commercial Properties Adjacent To The Construction Zone. Coordination With Property Owner(s) Is Required.*
2. *Contractor Shall Arrange Tubular Markers For Lane Shifts To Match Receiving Approach As Close As Possible To Minimize Traffic Shifting Across Intersections.*
3. *Contractor Shall Arrange All Lane Merging Transitions With a 20:1 Taper And All Shifting Tapers With No Merge With A Minimum Of 10:1 Taper.*
4. *All Tapers Shall Be Delineated With Traffic Control Drums Spaced At 20 ft Min.*
5. *Contractor To Provide Appropriate Moving Traffic Control During The Painted Pavement Marking Operation. Incidental To Item LONGITUDINAL PAVEMENT MARKING - WATERBORNE.*

SWPPP GENERAL NOTES

1. *Additional Sediment Control Measures May Be Required Beyond What Is Shown. All Additional Sediment Control BMP's Shall Be Considered Incidental.*





REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

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CADD FILE NAME Middleton Summary Sheets.dwg

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

LEGEND & GENERAL NOTES

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

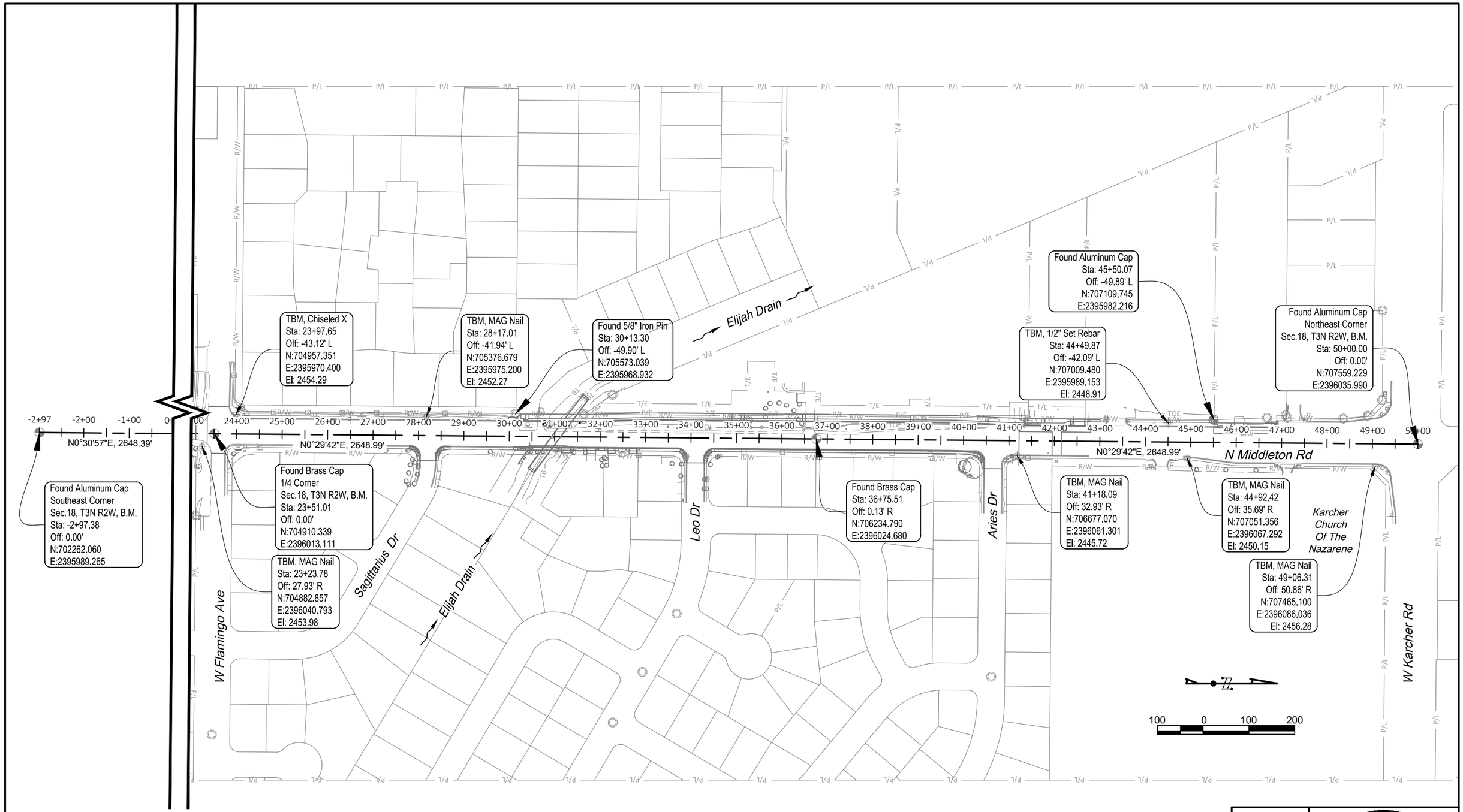
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 6 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

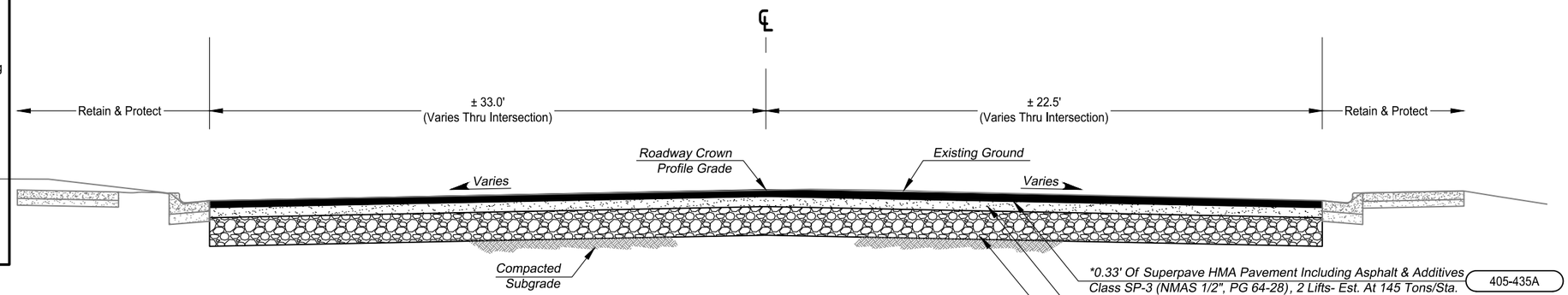
SURVEY CONTROL
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON
KEY NUMBER 24229
SHEET 7 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

301-005A	Granular Subbase
303-022A	3/4" Aggregate Type B for Base
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28)
612-005A	W-Beam Guardrail
614-015A	Sidewalk (Thickness 5")
615-492A	Curb & Gutter Type 2
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

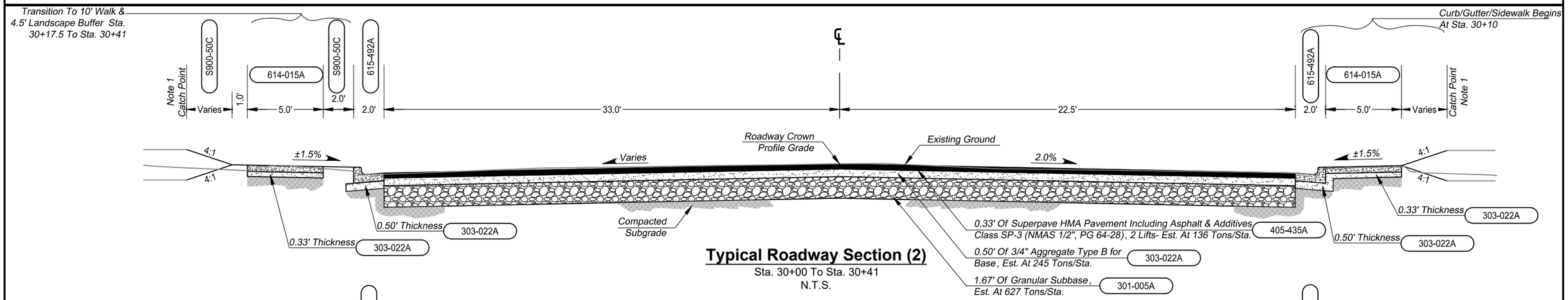


Typical Roadway Section (1)

*Sta. 23+10 To Sta. 30+00
N.T.S.
* STA 23+10 To STA 23+35 Paving Only (No Excavation or Granular Subbase)- See Note 2

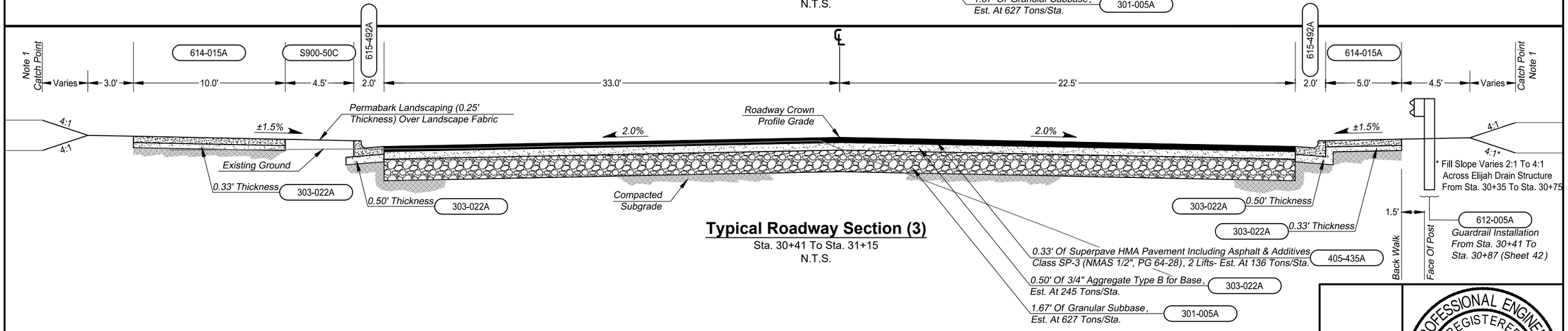
NOTES

1. See Sheets 19 Through 29 For Right-Of-Way And Easement Locations.
2. Contractor Shall Remove Existing Pavement, Regrade Existing Base Gravel Supplemented With $\frac{3}{4}$" Aggregate Type B For Base As Necessary To Shape Area To The Finished Grade And Proof Roll In The Presence Of The Engineer Prior To Paving.



Typical Roadway Section (2)

Sta. 30+00 To Sta. 30+41
N.T.S.



Typical Roadway Section (3)

Sta. 30+41 To Sta. 31+15
N.T.S.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

TYPICAL SECTIONS & DETAILS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

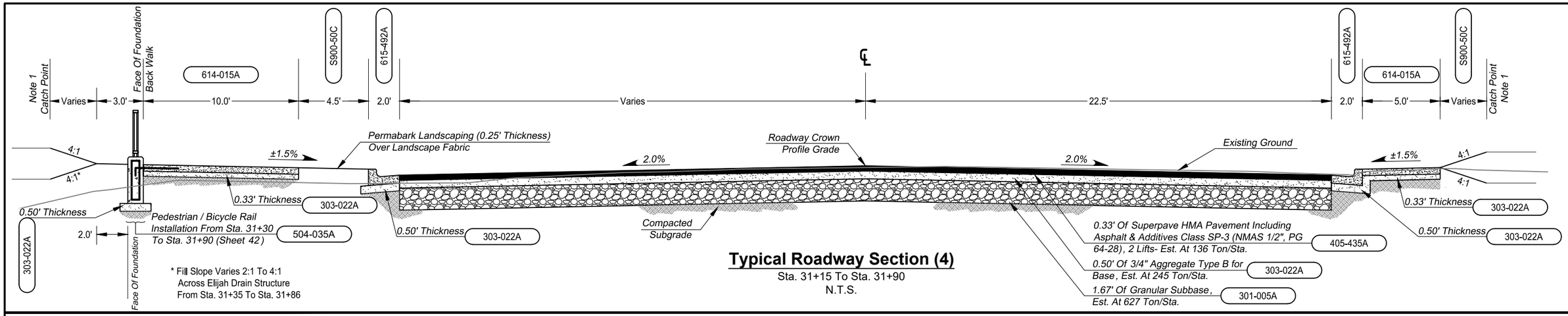
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 8 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



Typical Roadway Section (4)

Sta. 31+15 To Sta. 31+90
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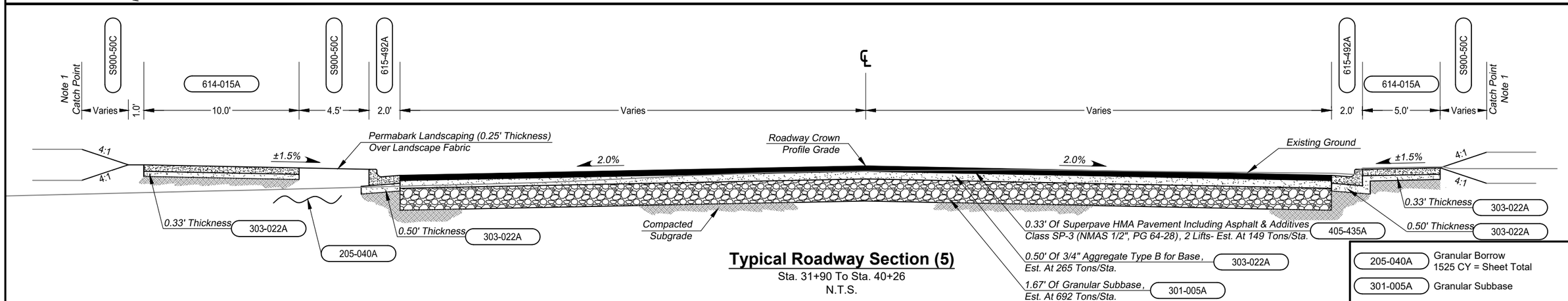
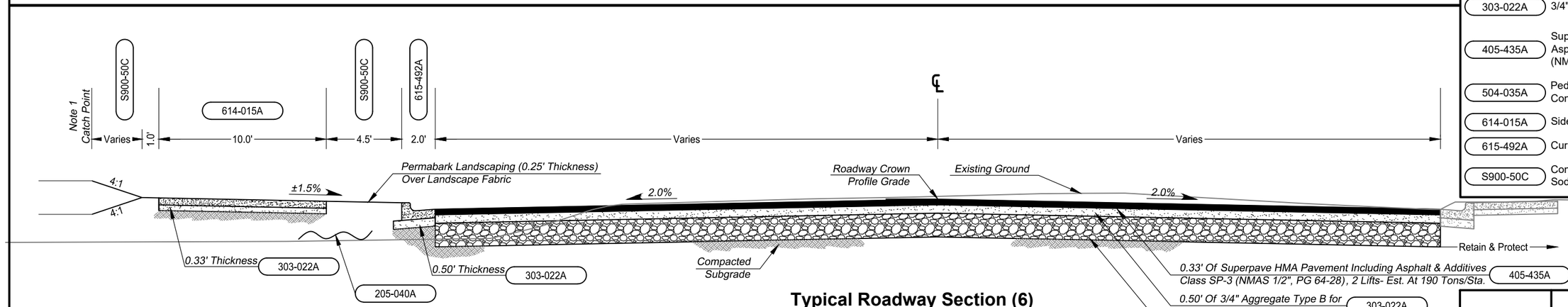


Typical Roadway Section (5)

Sta. 31+90 To Sta. 40+26
N.T.S.



Typical Roadway Section (6)

Sta. 40+26 To Sta. 41+22
N.T.S.

205-040A	Granular Borrow 1525 CY = Sheet Total
301-005A	Granular Subbase
303-022A	3/4" Aggregate Type B for Base
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28)
504-035A	Pedestrian / Bicycle Railing (Including Concrete & Reinforcement)
614-015A	Sidewalk (Thickness 5")
615-492A	Curb & Gutter Type 2
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheets 19 Through 29 For Right-Of-Way And Easement Locations.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

TYPICAL SECTIONS & DETAILS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

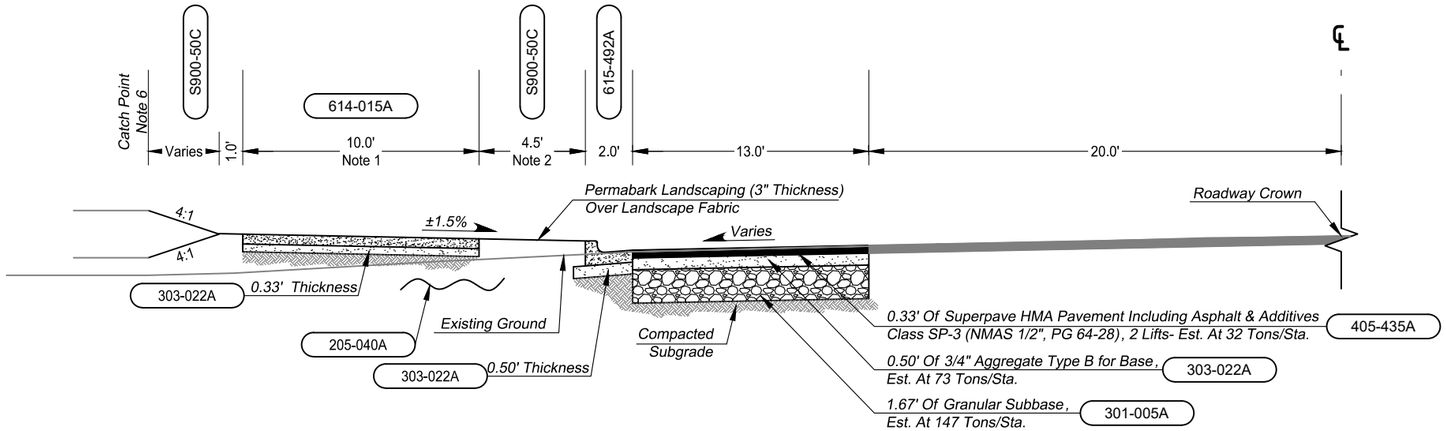
English

COUNTY CANYON

KEY NUMBER 24229

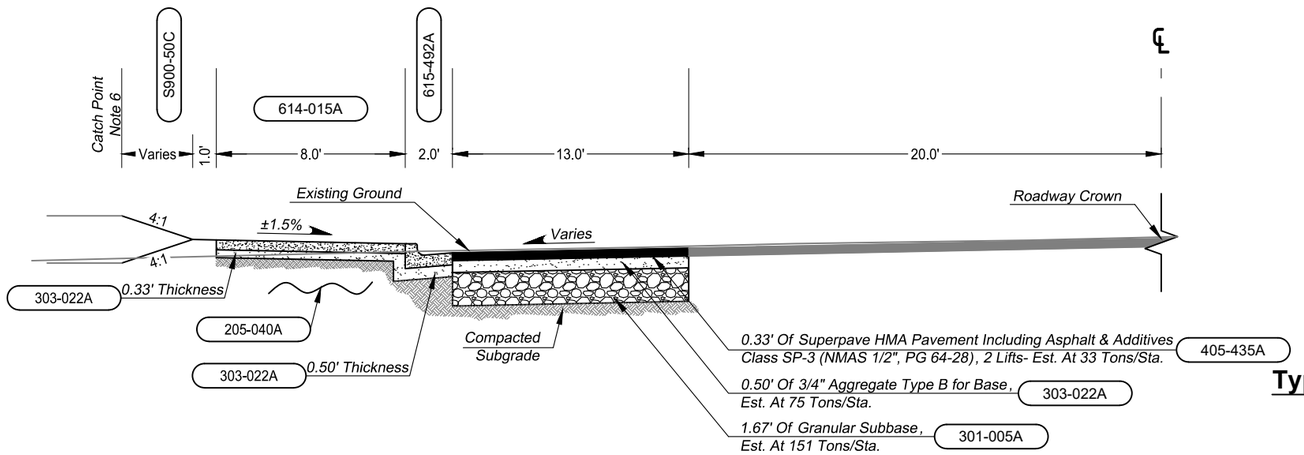
SHEET 9 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



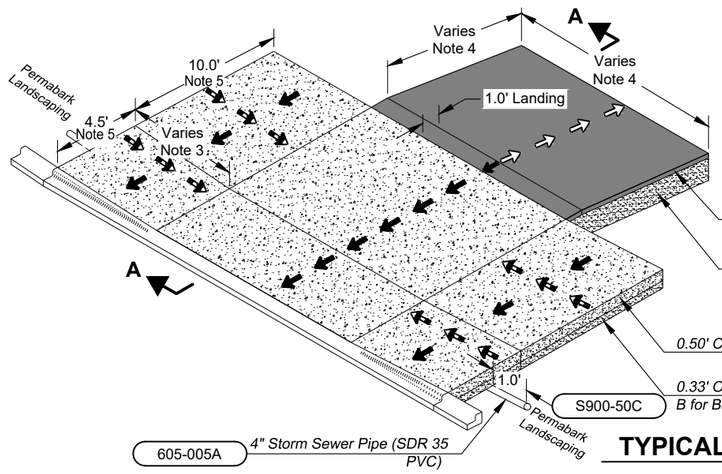
Typical Roadway Section (7)

Sta. 41+22 To Sta. 42+80
N.T.S.



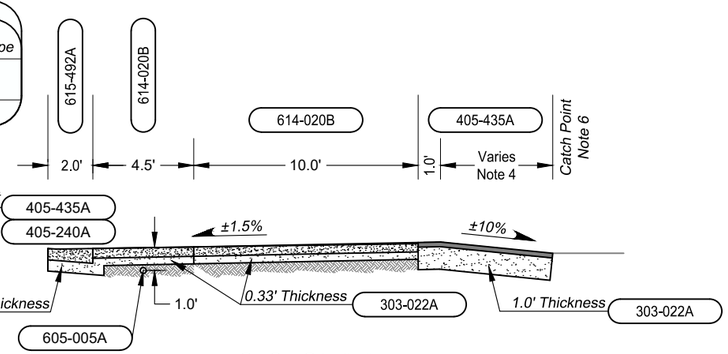
Typical Roadway Section (8)

Sta. 45+50 To Sta. 46+92
N.T.S.



SLOPE LEGEND

1.5% ± 0.5%	Design 1.5% ADA Sidewalk Cross Slope
5.0% To 8.3% Running Slope	ADA Drop Ramp
10%	Asphalt Approach



SECTION A-A
N.T.S.

TYPICAL DRIVEWAY (COMBINATION)

N.T.S.

614-020B

205-040A	Granular Borrow 215 CY = Sheet Total
301-005A	Granular Subbase
303-022A	3/4" Aggregate Type B for Base
405-240A	Miscellaneous Pavement
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28)
605-005A	4" Storm Sewer Pipe (SDR 35 PVC)
614-015A	Sidewalk (Thickness 5")
614-020B	Driveway (Combination)
615-492A	Curb & Gutter Type 2
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. 5' from Sta 42+30 to Sta 42+80.
2. 8' from Sta 42+30 to Sta 42+80.
3. See respective plan sheet for flare lengths.
4. See respective plan sheet for approach length & width.
5. Permabark landscaping width to be 8' & concrete width to be 5' for approach @ Sta 42+54 Lt.
6. See Sheets 19 Through 29 For Right-Of-Way And Easement Locations.

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
DESIGN CHECKED W.J. BARTON	
DETAILED J. JONES	CADD FILE NAME MIDDLETON.DWG
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.	TYPICAL SECTIONS & DETAILS
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

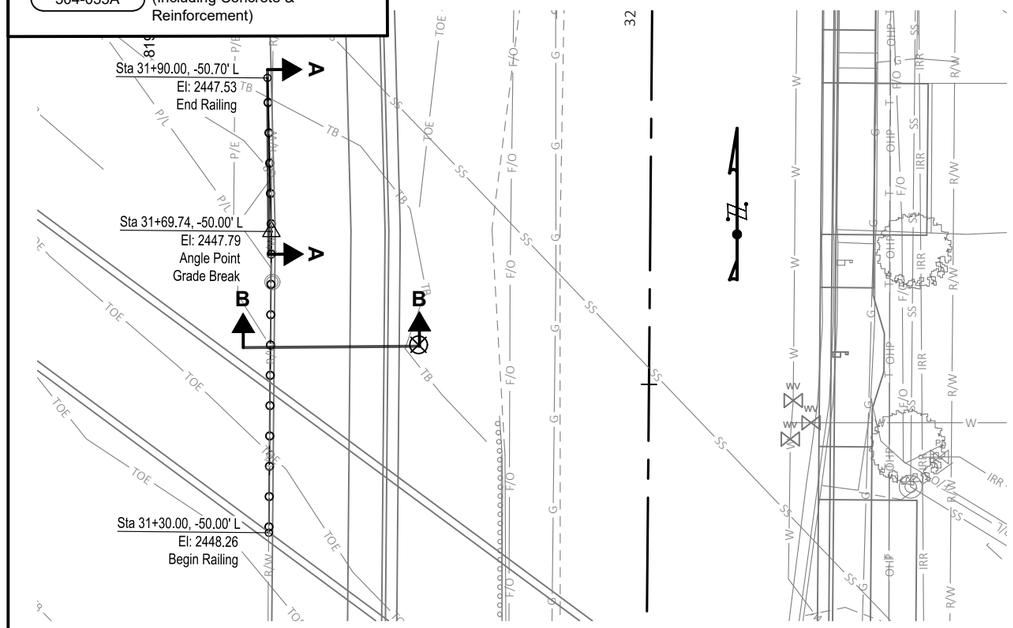
COUNTY CANYON

KEY NUMBER 24229

SHEET 10 OF 70

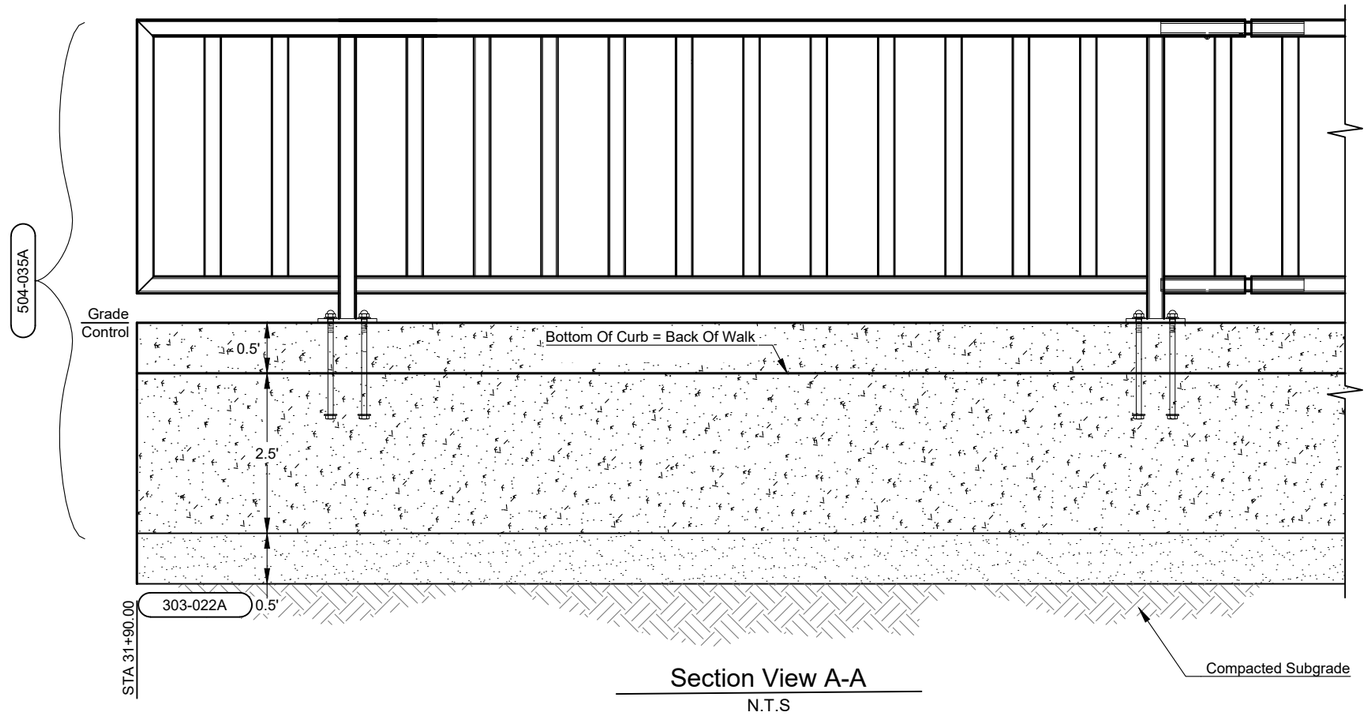
303-022A 3/4" Aggregate Type B for Base

504-035A Pedestrian / Bicycle Railing (Including Concrete & Reinforcement)



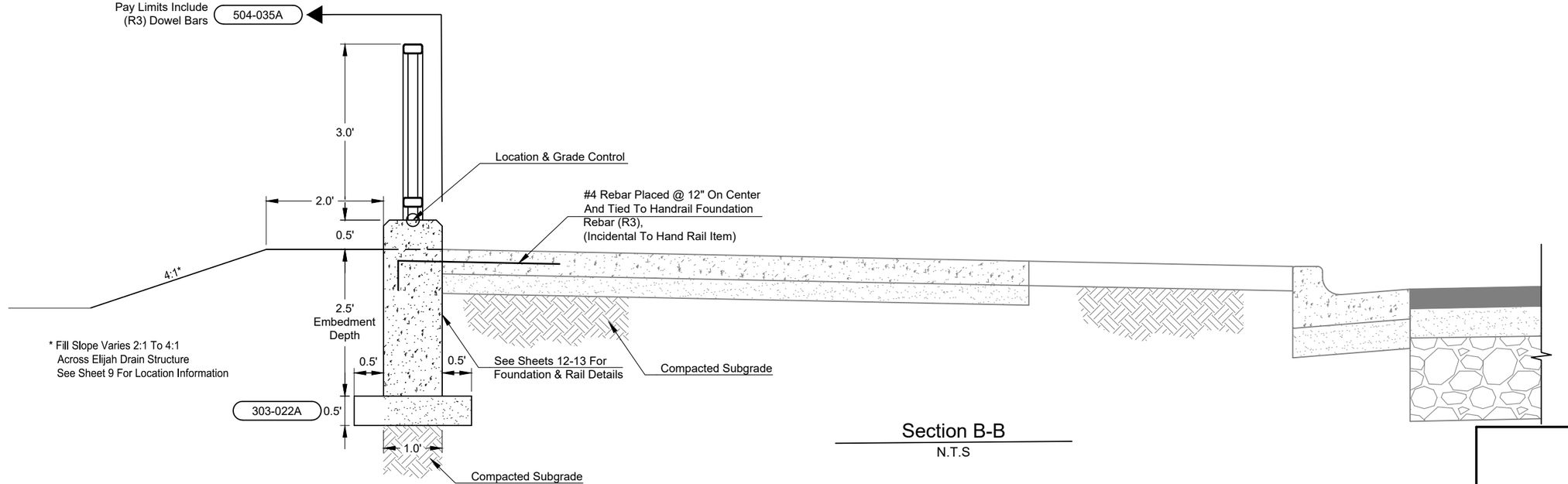
Plan View At Pedestrian/Bicycle Railing

1" = 20'



Section View A-A

N.T.S



Section B-B

N.T.S

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	W.J. BARTON
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PEDESTRIAN / BICYCLE RAILING DETAILS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

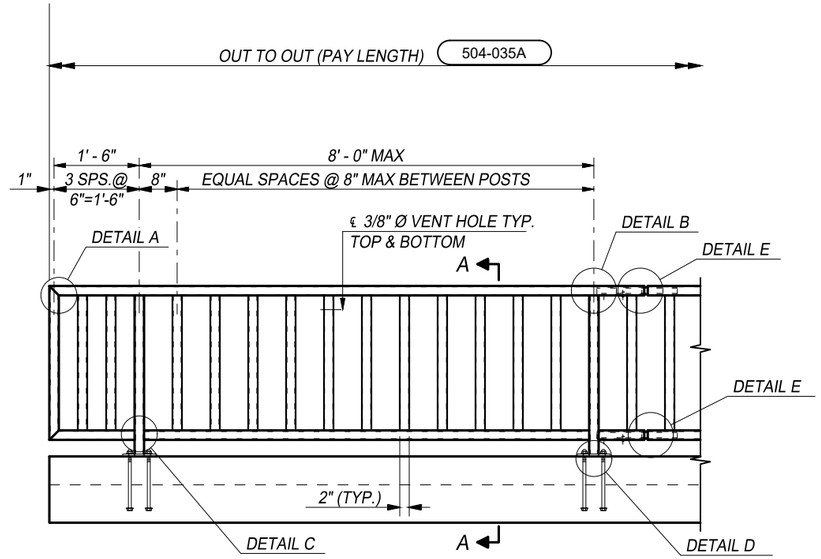
KEY NUMBER 24229

SHEET 11 OF 70

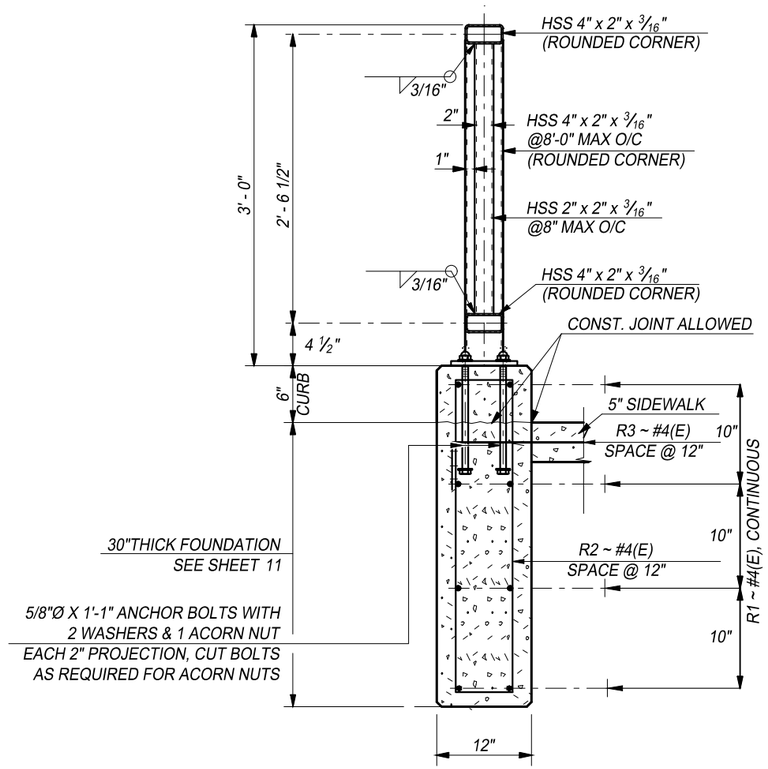
PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

504-035A Pedestrian / Bicycle Railing (Including Concrete & Reinforcement)

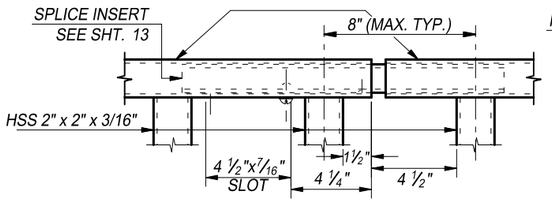
MODIFIED FROM ITD BRIDGE LRFD MANUAL



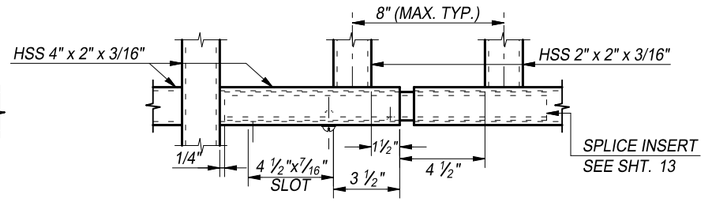
PARTIAL ELEVATION
N.T.S.



SECTION A-A
N.T.S.

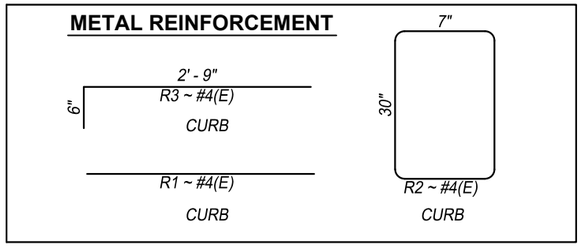


UPPER SPLICE CONNECTION ELEVATION
N.T.S.



LOWER SPLICE CONNECTION ELEVATION
N.T.S.

METAL REINFORCEMENT



2.5" MINIMUM CLEARANCE BETWEEN EDGE OF CONCRETE AND METAL REINFORCEMENT IS REQUIRED.

NOTES:
1. SEE SHT. 13 FOR ALL DETAILS, NOTES AND REINFORCEMENT DETAILS.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	W.J. BARTON
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.	PEDESTRIAN / BICYCLE RAILING DETAILS
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

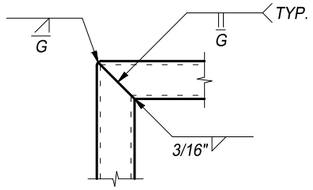
COUNTY CANYON

KEY NUMBER 24229

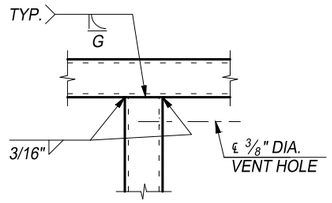
SHEET 12 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

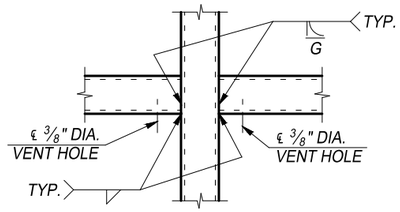
MODIFIED FROM ITD BRIDGE LRFD MANUAL



DETAIL A
N.T.S.



DETAIL B
N.T.S.



DETAIL C
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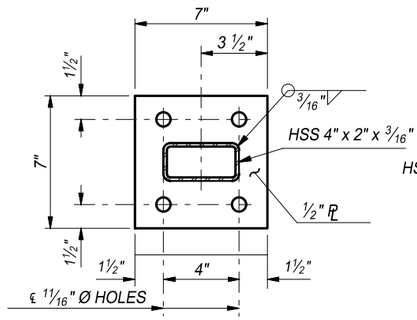

DETAIL D
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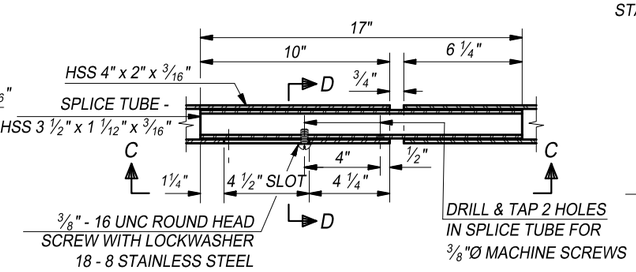

DETAIL E
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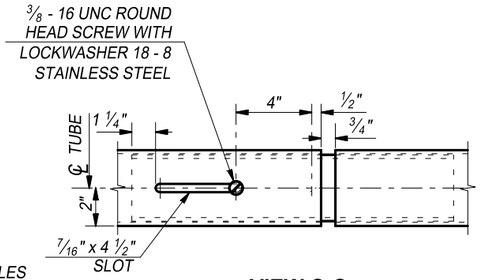
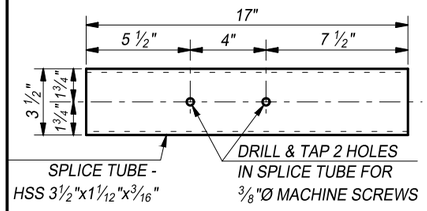
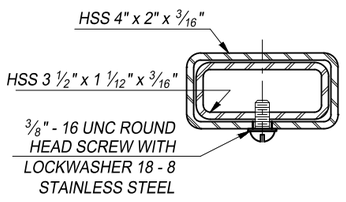


VIEW C-C
N.T.S.



SPLICE INSERT DETAILS
N.T.S.



SECTION D-D
N.T.S.

NOTES

MATERIALS

1. STRUCTURAL STEEL PLATES & SLEEVES SHALL CONFORM WITH ASTM A709 GRADE 36
2. STRUCTURAL STEEL TUBING SHALL CONFORM WITH ASTM A500, GRADE B OR ASTM A501.
3. BOLT, ACORN NUTS, AND WASHERS SHALL CONFORM WITH ASTM A307.
4. HEXAGONAL BOLTS AND NUTS SHALL CONFORM WITH ANSI B18.2.1 AND B18.2.2.
5. ROUND HEAD MACHINE SCREWS SHALL CONFORM WITH ANSI B18.6.3.
6. ALL METAL REINFORCEMENT SHALL BE EPOXY COATED
7. CONCRETE FOR CURB AND DRILLED POST HOLE SHALL BE CONCRETE CLASS 40A.

GALVANIZIING / POWDER COATING

8. ALL STEEL PARTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 AND ASTM A385.
9. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
10. ALL WELDED AREAS SHALL BE THOROUGHLY CLEANED PRIOR TO GALVANIZING TO REMOVE ALL SLAG OR OTHER MATERIAL THAT WOULD INTERFERE WITH THE ADHERENCE OF THE ZINC.
11. ALL GALVANIZED SURFACES SHALL BE FREE OF FINS, ABRASIONS, ROUGH OR SHARP EDGES, OR OTHER SURFACE DEFECTS.
12. THE RAILING SYSTEM SHALL BE POWDER COATED AFTER GALVANIZING WITH A MINIMUM THICKNESS OF 3 MILS. THE COLOR SHALL BE RAL 9005 (JET BLACK). A COLOR SAMPLE SHALL BE SUBMITTED FOR APPROVAL.
13. POWDER COATING SHOP PROCEDURES FOR PREPARATION OF THE GALVANIZED SURFACES AND AND APPLICATION PROCESS OF THE POWDER COATING SHALL BE SUBMITTED FOR APPROVAL.
14. SCRATCHES, PITS, AND OTHER DEFECTS SHALL BE REPAIRED IN ACCORDANCE WITH THE POWDER COATING MANUFACTURER'S WRITTEN INSTRUCTIONS.

FABRICATION AND ERECTION

15. FABRICATION AND ERECTION OF THE RAILING SHALL CONFORM WITH THE CURRENT EDITION OF AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES AND ITD STANDARD SPECIFICATIONS.
16. THE RAILING SHALL BE FABRICATED IN A PLANT EXPERIENCED IN PRODUCING RAILINGS AND ARCHITECTURAL METAL WORK AND SHALL BE ERECTED BY SKILLED WORKMEN EXPERIENCED IN THIS TYPE OF WORK.
17. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND SHALL INCLUDE COMPLETE DIMENSIONS AND DETAILS OF FABRICATION INCLUDING AN ERECTION DIAGRAM. MATERIALS BEING USED SHALL BE CLEARLY SPECIFIED. BEFORE PROJECT COMPLETION, THE CONTRACTOR SHALL FURNISH THE ENGINEER AS-BUILT SHOP DRAWINGS.
18. ALL POSTS AND BALUSTERS SHALL BE PLUMB.
19. ALL ENDS OF TUBE SECTIONS AT SPLICES SHALL BE SAWED OR MILLED. CUT ENDS SHALL BE TRUE, SMOOTH AND FREE FROM BURRS OR RAGGED EDGES.
20. VENT HOLES FOR GALVANIZING SHALL BE PROVIDED AS REQUIRED AND SHOWN ON THE SHOP DRAWINGS. VENT HOLES SHALL BE DRILLED AWAY FROM TRAFFIC FACE AND NOT ON THE TOP SURFACE OF THE HORIZONTAL TUBES.
21. EACH RAIL SECTION SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS, BUT PREFERABLY THREE OR MORE. RAILING SYSTEM SHALL BE CONTINUOUS. EACH JOINT IN A RAIL LENGTH SHALL BE LOCATED AT THE SAME POSITION IN THE SECTION AND SHALL BE SPLICED AS DETAILED.
22. ALTERNATE SPLICE DETAILS MAY BE SUBMITTED FOR APPROVAL ON THE SHOP DRAWINGS.

METHOD OF MEASUREMENT

23. PEDESTRIAN/BICYCLE RAILING WILL BE MEASURED BY THE LINEAR FOOT, COMPLETE IN PLACE. THIS INCLUDES ALL STEEL MATERIALS, METAL REINFORCEMENT, FABRICATION, CONCRETE AND INSTALLATION. AGGREGATE BASE WILL BE PAID UNDER 3/4" AGGREGATE TYPE B FOR BASE.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED W.J. BARTON
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PEDESTRIAN / BICYCLE RAILING DETAILS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 13 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

SHEET NUMBER				19	20	21	22	23	24	25	26	27	28	29	50
STATION – STATION				23+10–25+20	25+20–27+60	27+60–29+90	29+90–32+30	32+30–34+70	34+70–37+10	37+10–39+50	39+50–41+70	41+70–44+10	44+10–46+50	46+50–46+92	34+70–37+10
ITEM NO.	ITEM	UNIT	TOTAL												
202–005A	Selective Removal of Trees Including Stumps	EACH	4						4						
203–010A	Asbestos Removal and Disposal (Domestic Water Pipe Insullation)	CA	10,000												
203–025A	Removal of Catch Basin	EACH	3				2				1				
203–050A	Removal of Concrete Headwall	EACH	1								1				
203–060A	Removal of Concrete Sidewalk	SY	620	6		44	97	130	131	131	66	12	3		
203–070A	Removal of Curb & Gutter	FT	1179	10	10	108	172	245	240	240	130	24			
203–075A	Removal of Fence (Type & Size Varies)	FT	970			13		10	304	460	183				
203–122A	Removal of Miscellaneous Items (Gate, Posts & Foundations)	EACH	1								1				
203–123A	Removal of Miscellaneous Items (12" Pipe)	FT	140				21		30		24		65		
203–123B	Removal of Miscellaneous Items (24" Pipe)	FT	19				19								
203–123C	Removal of Miscellaneous Items (±6" Pressure Irrigation Pipe & Aerial Support Structure)	FT	78				78								
203–123D	Removal of Miscellaneous Items (12" Domestic Water Pipe & Aerial Support Structure)	FT	119				119								
LOCAL PARTICIPATION WORK BY CONTRACT															
202–005A	Selective Removal of Trees Including Stumps	EACH	6												6

ALL MATERIALS SHALL MEET BUILD AMERICA BUY AMERICA (BABA), AS APPLICABLE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME Middleton Summary Sheets.dwg

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

ROADWAY SUMMARY

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 14 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

SHEET NUMBER				31	32	34	36								
STATION – STATION				23+10–25+20	25+20–32+40	32+40–39+60	39+60–46+92								
ITEM NO.	ITEM	UNIT	TOTAL												
604–005A	4" Irrigation Pipe (PVC, Class 200 PSI)	FT	50		50										
605–025A	12" Storm Sewer Pipe (SDR 35 PVC)	FT	238			201	37								
605–045A	24" Storm Sewer Pipe (14 Gage Corrugated Aluminized Steel)	FT	90		90										
605–055A	30" Storm Sewer Pipe (Class IV Reinforced Concrete)	FT	20				20								
605–205A	4" Sanitary Sewer Pipe (SDR 35 PVC)	FT	65				65								
605–455A	Manhole Type A	EACH	1		1										
605–460A	Manhole Type B	EACH	1			1									
605–467A	Manhole Type D	EACH	1				1								
605–470A	Sediment & Oil Trap Manhole (1,000 Gallon)	EACH	3			2	1								
605–535A	Catch Basin Type 5	EACH	7		1	4	2								
605–635A	Adjust Manhole Covers	EACH	7	2	2	1	2								
605–640A	Adjust Valve Covers (Provide New Valve Can & Cover)	EACH	8	6		1	1								
606–025A	12" Pipe Underdrain (Perforated SDR 35 PVC)	FT	134			96	38								
640–005A	Drainage Geotextile	SY	606			439	167								
S600–30A	Water Valve – Size 6"	EACH	2		1		1								
S600–30B	Water Valve – Size 8"	EACH	1			1									
S600–30C	Water Valve – Size 12"	EACH	9	3	4	1	1								
S600–30D	Water Service Connection, Size 1"	EACH	4			3	1								
S600–30E	Water Main Fitting, Size Varies (See Plans), Tee	EACH	5	1	2	1	1								
S600–30F	1" Diameter Pressure Irrigation Service	EACH	2			1	1								
S600–30G	1.5" Pressure Irrigation Drain	EACH	1		1										
S600–45A	Water Line (12", C–900, 165 PSI Domestic)	FT	113		113										
S600–45B	Water Line (8", D–2241, 200 PSI Pressure Irrigation)	FT	78		78										
S900–10A	Cleanout (4" Sewer)	EACH	1				1								
S900–50A	Contingency Amount – Miscellaneous Work	CA	100000												
S900–50B	Contingency Amount – Unidentified Utilities	CA	5000												
S901–05A	SP–Groundwater Observation Well	EACH	6			4	2								
S901–05B	SP–Street Light, Type Large Wattage, 35' Mounting Height	EACH	9		4	3	2								
S901–05C	Junction Box & Apron (S–40T)	EACH	13		6	5	2								
S901–05D	SP–Junction Box & Apron (S–45T & Riser)	EACH	5		2	2	1								
S901–05E	SP–Miscellaneous Utility, Adjust to Grade SS Cleanout (Traffic Rated)	EACH	3				3								
S901–05F	SP–Miscellaneous Utility, Adjust to Grade Electrical Box	EACH	2				2								
S911–05A	SP–72 CT Fiber Optic Interconnect Cable	FT	3142	224	780	770	1368								
S911–05B	SP–Wire Conductor, Type #6 THWN	FT	7722	372	2217	1545	3588								
S911–05C	SP–Conduit, Size 2"	FT	7426	372	2910	2880	1264								
S911–05D	SP–Wire Conductor, Type #10 TWHN	FT	1623		678	513	432								
S911–05E	SP – 16" Steel Casing Pipe	FT	60		60										
S911–05F	SP – 20" Steel Casing Pipe	FT	60		60										
S913–05A	SP–3" Drain Rock	CY	395			291	104								
S913–05B	SP–Filter Sand	CY	168			124	44								

ALL MATERIALS SHALL MEET BUILD AMERICA BUY AMERICA (BABA), AS APPLICABLE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

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IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

ROADWAY SUMMARY
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 15 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

SHEET NUMBER				39	40	41	42	43	44	45	46	47	48	49	50
STATION – STATION				23+10–25+20	25+20–27+60	27+60–29+90	29+90–32+30	32+30–34+70	34+70–37+10	37+10–39+50	39+50–41+70	41+70–44+10	44+10–46+50	46+50–46+92	34+70–37+10
ITEM NO.	ITEM	UNIT	TOTAL												
107–019A	Survey Monument Preservation	CA	10000												
205–005A	Excavation	CY	9900												
205–040A	Granular Borrow	CY	1740												
301–005A	Granular Subbase	TON	12900												
303–022A	3/4" Aggregate Type B for Base	TON	4720				8		27	35	29	28	9		
405–240A	Miscellaneous Pavement	SY	219				13		44	55	46	45	16		
405–435A	Superpave HMA Pavement Including Asphalt & Additives Class SP–3 (NMAS 1/2", PG 64–28)	TON	2830				2		6	7	6	31	2		
504–035A	Pedestrian / Bicycle Railing (Including Concrete & Reinforcement)	FT	60				60								
605–005A	4" Storm Sewer Pipe (SDR 35 PVC)	FT	194						72	36	46	40			
610–005A	Fence A (Type 3' Cedar)	FT	15					10	5						
610–005B	Fence B (Type 6' Cedar)	FT	442						225	217					
610–030A	Fence Type 3 B (48" Mesh and No Barbed Wire)	FT	402						37	216	149				
610–101A	Gate Type 1A (Double Swing Farm)	EACH	1							1					
612–005A	W–Beam Guardrail	FT	83				83								
612–080A	Guardrail Terminal Type 7	EACH	1				1								
612–085A	Guardrail Terminal Type 8	EACH	1				1								
612–110A	Guardrail Anchor	EACH	1				1								
614–015A	Sidewalk (Thickness 5")	SY	1779	9		25	283	356	323	362	264	73	59	25	
614–020A	Driveway (Dipped Sidewalk)	SY	153				95	28					30		
614–020B	Driveway (Combination)	SY	291						110	55	71	55			
614–025A	Curb Ramp (Perpendicular)	SY	7											7	
614–025B	Curb Ramp (Combination)	SY	127			33	49	30			15				
615–492A	Curb & Gutter Type 2	FT	2630	10	10	109	450	485	480	480	348	110	100	48	
634–005A	Mailbox	EACH	5				1	1	1			1	1		
675–005A	Survey	LS	1												
677–005A	Record Drawings	LS	1												
S900–50C	Contingency Amount–Landscape / Sod / Surface / Sprinkler System	CA	30000												
Z629–05A	Mobilization	LS	1												
	LOCAL PARTICIPATION WORK BY CONTRACT														
205–005A	Excavation	CY	90												90
303–022A	3/4" Aggregate Type B for Base	TON	161												161
405–240A	Miscellaneous Pavement	SY	255												255
405–435A	Superpave HMA Pavement Including Asphalt & Additives Class SP–3 (NMAS 1/2", PG 64–28)	TON	35												35
605–005A	4" Storm Sewer Pipe (SDR 35 PVC)	FT	14												14
S900–50C	Contingency Amount–Landscape / Sod / Surface / Sprinkler System	CA	15000												

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IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

ROADWAY SUMMARY
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 16 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

SHEET NUMBER				57	58	59	60	69	70					
STATION – STATION				23+10–25+20	25+20–32+40	32+40–39+60	39+60–46+92		23+10 – 46+92					
ITEM NO.	ITEM	UNIT	TOTAL											
203–006A	Removal of Sign	EACH	3	1	1	1								
203–130B	Removal of Pavement Markings	SF	90				90							
212–011A	Fiber Wattle	FT	2148						2148					
212–060A	Stabilized Construction Entrance	EACH	2						2					
212–095A	Inlet Protection	EACH	14						14					
616–010A	Sign Type B–1	SY	77	8	55	14								
616–040J	Steel Sign Post Type E–1	FT	106	14	76	16								
621–061A	Mulch Plus Tackifier	SY	540						540					
626–010A	Temporary Traffic Control Signs	SY	1330					1330						
626–035A	Barricade Type 2	EACH	10					10						
626–040A	Barricade Type 3	EACH	15					15						
626–050A	Drums	EACH	60					60						
626–105A	Temporary Traffic Control Maintenance	HR	240											
626–120A	Flagger Control	HR	240											
626–135A	Weighted Base Tubular Markers	EACH	100					100						
630–010A	Transverse, Word, Symbol, and Arrow Pavement Markings – Preformed Thermoplastic	SF	592	388	204									
630–025A	Longitudinal Pavement Marking – Waterborne	FT	10926	1157	4161	4264	1344							

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PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

ROADWAY SUMMARY

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 17 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

STRUCTURE SHEET RANGE				51–55
NAME & STATION				ELIJAH DRAIN
ITEM NO.	ITEM	UNIT	TOTAL	31+03
203–020A	Removal of Bridge – Full	EACH	1	1
205–005B	Excavation (Plan Quantity)	CY	800	800
210–005A	Structure Excavation Schedule No. 1 (Plan Quantity)	CY	660	660
210–015A	Compacting Backfill (Plan Quantity)	CY	570	570
301–010A	Granular Subbase (Plan Quantity)	CY	2680	2680
303–052A	3/4" Aggregate Type B For Base (Plan Quantity)	CY	570	570
502–025A	Concrete Class 40–A	CY	4	4
503–005A	Metal Reinforcement	LB	540	540
511–005A	Concrete Waterproof System, Type D	SY	904	904
560–005A	Dewatering Foundation	LS	1	1
578–005A	Precast Concrete Culvert (4–Sided Box, 15' Span x 7' Rise)	LS	1	1
624–005A	Loose Riprap (Class III)	CY	90	90
640–010A	Riprap/Erosion Control Geotextile	SY	120	120
640–015A	Subgrade Separation Geotextile (Type III)	SY	455	455

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REVISIONS			
NO.	DATE	BY	DESCRIPTION

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DETAILED J. JONES
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IDAHO TRANSPORTATION DEPARTMENT

ELITE EDGE ENGINEERS

PROJECT NO. A024(229)

BOX CULVERT SUMMARY

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

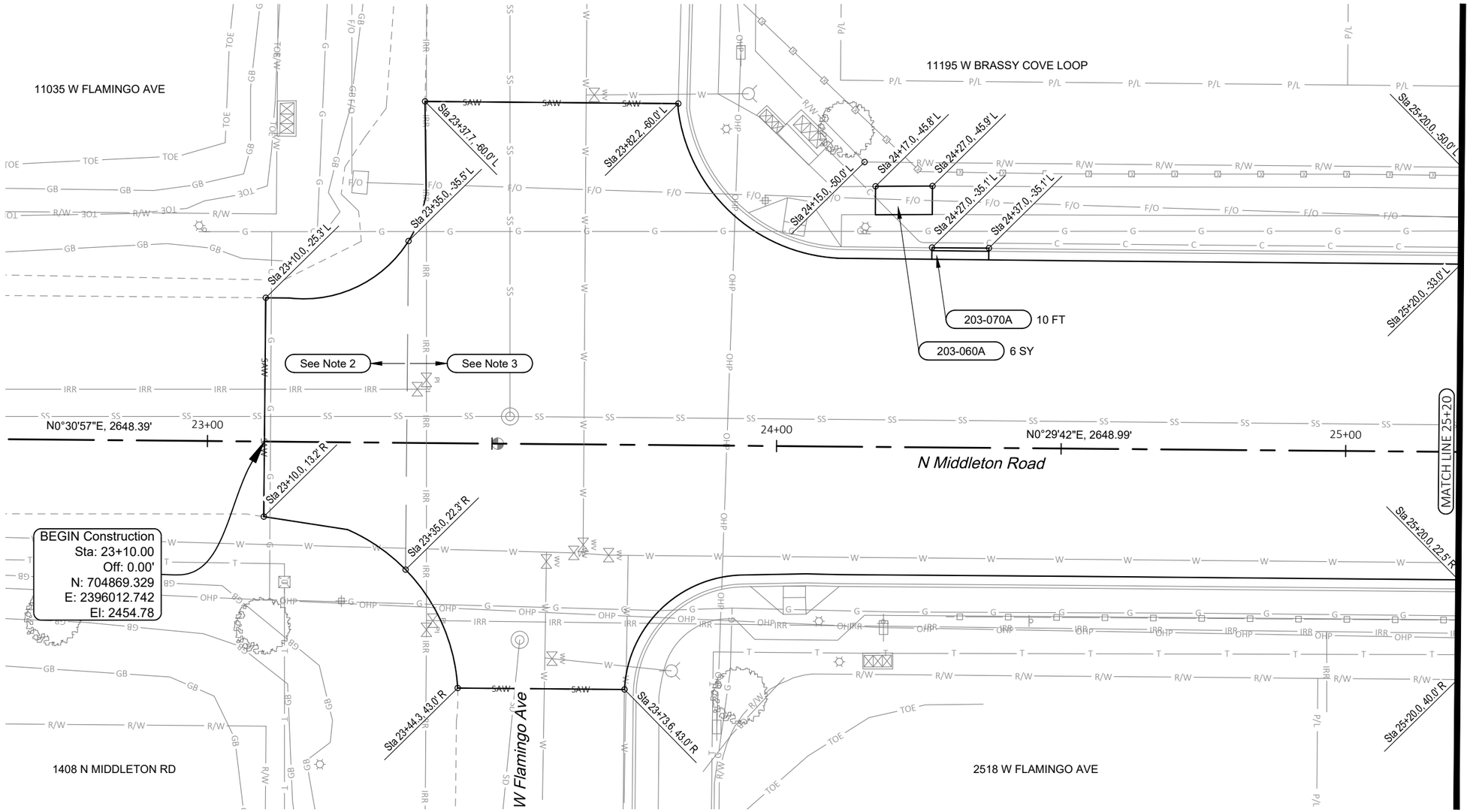
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 18 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A Removal of Concrete Sidewalk
6 SY = Sheet Total

203-070A Removal of Curb & Gutter
10 FT = Sheet Total

NOTES

1. See Sheet 5 & 6 For General Notes
2. STA 23+10.0 To STA 23+35.0 - Remove Pavement Only (No Excavation Or Granular Subbase). Contractor Shall Remove Existing Pavement, Regrade Existing Base Gravel Supplemented With ¾" Aggregate Type B For Base As Necessary To Shape Area To The Finished Grade And Proof Roll In The Presence Of The Engineer Prior To Paving.
3. STA 23+35.0 - Begin Full Depth Roadway Construction

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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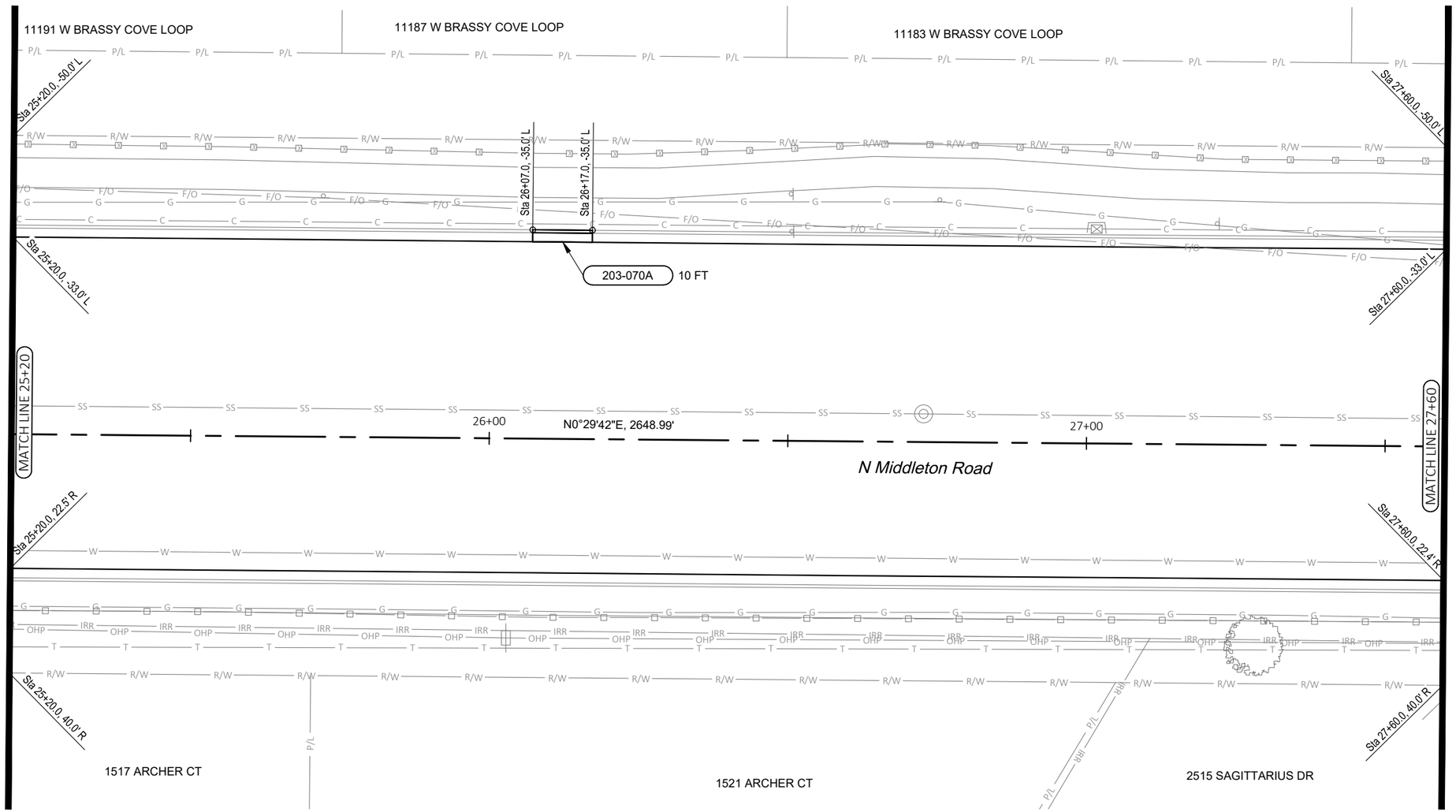
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

DEMOLITION PLANS
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 19 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-070A Removal of Curb & Gutter
10 FT = Sheet Total

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

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IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

DEMOLITION PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

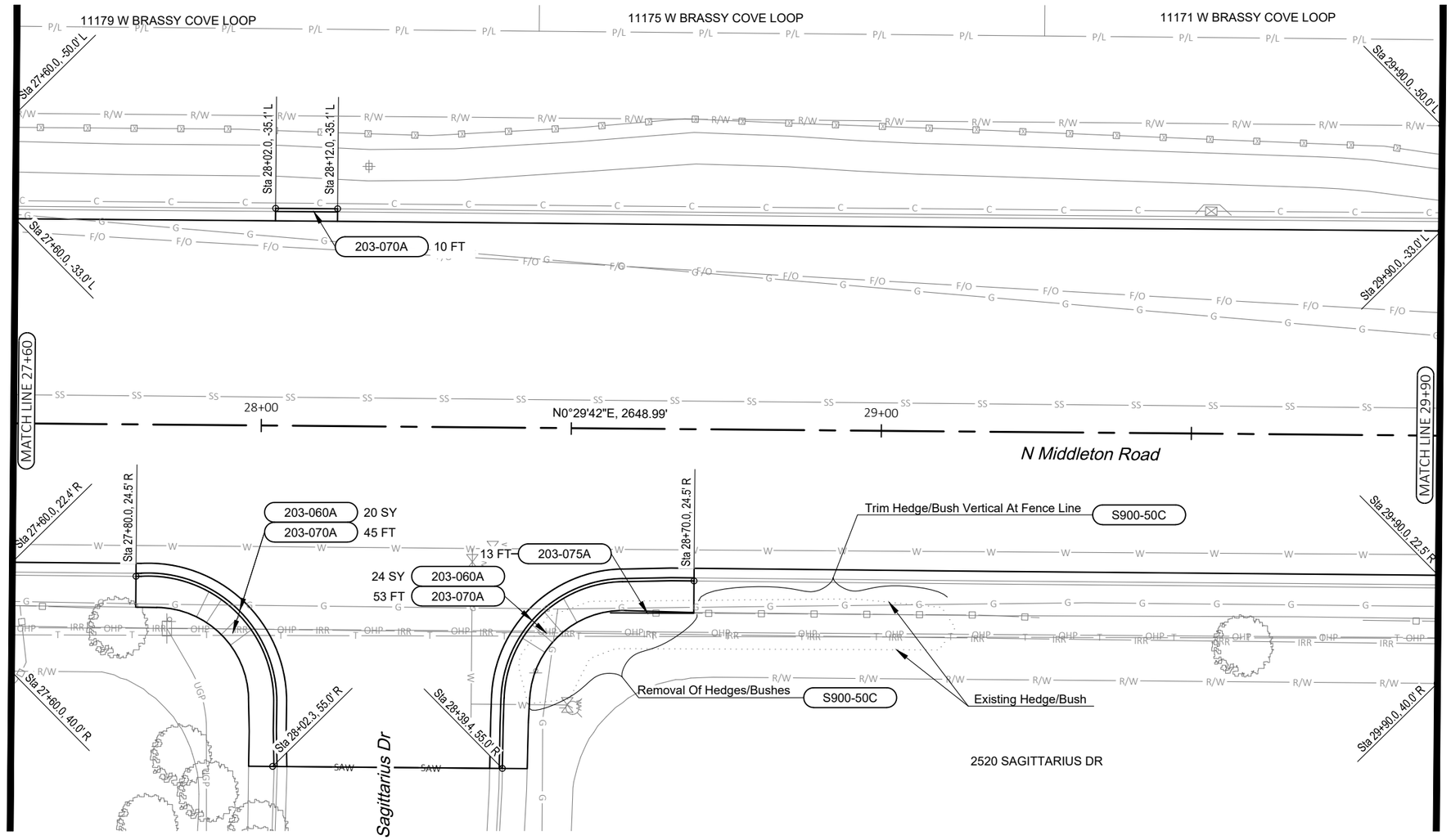
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 20 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A Removal of Concrete Sidewalk
44 SY = Sheet Total

203-070A Removal of Curb & Gutter
108 FT = Sheet Total

203-075A Removal of Fence (Type & Size Varies)
13 FT = Sheet Total

S900-50C Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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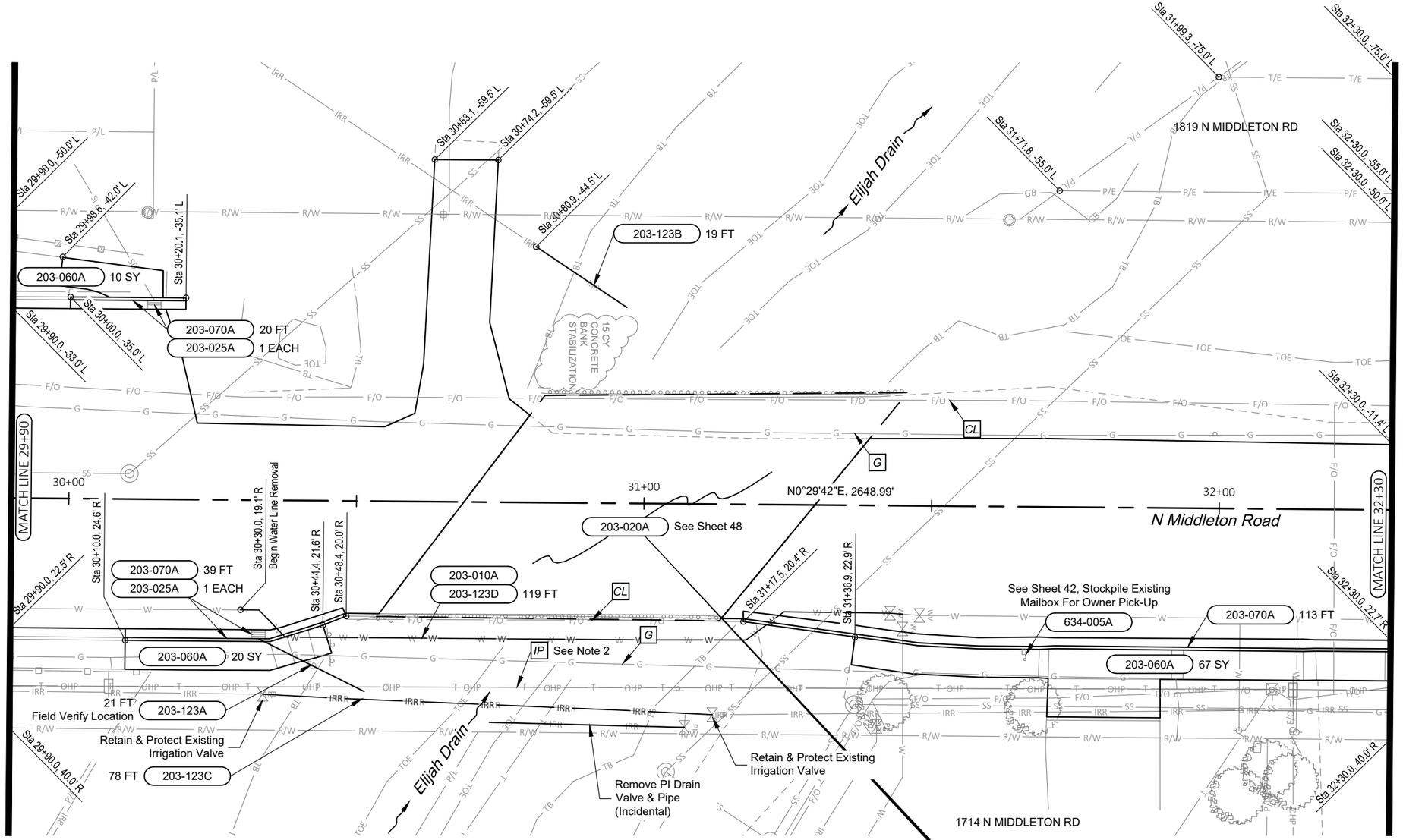
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

DEMOLITION PLANS
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 21 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-010A	Asbestos Removal and Disposal (Domestic Water Pipe Insullation) CA
203-123C	Removal of Miscellaneous Items (±6" Pressure Irrigation Pipe & Aerial Support Structure) 78 FT = Sheet Total
203-123D	Removal of Miscellaneous Items (12" Domestic Water Pipe & Aerial Support Structure) 119 FT = Sheet Total
203-020A	Removal of Bridge - Full Sheet 48 For Quantity
203-025A	Removal of Catch Basin 2 EACH = Sheet Total
203-060A	Removal of Concrete Sidewalk 97 SY = Sheet Total
203-070A	Removal of Curb & Gutter 172 FT = Sheet Total
203-123A	Removal of Miscellaneous Items (12" Pipe) 21 FT = Sheet Total
203-123B	Removal of Miscellaneous Items (24" Pipe) 19 FT = Sheet Total
634-005A	Mailbox Sheet 42 For Quantity

NOTES

1. See Sheet 5 & 6 For General Notes
2. It Is Anticipated The Contractor Will Encroach On The Required 10ft Working Clearance From Overhead Lines During This Crossing Demolition And Construction. Therefore, The Contractor Is Required To Contact Idaho Power At 1-800-488-6150 Per The Idaho Over Head Line Safety Act.

UTILITY OWNERSHIP KEY

- CL *Century Link/Lumen*
- G *Intermountain Gas*
- IP *Idaho Power*

- Remove Existing Bridge (Superstructure, Abutments, Wingwalls, Foundations, Footings, etc.) Down To A Maximum Elevation Of 2439.00.
- Remove Existing Partially Demolished Box Culvert/ Stiffleg Down To A Maximum Elevation Of 2429.40.
- If Approved By The Engineer, And At No Additional Cost To The Project, The Contractor May Remove Additional Structure Below The Elevations Indicated And Backfill The Void Left By Structure Removal, Meeting All Material And Compaction Requirements.
- Remove All Other Existing Structure Components As Necessary To Construct The New Box Culvert, Including Dewatering Activities.

10 0 10 20 Horizontal

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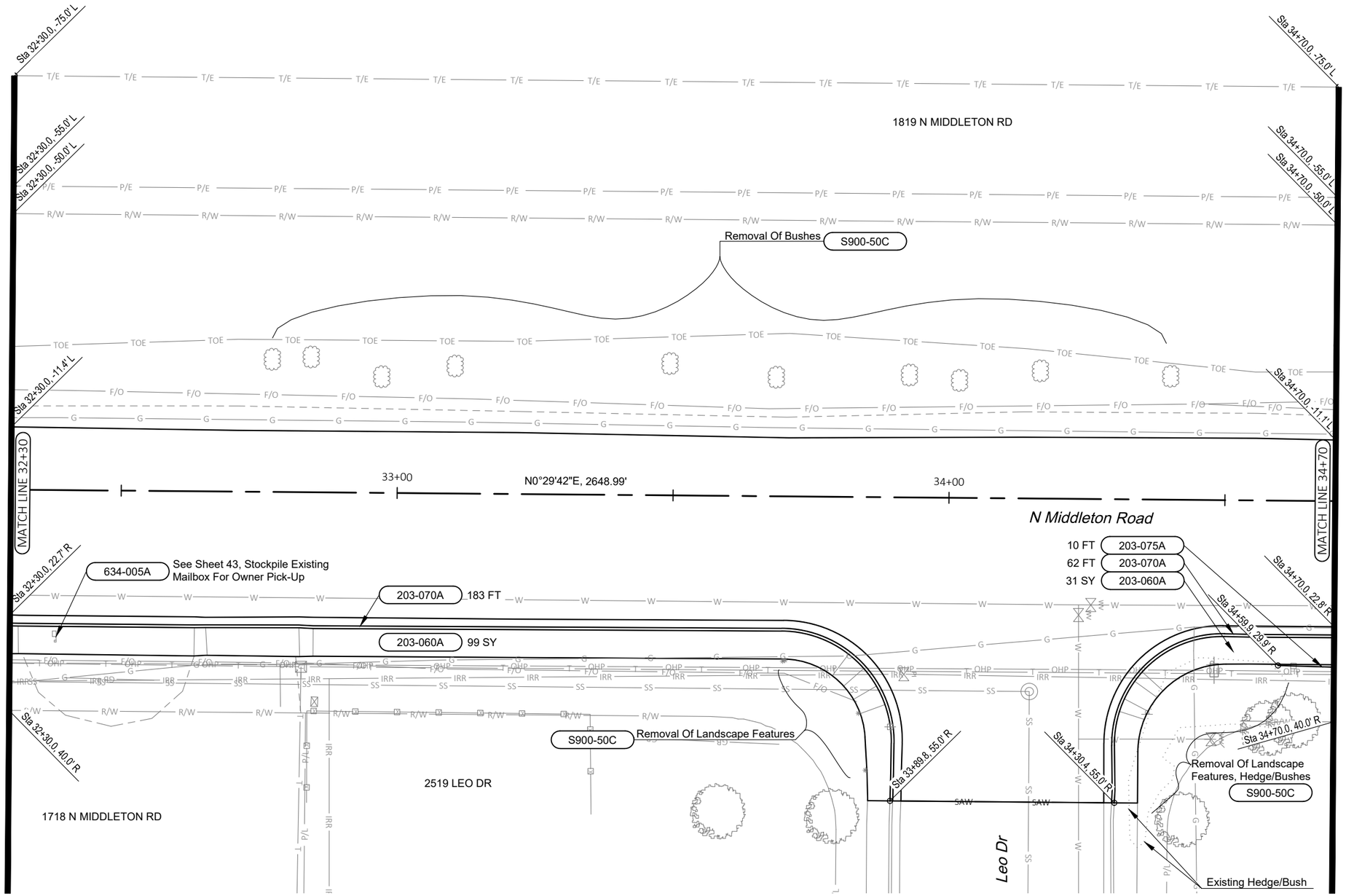
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

DEMOLITION PLANS
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 22 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A	Removal of Concrete Sidewalk 130 SY = Sheet Total
203-070A	Removal of Curb & Gutter 245 FT = Sheet Total
203-075A	Removal of Fence (Type & Size Varies) 10 FT = Sheet Total
634-005A	Mailbox Sheet 43 For Quantity
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
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IDAHO TRANSPORTATION DEPARTMENT

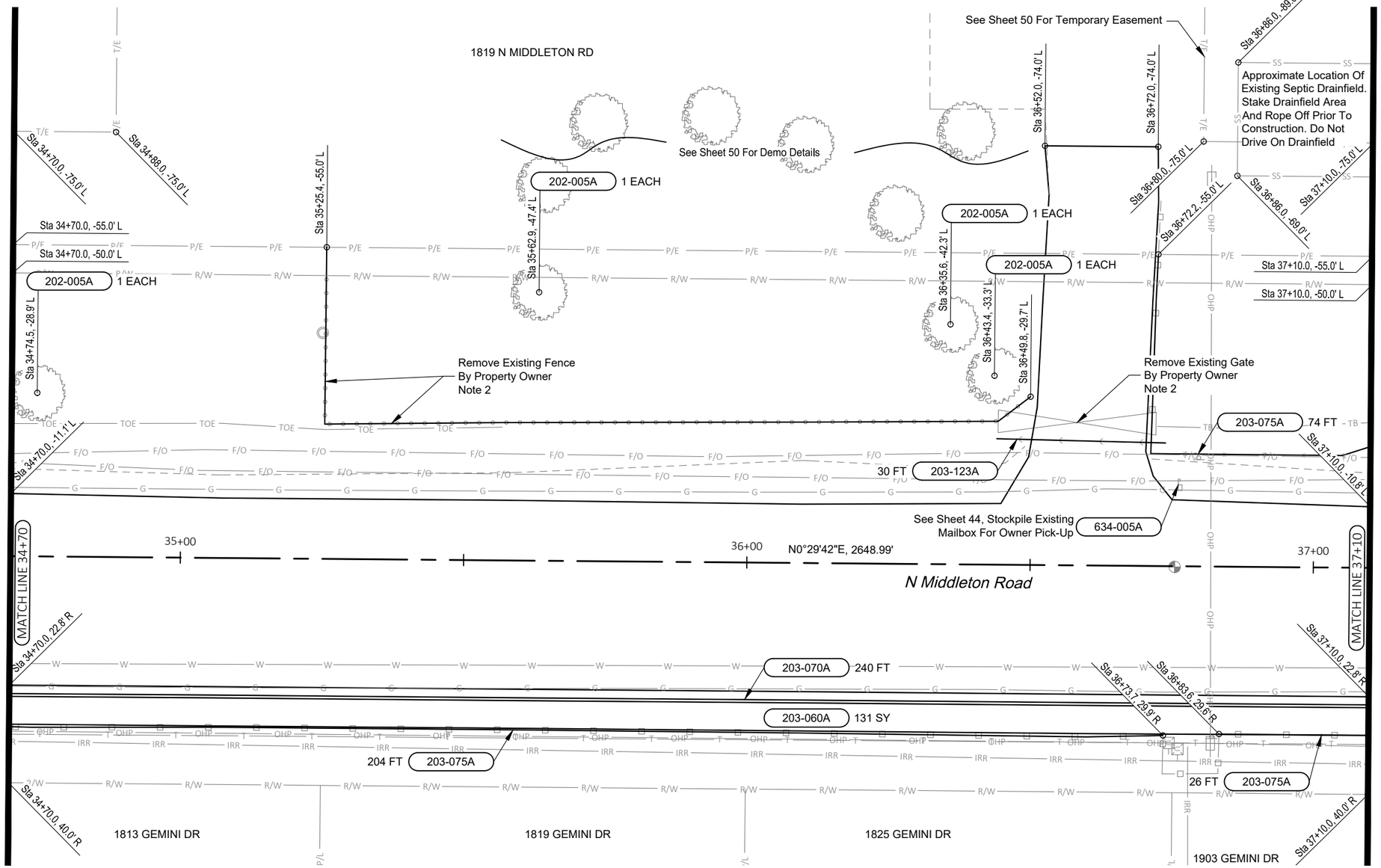
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

DEMOLITION PLANS
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 23 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



202-005A	Selective Removal of Trees Including Stumps 4 EACH = Sheet Total
203-060A	Removal of Concrete Sidewalk 131 SY = Sheet Total
203-070A	Removal of Curb & Gutter 240 FT = Sheet Total
203-075A	Removal of Fence (Type & Size Varies) 304 FT = Sheet Total
203-123A	Removal of Miscellaneous Items (12" Pipe) 30 FT = Sheet Total
634-005A	Mailbox Sheet 44 For Quantity

NOTES

1. See Sheet 5 & 6 For General Notes
2. Contractor Shall Provide Written Notice To Property Owner 30-Days Prior To Needed Fence And Gate Removal Date.

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

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DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

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CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

DEMOLITION PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

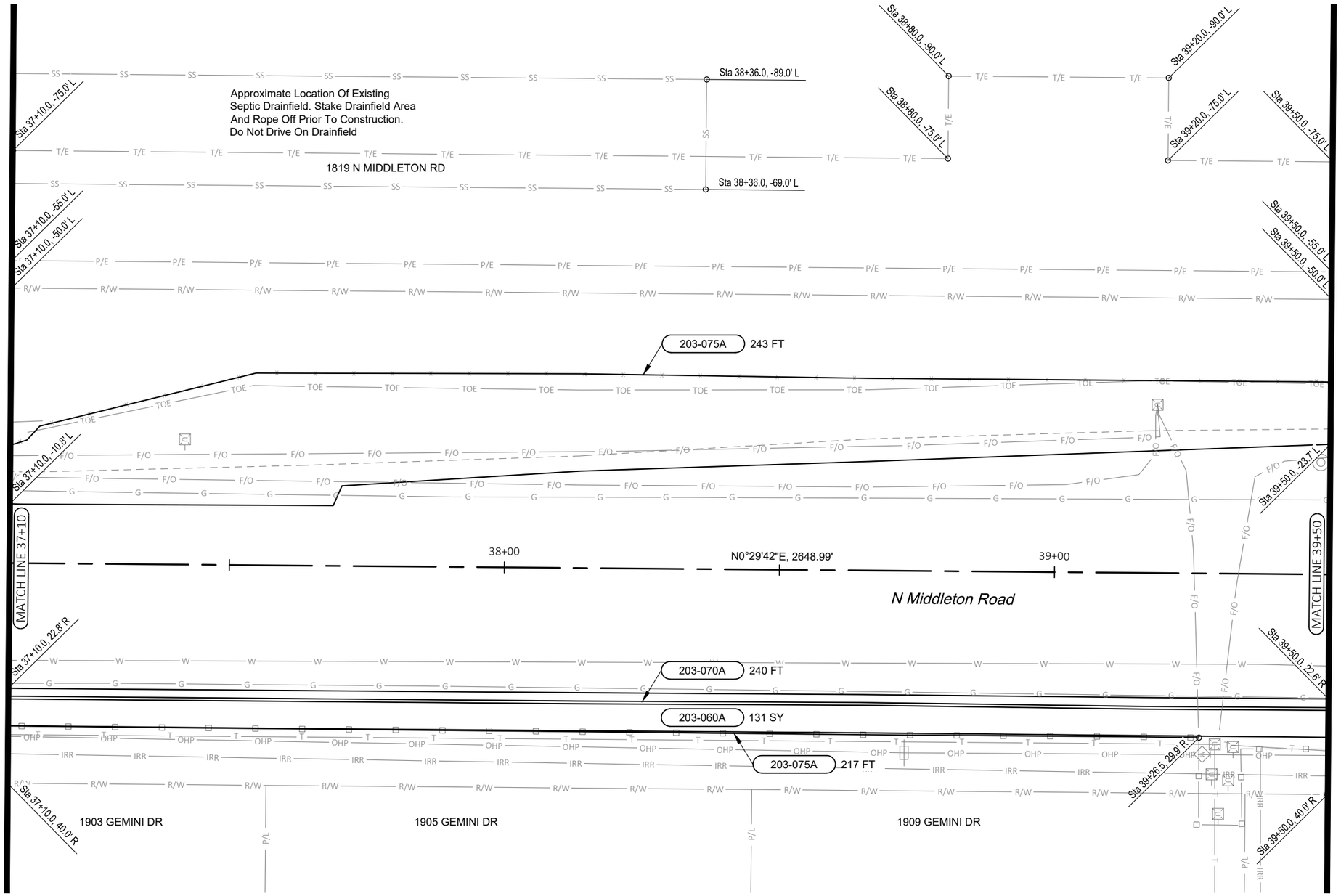
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 24 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A Removal of Concrete Sidewalk
131 SY = Sheet Total

203-070A Removal of Curb & Gutter
240 FT = Sheet Total

203-075A Removal of Fence (Type & Size Varies)
460 FT = Sheet Total

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
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DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

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IDAHO TRANSPORTATION DEPARTMENT

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PROJECT NO. A024(229)

DEMOLITION PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

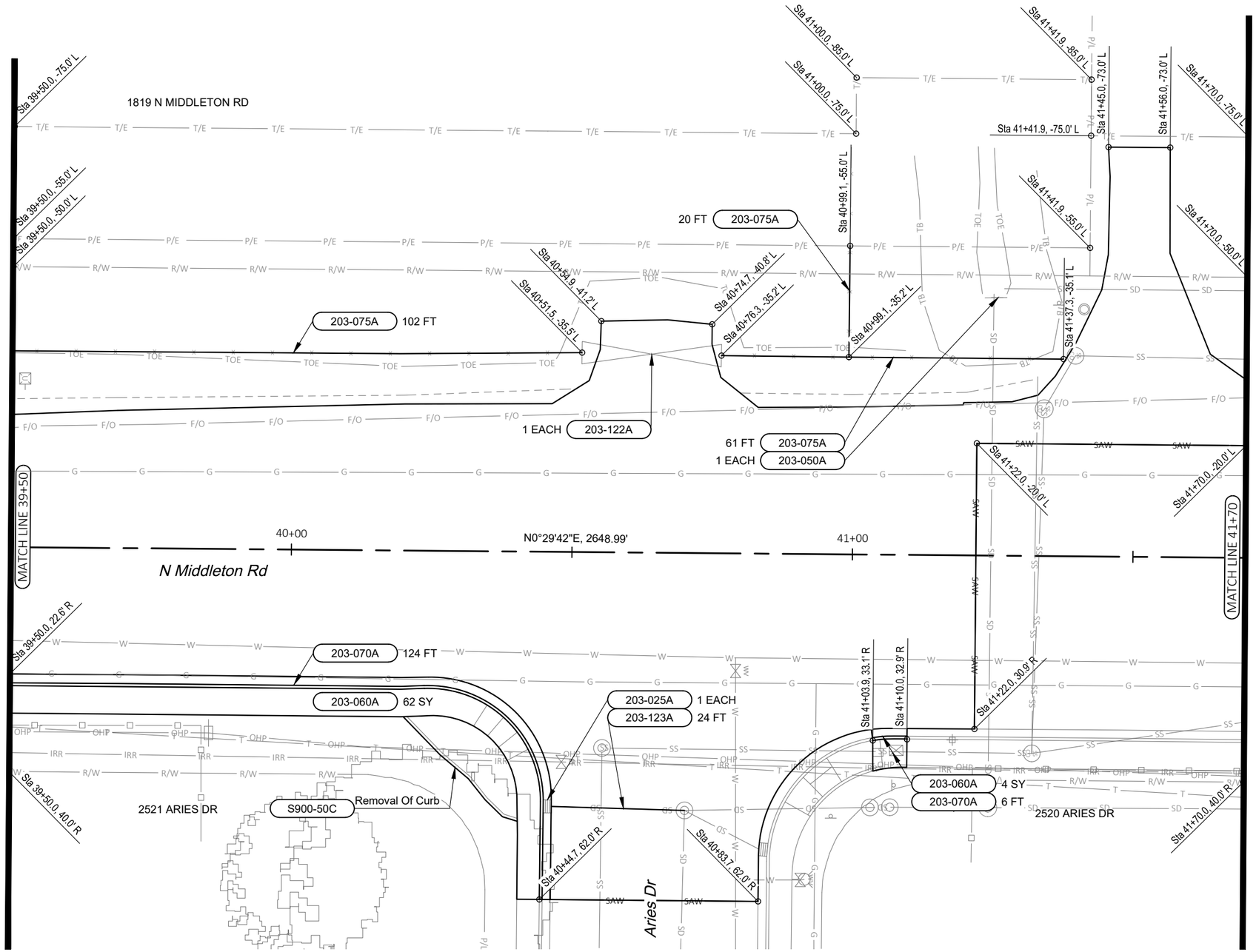
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 25 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-025A	Removal of Catch Basin 1 EACH = Sheet Total
203-050A	Removal of Concrete Headwall 1 EACH = Sheet Total
203-060A	Removal of Concrete Sidewalk 66 SY = Sheet Total
203-070A	Removal of Curb & Gutter 130 FT = Sheet Total
203-075A	Removal of Fence (Type & Size Varies) 183 FT = Sheet Total
203-122A	Removal of Miscellaneous Items (Gate, Posts & Foundations) 1 EACH = Sheet Total
203-123A	Removal of Miscellaneous Items (12" Pipe) 24 FT = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
DESIGN CHECKED W.J. BARTON	
DETAILED J. JONES	CADD FILE NAME MIDDLETON.DWG
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

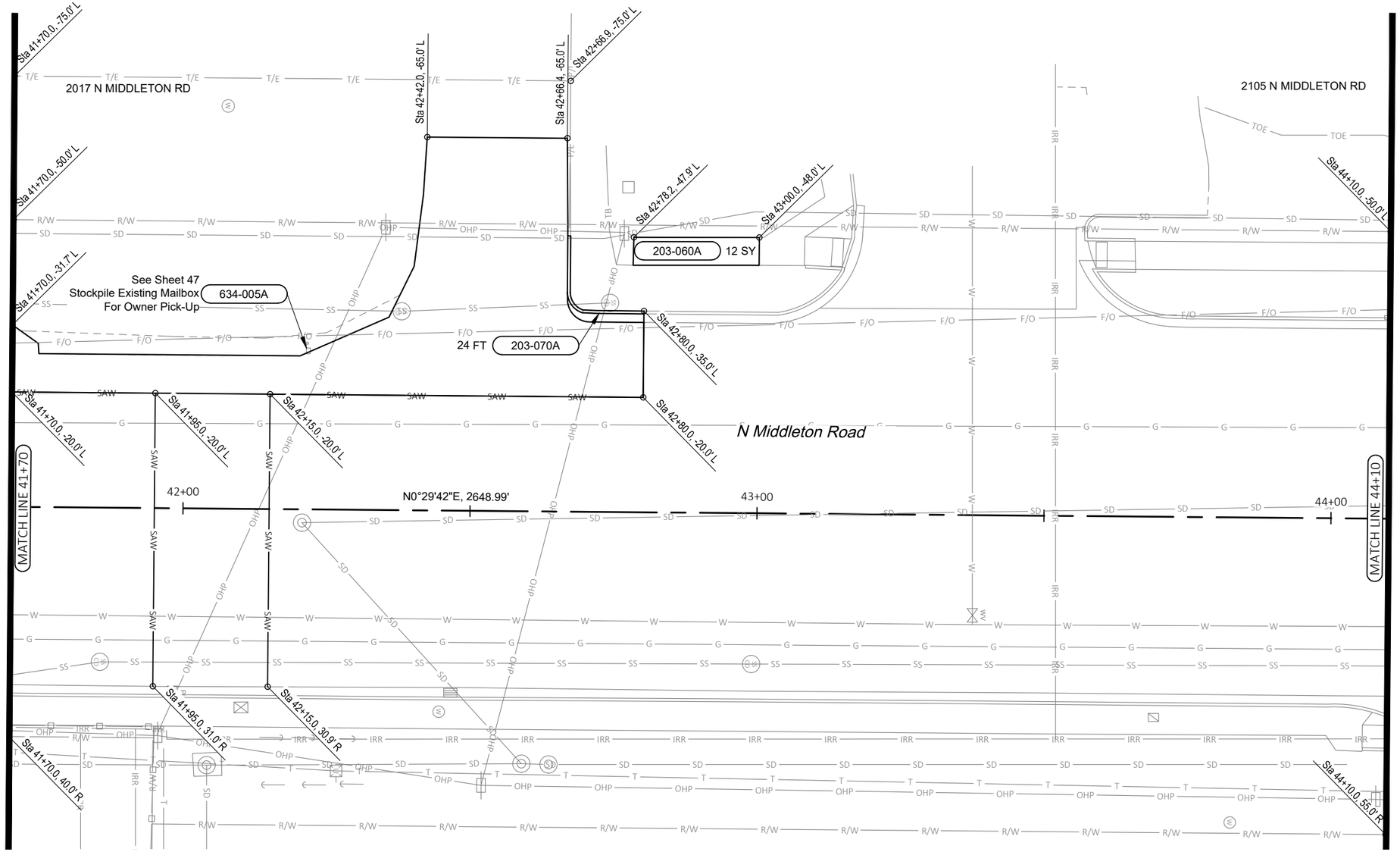
PARAGON CONSULTING, INC.

PROJECT NO.	DEMOLITION PLANS
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY	CANYON
KEY NUMBER	24229
SHEET	26 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A	Removal of Concrete Sidewalk 12 SY = Sheet Total
203-070A	Removal of Curb & Gutter 24 FT = Sheet Total
634-005A	Mailbox Sheet 47 For Quantity

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

DEMOLITION PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

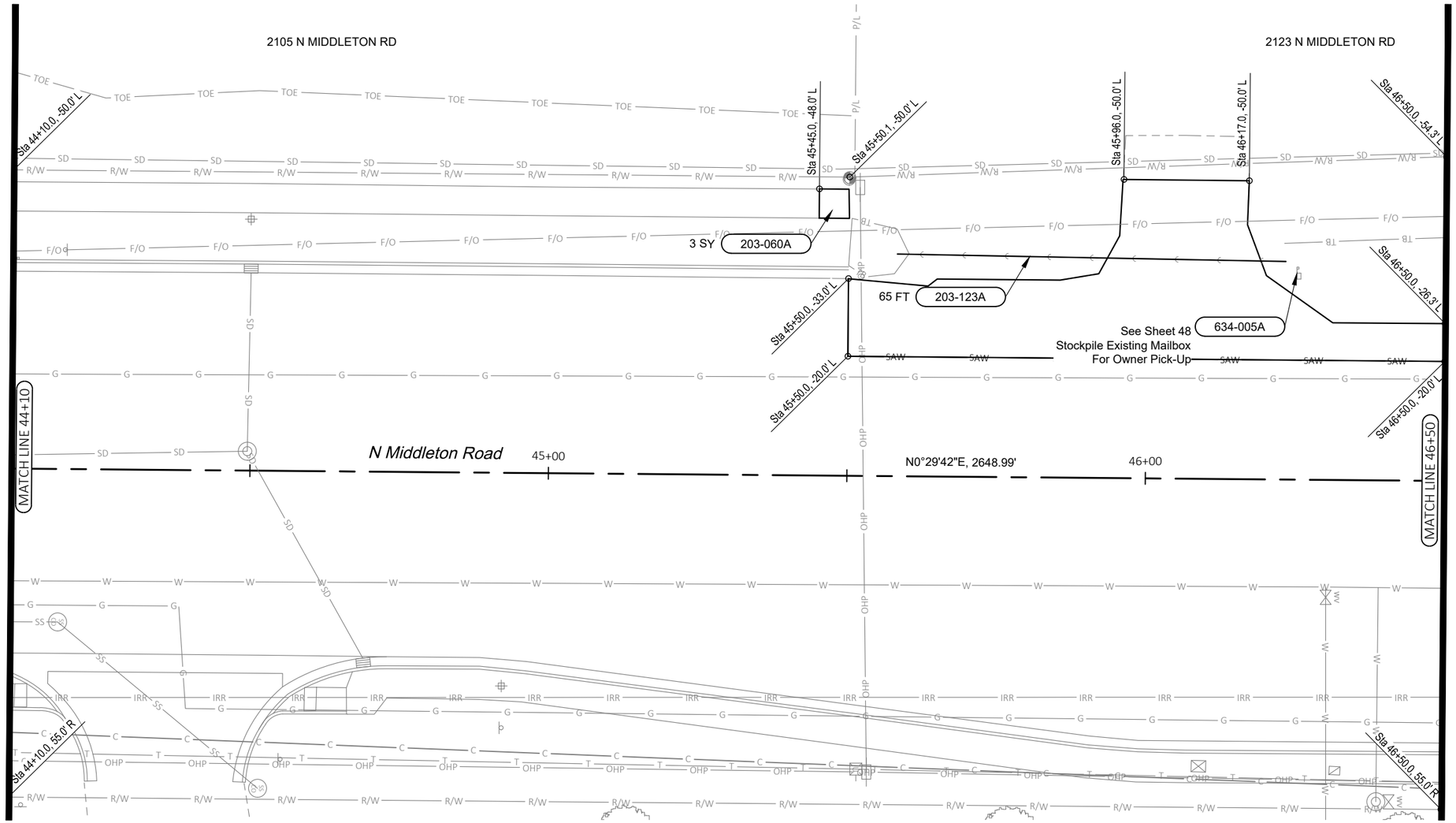
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 27 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-060A	Removal of Concrete Sidewalk 3 SY = Sheet Total
203-123A	Removal of Miscellaneous Items (12" Pipe) 65 FT = Sheet Total
634-005A	Mailbox Sheet 48 For Quantity

NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

DEMOLITION PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

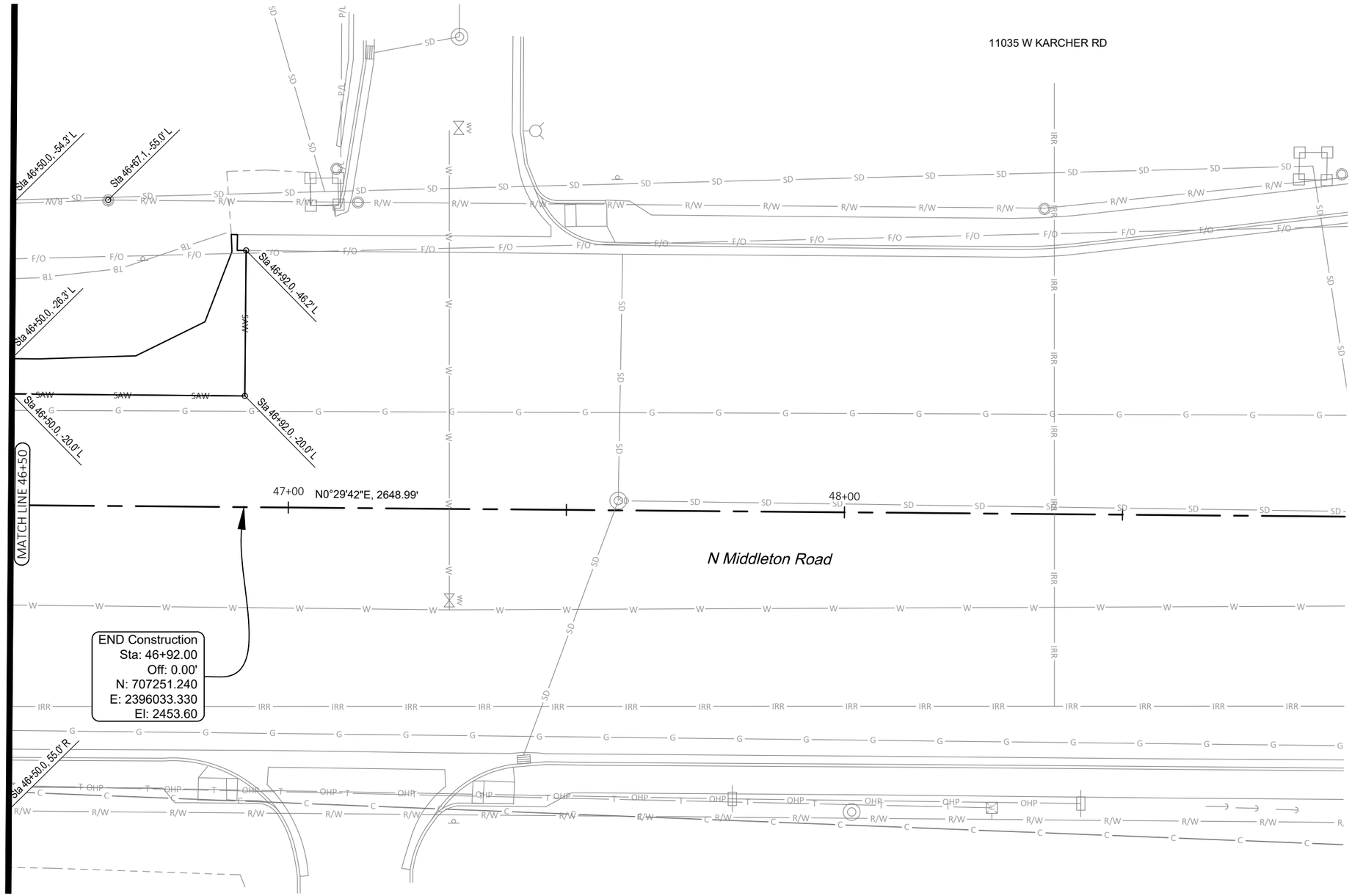
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 28 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



NOTES

1. See Sheet 5 & 6 For General Notes

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT
DESIGN CHECKED W.J. BARTON		
DETAILED J. JONES	CADD FILE NAME MIDDLETON.DWG	
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025	PARAGON CONSULTING, INC.

PROJECT NO.	DEMOLITION PLANS
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 29 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

Illumination Materials List

-Illumination Installation-
All Materials Furnished And Installed By The Contractor
Per The Modified City Of Nampa Division 1100 Traffic Specifications (Included In The Contract Special Provisions).
All Materials Shall Meet Build America Buy America (BABA).

Item No.	Qty.	
1.	9 Each	Pole Steel Luminaire Only Powder Coated Black, Round Or Octagonal In Cross Section, 35' Luminaire Mounting Height, With 25' Luminaire Arm, Base Cover And Anchor Bolts. Requires Type "B" Foundation (See Special Provisions - City Of Nampa Specifications 1101.08 And City Of Nampa Standard Drawings N-1110A And N-1110B).
2.	9 Each	Foundation Reinforced Concrete For Foundation Type "B" For Luminaire Poles (See Special Provisions - City Of Nampa Specifications 1101.13 And City Of Nampa Standard Drawings N-1110A And N-1110B).
3.	9 Each	Luminaire Large Wattage Fixture, LED (See Special Provisions - City Of Nampa Specifications 1101.12).
4.	18 Each	Single Pole Breakaway Connector Kits (2 Kits Per Luminaire), Fused In Line, Non Crimp Style With Watertight Boot, 30 Amp, 600 Volt (See Special Provisions - City Of Nampa Specifications 1101.06 And 1101.12).
5.	18 Each	Fuse 8 Amp Cartridge Type (See Special Provisions - City Of Nampa Specifications 1101.06 And 1101.12).
6.	27 Each	Splice Kits (3 Kits Per Luminaire). To Be Lug Type Connector Splice Kit (See Special Provisions - City Of Nampa Specifications 1101.06 And 1101.12).
7.	9 Each	Photoelectric Control Shorting Cap (Luminaire To Be Controlled By Existing Photoelectric Control In Service Cabinets At Middleton & Flamingo And At Middleton & Karcher).
8.	9 Each	Photocontrol Node Twist Lock Photocontroller For Future Onboard Fixture Installation At Each Luminaire (Supply Only - Provide Photocontrol Nodes To Nampa Traffic) (See Special Provisions - City Of Nampa Specifications 1101.12).
9.	Varies	Miscellaneous Items To Include 2" RPC Conduit, Watertight RPC Elbows, Fiber Optic Cable, #12 THWN Green Locate Wire, #6 THWN Wire, Multi-Circuit Ground Buss Bars, Lug Type Connections, Anchor Bolts, Conduit Molded Plugs, Wire Identification Markers And Various Other Items, Hardware And Fittings To Complete The Installation Within The Plans (See Special Provisions - City Of Nampa Specifications 1100 And City Of Nampa Standard Drawings).
10.	13 Each	Junction Boxes Reinforced Precast Concrete, With 3/8" Thick Steel Diamond Plate Lid And Locking Device With Stainless Steel Bolt, Type S-40T (See Special Provisions - City Of Nampa Specifications 1101.07 And City Of Nampa Standard Drawings N-1105A, N-1105B And N-1105D).
12.	5 Each	Junction Boxes Reinforced Precast Concrete, With 3/8" Thick Steel Diamond Plate Lid And Locking Device With Stainless Steel Bolt, Type S-45T With Riser (See Special Provisions - City Of Nampa Specifications 1101.07 And City Of Nampa Standard Drawings N-1105A, N-1105B And N-1105D).
13.	Varies (See Utility Sheets)	Junction Box Apron Concrete Junction Box Apron (See Special Provisions - City Of Nampa Specifications 1101.07 And City Of Nampa Standard Drawing N-1105B).

Pre-Installation Notes:

1. *The Contractor Shall Coordinate With The Engineer For An On-Ground Illumination Fixture Pre-Inspection Before Standing Any Lighting Fixture Structure. (Aerial Illumination Fixture Inspections Are Not Practical).*

P:\Projects\Nampa 005-20-007 Middleton Rd - Flamingo to Karcher\CADD\Middleton Summary Sheets.dwg

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED S. LLOYD
DESIGN CHECKED W.J. BARTON
DETAILED S. LLOYD
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME Middleton Summary Sheets.dwg
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

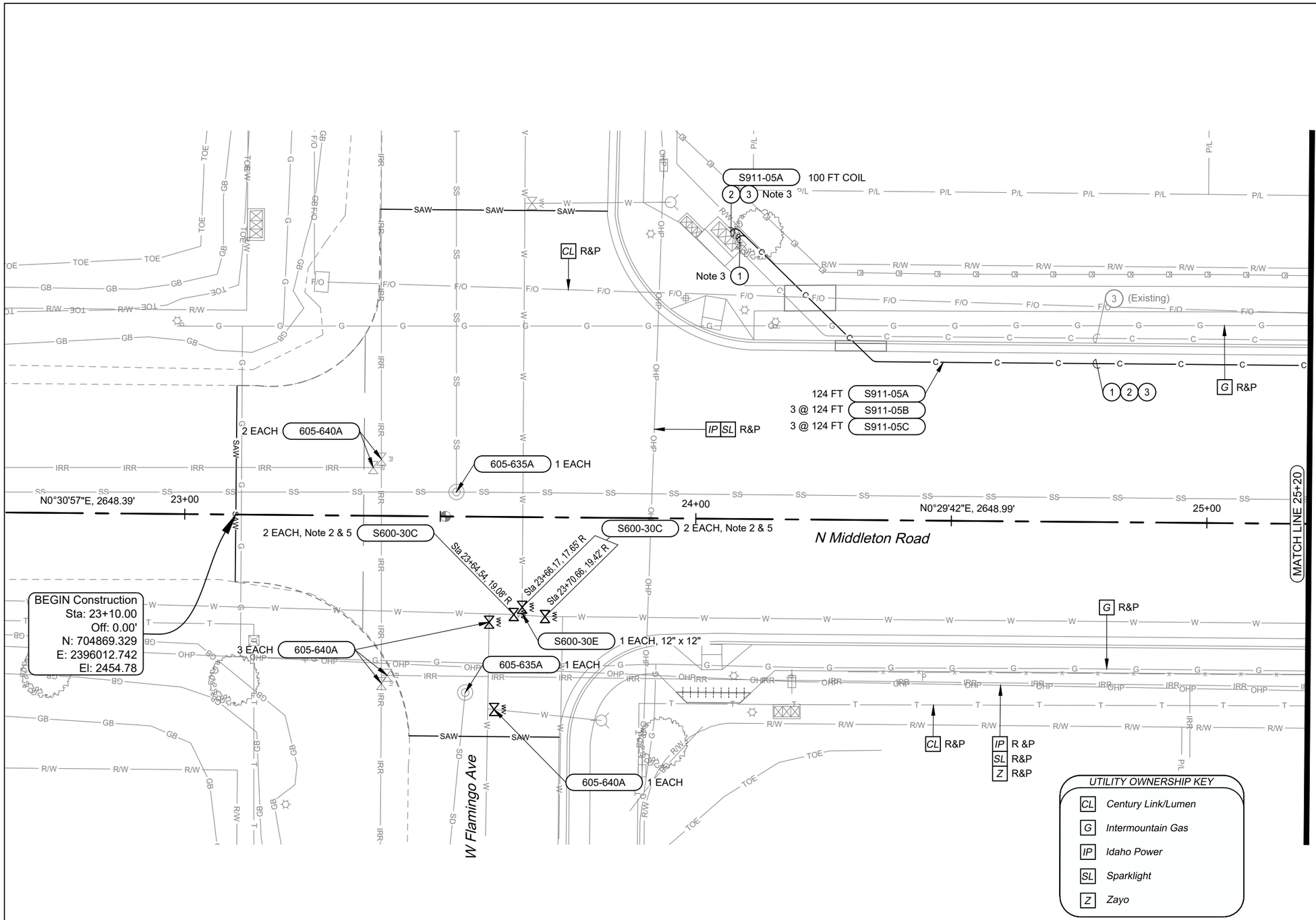
ILLUMINATION MATERIALS LIST

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON
KEY NUMBER 24229
SHEET 30 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



605-635A	Adjust Manhole Covers 2 EACH = Sheet Total
605-640A	Adjust Valve Covers (Provide New Valve Can & Cover) 6 EACH = Sheet Total
S600-30C	Water Valve - Size 12" 3 EACH = Sheet Total
S600-30E	Water Main Fitting, Size Varies (See Plans), Tee 1 EACH = Sheet Total
S911-05A	SP-72 CT Fiber Optic Interconnect Cable 224 FT = Sheet Total
S911-05B	SP-Wire Conductor, Type #6 THWN 372 FT = Sheet Total
S911-05C	SP-Conduit, Size 2" 372 FT = Sheet Total

LIGHTING CIRCUIT WIRING KEY

1 — *Lighting Circuit*
2" RPC
1 - #6 THWN Ground
2 - #6 THWN Circuit (Lighting)

2 — *Fiber Optic Interconnect*
2" RPC
1 - Fiber Cable

3 — *Spare*
2" RPC
1 - #12 Locate

4 — *Lighting Circuit*
2" RPC
1 - #10 THWN Ground
2 - #10 THWN Circuit (Lighting)

NOTES:
1. See Sheet 5 & 6 For General Notes
2. Removal Of Existing Domestic Water Valves Is Incidental To Items: S600-30A, S600-30B, S600-30C
3. Field Verify J-Box Connections With Engineer. Contractor Shall Coil Fiber Optic Cable In The Junction Box For Future Connection. Contractor Shall Connect The Lighting Circuit Wiring Into The Existing Service And Shall Supply & Install All Necessary Components (Lighting Contactor, Etc.).
4. Where "R&P" is Indicated Adjacent To A Utility Ownership Callout (X), It Is Anticipated That The Utility Can Be Retained And Protected. Where No "R&P" Is Indicated, The Utility May Require Relocation/Adjustment.
5. All Pipe And Couplers Necessary For The Valve Cluster Installation Are Incidental To Items S600-30A, S600-30B, S600-30C.

15 0 15 30 FEET

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON - UTILITIES.DWG
DRAWING DATE: August 11, 2025

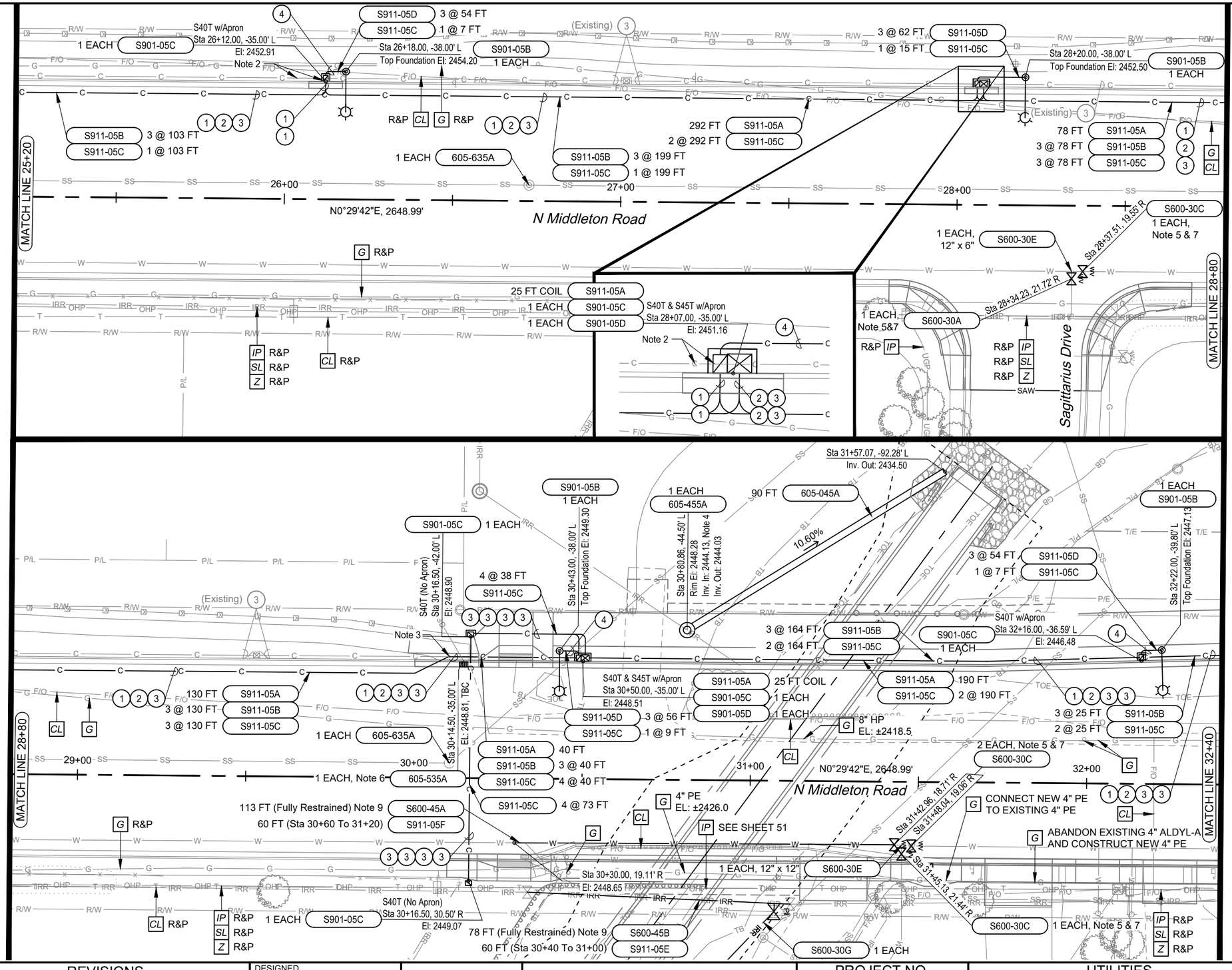
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

UTILITIES
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 31 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



604-005A	4" Irrigation Pipe (PVC, Class 200 PSI) 50 FT = Sheet Total
605-045A	24" Storm Sewer Pipe (14 Gage Corrugated Aluminized Steel) 90 FT = Sheet Total
605-455A	Manhole Type A 1 EACH = Sheet Total
605-535A	Catch Basin Type 5 1 EACH = Sheet Total
605-635A	Adjust Manhole Covers 2 EACH = Sheet Total

Pay Items Continued On Sheet 33

LIGHTING CIRCUIT WIRING KEY

1. *Lighting Circuit*
   2" RPC
   1 - #6 THWN Ground
   2 - #6 THWN Circuit (Lighting)
2. *Fiber Optic Interconnect*
   2" RPC
   1 - Fiber Cable
3. *Spare*
   2" RPC
   1 - #12 Locate
4. *Lighting Circuit*
   2" RPC
   1 - #10 THWN Ground
   2 - #10 THWN Circuit (Lighting)

NOTES:

1. See Sheet 5 & 6 For General Notes
2. Intercept Existing Conduit, Cut & Sweep Into The New S-40T Junction Box
3. Locate Existing Conduit & Connect To New Conduit.
4. Contractor To Field Verify Existing Invert Elevation
5. Removal Of Existing Domestic Water Valve Is Incidental To Items: S600-30A, S600-30B, S600-30C
6. Connect To Existing Storm Drain Pipe To The West.
7. All Pipe And Couplers Necessary For The Valve Cluster Installation Are Incidental To Items S600-30A, S600-30B, S600-30C.
8. Where "R&P" Is Indicated Adjacent To A Utility Ownership Callout (X), It Is Anticipated That The Utility Can Be Retained And Protected. Where No "R&P" Is Indicated, The Utility May Require Relocation/Adjustment.
9. All Couplers And Reducers Necessary To Connect To Existing Pipe Or Valves Are Incidental To Items: S600-45A, S600-45B.

UTILITY OWNERSHIP KEY

- CL *Century Link/Lumen*
- G *Intermountain Gas*
- IP *Idaho Power*
- SL *Sparklight*
- Z *Zayo*

15 0 15 30 FEET

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	R. DEL BOSQUE
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME: MIDDLETON - UTILITIES.DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.	UTILITIES
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY	CANYON
KEY NUMBER	24229
SHEET	32 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

S600-30A	Water Valve - Size 6" 1 EACH = Sheet Total
S600-30C	Water Valve - Size 12" 4 EACH = Sheet Total
S600-30E	Water Main Fitting, Size Varies (See Plans), Tee 2 EACH = Sheet Total
S600-30G	1.5" Pressure Irrigation Drain 1 EACH = Sheet Total
S600-45A	Water Line (12", C-900, 165 PSI Domestic) 113 FT = Sheet Total
S600-45B	Water Line (8", D-2241, 200 PSI Pressure Irrigation) 78 FT = Sheet Total
S901-05B	SP-Street Light, Type Large Wattage, 35' Mounting Height 4 EACH = Sheet Total
S901-05C	Junction Box & Apron (S-40T) 6 EACH = Sheet Total
S901-05D	SP-Junction Box & Apron (S-45T & Riser) 2 EACH = Sheet Total
S911-05A	SP-72 CT Fiber Optic Interconnect Cable 780 FT = Sheet Total
S911-05B	SP-Wire Conductor, Type #6 THWN 2217 FT = Sheet Total
S911-05C	SP-Conduit, Size 2" 2910 FT = Sheet Total
S911-05D	SP-Wire Conductor, Type #10 TWHN 678 FT = Sheet Total
S911-05E	SP - 16" Steel Casing Pipe 60 FT = Sheet Total
S911-05F	SP - 20" Steel Casing Pipe 60 FT = Sheet Total

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON - UTILITIES.DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

UTILITIES
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

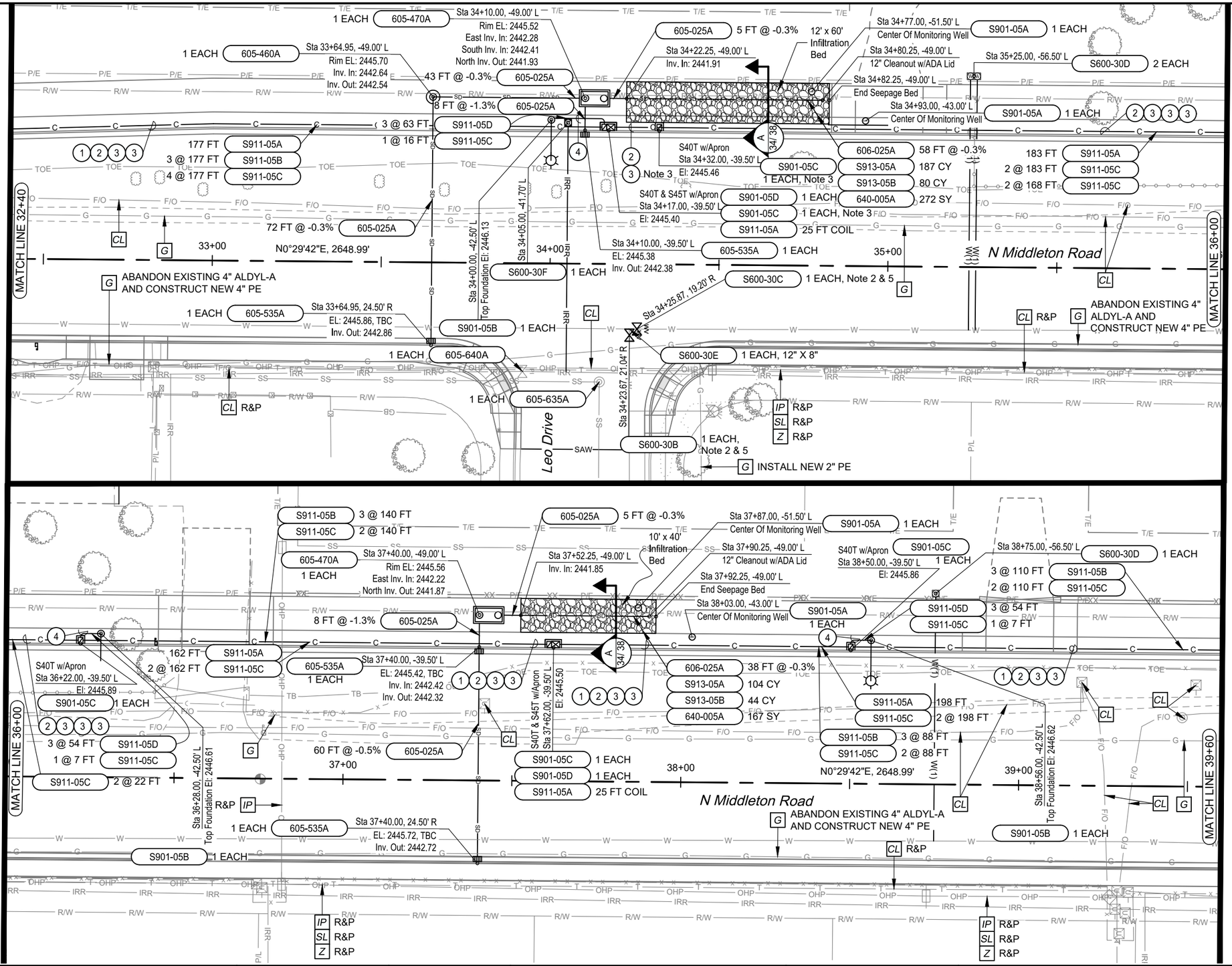
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 33 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



605-025A	12" Storm Sewer Pipe (SDR 35 PVC) 201 FT = Sheet Total
605-460A	Manhole Type B 1 EACH = Sheet Total
605-470A	Sediment & Oil Trap Manhole (1,000 Gallon) 2 EACH = Sheet Total
605-535A	Catch Basin Type 5 4 EACH = Sheet Total
605-635A	Adjust Manhole Covers 1 EACH = Sheet Total
605-640A	Adjust Valve Covers (Provide New Valve Can & Cover) 1 EACH = Sheet Total
606-025A	12" Pipe Underdrain (Perforated SDR 35 PVC) 96 FT = Sheet Total

Pay Items Continued On Sheet 35

LIGHTING CIRCUIT WIRING KEY

1 — *Lighting Circuit*
2" RPC
1 - #6 THWN Ground
2 - #6 THWN Circuit (Lighting)

2 — *Fiber Optic Interconnect*
2" RPC
1 - Fiber Cable

3 — *Spare*
2" RPC
1 - #12 Locate

4 — *Lighting Circuit*
2" RPC
1 - #10 THWN Ground
2 - #10 THWN Circuit (Lighting)

NOTES:
1. See Sheet 5 & 6 For General Notes
2. Removal Of Existing Domestic Water Valves Is Incidental To Items: S600-30A, S600-30B, S600-30C
3. No Conduit Connection Between The S-40T @ Sta. 34+17.00 & S-40T @ Sta. 34+32.00 To Provide Separation In Electrical Circuit.
4. Where "R&P" IS Indicated Adjacent To A Utility Ownership Callout (X), It Is Anticipated That The Utility Can Be Retained And Protected. Where No "R&P" Is Indicated, The Utility May Require Relocation/Adjustment.
5. All Pipe And Couplers Necessary For The Valve Cluster Installation Are Incidental To Items S600-30A, S600-30B, S600-30C.

UTILITY OWNERSHIP KEY

CL	*Century Link/Lumen*
G	*Intermountain Gas*
IP	*Idaho Power*
SL	*Sparklight*
Z	*Zayo*

15 0 15 30 FEET

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	R. DEL BOSQUE
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME: MIDDLETON - UTILITIES.DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.: A024(229)

UTILITIES: MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY: CANYON

KEY NUMBER: 24229

SHEET 34 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

640-005A	Drainage Geotextile 439 SY = Sheet Total
S600-30B	Water Valve - Size 8" 1 EACH = Sheet Total
S600-30C	Water Valve - Size 12" 1 EACH = Sheet Total
S600-30D	Water Service Connection, Size 1" 3 EACH = Sheet Total
S600-30E	Water Main Fitting, Size Varies (See Plans), Tee 1 EACH = Sheet Total
S600-30F	1" Diameter Pressure Irrigation Service 1 EACH = Sheet Total
S901-05A	SP-Groundwater Observation Well 4 EACH = Sheet Total
S901-05B	SP-Street Light, Type Large Wattage, 35' Mounting Height 3 EACH = Sheet Total
S901-05C	Junction Box & Apron (S-40T) 5 EACH = Sheet Total
S901-05D	SP-Junction Box & Apron (S-45T & Riser) 2 EACH = Sheet Total
S911-05A	SP-72 CT Fiber Optic Interconnect Cable 770 FT = Sheet Total
S911-05B	SP-Wire Conductor, Type #6 THWN 1545 FT = Sheet Total
S911-05C	SP-Conduit, Size 2" 2880 FT = Sheet Total
S911-05D	SP-Wire Conductor, Type #10 THWN 513 FT = Sheet Total
S913-05A	SP-3" Drain Rock 291 CY = Sheet Total
S913-05B	SP-Filter Sand 124 CY = Sheet Total

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON - UTILITIES.DWG
DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

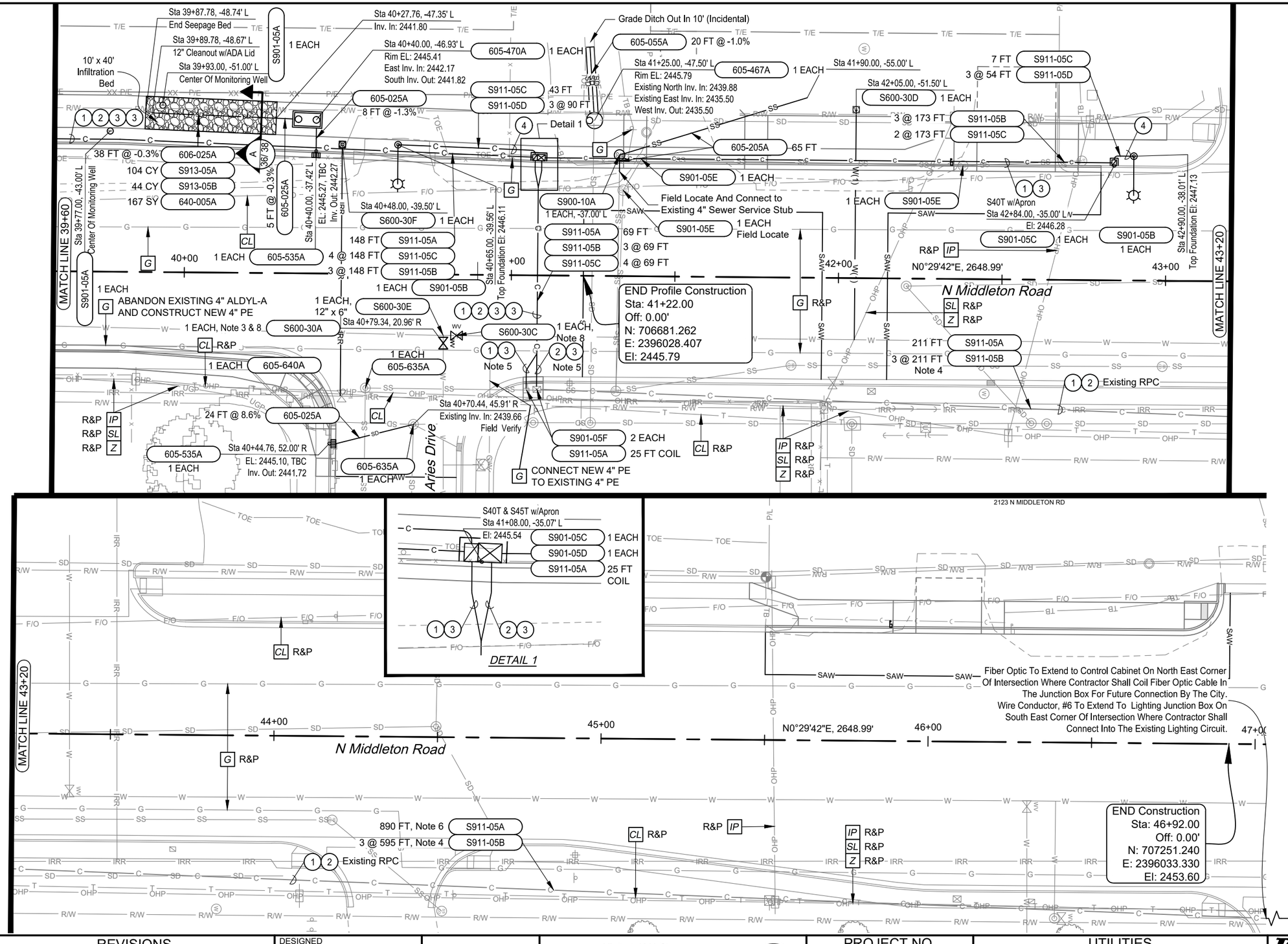
PROJECT NO.
A024(229)

UTILITIES
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON
KEY NUMBER 24229
SHEET 35 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



605-025A 12" Storm Sewer Pipe (SDR 35 PVC)
37 FT = Sheet Total

605-055A 30" Storm Sewer Pipe (Class IV Reinforced Concrete)
20 FT = Sheet Total

605-205A 4" Sanitary Sewer Pipe (SDR 35 PVC)
65 FT = Sheet Total

605-467A Manhole Type D
1 EACH = Sheet Total

Pay Items Continued On Sheet 37

LIGHTING CIRCUIT WIRING KEY

1. *Lighting Circuit*
   2" RPC
   1 - #6 THWN Ground
   2 - #6 THWN Circuit
   (Lighting)
2. *Fiber Optic Interconnect*
   2" RPC
   1 - Fiber Cable
3. *Spare*
   2" RPC
   1 - #12 Locate
4. *Lighting Circuit*
   2" RPC
   1 - #10 THWN Ground
   2 - #10 THWN Circuit
   (Lighting)

NOTES:

1. See Sheet 5 & 6 For General Notes
2. Contractor To Field Verify Existing Invert Elevation
3. Removal Of Existing Domestic Water Valves Is Incidental To Items: S600-30A, S600-30B, S600-30C
4. Use Existing Conduit For New Wire Run(s)
5. Field Verify J-Box Connections With Engineer
6. Quantity Includes 150 FT For Coils (2 @ 25 FT In J-Boxes & 1 @ 100 FT At The Cabinet
7. Where "R&P" IS Indicated Adjacent To A Utility Ownership Callout (X), It Is Anticipated That The Utility Can Be Retained And Protected. Where No "R&P" Is Indicated, The Utility May Require Relocation/Adjustment.
8. All Pipe And Couplers Necessary For The Valve Cluster Installation Are Incidental To Items S600-30A, S600-30B, S600-30C.

UTILITY OWNERSHIP KEY

- CL *Century Link/Lumen*
- G *Intermountain Gas*
- IP *Idaho Power*
- SL *Sparklight*
- Z *Zayo*

15 0 15 30 FEET

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON - UTILITIES.DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

UTILITIES MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 36 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

605-470A	Sediment & Oil Trap Manhole (1,000 Gallon) 1 EACH = Sheet Total
605-535A	Catch Basin Type 5 2 EACH = Sheet Total
605-635A	Adjust Manhole Covers 2 EACH = Sheet Total
605-640A	Adjust Valve Covers (Provide New Valve Can & Cover) 1 EACH = Sheet Total
606-025A	12" Pipe Underdrain (Perforated SDR 35 PVC) 38 FT = Sheet Total
640-005A	Drainage Geotextile 167 SY = Sheet Total
S600-30A	Water Valve - Size 6" 1 EACH = Sheet Total
S600-30C	Water Valve - Size 12" 1 EACH = Sheet Total
S600-30D	Water Service Connection, Size 1" 1 EACH = Sheet Total
S600-30E	Water Main Fitting, Size Varies (See Plans), Tee 1 EACH = Sheet Total
S600-30F	1" Diameter Pressure Irrigation Service 1 EACH = Sheet Total
S900-10A	Cleanout (4" Sewer) 1 EACH = Sheet Total
S901-05A	SP-Groundwater Observation Well 2 EACH = Sheet Total
S901-05B	SP-Street Light, Type Large Wattage, 35' Mounting Height 2 EACH = Sheet Total
S901-05C	Junction Box & Apron (S-40T) 2 EACH = Sheet Total
S901-05D	SP-Junction Box & Apron (S-45T & Riser) 1 EACH = Sheet Total
S901-05E	SP-Miscellaneous Utility, Adjust to Grade SS Cleanout (Traffic Rated) 3 EACH = Sheet Total
S901-05F	SP-Miscellaneous Utility, Adjust to Grade Electrical Box 2 EACH = Sheet Total
S911-05A	SP-72 CT Fiber Optic Interconnect Cable 1368 FT = Sheet Total
S911-05B	SP-Wire Conductor, Type #6 THWN 3588 FT = Sheet Total
S911-05C	SP-Conduit, Size 2" 1264 FT = Sheet Total
S911-05D	SP-Wire Conductor, Type #10 TWHN 432 FT = Sheet Total
S913-05A	SP-3" Drain Rock 104 CY = Sheet Total
S913-05B	SP-Filter Sand 44 CY = Sheet Total

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON - UTILITIES.DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

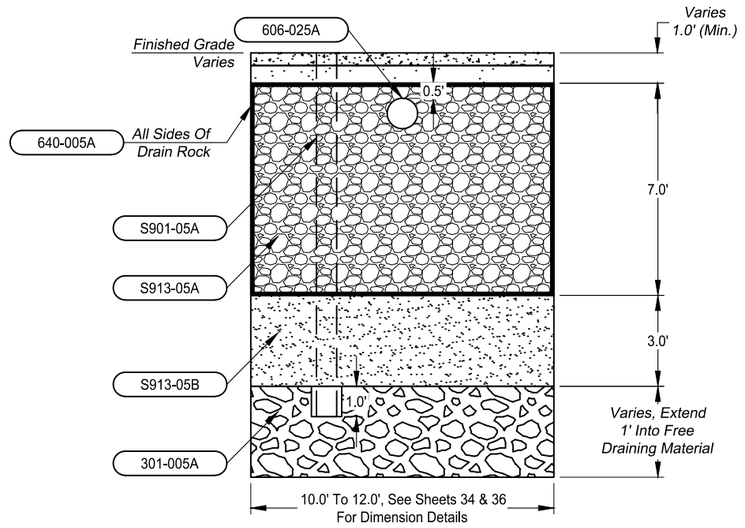
PROJECT NO.
A024(229)

UTILITIES
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

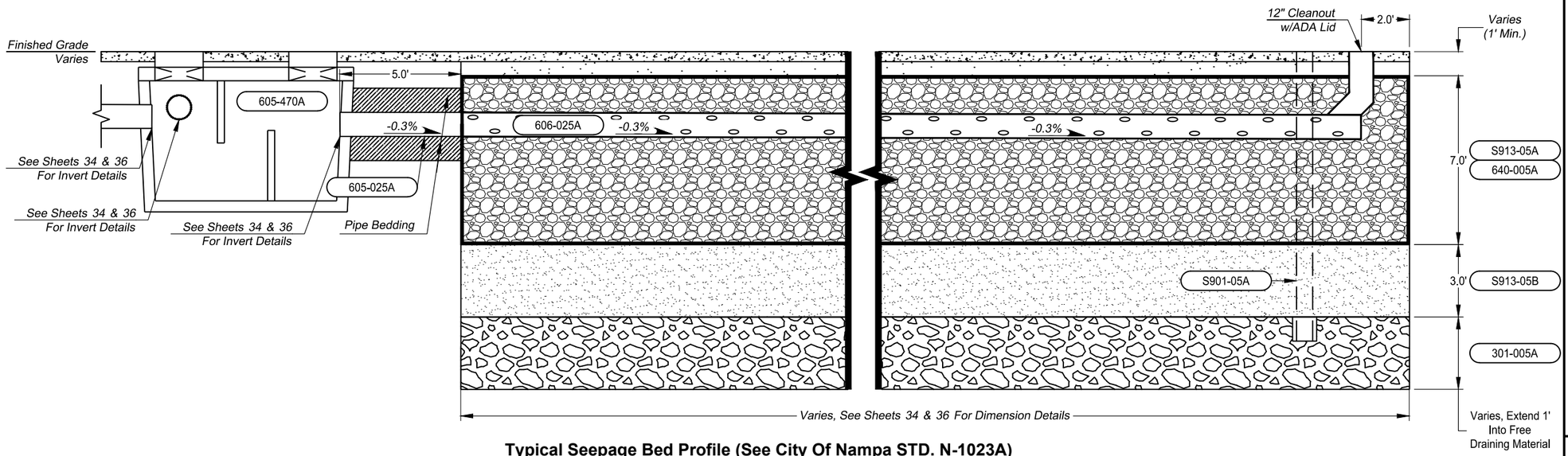
KEY NUMBER 24229



A
34, 36 / 38

Seepage Bed Section (See City Of Nampa STD. N-1023A)

N.T.S.



Typical Seepage Bed Profile (See City Of Nampa STD. N-1023A)

N.T.S.

301-005A	Granular Subbase
605-025A	12" Storm Sewer Pipe (SDR 35 PVC)
605-470A	Sediment & Oil Trap Manhole (1,000 Gallon)
606-025A	12" Pipe Underdrain (Perforated SDR 35 PVC)
640-005A	Drainage Geotextile
S901-05A	SP-Groundwater Observation Well
S913-05A	SP-3" Drain Rock
S913-05B	SP-Filter Sand

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

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CADD FILE NAME MIDDLETON - UTILITIES.DWG
DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

SEEPAGE BED DETAILS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

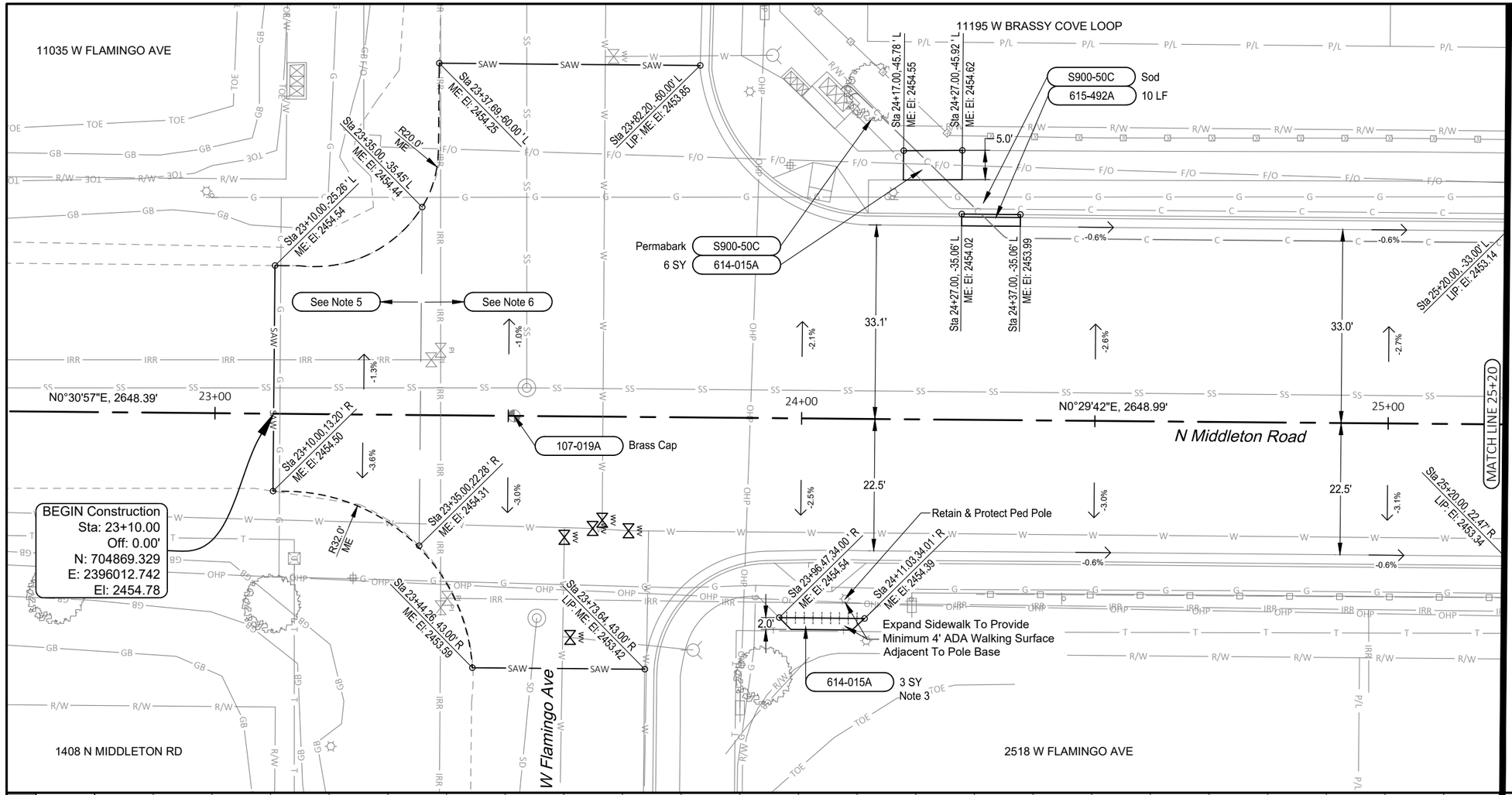
English

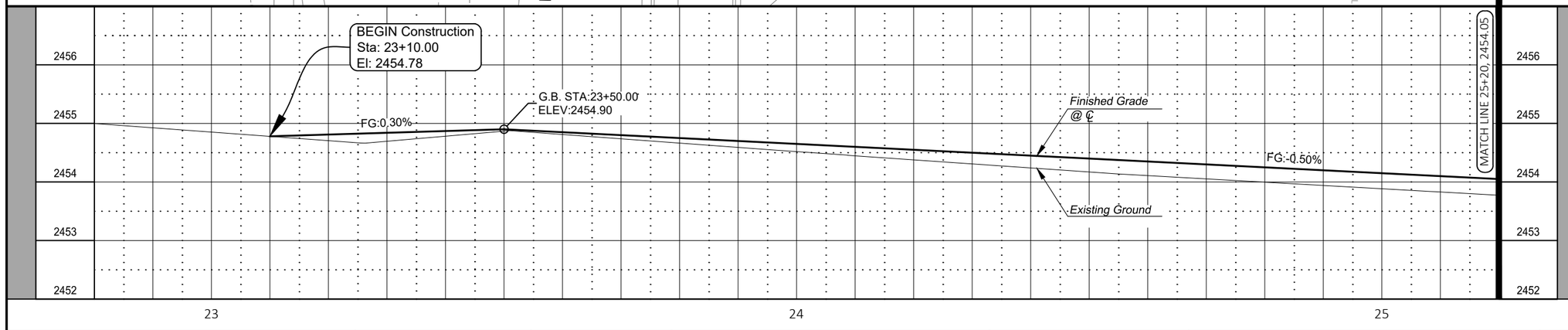
COUNTY CANYON

KEY NUMBER 24229

SHEET 38 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON





107-019A	Survey Monument Preservation
614-015A	Sidewalk (Thickness 5") 9 SY = Sheet Total
615-492A	Curb & Gutter Type 2 10 LF = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. Dowels Drilled & Epoxied Into Center Of Concrete Section. Dowels To Be 1' In Length #4 Rebar, Spaced 12" O.C. 6" Embedment Into Existing Sidewalk Is Specified (Incidental To Sidewalk Item).
4. See Sheets 31 Thru 36 For Utility Adjustments.
5. STA 23+10.00 To STA 23+35.00 - Construct New Pavement Only (No Excavation Or Granular Subbase). Contractor Shall Remove Existing Pavement, Regrade Existing Base Gravel Supplemented With $\frac{3}{4}$" Aggregate Type B For Base As Necessary To Shape Area To The Finished Grade And Proof Roll In The Presence Of The Engineer Prior To Paving.
6. STA 23+35.00 - Begin Full Depth Roadway Construction.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
GB - Grade Break
LIP - Lip Of Curb & Gutter

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

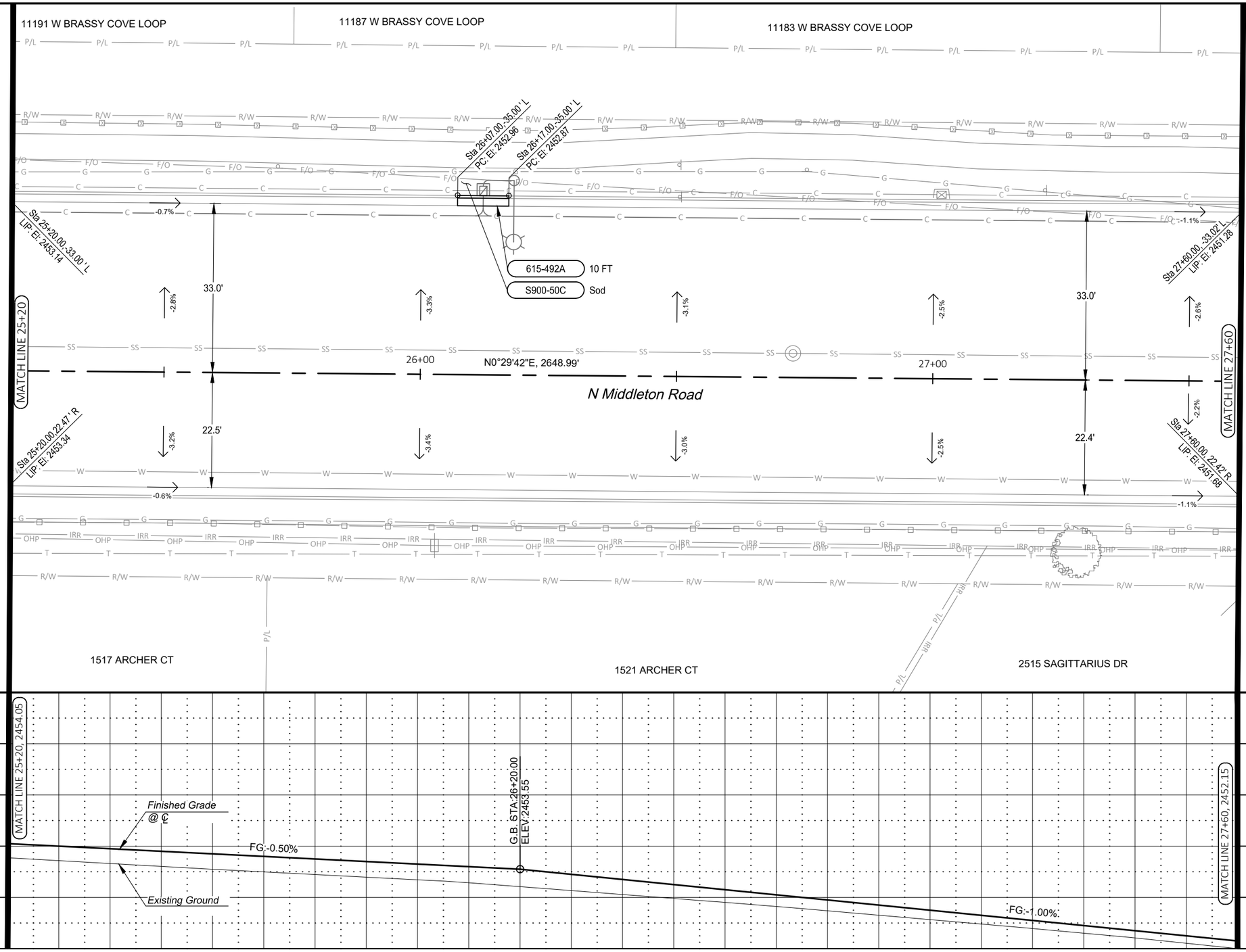
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PLAN / PROFILE: MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 39 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



615-492A Curb & Gutter Type 2
10 FT = Sheet Total

S900-50C Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes
2. See Sheets 31 Thru 36 For Utility Adjustments

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
GB - Grade Break
LIP - Lip Of Curb & Gutter

10 0 10 20 Horizontal
1 0 1 2 Vertical

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
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DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

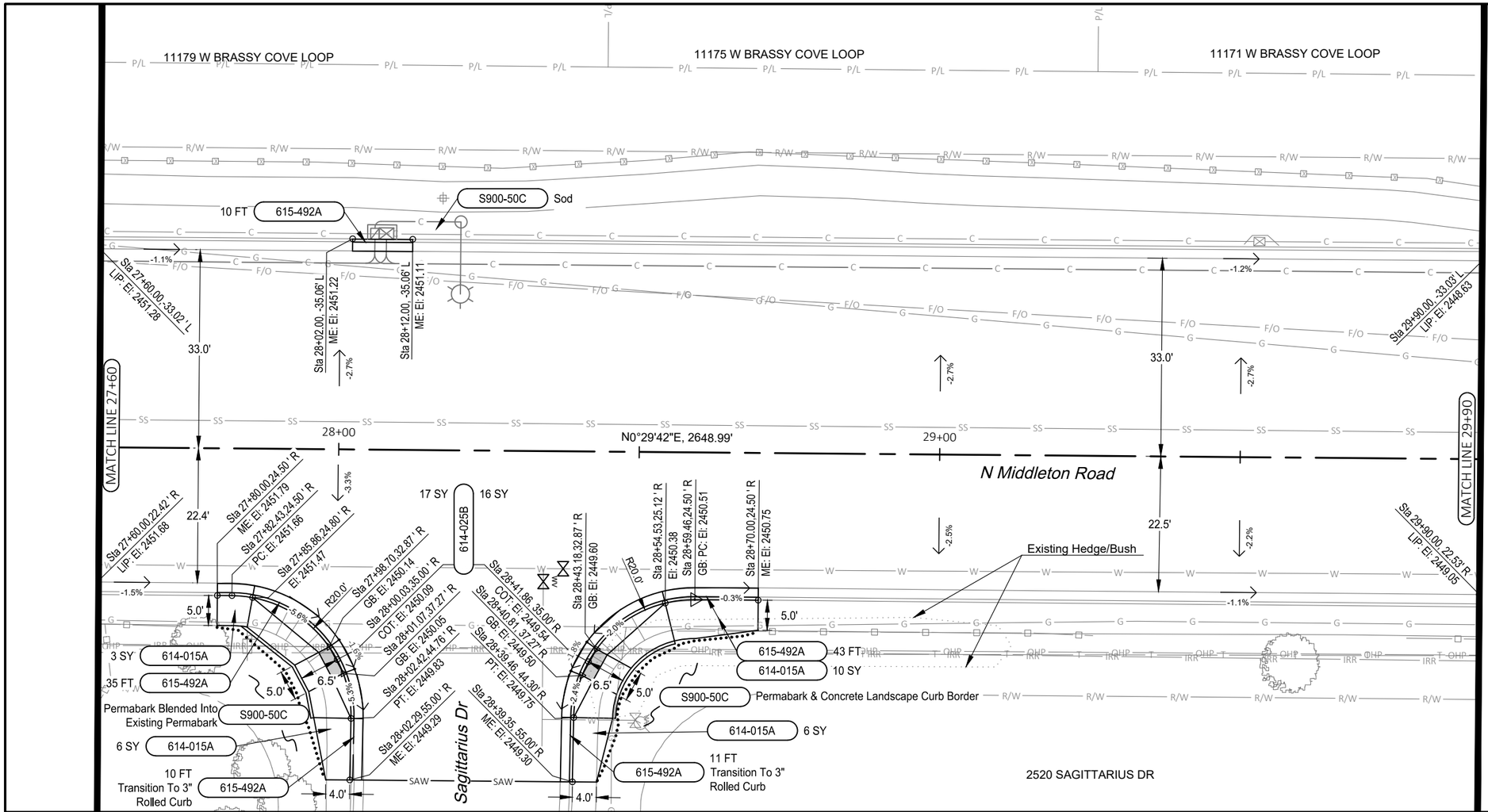
PARAGON CONSULTING, INC.

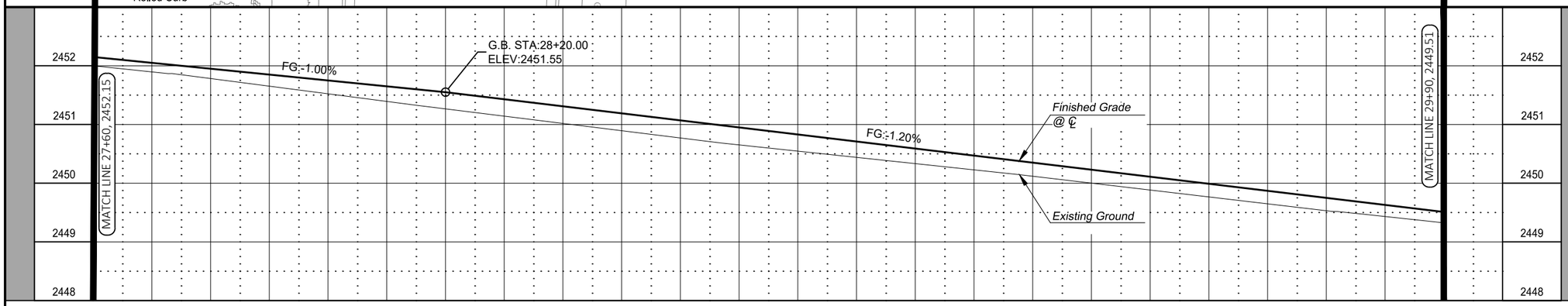
PROJECT NO. A024(229)

PLAN / PROFILE MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON
KEY NUMBER 24229
SHEET 40 OF 70





614-015A	Sidewalk (Thickness 5") 25 SY = Sheet Total
614-025B	Curb Ramp (Combination) 33 SY = Sheet Total
615-492A	Curb & Gutter Type 2 109 FT = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheets 31 Thru 36 For Utility Adjustments

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
GB - Grade Break
LIP - Lip Of Gutter
COT - Center Of Throat

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

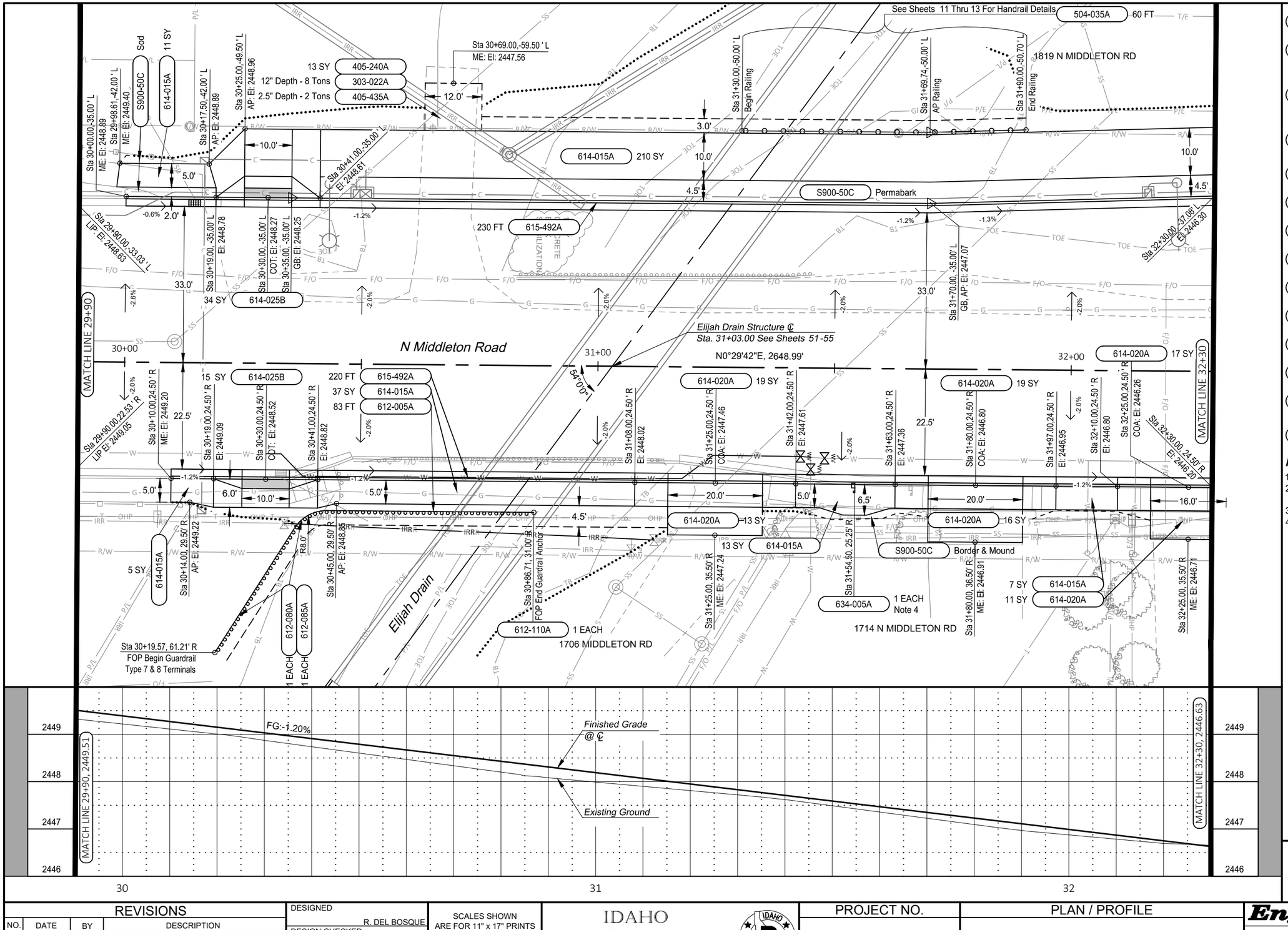
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.: A024(229)

PLAN / PROFILE: MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 41 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



303-022A	3/4" Aggregate Type B for Base 8 Ton = Sheet Total
405-240A	Miscellaneous Pavement 13 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 2 Ton = Sheet Total
504-035A	Pedestrian / Bicycle Railing (Including Concrete & Reinforcement) 60 FT = Sheet Total
612-005A	W-Beam Guardrail 83 FT = Sheet Total
612-080A	Guardrail Terminal Type 7 1 EACH = Sheet Total
612-085A	Guardrail Terminal Type 8 1 EACH = Sheet Total
612-110A	Guardrail Anchor 1 EACH = Sheet Total
614-015A	Sidewalk (Thickness 5") 283 SY = Sheet Total
614-020A	Driveway (Dipped Sidewalk) 95 SY = Sheet Total
614-025B	Curb Ramp (Combination) 49 SY = Sheet Total
615-492A	Curb & Gutter Type 2 450 FT = Sheet Total
634-005A	Mailbox 1 EACH = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For Gerneral Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheets 31 Thru 36 Utility Adjustments.
4. Stockpile Existing Mailbox For Owner Pick-up.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
GB - Grade Break
LIP - Lip Of Gutter
COT - Center Of Throat
COA - Center Of Approach
FOP - Face Of Post

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.	PLAN / PROFILE
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

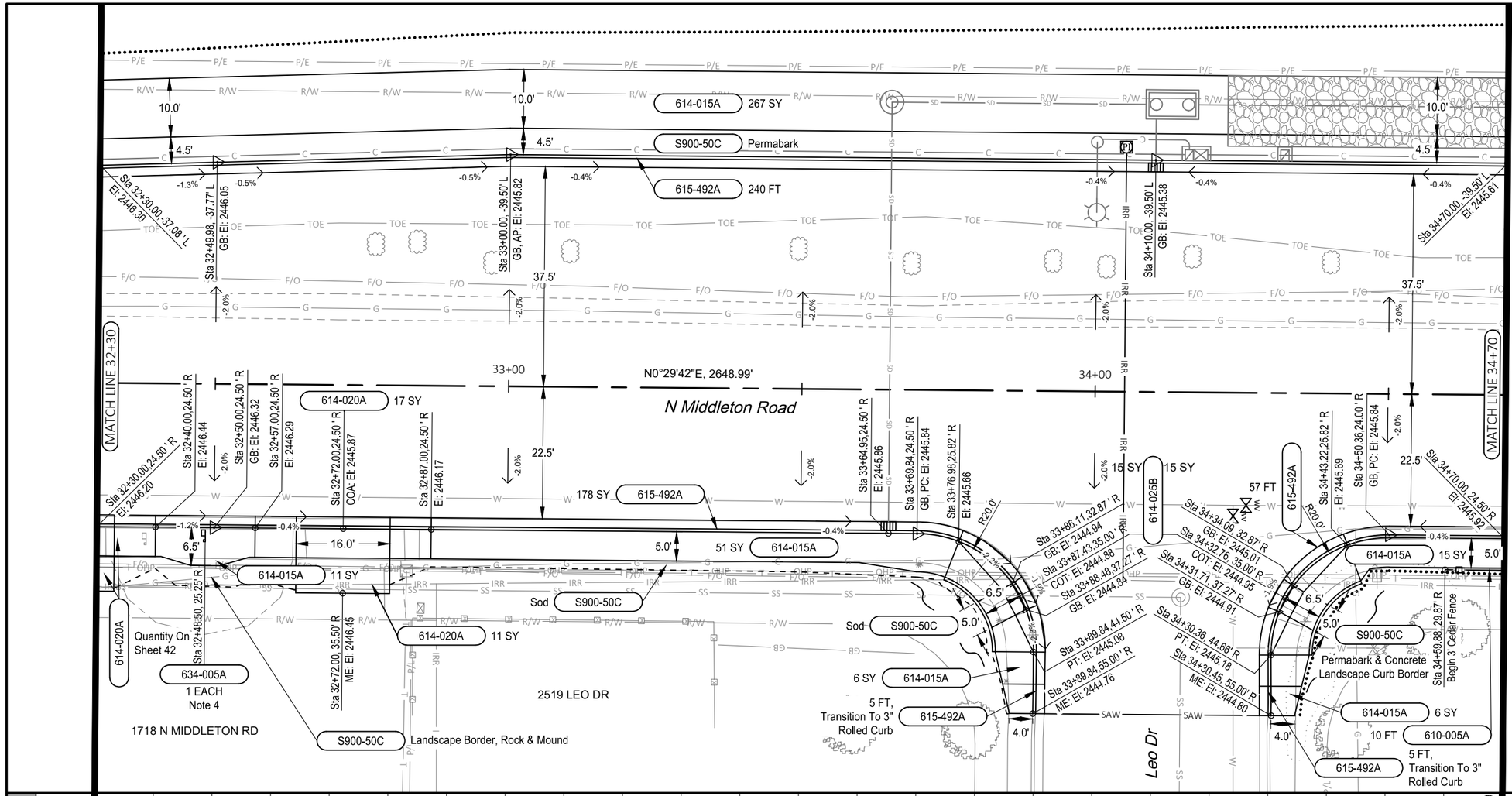
English

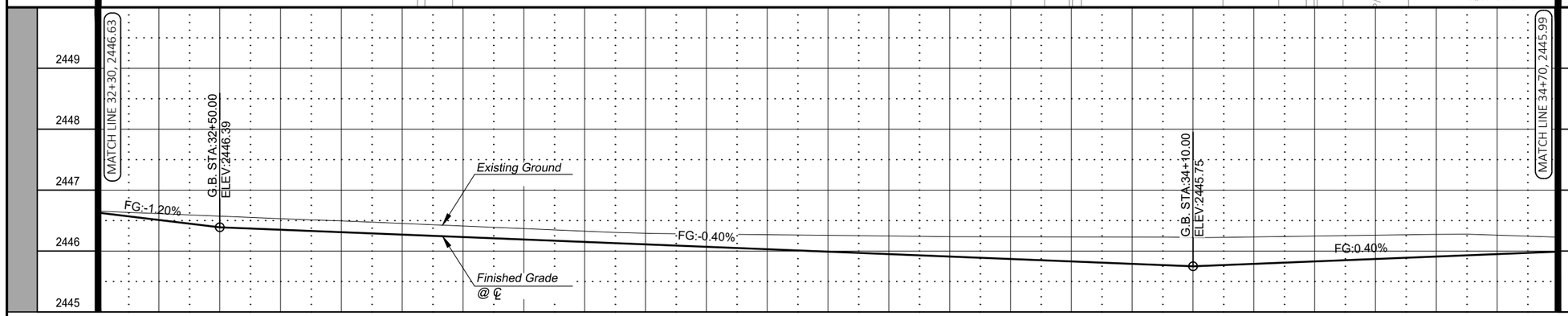
COUNTY CANYON

KEY NUMBER 24229

SHEET 42 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON





610-005A	Fence A (Type 3' Cedar) 10 FT = Sheet Total
614-015A	Sidewalk (Thickness 5") 356 SY = Sheet Total
614-020A	Driveway (Dipped Sidewalk) 28 SY = Sheet Total
614-025B	Curb Ramp (Combination) 30 SY= Sheet Total
615-492A	Curb & Gutter Type 2 485 FT = Sheet Total
634-005A	Mailbox 1 EACH = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheets 31 Thru 36 For Utilities Adjustments.
4. Stockpile Existing Mailbox For Owner Pick-up.

ABBREVIATION KEY

- *ME - Match Existing*
- *AP - Angle Point*
- *PC - Point Of Curvature*
- *PT - Point of Tangency*
- *GB - Grade Break*
- *LIP - Lip Of Gutter*
- *COA - Center Of Approach*
- *COT - Center Of Throat*

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
DESIGN CHECKED W.J. BARTON	
DETAILED J. JONES	CADD FILE NAME MIDDLETON.DWG
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.	PLAN / PROFILE
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

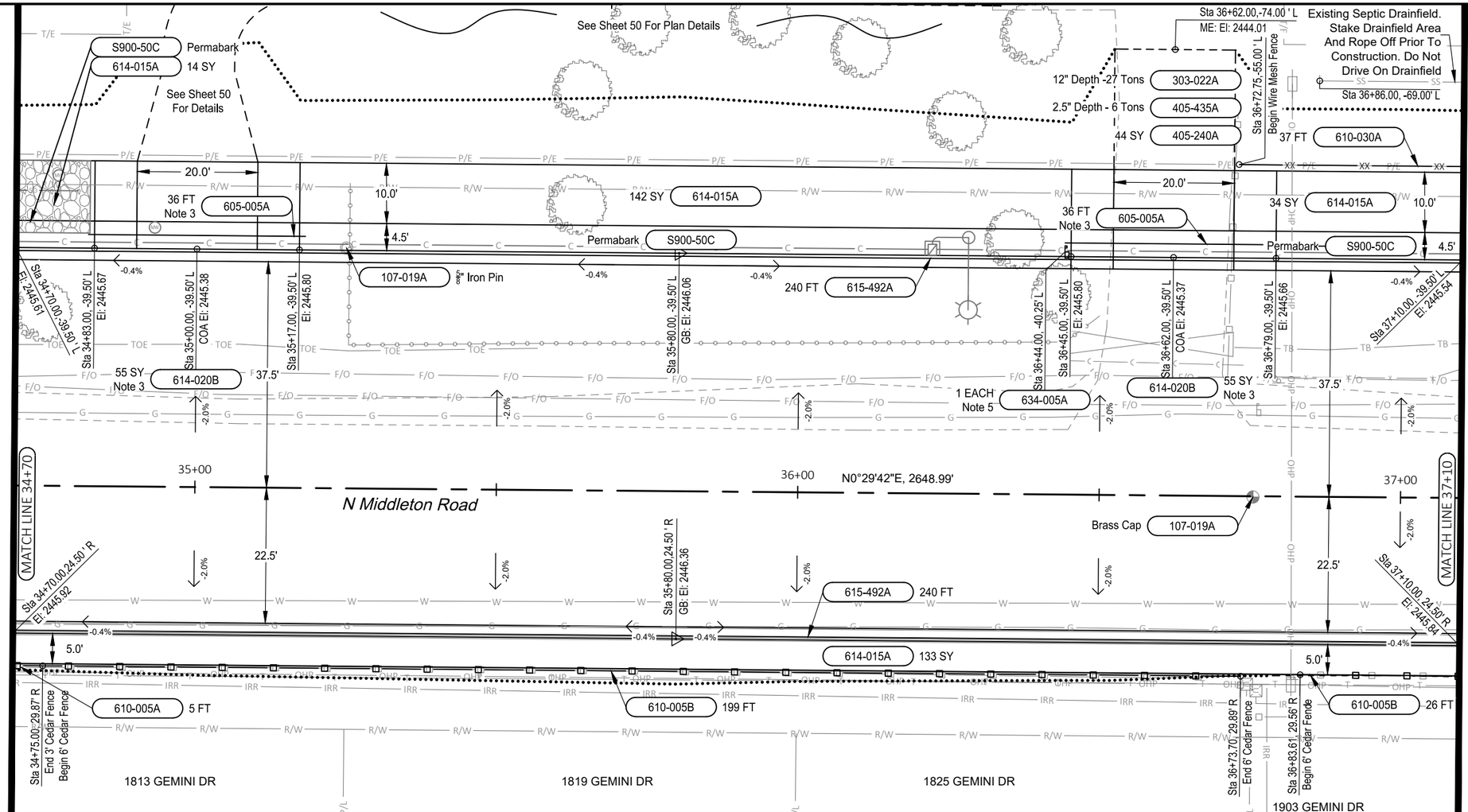
English

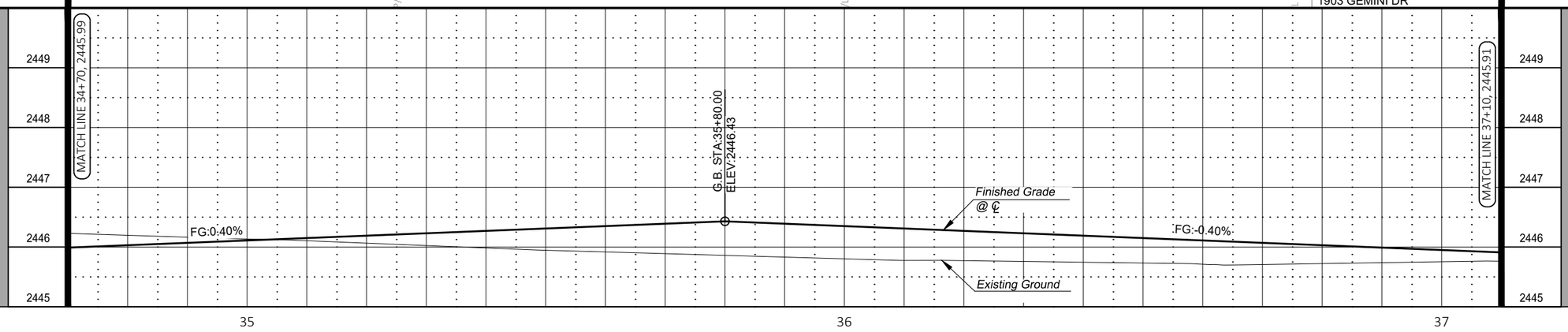
COUNTY CANYON

KEY NUMBER 24229

SHEET 43 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON





107-019A	Survey Monument Preservation
303-022A	3/4" Aggregate Type B for Base 27 Ton = Sheet Total
405-240A	Miscellaneous Pavement 44 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 6 Ton = Sheet Total
605-005A	4" Storm Sewer Pipe (SDR 35 PVC) 72 FT = Sheet Total
610-005A	Fence A (Type 3' Cedar) 5 FT = Sheet Total
610-005B	Fence B (Type 6' Cedar) 225 FT = Sheet Total
610-030A	Fence Type 3 B (48" Mesh and No Barbed Wire) 37 FT = Sheet Total
614-015A	Sidewalk (Thickness 5") 323 SY = Sheet Total
614-020B	Driveway (Combination) 110 SY = Sheet Total
615-492A	Curb & Gutter Type 2 480 FT = Sheet Total
634-005A	Mailbox 1 EACH = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheet 10 For Typical Driveway (Combination) Details.
4. See Sheets 31 Thru 36 For Utility Adjustments.
5. Stockpile Existing Mailbox For Owner Pick-up.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point of Tangency
GB - Grade Break
COA - Center Of Approach

10 0 10 20 Horizontal
1 0 1 2 Vertical

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

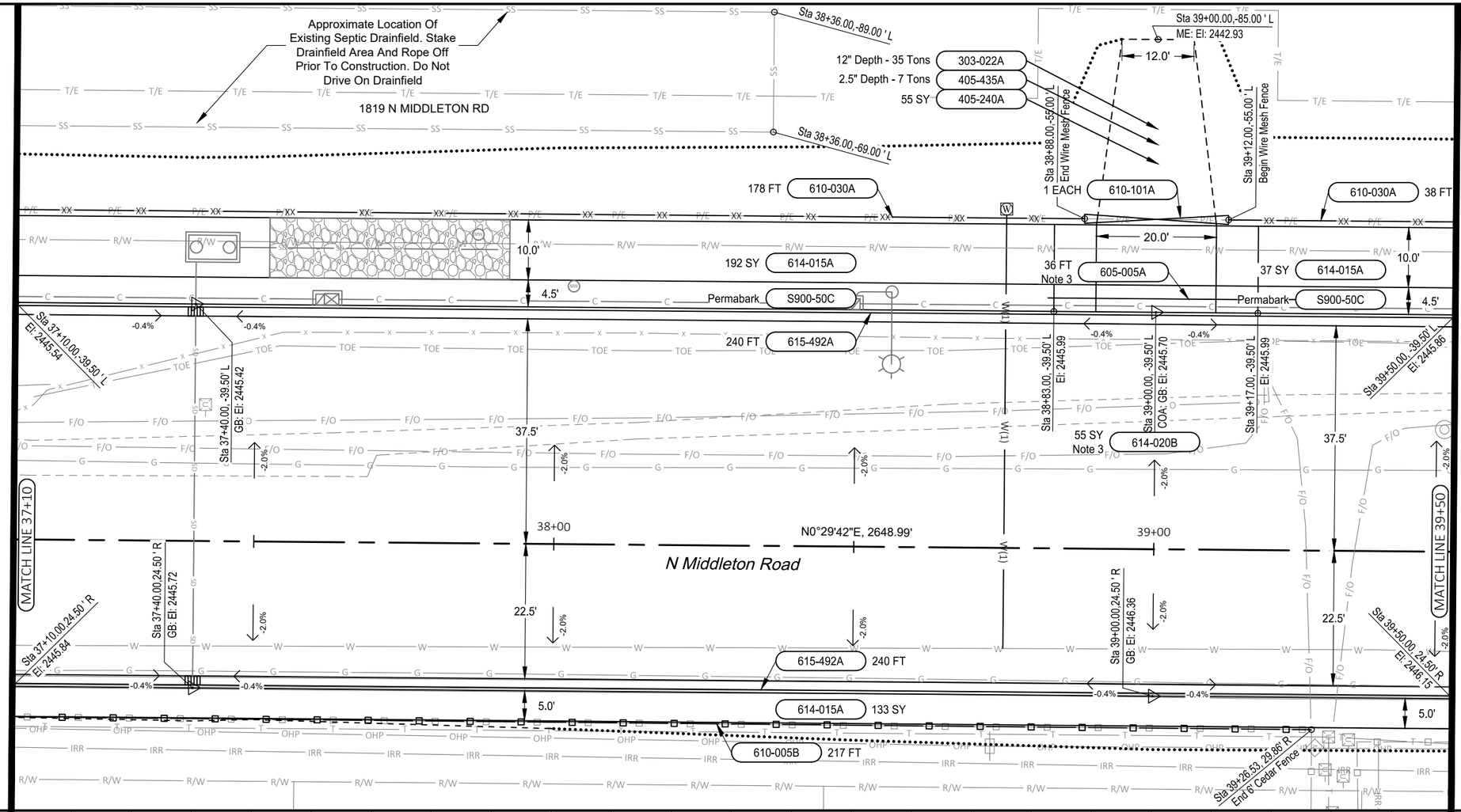
SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

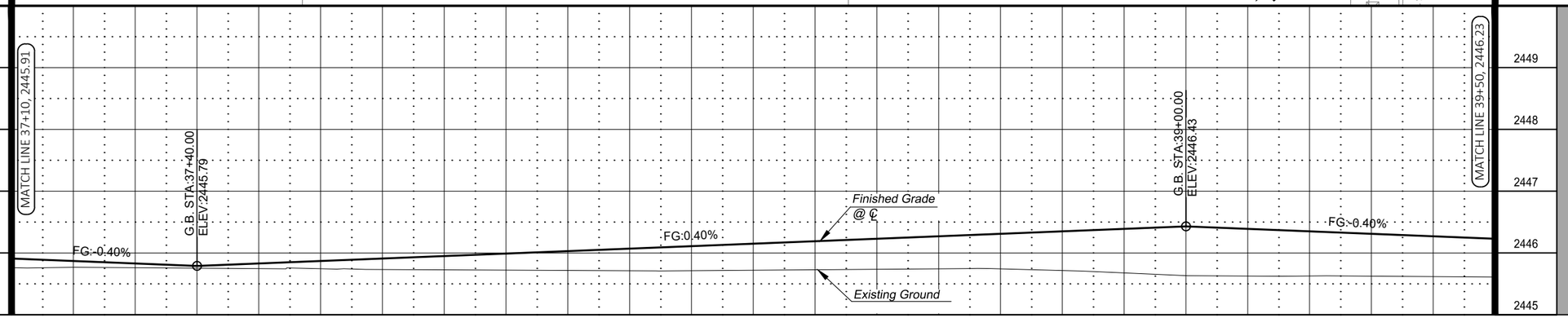
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PLAN / PROFILE MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 44 OF 70





303-022A	3/4" Aggregate Type B for Base 35 TON = Sheet Total
405-240A	Miscellaneous Pavement 55 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 7 TON = Sheet Total
605-005A	4" Storm Sewer Pipe (SDR 35 PVC) 36 FT = Sheet Total
610-005B	Fence B (Type 6' Cedar) 217 FT = Sheet Total
610-030A	Fence Type 3 B (48" Mesh and No Barbed Wire) 216 FT = Sheet Total
610-101A	Gate Type 1A (Double Swing Farm) 1 EACH = Sheet Total
614-015A	Sidewalk (Thickness 5") 362 SY = Sheet Total
614-020B	Driveway (Combination) 55 SY = Sheet Total
615-492A	Curb & Gutter Type 2 480 FT = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheet 10 For Typical Driveway (Combination) Details.
4. See Sheets 31 Thru 36 For Utility Adjustments.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point of Tangency
GB - Grade Break

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
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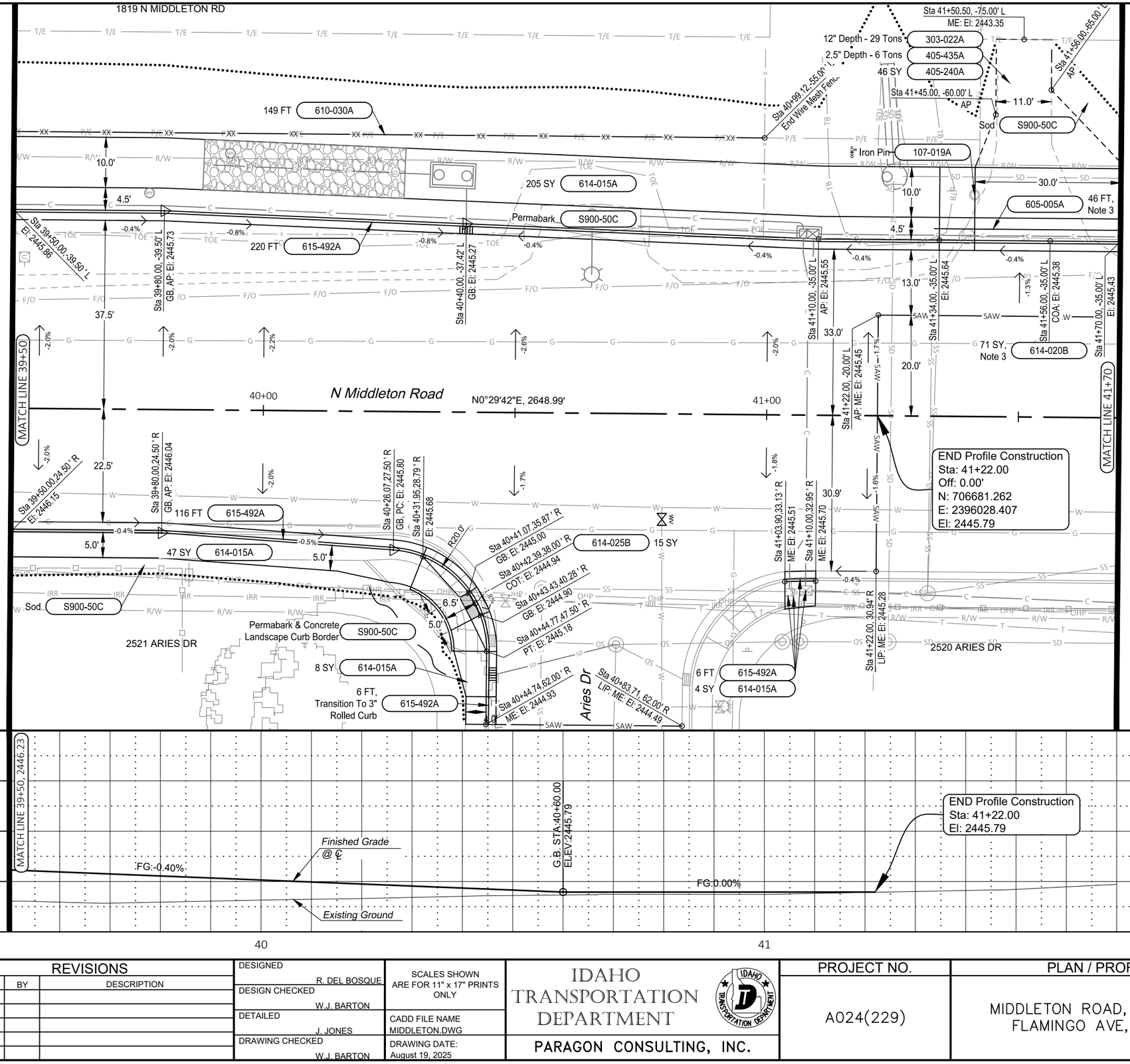
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PLAN / PROFILE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 45 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



107-019A	Survey Monument Preservation
303-022A	3/4" Aggregate Type B for Base 29 Tons = Sheet Total
405-240A	Miscellaneous Pavement 46 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 6 Tons = Sheet Total
605-005A	4" Storm Sewer Pipe (SDR 35 PVC) 46 FT = Sheet Total
610-030A	Fence Type 3 B (48" Mesh and No Barbed Wire) 149 FT = Sheet Total
614-015A	Sidewalk (Thickness 5") 264 SY = Sheet Total
614-020B	Driveway (Combination) 71 SY = Sheet Total
614-025B	Curb Ramp (Combination) 15 SY = Sheet Total
615-492A	Curb & Gutter Type 2 348 FT = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheet 10 For Typical Driveway (Combination) Details.
4. See Sheets 31 Thru 36 For Utilities Adjustment.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
LIP - Lip Of Gutter
GB - Grade Break
COA - Center Of Approach

10 0 10 20 Horizontal
1 0 1 2 Vertical

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
DESIGN CHECKED W.J. BARTON	
DETAILED J. JONES	CADD FILE NAME MIDDLETON.DWG
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

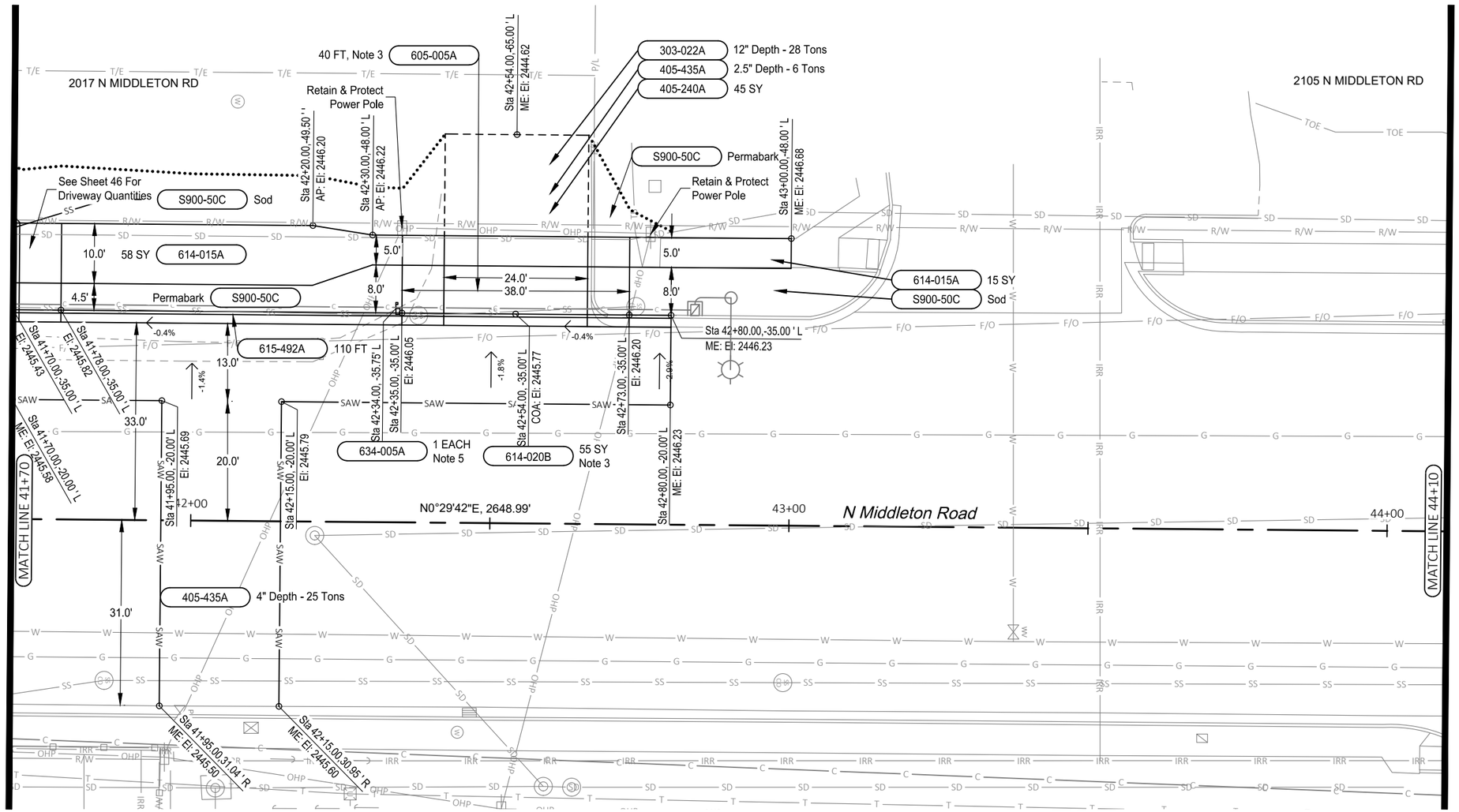
PROJECT NO.	PLAN / PROFILE
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY CANYON

KEY NUMBER 24229

SHEET 46 OF 70



303-022A	3/4" Aggregate Type B for Base 28 Tons = Sheet Total
405-240A	Miscellaneous Pavement 45 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 31 Tons = Sheet Total
605-005A	4" Storm Sewer Pipe (SDR 35 PVC) 40 FT = Sheet Total
614-015A	Sidewalk (Thickness 5") 73 SY = Sheet Total
614-020B	Driveway (Combination) 55 SY = Sheet Total
615-492A	Curb & Gutter Type 2 110 FT = Sheet Total
634-005A	Mailbox 1 EACH = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheet 10 For Typical Driveway (Combination) Details.
4. See Sheets 31 Thru 36 For Utility Adjustments.
5. Stockpile Existing Mailbox For Owner Pick-up.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point of Tangency
GB - Grade Break

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

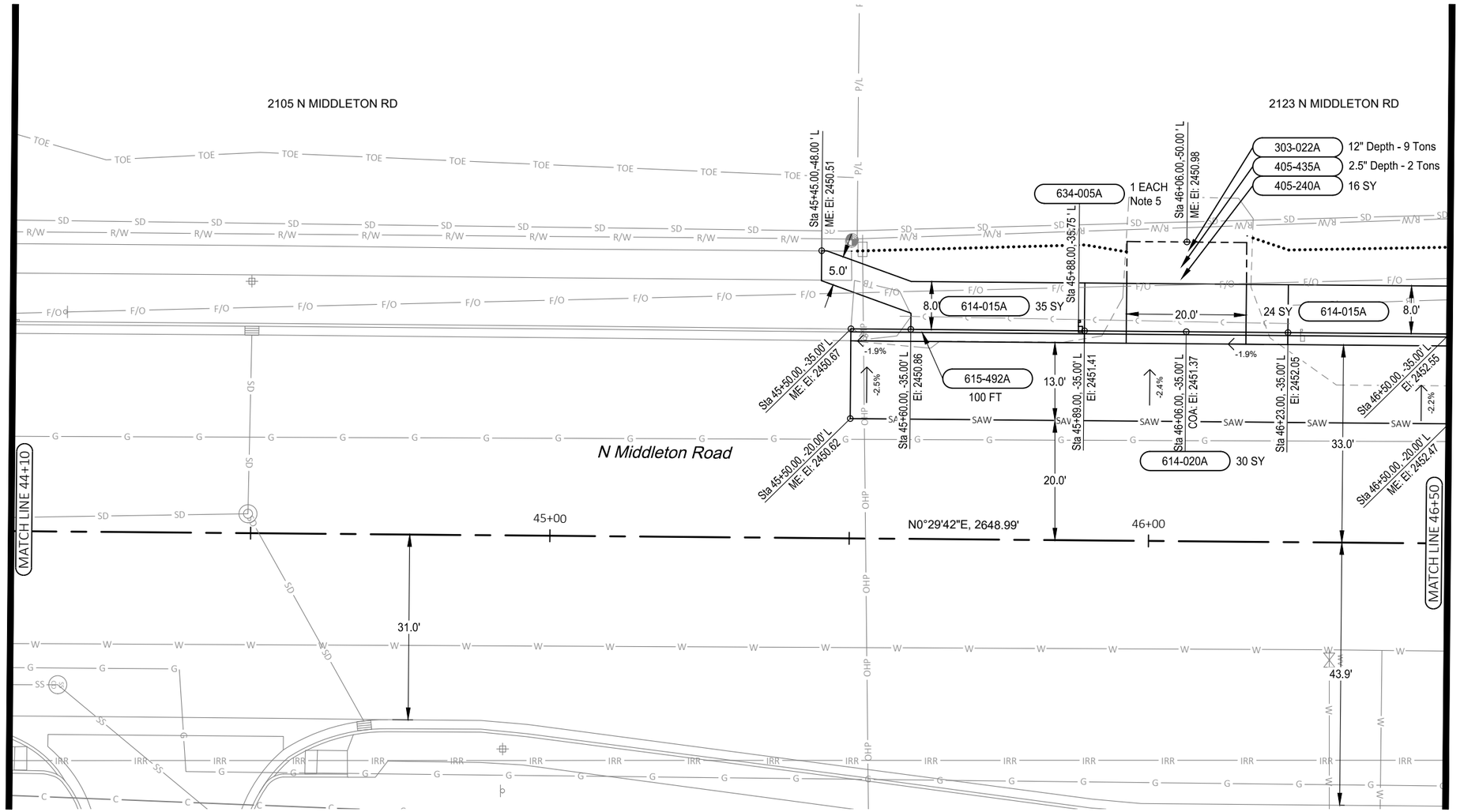
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

PLAN / PROFILE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 47 OF 70

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON



303-022A	3/4" Aggregate Type B for Base 9 Tons = Sheet Total
405-240A	Miscellaneous Pavement 16 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 2 Tons = Sheet Total
614-015A	Sidewalk (Thickness 5") 59 SY = Sheet Total
614-020A	Driveway (Dipped Sidewalk) 30 SY = Sheet Total
615-492A	Curb & Gutter Type 2 100 FT = Sheet Total
634-005A	Mailbox 1 EACH = Sheet Total

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheet 10 For Typical Driveway (Combination) Details.
4. See Sheets 31 Thru 36 For Utility Adjustments.
5. Stockpile Existing Mailbox For Owner Pick-up.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point Of Tangency
GB - Grade Break
LIP - Lip Of Gutter

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

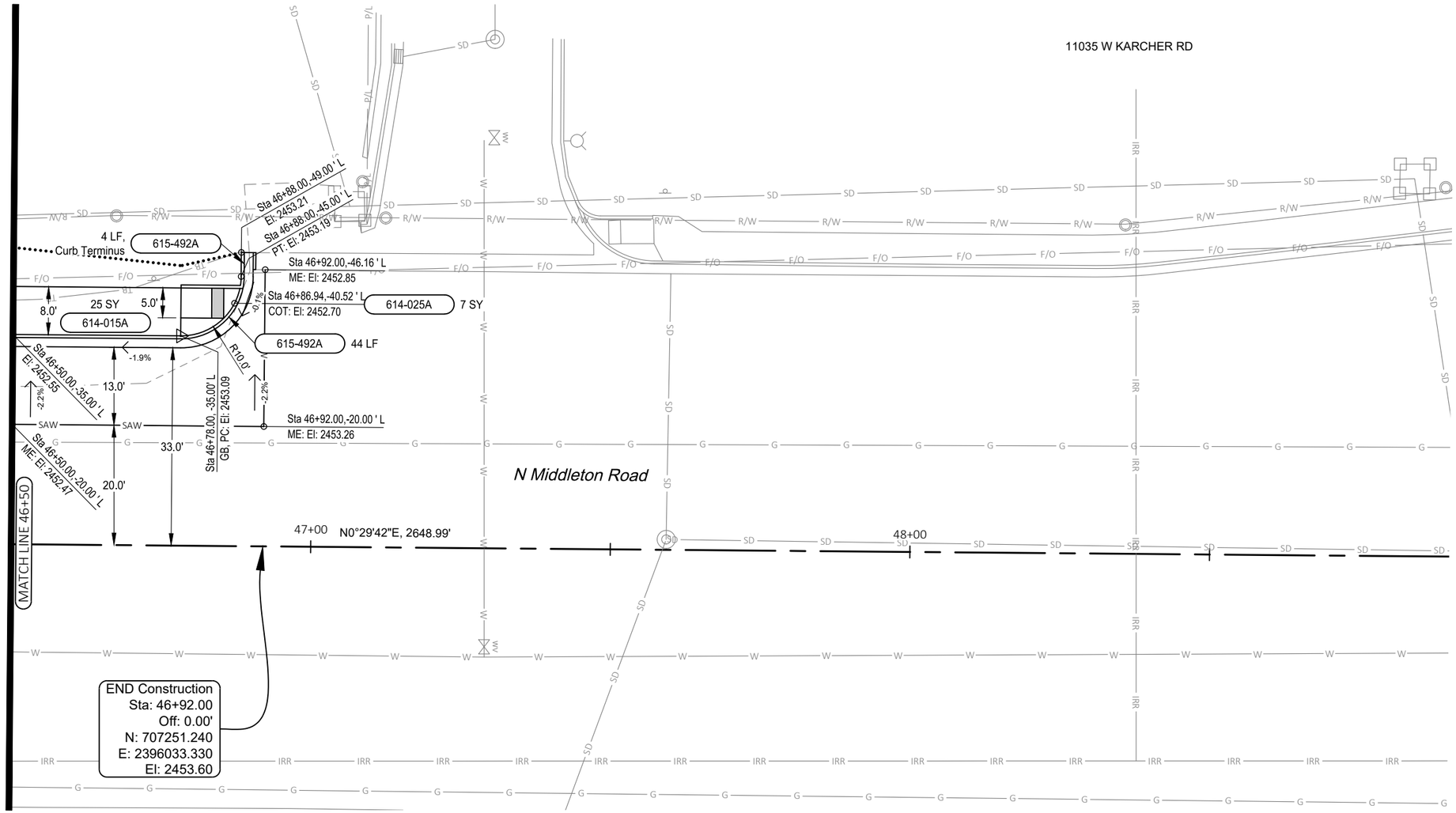
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO.
A024(229)

PLAN / PROFILE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 48 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



614-015A	Sidewalk (Thickness 5") 25 SY = Sheet Total
614-025A	Curb Ramp (Perpendicular) 7 SY = Sheet Total
615-492A	Curb & Gutter Type 2 48 LF = Sheet Total

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Calls Are To Top Back Of Curb Unless Otherwise Noted.
3. See Sheets 31 Thru 36 For Utility Adjustments.

ABBREVIATION KEY

- ME - Match Existing
- AP - Angle Point
- PC - Point Of Curvature
- PT - Point Of Tangency
- GB - Grade Break

10 0 10 20 Horizontal
1 0 1 2 Vertical

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

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CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

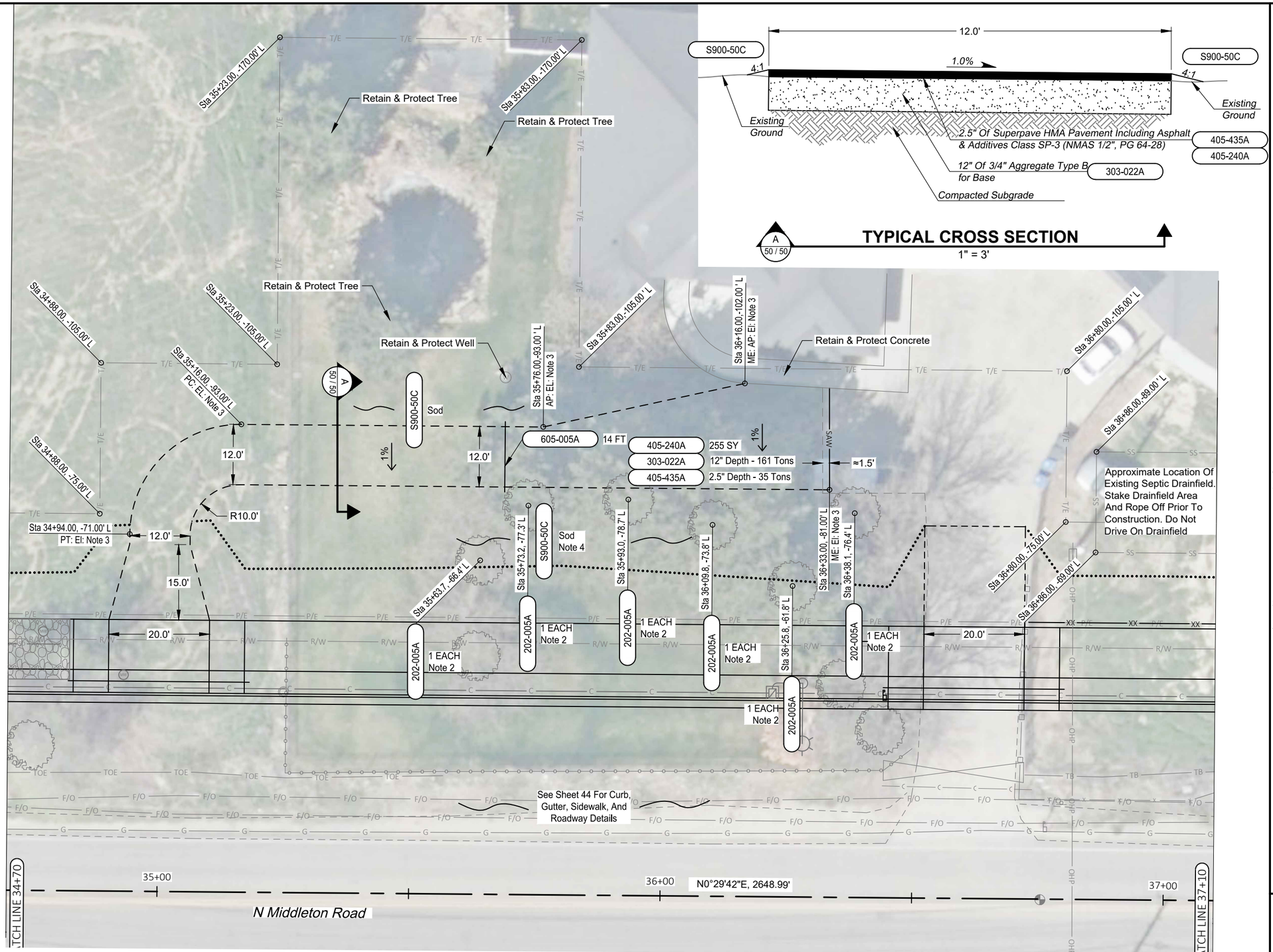
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PLAN / PROFILE: MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 49 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



A
50 / 50

TYPICAL CROSS SECTION

1" = 3'

202-005A	Selective Removal of Trees Including Stumps 6 EACH = Sheet Total, Note 2
205-005A	Excavation 90 CY = Sheet Total
303-022A	3/4" Aggregate Type B for Base 161 Ton = Sheet Total
405-240A	Miscellaneous Pavement 255 SY = Sheet Total
405-435A	Superpave HMA Pavement Including Asphalt & Additives Class SP-3 (NMAS 1/2", PG 64-28) 35 Ton = Sheet Total
605-005A	4" Storm Sewer Pipe (SDR 35 PVC) 14 FT = Sheet Total
S900-50C	Contingency Amount-Landscape / Sod / Surface / Sprinkler System

ALL WORK ITEMS AND QUANTITIES SHOWN ON THIS SHEET ARE LOCAL PARTICIPATION WORK BY CONTRACT

NOTES

1. See Sheet 5 & 6 For General Notes.
2. All Trees Identified Under Item 202-005A Are Schedule For Removal. Once Construction Staking Is Complete, Delineating The Limits Of Construction, The Contractor Shall Provide The Property Owner An Opportunity To Review The Staking And Existing Tree Locations. The Property Owner May, At Their Own Risk Of Trees Dying Due To Root Damage Caused By Construction, Elect To Have Certain Trees Retained And Protected, Rather Than Removed Under Item 202-005A.
3. Elevations Beyond Surveyed Area Shall Be Field Verified
4. Grade Area From Back Of Sidewalk To New Driveway For Sod Surface Repairs.

ABBREVIATION KEY

ME - Match Existing
AP - Angle Point
PC - Point Of Curvature
PT - Point of Tangency
GB - Grade Break
COA - Center Of Approach

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

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CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

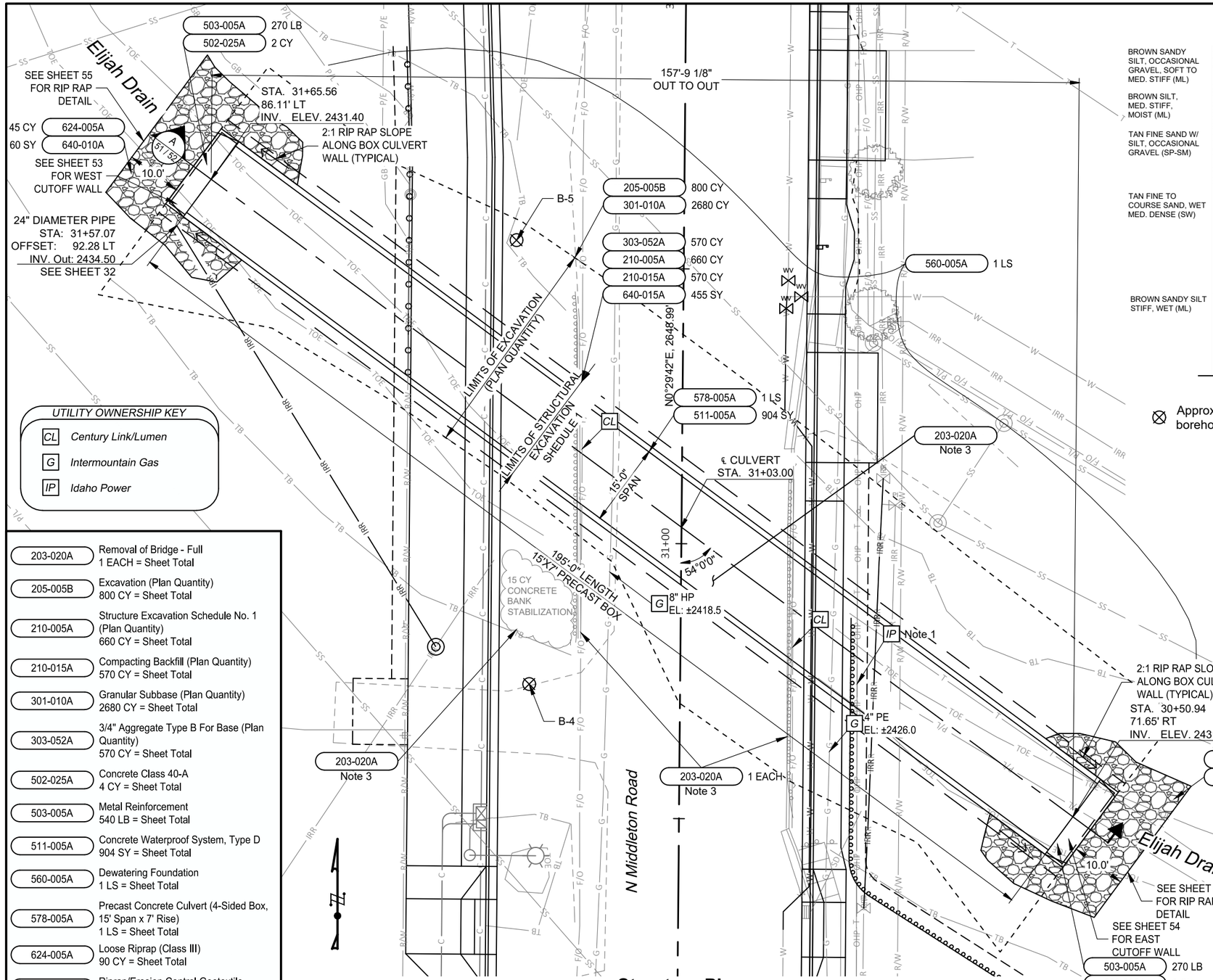
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

PLAN / PROFILE: MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 50 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

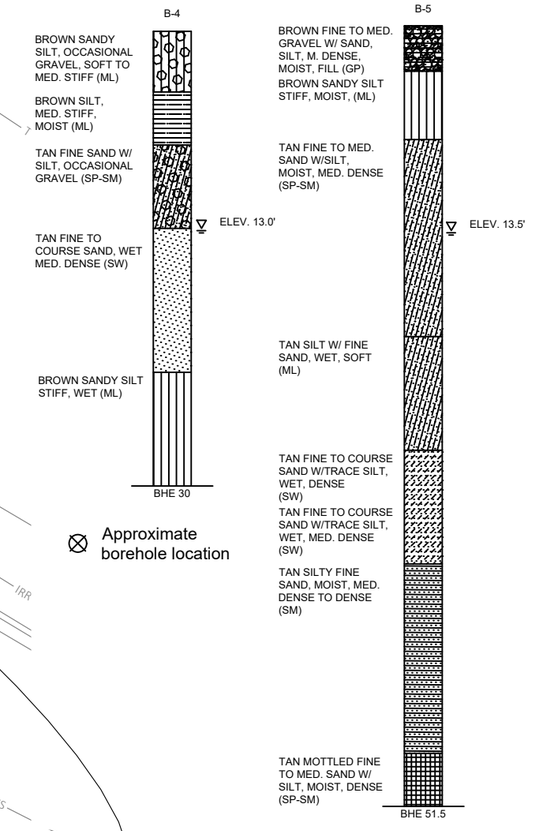


Structure Plan
Elijah Drain Crossing
1" = 20'

UTILITY OWNERSHIP KEY

- CL — Century Link/Lumen
- G — Intermountain Gas
- IP — Idaho Power

203-020A	Removal of Bridge - Full 1 EACH = Sheet Total
205-005B	Excavation (Plan Quantity) 800 CY = Sheet Total
210-005A	Structure Excavation Schedule No. 1 (Plan Quantity) 660 CY = Sheet Total
210-015A	Compacting Backfill (Plan Quantity) 570 CY = Sheet Total
301-010A	Granular Subbase (Plan Quantity) 2680 CY = Sheet Total
303-052A	3/4" Aggregate Type B For Base (Plan Quantity) 570 CY = Sheet Total
502-025A	Concrete Class 40-A 4 CY = Sheet Total
503-005A	Metal Reinforcement 540 LB = Sheet Total
511-005A	Concrete Waterproof System, Type D 904 SY = Sheet Total
560-005A	Dewatering Foundation 1 LS = Sheet Total
578-005A	Precast Concrete Culvert (4-Sided Box, 15' Span x 7' Rise) 1 LS = Sheet Total
624-005A	Loose Riprap (Class III) 90 CY = Sheet Total
640-010A	Riprap/Erosion Control Geotextile 120 SY = Sheet Total
640-015A	Subgrade Separation Geotextile (Type III) 455 SY = Sheet Total



⊗ Approximate borehole location

Boring Logs
Elijah Drain Crossing
N.T.S.

NOTES

1. It Is Anticipated The Contractor Will Encroach On The Required 10ft Working Clearance From Overhead Lines During This Crossing Demolition And Construction. Therefore, The Contractor Is Required To Contact Idaho Power At 1-800-488-6150 Per The Idaho Over Head Line Safety Act.
2. Where "R&P" IS Indicated Adjacent To A Utility Ownership Callout (X), It Is Anticipated That The Utility Can Be Retained And Protected. Where No "R&P" Is Indicated, The Utility May Require Relocation/Adjustment.
3. Item 203-020A Includes Removal Of The Existing Bridge Structure, Removal Of The ±15 Cubic Yard Concrete Bank Stabilization, Removal Of The Old Stiff Leg Culvert That Is Under The Existing Bridge And All Other Obstructions Necessary For The Proper Construction Of The New Box Culvert (See Sheet 22).

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
DESIGN CHECKED L VERNON
DETAILED
DRAWING CHECKED L VERNON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT
ELITE EDGE ENGINEERS

PROJECT NO. A024(229)

ELIJAH DRAIN STRUCTURE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 51 OF 70

PROFESSIONAL ENGINEER REGISTERED 7197 8/21/25 STATE OF IDAHO LISA K. VERNON

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

MATERIALS, CONSTRUCTION AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE ITD 2023 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE 2024 SUPPLEMENTS. ANY EXCEPTIONS ARE NOTED IN THE SPECIAL PROVISIONS OR CONSTRUCTION DRAWINGS.

MATERIAL

ALL CONCRETE SHALL BE CLASS 40-A WITH 3 LBS POLYPROPYLENE FIBER PER CY.

CONSTRUCTION

CONSTRUCTION JOINTS ARE PERMITTED ONLY WHERE SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.

CONCRETE WATERPROOF SYSTEM TYPE D SHALL BE APPLIED TO TOP OF BOX IN ACCORDANCE WITH SPECIFICATIONS.

BACKFILL OF THE STRUCTURE SHALL NOT BE MORE THAN 2 FEET DIFFERENCE IN ELEVATION FROM ONE SIDE OF THE STRUCTURE TO THE OTHER.

CONTRACTOR WILL SUBMIT DESIGN TO OWNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

PLAN DIMENSIONS AND ELEVATIONS

ALL EXPOSED CORNERS OF CONCRETE SHALL HAVE A 1" CHAMFER.

REINFORCING STEEL DIMENSIONS ARE MEASURED FROM CENTERLINE OF BAR UNLESS OTHERWISE NOTED.

REINFORCING STEEL CLEARANCE FROM THE OUTSIDE FACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE NOTED.

REINFORCING STEEL SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.

INCIDENTAL ITEMS

ALL ITEMS SHOWN OR NOTED ON PLANS WHICH ARE NOT SPECIFICALLY BID ITEMS ARE CONSIDERED INCIDENTAL ITEMS. THE COST OF FURNISHING AND INSTALLING INCIDENTAL ITEMS WILL NOT BE PAID FOR SEPARATELY.

DESIGN SPECIFICATIONS

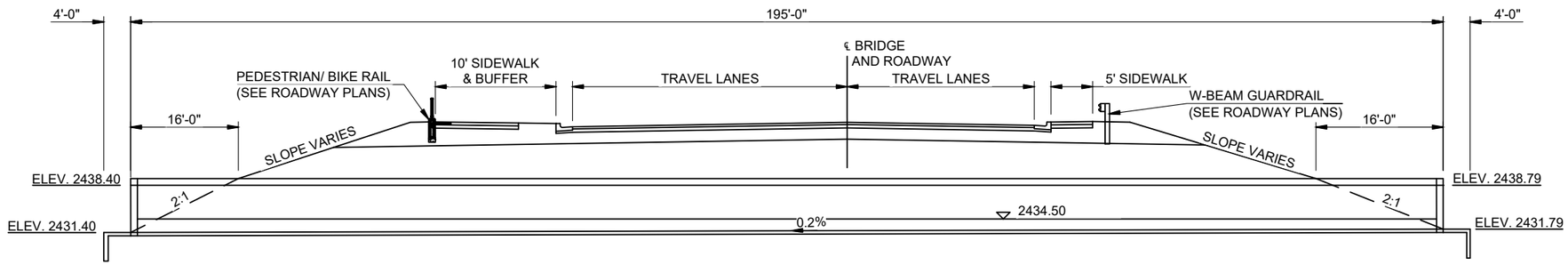
STRUCTURE DESIGNED IN ACCORDANCE WITH THE AASHTO "LFRD BRIDGE DESIGN SPECIFICATIONS", 9TH EDITION, 2020.

MAXIMUM FOOTING PRESSURES

ULTIMATE FOOTING PRESSURE (STRENGTH LIMIT)	3000	#/SF
ALLOWABLE FOOTING PRESSURE (SERVICE LIMIT STATE)	1500	#/SF

DESIGN LOADS

LIVE LOAD	HL93	
DEAD LOAD	CONCRETE = 150	PCF
DESIGN FILL	130	PCF
UNIT WEIGHT OF SOIL	135	PCF
SURCHARGE DEPTH	2.0	FT
LATERAL EQUIVALENT FLUID PRESSURE AT BARREL	36	PCF
LATERAL EQUIVALENT FLUID PRESSURE AT WINGWALL	57	PCF



A
51 / 52

Elijah Drain Structure Section

1" = 20'

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED

DESIGN CHECKED L VERNON

DETAILED

DRAWING CHECKED L VERNON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

ELITE EDGE ENGINEERS

PROJECT NO. A024(229)

ELIJAH DRAIN STRUCTURE

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

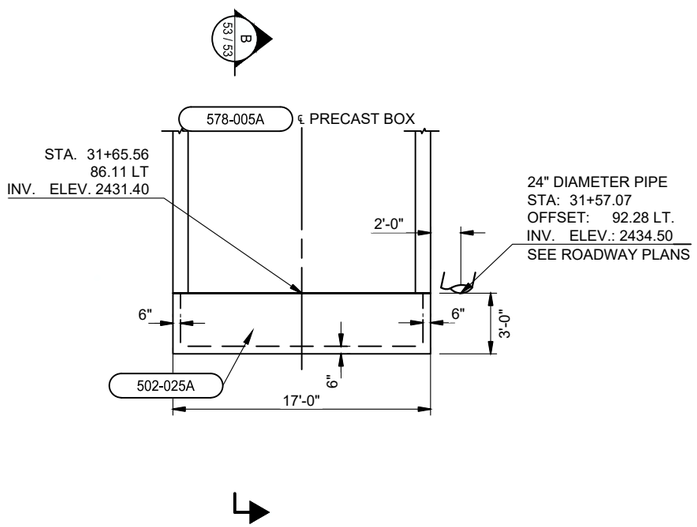
COUNTY CANYON

KEY NUMBER 24229

SHEET 52 OF 70

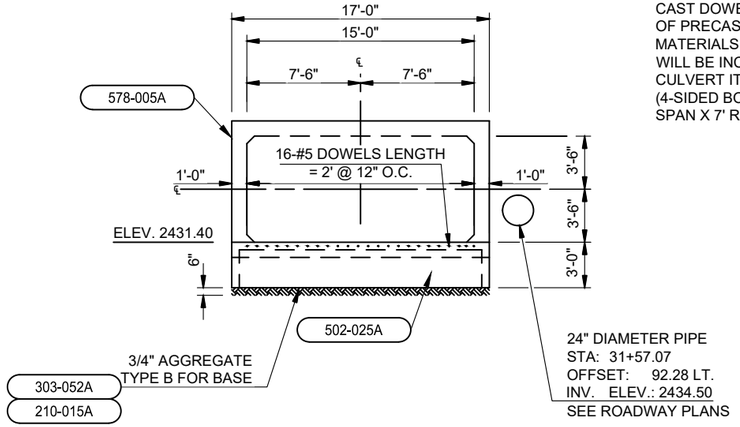
PROFESSIONAL ENGINEER REGISTERED 7197 8/21/25 STATE OF IDAHO LISA K. VERNON

210-015A	Compacting Backfill (Plan Quantity)
303-052A	3/4" Aggregate Type B For Base (Plan Quantity)
502-025A	Concrete Class 40-A
503-005A	Metal Reinforcement
578-005A	Precast Concrete Culvert (4-Sided Box, 15' Span x 7' Rise)
640-015A	Subgrade Separation Geotextile (Type III)



WEST CUTOFF WALL & SLAB PLAN

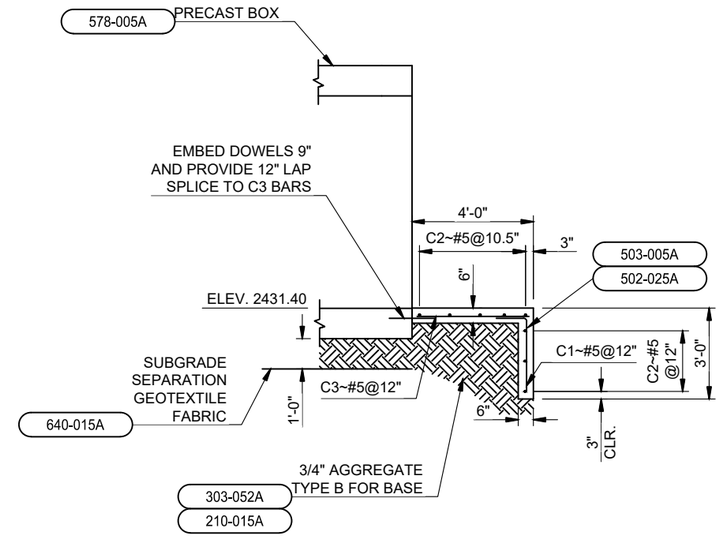
Elijah Drain Crossing
1" = 10'



NOTE: 578-005A
CAST DOWELS INTO END UNIT OF PRECAST BOX. DOWEL MATERIALS & INSTALLATION WILL BE INCIDENTAL TO BOX CULVERT ITEM, PREC STR (4-SIDED BOX CULVERT 15' SPAN X 7' RISE)

WEST CUTOFF WALL & SLAB ELEVATION

Elijah Drain Crossing
1" = 10'



B
53 / 53

WEST CUTOFF WALL & SLAB SECTION

1" = 5'

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
DESIGN CHECKED L VERNON
DETAILED
DRAWING CHECKED L VERNON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT
ELITE EDGE ENGINEERS

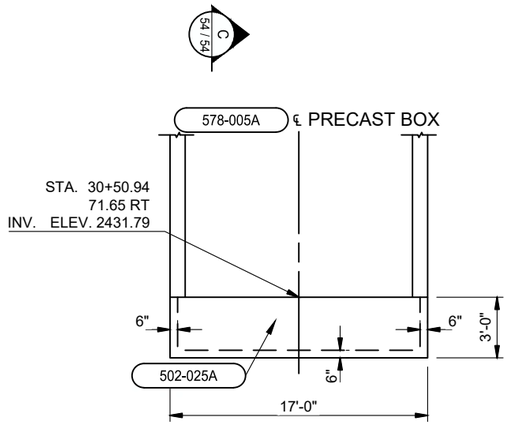
PROJECT NO.
A024(229)

ELIJAH DRAIN STRUCTURE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 53 OF 70

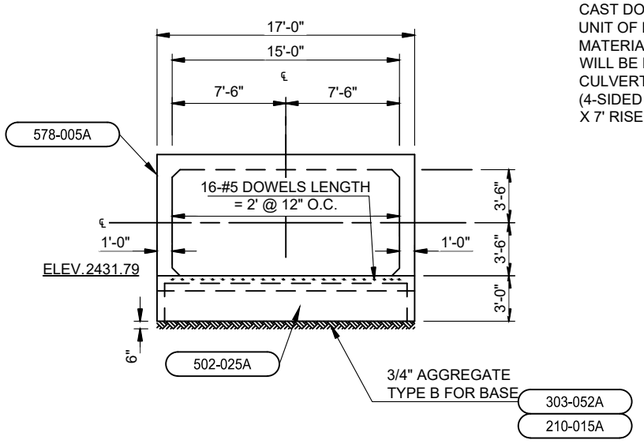
PROFESSIONAL ENGINEER REGISTERED 7197 8/21/25 STATE OF IDAHO LISA K. VERNON

210-015A	Compacting Backfill (Plan Quantity)
303-052A	3/4" Aggregate Type B For Base (Plan Quantity)
502-025A	Concrete Class 40-A
503-005A	Metal Reinforcement
578-005A	Precast Concrete Culvert (4-Sided Box, 15' Span x 7' Rise)
640-015A	Subgrade Separation Geotextile (Type III)



EAST CUTOFF WALL & SLAB PLAN

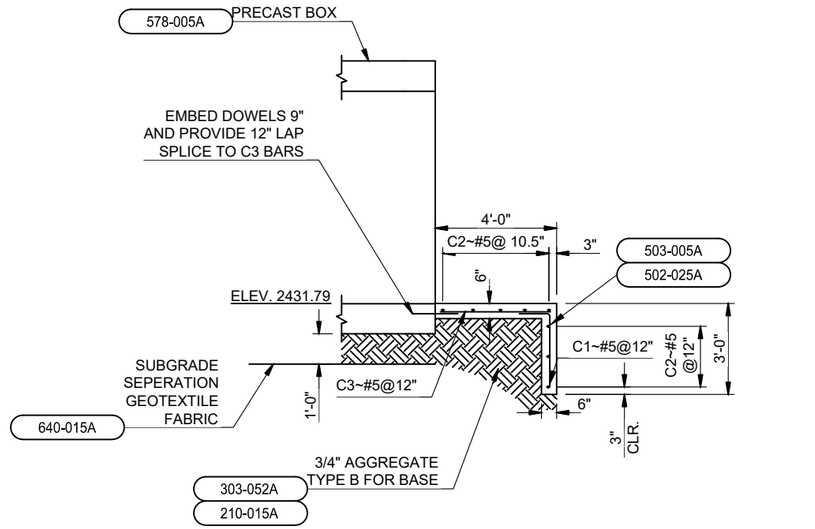
Elijah Drain Crossing
1" = 10'



NOTE: 578-005A
CAST DOWELS INTO END UNIT OF PRECAST BOX. DOWEL MATERIALS & INSTALLATION WILL BE INCIDENTAL TO BOX CULVERT ITEM: PREC STR (4-SIDED BOX CULVERT 15' SPAN X 7' RISE)

EAST CUTOFF WALL & SLAB ELEVATION

Elijah Drain Crossing
1" = 10'



C
54 / 54

EAST CUTOFF WALL & SLAB SECTION

1"= 5'

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
DESIGN CHECKED L VERNON
DETAILED
DRAWING CHECKED L VERNON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

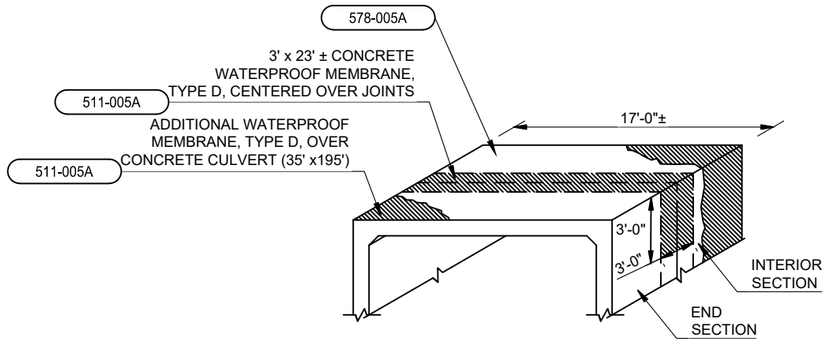
ELITE EDGE ENGINEERS

PROJECT NO.
A024(229)

ELIJAH DRAIN STRUCTURE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

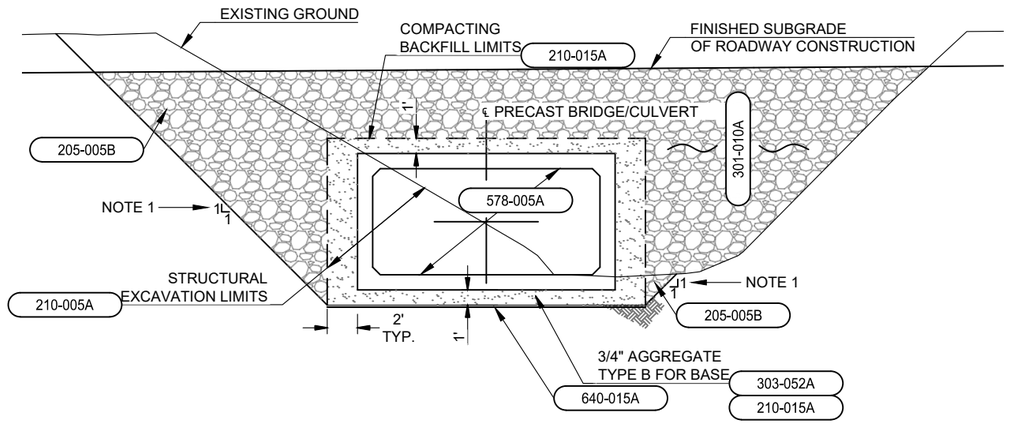
English
COUNTY CANYON
KEY NUMBER 24229
SHEET 54 OF 70

PROFESSIONAL ENGINEER REGISTERED 7197 8/21/25 STATE OF IDAHO LISA K. VERNON



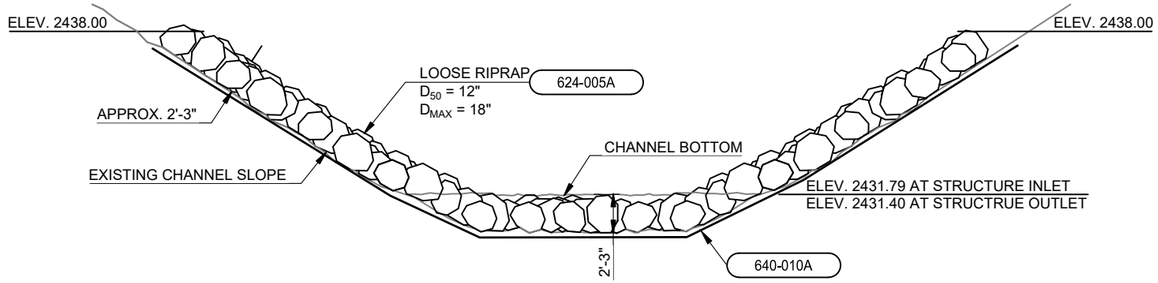
JOINT WATERPROOFING DETAIL

Elijah Drain Crossing
N.T.S.



EXCAVATION AND BACKFILL DETAIL

Elijah Drain Crossing
N.T.S.



RIP RAP DETAIL

Elijah Drain Crossing
N.T.S.

503-005A METAL REINFORCEMENT

MARK	LOCATION	SIZE	GRADE	COAT	SPACING	SKETCH
C1	CUT-OFF WALL	#5	60		12"	2'-6" × 1'-6"
C2	CUT-OFF WALL	#5	60		10.5"/12"	16'-6"
C3	CUT-OFF WALL	#5	60		12"	3'-6"

METAL REINFORCEMENT NOTES

ALL BEND DETAILS TO BE ACCORDING TO THE LATEST ACI STANDARD PRACTICE.

* INDICATES STIRRUP OR TIE BAR.

** INDICATES TIGHT BEND DUE TO LIMITED DEPTH. USE ONLY GRADE 40 BARS.

NOTE:
THE CONTRACTOR SHALL VERIFY THE QUANTITY, SIZE, AND SHAPE OF THE BAR REINFORCEMENT AGAINST THE STRUCTURE DRAWINGS AND MAKE ANY NECESSARY CORRECTIONS BEFORE ORDERING.

NOTE THAT REINFORCING STEEL TO BE PAID FOR UNDER THE BID ITEMS "METAL REINFORCEMENT" IS SHOWN ON THIS SHEET. SEE OTHER SHEETS FOR REINFORCING STEEL INCLUDED IN OTHER PAY ITEMS, IF ANY.

205-005B	Excavation (Plan Quantity)
210-005A	Structure Excavation Schedule No. 1 (Plan Quantity)
210-015A	Compacting Backfill (Plan Quantity)
301-010A	Granular Subbase (Plan Quantity)
303-052A	3/4" Aggregate Type B For Base (Plan Quantity)
503-005A	Metal Reinforcement
511-005A	Concrete Waterproof System, Type D
578-005A	Precast Concrete Culvert (4-Sided Box, 15' Span x 7' Rise)
624-005A	Loose Riprap (Class III)
640-010A	Riprap/Erosion Control Geotextile
640-015A	Subgrade Separation Geotextile (Type III)

NOTES

1. All Excavation And Backfill Outside The 1:1 Slope Line Required For Dewatering, Structure Removal, Box Culvert Construction, Etc. Is Incidental And No Additional Payment Will Be Made. Backfill Of All Areas Outside The 1:1 Slope Line Shall Be Completed With Granular Subbase Materials.

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED
DESIGN CHECKED L VERNON
DETAILED
DRAWING CHECKED L VERNON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT
ELITE EDGE ENGINEERS

PROJECT NO. A024(229)

ELIJAH DRAIN STRUCTURE
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 55 OF 70

PROFESSIONAL ENGINEER REGISTERED 7197 8/21/25 STATE OF IDAHO LISA K. VERNON

SIGN ASSEMBLY NO.	STATION LT. OR RT.	RAMP NO.	FOUNDATION TYPE	POST TYPE	NO. OF POSTS	POST SPACING	APPROX. LENGTH OF 1st POST	APPROX. LENGTH OF 2nd POST	POST LENGTH ABOVE FINISH SHOULDER.	C	E	SIGN TYPE	MUTCD SIGN DETAIL NUMBERS	SIGN SIZE W" X H"	APPROX. SQ. FT. OF SIGN	SIGN BACKGROUND COLOR	ARE BRACE ANGLES REQUIRED ON WOOD POST?	BRACKET NO.	REMARKS
1	24+45 RT.			E-1	1		11'		10'	6'-6"	7'-0"	B	R2-1	30" x 36"	8	WHITE			
2	28+48 RT.			E-1	1		13'		12'	8'-6"	7'-0"	B	R1-1	36" x 36"	9	RED			
												B	D3-1	10" x 42"	3	GREEN			
												B	D3-1	10" x 42"	3	GREEN			
3	28+95.5 RT.			E-1	1		13'		12'	8'-4"	7'-0"	B	W11-15	36" x 36"	9	YELLOW			
												B	W16-9P	24" x 12"	2	YELLOW			
4	29+95.5 RT.			E-1	1		11'		10'	8'-3"	7'-0"	B	R1-5	36" x 36"	9	WHITE			
5	30+64.5 LT.			E-1	1		11'		10'	3'-0"	7'-0"	B	R1-5	36" x 36"	9	WHITE			
6	31+64.5 LT.			E-1	1		13'		12'	3'-0"	7'-0"	B	W11-15	36" x 36"	9	YELLOW			
												B	W16-9P	24" x 12"	2	YELLOW			
7	34+40 RT.			E-1	1		13'		12'	9'-5"	7'-0"	B	R1-1	36" x 36"	9	RED			
												B	D3-1	10" x 42"	3	GREEN			
												B	D3-1	10" x 26"	2	GREEN			

Post Lengths Shown Are Approximate. Final Values Shall Be Determined In The Field Prior To Fabrication

Column C, Distance From Back of Curb To Center Line Of The First Post

Column E, Bottom Of Major Sign Above Finished Shoulder

ALL MATERIALS SHALL MEET BUILD AMERICA BUY AMERICA (BABA), AS APPLICABLE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED J. JONES
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME Middleton Summary Sheets.dwg

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

SIGN ERECTION SPECIFICATIONS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

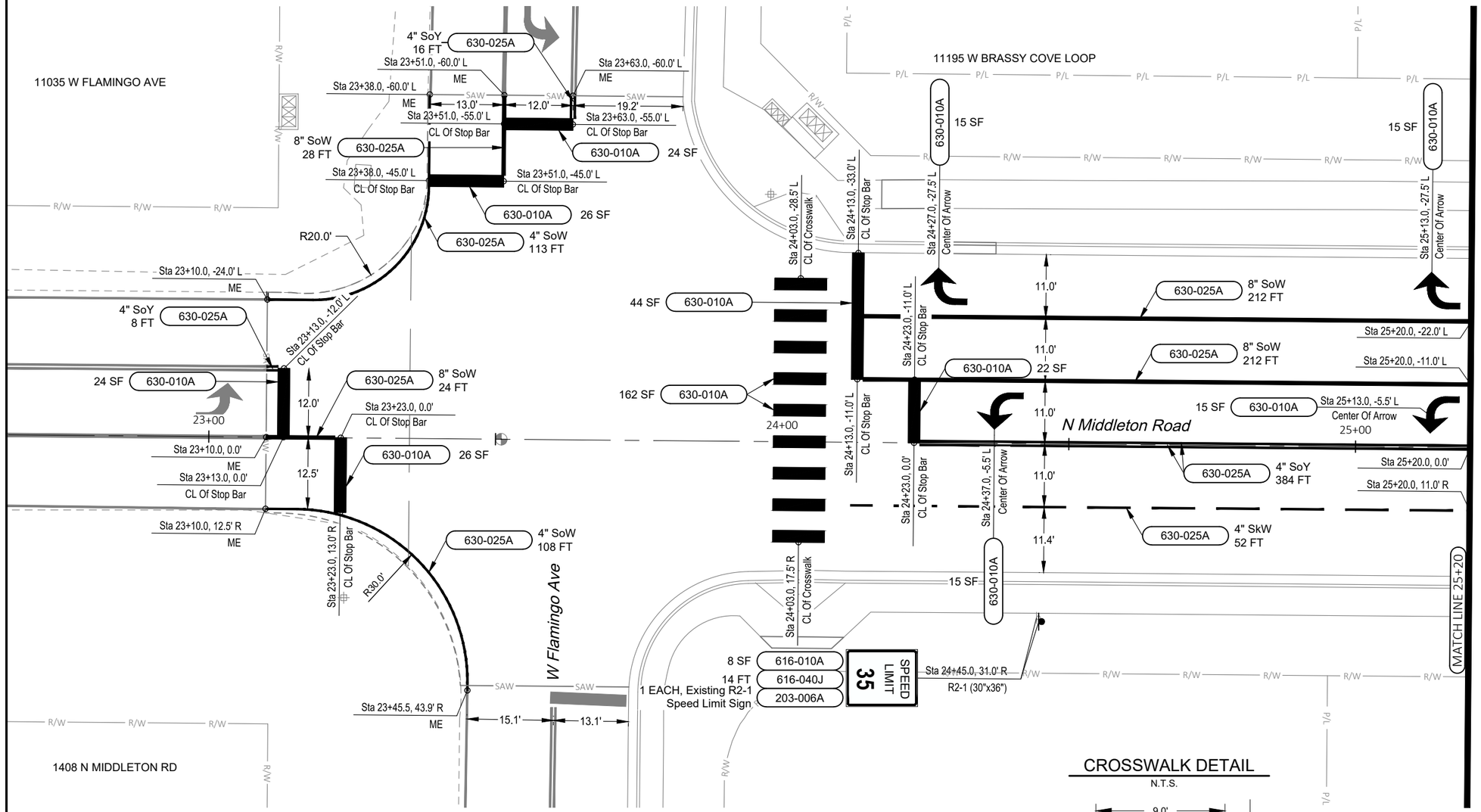
English

COUNTY CANYON

KEY NUMBER 24229

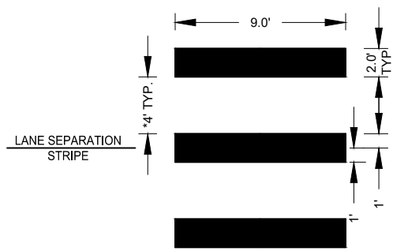
SHEET 56 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



CROSSWALK DETAIL

N.T.S.



*Adjust Crosswalk Pattern To Minimize Pavement Markings In The Wheel Paths. Layout Crosswalk Pattern On Roadway For Approval Of The Engineer Traffic Prior To Placing Marking.

203-006A	Removal of Sign 1 EACH = Sheet Total
616-010A	Sign Type B-1 8 SF = Sheet Total
616-040J	Steel Sign Post Type E-1 14 FT = Sheet Total
630-010A	Transverse, Word, Symbol, and Arrow Pavement Markings - Preformed Thermoplastic 388 SF = Sheet Total
630-025A	Longitudinal Pavement Marking - Waterborne 1157 FT* = Sheet Total

* Quantities Represent Two Paint Applications

NOTES

1. See Sheet 5 & 6 For General Notes.
2. Broken (Skip) Stripe Shall Be 12' Solid Line Followed By 38' Gap.
3. Dotted Stripe Shall Be 3' Solid Line Followed By 9' Gap.
4. All Dimensions Are To Edge Of Pavement, Lip Of Gutter Or Center Of Stripe(s).
5. All Stop Bars Are 2' In Width.

ABBREVIATION KEY	
SoW	- Solid White
SkW	- Skip White
DoW	- Dotted White
SoY	- Solid Yellow
SkY	- Skip Yellow
AP	- Angle Point
ME	- Match Existing

10 0 10 20 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON.DWG
DRAWING DATE: August 19, 2025

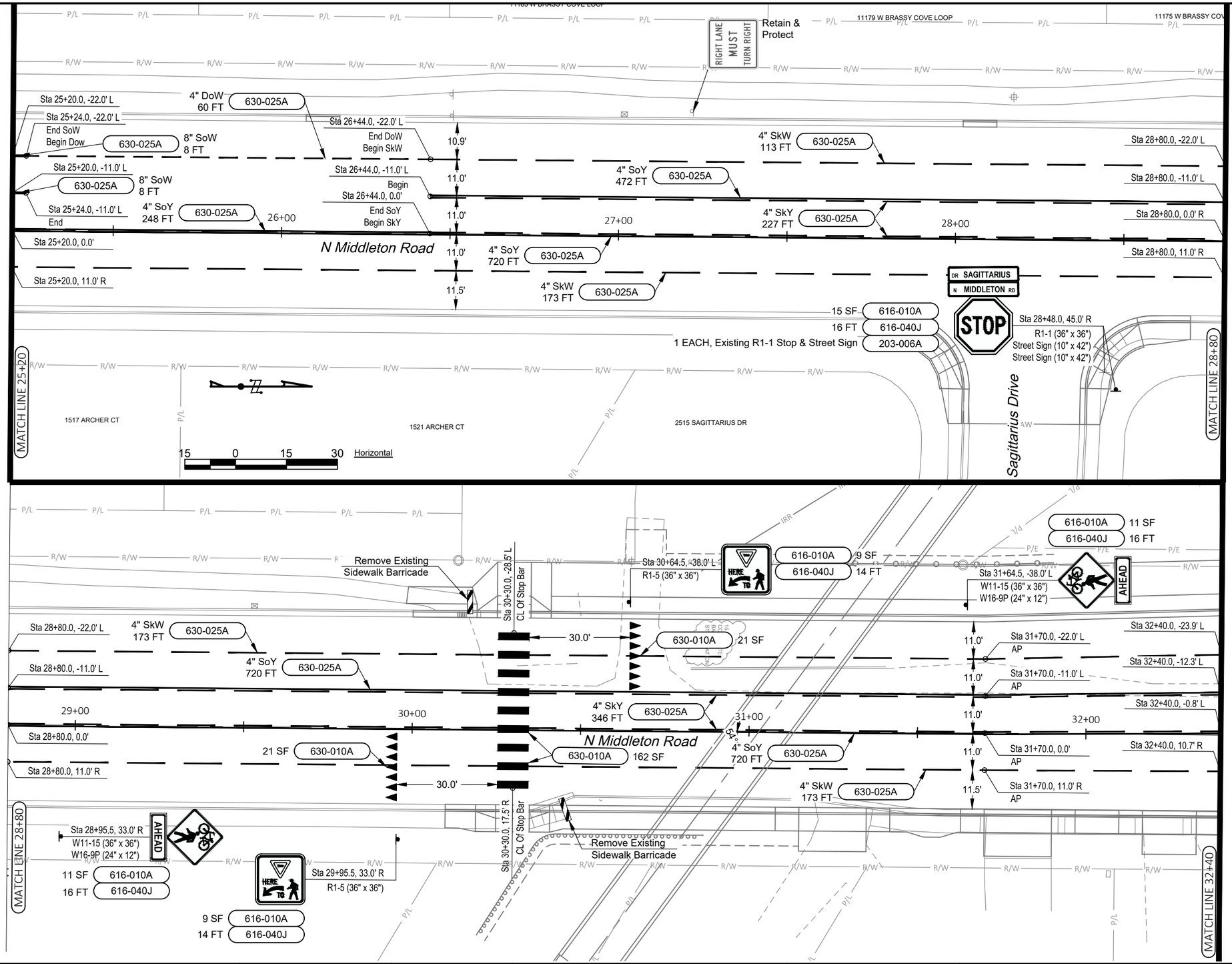
IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

SIGNING & PAVEMENT MARKING PLAN
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 57 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-006A	Removal of Sign 1 EACH = Sheet Total
616-010A	Sign Type B-1 55 SF = Sheet Total
616-040J	Steel Sign Post Type E-1 76 FT = Sheet Total
630-010A	Transverse, Word, Symbol, and Arrow Pavement Markings - Preformed Thermoplastic 204 SF = Sheet Total
630-025A	Longitudinal Pavement Marking - Waterborne 4161 FT* = Sheet Total

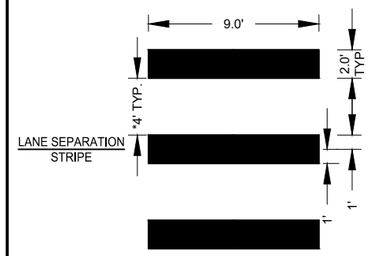
* Quantities Represent Two Paint Applications

NOTES

1. See Sheet 5 & 6 For General Notes.
2. Yield Line Triangles Shall Be 2' x 3' As Detailed In MUTCD.
3. Broken (Skip) Stripe Shall Be 12' Solid Line Followed By 38' Gap.
4. Dotted Stripe Shall Be 3' Solid Line Followed By 9' Gap.
5. All Dimensions Are To Edge Of Pavement, Lip Of Gutter Or Center Of Stripe(s).
6. All Stop Bars Are 2' In Width.

CROSSWALK DETAIL

N.T.S.



*Adjust Crosswalk Pattern To Minimize Pavement Markings In The Wheel Paths. Layout Crosswalk Pattern On Roadway For Approval Of The Engineer Prior To Placing Marking.

ABBREVIATION KEY

SoW	*- Solid White*
SkW	*- Skip White*
DoW	*- Dotted White*
SoY	*- Solid Yellow*
SkY	*- Skip Yellow*
AP	*- Angle Point*
ME	*- Match Existing*

PROFESSIONAL ENGINEER
REGISTERED
August 19, 2025
8818
STATE OF IDAHO
W. JOE BARTON

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME: MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.: A024(229)

SIGNING & PAVEMENT MARKING PLAN

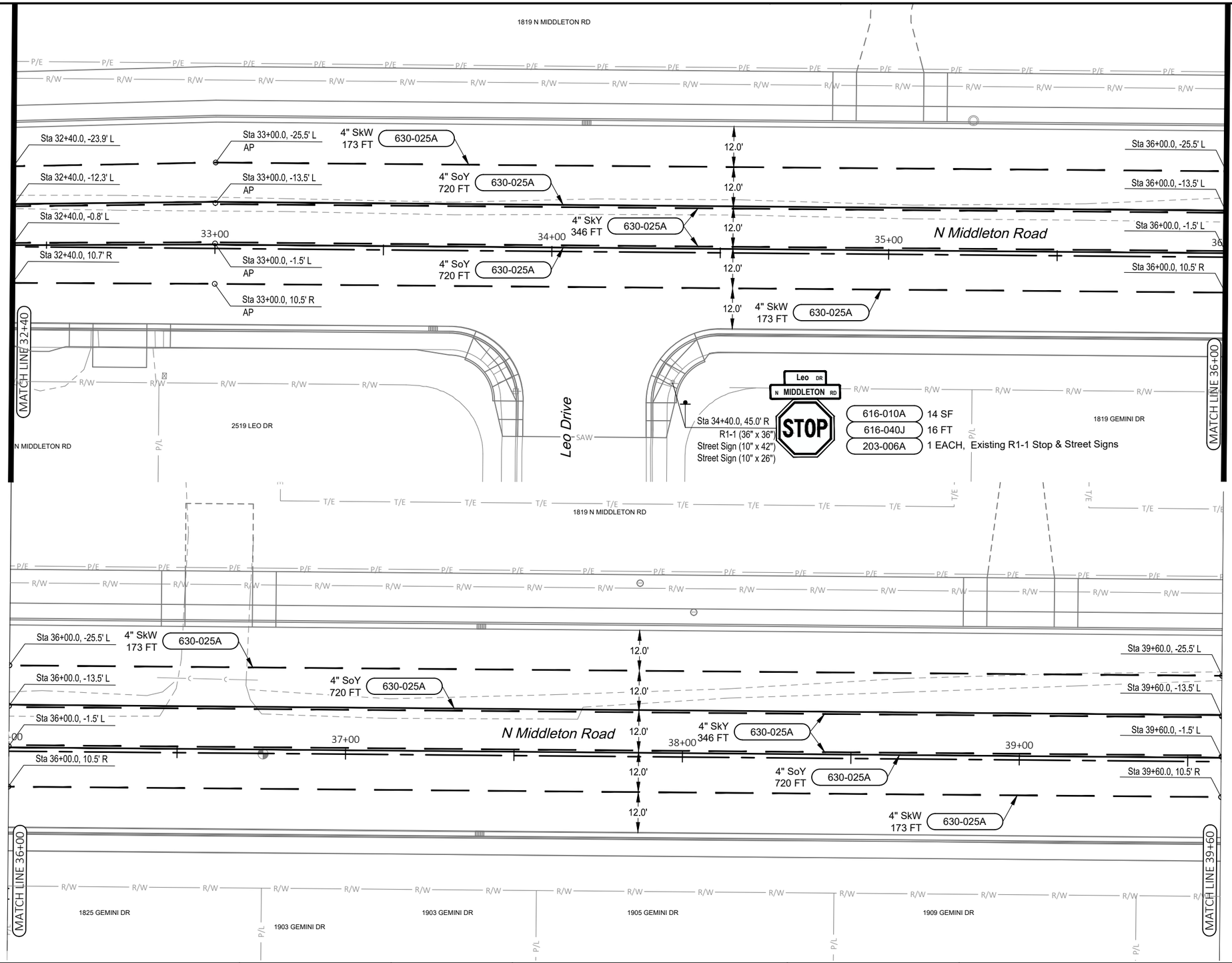
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY: CANYON

KEY NUMBER: 24229

SHEET 58 OF 70



203-006A	Removal of Sign 1 EACH = Sheet Total
616-010A	Sign Type B-1 14 SF = Sheet Total
616-040J	Steel Sign Post Type E-1 16 FT = Sheet Total
630-025A	Longitudinal Pavement Marking - Waterborne 4264 FT* = Sheet Total

* Quantities Represent Two Paint Applications

NOTES

1. See Sheet 5 & 6 For General Notes.
2. Broken (Skip) Stripe Shall Be 12' Solid Line Followed By 38' Gap.
3. Dotted Stripe Shall Be 3' Solid Line Followed By 9' Gap.
4. All Dimensions Are To Edge Of Pavement, Lip Of Gutter Or Center Of Stripe(s).
5. All Stop Bars Are 2' In Width.

ABBREVIATION KEY	
SoW	- Solid White
SkW	- Skip White
DoW	- Dotted White
SoY	- Solid Yellow
SkY	- Skip Yellow
AP	- Angle Point
ME	- Match Existing

15 0 15 30 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

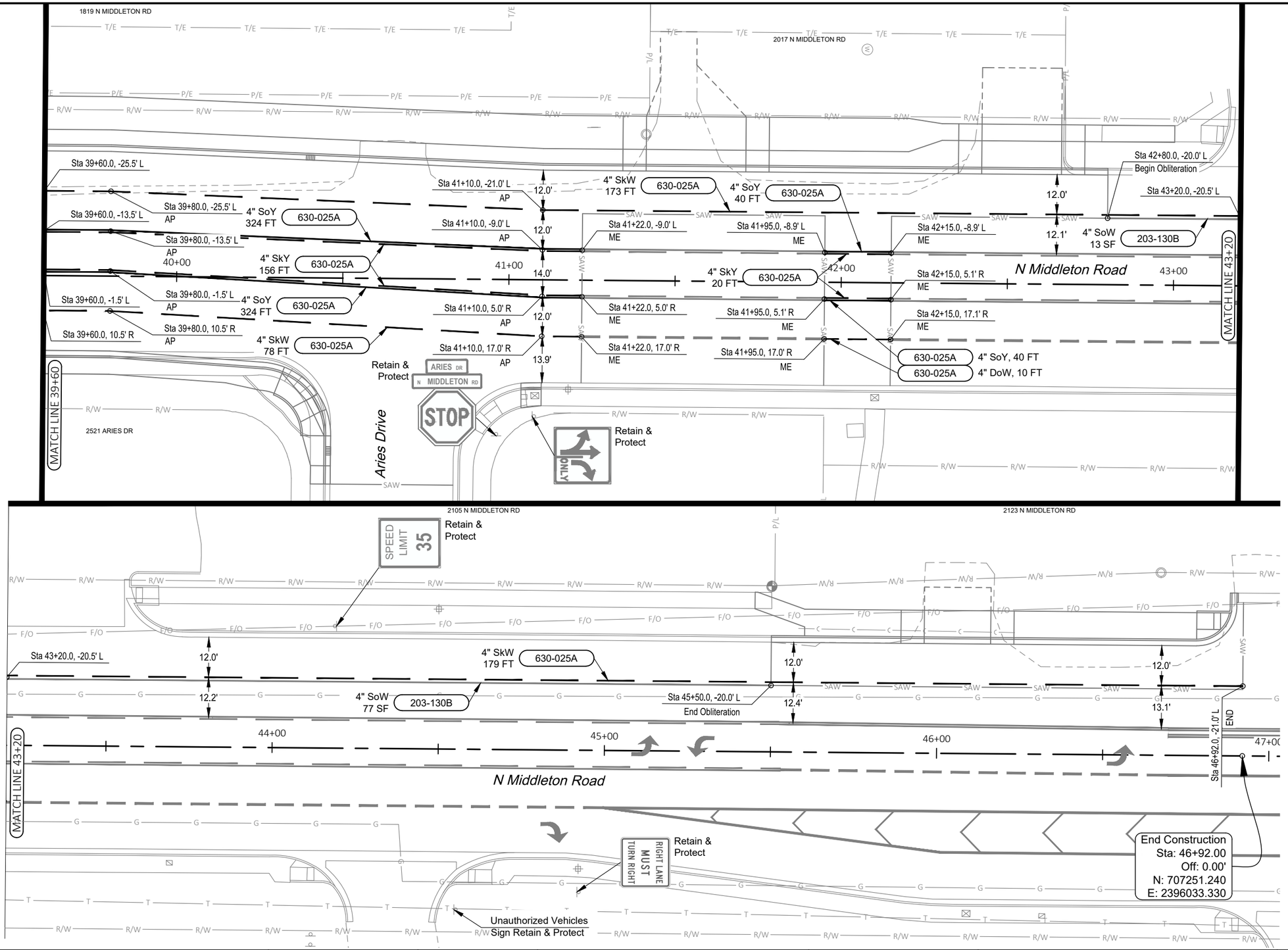
SIGNING & PAVEMENT MARKING PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

COUNTY	CANYON
KEY NUMBER	24229
SHEET	59 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



203-130B Removal of Pavement Markings
90 SF = Sheet Total

630-025A Longitudinal Pavement Marking - Waterborne
1344 FT* = Sheet Total

* Quantities Represent Two Paint Applications

NOTES

1. See Sheet 5 & 6 For General Notes.
2. Broken (Skip) Stripe Shall Be 12' Solid Line Followed By 38' Gap.
3. Dotted Stripe Shall Be 3' Solid Line Followed By 9' Gap.
4. All Dimensions Are To Edge Of Pavement, Lip Of Gutter Or Center Of Stripe(s).
5. All Stop Bars Are 2' In Width.

ABBREVIATION KEY

SoW	- Solid White
SkW	- Skip White
DoW	- Dotted White
SoY	- Solid Yellow
SkY	- Skip Yellow
AP	- Angle Point
ME	- Match Existing

15 0 15 30 Horizontal

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON.DWG

DRAWING DATE: August 19, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

SIGNING & PAVEMENT MARKING PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

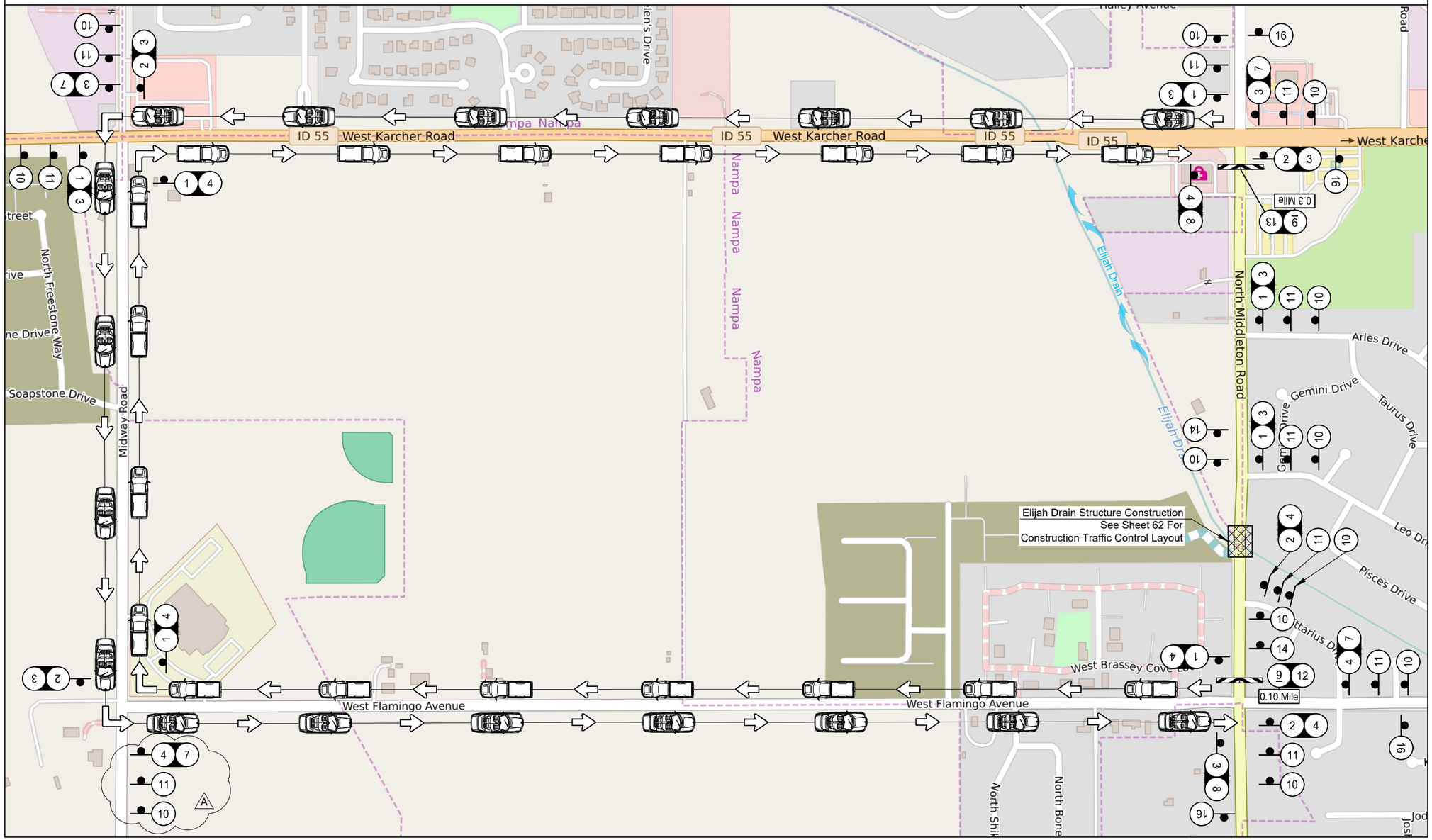
COUNTY CANYON

KEY NUMBER 24229

SHEET 60 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

DETOUR ROUTE DURING ELIJAH DRAIN STRUCTURE CONSTRUCTION



SIGN LEGEND

1. DETOUR
2. DETOUR
3. SB Middleton
4. NB Middleton
5. EB Flamingo
6. WB Flamingo
7. DETOUR
8. END DETOUR
9. ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY
10. ROAD CLOSED AHEAD
11. DETOUR AHEAD
12. DETOUR
13. DETOUR
14. ROAD WORK AHEAD
16. END ROAD WORK

SYMBOL LEGEND

	Traffic Control Sign
	Type III Barricade w/Flashing Warning Light & Traffic Control Signs Mounted On Barricade
	Construction Traffic Control Detour Route
	Work Zone

NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
A	2/18/25	WJB	POST-ITD R/W PERMIT APPROVAL

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG
DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

CONSTRUCTION TRAFFIC CONTROL PLANS

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

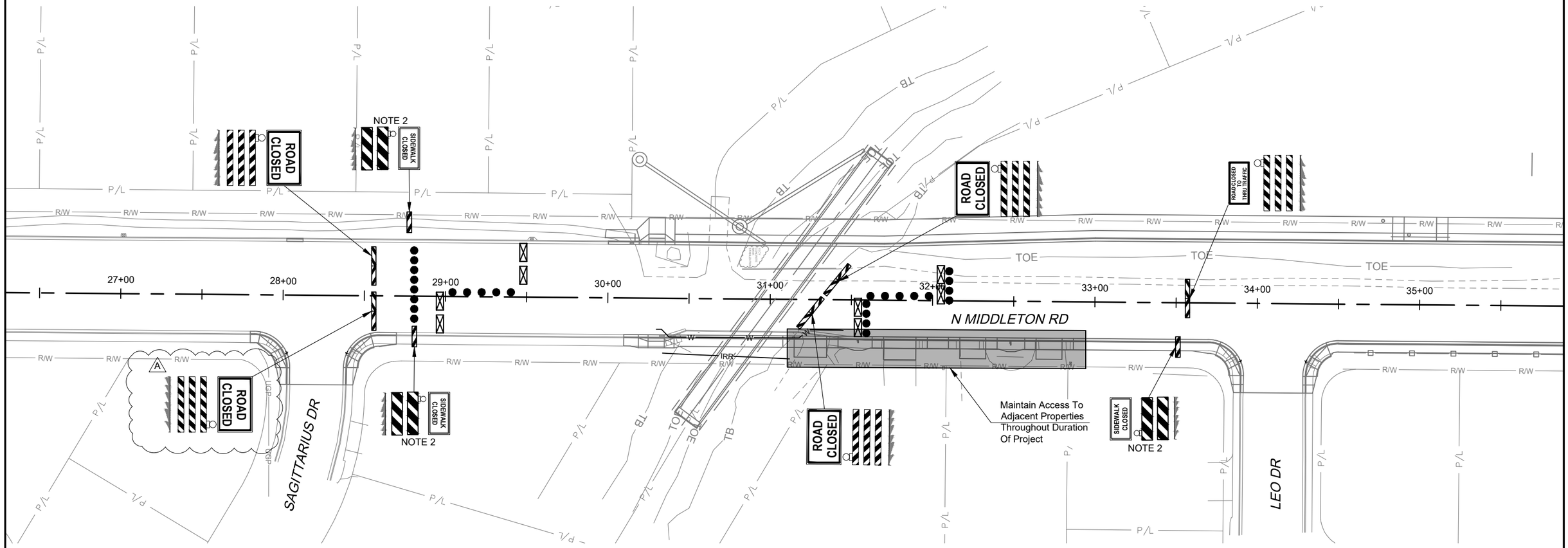
COUNTY CANYON

KEY NUMBER 24229

SHEET 61 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

TRAFFIC CONTROL DETAILS DURING ELIJAH DRAIN STRUCTURE CONSTRUCTION



LEGEND

- Traffic Control Sign
- Type II Barricade w/Flashing Warning Light
- Type III Barricade w/Flashing Warning Light
- Traffic Control Drum
- A — Concrete Or Water Filled Jersey Barrier (Optional And Incidental If Used)

30 0 30 60

NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.
2. See Sheet 60 For Pedestrian Detour

REVISIONS			
NO.	DATE	BY	DESCRIPTION
A	2/18/25	WJB	POST-ITD R/W PERMIT APPROVAL

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

TRAFFIC CONTROL PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

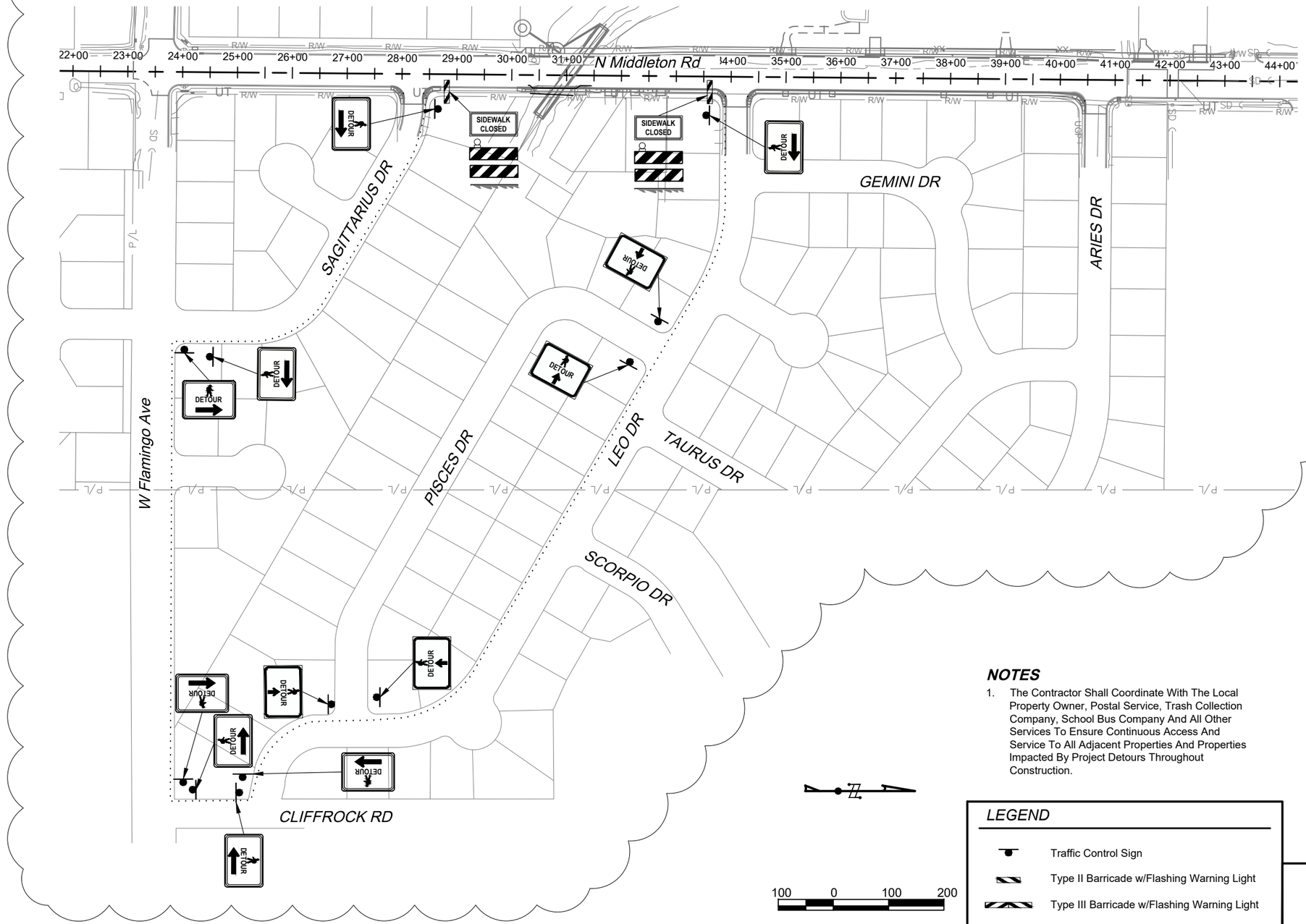
COUNTY CANYON

KEY NUMBER 24229

SHEET 62 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

(A) PEDESTRIAN DETOUR DETAILS DURING ELIJAH DRAIN STRUCTURE CONSTRUCTION



NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.

100 0 100 200

LEGEND

- Traffic Control Sign
- Type II Barricade w/Flashing Warning Light
- Type III Barricade w/Flashing Warning Light

REVISIONS			
NO.	DATE	BY	DESCRIPTION
A	2/18/25	WJB	POST-ITD R/W PERMIT APPROVAL

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

TRAFFIC CONTROL PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

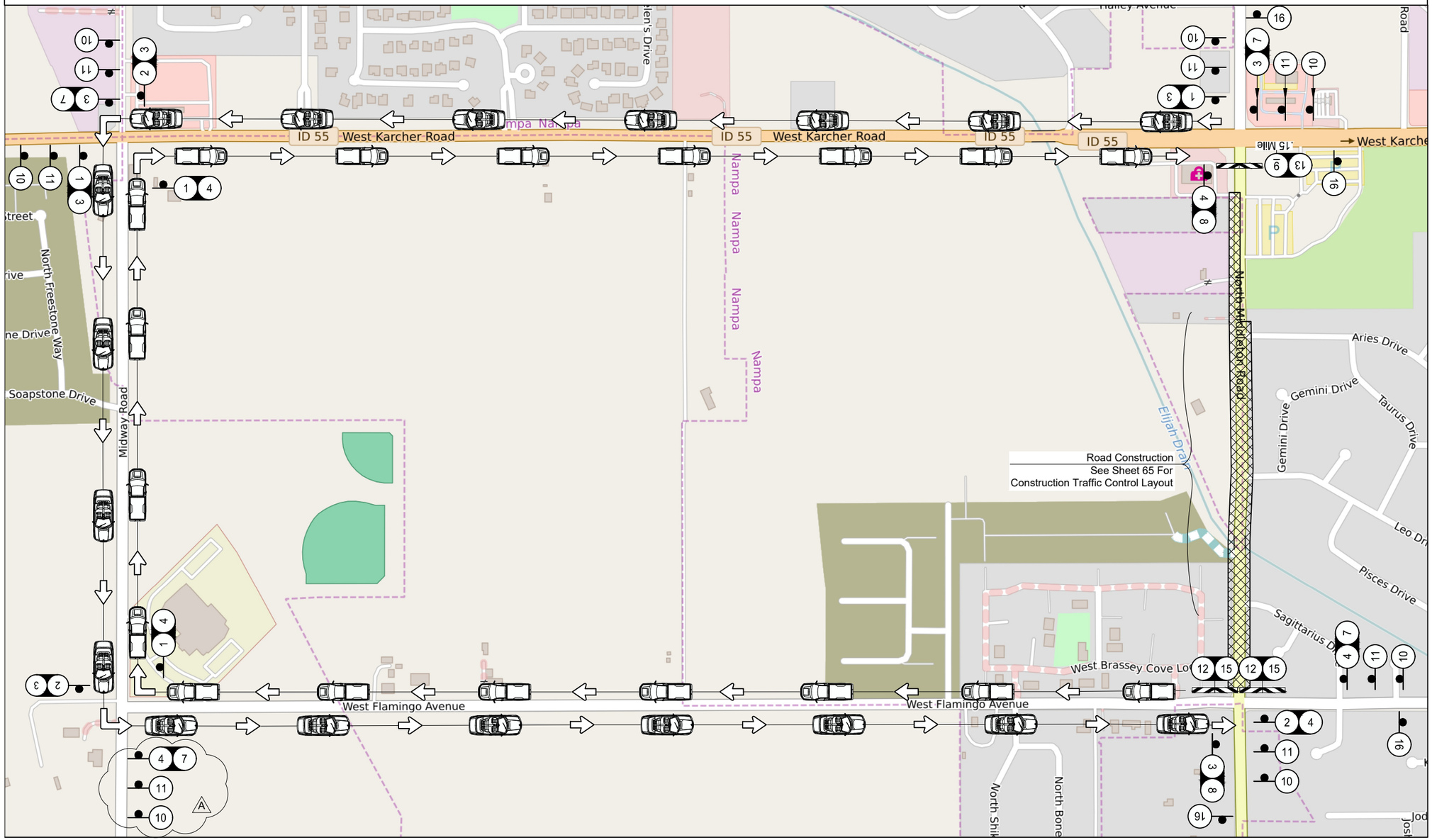
COUNTY CANYON

KEY NUMBER 24229

SHEET 63 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

DETOUR ROUTE DURING MIDDLETON ROAD CONSTRUCTION



SIGN LEGEND

1	DETOUR	10	ROAD CLOSED AHEAD
2	DETOUR	11	DETOUR AHEAD
3	SB Middleton	12	DETOUR
4	NB Middleton	13	DETOUR
5	EB Flamingo	14	ROAD WORK AHEAD
6	WB Flamingo	15	ROAD CLOSED
7	DETOUR	16	END ROAD WORK
8	END DETOUR		
9	ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY		

SYMBOL LEGEND

	Traffic Control Sign
	Type III Barricade w/Flashing Warning Light & Traffic Control Signs Mounted On Barricade
	Construction Traffic Control Detour Route
	Work Zone

NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.

REVISIONS			
NO.	DATE	BY	DESCRIPTION
A	2/18/25	WJB	POST-ITD R/W PERMIT APPROVAL

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY
CADD FILE NAME MIDDLETON(TC-PPP).DWG
DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT
PARAGON CONSULTING, INC.

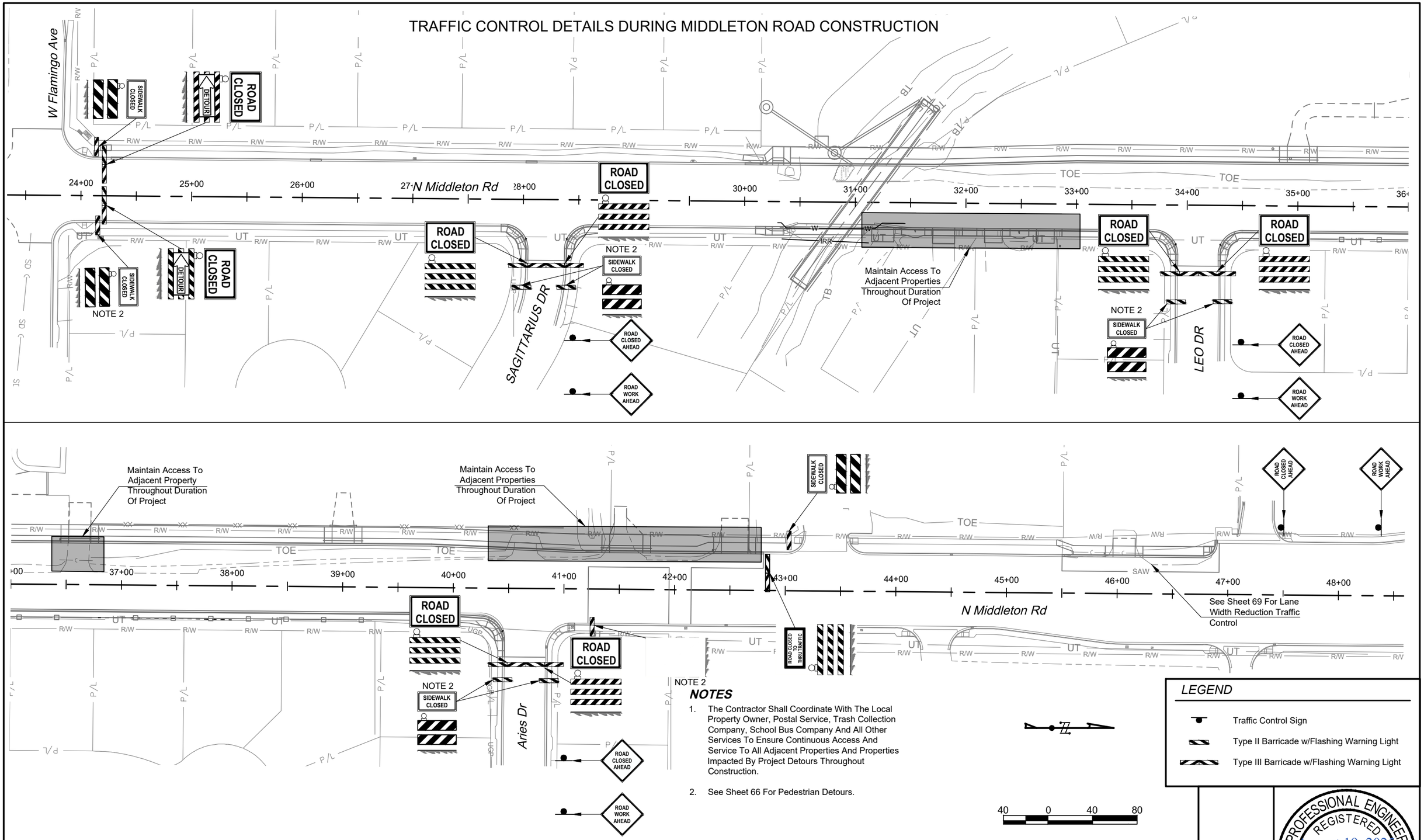
PROJECT NO. A024(229)

TRAFFIC CONTROL DETOUR
MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English
COUNTY CANYON
KEY NUMBER 24229
SHEET 64 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

TRAFFIC CONTROL DETAILS DURING MIDDLETON ROAD CONSTRUCTION



NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.
2. See Sheet 66 For Pedestrian Detours.

LEGEND

- Traffic Control Sign
- Type II Barricade w/Flashing Warning Light
- Type III Barricade w/Flashing Warning Light

40 0 40 80

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME: MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.: A024(229)

TRAFFIC CONTROL PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

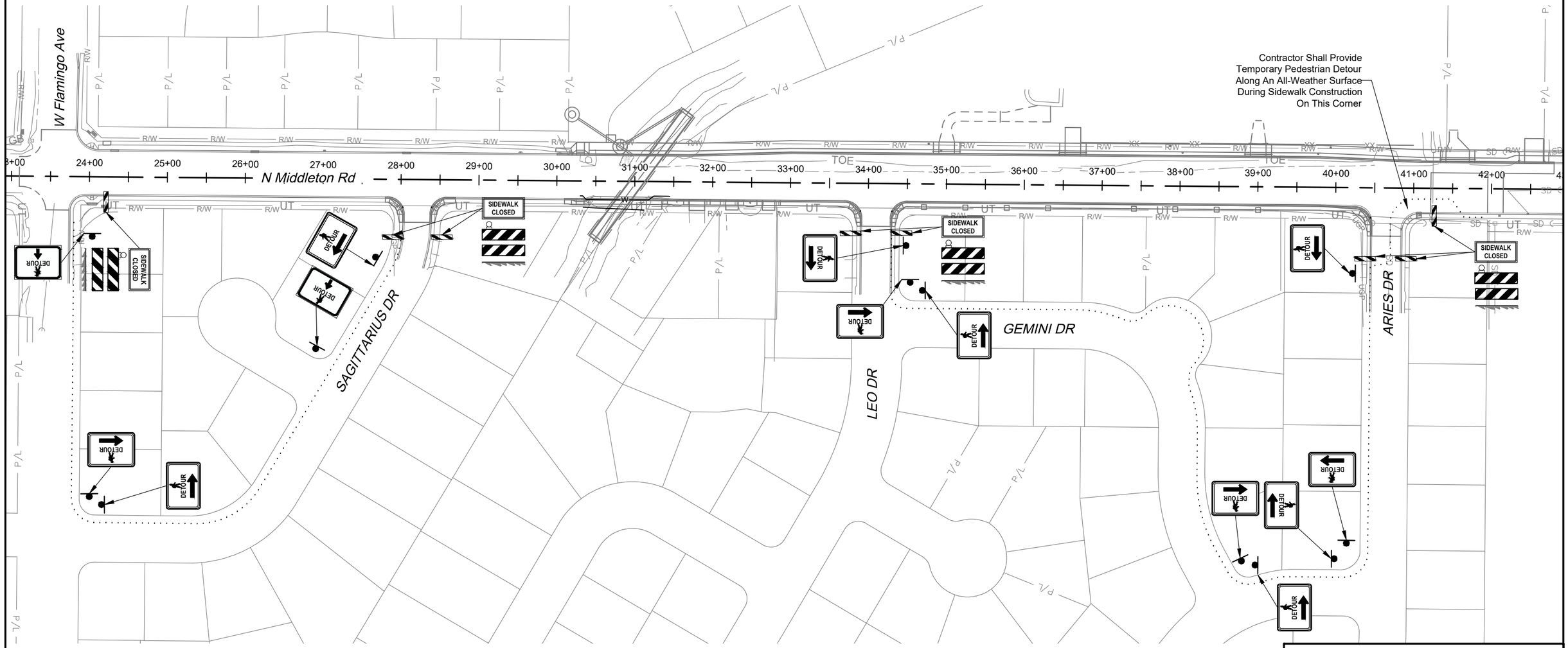
COUNTY: CANYON

KEY NUMBER: 24229

SHEET 65 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

PEDESTRIAN DETOUR DETAILS DURING MIDDLETON ROAD CONSTRUCTION



NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.

LEGEND

- Traffic Control Sign
- Type II Barricade w/Flashing Warning Light
- Type III Barricade w/Flashing Warning Light

40 0 40 80

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED J. JONES
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG
DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

TRAFFIC CONTROL PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

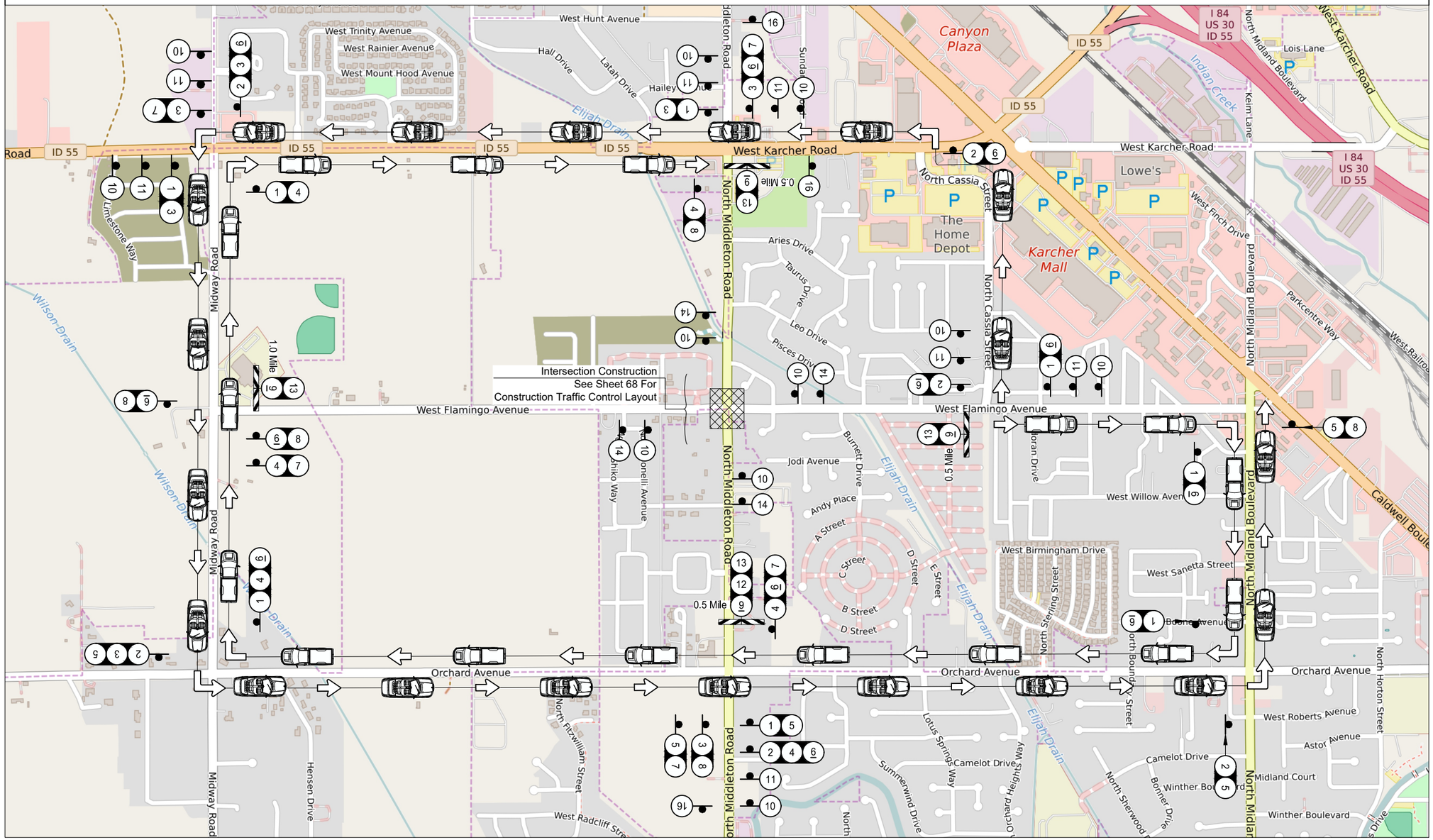
COUNTY CANYON

KEY NUMBER 24229

SHEET 66 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

DETOUR ROUTE DURING MIDDLETON & FLAMINGO CONSTRUCTION



SIGN LEGEND

1	DETOUR →	10	ROAD CLOSED AHEAD
2	DETOUR ←	11	DETOUR AHEAD
3	SB Middleton	12	DETOUR
4	NB Middleton	13	DETOUR
5	EB Flamingo	14	ROAD WORK AHEAD
6	WB Flamingo	16	END ROAD WORK
7	DETOUR ↑		
8	END DETOUR		
9	ROAD CLOSED ## MILES AHEAD LOCAL TRAFFIC ONLY		

SYMBOL LEGEND

	Traffic Control Sign
	Type III Barricade w/Flashing Warning Light & Traffic Control Signs Mounted On Barricade
	Construction Traffic Control Detour Route
	Work Zone

NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.

N

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

TRAFFIC CONTROL DETOUR

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

English

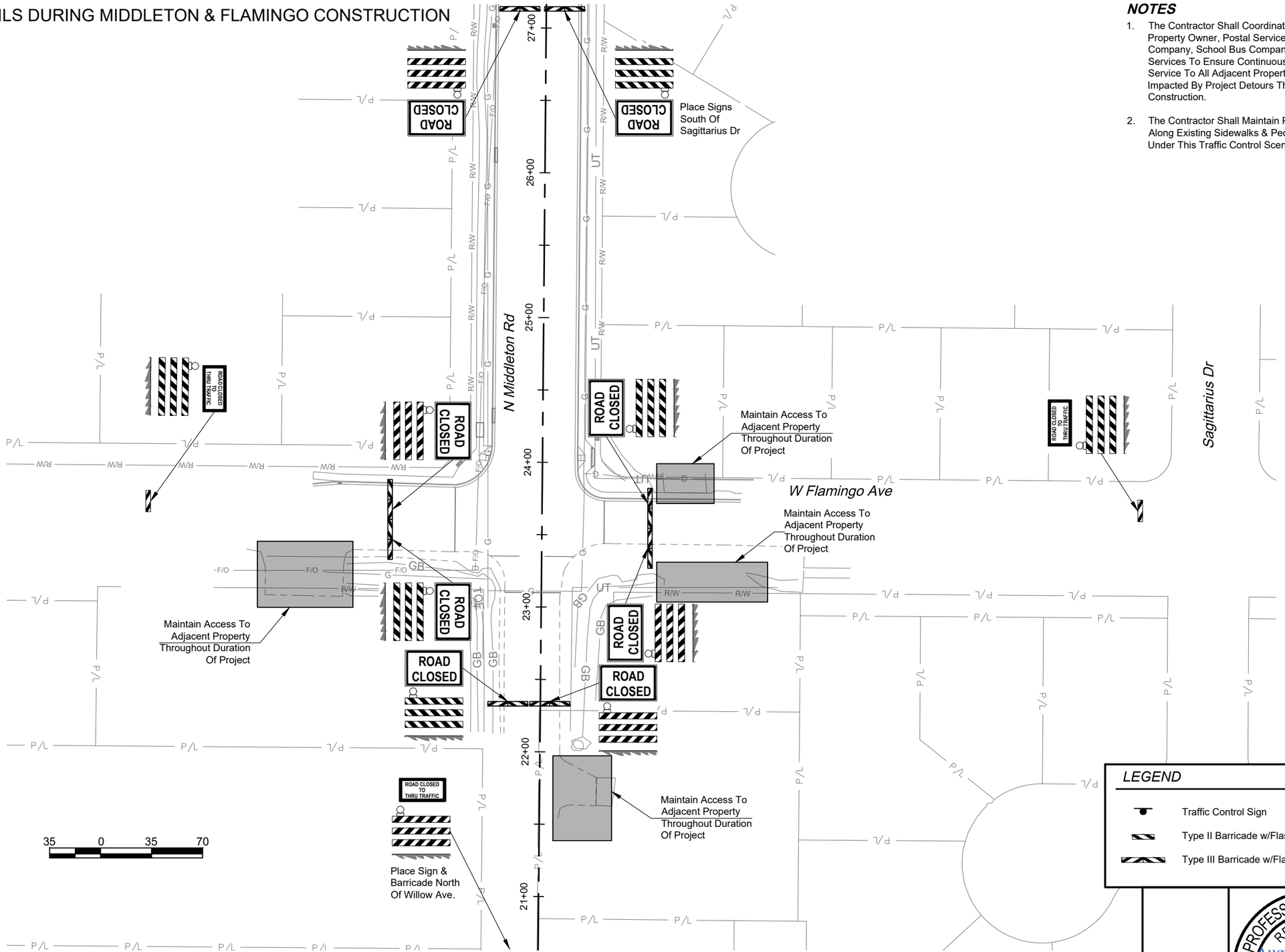
COUNTY CANYON

KEY NUMBER 24229

SHEET 67 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON

TRAFFIC CONTROL DETAILS DURING MIDDLETON & FLAMINGO CONSTRUCTION



NOTES

1. The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.
2. The Contractor Shall Maintain Pedestrian Access Along Existing Sidewalks & Pedestrian Routes Under This Traffic Control Scenario.

LEGEND

- Traffic Control Sign
- Type II Barricade w/Flashing Warning Light
- Type III Barricade w/Flashing Warning Light

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	R. DEL BOSQUE
DESIGN CHECKED	W.J. BARTON
DETAILED	J. JONES
DRAWING CHECKED	W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO.

A024(229)

TRAFFIC CONTROL PLAN

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

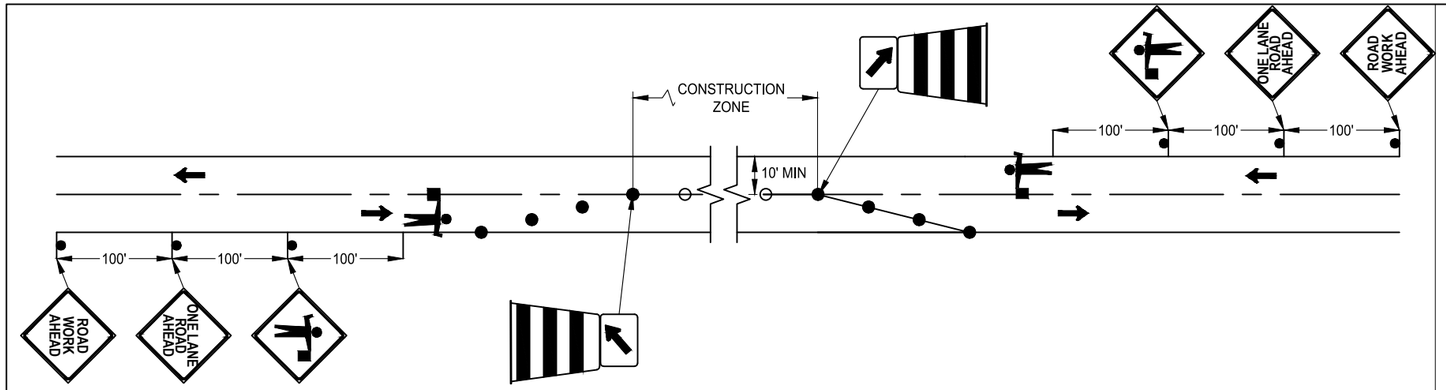
English

COUNTY CANYON

KEY NUMBER 24229

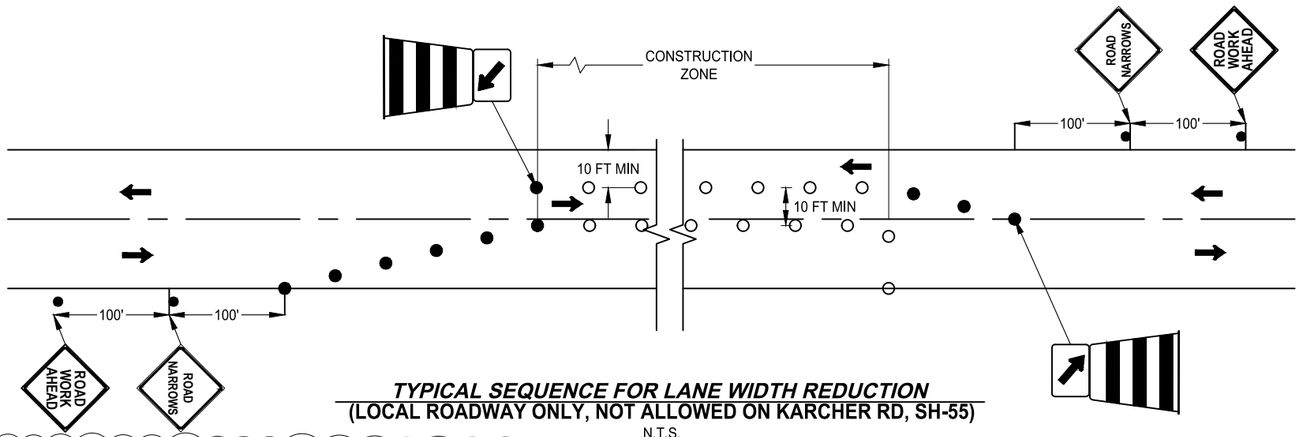
SHEET 68 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



TYPICAL FLAGGING SEQUENCE FOR SIGNAL LANE TRAFFIC CONTROL

N.T.S.



TYPICAL SEQUENCE FOR LANE WIDTH REDUCTION

(LOCAL ROADWAY ONLY, NOT ALLOWED ON KARCHER RD, SH-55)

N.T.S.

CONSTRUCTION TRAFFIC CONTROL NOTES

1. *Contractor Shall Maintain Continuous Access To The Private And Commercial Properties Adjacent To The Construction Zone. Coordination With Property Owner Is Required.*
2. *Contractor Shall Arrange Tubular Markers For Lane Shifts To Match Receiving Approach As Close As Possible To Minimize Traffic Shifting Across Intersections.*
3. *Contractor Shall Arrange All Lane Merging Transitions With A 20:1 Taper And All Shifting Tapers With No Merge With A Minimum Of 10:1 Taper.*
4. *All Tapers Shall Be Delineated With Traffic Control Drums Spaced At 20 ft Min.*
5. *The Contractor Shall Coordinate With The Local Property Owner, Postal Service, Trash Collection Company, School Bus Company And All Other Services To Ensure Continuous Access And Service To All Adjacent Properties And Properties Impacted By Project Detours Throughout Construction.*

A

LEGEND

- *Traffic Control Sign*
- *Portable Tubular Marker*
- *Traffic Control Drum*

TRAFFIC CONTROL SIGNS, 1103.4.1.B.1

SIGN	NUMBER	AREA (SF)	QUANTITY	TOTAL AREA (SF)
DETOUR	M4-10L (48"x18")	6	2	12
DETOUR	M4-10R (48"x18")	6	4	24
DETOUR AHEAD	W20-2 (48"x48")	16	10	160 (A)
DETOUR	M4-9L (30"x24")	5	6	30
DETOUR	M4-9R (30"x24")	5	8	40
DETOUR	M4-9S (30"x24")	5	5	25
END DETOUR	M4-8A (24"x18")	3	5	15
ROAD CLOSED TO THRU TRAFFIC	R11-4 (60"x30")	12.5	3	37.5
ROAD CLOSED	R11-2 (48"x30")	10	8	80
ROAD CLOSED AHEAD	W20-3 (48"x48")	16	12	192 (A)
PRE-NOTIFICATION SIGNING	SPECIAL (48"x96")	32	2	64
DETOUR	M4-9bR (30"X24")	5	4	20
DETOUR	M4-9bL (30"X24")	5	6	30
ONE LANE ROAD AHEAD	W20-4 (48"x48")	16	4	64
ROAD WORK AHEAD	W20-1 (48"x48")	16	4	64
SIDEWALK CLOSED	R9-9 (24"x12")	2	10	20
	W20-7 (48"x48")	16	4	64
ROAD NARROWS	W5-1 (48"x48")	16	4	64
	M6-2 (21"x15")	2.25	4	9
	M6-2 (21"x15")	2.25	4	9
WB FLAMINGO	SPECIAL (48"x12")	4	12	48
EB FLAMINGO	SPECIAL (48"x12")	4	5	20
SB MIDDLETON	SPECIAL (48"x12")	4	10	40
NB MIDDLETON	SPECIAL (48"x12")	4	8 (A)	32 (A)
ROAD CLOSED – MILES AHEAD LOCAL TRAFFIC ONLY	R11-3A (60"x30")	12.5	4	50
DETOUR	M4-9bS (30"X24")	5	2	10
END ROAD WORK	G20-2 (36"X18")	4.5	4	18

A

TRAFFIC CONTROL SIGNS SUB-TOTAL	1241.5 SF
CONTINGENCY	88.5 SF
TOTAL	1330 SF

TRAFFIC CONTROL BARRICADES, TYPE II	10 EACH
TRAFFIC CONTROL BARRICADES, TYPE III	15 EACH
TRAFFIC CONTROL DRUMS	60 EACH
PORTABLE TUBULAR MARKERS	100 EACH

REVISIONS

NO.	DATE	BY	DESCRIPTION
A	2/18/25	WJB	POST-ITD R/W PERMIT APPROVAL

DESIGNED R. DEL BOSQUE
DESIGN CHECKED W.J. BARTON
DETAILED R. DEL BOSQUE
DRAWING CHECKED W.J. BARTON

SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY

CADD FILE NAME MIDDLETON(TC-PPP).DWG

DRAWING DATE: August 11, 2025

IDAHO TRANSPORTATION DEPARTMENT

PARAGON CONSULTING, INC.

PROJECT NO. A024(229)

CONSTRUCTION TRAFFIC CONTROL NOTES

MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA

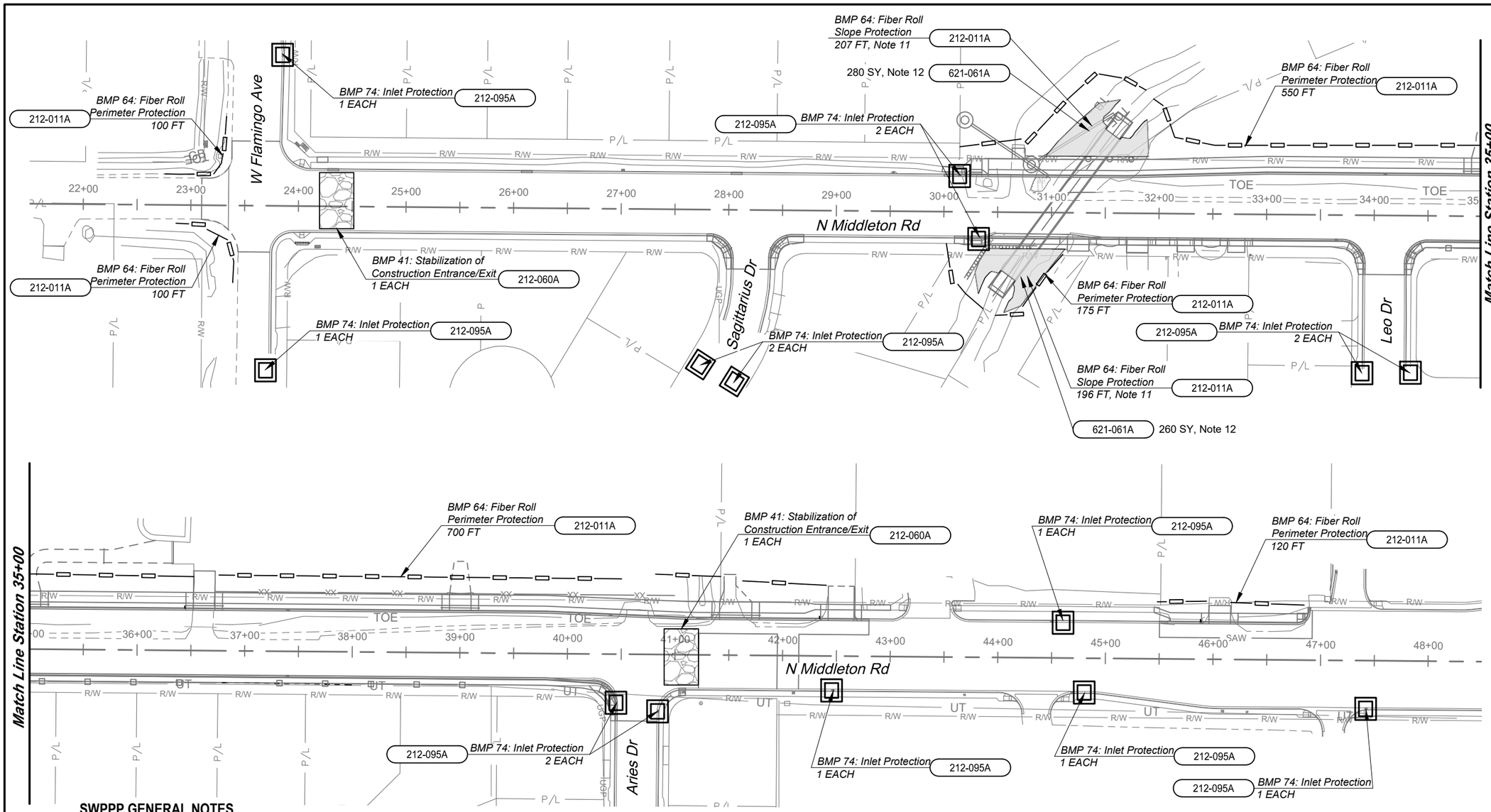
English

COUNTY CANYON

KEY NUMBER 24229

SHEET 69 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



212-011A	Fiber Wattle 2148 FT = Sheet Total
212-060A	Stabilized Construction Entrance 2 EACH = Sheet Total
212-095A	Inlet Protection 14 EACH = Sheet Total
621-061A	Mulch Plus Tackifier 540 SY = Sheet Total

50 0 50 100

SWPPP GENERAL NOTES

1. Additional Sediment Control Measures May Be Required Beyond What Is Shown On This Sheet. All Additional Sediment Control BMP's Shall Be Considered Incidental To Item Water Pollution Control Manager.
2. Ground Disturbance Is Anticipated To Be 4.0 Acres Without Consideration Of Any Contractor Staging Areas Outside The Project Footprint.
3. Install Fiber Rolls Parallel To The 2:1 Embankment Slope Every 10-Feet From Top Of Slope To Toe Of Slope.
4. At No Change In Unit Price, Contractor May Substitute An Acceptable Rolled Erosion Control Product Per Section 711.11 Of The Specifications, In Lieu Of Mulch Plus Tackifier. Contractor Shall Request Approval And Make All Appropriate Product Submittals For Approval Prior To Implementing The Substitution.

SYMBOL LEGEND

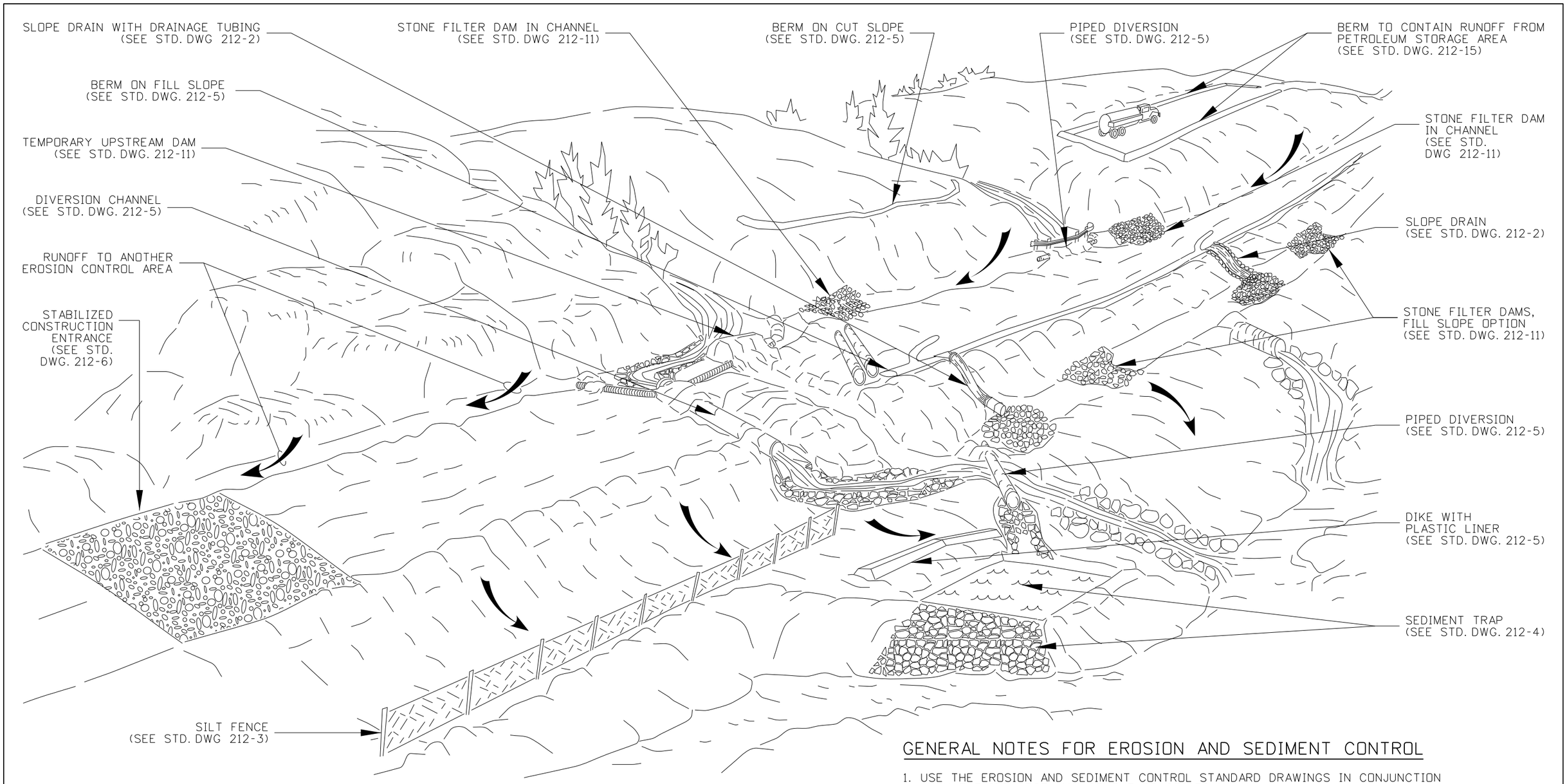
- Inlet Protection
- Fiber Roll
- Construction Entrance/Exit

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED R. DEL BOSQUE	SCALES SHOWN ARE FOR 11" x 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT
DESIGN CHECKED W.J. BARTON		
DETAILED J. JONES	CADD FILE NAME MIDDLETON(TC-PPP).DWG	PARAGON CONSULTING, INC.
DRAWING CHECKED W.J. BARTON	DRAWING DATE: August 11, 2025	

PROJECT NO.	STORMWATER POLLUTION PREVENTION PLAN	
A024(229)	MIDDLETON ROAD, SH 55 TO FLAMINGO AVE, NAMPA	English COUNTY CANYON KEY NUMBER 24229 SHEET 70 OF 70

PROFESSIONAL ENGINEER REGISTERED August 19, 2025 8818 STATE OF IDAHO W. JOE BARTON



GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

1. USE THE EROSION AND SEDIMENT CONTROL STANDARD DRAWINGS IN CONJUNCTION WITH THE ITD BEST MANAGEMENT PRACTICES MANUAL.
2. THE PLACEMENT OF EROSION CONTROL MEASURES IS SITE SPECIFIC. OBTAIN THE ENGINEER'S APPROVAL OF THE EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO INSTALLATION.
3. EROSION AND SEDIMENT CONTROL MEASURES PLACEMENT AND INSTALLATION MAY BE CONTROLLED BY THE NPDES, 404 PERMIT OR CONTRACT SPECIFICATIONS.
4. DRAWING NOT TO SCALE

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER ORIGINAL SIGNED AND DATED MARCH 18, 2021 STATE OF IDAHO 13683

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	9-93	MSM	6	12-16	RDL			
2	6-96	MSM	7	02-21	TWF			
3	10-10	KEH						
4	10-11	KEH						
5	12-12	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-01_0421.dgn

DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

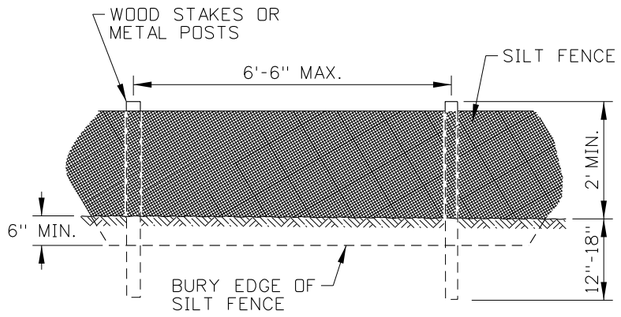
STANDARD DRAWING

EROSION AND SEDIMENT CONTROL EXAMPLE APPLICATIONS

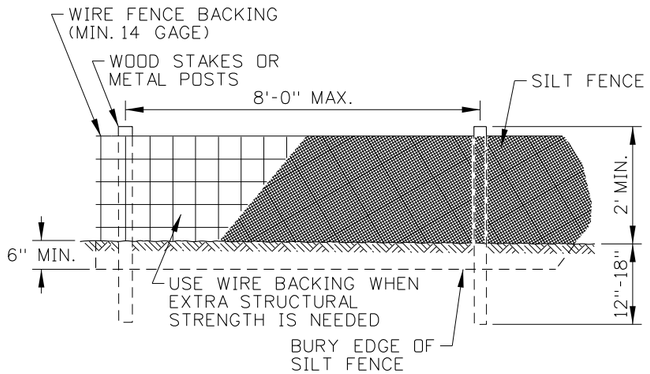
English

STANDARD DRAWING NO. 212-1

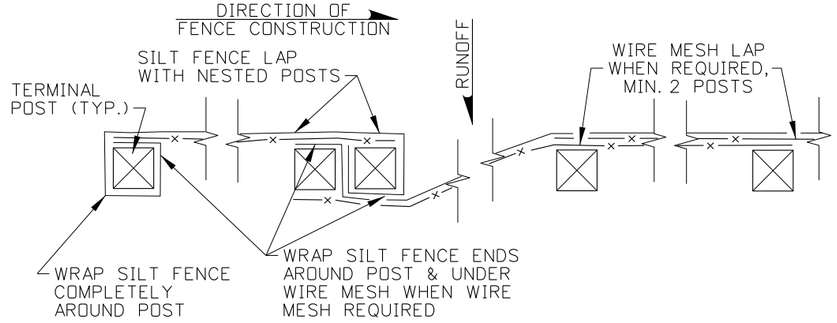
SHEET 1 OF 1



SILT FENCE (NO WIRE BACKING)



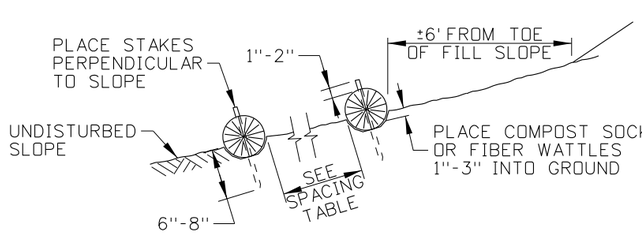
SILT FENCE (WIRE BACKING)



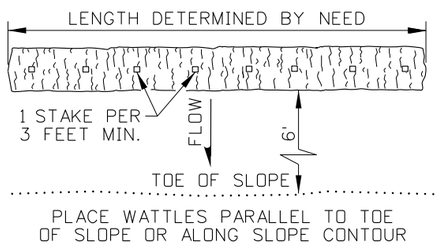
SILT FENCE LAP DETAIL

FIBER WATTLE & COMPOST SOCK SPACING TABLE				
SLOPE	WATTLE SIZE			
	6"	9"	12"	20"
1:1	5 FT	10 FT	15 FT	20 FT
2:1	10 FT	20 FT	30 FT	40 FT
3:1	15 FT	30 FT	45 FT	60 FT
4:1 OR FLATTER	20 FT	40 FT	60 FT	80 FT

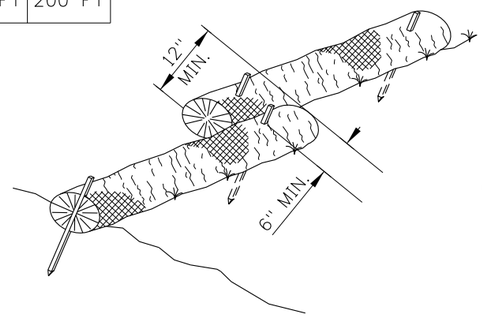
SILT FENCE SPACING TABLE			
SLOPE	SOIL TYPE		
	SILTY	CLAYS	SANDY
1:1	50 FT	75 FT	100 FT
2:1	75 FT	100 FT	125 FT
4:1	100 FT	125 FT	150 FT
10:1 OR FLATTER	125 FT	150 FT	200 FT



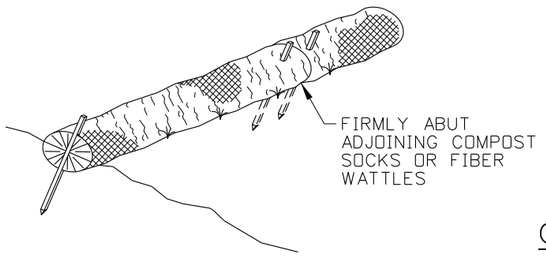
COMPOST SOCK AND FIBER WATTLE
SIDE VIEW



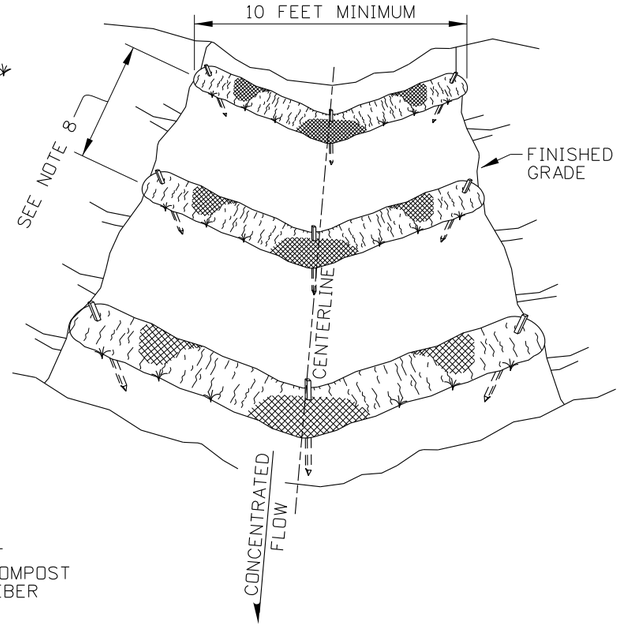
COMPOST SOCK AND FIBER WATTLE
PLAN VIEW



COMPOST SOCK AND FIBER WATTLE OVERLAPPING DETAIL



COMPOST SOCK AND FIBER WATTLE ABUTTING DETAIL



COMPOST SOCK AND FIBER WATTLE TEMPORARY CHECK DAM DETAIL

NOTES

1. SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
2. THE NEED FOR TEMPORARY SEDIMENT CONTROL DEVICES ARE DETERMINED BY SITE DESIGN. SPACE SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES IN ACCORDANCE WITH THE SILT FENCE SPACING TABLE AND FIBER WATTLE & COMPOST SOCK SPACING TABLE.
3. INSTALL TEMPORARY SEDIMENT CONTROL BARRIERS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS. THE DIMENSIONS SHOWN ARE GENERAL GUIDELINES.
4. PLACE SEDIMENT BARRIERS TO FOLLOW THE SLOPE CONTOURS. USE EITHER METAL POSTS OR WOOD STAKES.
5. ENSURE RUNOFF PASSES THROUGH THE SILT FENCE AND NOT AROUND THE FENCE.
6. GROUND SILT FENCES WITH WIRE MESH IN ACCORDANCE WITH THE GROUNDING DETAIL SHOWN ON STANDARD DRAWING 610-1.
7. EXTEND OR JOIN SILT FENCE USING SILT FENCE LAP WITH NESTED POSTS.
8. SPACE CHECK DAMS ACCORDING TO THE HEIGHT OF THE DAM AND THE SLOPE OF THE CHANNEL SO THE BACKWATER FROM THE DOWNSTREAM DAM REACHES THE TOE OF THE UPSTREAM DAM.
9. ON SLOPES, TURN THE ENDS OF EACH ROW OF COMPOST SOCKS AND FIBER WATTLES UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE SOCK OR WATTLE.
10. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF SILT FENCES, COMPOST SOCKS, AND FIBER WATTLES WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE BARRIER.
11. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER STATE OF IDAHO 13683 ORIGINAL SIGNED MARCH 18, 2021 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-93	MSM	6	01-13	RDL			
2	12-94	MSM	7	03-21	TWF			
3	06-96	GFK						
4	10-10	KEH						
5	10-11	KEH						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-03_0421.dgn

DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

TEMPORARY EROSION AND SEDIMENT CONTROL

SILT FENCE, FIBER WATTLE, AND COMPOST SOCK

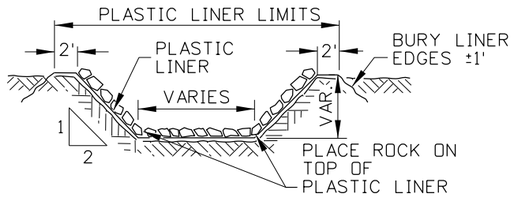
REQUIRES STD. DWG. 212-1

English

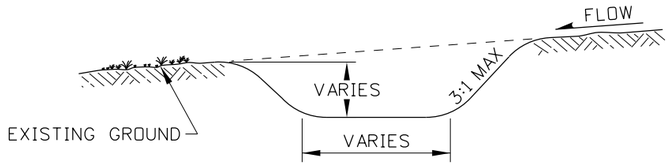
STANDARD DRAWING NO.

212-3

SHEET 1 OF 1

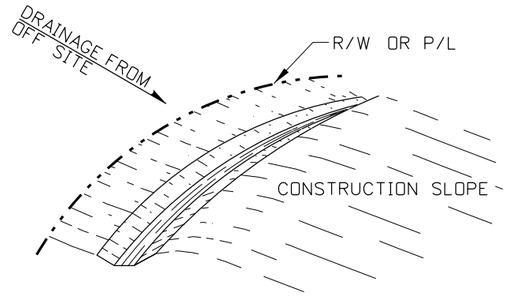


DIVERSION CHANNEL

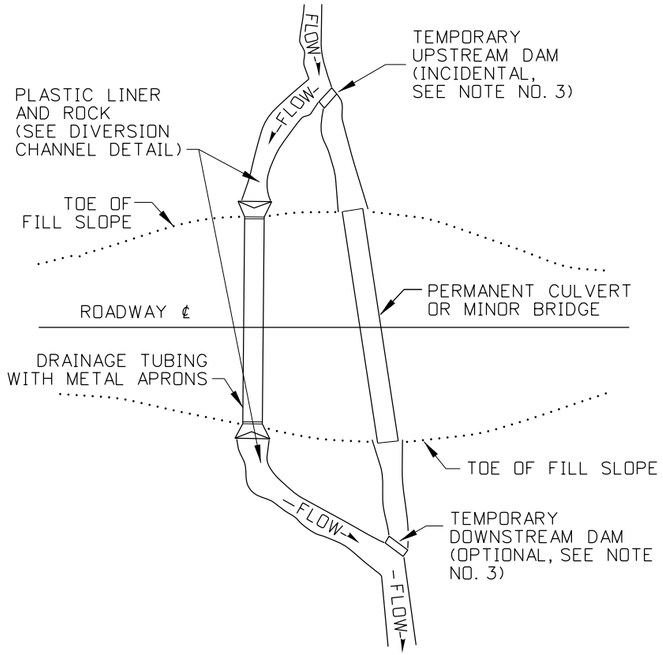


SWALE

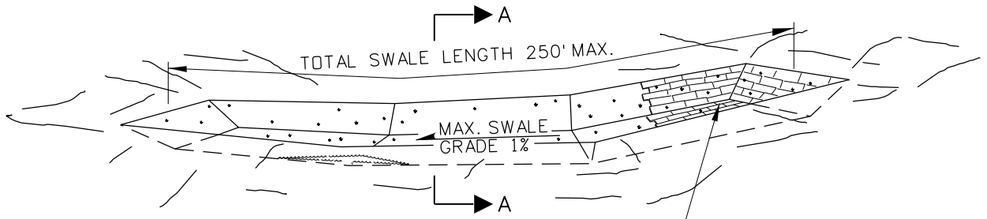
FOR PERIMETER, INTERCEPTOR, AND DIVERSION SWALES



PERIMETER SWALE

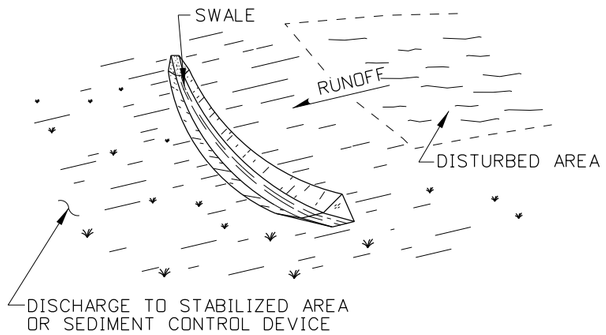


DIVERSION CHANNEL EXAMPLE

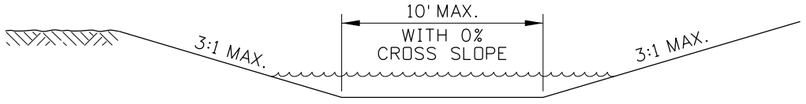


DIVERSION OF RUNOFF MAY BE NECESSARY DURING THE ESTABLISHMENT OF VEGETATION ON THE SWALE SIDES AND BOTTOM. WHERE RUNOFF DIVERSION IS NOT POSSIBLE, COVER GRADED AND SEEDED AREAS WITH SUITABLE EROSION CONTROL MATERIALS OR SOD.

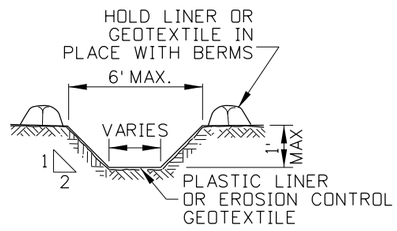
GRASSED SWALE



INTERCEPTOR SWALE

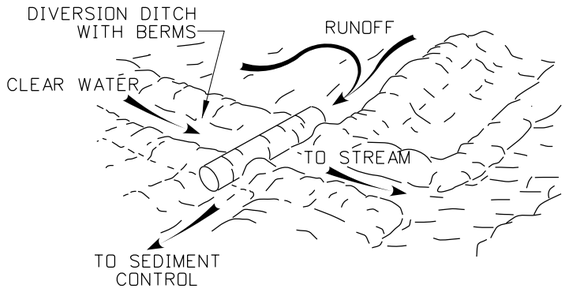


SECTION A-A

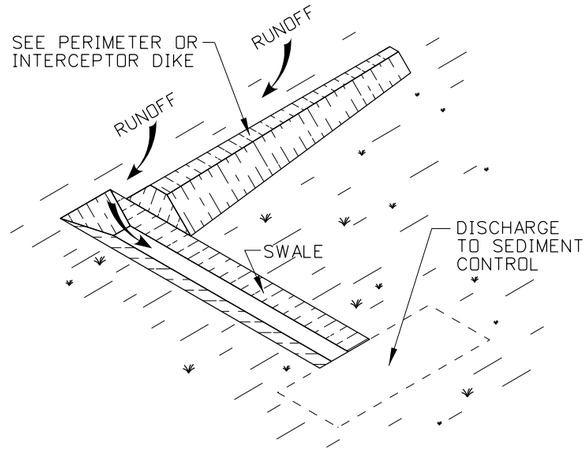


DIVERSION DITCH

ONLY USE WITH CLEAR WATER



DIVERSION DITCH EXAMPLE



DIVERSION SWALE

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED AND DATED RYAN D. LANCASTER DECEMBER 27, 2016 13683 STATE OF IDAHO RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-5_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

TEMPORARY EROSION AND SEDIMENT CONTROL

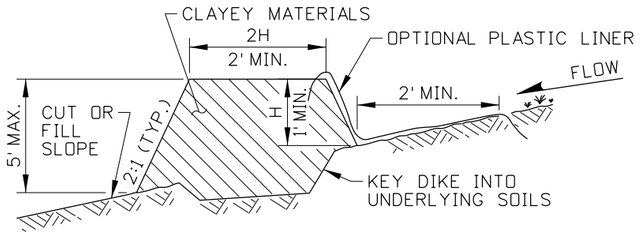
DIVERSION CHANNEL, DITCH, SWALE, DIKE, BERM, WATERBAR, AND ROLLING DIP

REQUIRES SHT. 2 OF 2 & STD. DWG. 212-1

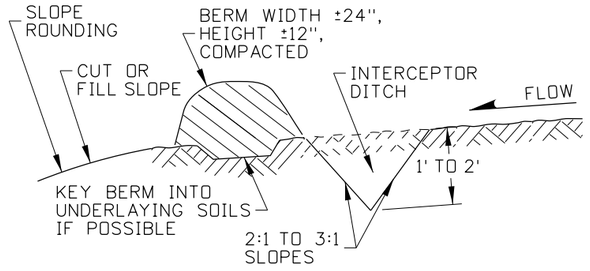
English

STANDARD DRAWING NO. 212-5

SHEET 1 OF 2

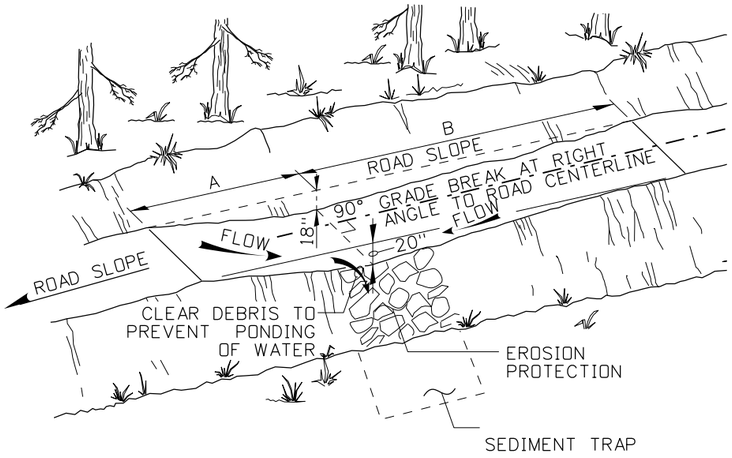


DIKE



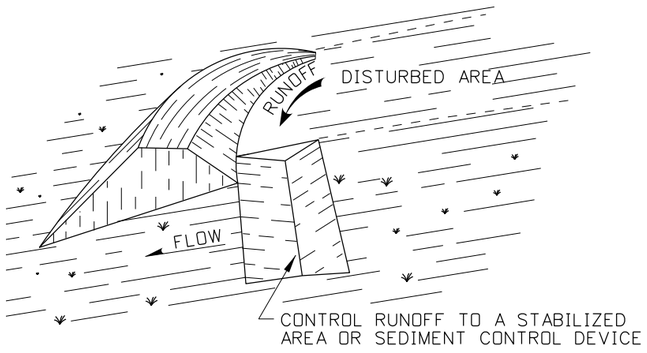
BERM

SHOWN WITH INTERCEPTOR DITCH

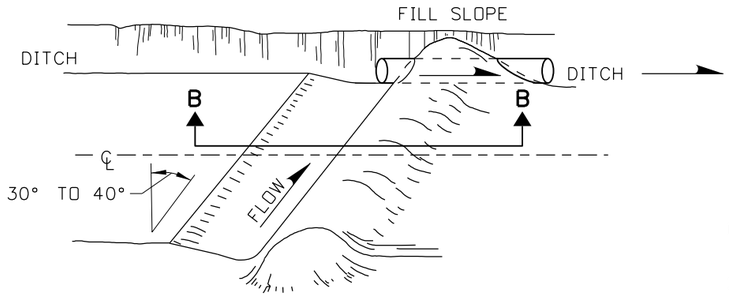


ROLLING DIP

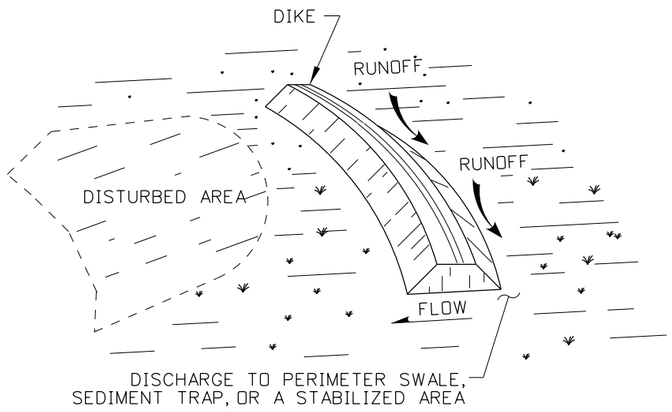
ROLLING DIP DIMENSION TABLE		
% ROAD SLOPE	A (DOWNHILL)	B (UPHILL)
0% TO 4%	35'	65'
4% TO 6%	25'	75'



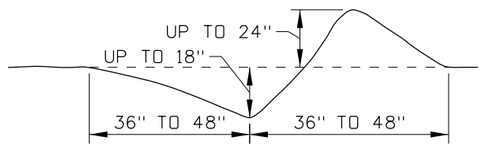
PERIMETER DIKE



WATERBAR



INTERCEPTOR DIKE



SECTION B-B

NOTES

1. SEE THE GENERAL NOTES FOR TEMPORARY EROSION CONTROL STANDARD DRAWINGS ON 212-1.
2. CONSTRUCT DIVERSION CHANNELS, DITCHES, SWALES, DIKES, BERMS, WATER BARS, AND ROLLING DIPS TO THE DIMENSIONS SHOWN ON THE PLANS. USE A PLASTIC LINER WHEN RUNOFF IS NOT INTENDED TO INFILTRATE INTO THE SOIL.
3. WHEN USING A DIVERSION CHANNEL, CONSTRUCT A TEMPORARY DAM TO DIVERT WATER INTO THE CHANNEL. A TEMPORARY DOWNSTREAM DAM IS OPTIONAL AND MAY BE USED TO PREVENT WATER FROM RETURNING TO THE UPSTREAM WORK AREA.
4. USE DIVERSION DITCHES WITH CLEAR WATER. USE A DIVERSION CHANNEL WHEN THE FLOW EXCEEDS 0.25 CUBIC FEET PER SECOND.
5. INSTALL A PLASTIC LINER ALONG THE LENGTH AND WIDTH OF DIVERSION CHANNELS AND DITCHES. OVERLAP THE PLASTIC LINER EDGES 2 FEET. SECURE THE PLASTIC LINER EDGES WITH BERMS, ROCKS, OR OTHER SUITABLE MATERIALS.
6. THE RECOMMENDED MAXIMUM DRAINAGE AREA FOR GRASSED SWALES IS 1 ACRE. THE RECOMMENDED MAXIMUM DRAINAGE AREA CONTRIBUTING RUNOFF TO A DIKE, SWALE OR COMBINATION THEREOF SHOULD NOT EXCEED 5 ACRES.
7. USE DIKES WHEN BERMS ARE NOT SUFFICIENT TO CONTROL RUNOFF. COMPACT DIKES TO 90 PERCENT OF STANDARD DENSITY.
8. DIVERT COLLECTED RUNOFF, INTERCEPTED RUNOFF, OR BOTH FROM A BERM, DIKE, SWALE OR COMBINATION THEREOF TO A SEDIMENT CONTROL DEVICE OR STABILIZED AREA.
9. ENSURE THAT THE SIDE SLOPES OF A DIKE OR SWALE WITHIN THE CLEAR ZONE ARE 6:1 OR FLATTER UNLESS SHIELDED.
10. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER ON DECEMBER 27, 2016 13683 STATE OF IDAHO RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-5_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

TEMPORARY EROSION AND SEDIMENT CONTROL

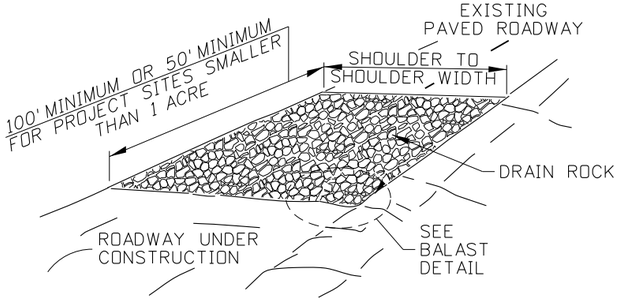
DIVERSION CHANNEL, DITCH, SWALE, DIKE, BERM, WATERBAR, AND ROLLING DIP

REQUIRES SHT. 1 OF 2 & STD. DWG. 212-1

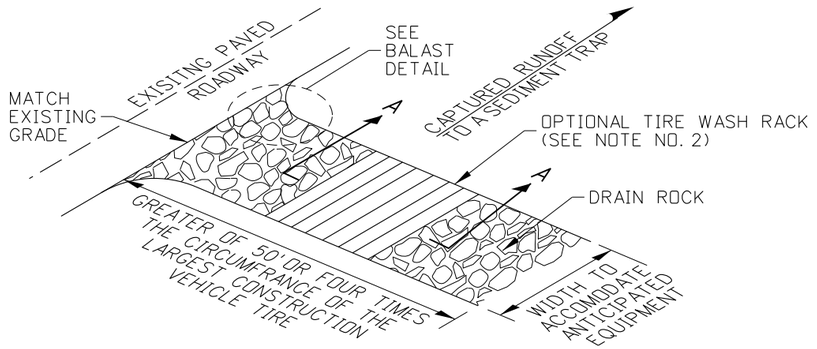
English

STANDARD DRAWING NO. 212-5

SHEET 2 OF 2

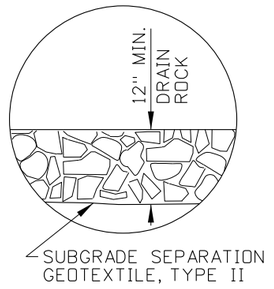


IN-LINE WITH HIGHWAY

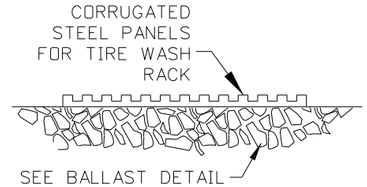


PERPENDICULAR TO HIGHWAY

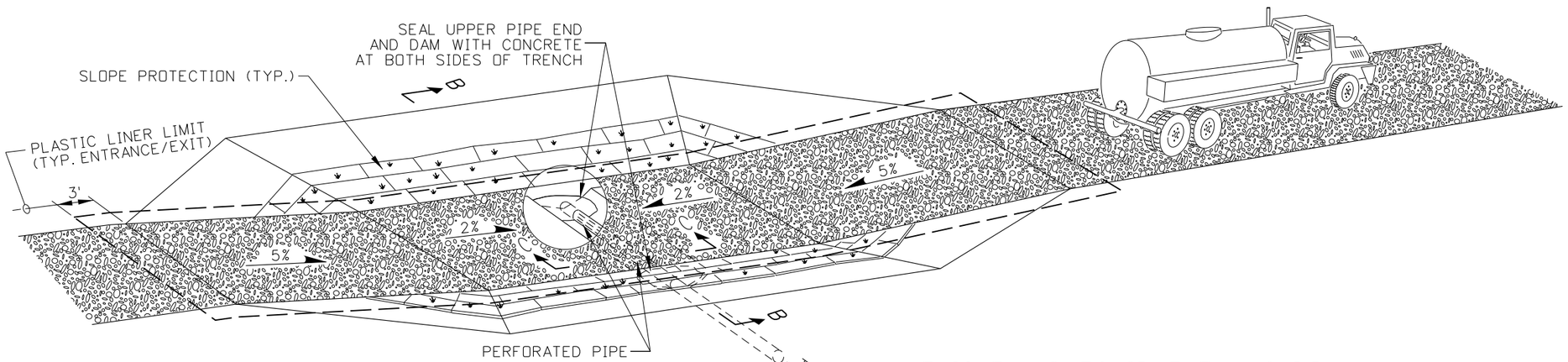
STABILIZED CONSTRUCTION ENTRANCE



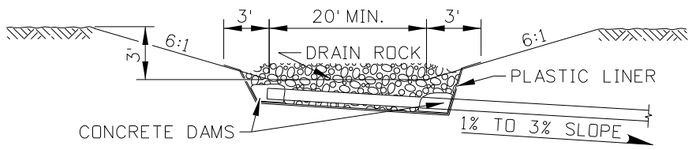
BALLAST DETAIL



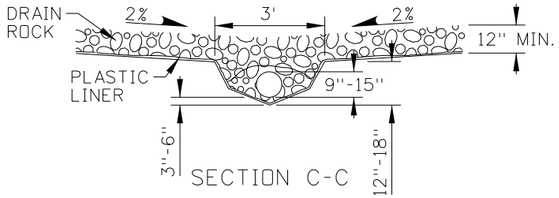
SECTION A-A



VEHICLE AND EQUIPMENT WASHDOWN



SECTION B-B



SECTION C-C

NOTES

1. SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
2. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER STATE OF IDAHO 13683 ORIGINAL SIGNED MARCH 18, 2021 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-21	TWF						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-06_0421.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

TEMPORARY EROSION AND SEDIMENT CONTROL

STABILIZED CONSTRUCTION ENTRANCE AND VEHICLE WASHDOWN

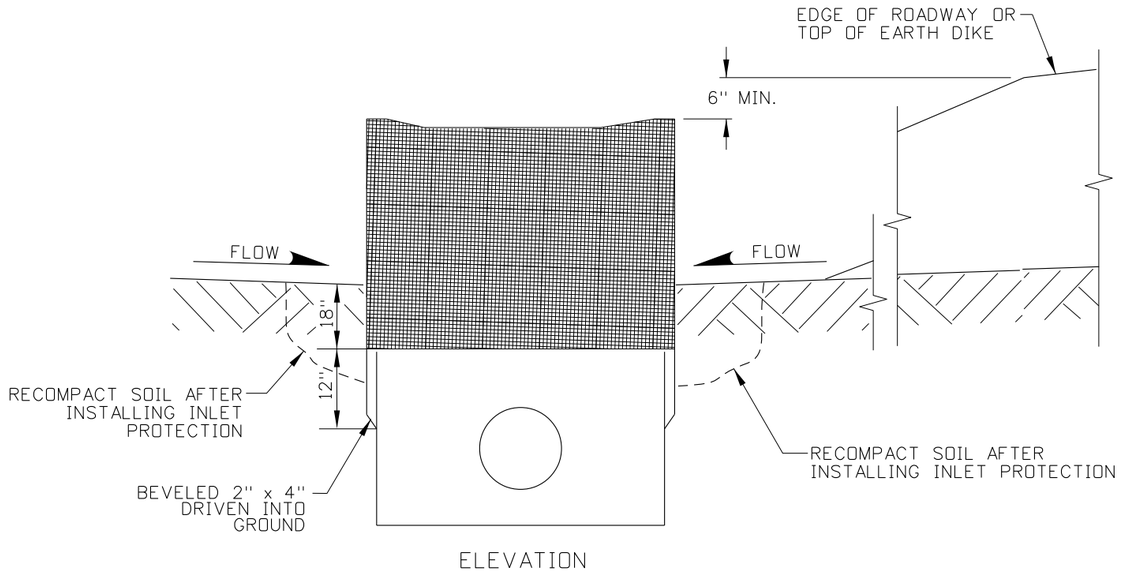
REQUIRES STD. DWG. 212-1

English

STANDARD DRAWING NO.

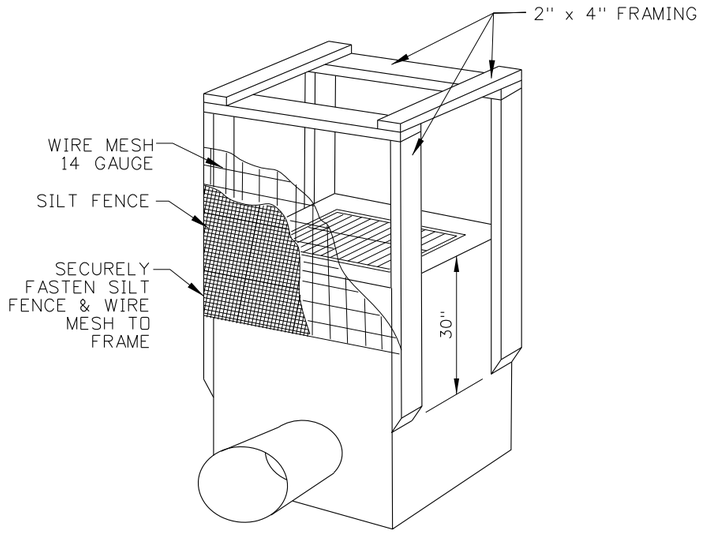
212-6

SHEET 1 OF 1

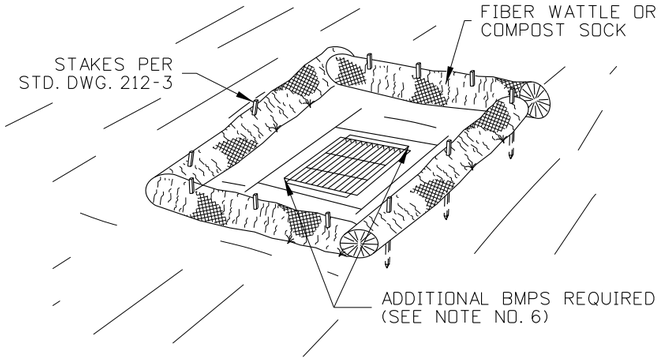


ELEVATION

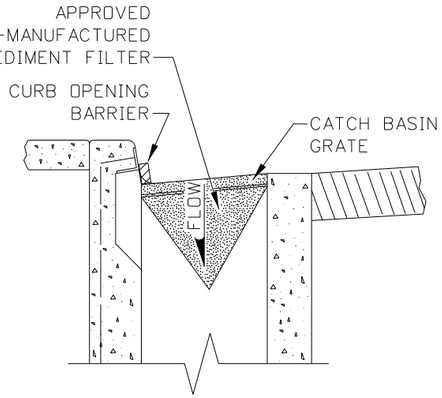
FRAMED WIRE/FABRIC FILTER



PERSPECTIVE VIEW



FIBER WATTLE FILTER



PRE-MANUFACTURED SEDIMENT FILTER FOR INLET GRATE

NOTES

1. SEE THE GENERAL NOTES FOR EROSION CONTROL STANDARD DRAWINGS ON 212-1.
2. REMOVE TRASH, DEBRIS, DUFF, AND MATERIALS THAT MAY INTERFERE WITH THE INLET OR CATCH BASIN PROTECTION FUNCTION PRIOR TO PLACEMENT AND DAILY THEREAFTER OR AS NEEDED.
3. ADJUST TO ENSURE EFFECTIVENESS.
4. FRAMED WIRE/FABRIC FILTER AND FIBER WATTLE FILTERS ARE INTENDED TO BE USED ON STRUCTURES NOT PRESENTLY SURROUNDED BY PAVEMENT.
5. ENSURE WATER DISCHARGING FROM THE INLET MEETS APPLICABLE WATER QUALITY STANDARDS.
6. USE IN CONJUNCTION WITH OTHER INLET PROTECTION DEVICES, NOT AS THE SOLE BMP. SEE SECTION SC-6 IN THE BMP MANUAL.
7. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
LICENSED
RYAN D. LANCASTER
13683
STATE OF IDAHO
ORIGINAL SIGNED BY RYAN D. LANCASTER
MARCH 18, 2021

REVISIONS

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-10	KEH						
2	10-11	KEH						
3	01-13	RDL						
4	03-21	TWF						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-07_0421.dgn

DRAWING DATE: JUNE, 1996

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

TEMPORARY EROSION AND SEDIMENT CONTROL INLET PROTECTION

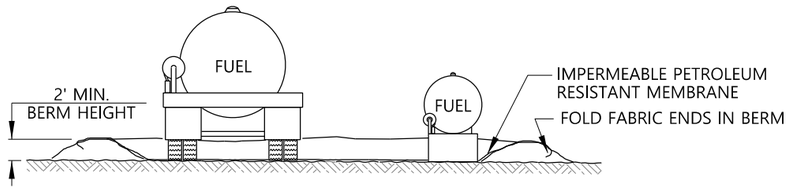
REQUIRES STD. DWG. 212-1

English

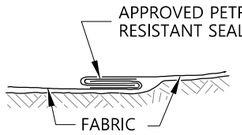
STANDARD DRAWING NO.

212-7

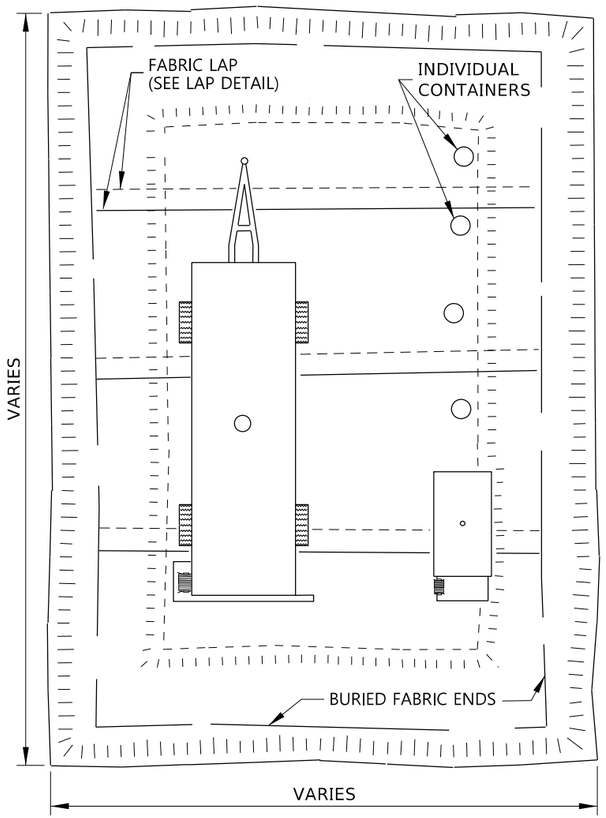
SHEET 1 OF 1



ELEVATION

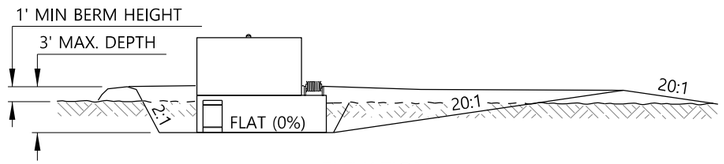


LAP DETAIL

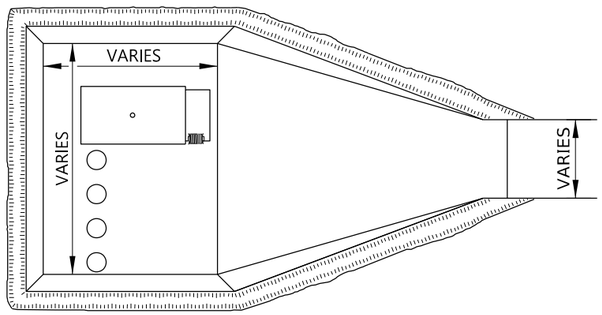


PLAN

PETROLEUM STORAGE AREA - TYPE 1



ELEVATION



PLAN

PETROLEUM STORAGE AREA - TYPE 2

NOTES

1. USE THIS DRAWING IN CONJUNCTION WITH THE ITD BEST MANAGEMENT PRACITCES MANUAL.
2. PROVIDE THE PETROLEUM STORAGE AREA FOR THE DURATION OF THE PROJECT.
3. PROVIDE A TYPE 1 OR TYPE 2 PETROLEUM STORAGE AREA WITH AN IMPERMEABLE PETROLEUM RESISTANT MEMBRANE IF PETROLEUM PRODUCTS ARE STORED ONSITE.
4. ENSURE THE TOTAL VOLUME OF THE BERMED AREA IS 110 PERCENT OF THE TOTAL CAPACITY OF THE STORAGE CONTAINERS INSIDE THE BERM.
5. NOTIFY THE ENGINEER AND THE HAZARDOUS MATERIALS COORDINATOR OF SOIL CONTAMINATION RESULTING FROM PETROLEUM SPILLS. COORDINATE REMOVAL PROCEDURES WITH THE ENGINEER AND HAZARDOUS MATERIAL COORDINATOR BEFORE PERFORMING THE WORK.
6. ENSURE RUNOFF AT THE EQUIPMENT STAGING AREA ENTRANCE IS RETAINED IN THE STAGING AREA.
7. REMOVE UNCONTAMINATED STORMWATER FROM INSIDE THE STORAGE AREA. TREAT CONTAMINATED STORMWATER AS A HAZARDOUS WASTE.
8. STORE INCOMPATIBLE MATERIALS IN SEPARATE STORAGE AREAS.
9. STORE MATERIALS IN THEIR ORIGINAL PACKAGING AND ON PALLETS.
10. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
LICENSED
ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINALLY SIGNED:
MARCH 1, 2023
13683
STATE OF IDAHO
RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-98	MSM						
2	10-10	KEH						
3	11-13	RDL						
4	01-23	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-15_0423.dgn

DRAWING DATE: DECEMBER, 1995

IDAHO TRANSPORTATION DEPARTMENT
YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

BOISE IDAHO

ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING

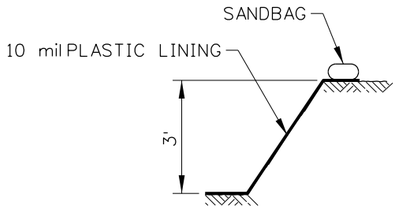
PETROLEUM STORAGE AREA

REQUIRES STD. DWG. 212-5

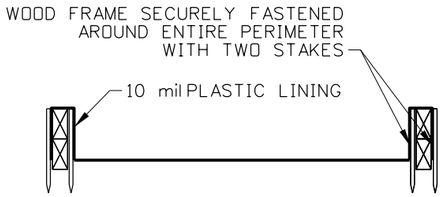
ENGLISH

STANDARD DRAWING NO.
212-15

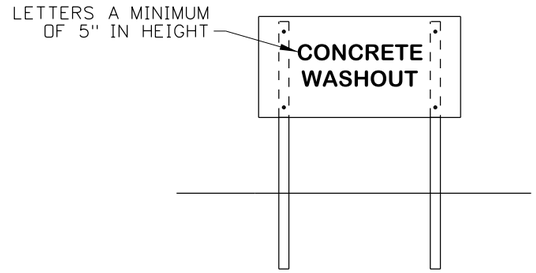
SHEET 1 OF 1



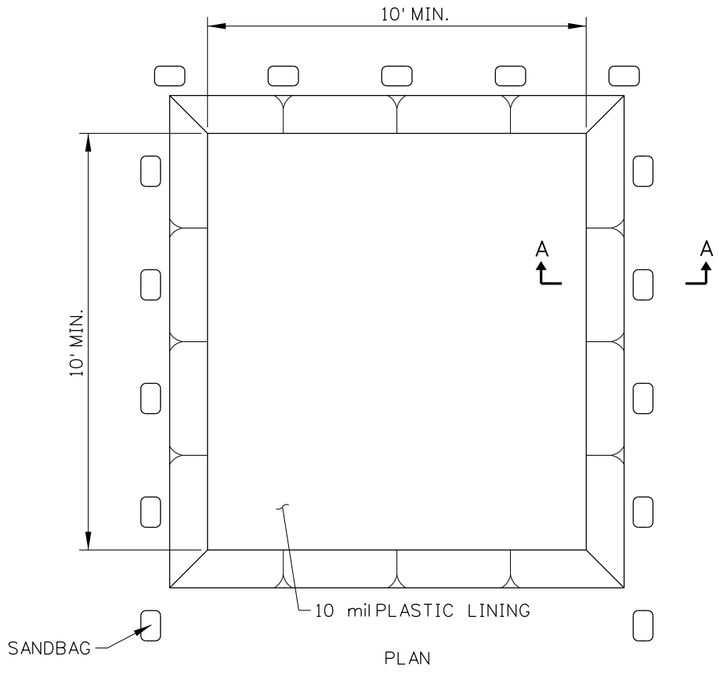
SECTION A-A



SECTION B-B

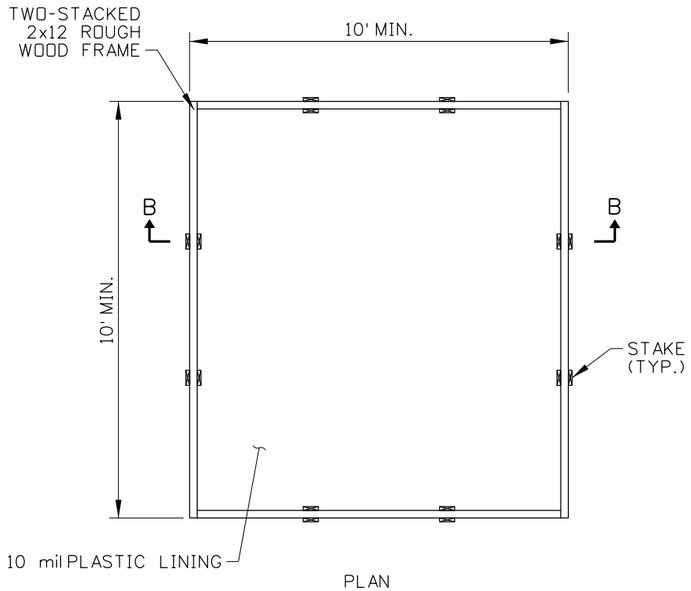


CONCRETE WASHOUT SIGN DETAIL
(SEE NOTE NO. 2)



PLAN

TYPE BELOW GRADE



PLAN

TYPE ABOVE GRADE

NOTES

1. USE THIS DRAWING IN CONJUNCTION WITH THE ITD BEST MANAGEMENT PRACTICES (BMP) MANUAL.
2. ACTUAL LAYOUT DETERMINED IN THE FIELD
3. INSTALL THE CONCRETE WASHOUT SIGN WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
4. USE OF PREFABRICATED TEMPORARY WASHOUT MAY ONLY BE USED ON APPROVAL BY THE ENGINEER.
5. NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED J. CALEB LAKEY ORIGINAL SIGNED BY: J. CALEB LAKEY NOVEMBER 20, 2013 15116 STATE OF IDAHO J. CALEB LAKEY

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	11-13	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 212-16_1113.dgn

DRAWING DATE: OCTOBER, 2010

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TOM COLE *for*
HIGHWAYS PROGRAM OVERSIGHT ENGINEER
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

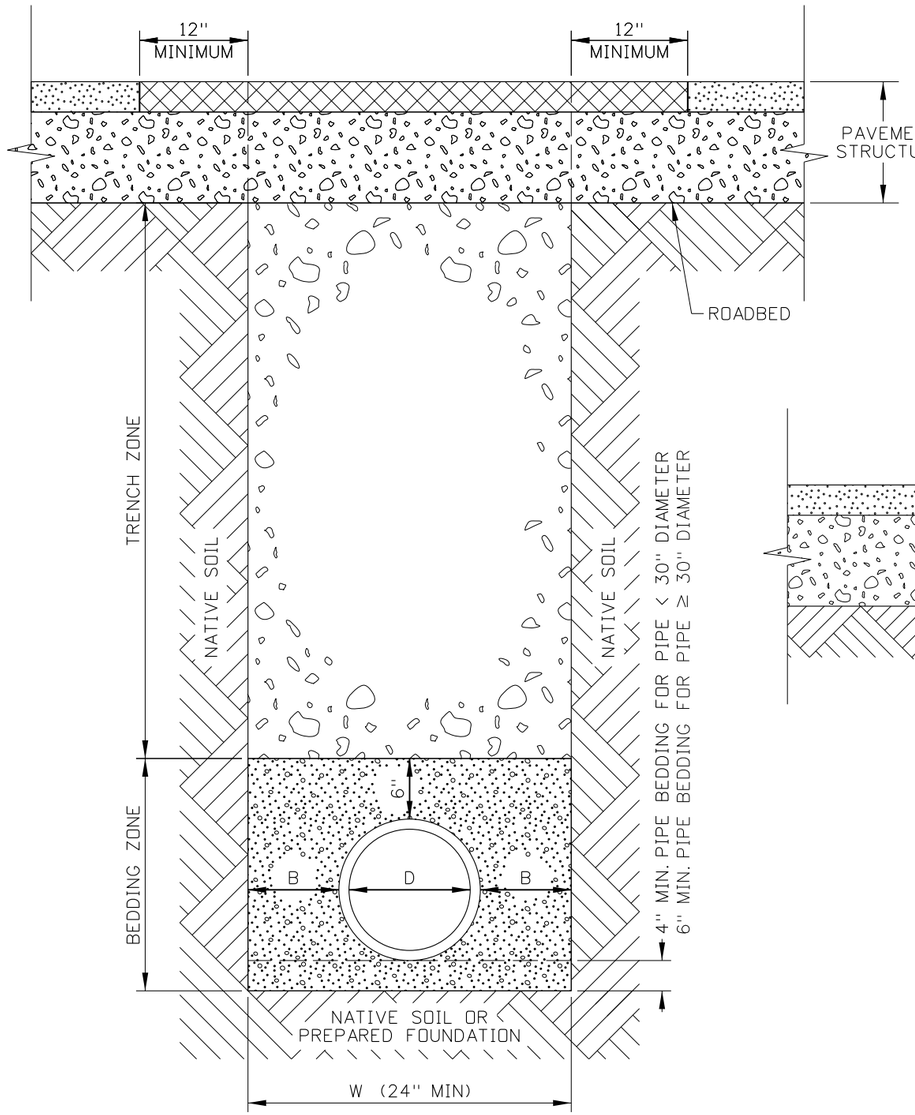
STANDARD DRAWING

TEMPORARY CONCRETE WASHOUT

English

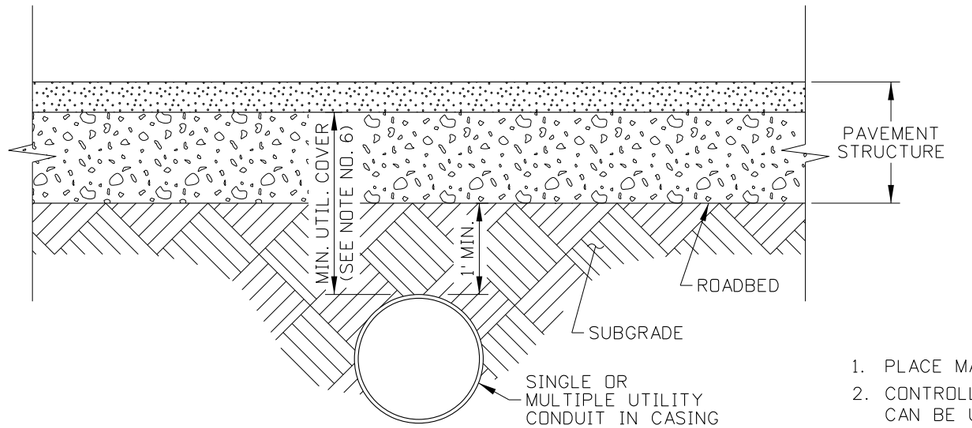
STANDARD DRAWING NO.
212-16

SHEET 1 OF 1

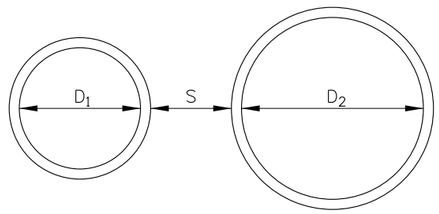


TRENCHING

MATERIALS AND COMPACTION TABLE				
PIPE LOCATION	BEDDING ZONE		TRENCH ZONE	
	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT
INSIDE ROADWAY PRISM	COARSE AGGREGATE FOR CONCRETE SIZE NO. 1, NO. 2A, OR NO. 2B (SUBSECTION 703.02)	ENGINEER ACCEPTANCE	3/4" AGGREGATE FOR BASE (SUBSECTION 703.04) (SEE NOTE NO. 1)	CLASS A COMPACTION (SECTION 205) OR 95% OF IT-74
OUTSIDE ROADWAY PRISM	COARSE AGGREGATE FOR CONCRETE SIZE NO. 1, NO. 2A, OR NO. 2B (SUBSECTION 703.02)	ENGINEER ACCEPTANCE	GRANULAR BORROW OR NATIVE MATERIALS WITH MAXIMUM SIZE OF 6" AND FREE FROM WOOD WASTE OR DELETERIOUS MATERIALS. (SEE NOTE NO. 1)	CLASS D COMPACTION (SECTION 205)



JACKING, DRIVING, OR BORING



MULTIPLE PIPE INSTALLATION DETAIL
(SEE NOTE NO. 4)

MINIMUM DIMENSION TABLE (SEE NOTE NOS. 3 AND 4)		
D (INCHES)	B (INCHES)	S (INCHES)
≤ 6	10	24
7 TO 15	12	24
16 TO 30	18	24
> 30	24	GREATER OF 24 OR D/2

NOTES

1. PLACE MATERIAL IN ACCORDANCE WITH SECTION 210.
2. CONTROLLED DENSITY FILL (CDF) IN ACCORDANCE WITH SECTION 522 CAN BE USED IF APPROVED BY THE ENGINEER.
3. LOOSE LIFT THICKNESS DIRECTLY ON TOP OF PIPE MAY BE INCREASED WITH APPROVAL TO PREVENT DAMAGE TO PIPE DURING COMPACTION.
4. WHEN TWO DIFFERENT DIAMETER PIPES ARE INSTALLED, USE THE LARGER D DIMENSION TO DETERMINE THE S DIMENSION.
5. WHEN THE PIPE DIAMETER IS 36 INCHES OR GREATER AND THE PIPE IS INSTALLED DURING EMBANKEMENT CONSTRUCTION, USE B DIMENSION EQUAL TO THE PIPE DIAMETER.
6. PROVIDE THE FOLLOWING MINIMUM COVER DEPTHS:
   WATER: 4'
   LIQUID OR GAS PETROLEUM: 4'
   ELECTRICAL MAIN LINE: 4'
   COMMUNICATIONS OR ELECTRONICS: 2'
   UTILITY OWNERS AND LOCAL PUBLIC AGENCIES MAY HAVE DIFFERENT MINIMUM COVER DEPTHS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE REQUIRED COVER DEPTHS.
7. PERFORM TRENCHING PER OSHA REQUIREMENTS.
8. DO NOT DISTURB THE INSTALLED PIPE OR CONDUIT, OR LEAVE VOIDS WHEN USING TRENCH BOXES OR SHIELDS.
9. DRAWINGS NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER REGISTERED ORIGINAL SIGNED BY: JOHN W. INGRAM MARCH 18, 2020 STATE OF IDAHO 6755 JOHN W. INGRAM III

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-15	RDL	6	03-21	TWF			
2	03-16	RDL						
3	06-17	RDL						
4	06-18	HEB						
5	11-18	TWF						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 601-1_0421.dgn

DRAWING DATE: MAY 2014

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

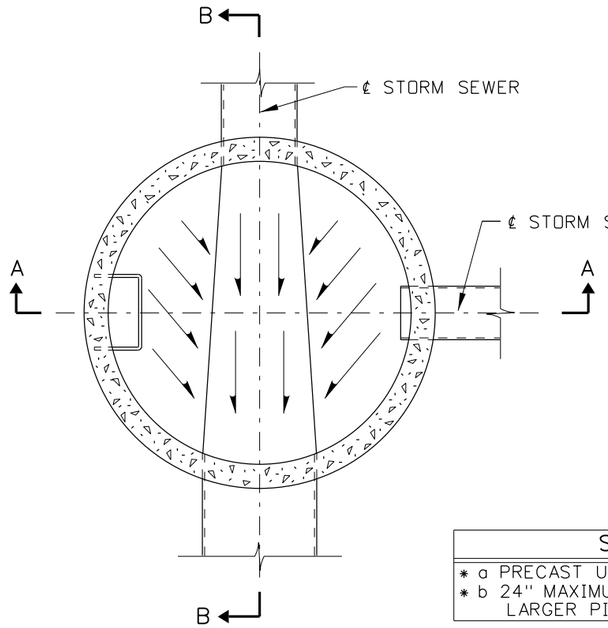
PIPE AND CONDUIT INSTALLATION

English

STANDARD DRAWING NO.

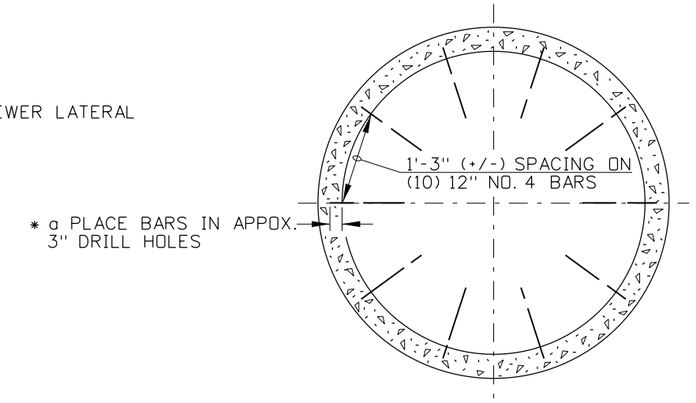
601-1

SHEET 1 OF 1



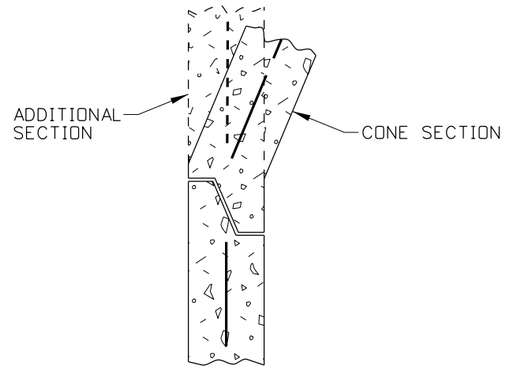
SECTION C-C

(SCALE 1/2"=1')



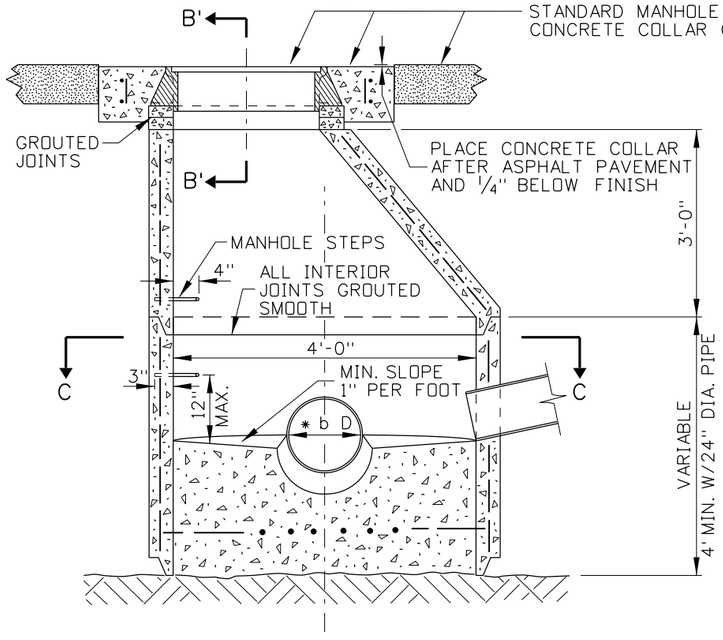
FLOOR METAL REINFORCEMENT

SUB-NOTES
* a PRECAST UNITS ONLY
* b 24" MAXIMUM PIPE DIA., FOR LARGER PIPE USE MANHOLE TYPE D.



PRECAST CONSTRUCTION JOINT DETAIL

(NO SCALE)

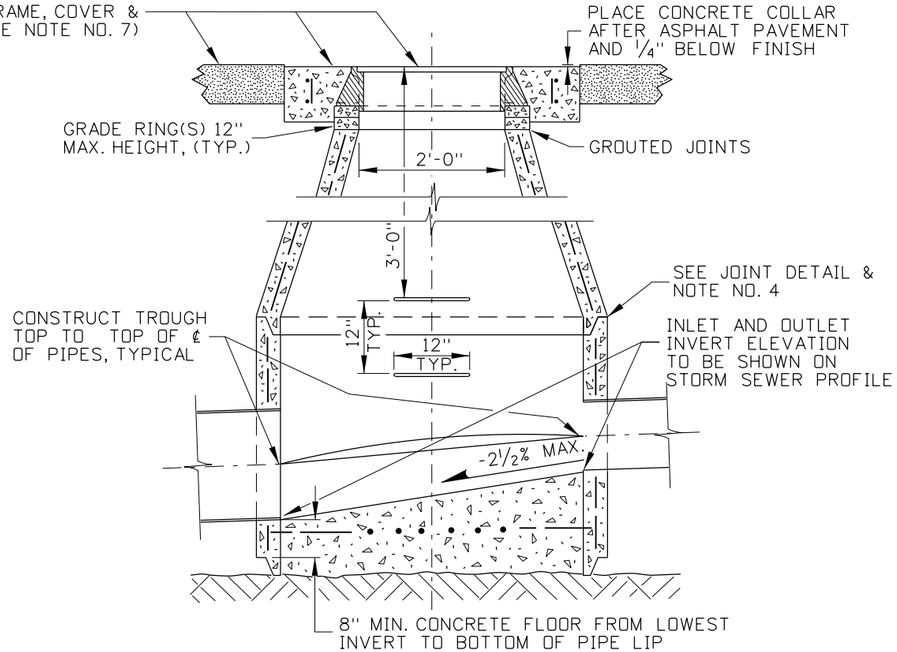


SECTION A-A

(SCALE 1/2"=1')

TOP - SECTION B'-B'

(SCALE 1/2"=1')



BOTTOM - SECTION B-B

(SCALE 1/2"=1')

NOTES

1. CARE SHALL BE TAKEN TO AVOID PLACING MANHOLES IN WHEEL PATHS.
2. MANHOLES TYPE A MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. PRIOR APPROVAL OF THE SHOP DRAWING WILL BE REQUIRED ON PRECAST UNITS WITH FLOOR AND/OR PIPE OPENINGS.
3. CAST-IN-PLACE MANHOLES TYPE A SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. CAST-IN-PLACE MANHOLES SHALL HAVE 6" WALLS AND MINIMUM 8" FLOORS. THE METAL REINFORCEMENT USED ON THE WALLS AND FLOORS SHALL BE NO. 4 BARS. ALL REINFORCEMENT SHALL HAVE A MINIMUM CONCRETE COVER OF 2" AND/OR 3" IF CAST AGAINST EARTH.
4. ALL CONNECTIONS AND BROKEN AREAS SHALL BE GROUTED SMOOTH TO FORM A WATER TIGHT MANHOLE. MASTIC SEALANTS, GASKETS, AND O-RINGS USED ON PRECAST SECTION(S) CONSTRUCTION JOINT(S) SHALL CONFORM TO AASHTO AND ASTM REQUIREMENTS.
5. BENDS IN THE MAIN STORM SEWER SHALL BE MADE BY FORMING CURVED CHANNELS WITHIN THE MANHOLE. THE INSIDE OF THE TOP LATERAL PIPES MAY NOT BE LOWER THAN THE INSIDE TOP OF MAIN SEWER PIPES. WHEN THE INVERT OF A LATERAL PIPE FALLS BELOW THE 1" PER FOOT MINIMUM SLOPE LINE, THE CHANNEL SHALL BE FORMED FROM THE LATERAL PIPE TO THE MAIN SEWER.
6. WHEN MANHOLE STEPS ARE REQUIRED AN ECCENTRIC CONE SECTION SHALL BE USED. PLASTIC COATED MANHOLE STEPS SHALL BE PLACED IN MANHOLES GREATER THAN 4' IN DEPTH. PLASTIC COATED MANHOLE STEPS SHALL CONFORM TO IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
7. USE OF A PLASTIC MANHOLE FRAME SUPPORT, I. E. WHIRLY-GIG OR COMPARABLE DEVICE, IS AN ACCEPTABLE CONSTRUCTION OPTION (FOR FURTHER INFORMATION REFER TO STANDARD DRAWING 605-13).
8. CHEMICAL RESISTANT LINERS MAY BE REQUIRED (SEE PLANS AND/OR SPECIAL PROVISIONS).
9. STANDARD DRAWING 605-13 SHALL ACCOMPANY THIS DRAWING.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER — ORIGINAL SIGNED AND STAMPED — TED E. MASON — OCTOBER 26, 2010 — STATE OF IDAHO

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-64		6	12-93	MSM	11	09-10	PLR
2	04-71		7	11-01	MSM			
3	05-74		8	06-03	MSM			
4	02-75		9	12-04	MSM			
5	12-92	MSM	10	05-07	MSM			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-10_1010.dgn

DRAWING DATE: JUNE, 1961

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

MANHOLE TYPE A

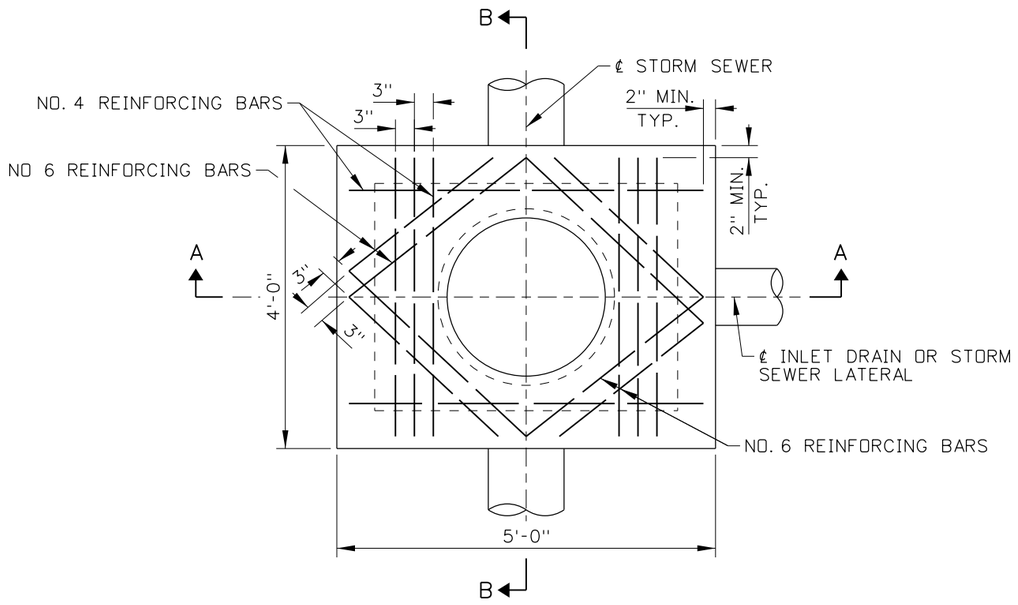
REQUIRES STD. DWG. 605-13

English

STANDARD DRAWING NO.

605-10

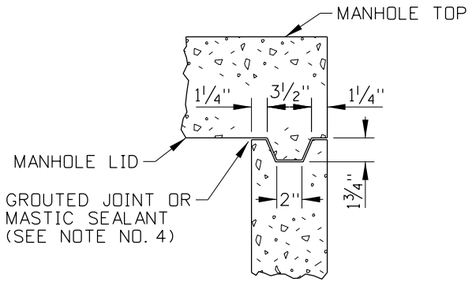
SHEET 1 OF 1



MANHOLE TOP

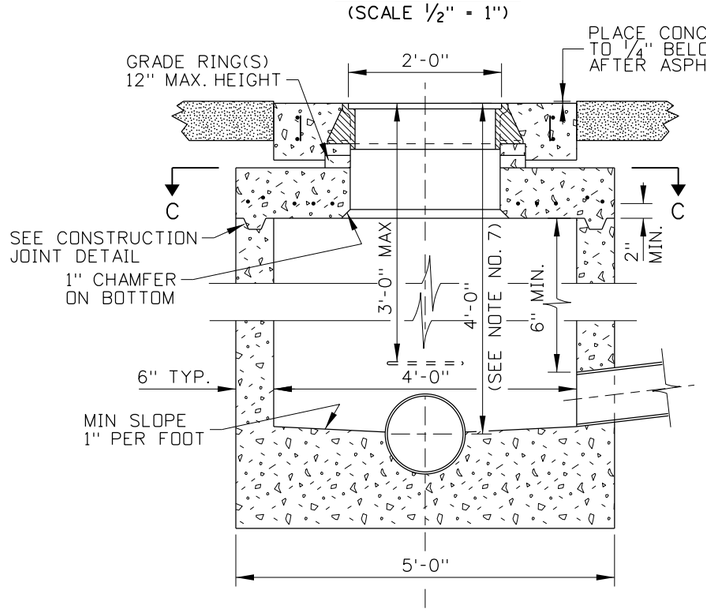
SECTION C-C

(SCALE ½" = 1")



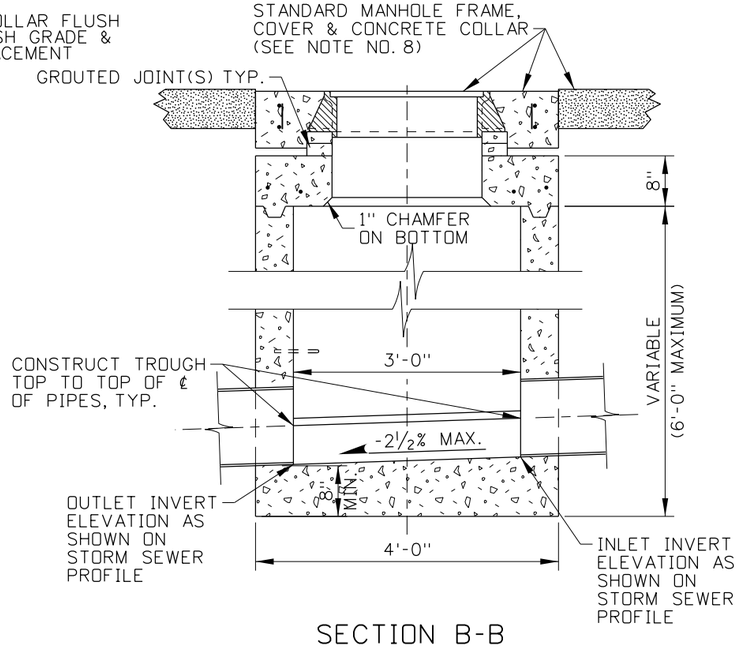
CONSTRUCTION JOINT DETAIL

(NO SCALE)



SECTION A-A

(SCALE ½" = 1")



SECTION B-B

(SCALE ½" = 1")

NOTES

1. CARE SHALL BE TAKEN TO AVOID PLACING MANHOLES IN WHEEL PATHS.
2. MANHOLE TYPE B MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. PRIOR APPROVAL OF THE SHOP DRAWING WILL BE REQUIRED ON PRECAST UNITS WITH FLOOR AND/OR PIPE OPENINGS.
3. CAST-IN-PLACE MANHOLE TYPE B SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. CAST-IN-PLACE MANHOLES SHALL HAVE 6" WALLS AND MINIMUM 8" FLOORS. THE METAL REINFORCEMENT USED ON THE WALLS AND FLOORS SHALL BE NO. 4 BARS. ALL REINFORCEMENT SHALL HAVE A MINIMUM CONCRETE COVER OF 2" AND/OR 3" IF CAST AGAINST EARTH.
4. ALL CONNECTIONS AND BROKEN AREAS SHALL BE GROUTED SMOOTH TO FORM A WATER TIGHT MANHOLE. MASTIC SEAL ANTS, GASKETS, USED ON PRECAST SECTION(S) CONSTRUCTION JOINT(S) SHALL CONFORM TO AASHTO AND ASTM REQUIREMENTS.
5. BENDS IN THE MAIN STORM SEWER SHALL BE MADE BY FORMING CURVED CHANNELS WITHIN THE MANHOLE. THE INSIDE OF THE TOP LATERAL PIPES MAY NOT BE LOWER THAN THE INSIDE TOP OF MAIN SEWER PIPES. WHEN THE INVERT OF THE LATERAL PIPE FALLS BELLOW THE 1" PER FOOT MINIMUM SLOPE LINE, THE CHANNEL SHALL BE FORMED FROM THE LATERAL PIPE TO THE MAIN SEWER.
6. THE CONCRETE MANHOLE LIDS SHALL BE DESIGNED FOR AASHTO H-25 LIVE LOADS.
7. WHEN MANHOLE DEPTH IS GREATER THAN 4'-0" INSTALL MANHOLE STEP(S), THE NORMAL STEP-TO-STEP SPACING IS 12" AND THE STEP PROTRUDES FROM THE MANHOLE WALL 4".
8. USE OF A PLASTIC MANHOLE FRAME SUPPORT, I. E. WHIRLY-GIG OR COMPARABLE DEVICE IS AN ACCEPTABLE CONSTRUCTION OPTION (FOR FURTHER INFORMATION REFER TO STANDARD DRAWING 605-13).
9. STANDARD DRAWING 605-13 SHALL ACCOMPANY THIS DRAWING.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER * LAND SURVEYOR REGISTERED ORIGINAL SIGNED MILFORD MILLER MAY 16, 2007 STATE OF IDAHO 2240

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-64		6	09-04	MSM			
2	04-71		7	05-07	MSM			
3	05-71							
4	12-92	MSM						
5	11-01	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-11_0507.dgn

DRAWING DATE: JUNE, 1961

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

STANDARD DRAWING

MANHOLE TYPE B

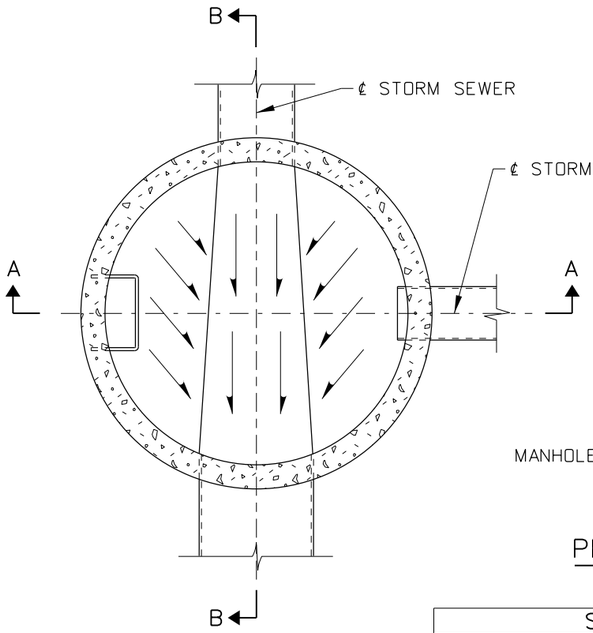
REQUIRES STD. DWG. 605-13

English

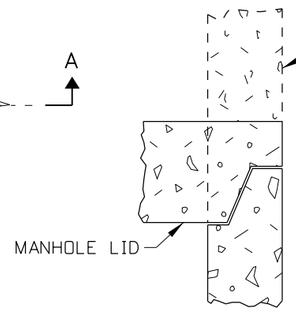
STANDARD DRAWING NO.

605-11

SHEET 1 OF 1

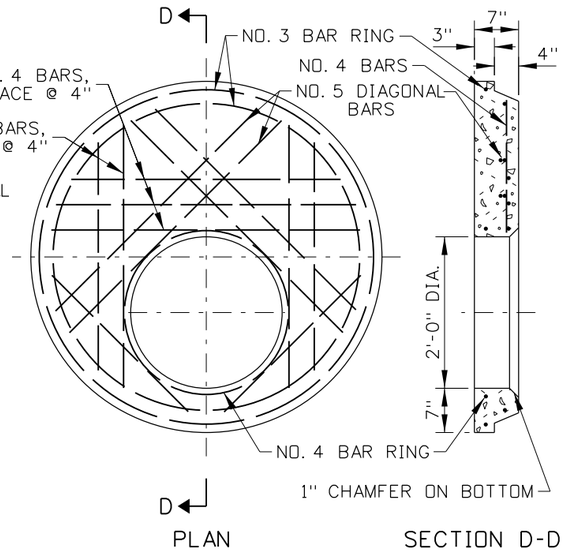


SECTION C-C
(SCALE ½" = 1")

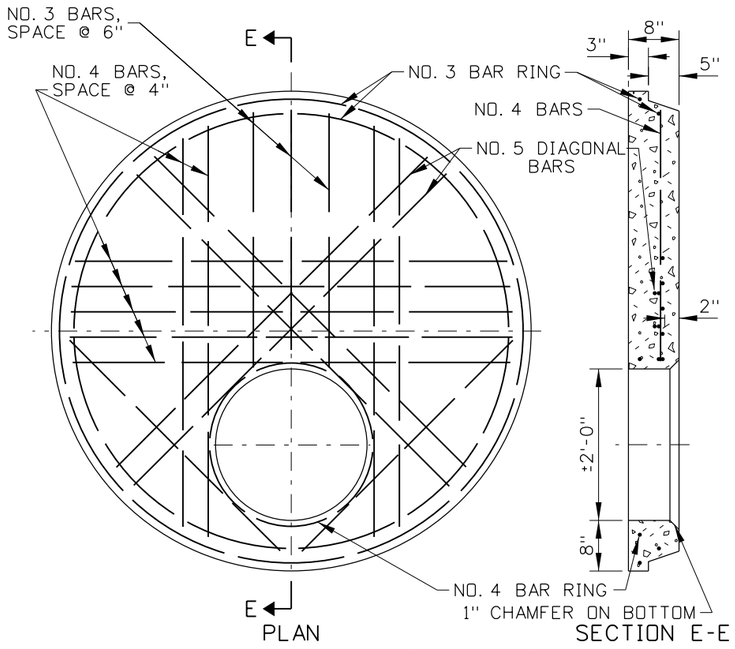


PRECAST JOINT DETAIL
(NO SCALE)

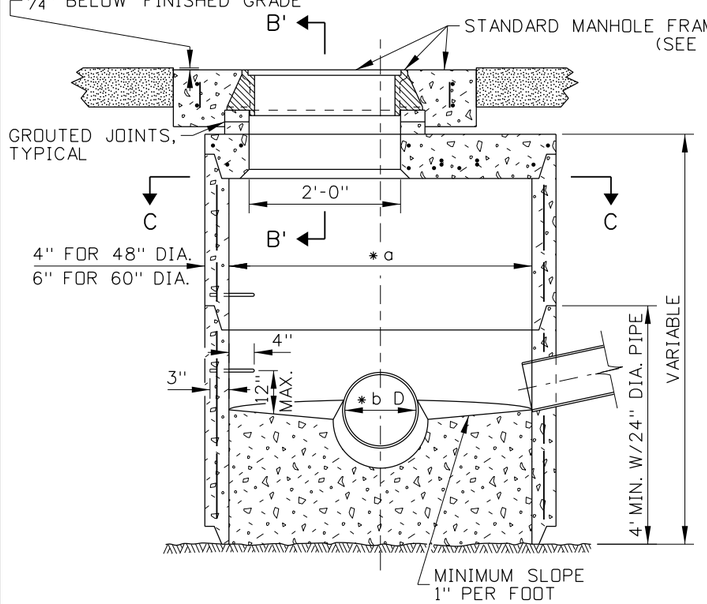
SUB-NOTES
* a MANHOLE TYPE C (48" DIA. SECTION), MANHOLE TYPE D (60" DIA. SECTION)
* b 24" MAX. PIPE DIA. W/48" DIA. SECTION 36" MAX. PIPE W/60" DIA. SECTION



48" DIA. FLAT LID
(SCALE ½" = 1")

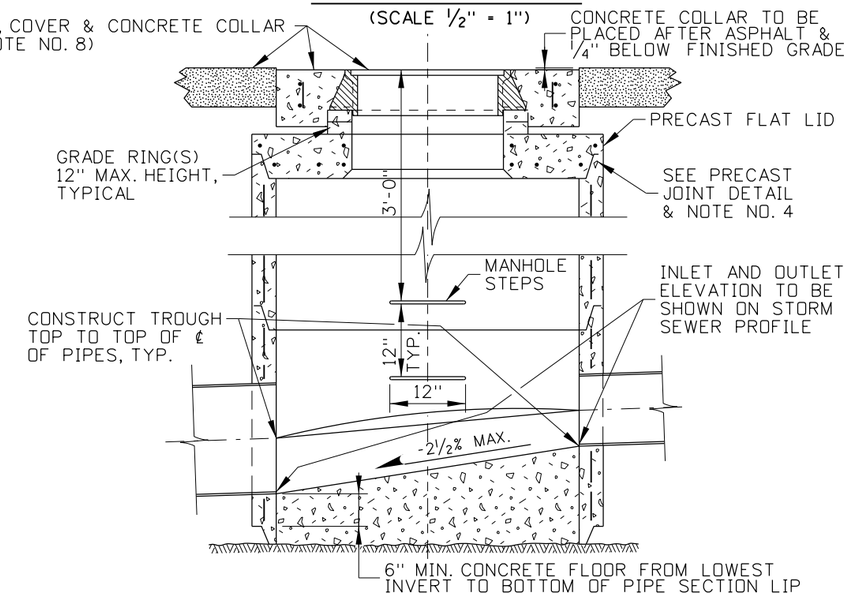


60" DIA. FLAT LID
(SCALE ½" = 1")



SECTION A-A
(SCALE ½" = 1")

TOP SECTION B'-B'
(SCALE ½" = 1")



BOTTOM SECTION B-B
(SCALE ½" = 1")

NOTES

1. CARE SHALL BE TAKEN TO AVOID PLACING MANHOLES IN WHEEL PATHS.
2. MANHOLES TYPE C & D MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. PRIOR APPROVAL OF THE SHOP DRAWING WILL BE REQUIRED ON PRECAST UNITS WITH FLOOR AND/OR PIPE OPENINGS.
3. CAST-IN-PLACE MANHOLES TYPE C & D SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT "ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION". CAST-IN-PLACE MANHOLES SHALL HAVE 6" WALLS AND MINIMUM 8" FLOORS. THE METAL REINFORCEMENT USED ON THE WALLS AND FLOORS SHALL BE NO. 4 BARS. ALL REINFORCEMENT SHALL HAVE A MINIMUM CONCRETE COVER OF 2" AND/OR 3" IF CAST AGAINST EARTH.
4. ALL CONNECTIONS AND BROKEN AREAS SHALL BE GROUTED SMOOTH TO FORM A WATER TIGHT MANHOLE. MASTIC SEALANTS, GASKETS, AND O-RINGS USED ON PRECAST SECTION(S) CONSTRUCTION JOINT(S) SHALL CONFORM TO AASHTO AND ASTM REQUIREMENTS.
5. BENDS IN THE MAIN STORM SEWER SHALL BE MADE BY FORMING CURVED CHANNELS WITHIN THE MANHOLE. THE INSIDE OF THE TOP LATERAL PIPES MAY NOT BE LOWER THAN THE INSIDE TOP OF MAIN SEWER PIPES. WHEN THE INVERT OF THE LATERAL PIPE FALLS BELLOW THE 1" PER FOOT MINIMUM SLOPE LINE, THE CHANNEL SHALL BE FORMED FROM THE LATERAL PIPE TO THE MAIN SEWER.
6. THE CONCERTE MANHOLE LIDS SHALL BE DESIGNED FOR AASHTO H-25 LIVE LOADS.
7. WHEN MANHOLE STEPS ARE REQUIRED AN ECCENTRIC CONE SECTION SHALL BE USED. PLASTIC COATED MANHOLE STEPS SHALL BE PLACED IN MANHOLES GREATER THAN 4' IN DEPTH. MANHOLE STEPS SHALL CONFORM TO IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION, STANDARD DRAWING SD-509 AND SECTION 504.06 PLASTIC COATED MANHOLE STEPS.
8. USE OF A PLASTIC MANHOLE FRAME SUPPORT, I.E. WHIRLY-GIG OR COMPARABLE DEVICE, IS AN ACCEPTABLE CONSTRUCTION OPTION (FOR FURTHER INFORMATION REFER TO STANDARD DRAWING 605-13).

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER * LAND SURVEYOR REGISTERED ORIGINAL SIGNED MILFORD MILLER MAY 16, 2007 ORIGINAL SIGNED STATE OF IDAHO MILFORD MILLER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-92	MSM						
2	11-01	MSM						
3	12-04	MSM						
4	05-07	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-12_0507.dgn

DRAWING DATE: MAY, 1981

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON
CHIEF ENGINEER

STANDARD DRAWING

MANHOLE TYPES C & D

REQUIRES STD. DWG. 605-13

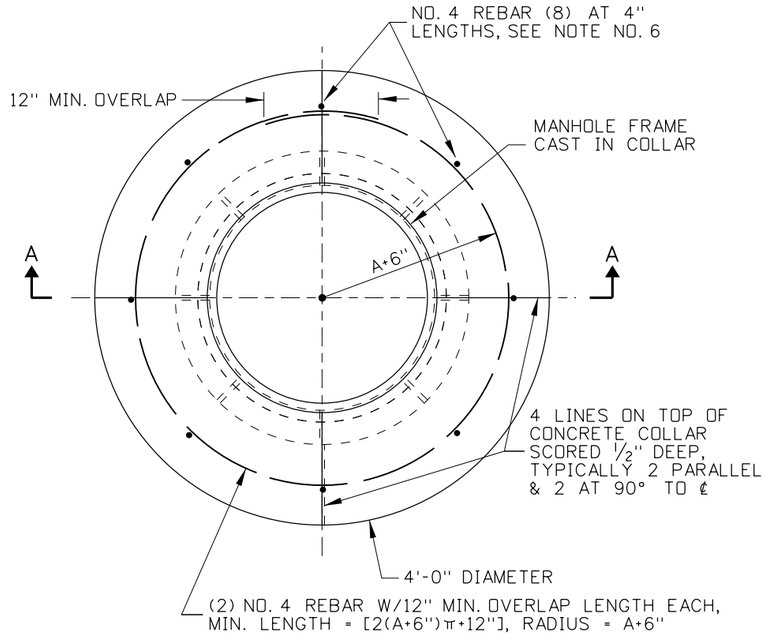
English

STANDARD DRAWING NO.

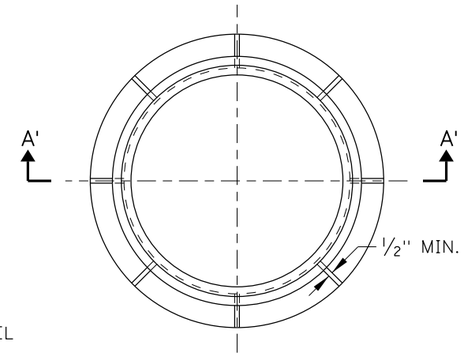
605-12

SHEET 1 OF 1

2240

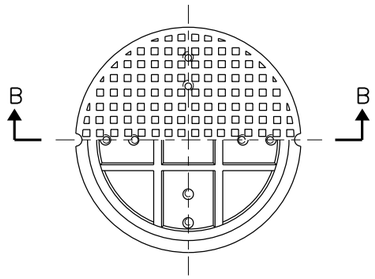


CONCRETE COLLAR PLAN



FRAME PLAN

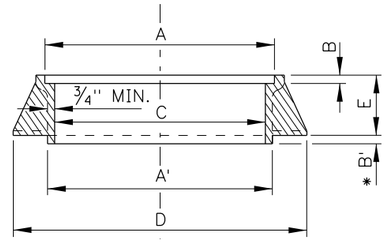
COVER PLAN - TOP HALF VIEW



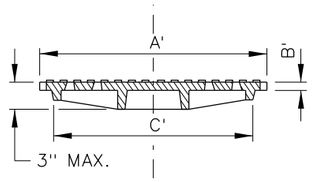
COVER PLAN - BOTTOM HALF VIEW

STANDARD MANHOLE FRAME BASIC DIMENSIONS	
A	24 1/8"
B	1"
C	21" MIN.
D	31" MIN.
E	5"
STANDARD MANHOLE COVER BASIC DIMENSIONS	
A'	23 7/8"
* B'	1"
C'	20"

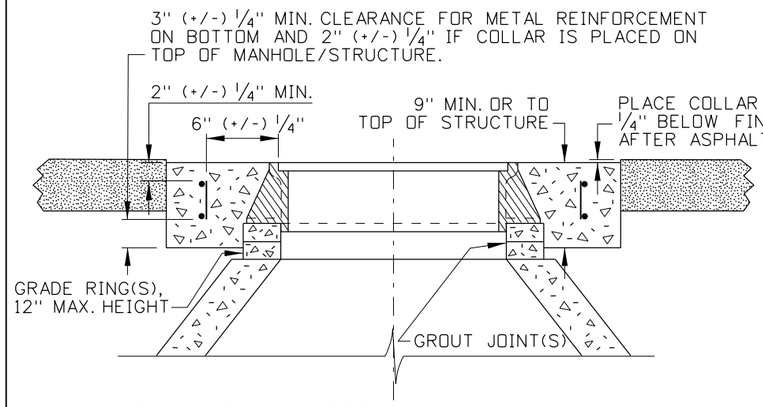
* B' MANHOLE FRAME BOTTOM TO FIT INSIDE ANOTHER FRAME LID OPENING



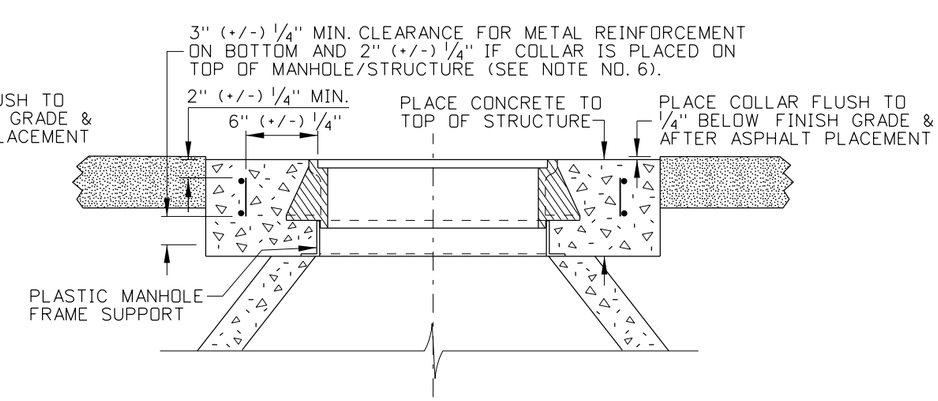
SECTION A'-A'



SECTION B-B



MANHOLE FRAME SUPPORTED WITH CONC. COLLAR RINGS
(SEE NOTE NO. 6)



PLASTIC MANHOLE FRAME SUPPORT
(SEE NOTE NO. 7)

SECTION A-A

NOTES

1. THE MINIMUM WEIGHT OF THE FRAMES SHALL BE 150LBS. AND THE MINIMUM WEIGHT OF COVERS SHALL BE 110LBS. THESE FRAMES AND COVERS ARE TO BE USED IN ALL TRAFFIC AND NON-TRAFFIC AREAS.

2. FRAMES AND COVERS SHALL CONFORM TO AASHTO M 306-05 AND SHALL BE MADE OF CLASS 35B GRAY IRON.

3. THE LAYOUT AND DIMENSIONS OF THE WEBS ARE TYPICAL MINIMUMS. PROPRIETARY MANHOLE COVERS WITHOUT WEBS ARE ACCEPTABLE PROVIDED THEY MEET AASHTO M 306-05 AND MINIMUM WEIGHT REQUIREMENTS. ALL COVER DESIGNS SHALL BE PROVIDED WITH AN ANTI-SHIFT SKIRT THAT EXTENDS A MINIMUM OF 1" BELOW THE COVER SEAT.

4. THE SURFACE SHOWN IS FOR ILLUSTRATION ONLY. ANY SURFACE DESIGN, OTHER THAN SMOOTH, MAY BE USED UPON APPROVAL.

5. A CAST-IN-PLACE CONCRETE COLLAR SHALL BE PLACED AROUND THE MANHOLE FRAME UNLESS OTHERWISE DIRECTED. THE CONCRETE COLLAR SHALL MEET THE REQUIREMENTS OF SECTION 609 - MINOR STRUCTURES, OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

6. THE CONCRETE COLLAR SHALL BE PLACED TO THE TOP OF THE MANHOLE/STRUCTURE OR HAVE A MINIMUM THICKNESS OF 9". WHEN THE CONCRETE COLLAR IS PLACED ON TOP OF A MANHOLE/STRUCTURE THE THICKNESS SHALL NOT BE LESS THAN THE "F DIMENSION" OF THE FRAME. THE VERTICAL METAL REINFORCEMENT LENGTHS MAY BE ADJUSTED WHEN THE COLLAR IS PLACED ON TOP OF A STRUCTURE/MANHOLE.

7. USE OF A PLASTIC MANHOLE FRAME SUPPORT, I.E. WHIRLY-GIG OR COMPARABLE DEVICE, IS AN ACCEPTABLE CONSTRUCTION OPTION.

8. NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER REGISTERED ORIGINAL SIGNED BY TED E. MASON OCTOBER 26, 2012 STATE OF IDAHO TED E. MASON

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	06-61	NS	6	10-05	MSM			
2	02-74		7	06-07	MSM			
3	12-92	MSM	8	09-10	PLR			
4	05-95	MSM						
5	11-01	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-13_1010.dgn

DRAWING DATE: JUNE, 1961

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

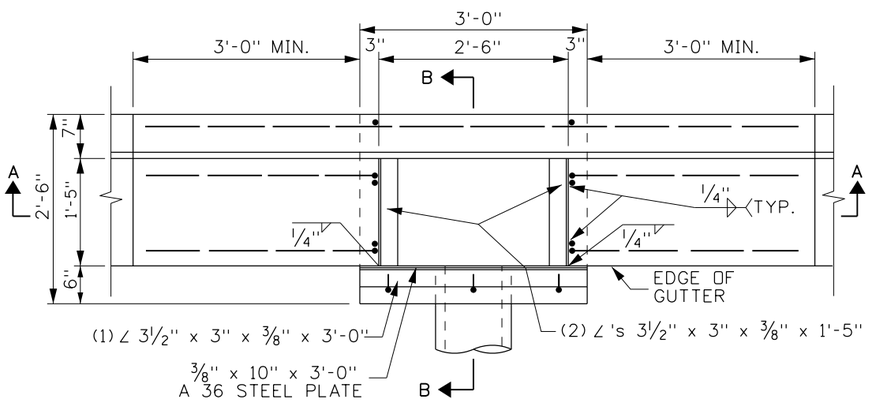
MANHOLE FRAME, COVER, & CONCRETE COLLAR

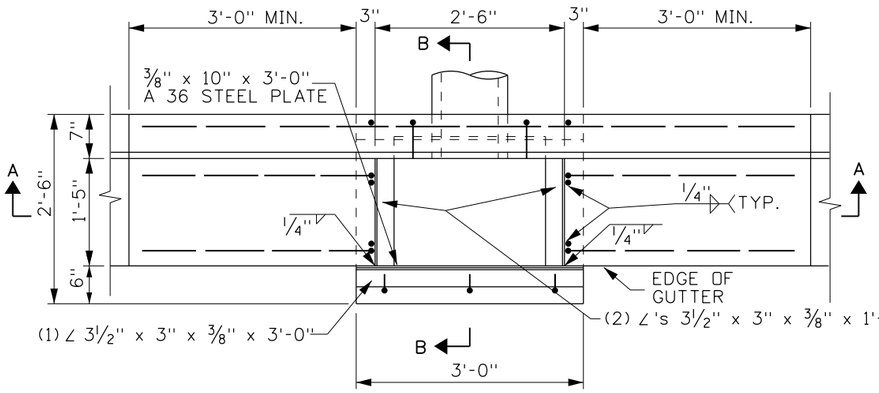
English

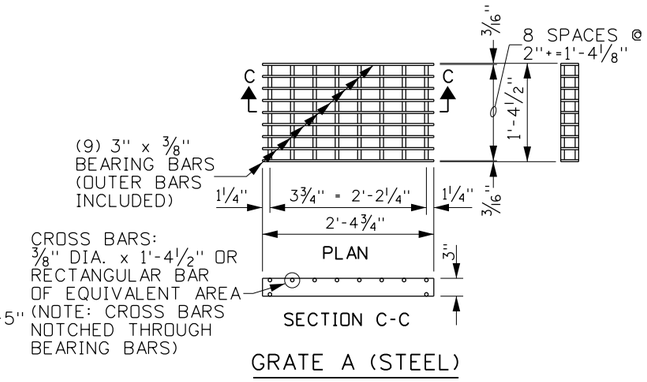
STANDARD DRAWING NO.

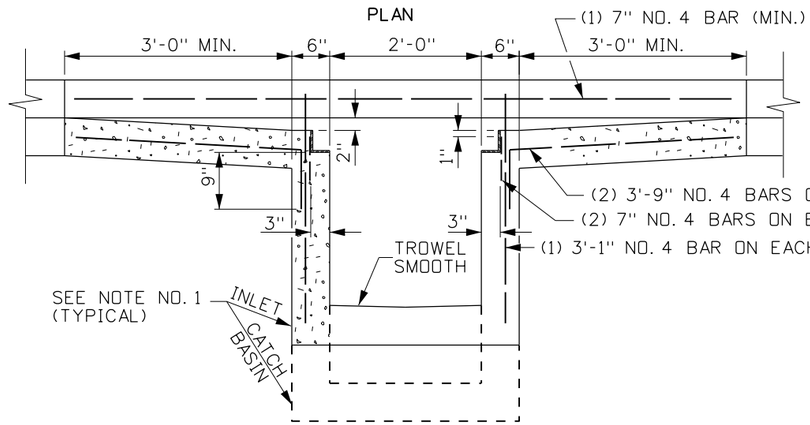
605-13

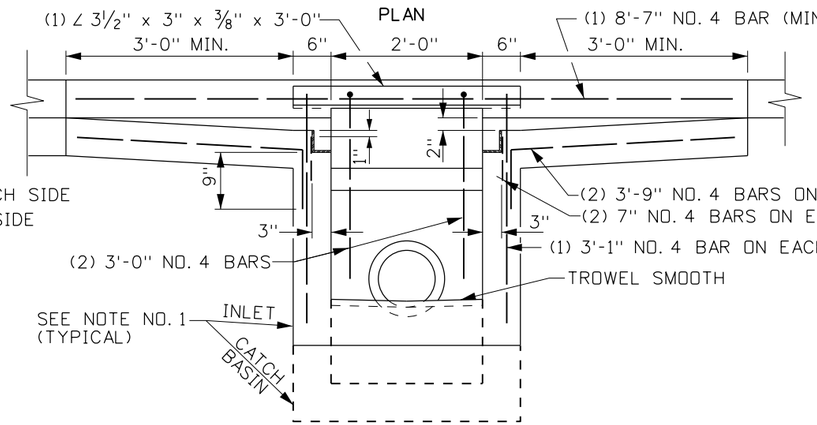
SHEET 1 OF 1

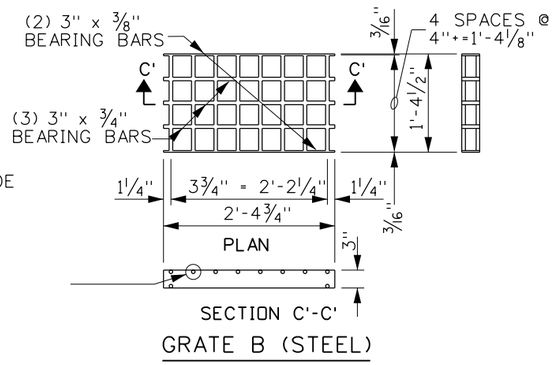


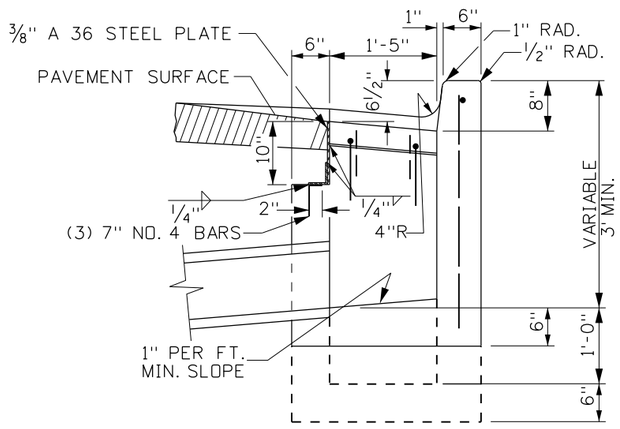


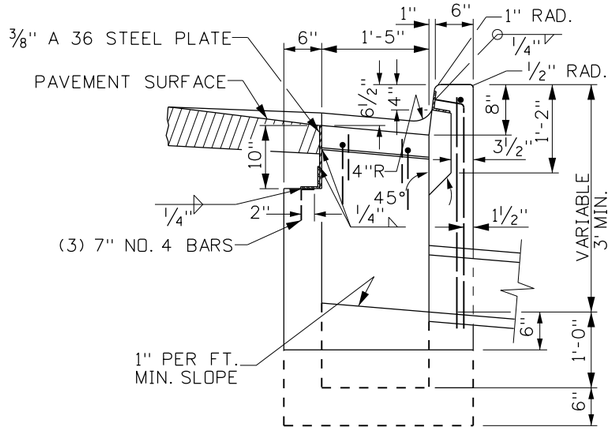












NOTES

2. INLETS AND CATCH BASINS MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST UNITS SHALL MEET THE REQUIREMENTS OF ASTM C 913. (PRIOR APPROVAL OF SHOP DRAWINGS WILL BE REQUIRED ON MODIFIED UNITS.)
3. A 1" SIDE DRAFT IS ALLOWED FOR FORM REMOVAL.
4. CAST-IN-PLACE INLETS AND CATCH BASINS SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
5. THE GRADE LINE OF THE TOP INSIDE OF ANY PIPE SHALL ENTER AT A POINT NO LOWER THAN THE TOP INSIDE OF THE OUTLET PIPE.
6. PIPES CAN ENTER OR LEAVE THE BOX IN ANY DIRECTION. ALL CONNECTIONS AND BROKEN AREAS SHALL BE GROUTED SMOOTH.
7. STEEL ANGLES SHALL BE SET SO THAT EACH BEARING BAR OF PREFABRICATED GRATE SHALL HAVE FULL BEARING ON BOTH ENDS. THE FINISHED TOP OF CONCRETE SHALL BE EVEN WITH THE ANGLE/GRATE SURFACE. THE STRUCTURAL STEEL NEED NOT BE PAINTED BUT SHALL MEET THE REQUIREMENTS OF ASTM A 36.
8. ALL METAL REINFORCEMENT USED SHALL BE NO. 4 BARS. THE METAL REINFORCEMENT SHALL BE SMOOTH CUT TO ACCOMMODATE PIPES.
9. GRAY IRON CAST TO THE DIMENSIONS GIVEN FOR THE STEEL GRATES MAY BE USED. THE CASTINGS SHALL CONFORM TO AASHTO M306 CLASS 35B GRAY IRON CASTINGS.
10. INLET/CATCH BASIN GRATES MAY EITHER BE RESISTANCE WELDED OR ARC WELDED. IN EITHER CASE THE GRATE SHALL BE TRUE AND FLUSH.
11. GRATE B WILL BE USED ONLY WHEN SPECIFIED.
12. NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER REGISTERED ORIGINAL SIGNED BY TED E. MASON NOVEMBER 3, 2004 STATE OF IDAHO TED E. MASON

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-80		6	06-97	MSM			
2	04-82		7	03-01	MSM			
3	03-84		8	12-04	MSM			
4	01-89		9	11-08	JRV			
5	12-94	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-22_1108.dgn

DRAWING DATE: NOVEMBER, 1969

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

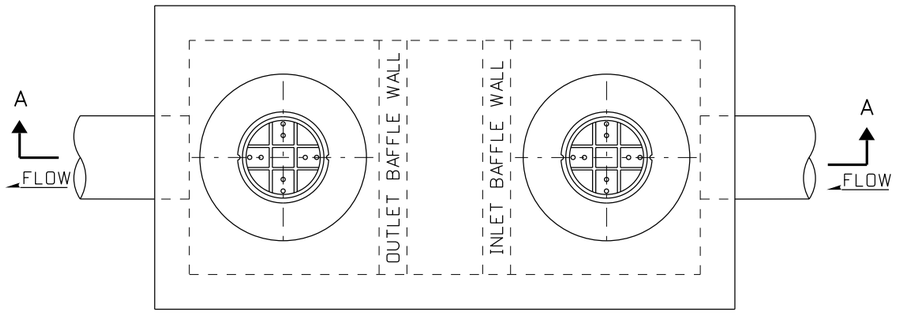
STANDARD DRAWING

INLETS & CATCH BASINS TYPES 4 & 5

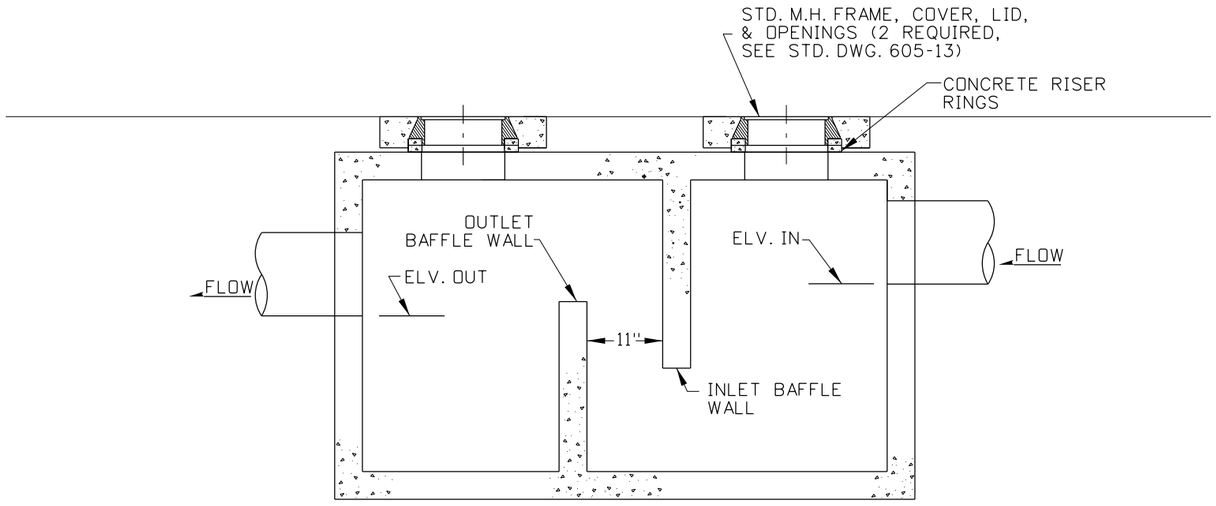
English

STANDARD DRAWING NO. 605-22

SHEET 1 OF 1



PLAN



SECTION A-A

SAND AND OIL TRAP

NOTES

1. SEDIMENT & OIL TRAPS MAY BE EITHER PRECAST OR CAST-IN-PLACE. PRECAST TRAPS SHALL MEET THE REQUIREMENTS OF ASTM C 478 AND SHALL HAVE A DESIGN LOAD MEETING AASHTO HS-25 HIGHWAY LOADING.

2. ALL REINFORCING STEEL SHALL BE GRADE 60.

3. CAST-IN-PLACE SEDIMENT & OIL TRAPS SHALL CONFORM TO SECTION 609 - MINOR STRUCTURES OF THE CURRENT ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. DETAILED DRAWING OF PRECAST BOX OR CAST-IN-PLACE BOX DESIGN MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

4. FOR DETAILS ON MANHOLE INSTALLATION REFER TO STANDARD DRAWING 605-13 (STANDARD MANHOLE FRAME, COVER, & CONCRETE COLLAR.

5. HEIGHT OF OUTLET BAFFLE WALL AND LENGTH OF INLET BAFFLE WALL DETERMINED BY TANK CAPACITY AND FLOW RATE.

6. IF DISTANCE FROM TOP OF BOX TO BOTTOM OF MANHOLE FORM EXCEEDS 12" USE PRECAST MANHOLE RISER PLUS A MAXIMUM OF 12" OF RISER GRADE RINGS.

7. PROVIDE STEPS WHEN THE DISTANCE FROM TOP OF MANHOLE FRAME TO TOP OF BOX EXCEEDS 24".

8. CONCRETE RISER RINGS (MAX 24"). FOR VAULT DEPTH GREATER THAN 24", USE PRECAST MANHOLE SECTIONS.

9. LOCATION AND FLOW LINE ELVATION PER DESIGN PLANS.

10. ELV. IN > ELV. OF TOP OF OUTLET BAFFLE WALL BY A MINIMUM OF 0.1', UNLESS OTHERWISE APPROVED BY THE ENGINEER.

11. ELV. OUT < ELV OF TOP OF OUTLET BAFFLE WALL BY A MINIMUM OF 0.25', UNLESS OTHERWISE APPROVED BY THE ENGINEER.

12. NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY: KARISSA HARDY OCTOBER 3, 2011 STATE OF IDAHO 14025 KARISSA HARDY

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-11	KEH						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 605-31_1011.dgn

DRAWING DATE: JUNE, 1996

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

SEDIMENT AND OIL TRAP MANHOLE

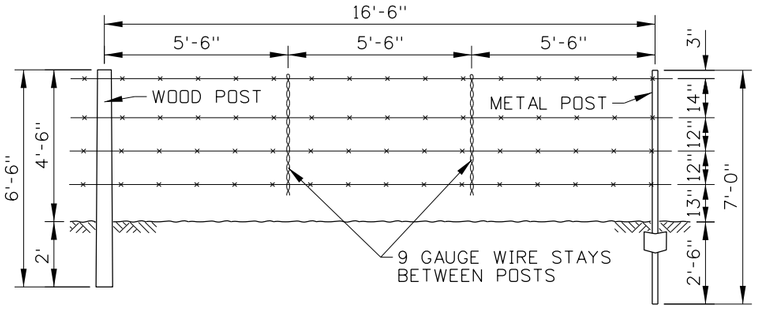
REFER TO STD. DWG. 605-13

English

STANDARD DRAWING NO.

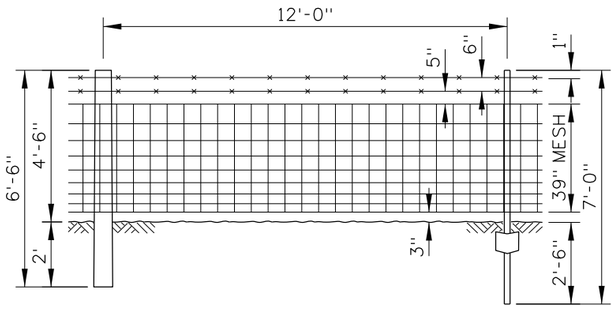
605-31

SHEET 1 OF 1



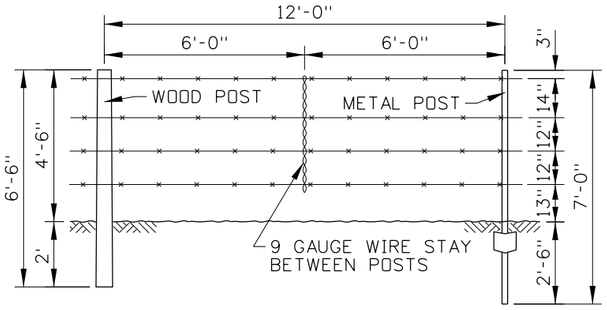
1A (WOOD) 1B (METAL)

FENCE TYPE 1



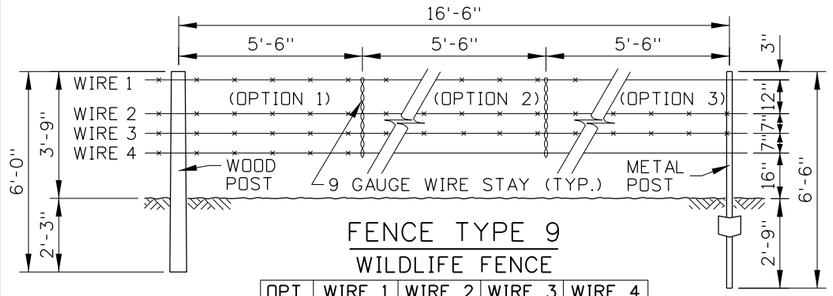
3A (WOOD) 3B (METAL)

FENCE TYPE 3



5-A (WOOD) 5-B (METAL)

FENCE TYPE 5

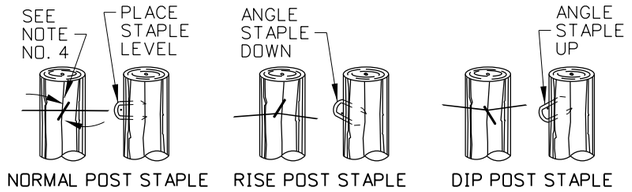


9-A (WOOD) 9-B (METAL)

FENCE TYPE 9

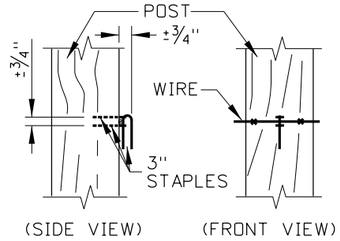
WILDLIFE FENCE

OPT.	WIRE 1	WIRE 2	WIRE 3	WIRE 4
1	BARBED	BARBED	BARBED	BARBED
2	BARBED	BARBED	BARBED	SMOOTH
3	SMOOTH	BARBED	BARBED	SMOOTH



WOOD FENCE POST STAPLE DETAILS

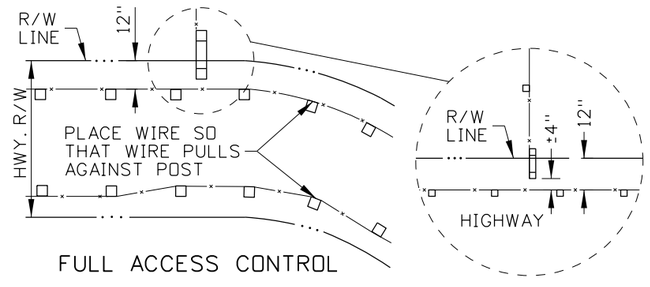
(SEE NOTE NO. 4)



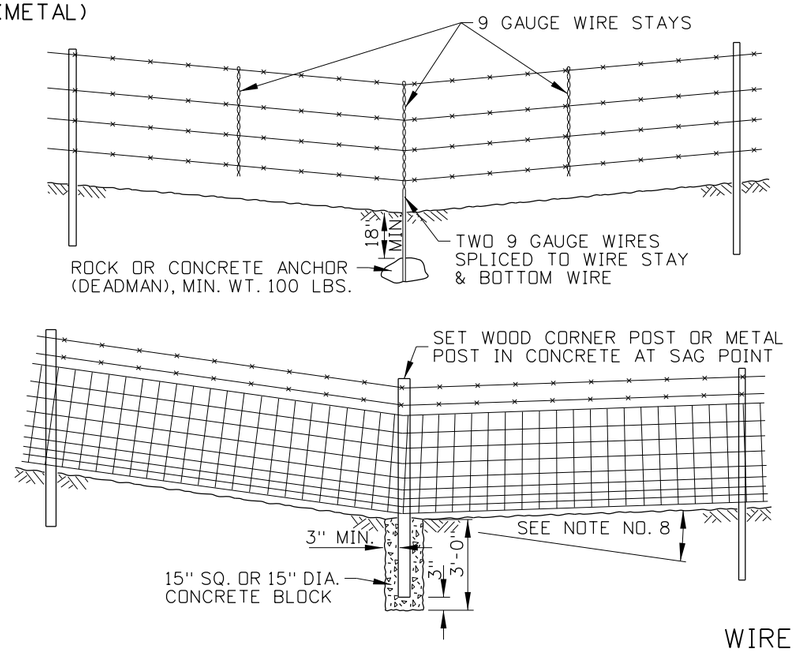
DROP FENCE STAPLE DETAIL

(SEE NOTE NO. 1)

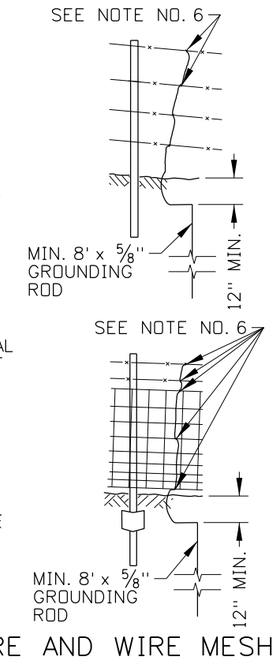
WIRE AND WIRE MESH FENCE GROUNDING TABLE			
FENCE DIST. FROM TRANSMISSION LINE	kV	POST MATERIAL	GROUNDING INTERVAL
0' - 100'	500	ALL	200'
100' - 200'	500	ALL	500'
0' - 100'	345	ALL	400'
100' - 150'	345	ALL	1,000'
50' - 100'	230	ALL	500'



RIGHT-OF-WAY FENCE LOCATION DETAILS



SAG DETAILS



WIRE AND WIRE MESH FENCE GROUNDING DETAILS

BARBED OR WOVEN WIRE FENCE NOTES

1. DESIGNATE POST MATERIAL ON PROJECT PLANS. INDICATE WHETHER THE FENCE WILL BE A DROP FENCE AND THE LOCATION WHERE DROP FENCE STAPLES WILL BE USED.
2. DESIGNATE OPTION 1, 2, OR 3 FOR FENCE TYPE 9 - WILDLIFE FENCE - ON PROJECT PLANS.
3. ATTACH ANCHOR PLATES TO METAL POSTS UNLESS THE POST IS SET IN SOLID ROCK. GROUT DRILL HOLES WHEN METAL POSTS ARE SET IN SOLID ROCK.
4. STAPLE EACH WIRE TO EACH WOOD POST. STAPLE ALTERNATING WIRES ON MESH WIRE FENCES. USE TWO STAPLES ON BRACES AND IN SAG SECTIONS. ROTATE THE STAPLES TO STRADDLE ACROSS THE WOOD GRAIN. ALLOW ENOUGH SPACE FOR WIRE TO SLIDE THROUGH THE STAPLE.
5. ATTACH FENCE WIRE OR WIRE MESH TO STEEL POSTS WITH WIRE CLAMPS. USE ONE WIRE CLAMP PER WIRE. ON WIRE MESH, USE FOUR WIRE CLAMPS PER POST OR EIGHT WIRE CLAMPS PER POST IN SAG SECTIONS.
6. GROUND WIRE AND WIRE MESH FENCES THAT ARE NEAR POWER TRANSMISSION LINES OR THAT PASS UNDER TRANSMISSION LINES. SEE THE WIRE AND WIRE MESH FENCE GROUNDING TABLE AND WIRE AND WIRE MESH FENCE GROUNDING DETAILS. TO GROUND, CONNECT EACH FENCE WIRE TO 6 GAUGE BRAIDED GROUND CABLE WITH SPLIT BOLT CABLE CONNECTORS. FOR WIRE MESH FENCE, CONNECT THE BRAIDED GROUND CABLE EVERY 18". GROUND THE FENCE ONCE IF THE FENCE SECTION IS SHORTER THAN THE GROUNDING INTERVAL.
7. WHEN THE FENCE TERMINATES AT A BRIDGE, ENSURE THAT THE TOP OF THE FENCE DOES NOT EXTEND BEYOND THE TOP OF THE PARAPET OR RAILING.
8. ON THE SAG DETAIL, INSTALL CORNER BRACE IN ADDITION TO THE CONCRETE BASE WHEN THE ANGLE IS GREATER THAN 20°.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER DECEMBER 6, 2016 STATE OF IDAHO 13683 RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 610-1_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

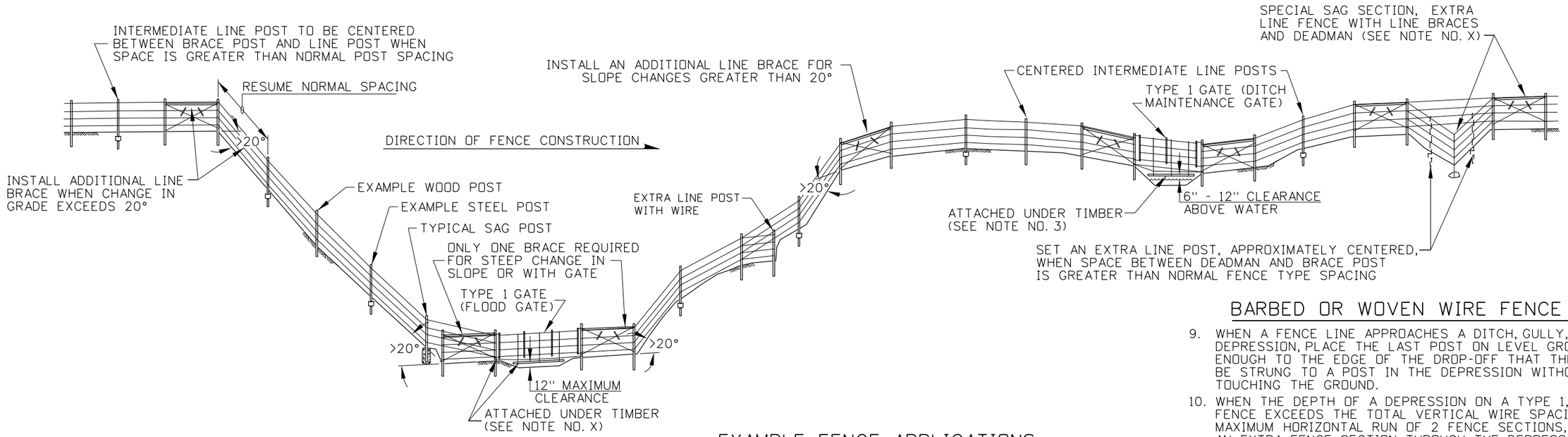
FENCES

English

STANDARD DRAWING NO.

610-1

SHEET 1 OF 3

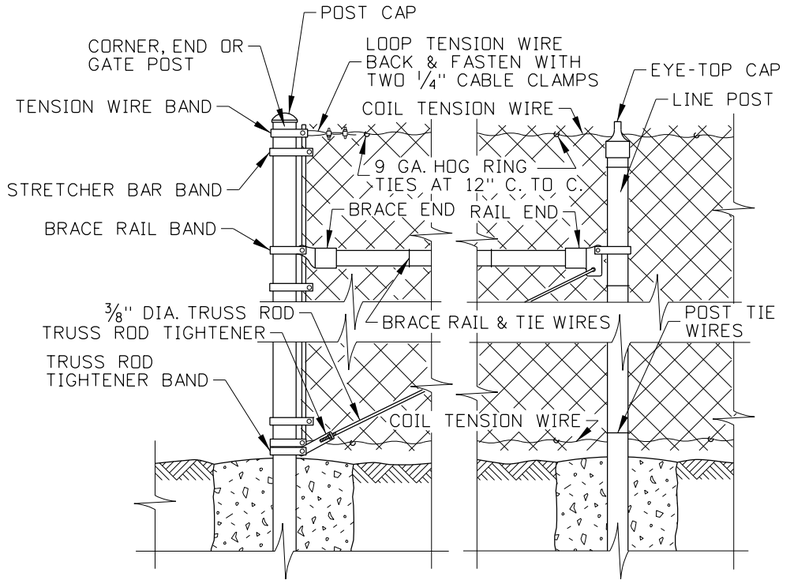


EXAMPLE FENCE APPLICATIONS

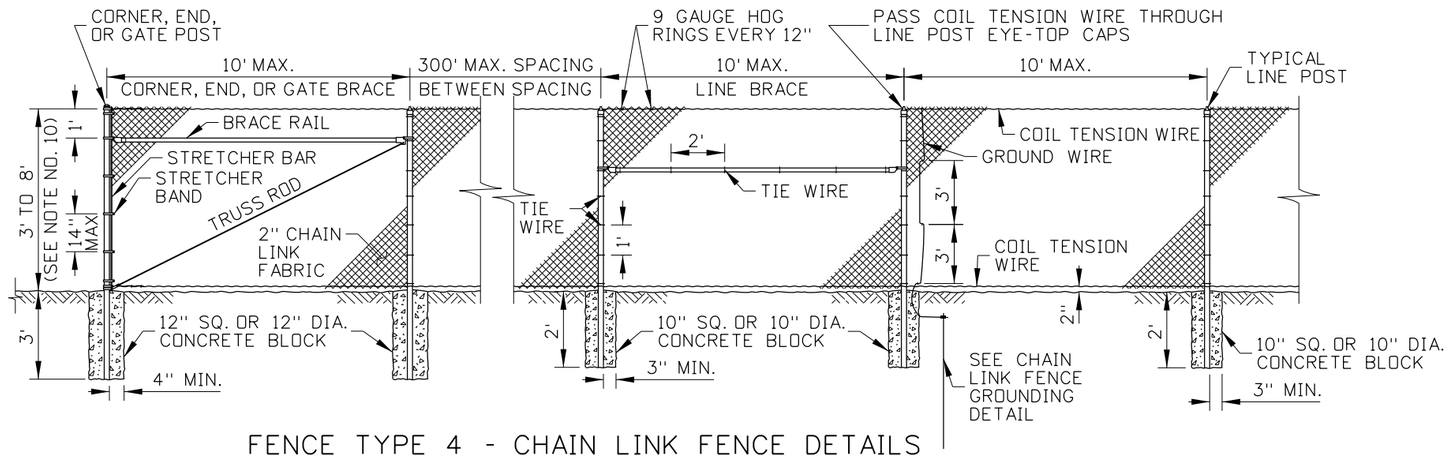
FOR FENCE TYPES 1, 3, 5, & 9

BARBED OR WOVEN WIRE FENCE NOTES

9. WHEN A FENCE LINE APPROACHES A DITCH, GULLY, OR DEPRESSION, PLACE THE LAST POST ON LEVEL GROUND CLOSE ENOUGH TO THE EDGE OF THE DROP-OFF THAT THE WIRE MAY BE STRUNG TO A POST IN THE DEPRESSION WITHOUT TOUCHING THE GROUND.
10. WHEN THE DEPTH OF A DEPRESSION ON A TYPE 1, 5, OR 9 FENCE EXCEEDS THE TOTAL VERTICAL WIRE SPACING OVER A MAXIMUM HORIZONTAL RUN OF 2 FENCE SECTIONS, CONSTRUCT AN EXTRA FENCE SECTION THROUGH THE DEPRESSION. SEE THE EXAMPLE FENCE APPLICATIONS.
11. IF THE DISTANCE BETWEEN THE GROUND AND THE BOTTOM WIRE OF A TYPE 1 GATE IS GREATER THAN 16", INSTALL AN UNDER TIMBER, ADDITIONAL WIRE, AND WIRE STAYS, AND BRACES.



FENCE TYPE 4
CHAIN LINK FENCE



FENCE TYPE 4 - CHAIN LINK FENCE DETAILS

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REVISIONS									
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CADD FILE NAME: 610-1_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

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FENCES

English

STANDARD DRAWING NO.

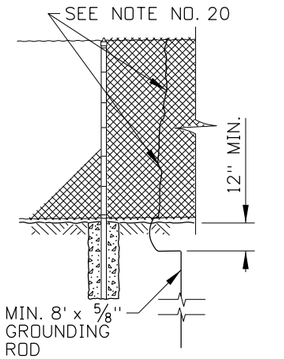
610-1

CHAIN LINK FENCE HARDWARE TABLE

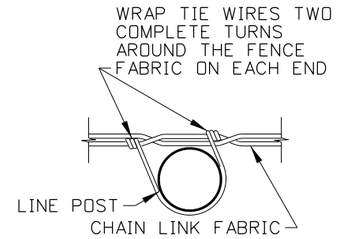
CORNER, END AND GATE POSTS	SEE STANDARD SPECIFICATIONS FOR HIGHWAY CONST.
LINE POST	SEE STANDARD SPECIFICATIONS FOR HIGHWAY CONST.
BRACE RAIL/TOP RAIL	SEE STANDARD SPECIFICATIONS FOR HIGHWAY CONST.
POST CAP	CAST NON-FERROUS ALLOY OR GALVANIZED PRESSED STEEL CAP. MUST FIT SNUGGLY ON POST.
EYE-TOP CAP	GALVANIZED PRESSED STEEL MIN. 3/32" THICKNESS OR GALVANIZED MALLEABLE FERROUS ALLOY
STRECHER BAR BAND	CLASS 1 - MIN. 1/8" x 3/4" MIN. GALVANIZED STEEL CLASS 2 - MIN. 3/32" x 5/16" MIN. GALVANIZED STEEL
TENSION WIRE/BRACE BAND	CLASS 1 - MIN. 1/8" x 3/4" MIN. GALVANIZED STEEL CLASS 2 - MIN. 3/32" x 5/16" MIN. GALVANIZED STEEL
BAND BOLT	CLASS 1 - 5/16" DIA. x 1 3/4" GALV. CARRIAGE BOLT CLASS 2 - 3/8" DIA. x 1 1/4" GALV. CARRIAGE BOLT, (LOCK WASHER & FLAT WASHER FOR EACH BAND)
RAIL END	GALVANIZED PRESSED STEEL OR GALVANIZED MALLEABLE FERROUS ALLOY MIN. 3/8" THICKNESS ON BACK BOLTING APPENDAGE
BRACE END	GALVANIZED PRESSED STEEL OR GALVANIZED MALLEABLE FERROUS ALLOY MIN. 3/8" THICKNESS ON BACK BOLTING APPENDAGE
TRUSS ROD TIGHTENER	CLASS 1 - MIN. 3/8" FORMED GALVANIZED STEEL CLASS 2 - MIN. 1/4" FORMED GALVANIZED STEEL
TRUSS ROD	3/8" GALVANIZED, NC TREADED ROD, LOCK WASHER, & FLAT WASHER WITH TWO 90° BENDS OPPOSITE OF TREADED END
TOP RAIL SLEEVE	GALVANIZED STEEL, NOT TO BE USED ON R/W FENCES, MUST MEET REQUIRED PIPE THICKNESSES
TENSION BAR	CLASS 1 - MIN. 1/8" x 3/4" GALVANIZED STEEL CLASS 2 - MIN. 1/8" x 5/16" GALVANIZED STEEL
FENCE FABRIC	2" GALVANIZED DIAMOND MESH STEEL FABRIC
TIE WIRES	MIN. 9 GAUGE ALUMINUM WITH ONE HOOKED END
COIL TENSION WIRE	MIN. 7 GAUGE
BARBED WIRE & 3-WIRE BARBARM	BARBED WIRE: 14 GAUGE SPACED GALVANIZED MEDIUM CARBON STEEL WIRE WITH BARBS SPACED AT 5" C. to C. GALVANIZING SHALL CONFORM TO APPLICABLE A.S.T.M. DES. A-121-66 FOR ZINC-COATED & AASHTO M 280 SPECIFICATIONS. 3-WIRE BARBARM: BARBWIRE ARM (ONE PIECE "Z" CUT) FITS 1 5/8" O.D. POST, 1 5/8" TOP RAIL" FITS 2" O.D. POST, 1 5/8" TOP RAIL" FITS 2 1/2" O.D. POST, 1 5/8" TOP RAIL" FITS 3" O.D. POST, 1 5/8" TOP RAIL"

CHAIN LINK FENCE GROUNDING TABLE

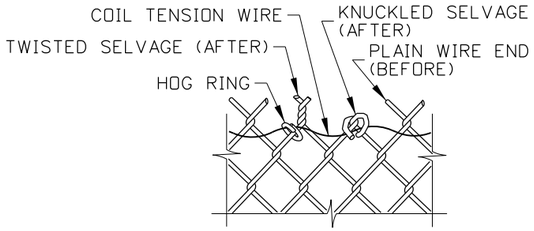
FENCE DIST. FROM TRANSMISSION LINE	kV	GROUNDING INTERVAL
0' - 100'	500	200'
100' - 200'	500	500'
0' - 100'	345	400'
100' - 150'	345	1,000'
50' - 100'	230	500'



CHAIN LINK FENCE GROUNDING DETAIL

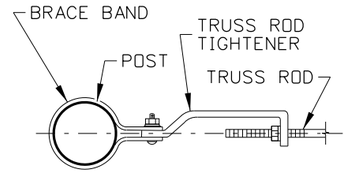


CHAIN LINK FENCE TIE DETAIL



WIRE SELVAGE DETAIL

(SEE NOTE NO. 16)



TRUSS ROD TIGHTENER DETAIL

CHAIN LINK FENCE NOTES

12. THE MINIMUM FENCE HEIGHT IS 8' WHEN BARBED WIRE AND THE 3-WIRE BARBARM ARE USED. DO NOT USE RAZOR WIRE WITH THE 3-WIRE BARBARM.
13. SPACE POSTS EQUAL DISTANCES APART, 10' MAXIMUM SPACING.
14. ADJUST THE POST TOP ELEVATIONS TO PROVIDE A SMOOTH VISUAL FENCE PROFILE. INSTALL CORNER POSTS AT HORIZONTAL BREAKS IN THE FENCE OF 15° OR MORE.
15. STRETCH THE FENCE FABRIC SMOOTH SO THAT IT HAS A UNIFORM APPEARANCE.
16. SELVAGE THE PLAIN WIRE ENDS ON THE TOP AND BOTTOM OF THE CHAIN LINK FABRIC BY THE TWISTED OR KNUCKLED METHOD. SEE WIRE SELVAGE DETAIL.
17. CHAIN LINK FENCE HARDWARE MAY VARY SOMEWHAT FROM THAT SHOWN IN THE CHAIN LINK FENCE HARDWARE TABLE. ENSURE THAT HARDWARE AND MATERIALS USED ARE UNIFORM AND COMPATIBLE.
18. INSTALL A TOP RAIL WHEN BARBED WIRE AND THE 3-WIRE BARBARM ARE USED.
19. INSTALL PRIVACY FENCE SLATS IF SHOWN ON PROJECT PLANS.
20. GROUND CHAIN LINK FENCES THAT ARE NEAR POWER TRANSMISSION LINES OR THAT INTERSECT TRANSMISSION LINES. SEE THE CHAIN LINK FENCE GROUNDING TABLE AND CHAIN LINK FENCE GROUNDING DETAILS. TO GROUND, CONNECT 6 GAUGE BRAIDED GROUND CABLE TO THE CHAIN LINK FABRIC EVERY 36". GROUND THE FENCE ONCE IF THE FENCE SECTION IS SHORTER THAN THE GROUNDING INTERVAL.
21. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER STATE OF IDAHO DECEMBER 6, 2016 13683 RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 610-1_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

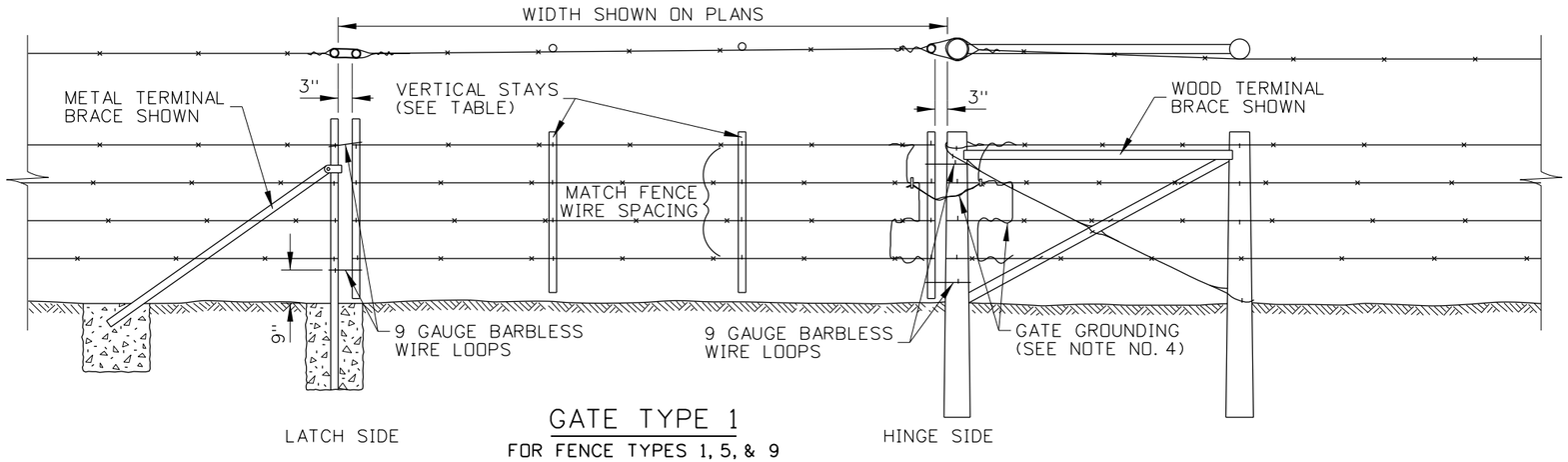
STANDARD DRAWING

FENCES

English

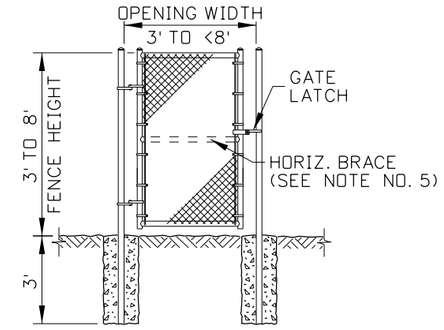
STANDARD DRAWING NO. 610-1

SHEET 3 OF 3

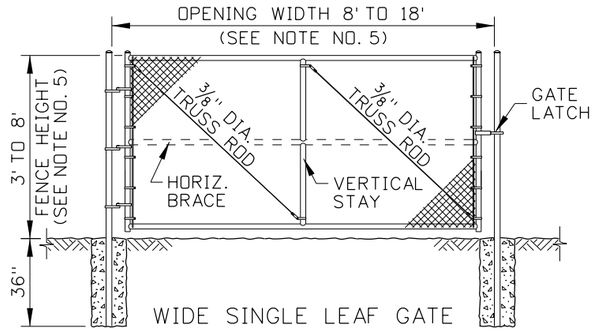


GATE TYPE 1

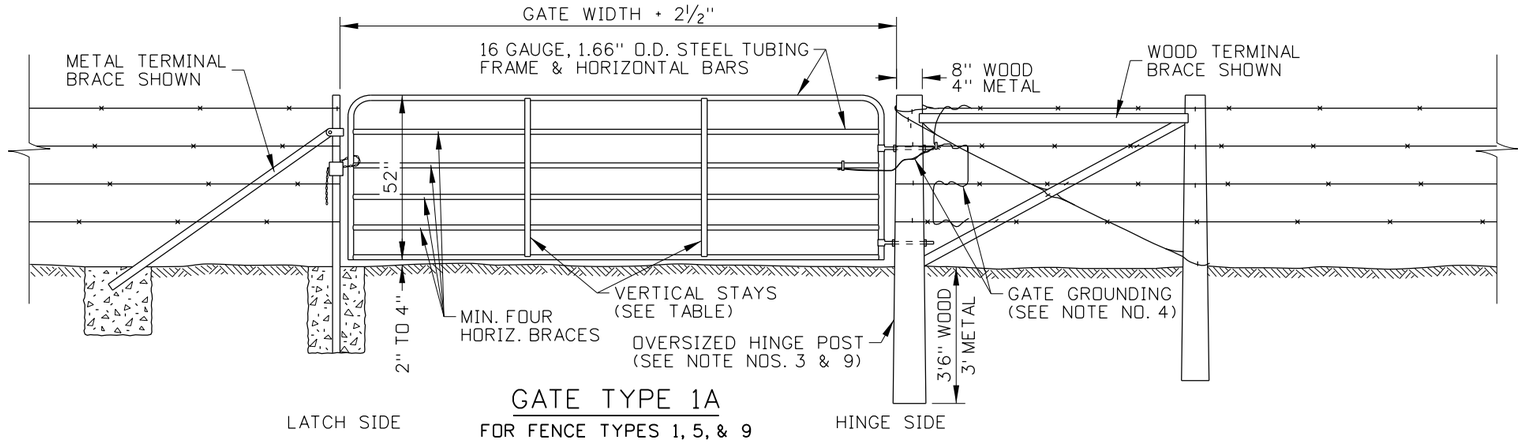
FOR FENCE TYPES 1, 5, & 9



NARROW SINGLE LEAF GATE

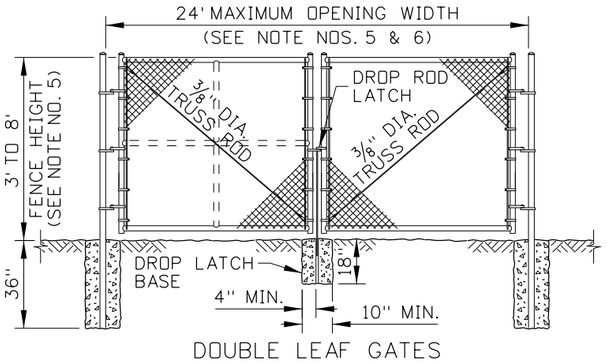


WIDE SINGLE LEAF GATE

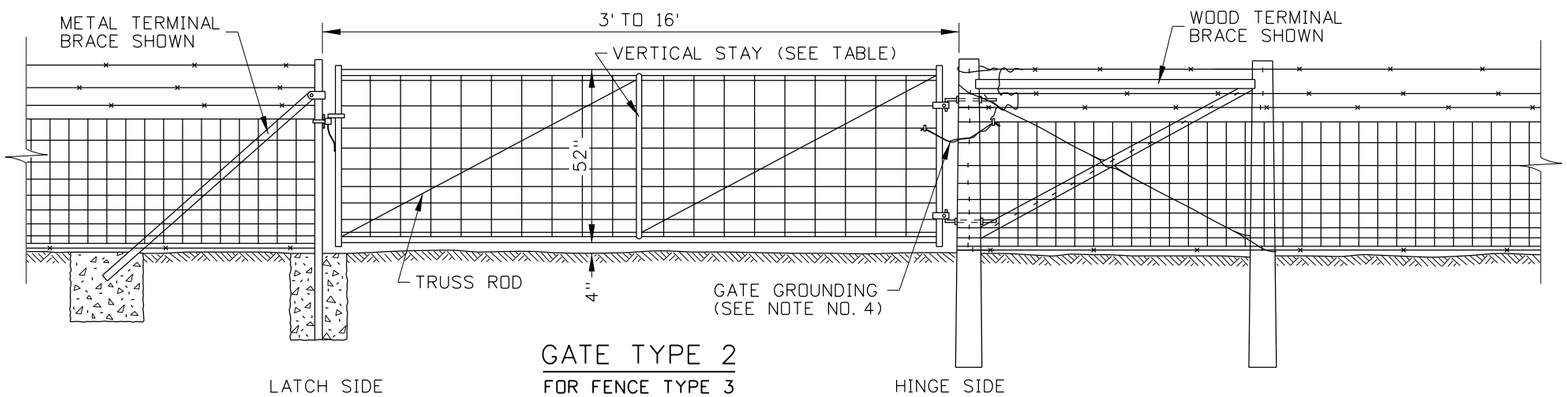


GATE TYPE 1A

FOR FENCE TYPES 1, 5, & 9



DOUBLE LEAF GATES



GATE TYPE 2

FOR FENCE TYPE 3

GATE TYPE 3

FOR FENCE TYPE 4

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PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER DATE DRAWING SIGNED DECEMBER 6, 2016 13683 STATE OF IDAHO RYAN D. LANCASTER

REVISIONS								
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CADD FILE NAME: 610-2_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

GATES

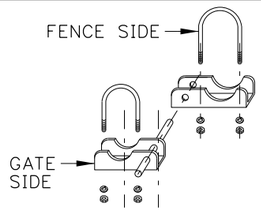
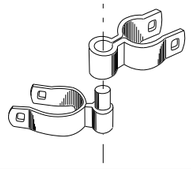
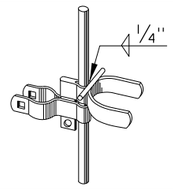
REQUIRES STD. DWGS. 610-1 & 610-3

English

STANDARD DRAWING NO.

610-2

SHEET 1 OF 2

CHAIN LINK FENCE GATE HARDWARE TABLE	
GATE FORK LATCH 	MIN. 1/8" GALVANIZED PRESSED STEEL OR MALLEABLE FERROUS ALLOY. ONE LATCH PER EACH SINGLE GATE WITH BENT MIN. 3/8" DIA. ATTACHMENT BOLT, WASHER & NUT.
HEAVY GATE HINGE 	MIN. 1/8" GALVANIZED PRESSED STEEL WITH TWO 3/8" U-BOLTS, LOCK WASHER & NUTS PER HINGE. USE 2 HINGES PER GATE LEAF UP TO 8' IN WIDTH AND 3 HINGES PER GATE LEAF WIDTHS GREATER THAN 8' (THESE HINGES ARE RECOMMENDED FOR MAINTENANCE & COMMERCIAL INSTALLATIONS).
RESIDENTAL GATE HINGE 	MIN. 1/8" GALVANIZED PRESSED STEEL WITH 3/8" DIA. x 3" CARRIAGE BOLTS, LOCK WASHER & NUTS PER HINGE. USE 2 HINGES PER GATE LEAF UP TO 6' IN HEIGHT AND 3 HINGES PER GATE LEAF HEIGHTS GREATER THAN 6'.
INDUSTRIAL DROP ROD FORK & GUIDE 	MIN. 1/8" GALVANIZED PRESSED STEEL. DROP ROD GUIDE INCLUDES 3/8" x 3" CARRIAGE BOLT WITH LOCK WASHER & NUT. DROP ROD FORK IS TO BE WELDED TO ROD & PAINTED WITH AN APPROVED ZINC RICH PAINT.

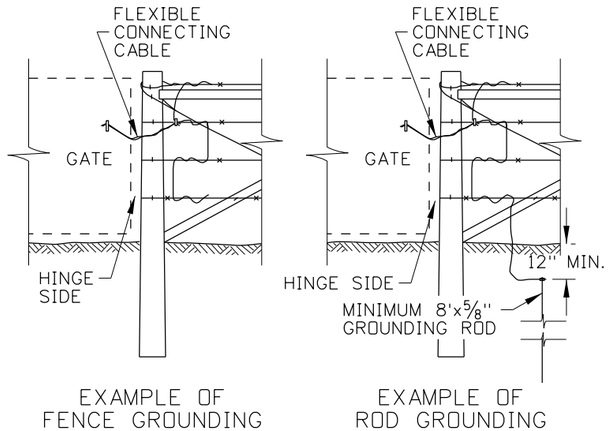
GATE GROUNDING TABLE			
FENCE DIST. FROM TRANSMISSION LINE	kV	GATE TYPE	GROUNDING TYPE
0' - 100'	500	1A, 2, 3	ROD
100' - 200'	500	1A, 2, 3	FENCE
0' - 100'	345	1A, 2, 3	ROD
100' - 150'	345	1A, 2, 3	FENCE
50' - 100'	230	1A, 2, 3	FENCE

GATE VERTICAL STAY TABLE		
GATE TYPE	GATE WIDTH	NO. OF VERT. STAYS
TYPE 1	4' TO 6'	0
	8' TO 12'	1
	14' TO 16'	2
TYPE 1A	4' TO 6'	0
	8' TO 12'	1
	14' TO 16'	2
TYPE 2	3' TO 7'	0
	8' TO 16'	1
TYPE 3	3' TO 7'	0
	8' TO 15'	1
	16' TO 18'	2

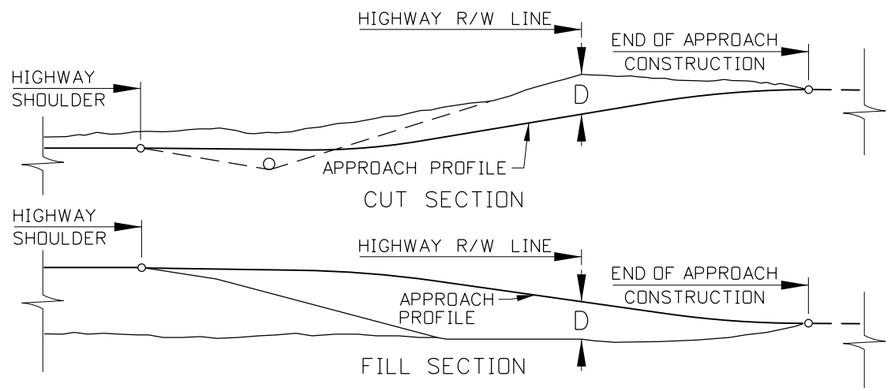
GATE HORIZONTAL BRACE TABLE		
GATE TYPE	GATE HEIGHT	NO. OF HORIZ. BRACES
TYPE 1A	4.33'	4
TYPE 3	4' TO 5'	0
	6' TO 8'	1

NOTES

1. CONSTRUCT GATES FROM THE MATERIALS SHOWN ON FENCES STANDARD DRAWING UNLESS OTHERWISE SHOWN.
2. ALTERNATE GATE DESIGNS MAY BE USED WITH ENGINEER APPROVAL.
3. CONSTRUCT MATCHING METAL OR WOOD TERMINAL BRACES ON BOTH SIDES OF THE GATE OPENING. MODIFY THE TERMINAL BRACE ON THE HINGE SIDE OF TYPE 1A GATES.
4. GROUND GATES THAT ARE NEAR POWER TRANSMISSION LINES OR THAT PASS UNDER TRANSMISSION LINES. GROUND BY CONNECTING THE HINGE SIDE OF THE GATE TO THE FENCE OR TO THE FENCE AND A GROUNDING ROD. SEE THE GATE GROUNDING TABLE AND GATE GROUNDING DETAILS. ENSURE THAT THE GATE IS GROUNDED WITH A FLEXIBLE COPPER CABLE. TYPE 1 GATES DO NOT NEED TO BE GROUNDED.
5. CONSTRUCT VERTICAL STAYS AND HORIZONTAL BRACES IN ACCORDANCE WITH THE GATE VERTICAL STAY TABLE AND THE GATE HORIZONTAL BRACE TABLE.
6. WHERE TWO TYPE 1A, TYPE 2, OR TYPE 3 GATES ARE USED IN A SINGLE OPENING, PROVIDE A DROP ROD TO SECURE THE GATES.
7. ON THE GATE LOCATION DETAIL, WHEN D IS 5' OR LESS, INSTALL GATES AT THE RIGHT-OF-WAY LINE. WHEN D IS GREATER THAN 5', INSTALL GATES AT THE END OF THE APPROACH CONSTRUCTION OR AS OTHERWISE DIRECTED BY THE ENGINEER. IF INSTALLED AT THE END OF THE APPROACH, ANGLE AND INSTALL RIGHT-OF-WAY FENCE ALONG THE EDGE OF THE APPROACH CUT OR FILL SLOPE.
8. TYPE 1 GATES:
   A. CONSTRUCT GATE ENDS AND VERTICAL STAYS FROM A SECTION OF METAL FENCE POST OR ROUND WOOD POST 2 1/2" TO 3" IN DIAMETER. PLACE LARGER WOODEN STAYS AT THE GATE ENDS.
   B. ATTACH WIRE LOOPS MADE WITH A DOUBLE WOVEN 9 GAUGE BARBLESS WIRE OR A SUITABLE CHAIN. ADJUST THE LOOPS SO THAT THE GATE IS TAUT WHEN CLOSED. FASTEN THE LOOPS TO THE ADJACENT LATCH/HINGE POST.
   C. STAPLE THE STAYS AND END POSTS TO THE CONNECTING WIRES.
9. TYPE 1A GATES:
   A. USE A MODIFIED METAL OR WOOD POST ON THE HINGE SIDE. USE A 4" DIAMETER, 7'-6" METAL TUBE OR A 8" DIAMETER, 8' WOOD POST. IF THE METAL POST IS USED, SET THE POST IN AN 18" SQUARE OR ROUND FOUNDATION.
   B. ENSURE THAT HINGES ON GATES WIDER THAN 10' HAVE LEVELING THREADS ON A 3/4" DIAMETER OR LARGER ROD.
   C. ENSURE THAT LATCHES ARE LOCKABLE.
   D. CLEAR THE GROUND NEAR THE GATE SO THAT THE GATE CAN SWING 90° IN EACH DIRECTION.
10. TYPE 2 GATES:
   A. FABRICATE GATE FRAMES WITH 1.05" O.D. GALVANIZED STEEL TUBING WITH 0.095" WALL THICKNESS OR 1" DIAMETER GALVANIZED PIPE.
   B. USE 12.5 GAUGE OR HEAVIER GALVANIZED WIRE MESH.
   C. EQUIP GATE WITH AN ADJUSTABLE DIAGONAL TRUSS ROD. THE TRUSS ROD TIGHTENER AND NON-TIGHTENING END OF THE TRUSS ROD MAY BE WELDED TO THE GATE.
   D. USE GALVANIZED MALLEABLE STEEL HINGES AND LATCHES.
   E. PAINT WELDS WITH ITD PAINT FORMULA NO. 2.
   F. CLEAR THE GROUND NEAR THE GATE SO THAT THE GATE CAN SWING 90° IN EACH DIRECTION.
11. TYPE 3 GATES:
   A. CHAIN LINK FENCE HARDWARE MAY VARY SOMEWHAT FROM THAT SHOWN. ENSURE THAT THE HARDWARE AND MATERIALS USED ARE UNIFORM AND COMPATIBLE.
   B. PAINT WELDS WITH ITD PAINT FORMULA NO. 2.
   C. CLEAR THE GROUND NEAR THE GATE SO THAT THE GATE CAN SWING 90° IN EACH DIRECTION.
12. DRAWING NOT TO SCALE.



GATE GROUNDING DETAILS



GATE LOCATION DETAIL
(SEE NOTE NO. 7)

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER ORIGINAL SIGNED DECEMBER 6, 2016 STATE OF IDAHO 13683 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 610-2_1216.dgn

DRAWING DATE: NOVEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

GATES

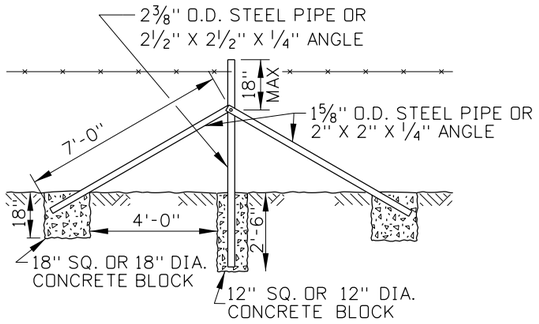
REQUIRES STD. DWGS. 610-1 & 610-3

English

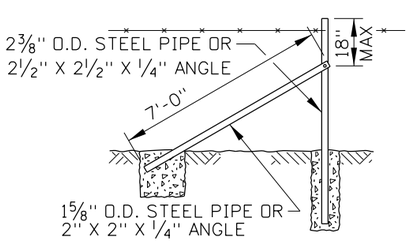
STANDARD DRAWING NO.

610-2

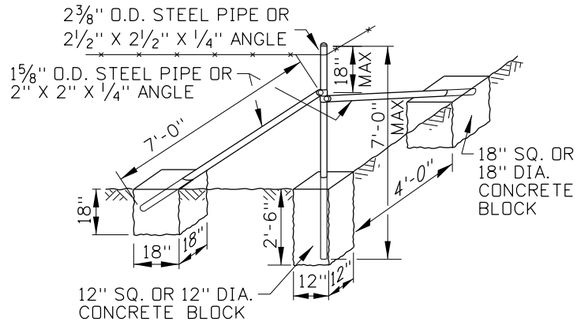
SHEET 2 OF 2



LINE BRACE



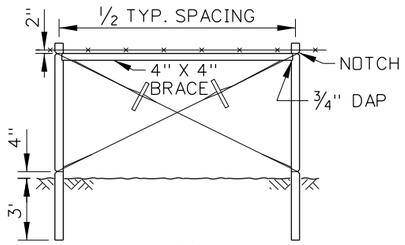
TERMINAL BRACE



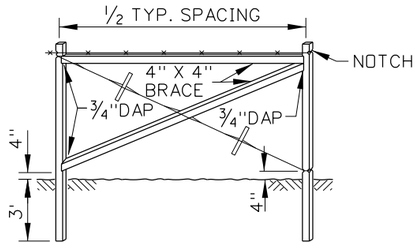
CORNER BRACE

BRACE SPACING TABLE			
FENCE TYPE	DISTANCE BETWEEN BRACES	METAL BRACES	WOOD BRACES
1, 5, & 9	<66'	NONE	NONE
	66' TO 660'	SINGLE	SINGLE
	660' TO 990'	DO NOT EXCEED 660'	DOUBLE
3	<33'	NONE	NONE
	33' TO 330'	SINGLE	SINGLE
	330' TO 660'	DO NOT EXCEED 330'	DOUBLE
4	INTEGRATED INTO CHAIN LINK FENCE		

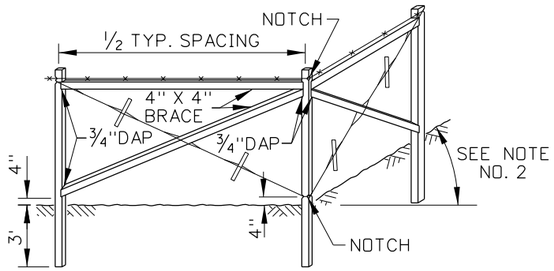
METAL BRACES



LINE BRACE

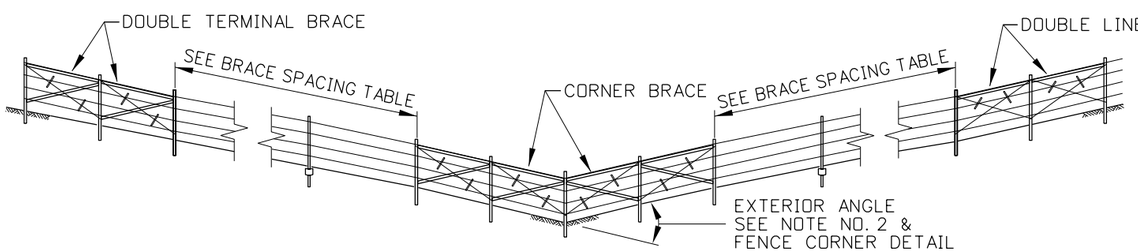


TERMINAL BRACE

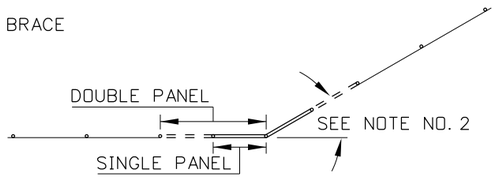


CORNER BRACE

WOOD BRACES



WOOD DOUBLE BRACE PANELS



FENCE CORNER DETAIL

NOTES

1. USE METAL BRACES WHEN METAL FENCE POSTS ARE USED. USE WOOD BRACES WHEN WOOD FENCE POSTS ARE USED.
2. USE DOUBLE WOOD CORNER BRACES WHEN THE EXTERIOR FENCE CORNER ANGLE EXCEEDS 30°. INSTALL DOUBLE LINE AND TERMINAL BRACES IN ACCORDANCE WITH THE FENCE BRACE TABLE.
3. SEE THE BRACE SPACING TABLE FOR THE MAXIMUM DISTANCES BETWEEN BRACES.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER 13683 ORIGINAL SIGNED BY RYAN D. LANCASTER DECEMBER 6, 2016 STATE OF IDAHO

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	

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IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TED MASON

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

FENCE BRACES

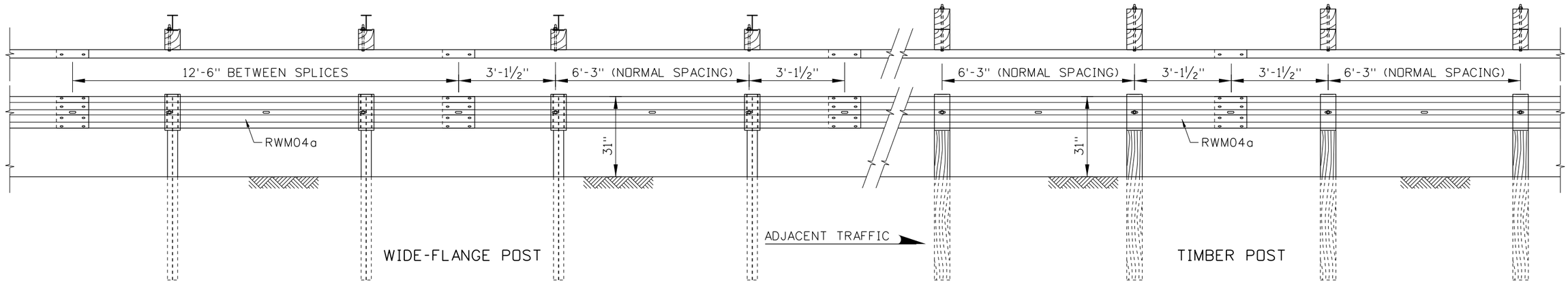
REQUIRES STD. DWG. 610-1

English

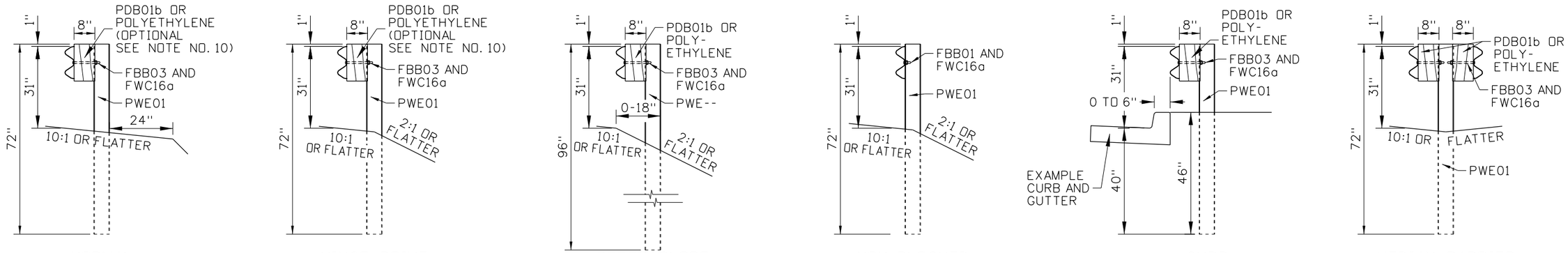
STANDARD DRAWING NO.

610-3

SHEET 1 OF 1

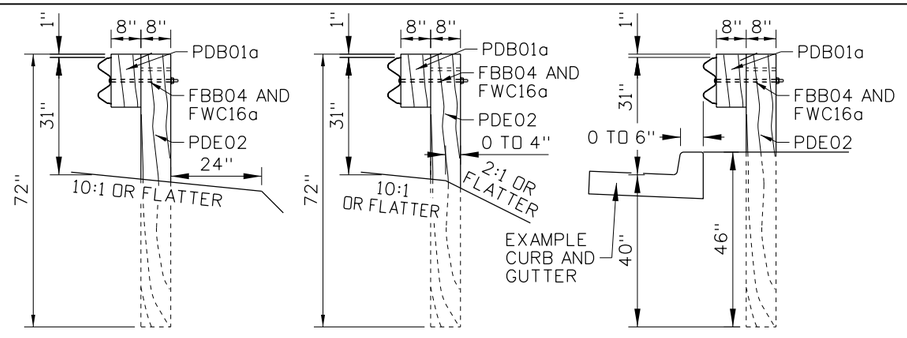


31" W-BEAM GUARDRAIL



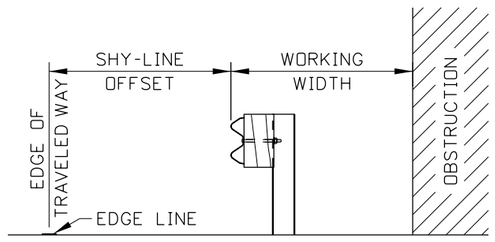
WIDE-FLANGE POST APPLICATIONS

SEE NOTE NOS. 3 AND 11



TIMBER POST APPLICATIONS

SEE NOTE NOS. 3 AND 11



PLACEMENT DETAIL

SEE NOTE NOS. 4 THROUGH 7

SHY-LINE OFFSET AND FLARE RATE TABLE			
DESIGN SPEED (MPH)	SHY-LINE OFFSET (FT)	BARRIER FLARE RATE	
		INSIDE SHY LINE	AT OR BEYOND SHY LINE
80	12	30:1	15:1
70	9	30:1	15:1
60	8	26:1	14:1
55	7	24:1	12:1
50	6.5	21:1	11:1
45	6	18:1	10:1
40	5	16:1	8:1
30	4	13:1	7:1

DEFLECTION TABLE		
APPLICATION	POST SPACING	WORKING WIDTH
NORMAL SPACING	6'-3"	54"
½ SPACING	3'-1½"	46"
¼ SPACING	1'-6¾"	38"
STEEP SLOPE	6'-3"	56"
HINGE POINT	6'-3"	78"
LONG SPAN	≤ 25'	96"

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1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

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CADD FILE NAME: 612-1_0420.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

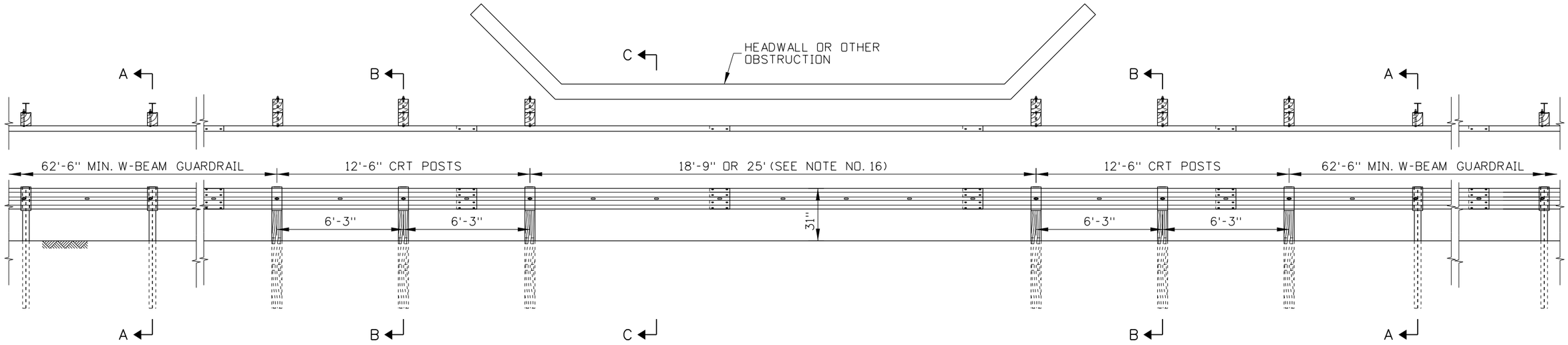
STANDARD DRAWING

31" W-BEAM GUARDRAIL

English

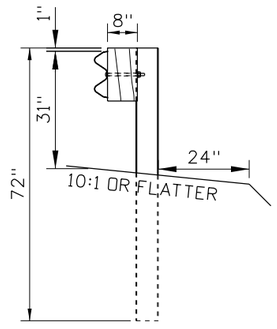
STANDARD DRAWING NO. 612-1

SHEET 1 OF 5

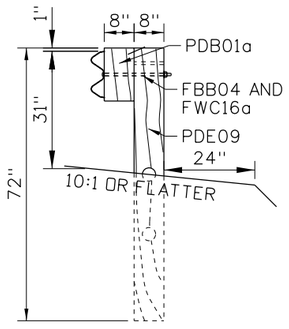


31" LONG-SPAN APPLICATION

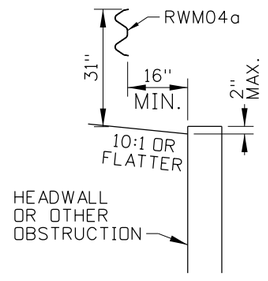
SEE NOTE NOS. 17 AND 18



SECTION A-A
WIDE-FLANGE OR TIMBER POST



SECTION B-B



SECTION C-C

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

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LICENSED
ORIGINAL SIGNED BY RYAN D. LANCASTER
DATE ORIGINAL SIGNED MARCH 10, 2021
13683
STATE OF IDAHO
RYAN D. LANCASTER

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2	03-19	RDL						
3	03-20	RDL						

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IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

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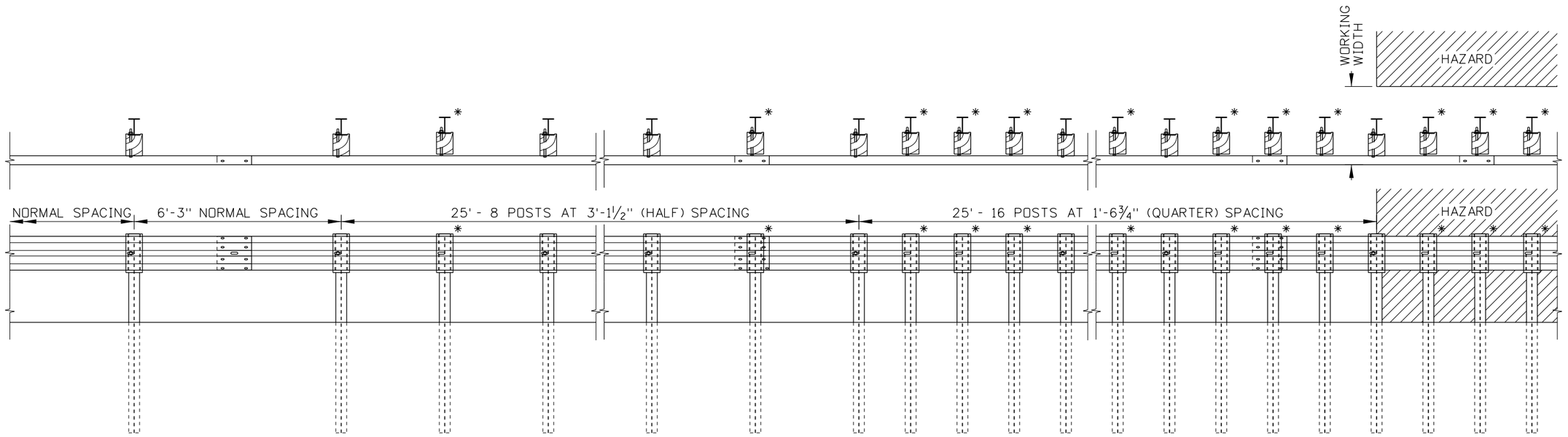
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

31" W-BEAM GUARDRAIL

English

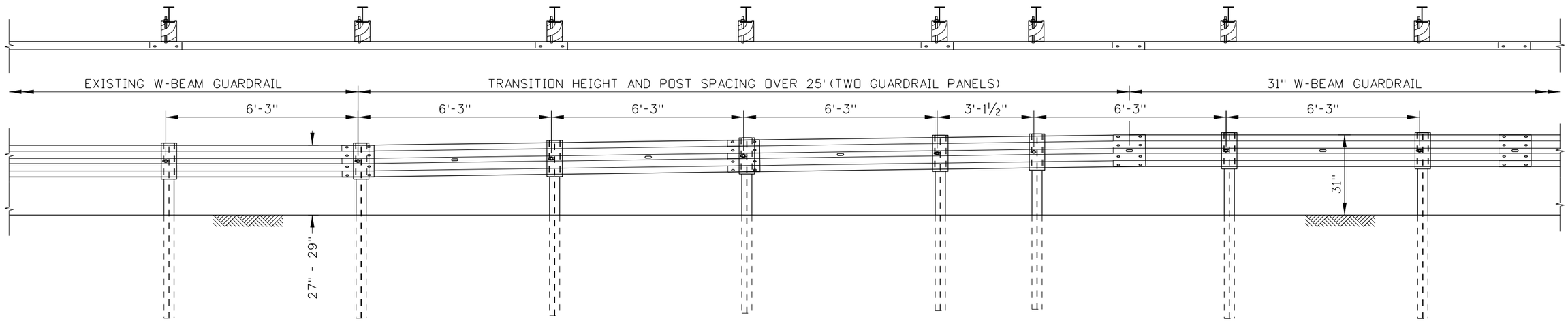
STANDARD DRAWING NO.
612-1



REDUCED POST SPACING

SEE NOTE NO. 7

LEGEND:
* EXTRA POSTS.
BOLT BLOCKOUT TO POST, BUT DO NOT BOLT TO GUARDRAIL



TRANSITION TO 31" W-BEAM GUARDRAIL

SEE NOTE NO. 19

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REVISIONS								
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2	03-19	RDL						
3	03-20	RDL						

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CADD FILE NAME: 612-1_0420.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

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DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

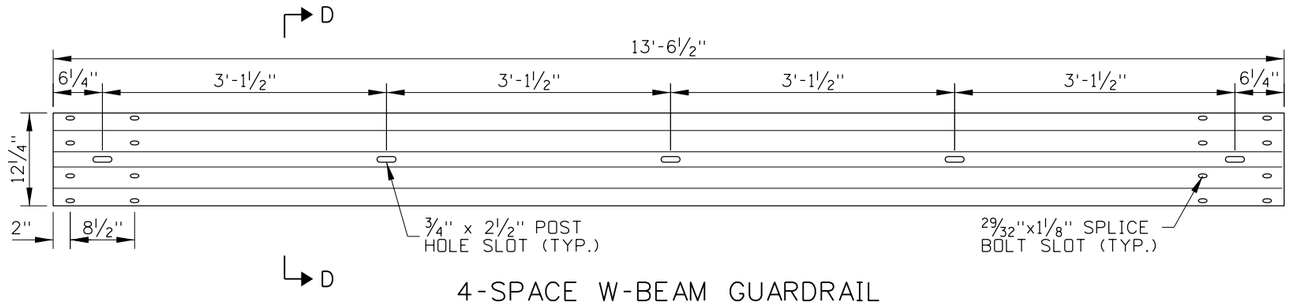
31" W-BEAM GUARDRAIL

English

STANDARD DRAWING NO.

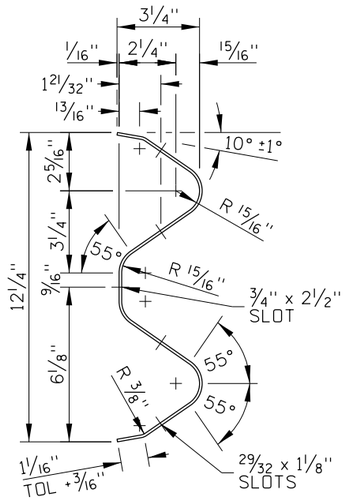
612-1

SHEET 3 OF 5



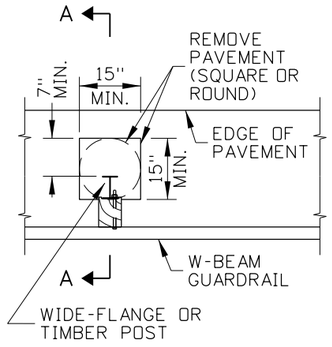
4-SPACE W-BEAM GUARDRAIL

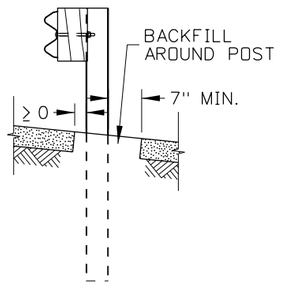
RWM04a



SECTION D-D

31" W-BEAM GUARDRAIL HARDWARE COMPONENTS TABLE		
COMPONENT DESCRIPTION	WIDE-FLANGE POST	TIMBER POST
4-SPACE W-BEAM GUARDRAIL	RWM04a	RWM04a
WIDE-FLANGE GUARDRAIL POSTS	PWE01, PWE--	-
TIMBER GUARDRAIL POSTS	-	PDE02
CRT TIMBER GUARDRAIL POST	-	PDE09
W-BEAM BLOCKOUT	PDB01b OR POLYETHYLENE	PDB01a
⅝" GUARDRAIL SPLICE BOLT AND RECESSED NUT	FBB01	FBB01
⅝" GUARDRAIL BOLT AND RECESSED NUT	FBB03	FBB04
⅝" PLAIN ROUND WASHER	FWC16a	FWC16a
16D GALVANIZED NAIL	-	N/A

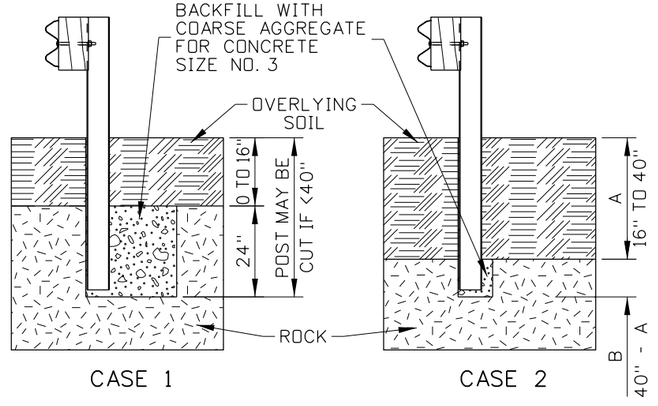




SECTION A-A

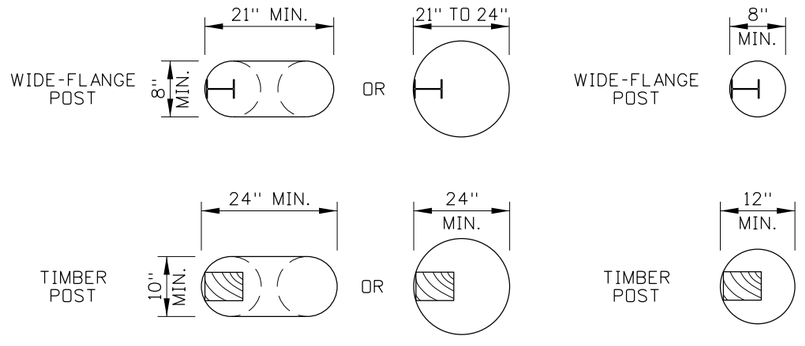
GUARDRAIL POST IN PAVEMENT

SEE NOTE NO. 9



GUARDRAIL POST IN ROCK FORMATION

SEE NOTE NO. 9



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PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED RYAN D. LANCASTER DATE OF ORIGINAL SIGNATURE MARCH 10, 2021 13683 STATE OF IDAHO

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
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3	03-20	RDL						

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CADD FILE NAME: 612-1_0420.dgn

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BOISE IDAHO

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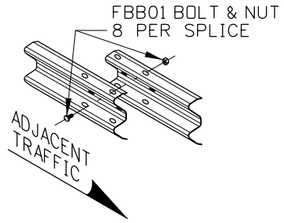
STANDARD DRAWING

31" W-BEAM GUARDRAIL

English

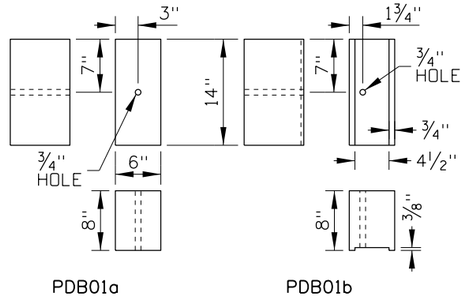
STANDARD DRAWING NO.

612-1



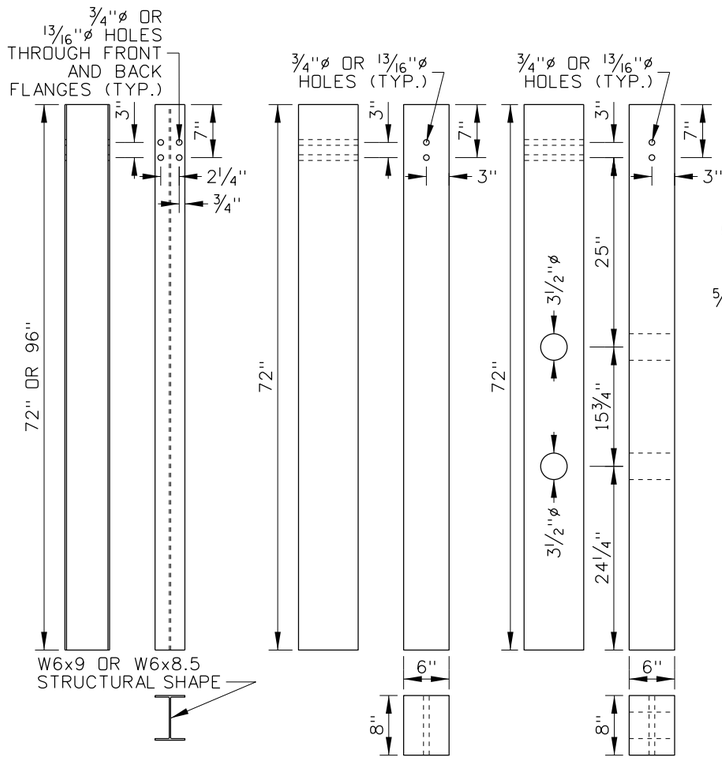
W-BEAM SPLICE DETAIL

SEE NOTE NO. 14



PDB01a PDB01b

W-BEAM TIMBER BLOCKOUTS

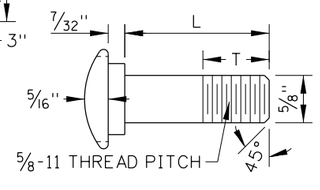


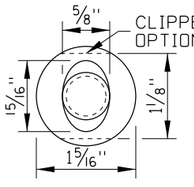
WIDE-FLANGE PWE01, PWE--

TIMBER PDE02, PDE--

CRT TIMBER POST PDE09

GUARDRAIL POSTS

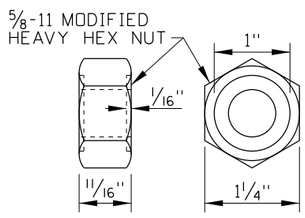




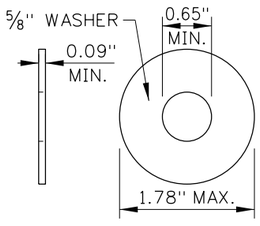
BOLT DIMENSION TABLE		
DESIGNATOR	L	T
FBB01	1¼"	1⅛"
FBB03	10"	1¾"
FBB04	18"	4"

GUARDRAIL BOLT (BUTTON-HEADED)

FBB01, FBB03, FBB04



RECESSED NUT



PLAIN ROUND WASHER

FWC16a

NOTES

1. THE 31" W-BEAM GUARDRAIL SYSTEM SHOWN IS A MASH TEST LEVEL 3 BARRIER SYSTEM.
2. PROVIDE BARRIER HARDWARE AS SHOWN AND AS SPECIFIED IN THE PUBLICATION "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE." WHERE THE GUIDE AND PLANS CONFLICT, PROVIDE HARDWARE COMPONENTS AS SHOWN ON THE PLANS.
3. INSTALL GUARDRAIL AS SHOWN IN THE NORMAL APPLICATION UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS. THE CURB APPLICATIONS CAN BE USED WITH ANY OF THE CURB AND GUTTER OR CURB TYPES SHOWN ON THE CURB AND GUTTER STANDARD DRAWING.
4. PLACE 31" W-BEAM GUARDRAIL AS FAR FROM THE TRAVELED WAY AS PRACTICAL. WHERE PRACTICAL PROVIDE THE SHY-LINE OFFSET DISTANCE SHOWN IN THE SHY-LINE OFFSET TABLE.
5. WHERE PRACTICAL, FLARE THE 31" W-BEAM GUARDRAIL AWAY FROM THE TRAVELED WAY. SEE THE SHY-LINE OFFSET AND FLARE RATE TABLE.
6. PROVIDE ADEQUATE DEFLECTION DISTANCE TO OBSTRUCTIONS BEHIND THE GUARDRAIL BY PROVIDING THE WORKING WIDTH SHOWN ON THE PLACEMENT DETAIL AND IN THE DEFLECTION TABLE.
7. DECREASE DEFLECTION BY REDUCING POST SPACING. INTRODUCE EACH REDUCTION IN POST SPACING OVER 25' OR MORE. DO NOT BOLT THE GUARDRAIL TO THE EXTRA POSTS.
8. WIDE-FLANGE OR TIMBER POSTS MAY BE USED UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS. USE THE SAME POST MATERIAL FOR THE PROJECT LENGTH (EXCEPT IN THE 31" LONG-SPAN APPLICATION).
9. REMOVE PAVEMENT AND ROCK AROUND GUARDRAIL POSTS.
10. USE TIMBER OR POLYETHYLENE BLOCKOUTS WITH WIDE-FLANGE POSTS. USE TIMBER BLOCKOUTS WITH TIMBER POSTS. USE THE SAME BLOCKOUT MATERIAL FOR THE PROJECT LENGTH (EXCEPT IN THE 31" LONG-SPAN APPLICATION). THE WIDE-FLANGE POST NORMAL APPLICATON CAN BE CONSTRUCTED WITHOUT BLOCKOUTS IF INDICATED ON THE PROJECT PLANS OR IF APPROVED BY THE ENGINEER.
11. INSTALL THE BLOCKOUT AND W-BEAM GUARDRAIL USING THE HOLE 7" FROM THE TOP OF THE POST. THE HIGHER HOLE IS RESERVED FOR FUTURE GUARDRAIL HEIGHT ADJUSTMENT.
12. NAIL TIMBER BLOCKOUTS TO TIMBER POSTS TO RESTRICT BLOCK ROTATION. NAIL THROUGH THE SIDES OF THE BLOCKOUT AND POST.
13. WHEN WIDE-FLANGE POSTS ARE USED AND WHEN PRACTICAL, INSTALL THE BOLT (FBB03) ON THE UPSTREAM SIDE OF THE POST IN RELATION TO THE ADJACENT TRAFFIC.
14. SPLICE 31" W-BEAM GUARDRAIL BETWEEN POSTS. OVERLAP SPLICES SO THAT THE EXPOSED W-BEAM EDGE IS DOWNSTREAM OF THE ADJACENT TRAFFIC.
15. BEGIN AND END 31" W-BEAM GUARDRAIL WITH A TERMINAL, ANCHOR, OR TRANSITION. CONSTRUCT TERMINALS OR TRANSITIONS USING THE SAME POST MATERIAL AS THE GUARDRAIL WHEN PRACTICAL. SOME ANCHORS AND TERMINALS ARE ONLY AVAILABLE WITH TIMBER OR WIDE-FLANGE POSTS.
16. DELINEATE GUARDRAILS WITH TYPE 9 DELINEATORS. SEE THE DELINEATOR STANDARD DRAWING FOR DELINEATOR SPACING.
17. ONE POST CAN BE OMITTED WITHOUT OTHER MODIFICATION IF APPROVED BY THE ENGINEER. THE LONG-SPAN APPLICATION CAN BE USED WHERE TWO POSTS (18'-9" SPAN) OR THREE POSTS (25' SPAN) ARE OMITTED.
18. WHEN THE LONG-SPAN APPLICATION (18'-9", OR 25') IS USED, INSTALL THREE CRT TIMBER POSTS (PDE09) WITH TIMBER BLOCKOUTS ADJACENT TO THE UPSTREAM AND DOWNSTREAM ENDS OF THE UNSUPPORTED SECTION. DO NOT NEST THE 4-SPACE W-BEAM GUARDRAIL IN THE UNSUPPORTED SECTION. INSTALL AT LEAST 62'-6" OF 31" W-BEAM GUARDRAIL UPSTREAM AND DOWNSTREAM OF THE CRT POSTS.
19. WHEN CONNECTING TO EXISTING GUARDRAIL, TRANSITION THE GUARDRAIL HEIGHT TO 31". REPLACE THE EXISTING W-BEAM GUARDRAIL IF THE TOP OF GUARDRAIL HEIGHT IS LESS THAN 27".
20. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED RYAN D. LANCASTER STATE OF IDAHO 13683 ORIGINAL SIGNED BY RYAN D. LANCASTER MARCH 10, 2020

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	08-18	RDL						
2	03-19	RDL						
3	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-1_0420.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

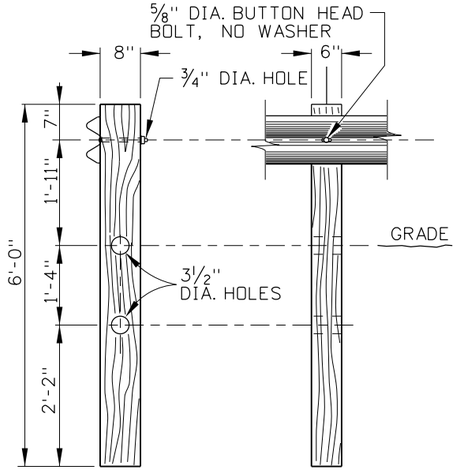
STANDARD DRAWING

31" W-BEAM GUARDRAIL

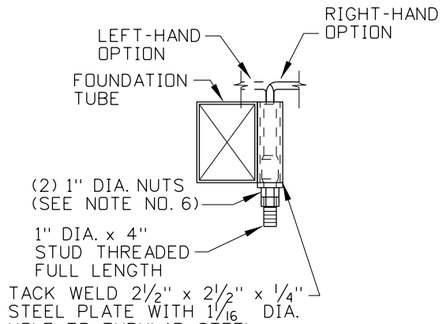
English

STANDARD DRAWING NO. 612-1

SHEET 5 OF 5



MODIFIED CRT TIMBER POST



ANCHOR DETAIL

(SEE NOTE NO. 9)

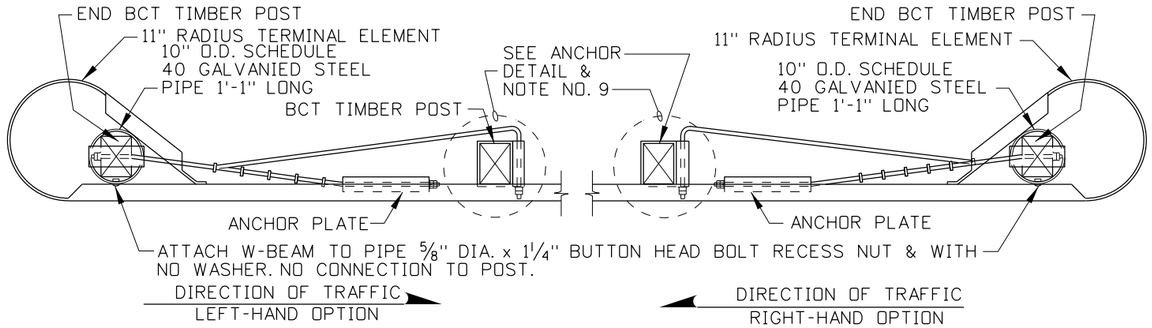
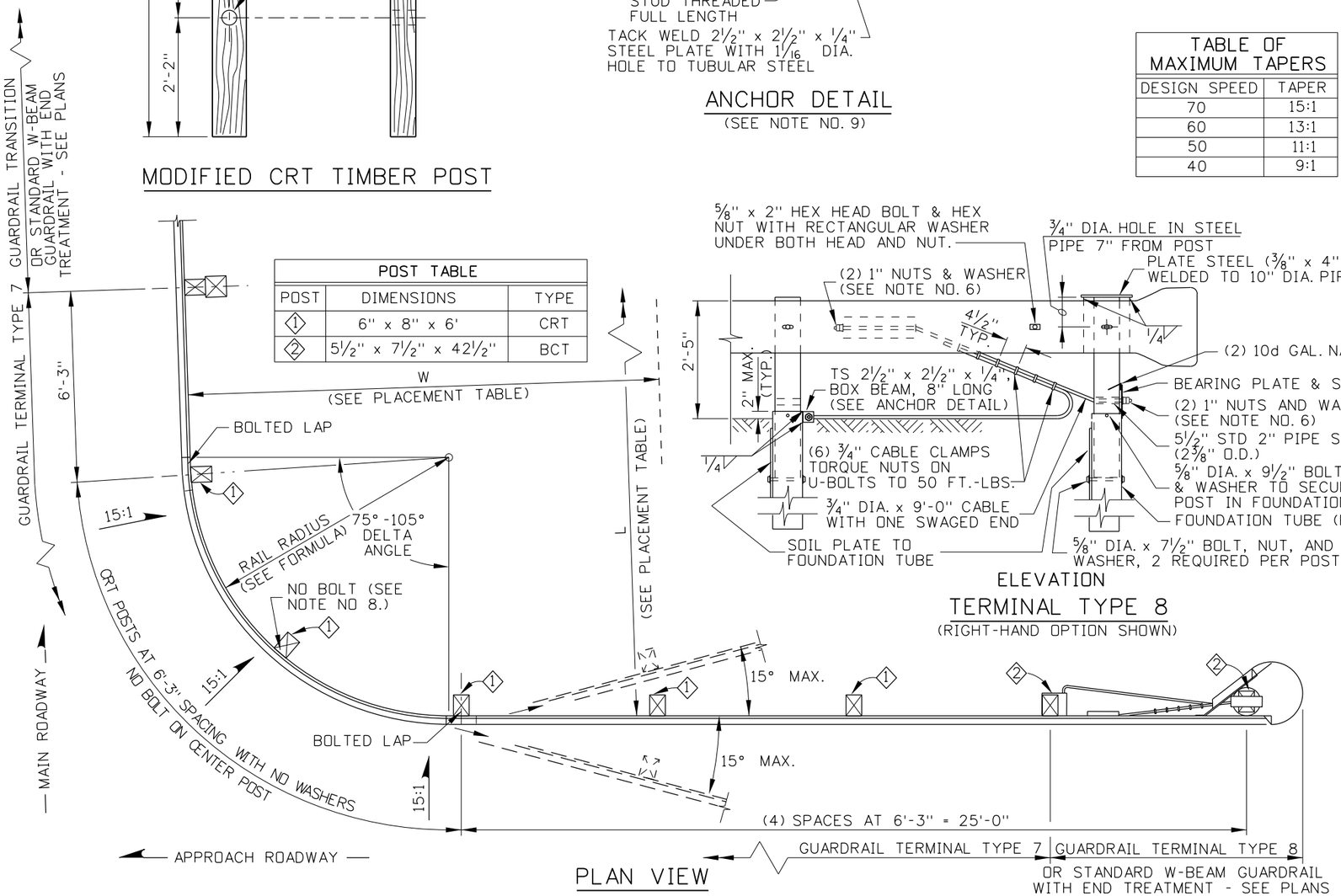


TABLE OF MAXIMUM TAPERS	
DESIGN SPEED	TAPER
70	15:1
60	13:1
50	11:1
40	9:1

PLACEMENT TABLE					
DELTA ANGLE	RAIL RADIUS	NO. RAIL SECTIONS	NO. CRT POSTS	AREA FREE OF FIXED OBJECTS	
				L	W
75° -105°	8'	1	5	25'	15'
75° -105°	16'	2	7	30'	15'
75° -105°	24'	3	9	40'	20'
75° -80°	32'	3	9	40'	20'
>80° -100°	32'	4	11	40'	20'
>100° -105°	32'	5	13	40'	20'



POST TABLE		
POST	DIMENSIONS	TYPE
1	6" x 8" x 6'	CRT
2	5 1/2" x 7 1/2" x 42 1/2"	BCT

PLAN VIEW

ELEVATION

TERMINAL TYPE 8

(RIGHT-HAND OPTION SHOWN)

NOTES

1. THE TYPE 8 TERMINAL SHALL ONLY BE USED OUTSIDE THE CLEAR ZONE OR WHEN THE APPROACH ROADWAY SPEED IS 35 MPH OR LESS. OTHERWISE AN APPROPRIATE NCHRP 350 TERMINAL IS REQUIRED.

2. THE GUARDRAIL ALONG THE APPROACH ROADWAY MAY BE ANGLED 15° TO EITHER SIDE OF THE PERPENDICULAR AXIS TO THE MAIN ROADWAY. HOWEVER, FLARE RATES ALONG ROADWAYS WITH 35 MPH OR GREATER SPEEDS MUST FOLLOW STANDARD TAPER RATES (SEE "TABLE OF MAXIMUM TAPERS").

3. THE ROADWAY IN FRONT THE CURVED PORTION OF THE TERMINAL SHALL BE 15:1 OR FLATTER. GRADE TERRAIN TO A 10:1 SLOPE OR FLATTER FOR 2' BEYOND THE GUARDRAIL POST, THEN A 2:1 OR FLATTER SLOPE. A 6:1 OR FLATTER SLOPE IS DESIRABLE. IF THE FILL HEIGHT IS GREATER THAN 30' OTHER SOLUTIONS SHOULD BE CONSIDERED. AN AREA FREE OF FIXED OBJECTS SHALL BE MAINTAINED BEHIND THE GUARDRAIL.

4. THIS DRAWING REQUIRES STANDARD DRAWING 612-1 AND IS SUBJECT TO THE W-BEAM GUARDRAIL INSTALLATION REQUIREMENTS AND HARDWARE/ACCESSORY SPECIFICATIONS.

5. ALL TERMINAL HARDWARE ITEMS SHALL MEET THE SPECIFICATIONS IN THE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" (CURRENT EDITION). ALL WELDING SHALL MEET THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY.

6. WHEN FASTENING THE CABLE ENDS THE OUTSIDE NUTS SHALL BE TORQUED AGAINST INSIDE NUTS A MINIMUM OF 100 FT.-LBS.

7. ALL CURVED GUARDRAIL SHALL BE SHOP BENT, FIELD BENDING WILL NOT BE ALLOWED.

8. ALL CURVED RAIL SECTIONS SHALL BE 12'-6" IN LENGTH AND BOLTED TO THE POSTS ONLY AT THE LAPS.

9. THE ANCHOR CABLE FROM POST #1 TO POST #2 MUST BE ATTACHED ON THE FAR SIDE OF THE FOUNDATION TUBE FOR LEFT-HAND INSTALLATIONS.

10. NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER — REGISTERED — ORIGINAL SIGNED AND SEALED — TED E. MASON — OCTOBER 26, 2010 — STATE OF IDAHO

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	05-90	GB	6	05-06	MSM			
2	04-93	MSM	7	11-06	MSM			
3	04-99	MSM	8	09-10	MGL			
4	03-03	MSM						
5	12-04	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-3_1010.dgn

DRAWING DATE: MAY, 1989

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

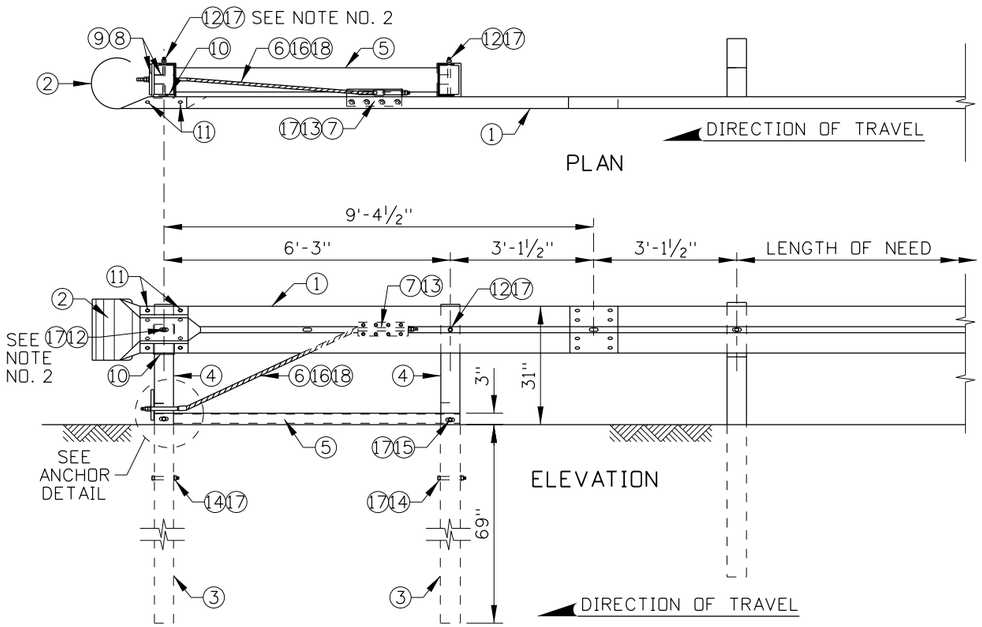
GUARDRAIL TERMINAL TYPES 7 & 8

REQUIRES STD. DWG. 612-1

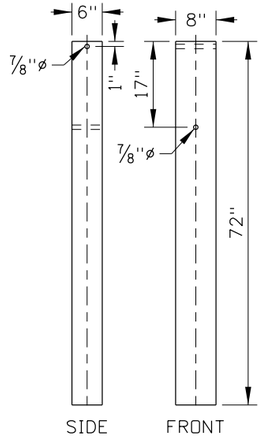
English

STANDARD DRAWING NO. 612-3

SHEET 1 OF 1

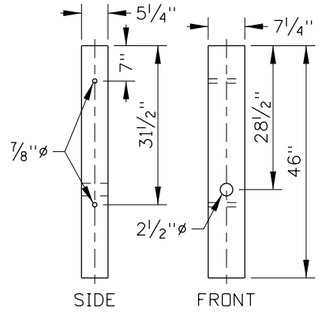


GUARDRAIL ANCHOR



③ FOUNDATION TUBE DETAIL

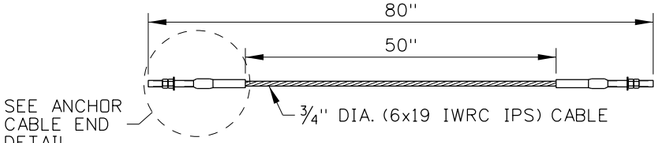
PTE06



④ BCT TIMBER POST DETAIL

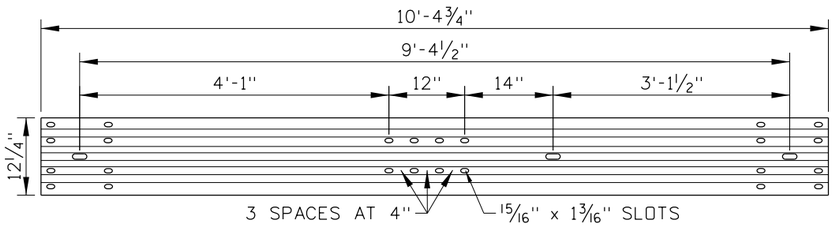
PDF--

ANCHOR HARDWARE COMPONENTS TABLE			
ITEM NO.	COMPONENT DESCRIPTION	QTY.	TF-13 NAME
①	W-BEAM ANCHOR GUARDRAIL	1	RWM14a (MOD)
②	W-BEAM END SECTION (ROUNDED)	1	RWE03a
③	FOUNDATION TUBE	2	PTE06
④	BCT TIMBER POST	2	PDF--
⑤	STRUT AND YOKE ASSEMBLY	1	PFP02
⑥	BCT CABLE ANCHOR ASSEMBLY	1	FCA01
⑦	GUARDRAIL ANCHOR BRACKET	1	FPA01
⑧	BCT POST SLEEVE	1	FMM02
⑨	BCT BEARING PLATE	1	FPB01
⑩	SHELF ANGLE BRACKET	1	FPP02
⑪	⅝" GUARDRAIL SPLICE BOLT AND RECESSED NUT	4	FBB01
⑫	10" GUARDRAIL BOLT & RECESSED NUT	2	FBB03
⑬	⅝" X 2" HEX HEAD BOLT & NUT	8	FBX16a
⑭	⅝" X 8" HEX HEAD BOLT & NUT	2	FBX16a
⑮	⅝" X 10" HEX HEAD BOLT & NUT	2	FBX16a
⑯	1" HEX NUTS	4	FNX24a
⑰	⅝" FLAT WASHER	22	FWC16a
⑱	1" FLAT WASHER	2	FWC24a
⑲	16D GALVANIZED NAIL	2	N/A



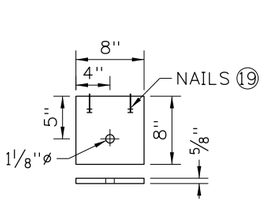
⑥ BCT ANCHOR ASSEMBLY DETAIL

FCA01



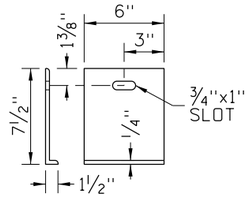
① W-BEAM ANCHOR GUARDRAIL

RWM14a (MODIFIED)



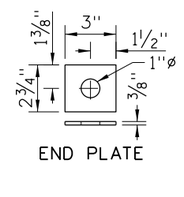
⑨ BCT BEARING PLATE DETAIL

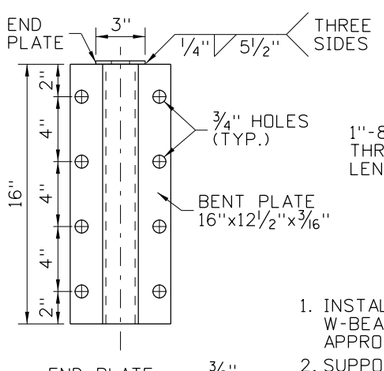
FPB01



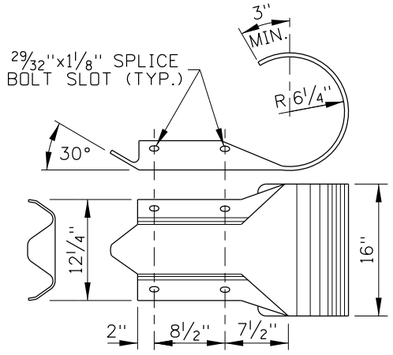
⑩ SHELF ANGLE BRACKET DETAIL

FPP02



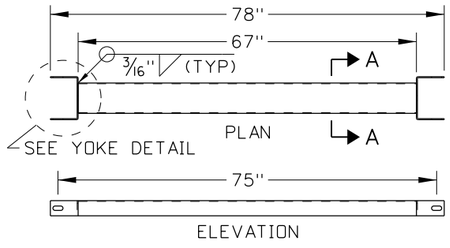


ANCHOR CABLE END DETAIL



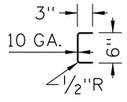
② W-BEAM END SECTION DETAIL

RWE03a

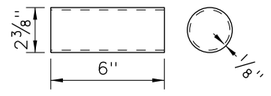


⑤ STRUT AND YOKE ASSEMBLY DETAIL

PFP02

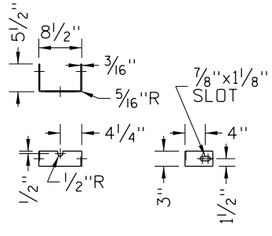


SEC A-A

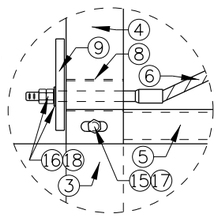


⑧ BCT POST SLEEVE DETAIL

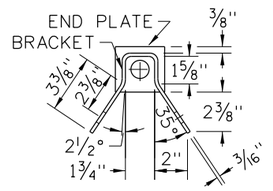
FMM02



YOKE DETAIL



ANCHOR DETAIL



⑦ GUARDRAIL ANCHOR BRACKET DETAIL

FPA01

NOTES

1. INSTALL THE ANCHOR SYSTEM ON THE TRAILING END OF 31" W-BEAM GUARDRAIL, OUTSIDE OF THE CLEAR ZONE FOR APPROACHING TRAFFIC, OR BOTH.
2. SUPPORT THE W-BEAM ANCHOR GUARDRAIL AT THE END POST WITH THE SHELF ANGLE BRACKET. DO NOT BOLT THE W-BEAM GUARDRAIL TO THE POST.
3. ENSURE THAT THE FOUNDATION TUBES DO NOT EXTEND MORE THAN 3¾" ABOVE THE FINISHED GRADE.
4. INSTALL AN EXTRA HEX NUT ON EACH END OF THE BCT CABLE ANCHOR ASSEMBLY.
5. AFFIX A TYPE 3 OBJECT MARKER TO THE W-BEAM END SECTION WHEN THE ANCHOR IS USED ON AN UNDIVIDED HIGHWAY.
6. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER — LICENSED — ORIGINAL SIGNED BY RYAN D. LANCASTER — STATE OF IDAHO — JULY 25, 2017 — 13683 — RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-5_0617.dgn

DRAWING DATE: JUNE, 2017

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

GUARDRAIL ANCHOR

English

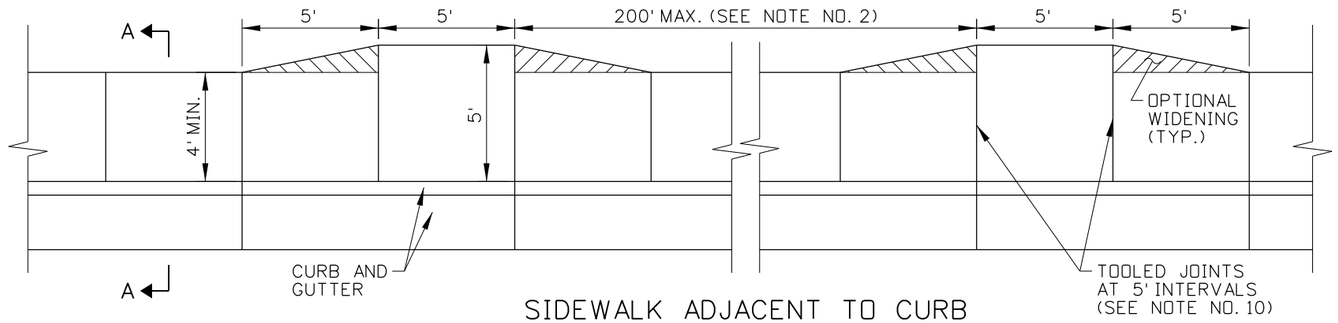
STANDARD DRAWING NO. 612-5

SHEET 1 OF 1

SYMBOL LEGEND

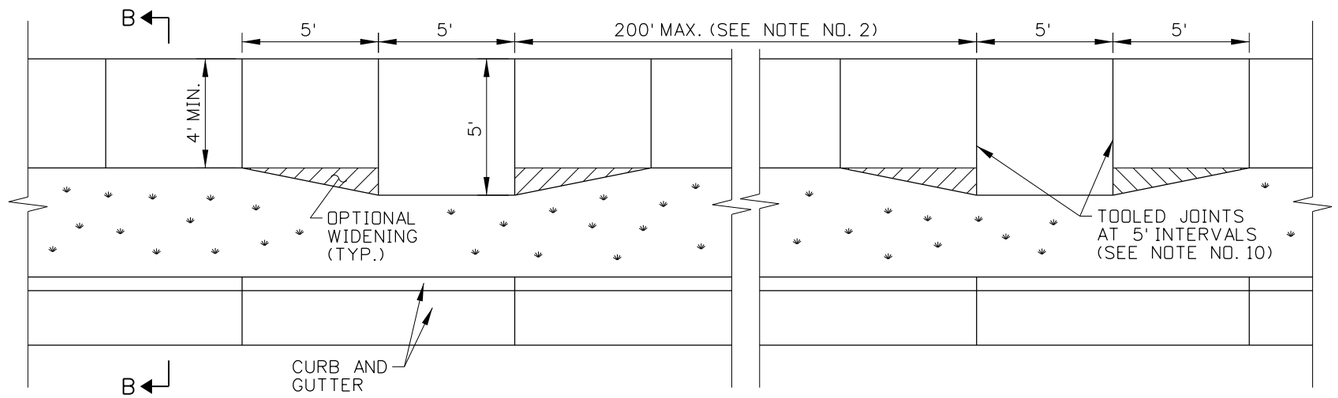
1.0% TO 2.0% SLOPE

5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE

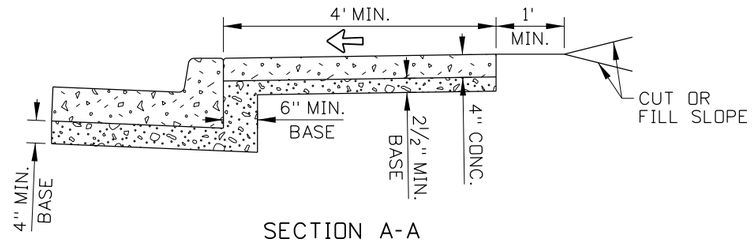


SIDEWALK ADJACENT TO CURB

SEE NOTE NO. 9

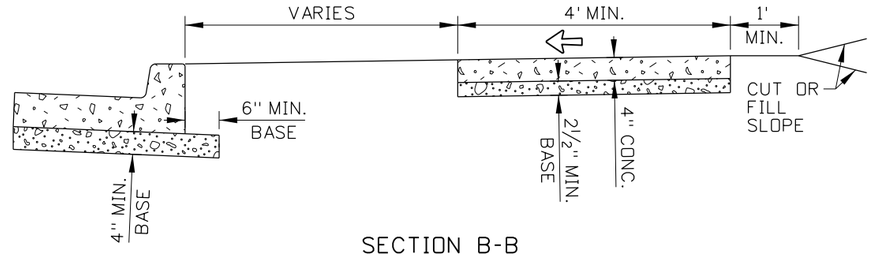


DETACHED SIDEWALK

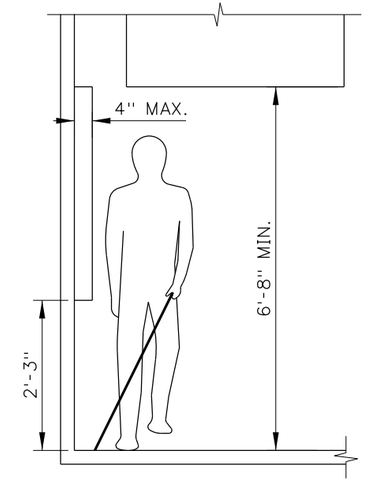


SECTION A-A

SEE NOTE NO. 9

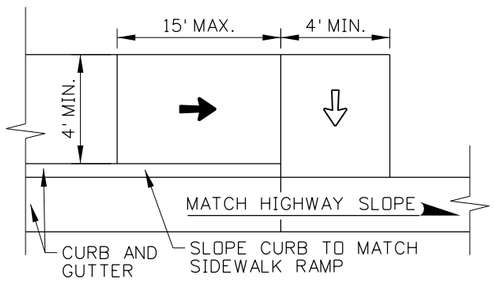


SECTION B-B

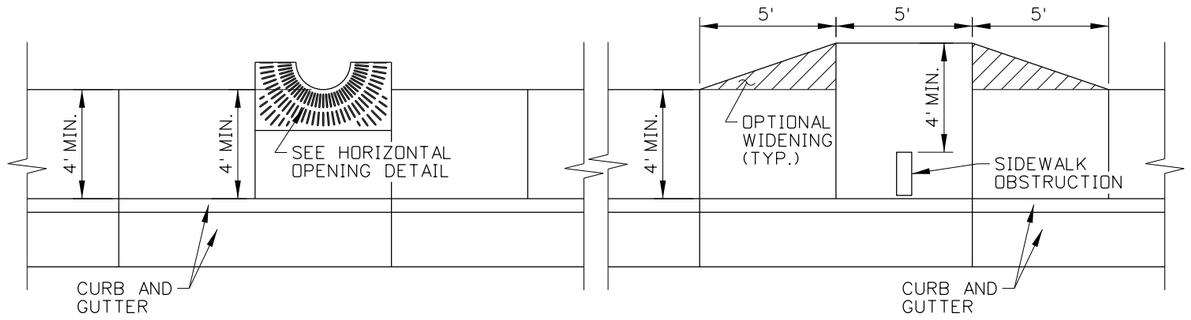


PROTRUDING OBJECT DETAIL

SEE NOTE NO. 7



SIDEWALK TERMINATION DETAIL



WIDENING AROUND OBSTRUCTIONS DETAIL

SEE NOTE NOS. 6 & 7

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER STATE OF IDAHO 13683 JUNE 15, 2015 ORIGINAL SIGNED RYAN D. LANCASTER STATE OF IDAHO

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-1_0615.dgn

DRAWING DATE: MAY, 2015

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

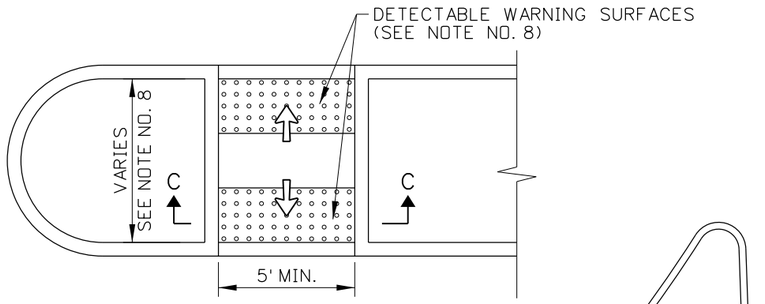
SIDEWALKS

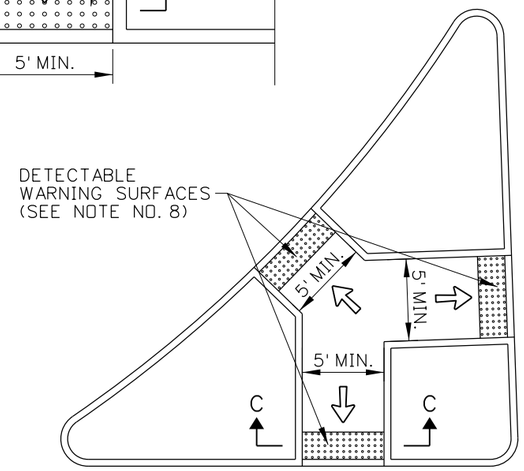
English

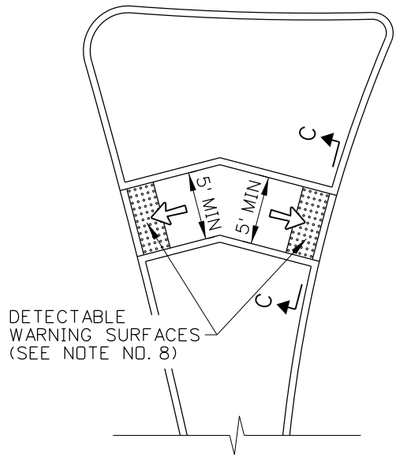
STANDARD DRAWING NO.

614-1

SHEET 1 OF 2





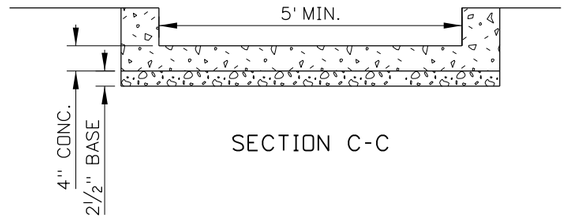


PEDESTRIAN REFUGE ISLAND DETAILS

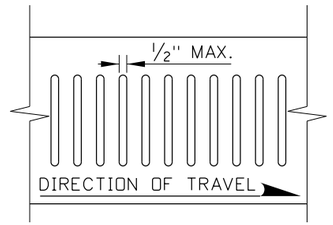
SYMBOL LEGEND

1.0% TO 2.0% SLOPE

5.0% TO 8.3% RUNNING SLOPE,
2.0% OR FLATTER CROSS SLOPE

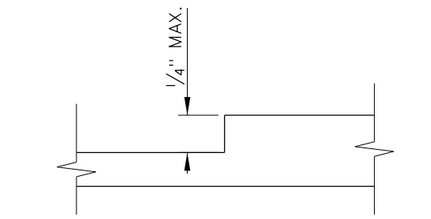


SECTION C-C

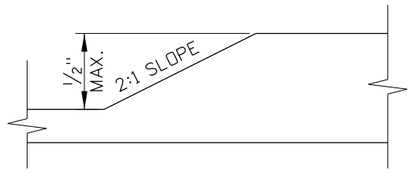


HORIZONTAL OPENING DETAIL

SEE NOTE NO. 6



VERTICAL DISCONTINUITY OF ¼" OR LESS



VERTICAL DISCONTINUITY BETWEEN ¼" AND ½"

VERTICAL SURFACE DISCONTINUITY DETAIL

SEE NOTE NO. 5

NOTES

1. SIDEWALKS MAY CONSIST OF A PEDESTRIAN CIRCULATION PATH AND A PEDESTRIAN ACCESS ROUTE. THE PEDESTRIAN CIRCULATION PATH IS A PREPARED SURFACE PROVIDED FOR PEDESTRIAN TRAVEL IN THE PUBLIC RIGHT-OF-WAY. THE PEDESTRIAN ACCESS ROUTE IS A CONTINUOUS AND UNOBSTRUCTED PATH OF TRAVEL PROVIDED FOR PEDESTRIANS WITH DISABILITIES WITHIN OR COINCIDING WITH A PEDESTRIAN CIRCULATION PATH.
2. PROVIDE AT LEAST 4' OF CONTINUOUS CLEAR WIDTH OF PEDESTRIAN ACCESS ROUTE, EXCLUSIVE OF THE CURB WIDTH. WHERE SIDEWALKS ARE WIDER THAN 4', ONLY A PORTION OF THE SIDEWALK IS REQUIRED TO BE PART OF THE PEDESTRIAN ACCESS ROUTE.

   PROVIDE A PASSING SPACE AT 200' OR SHORTER INTERVALS WHEN THE CLEAR WIDTH OF THE PEDESTRIAN ACCESS ROUTE IS LESS THAN 5'. ENSURE THAT THE DIMENSIONS OF THE PASSING SPACE ARE AT LEAST 5' BY 5'. INTERSECTING SIDEWALKS, DRIVEWAYS, AND ALLEYS MAY BE USED AS PASSING SPACES.
3. ENSURE THAT THE GRADE OF THE PEDESTRIAN ACCESS ROUTE DOES NOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT HIGHWAY.
4. ENSURE THAT THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE WITHIN THE SIDEWALK DOES NOT EXCEED TWO PERCENT.
5. VERTICAL SURFACE DISCONTINUITIES MAY OCCASIONALLY OCCUR AT EXPANSION JOINTS, UTILITY COVERS, VAULT FRAMES, AND GRATINGS WITHIN THE SIDEWALK. ENSURE THAT VERTICAL SURFACE DISCONTINUITIES DO NOT EXCEED ½". BEVEL VERTICAL SURFACE DISCONTINUITIES BETWEEN ¼" AND ½" WITH A 2:1 SLOPE ACROSS THE ENTIRE VERTICAL SURFACE DISCONTINUITY.
6. ENSURE THAT HORIZONTAL OPENINGS IN GRATINGS AND JOINTS DO NOT PERMIT PASSAGE OF A SPHERE MORE THAN ½" IN DIAMETER.
7. OBJECTS PROTRUDING INTO OR OVERHANGING A PEDESTRIAN CIRCULATION PATH MUST NOT REDUCE THE MINIMUM CLEAR WIDTH OF THE PEDESTRIAN ACCESS ROUTE. PROTRUDING OBJECTS INCLUDE STREET FURNITURE, STREET LIGHTS, UTILITY POLES, EQUIPMENT CABINETS, SIGN POSTS AND SIGNS, PARKING METERS, TRASH RECEPTACLES, PUBLIC TELEPHONES, MAILBOXES, NEWSPAPER VENDING MACHINES, BENCHES, TRANSIT SHELTERS, KIOSKS, BICYCLE RACKS, PLANTERS AND PLANTED TREES, AND STREET SCULPTURES.

   ENSURE THAT OBJECTS WITH LEADING EDGES BETWEEN 2'-3" AND 6'-8" ABOVE THE FINISH SURFACE DO NOT PROTRUDE MORE THAN 4" HORIZONTALLY INTO THE PEDESTRIAN CIRCULATION PATH.
8. PROVIDE DETECTABLE WARNING SURFACES ON PEDESTRIAN REFUGE ISLANDS WITH CURB RAMPS OR WHEN CUT-THROUGH AT STREET LEVEL AND REFUGE ISLAND WIDTHS ARE GREATER THAN SIX FEET IN THE DIRECTION OF PEDESTRIAN TRAVEL. DO NOT INSTALL DETECTABLE WARNING SURFACES AT PEDESTRIAN REFUGE ISLANDS THAT ARE CUT-THROUGH AT STREET LEVEL AND ARE LESS THAN SIX FEET IN WIDTH IN THE DIRECTION OF PEDESTRIAN TRAVEL. SEE STANDARD DRAWING 614-3 FOR DETECTABLE WARNING SURFACE DETAILS.
9. USE A BOND PREVENTATIVE BETWEEN THE SIDEWALK AND CURB WHEN CONSTRUCTED SEPARATELY AND PLACED ADJACENT TO EACH OTHER.
10. ALIGN CURB AND SIDEWALK JOINTS. CONSTRUCT JOINTS AT 5' INTERVALS THAT ARE APPROXIMATELY ⅛" WIDE AND ¾" IN DEPTH. CONSTRUCT A LONGITUDINAL JOINT WHEN THE SIDEWALK IS 8' WIDE OR WIDER. INSTALL A PREFORMED EXPANSION JOINT FILLER EVERY 40'.
11. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
LICENSED
RYAN D. LANCASTER
STATE OF IDAHO
13683
ORIGINAL SIGNED BY RYAN D. LANCASTER
JUNE 15, 2015

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-1_0615.dgn

DRAWING DATE: MAY, 2015

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

SIDEWALKS

English

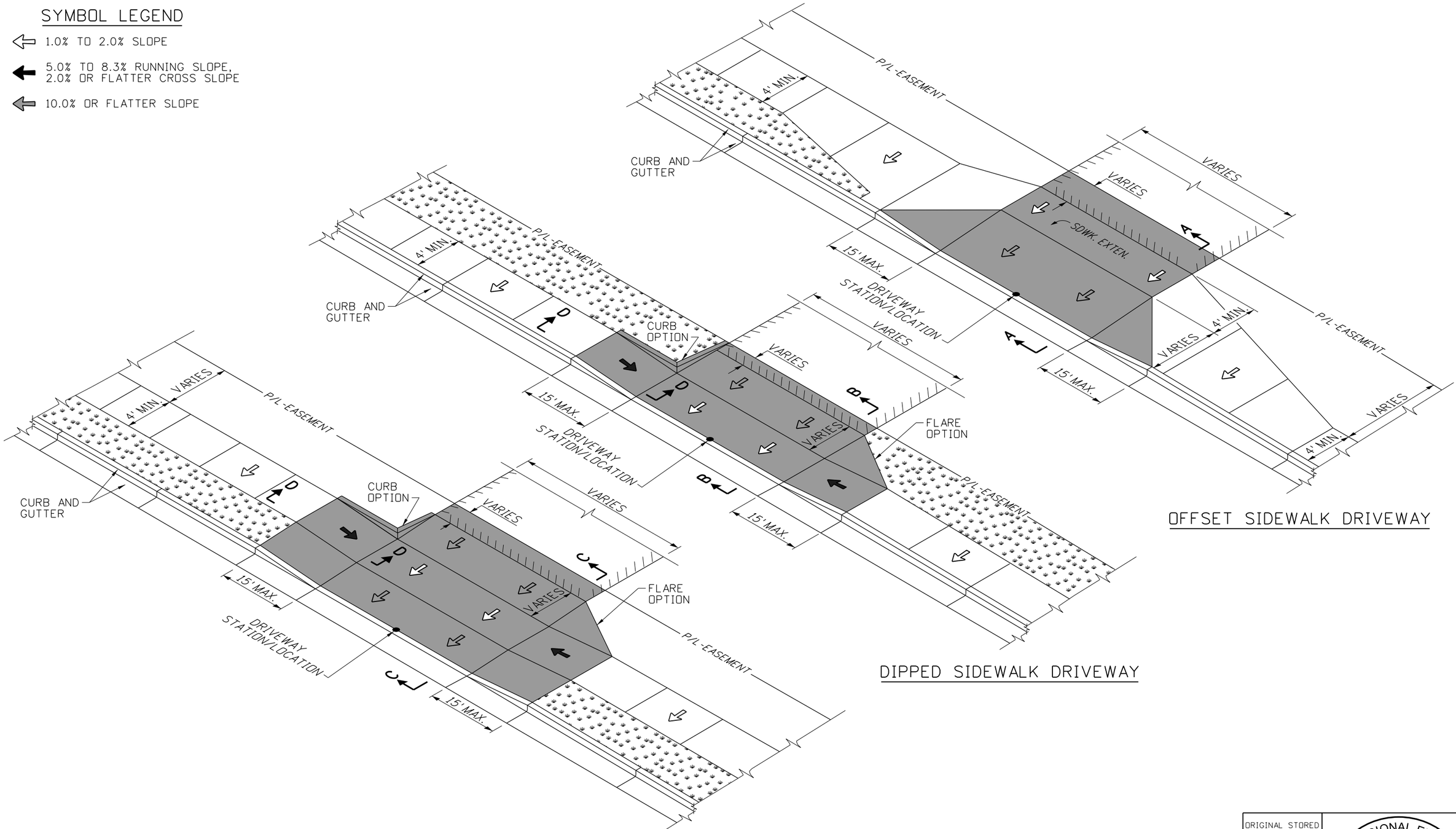
STANDARD DRAWING NO.

614-1

SHEET 2 OF 2

SYMBOL LEGEND

- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE



OFFSET SIDEWALK DRIVEWAY

DIPPED SIDEWALK DRIVEWAY

COMBINATION DRIVEWAY

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER STATE OF IDAHO JUNE 15, 2015 13683 RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	11-90	GB	6	05-06	MSM			
2	09-93	MSM	7	05-07	MSM			
3	12-94	MSM	8	07-10	JAW			
4	09-02	MSM	9	04-15	EG			
5	06-04	MSM						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-2_0615.dgn

DRAWING DATE: APRIL, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

DRIVEWAYS

English

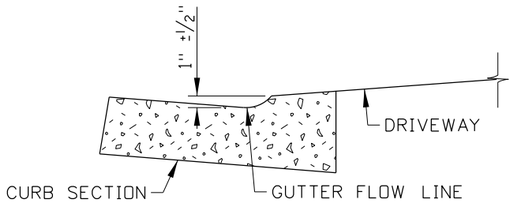
STANDARD DRAWING NO.

614-2

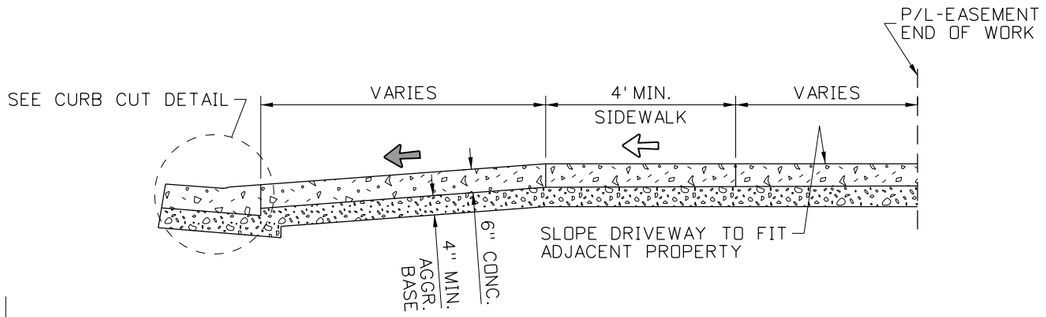
SHEET 1 OF 2

SYMBOL LEGEND

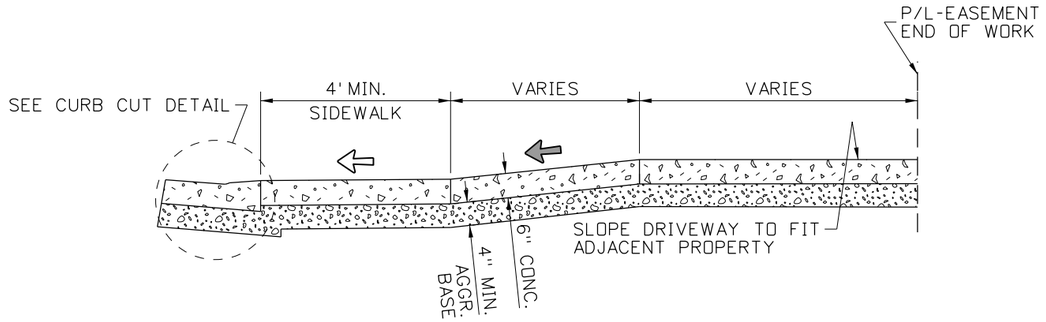
- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE



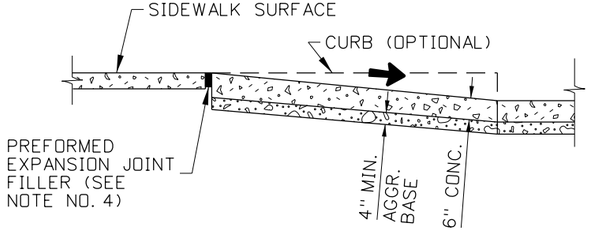
CURB CUT DETAIL



SECTION A-A



SECTION B-B



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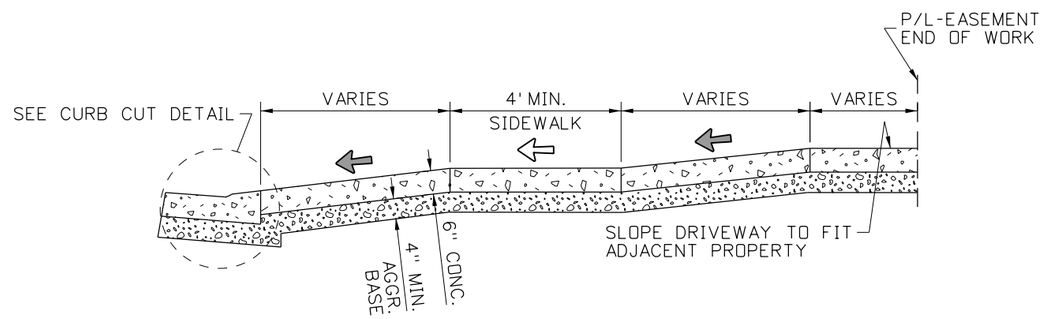

SECTION C-C

NOTES

1. EXTENTS OF DRIVEWAY PAY ITEMS ARE SHOWN IN GRAY SHADING.
2. SEE THE SIDEWALKS STANDARD DRAWING FOR NOTES RELATED TO THE PEDESTRIAN ACCESS ROUTE.
3. DO NOT PLACE DETECTABLE WARNING SURFACES ON DRIVEWAYS.
4. USE A BOND PREVENTATIVE BETWEEN THE DRIVEWAY OR SIDEWALK AND CURB WHEN CONSTRUCTED SEPARATELY AND PLACED ADJACENT TO EACH OTHER.
5. ALIGN ALTERNATING CURB AND SIDEWALK JOINTS. CONSTRUCT DRIVEWAY AND SIDEWALK JOINTS AT 5' INTERVALS THAT ARE APPROXIMATELY 1/8" WIDE AND 3/4" IN DEPTH.
6. DRAWING NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	11-90	GB	6	05-06	MSM			
2	09-93	MSM	7	05-07	MSM			
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5	06-04	MSM						

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DRAWING DATE: APRIL, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

DRIVEWAYS

English

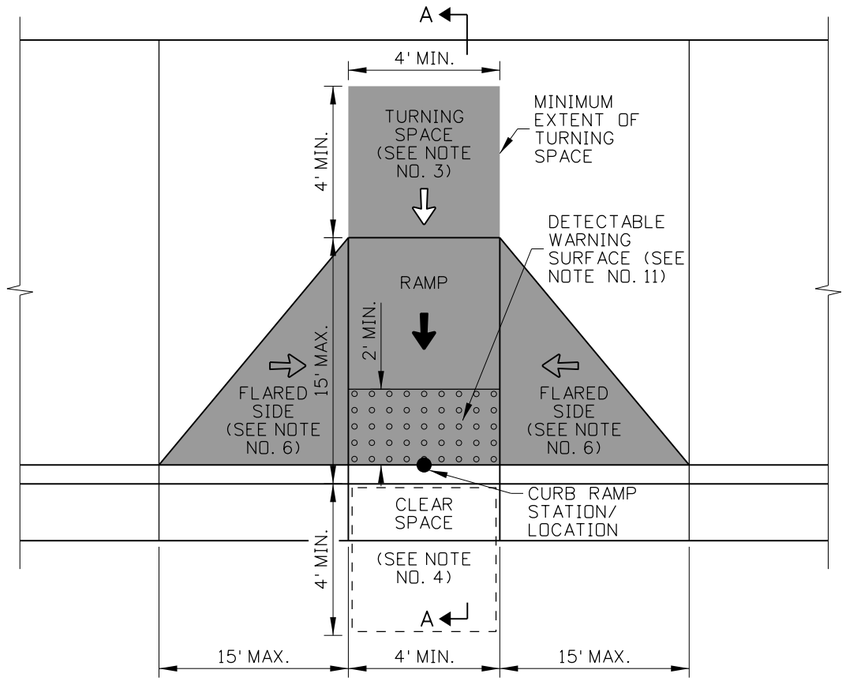
STANDARD DRAWING NO.

614-2

SHEET 2 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER DATE OF ORIGINAL SIGNATURE JUNE 15, 2015 STATE OF IDAHO 13683 RYAN D. LANCASTER



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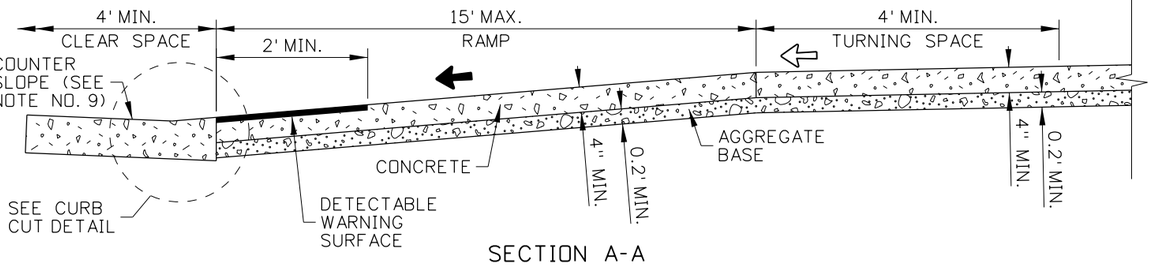
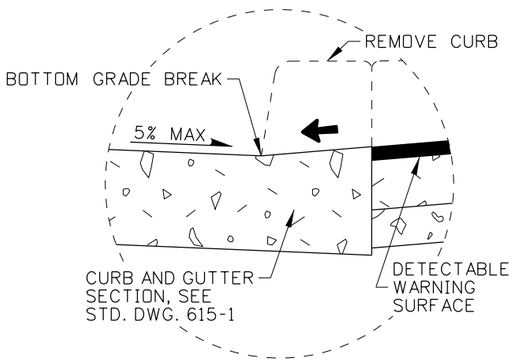


SECTION A-A



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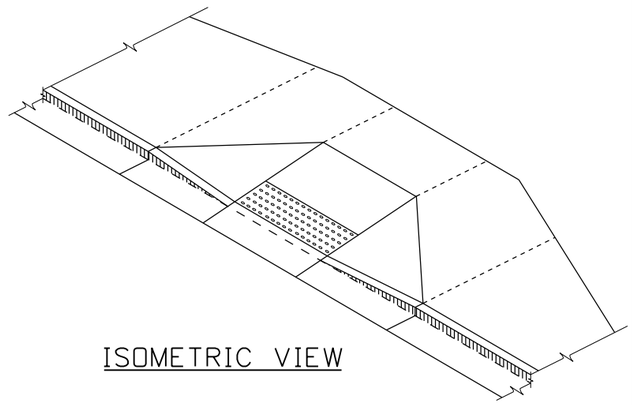
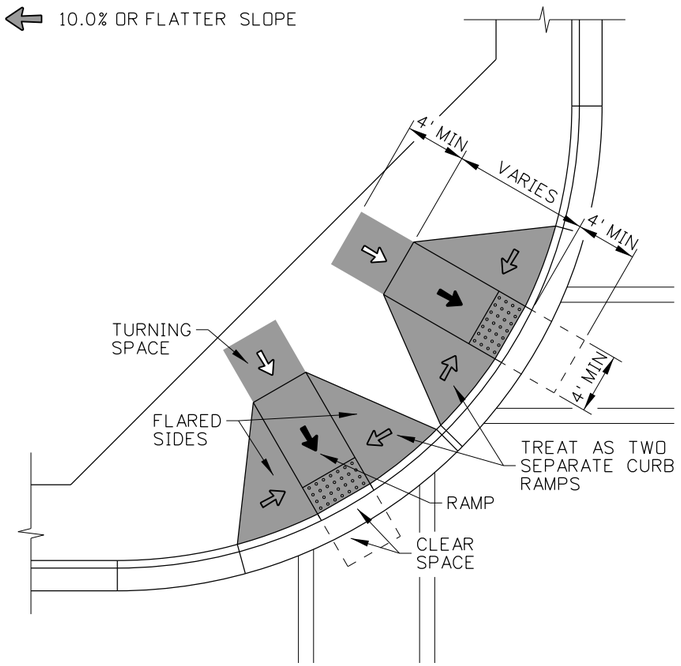
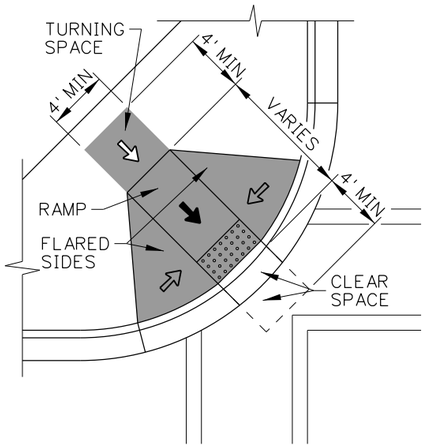


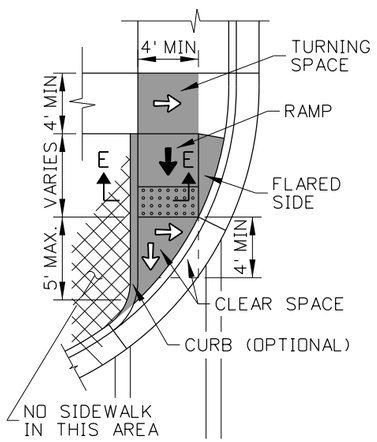
ISOMETRIC VIEW

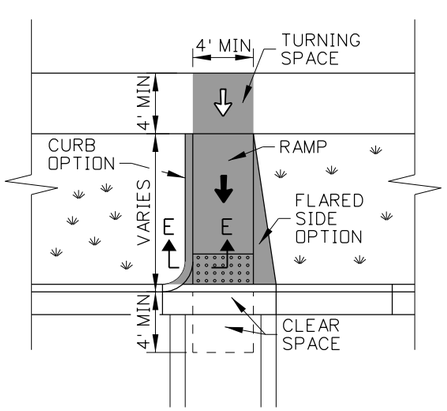
SYMBOL LEGEND

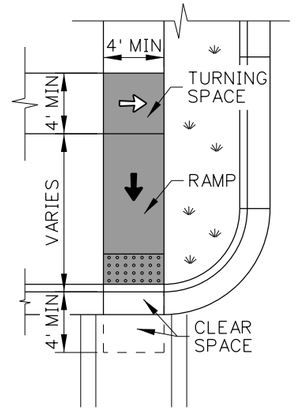
- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE











EXAMPLE APPLICATIONS

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER JUNE 15, 2015 13683 STATE OF IDAHO RYAN D. LANCASTER

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3	06-98	MSM	8	06-05	MSM	13	05-15	RDL
4	08-01	MSM	9	05-06	MSM			
5	10-02	MSM	10	05-07	MSM			

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CADD FILE NAME: 614-3_0615.dgn

DRAWING DATE: JUNE, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

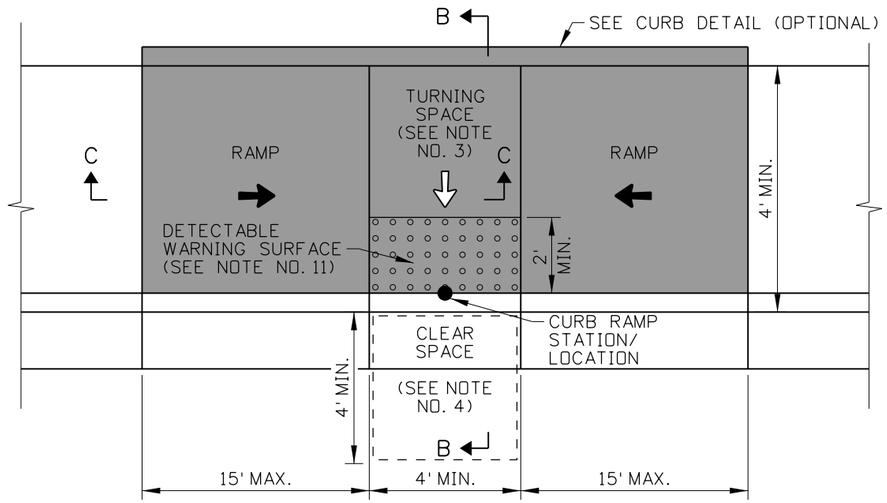
STANDARD DRAWING

CURB RAMPS

English

STANDARD DRAWING NO.

614-3



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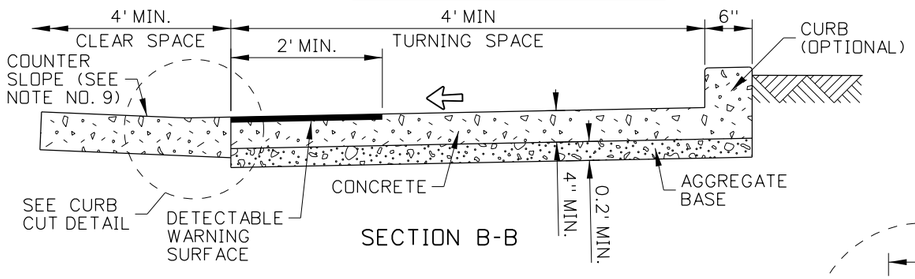
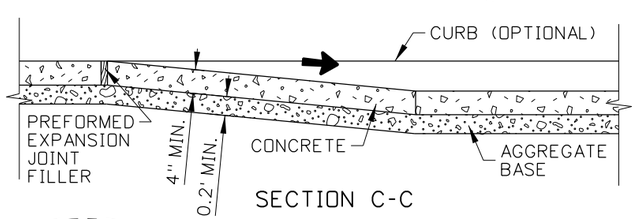
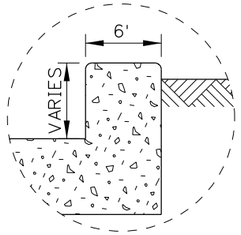


SECTION B-B



SECTION C-C



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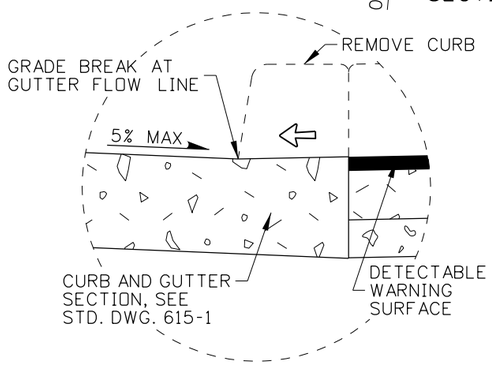
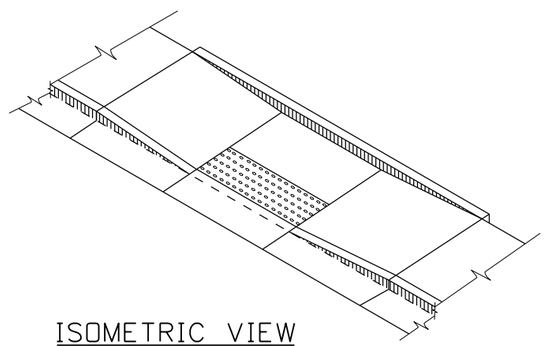


CURB CUT DETAIL



ISOMETRIC VIEW

SYMBOL LEGEND

- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
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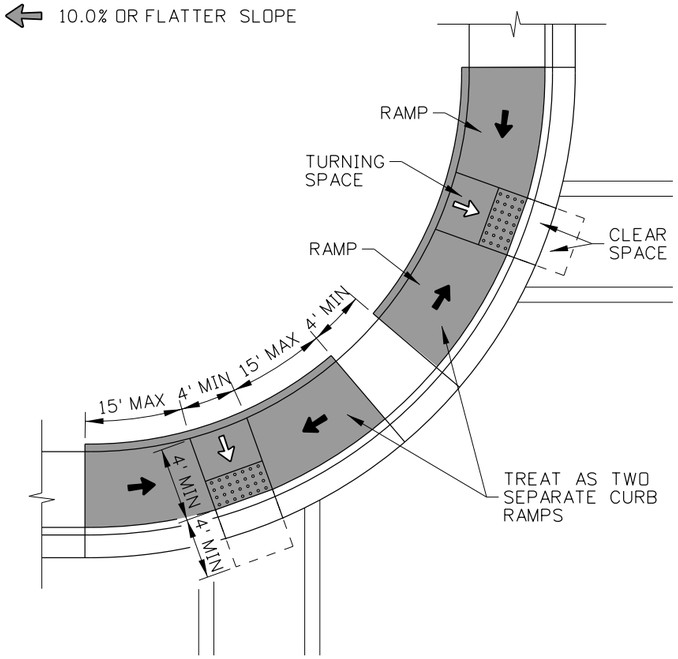

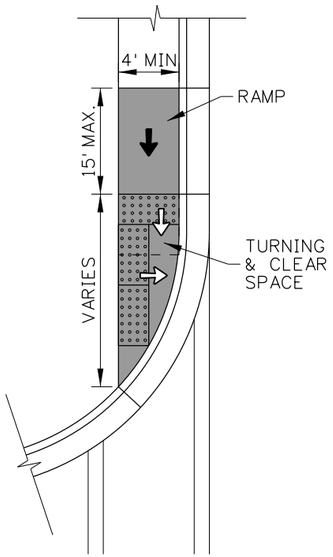

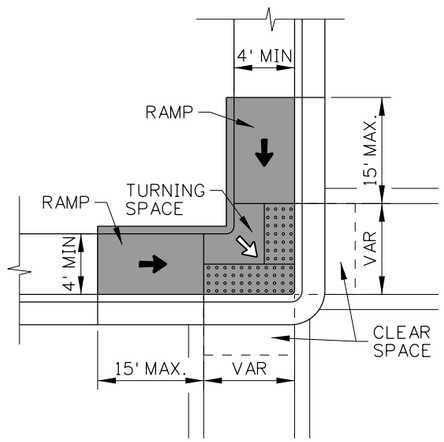

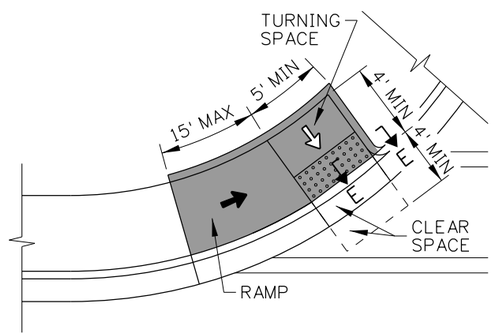

EXAMPLE APPLICATIONS

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PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER JUNE 15, 2015 STATE OF IDAHO 13683 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-93	MSM	6	07-03	MSM	11	07-10	JAW
2	12-95	MSM	7	12-04	MSM	12	09-11	TEM
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4	08-01	MSM	9	05-06	MSM			
5	10-02	MSM	10	05-07	MSM			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-3_0615.dgn

DRAWING DATE: JUNE, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

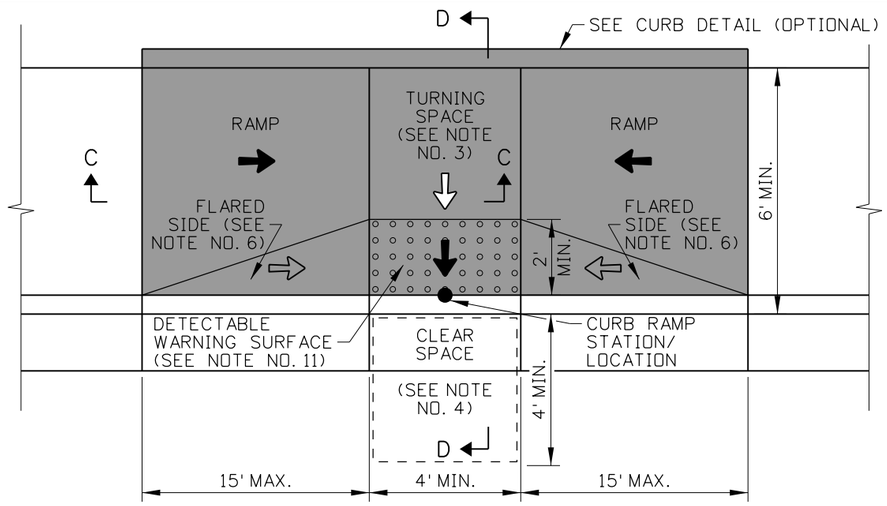
STANDARD DRAWING

CURB RAMPS

English

STANDARD DRAWING NO.

614-3



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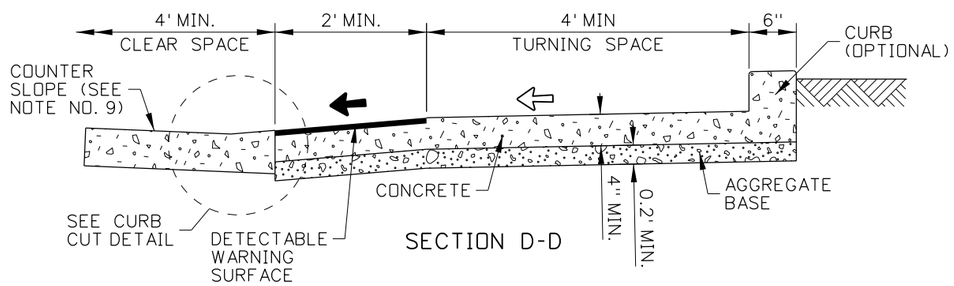
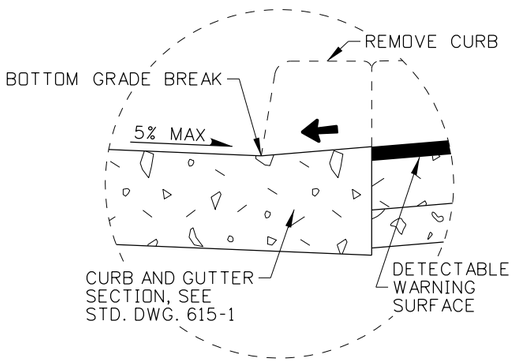
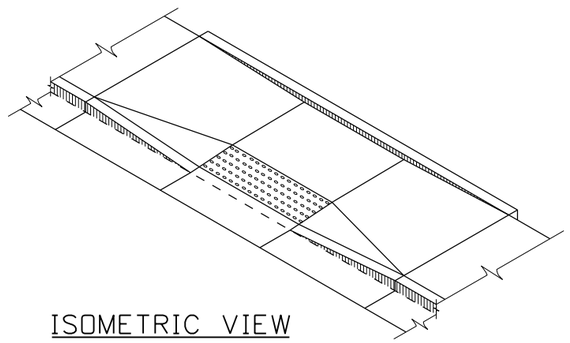


SECTION D-D



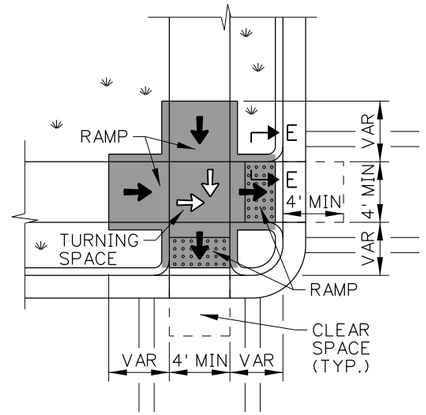
CURB CUT DETAIL

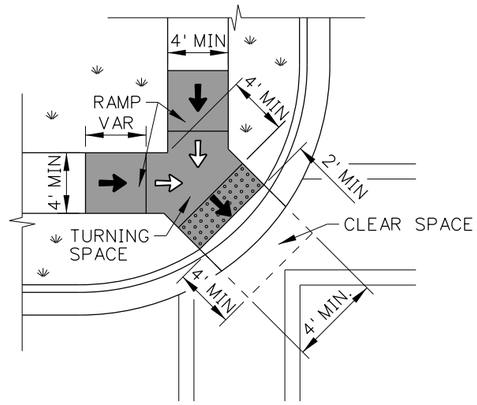


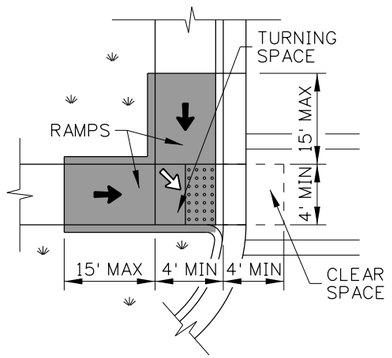
ISOMETRIC VIEW

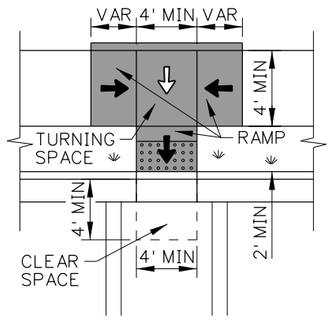
SYMBOL LEGEND

- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE









EXAMPLE APPLICATIONS

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER JUNE 15, 2015 13683 STATE OF IDAHO RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-93	MSM	6	07-03	MSM	11	07-10	JAW
2	12-95	MSM	7	12-04	MSM	12	09-11	TEM
3	06-98	MSM	8	06-05	MSM	13	05-15	RDL
4	08-01	MSM	9	05-06	MSM			
5	10-02	MSM	10	05-07	MSM			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-3_0615.dgn

DRAWING DATE: JUNE, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

CURB RAMPS

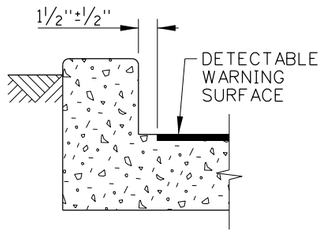
English

STANDARD DRAWING NO.

614-3

SYMBOL LEGEND

- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE, 2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE



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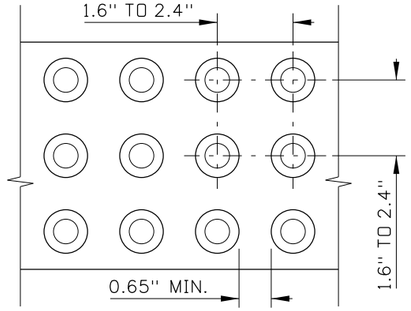
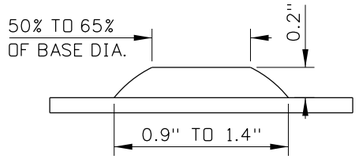
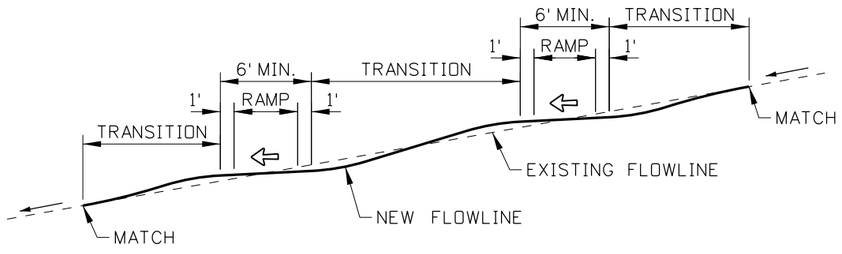


DOME SPACING



DOME SIZE

PLAN



PROFILE

FLOWLINE PROFILE DETAIL

SEE NOTE NO. 5

DETECTABLE WARNING SURFACE DETAILS

SEE NOTE NO. 11

NOTES

1. EXTENTS OF CURB RAMP PAY ITEMS ARE SHOWN IN GRAY SHADING.
2. CURB RAMPS CAN BE PERPENDICULAR, PARALLEL, OR A COMBINATION OF PARALLEL AND PERPENDICULAR RAMPS. EXAMPLE APPLICATIONS OF EACH ARE SHOWN ON SHEETS 1, 2, AND 3.
   PERPENDICULAR CURB RAMPS HAVE A RAMP THAT CUTS THROUGH THE CURB AT RIGHT ANGLES OR MEETS THE GUTTER GRADE BREAK AT RIGHT ANGLES WHEN THE CURB IS CURVED.
   PARALLEL CURB RAMPS HAVE A RAMP OR RAMPS IN-LINE WITH THE DIRECTION OF SIDEWALK TRAVEL AND LOWER THE SIDEWALK TO A LEVEL TURNING SPACE WHERE A TURN IS MADE TO ENTER THE PEDESTRIAN STREET CROSSING.
   COMBINATION CURB RAMPS HAVE FEATURES FROM PERPENDICULAR AND PARALLEL CURB RAMPS.
3. PROVIDE A TURNING SPACE WITH A 2.0% OR FLATTER SLOPE IN EACH DIRECTION. TURNING SPACES MAY OVERLAP WITH OTHER TURNING SPACES AND CLEAR SPACES.
   PERPENDICULAR CURB RAMP:
   PROVIDE A 4' BY 5' MINIMUM TURNING SPACE WHEN THE TURNING SPACE IS CONSTRAINED AT THE BACK-OF-SIDEWALK.
   PARALLEL CURB RAMP:
   PROVIDE A 4' BY 5' TURNING SPACE WHEN THE TURNING SPACE IS CONSTRAINED ON TWO OR MORE SIDES. ENSURE THAT THE 5' DIMENSION IS PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
4. PROVIDE A CLEAR SPACE BEYOND THE BOTTOM OF THE GRADE BREAK THAT IS WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAFFIC LANE.
5. CROSS SLOPE IS THE SLOPE PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL. ENSURE THAT THE CROSS SLOPE OF THE RAMP AND TURNING SPACE DOES NOT EXCEED TWO PERCENT. AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL AND AT MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE MAY MATCH THE STREET OR HIGHWAY GRADE. FLATTEN THE GUTTER FLOWLINE THROUGH CURB RAMPS TO TWO PERCENT OR FLATTER WHEN NEEDED. WHEN THE PAVEMENT IS SAWCUT TO FLATTEN THE FLOWLINE, VARY THE WIDTH OF THE SAWCUT SO THAT THE PAVEMENT PATCH SMOOTHLY MATCHES THE EXISTING PAVEMENT.
6. PROVIDE FLARED SIDES ON PERPENDICULAR CURB RAMPS, OR COMBINATION CURB RAMPS WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP. THE FLARED SIDES ARE PART OF THE PEDESTRIAN CIRCULATION PATH, BUT ARE NOT PART OF THE PEDESTRIAN ACCESS ROUTE. THE SLOPE OF THE FLARED SIDES IS MEASURED PARALLEL TO THE CURB LINE. FLARED SIDES ARE NOT NEEDED OR MAY BE STEEPER WHEN THE PEDESTRIAN CIRCULATION PATH DOES NOT CROSS THE CURB RAMP.
7. THE PEDESTRIAN CIRCULATION PATH IS A PREPARED SURFACE PROVIDED FOR PEDESTRIAN TRAVEL IN THE PUBLIC RIGHT-OF-WAY. THE PEDESTRIAN ACCESS ROUTE IS A CONTINUOUS AND UNOBSTRUCTED PATH OF TRAVEL PROVIDED FOR PEDESTRIANS WITH DISABILITIES WITHIN OR COINCIDING WITH A PEDESTRIAN CIRCULATION PATH.
8. ENSURE THAT GRADE BREAKS ARE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN AND ARE FLUSH. DO NOT CREATE GRADE BREAKS ON THE SURFACE OF RAMP RUNS AND TURNING SPACES.
9. ENSURE THAT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF CURB RAMPS RUNS DOES NOT EXCEED FIVE PERCENT.
10. WHERE PRACTICAL, PLACE UTILITY COVERS, VAULT FRAMES, AND GRATINGS OUTSIDE RAMP RUNS, TURNING SPACES, OR GUTTER AREAS. LOCATE CATCH BASINS AND INLETS OUTSIDE OF RAMP RUNS.
11. DETECTABLE WARNING SURFACES CONSIST OF TRUNCATED DOMES ALIGNED IN A SQUARE OR RADIAL GRID PATTERN. PROVIDE DETECTABLE WARNING SURFACES THAT CONTRAST VISUALLY WITH ADJACENT GUTTER, HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. ENSURE THAT THE DETECTABLE WARNING SURFACE EXTENDS THE FULL WIDTH OF THE RAMP RUN (EXCLUDING FLARED SIDES) OR TURNING SPACE.
    PERPENDICULAR AND COMBINATION CURB RAMPS:
    WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE IN FRONT OF THE BACK OF CURB, PLACE THE DETECTABLE WARNING SURFACE AT THE BACK OF CURB.
    WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB, PLACE THE DETECTABLE WARNING SURFACE ON THE RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK AND WITHIN 5' OF THE BACK OF CURB.
    PARALLEL CURB RAMP:
    PLACE DETECTABLE WARNING SURFACE ON THE TURNING SPACE AT THE BACK OF CURB.
12. USE A BOND PREVENTATIVE BETWEEN THE CURB RAMP OR SIDEWALK AND CURB WHEN CONSTRUCTED SEPARATELY AND PLACED ADJACENT TO EACH OTHER.
13. ALIGN ALTERNATING CURB AND SIDEWALK JOINTS. CONSTRUCT JOINTS APPROXIMATELY ⅛" WIDE AND ¾" IN DEPTH.
14. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER STATE OF IDAHO 13683 JUNE 15, 2015 RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	09-93	MSM	6	07-03	MSM	11	07-10	JAW
2	12-95	MSM	7	12-04	MSM	12	09-11	TEM
3	06-98	MSM	8	06-05	MSM	13	05-15	RDL
4	08-01	MSM	9	05-06	MSM			
5	10-02	MSM	10	05-07	MSM			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 614-3_0615.dgn

DRAWING DATE: JUNE, 1990

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

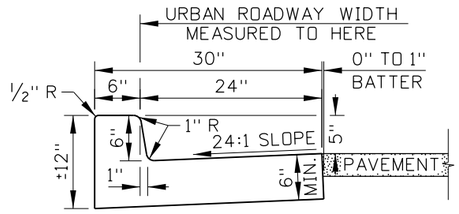
CURB RAMPS

English

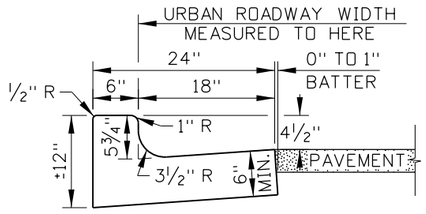
STANDARD DRAWING NO.

614-3

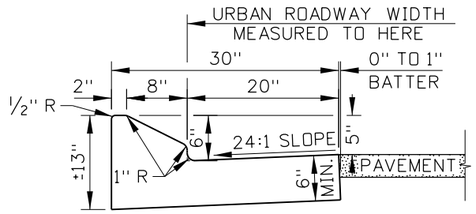
SHEET 4 OF 4



CURB AND GUTTER TYPE 1



CURB AND GUTTER TYPE 2
(SEE NOTE NO. 4)



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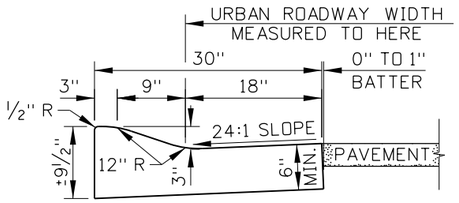

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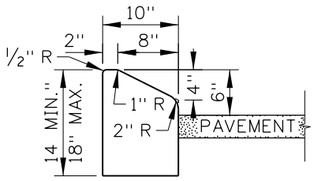

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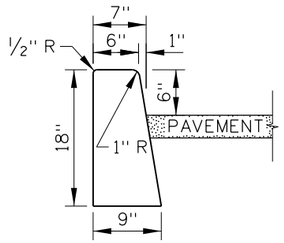

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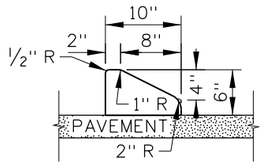
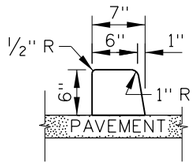
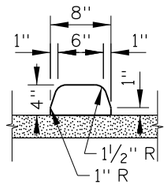


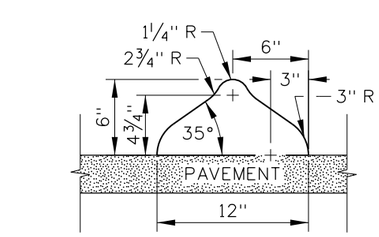
CURB TYPE 3
(SEE NOTE NO. 3)



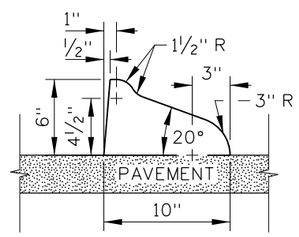
CURB TYPE 4
(SEE NOTE NO. 3)



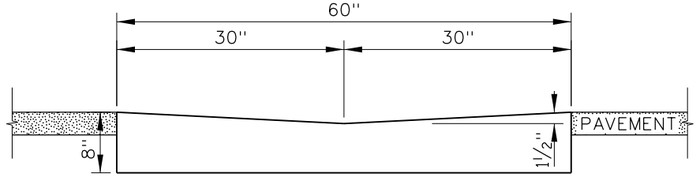
CURB TYPE 5
(SEE NOTE NO. 3)



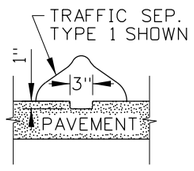
TRAFFIC SEPARATOR TYPE 1
(SEE NOTE NO. 3)



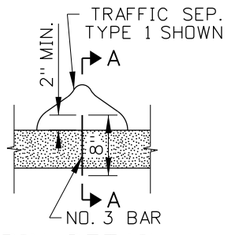
TRAFFIC SEPARATOR TYPE 2
(SEE NOTE NO. 3)



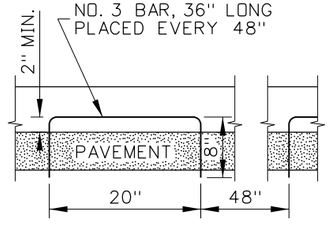
GUTTER TYPE 1



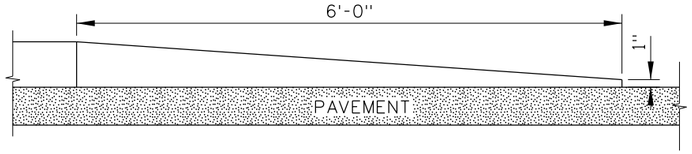
KEY DETAIL
(SEE NOTE NO. 3)



PIN DETAIL
(SEE NOTE NO. 3)



SECTION A-A



CURB TERMINUS DETAIL
(SEE NOTE NO. 5)

NOTES

1. TRANSITION BETWEEN DIFFERENT TYPES OVER 10 FEET.
2. PROVIDE 4 INCHES OF AGGREGATE BASE UNDER CURB AND GUTTER, CURB, OR GUTTER UNLESS THE CURB IS PLACED ON PAVEMENT.
3. PORTLAND CEMENT CONCRETE CURB OR TRAFFIC SEPARATOR ON ASPHALT CONCRETE PAVEMENT:

   PROVIDE A KEY IN THE PAVEMENT AT THE CENTERLINE OF THE CURB OR TRAFFIC SEPARATOR. SEE THE KEY DETAIL.

   CONCRETE CURBS OR TRAFFIC SEPARATORS MAY BE PINNED TO THE PAVEMENT STRUCTURE IN LIEU OF THE KEY. DRILL THE PAVEMENT AND PLACE PINS BEFORE THE CURB OR TRAFFIC SEPARATOR IS CONSTRUCTED. SEE THE PIN DETAIL.

   PORTLAND CEMENT CONCRETE CURB OR TRAFFIC SEPARATOR ON PORTLAND CEMENT CONCRETE PAVEMENT:

   USE AN EPOXY BONDING AGENT. NO KEY IS NEEDED.

   ASPHALT CONCRETE CURB OR TRAFFIC SEPARATOR ON ASPHALT CONCRETE PAVEMENT:

   NO KEY IS NEEDED. ENSURE THAT THE CURB IS BONDED TO THE PAVEMENT.
4. ENSURE THAT THE GUTTER SLOPE DOES NOT EXCEED 5 PERCENT AT CURB RAMPS.
5. TAPER THE LAST 6 FEET OF CURB AND GUTTER TYPES 1, 2, 3, AND 4 AND CURB TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT. TAPER CURB TYPES 3, 4, AND 5 AND TRAFFIC SEPARATORS TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT AT A 1:1 SLOPE.
6. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER
LICENSED
ORIGINAL SIGNED
RYAN D. LANCASTER
AUGUST 22, 2018
13683
STATE OF IDAHO

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-76		6	12-04	MSM	11	07-18	RDL
2	12-90	GB	7	06-05	MSM			
3	09-93	MSM	8	07-10	JAW			
4	12-94	MSM	9	11-14	RDL			
5	12-01	MSM	10	06-17	RDL			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 615-1_0818.dgn

DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

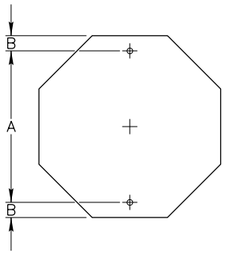
CURB AND GUTTER

English

STANDARD DRAWING NO.

615-1

SHEET 1 OF 1



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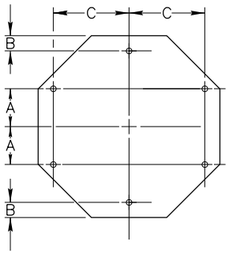

SIGN SIZE	A	B	C
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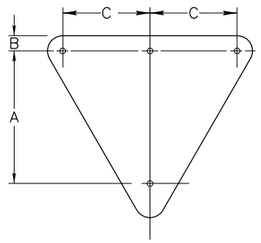
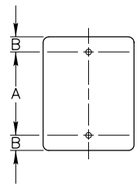
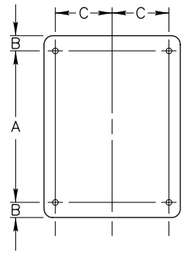
48"X48"	10"	—	20"



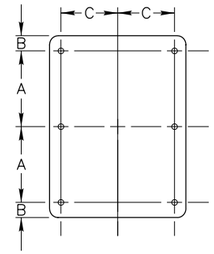
SIGN SIZE	A	B	C
30"X30"	18"	3"	—
36"X36"	23"	3"	—
48"X48"	25"	3"	17"
60"X60"	35"	4"	23"



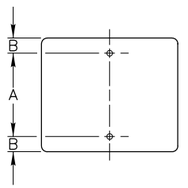
SIGN SIZE	A	B
6"X12"	9"	1½"
6"X18"	15"	1½"
9"X12"	9"	1½"
12"X18"	15"	1½"
12"X30"	24"	3"
12"X36"	32"	2"
18"X24"	18"	3"
24"X30"	24"	3"
24"X36"	30"	3"
30"X36"	30"	3"



SIGN SIZE	A	B	C
36"X36"	30"	3"	15"
36"X48"	42"	3"	15"
48"X30"	24"	3"	15"
48"X36"	30"	3"	15"
60"X36"	30"	3"	21"

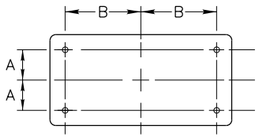


SIGN SIZE	A	B	C
48"X60"	27"	3"	15"

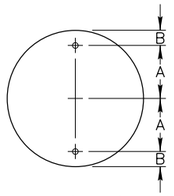


SIGN SIZE	A	B
12"X6"	3"	1½"
18"X9"	6"	1½"
18"X12"	9"	1½"
18"X18"	15"	1½"
21"X15"	12"	1½"
24"X6"	3"	1½"
24"X10"	7"	1½"
24"X12"	9"	1½"
24"X18"	15"	1½"
24"X24"	18"	3"
30"X18"	12"	3"
30"X24"	18"	3"
30"X30"	24"	3"
36"X24"	18"	3"
36"X30"	24"	3"
42"X24"	18"	3"
42"X30"	24"	3"
42"X36"	30"	3"

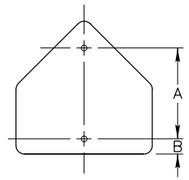
SIGN SIZE	A	B
30"X15"	24"	3"
36"X12"	30"	3"
36"X18"	24"	6"
48"X12"	42"	3"
48"X18"	42"	3"
54"X18"	48"	3"



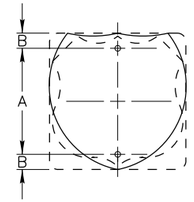
SIGN SIZE	A	B
48"X24"	9"	20"



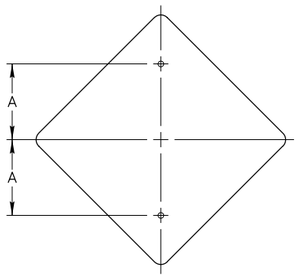
SIGN SIZE	A	B
36"	15"	3"
48"	21"	3"



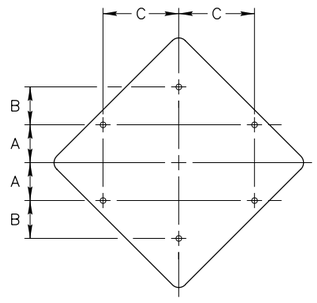
SIGN SIZE	A	B
30"X30"	21"	3"
36"X36"	24"	3"



SIGN SIZE	A	B
24"X24"	18"	3"
30"X24"	18"	3"



SIGN SIZE	A
18"X18"	10"
24"X24"	12"
30"X30"	15"



SIGN SIZE	A	B	C
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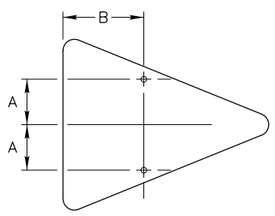
48"X48"	10"	—	20"



SIGN SIZE	A	B
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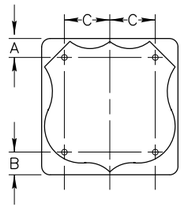
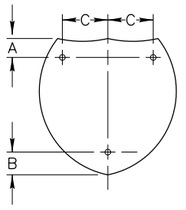


SIGN SIZE	A	B	C
36"X36"	5"	6"	12"



SIGN SIZE	A	B	C
36"X36"	5"	6"	12"
45"X36"	5"	6"	16"

NOTES:

1. ALL MOUNTING HOLES SHALL BE ⅜" DIAMETER.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER STATE OF IDAHO 13683 MANUAL SIGNATURE OR AUTHENTICATED ELECTRONIC SIGNATURE 1, 2017 RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-01	NQB						
2	06-07	HEB						
3	07-14	HEB						
4	05-17	HEB						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 616-1_0517.dgn

DRAWING DATE: DECEMBER, 1994

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

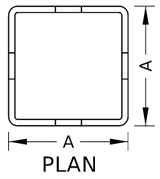
PUNCHING SCHEDULE FOR TYPE "B" OR TYPE "E" SIGNS

English

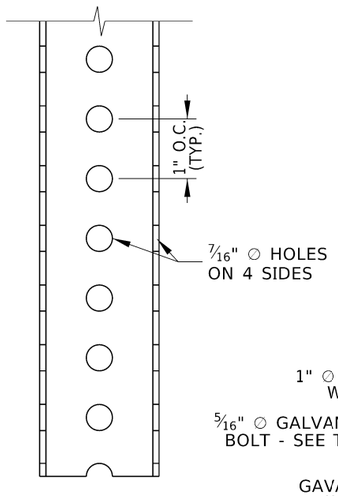
STANDARD DRAWING NO.

616-1

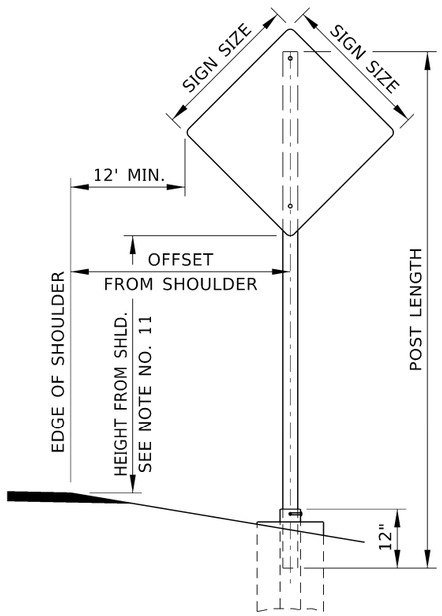
SHEET 1 OF 1



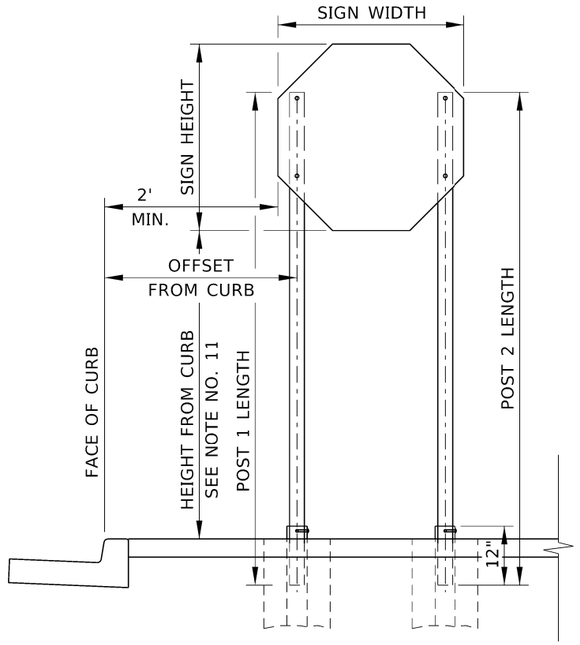
PLAN



ELEVATION

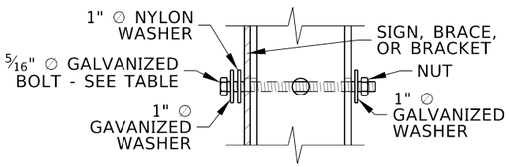


ONE POST

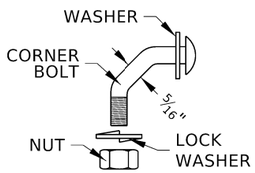


TWO POSTS

SIGN ASSEMBLY MEASUREMENTS



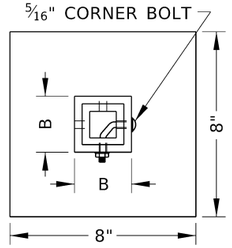
SIGN BOLT



CORNER BOLT

FASTENER DETAILS

SEE NOTE NO. 10



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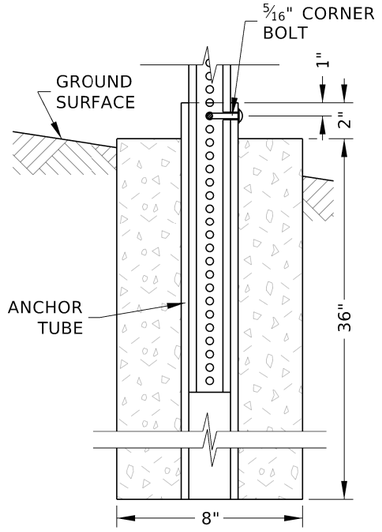
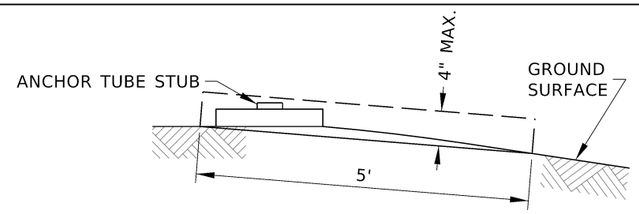


ELEVATION

FOUNDATION

SEE NOTE NOS. 12 & 13



FOUNDATION AND STUB HEIGHT DETAIL

SEE NOTE NO. 15

SIGN POST AND FOUNDATION TABLE										
TYPE E PERFORATED STEEL TUBE POST					FOUNDATION		ANCHOR TUBE			FASTENERS
POST TYPE	PERFORATED STEEL TUBE POST SIZE		POST WEIGHT (LB/FT)	MAXIMUM SIGN LOAD (SFxFT)	SIZE (INxINxIN)	CONCRETE (CY)	B (IN)	GAUGE	POST WEIGHT (LB/FT)	SIGN BOLT LENGTH (IN)
	A (IN)	GAUGE								
E-1	2	12	2.42	43	8x8x36	0.05	2½x2½	7	5.59	2½
E-2	2½	10	4.01	91	8x8x36	0.05	3x3	7	6.87	3

NOTES

1. USE TYPE E - PERFORATED STEEL TUBE POSTS - WITH TYPE B - SHEET ALUMINUM AND TYPE E - HDO PLYWOOD SIGNS.
2. SEE THE TRAFFIC MANUAL TO CALCULATE SIGN LOAD PER POST.
3. SEE PROJECT SIGN SUMMARY FOR SIGN ASSEMBLY DIMENSIONS.
4. USE ONE OR MORE TYPE E - PERFORATED STEEL TUBE POST. DO NOT MIX E-1 AND E-2 POSTS ON THE SAME SIGN ASSEMBLY.
5. POST 1 IS CLOSEST TO THE HIGHWAY, WHETHER INSTALLED ON THE RIGHT OR LEFT SIDE.
6. A BREAKAWAY DEVICE MUST BE INSTALLED IF THREE POSTS ARE USED. REFER TO THE ITD QUALIFIED PRODUCTS LIST FOR BREAKAWAY DEVICES.
7. TYPE E - PERFORATED STEEL TUBE POSTS - DO NOT NEED TO BE SHIELDED BY GUARDRAIL OR BARRIER. WHEN PERFORATED STEEL POSTS ARE INSTALLED BEHIND GUARDRAIL OR BARRIER, ENSURE THE POSTS ARE OUTSIDE OF THE GUARDRAIL OR BARRIER WORKING WIDTH.
8. SIGNS CAN BE MOUNTED BACK-TO-BACK IF THE SHAPE OF STOP, YIELD, OR WARNING SIGNS ARE NOT SHIELDED.
9. SIGNS ARE INSTALLED WITH OR WITHOUT BRACES DEPENDENT ON SIGN SIZE AND APPLICATION.
10. TYPE B - SHEET ALUMINUM - OR TYPE E - HDO PLYWOOD - SIGNS CAN BE AFFIXED TO THE POST OR THROUGH BRACES OR BRACKETS.
11. INSTALL SIGNS AT THE FOLLOWING HEIGHTS:
    A. IF INSTALLED IN A RURAL AREA, 5 FEET ABOVE THE PAVEMENT ELEVATION OR 4 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN.
    B. IF INSTALLED IN THE VICINITY OF A CURB OR IN A BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA WHERE PARKING OR PEDESTRIAN MOVEMENTS ARE LIKELY, 7 FEET ABOVE THE PAVEMENT ELEVATION OR 6 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN. IF INSTALLED LOWER THAN 7 FEET, ENSURE SIGNS DO NOT PROJECT MORE THAN 4 INCHES INTO THE PEDESTRIAN FACILITY.
12. PRECAST FOUNDATION OR CAST FOUNDATION IN PLACE. ENSURE THE BOTTOM OF THE FOUNDATION IS KEPT OPEN TO DRAIN. IF THE ANCHOR TUBE IS PERFORATED, ENSURE THE INSIDE OF THE ANCHOR REMAINS OPEN.
13. IF SOLID BEDROCK IS ENCOUNTERED WITHIN THE FOUNDATION DEPTH, DRILL A 4.5 INCH VERTICAL HOLE AND SOCKET THE ANCHOR TUBE. FILL DRILLED HOLES WITH GROUT, TYPE B, CLASS 1. ENSURE THE INSIDE OF THE ANCHOR TUBE REMAINS OPEN. WHEN INSTALLED IN BEDROCK, ENSURE THE E-1 POST IS EMBEDDED 18 INCHES DEEP AND THE E-2 POST IS EMBEDDED 24 INCHES.
14. WHEN THE SIGN IS INSTALLED ON A BACKSLOPE, ENSURE THE SIGN POST IS AT LEAST 5' HIGHER THAN THE GROUND SURFACE.
15. ENSURE NO PART OF THE FOUNDATION OR SIGN POST STUB PROJECTS MORE THAN 4 IN. ABOVE ANY 5 FT. CHORD ALIGNED PERPENDICULARLY TO THE EDGE OF THE HIGHWAY BETWEEN A POINT ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE OF THE SUPPORT.
16. DRAWING NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER DATE ORIGINAL SIGNED MARCH 1, 2023 ORIGINAL SIGNED 13683 STATE OF IDAHO RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	02-92	JEC	6	05-15	HEB			
2	12-94	HEB	7	12-16	HEB			
3	06-99	HEB	8	02-23	RDL			
4	12-01	NQB						
5	12-13	HEB						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 616-7_0423.dgn

DRAWING DATE: JULY, 1991

IDAHO TRANSPORTATION DEPARTMENT

YOUR Safety→YOUR Mobility→YOUR Economic Opportunity

BOISE IDAHO

ORIGINAL SIGNED BY: MONICA CRIDER

HIGHWAY DESIGN ENGINEER

STANDARD DRAWING

STEEL SIGN POST AND FOUNDATION TYPE E - PERFORATED STEEL TUBE POST

ENGLISH

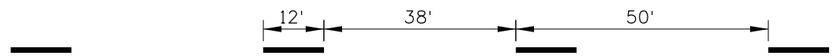
STANDARD DRAWING NO. 616-7

SHEET 1 OF 1

LONGITUDINAL PAVEMENT MARKING LINES

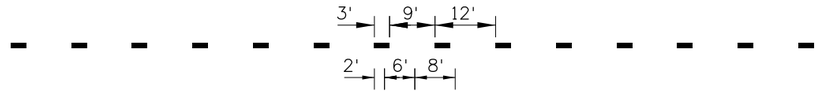
SOLID LINE
COLOR: WHITE OR YELLOW
WIDTH: NORMAL (4" TO 6") OR WIDE (2X NORMAL WIDTH)

DOUBLE LINE
COLOR: WHITE OR YELLOW
WIDTH: NORMAL (4" TO 6" LINE, 3" GAP, 4" TO 6" LINE)



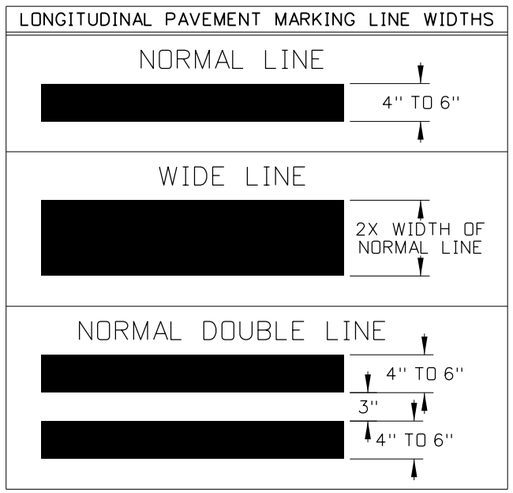
BROKEN LINE
COLOR: WHITE OR YELLOW
WIDTH: NORMAL (4" TO 6")

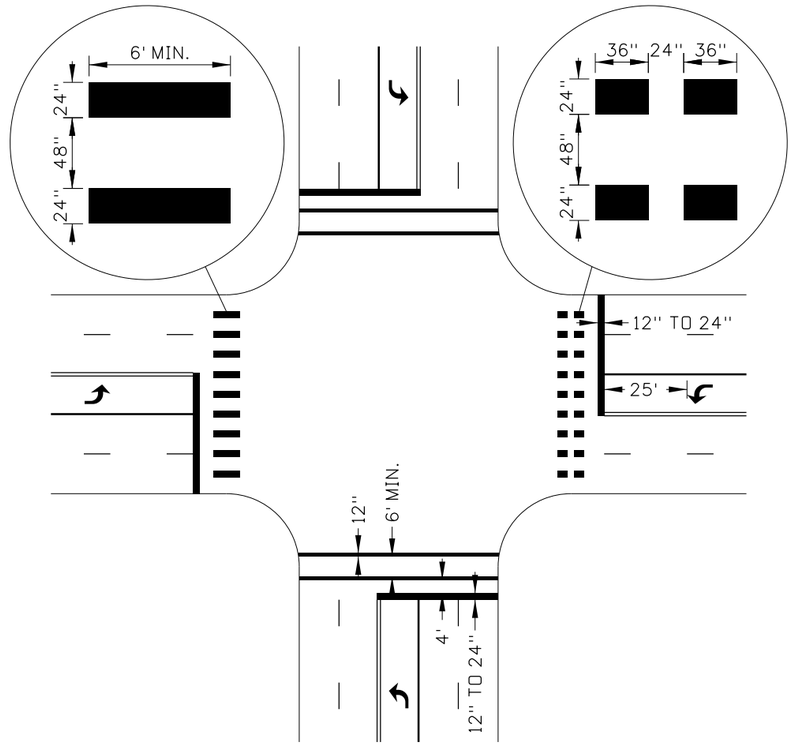
COMBINATION SOLID AND BROKEN LINE
COLOR: YELLOW
WIDTH: NORMAL (4" TO 6" LINE, 3" GAP, 4" TO 6" LINE)



DOTTED LINE
3' LINE SEGMENT, 9' GAP OR 2' LINE SEGMENT, 6' GAP (SEE NOTE NO. 2)
COLOR: WHITE OR YELLOW
WIDTH: NORMAL (4" TO 6") OR WIDE (2X NORMAL WIDTH)

LONGITUDINAL PAVEMENT MARKING LINE WIDTHS





EXAMPLE STOP LINE AND CROSSWALK DETAIL

NOTES

1. USE WHITE AND YELLOW PAVEMENT MARKINGS AS FOLLOWS:
   WHITE:
   A. THE SEPARATION OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
   B. THE RIGHT-HAND EDGE OF THE HIGHWAY.
   YELLOW:
   A. THE SEPARATION OF TRAFFIC TRAVELING IN OPPOSITE DIRECTIONS.
   B. THE LEFT-HAND EDGE DIVIDED HIGHWAYS, ONE-WAY STREETS, OR RAMPS.
   C. TWO-WAY LEFT-TURN LANES.
2. USE LONGITUDINAL PAVEMENT MARKINGS AS FOLLOWS:
   A. USE SOLID LINES TO INDICATE THE LEFT OR RIGHT EDGE OF TRAVEL WAY OR TO DISCOURAGE LANE CHANGING.
   B. USE DOUBLE LINES TO PROHIBIT PASSING OR LANE CHANGING.
   C. USE BROKEN LINES TO INDICATE PASSING OR LANE CHANGING ARE PERMITTED. USE THE 12' LINE SEGMENT, 38' GAP PATTERN FOR ALL SPEEDS.
   D. USE COMBINATION SOLID AND BROKEN LINES TO PROHIBIT PASSING IN ONE DIRECTION WHILE PERMITTING PASSING IN THE OPPOSITE DIRECTION OR TO INDICATE A TWO-WAY LEFT-TURN LANE.
   E. USE DOTTED LINES AS FOLLOWS:
      3' LINE SEGMENT, 9' GAP:
      I. TO SEPARATE A THROUGH LANE AND A LANE THAT BECOMES A MANDATORY EXIT OR TURN LANE (DROPPED LANE).
      II. TO SEPARATE THROUGH LANES AND TURN LANES OR RAMPS.
      III. TO SEPARATE A THROUGH LANE AND AN AUXILIARY LANE 2 MILES OR LESS IN LENGTH BETWEEN FREEWAY ENTRANCE RAMP AND EXIT RAMPS OR 1 MILE OR LESS IN LENGTH BETWEEN INTERSECTIONS.
      2' LINE SEGMENT, 6' GAP:
      I. AS A LANE LINE EXTENSION THROUGH AN INTERSECTION.
3. USE 12' VEHICULAR TRAVEL LANES UNLESS OTHERWISE INDICATED. MEASURE LANE WIDTHS FROM THE CENTER OF LINE TO THE CENTER OF LINE.
4. THE PAVEMENT MARKING APPLICATION EXAMPLES PRESENTED SHOW COMMON APPLICATION. MODIFY AS NEEDED TO ACCOMODATE OTHER SITUATIONS.
5. METHODS FOR DETERMINING TURN-LANE LENGTH ARE DESCRIBED IN THE ITD TRAFFIC MANUAL.
6. USE 15W FOR POSTED SPEED LIMITS OF 45 MPH OR GREATER. USE 8W FOR POSTED SPEED LIMITS OF 40 MPH OR LESS. W IS THE OFFSET WIDTH IN FEET.
7. USE DISTANCE L WHEN PRACTICAL. USE THE FOLLOWING EQUATION TO DETERMINE L:
   L = WS
   WHERE:
   W = OFFSET WIDTH IN FEET
   S = POSTED SPEED LIMIT
8. USE LANE-USE ARROWS AND WORD PAVEMENT MARKINGS AS SHOWN. SOME MARKINGS ARE OPTIONAL.
   A. USE TWO OR MORE LANE-USE ARROWS UNLESS THE TURN-LANE LENGTH IS LESS THAN 75 FEET. IF SHORTER THAN 75 FEET, THE DOWNSTREAM ARROW CAN BE OMITTED.
   B. USE TWO-WAY LEFT-TURN ARROW MARKINGS NEAR THE BEGINNING OF A TWO-WAY LEFT-TURN LANE AND EVERY ½ MILE THEREAFTER.
9. BREAK EDGE AND LANE LINES AT INTERSECTIONS WITH MINOR ROADS. CONTINUE EDGE AND LANE LINES THROUGH DRIVEWAY APPROACHES.
10. ON TWO-LANE HIGHWAYS, PAINT THE CENTERLINE IN ONE DIRECTION IN ASCENDING STATION/MILEPOST DIRECTION AS SHOWN.
11. DRAWINGS NOT TO SCALE.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED BY RYAN D. LANCASTER ON MARCH 17, 2020 STATE OF IDAHO 13683 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 630-1_0420.dgn

DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

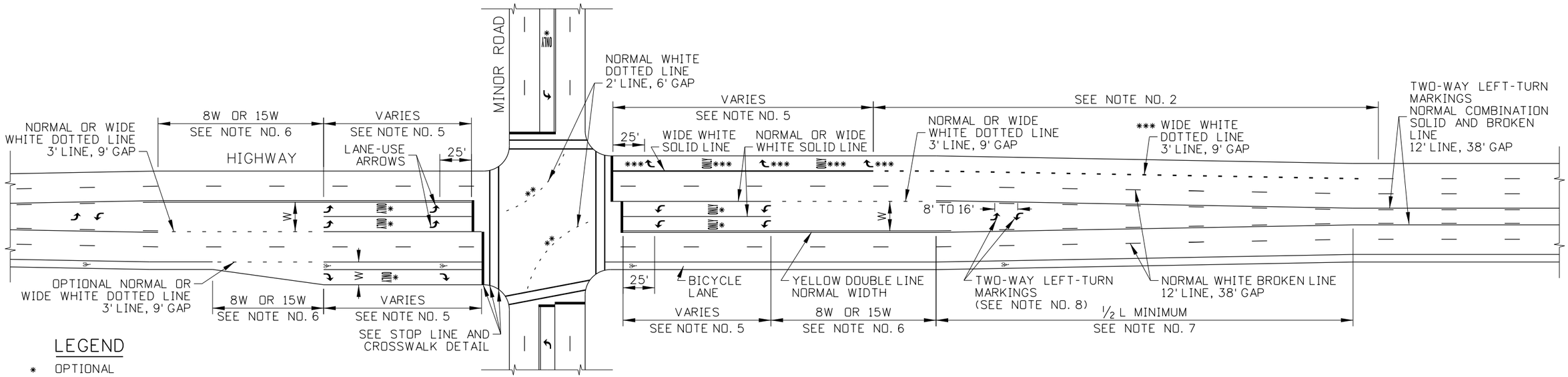
PAVEMENT MARKINGS

English

STANDARD DRAWING NO.

630-1

SHEET 1 OF 4



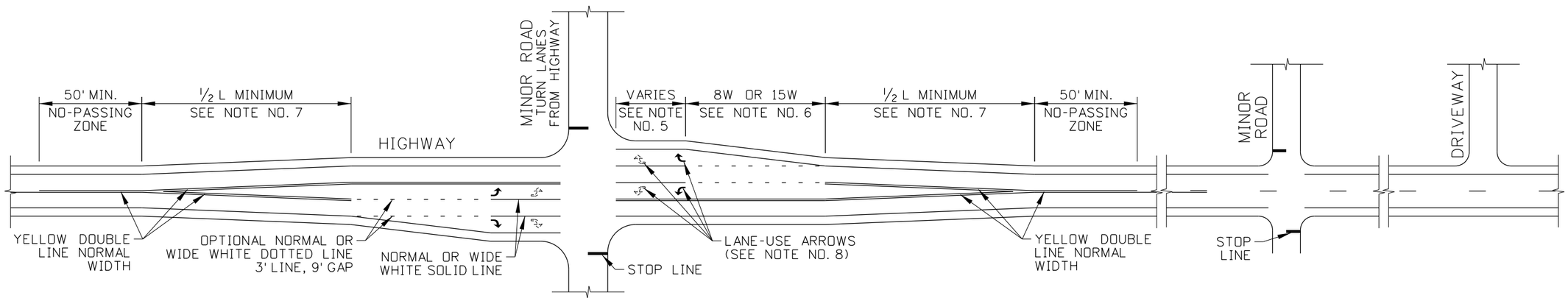
LEGEND

* OPTIONAL

** DOTTED LANE LINE EXTENSION (2' SEGMENT, 6' GAP)

*** REQUIRED WHERE THROUGH LANE BECOMES MANDATORY TURN LANE

EXAMPLE URBAN HIGHWAY PAVEMENT MARKINGS



EXAMPLE RURAL HIGHWAY PAVEMENT MARKINGS

SEE NOTE NO. 9

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER — LICENSED — ORIGINAL SIGNED BY RYAN D. LANCASTER — DATE OF ORIGINAL SIGNATURE MARCH 17, 2020 — 13683 — STATE OF IDAHO — RYAN D. LANCASTER

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 630-1_0420.dgn

DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

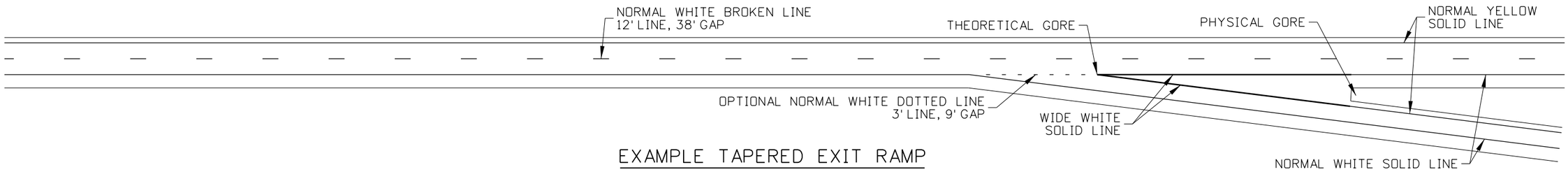
STANDARD DRAWING

PAVEMENT MARKINGS

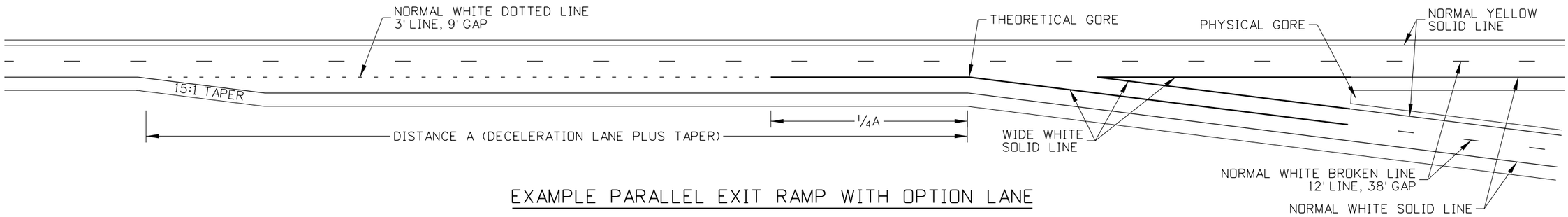
English

STANDARD DRAWING NO.

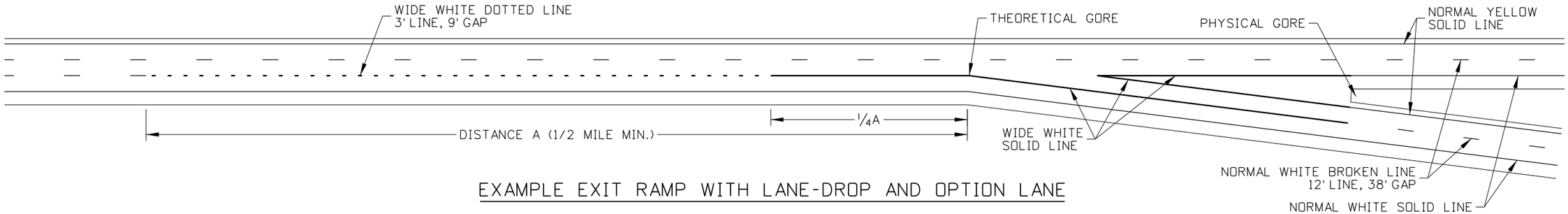
630-1



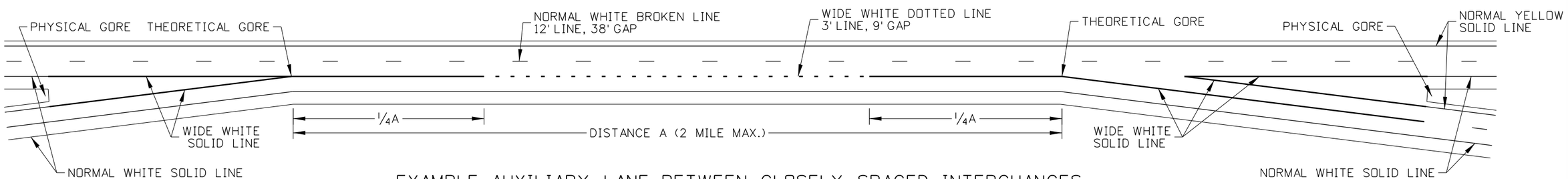
EXAMPLE TAPERED EXIT RAMP



EXAMPLE PARALLEL EXIT RAMP WITH OPTION LANE



EXAMPLE EXIT RAMP WITH LANE-DROP AND OPTION LANE



EXAMPLE AUXILIARY LANE BETWEEN CLOSELY SPACED INTERCHANGES

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER LICENSED ORIGINAL SIGNED RYAN D. LANCASTER STATE OF IDAHO MARCH 17, 2020 13683 RYAN D. LANCASTER

REVISIONS									
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-20	RDL						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 630-1_0420.dgn

DRAWING DATE: DECEMBER, 2016

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN

DESIGN/TRAFFIC SERVICES ENGINEER

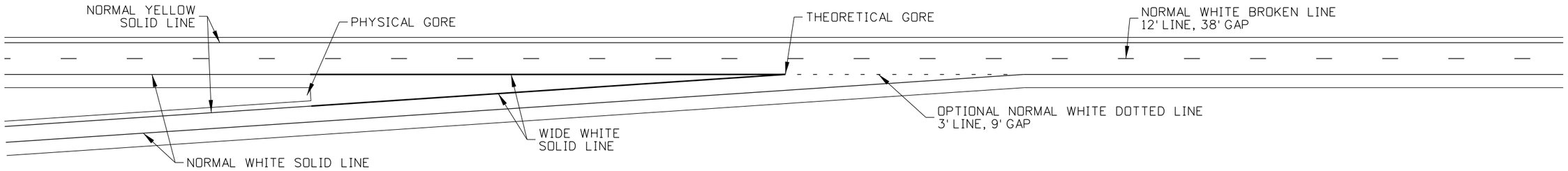
STANDARD DRAWING

PAVEMENT MARKINGS

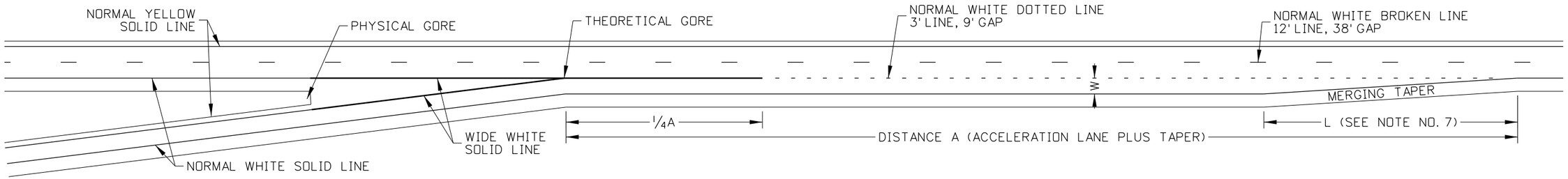
English

STANDARD DRAWING NO.

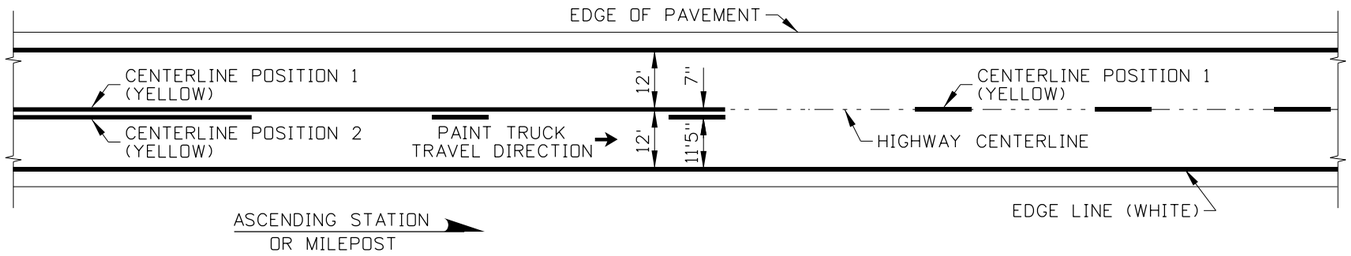
630-1



EXAMPLE TAPERED ENTRANCE RAMP

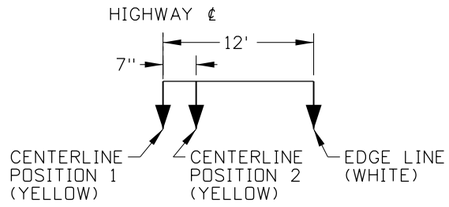


EXAMPLE PARALLEL ENTRANCE RAMP



PAVEMENT MARKINGS
ON TWO-WAY HIGHWAYS

SEE NOTE NO. 10 AND
PAINT TRUCK SETUP DETAIL



PAINT TRUCK SETUP DETAIL

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REVISIONS									
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