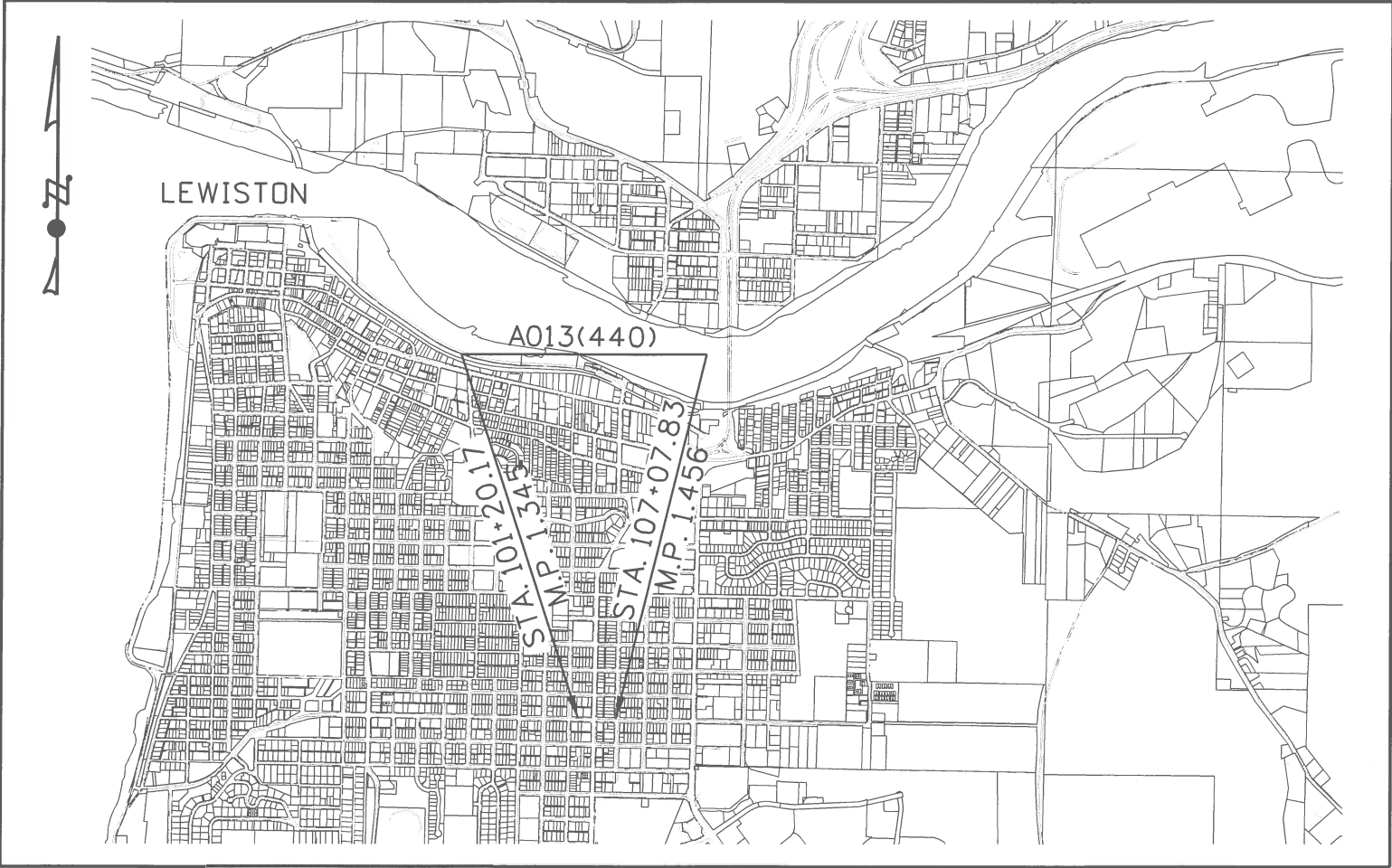
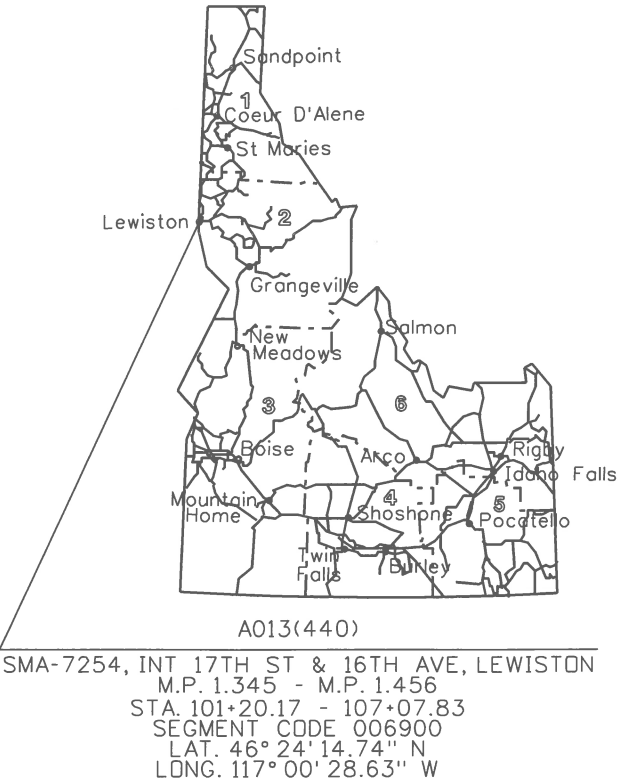


INDEX OF ROADWAY SHEETS	
SHEET NO.	DESCRIPTION
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2-3	STANDARD DRAWING INDEX
4	OVERVIEW/SURVEY CONTROL
5	OVERVIEW/INLET PROTECTION
6	PROJECT CLEARANCE SUMMARY
7-8	TYPICAL SECTION
9	ROADWAY SUMMARY
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17	TRAFFIC SIGNAL MATERIALS LIST
18	TRAFFIC SIGNAL PLAN
19	PHASING AND CONDUIT PLAN
20	SIGNAL FIELD WIRING DIAGRAM
21	VIDEO DETECTION FIELD WIRING DIAGRAM
22	SIGNAL HEAD AND SIGN MOUNTING DETAILS
23	SIGN DETAILS
24	STANDARD MAST ARM SIGNAL POLES
25	MAIN SHAFT TERMINAL COMPARTMENT
26	DUAL CHANNEL DETECTOR AND CALL BACK LIGHT
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30-32	TRAFFIC CONTROL PLAN

IDAHO
TRANSPORTATION DEPARTMENT
PLAN AND PROFILE OF PROPOSED
SMA-7254, INT 17TH ST & 16TH AVE, LEWISTON
FEDERAL AID PROJECT NO. A013(440)
KEY NO.13440
NEZ PERCE COUNTY
NOVEMBER 2015



DESIGN DESIGNATION

NORTH		SOUTH	
ADT 2019	9,010	ADT 2019	11,390
ADT 2041	10,110	ADT 2041	13,730
DHV 2019	730	DHV 2019	920
DHV 2041	810	DHV 2041	1,100
D	60/40%	D	60/40%
V	25 MPH	V	25 MPH
TRUCKS:		TRUCKS:	
ADT 2019	185	ADT 2019	230
ADT 2041	205	ADT 2041	275
DHV 2019	40	DHV 2019	50
DHV 2041	45	DHV 2041	55

WEST		EAST	
ADT 2019	12,170	ADT 2019	8,210
ADT 2041	14,560	ADT 2041	9,550
DHV 2019	980	DHV 2019	660
DHV 2041	1,170	DHV 2041	770
D	60/40%	D	60/40%
V	25 MPH	V	25 MPH
TRUCKS:		TRUCKS:	
ADT 2019	245	ADT 2019	165
ADT 2041	295	ADT 2041	195
DHV 2019	50	DHV 2019	35
DHV 2041	60	DHV 2041	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
13440_titl_001a.sht
DRAWING DATE:
November 2015

IDAHO
TRANSPORTATION
DEPARTMENT
DISTRICT 2

PROJECT NO.
A013(440)

TITLE SHEET
SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

English
COUNTY
Nez Perce
KEY NUMBER
13440
SHEET 1 OF 32

David B. Kusti
Approved for Advertising
12-13-18
Date Approved

STANDARD DRAWING LIST
JUNE, 2015

DRAWING NUMBER	DRAWING NAME (additional required drawings in parentheses)	REVISION DATE
☐ A-1	Freeway Grading	05-15
☐ A-2	Rural Principal Arterial Grading	05-15
☐ A-3	Rural Minor Arterial Grading	05-15
☐ A-4	Rural Major Collector Grading	05-15
☐ A-5	Superelevation	03-05
☐ A-6	Typical Roadside Slope Treatment	07-09
☐ A-7	Median Crossovers	03-05
☐ A-8	Standard Template	05-13
☒ A-9	ITD Roadway Nomenclature Location & Examples	10-10
☐ A-10	Parabolic Crown	10-10
☐ C-1-A-1	Urban Concrete Pavement Details	10-11
☐ C-1-A-2	Manhole Collars (PCC Pavement Roundouts)(requires E-9)	10-11
☐ C-1-B	Doweled Concrete Pavement Details	05-13
☐ C-1-C	Ramp Gore Details (requires C-1-B)	10-11
☐ C-2-A	Shoulder Rumble Strips and Rumble Stripes	05-14
☐ C-2-C	Centerline Rumble Strips For Two-Way Roadways	09-11
☐ D-1-A	Runoff Drain or Embankment Protector	10-10
☐ D-1-B	Runoff Drain or Embankment Protector with Slotted Drain (requires D-5 & E-6-H)	01-13
☐ D-2-A	Culvert Inlet Headwall	12-12
☐ D-3-C	Metal Safety Slope Aprons	12-12
☐ D-4-A	Watertight Coupling Bands for Corrugated Metal Pipes	03-05
☐ D-4-B	12" Thru 30" Slotted Drain (requires D-4-A)	12-12
☐ D-4-C	See Standard Drawing 606-2	N/A
☐ D-5	Galvanized Steel Aprons for Pipe Culverts	03-05
☐ D-5-A	Concrete Aprons for Pipe Culverts	12-12
☐ D-6	Precast Concrete Headgate	03-05
☐ D-7	Concrete Headwall for Twin Pipe Culverts	03-05
☐ D-8	Concrete Headwall for Single Pipe Culvert	03-05
☐ D-9	Concrete Headwall for Arch Pipe Culvert	03-05
☐ D-10	Concrete Headwall for Siphons	12-05
☒ D-12	Pipe & Conduit Installation	05-14
☒ D-13	Conduit Installation for Existing Roadways & Approaches (requires D-12)	01-05
☒ E-6-A	Inlets & Catch Basins Types 1, 2, & 3	11-08
☐ E-6-B	Inlets & Catch Basins Types 1A, 2A, & 3A	11-08
☐ E-6-C	Inlets & Catch Basins Types 4 & 5	11-08
☐ E-6-D	Catch Basin Type 6	11-08
☐ E-6-E	Catch Basin Type 7	11-08
☐ E-6-F	Inlet Type 8	11-08
☐ E-6-G	Inlet Median Drain Type 9	10-10
☐ E-6-H	Catch Basin Type 10 (requires D-1-B)	01-13
☐ E-7	Manhole Type A (requires E-9)	10-10
☐ E-7-C	Manholes Type C & D (requires E-9)	05-07
☐ E-8	Manhole Type B (requires E-9)	05-07
☐ E-9	Standard Manhole Frame, Cover, & Concrete Collar	10-10
☐ F-1-A	Cattle Guard Type A	12-12
☐ F-1-B	Cattle Guard Type B	12-05
☐ F-1-C	Cattle Guard Type C, Painted Cattle Guard	12-12
☐ F-2-A	Standard Barbed, Woven, Mesh, Combination Wire Fences, & Fencing Details	12-12
☐ F-2-B	High Tension 8 Wire Fence	12-12
☐ F-2-C	Gate Types 1, 1A, & 2 (requires F-2-A)	01-13
☐ F-2-D	Chain Link Fence - Fence Type 4	01-13
☐ F-2-E	Wildlife Fence - Fence Type 9	10-05

DRAWING NUMBER	DRAWING NAME (additional required drawings in parentheses)	REVISION DATE
☐ G-1-A-1	Guardrail Slope Treatment Types A & B	08-11
☐ G-1-A-2	W-Beam Guardrail Installation Assemblies	12-10
☐ G-1-A-3	W-Beam Guardrail Posts, Blockouts, & Hardware	12-10
☐ G-1-A-4	Guardrail Bolting Hardware for W-Beam & Thrie Beam	04-06
☐ G-1-A-5	Thrie Beam Guardrail	10-10
☐ G-1-B	Guardrail Terminals Type 1 & 1-A (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-C-1	Guardrail Terminal Type 2-A, With 10:1 or Flatter Foreslope (requires G-1-A-1 through G-1-A-4)	12-10
☐ G-1-C-2	Guardrail Terminal Type 2-B, for Less Than 10 : 1 to 6 : 1 Foreslope (requires G-1-A-1 through G-1-A-4)	12-10
☐ G-1-E	Guardrail Terminal Type 3 (requires G-1-A-1 through G-1-A-5, & 615-1)	08-11
☐ G-1-F-1	Guardrail Terminal Type 5 Alternate "A" (requires G-1-A-1 through G-1-A-4)	05-06
☐ G-1-F-2	Guardrail Terminal Type 5 Alternate "B" (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-G	Guardrail Terminal Type 6 Options 1, 2, & 3 (Bullnose Guardrail System) (requires G-1-A-1 through G-1-A-5)	10-10
☐ G-1-H	Guardrail Terminals Type 7 & 8 (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-I	Guardrail Terminal Type 11 (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-J	Guardrail Terminal Types 4-A & 4-B (requires G-1-A-1 through G-1-A-4 & R-2 when needed)	05-06
☐ G-1-K	Guardrail Terminal Type 9 (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-L	Guardrail Installation for Minor Structures & Large Culverts (requires G-1-A-1 through G-1-A-4)	12-10
☐ G-1-M	Guardrail Terminal Type 10 (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-1-N	Guardrail Terminal Type 12 (requires G-1-A-1 through G-1-A-4)	10-10
☐ G-2-A	Concrete Barrier Terminals	12-14
☐ G-2-A-1	20' Concrete Barrier	05-14
☐ G-2-A-2	10' Concrete Barrier	05-14
☐ G-2-C	Concrete Parapet to Thrie Beam Guardrail Connector (requires G-1-E)	11-13
☐ G-2-D	Concrete Barrier to Thrie Beam Guardrail Connector (requires G-1-E)	11-13
☐ G-2-H	Special Cast-in-place Concrete Barrier (requires G-2-A-1 or G-2-A-2)	05-13
☐ G-2-I-1	Toll Concrete Median Barrier	05-13
☐ G-2-I-2	Toll to Standard Concrete Barrier Transition	05-13
☐ G-3-A	See Standard Drawing 617-1	N/A
☐ G-3-B	See Standard Drawing 634-2	N/A
☐ H-1-A	See Standard Drawing 615-1	N/A
☐ H-2-A	See Standard Drawing 614-3	N/A
☒ H-2-C	Pedestrian Pushbutton Placement	06-14
☐ H-3	See Standard Drawing 614-2	N/A
☐ H-4-A	Rural Approaches (Private, Commercial, & Public)	06-07
☐ H-4-B	Mailbox Turnout & Installation (requires H-4-A)	01-13
☐ H-5-A	See Standard Drawing 634-1	N/A
☐ H-5-B	See Standard Drawing 634-2	N/A

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REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT  KELLER associates
NO.	DATE	BY	DESCRIPTION			
				DESIGN CHECKED N. Cleaver		
				DETAILED M. Carlisle	CADD FILE NAME 13440_std_001.sht	
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015	

PROJECT NO.

A013(440)

STANDARD DRAWING LIST (1 of 2)

SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

English

COUNTY
Nez Perce
KEY NUMBER
13440

SHEET 2 OF 32



STANDARD DRAWING LIST
JUNE, 2015

DRAWING NUMBER	DRAWING NAME (additional required drawings in parentheses)	REVISION DATE
☐ 606-2	Edge Drains	05-15
☒ 614-1	Sidewalks	05-15
☒ 614-2	Driveways	05-15
☒ 614-3	Curb Romsps	05-15
☒ 615-1	Curb and Gutter	05-15
☐ 617-1	Delineators	05-15
☐ 617-2	Mileposts	05-15
☐ 628-1	Snow Poles	05-15
☐ 634-1	Mailboxes	05-15
☐ 634-2	Mailbox Snow Shield	05-15
☐ I-2-A	Monument Markers & Witness Posts (requires 617-1)	12-12
☐ I-2-B	Street Monument Marker & Installation (requires I-2-A)	12-12
☐ I-5	Loop Detectors - 10 ft/sec ² Deceleration Rate	07-10
☒ I-6-A	Most Arm Traffic Signal Poles (requires H-2-C)	04-14
☒ I-6-B	Frangible Cost Base Traffic Signal Poles (requires H-2-C)	04-14
☒ I-7-A-1	Signal Cabinet & Service Pedestal Foundation Details	06-14
☐ I-7-A-2	Signal Cabinet Foundation Detail	06-14
☐ I-7-B-1	Electronic Cabinet Foundation Detail	04-14
☐ I-7-B-2	Electronic Cabinet & Service Pedestal Foundation Detail	04-14
☒ I-7-C-1	Most Arm Signal Pole, Lighting Pole and Pedestrian Pole Foundation Details (req. I-7-C-2)	04-14
☐ I-7-C-2	Most Arm Signal Pole, Lighting Pole and Pedestrian Pole Foundation Details (req. I-7-C-1)	11-14
☐ I-8-A	Breakaway Steel Sign Post Installation Type A	05-15
☐ I-8-D	Breakaway Steel Sign Post Installation Type B	05-15
☐ I-8-E	Breakaway Sign Posts Type D	12-13
☒ I-8-F	Breakaway Sign Posts Type E	05-15
☐ I-9-A-1	B Post and Broce Angle Detail (requires I-9-A-2)	12-13
☐ I-9-A-2	B Post and Broce Angle Detail (requires I-9-A-1)	12-13
☐ I-9-B	Cordinol Route Marker Assemblies (requires I-8-D)	09-10
☐ I-9-C	Route Marker Bracket Details	12-13
☐ I-10-A	Extruded Aluminum Signs	11-14
☐ I-10-B	Exit Number Panels (requires I-10-A)	11-14
☐ I-11-A	Standard Route Markers (requires I-12-F)	12-13
☐ I-11-C	Route Marker Auxiliary Panels (requires I-12-F)	12-13
☒ I-12-A	Standard Regulatory Signs (requires I-12-F)	12-13
☐ I-12-D	Standard Warning Signs (requires I-12-F)	12-13
☒ I-12-F	Punching Schedule for Type "B" or Type "E" Signs	07-14
☐ I-13	Interstate Exit Number Panels	05-15
☐ I-20	See Standard Drawing 617-2	05-15
☒ I-21-A	Standard Pavement Markings for Arterial and Collector Roadways	07-10
☐ I-22	Freeway Pavement Markings	05-15
☐ P-1-A	Temporary Erosion Control Slope Drains (requires D-4-A, D-5, P-1-D & P-1-E)	11-13
☒ P-1-B	Temporary Sediment Control Barriers (requires P-1-D)	02-13
☐ P-1-C	Temporary Sediment Trap (requires P-1-D)	11-13
☒ P-1-D	Temporary Erosion Control Diversion Devices & Site Example	12-12
☐ P-1-E	Temporary Sediment Control Berms, Dikes, and Swales (requires P-1-D)	02-13
☐ P-1-F	Erosion and Sediment Control for Temporary Roads (requires P-1-D)	12-12
☒ P-1-H	Temporary Sediment Control Inlet Protection (requires P-1-D)	02-13
☐ P-2-A	Erosion and Sediment Control Gabions and Retention Structures	02-13
☐ P-2-B	Sediment Control Rock Check Dam Types (requires P-2-A)	02-13
☐ P-2-C	Permanent Erosion Control Slope & Channel Protection (requires P-2-A)	11-14
☐ P-2-D	Chutes and Flumes (requires P-2-A)	10-10
☐ P-2-F	Permanent Erosion Control Culvert Outlet Protection (requires P-2-A)	10-10

DRAWING NUMBER	DRAWING NAME (additional required drawings in parentheses)	REVISION DATE
☐ P-3-A	Sediment Control Box (Cotch Basin)	10-11
☐ P-3-B	Water Pollution Control Sediment & Oil Trap (refer to E-9)	10-11
☐ P-3-D	Water Pollution Control In Street Sediment & Oil Trap (requires E-7-C, refer to E-9)	12-95
☐ P-3-E	Vehicle and Equipment Washdown (requires P-1-D)	12-12
☐ P-4-A	Erosion & Sediment Control Retention Basin	10-10
☐ P-5-A	Petroleum Storage Area	11-13
☒ P-5-B	Temporary Concrete Washout	11-13
☐ R-1-A	Highway - Railroad Grade Crossing Signal Type 1	07-10
☐ R-1-B	Highway - Railroad Grade Crossing Signal Type 2	07-10
☐ R-1-C	Highway - Railroad Grade Crossing Signal Type 3	03-04
☐ R-2	Highway - Railroad Grade Crossing Area	03-04

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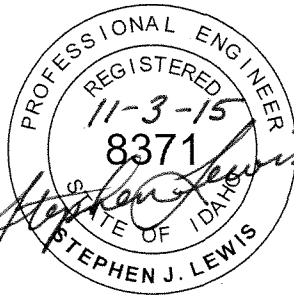
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NO.	DATE	BY	DESCRIPTION	S. Lewis	ARE FOR 11" X 17"
				DESIGN CHECKED N. Cleaver	PRINTS ONLY
				DETAILED M. Carlisle	CADD FILE NAME 13440_std_002.sht
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015

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TRANSPORTATION
DEPARTMENT

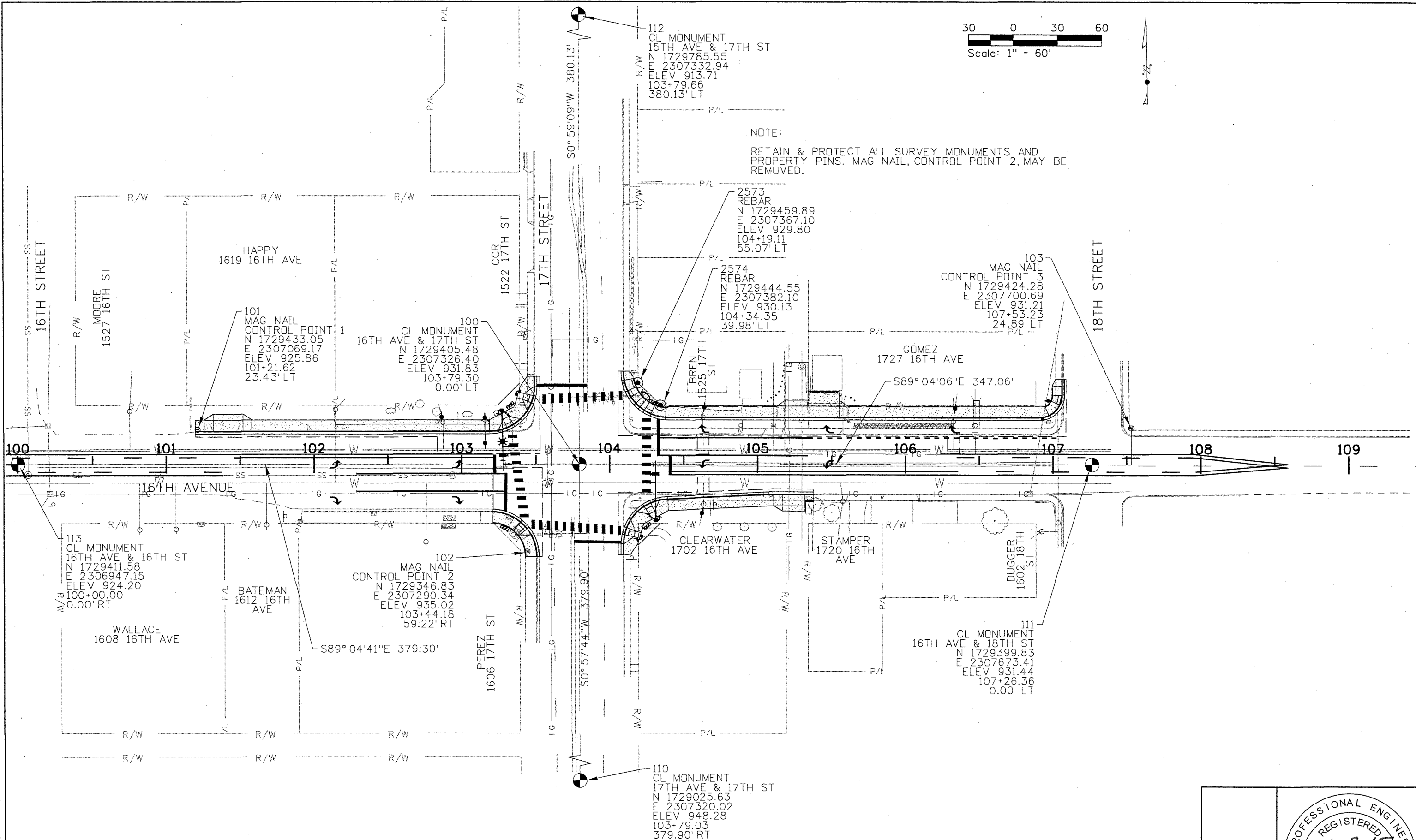


KELLER associates

PROJECT NO.	STANDARD DRAWING LIST (2 of 2)	English
A013(440)	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON	COUNTY Nez Perce KEY NUMBER 13440
		SHEET 3 OF 32



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REVISIONS			
ND.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN	ARE FDR 11" X 17"
PRINTS ONLY	
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DRAWING DATE:	November 2015

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TRANSPORTATION
DEPARTMENT



KELLER associates

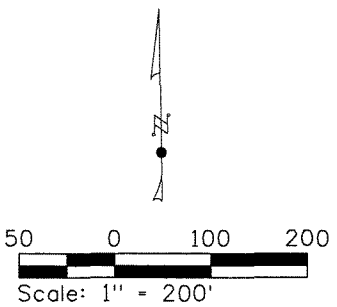
PROJECT NO.	A013(440)
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OVERVIEW/SURVEY CONTROL	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON
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English	
COUNTY	Nez Perce
KEY NUMBER	13440
SHEET	4 DF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS
STATE OF IDAHO

PENTABLE: LTD.tbl
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REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

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DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT



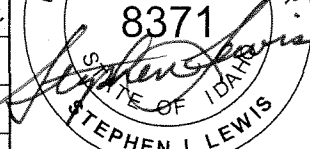
 **KELLER associates**

PROJECT NO.
A013(440)

OVERVIEW/INLET PROTECTION
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 5 OF 32

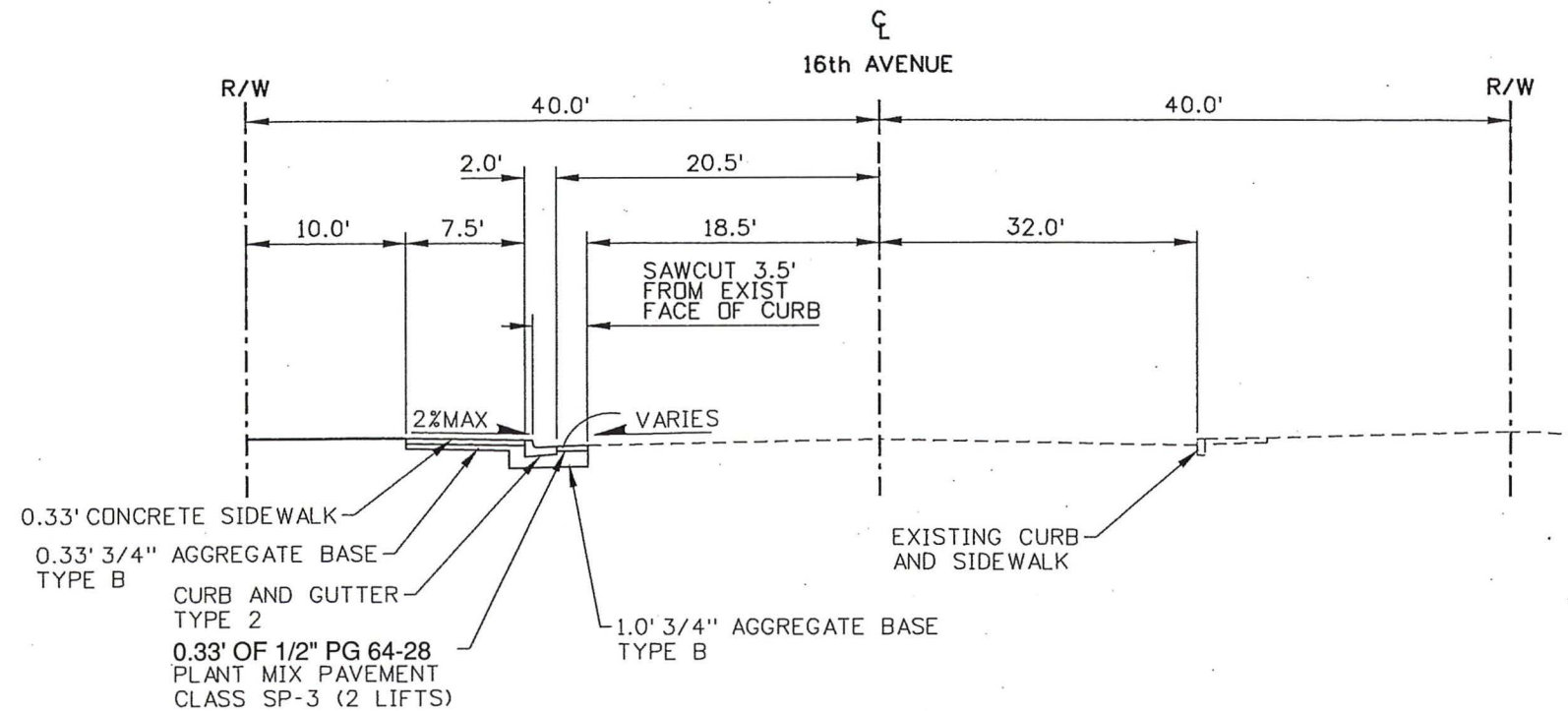
PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS



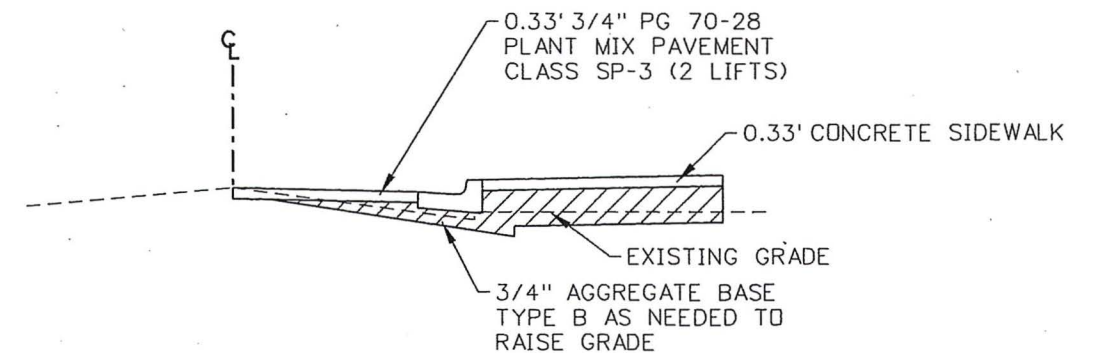
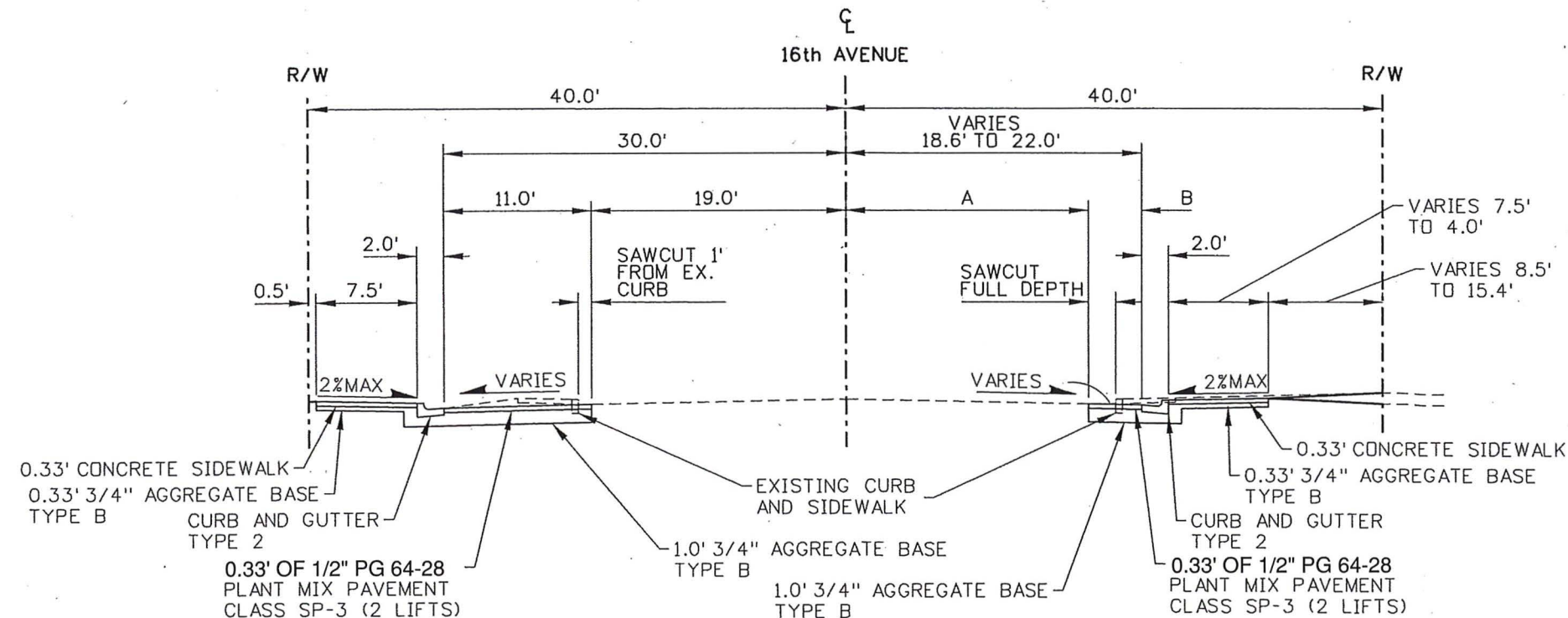
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PROJECT STANDARDS				CLEARANCES		* CLEARED UNDER PROJECT NO.		* APPROVAL DATE		ACCESS CONTROL DETERMINATION FROM FORM ITD-606 (SUBMITTED FOR CHANGE ONLY)			
CONCEPT APPROVAL ☐ AASHTO ☐ 3R ☐ 1R ☒ STATE						A013(440)		11/3/2014		Approved by Assistant Chief Engineer (Dev.): <u>N/A</u> Date _____			
DESIGN EXCEPTIONS: <u>NONE</u>						N/A				PROJECT NO. _____ LOCATION _____ TYPE OF CONTROL LOCAL			
PUBLIC HEARING WAIVER _____						A013(440)		02/19/2015		DESCRIPTION OF CONTROL TYPE: <u>STANDARD APPROACH, NO CHANGE</u>			
PUBLIC HEARING DATE (Latest hearing date held or scheduled for opportunity) _____						N/A							
DESIGN APPROVAL _____						A013(440)		02/19/2015					
RECLAMATION PLAN APPROVAL NO(S) _____						N/A							
AIRPORT _____						N/A							
Land Survey Monument Search and Documentation (I.C.55-1613) _____						A013(440)		03/14/2015					
R/W CERTIFICATE: Issued by ☐ HQ ☒ DISTRICT						A013(440)		01/14/2019					
TRIBAL LANDS: ☐ AGREEMENT REQUIRED ☐ SPECIAL PROVISIONS FOR CONTRACT PROPOSAL						N/A							
BRIDGE PS & E _____						N/A							
ENVIRONMENTAL DECISION: TYPE ☒ CAT-EX ☐ FONSI ☐ ROD						A013(440)		01/20/2015					
ENVIRONMENTAL RE-EVALUATION _____						A013(440)		11/02/2018					
PERMITS								* EXPIRATION DATE					
IDAHO DEPARTMENT OF WATER RESOURCES PERMIT NO(S) _____						N/A							
US ARMY CORPS OF ENGINEERS 404 PERMIT NO(S) _____						N/A							
OTHER _____						N/A							
DEQ SECTION 401 WATER QUALITY CERTIFICATION ☐ YES ☒ NO													
NPDES GENERAL PERMIT/SWPPP REQUIRED: ☐ YES ☒ NO													
THIRD PARTY INSPECTION REQUIRED ☐ YES ☒ NO													
EROSION AND SEDIMENT CONTROL PLAN REQUIRED ☒ YES ☐ NO													
AGREEMENTS (List Appropriate Name)													
LOCAL: CITY _____						N/A							
COUNTY _____						N/A							
HIGHWAY DISTRICT _____						N/A							
ROAD CLOSURE AND MAINTENANCE _____						N/A							
STATE/LOCAL CONSTRUCTION <u>CITY OF LEWISTON</u>						A013(440)		** 12/24/2018					
IRRIGATION DISTRICT(S): Crossing Agreement Required ☐ YES ☐ NO (Signatures Required on either Structure Drawing or Bridge Sheet)													
UTILITIES: List all Utilities shown on plans				RETAIN & PROTECT		* APPROVAL DATES		* AGREEMENT NO.					
Co. <u>Century Link</u>				☒		UTILITY HEARING WAIVER		AGREEMENT					
Co. <u>Avista Utilities</u>				☐		N/A		N/A					
Co. <u>Cable One</u>				☒		11/05/2015		N/A					
Co. <u>City of Lewiston</u>				☒		N/A		N/A					
Co. <u>XO Communications</u>				☒		N/A		N/A					
Co. _____				☐									
Co. _____				☐									
RAILROAD List all Railroads encroached upon						* AGREEMENT							
Co. <u>NONE</u>						* AGREEMENT FOR		EFFECTIVE DATE		NO.			
Co. _____						N/A							
REVISIONS				DESIGNED S. Lewis		SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY		PROJECT NO.		PROJECT CLEARANCE SUMMARY		English	
NO. DATE BY DESCRIPTION				DESIGN CHECKED N. Cleaver		CADD FILE NAME 1344D_pcsa-DDI.sht		A013(440)		SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON		COUNTY Nez Perce	
				DETAILED M. Carlisle		DRAWING DATE: November 2015						KEY NUMBER 13440	
				DRAWING CHECKED S. Lewis								SHEET 6 OF 32	
												PROFESSIONAL ENGINEER REGISTERED 12490 11/15/19 STATE OF IDAHO NATHAN CLEAVER	

TYPICAL SECTION
N.T.S.
Sta. 101+20.17 - Sta. 103+18.84



TYPICAL SECTION
N.T.S.
Sta. 104+38.22 - Sta. 105+37.92



DETAIL
N.T.S.
Sta. 103+21.13 - Sta. 103+54.25

LOCATION	STATION	WIDTH
A	104+38.22 - 104+59.26	19.0'
	104+59.26 - 105+10.74	VARIES 19.0' - 16.6'
B	104+38.22 - 104+59.26	3.0' - 2.0' MIN.
	104+59.26 - 105+37.92	2.0' MIN.

PENTABLE: ITD.tbi 11/2/2015 J:\214023\Project_Development\Plan_Sheets\Roadway\13440_tpyl_001a.sht

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN	ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME	13440_tpyl_001a.sht
DRAWING DATE:	November 2015

IDAHO TRANSPORTATION DEPARTMENT

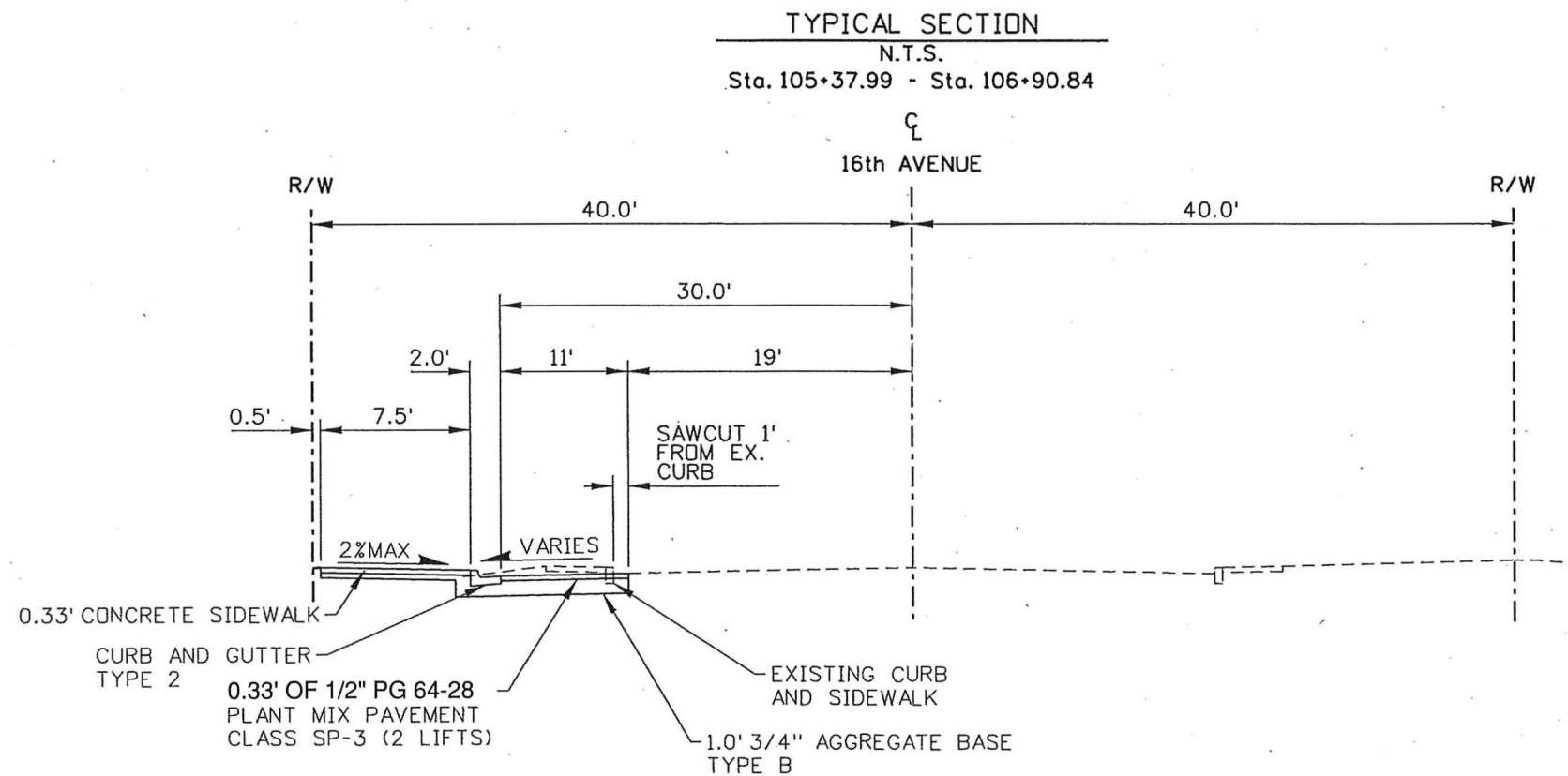
KELLER associates

PROJECT NO.	A013(440)
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TYPICAL SECTION (1 OF 2)	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON
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English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 7 OF 32

PROFESSIONAL ENGINEER
REGISTERED
12490
12-12-2015
STATE OF IDAHO
NATHAN CLEAVER



PLOT FILE: ITD-101 11/2/2015 J:\214023\Project_Development\Plan_Sheets\Roadway\13440_typi_002a.sht

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN	ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME	13440_typi_002a.sht
DRAWING DATE:	November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.
A013(440)

TYPICAL SECTION (2 OF 2)
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 8 OF 32

PROFESSIONAL ENGINEER

REGISTERED

12490

12.12.2015

STATE OF IDAHO

NATHAN CLEAVER

SHEET NUMBER				10	11	12	13	28	29						
STATION - STATION				98+75.90-103+79.30	103+79.30-108+59.13	98+75.90-103+79.30	103+79.30-108+59.13	98+75.90-103+79.30	103+79.30-108+59.13						
ITEM NO.	ITEM	UNIT	TOTAL	DEMO	DEMO	PLAN	PLAN	SIGNING & PAV MARKING	SIGNING & PAV MARKING						
201-010A	CLEARING & GRUBBING	LS	1												
203-005A	REM OF OBSTRUCTIONS	LS	1												
203-015A	REM OF BITUMINOUS SURF	SY	477	334	143										
203-060A	REM OF CONC SIDEWALK	SY	404	120	284										
203-070A	REM OF CURB & GUTTER	FT	844	309	535										
205-005A	EXCAVATION	CY	325												
212-095A	INLET PROTECTION	EACH	8												
303-022A	3/4" AGGR TY B FOR BASE	TON	500												
405-325A	SUPERPAVE HMA PAV INCL ASPH&ADD CL SP-3	TON	180												
605-500A	CATCH BASIN TY 1	EACH	1				1								
614-015A	SIDEWALK	SY	439			163	276								
614-020A	DRIVEWAY	SY	148			48	100								
614-025A	CURB RAMP	SY	102			48	54								
615-492A	CURB & GUTTER TY 2	FT	786			299	487								
616-010A	SIGN TY B	SF	33.3												
616-050A	BRKAWY STL SIGN POST TY E	LB	177.1												
616-070A	BRKAWY STL SIGN POST INST TY E	EACH	5												
626-010A	RENT CONST SIGN CL B	SF	336												
626-040A	RENT CONST BARR CL B TY III	EACH	16												
626-050A	RENT DRUM CL B	EACH	10												
626-105A	TRAF CNTRL MAINTENANCE	MNHR	200												
626-120A	FLAGGING	HR	80												
626-135A	RENT PORT TUBULAR MARKERS	EACH	20												
656-005A	TRAF SIGNAL INSTALLATION	LS	1												
S105-05A	DIRECTED SURVEYING (2-Man Survey Crew)	HR	20												
S105-05B	DIRECTED SURVEYING (Office Computations)	HR	8												
S105-10A	SURVEY	LS	1												
S203-20A	OBLITERATION OF PAV MARKINGS	SF	447					233	214						
S203-45A	REM OF EXISTING SIGNS	EACH	4	1	3										
S610-05A	REM & RESET FENCE	FT	75		75										
S626-35A	NIGHT WORK LIGHTING	LS	1												
S656-10A	MULTIPLE APPROACH VIDEO DETECTION SYSTEM	LS	1												
S900-50A	CONTINGENCY AMOUNT (WATER POLLUTION AND EROSION CONTROL)	CA	1												
S900-60A	PAV MARKING WATERBORNE	FT	2853					1543	1310						
S900-62A	PAV MARKING THERMOPLASTIC	SF	893					451	442						
S901-05A	SP RELOCATE PRIVATE SIGN	EACH	1	1											
S901-05B	SP REM FIRE HYDRANT	EACH	1	1											
S901-05C	SP REM & RESET WATER METER	EACH	4	1	3										
S901-05D	SP FIRE HYDRANT	EACH	1			1									
S904-05A	SP EMERGENCY VEHICLE PRE-EMPTION SYSTEM	LS	1												
S904-05B	SP REM & RESET PRESSURIZED IRRIGATION SYSTEM	LS	1	1											
S911-05A	SP 4" SLOTTED DRAIN	FT	20				20								
Z629-05A	MOBILIZATION	LS	1												

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	
DETAILED	CADD FILE NAME 13440_rsum_001.sht
DRAWING CHECKED	DRAWING DATE: November 2015

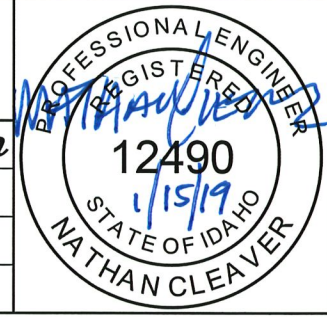
IDAHO TRANSPORTATION DEPARTMENT

KELLER associates

PROJECT NO.	ROADWAY SUMMARY
A013(440)	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

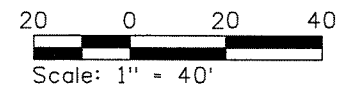
English

COUNTY	Nez Perce
KEY NUMBER	13440
SHEET	9 OF 32



Notes:

- Any Excavation that May be Required After Removal of Concrete Sidewalk will be Incidental to 203-060A.
- Sawcut a Neat Edge 2' from Edges of Proposed Construction as Shown in Plans.
- See Sheet 5 for Inlet Protection Locations.
- Existing Fire Hydrant has Lead Joints. See SP for Details



Light Pole Removed by
Avista at Company
Expense

(203-005A)
Signal Pole

(S901-05B)
See Note 4

(S901-05A)
(S904-05B)

(S203-45A)

(203-015A)

(203-070A)

(S901-05C)

(203-015A)

(203-070A)

(203-060A)

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

Jct. Boxes

(203-005A)

- (203-005A) Rem of Obstructions
Signal Pole
103+39.61 Lt
Jct. Boxes
103+31.55 Rt
103+37.36 Rt.
- (203-015A) Rem of Bituminous
Surf
196 S.Y., 101+20.17 Lt to
103+52.83 Lt
138 S.Y., 103+21.13 Rt to
103+54.25 Rt
- (203-060A) Rem of Conc
Sidewalk
87 S.Y., 102+19.77 Lt to
103+48.83 Lt
33 S.Y., 103+20.92 Rt to
103+51.25 Rt
- (203-070A) Rem of Curb & Gutter
262 Ft., 101+20.17 Lt to
103+49.84 Lt
47 Ft., 103+20.92 Rt to
103+51.25 Rt
- (S203-45A) Rem of Existing Signs
1 Ea., 103+18.56 Lt
- (S901-05A) SP Relocate Private Sign
1 Ea., 102+97.76 Lt
- (S901-05B) SP Rem Fire Hydrant
1 Ea., 103+34.48 Lt
- (S901-05C) SP Rem & Reset Water
Meter
1 Ea., 102+87.51 Lt (1" WM)
- (S904-05B) SP Rem & Reset Pressure
Irrigation System
1 LS., 102+84.50 Lt

BEGIN CONSTRUCTION
Sta. 98+75.90
N. 1729412.33
E. 2306823.05

BEGIN PROJECT
Sta. 101+20.17
N. 1729409.65
E. 2307067.31

Match Line Sta. 103+79.30

17th Street

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 13440_plan_001a.sht
DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.
A013(440)

DEMOLITION PLAN (1 OF 2)
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 10 OF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS

PENTABLE: ITD.tbl
11/2/2015 J:\214\023\Project_Development\Plan_Sheets\Roadway\13440_plan_001a.sht

Notes:

- Any Excavation that May be Required After Removal of Concrete Sidewalk will be Incident to 203-060A.
- Sowcut o Neot Edge 2' from Edges of Proposed Construction as Shown in Plans.
- See Sheet 5 for Inlet Protection Locations.

20 0 20 40
Scale: 1" = 40'

Match Line Sta. 103+79.30

17TH STREET

16TH AVENUE

END CONSTRUCTION

Sta. 108+59.13
N. 1729397.07
E. 2307806.16

END PROJECT

Sta. 107+07.83
N. 1729400.13
E. 2307654.89

(203-005A) Rem of Obstructions
Signal Pole
104+20.28 Lt
Conc. Dwy
105+35.02 Lt to
105+57.13 Lt
Ped. Pole
103+14.60 Lt
Jct. Box
103+15.24 Rt

(203-015A) Rem of Bituminous
Surf
87 S.Y., 104+05.79 Lt to
107+08.83 Lt
56 S.Y., 104+05.62 Rt to
105+37.92 Rt

(203-060A) Rem of Conc
Sidewalk
196 S.Y., 104+09.79 Lt to
107+05.83 Lt
8 S.Y., 106+46.36 Lt to
106+50.29 Lt
80 S.Y., 104+09.62 Rt to
105+37.92 Rt

(203-070A) Rem of Curb & Gutter
369 Ft., 104+09.79 Lt to
107+05.83 Lt
166 Ft., 104+09.62 Rt to
105+37.92 Rt

(S203-45A) Removal of Existing Signs
1 Eo., 104+89.80 Lt
1 Eo., 106+97.57 Lt
1 Eo., 104+70 Rt

(S610-05A) Rem & Reset Fence
75 Ft., 104+34.25 Lt to
104+89.55 Lt

(S901-05C) SP Rem & Reset Water
Meter
1 Eo., 104+58.92 Lt (1" WM)
1 Eo., 104+63.95 Rt (1" WM)
1 Eo., 106+32.75 Lt (1" WM)

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED

S. Lewis

DESIGN CHECKED

N. Cleaver

DETAILED

M. Carlisle

DRAWING CHECKED

S. Lewis

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME
13440_plan_002a.sht

DRAWING DATE:
November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.

A013(440)

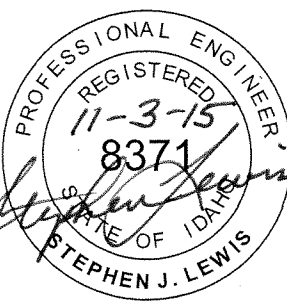
DEMOLITION PLAN (2 OF 2)

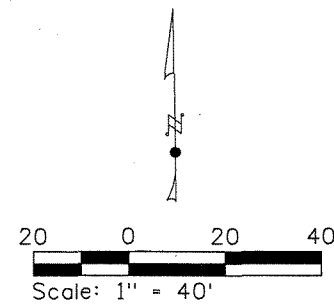
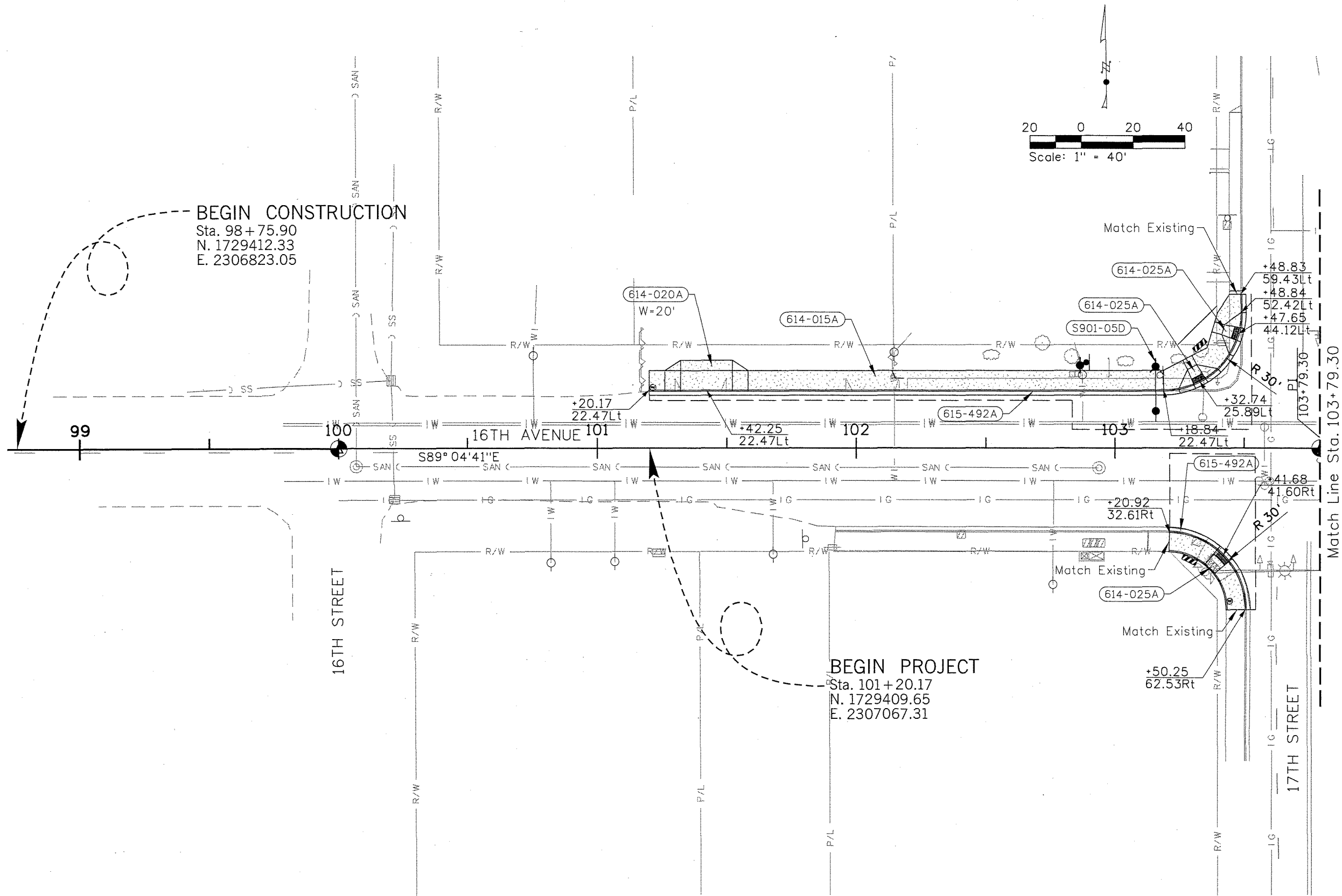
SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

English

COUNTY
Nez Perce
KEY NUMBER
13440

SHEET 11 OF 32





- (614-015A) Sidewalk (Concrete 4")
163 S.Y., 101+20.17 Lt to
103+48.83 Lt
- (614-020A) Driveway (Type 9)
48 S.Y., 101+26.25 Lt to
101+58.25 Lt
- (614-025A) Curb Ramp
7 S.Y., 103+32.74 Lt
7 S.Y., 103+47.65 Lt
34 S.Y., 103+41.68 Rt
- (615-492A) Curb & Gutter Ty 2
253 Ft., 101+20.17 Lt to
103+48.83 Lt
46 Ft., 103+20.92 Rt to
103+50.25 Rt
- (S901-05D) SP Fire Hydrant
1 Ea., 103+15.75 Lt

Match Line Sta. 103+79.30

16TH STREET

17TH STREET

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 13440_plan_003a.sht
DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.
A013(440)

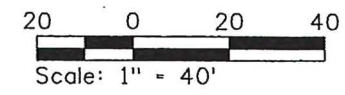
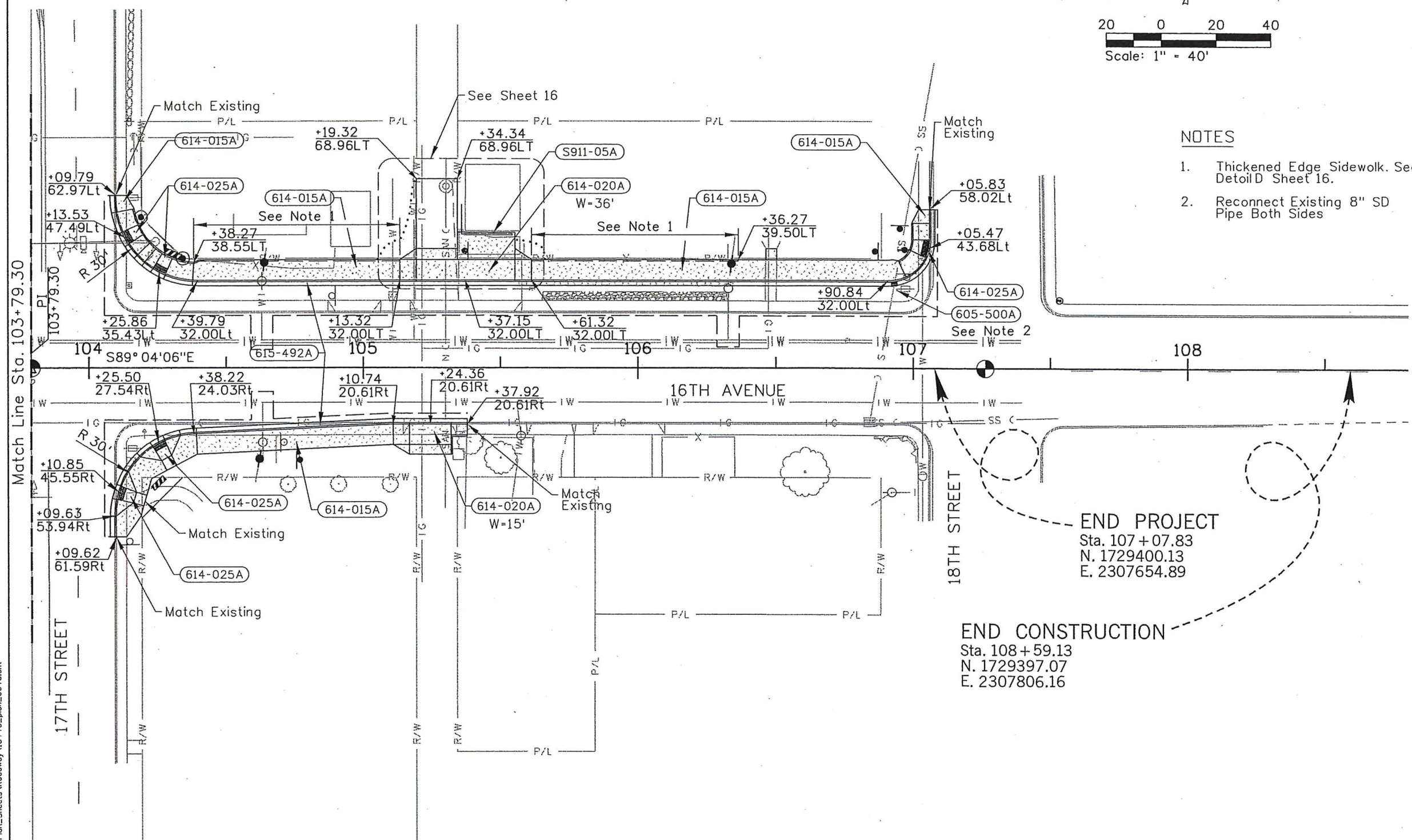
ROADWAY PLAN
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 12 OF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371

STEPHEN J. LEWIS

PENTABLE: ITD.tbl
11/2/2015 J:\214023\Project_Development\Plan_Sheets\Roadway\13440_plan_004a.sht



NOTES

1. Thickened Edge Sidewalk. See Detail D Sheet 16.
2. Reconnect Existing 8" SD Pipe Both Sides

- 605-500A Catch Basin Ty 1
1 Eo., 106+94± Lt
- 614-015A Sidewalk (4")
93 S.Y., 104+09.62 Rt to 105+10.74 Rt
3 S.Y., 104+09.79 Lt to 104+10.22 Lt
63 S.Y., 104+37.85 Lt to 105+13.32 Lt
114 S.Y., 105+61.32 Lt to 106+97.29
3 S.Y., 107+05.84 Lt to 107+05.83 Lt
- 614-020A Driveway
72 S.Y., 105+13.32 Lt to 105+61.32 Lt (w/ Flare)
28 S.Y., 105+10.74 Rt to 105+37.92 Rt (w/ Flare & Curb)
- 614-025A Curb Ramp
26 S.Y., 104+10.22 Lt to 104+37.92 Lt
7 S.Y., 104+10.85 Rt
7 S.Y., 104+25.50 Rt
14 S.Y., 107+05.47 Lt
- 615-492A Curb & Gutter Ty 2
334 Ft., 104+09.79 Lt to 107+05.83 Lt
153 Ft., 104+09.62 Rt to 105+37.92 Rt
- S911-05A SP 4" Slotted Drain
20 Ft., 105+37.11 Lt - 105+54.32

END PROJECT
Sta. 107 + 07.83
N. 1729400.13
E. 2307654.89

END CONSTRUCTION
Sta. 108 + 59.13
N. 1729397.07
E. 2307806.16

REVISIONS				DESIGNED S. Lewis	DESIGN CHECKED N. Cleaver	DETAILED M. Carlisle	DRAWING CHECKED S. Lewis
NO.	DATE	BY	DESCRIPTION				

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME
13440_plan_004a.sht

DRAWING DATE:
November 2015

**IDAHO
TRANSPORTATION
DEPARTMENT**

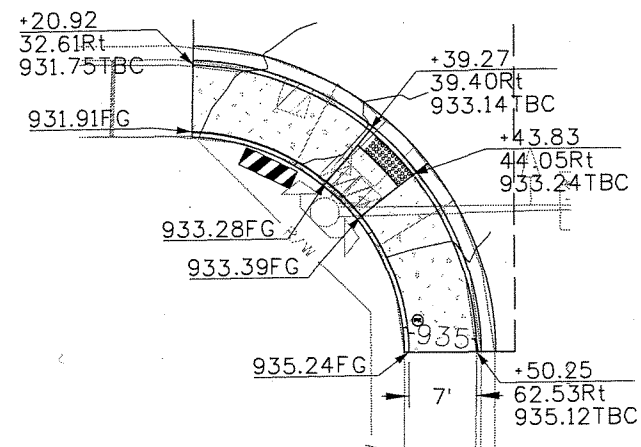


KELLER associates

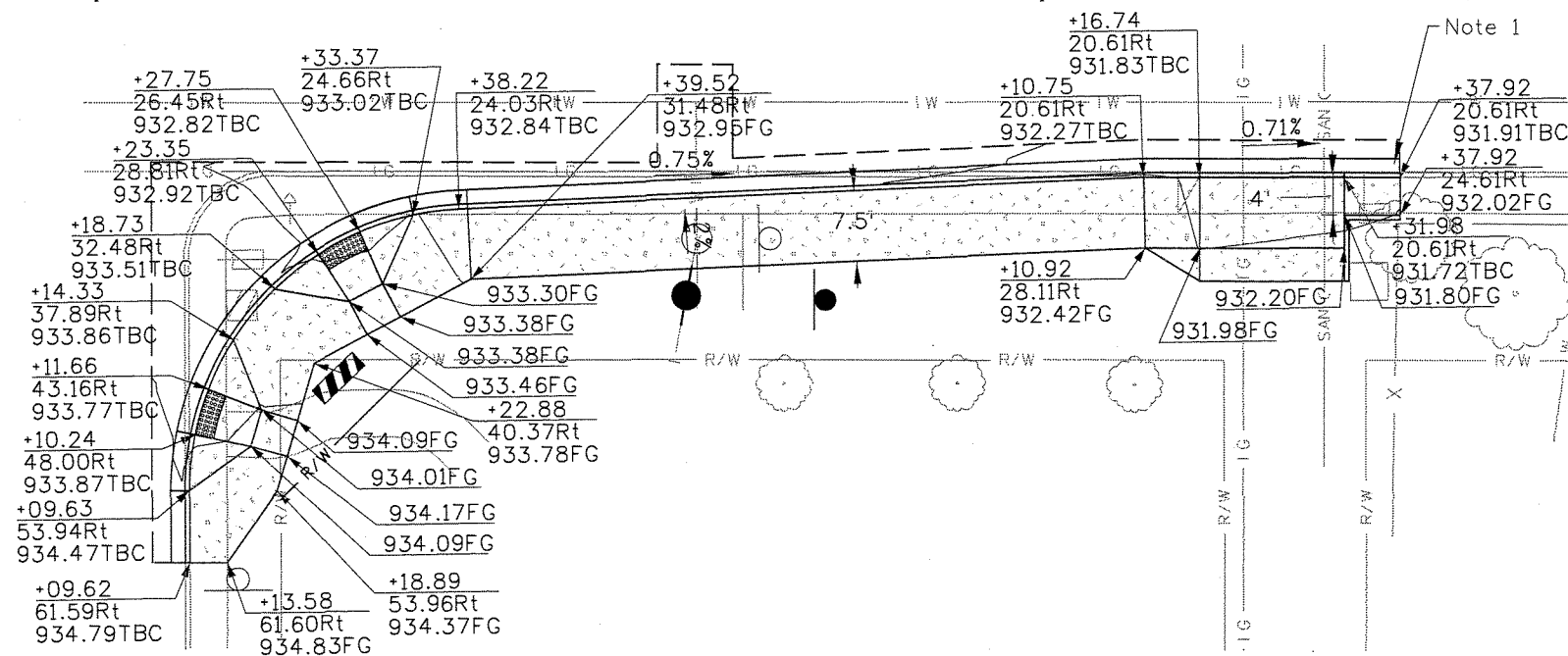
PROJECT NO.	ROADWAY PLAN
A013(440)	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 13 OF 32

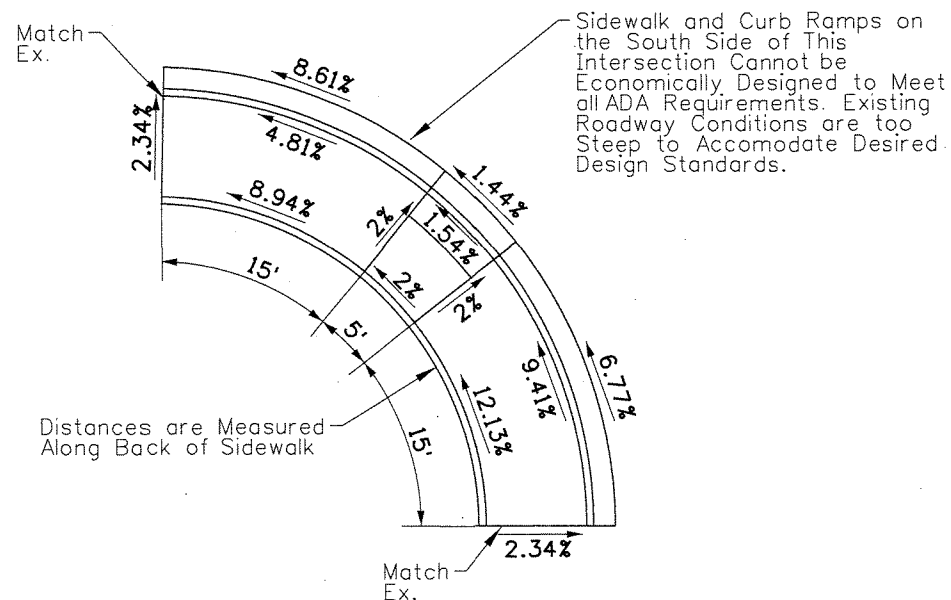




SOUTHWEST DESIGN



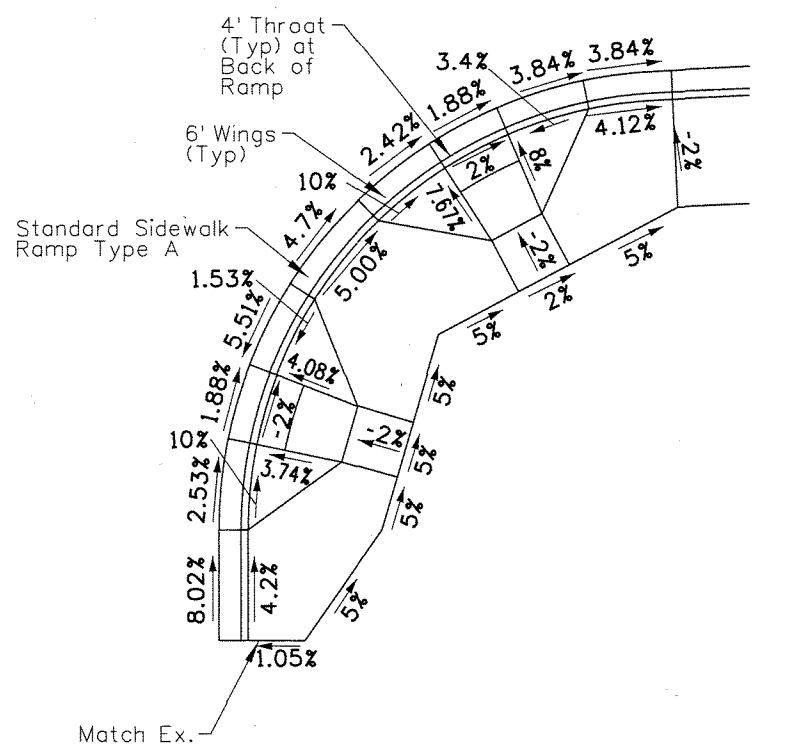
SOUTHEAST DESIGN



Back of Curb Radius = 30'

SOUTHWEST RAMP DETAIL

NTS



Back of Curb Radius = 30'
SOUTHEAST RAMP DETAIL
NTS

Notes:

1. Transition Flow Line and Lip of Gutter to Match Existing Pavement.

REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
NO.	DATE	BY	DESCRIPTION	DESIGN CHECKED N. Cleaver	
				DETAILED M. Carlisle	CADD FILE NAME 13440_delt_002.sht
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015



KELLER associates

PROJECT NO.
A013(440)

DETAIL SHEET

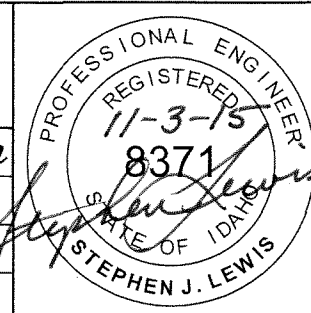
SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

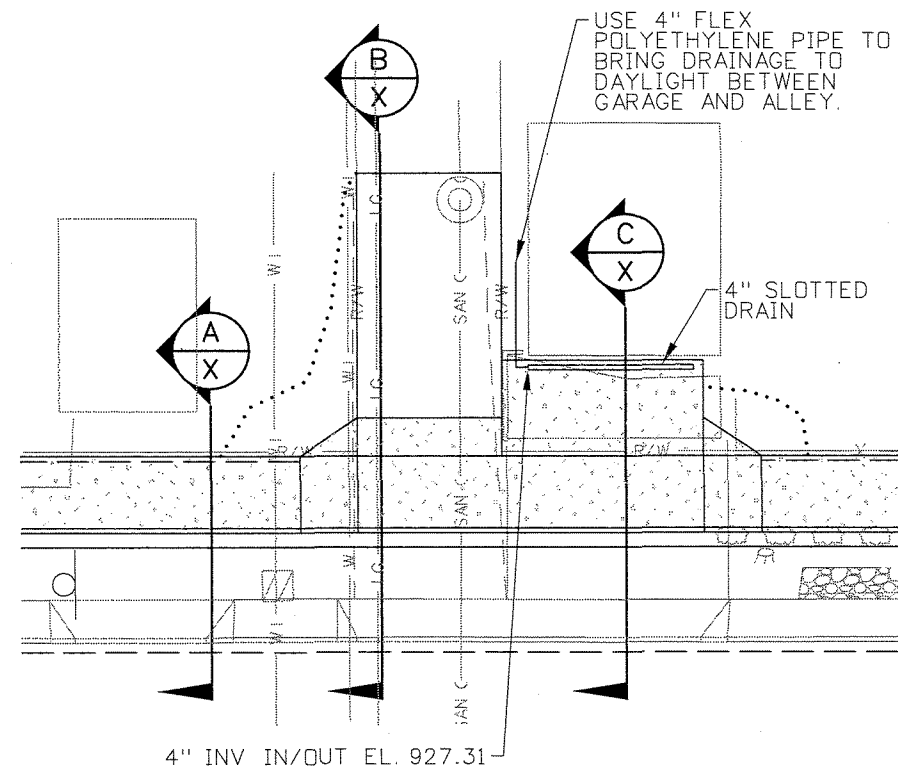
English

COUNTY
Nez Perce

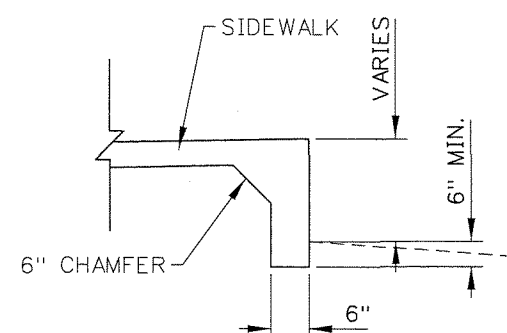
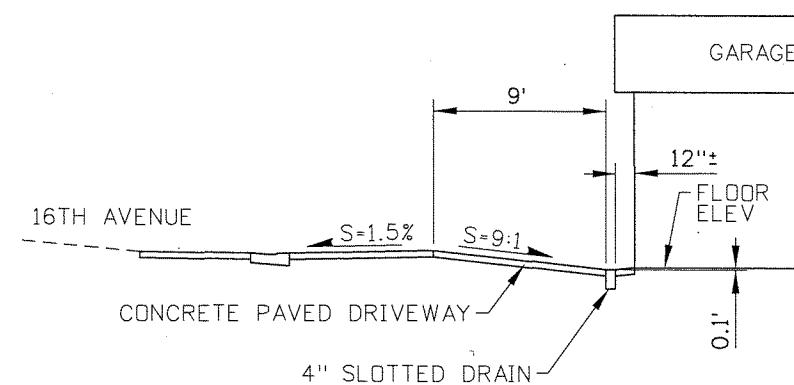
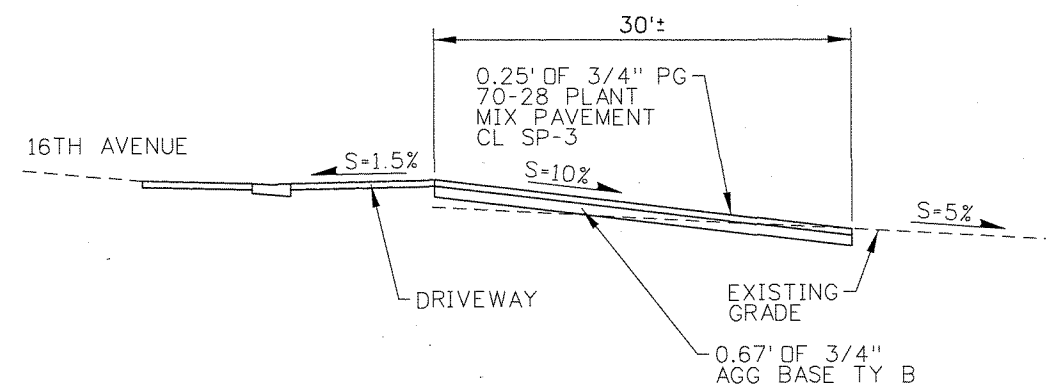
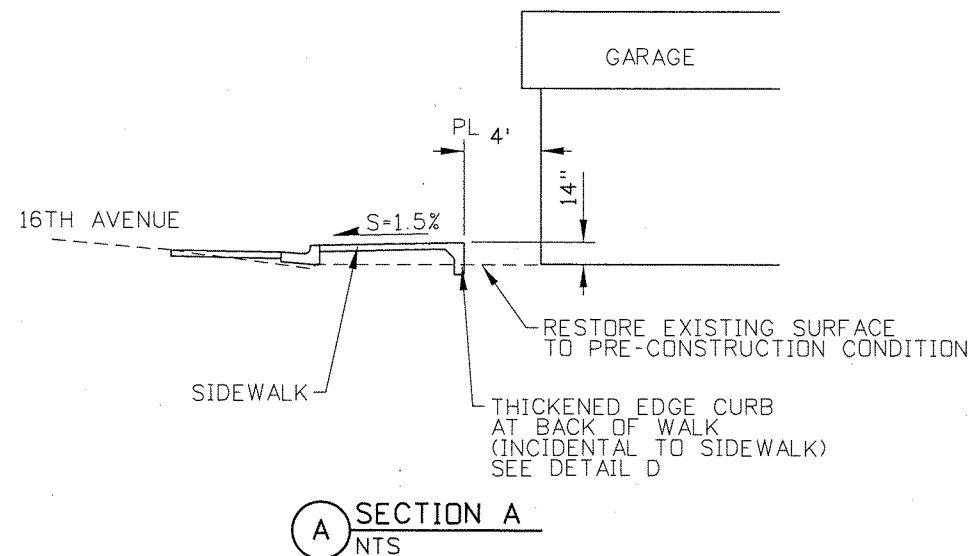
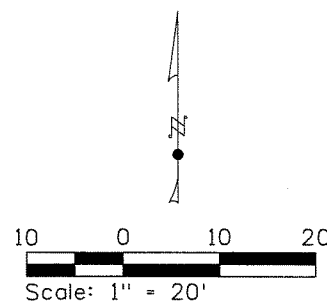
KEY NUMBER
13440

SHEET 15 OF 32





ALLEY PLAN VIEW



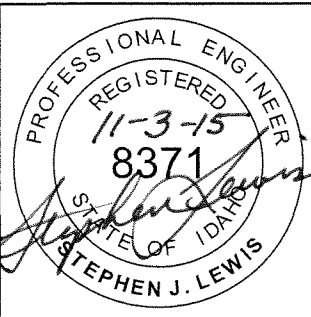
REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
NO.	DATE	BY	DESCRIPTION		
				DESIGN CHECKED N. Cleaver	
				DETAILED M. Carlisle	CADD FILE NAME 13440_delt_003.sht
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.	DETAIL SHEET
A013(440)	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 16 OF 32



LEGEND

- SIZE C J BDX
- PGC JCT BDX
- ★ LUMINAIRE W/ARM
- SIGNAL HEAD (3 SECTION)
- SIGNAL HEAD (4 SECTION)
- PEDESTRIAN HEAD
- VIDEO CAMERA
- SIGNAL POLE W/MASTARM
- PEDESTRIAN POLE
- PREEMPT DETECTOR/INDICATOR
- ① SIGNAL HEAD NUMBER
- ② PEDESTRIAN HEAD NUMBER
- CONTROLLER & SERVICE PEDESTAL
- SIGNAL CONDUIT
- LIGHTING CONDUIT
- DETECTION CONDUIT
- PDWER SOURCE

PED POLE "C"
Sta. 103+37.0, 47' Lt.
Ped Signal
Mounting Height = 8'

POLE "B"
STA. 103+27.4, 36' Lt.
Signal Mast Arm = 40'
Luminaire Mounting Height = 40'
Luminaire Mast Arm = 15'
Camera #2
Pre-Empt #3 & #4

REPLACE EXISTING LEFT-TURN
HEAD WITH FYA AND REMOVE
MAST-ARM MOUNTED SIGN

INSTALL NEW PED HEADS
& PUSH BUTTONS ON
EXISTING POLE

POLE "D"
(EXISTING)
Ped Signal Mounting Height = 8'
Camera #3
Pre-Empt #2 Ind.

REMOVE EXISTING
PEDESTRIAN POLE

REMOVE EXISTING
SIGNAL POLE

REMOVE EXISTING
SIGNAL POLE

NEW CABINET AND CONTROLLER
ON EXISTING FOUNDATION.
RETAIN & PROTECT ELECTRICAL
SERVICE PEDESTAL

POLE "A"
(EXISTING)
Camera #1
Pre-Empt #1 & #2 Det.
Pre-Empt #1 Ind.

INSTALL NEW PUSH BUTTONS
ON EXISTING POLE

REPLACE EXISTING LEFT-TURN
HEAD WITH FYA AND REMOVE
MAST-ARM MOUNTED SIGN

POLE "E"
Sta. 104+31.0, 38' Rt.
Signal Mast Arm = 40'
Camera #4

PED POLE "F"
Sta. 104+21.6, 45' Rt.
Ped Signal
Mounting Height = 8'

20' 0 20' 40'
Scale in Feet

NOTES:

- INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS ADOPTED BY THE STATE.
- SEE "PHASING AND CONDUIT PLAN" SHEET FOR CONDUIT DIAGRAM, PHASING DIAGRAM, AND SIGNAL HEAD NUMBERING.
- SEE "SIGNAL HEAD AND SIGN MOUNTING DETAILS" SHEET FOR MAST ARM MOUNTED SIGNING.
- POTHOLE LOCATIONS OF PROPOSED POLE AND CABINET FOUNDATIONS PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING SIGNAL EQUIPMENT. BRING ANY CONFLICTS IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
- INSTALL TYPE D SIGNAL POLE FOUNDATIONS FOR POLES "B" & "E" AND TYPE A FOR PED POLES "C" & "F".
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. BRING ANY DISCREPANCIES IMMEDIATELY TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATIONS.
- SPACING PLANS SHOWN ARE VIRTUAL ZONES FOR VIDEO DETECTION.
- LEFT-TURN PHASE QUEUE ZONES (50' FROM STOP BAR) ARE TO BE SET IN NON-LOCKING MODE. RIGHT-TURN LANE ZONES ARE TO BE SET IN TIME DELAY & NON-LOCKING MODE.
- KEEP EXISTING SIGNAL IN OPERATION, UNTIL NEW SIGNAL EQUIPMENT IS INSTALLED AND READY FOR SWITCHOVER IN CONTROLLER CABINET.
- ABANDON IN PLACE EXISTING LOOP DETECTORS ON 16TH AVE.
- REPLACE EXISTING VIDEO DETECTION ON POLES "A" & "D".
- EXISTING EMERGENCY VEHICLE PRE-EMPT DETECTORS AND INDICATOR LIGHTS ON POLES "A" & "D" MAY REMAIN IN PLACE.
- REMOVE MDS RADIO INTERCONNECT FROM EXISTING SIGNAL CABINET AND INSTALL IN NEW CABINET.
- FOR POLE "A" JUNCTION BOXES, INTERCEPT AND USE EXISTING UNDERGROUND CONDUITS BETWEEN POLE "A" AND THE CONTROLLER. NO OTHER EXISTING CONDUIT IS USABLE.

LIGHTING SPECIFICATIONS

ILLUMINATION	LIGHT EMITTING DIDDE (LED)
LUMINAIRES	200 WATT MAX.
INTENSITY	Eavg = 1.8fc Eavg/Emin = 3.0 MAX.
DISTRIBUTION	TYPE III
CIRCUITRY	UNDERGROUND CONDUIT
SERVICE	PEDESTAL MOUNTED 120/240 VDLT
SUPPORT	GALVANIZED STEEL POLES AND STANDARD EXTENSIONS ON SIGNAL POLES

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME
13440_tspl_001a.sht

DRAWING DATE:
November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.

A013(440)

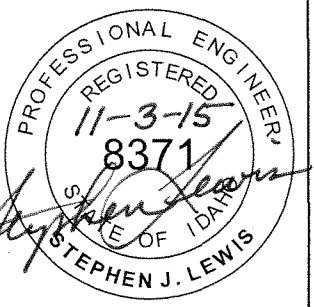
TRAFFIC SIGNAL PLAN

SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

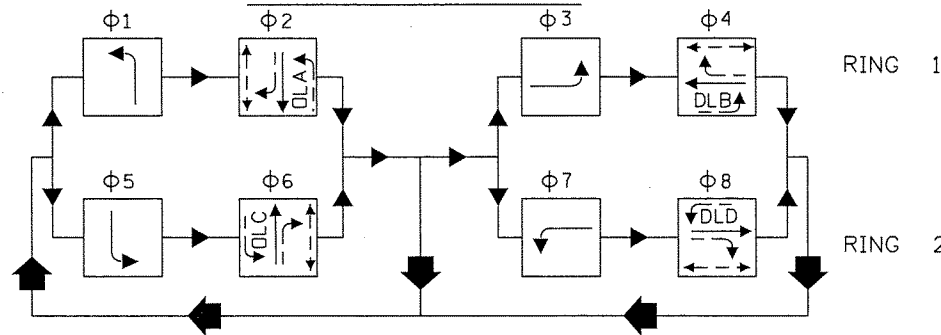
English

COUNTY
Nez Perce
KEY NUMBER
13440

SHEET 18 OF 32



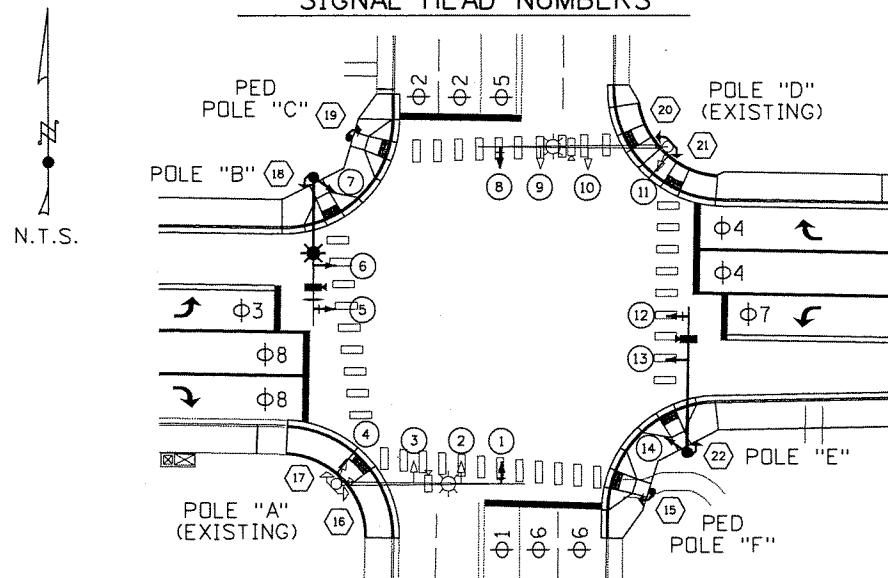
PHASING DIAGRAM



SIGNAL SEQUENCE CHART

PHASE	VEHICLE HEADS								PEDESTRIAN HEADS				CLEARANCE
	1	2-4	5	6-7	8	9-11	12	13-14	15-16	17-18	19-20	21-22	
Φ1	R	R	R	R	G	R	R	R	DW	DW	DW	DW	VEHICLE
Φ2	R	G	R	R	FY	R	R	R	DW	W	DW	DW	PEDESTRIAN
Φ3	R	R	R	R	R	R	G	R	DW	DW	DW	DW	VEHICLE
Φ4	R	R	R	G	R	R	FY	R	DW	DW	W	DW	PEDESTRIAN
Φ5	G	R	R	R	R	R	R	R	DW	DW	DW	DW	VEHICLE
Φ6	FY	R	R	R	R	G	R	R	DW	DW	DW	W	PEDESTRIAN
Φ7	R	R	G	R	R	R	R	R	DW	DW	DW	DW	VEHICLE
Φ8	R	R	FY	R	R	R	R	G	FDW	DW	DW	DW	PEDESTRIAN
FLASH	R	R	R	R	R	R	R	R					

SIGNAL HEAD NUMBERS

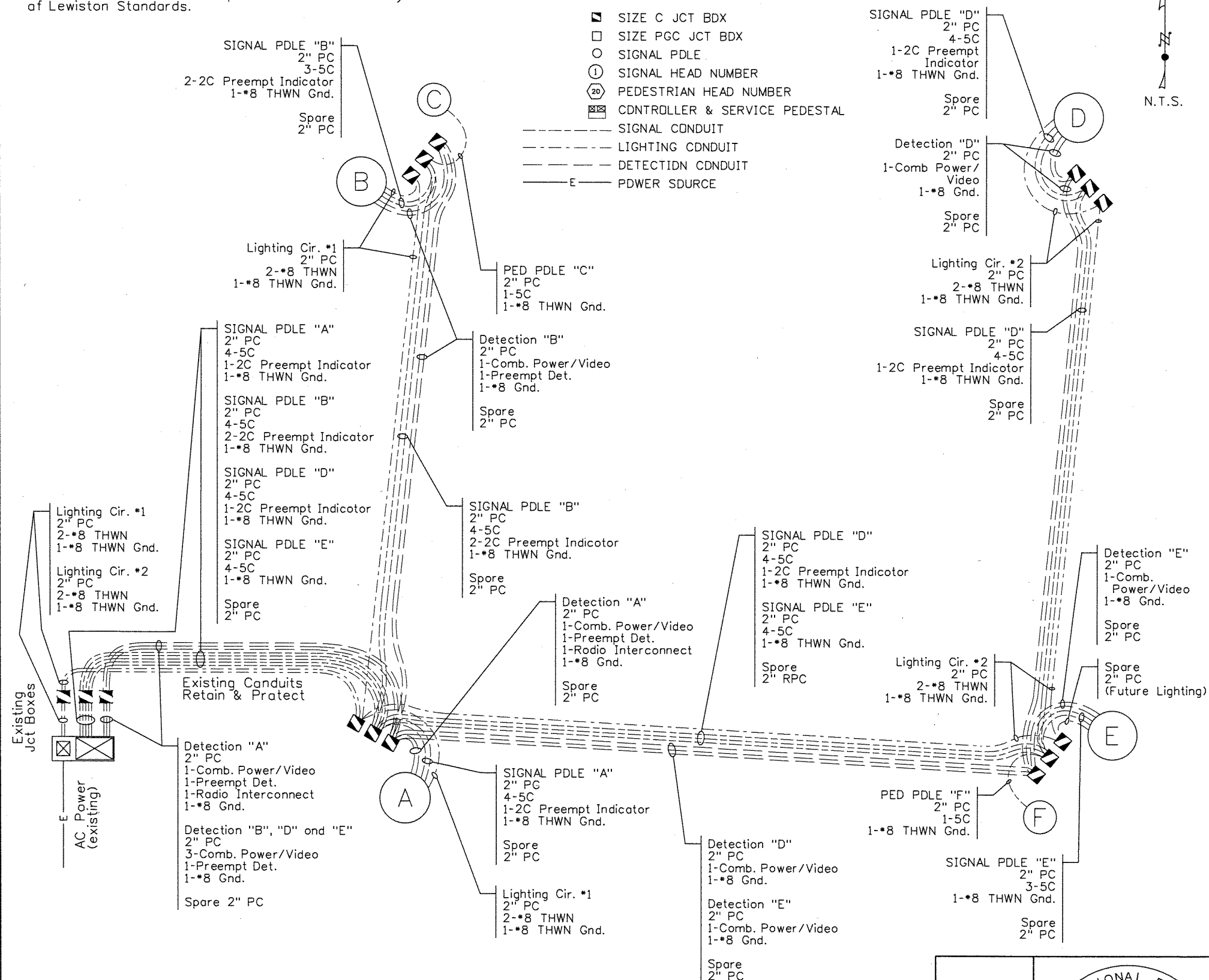


Note:

Per Section 656, Trenching, Backfilling, Surfacing and Materials are Incidental. Replace Pavement Per City of Lewiston Standards.

LEGEND

- SIZE C JCT BDX
- SIZE PGC JCT BDX
- SIGNAL PDLE
- SIGNAL HEAD NUMBER
- PEDESTRIAN HEAD NUMBER
- CDNTROLLER & SERVICE PEDESTAL
- SIGNAL CONDUIT
- LIGHTING CONDUIT
- DETECTION CONDUIT
- PDWER SOURCE



REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED

S. Lewis
DESIGN CHECKED
N. Cleover
DETAILED
M. Carlisle
DRAWING CHECKED
S. Lewis

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME
13440_tspl_002o.sht
DRAWING DATE:
November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.

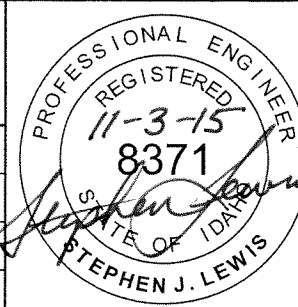
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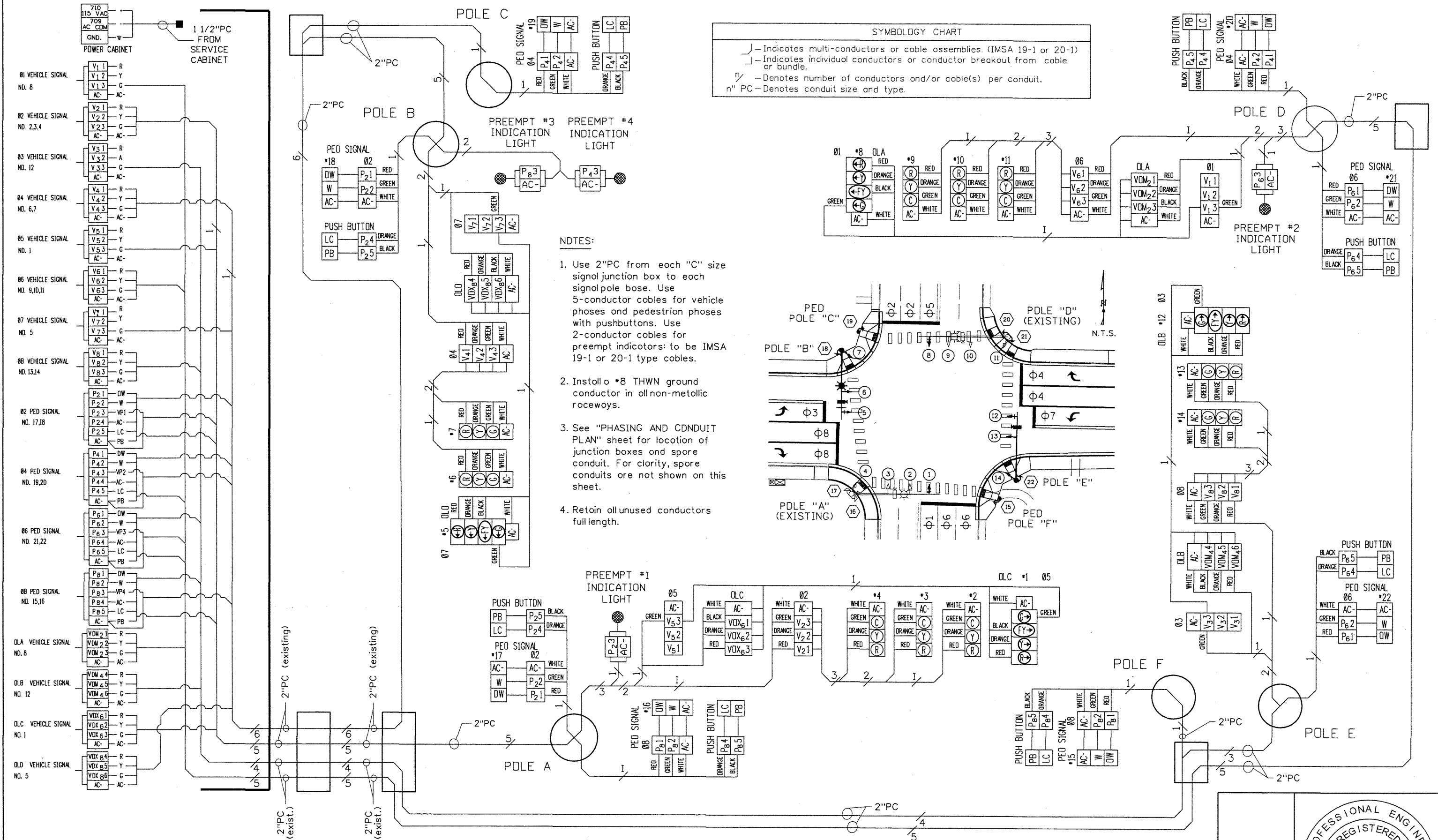
PHASING AND CONDUIT PLAN

SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

English

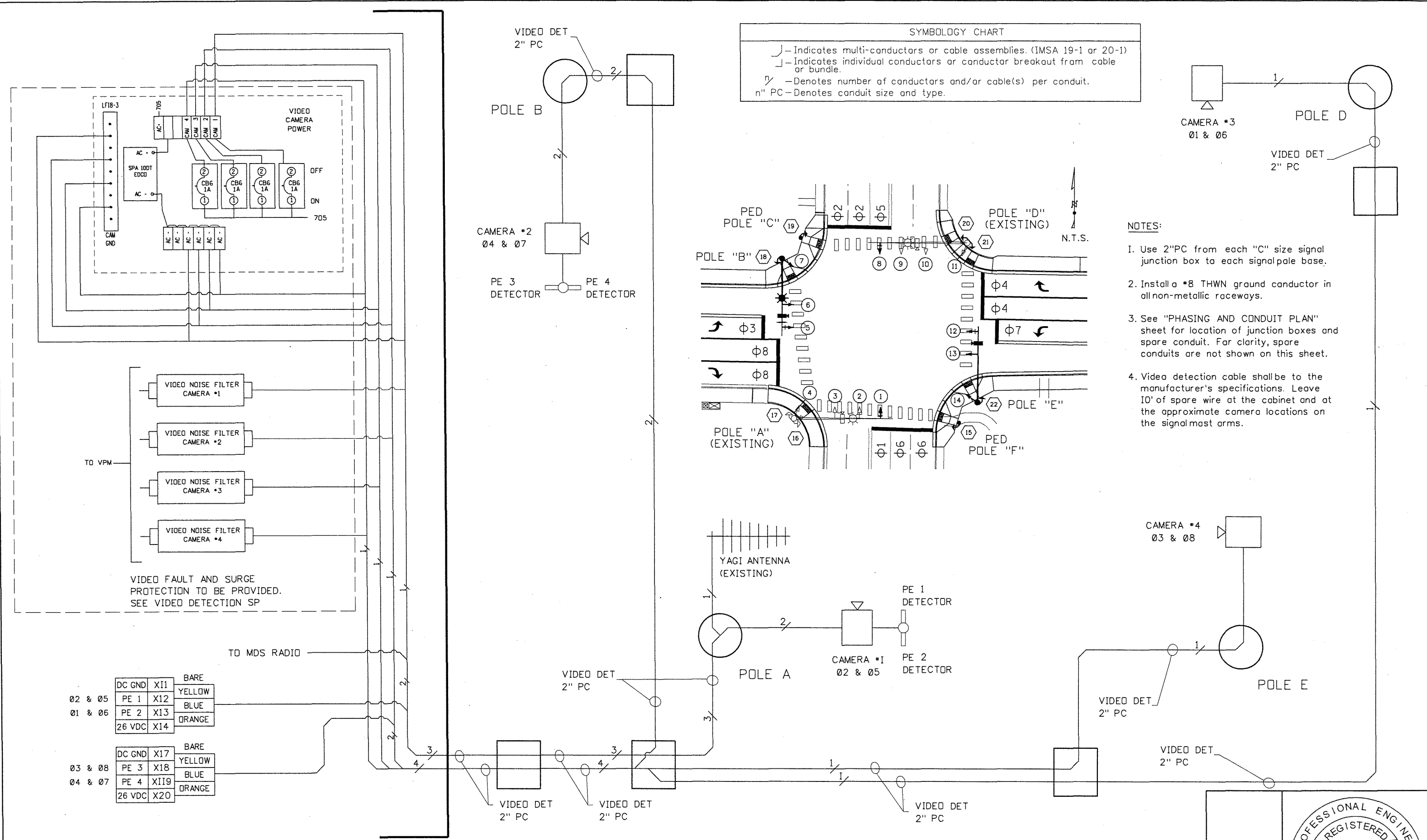
COUNTY
Nez Perce
KEY NUMBER
13440
SHEET 19 OF 32





REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	PROJECT NO. A013(440)	SIGNAL FIELD WIRING DIAGRAM SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON	English COUNTY Nez Perce KEY NUMBER 13440 SHEET 20 OF 32	PROFESSIONAL ENGINEER REGISTERED 11-3-15 8371 STEPHEN J. LEWIS
NO.	DATE	BY	DESCRIPTION						
				DESIGN CHECKED N. Cleaver					
				DETAILED M. Corlisle	CADD FILE NAME 13440_tdtl_001a.sht				
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015				

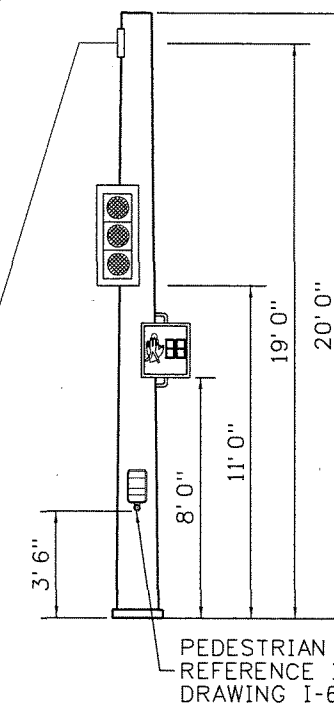
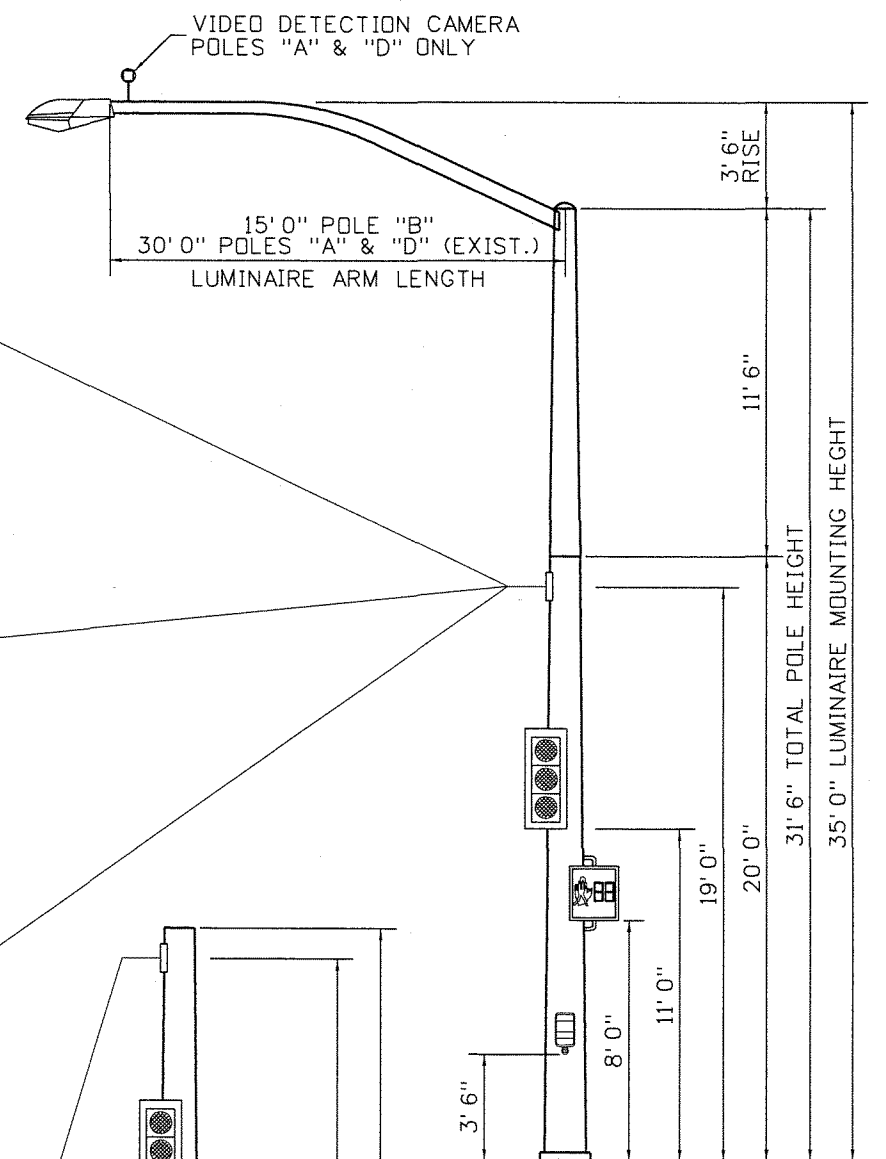
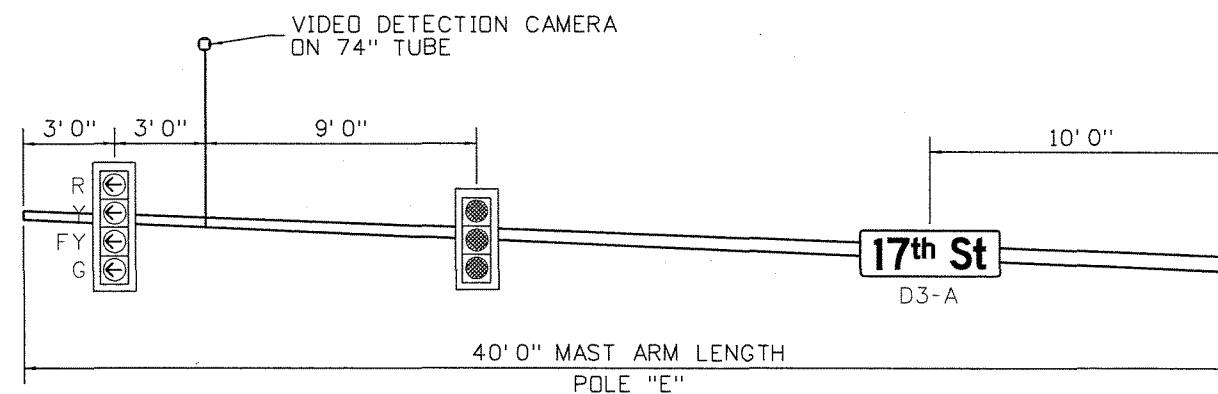
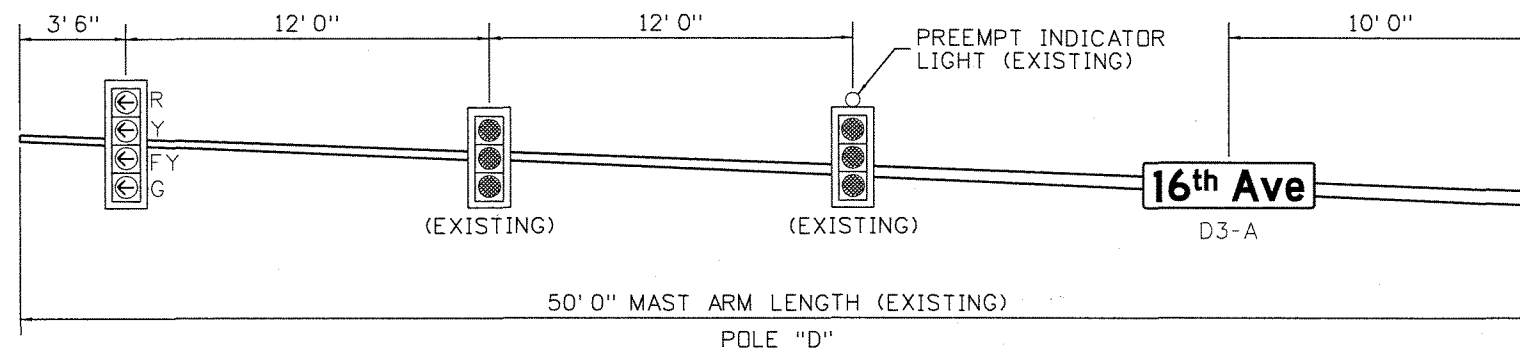
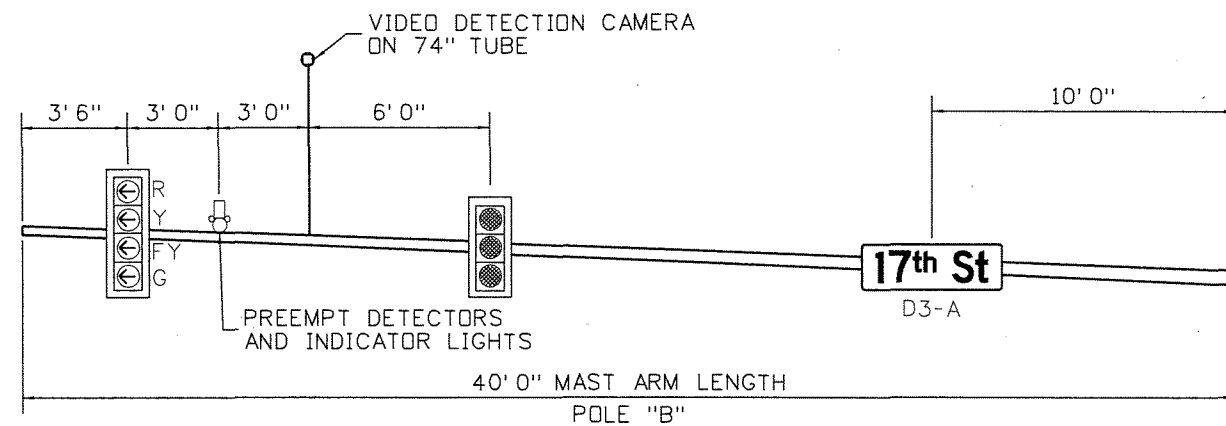
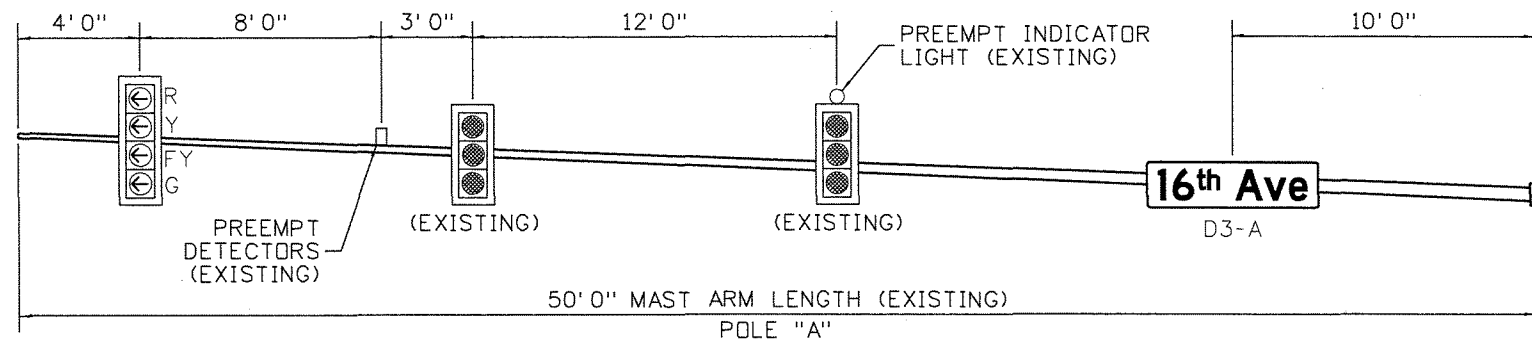
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REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	PROJECT NO. A013(440)	VIDEO DETECTION FIELD WIRING DIAGRAM SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON	English COUNTY Nez Perce KEY NUMBER 13440 SHEET 21 OF 32	PROFESSIONAL ENGINEER REGISTERED 11-3-15 8371 STEPHEN J. LEWIS
NO.	DATE	BY	DESCRIPTION						
				DESIGN CHECKED N. Cleaver	CADD FILE NAME 13440_tdtl_002a.sht				
				DETAILED M. Carlisle	DRAWING DATE: November 2015				
				DRAWING CHECKED S. Lewis					

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates



- NOTES:
- VIDEO CAMERA LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED ON SITE BY A MANUFACTURER'S SITE SURVEY.
 - ADJUST MAST ARM SIGNAL HEAD POSITIONS IF NECESSARY, TO ENSURE THAT THEY ARE CENTERED ABOVE THE TRAVEL LANE.
 - ALL SIGNING AND MOUNTING BRACKETS SHOWN ON THIS SHEET SHALL NOT BE PAID FOR SEPARATELY, BUT CONSIDERED INCIDENTAL TO ITEM 656-005A TRAFFIC SIGNAL INSTALLATION.
 - SEE "TRAFFIC SIGNAL PLAN" SHEET FOR LUMINAIRE MAST ARM AND PEDESTRIAN SIGNAL HEAD ORIENTATION.

REVISIONS				DESIGNED	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
NO.	DATE	BY	DESCRIPTION	S. Lewis	
				DESIGN CHECKED N. Cleaver	
				DETAILED M. Carlisle	CADD FILE NAME 13440_tdtl_008a.sh
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

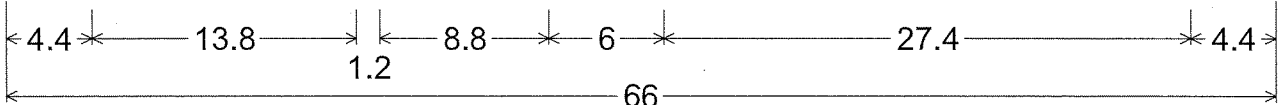
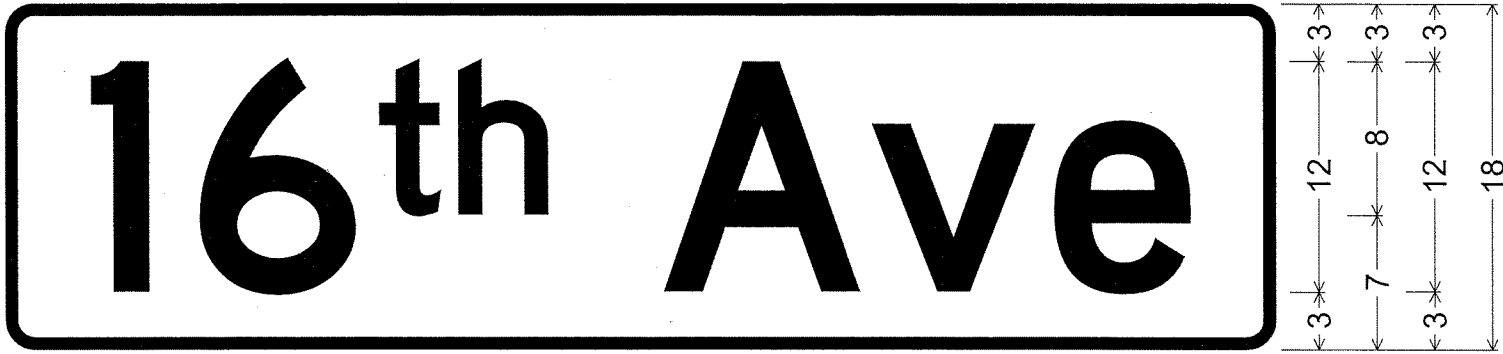
KELLER associates

PROJECT NO.
A013(440)

SIGNAL HEAD AND SIGN MOUNTING DETAILS
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 22 OF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS

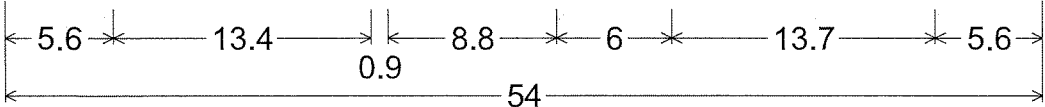
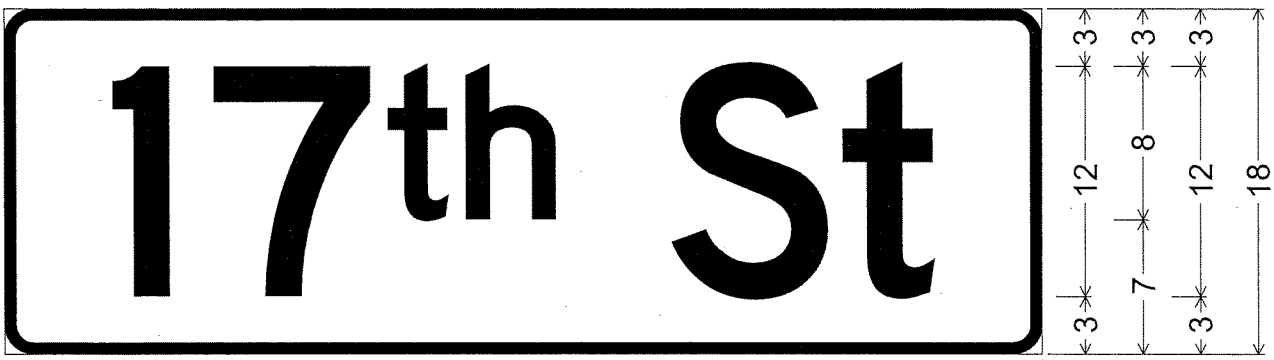


1.5" Radius, 0.6" Border, White on Green;

[16] D 2K; [th] D 2K; [Ave] D 2K;

Table of widths and spaces.

	l		6		t		h		A		v		e	
4.4	3.0	2.7	8.1	1.2	3.2	0.9	4.7	6.0	10.2	0.6	8.5	1.0	7.1	4.4



1.5" Radius, 0.6" Border, White on Green;

[17] D 2K; [th] D 2K; [St] D 2K;

Table of widths and spaces.

	1		7		t		h		S		t	
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PENTABLE: ITD.tbl 11/2/2015 J:\214023\Project_Development\Plan_Sheets\Traffic\13440_sign_001a.sht

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN	ARE FOR 11" X 17"
PRINTS ONLY	
CADD FILE NAME	13440_sign_001a.sht
DRAWING DATE:	November 2015

IDAHO
TRANSPORTATION
DEPARTMENT



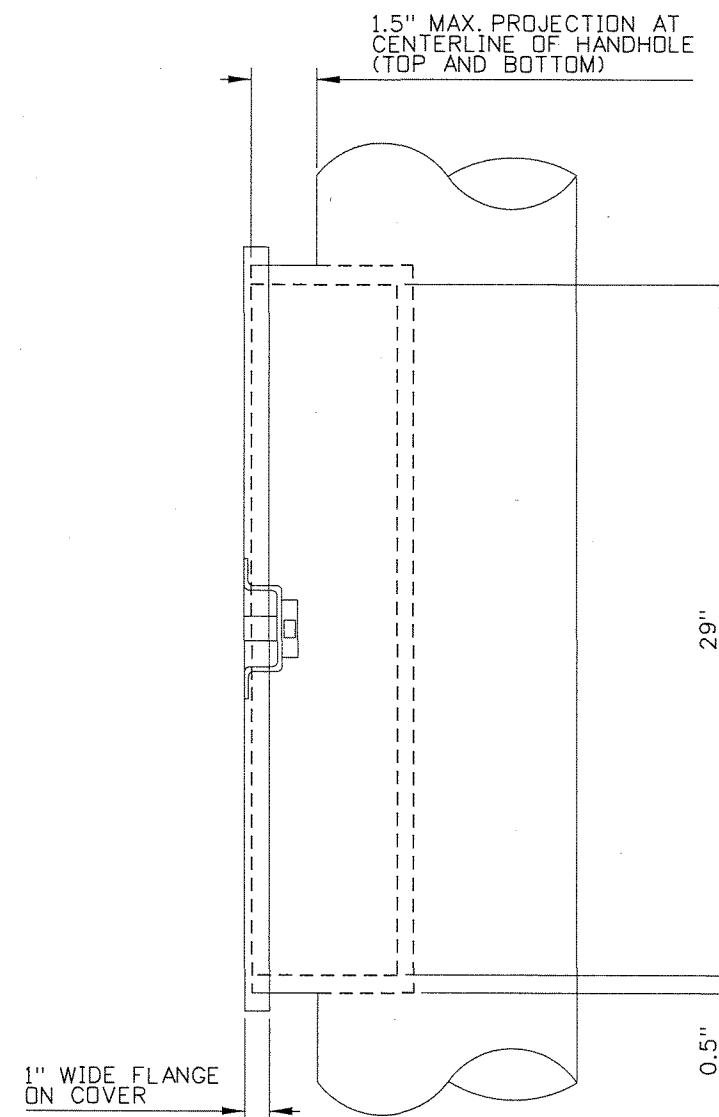
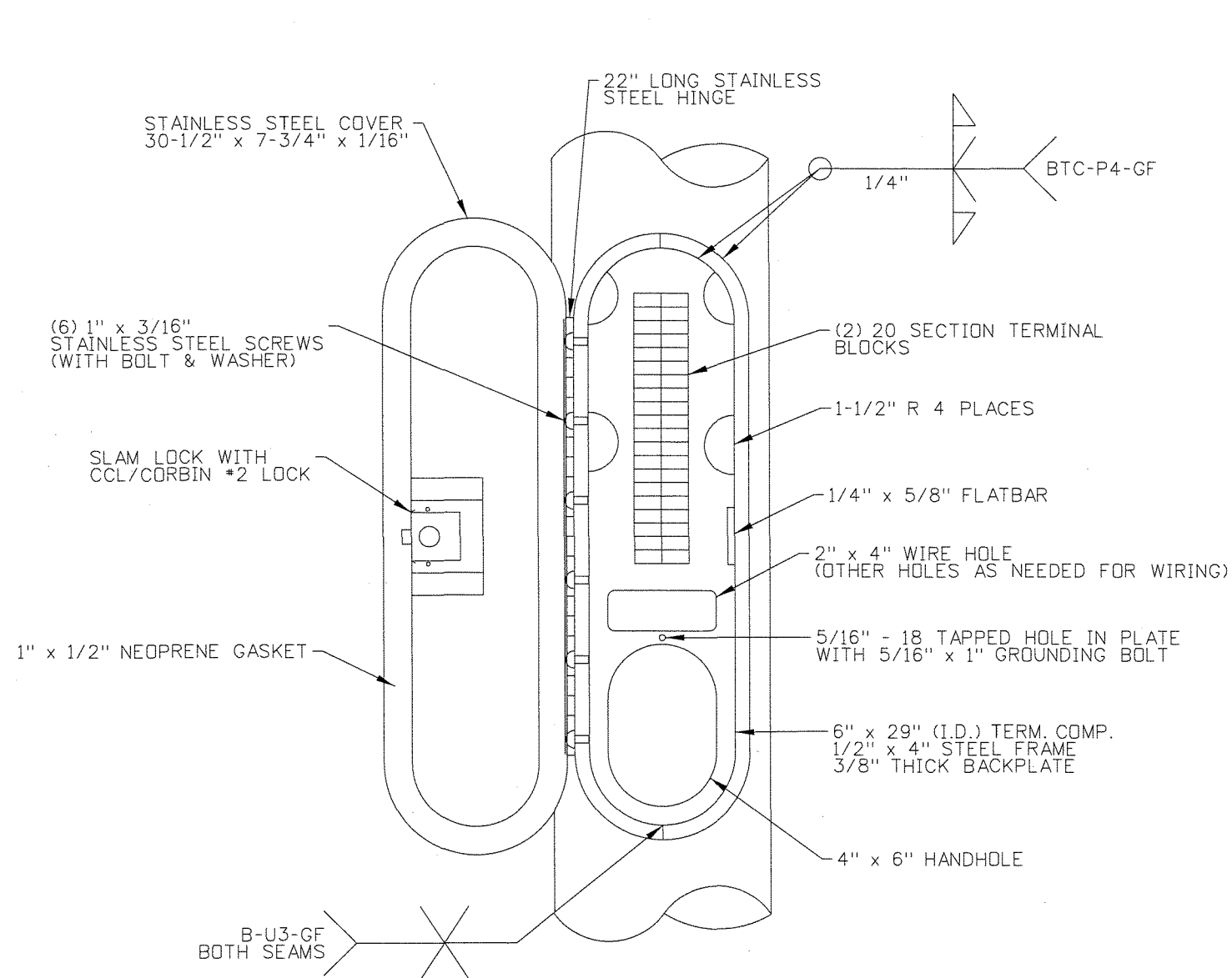
KELLER associates

PROJECT NO.
A013(440)

SIGN DETAILS
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

<i>English</i>	
COUNTY	Nez Perce
KEY NUMBER	13440
SHEET 23 OF	32

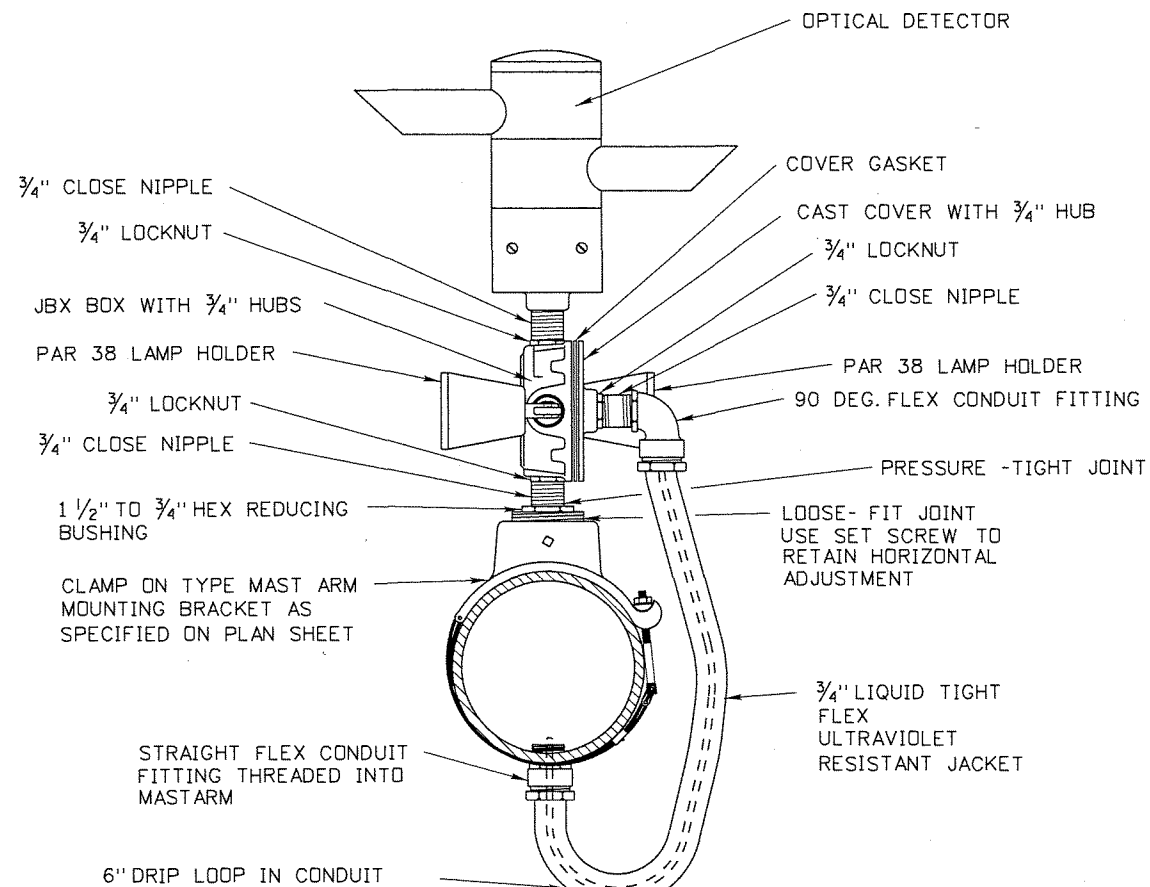
PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS



RECESSED TERMINAL COMPARTMENT DETAIL

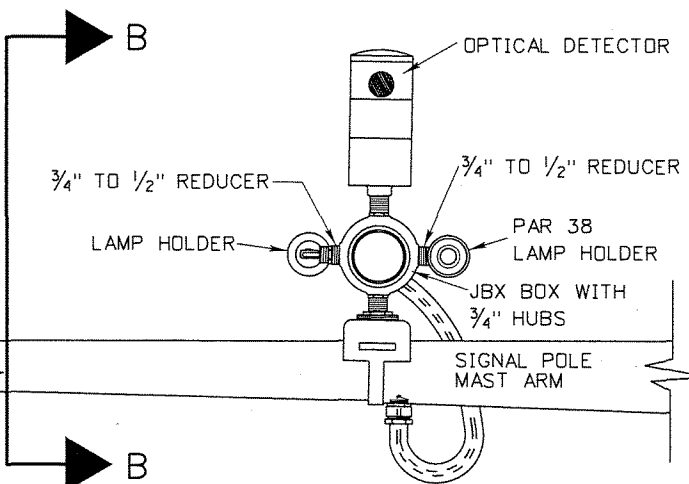
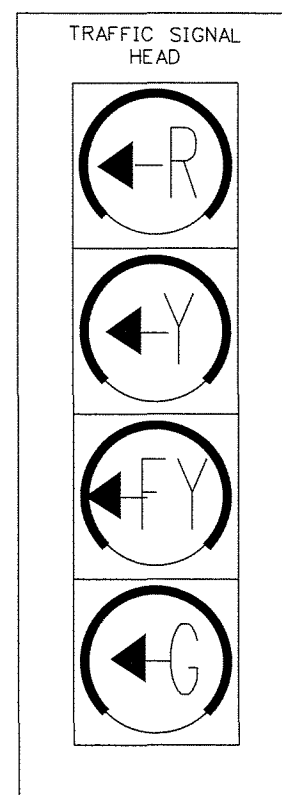
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REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT	PROJECT NO. A013(440)	MAIN SHAFT TERMINAL COMPARTMENT SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON	English COUNTY Nez Perce KEY NUMBER 13440 SHEET 25 OF 32	PROFESSIONAL ENGINEER REGISTERED 11-3-15 8371 STEPHEN J. LEWIS
NO.	DATE	BY	DESCRIPTION							
				DESIGN CHECKED N. Cleaver						
				DETAILED M. Carlisle	CADD FILE NAME 13440_tdtl_004a.sht					
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015	KELLER associates				



EMERGENCY VEHICLE DETECTOR
AND MOUNTING ASSEMBLY
VIEW B-B

USE ONE M-138 CABLE FOR DUAL CHANNEL
OPTICAL DETECTOR (GTT 722) AND ONE
IMSA 3 CONDUCTOR CABLE FOR DUAL
CALL BACK INDICATOR LIGHTS



PENTABLE: ITD.tbl
11/2/2015 J:\214023\Project_Development\Plan_Sheets\Traffic\13440_tdt_007a.sht

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

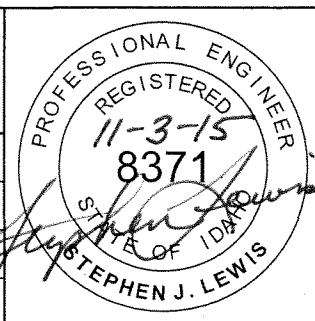
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 13440_tdt_007a.sht
DRAWING DATE: November 2015

IDAHO TRANSPORTATION DEPARTMENT
KELLER associates

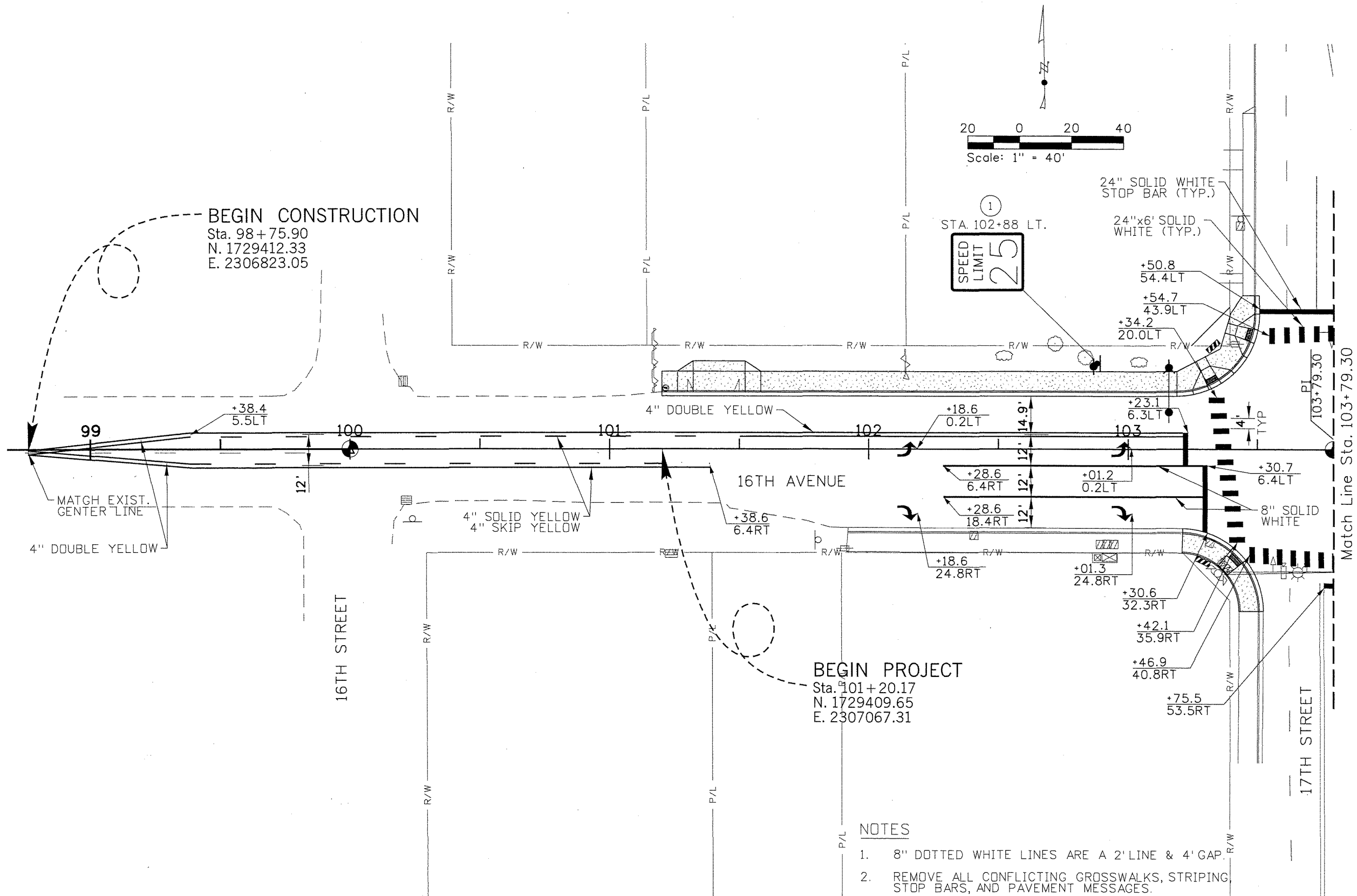
PROJECT NO.
A013(440)

DUAL CHANNEL DETECTOR & CALL BACK LIGHT
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 26 OF 32



PENTABLE: 11D.tbl
11/2/2015 J:\214023\Project_Development\Plan_Sheets\Roadway\13440_pvmL_001a.sht



NOTES

1. 8" DOTTED WHITE LINES ARE A 2' LINE & 4' GAP.
2. REMOVE ALL CONFLICTING GROSSWALKS, STRIPING, STOP BARS, AND PAVEMENT MESSAGES.
3. SALVAGE EXISTING SIGNS TO CITY OF LEWISTON.

- (S203-20A) OBLITERATION OF PAVEMENT MARKINGS
233 S.F., 98+75.90 TO 103+31
- (S900-60A) PAVEMENT MARKING (WATERBORNE)
1543 Ft., 98+75.90 TO 103+31
- (S900-62A) PAVEMENT MARKING (THERMOPLASTIC)
252 S.F., CROSSWALKS
140 S.F., STOP BARS
59 S.F., ARROWS

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 13440_pvmL_001a.sht
DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT



KELLER associates

PROJECT NO.
A013(440)

SIGNING & PAVEMENT MARKING
SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON

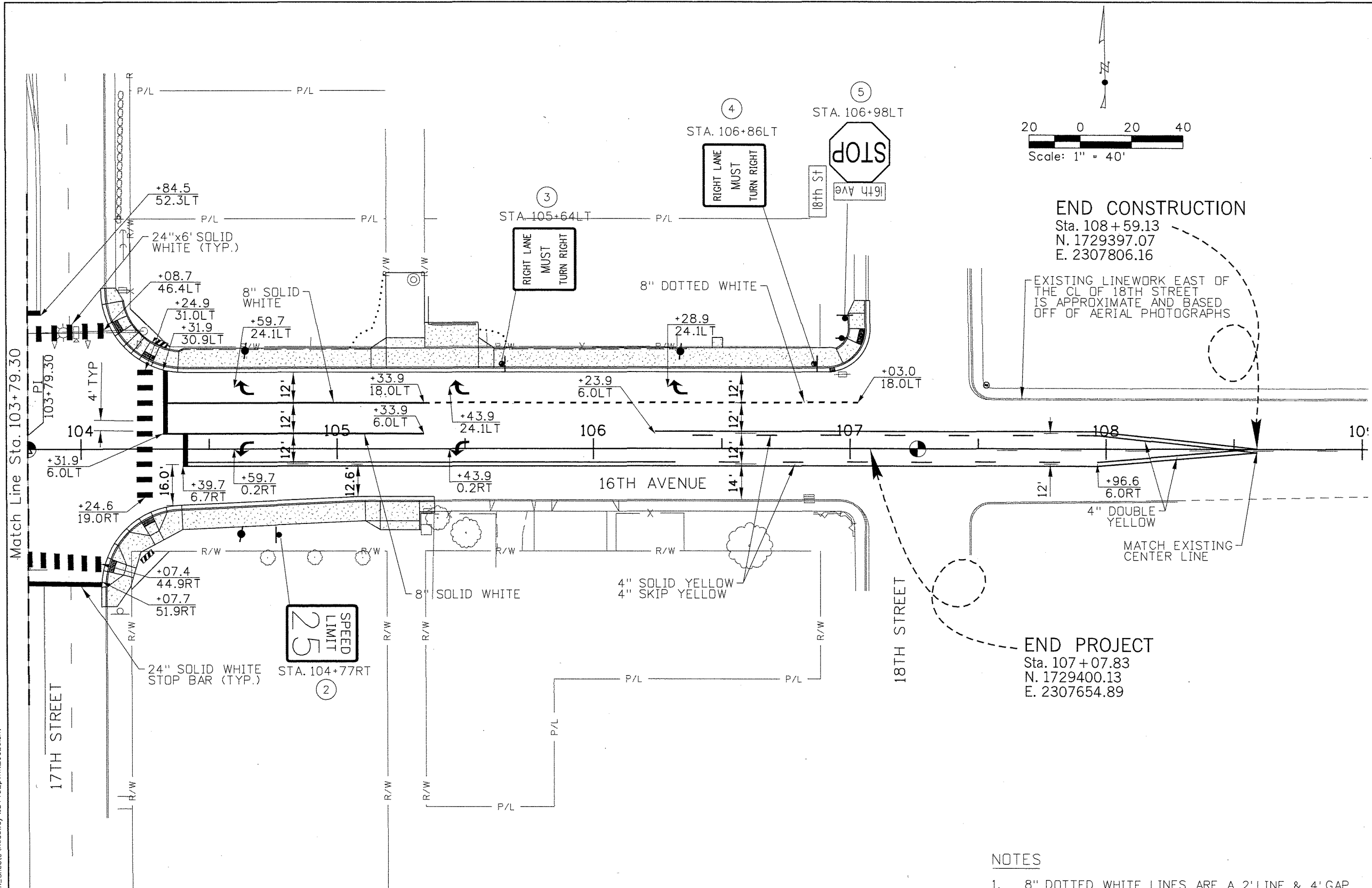
English
COUNTY Nez Perce
KEY NUMBER 13440
SHEET 28 OF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371



STEPHEN J. LEWIS

PENTABLE: ITD.tbl
11/2/2015 J:\214023\Project_Development\Plan_Sheets\Roadway\13440_pvm\002a.sht



NOTES

- 8" DOTTED WHITE LINES ARE A 2' LINE & 4' GAP.
- REMOVE ALL CONFLICTING CROSSWALKS, STRIPING, STOP BARS, AND PAVEMENT MESSAGES.
- SALVAGE EXISTING SIGNS TO CITY OF LEWISTON.

(S203-20A) OBLITERATION OF
PAVEMENT MARKINGS
214 S.F., 104+31 TO 108+59

(S900-60A) PAVEMENT MARKING
(WATERBORNE)
1310 Ft., 104+31 TO 108+59

(S900-62A) PAVEMENT MARKING
(THERMOPLASTIC)
143 S.F., STOP BARS
240 S.F., CROSSWALK
59 S.F., ARROWS

END CONSTRUCTION

Sta. 108+59.13
N. 1729397.07
E. 2307806.16

EXISTING LINEWORK EAST OF
THE CL OF 18TH STREET
IS APPROXIMATE AND BASED
OFF OF AERIAL PHOTOGRAPHS

END PROJECT

Sta. 107+07.83
N. 1729400.13
E. 2307654.89

REVISIONS				DESIGNED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
NO.	DATE	BY	DESCRIPTION		
				DESIGN CHECKED N. Cleaver	
				DETAILED M. Carlisle	CADD FILE NAME 3440_pvm\002a.sht
				DRAWING CHECKED S. Lewis	DRAWING DATE: November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

PROJECT NO.

A013(440)

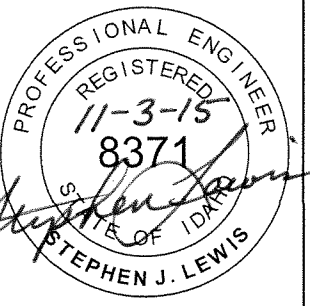
SIGNING & PAVEMENT MARKING

SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

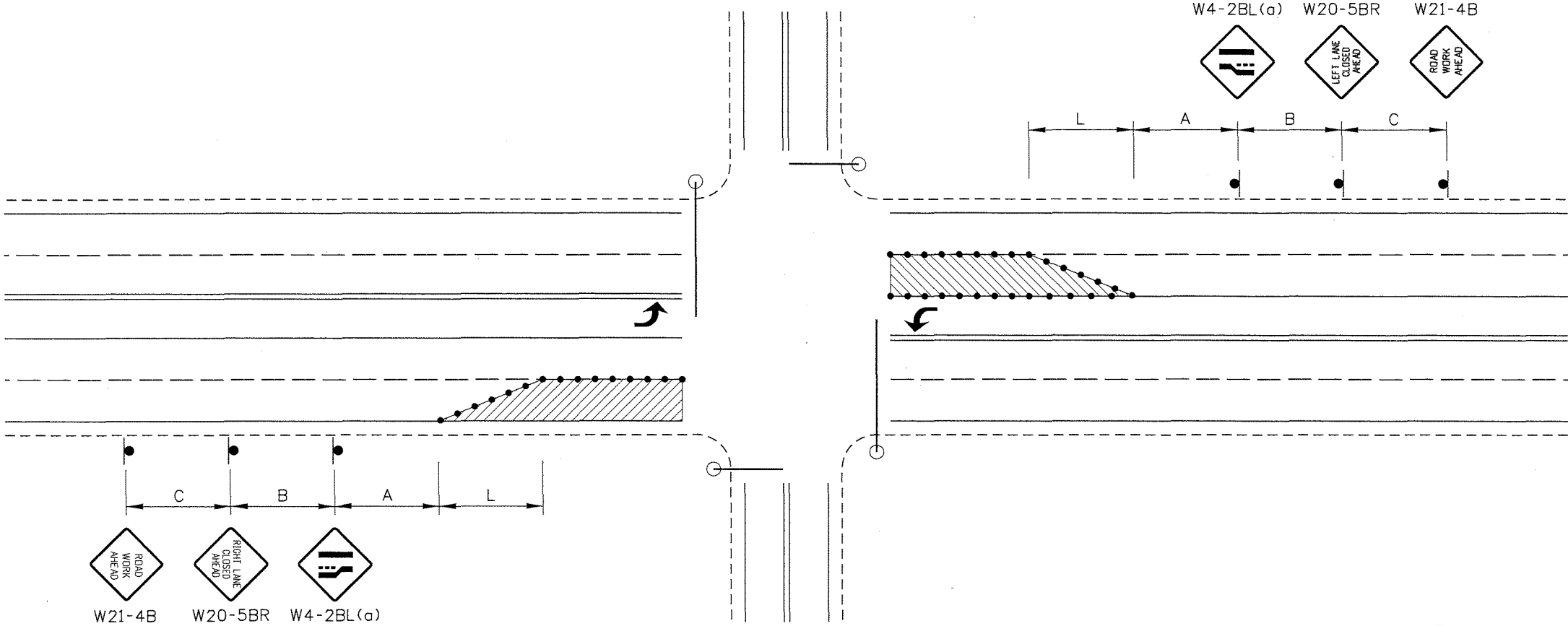
English

COUNTY
Nez Perce
KEY NUMBER
13440

SHEET 29 OF 32



LANE CLOSURE AT INTERSECTION



NOTES:

1. ALL SIGNS ARE 48"x48" IN SIZE. SEE ITD SIGN CHART FOR DETAILS.
2. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENT OF THE MOST CURRENT EDITION OF THE MUTCD.
3. MOUNTING CONFIGURATION, NUMBER OF SIGNS, AND MINOR ADJUSTMENTS NEEDED FOR TRAFFIC CONTROL DEVICES SHALL BE AS DIRECTED BY THE ENGINEER. FOR THE DURATION OF THIS PROJECT, THE OVERALL EFFECTIVENESS UNDER BOTH NIGHT AND DAY CONDITIONS AND THE PLACEMENT OF THESE INSTALLATIONS SHALL BE MONITORED. ADJUSTMENTS AND CLEANING SHALL BE DONE TO PROVIDE THE OPTIMUM PERFORMANCE OF THE TRAFFIC CONTROL DEVICES.
4. THE DISTANCES SHOWN BETWEEN TRAFFIC CONTROL SIGNS ARE MINIMUMS; SOME ADJUSTMENTS MAY BE NECESSARY DEPENDING ON CONDITIONS ENCOUNTERED IN THE FIELD.
5. IF THE TRAFFIC CONTROL PLAN AS SHOWN DOES NOT CONFORM TO THE CONTRACTOR'S METHOD OF OPERATION, THEN THE CONTRACTOR SHALL SUBMIT A NEW TRAFFIC CONTROL PLAN FOR APPROVAL. A 14-CALENDAR-DAY REVIEW TIME IS REQUIRED FOR ALL CHANGES MADE TO THE TRAFFIC CONTROL PLAN.
6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO ANY DIVERSION OF TRAFFIC ONTO THE CONSTRUCTION DETOURS.

7. ALL CONSTRUCTION SIGNING NOT IN USE SHALL BE COMPLETELY COVERED OR REMOVED AND LAID DOWN AWAY FROM TRAFFIC AT THE R/W LINE.
8. ALL PRIVATE DRIVES SHALL REMAIN OPEN, ACCESSIBLE, AND MAINTAINED DURING CONSTRUCTION.
9. USE SIGN SERIES DURING HOURS OF ACTIVE WORK. DURING NON-ACTIVE PERIODS, OPEN TWO-WAY TRAFFIC AND LEAVE "ROAD WORK AHEAD" SIGN IN PLACE.
10. SIDEWALK CLOSURE SIGNS ARE NOT SHOWN. PROVIDE PEDESTRIAN DETOUR SIGNAGE AND ADVANCE WARNING.

LEGEND

- SIGNAL MAST ARM
- CHANNELIZING DEVICE
- TRAFFIC CONTROL SIGN
- ▨ WORK ZONE

TAPER FORMULA:

FOR SPEEDS OF 40 mph OR LESS, $L = WS^2/60$
FOR SPEEDS OF 45 mph OR GREATER, $L = WS$
 L = TAPER LENGTH IN FEET
 W = WIDTH OF OFFSET IN FEET
 S = POSTED SPEED IN MPH

TAPER LENGTH CRITERIA:

MERGING TAPERS = at least L
SHIFTING TAPERS = at least $0.5L$
SHOULDER TAPERS = at least $0.33L$
ONE-LANE, TWO-WAY TRAFFIC TAPER = 100 feet max
DOWNSTREAM TAPERS = 100 feet per lane

ADVANCE WARNING SIGN SPACING

ROAD TYPE	Distance between signs in feet		
	A	B	C
Urban < 35 mph	100	100	100
Urban ≥ 35 mph	350	350	350
Rural	500	500	500
Expressway	1000	1500	2640

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Corlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN	ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME	13440_trcp_001.sht
DRAWING DATE:	November 2015

IDAHO
TRANSPORTATION
DEPARTMENT

IDAHO
TRANSPORTATION
DEPARTMENT

KELLER associates

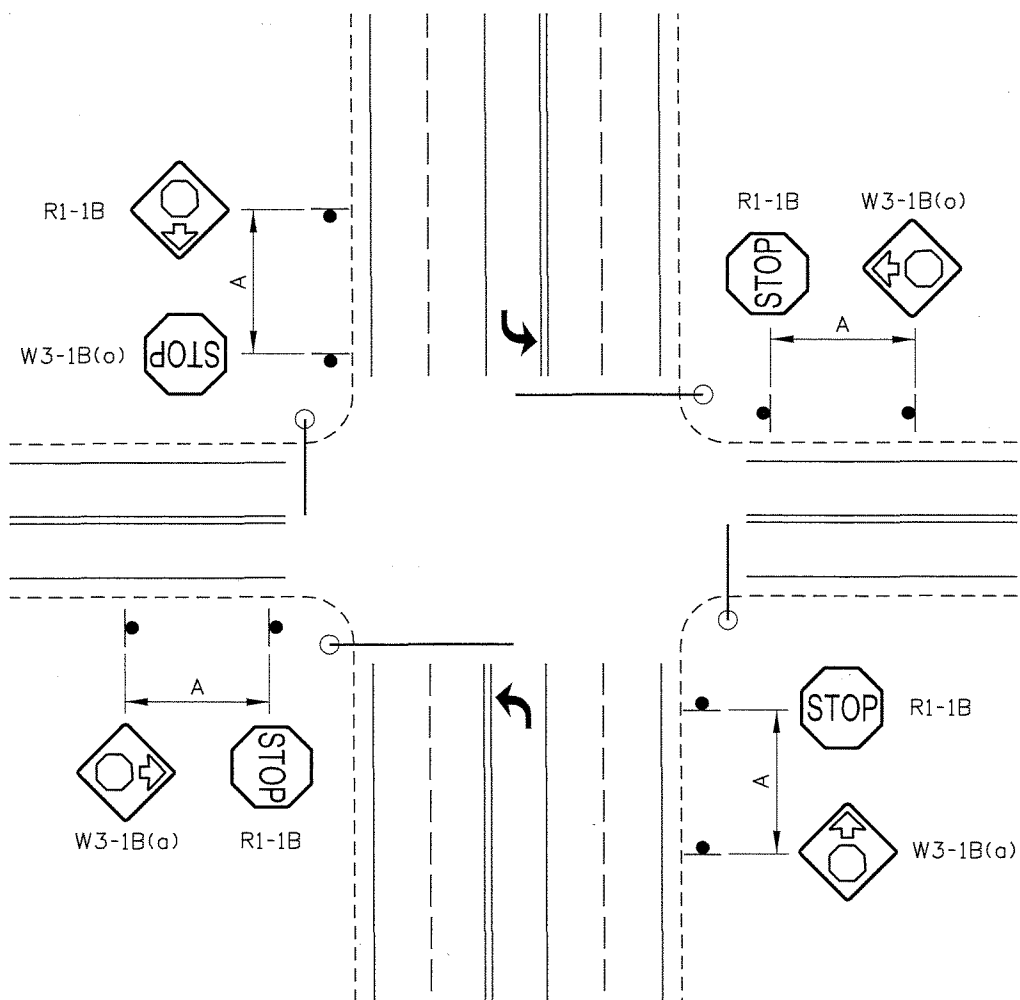
PROJECT NO.	A013(440)
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TRAFFIC CONTROL PLAN	SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON
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English	
COUNTY	Nez Perce
KEY NUMBER	13440
SHEET	30 OF 32

PROFESSIONAL ENGINEER
REGISTERED
11-3-15
8371
STEPHEN J. LEWIS

STOP CONTROL - 5 LANE ROAD



NOTES:

1. USE THIS TRAFFIC CONTROL PLAN WHEN SIGNAL MUST GO DARK OR MUST BE IN FLASH LONGER THAN 30 MINUTES DUE TO MAINTENANCE AND REPAIR OPERATIONS.
2. PUT SIGNAL INTO FLASH PRIOR TO SETTING UP STOP SIGNS.
3. DO NOT USE STOP-AND-GO SIGNAL OPERATION (RED-YELLOW-GREEN) WHEN STOP SIGNS ARE UP.
4. ALL SIGNS ARE 48"x48" IN SIZE. SEE ITD SIGN CHART FOR DETAILS.

LEGEND

- SIGNAL MAST ARM
- TRAFFIC CONTROL SIGN

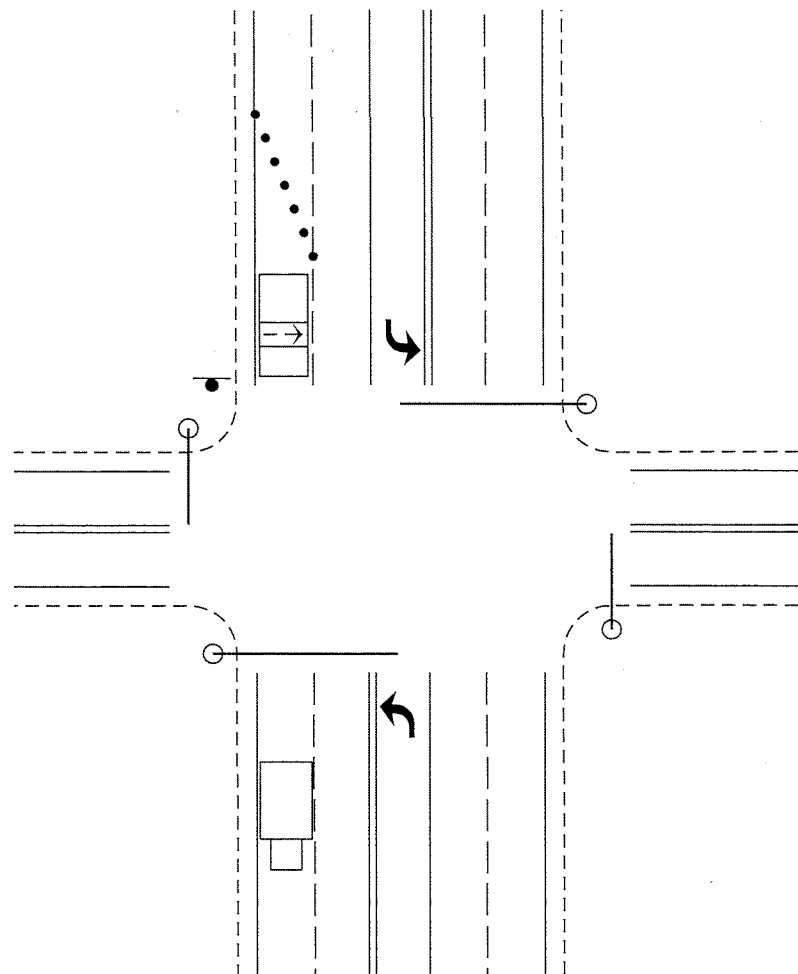
ADVANCE WARNING SIGN SPACING

ROAD TYPE	Distance between signs in feet		
	A	B	C
Urban < 35 mph	100	100	100
Urban ≥ 35 mph	350	350	350
Rural	500	500	500
Expressway	1000	1500	2640

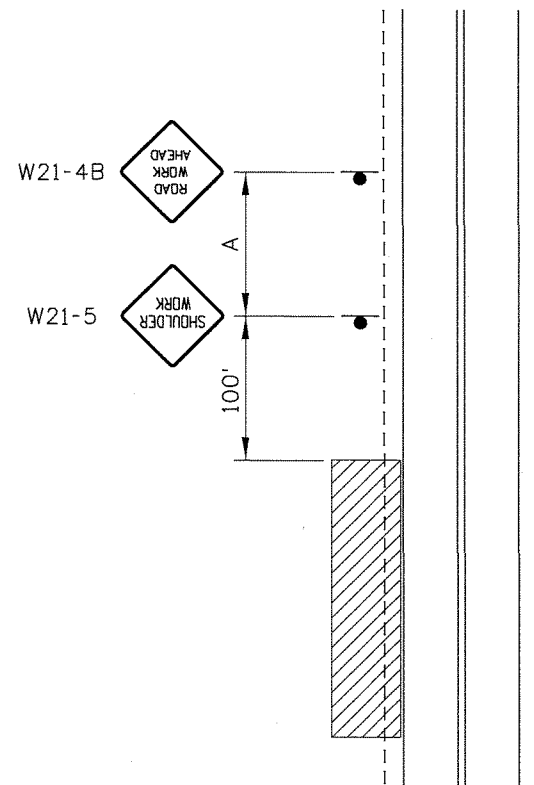
PENTABLE: ITD.tbl 11/2/2015 J:\214023\Project_Development\Plan_Sheets\Traffic\13440_trcp_002.sht

REVISIONS NO. DATE BY DESCRIPTION				DESIGNED S. Lewis DESIGN CHECKED N. Cleaver DETAILED M. Corlisle DRAWING CHECKED S. Lewis	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME 13440_trcp_002.sht DRAWING DATE: November 2015	IDAHO TRANSPORTATION DEPARTMENT KELLER associates	PROJECT NO. A013(440)	TRAFFIC CONTROL PLAN SMA-7254 INT 17TH ST & 16TH AVE, LEWISTON	English COUNTY Nez Perce KEY NUMBER 13440 SHEET 31 OF 32	
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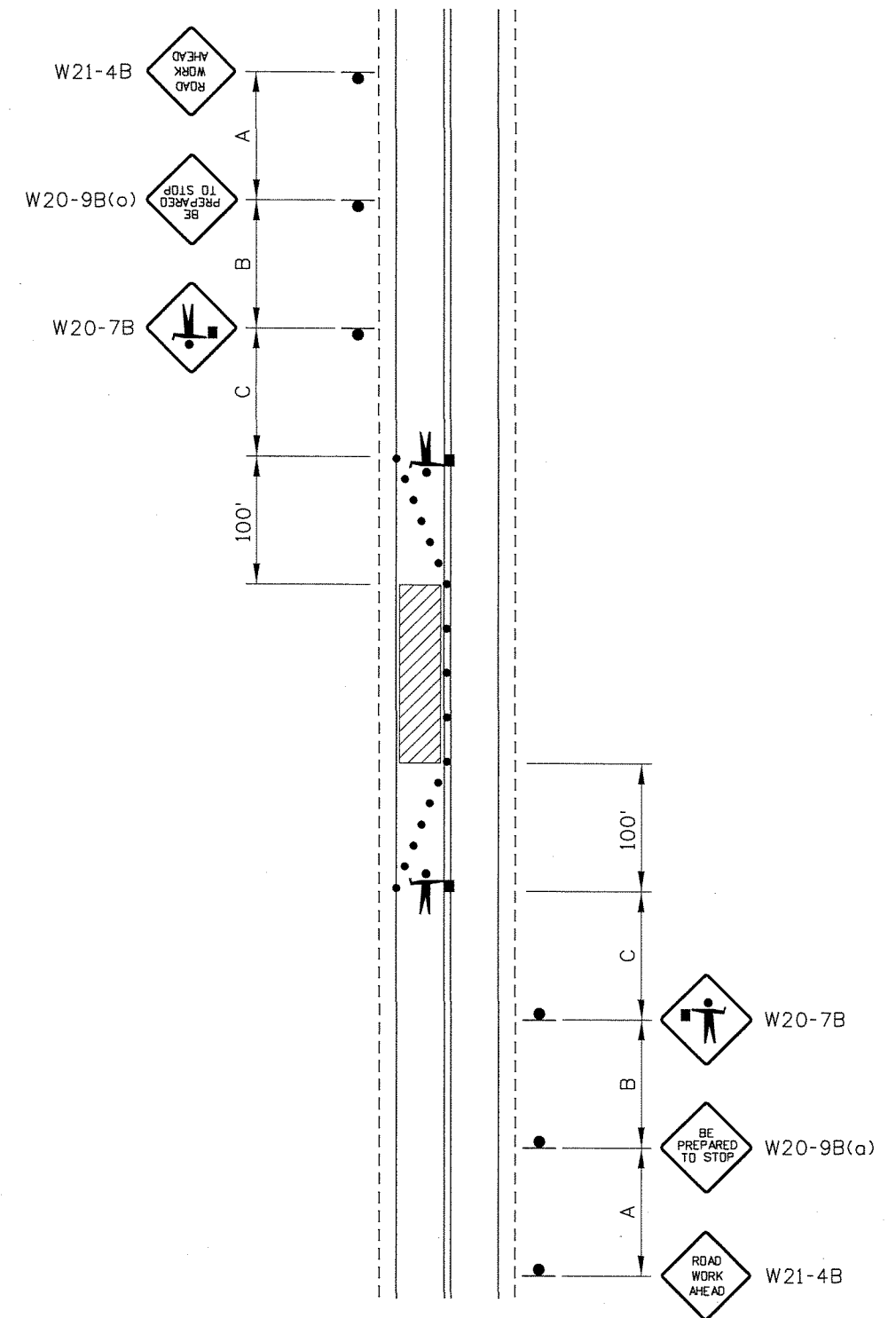
SHORT-TERM LANE CLOSURE - 5 LANE HIGHWAY



SHOULDER WORK - 2 LANE ROAD



STOP FLAGGER LANE CLOSURE - 2 LANE ROAD



NOTES:

1. PUT SIGNAL IN FLASH WHILE FLAGGING SIDE STREET APPROACHES.
2. ALL SIGNS ARE 48"x48" IN SIZE. SEE ITD SIGN CHART FOR DETAILS.

ADVANCE WARNING SIGN SPACING

ROAD TYPE	Distance between signs in feet		
	A	B	C
Urban < 35 mph	100	100	100
Urban ≥ 35 mph	350	350	350
Rural	500	500	500
Expressway	1000	1500	2640

LEGEND

- SIGNAL MAST ARM
- CHANNELIZING DEVICE
- TRAFFIC CONTROL SIGN
- FLAGGER
- WORK ZONE
- BUCKET TRUCK WITH STROBE LIGHT
- PICKUP TRUCK WITH ARROW PANEL

REVISIONS

NO.	DATE	BY	DESCRIPTION

DESIGNED	S. Lewis
DESIGN CHECKED	N. Cleaver
DETAILED	M. Carlisle
DRAWING CHECKED	S. Lewis

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME 13440_trcp_003.sht
DRAWING DATE: November 2015

IDAHO TRANSPORTATION DEPARTMENT

KELLER associates

PROJECT NO. A013(440)

TRAFFIC CONTROL PLAN

SMA-7254
INT 17TH ST & 16TH AVE,
LEWISTON

English

COUNTY Nez Perce

KEY NUMBER 13440

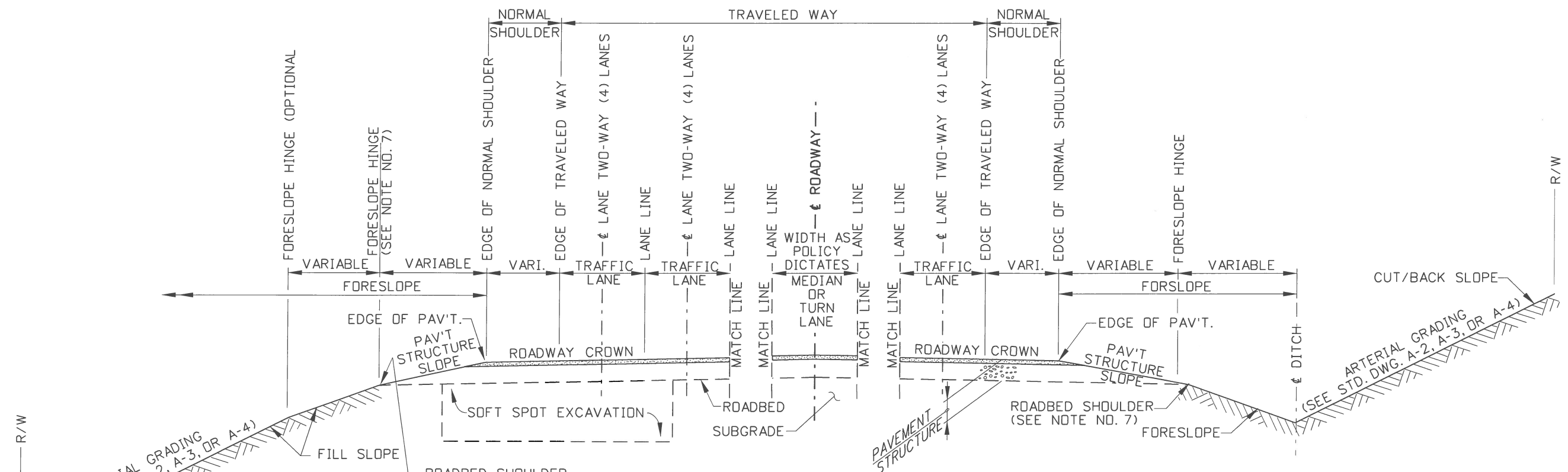
SHEET 32 OF 32

PROFESSIONAL ENGINEER

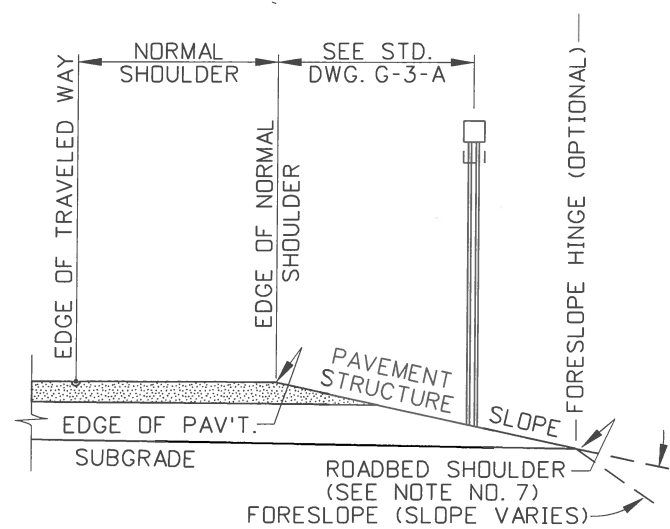
REGISTERED 11-3-15

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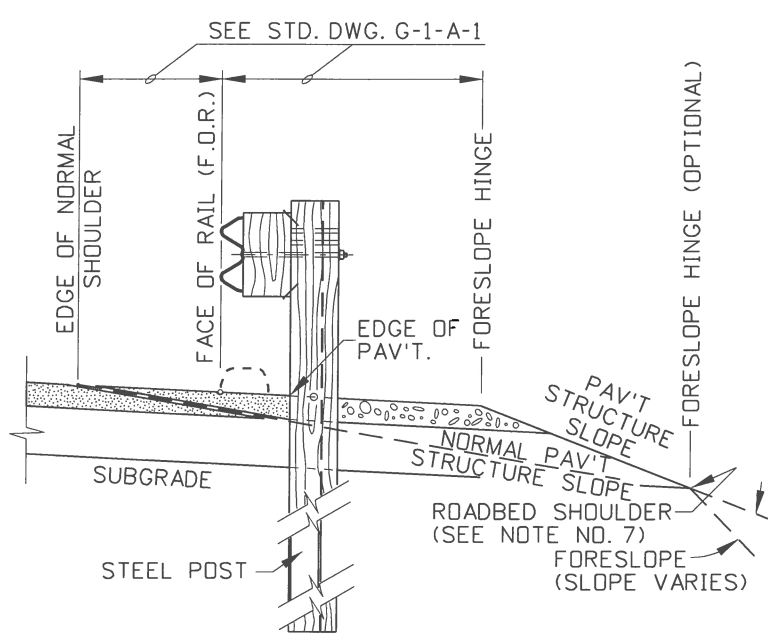
STEPHEN J. LEWIS



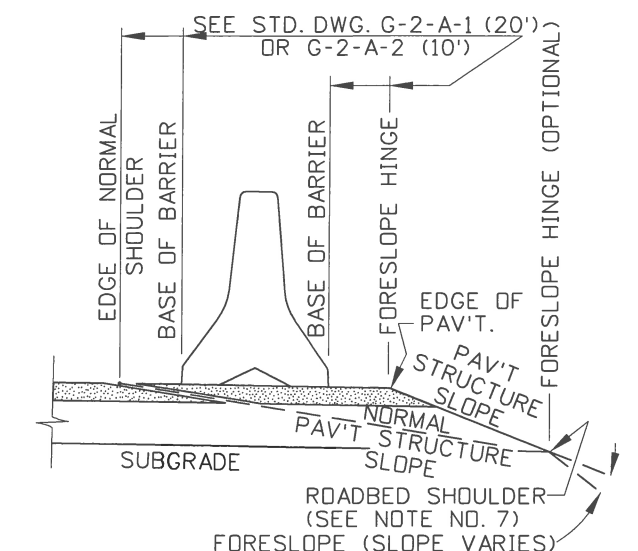
TYPICAL HIGHWAY



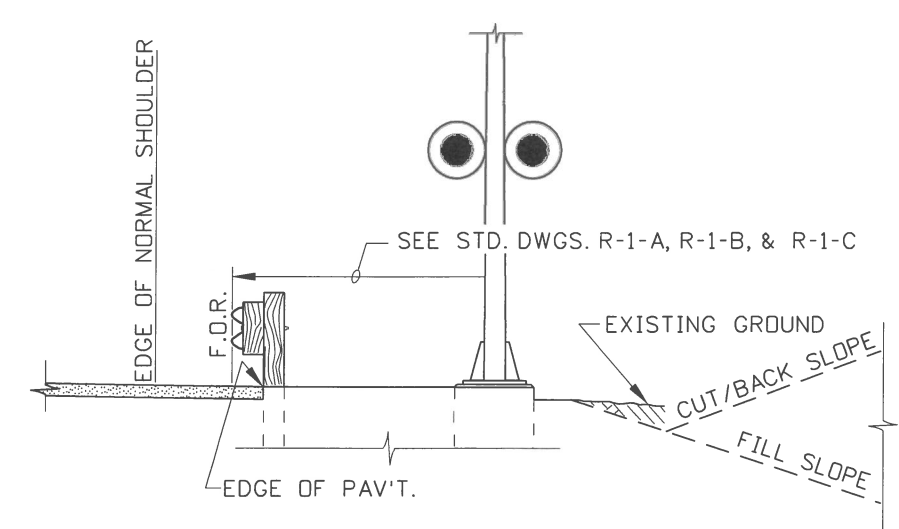
DELINEATOR INSTALLATION



STANDARD W-BEAM INSTALLATION (ASPHALT)



CONCRETE BARRIER INSTALLATION



RAILROAD INSTALLATION WITH GUARDRAIL

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	04-04	RL					
2	06-05	MSM					
3	09-10	PLR					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: a9_1010.dgn
DRAWING DATE: JUNE, 2003

IDAHO
TRANSPORTATION
DEPARTMENT

BOISE IDAHO

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

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

ITD ROADWAY NOMENCLATURE
LOCATION & EXAMPLES

REQUIRES SHEETS 2, 3, & 4

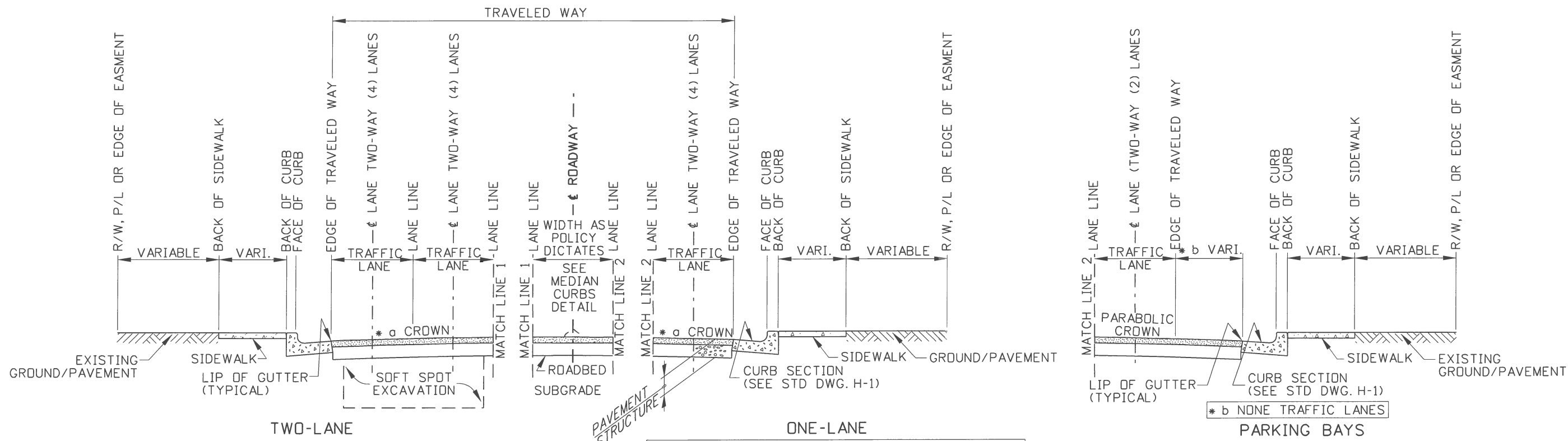
English

STANDARD DRAWING NO.
A-9

SHEET 1 OF 4

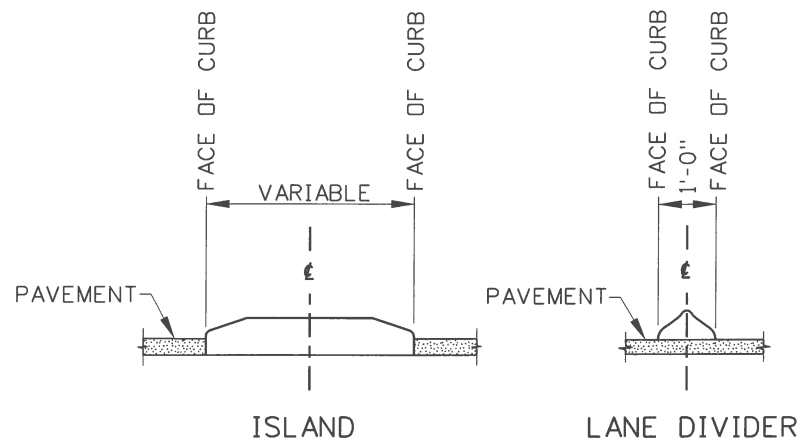
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: TED E. MASON
DATE ORIGINAL SIGNED: OCTOBER 26, 2010



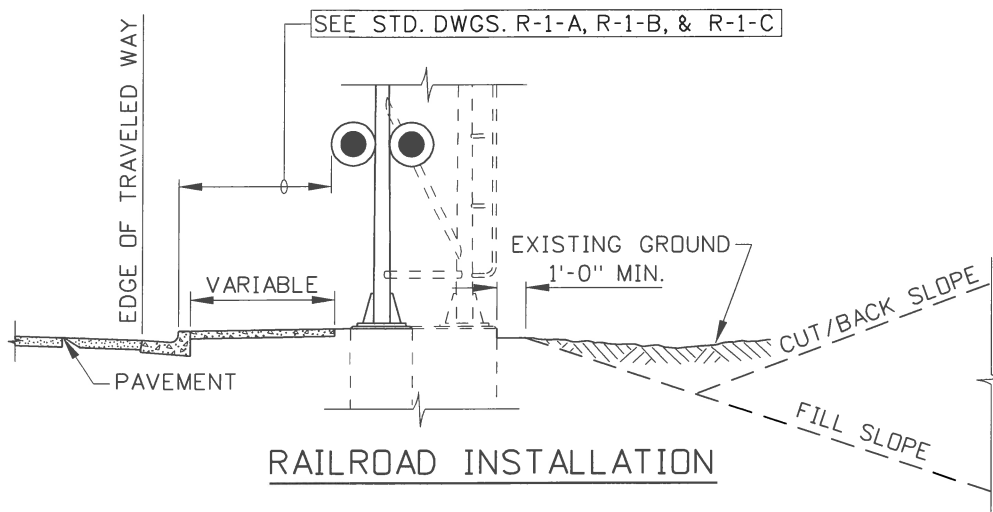
* a A PARABOLIC CROWN IS NORMALLY INSTALLED ON URBAN ROADWAYS BETWEEN CURB & GUTTERS (SEE NOTE NO. 5)

TYPICAL URBAN STREET



MEDIAN CURBS

(SEE STD. DWG H-1)



RAILROAD INSTALLATION

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	04-04	RL					
2	06-05	MSM					
3	09-10	PLR					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: a9_1010.dgn

DRAWING DATE: JUNE, 2003

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

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

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

ITD ROADWAY NOMENCLATURE LOCATION & EXAMPLES

REQUIRES SHEETS 1, 3, & 4

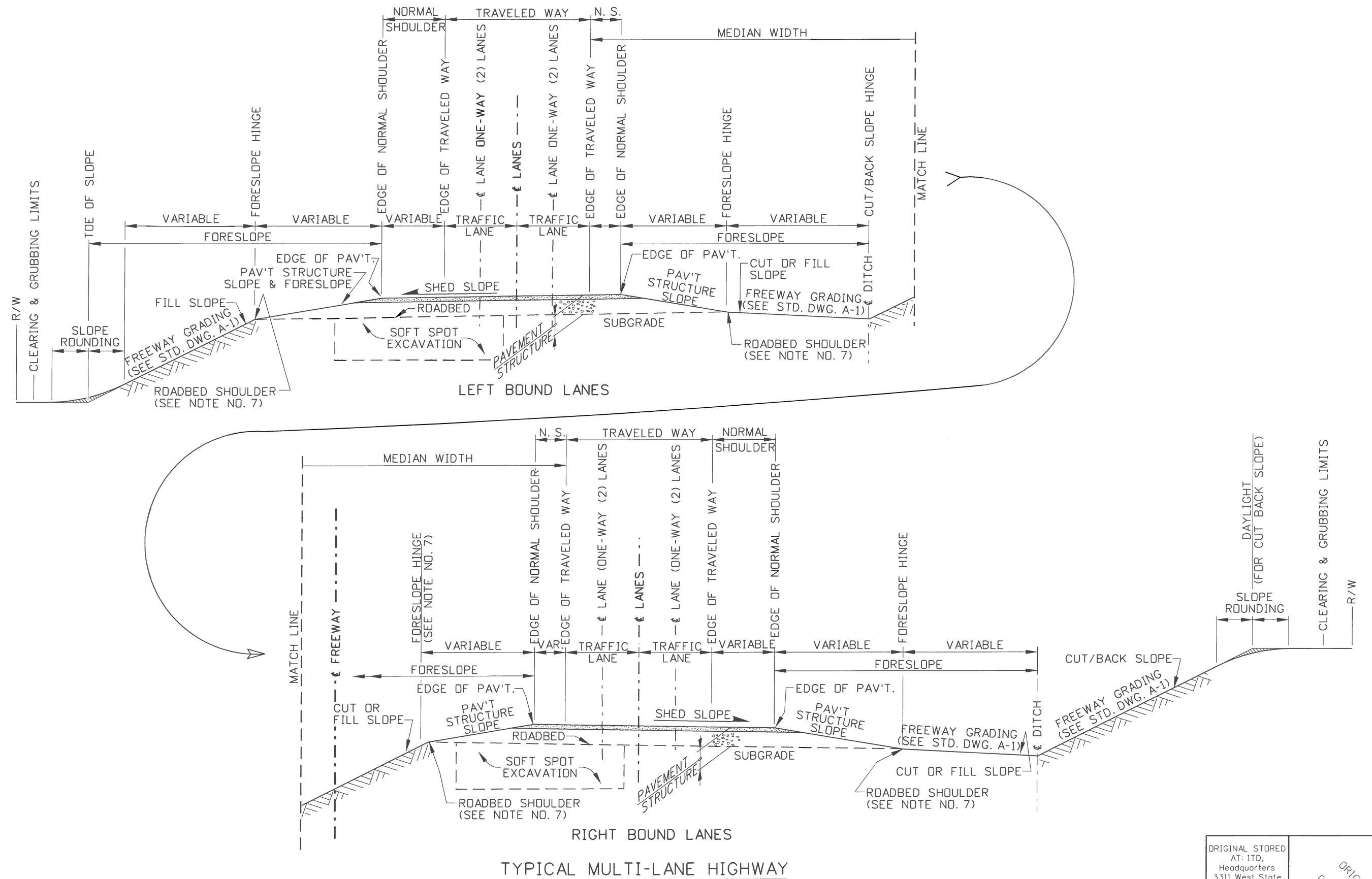
English

STANDARD DRAWING NO. **A-9**

SHEET 2 OF 4

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

ORIGINAL SIGNED BY: TED E. MASON
DATE ORIGINAL SIGNED: OCTOBER 26, 2010



REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	04-04	RL						
2	06-05	MSM						
3	09-10	PLR						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
a9_1010.dgn

DRAWING DATE:
JUNE, 2003

**IDAHO
TRANSPORTATION
DEPARTMENT**

BOISE IDAHO



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

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

**ITD ROADWAY NOMENCLATURE
LOCATION & EXAMPLES**

REQUIRES SHEETS 1, 2, & 4

English

STANDARD DRAWING NO.
A-9

SHEET 3 OF 4

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

ORIGINAL SIGNED BY:
TED E. MASON
DATE ORIGINAL SIGNED:
OCTOBER 26, 2010

DEFINITIONS

* THESE TERMS ARE NOT NORMALLY USED ON STANDARD DRAWINGS.

BACK OF CURB: THE BEGINNING OF SIDEWALK OR UTILITY STRIP. ALSO USED FOR SURVEY CONTROL LINE.

*PAVEMENT STRUCTURE: THE STRUCTURE THAT IS CONSTRUCTED ON THE ROADBED AND TYPICALLY INCLUDES SURFACING, BASE COURSES, AND GRANULAR SUBBASE.

PAVEMENT STRUCTURE SLOPE: THE PRIMARY PORTION OF THE FORESLOPE, BEGINNING AT THE EDGE OF PAVEMENT AND ENDING AT THE ROADBED SHOULDER.

BASE OF BARRIER: WHERE THE BASE OF CONCRETE BARRIER TOUCHES THE PAVEMENT (THE POINTS OF MEASUREMENT).

*CLEAR ZONE: THE ROADSIDE PORTION THAT IS BEYOND THE TRAVELED WAY AND IS AVAILABLE FOR USE BY ERRANT VEHICLES.

*CLEARING & GRUBBING LIMITS: AN AREA WITHIN THE ROADWAY CORRIDOR THAT ORGANIC MATTER IS REMOVED PRIOR TO PLACEMENT OF EMBANKMENT OR REMOVAL OF EXCAVATION.

CENTERLINE (C/L): THE CENTERLINE OF ROADWAY, TRAFFIC LANE(S), OR FREEWAY. ALSO REFERRED TO AS THE TRAFFIC MARKINGS THAT DELINEATE THE DIVISION OF OPPOSING TRAFFIC (SEE CONTROL LINE).

CONTROL LINE: A SURVEY LINE FROM WHICH ROADWAY DIMENSIONS ARE MEASURED (NOT NECESSARILY THE SAME AS THE ROADWAY CENTERLINE).

CUT/BACK SLOPE: AN ASCENDING SLOPE FROM THE EDGE OF FORESLOPE OR BOTTOM OF DITCH TO DAYLIGHT.

EDGE OF NORMAL SHOULDER: WHERE THE NORMAL SHOULDER ENDS.

EDGE OF PAVEMENT: THE EDGE OF THE TRAVELABLE PAVEMENT, WHERE THE PAVEMENT STRUCTURE SLOPE BREAKS DOWN FROM THE ROADWAY WIDTH.

FACE OF RAIL (F.O.R.): A VERTICAL LINE ALONG THE INNER MOST PART OF METAL GUARDRAIL THAT FACES THE ROADWAY.

FILL SLOPE: A DESCENDING SLOPE OF COMPACTED MATERIAL FROM THE EDGE OF ROADBED TO TOE OF SLOPE.

FORESLOPE: ANY DESCENDING SLOPE OR COMBINATION OF SLOPES FROM THE EDGE OF PAVEMENT TO THE BEGINNING OF A CUT/BACK SLOPE, BOTTOM OF DITCH, OR THE TOE OF SLOPE OF AN ADJACENT ROADWAY.

HIGHWAY: THE ENTIRE RIGHT-OF-WAY.

HINGE (POINT): A BREAKING POINT OF THE ROADWAY CROWN, PARABOLIC CROWN, PAVEMENT STRUCTURE SLOPE, FORESLOPE, FILL SLOPE, OR CUT SLOPE.

LANE LINE: EDGE OF A TRAFFIC LANE USUALLY DELINEATED BY A TRAFFIC MARKING LINE.

LIP OF GUTTER (L.O.G.): THE END OF THE CURB/GUTTER SECTION AND BEGINNING OF THE ROADWAY PAVEMENT. NORMALLY, THE CONTROL LINE WHEN A PARABOLIC CROWN IS INSTALLED.

MEDIAN: THE PORTION OF A DIVIDED HIGHWAY OR FREEWAY THAT SEPARATES THE TRAVELED WAYS FOR TRAFFIC IN OPPOSITE DIRECTIONS.

*MEDIAN WIDTH: THE WIDTH OF THE AREA BETWEEN THE TRAVELED WAYS OF TWO ROADWAYS.

NORMAL SHOULDER: THAT PORTION OF THE PAVED ROADWAY SURFACE OUTSIDE OF THE TRAVELED WAY.

PARABOLIC CROWN: A CROSS-SECTION FINISH GRADE THAT CONTAINS A PARABOLIC CURVE BETWEEN CURB & GUTTERS.

PLANS: APPROVED DRAWINGS OR REPRODUCTION OF APPROVED DRAWINGS THAT THE PROPOSED ROADWAY IS TO BE LET FOR CONTRACT AND CONSTRUCTED.

*PROFILE GRADE: A SERIES OF TANGENT GRADE LINES CONNECTED BY VERTICAL CURVES. IT IS TYPICALLY PLACED ALONG THE ROADWAY CENTERLINE OF UNDIVIDED FACILITIES AND AT THE RIGHT/LEFT LIP OF GUTTER FOR PAROBOLIC CONTROL IN URBAN AREAS.

*ROADSIDE: THE AREA ADJOINING THE OUTER EDGE OF THE ROADWAY WITHIN THE RIGHT-OF-WAY. AREAS (ALSO CALLED MEDIAN) BETWEEN THE ROADWAYS OF A DIVIDED HIGHWAY SHALL ALSO BE CONSIDERED ROADSIDE.

ROADWAY BALLAST: COMBINED PAVEMENT STRUCTURE AND EMBANKMENT (FILL) MATERIAL, INCLUDING SHOULDER MATERIAL OUTSIDE THE ROADWAY PRISM.

*ROADWAY CORRIDOR: THAT PORTION OF THE HIGHWAY WITHIN THE LIMITS OF CONSTRUCTION.

ROADWAY: SEE ROADWAY CORRIDOR.

ROADWAY CROWN: A CROSS-SECTION FINISH GRADE THAT CONTAINS A PERCENT GRADE OR SLOPE (SHOWN ON THE TYPICAL SECTION).

*ROADWAY PRISM: THE ENGINEERED/STRUCTURAL PORTION OF THE HIGHWAY. INCLUDES THE PAVEMENT STRUCTURE PLUS THE AREA BETWEEN THE ROADBED SHOULDERS, OR BACK OF CURB, EXTENDING DOWNWARD AND OUTWARD AT THE SLOPE OF 1.5 H TO 1.0 V TO THE INTERCEPT OF NATURAL GROUND, REMOVAL LIMIT, OR SLOPE OF EMBANKMENT KEYING BENCHES. INCLUDED ELEMENTS ARE ROADWAY PAVEMENT STRUCTURE, EMBANKMENT FILL, FOUNDATIONS FOR EMBANKMENT, AND SOFT SPOT EXCAVATION/BACKFILL. EMBANKMENT FILL OUTSIDE OF THE 1.5*H TO 1.0*V SLOPE IS NOT CONSIDERED PART OF THE ROADWAY PRISM (SEE DETAIL).

*ROADWAY SHOULDER: ANY TRAVELABLE PORTION OF THE ROADWAY OUTSIDE OF THE TRAVELED WAY.

*ROADWAY WIDTH: FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.

SHED SECTION: A CROSS-SECTION FINISH GRADE THAT CONTAINS A SINGLE PERCENT GRADE OR SLOPE (SHOWN ON THE TYPICAL SECTION).

SHY LINE OFFSET: THE DISTANCE FROM THE EDGE OF THE TRAVELED WAY, BEYOND WHICH A ROADSIDE OBJECT WILL NOT BE PERCEIVED AS AN OBSTACLE AND RESULT IN A MOTORIST'S REDUCING SPEED OR CHANGING VEHICLE POSITION ON THE ROADWAY (SEE 2006 AASHTO ROADSIDE DESIGN GUIDE, TABLE 5.5)

SHOULDER: THE PORTION OF THE ROADWAY CONTIGUOUS WITH THE TRAVELED WAY FOR THE ACCOMMODATION OF STOPPED VEHICLES, FOR EMERGENCY USE, AND FOR LATERAL SUPPORT OF BASE AND SURFACE COURSES (SEE NORMAL SHOULDER).

SLOPE: THE RELATIVE STEEPNESS OF THE TERRAIN EXPRESSED AS A RATIO OR PERCENTAGE,

SLOPE ROUNDING: THE INTRODUCTION OF A VERTICAL CURVE BETWEEN TWO SLOPES TO MINIMIZE THE ABRUPT SLOPE CHANGE.

ROADBED: THE TOP OF SUBGRADE, UPON WHICH THE PAVEMENT STRUCTURE, CURBS, SIDEWALKS, MEDIAN AND OTHER INCIDENTAL FACILITIES ARE CONSTRUCTED.

ROADBED SHOULDER: EDGE OF ROADBED, WHERE THE BOTTOM OF THE ROADWAY PAVEMENT STRUCTURE MEETS DAY LIGHT AT THE FORESLOPE OR FILL SLOPE.

SOFT SPOT EXCAVATION: EXCAVATION BELOW OR BEYOND THE NORMAL ROADWAY PRISM USUALLY DUE TO SUBGRADE MATERIAL THAT WILL NOT SUPPORT A NORMAL ROADWAY BALLAST. SMALL QUANTITIES AT SPECIFIC LOCATIONS THAT ARE USUALLY NOT SHOWN ON THE PLANS.

TOE OF SLOPE: WHERE THE BOTTOM OF A SLOPE (USUALLY A FILL SLOPE) INTERSECTS THE NATURAL GROUND OR BOTTOM OF DITCH.

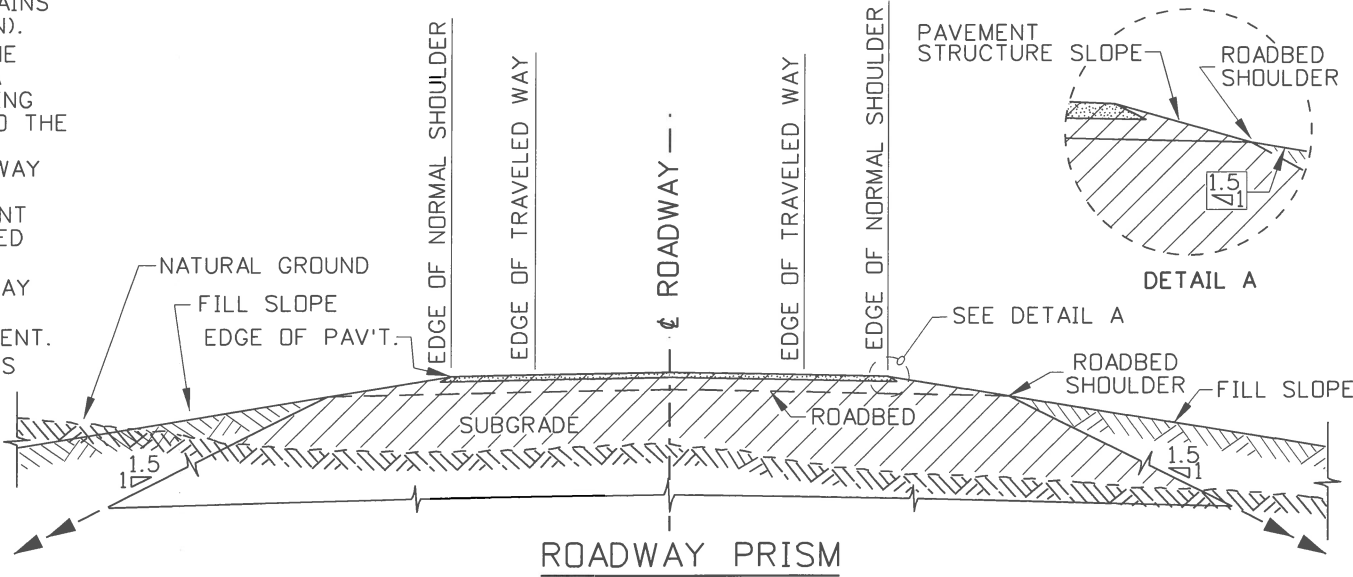
*TRAFFIC LANE: THE PORTION OF THE TRAVELED WAY FOR THE MOVEMENT A SINGLE LINE OF VEHICLES.

TRAVELED WAY: THAT PORTION OF THE ROADWAY CORRIDOR THAT IS DESIGNATED FOR VEHICULAR TRAVEL NOT INCLUDING THE ROADWAY SHOULDERS.

TYPICAL SECTION: AN ELEVATION DETAIL IN THE PLANS WHICH IS A ROADWAY CROSS-SECTION THAT INCLUDES A TRAVERSE FINISH GRADE PROFILE, THE PAVEMENT STRUCTURE REQUIREMENTS AND BASIC ROADWAY CONSTRUCTION DIMENSIONS.

*URBAN STREET: A PAVED STREET WITH A PARABOLIC CROWN CONNECTING CURB AND GUTTER EDGES.

THE ROADWAY PRISM IS REPRESENTED BY THE CROSS-HATCHED AREA THAT INCLUDES PAVEMENT STRUCTURE AND SUBGRADE, BUT NOT NATURAL GROUND (NOTE: TOP SOIL AND ORGANIC MATTER REMOVED).



NOTES

1. THE ITEMS AND TERMS SHOWN ARE INTENDED TO BE GENERAL EXAM- PLES AND SHALL NOT HAVE PRECEDENCE OF ANY DEFINITION CONTAINED IN THE PLANS OR STANDARD SPECIFICATIONS. SOME DEFINITIONS AND USAGE HEREIN MAY BE UNIQUE TO THE (ITD) IDAHO TRANSPORTATION DEPARTMENT.
2. ADDITIONAL DEFINITION OF TERMS CAN BE FOUND IN THE AASHTO ROADSIDE DESIGN GUIDE AND THE ITD STANDARD SPECIFICATIONS.
3. REFER TO STANDARD DRAWING A-1 WHEN USING FREEWAY TERMS.
4. REFER TO STANDARD DRAWING A-2, A-3, & A-4 WHEN USING MAJOR AND/OR MINOR ARTERIAL TERMS.
5. REFER TO STANDARD DRAWING A-10 WHEN INSTALLING A PARABOLIC CROWN.
6. REFER TO STANDARD DRAWING G-1-A-1 WHEN INSTALLING A METAL GUARDRAIL.
7. REFER TO STANDARD DRAWING G-2-A-1 AND OR G-2-A-2 WHEN INSTALLING STANDARD CONCRETE BARRIER.
8. REFER TO THE APPROPRIATE STANDARD DRAWING, R-1-A, R-1-B, R-1-C, OR R-2 WHEN A RAILROAD CROSSING IS INVOLVED.
9. WHEN CURB OR CURB & GUTTER IS USED REFER TO STANDARD DRAWING H-1.
10. A FORESLOPE HINGE POINT IS NOT NECESSARILY AT THE EDGE OF ROADBED (SEE DEFINITION OF FORESLOPE).

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	04-04	RL						
2	06-05	MSM						
3	09-10	PLR						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: a9-1010.dgn
DRAWING DATE: JUNE, 2003

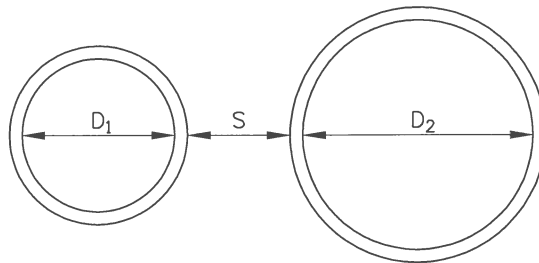
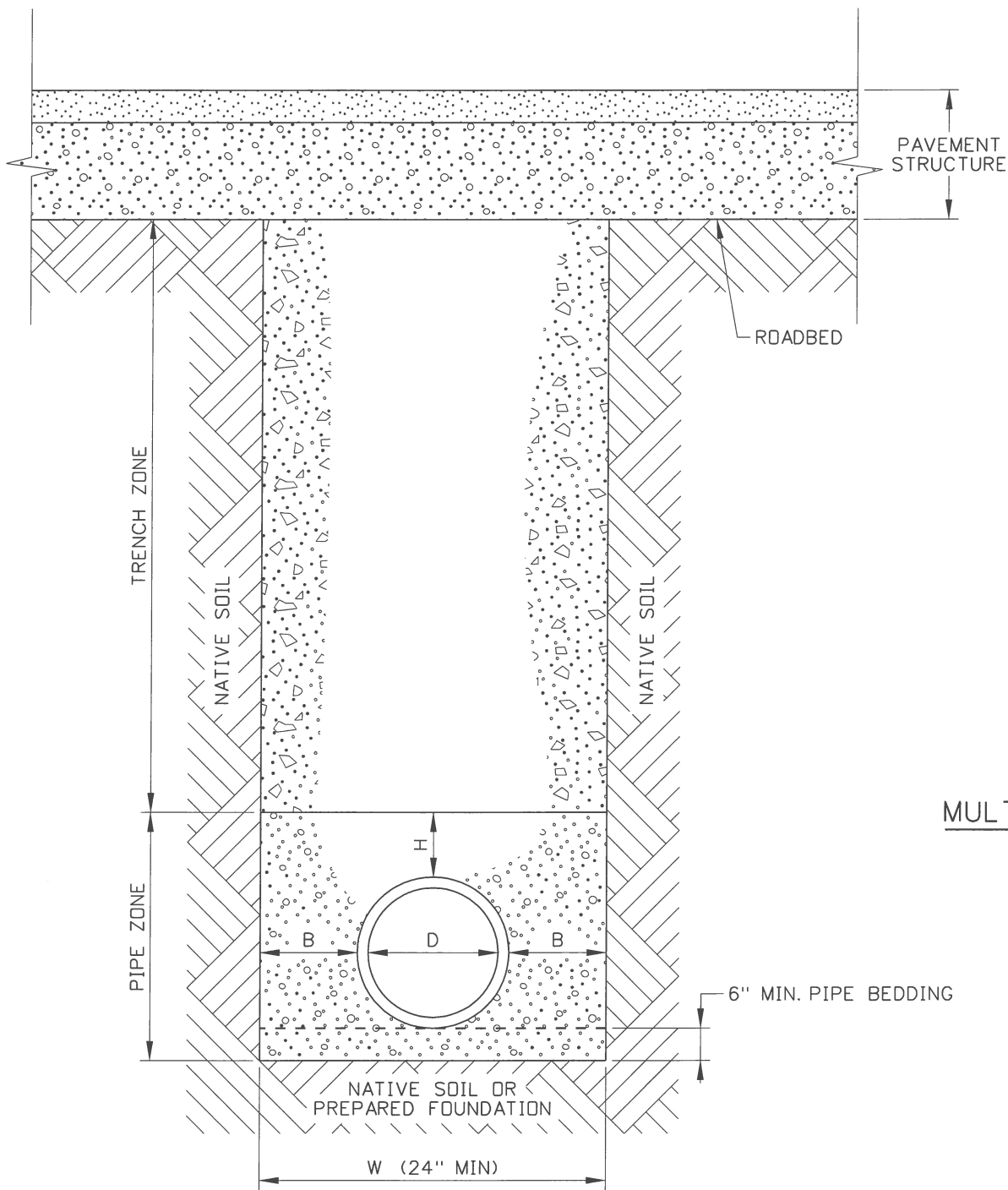
IDAHO TRANSPORTATION DEPARTMENT	
BOISE IDAHO	

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

STANDARD DRAWING
ITD ROADWAY NOMENCLATURE LOCATION & EXAMPLES
REQUIRES SHEETS 1, 2, & 3

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho
English STANDARD DRAWING NO. A-9
SHEET 4 OF 4

ORIGINAL SIGNED BY: TED E. MASON DATE ORIGINAL SIGNED: OCTOBER 26, 2010
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MULTIPLE PIPE INSTALLATION DETAIL

MATERIALS AND COMPACTION TABLE				
PIPE LOCATION	PIPE ZONE		TRENCH ZONE	
	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT	MATERIAL REQUIREMENT	COMPACTION REQUIREMENT
INSIDE ROADWAY PRISM	¾" AGGREGATE (703.04) (SEE NOTE NO. 1)	6" MAX. LOOSE LIFTS, COMPACTED TO 95% OF AASHTO T-99 OR IT-74 (SEE NOTE NO. 3)	¾" AGGREGATE (703.04) (SEE NOTE NO. 1)	CLASS A COMPACTION. (SEE NOTE NO. 2)
OUTSIDE ROADWAY PRISM	¾" AGGREGATE (703.04) (SEE NOTE NO. 1)	6" MAX. LOOSE LIFTS, COMPACTED TO 95% OF AASHTO T-99 OR IT-74 (SEE NOTE NO. 3)	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

DIMENSION TABLE (SEE NOTE NOS. 4 AND 5)			
D (INCHES)	B (INCHES)	H (INCHES)	S (INCHES)
≤ 6	10	8	24
7 TO 15	12	10	24
16 TO 30	18	12	24
> 30	24	14	GREATER OF 24 OR D/2

NOTES

- 1. CONTROLLED DENSITY FILL (FLOWABLE FILL) MATERIAL OR PEA GRAVEL CAN BE USED IF APPROVED BY THE ENGINEER.
- 2. CLASS D COMPACTION IN MEDIAN AND OUTSIDE 2H:1V SLOPE.
- 3. LOOSE LIFT THICKNESS DIRECTLY ON TOP OF PIPE MAY BE INCREASED TO PREVENT DAMAGE TO PIPE DURING COMPACTION. CLASS D COMPACTION MAY BE APPLIED OUTSIDE THE ROADWAY PRISM IF APPROVED BY THE ENGINEER.
- 4. WHEN TWO DIFFERENT DIAMETER PIPES ARE INSTALLED, USE THE LARGER D DIMENSION TO DETERMINE THE S DIMENSION.
- 5. FOR PIPE DIAMETERS GREATER THAN 36 INCHES, THE B DIMENSION SHOULD BE EQUAL TO THE PIPE DIAMETER WHEN THE PIPE INSTALLED DURING EMBANKMENT CONSTRUCTION.
- 6. DRAWINGS NOT TO SCALE.

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: d12_0514.dgn

DRAWING DATE: May, 2014

IDAHO
TRANSPORTATION
DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: CARL D. MAIN
DESIGN/TRAFFIC SERVICES ENGINEER

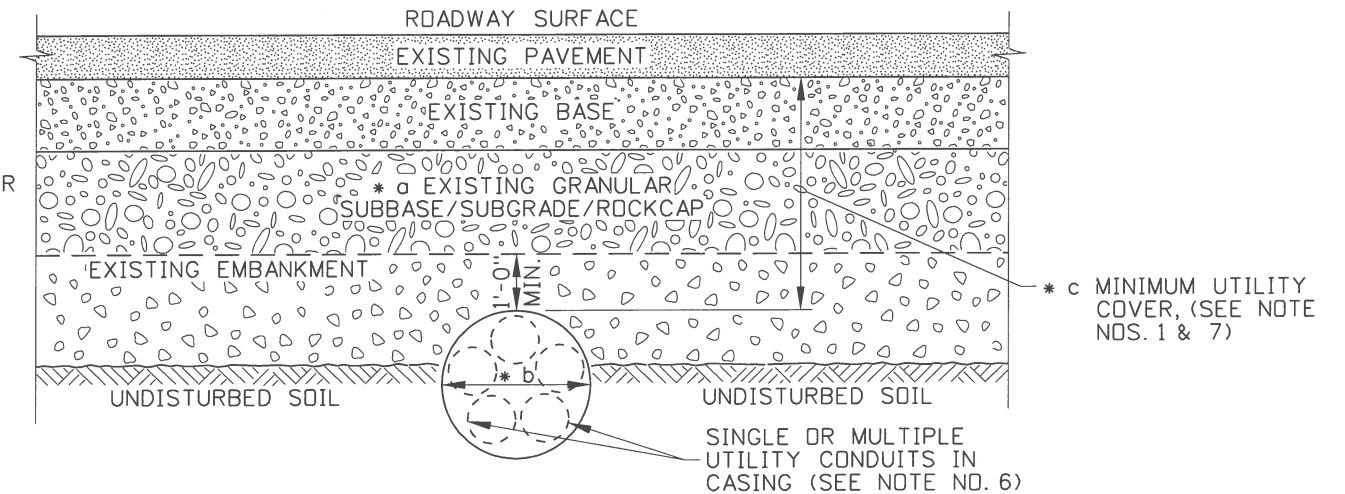
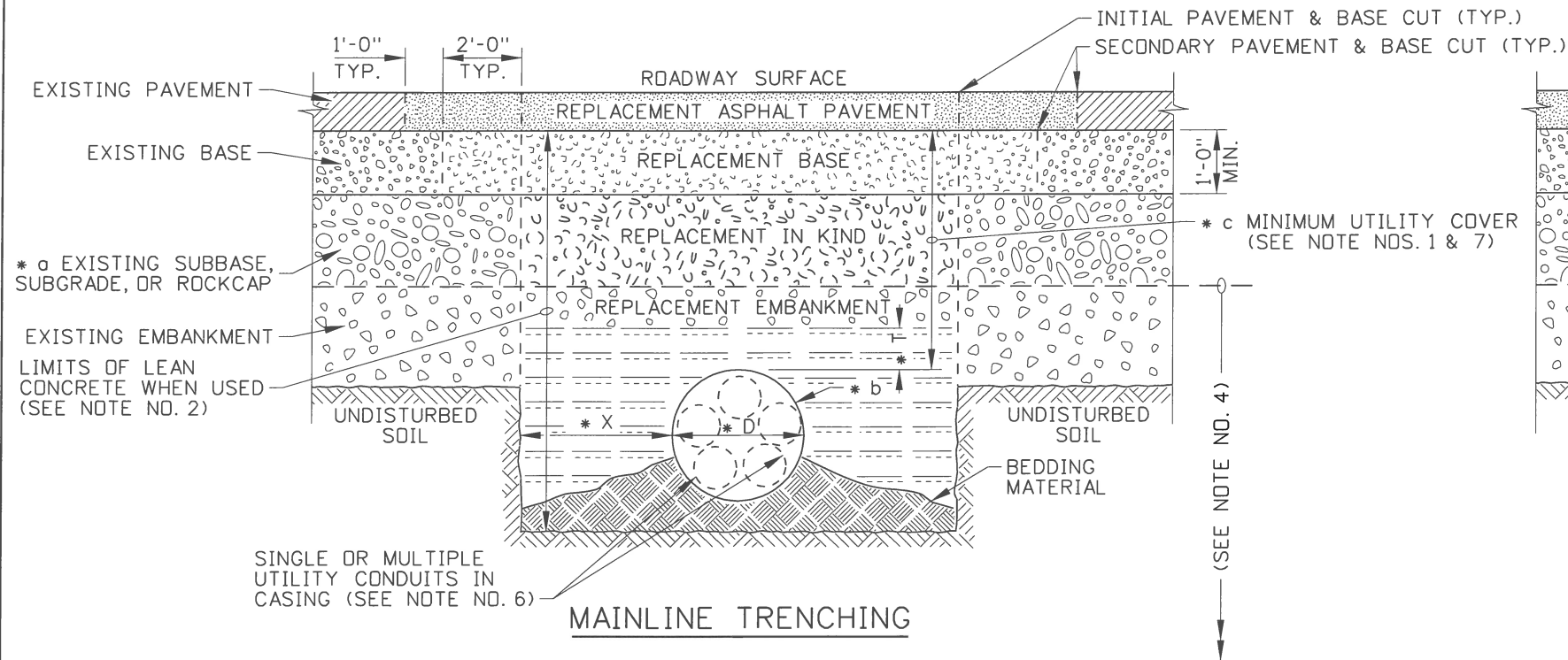
STANDARD DRAWING

PIPE & CONDUIT
INSTALLATION

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

English
STANDARD DRAWING NO. D-12
SHEET 1 OF 1

ORIGINAL SIGNED BY: TR1 BUU
DATE ORIGINAL SIGNED: MAY 8, 2014



JACKING, DRIVING, OR BORING

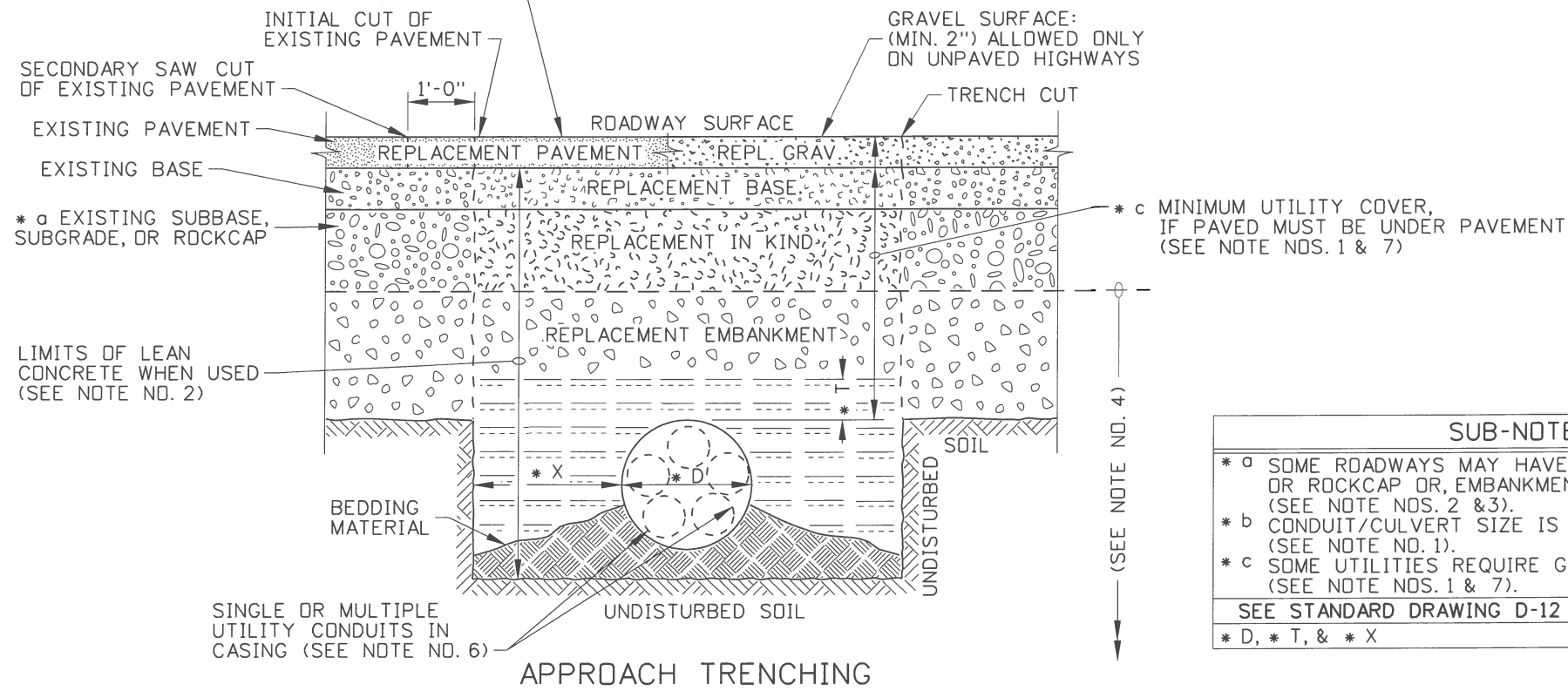
NOTES

- THE DESCRIPTION OF CONDUIT SHALL INCLUDE CULVERTS, PIPES, AND CASINGS USED FOR THE PURPOSE OF CONVEYING WATER, PETROLEUM PRODUCTS, AND UNDERGROUND UTILITIES. THE METHOD OF INSTALLATION (JACKING, DRIVING, OR BORING AND TRENCHING) SHALL MEET THE REQUIREMENTS OF THE "UTILITIES ACCOMMODATIONS", APPENDIX B, OF THE ITD DESIGN MANUAL AND THE REQUIREMENTS OF STATE, COUNTY OR OTHER LOCAL AUTHORITY.
- THE USE OF LEAN CONCRETE AS BACKFILL MATERIAL IN OPEN TRENCH CROSSINGS ON ROADWAYS AND APPROACHES MAY BE REQUIRED BY THE PERMITTING ENTITY. LEAN CONCRETE FOR THE REPLACEMENT OF BASE, SUBBASE, AND EMBANKMENT SHALL REQUIRE AN APPROVED MIX DESIGN.
- WHEN REPLACEMENT MATERIAL FOR THE BASE, SUBBASE, AND/OR EMBANKMENT IS NOT LEAN CONCRETE, THEN THE REPLACEMENT MATERIALS AND COMPACTION OF THE BASE COURSE(S) SHALL BE IN ACCORDANCE WITH SECTION 303 - AGGREGATE BASE AND THE SUBBASE SHALL BE IN ACCORDANCE WITH SECTION 301 - GRANULAR SUBBASE OF THE ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (NOTE: WHEN A ROCKCAP IS ENCOUNTERED THE REPLACEMENT MATERIAL SHALL BE IN KIND OR AS DIRECTED BY THE ENGINEER).
- ALL CONDUIT PLACEMENT BY OPEN TRENCHING SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING D-12 - CONDUIT INSTALLATION AND SECTION 210 - STRUCTURE EXCAVATION AND COMPACTING BACKFILL OF THE ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- WHEN THE PAVEMENT IS DISTURBED ON ROADWAYS AND/OR RURAL PRIVATE, COMMERCIAL, AND PUBLIC APPROACHES BY JACKING, DRIVING, BORING OR TRENCHING THE PAVEMENT SHALL BE RESTORED TO THE ORIGINAL DEPTH AND SMOOTHNESS.
- UTILITY CONDUITS SHALL CONTAIN ADDITIONAL CARRIERS WHENEVER FEASIBLE TO ALLOW ACCESS FOR FUTURE USE. WHEN MULTIPLE CARRIERS ARE PLACED IN TRENCH WITHOUT CASING, THE CARRIERS SHALL BE SEPARATED BY 3" OF SAND OR SOIL CUSHION.
- THE MINIMUM DEPTH COVER FOR CULVERTS CONVEYING WATER IS 2'-0". PIPELINES CARRYING LIQUID OR GAS PETROLEUM SHALL HAVE A MINIMUM DEPTH COVER AT ANY POINT UNDER THE ROADWAY PRISM OF 4'-0". UTILITIES FOR COMMUNICATION SHALL CONFORM TO THE 2'-0" MINIMUM DEPTH COVER (NOTE: MINIMUM DEPTH IS FROM UNDER PAVEMENT).
- NOT TO SCALE.

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

ORIGINAL SIGNED BY:
MILFORD L. MILLER
DATE ORIGINAL SIGNED:
JANUARY 5, 2005

ASPHALT PAVEMENT SURFACE:
REQUIRED ON ALL RURAL PRIVATE & COMMERCIAL APPROACHES. PAVED TO A MINIMUM DEPTH OF 3". ALL PUBLIC APPROACH PAVING & BALLAST DEPTHS SHALL MEET LOCAL HIGHWAY DISTRICT OR CITY REQUIREMENTS (SEE NOTE NO. 5).



SUB-NOTES	
* a	SOME ROADWAYS MAY HAVE A GRANULAR SUBBASE, OR ROCKCAP OR EMBANKMENT WITH NO SUBBASE. (SEE NOTE NOS. 2 & 3).
* b	CONDUIT/CULVERT SIZE IS MIN. 1'-0" (SEE NOTE NO. 1).
* c	SOME UTILITIES REQUIRE GREATER DEPTH. (SEE NOTE NOS. 1 & 7).
SEE STANDARD DRAWING D-12 FOR DEFINITIONS OF:	
* D, * T, & * X	

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
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2	01-05	MSM					

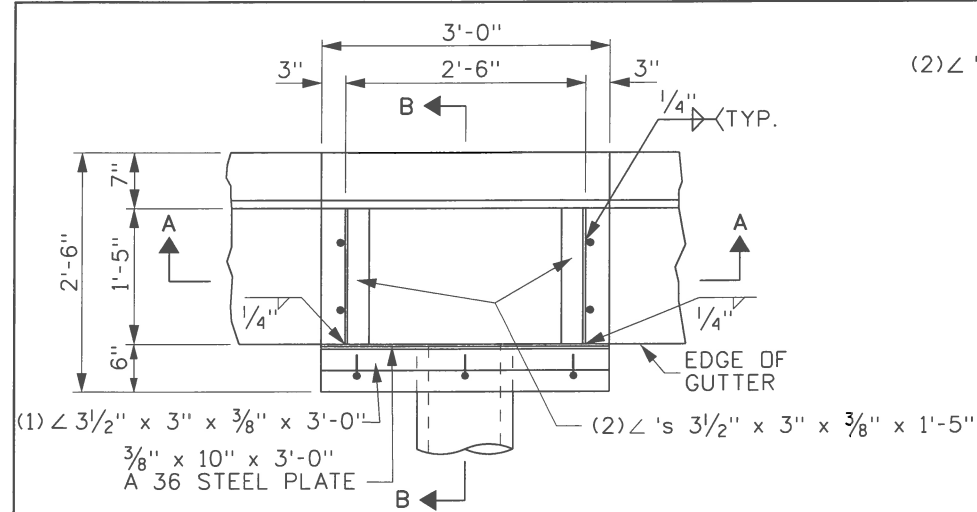
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
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DRAWING DATE: FEBRUARY, 2000

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

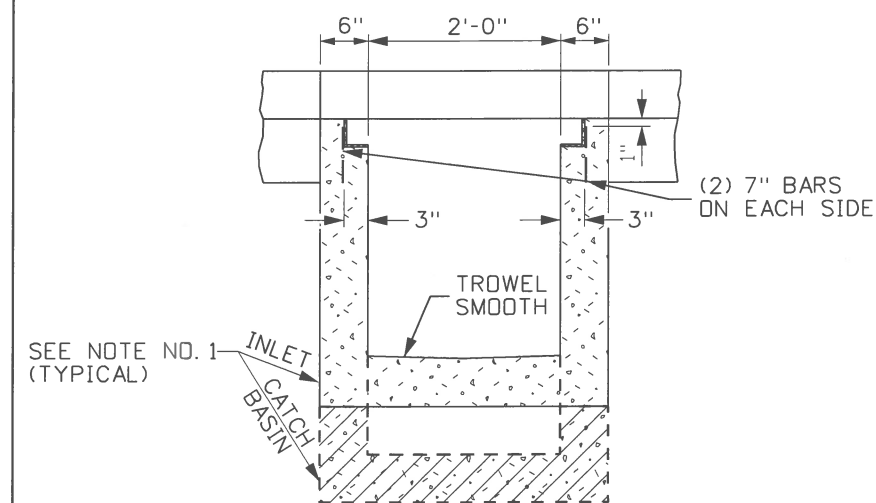
ORIGINAL SIGNED BY: LOREN THOMAS ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: STEVEN HUTCHINSON CHIEF ENGINEER

STANDARD DRAWING
CONDUIT INSTALLATION FOR EXISTING ROADWAYS & APPROACHES
REQUIRES STD. DWG. D-12

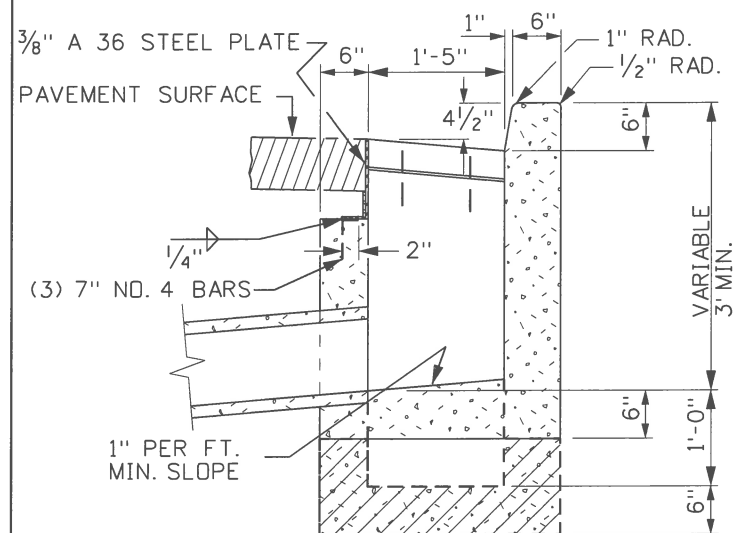
English
STANDARD DRAWING NO. D-13
SHEET 1 OF 1



PLAN



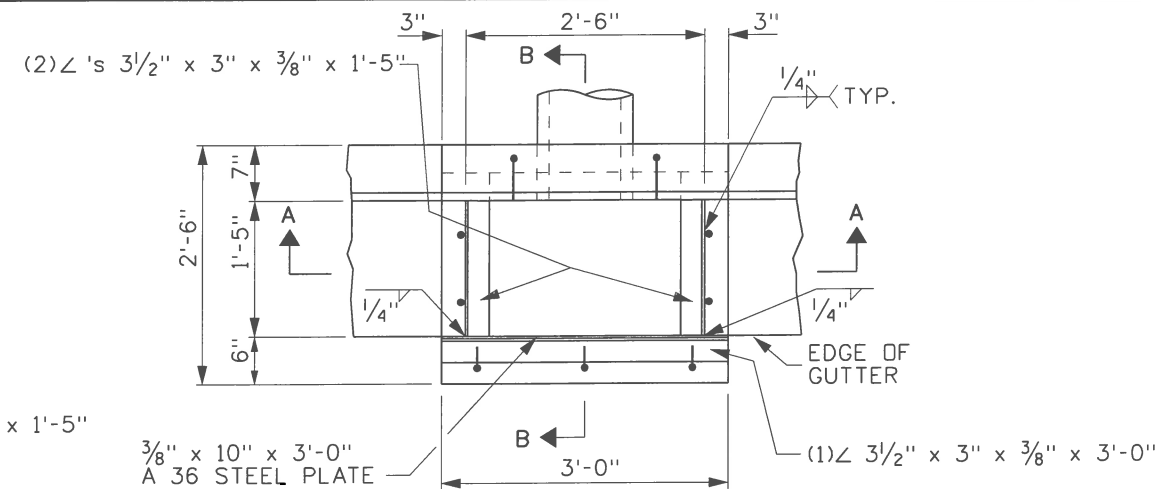
SECTION A-A



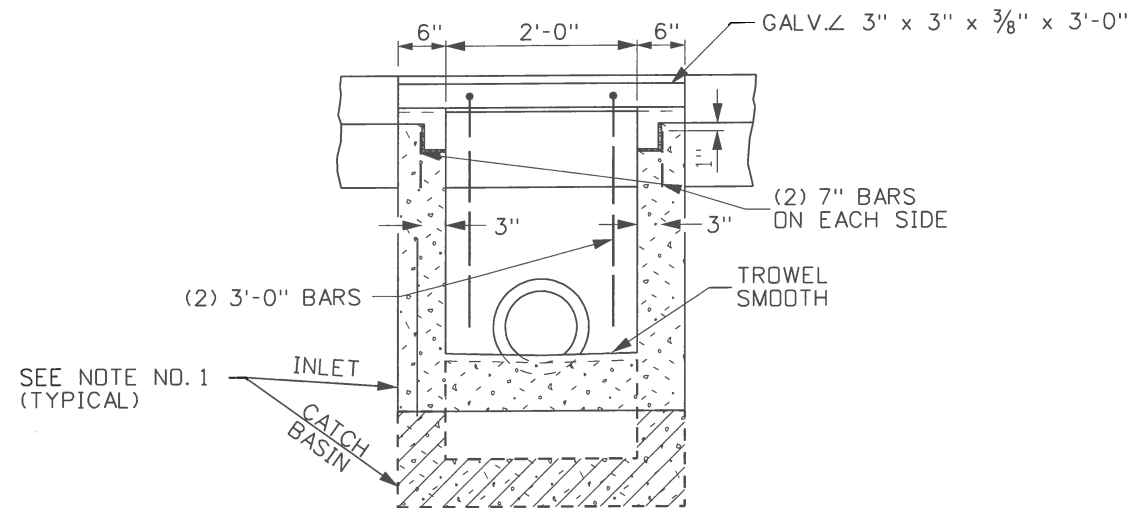
SECTION B-B

INLET - TYPE 1

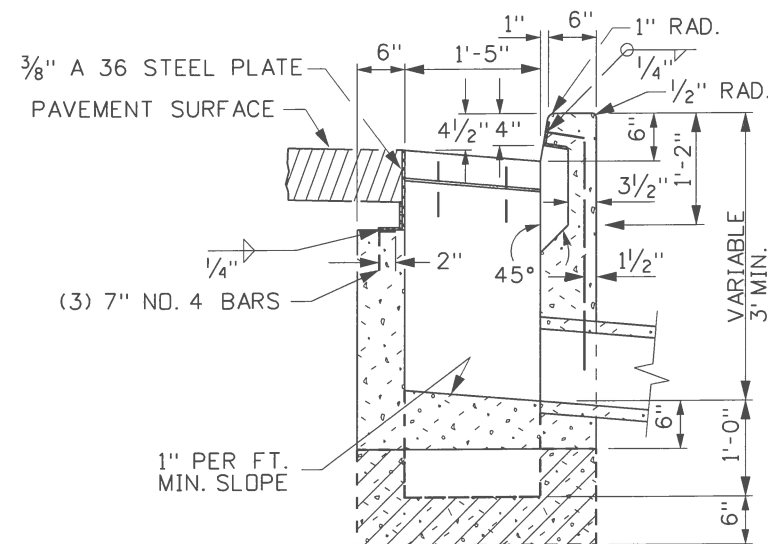
CATCH BASIN - TYPE 1



PLAN



SECTION A-A



SECTION B-B

INLET - TYPE 2

CATCH BASIN - TYPE 2

NOTES

1. PATTERNS USED IN DRAWING:

INLET SECTIONS:



CATCH BASIN BOTTOMS:



PAVEMENT:



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.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	10-80		6	09-94	MSM	11	11-08
2	04-82		7	06-97	MSM		
3	03-84		8	06-01	MSM		
4	01-89	GB	9	11-04	MSM		
5	12-93	MSM	10	05-07	MSM		

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
e6a_1108.dgn

DRAWING DATE:
JULY, 1961

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 1, 2, & 3

REQUIRES SHEET 2 OF 2

English

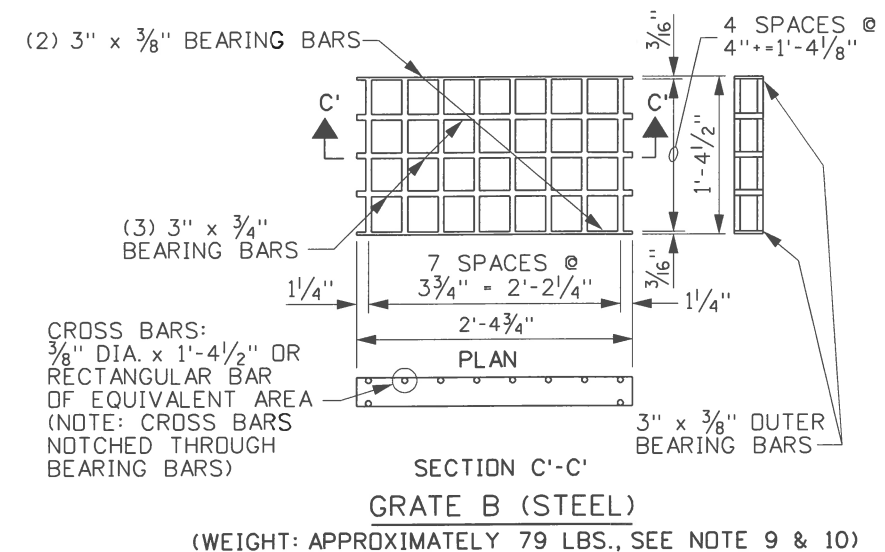
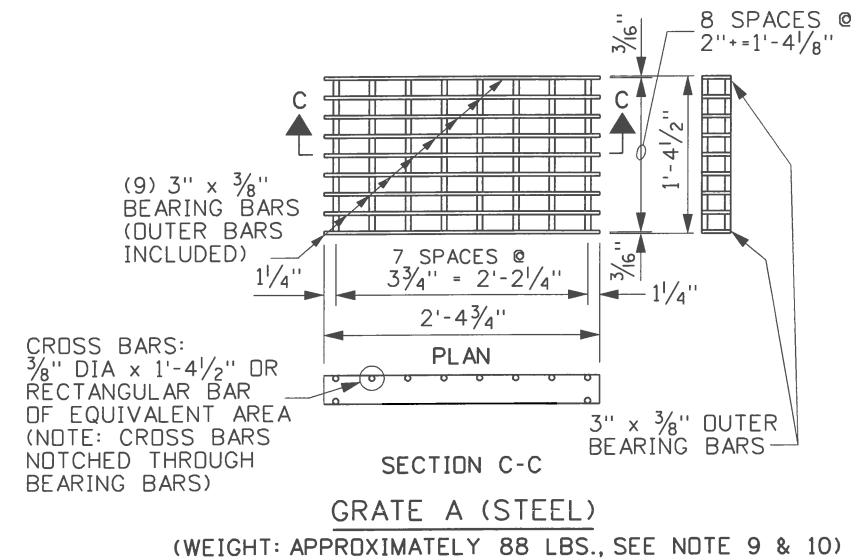
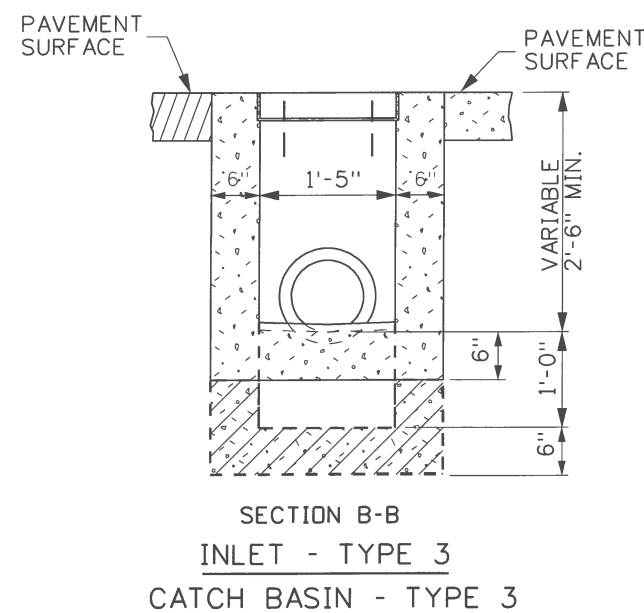
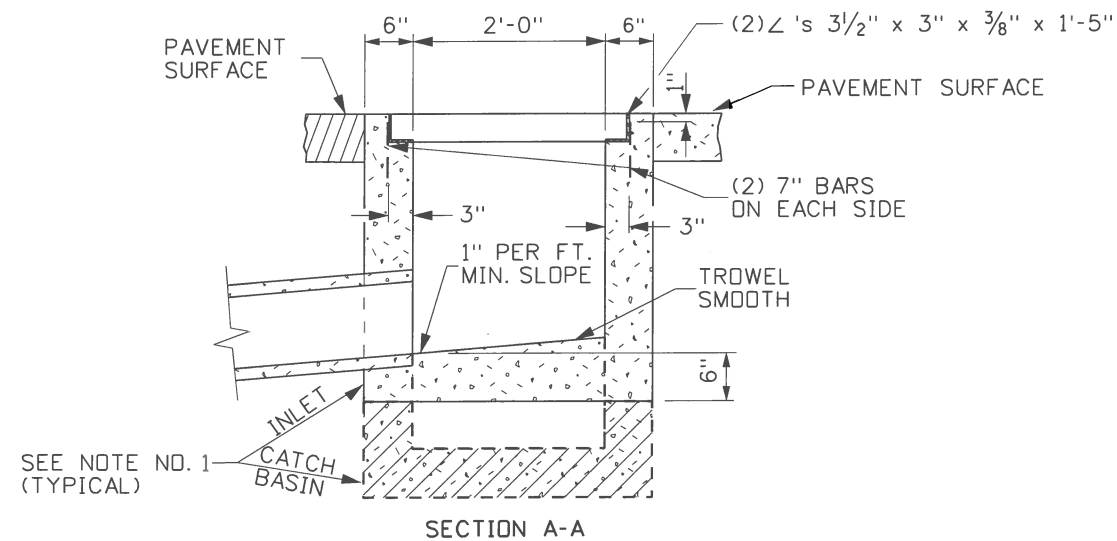
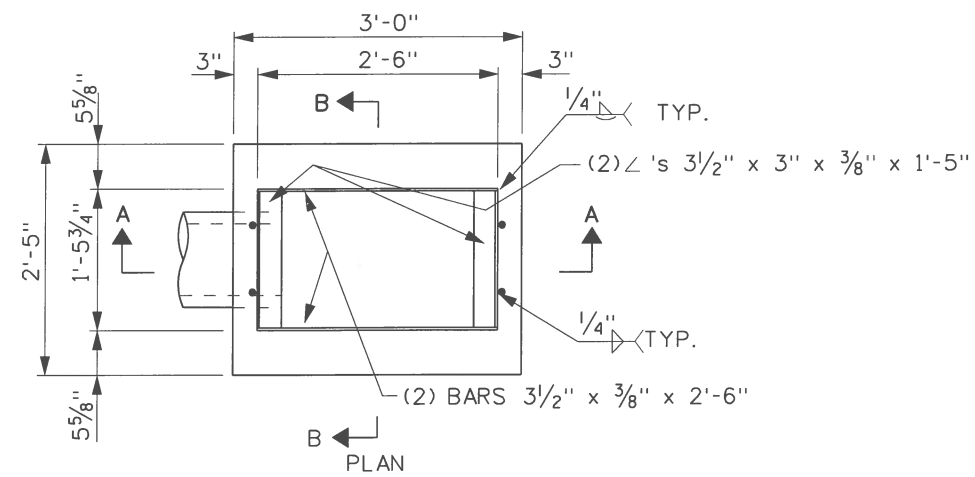
STANDARD DRAWING NO.

E-6-A

SHEET 1 OF 2

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

ORIGINAL SIGNED BY:
DATE TED E. MASON
NOVEMBER 3, 2008



REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
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2	04-82		7	06-97	MSM		
3	03-84		8	06-01	MSM		
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SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: e6a_1108.dgn
DRAWING DATE: JULY, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

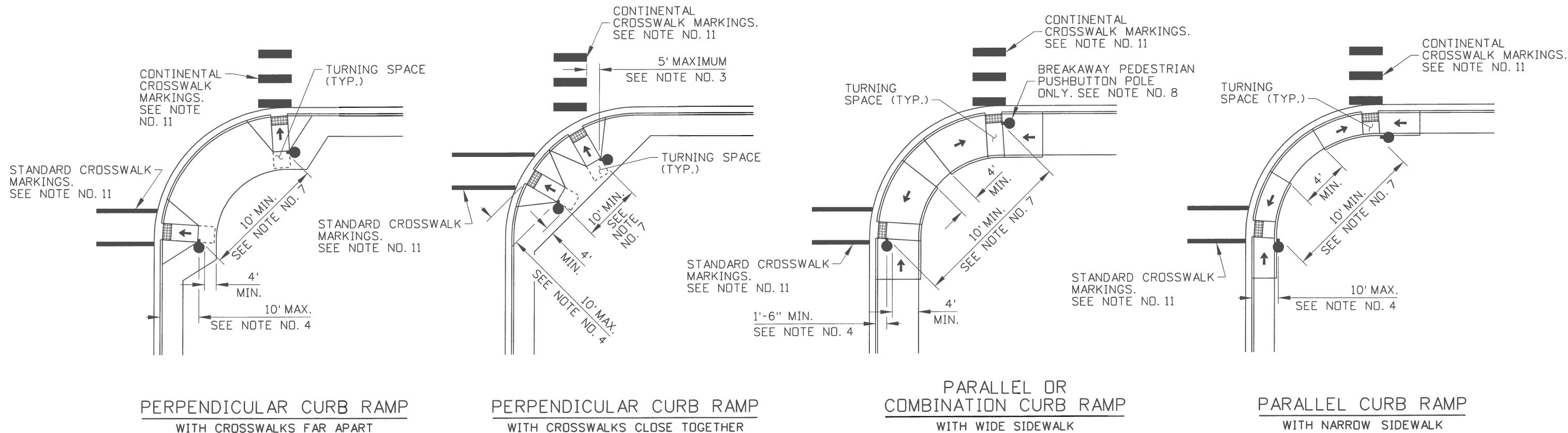
ORIGINAL SIGNED BY: LOREN THOMAS ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE CHIEF ENGINEER

STANDARD DRAWING
INLETS & CATCH BASINS TYPES 1, 2, & 3
REQUIRES SHEET 1 OF 2

English
STANDARD DRAWING NO. E-6-A
SHEET 2 OF 2

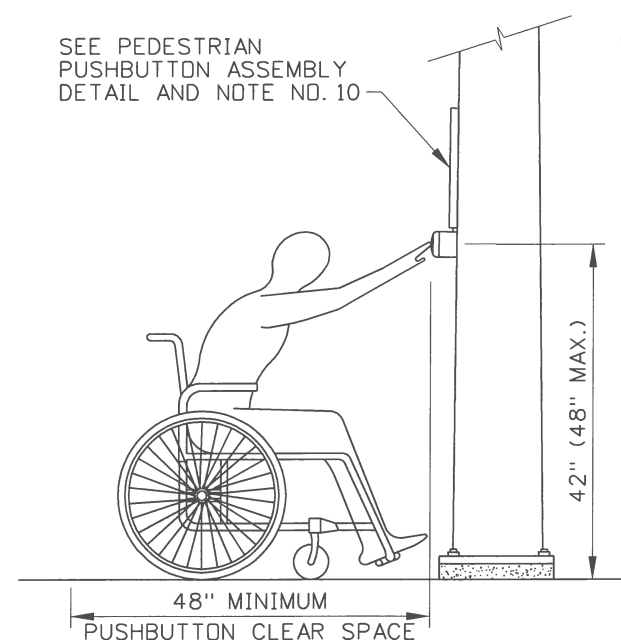
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: TED E. MASON
DATE ORIGINAL SIGNED: NOVEMBER 3, 2008

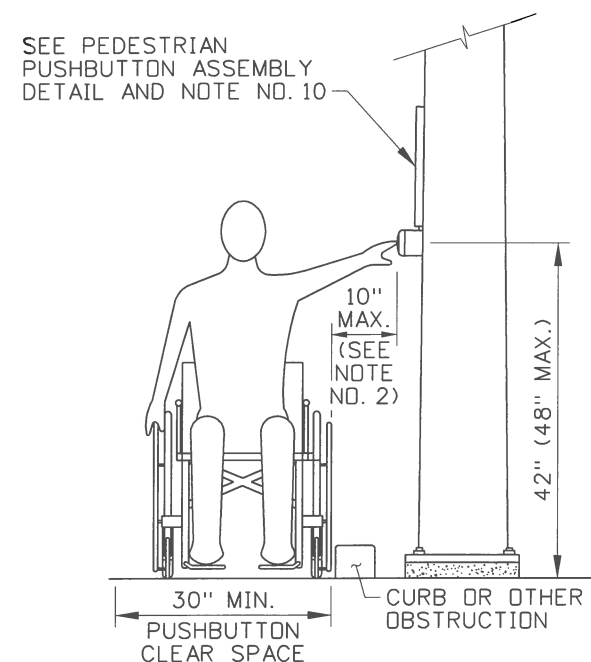


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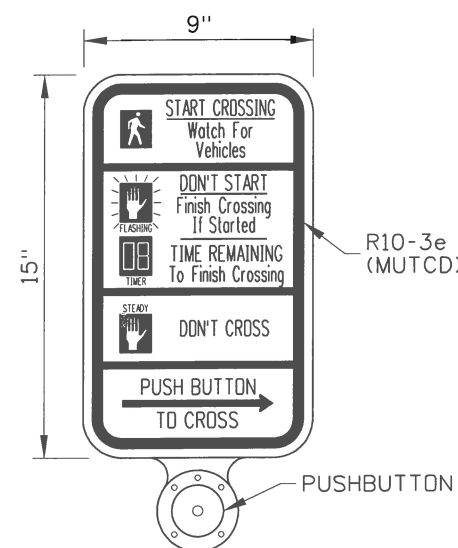
- FOUR TYPICAL CONFIGURATIONS ARE SHOWN. FOR OTHER CONFIGURATIONS, THE MAXIMUM AND MINIMUM DIMENSIONS SHOWN REMAIN APPLICABLE. WHERE CURB AND CURB RAMPS ARE NOT PRESENT, MEASURE FROM THE EDGE OF TRAVELED WAY.
- PROVIDE A PUSHBUTTON CLEAR SPACE, WITH 30" BY 48" MINIMUM DIMENSIONS, ADJACENT TO PEDESTRIAN PUSHBUTTONS. ENSURE THAT THE CLEAR SPACE SURFACE IS FIRM, STABLE, AND SLIP RESISTANT. POSITION THE CLEAR SPACE SO THE PUSHBUTTON CAN BE ACCESSED WITH EITHER A FORWARD OR PARALLEL APPROACH. AN OBSTRUCTION, UP TO 10" IN DEPTH, BETWEEN THE CLEAR SPACE AND THE PUSHBUTTON IS PERMITTED FOR A PARALLEL APPROACH. WHERE CURB RAMPS ARE USED, THE TURNING SPACE FOR THE CURB RAMP MAY DOUBLE AS THE CLEAR SPACE.
- PLACE PUSHBUTTON BETWEEN THE EDGE OF THE CROSSWALK LINE (EXTENDED) FARTEST FROM THE CENTER OF THE INTERSECTION AND THE SIDE OF A CURB RAMP (IF PRESENT), BUT NOT MORE THAN 5' FROM THE SAID CROSSWALK LINE.
- PLACE PUSHBUTTON BEHIND THE FACE OF CURB OR OUTSIDE THE EDGE OF TRAVELED WAY A MINIMUM DISTANCE OF 1'-6" AND A MAXIMUM DISTANCE OF 10'.
- ENSURE THAT THE FACE OF THE PUSHBUTTON IS PARALLEL TO THE CROSSWALK TO BE USED.
- MOUNT THE PUSHBUTTON 42" ABOVE THE CLEAR SPACE. THE MAXIMUM MOUNTING HEIGHT IS 48".
- PROVIDE A MINIMUM DISTANCE OF 10' BETWEEN PEDESTRIAN PUSHBUTTONS. WHERE THERE ARE PHYSICAL CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10' SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.
- PUSHBUTTONS MAY BE INSTALLED ON A SIGNAL POLE OR PEDESTRIAN PUSHBUTTON POLES. ENSURE THAT POLES WITHIN 10' OF THE FACE OF CURB OR EDGE OF TRAVELED WAY HAVE BREAKAWAY FEATURES.
- INSTALL ACCESSIBLE PEDESTRIAN SIGNALS WHEN RECOMMENDED BY AN ENGINEERING STUDY.
- USE MODULAR OR CAST PEDESTRIAN PUSHBUTTON ASSEMBLIES. DO NOT USE H FRAME PEDESTRIAN PUSHBUTTON ASSEMBLIES. USE THE R10-3e(MUTCD) SIGN ON THE PUSHBUTTON ASSEMBLY.
- CROSSWALK MARKINGS MAY VARY.
- DRAWINGS NOT TO SCALE.



FORWARD APPROACH
SEE NOTE NOS. 2 & 6



PARALLEL APPROACH
SEE NOTE NOS. 2 & 6



PEDESTRIAN PUSHBUTTON ASSEMBLY DETAIL
SEE NOTE NO. 10

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

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
h2c_0614.dgn

DRAWING DATE:
MAY, 2014

**IDAHO
TRANSPORTATION
DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: CARL D. MAIN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

**PEDESTRIAN PUSHBUTTON
PLACEMENT**

English

STANDARD DRAWING NO.

H-2-C

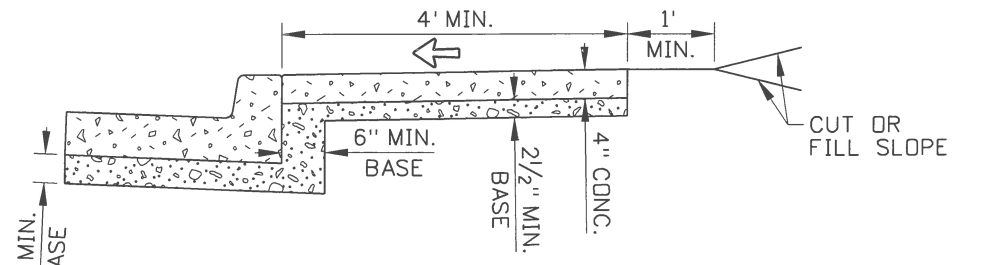
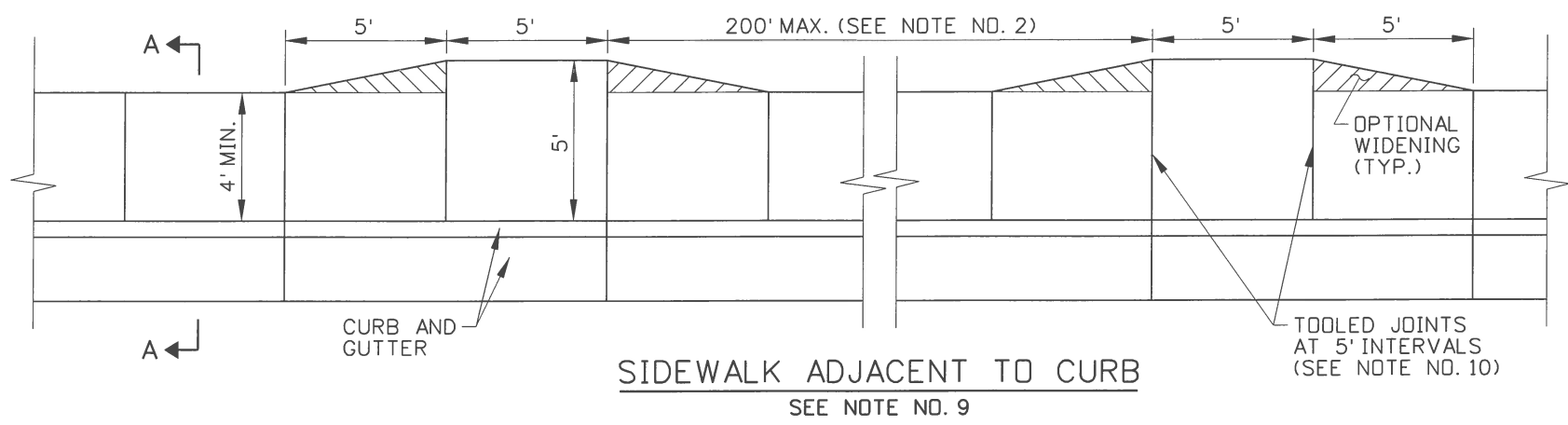
SHEET 1 OF 1

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JUNE 17, 2014

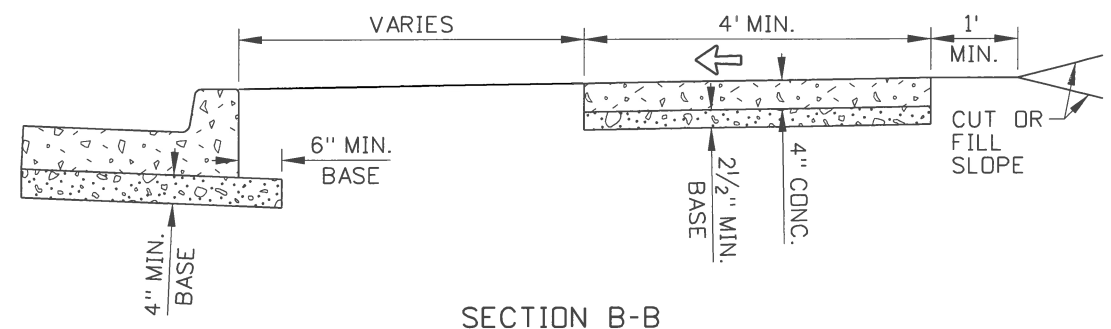
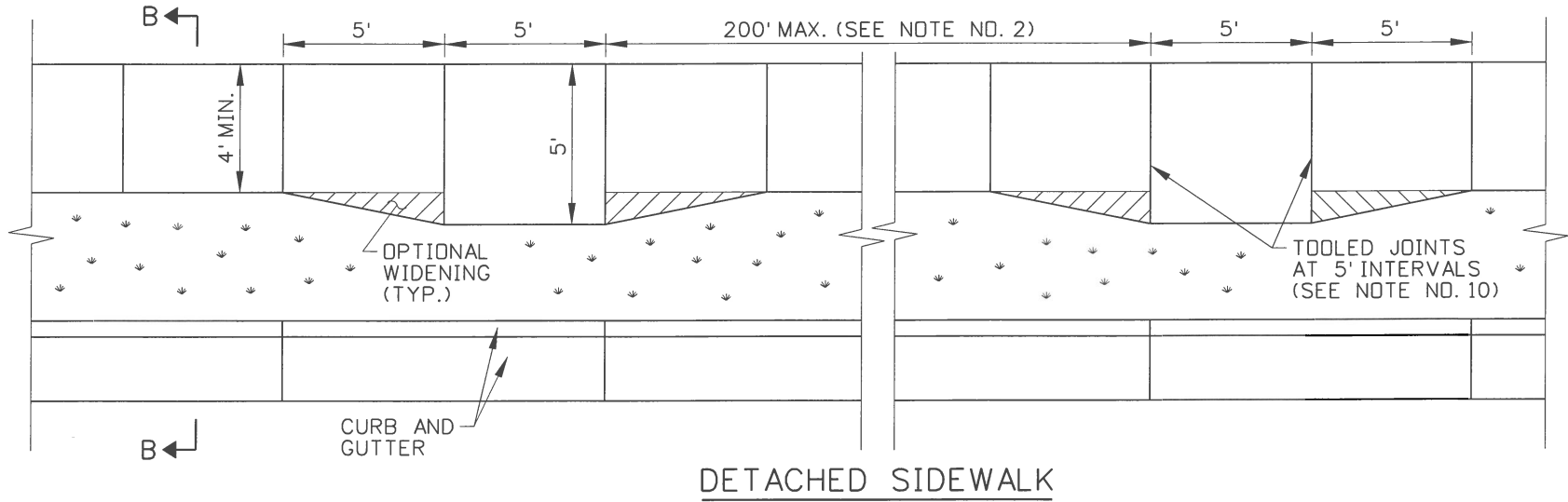
ORIGINAL STORED
AT: ITD,
Headquarters
3311 West State
Boise, Idaho

SYMBOL LEGEND

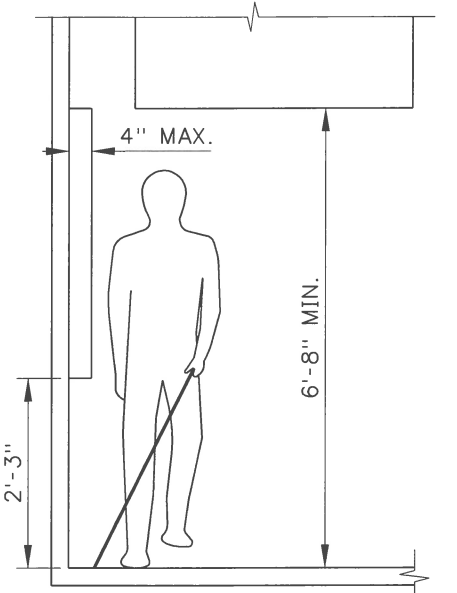
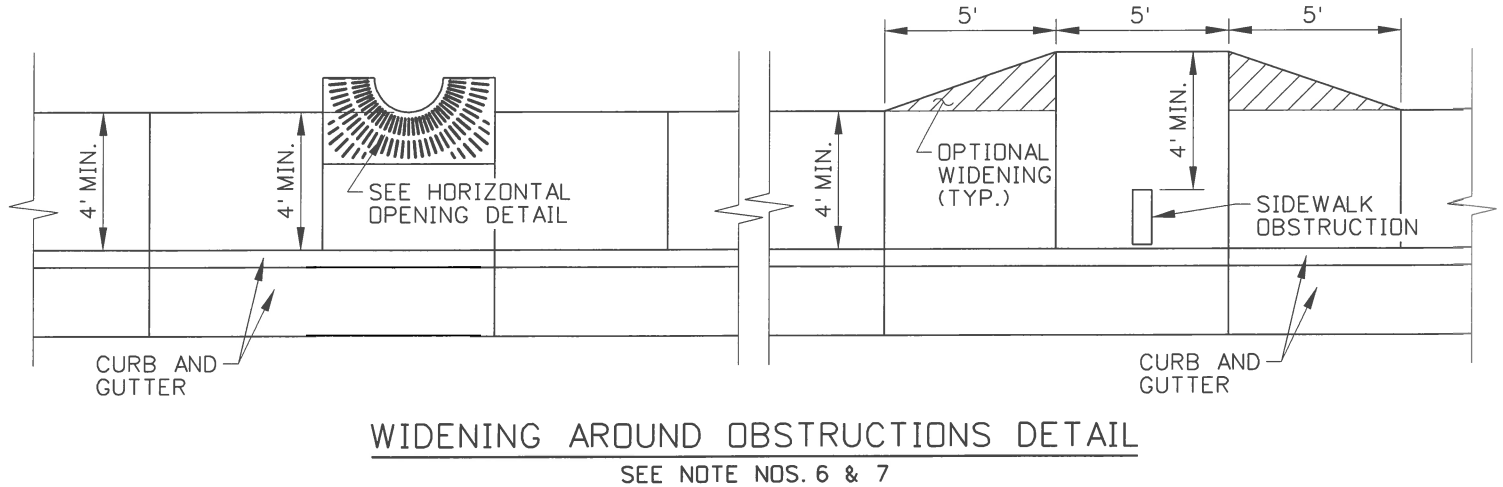
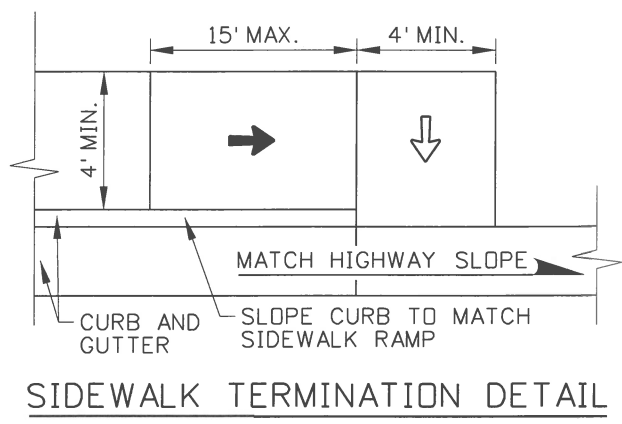
- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE,
2.0% OR FLATTER CROSS SLOPE



SECTION A-A
SEE NOTE NO. 9



SECTION B-B



PROTRUDING OBJECT DETAIL
SEE NOTE NO. 7

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

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

REQUIRES SHEET 2 OF 2

English

STANDARD DRAWING NO.
614-1

SHEET 1 OF 2

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

ORIGINAL SIGNED BY:
RYAN D LANCASTER
DATE ORIGINAL SIGNED:
JUNE 15, 2015

SYMBOL LEGEND

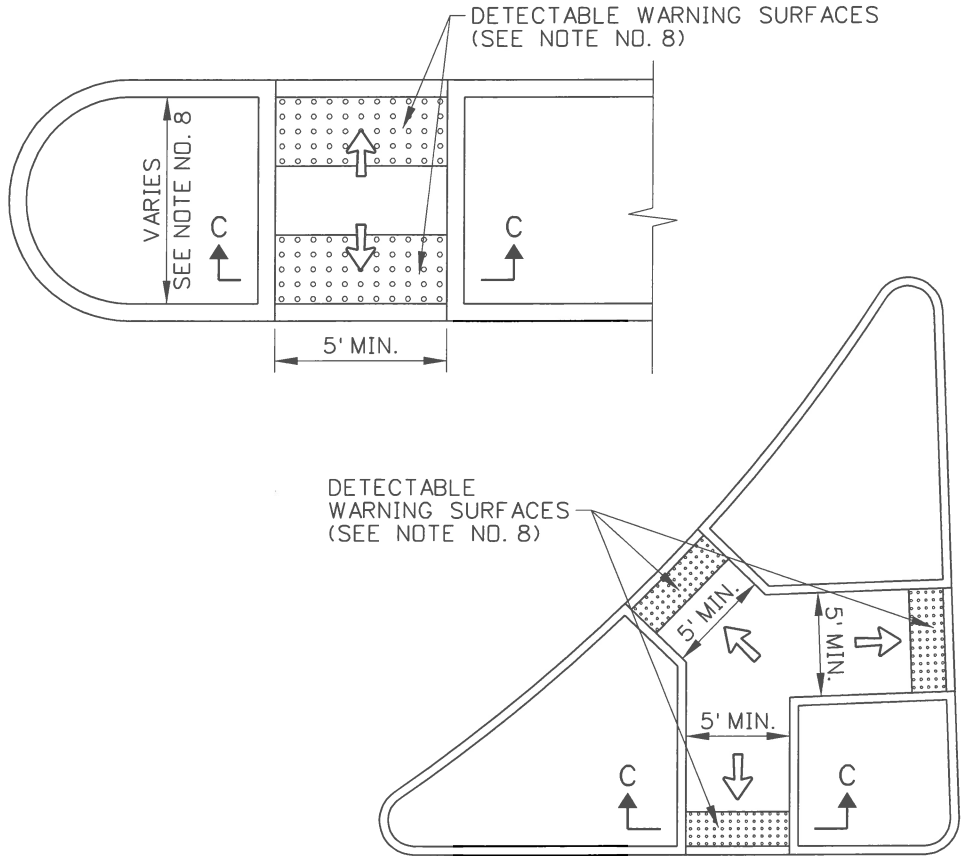
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2.0% OR FLATTER CROSS SLOPE

NOTES

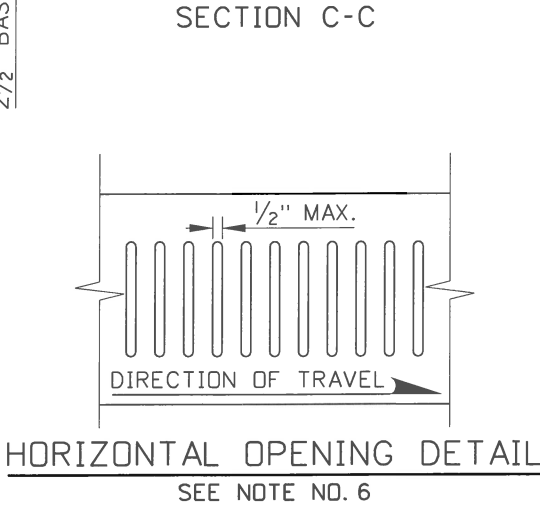
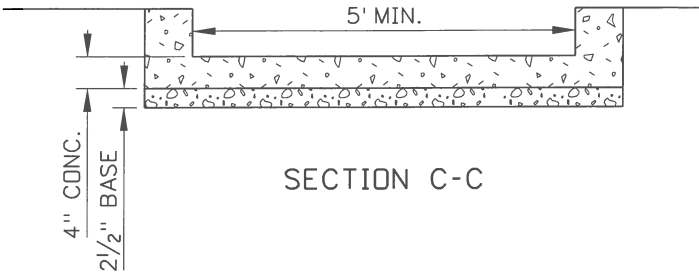
1. SIDEWALKS MAY CONSIST OF A PEDESTRIAN CIRCULATION PATH AND A PEDESTRIAN ACCESS ROUTE. THE PEDESTRIAN CIRCULATION PATH IS A PREPARED SURFACE PROVIDED FOR PEDESTRIAN TRAVEL IN THE PUBLIC RIGHT-OF-WAY. THE PEDESTRIAN ACCESS ROUTE IS A CONTINUOUS AND UNOBSTRUCTED PATH OF TRAVEL PROVIDED FOR PEDESTRIANS 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 1/2". BEVEL VERTICAL SURFACE DISCONTINUITIES BETWEEN 1/4" AND 1/2" 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 1/2" 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.

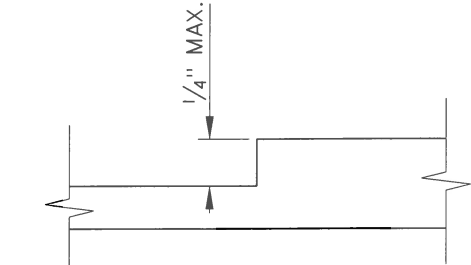
ENSURE THAT OBJECTS WITH LEADING EDGES BETWEEN 2'-3" AND 6'-8" ABOVE THE FINISH SURFACE DO NOT PROTRUDE MORE THAN 4" HORIZONTALLY INTO THE PEDESTRIAN CIRCULATION PATH.
8. PROVIDE DETECTABLE WARNING SURFACES ON PEDESTRIAN REFUGE ISLANDS WITH CURB RAMPS OR WHEN CUT-THROUGH AT STREET LEVEL AND REFUGE ISLAND 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 1/8" WIDE AND 3/4" 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.



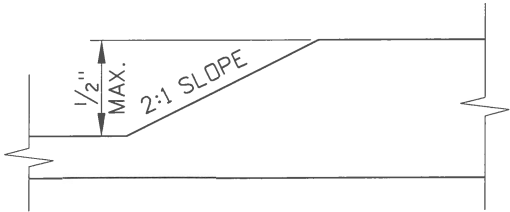
PEDESTRIAN REFUGE ISLAND DETAILS



VERTICAL DISCONTINUITY OF 1/4" OR LESS



VERTICAL DISCONTINUITY BETWEEN 1/4" AND 1/2"



VERTICAL SURFACE DISCONTINUITY DETAIL
SEE NOTE NO. 5

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

REQUIRES SHEET 1 OF 2

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

English

STANDARD DRAWING NO.

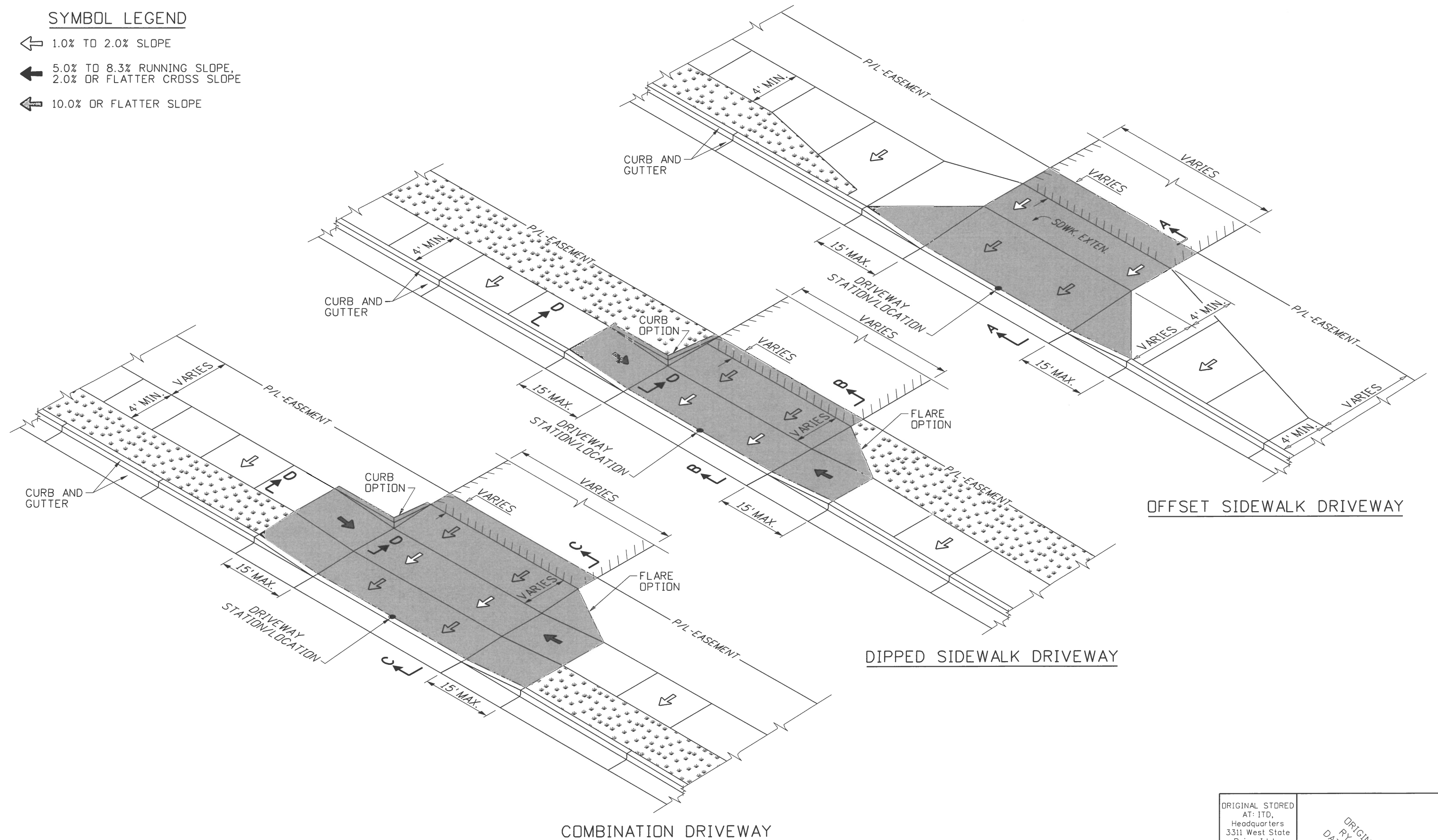
614-1

SHEET 2 OF 2

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JUNE 15, 2015

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

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
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3	12-94	MSM	8	07-10	JAW		
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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

REQUIRES SHEET 2 OF 2

English

STANDARD DRAWING NO.

614-2

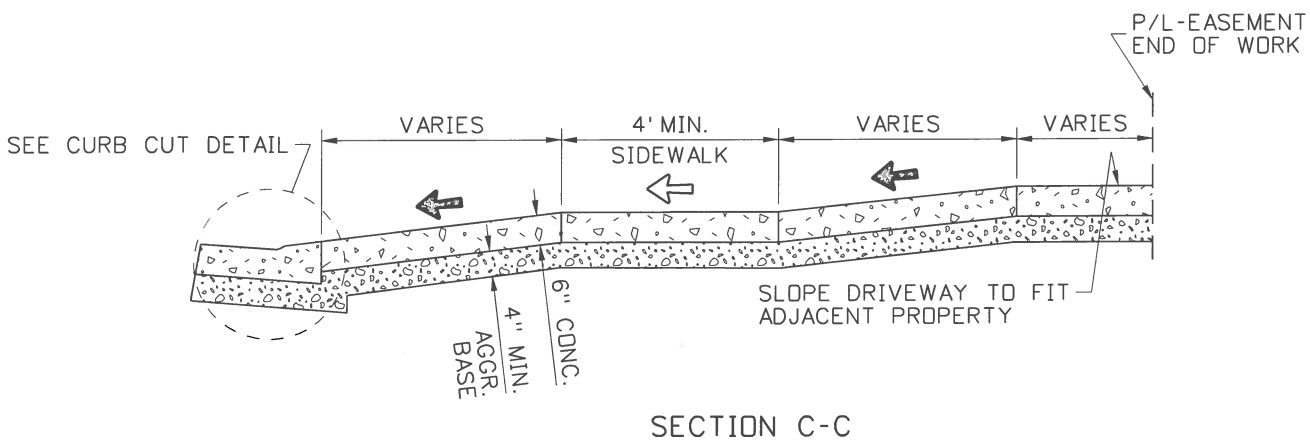
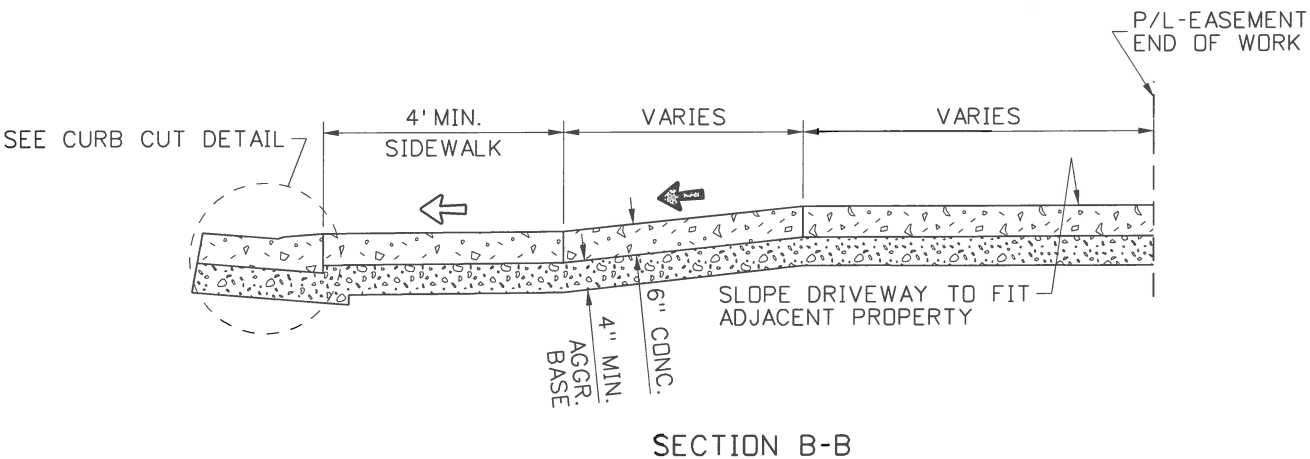
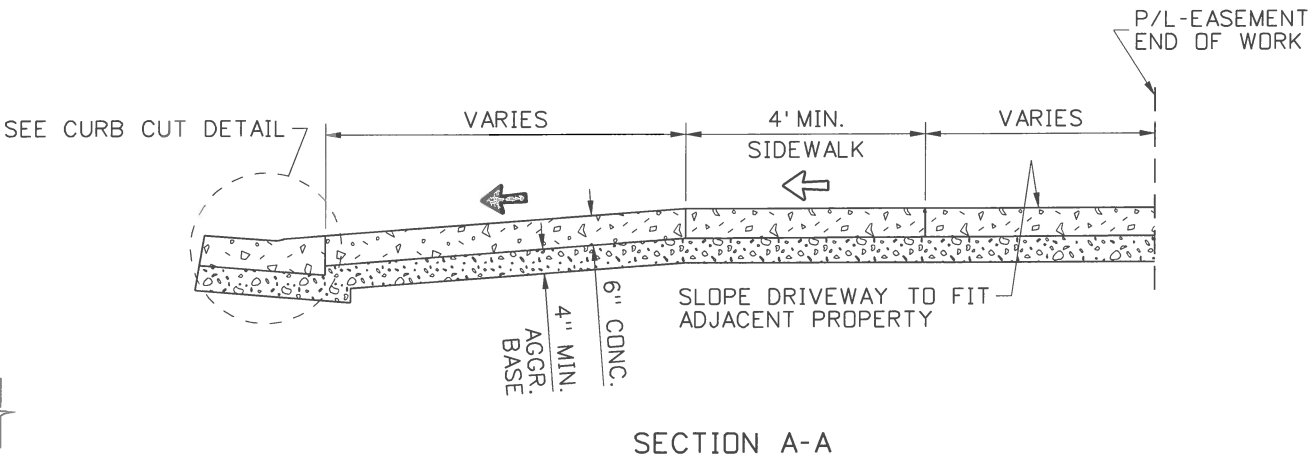
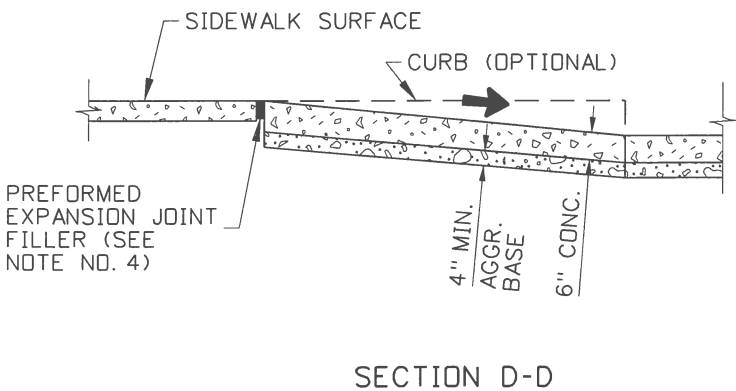
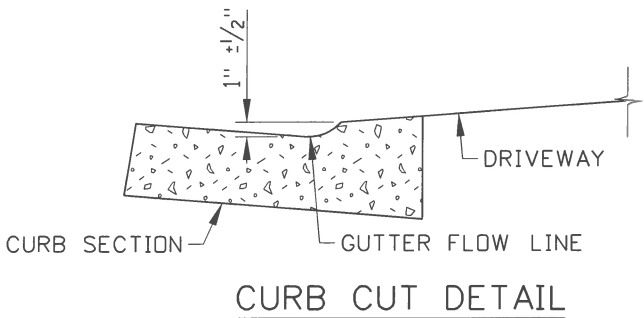
SHEET 1 OF 2

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

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JUNE 15, 2015

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



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			
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

REQUIRES SHEET 1 OF 2

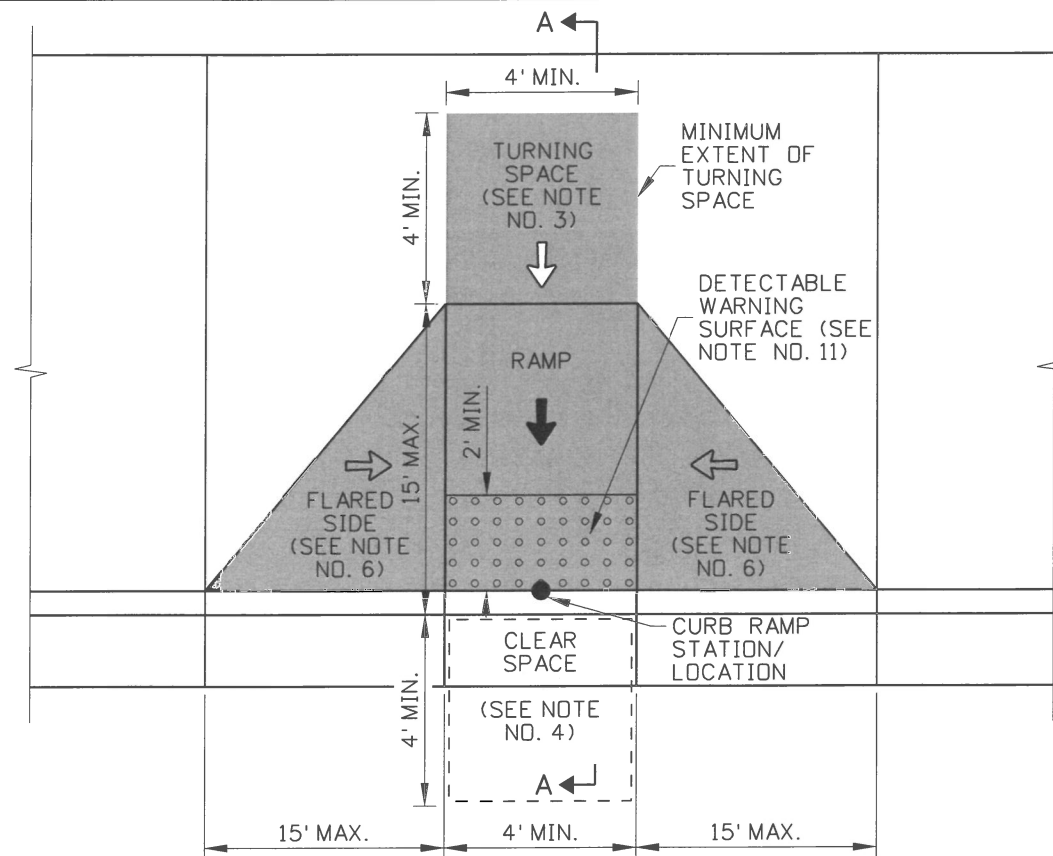
English

STANDARD DRAWING NO.
614-2

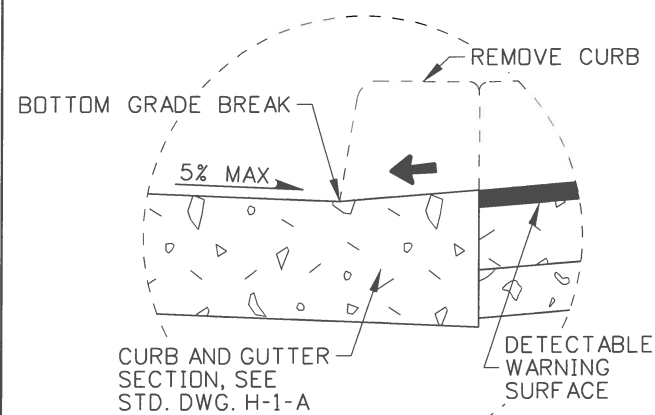
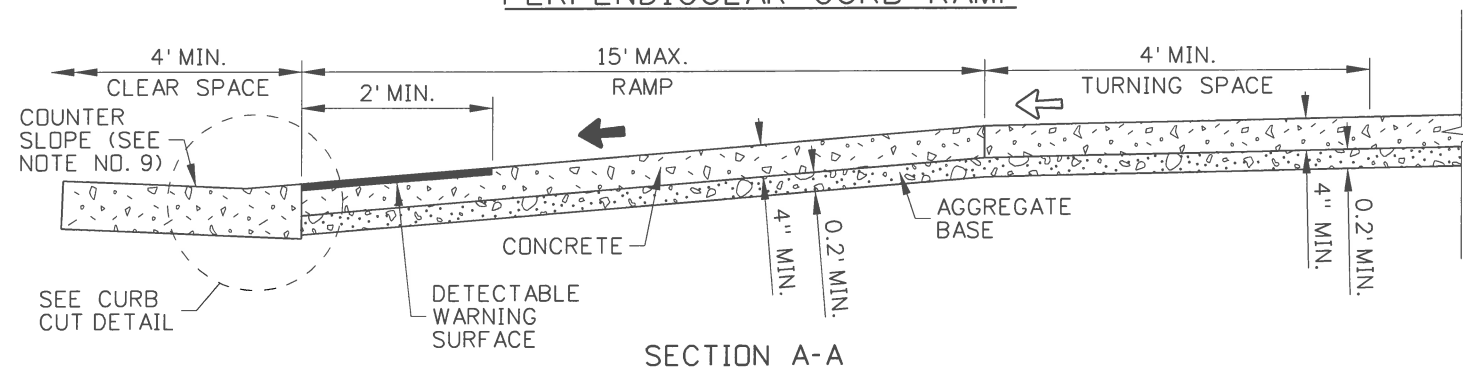
SHEET 2 OF 2

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

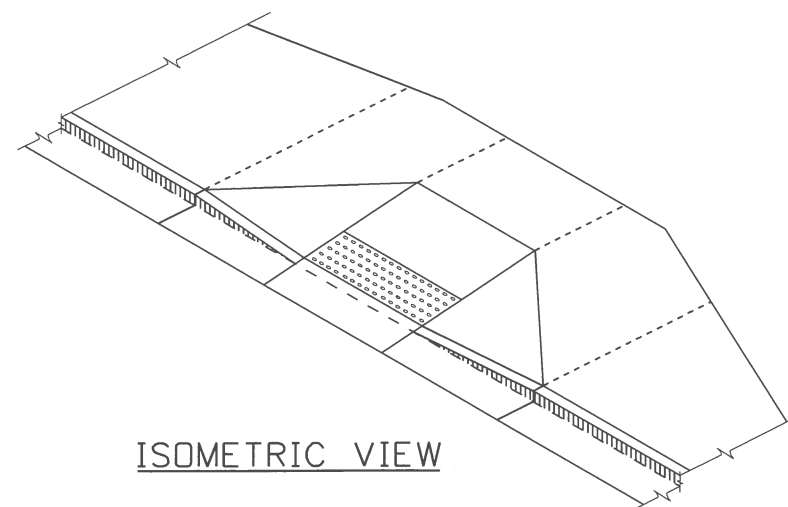
ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: JUNE 15, 2015



PERPENDICULAR CURB RAMP



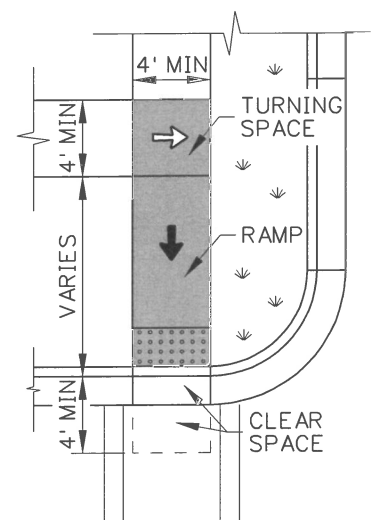
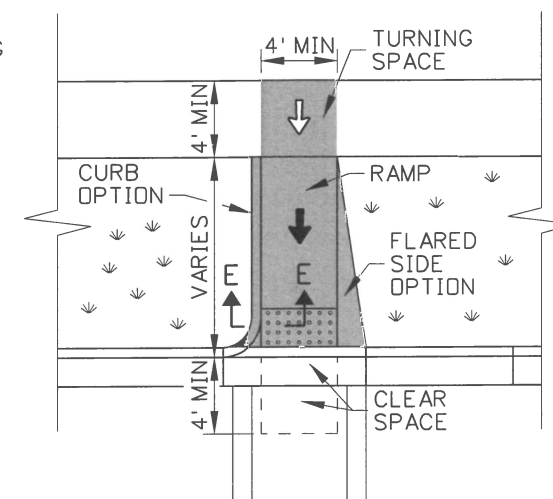
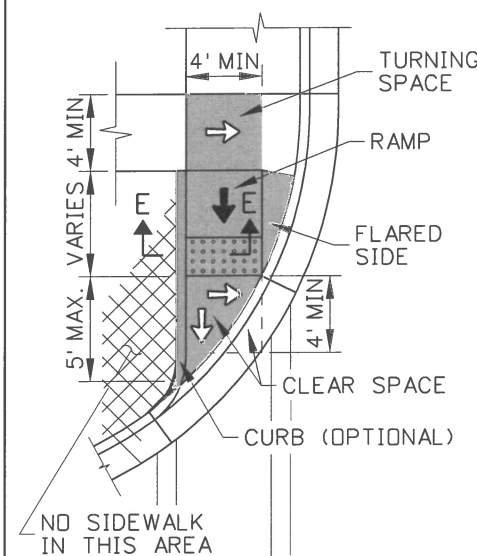
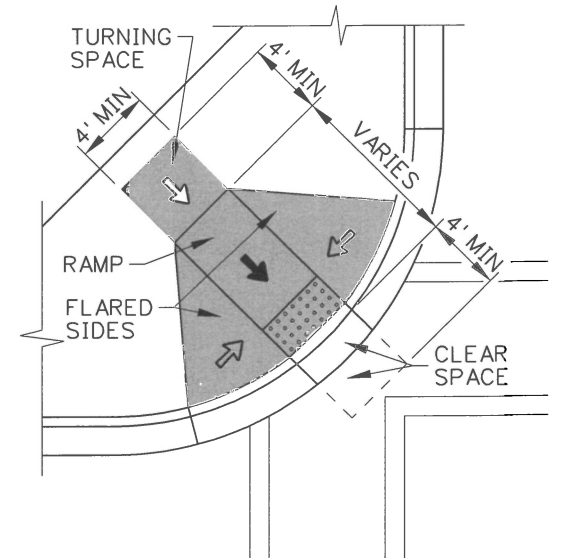
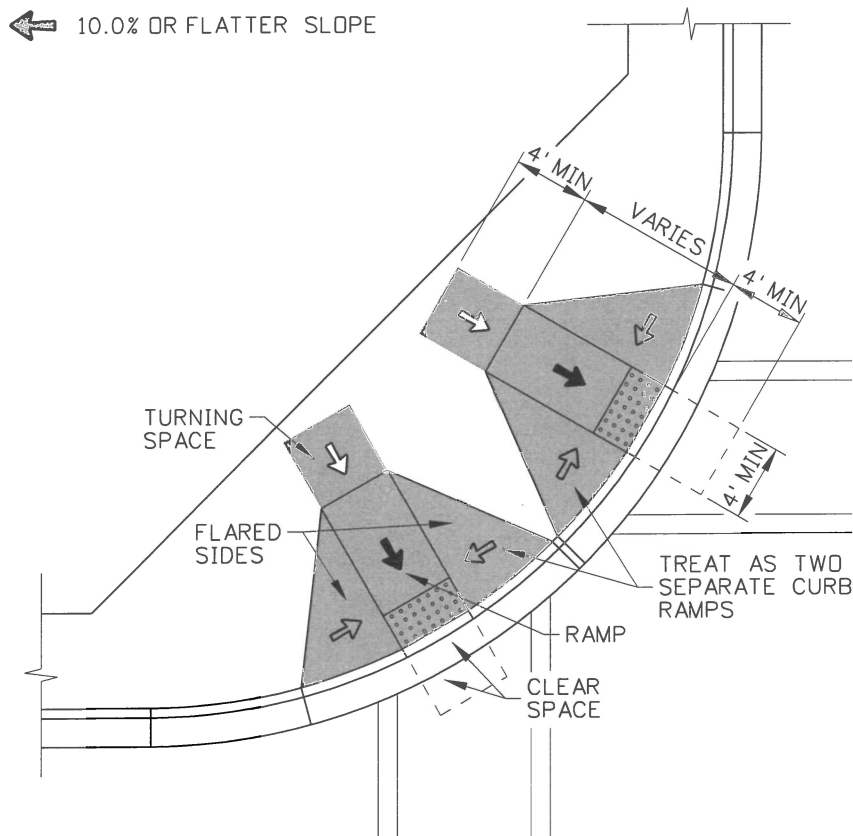
CURB CUT DETAIL



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

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	09-93	MSM	6	07-03	MSM	11	07-10
2	12-95	MSM	7	12-04	MSM	12	09-11
3	06-98	MSM	8	06-05	MSM	13	05-15
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

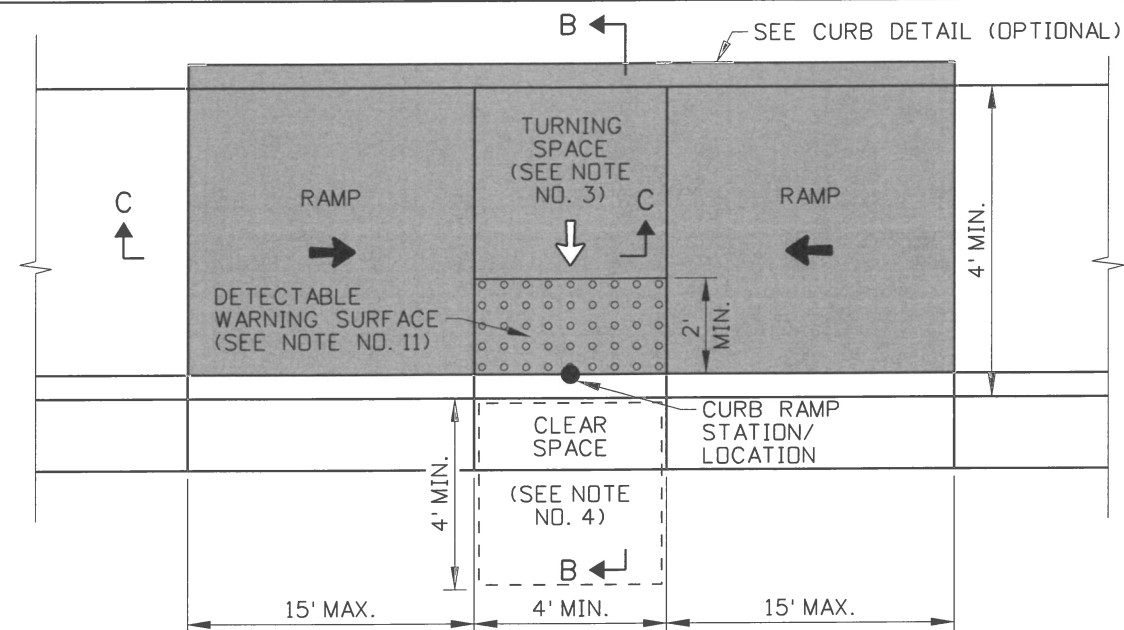
ORIGINAL SIGNED BY: KEVIN SABLAN DESIGN/TRAFFIC SERVICES ENGINEER
--

STANDARD DRAWING
CURB RAMPS
REQUIRES SHEETS 2 OF 4, 3 OF 4, & 4 OF 4

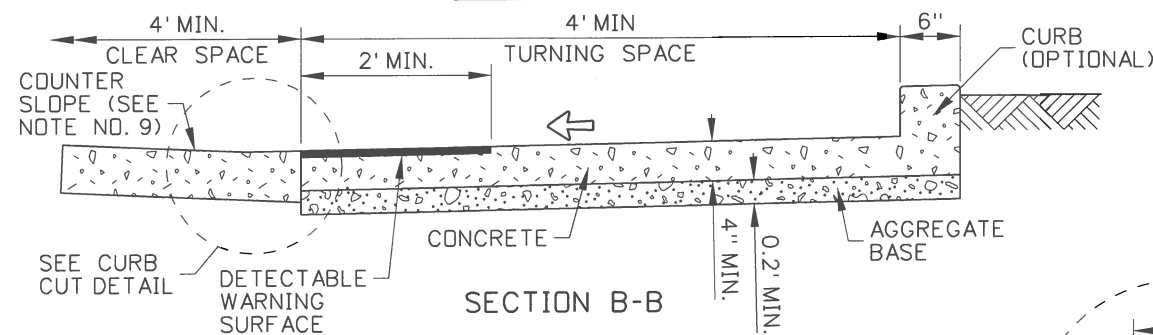
English
STANDARD DRAWING NO. 614-3
SHEET 1 OF 4

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

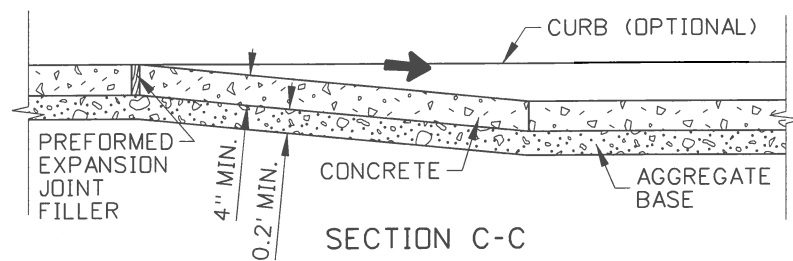
ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: JUNE 15, 2015



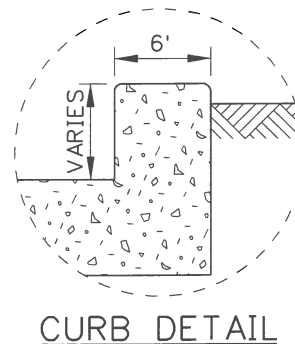
PARALLEL CURB RAMP



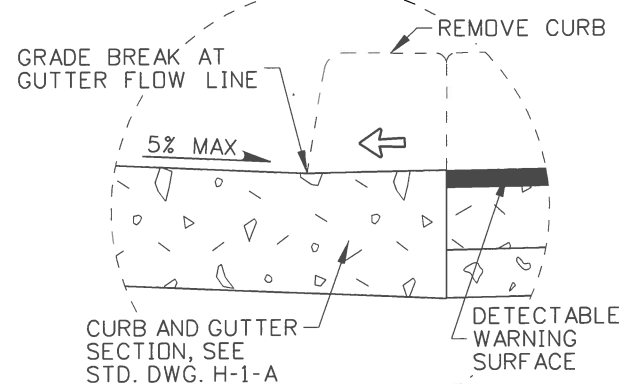
SECTION B-B



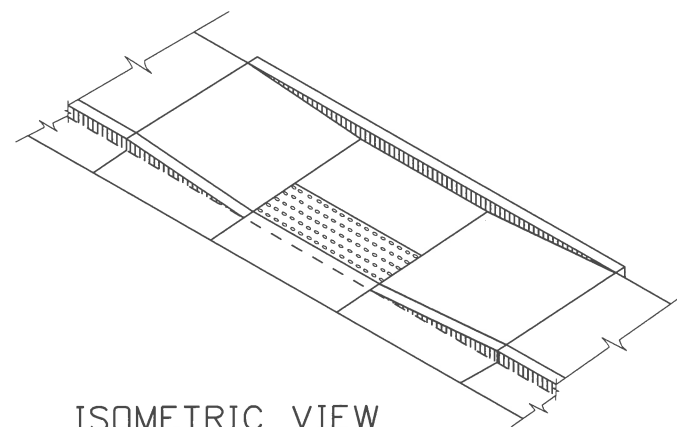
SECTION C-C



CURB DETAIL



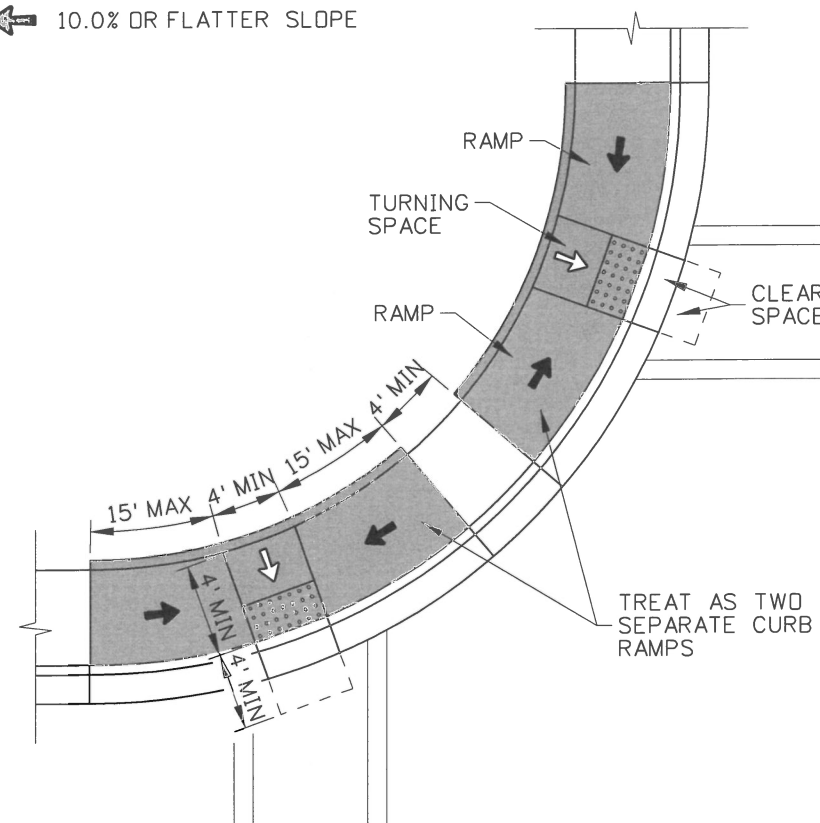
CURB CUT DETAIL



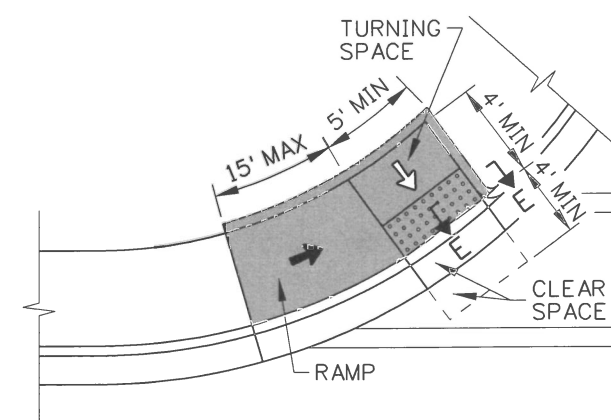
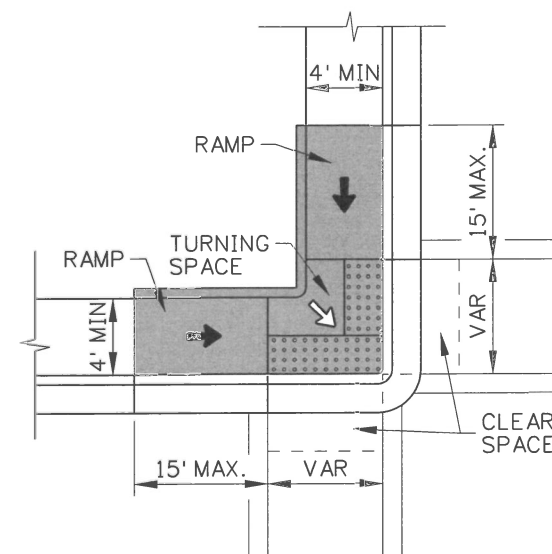
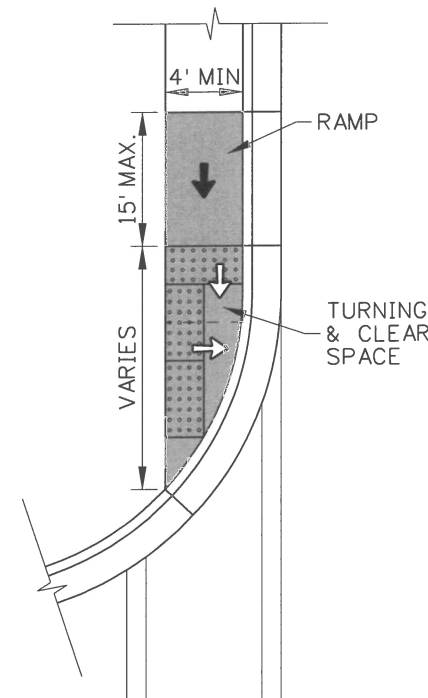
ISOMETRIC VIEW

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



TREAT AS TWO SEPARATE CURB RAMP



EXAMPLE APPLICATIONS

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

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JUNE 15, 2015

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

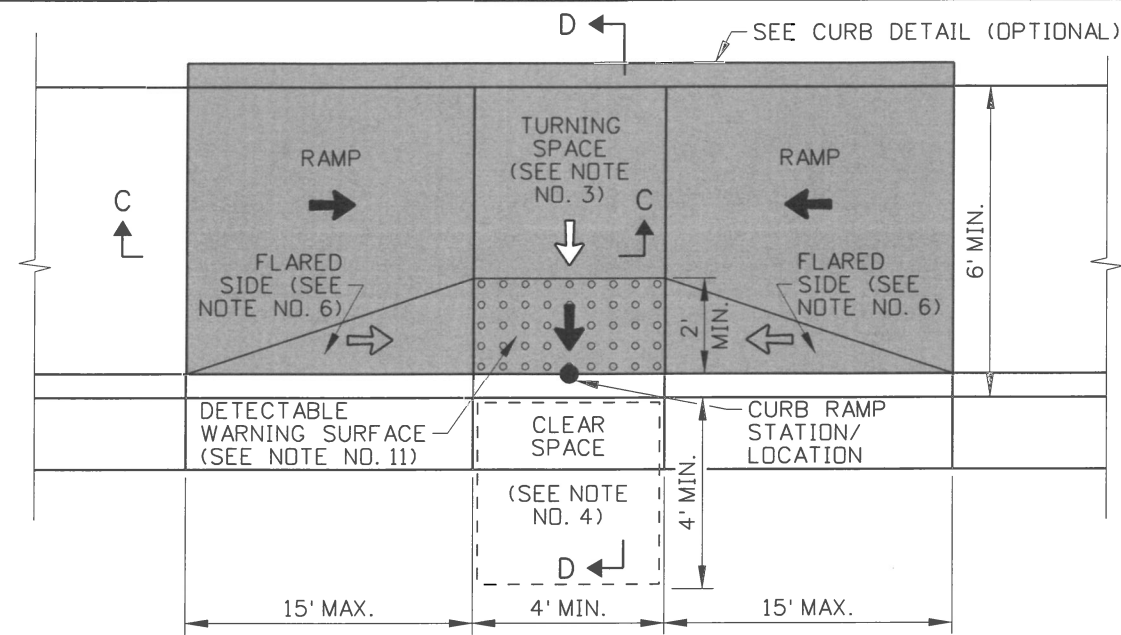
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 614-3_0615.dgn
DRAWING DATE: JUNE, 1990

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

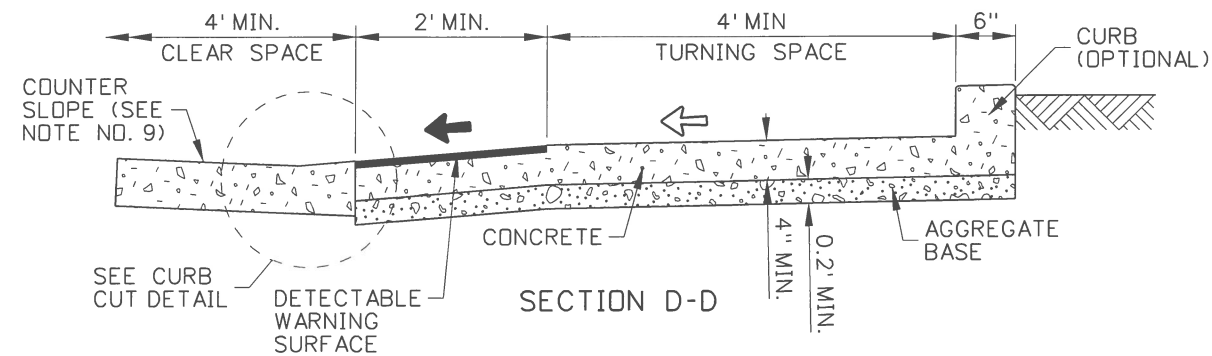
ORIGINAL SIGNED BY: KEVIN SABLAN DESIGN/TRAFFIC SERVICES ENGINEER
--

STANDARD DRAWING
CURB RAMPS
REQUIRES SHEETS 1 OF 4, 3 OF 4, & 4 OF 4

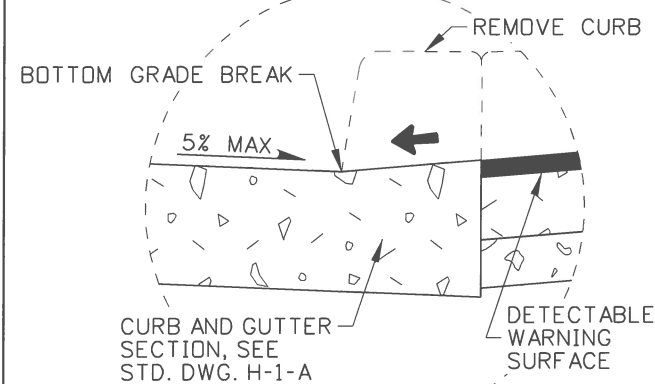
English
STANDARD DRAWING NO. 614-3
SHEET 2 OF 4



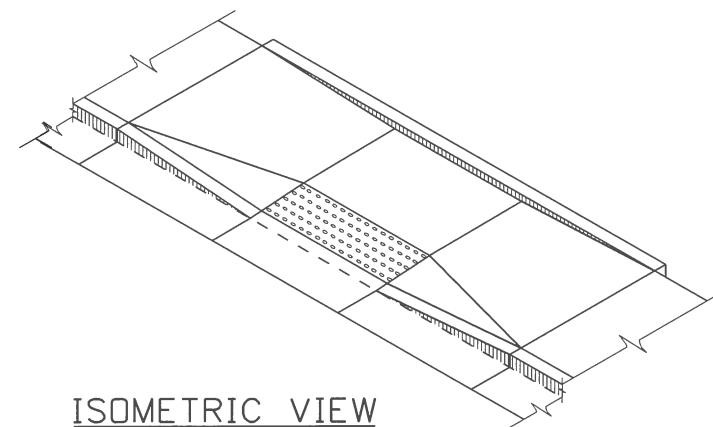
COMBINATION CURB RAMP



SECTION D-D



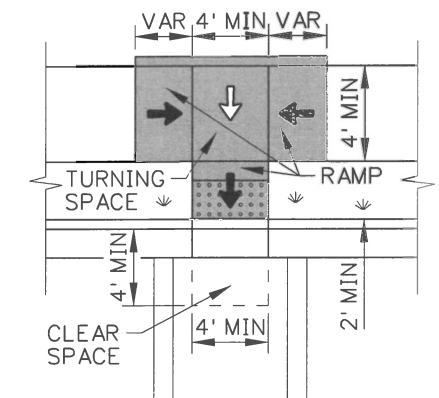
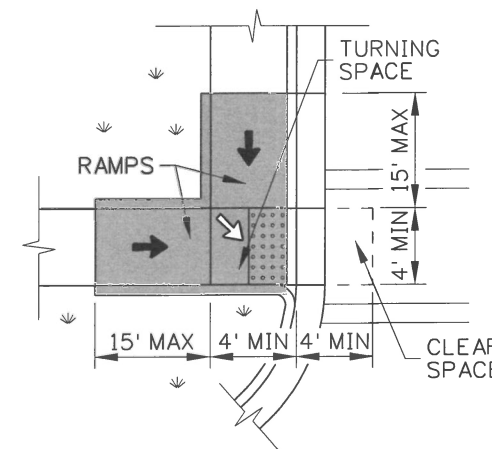
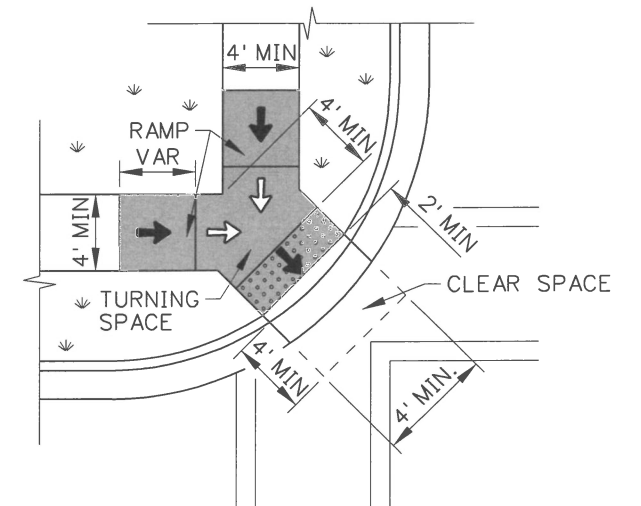
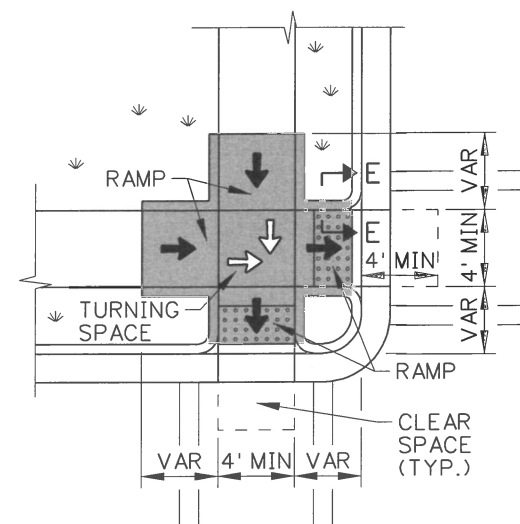
CURB CUT DETAIL



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

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	09-93	MSM	6	07-03	MSM	11	07-10
2	12-95	MSM	7	12-04	MSM	12	09-11
3	06-98	MSM	8	06-05	MSM	13	05-15
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 REQUIRES SHEETS 1 OF 4, 2 OF 4, & 4 OF 4

English STANDARD DRAWING NO. 614-3 SHEET 3 OF 4
--

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

ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: JUNE 15, 2015

NOTES

1. EXTENTS OF CURB RAMP PAY ITEMS ARE SHOWN IN GRAY SHADING.
2. CURB RAMP 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 RAMP 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 RAMP 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 RAMP 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.

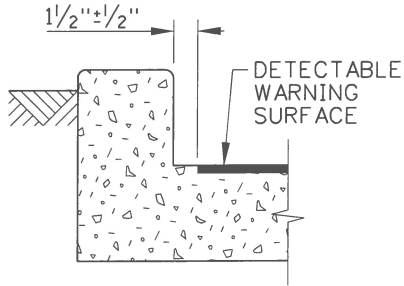
WHERE THE ENDS OF THE BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB, PLACE THE DETECTABLE WARNING SURFACE ON THE RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK AND WITHIN 5' OF THE BACK OF CURB.

PARALLEL CURB RAMP:

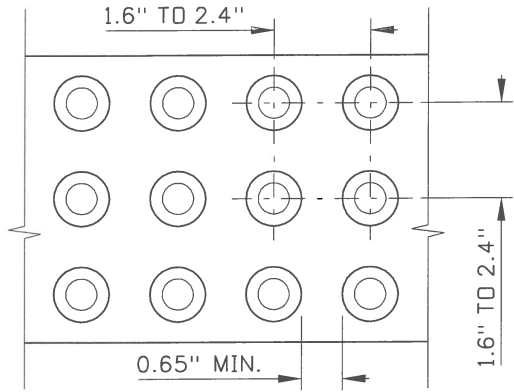
PLACE DETECTABLE WARNING SURFACE ON THE TURNING SPACE AT THE BACK OF CURB.
12. USE A BOND PREVENTATIVE BETWEEN THE CURB RAMP OR SIDEWALK AND CURB WHEN CONSTRUCTED SEPARATELY AND PLACED ADJACENT TO EACH OTHER.
13. ALIGN ALTERNATING CURB AND SIDEWALK JOINTS. CONSTRUCT JOINTS APPROXIMATELY 1/8" WIDE AND 3/4" IN DEPTH.
14. DRAWING NOT TO SCALE.

SYMBOL LEGEND

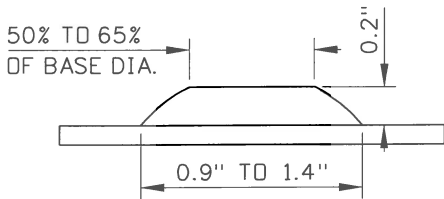
- 1.0% TO 2.0% SLOPE
- 5.0% TO 8.3% RUNNING SLOPE,
2.0% OR FLATTER CROSS SLOPE
- 10.0% OR FLATTER SLOPE



SECTION E-E

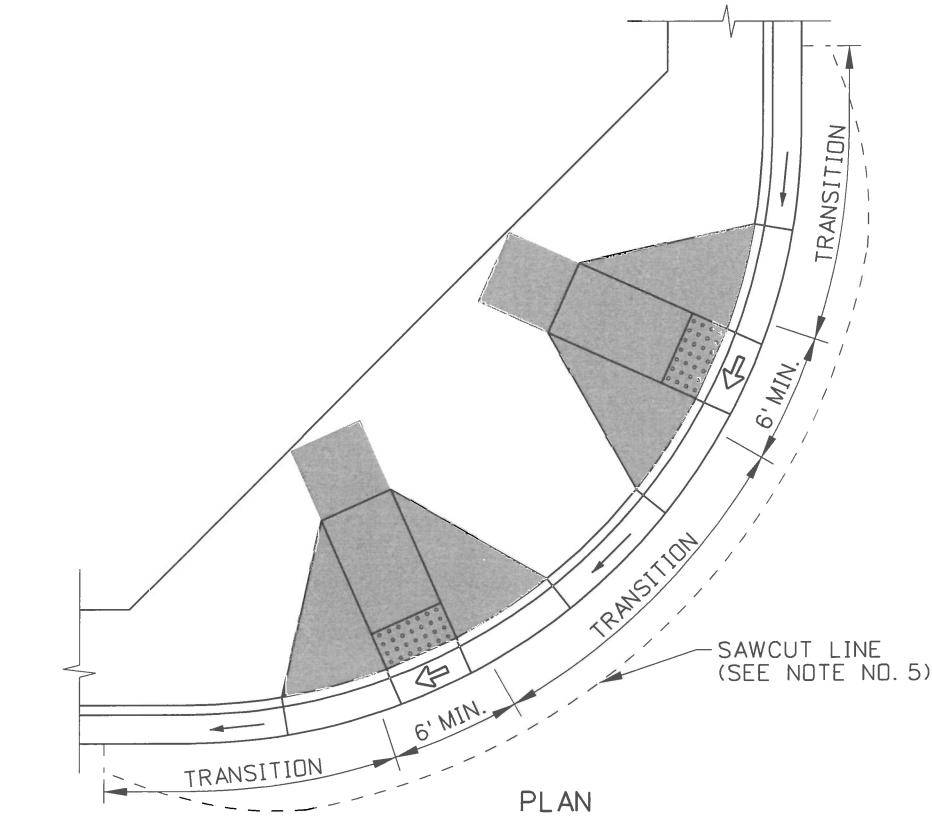


DOME SPACING

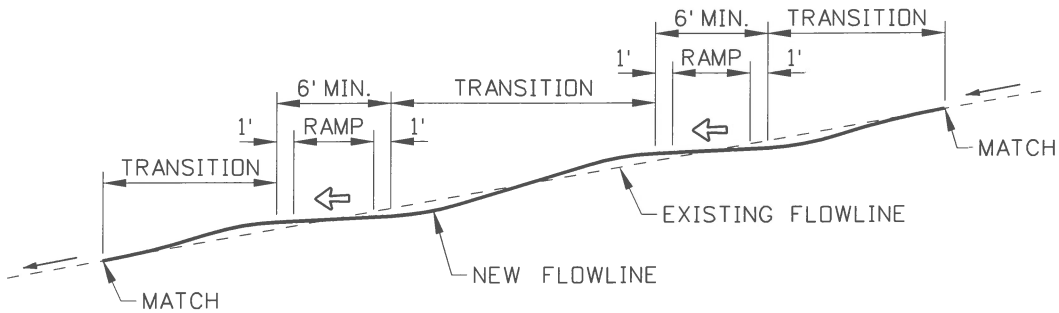


DOME SIZE

DETECTABLE WARNING SURFACE DETAILS
SEE NOTE NO. 11



PLAN



PROFILE

FLOWLINE PROFILE DETAIL
SEE NOTE NO. 5

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

REQUIRES SHEETS 1 OF 4, 2 OF 4, & 3 OF 4

English

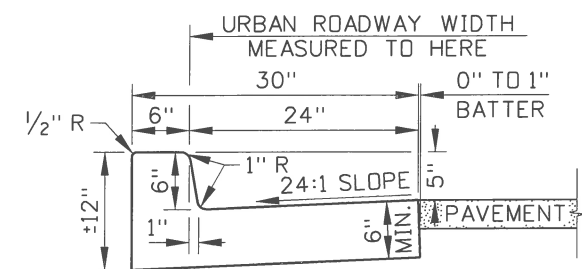
STANDARD DRAWING NO.

614-3

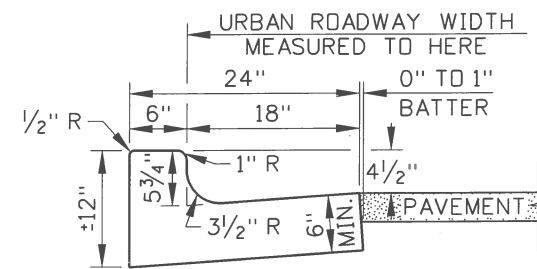
SHEET 4 OF 4

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

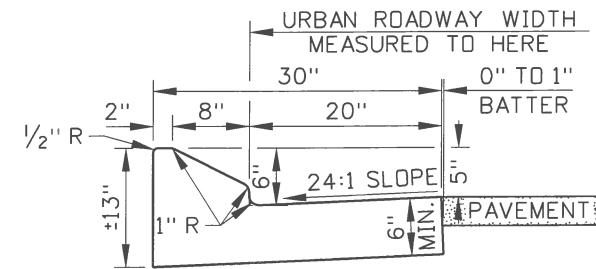
ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JUNE 15, 2015



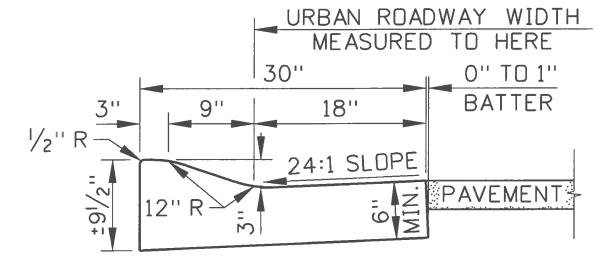
CURB AND GUTTER TYPE 1



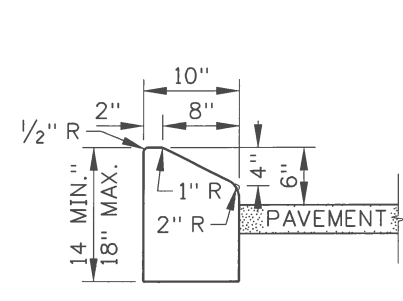
CURB AND GUTTER TYPE 2
(SEE NOTE NO. 4)



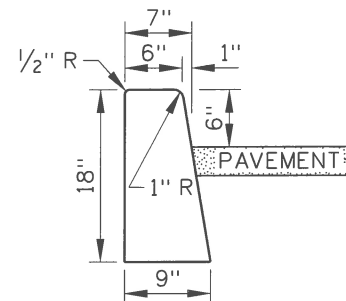
CURB AND GUTTER TYPE 3



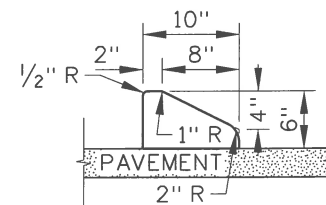
CURB AND GUTTER TYPE 4



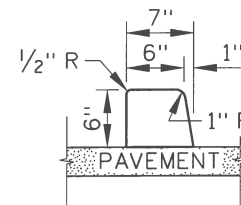
CURB TYPE 1



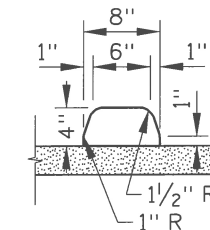
CURB TYPE 2



CURB TYPE 3
(SEE NOTE NO. 3)



CURB TYPE 4
(SEE NOTE NO. 3)



CURB TYPE 5
(SEE NOTE NO. 3)

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.

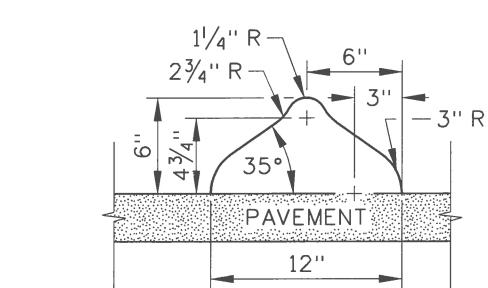
PORTLAND CEMENT CONCRETE CURB OR TRAFFIC SEPARATOR ON PORTLAND CEMENT CONCRETE PAVEMENT:

USE AN EPOXY BONDING AGENT. NO KEY IS NEEDED.

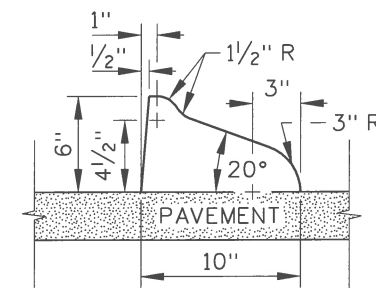
ASPHALT CONCRETE CURB OR TRAFFIC SEPARATOR ON ASPHALT CONCRETE PAVEMENT:

NO KEY IS NEEDED. ENSURE THAT THE CURB IS BONDED TO THE PAVEMENT.

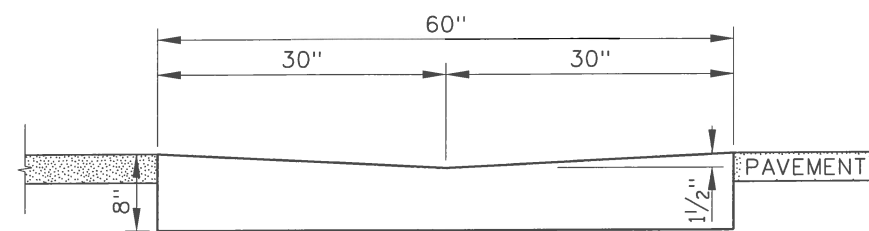
4. ENSURE THAT THE GUTTER SLOPE DOES NOT EXCEED 5 PERCENT AT CURB RAMPS.
5. TAPER THE LAST 6 FEET OF CURB AND GUTTER AND CURB TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT. TAPER CURB TYPES 3, 4, AND 5 AND TRAFFIC SEPARATORS TYPES 1 AND 2 DOWN TO A 1 INCH HEIGHT AT A 1:1 SLOPE.
6. DRAWING NOT TO SCALE.



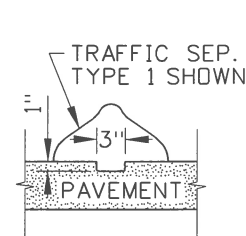
TRAFFIC SEPARATOR TYPE 1
(SEE NOTE NO. 3)



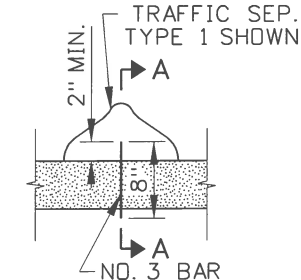
TRAFFIC SEPARATOR TYPE 2
(SEE NOTE NO. 3)



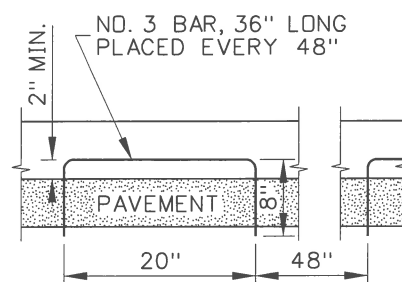
GUTTER TYPE 1



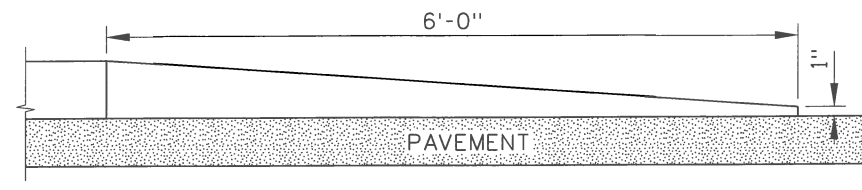
KEY DETAIL
(SEE NOTE NO. 3)



PIN DETAIL
(SEE NOTE NO. 3)



SECTION A-A



CURB TERMINUS DETAIL
(SEE NOTE NO. 5)

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

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
DECEMBER 1, 2014

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	02-76	GB	6	12-04	MSM		
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					

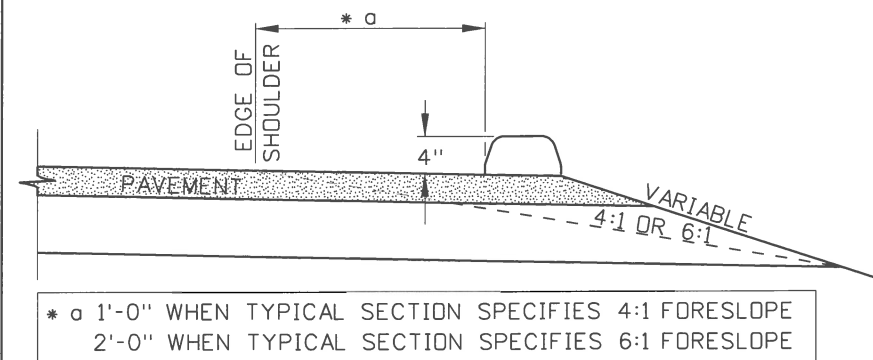
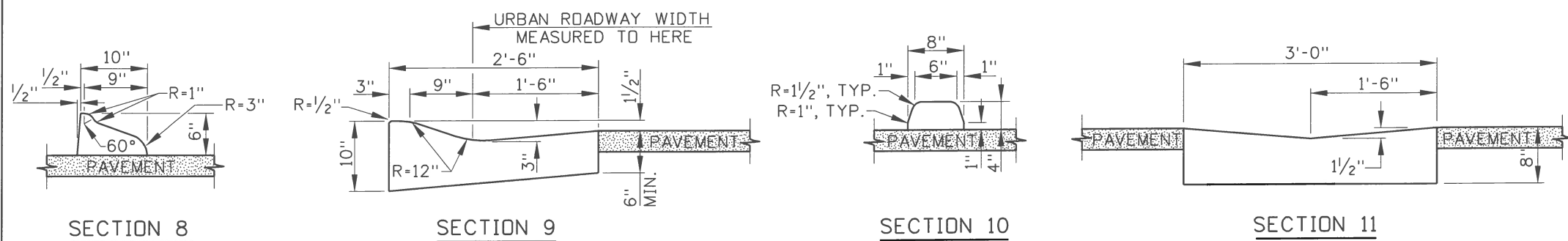
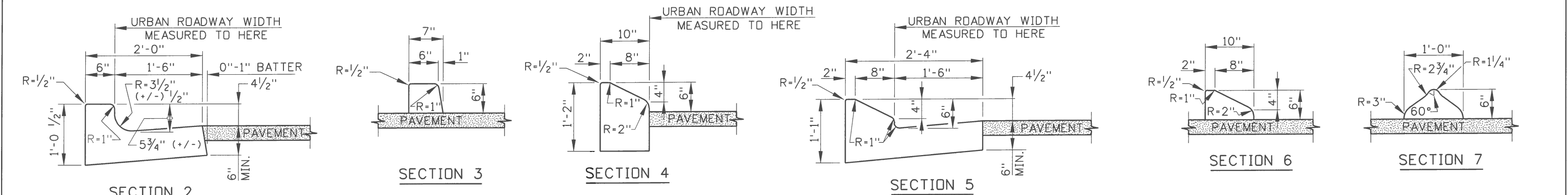
SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: 615-1_1114.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

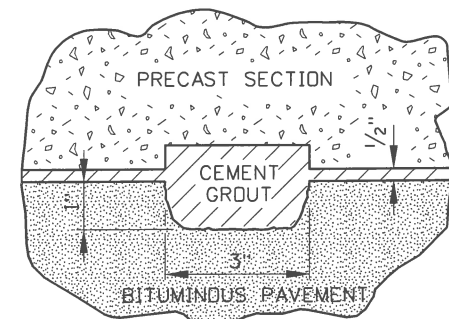
ORIGINAL SIGNED BY: CARL D. MAIN for STANDARDS ENGINEER
--

STANDARD DRAWING
CURB AND GUTTER (SHEET 1 IS FOR USE WITH 2015 OR NEWER SUPPLEMENTAL SPECIFICATIONS)
REQUIRES SHEET 2 OF 2

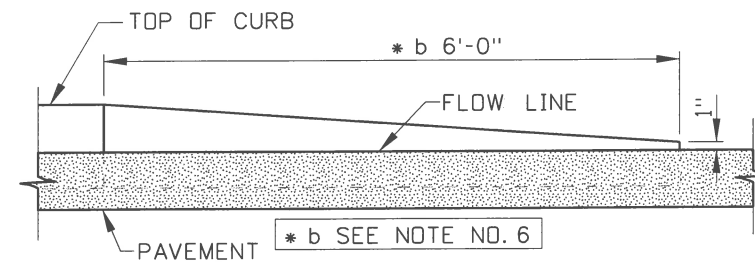
English
STANDARD DRAWING NO. 615-1
SHEET 1 OF 2



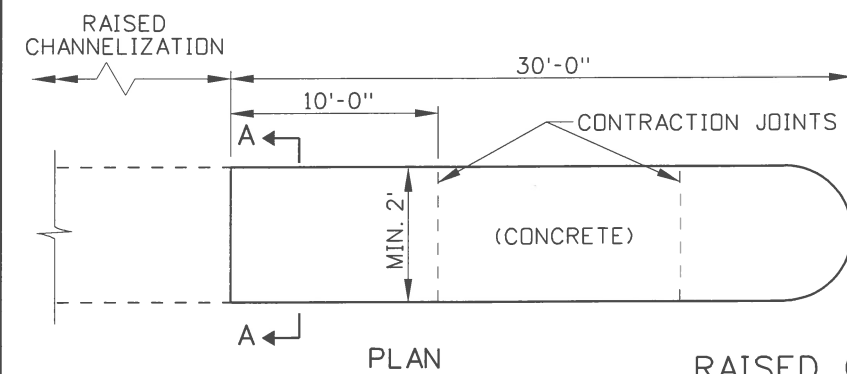
TYPICAL CURB INSTALLATION
(WHEN USED IN CONJUNCTION WITH
GUARDRAIL SEE STD. DWG G-1-A-1)



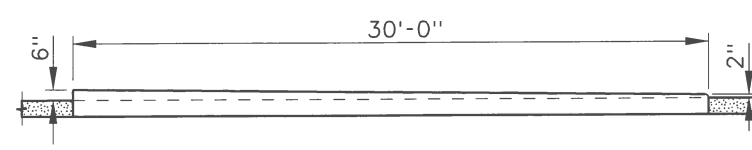
FOR CURB PLACED ON BITUMINOUS PAVEMENT
TYPICAL GROUT JOINT



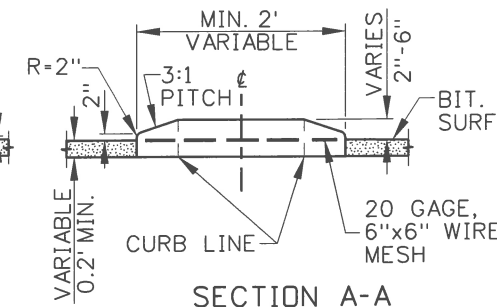
CURB TERMINUS



PLAN



ELEVATION



SECTION A-A

NOTES

1. THERE SHALL BE FOUR TYPES OF CURB, GUTTER, AND TRAFFIC SEPARATORS AS FOLLOWS:
TYPE A SECTIONS SHALL BE CAST-IN-PLACE PORTLAND CEMENT CONCRETE.
TYPE B SECTIONS SHALL BE PRECAST PORTLAND CEMENT CONCRETE.
TYPE C SECTIONS SHALL BE EXTRUDED PORTLAND CEMENT CONCRETE.
TYPE D SECTIONS SHALL BE EXTRUDED ASPHALT CONCRETE.
2. WHERE DIFFERENT CURB SECTIONS CONNECT, PROVIDE A UNIFORM TRANSITION WITH A MINIMUM LENGTH OF 12 TIMES THE LARGEST VARIATION IN CURB DIMENSIONS.
3. WHEN CONCRETE CURBS OR TRAFFIC SEPARATORS ARE PLACED ON TOP OF BITUMINOUS PAVEMENT, A KEY APPROXIMATELY 1" DEEP BY 3" WIDE SHALL BE PLACED AT THE CENTERLINE OF THE SECTION FOR ITS ENTIRE LENGTH. WHEN PRECAST CONCRETE SECTIONS ARE PLACED ON THE PAVEMENT, A KEY APPROXIMATELY 1" DEEP BY 3" WIDE SHALL BE PROVIDED IN THE BOTTOM OF THE SECTION. WHEN BITUMINOUS SECTIONS ARE USED, NO KEY IN THE PAVEMENT WILL BE REQUIRED. CURB PIN DOWELS MAY BE PROVIDED AS AN ALTERNATIVE TO PROVIDING A KEY. THE DOWELS SHALL BE #6 DEFORMED REBAR AND SHALL BE INSTALLED AT A MAXIMUM SPACING OF 5'. THE DOWELS SHALL EXTEND 8" BELOW THE FINISHED PAVEMENT SURFACE AND 4" INTO THE CURB. FOR CURB SECTION 10, THE DOWELS SHALL EXTEND INTO THE CURB TO PROVIDE 1" OF COVER. PRECAST CONCRETE CURBS SHALL HAVE A MINIMUM LENGTH OF 6' WITH 2 DOWELS. ANY SECTION LONGER THAN 6' SHALL HAVE A MINIMUM OF 3 DOWELS. NO PRECAST CONCRETE SECTION SHALL EXCEED 10'.
4. PRECAST OR EXTRUDED CONCRETE CURB AND TRAFFIC SEPARATORS PLACED ON PORTLAND CEMENT SURFACES SHALL BE ATTACHED TO THE SURFACE WITH AN EPOXY BONDING AGENT. NO KEY WILL BE REQUIRED.
5. AT SPECIFIED LOCATIONS, A REQUIREMENT SUCH AS "CONSTRUCT TYPE A-2 CURB AND GUTTER" INDICATES TYPE A CONSTRUCTION AS DEFINED IN THE SPECIFICATIONS AND SECTION 2 AS SHOWN ON THIS DRAWING. A DESIGNATION SUCH AS "CONSTRUCT TYPE B-6 OR C-6 CURB" INDICATES THAT EITHER TYPE B OR TYPE C CONSTRUCTION, AS DEFINED IN THE SPECIFICATIONS, MAY BE USED TO CONSTRUCT SECTION 6.
6. THE TERMINUS ENDS OF CURBS SHALL BE TAPERED DOWN IN THE LAST 6' TO A MAXIMUM OF 1" THICKNESS AT THE EXPOSED END.
7. REFER TO STANDARD DRAWING R-2 WHEN TRANSITIONING AND FLATTENING CURB AND/OR CURB & GUTTER FOR A RAILROAD CROSSING.
8. REFER TO STANDARD DRAWING H-1-B FOR A.D.A. CURB AND GUTTER SECTIONS TO BE USED AT A.D.A. PEDESTRIAN RAMPS.
9. REFER TO STANDARD DRAWING H-1-B FOR AGGREGATE BASE THICKNESS REQUIRED BENEATH CURB AND/OR CURB AND GUTTER SECTIONS.
10. NOT TO SCALE.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	02-76		6	12-04	MSM		
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					

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CADD FILE NAME: 615-1_1114.dgn
DRAWING DATE: APRIL, 1961

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

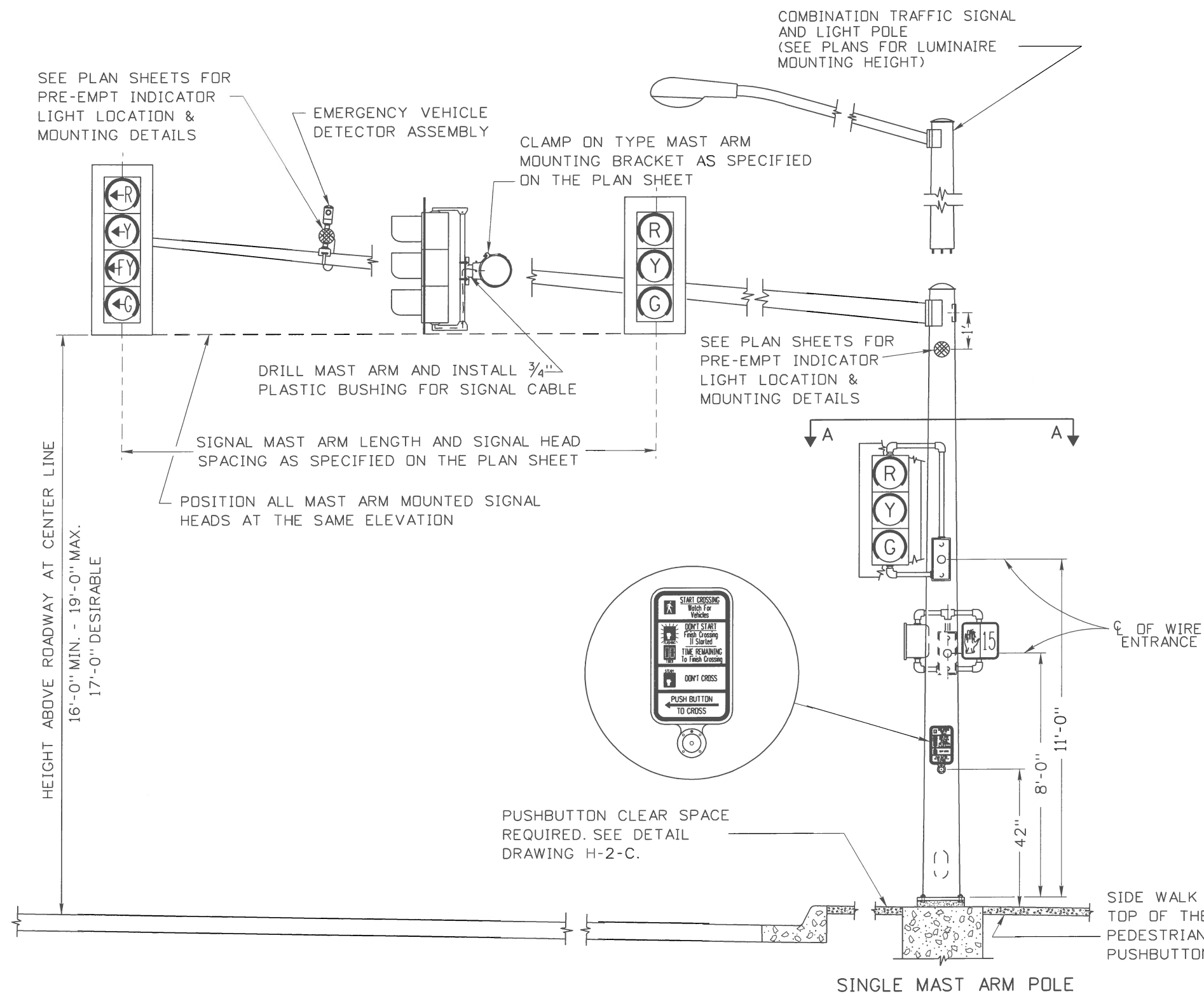
ORIGINAL SIGNED BY: CARL D. MAIN for STANDARDS ENGINEER
--

STANDARD DRAWING
CURB AND GUTTER (SHEET 2 IS FOR USE WITH 2014 OR OLDER SUPPLEMENTAL SPECIFICATIONS)
REQUIRES SHEET 1 OF 2

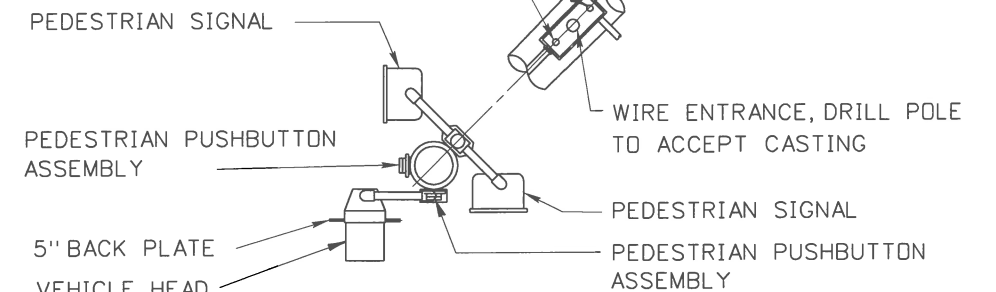
English
STANDARD DRAWING NO. 615-1
SHEET 2 OF 2

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

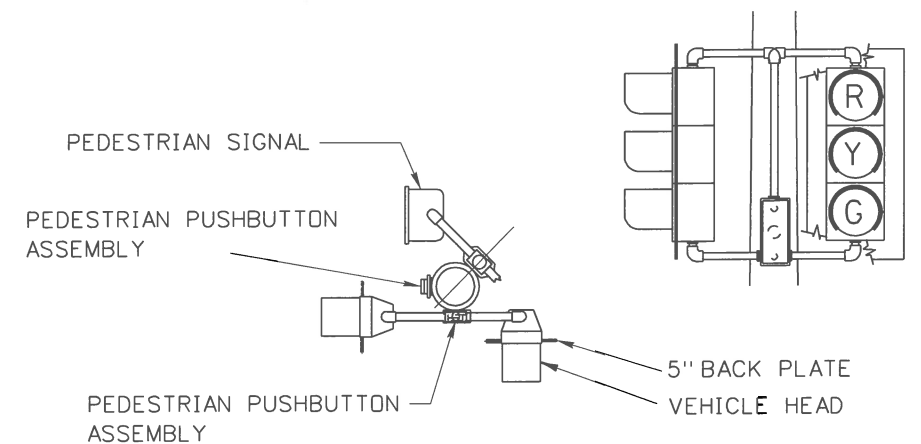
ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
DECEMBER 1, 2014



DRILL AND TAP POLE FOR 1/2" CAP SCREWS TO FIT TERMINAL COMPARTMENT MOUNTING BRACKET. (TYPICAL POLE MOUNTING)



VIEW A-A



POLE MOUNTED HEADS FOR DUAL VEHICLE SIGNAL HEAD INSTALLATION

PEDESTRIAN PUSHBUTTON MOUNTING

1. PEDESTRIAN PUSHBUTTON ASSEMBLIES ARE TO BE MOUNTED AS PER MANUFACTURER'S INSTRUCTIONS.

NOTES:

1. THIS DRAWING SHOWS TYPICAL INSTALLATION DETAILS ONLY. SEE PLAN SHEETS FOR QUANTITY OF SIGNAL AND LIGHTING COMPONENTS TO BE INSTALLED.
2. ORIENTATION OF SIGNAL COMPONENTS SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLAN SHEETS.
3. SEE STANDARD DRAWING "I-7-C-1" & STANDARD DRAWING "I-7-C-2" FOR FOUNDATION DETAILS.
4. ALL SIGNAL COMPONENTS SHALL BE LEVELED AFTER THE POLE HAS BEEN PLUMBED.
5. SPECIFIC LOCATION OF EACH POLE INSTALLATION SHALL BE AS INDICATED ON THE PROJECT PLAN SHEETS.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-94	HEB	6	04-14	HEB			
2	12-01	NQB						
3	07-05	HEB						
4	08-06	HEB						
5	07-10	HEB						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
i6o_0414.dgn

DRAWING DATE:
AUGUST, 1994

**IDAHO
TRANSPORTATION
DEPARTMENT**

BOISE IDAHO

ORIGINAL SIGNED BY: CARL D. MAIN
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

**MAST ARM
TRAFFIC SIGNAL POLES**

REQUIRES STD. DWG. H-2-C

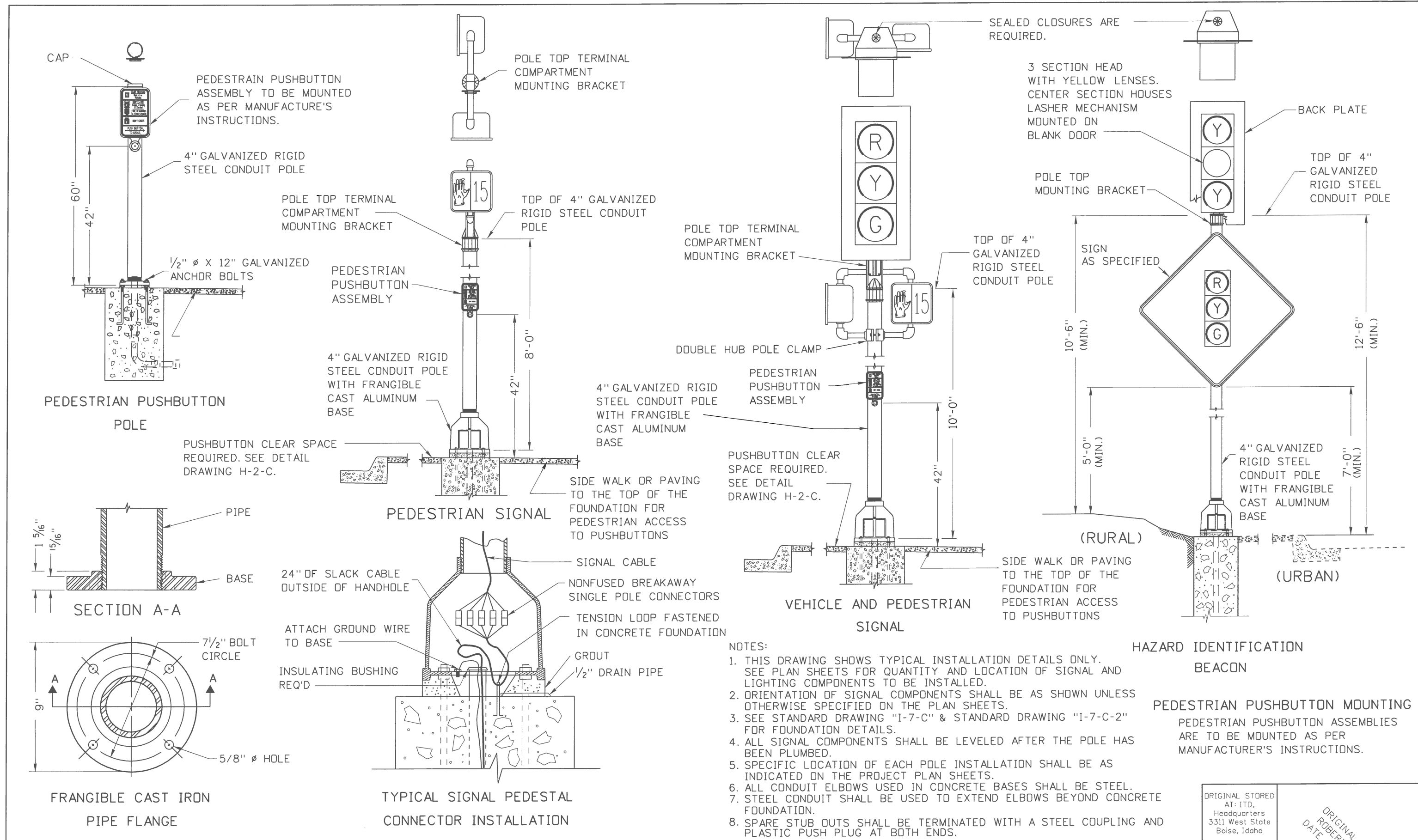
English

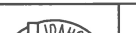
STANDARD DRAWING NO.
I-6-A

SHEET 1 OF 1

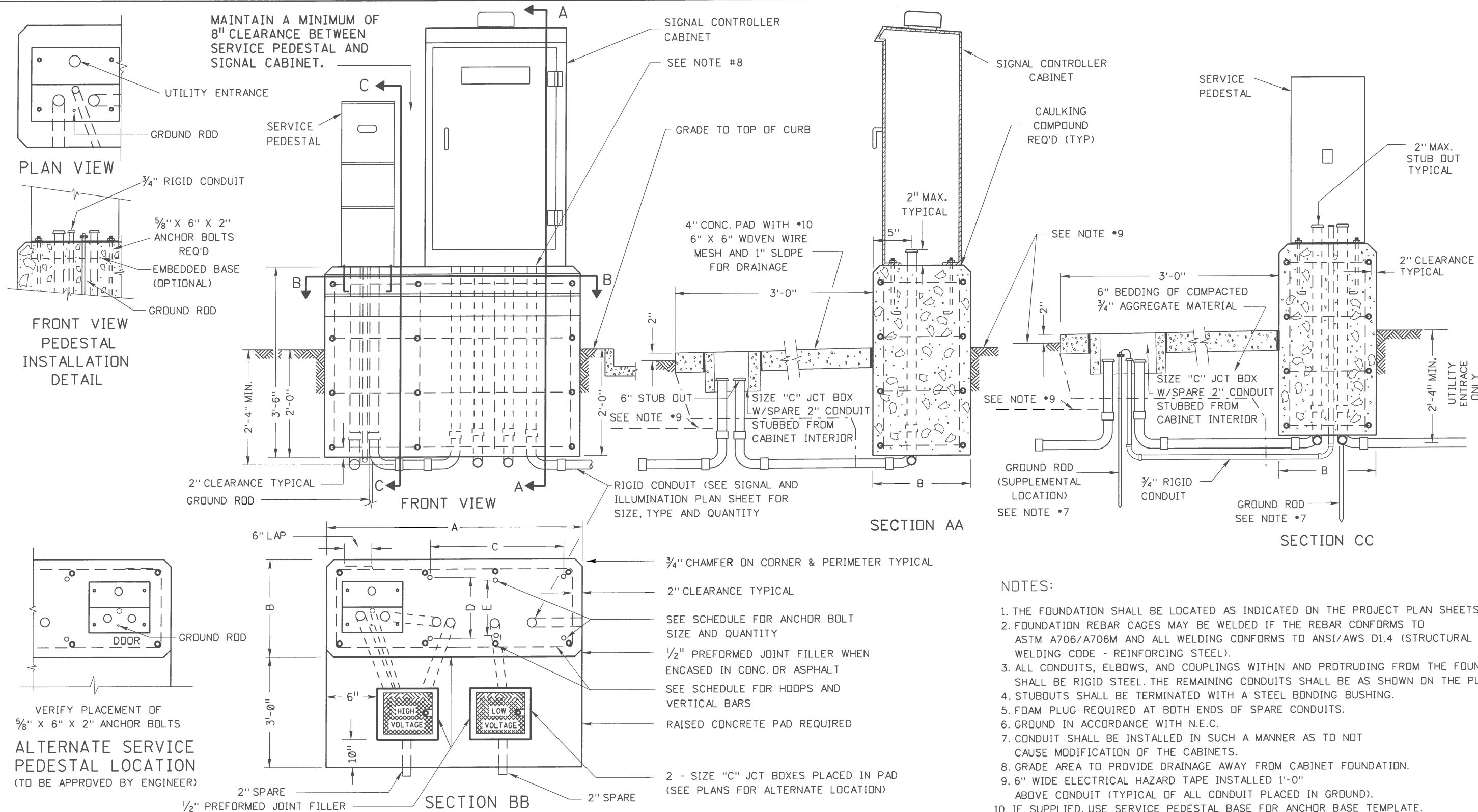
ORIGINAL STORED
AT: ITD,
Headquarters
3311 West State
Boise, Idaho

ORIGINAL SIGNED BY:
ROBERT KOEBERLEIN
DATE ORIGINAL SIGNED:
APRIL 25, 2014



REVISIONS									SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	IDAHO TRANSPORTATION DEPARTMENT		STANDARD DRAWING		English STANDARD DRAWING NO. I-6-B SHEET 1 OF 1
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY				FRANGIBLE CAST BASE TRAFFIC SIGNAL POLES		
1	12-94	HEB	6	04-14	HEB							ORIGINAL SIGNED BY: CARL D. MAIN		
2	08-06	NQB										DESIGN/TRAFFIC SERVICES ENGINEER		
3	12-07	HEB												
4	07-09	HEB												
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									DRAWING DATE: AUGUST, 1994		BOISE IDAHO			

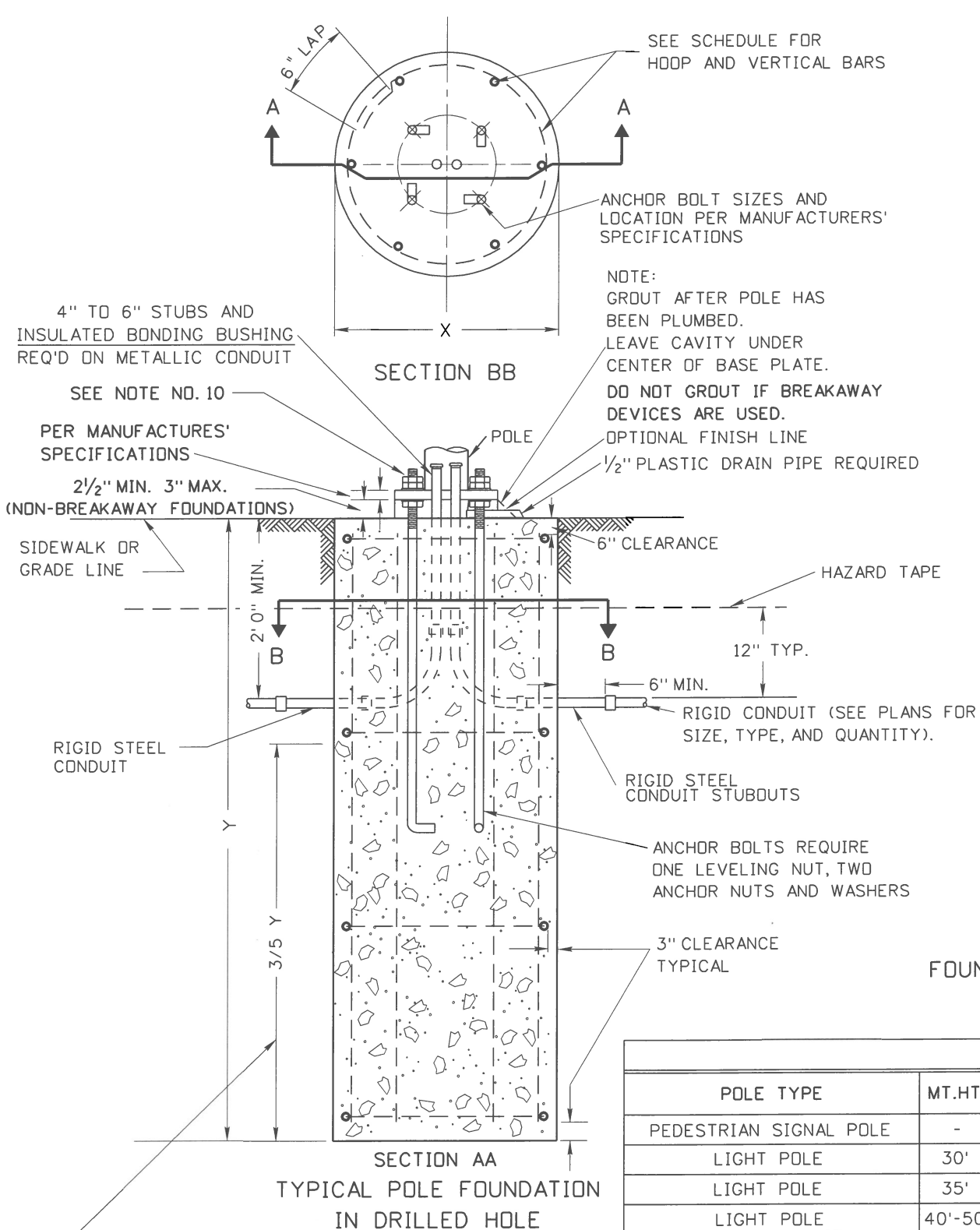
DESIGNED BY: T. KOEBERLEIN
ORIGINAL SIGNED: APRIL 25, 2014



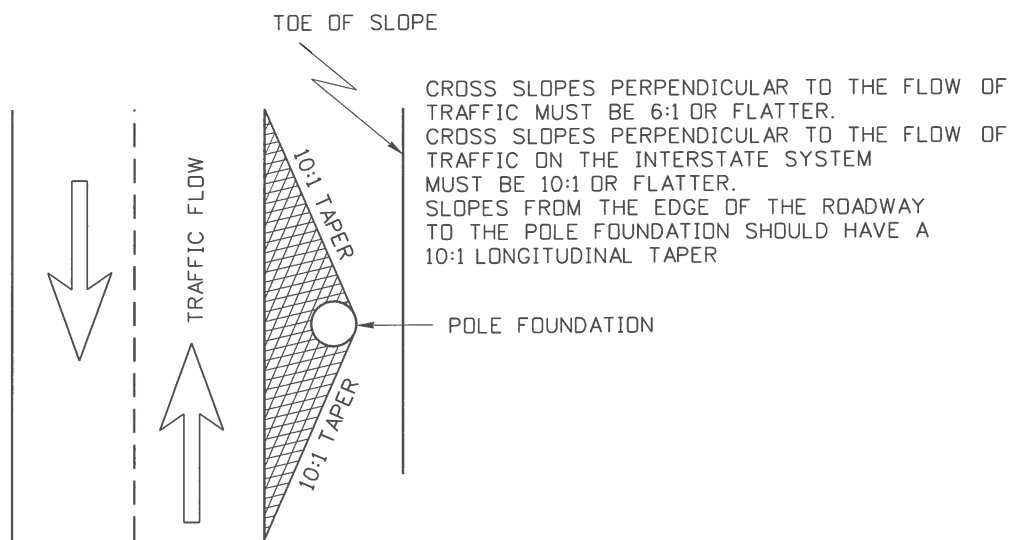
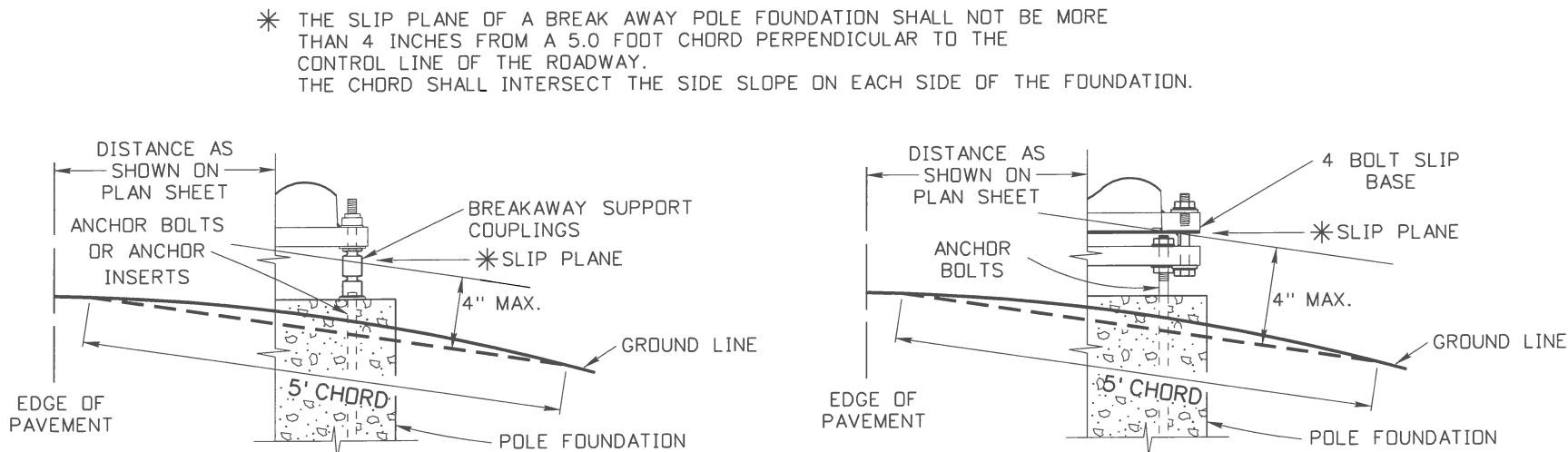
- NOTES:
1. THE FOUNDATION SHALL BE LOCATED AS INDICATED ON THE PROJECT PLAN SHEETS.
 2. FOUNDATION REBAR CAGES MAY BE WELDED IF THE REBAR CONFORMS TO ASTM A706/A706M AND ALL WELDING CONFORMS TO ANSI/AWS D1.4 (STRUCTURAL WELDING CODE - REINFORCING STEEL).
 3. ALL CONDUITS, ELBOWS, AND COUPLINGS WITHIN AND PROTRUDING FROM THE FOUNDATION SHALL BE RIGID STEEL. THE REMAINING CONDUITS SHALL BE AS SHOWN ON THE PLANS.
 4. STUBOUTS SHALL BE TERMINATED WITH A STEEL BONDING BUSHING.
 5. FOAM PLUG REQUIRED AT BOTH ENDS OF SPARE CONDUITS.
 6. GROUND IN ACCORDANCE WITH N.E.C.
 7. CONDUIT SHALL BE INSTALLED IN SUCH A MANNER AS TO NOT CAUSE MODIFICATION OF THE CABINETS.
 8. GRADE AREA TO PROVIDE DRAINAGE AWAY FROM CABINET FOUNDATION.
 9. 6" WIDE ELECTRICAL HAZARD TAPE INSTALLED 1'-0" ABOVE CONDUIT (TYPICAL OF ALL CONDUIT PLACED IN GROUND).
 10. IF SUPPLIED, USE SERVICE PEDESTAL BASE FOR ANCHOR BASE TEMPLATE.
 11. NOT TO SCALE

FOUNDATION SCHEDULE														
CABINET AND SERVICE PEDESTAL														
CABINET TYPE	FOUNDATION TYPE	A	B	C	D	E	HOOPS			VERTICAL RODS			CU. YDS. CONC.	
							NO.	SIZE	LIN. FT.	NO.	SIZE	LIN. FT.	FOUNDATION	PAD
SIGNAL	M	5'-6"	1'-8"	-	-	1'-0"	4	#4	54'-0"	8	#4	25'-4"	1.2	.2
	P & R	6'-8"	2'-5"	3'-4 3/4"	1'-6 1/2"	-	4	#4	69'-4"	8	#4	25'-4"	2.1	.25

REVISIONS <table border="1"> <tr><th>NO.</th><th>DATE</th><th>BY</th><th>NO.</th><th>DATE</th><th>BY</th><th>NO.</th><th>DATE</th><th>BY</th></tr> <tr><td>1</td><td>08-96</td><td>NQB</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td>12-04</td><td>HEB</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td>05-05</td><td>HEB</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td>05-14</td><td>HEB</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>								NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	1	08-96	NQB							2	12-04	HEB							3	05-05	HEB							4	05-14	HEB							SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY CADD FILE NAME: i7a10514.dgn DRAWING DATE: DECEMBER, 1994		IDAHO TRANSPORTATION DEPARTMENT BOISE IDAHO		ORIGINAL SIGNED BY: CARL D. MAIN DESIGN/TRAFFIC SERVICES ENGINEER		STANDARD DRAWING SIGNAL CABINET & SERVICE PEDESTAL FOUNDATION DETAILS		English STANDARD DRAWING NO. I-7-A-1 SHEET 1 OF 1		ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho ORIGINAL SIGNED BY: ROBERT KOEBERLEIN DATE: JUNE 19, 2014	
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY																																																								
1	08-96	NQB																																																														
2	12-04	HEB																																																														
3	05-05	HEB																																																														
4	05-14	HEB																																																														



THE LOWER 3/5 OF THE FOUNDATION TO BE PLACED AGAINST UNDISTURBED SOIL UNLESS OTHERWISE APPROVED BY THE ENGINEER. THE UPPER 2/5 OF THE FOUNDATION MAY BE FORMED AS NEEDED.



* THE SLIP PLANE OF A BREAK AWAY POLE FOUNDATION SHALL NOT BE MORE THAN 4 INCHES FROM A 5.0 FOOT CHORD PERPENDICULAR TO THE CONTROL LINE OF THE ROADWAY. THE CHORD SHALL INTERSECT THE SIDE SLOPE ON EACH SIDE OF THE FOUNDATION.

POLE FOUNDATION SCHEDULE												
POLE TYPE	MT.HT.	MASTARM LENGTH	FOUNDATION TYPE	X	Y	HOOPS			VERTICAL RODS			CU. YDS. CONCRETE
						NO.	SIZE	LIN.FT.	NO.	SIZE	LIN.FT.	
PEDESTRIAN SIGNAL POLE	-	-	A	2'-0"	5'-0"	4	#4	20'-10"	6	#4	25'-6"	.6
LIGHT POLE	30'	ALL	A	2'-0"	5'-0"	4	#4	20'-10"	6	#4	25'-6"	.6
LIGHT POLE	35'	ALL	B	2'-6"	7'-0"	4	#4	27'-2"	6	#6	37'-6"	1.3
LIGHT POLE	40'-50'	ALL	C	3'-0"	8'-0"	5	#4	41'-10"	8	#6	58'-0"	2.1
SIGNAL POLE		20' - 45'	D	3'-0"	9'-0"	5	#4	41'-10"	8	#6	66'-0"	2.4
PEDESTRIAN PUSHBUTTON POLE	4'-0"	-	E	1'-6"	2'-6"	-	-	-	-	-	-	.2
DUAL MAST ARM SIGNAL POLE	-	ALL	F	3'-0"	12'-0"	8	#5	66'-10"	12	#6	135'-0"	3.1
SIGNAL POLE	-	50' - 55'	F	3'-0"	12'-0"	8	#5	66'-10"	12	#6	135'-0"	3.1

- NOTES:
1. THE FOUNDATIONS SHALL BE LOCATED AS INDICATED ON THE PROJECT PLAN SHEETS.
 2. FOUNDATION REBAR CAGES MAY BE WELDED IF THE STEEL REBAR CONFORMS TO ASTM A706/A706M AND ALL WELDING CONFORMS TO ANSI/AWS D1.4 (STRUCTURAL WELDING CODE - REINFORCING STEEL).
 3. REBAR IN POLE FOUNDATIONS SHALL BE 60 KSI STEEL.
 4. STEEL TEMPLATE REQUIRED FOR ANCHOR BOLT PLACEMENT.
 5. SPARE STUBOUTS WHEN SHOWN ON PLAN SHEETS SHALL BE TERMINATED WITH A STEEL COUPLING AND FOAM PLUG AT BOTH ENDS.
 6. CLASS 40 CONCRETE SHALL BE USED IN POLE FOUNDATIONS.
 7. FOUNDATION CONCRETE SHALL ACHIEVE 100% STRENGTH AND CURE FOR A MINIMUM OF 7 DAYS BEFORE ANY LOADING IS APPLIED.
 8. FILLER JOINT MATERIAL WILL BE PLACED AROUND POLE FOUNDATION WHEN POLE FOUNDATION IS IN CONTACT WITH SIDEWALK.
 9. ELEVATION OF TOP OF POLE FOUNDATION SHALL MATCH THE ADJACENT PAVEMENT EDGE OR SIDEWALK ELEVATION.
 10. ANCHOR BASE ASSEMBLIES SHALL BE INSTALLED AND TIGHTENED IN ACCORDANCE WITH SUBSECTION 619.03 OF THE ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE SUPPLEMENTAL SPECIFICATIONS.

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	08-96	HEB					
2	07-03	HEB					
3	05-05	HEB					
4	07-10	EBG					
5	04-14	HEB					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: i7c10414.dgn

DRAWING DATE: DECEMBER, 1994

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: CARL D. MAIN

DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING

MAST ARM SIGNAL POLE, LIGHTING POLE AND PEDESTRIAN POLE FOUNDATION DETAILS

REQUIRES STD. DWG. I-7-C-2

English

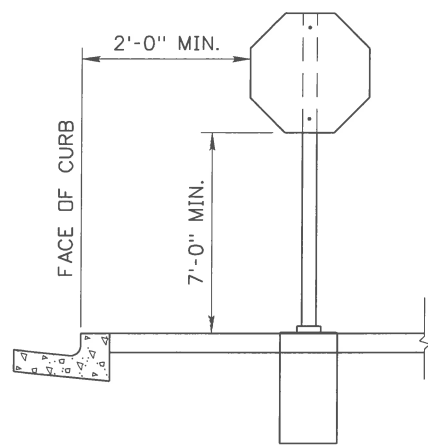
STANDARD DRAWING NO. I-7-C-1

SHEET 1 OF 1

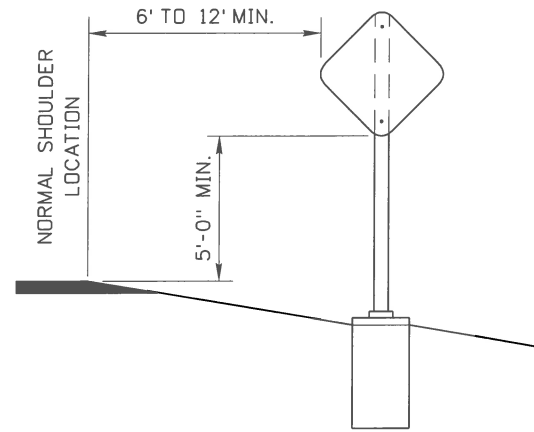
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

ORIGINAL SIGNED BY: TRI BUJ

DATE ORIGINAL SIGNED: APRIL 28, 2014

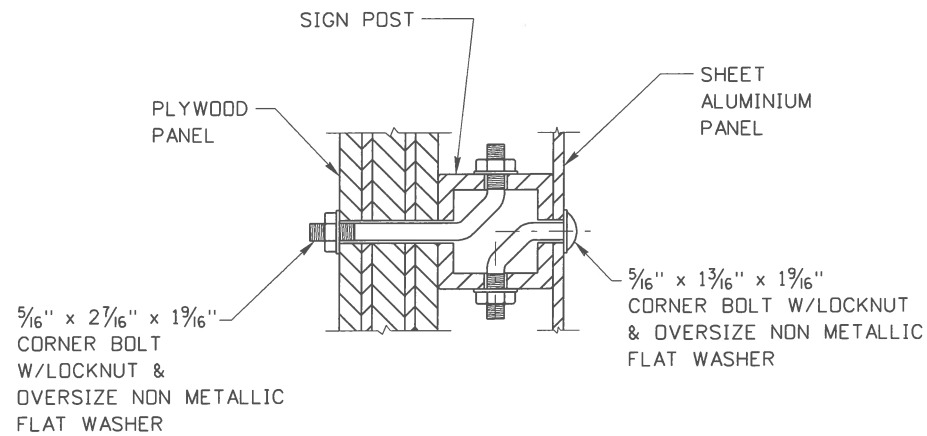


URBAN LOCATIONS
WITH CURB AND GUTTER



RURAL LOCATIONS
(SEE NOTE 3 WHEN SOLID ROCK IS ENCOUNTERED)

TYPICAL INSTALLATION FOR SIGNS

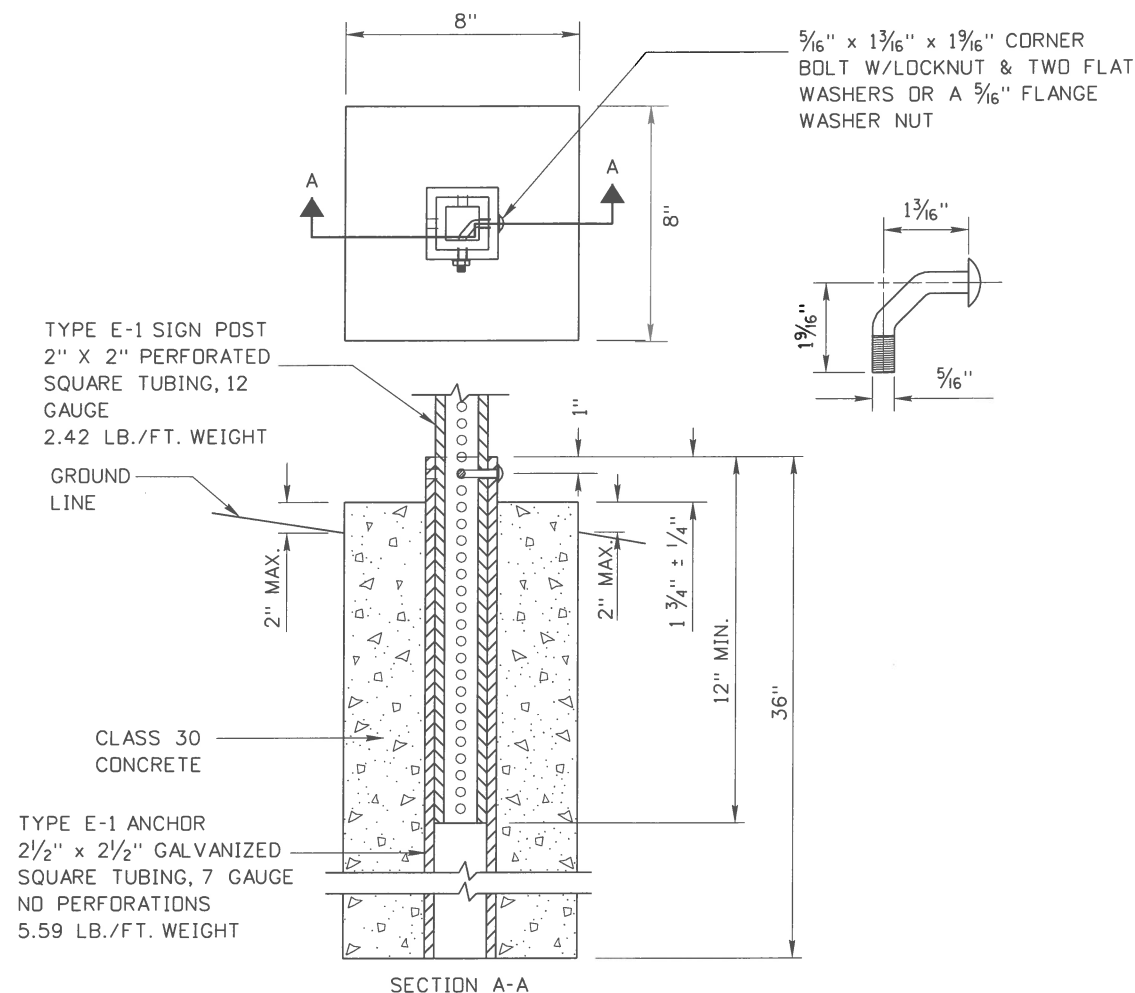


CORNER BOLTS MAY BE USED WITH BACK TO BACK INSTALLATIONS

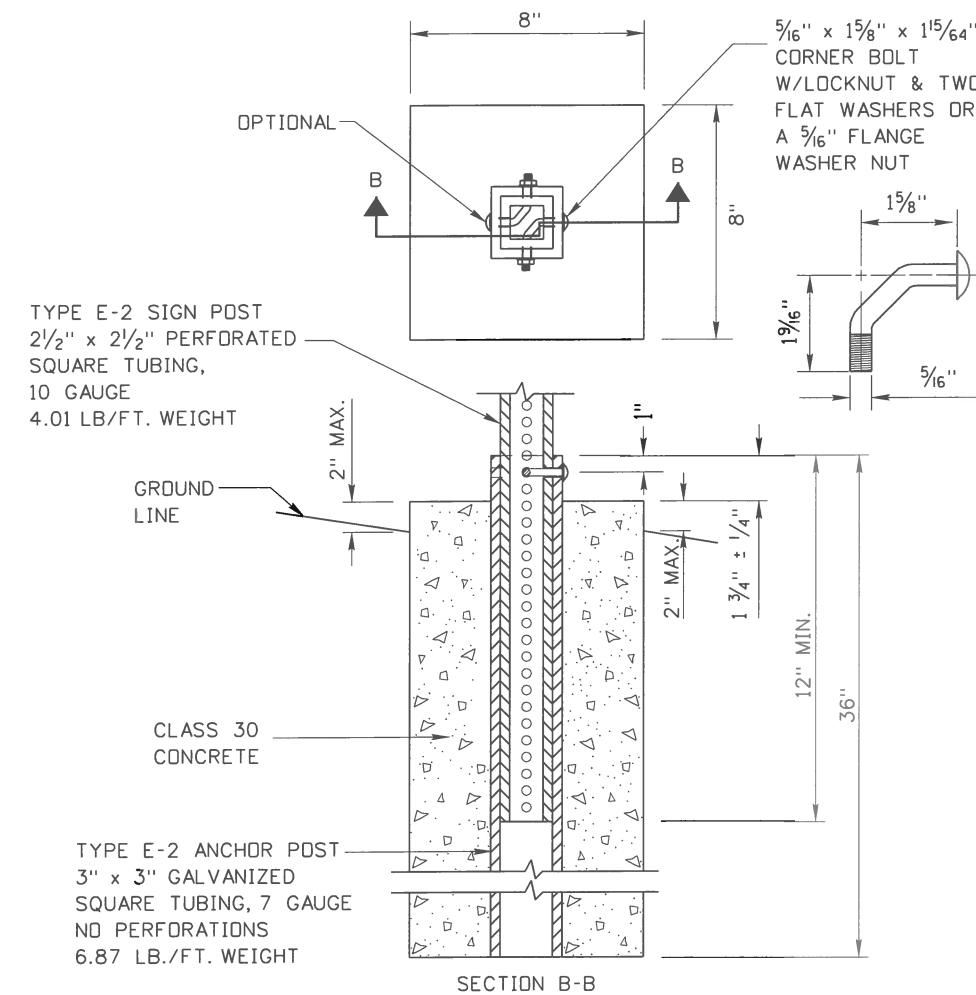
BACK TO BACK SIGN MOUNTING DETAILS

NOTES

1. ENSURE THAT THE BOTTOM OF ANCHOR IS BE KEPT OPEN TO DRAIN.
2. DO NOT USE MORE THAN ONE POST PER SIGN INSTALLATION.
3. INSTALL SIGN POST AND ANCHOR IN FOUNDATION OR GROUT INTO SOLID ROCK. ENSURE THAT THE 2" X 2" POST INSTALLATIONS ARE EMBEDDED 18" ONTO SOLID ROCK AND 2 1/2" X 2 1/2" POST INSTALLATIONS ARE EMBEDDED 24" INTO SOLID ROCK.
4. DO NOT USE BRACE ANGLES.
5. DRAWING NOT TO SCALE.



2" X 2" SIGN POST INSTALLATION DETAILS



2 1/2" X 2 1/2" SIGN POST INSTALLATION DETAILS

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: i8f_0515.dgn
DRAWING DATE: JULY, 1991

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN DESIGN/TRAFFIC SERVICES ENGINEER
--

STANDARD DRAWING BREAKAWAY STEEL SIGN POSTS TYPE E

English STANDARD DRAWING NO. I-8-F SHEET 1 OF 1
--

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

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
MAY 28, 2015



R1-1 (30"X30")
R1-1A (36"X36")
R1-1B (48"X48")



R1-2 (36"X36"X36")
R1-2A (48"X48"X48")
R1-2B (60"X60"X60")



R2-1 (24"X30")
R2-1A (36"X48")
R2-1B (48"X60")



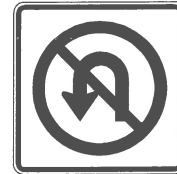
R2-2 (24"X24")
R2-2A (36"X36")
R2-2B (48"X48")



R3-1L (24"X24")
R3-1AL (36"X36")



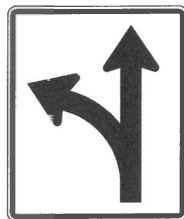
R3-1R (24"X24")
R3-1AR (36"X36")



R3-4 (24"X24")
R3-4A (36"X36")



R3-5 LorR (30"X36")



R3-6 LorR (30"X36")



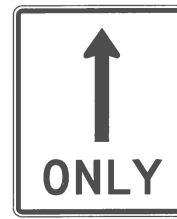
R3-7 LorR (30"X30")
R3-7A LorR (36"X36")
R3-7B LorR (48"X48")



R3-8 LorR (30"X30")
R3-8A LorR (36"X36")
R3-8B LorR (48"X48")



R3-10 (24"X36")
R3-10A (36"X48")



R3-11 (30"X36")



R4-1 (24"X30")
R4-1A (36"X48")
R4-1B (48"X60")



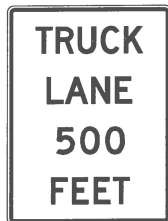
R4-2 (24"X30")
R4-2A (36"X48")
R4-2B (48"X60")



R4-4 (24"X30")
R4-4A (36"X48")
R4-4B (48"X60")



R4-5 (24"X30")
R4-5A (36"X48")
R4-5B (48"X60")



R4-6 (24"X30")
R4-6A (36"X48")
R4-6B (48"X60")



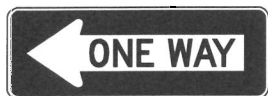
R4-7 (24"X30")
R4-7A (36"X48")
R4-7B (48"X60")



R5-1 (30"X30")
R5-1A (36"X36")



R5-9 (30"X18")
R5-9A (36"X24")



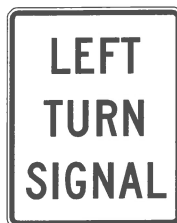
R6-1 LorR (36"X12")



R8-7 (30"X24")
R8-7A (48"X36")



R8-8 (48"X36")



R10-10 LorR (24"X30")
R10-10A LorR (30"X36")

NOTES:

1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS ADOPTED BY THE STATE.
2. SIGNS SHALL BE PUNCHED WITH THE REQUIRED NUMBER OF 3/8" DIAMETER MOUNTING HOLES AS SHOWN ON STANDARD DRAWING I-12-F.
3. DASHED NUMBERS INDICATED ARE VARIABLE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-93	HEB						
2	12-01	NQB						
3	07-03	NQB						
4	06-07	HEB						
5	12-13	HEB						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: i12a1213.dgn
DRAWING DATE: JANUARY, 1991

IDAHO TRANSPORTATION DEPARTMENT	
BOISE IDAHO	

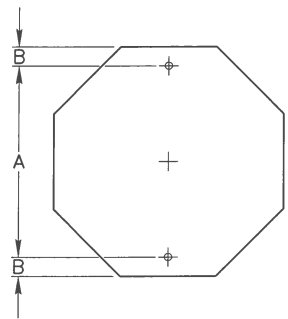
ORIGINAL SIGNED BY: RYAN LANCASTER for DESIGN/TRAFFIC SERVICES ENGINEER
--

STANDARD DRAWING
STANDARD REGULATORY SIGNS
REQUIRES STD. DWG. I-12-F

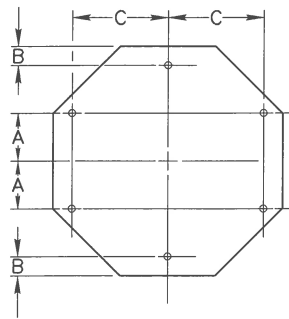
English
STANDARD DRAWING NO. I-12-A
SHEET 1 OF 1

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

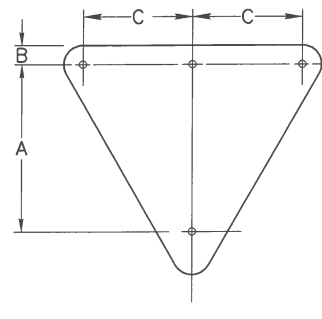
ORIGINAL SIGNED BY:
CARL D. MAIN
DATE ORIGINAL SIGNED:
DECEMBER 5, 2013



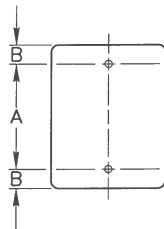
SIGN SIZE	A	B
30"X30"	24"	3"



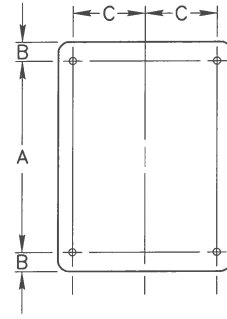
SIGN SIZE	A	B	C
36"X36"	8"	3"	12"
48"X48"	10"	—	20"



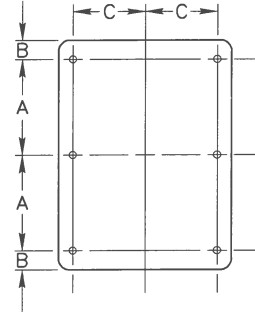
SIGN SIZE	A	B	C
30"X30"	18"	3"	—
36"X36"	23"	3"	—
48"X48"	25"	3"	17"
60"X60"	35"	4"	23"



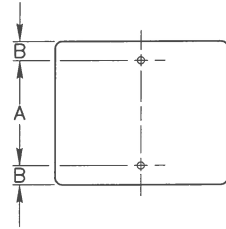
SIGN SIZE	A	B
6"X12"	9"	1 1/2"
6"X18"	15"	1 1/2"
9"X12"	9"	1 1/2"
12"X18"	15"	1 1/2"
12"X30"	24"	3"
12"X36"	32"	2"
18"X24"	18"	3"
24"X30"	24"	3"
24"X36"	30"	3"
30"X36"	30"	3"



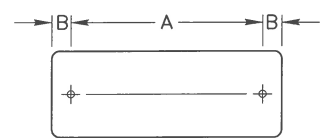
SIGN SIZE	A	B	C
36"X36"	30"	3"	15"
36"X48"	42"	3"	15"
48"X30"	24"	3"	15"
48"X36"	30"	3"	15"
60"X36"	30"	3"	21"



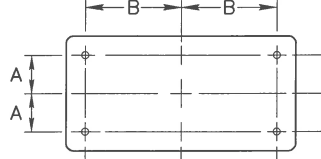
SIGN SIZE	A	B	C
48"X60"	27"	3"	15"



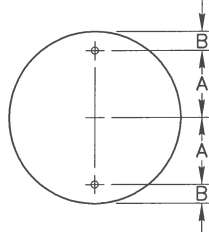
SIGN SIZE	A	B
12"X6"	3"	1 1/2"
18"X9"	6"	1 1/2"
18"X12"	9"	1 1/2"
18"X18"	15"	1 1/2"
21"X15"	12"	1 1/2"
24"X6"	3"	1 1/2"
24"X10"	7"	1 1/2"
24"X12"	9"	1 1/2"
24"X18"	15"	1 1/2"
24"X24"	18"	3"
30"X18"	12"	3"
30"X24"	18"	3"
30"X30"	24"	3"
36"X24"	18"	3"
36"X30"	24"	3"
42"X24"	18"	3"
42"X30"	24"	3"
42"X36"	30"	3"



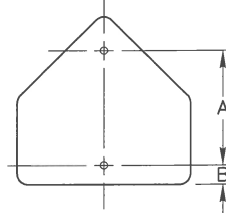
SIGN SIZE	A	B
30"X15"	24"	3"
36"X12"	30"	3"
36"X18"	30"	3"
48"X12"	42"	3"
48"X18"	42"	3"
54"X18"	48"	3"



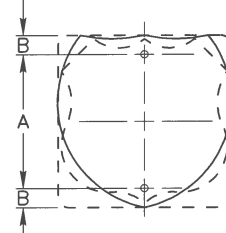
SIGN SIZE	A	B
48"X24"	9"	20"



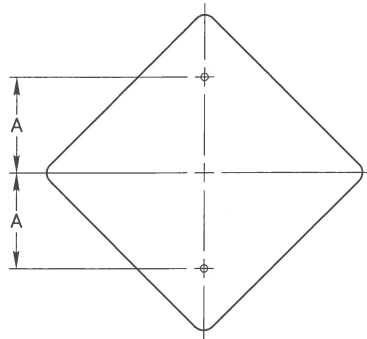
SIGN SIZE	A	B
36"	15"	3"
48"	21"	3"



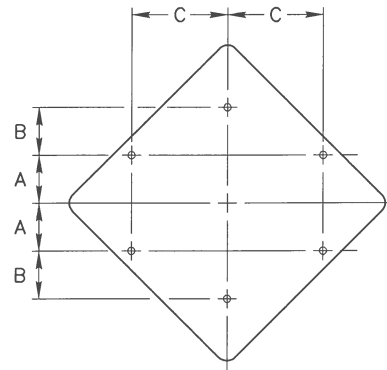
SIGN SIZE	A	B
30"X30"	21"	3"
36"X36"	24"	3"



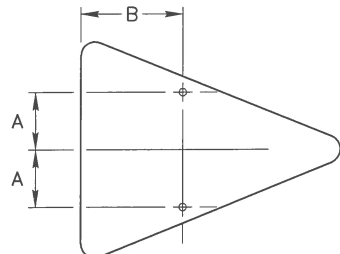
SIGN SIZE	A	B
24"X24"	18"	3"
30"X24"	18"	3"



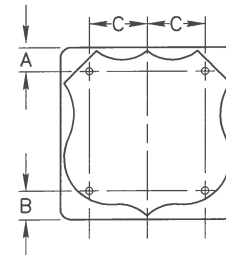
SIGN SIZE	A
18"X18"	10"
24"X24"	12"
30"X30"	15"



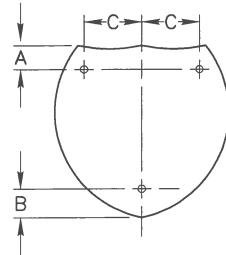
SIGN SIZE	A	B	C
36"X36"	8"	10"	12"
48"X48"	10"	—	20"



SIGN SIZE	A	B
36"X48"	9"	16"



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 3/8" DIAMETER.

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

ORIGINAL SIGNED BY:
RYAN D. LANCASTER
DATE ORIGINAL SIGNED:
JULY 14, 2014

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY	
CADD FILE NAME: i12f0714.dgn	
DRAWING DATE: DECEMBER, 1994	

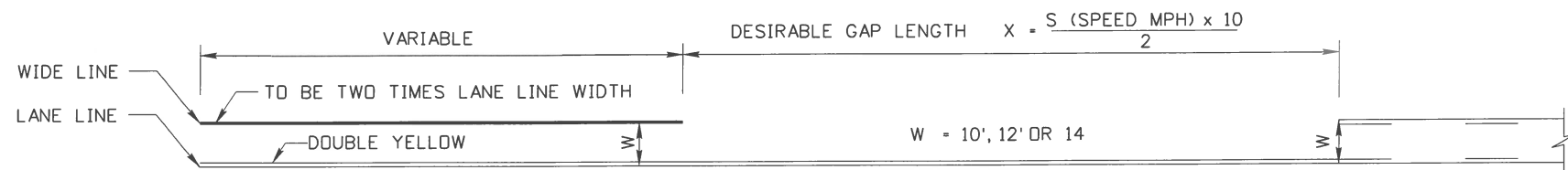
IDAHO TRANSPORTATION DEPARTMENT	
BOISE IDAHO	



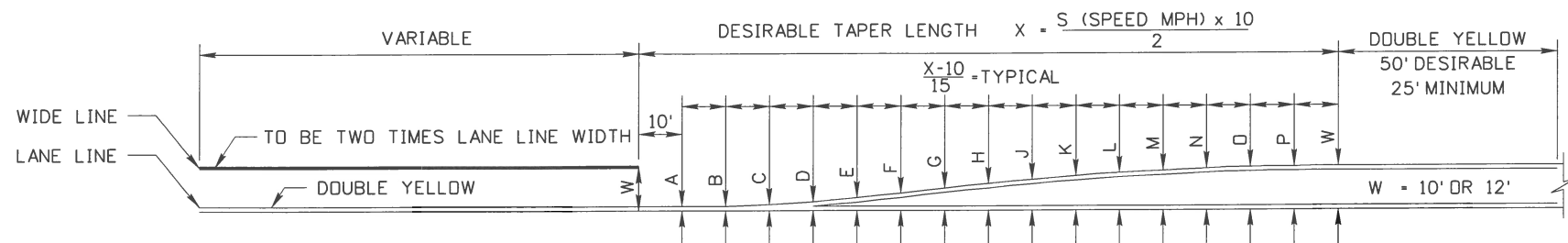
ORIGINAL SIGNED BY: CARL D. MAIN
DESIGN/TRAFFIC SERVICES ENGINEER

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

English
STANDARD DRAWING NO. I-12-F
SHEET 1 OF 1



10', 12' AND 14' MEDIAN WIDTH

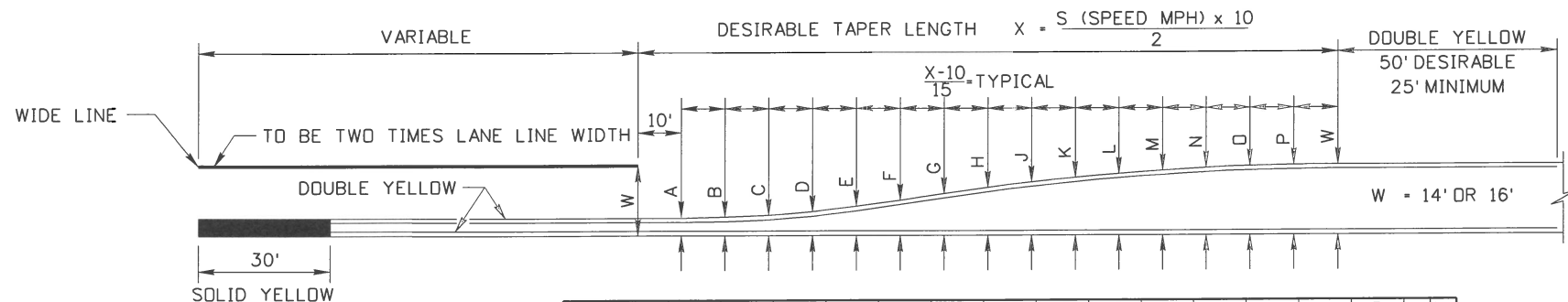


LINE WIDTHS:

LONGITUDINAL PAVEMENT MARKINGS (LANE LINES) HAVE A NORMAL LINE WIDTH OF 4, 5 OR 6 INCHES. WIDE LINES USED FOR EMPHASIS ARE A MINIMUM OF TWICE AS WIDE AS NORMAL LINES.

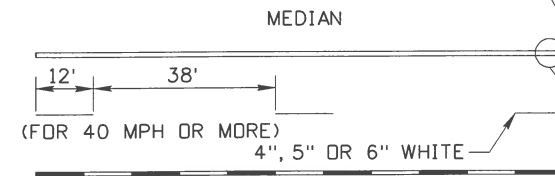
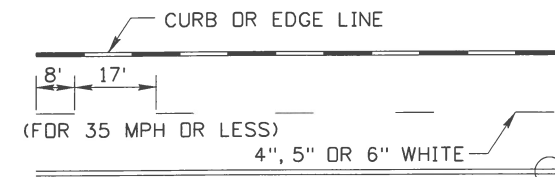
W	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	W
10.0'	.9'	1.0'	1.4'	2.0'	2.9'	3.9'	5.1'	6.1'	7.0'	7.8'	8.5'	9.0'	9.5'	9.8'	9.9'	10.0'
12.0'	.9'	1.1'	1.5'	2.2'	3.3'	4.6'	6.0'	7.3'	8.4'	9.3'	10.1'	10.8'	11.3'	11.7'	11.9'	12.0'

10' AND 12' MEDIAN WIDTH

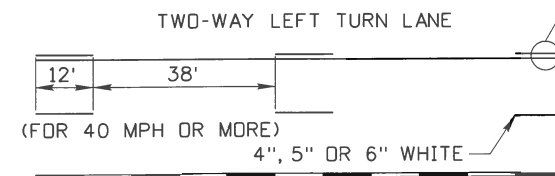
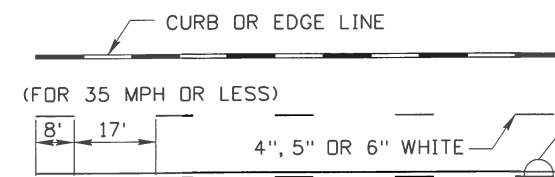


W	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	W
14.0'	3.0'	3.1'	3.6'	4.3'	5.3'	6.7'	8.1'	9.3'	10.4'	11.4'	12.2'	12.8'	13.3'	13.7'	13.9'	14.0'
16.0'	4.0'	4.2'	4.6'	5.4'	6.6'	8.0'	9.5'	10.9'	12.1'	13.1'	14.0'	14.7'	15.3'	15.7'	15.9'	16.0'

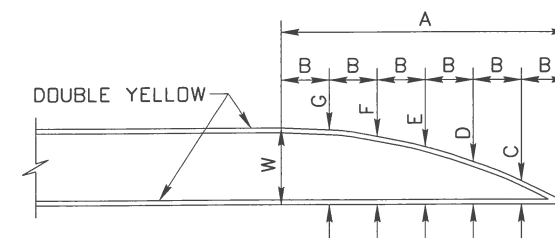
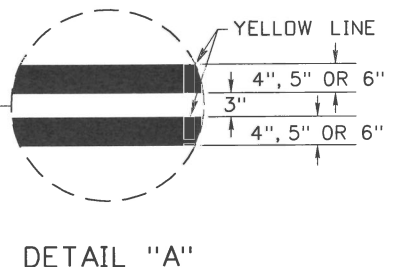
14' AND 16' MEDIAN WIDTH



TYPICAL PLAN VIEW (MEDIAN)



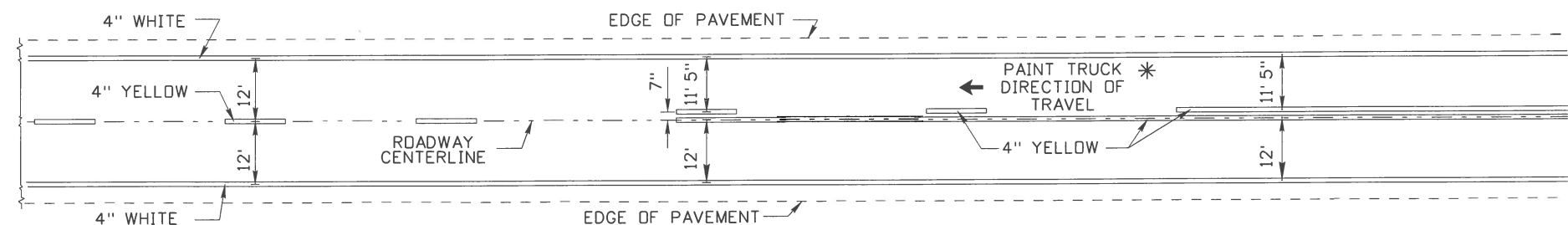
TYPICAL PLAN VIEW (TWO-WAY LEFT TURN LANE)



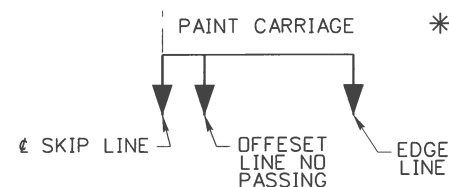
W	A	B	C	D	E	F	G
10.0'	60.0'	10.0'	3.1'	5.6'	7.5'	8.9'	9.7'
12.0'	60.0'	10.0'	3.7'	6.7'	9.0'	10.7'	11.7'
14.0'	60.0'	10.0'	4.3'	7.8'	10.5'	12.4'	13.6'
16.0'	60.0'	10.0'	4.9'	8.9'	12.0'	14.2'	15.6'

OFFSET NOSE (OPTIONAL)

NOTES:
1. STANDARD LANE LINE WIDTH IS 4".



* PAINT TRUCK SETUP



* CONTACT DISTRICT PAINT FOREMEN FOR DIRECTION OF TRAVEL FOR SECTION OF HIGHWAY

DIMENSION LAYOUT FOR 12' LANE WIDTHS
SEE TABLE BELOW FOR LANE WIDTHS LESS THAN 12'

SECTION WIDTH FEET	DISTANCE FROM CL TO EDGE LINE FEET
20.0'	9.5'
22.0'	10.5'
24.0'	11.5'
26.0' & WIDER	12.0'

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	12-01	NQB					
2	07-03	HEB					
3	12-04	HEB					
4	05-05	HEB					
5	07-10	HEB					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: i21a_0710.dgn
DRAWING DATE: DECEMBER, 1993

IDAHO
TRANSPORTATION
DEPARTMENT
BOISE IDAHO

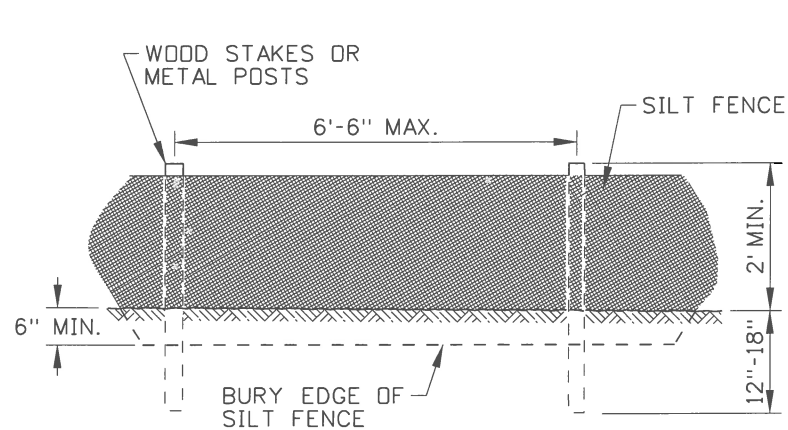
ORIGINAL SIGNED BY: LOREN THOMAS
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING
STANDARD PAVEMENT MARKINGS
FOR ARTERIAL AND COLLECTOR
ROADWAYS

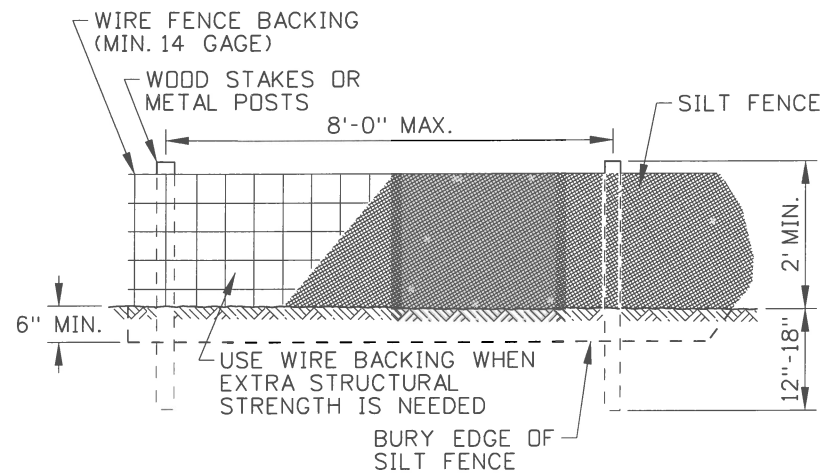
English
STANDARD DRAWING NO.
I-21-A
SHEET 1 OF 1

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

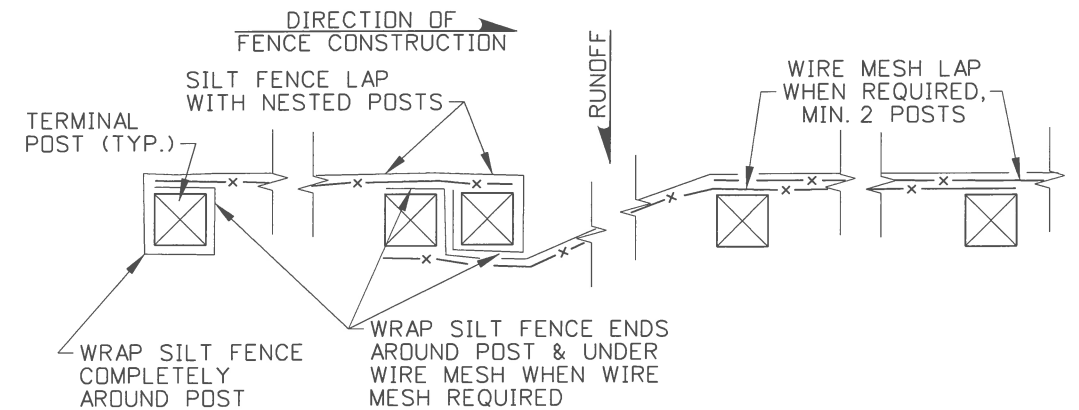
ORIGINAL SIGNED BY: CARL D. MAIN
DATE ORIGINAL SIGNED: JULY 12, 2010



SILT FENCE (NO WIRE BACKING)



SILT FENCE (WIRE BACKING)



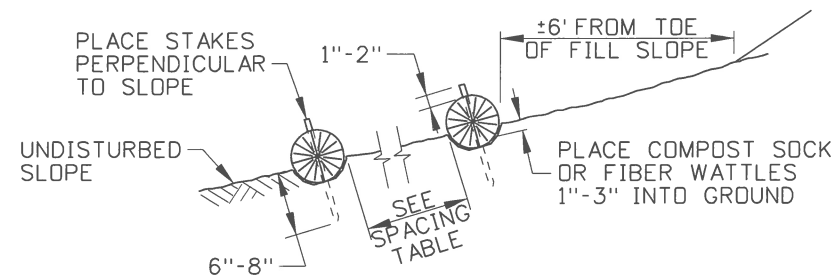
SILT FENCE LAP DETAIL

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

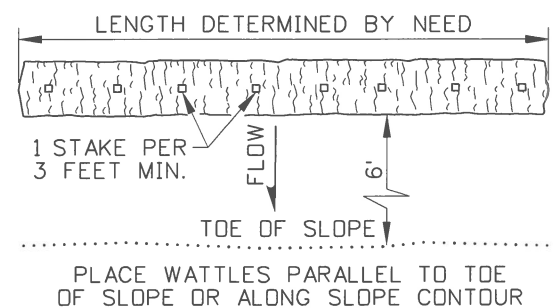
SILT FENCE SPACING TABLE				
SLOPE	SOIL TYPE			
	SILTY	CLAYS	SANDY	
1:1	50 FT	75 FT	100 FT	
2:1	75 FT	100 FT	125 FT	
4:1	100 FT	125 FT	150 FT	
10:1 OR FLATTER	125 FT	150 FT	200 FT	

NOTES

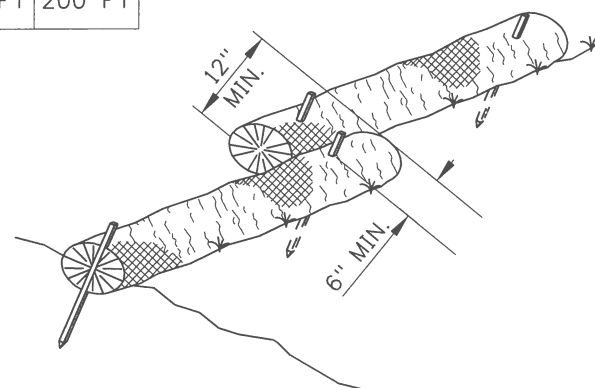
1. THE GENERAL NOTES FOR ALL P-1 SERIES STANDARD DRAWINGS (TEMPORARY EROSION CONTROL) ARE GIVEN ON STANDARD DRAWING P-1-D.
2. INSTALL TEMPORARY SEDIMENT CONTROL BARRIERS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND SPECIFICATIONS. THE DIMENSIONS SHOWN ARE GENERAL GUIDELINES.
3. PLACE SEDIMENT BARRIERS TO FOLLOW THE SLOPE CONTOURS. METAL POSTS OR WOOD STAKES MAY BE USED.
4. ENSURE THAT RUNOFF PASSES THROUGH THE SILT FENCE AND NOT AROUND THE FENCE.
5. ENSURE THAT SILT FENCE MATERIAL IS IN ACCORDANCE WITH 718.09 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
6. GROUND SILT FENCES WITH WIRE MESH IN ACCORDANCE WITH THE GROUNDING DETAIL SHOWN ON STANDARD DRAWING F-2-A.
7. 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.
8. 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.
9. EXTEND OR JOIN SILT FENCE USING SILT FENCE LAP WITH NESTED POSTS.
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. NOT TO SCALE.



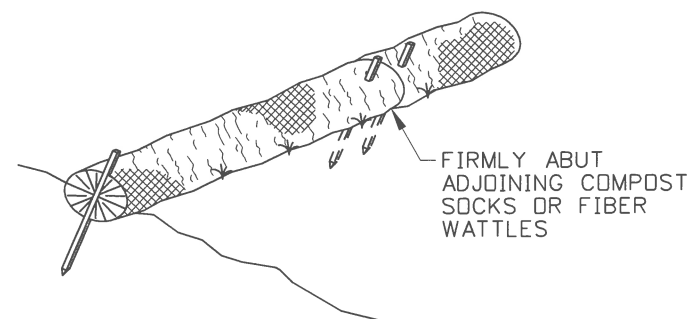
COMPOST SOCK AND FIBER WATTLE
SIDE VIEW



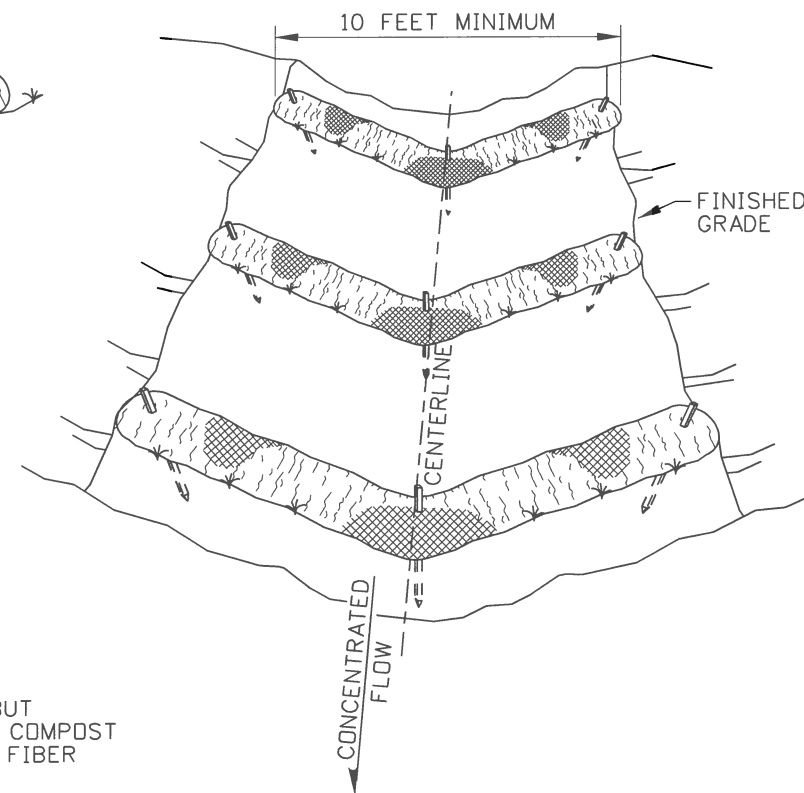
COMPOST SOCK AND FIBER WATTLE
PLAN VIEW



COMPOST SOCK AND FIBER WATTLE
OVERLAPPING DETAIL



COMPOST SOCK AND FIBER WATTLE
ABUTTING DETAIL



COMPOST SOCK AND FIBER WATTLE
TEMPORARY CHECK DAM DETAIL

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

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY

CADD FILE NAME:
plb_0213.std

DRAWING DATE:
APRIL, 1993

**IDAHO
TRANSPORTATION
DEPARTMENT**

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

**TEMPORARY SEDIMENT
CONTROL BARRIERS**

REQUIRES STD. DWG. P-1-D

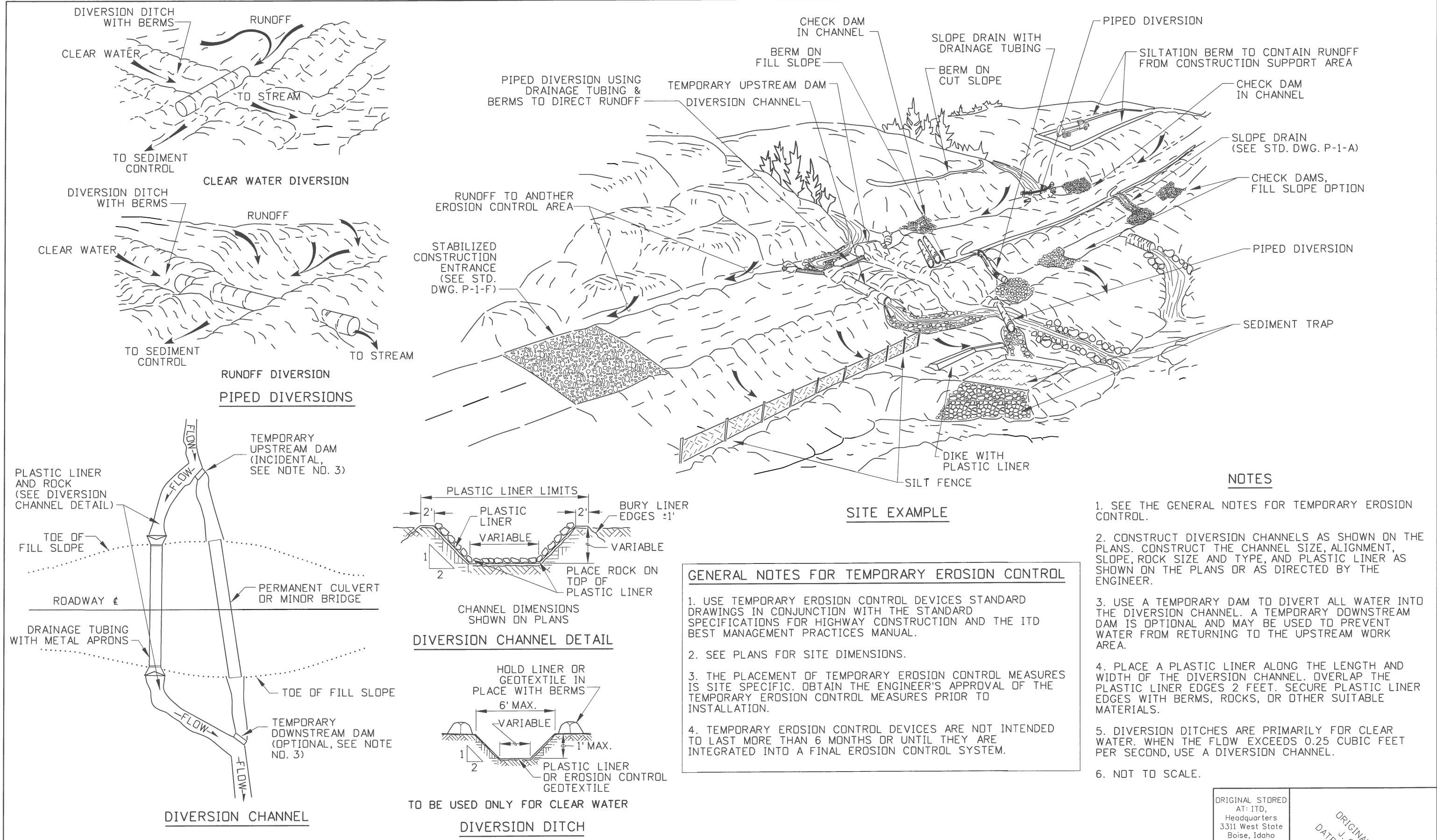
English

STANDARD DRAWING NO.
P-1-B

SHEET 1 OF 1

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

ORIGINAL SIGNED BY:
J. CALEB LAKEY
DATE ORIGINAL SIGNED:
FEBRUARY 1, 2013



NOTES

- SEE THE GENERAL NOTES FOR TEMPORARY EROSION CONTROL.
- CONSTRUCT DIVERSION CHANNELS AS SHOWN ON THE PLANS. CONSTRUCT THE CHANNEL SIZE, ALIGNMENT, SLOPE, ROCK SIZE AND TYPE, AND PLASTIC LINER AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- USE A TEMPORARY DAM TO DIVERT ALL WATER INTO THE DIVERSION CHANNEL. A TEMPORARY DOWNSTREAM DAM IS OPTIONAL AND MAY BE USED TO PREVENT WATER FROM RETURNING TO THE UPSTREAM WORK AREA.
- PLACE A PLASTIC LINER ALONG THE LENGTH AND WIDTH OF THE DIVERSION CHANNEL. OVERLAP THE PLASTIC LINER EDGES 2 FEET. SECURE PLASTIC LINER EDGES WITH BERMS, ROCKS, OR OTHER SUITABLE MATERIALS.
- DIVERSION DITCHES ARE PRIMARILY FOR CLEAR WATER. WHEN THE FLOW EXCEEDS 0.25 CUBIC FEET PER SECOND, USE A DIVERSION CHANNEL.
- NOT TO SCALE.

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

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: pld_1212.std

DRAWING DATE: APRIL, 1993

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

TEMPORARY EROSION CONTROL DIVERSION DEVICES & SITE EXAMPLE

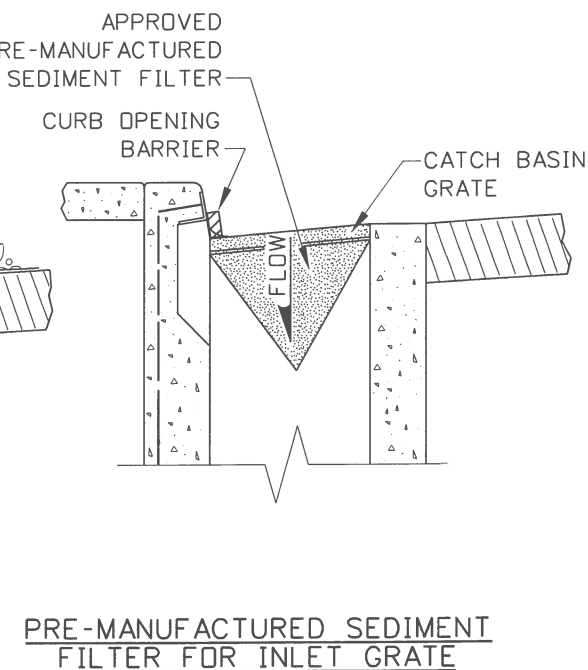
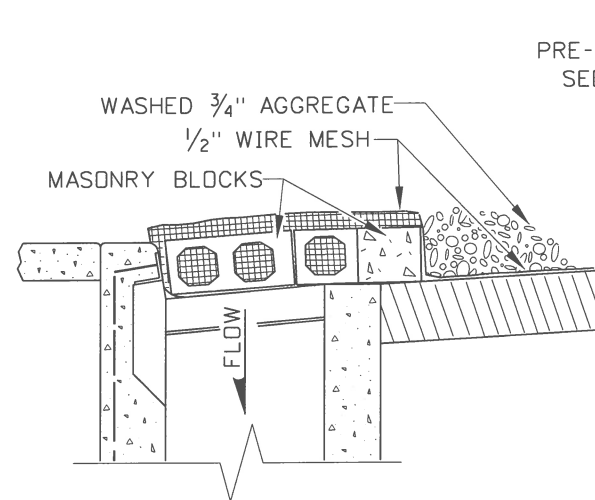
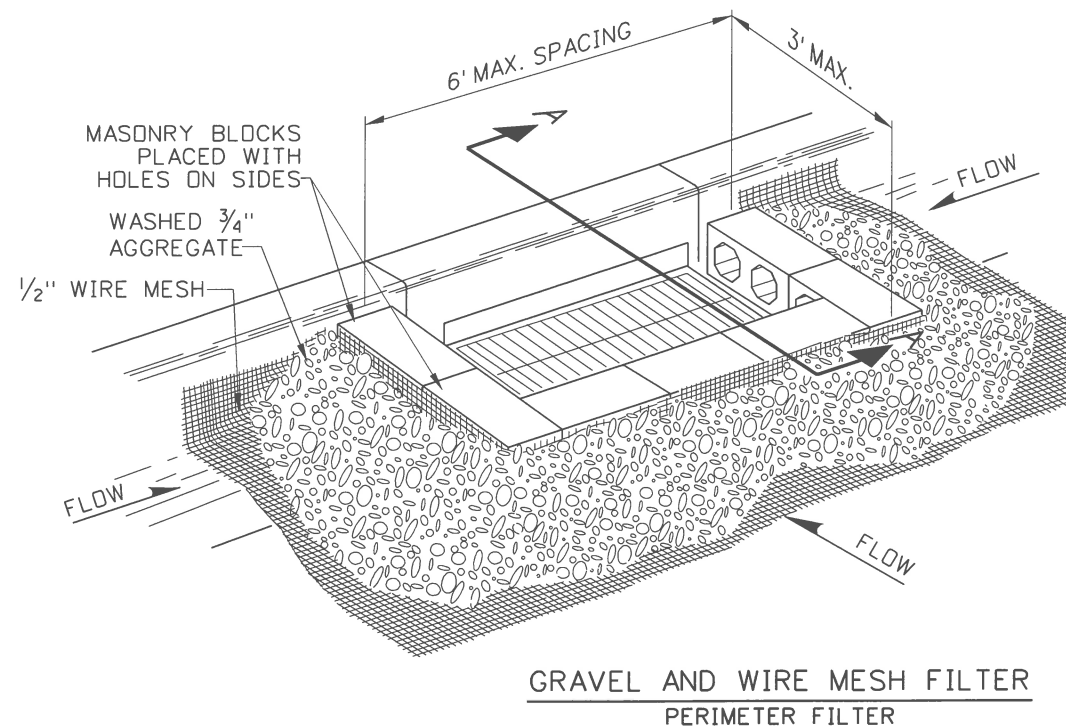
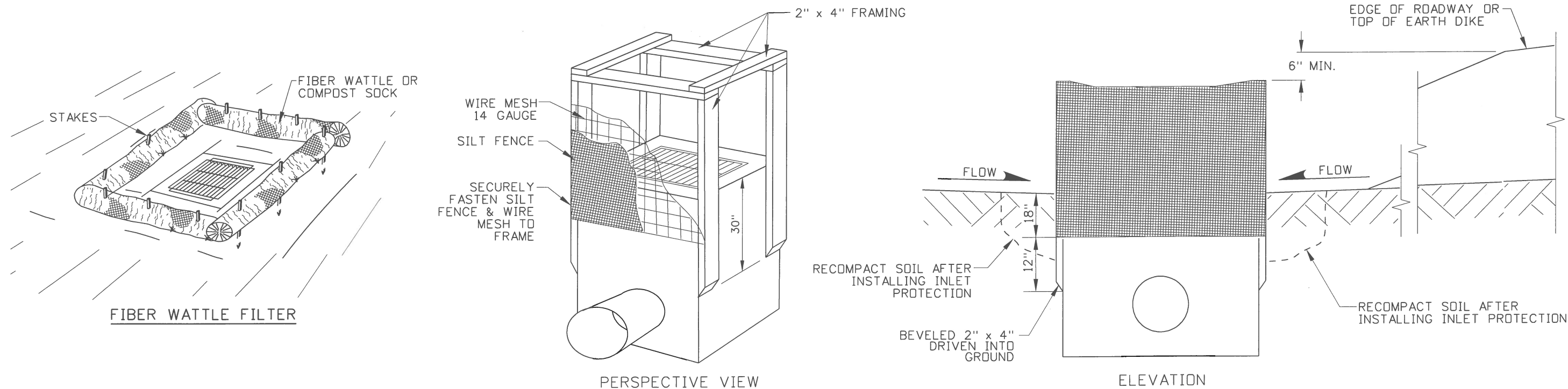
English

STANDARD DRAWING NO. **P-1-D**

SHEET 1 OF 1

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

ORIGINAL SIGNED BY: J. CALEB LAKEY
DATE: ORIGINAL SIGNED: DECEMBER 17, 2012



NOTES

1. THE GENERAL NOTES FOR ALL P-1 SERIES STANDARD DRAWINGS (TEMPORARY EROSION CONTROL) ARE GIVEN ON STANDARD DRAWING P-1-D.
2. REMOVE TRASH, DEBRIS, DUFF, AND MATERIALS THAT MAY INTERFERE WITH THE INLET OR CATCH BASIN PROTECTION FUNCTION PRIOR TO PLACEMENT AND THEREAFTER ON A DAILY BASIS OR AS NEEDED.
3. FIELD ADJUSTMENTS MAY BE NECESSARY TO ENSURE EFFECTIVENESS.
4. FRAMED WIRE/FABRIC FILTER AND FIBER WATTLE FILTERS ARE INTENDED TO BE USED ON ANY STRUCTURE NOT PRESENTLY SURROUNDED BY PAVEMENT.
5. GRAVEL AND WIRE MESH FILTER AND PRE-MANUFACTURED SEDIMENT FILTER INSTALLATIONS ARE INTENDED TO BE USED ON STRUCTURES SURROUNDED BY PAVEMENT WITH OR WITHOUT CURBS.
6. ENSURE THAT WATER DISCHARGING FROM THE INLET MEETS APPLICABLE WATER QUALITY STANDARDS.
7. NOT TO SCALE.

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

ORIGINAL SIGNED BY:
J. CALEB LAKEY
DATE ORIGINAL SIGNED:
FEBRUARY 1, 2013

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	10-10	KEH						
2	10-11	KEH						
3	01-13	RDL						

SCALES SHOWN
ARE FOR 11" X 17"
PRINTS ONLY
CADD FILE NAME:
p1h_0213.std
DRAWING DATE:
JUNE, 1996

**IDAHO
TRANSPORTATION
DEPARTMENT**

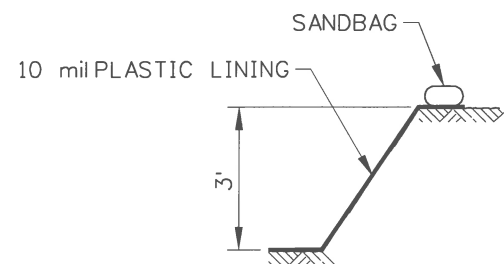


BOISE IDAHO

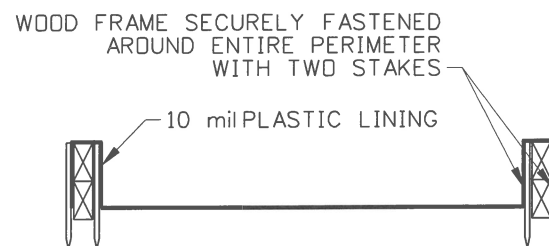
ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING
**TEMPORARY SEDIMENT
CONTROL INLET PROTECTION**
REQUIRES STD. DWG. P-1-D

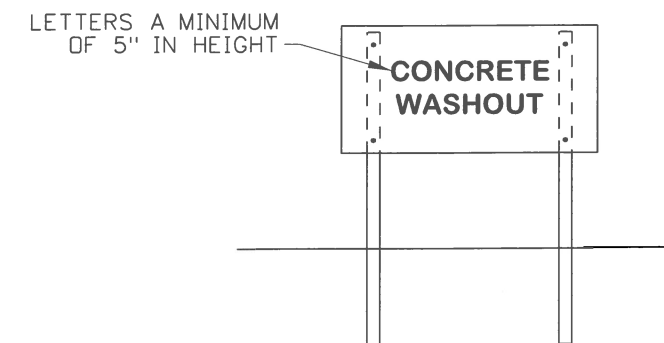
English
STANDARD DRAWING NO.
P-1-H
SHEET 1 OF 1



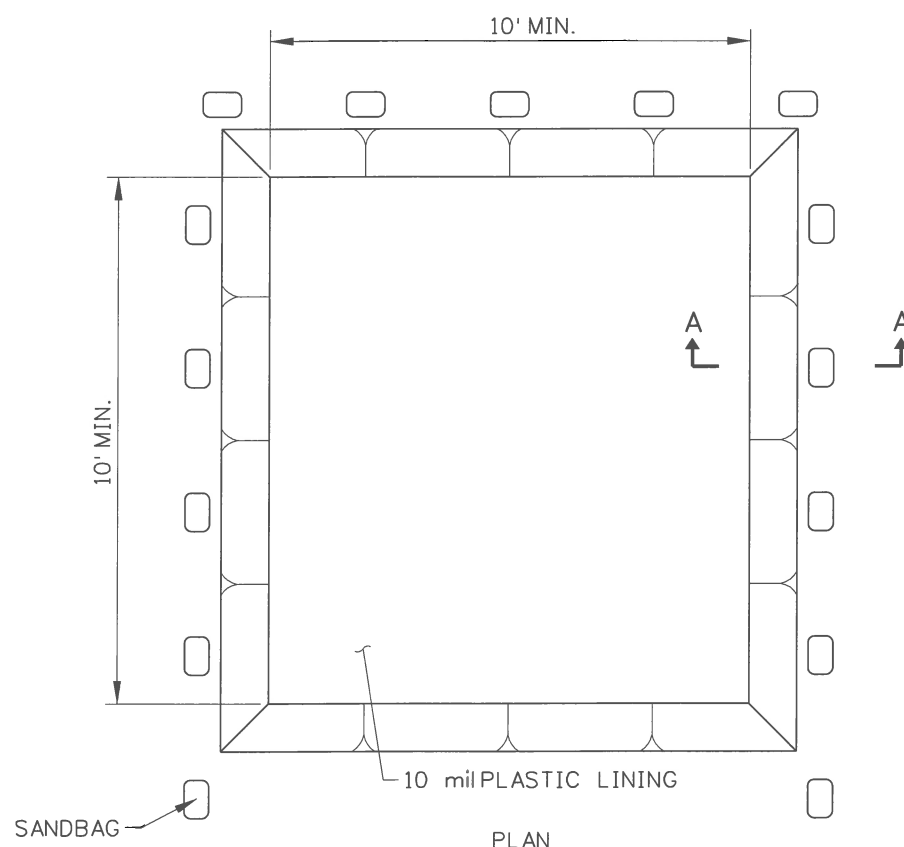
SECTION A-A



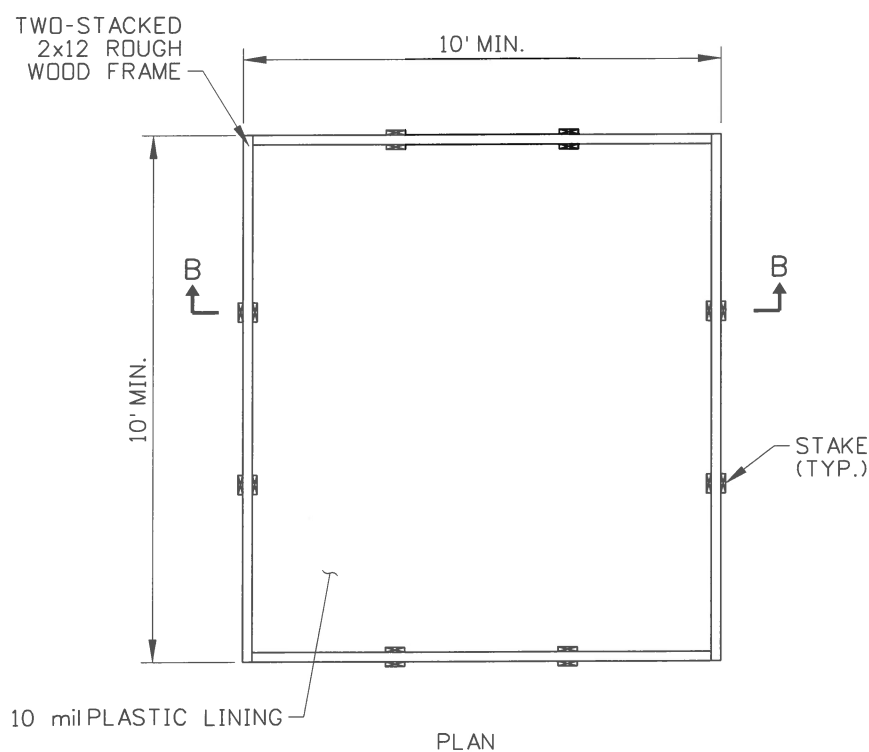
SECTION B-B



CONCRETE WASHOUT SIGN DETAIL
(SEE NOTE NO. 2)



TYPE BELOW GRADE



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

ORIGINAL SIGNED BY:
J. CALEB LAKEY
DATE ORIGINAL SIGNED:
NOVEMBER 20, 2013

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:
p5b_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.

P-5-B

SHEET 1 OF 1