STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

19 90

DRAFTING GUIDES

FOR USE IN

OFFICE AND FIELD

DRAFTING GUIDES

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STANDARD DRAWINGS

SHEET INDEX

DRAWING NO. P-00.01

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1-1.1 Introduction

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1-2 SHEET PREPERATION

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1-2.2 Drawing Format Order

1-2.3 General Drafting Practices

1-1 GENERAL

1-1.1 Introduction

The "Drafting Guide for use in Office and Field" is intended to be used by both state and consultant design personnel. It shall be used as a guideline and not as the sole source of information to which design personnel are restricted. The projected goal of these Drafting Guides is to maintain consistency and uniformity in the appearance of the prepared project plans.

This guide was created for the purpose of assisting design personnel in the preparation of the plans through the use of the CADD system. This is due to the commitment of Highway Plans Services to utilize the CADD system for 100% of the drafting required for the construction project plans.

The department realizes certain plans will be prepared using manual methods. For this purpose, additional fields have been shown within the guides for the manual preparation of the project plans.

Each sample drawing has a reference sheet on which typical drafting parameters used in the preparation of the drawing are identified. It will also refer to any related drawings within the Drafting Guides. Additional design, supporting the information shown on the sample drawing, is included on the corresponding reference sheet.

The Drafting Guides will cover a number of individual plan and detail sheets which may be included in a set of project plans. It is intended to present a variety of samples covering different project types and requirements. This edition, however, will not be able to cover everything which may be desired or necessary; because of this limitation, the Drafting Guides will be updated periodically with modifications and/or additions.

These guides are to be used in conjunction with the ADOT CADD Standards manuals. The "Drafting Guides for use in Office and Field", and updates, will be distributed by ADOT's Engineering Records.

1-1.2 Standards

The project plans shall be clear, complete and concise. Accurate, complete and easily understood plans provide the contractor with the means to construct the project. This goal can be met through the initial effort within the design and drafting phase.

Details within the project plans show what is necessary for the contractor to build the item. The details, if necessary, should be kept simple, yet containing all pertinent information. The usage of special details should be kept minimal, refering to the Construction Standard Drawings whenever possible.

Details shown within the Drafting Guides are samples from previous projects and are not meant to be duplicated without thorough review in regard to specific project applicability. Detail content is the responsibility of the design engineer.

1-2 SHEET PREPARATION

1-2.1 General

Project plans are engineering drawings used to convey information pertaining to typical sections, pavement, geometrics, structures, drainage and other data used to construct the project.

1-2.2 Drawing Format Order

All Sheets are to be 22" x 36" overall. They shall be of reproducible paper, linen, or plastic. The drawing border & title block shall conform to ADOT's CADD Standards.

Project plans may contain some or all of the following sheets. The contents of the plan set shall follow the sequence presented below:

(1) Face Sheet

(2) ADOT Standard Drawings

(3) Design Sheet(s)

(4) Barrier Summary Sheet(s)

(5) New Pipe Summary Sheet(s)

(6) Pipe Extension Summary Sheet(s)

(7) Box Summary Sheet(s)

(8) Box Extension Summary Sheet(s)

(9) Detail Sheet(s)

(10) Culvert Detail Sheet(s)

(11) Construction Phasing Sheet(s)

(12) Geometric Sheet(s)

(13) Plan & Profile Sheet(s)
a. Mainline

(14) Traffic Interchange Sheet(s)
a. Ramp Plan & Profile Sheet(s)
b. Crossroad Plan & Profile Sht(s)
c. Paving Plan Sheet(s)
d. Staking Plan Sheet(s)
e. Pavement Joint Layout Sheet(s)
f. Detour Sheet(s)

(15) Storm Drain Plan & Profile Sht(s)

(16) Topsoil Excavation & Plating Sheet(s)

(17) Berm Plan & Profile Sheet(s)

(18) Drainage Channel Sheet(s)

(19) Traffic Sheet(s)

(20) Structure Sheet(s)

1-2.3 General Drafting Practices

Lettering

1) All lettering should follow the basic principles of single stroke Gothic style, either vertical or slant. Back slant is not acceptable. The lettering may be accomplished by means other than freehand. Mechanical means, such as Leroy or by other templates, are acceptable. Slant lettering shall have a 22.5, plus or minus, degree angle from the right side of vertical.

2) The normal direction of reading lettering shall be from the bottom or the right side of the sheet. Horizontal and diagonal lines shall read from left to right and vertical lines shall read from bottom to top.

3) Line spacing for lettering shall always be one half the text size unless noted otherwise.

4) Abbreviations should only occur when not enough space is available for the entire text placement.

Line Work

Standard P-00.60 shows the allowable line thickness and the associated ink pen equivalent. Line work shall be uniform throughout the drawings.

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STANDARD DRAWINGS

GENERALIZED NOTES

DRAWING NO. P-00.10
Sheet 1 of 1

WORDS	ABBREVIATION
A	
Abutment	Abt
Acceleration	Acc
Acres	Ac
Aggregate	Agg
Aggregate Base	AB
Ahead	AHD, Ahd
Alternate	Alt
Aluminum	Al
American Association of State Highway and Transportation Officials	AASHTO
American Concrete Institute	ACI
American Institute of Steel Construction	AISC
American Road and Transportation Builders Association	ARTBA
American Society for Testing Materials	ASTM
Amount	Amt
Approach	Appr
Approximate	Approx
Asphalt	Asph
Asphalt Rubber	AR
Asphalt Rubber ACFC	ARACFC
Asphaltic Concrete	AC
Asphaltic Concrete Base	ABC
Asphaltic Concrete Friction Course	ACFC
Asphaltic Concrete Surface Course	ACSC
Avenue	AVE, Ave
Average Daily Traffic	ADT
B	
Back	BK, Bk
Backfill	Bkfl
Balance	Bal
Bank Protection	BP
Barbed Wire	Bank Prt
Bearing	BW
Begin	Brg
Begin Curb Return	Bgn
Begin Full Super	BCR
Bench Mark	BFS
Bevel or Beveled	BM
	Bev

WORDS	ABBREVIATION
B (cont)	
Bituminous	Bit
Bituminous Mixture	Bit Mix
Bituminous Surface Treatment	BST
Bituminous Treated Base	BTB
Black Steel Pipe	BSP
Borrow	Bor
Boulevard	BLVD, Blvd
Boundary	Bdry
Brass Cap	BC
Breakaway Cable Terminal	BCT
Bridge	Br
Building	Bldg
C	
Calculated	Calc
Cast-in-Place	C-I-P
Cast Iron	CI
Cast Iron Pipe	CIP
Catch Basin	CB
Cattle Guard	CG
Cement	Cem
Cement Treated Base	CTB
Center	Ctr
Center Line	℄
Center to Center	C to C
Channel	Chan
Class	Cl
Clear	Clr
Column	Col
Compact or Compaction	Comp
Complete in Place	C in P
Concrete	Conc
Concrete Box Culvert	CBC
Concrete Treated Base	CTB
Connection	Conn
Conduit	Cond
Construct or Construction	Cst
Continous	Cont
Coordinate	Coord
Corner	Cor
Correction	Corr

WORDS	ABBREVIATION
C (cont)	
Corrugated High Density Polyethylene Plastic Pipe	CHDPEPP
Corrugated Steel Pipe	CSP
Corrugated Steel Pipe Arch	CSPA
County	Co
Crossing	X-ING
Cross Section	X-SECT
Crown	Cr
Cubic	Cu
Cubic Feet Per Second	CFS
Cubic Yard or Cubic Yards	CY, Cu Yd
Culvert	Culv
Curb and Gutter	C&G
Curve to Spiral	CS
D	
Deceleration	Dcl
Deflection	Def
Deflection of Total Curve	I
Degree of Curve	D
Delineator	Del
Delta	Δ
Depressed Curb	DC
Design Speed	Des Spd
Detail	Dtl
Diameter	Dia
Distance	Dist
Division	Div
Double	Dbl
Drain or Drainage	Drn
Drainage Area	DA
Drawing	Dwg
Drive	Dr
Driveway	Dwy
Ductile Iron Pipe	DIP
E	
Each	Ea
Easement	Esmt
East	E
Eastbound	EB

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STANDARD DRAWINGS

GENERAL ABBREVIATIONS

DRAWING NO.
P-00.20
Sheet 1 of 3

WORDS	ABBREVIATION
E (cont)	
Edge of Pavement	EP
Electric, Electricity	Elec, E
Elevation	Elev
Embankment	Emb
End Curb Return	ECR
End Full Superelevation	EFS
Engineer	Engr
Entrance	Ent
Equation	EQ, Eq
Estimate	Est
Excavation	Exc
Existing	Exst
Expansion Joint	Exp Jt
Extend or Extension	Ext
External	Ext
F	
Federal	Fed
Feet or Foot	Ft
Feet per Foot	′/″
Feet Per Second	FPS
Figure	Fig
Finish	Fin
Floor	Fl
Flow Line	FL
Footing	Ftg
Forest	Fst
Found	Fnd
Frame	Fr
Freeway	Fwy
Frontage	Frt
Furnish or Furnished	Furn
Future	Fut
G	
Gas	G
Gas Meter	GM
Gas Valve	GV
Galvanize or galvanized	Galv
Gauge	Ga
Government	Gov't
Grade	Gr
Grade Seperation	GS

WORDS	ABBREVIATION
G (cont)	
Ground	Gnd
Ground Compaction	Gnd Comp
Grubbing	Grb
Guard	Grd
Guard Rail	GR
Guard Rail Extruder Terminal	GET
H	
Headwall	Hdwl
Height	Ht, H, h
Height of Instrument	HI
Head Water	HW
Highway	Hwy
Horizontal	Horz
Horizontal Elliptical Reinforced Concrete Pipe	HERCP
I	
Improvement	Impr
Inch or Inches	In
Include, Included or Inclusive	Incl
Inside Diameter	ID
Invert	Inv
Irrigation	Irr
J	
Joint	Jt
Junction	Jct
L	
Laboratory	Lab
Lateral	Lat
Left	Lt
Length or Length of Curve	L
Length of Normal Crown Removal	L_C
Length of Spiral	Ls
Length of Superelevation Runoff	L_S
Line	Ln
Linear or Lineal	Lin
Linear Feet	Lin Ft
Location	Loc
M	
Manhole	MH
Material	Mtl
Maximum	Max
Median	Med

WORDS	ABBREVIATION
M (cont)	
Mile or Miles	MI
Mile Post	MP
Miles Per Hour	MPH
Mineral Aggregate	MA
Minimum	Min
Miscellaneous	Misc
Modify or Modified	Mod
Monument	Mon
Mountain	Mt
N	
National	Natl
Non-Reinforced Cast-In-Place Concrete Pipe	NRCIPCP
Normal Crown	NC
North	N
Northbound	NB
Number	No
O	
Obliterate	Obl
Original	Orig
Outside Diameter	OD
Overhead	OH
Overpass	OP
P	
Parkway	Pkwy
Pavement	Pvmt
Pedestrian	Ped
Place	Pl
Point	Pt
Point of Compound Curvature	PCC
Point of Curvature	PC
Point of Intersection	PI
Point of Reverse Curvature	PRC
Point of Tangency	PT
Point on Curve	POC
Point on Semi-Tangent	POST
Point on Spiral	POS
Point on Tangent	POT
Polyethylene	PE

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GENERAL ABBREVIATIONS

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Sheet 2 of 3

WORDS	ABBREVIATION
P (cont)	
Polyvinyl Chloride	PVC
Portland Cement Concrete	PCC
Portland Cement Concrete Pavement	PCCP
Pounds	Lbs
Pounds Per Square Inch	PSI
Preliminary	Prelim
Prestress, Prestressed or Prestressing	PS
Project	Prj
Property Line	P/L
Proposed	Prop
Protection	Prt
Provision or Provide	Prv
Q	
Quadrant	Quad
Quantity or Quantities	Quan
Quantity of Drainage Runoff	Q
R	
Radius	R
Railroad	RR
Range	R
Reconstruct	Recst
Reference	Ref
Reinforced or Reinforcing	Reinf
Reinforced Concrete	RC
Reinforced Concrete Pipe	RCP
Reinforced Concrete Pipe Arch	RCPA
Reinforcing Bar	Rebar
Relocate, Relocation or Relocated	Reloc
Remove	Rem
Required	Reqd
Reservation	Resv
Residence	Res
Retain or Retaining	Ret
Revised or Revision	Rev
Right	Rt
Right of Way	R/W
Road	Rd
Roadway	Rdwy
Route	Rte
Rubber Gasket Reinforced Concrete Pipe	RGRCP

WORDS	ABBREVIATION
S	
Salvage	Salv
Section	Sct
Select Material	SM
Sheet	Sh
Shoulder	Shldr
Shrinkage	Shr
Sidewalk	Swlk
Sight Distance-Stopping	SD_S
Single	Sgl
Skew	Sk
South	S
Southbound	SB
Special	Spcl
Specification	Spec
Spiral Rate of Change	a
Spiral To Curve	SC
Spiral To Tangent	ST
Square	Sq
Square Feet	Sq Ft
Square Yard	Sq Yd
Standard	Std
State Route	SR
Station	Sta
Street	St
Structure or Structural	Str
Subdivision	Subdiv
Subgrade	SG
Subgrade Seal	SS
Superelevation	e or Super
Surface	Surf
Survey	Sur
Swell	Sw
Symmetrical	Sym
Tangent	Tan
Tangent Length	T
Tangent to Spiral	TS
Telegraph	Tlg

WORDS	ABBREVIATION
T (cont)	
Telephone	Tel
Temporary	Temp
Temporary Construction Easement	TCE
Timber	Tbr
Top of Curb	TC
Topography	Topo
Township	T
Traffic Interchange	TI
Transition	Trns
Turning Point	TP
Turnout	TO
Typical	Typ
U	
Underground	Ugnd
Underpass	UP
V	
Variable	Var
Vertical	Vert
Vertical Curve	VC
Vertical Elliptical Reinforced Concrete Pipe	VERCP
Vertical Point of Intersection	VPI
Viaduct	Via
Vitrified Clay Pipe	VCP
Volume	Vol
W	
Water	W
Water Meter	WM
Water Valve	WV
Welded Wire Fabric	WWF
West	W
Westbound	WB
Western Wood Products Association	WWPA
Wide or Width	W
Wood	Wd
Y	
Yard	Yd

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GENERAL ABBREVIATIONS

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	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
City Limits		
County Line		
Forest or Reservation Boundry		
Property Line		
Mid Section or Quarter Section Line		
Right of Way Line		
Section Line		
Sixteenth Line		
National, State Boundry		
Township or Range Line		
Temporary Construction Easement		
Mile Post Marker	MP	MP
Right of Way Marker		
Survey Monument		
Angle Point or PI		
Centerline, Station Marks		
Quarter Corner		

	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Section Corner		
Survey Control Point		
Bench Mark		
Access Control		
Sidewalk, Curb & Gutter w/Depressed Curb (1"=50' or larger)	30' DC +25	
Curb & Gutter with Depressed Curb (1"=100')		
Curb, Single with Depressed Area		
Pavement and Sidewalk Edge		
Turnout	R	R
Top of Cut	C C	
Toe of Fill	F F	
Transition, Cut to Fill	C F	
Railroad Track (1"=50' or larger)		
Railroad Track (1"=100')		
Bank Protection		
Bridge		
Building	Floor Elevation 1984.68'	Floor Elevation 1984.68'

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SYMBOL LEGEND

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	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Catch Basin, Curb & Gutter		
Catch Basin, Median Dike		
Catch Basin, Off Roadway, Flush		
Catch Basin, Single Curb		
Cattle Guard		
Concrete Box Culvert		
Dike, Median		
Dike		
Downdrain, one way	+45 35'	
Downdrain, two way	+45 35'	
Manhole		
Manhole, Frame & Cover, Reset		
Retaining Wall		
Rock Riprap		
Spillway, one way	+45 35'	
Spillway, two way	+45 35'	

	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Straight Hdwl w/End Sct, Pipe (1"=20') (All Dia)		
Straight Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=42" and larger)		
Straight Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=36" and smaller)		
"U" Hdwl w/End Sct, Pipe (1"=20') (All Dia)		
"U" Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=42" and larger)		
"U" Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=36" and smaller)		
Wing Hdwl w/End Sct, Pipe (1"=20') (All Dia)		
Wing Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=42" and larger)		
Wing Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=36" and smaller)		
"L" Hdwl w/End Sct, Pipe (1"=20') (All Dia)		
"L" Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=42" and larger)		
"L" Hdwl w/End Sct, Pipe (1"=50' or smaller) (Dia=36" and smaller)		
Pipe Ext W/End Sct & Berm (1"=20') (All Dia)		
Pipe Ext W/End Sct & Berm (1"=20') (1"=50' or smaller) (Dia=42" and larger)		
Pipe Ext W/End Sct & Berm (1"=20') (1"=50' or smaller) (Dia=36" and smaller)		
Pipe Ext W/End Sct Roadway Widening (1"=20')	F F	

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SYMBOL LEGEND

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	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Plan View, Bituminous Pavement		
Plan View, Concrete Pavement		
Plan View, Graded Surface		
Plan View, Obliterate Pavement		
Plan View, Wood		
Section, Asphaltic Concrete Friction Course		
Section, Bituminous Pavement		
Section, Concrete		
Section, Metal		
Section, Wood		
Section, Aggregate Base		
Section, Ground Line		
Ground Line Profile		
Barbed Wire Fence & Gate		
Chain Link Fence & Gate		
Guard Rail & Breakaway Cable Terminal		
Gas Line	G 3" G	G 3" G

	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Irrigation Ditch, Concrete	IR IR	IR IR
Irrigation Ditch, Earth	IR IR	IR IR
Irrigation Line (1"=20')	IR 24" IR	IR 24" IR
Irrigation Line (1"=100')	IR 24" IR	IR 24" IR
Overhead Power/Joint Use Line	OP OP	OP OP
Overhead Telephone Line	OT OT	OT OT
Sanitary Sewer (1"=20')	S 8" S	S 8" S
Sanitary Sewer (1"=100')	S 8" S	S 8" S
Storm Drain (1"=20') & (1"=50')		SD 24" SD
Storm Drain (1"=100')		SD 36" SD
Street Light and With Mast Arm		
Telephone/Power Pedestal	T P	T P
Utility Pole with Down Guy and Anchor		
Underground Power/Joint Use Line	P P	P P
Underground Telephone Line	T T	T T
Water/Gas Meter Box	WM GM	WM GM
Water/Gas Valve	WV GV	WV GV

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SYMBOL LEGEND

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	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Water Line	W 8" W	W 8" W
Drainage Channel		
Drainage Ditch		
Major Wash		NAME
Minor Wash		
℄ Grade, Profile		
Hedge		
Palm Tree		
Shrubbery		
Unclassified Tree		
Sign, Single Post		
Sign, Multiple Post		
Dimensions		
Visible Outlines, Sections, etc...		
Index Contour Line	8650	8650
Intermediate Contour Line	8650	8650
Depressed Index Contour Line		
Depressed Intermediate Contour Line		

	CONSTRUCTION DRAWING SYMBOLS	
	NEW FEATURES	EXISTING FEATURES
Block Wall (1"=20')		
Median Barrier		
Fire Hydrant	FH	FH
Standpipe		SP
Transmission Tower		
Windmill		
Mail Box		
Flag Pole		
North Arrow		N

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STANDARD DRAWINGS

SYMBOL LEGEND

DRAWING NO.
P-00.30
Sheet 4 of 4

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	18	23	17.5	4	8.75	LB	
2	54	1	22	6	11	CB	
3	18	23	17.5	3	8.75	CB	
4	18	23	15	2	7.5	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 3	No. 6 Ames/ 200 Leroy	2	Slant	
2	No. 7 Ames/ 240 Leroy	3	Straight	
4	No. 5 Ames/ 175 Leroy	0	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall be the same LV/CO as the text placed for the item
2	17	3	0	
3	17	1	0	

USER NOTES

Reference No.	Comments
1	See Std P-00.60 For Dimension And Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (1" = 100') using ADOT's Standard Working Units.

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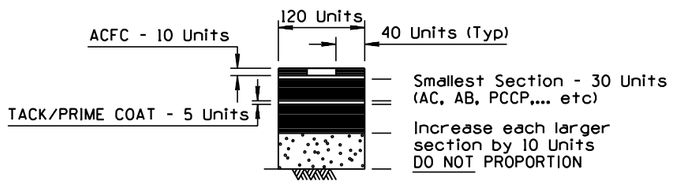
REV.

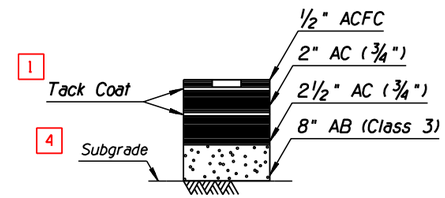
PAVEMENT STRUCTURAL SECTION
LAYOUT & CONSTRUCTION

DRAWING NO.
P-00.40
Sheet 1 of 2



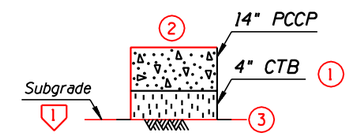
SECTION NO. 1

FIGURE A



3 Total Thickness = 13"

SECTION NO. 1 2



Total Thickness = 18"

SECTION NO. 3

Drafting Notes

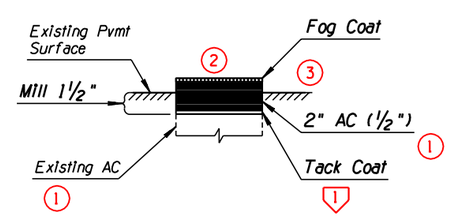
a) Pavement structural sections for AC should be filled in with a weight of 3 and a distance of 2.5 units between lines. This will accomplish a blackened symbol when reduced to half size.

b) The various lifts shown in the pavement structural sections are not drawn to scale. Example: 2" AC & 16" AB - Draw the 2" AC lift 30 units tall and the 16" AB 40 units tall. Use FIGURE A as a guide.

c) The note " Pavement lift thickness is 'nominal' " , when applicable, should be placed in the general notes on the design sheet.

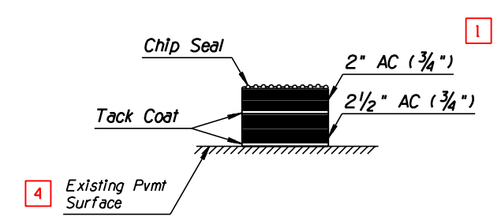
d) If the AC removal is to be a known milling operation, the callout should be "Mill". Otherwise the callout should be "Remove".

e) Symbols for bases and subbases, such as AB and CTB, are created by randomly placing the respective cell as shown in sections No. 1 and 2.



Total Thickness = 2"

SECTION NO. 2



Total Thickness = 4 1/2"

3

SECTION NO. 4

PAVEMENT STRUCTURAL SECTIONS 2

APPROVED FOR DISTRIBUTION	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD DRAWINGS	REV.
	PAVEMENT STRUCTURAL SECTION LAYOUT & CONSTRUCTION	DRAWING NO. P-00.40 Sheet 2 of 2

NO.	DESCRIPTION OF REVISION

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	58	1	22	6	11	CC	
2	58	23	17.5	4		CB	
3	58	23	17.5	4	8.75	CB	
4	58	23	17.5	4		CB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	57	5	0	
2	57	3	0	
3	57	2	0	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 7 Ames/ 240 Leroy	3	Straight	
2 3 4	No. 6 Ames/ 200 Leroy	2	Slant	

USER NOTES

Reference No.	Comments

Abbreviations:
LV - LEVEL/COLOR
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO. | DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

DATA TABLE & DIMENSION LAYOUT
LINE WEIGHTS & CODES

DRAWING NO.
P-00.60
Sheet 1 of 2

50 Units

10 Units

50 Units

As Required

60 Units

40 Units

40 Units

40 Units

40 Units

EARTHWORK QUANTITIES 1	
Roadway Excavation	_____ CY
Shrink/Swell	_____ CY
Embankment (Including Ground Comp.) 2	_____ CY
Borrow	_____ CY
Shrink	_____ CY

3 Station	Shrink/Swell	Ground Compaction
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ 4 ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'
__ ____+__ to ____+__	__% Shrink	0.__'

EARTHWORK FACTORS

75 Units

50 Units

50 Units

40 Units

40 Units

LOOP DETECTOR TRAFFIC COUNTER SYSTEM	
Std TS 7-3	
Location	No. of Installations
Sta 396+00	1 (3-loops)
Sta 439+00	1 (3-loops)

10 Units Minimum

50 Units

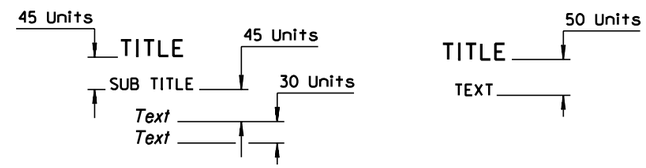
50 Units

40 Units

40 Units

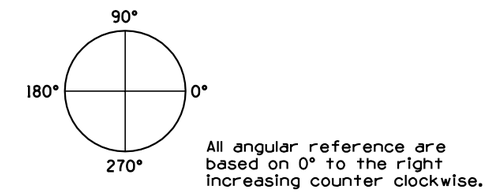
SOIL VALUES		
Station	pH	Resistivity
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____
__ ____+__ to ____+__	__.__	____

DATA TABLE LAYOUT & CONSTRUCTION



TYPICAL TEXT LAYOUT

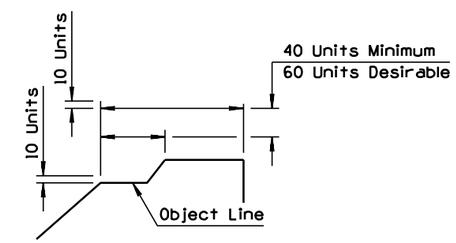
WITHOUT DATA TABLE



ANGLE REFERENCE

RAPIDOGRAPH WT	CADD WT
000	0
00	1
0	2
1	3
2	4
2.5	5
3	6
4	7

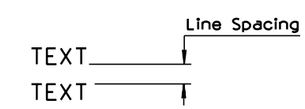
LINE WEIGHT TABLE



DIMENSION LAYOUT

LC	
0	————————————
1	· ·
2	- -
3	— —
4	-·- (Not In Use)
5	- -
6	-·- (Not In Use)
7	- (Not In Use)

LINE CODE TABLE



LINE SPACING

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD DRAWINGS	REV.
	DATA TABLE & DIMENSION LAYOUT LINE WEIGHTS & CODES	DRAWING NO. P-00.60 Sheet 2 of 2

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	54	30	50	0	-	LB	See user note #1
2	54	30	100	0	-	LB	See user note #1
3	54	1	22	6	11	CB	
4	54	1	15	4	-	CB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	1"	◧	Straight	◧ Use Method as Required to Acheive Desired Results
2	½"	◧	Straight	◧ Use Method as Required to Acheive Desired Results
3	No 7 Ames/ 240 Leroy	3	Straight	
4	No 5 Ames/ 175 Leroy	2	Straight	

USER NOTES

Reference No.	Comments
1	For systems which can not support Intergraph's BITSTREAM CELL LIBRARIES, use the
	equivalent to Intergraph font 42. Shade the block letters with lines using a weight
	of 4 and spaced at 2 units apart.

Abbreviations:
- LV - LEVEL
- CO - COLOR
- FT - FONT
- TX - TEXT SIZE
- WT - LINE WEIGHT
- LS - LINE SPACING
- TJ - TEXT JUSTIFICATION
- AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

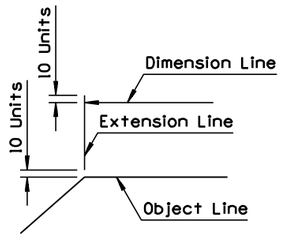
NO.	DESCRIPTION OF REVISION

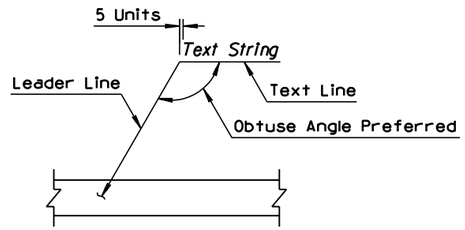
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

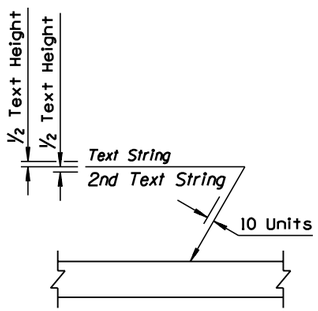
DETAIL FORMAT LAYOUT
AND LEADER LINE CONSTRUCTION

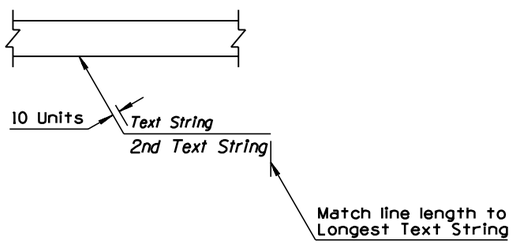
DRAWING NO.
P-00.61
Sheet 1 of 2

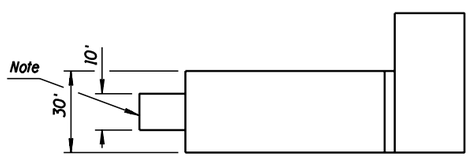




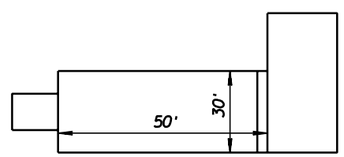
Angle of leader lines should remain constant throughout the sheet



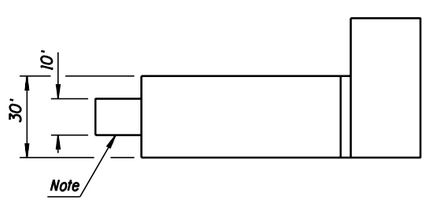




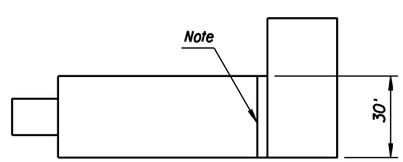
Break leader & extension lines when crossing dimension lines



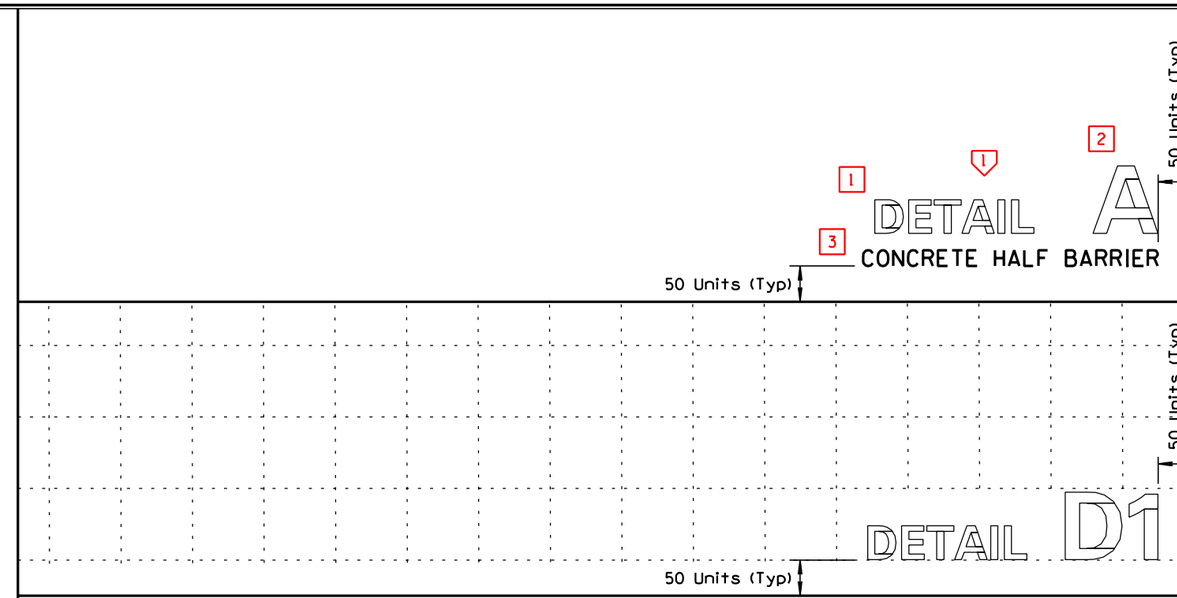
Do not break dimension lines that cross

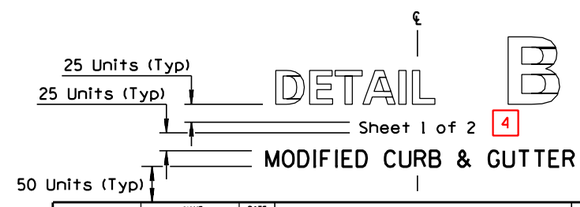


Break extension lines when crossing leader lines



Do not break object line for leader or extension line crossing





	NAME	DATE
DESIGN		
DRAWN		
CHECKED		
TEAM LEADER		
ROUTE	LOCATION	

SHEET OF

TRACS NO. OF

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		
TEAM LEADER		
ROUTE	LOCATION	

SHEET OF

TRACS NO. OF

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

DETAIL FORMAT LAYOUT
AND LEADER LINE CONSTRUCTION

DRAWING NO.
P-00.61
Sheet 2 of 2

CADD TEXT PARAMETERS

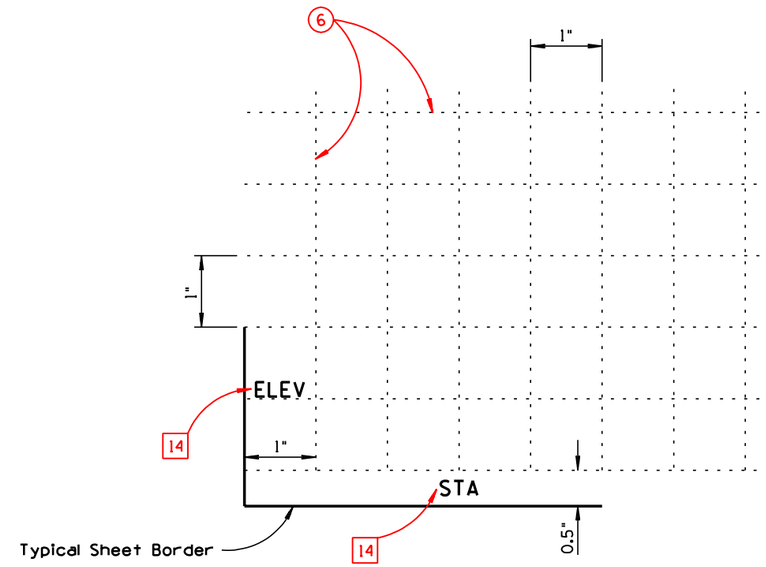
Reference No.	LV/CO=	FT=	TH/TW	WT=	LS=	TJ=	Comments
1	63	1	10/7	2	-	LC	
2	62	1	10	2	-	LC	Use text node supplied with cell.
3	63	1	13/11	3	7	CC	
4	63	7	20	3	-	CC	
5	62	1	15	4	10	CC	Use text node supplied with cell.
6	63	1	7	1	-	CC	
7	63	1	10	2	-	LC	
8	62	1	15	4	-	LC	Use text node supplied with cell.
9	63	23	20	4	-	CC	
10	63	1	8	2	7	CC	
11	62	1	15	3	-	CC	Use text node supplied with cell.
12	62	1	15/13.5	3	-	CC	Use text node supplied with cell.
13	62	1	8	2	-	LC	Use text node supplied with cell.
14	62	1	20	6	-	CC	Use text node supplied with cell.

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 7	No. 3 Ames 100 Leroy	0	Straight	
3	No. 4 Ames/ 140 Leroy	1	Straight	
4	Special		Special	Not Required by Consultants
5 8	No. 5 Ames/ 175 Leroy	2	Straight	
6	No. 2 Ames/ 80 Leroy	00	Straight	
9	No. 6 Ames/ 200 Leroy	2	Slant	
10 13	No. 2 Ames/ 80 Leroy	0	Straight	
11 12	No. 5 Ames/ 175 Leroy	1	Straight	
14	No. 7 Ames/ 200 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	63	5	0	
2	63	0	0	
3	63	1	0	
4	63	4	0	
5	63	2	0	
6	60	1	1	



PROFILE SHEET OVERLAY 4

USER NOTES

Reference No.	Comments
1	ADOT Prefix Number
2	When using cell, the project number may require reduction
3	Optional initial area
4	To place overlay, place origin at center of plan sheet
5	Registrant Seal
6	Sheet Description
7	County Number after job has gone to bid
8	Project Number after job has gone to bid
9	Total of sheets filed after job has gone to bid
10	Use these fields to sequence each sheet as shown in the INDEX OF SHEETS.

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

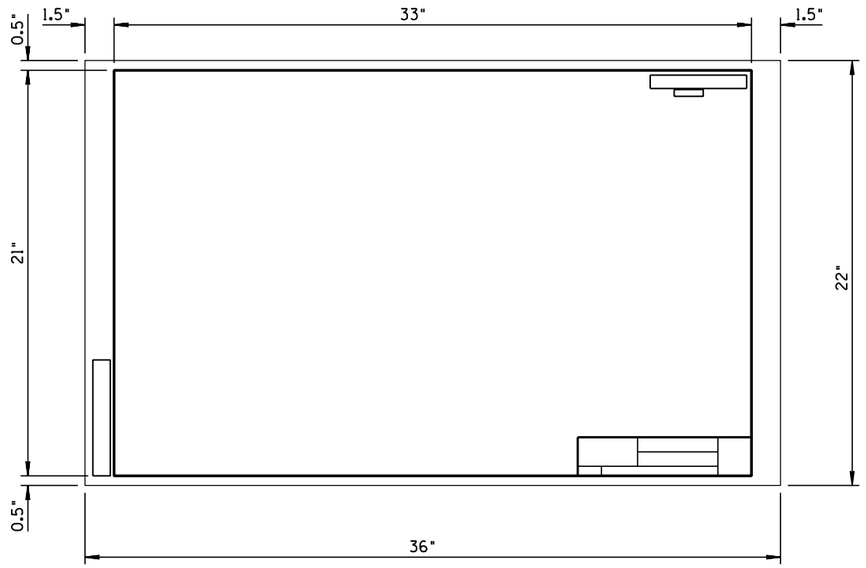
NO. | DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

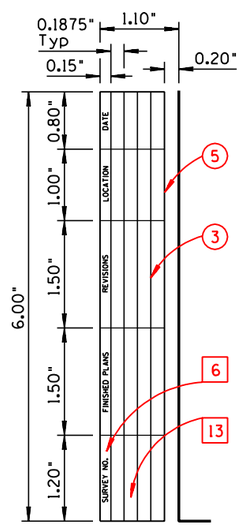
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SHEET LAYOUT

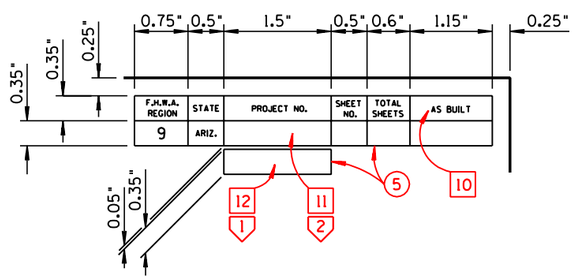
DRAWING NO. P-00.70
Sheet 1 of 2



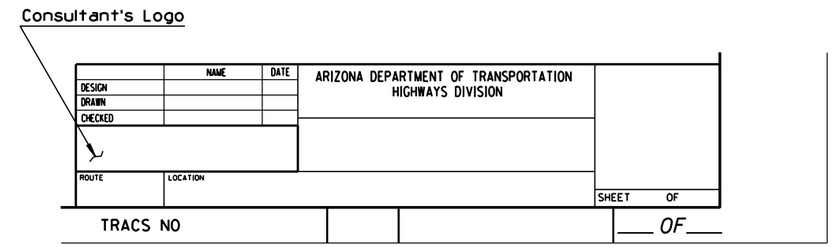
STANDARD PLAN SHEET



REVISION & SURVEY BLOCK LAYOUT
Lower Left Corner

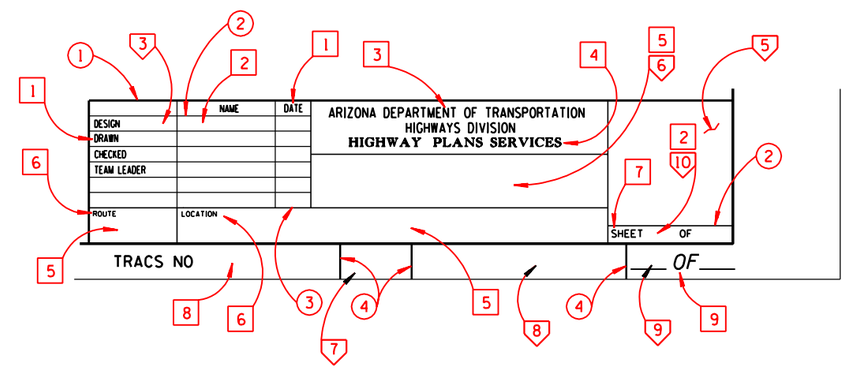


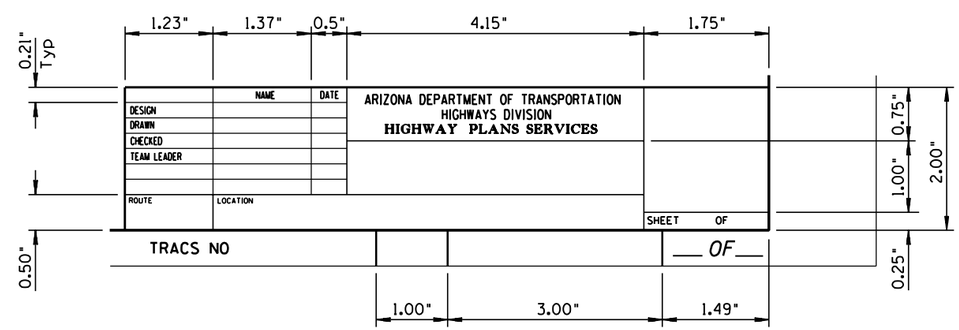
PROJECT NUMBER BLOCK LAYOUT
Upper Right Corner



NOTE: Use same dimensions and text parameters as shown below.

CONSULTANT VERSION





TITLE BLOCK LAYOUT
Lower Right Corner

STATE VERSION

NOTE: All Dimensions on this sheet are based on final plot size.

NO.	DESCRIPTION OF REVISION
1	
2	
3	
4	

APPROVED FOR DISTRIBUTION	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD DRAWINGS	
	SHEET LAYOUT	DRAWING NO. P-00.70 Sheet 2 of 2

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	140 Leroy	1	Straight	

USER NOTES

Reference No.	Comments
1	Highway Plans Control Desk will create Face Sheet

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

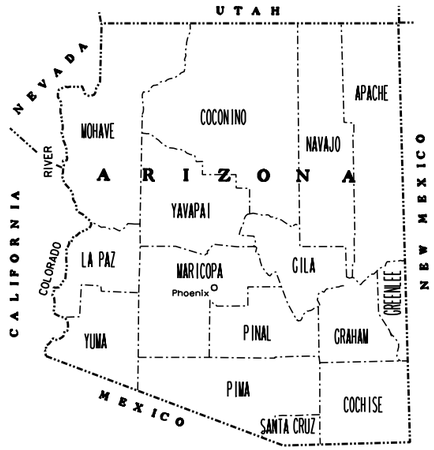
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE FACE SHEET

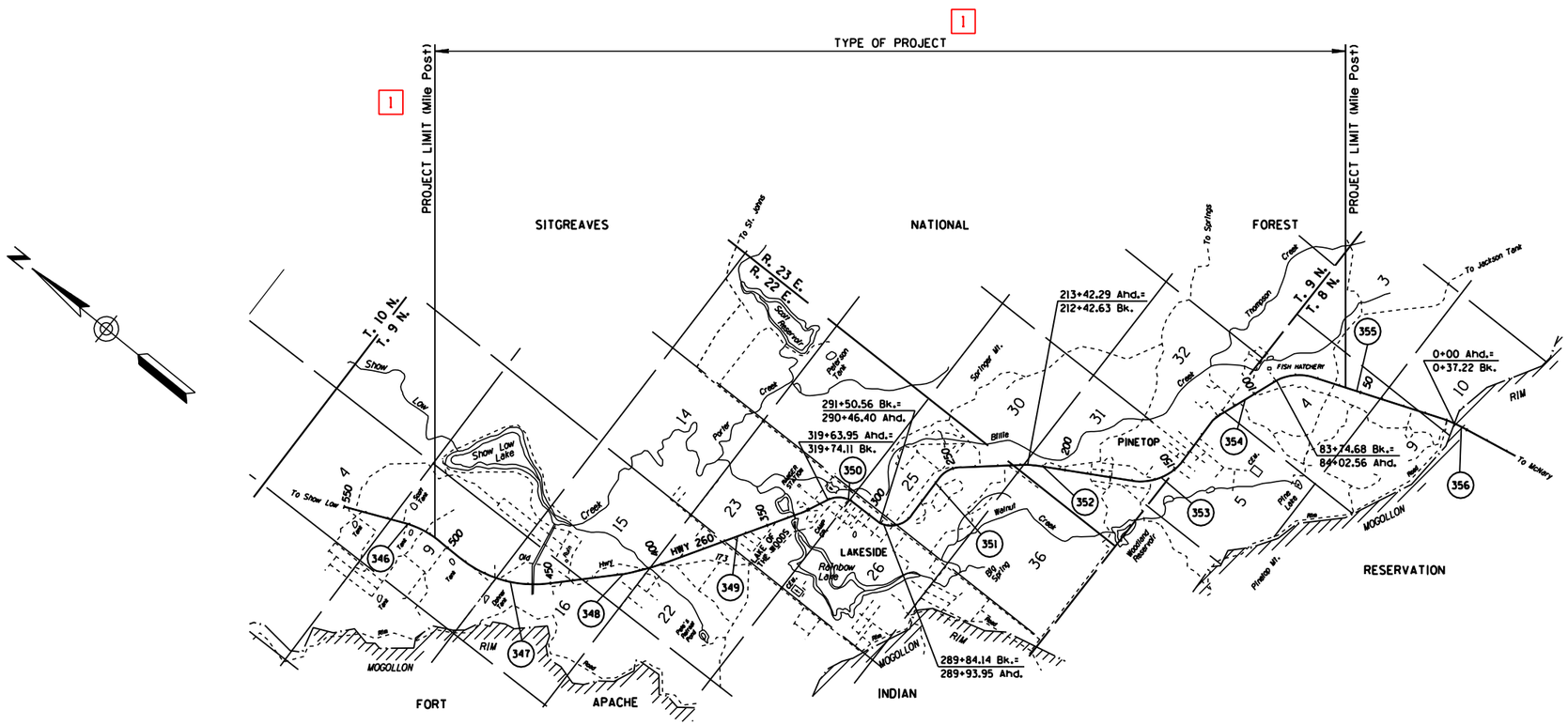
DRAWING NO. P-01.10



STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

PLAN AND PROFILE OF PROPOSED

STATE HIGHWAY
HIGHWAY NAME
PROJECT NUMBER
ADOT PREFIX



PROJECT LOCATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
APPROVED: EDWARD D. WRIGHT
STATE ENGINEER

APPROVED DATE

ASSISTANT STATE ENGINEER

STD P-01.10

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	55	23	17.5	4	12.5	LB	TJ=LB unless shown otherwise
2	55	23	17.5	4	8.75	LB	Line Spacing between notes shall be 17.5 units
3	54	1	22	6	-	CB	
4	55	1	17.5	4	-	CB	
					-		

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	
4	No. 6 Ames/ 200 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.60 for Data Table Layout
3	See Std P-00.60 for Text Layout

NOTE : For project related sheets, see standards: P-02.15; P-02.30; P-06.10

NOTE : Design Data, Index of Sheets and General Notes Callouts are to be positioned as shown.

Abbreviations:
- LV - LEVEL
- CO - COLOR
- FT - FONT
- TX - TEXT SIZE
- WT - LINE WEIGHT
- LS - LINE SPACING
- TJ - TEXT JUSTIFICATION
- AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO. | DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE DESIGN SHEET FOR RURAL DIVIDED ROADWAY

DRAWING NO. P-02.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	F-035-1(8)	2	190	

087 GI 202

MIDPOINT OF PROJECT

Central Zone

State Plane Coordinates

X = 140,000
Y = 1,090,000

DESIGN DATA

1990 ADT = 7,350
2010 ADT = 14,350
Min Design Speed = 60 MPH

LENGTH OF PROJECT

NORTHBOUND

Sta 1441 + 84.36 to 1539 + 91.87 Bk = 9,807.51'
Sta 1540 + 03.52 Ahd to 1642 + 24.97 Bk = 10,221.45'
Sta 135 + 39.21 Ahd to 193 + 05.10 = 5,765.89'
Gross & Net Length = 25,794.85' - 4.89 Miles
Mile Post 231.29 to 236.18

SOUTHBOUND

Sta 1442 + 00.00 to 1539 + 55.34 = 9,755.34'
Sta 1540 + 03.52 Ahd to 1627 + 68.35 Bk = 8,764.83'
Sta 124 + 88.79 Ahd to 180 + 68.51 = 5,579.72'
Gross & Net Length = 24,099.89' - 4.56 Miles
Mile Post 231.02 to 235.58

LOOP DETECTOR TRAFFIC COUNTER SYSTEM

Std TS 7-3

Location	No. of Installations
NB 1505 + 55	1 (2-loops)
SB 1506 + 62	1 (2-loops)

INDEX OF SHEETS

Sheet No.	Sheet Type
1	Face Sheet
1A-1B	ADOT Standard Drawings
2-3	Design Sheets
4	Barrier Summary Sheet
5-6	New Pipe Summary Sheet
7	Pipe Ext Summary Sheet
8	Box Culvert Summary Sheet
9-16	Phase Construction Sequence
17-42	Detail Sheets
43-74	Culvert Detail Sheets
75	Geometric Layout Sheet
76-96	Plan & Profile Sheets
97-143	Traffic Sheets
144-190	Structure Sheets

EARTHWORK QUANTITIES

Roadway Excavation	1,252,270 CY
Shrink	9,871 CY
Embankment (Including Ground Comp.)	1,185,625 CY
Waste	56,774 CY

EARTHWORK FACTORS

Station	Shrink/Swell	Ground Compaction
NB 1441 + 84 to 1485 + 25	15% Shrink	0.10 '
NB 1485 + 25 to 1494 + 62	10% Shrink	0.10 '
NB 1494 + 62 to 1542 + 42	15% Shrink	0.10 '
NB 1542 + 42 to 139 + 78	10% Shrink	0.20 '
NB 139 + 78 to 193 + 10	Even	0.20 '
SB 1442 + 00 to 1507 + 54	5% Shrink	0.20 '
SB 1507 + 54 to 1568 + 09	5% Shrink	0.10 '
SB 1568 + 09 to 1598 + 55	5% Shrink	0.20 '
SB 1598 + 55 to 1611 + 32	15% Shrink	0.20 '
SB 1611 + 32 to 125 + 89	Even	0.20 '
SB 125 + 89 to 180 + 70	Even	0.15 '

CUT SLOPE EXCEPTION TABLE

Station	Side	Slope Control
NB 1473 + 00 to 1479 + 50	Both	4:1
NB 1479 + 50 to 1515 + 25	Right	6:1 (Daylight)
NB 1537 + 75 to 1542 + 50	Right	4:1
NB 1586 + 25 to 1630 + 25	Both	3:1
NB 133 + 50 to 162 + 36	Both	6:1 (Daylight)
SB 1445 + 50 to 1472 + 25	Left	3:1
SB 1485 + 75 to 1510 + 50	Both	4:1
SB 1515 + 25 to 1530 + 25	Right	6:1 (Daylight)
SB 1602 + 75 to 150 + 75	Right	4:1

FILL SLOPE EXCEPTION TABLE

Station	Side	Slope Control
NB 1479 + 50 to 1515 + 25	Left	4:1
NB 1537 + 75 to 1542 + 50	Left	4:1
NB 162 + 50 to 164 + 25	Left	4:1 - 6:1
SB 1445 + 50 to 1472 + 25	Right	2:1
SB 1505 + 50 to 1525 + 75	Both	6:1
SB 1525 + 75 to 1528 + 75	Both	6:1 - C-02.10
SB 150 + 25 to 175 + 25	Right	4:1

SOIL VALUES

Station	pH	Resistivity	Station	pH	Resistivity
SB 1442 + 25 to 1482 + 49	8.0	520	NB 1442 + 43 to 1496 + 24	7.2	800
SB 1482 + 50 to 1494 + 99	7.4	820	NB 1496 + 25 to 1530 + 31	8.0	760
SB 1495 + 00 to 1517 + 29	7.4	520	NB 1530 + 32 to 1546 + 10	7.4	1280
SB 1517 + 30 to 1536 + 21	7.6	580	NB 1546 + 11 to 1622 + 70	7.2	1000
SB 1536 + 22 to 142 + 75	7.3	600	NB 1662 + 71 to 152 + 64	7.3	680

GENERAL NOTES

The roadway plans have been designed utilizing the 1989 Construction Standard Drawings (C-Series), and current revisions.

The project roadway shall be striped by contractor forces in accordance with the current edition of the Signing and Marking Standard Drawings (M&S-Series) and striping plans.

The new pavement shoulders shall be grooved in accordance with Std C-09.10.

Changes in location or length of spillway installation may be made by the Engineer to improve drainage conditions.

Survey Monuments in median shall not be disturbed.

Bench Markers will be furnished by the State, and placed by the contractor. Std C-21.20.

R/W Markers shall be furnished and placed by the contractor, as directed by the Engineer. Std C-21.10.

For R/W information not shown, see Right-of-Way project No. F-035-1(9).

For Superelevation information not shown, see Drawing Series D-56 in the Roadway Design Guides for use in Office and Field - 1986.

The average project elevation is 4,500'.

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET

ROUTE SR 87 — LOCATION SUNFLOWER - MAZATZAL

SHEET 1 OF 2

TRACS NO. H0000 01 C

___ OF ___

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

STD P-02.10

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	18	23	17.5	4	8.75	LB	
2	25	23	17.5	4	8.75	CB	TJ is CB unless otherwise shown
3	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
4	54	1	22	6	11	CB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	20	3	0	
3	59	1	5	
4	-	-	-	ADOT Standard Line Terminator; typical

NOTE : For project related sheets, see standards:
P-02.10; P-06.10

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 3	No. 6 Ames/ 200 Leroy	2	Slant	
4	No. 7 Ames/ 240 Leroy	3	Straight	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.40 for Pavement Structural Section Layout & Construction
3	Show Roadway Cross Slope in feet per foot to 3 Decimal Places
4	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

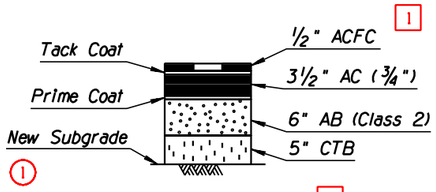
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE TYPICAL SECTION SHEET FOR
RURAL DIVIDED ROADWAY

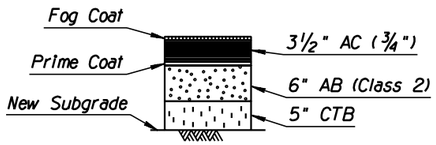
DRAWING NO. P-02.15

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	F-035-1(8)	3	190	
		087 GI 202			



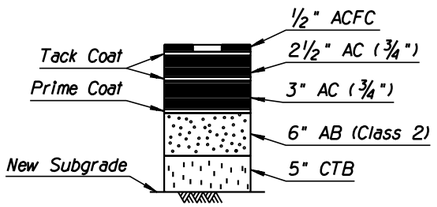
Total Thickness = 15"

SECTION NO. 1



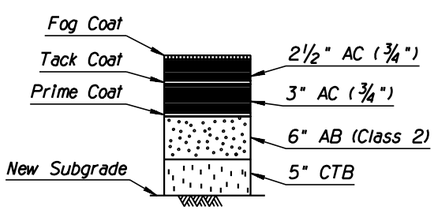
Total Thickness = 14 1/2"

SECTION NO. 2



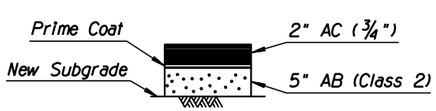
Total Thickness = 17"

SECTION NO. 3



Total Thickness = 16 1/2"

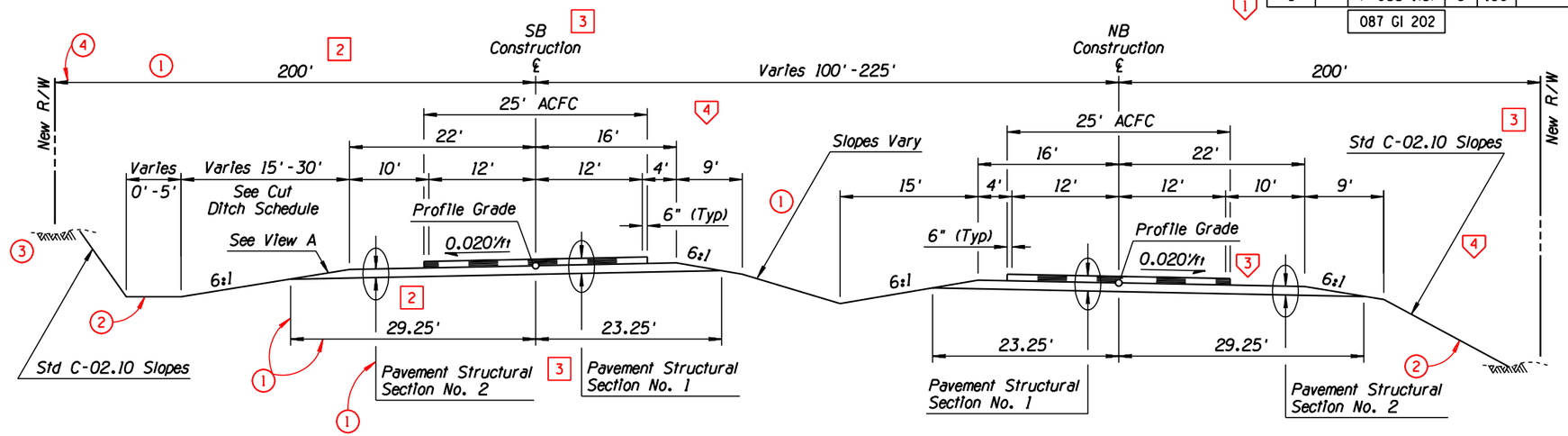
SECTION NO. 4



Total Thickness = 7"

SECTION NO. 5

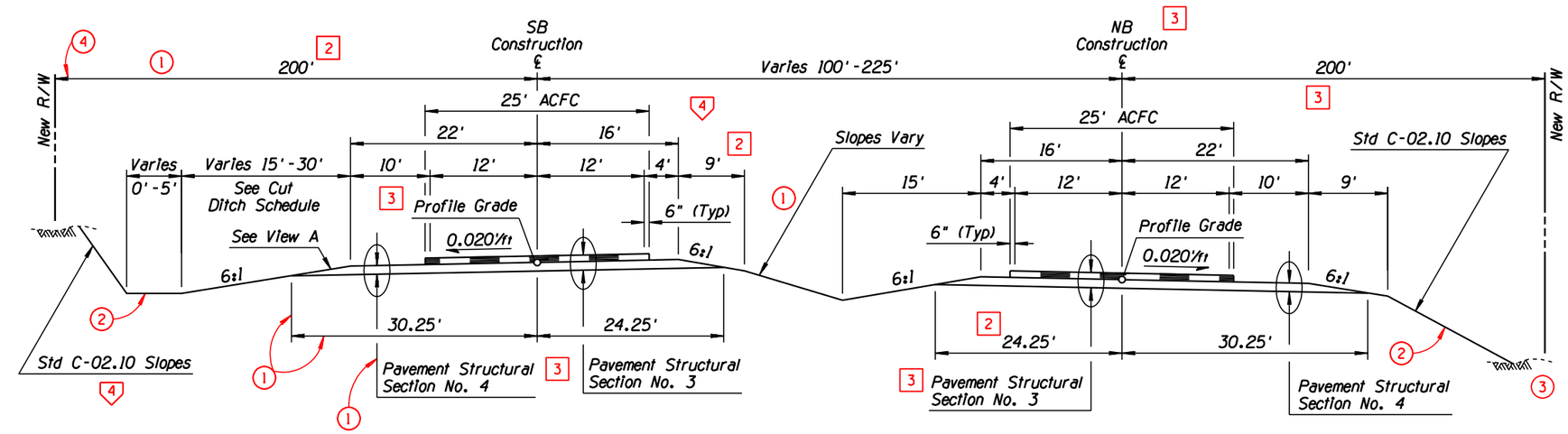
PAVEMENT STRUCTURAL SECTIONS



Sta 1442 + 00.00 to 1467 + 94.63
Sta 1487 + 30.46 to 1598 + 55.00

Sta 1441 + 84.36 to 1468 + 35.72
Sta 1487 + 78.51 to 1600 + 75.00

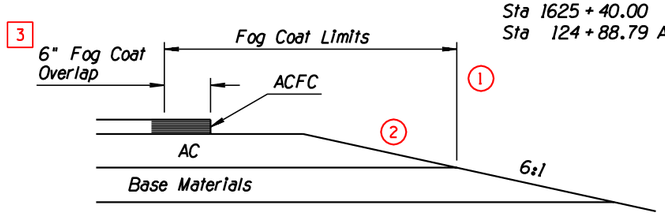
TYPICAL SECTION



Sta 1625 + 40.00 to 1627 + 68.35 Bk
Sta 124 + 88.79 Ahd to 195 + 80.00

Sta 1629 + 50.00 to 1642 + 24.97 Bk
Sta 135 + 39.21 Ahd to 180 + 68.51

TYPICAL SECTION



FOG COAT APPLICATION
VIEW A

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET
TYPICAL SECTIONS

ROUTE SR 87 | LOCATION SUNFLOWER - MAZATZAL

SHEET 2 OF 2

STD P-02.15

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

CCCCCDGNCSPECIFICATIONCCCCC VIEW NAME:
CCCCCSYSTIMECCCCC

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	55	23	17.5	4	12.5	CB	TJ is CB unless shown otherwise
2	55	23	17.5	4	8.75	LB	LS between notes shall be 17.5 units
3	21	23	17.5	4	8.75	CB	
4	54	1	22	6	11	CB	
5	55	1	17.5	4	12.5	CB	
6	18	23	17.5	4	8.75	LB	
7	25	23	17.5	4	8.75	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 3 6 7	No. 6 Ames/ 200 Leroy	2	Slant	
5	No. 6 Ames/ 200 Leroy	2	Straight	
4	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	20	3	0	
3	59	1	5	
4	-	-	-	ADOT Standard Line Terminator

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.60 for Pavement Structural Section Layout & Construction
3	See Std P-00.61 for Data Table Layout
4	Show Roadway Cross Slopes in feet per foot to 3 Decimal Places
5	See Std P-00.61 for Text Layout
6	See Stds P-00.60 & P00.61 for Dimension & Leader Line Layout

NOTE : For project related sheets, see standards:
P-03.20; P-03.30; P-07.20; P-08.20

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE DESIGN SHEET FOR
RURAL UNDIVIDED ROADWAY

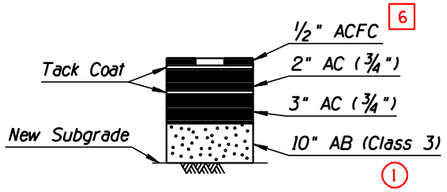
DRAWING NO.
P-02.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BP-063-2-310	2	63	
		095 LP 148			

MIDPOINT OF PROJECT

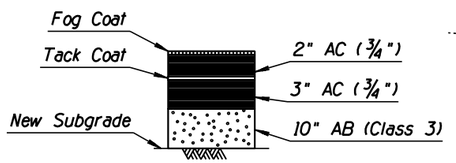
Western Zone
State Plane Coordinates

X = 298,000
Y = 840,000



Total Thickness = 15 1/2"

SECTION NO. 1



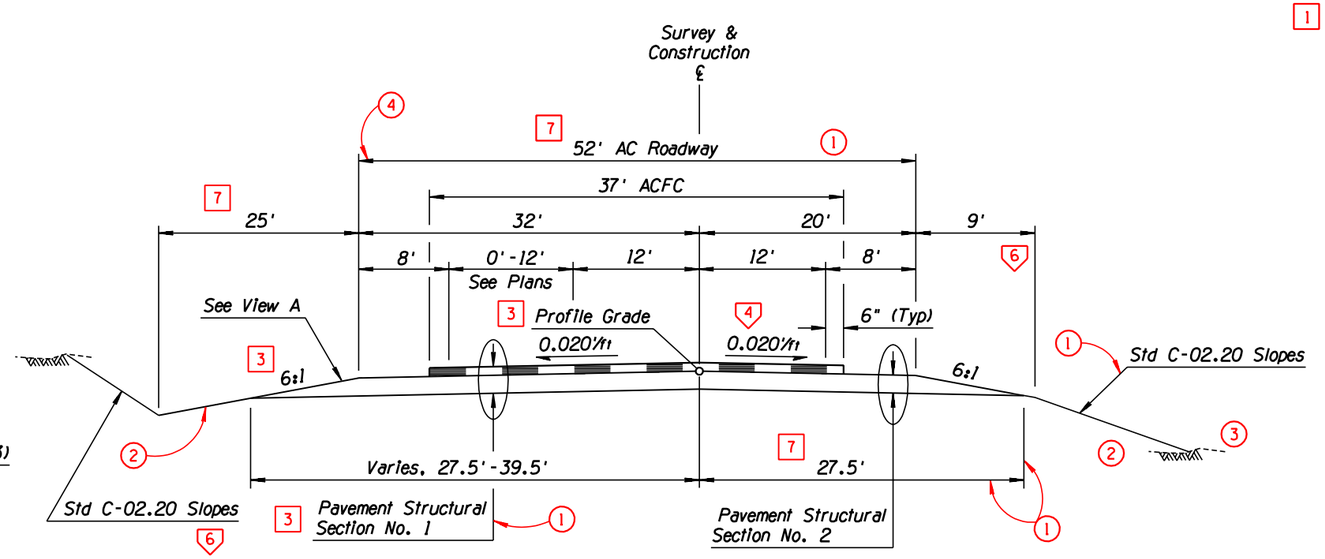
Total Thickness = 15"

SECTION NO. 2

PAVEMENT STRUCTURAL SECTIONS

DESIGN DATA

1989 ADT = 2,900
2009 ADT = 5,400
Min Design Speed = 60 MPH



TYPICAL SECTION

LENGTH OF PROJECT

Sta 395+00.00 to 501+90.00 = 10,690.00'
Gross & Net Length = 10,690.00' - 2.02 Miles
Mile Post 125.36 to 127.38

INDEX OF SHEETS

Sheet No.	Sheet Type
1	Face Sheet
1A-1B	ADOT Standard Drawings
2-5	Design Sheets
6-7	Barrier Summary Sheets
8	New Pipe Summary Sheet
9	Box Culvert Summary Sheet
10-15	Detail Sheets
16-25	Culvert Detail Sheets
26-28	Construction Phasing Sequence
29-44	Plan & Profile Sheets
45-61	Traffic Sheets
62-63	Structure Sheets

GENERAL NOTES

The roadway plans have been designed utilizing the 1989 Construction Standard Drawings (C-Series), and current revisions.

The project roadway shall be striped by the contractor in accordance with the current edition of the Signing and Marking Standard Drawings (M&S-Series) and striping plans.

Changes in location and/or length of spillway installation may be made by the Engineer to improve drainage conditions.

Delineators and object markers shall be furnished and placed by the contractor, as directed by the Engineer.

Bench Markers will be furnished by the State, and placed by the contractor. Std C-21.20.

R/W Markers shall be furnished and placed by the contractor, as directed by the Engineer. Std C-21.10.

For R/W information not shown, see Right-of-Way project No. F-063-2-311.

For Superelevation information not shown, see Drawing Series D-56 in the Roadway Design Guides for use in Office and Field - 1986.

The new pavement shoulders shall be grooved in accordance with Std C-09.10.

The average project elevation is 500'.

EARTHWORK QUANTITIES

Roadway Excavation	655,029 CY
Swell/Shrink	+71,942 CY
Drainage Excavation	482 CY
Swell	72 CY
Embankment (Including Ground Comp.)	768,798 CY
Borrow	45,859 CY
10% Shrink	4,586 CY

EARTHWORK FACTORS

Station	Shrink/Swell	Ground Compaction
395+00 to 400+99	Even	0.00'
401+00 to 403+00	Even	0.25'
403+00 to 406+00	15% Swell	0.25'
406+00 to 417+00	5% Swell	0.25'
417+00 to 431+00	10% Swell	0.30'
431+00 to 440+00	15% Swell	0.15'
440+00 to 449+00	10% Swell	0.15'
449+00 to 459+00	10% Swell	0.25'
459+00 to 464+00	5% Shrink	0.25'
464+00 to 480+00	10% Swell	0.25'
480+00 to 501+90	15% Swell	0.30'

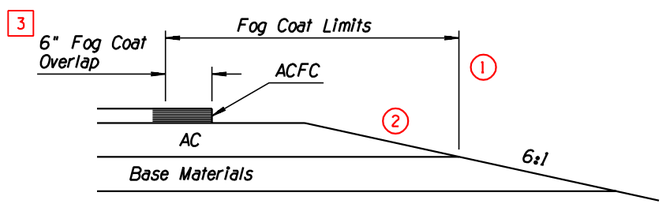
SOIL VALUES

Station	pH	Resistivity
394+10 to 398+59	7.3	2240
398+60 to 409+59	7.2	800
409+60 to 438+79	7.4	480
438+80 to 442+14	7.2	780
442+15 to 451+49	7.4	740
451+50 to 465+24	7.3	520
465+25 to 512+15	7.2	310

LOOP DETECTOR TRAFFIC COUNTER SYSTEM

Std TS 7-3

Location	No. of Installations
Sta 396+00	1 (3-loops)
Sta 439+00	1 (3-loops)



FOG COAT APPLICATION
VIEW A

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET

ROUTE US 95 — LOCATION OSBORN WASH - NORTH (UNIT II)

SHEET 1 OF 2

TRACS NO. H0000 01 C ___ OF ___

STD P-02.20

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC VIEW NAME:
CCCCCSYSTIMECCCCC

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	18	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
2	18	23	15	2	7.5	LB	
3	54	1	22	6	11	CB	
4	25	23	17.5	4	8.75	CB	
5	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
6	25	23	15	2	7.5	CB	
7	55	23	17.5	4	12.5	LB	TJ is LB unless otherwise shown
8	55	1	17.5	4	12.5	CB	
9	55	23	17.5	4	8.75	LB	Line Spacing between notes shall be 17.5 units
10	21	23	15	2	7.5	LB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	59	1	5	
3	20	3	0	
4	-	-	-	ADOT Standard Line Terminator; Typical
5	20	1	2	

NOTE: For project related sheets, see standards:
P-02.31; P-07.30; P-08.30; P-12.20; P-13.20

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 4 5 7 9	No. 6 Ames/ 200 Leroy	2	Slant	
2 6 10	No. 5 Ames/ 175 Leroy	0	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	
8	No. 6 Ames/ 200 Leroy	2	Straight	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.40 for Pavement Structural Section Layout & Construction
3	See Stds P-00.60 & P-00.61 for Dimension and Leader Line Layout
4	See Std P-00.60 for Text Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's CADD Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV. 00-00

SAMPLE DESIGN SHEET
FOR AN ORGANIZED AREA

DRAWING NO. P-00.00
Sheet 0 of 0

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	2	79	
		095 YU 020			

REFERENCES

BP-063-1-503
S-53(1)

MIDPOINT OF PROJECT

Western Zone
State Plane Coordinates

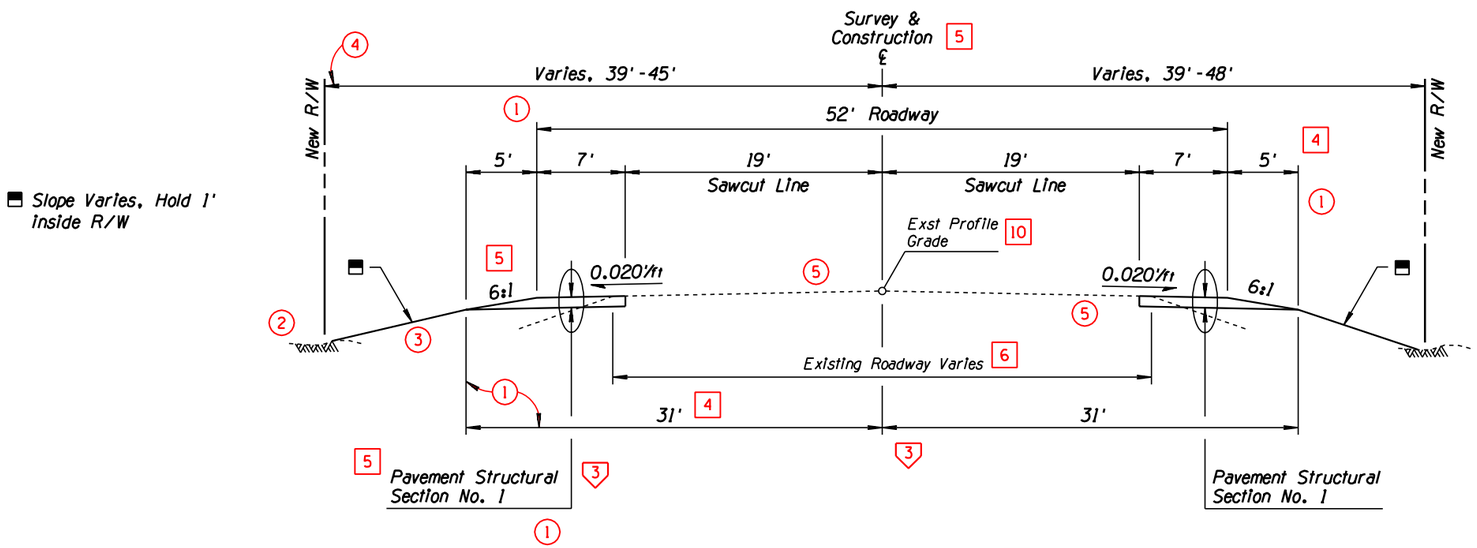
X = 220,000
Y = 610,000

DESIGN DATA

1991 ADT = 19,000
2011 ADT = 30,000
Min Design Speed = 50 MPH

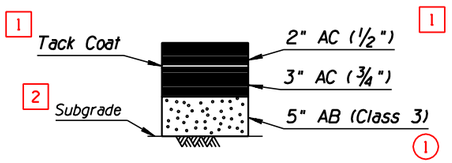
LENGTH OF PROJECT

Sta 1079+00.00 to 1089+59.40 Bk = 1,059.40'
Sta 1089+58.35 Ahd to 1124+00.00 = 3,441.65'
Gross & Net Length = 4,501.05' - 0.85 Mile
Mile Post 19.70 to 20.55



TYPICAL SECTION

Sta 1079+00 to 1086+00



Total Thickness = 10"

PAVEMENT STRUCTURAL SECTION NO. 1

INDEX OF SHEETS

Sheet No.	Sheet Type
1	Face Sheet
1A-1B	ADOT Standard Drawings
2-3	Design Sheets
4-5	Pipe Summary Sheet
6	PSWP Summary Sheet
7-21	Detail Sheets
22-37	Plan & Profile Sheets
38-56	Storm Drain Plan & Profile Sheets
57-59	PSWP Profile Sheets
60-66	Driveway Profile Sheets
67-79	Traffic Sheets

GENERAL NOTES

The roadway plans have been utilizing utilizing the 1989 Construction Standard Drawings (C-Series), and current revisions.

The project roadway shall be striped by contractor forces in accordance with the current edition of the Signing and Marking Standard Drawings (M&S-Series) and striping plans.

R/W Markers shall be furnished and placed by the contractor, as directed by the Engineer. Std C-21.10.

For R/W information not shown, see Right-of-Way project No. BP-063-1-611.

Bench markers will be furnished by the State and shall be placed by the Contractor. Std C-21.20.

Existing utility locations are approximate. The contractor shall verify the exact location and depth of all underground facilities.

For Superelevation information not shown, see Drawing Series D-56 in the Roadway Design Guides for use in Office and Field - 1986.

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET

ROUTE US 95 | LOCATION 32nd ST - 26th ST (YUMA)

SHEET 1 OF 2

TRACS NO. H0000 01 C

___ OF ___

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

STD P-02.30

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
2	30	23	17.5	4	8.75	CB	
3	25	23	17.5	4	8.75	CB	
4	45	23	17.5	4	8.75	LB	
5	54	1	22	6	11	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 3 4	No. 6 Ames/ 200 Leroy	2	Slant	
5	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	20	3	0	
3	44	3	0	
4	-	-	-	ADOT Standard Line Terminator; Typical
5	59	1	5	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Show roadway cross slope in feet per foot to 3 decimal places
3	See Stds P-00.60 & P-00.61 for Dimension and Leader Line Layout

NOTE: For project related sheets, see standards:
P-02.30; P-07.30; P-08.30; P-12.20; P-13.20

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

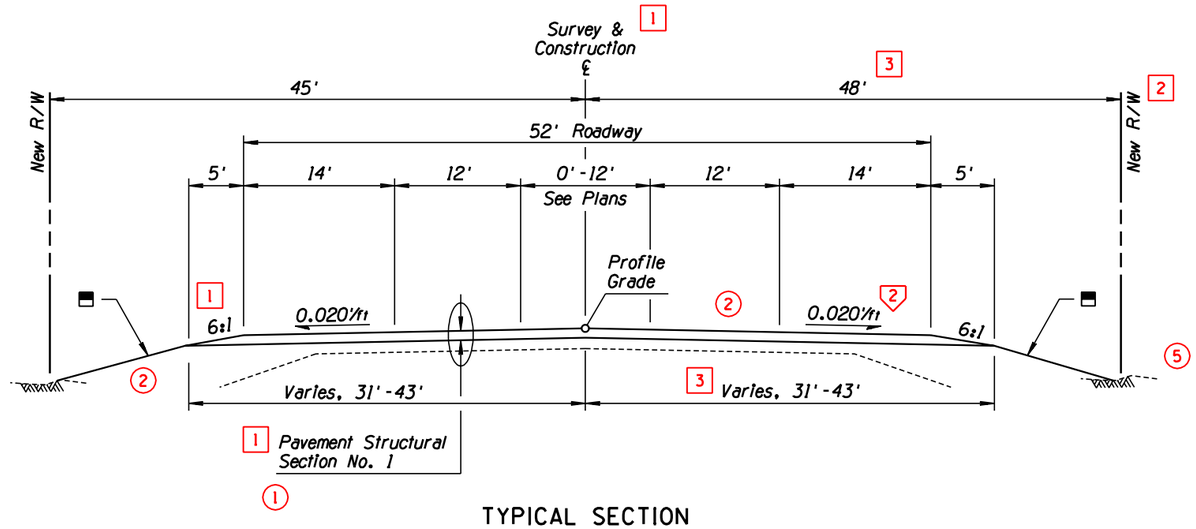
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE TYPICAL SECTIONS
FOR URBANIZED AREA

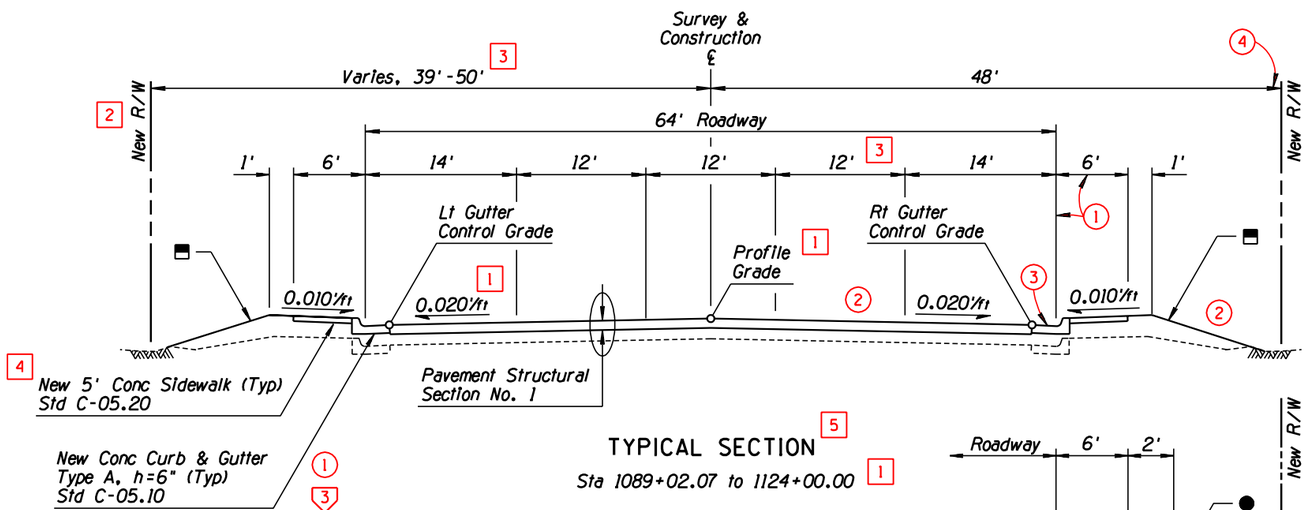
DRAWING NO.
P-02.31

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	3	79	
		095 YU 020			



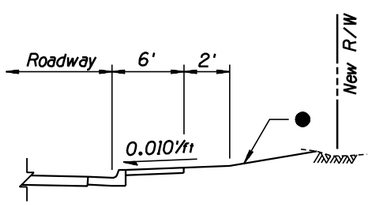
TYPICAL SECTION

Sta 1086+00 to 1089+02.07



TYPICAL SECTION

Sta 1089+02.07 to 1124+00.00



Rt Sta 1091+50 to 1093+00

■ Slopes Vary, Hold 1' Inside R/W

● 6:1 Slope or Hold 1' Inside R/W

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET
TYPICAL SECTIONS

ROUTE: US 95
LOCATION: 32nd ST - 26th ST (YUMA)

SHEET 2 OF 2

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-02.31

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	18	23	17.5	4	8.75	LB	
2	18	23	15	2	7.5	LB	
3	18	23	17.5	4	8.75	CB	
4	54	1	22	6	11	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 3	No. 6 Ames/ 200 Leroy	2	Slant	
2	No. 7 Ames/ 240 Leroy	3	Straight	
4	No. 5 Ames/ 175 Leroy	0	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.40 for Pavement Structural Section Layout & Construction
3	See Std P-00.61 for Leader Line Layout

NOTE: For project related sheets, see standards:
P-02.52; P-02.53; P-04.10

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

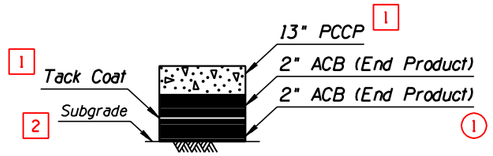
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE PAVEMENT STRUCTURAL SECTIONS
FOR URBAN FREEWAY ROADWAY

DRAWING NO.
P-02.51

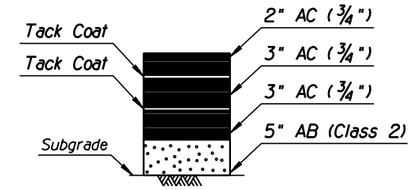
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RAM-600-1-501	3	541	

101L MA 52 [1]



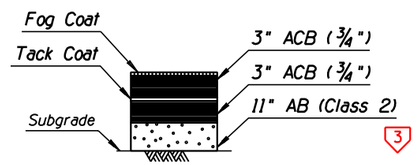
Total Thickness = 17" [3]

[4] SECTION NO. 1



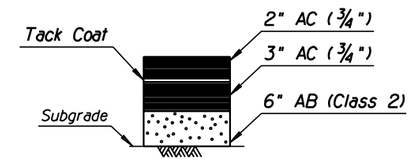
Total Thickness = 13"

SECTION NO. 4



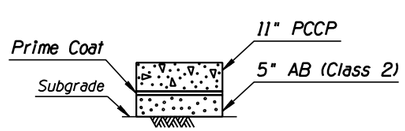
Total Thickness = 17"

SECTION NO. 2



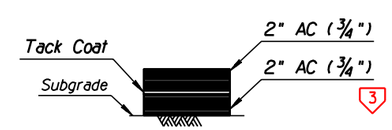
Total Thickness = 11"

SECTION NO. 5



Total Thickness = 16"

SECTION NO. 3



Total Thickness = 4"

SECTION NO. 6

PAVEMENT STRUCTURAL SECTIONS [4] [2]

[1]

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET
PAVEMENT STRUCTURAL SECTIONS

ROUTE: SR 101L
LOCATION: PRICE, FIRST ST - BASELINE

SHEET 2 OF 4

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-02.51

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	30	23	17.5	4	8.75	RB	
2	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
3	54	1	22	6	11	CB	
4	39	23	17.5	4	8.75	LB	
5	25	23	17.5	4	8.75	CB	
6	45	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 4 5 6	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	20	3	0	
2	59	1	5	
3	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
4	-	-	-	ADOT Standard Line Terminator; Typical
5	44	3	0	
6	38	3	0	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.60 for Leader Line Layout
3	Show roadway cross slope in feet per foot to 3 decimal places

NOTE: For project related sheets, see standards:
P-02.51; P-02.53; P-04.10

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

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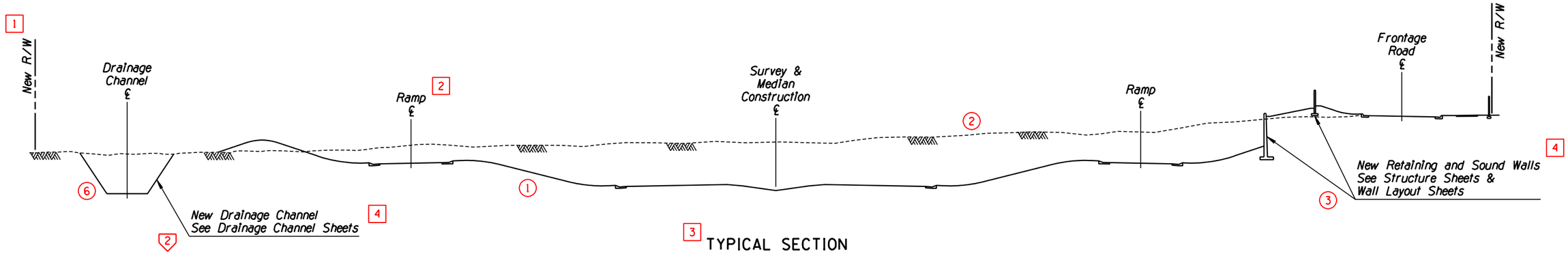
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE TYPICAL SECTIONS FOR
URBAN FREEWAY ROADWAY

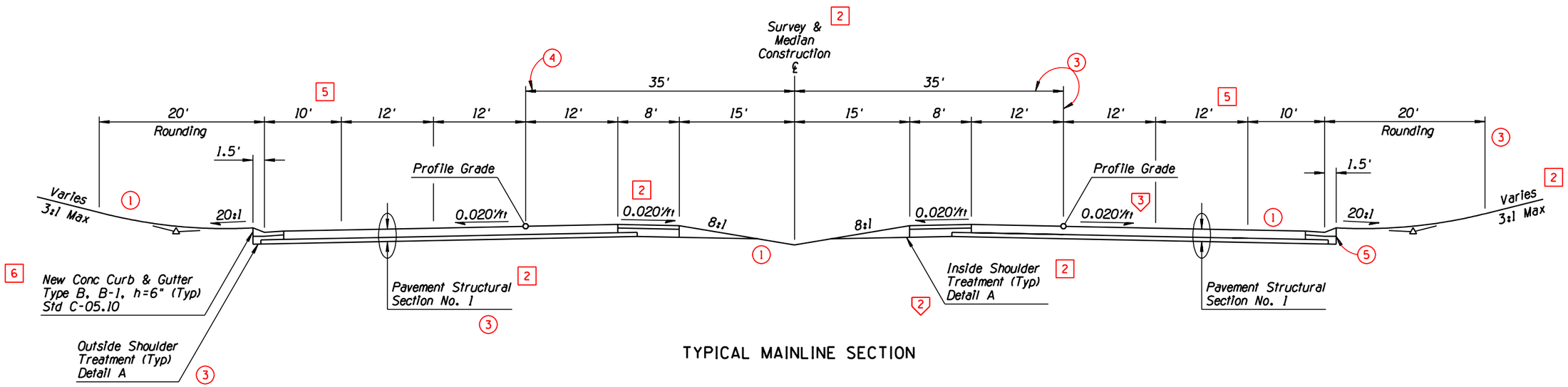
DRAWING NO.
P-02.52

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RBA-600-1-501	4	541	

101L MA 52



TYPICAL SECTION



TYPICAL MAINLINE SECTION

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET
TYPICAL SECTIONS

ROUTE SR 101L
LOCATION PRICE, FIRST ST - BASELINE

SHEET 3 OF 4

TRACS NO. H0000 01 C

___ OF ___

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

STD P-02.52

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
2	25	23	17.5	4	8.75	CB	
3	54	1	22	6	11	CB	
4	39	23	17.5	4	8.75	LB	
5	30	23	17.5	4	8.75	RT	
6	45	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 4 5 6	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	-	-	-	ADOT Standard Line Terminator; Typical
3	20	3	0	
4	45	3	0	
5	48	3	0	
6	42	3	0	
7	59	1	5	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Porject Number Block Layout
2	See Stds P-00.60 & P-00.61 for Dimemsion & Leader Line Layout
3	Show roadway cross slope in feet per foot to 3 decimal places

NOTE: For project related sheets, see standards:
P-02.51; P-02.52; P-02.53; P-04.10

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

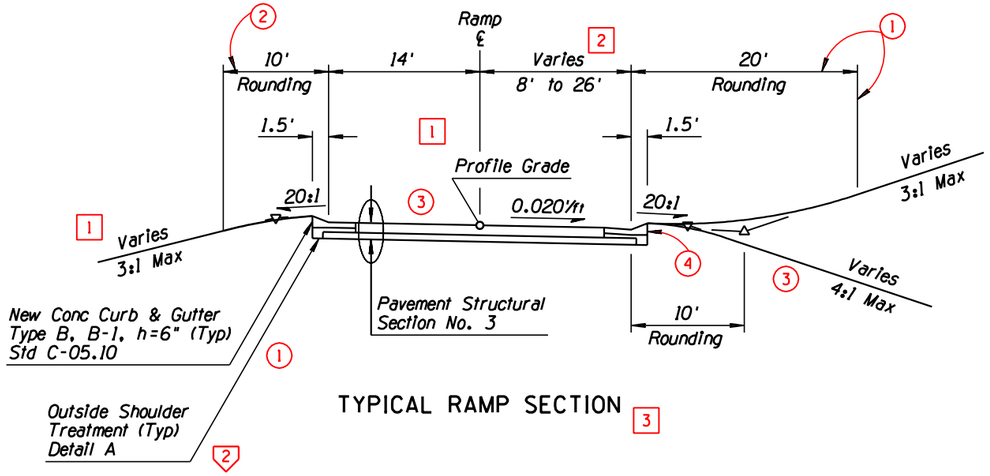
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE DESIGN SHEET FOR
URBAN FREEWAY ROADWAY

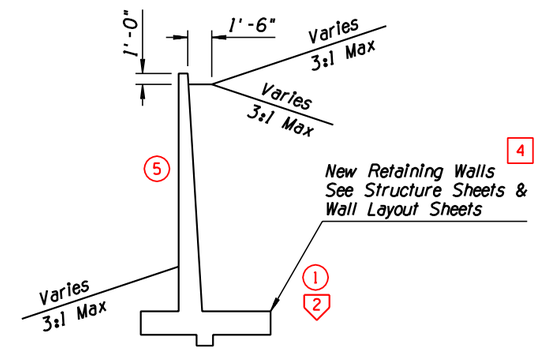
DRAWING NO. P-02.53

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RBA-600-1-501	5	541	

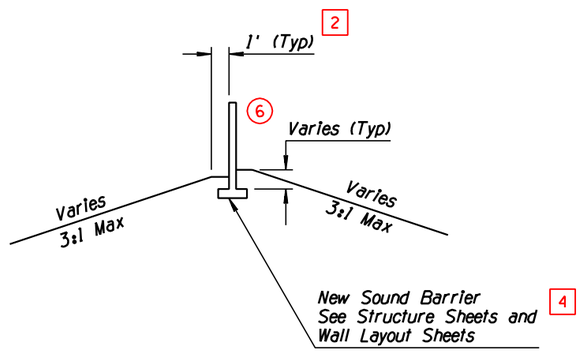
101L MA 52



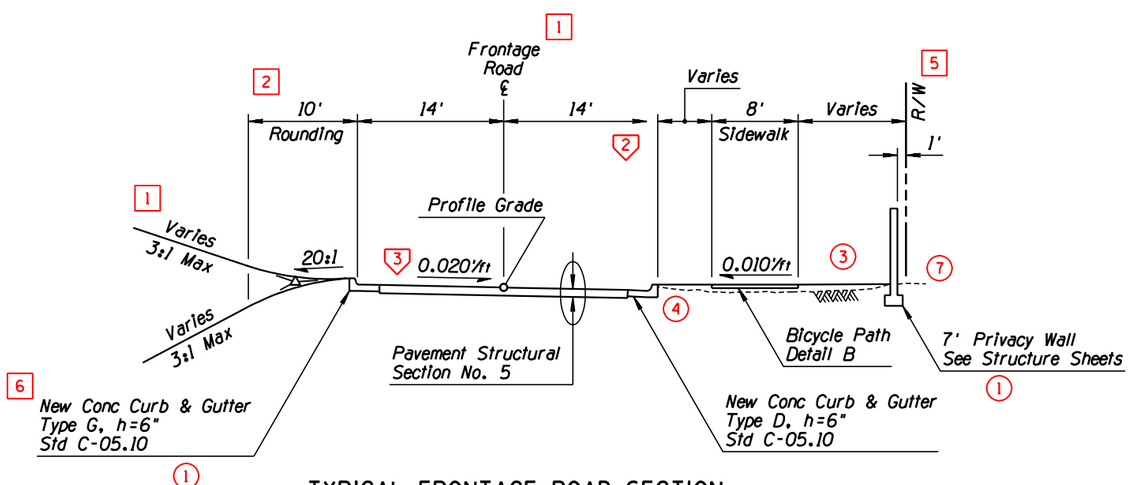
TYPICAL RAMP SECTION



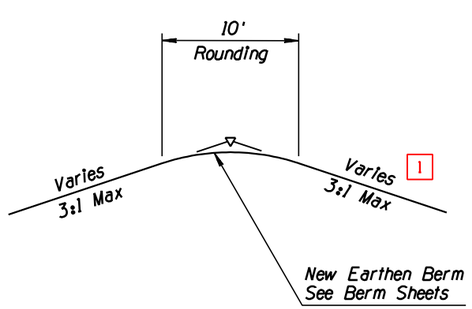
TYPICAL WALL SECTION



TYPICAL SOUND BARRIER SECTION



TYPICAL FRONTAGE ROAD SECTION



TYPICAL BERM SECTION

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DESIGN SHEET
TYPICAL SECTIONS

ROUTE SR 101L
LOCATION PRICE, FIRST ST - BASELINE

SHEET 4 OF 5

TRACS NO. H0000 01 C

___ OF ___

STD P-02.53

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	58	1	15	4	45	CT	TJ is CT unless otherwise shown

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 5 Ames/ 175 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Use supplied Text Node

NOTE : For project related sheets, see standards:
P-03.25; P-05.10; P-05.20; P-05.30; P-07.25

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
⌂ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

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STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE BARRIER SUMMARY SHEET

DRAWING NO.
P-03.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	3	30	

089A YV 384

	Beginning Station (Approximate)	Plan Reference No. ◇	TYPE INSTALLATION: "A" C-10.01, "B" C-10.02	New Guard Rail (Linear Feet)	Reconstruct Guard Rail (Linear Feet)	Construct Guard Rail from Salvage (Linear Feet)	Remove and Salvage Guard Rail (Linear Feet)	Remove Guard Rail (Linear Feet)	Reconstruct BCT	Construct BCT from Salvage	Remove and Salvage BCT	BARRIER TYPE: Guard Rail: Timber C-10.04	Steel C-10.05	Full C-10.12,13&14	Half C-10.09,10&11	Concrete Barrier: Linear Feet	END TREATMENT: Anchor: Steel C-10.21■	Timber C-10.22	Each	END POSTS: C-10.17 STEEL	C-10.18 TIMBER	BCT Assembly: Steel C-10.16&17■	Each	Timber C-10.15	MISCELLANEOUS: Bolted Anchor: Timber C-10.23	Steel C-10.24	Each	Buried Anchor: Timber C-10.23	Steel C-10.24	Linear Feet	TRANSITION: W-Beam or Thrie-Beam: Timber C-10.25	Steel C-10.30	Standard or Detail	Each	New	Rub Rail (Each): Reconstruct	C-10.25	C-10.30	Standard or Detail	Half Barrier: Linear Feet	Standard or Detail	Each	ATTEN-UATOR: Standard or Detail	GLARE SCREEN: Linear Feet	REMARKS
1	L+ 721+25	1	A	300	200				1	1	1	X																																		
2	R+ 730+75	2	A	400				225			2	X							X			2																								
	R+ 748+00	3					600				1																																			
	R+ 747+00	4	A	225		800				2		X																																		
	240' L+ 758+75	5					200				2																																			
	R+ 763+25	6	A	650						2		X																																		
	L+ 775+00	7	A	350								X							X			1									X			1	1				B-21.20	-					▲
	R+ 774+00	8	A	450								X							X			1									X			1	1				B-21.20	-					▲
	L+ 782+00	9	A	450								X							X			1									X			1	1				B-21.20	-					▲
	R+ 782+00	10	A	350								X							X			1									X			1	1				B-21.20	-					▲
	Total			3,175	200	800	800	225	1	5	6											6											4	4										

◇33◇ Reference numbers correspond to numbers in diamonds on PLAN SHEETS.

■ BCT (Steel) bearing plates utilized with Standard Drawings C-10.17 and C-10.21 shall conform to ARTBA Standard F-41-79 except that the dimension from bottom of plate to center of hole shall be 2¼".

NOTE:
All barrier items shown in the summary shall be delineated in accordance with Standard Drawings 4-M-10.02, 4-M-10.03 and other standard drawing referenced therein. No separate measurement or payment will be made for this work.

▲ Hardware connection for W-Beam transition to concrete barrier are to be installed as per Std B-21.20 and B-21.21. Std C-10.25 applies to sheets 1 and 2 of 5 only.

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

BARRIER SUMMARY SHEET

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 1 OF 1

STD P-03.10

ccccc DGNcSPECIFICATIONccccc
cccccSYSTIMFcccc
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	58	1	15	4	45	CT	TJ is CT unless otherwise shown

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

NOTE : For project related sheets, see standards:
P-02.20; P-03.30; P-07.20; P-08.20

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 5 Ames/ 175 Leroy	2	Straight	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Use supplied Text Nodes

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE NEW PIPE SUMMARY SHEET

DRAWING NO. P-03.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BP-063-2-310	8	63	

095 LP 148

URBAN & RURAL

DESCRIPTION							⬢ CSP					⬢ CAP					RCP				NR CP	NR CIP CP	END TREATMENT													QUANTITIES			REMARKS
									Allowable Coating								Non Trench		Trench				End Sct	CB, MH & Jct Str								Headwall						
																													Grate		Gutter Depression							
Station	Plan Ref No. ⬡	Fill Height Range (Ft.) ◒	Size, (In.) Corrugated	Size, (In.) Smooth	Length (Ft.)	Skew (Degree)	Corrugation	Wall Thickness (In.)	Zinc	Aluminum	Bituminous	Corrugation	Wall Thickness (In.)	Uncoated	Bit. Coated	Class	■Min D-Load	Class	■Min D-Load	Class	Min Wall Thickness (In.)	C-13.20 C-13.25	Manhole No. 3▲	Standard or Detail	Location	H (Ft-In.)	Slotted Drn. Length (Ft)	Type	Elev.	D (In.)	L (Ft.)	Standard or Detail	Location	Pipe Ex (CY)✳	Pipe Bk-fl (CY)✳	Drn Ex (CY)	
396+50	1	8-11	48	48	194	15° Rt	2⅔x⅓	0.064	X	X	X	2⅔x⅓	0.105	X				2	695													C-14.21	Lt&Rt	870	155		See Detail D1
402+23	2	30-40	48		222	25° Lt	3x1	0.079			X	2⅔x⅓	0.105	X																	C-14.21	Lt&Rt	481	150		See Detail D2
411+23	3	30-40	30		178	15° Rt	2⅔x⅓	0.064			X	6x1	0.075		X																		-	88		See Detail D3

CSP - Corrugated Steel Pipe
CAP - Corrugated Aluminum Pipe
RCP - Reinforced Concrete Pipe
NRCP - Non-Reinforced Concrete Pipe
NRCIPCP-Non-Reinforced Cast-In Place Concrete Pipe

⬡ Reference numbers correspond to numbers in hexagons on PLAN SHEETS.

◒ The Pipe Has Been Designed For A Fill Height Range As Indicated With The Fill Height Equal To Or Greater Than The Lower Number And Not Exceeding The Higher Number. Fill Heights Are The Maximum Measured From The Top Of Pipe To The Highest Point Of Subgrade Over The Pipe. Should Field Conditions Vary From The Range Indicated, Contact Design For Reevaluation Of Pipe Design Requirements.

■ The Minimum D-LOAD Needed To Produce A 0.01 Inch Crack. RCP May Be Provided By Either Min. D-LOAD Or Class.

✳ PIPE EXCAVATION & PIPE BACKFILL Will Not Be Measured For Payment.

⬢ When Bituminous Coating Is Specified For Either Structural Plate Pipe Or Corrugated Metal Pipe, It Shall Be Applied In Accordance With AASHTO M 243 Or AASHTO M 190, Type A, Respectively, And Coated On Both The Inside And The Outside Of The Pipe Unless Otherwise Specified In These Drawings.

NOTE:
FOR PIPE CULVERT PLACEMENT
SEE STANDARD DRAWING C-13.15

▲ Include FRAME & COVER STD. C-18.10 & C-18.20

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

NEW PIPE SUMMARY SHEET

ROUTE US 95 | LOCATION OSBORN WASH - NORTH (UNIT II)

SHEET 1 OF 1

STD P-03.20

ccccc DGNcSPECIFICATIONccccc
ccccc SYSTIMEccccc
VIEW NAME:

TRACS NO.

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	58	1	15	4	45	CT	TJ is Ct unless otherwise shown

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 5 Ames/ 175 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Titile Block & Project Number Block Layout
2	Use supplied text nodes

NOTE: For project related sheets, see standards:
P-03.10; P-05.10; P-05.30; P-05.40; P-07.25

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units

DESCRIPTION OF REVISION

NO.

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE NEW CORRUGATED
STEEL PIPE EXTENSION SUMMARY SHEET

DRAWING NO.
P-03.25

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	3	30	

089A YV 384

	DESCRIPTION												● CSP						END TREATMENT									QUANTITIES					REMARKS
										Remove Exst. Pipe (Ft.)		Extend (Ft.)					Allowable Coating					CB, MH & Jct Str				Headwall						
																							Grate										
	Station	Plan Ref No. (PE)	Fill Height Range (Ft.) ◒	Size (in.)	Length in Place (Ft.)	Skew (Degree)	Remove & Salv. End Section	Remove Hdwl.	Left	Right	Left	Right	Corrugation	Wall Thickness (in.)	Zinc	Aluminum	Bituminous	Reset Salv. End Sct.	New	Standard or Detail	Location	H (Ft-In)	Type	Elev.	Standard or Detail	Location	Pipe Ex. (CY) ✳	Pipe Bk'fl. (CY) ✳	Drn. Ex. (CY)	Berm Emb. (CY)	Dike Emb. (CY)	
1	735+00	1	8-11	24	70						8	6	2⅔x½	0.064	X	X	X										40	44			15	See Culvert Detail D1
2	775+13	2	5-8	24	66				2		20	18	2⅔x½	0.064	X	X	X		Rt	Det B	Lt						130	55	5		15	See Details A, B & Culvert Detail D5
	Total																																

CSP - Corrugated Steel Pipe
CAP - Corrugated Aluminum Pipe

(PE 33) Reference numbers correspond to numbers in hexagons on PLAN SHEETS.

◒ The Pipe Has Been Designed For A Fill Height Range As Indicated With The Fill Height Equal To Or Greater Than The Lower Number And Not Exceeding The Higher Number. Fill Heights Are The Maximum Measured From The Top Of Pipe To The Highest Point Of Subgrade Over The Pipe. Should Field Conditions Vary From The Range Indicated, Contact Design For Reevaluation Of Pipe Design Requirements.

● When Bituminous Coating Is Specified For Either Structural Plate Pipe Or Corrugated Metal Pipe, It Shall Be Applied In Accordance With AASHTO M 243 Or AASHTO M 190, Type A, Respectively, And Coated On Both The Inside And The Outside Of The Pipe Unless Otherwise Specified In These Drawings.

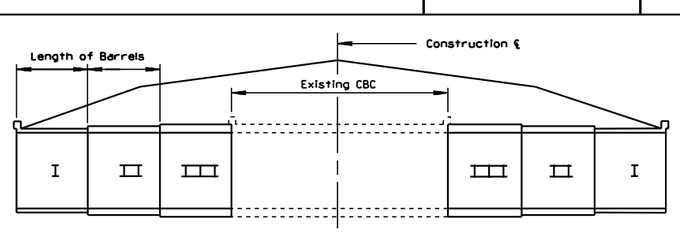
NOTE:
FOR PIPE CULVERT PLACEMENT
SEE STANDARD DRAWING C-13.15

✳ PIPE EXCAVATION & PIPE BACKFILL Will Not Be Measured For Payment.

	DESCRIPTION				STANDARD DRAWINGS REQUIRED	LENGTH OF BARREL EXTENSIONS										APPROXIMATE QUANTITIES							
	STATION or MP	PLAN REF NO. (BE)	STR. NO.	SIZE		Left of ℄ ▲					Right of ℄ ▲					Struct. Excav. Cu. Yds.	Class S f'_c=3000psi Concrete Cu. Yds.	Reinforcing Steel Lbs.	Structure Backfill Cu. Yds.	Remove Str. Conc. Cu. Yds.	Place Dowels Each	Drainage Excav. Cu. Yds.	Berm Emb. Cu. Yds.
						I	II	III	IV	V	V	IV	III	II	I								
1	766+40	1	N/A	Extend Lt 10x5x24'-0" with Inlet Wings	B-01.10, B-02.20,	24'-0"										16	43	4,925	362	3	8		
				Extend Rt 10x5x67'-0" with Outlet Wings	B-04.50 & B-04.70										67'-0"	43	100	12,470	1,009	3	8		
				See Culvert Detail D4																			
	Total															59	143	17,395	1,374	6	16		

(BE 66) Reference numbers correspond to numbers in circles on PLAN SHEETS.

NOTE:
FOR STRUCTURAL EXCAVATION AND STRUCTURE BACKFILL PLACEMENT AND MEASUREMENT, SEE STANDARD DRAWINGS C-13.35, C-13.45 AND C-13.50.



▲ Construction ℄ (Looking Ahead).

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

NEW CSP EXTENSION
CBC EXTENSION
SUMMARY SHEET

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 1 OF 1

STD P-03.25

CCCCCDGNCSPECIFICATIONCCCCC VIEW NAME:
CCCCCSYSTIMECCCCC

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	58	1	15	4	15	CT	TJ is CT unless otherwise shown

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 5 Ames/ 175 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Use supplied Text Nodes

NOTE : For project related sheets, see standards:
P-02.20; P-03.20; P-07.20; P-08.20

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE REINFORCED CONCRETE BOX
CULVERT SUMMARY SHEET

DRAWING NO. P-03.30

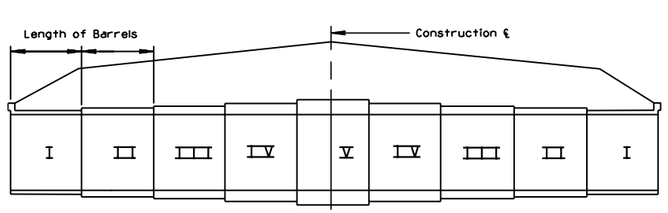
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BP-063-2-310	9	63	

095 LP 148

DESCRIPTION				STANDARD DRAWINGS REQUIRED	LENGTH OF BARRELS										APPROXIMATE QUANTITIES					REMARKS
STATION or MP	PLAN REF. NO. (--)	STR. NO.	SIZE		Left of ℄ ▲					Right of ℄ ▲					Struct. Excav. Cu. Yds.	Class S f'_c=3000psi Concrete Cu. Yds.	Reinforcing Steel Lbs.	Structure Backfill Cu. Yds.	Drainage Excav. Cu. Yds.	
					I	II	III	IV	V	V	IV	III	II	I						
412+60	1	N/A	10'x8'x180' w/Outlet Wing Lt &	B-02.10; B-04.20;	10		20		60	60		20		10	115	397	57,534	2,710		
			Inlet Wing Rt	B-04.4																
Total																				

(55) Reference numbers correspond to numbers in circles on PLAN SHEETS.

NOTE:
FOR STRUCTURAL EXCAVATION AND STRUCTURE BACKFILL PLACEMENT AND MEASUREMENT, SEE STANDARD DRAWINGS C-13.35, C-13.45 AND C-13.50.



▲ Construction ℄ (Looking Ahead).

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

REINFORCED CONCRETE BOX CULVERT SUMMARY SHEET

ROUTE: US 95
LOCATION: OSBORN WASH - NORTH (UNIT II)

SHEET 1 OF 1

STD P-03.30

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	25	23	17.5	4	8.75	CB	
2	21	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
3	54	1	22	6	11	CB	
4	33	23	17.5	4	8.75	LB	
5	28	23	17.5	4	8.75	LB	
6	55	23	17.5	4	8.75	LB	LS between notes shall be 17.5 units

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 4 5 6	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 6 Ames/ 200 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	-	-	-	ADOT Standard Line Terminator; Typical
3	20	3	0	
4	44	3	0	
5	63	7	0	
6	42	3	0	
7	42	1	2	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.61 for Detail Format Layout
3	Show roadway cross slope in feet per foot to 3 decimal places
4	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout

NOTE: For project related sheets, see standards:
P-02.51; P-02.52; P-02.53

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

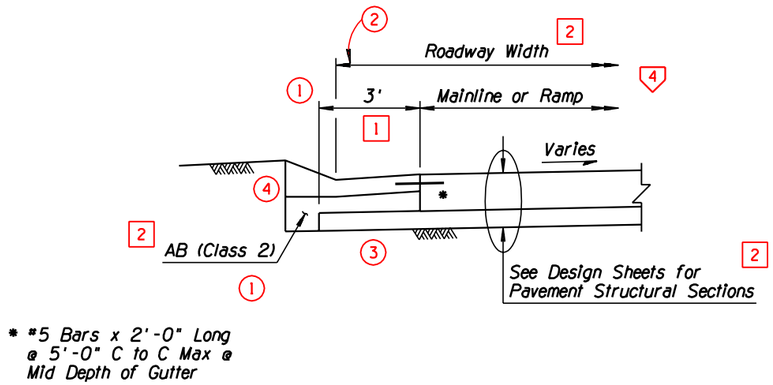
REV.

SAMPLE DETAIL SHEET FOR
SHOULDER TREATMENT & ALTERNATE FOOTINGS

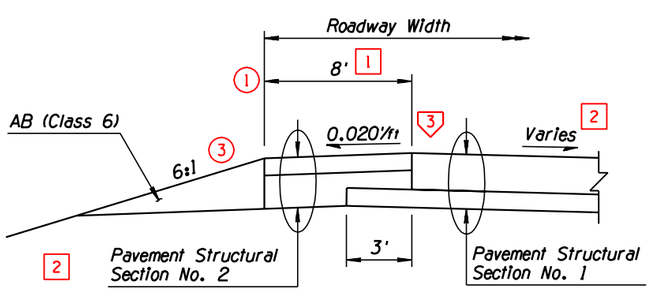
DRAWING NO.
P-04.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RBA-600-1-501	54	541	

101L MA 25



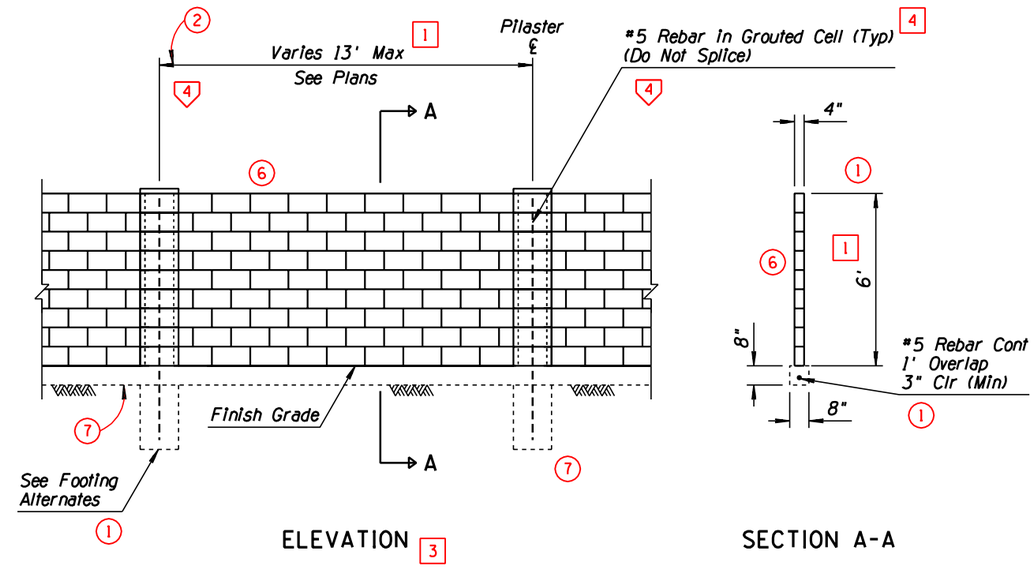
OUTSIDE SHOULDER TREATMENT



INSIDE SHOULDER TREATMENT

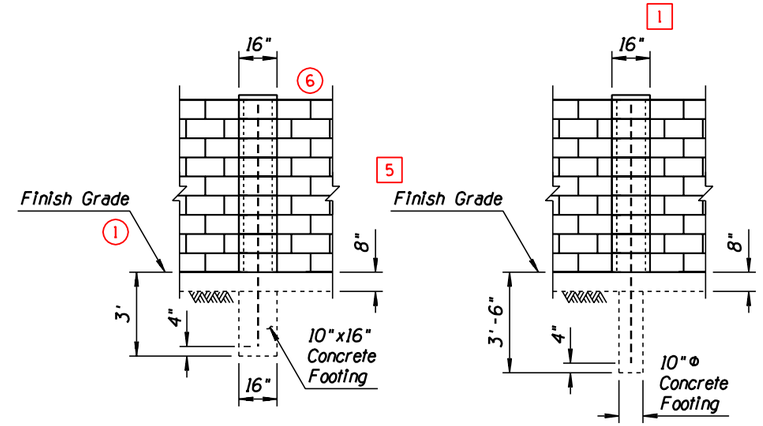
DETAIL A

SHOULDER PAVEMENT TREATMENTS



ELEVATION

SECTION A-A



FOOTING ALTERNATE NO. 1

FOOTING ALTERNATE NO. 2

NOTES

Concrete shall be placed against undisturbed soil.

Tongue & Groove Panel Blocks do not require mortared head joints. Mortared head joints shall be required for standard Panel Blocks.

All concrete shall be Class B.

Reinforcing Steel shall be in accordance with ASTM A-615, Grade 40.

Masonry units shall be in accordance with ASTM C-90, Grade N Type I f'_m = 1,350 PSI.

Mortar shall be in accordance with ASTM C-270, Type 'S'.

Grout shall be in accordance with ASTM C-476, f'_c = 2,000 PSI.

DETAIL B

PRIVACY WALL FOOTING ALTERNATES

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DETAIL SHEET
DETAILS A & B

ROUTE SR 101L

LOCATION PRICE, FIRST ST - BASELINE

SHEET 1 OF 10

TRACS NO. H0000 01 C

___ OF ___

STD P-04.10

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC

VIEW NAME:

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	14	23	15	2	7.5	LB	
2	39	23	17.5	4	8.75	LB	
3	54	1	22	6	11	CB	
4	25	23	17.5	4	8.75	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 5 Ames/ 175 Leroy	0	Slant	
2 4	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	38	3	0	
2	59	1	5	
3	20	1	2	
4	-	-	-	ADOT Standard Line Terminator; Typical
5	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Block Layout
2	See Std P-00.61 for Detail Format Layout
3	See Std P-00.60 & P-00.61 for Dimension & Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

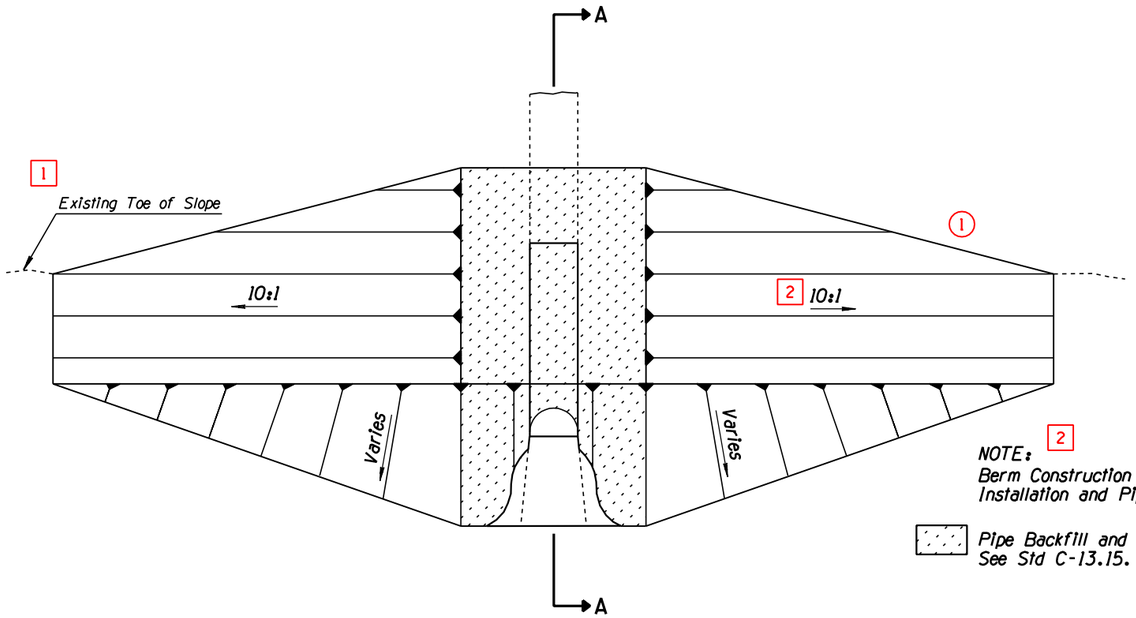
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE DETAIL SHEET FOR
PIPE BERM PLACEMENT

DRAWING NO.
P-04.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	I-IR-10-3(409)	7	57	

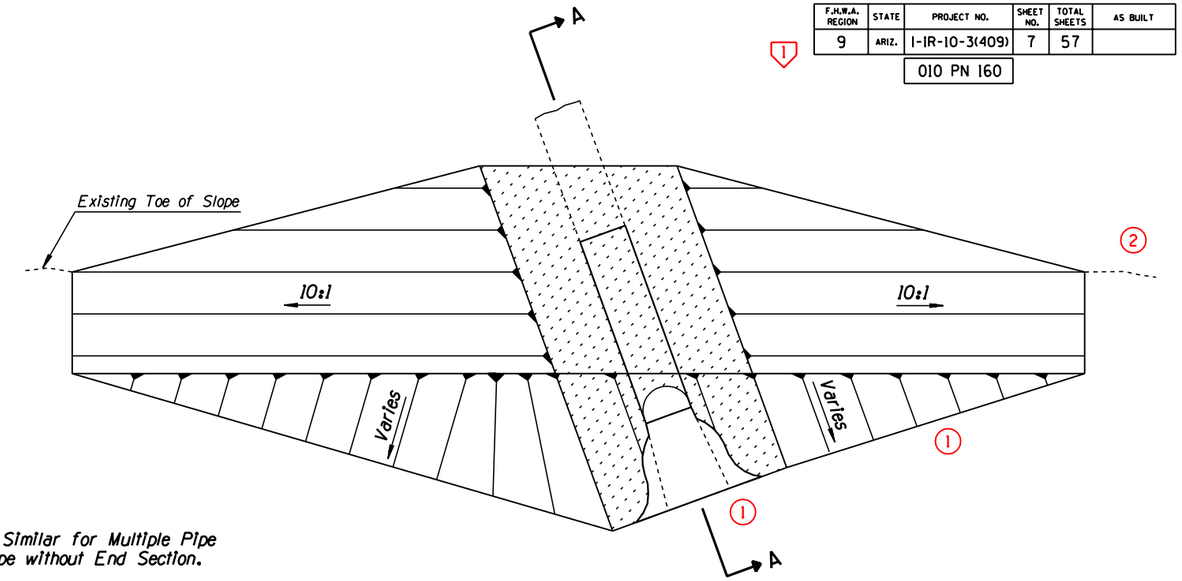
010 PN 160



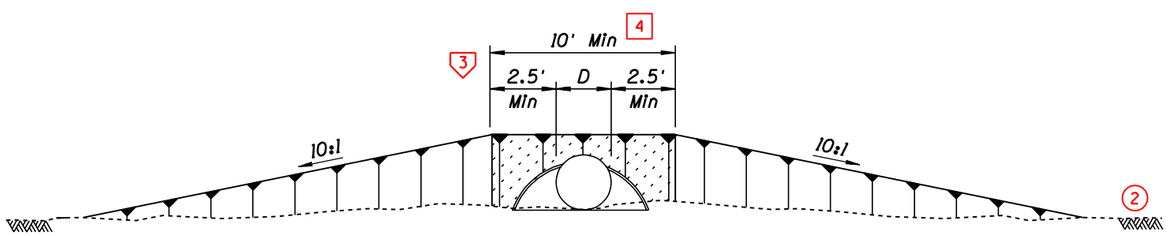
STRAIGHT PIPE PLAN 3

NOTE: 2
Berm Construction Similar for Multiple Pipe Installation and Pipe without End Section.

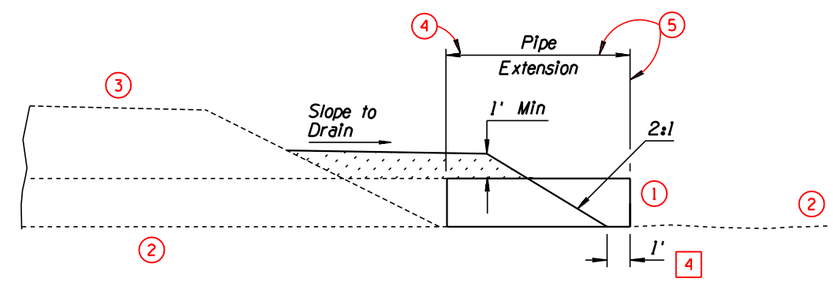
Pipe Backfill and Bedding Material Limits See Std C-13.15.



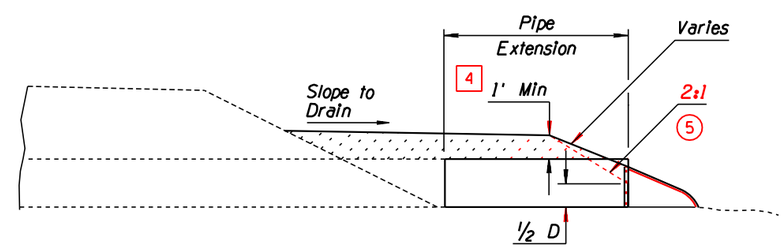
SKEWED PIPE PLAN



ELEVATION

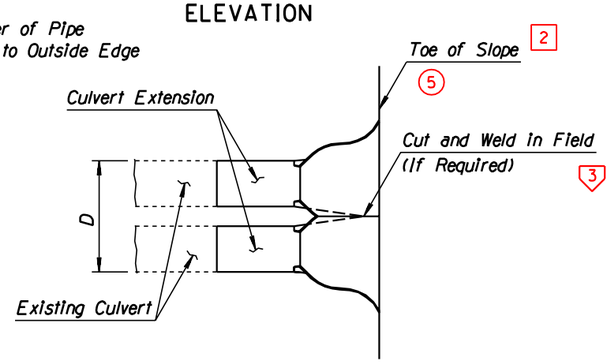


SECTION A-A (WITHOUT END SECTION)



SECTION A-A (WITH END SECTION) 3

NOTE:
Single Pipe Installation: D=Outside Diameter of Pipe
Multiple Pipe Installation: D=Outside Edge to Outside Edge of Pipes



SPECIAL END SECTION

DETAIL A

2 PIPE BERM PLACEMENT

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

DETAIL SHEET
DETAIL A

ROUTE I-10 | LOCATION GILA RIVER - CASA BLANCA

SHEET 1 OF 5

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-04.20

CCCCCDGNCSPECIFICATIONCCCCC VIEW NAME:
CCCCCSYSTIMECCCCC

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	30	23	17.5	4	8.75	LB	
2	39	23	17.5	4	8.75	LB	
3	37	23	17.5	4	8.75	LB	
4	62	1	20	6	11	CB	
5	25	23	17.5	4	8.75	CB	
6	21	23	17.5	4	8.75	CB	
7	39	1	17.5	4	8.75	CC	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 3				
5 6	No. 6 Ames/ 200 Leroy	2	Slant	
7	No. 6 Ames/ 200 Leroy	2	Straight	
4	No. 7 Ames/ 240 Leroy	3	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	16	1	3	
2	38	3	0	
3	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
4	35	3	0	
5	59	1	5	
6	~~2~~037	3	0	
7	-	-	-	ADOT Standard Line Terminator; Typical

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-03.10; P-03.25; P-05.20; P-05.30; P-07.25

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	See Std P-00.60 & P-00.61 for Dimension & Leader Line Layout
4	Show slope in feet per foot to 4 decimal places
5	See Std P-00.61 for Detail Format Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units

NO.	DESCRIPTION OF REVISION

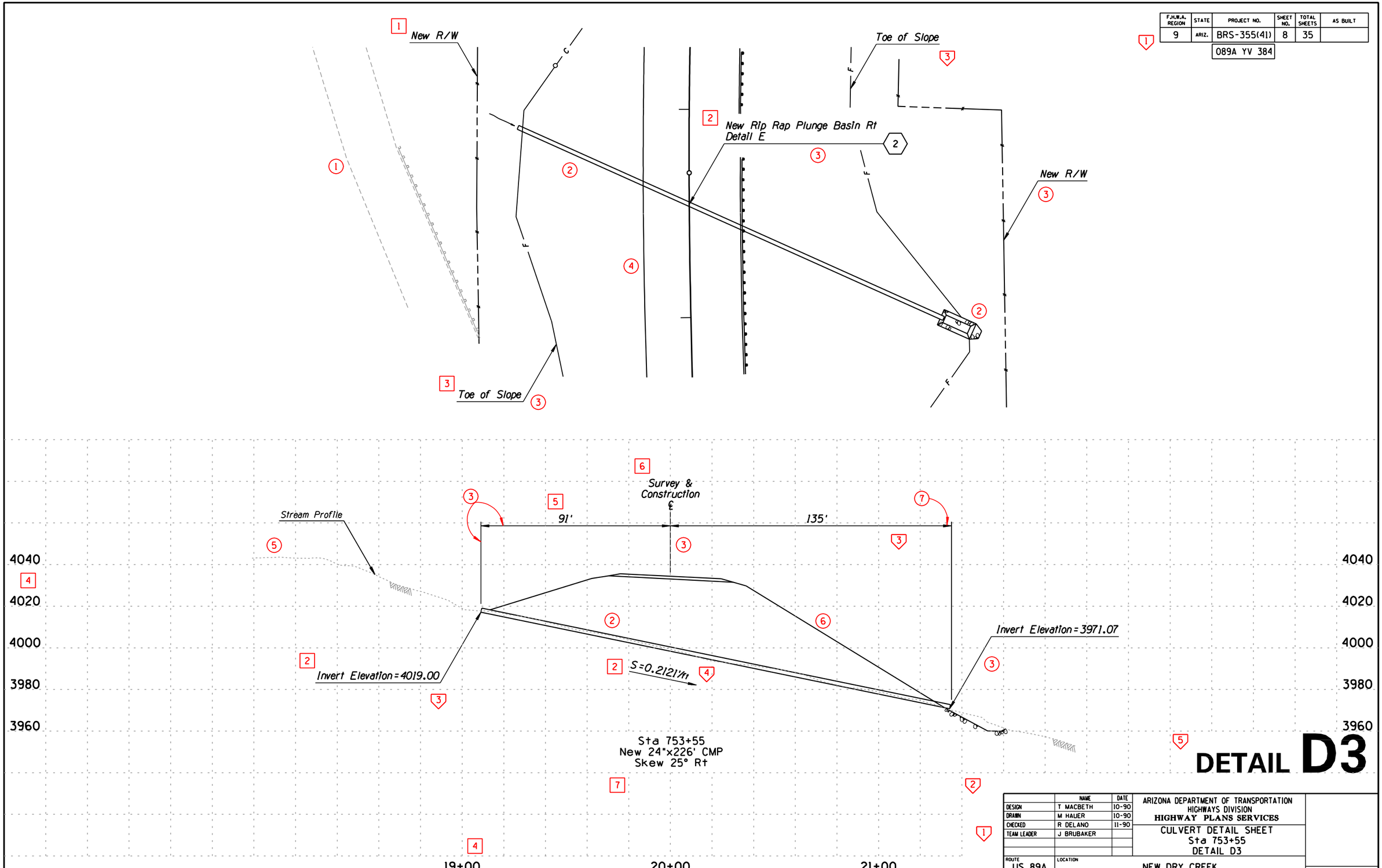
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE CULVERT DETAIL SHEET FOR NEW PIPE INSTALLATION

DRAWING NO. P-05.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	8	35	
		089A YV 384			



DETAIL D3

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

CULVERT DETAIL SHEET
Sta 753+55
DETAIL D3

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 3 OF 6

TRACS NO. H0000 01 C

___ OF ___

STD P-05.10

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\P0510.DGN
28 OCT 99

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	39	23	17.5	4	8.75	LB	
2	30	23	17.5	4	8.75	LB	
3	62	1	20	6	11	CB	
4	14	23	15	2	7.5	LB	
5	25	23	17.5	4	8.75	CB	
6	14	1	15	2	7.5	CB	
7	39	1	17.5	4	8.75	CB	
8	21	23	17.5	4	8.75	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 5 8	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 7 Ames/ 240 Leroy	3	Straight	
4	No. 5 Ames/ 175 Leroy	0	Slant	
6	No. 5 Ames/ 175 Leroy	0	Straight	
7	No. 6 Ames/ 200 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of Text placed for item
2	35	3	0	
3	22	1	5	
4	48	3	0	
5	16	1	3	
6	59	1	5	
7	-	-	-	ADOT Stanard Line Terminator; Typical
8	20	3	0	

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-03.10; P-03.25; P-05.10; P-05.30; P-07.25

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	See Std P-00.61 for Detail Format Layout
4	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout
5	Show Slope in feet per foot to 4 decimal places

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

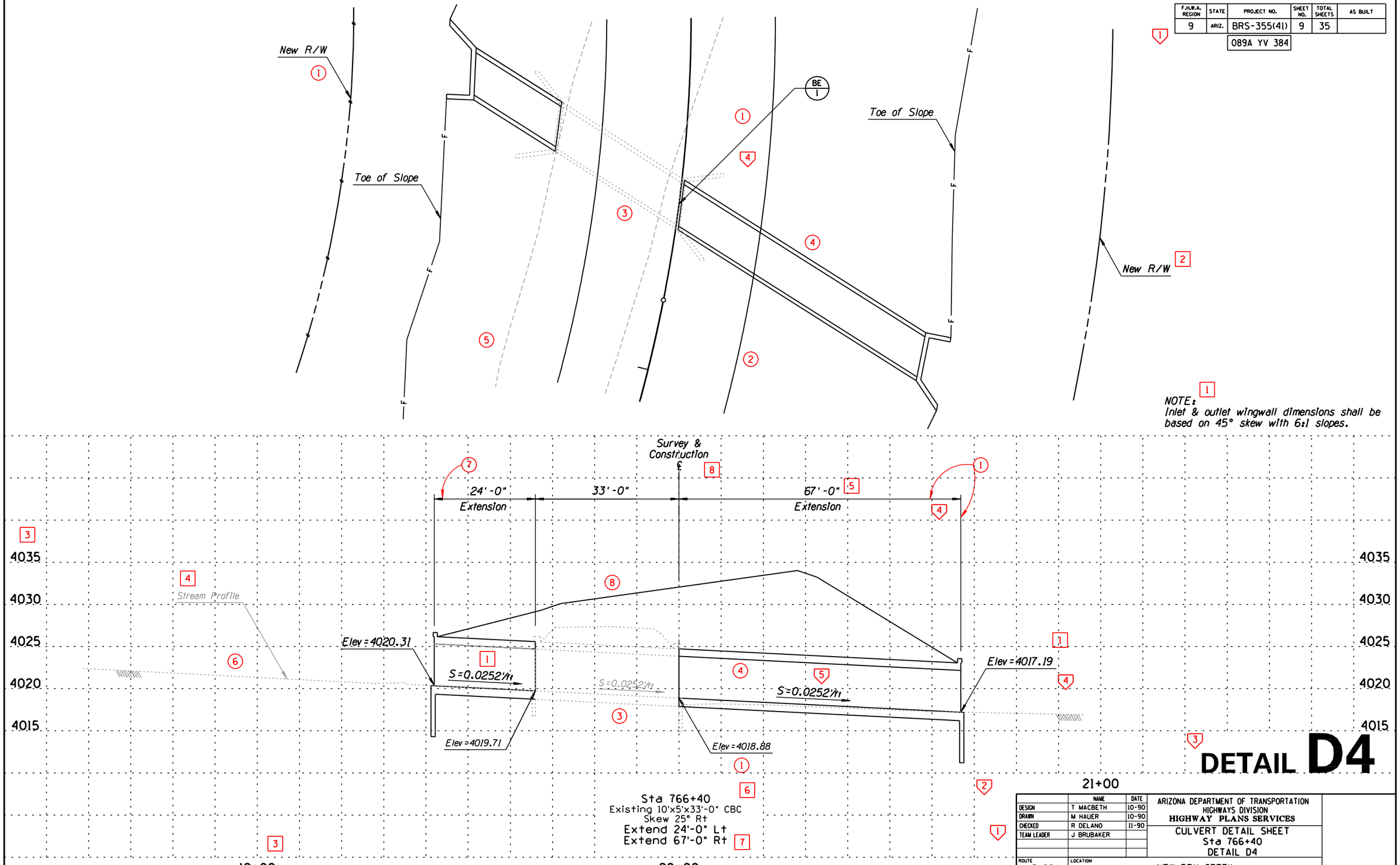
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

REV.

SAMPLE CULVERT DETAIL
SHEET FOR BOX EXTENSION

DRAWING NO. P-05.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	9	35	
		089A YV 384			



NOTE: 1
Inlet & outlet wingwall dimensions shall be based on 45° skew with 6:1 slopes.

DETAIL D4

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

CULVERT DETAIL SHEET
Sta 766+40
DETAIL D4

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 4 OF 6

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-05.20

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	39	23	17.5	4	8.75	LB	
2	30	23	17.5	4	8.75	LB	
3	39	1	15	2	7.5	CB	
4	62	1	20	6	11	CC	
5	14	23	15	2	7.5	LB	
6	21	23	17.5	4	8.75	CB	
7	25	23	15	2	7.5	CB	
8	39	1	17.5	4	8.75	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 6	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 5 Ames/ 175 Leroy	0	Straight	
4	No. 7 Ames/ 240 Leroy	3	Slant	
5 7	No. 5 Ames/ 175 Leroy	0	Slant	
8	No. 6 Ames/ 200 Leroy	2	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	35	3	0	
2	◑	1	0	◑ LV/CO shall be the same LV/CO as Text placed for item
3	38	3	0	
4	-	-	-	ADOT Standard arrow head; Typical
5	16	1	3	
6	13	1	5	
7	25	1	0	
8	59	1	5	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	See Std P-00.61 for Detail Sheet Format
4	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-03.10; P-03.25; P-05.10; P-05.20; P-07.25

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

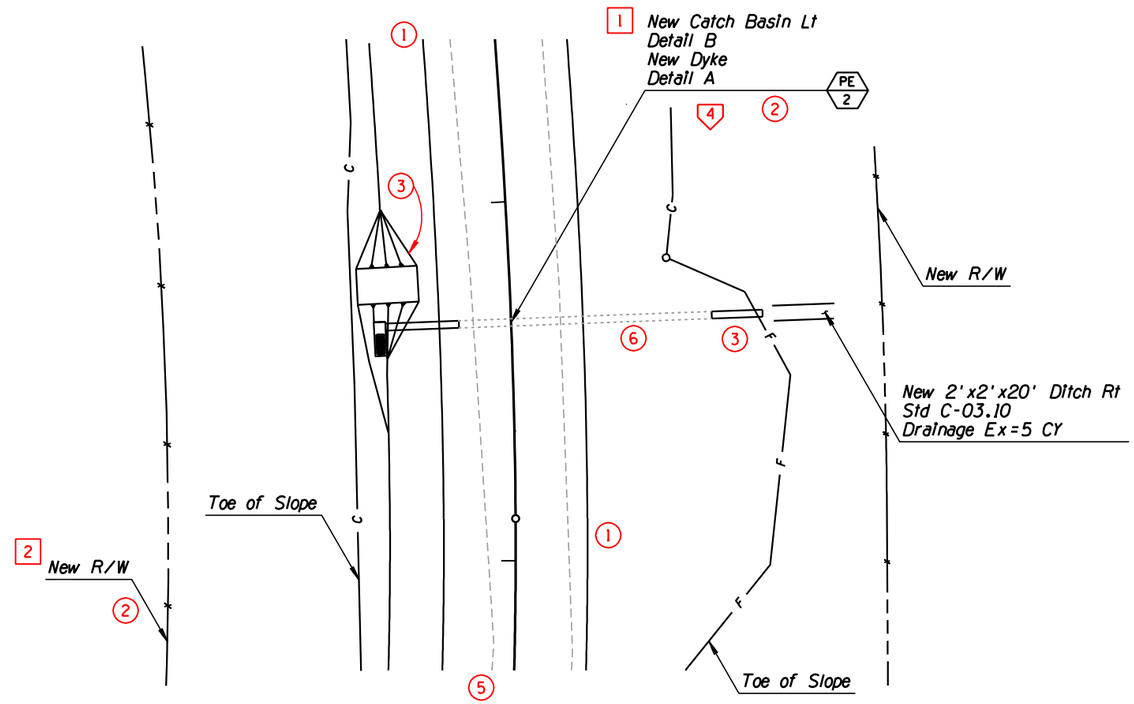
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

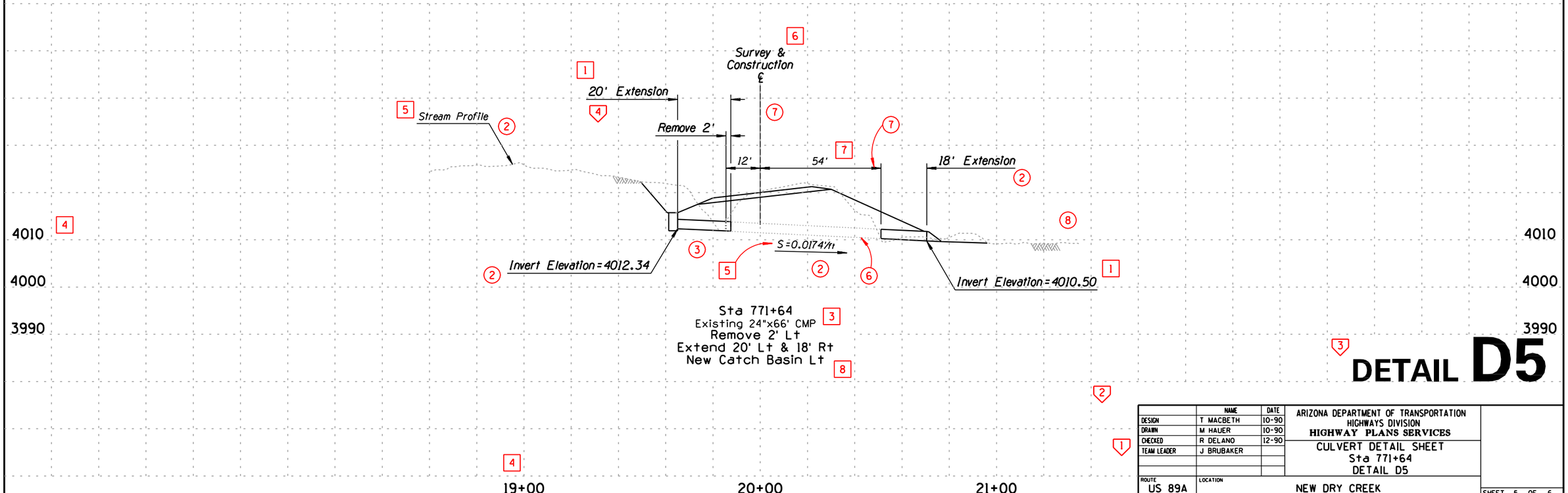
SAMPLE CULVERT DETAIL SHEET FOR PIPE EXTENSION

DRAWING NO. P-05.30

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	10	35	

089A YV 384





DETAIL D5

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

CULVERT DETAIL SHEET
Sta 771+64
DETAIL D5

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 5 OF 6

TRACS NO. H0000 01 C

___ OF ___

STD P-05.30

DATE | LOCATION | REVISIONS | FINISHED PLANS | SURVEY NO.

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28 OCT 99

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	28	1	22	6	11	LB	
2	28	23	17.5	4	8.75	LB	
3	28	1	22	6	-	LC	
4	25	23	17.5	4	8.75	LB	
5	28	1	22	6	11	CC	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 3 5	No. 7 Ames/ 240 Leroy	3	Straight	
2 4	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	28	4	0	
2	28	4	0	ADOT Standard Line Terminator; modify scale 4 times larger
3	27	6	0	
4	◑	1	0	◑ LV/CO shall match LV/CO of Text placed for item
5	28	1	0	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Locate Top Point of PI Toward CC of Curve
3	Horizontal Control Point Callouts are Shown Perpendicular to
	Roadway ℄; Some Adjustment to Leader Line May be Necessary
4	Show Super Elevation in Feet per Foot to 3 Decimal Places

NOTE : For project related sheets, see standards:
P-02.10; P-02.15

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
⌂ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

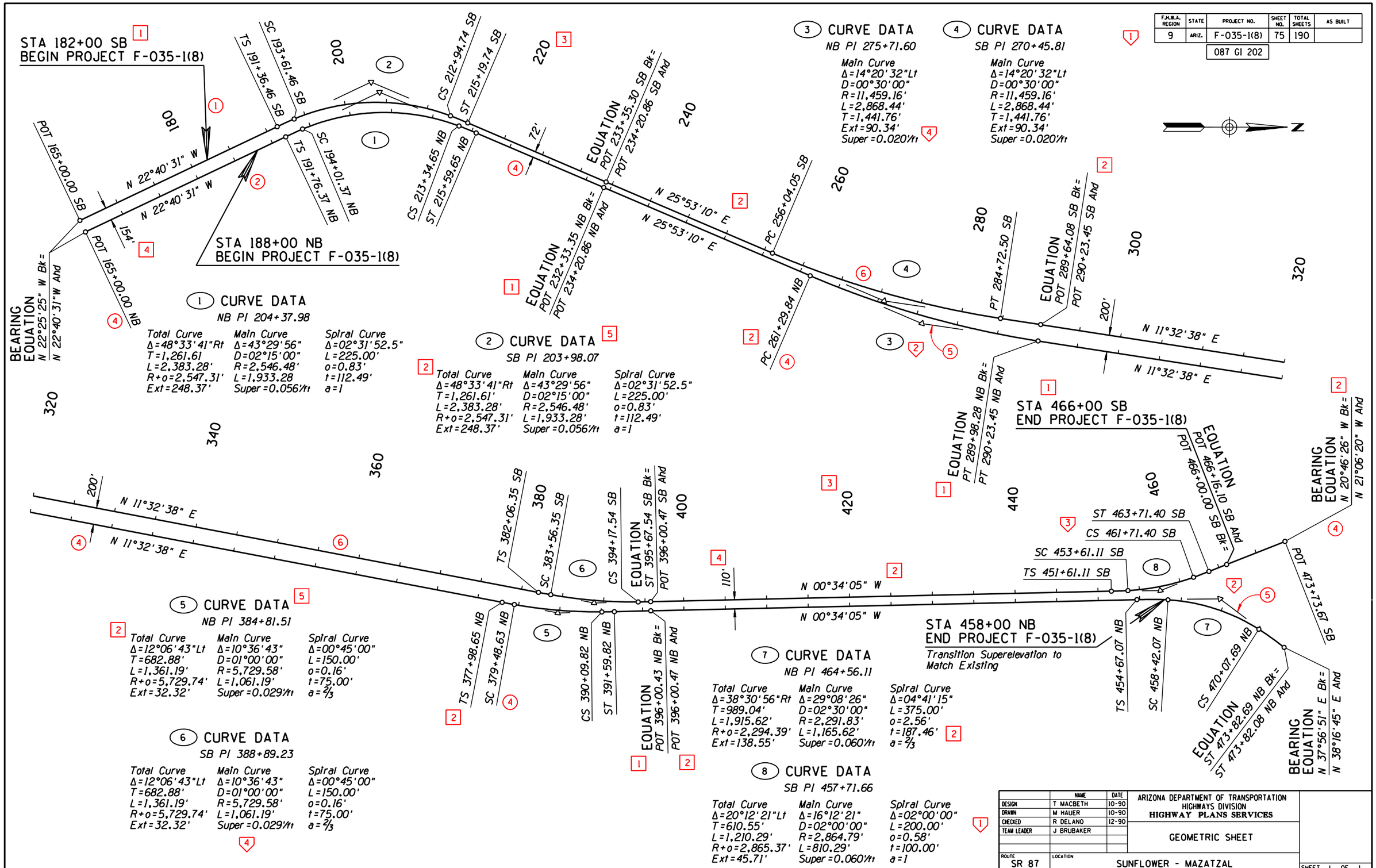
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE GEOMETRIC SHEET
FOR RURAL ROADWAY

DRAWING NO.
P-06.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	F-035-1(8)	75	190	
		087 GI 202			



1 CURVE DATA
NB PI 204+37.98

Total Curve	Main Curve	Spiral Curve
Δ=48°33'41"Rt	Δ=43°29'56"	Δ=02°31'52.5"
T=1,261.61	D=02°15'00"	L=225.00'
L=2,383.28'	R=2,546.48'	o=0.83'
R+o=2,547.31'	L=1,933.28	t=112.49'
Ext=248.37'	Super=0.056'/ft	a=1

2 CURVE DATA
SB PI 203+98.07

Total Curve	Main Curve	Spiral Curve
Δ=48°33'41"Rt	Δ=43°29'56"	Δ=02°31'52.5"
T=1,261.61'	D=02°15'00"	L=225.00'
L=2,383.28'	R=2,546.48'	o=0.83'
R+o=2,547.31'	L=1,933.28'	t=112.49'
Ext=248.37'	Super=0.056'/ft	a=1

3 CURVE DATA
NB PI 275+71.60

Main Curve
Δ=14°20'32"Lt
D=00°30'00"
R=11,459.16'
L=2,868.44'
T=1,441.76'
Ext=90.34'
Super=0.020'/ft

4 CURVE DATA
SB PI 270+45.81

Main Curve
Δ=14°20'32"Lt
D=00°30'00"
R=11,459.16'
L=2,868.44'
T=1,441.76'
Ext=90.34'
Super=0.020'/ft

5 CURVE DATA
NB PI 384+81.51

Total Curve	Main Curve	Spiral Curve
Δ=12°06'43"Lt	Δ=10°36'43"	Δ=00°45'00"
T=682.88'	D=01°00'00"	L=150.00'
L=1,361.19'	R=5,729.58'	o=0.16'
R+o=5,729.74'	L=1,061.19'	t=75.00'
Ext=32.32'	Super=0.029'/ft	a=⅔

6 CURVE DATA
SB PI 388+89.23

Total Curve	Main Curve	Spiral Curve
Δ=12°06'43"Lt	Δ=10°36'43"	Δ=00°45'00"
T=682.88'	D=01°00'00"	L=150.00'
L=1,361.19'	R=5,729.58'	o=0.16'
R+o=5,729.74'	L=1,061.19'	t=75.00'
Ext=32.32'	Super=0.029'/ft	a=⅔

7 CURVE DATA
NB PI 464+56.11

Total Curve	Main Curve	Spiral Curve
Δ=38°30'56"Rt	Δ=29°08'26"	Δ=04°41'15"
T=989.04'	D=02°30'00"	L=375.00'
L=1,915.62'	R=2,291.83'	o=2.56'
R+o=2,294.39'	L=1,165.62'	t=187.46'
Ext=138.55'	Super=0.060'/ft	a=⅔

8 CURVE DATA
SB PI 457+71.66

Total Curve	Main Curve	Spiral Curve
Δ=20°12'21"Lt	Δ=16°12'21"	Δ=02°00'00"
T=610.55'	D=02°00'00"	L=200.00'
L=1,210.29'	R=2,864.79'	o=0.58'
R+o=2,865.37'	L=810.29'	t=100.00'
Ext=45.71'	Super=0.060'/ft	a=1

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

GEOMETRIC SHEET

ROUTE: SR 87
LOCATION: SUNFLOWER - MAZATZAL

SHEET 1 OF 1

TRACS NO. H000 01 C

___ OF ___

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

STD P-06.10

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	20	1	22	2	-	LC	
2	27	1	22	6	-	LC	
3	28	1	22	6	-	LB	
4	25	23	15	2	7.5	CB	
5	29	23	15	2	7.5	LB	
6	21	23	15	2	7.5	LB	
7	30	23	17.5	4	8.75	LB	
8	28	23	17.5	4	8.75	LB	
9	25	23	17.5	4	8.75	LB	TJ may be adjusted to fit condition
10	14	23	15	2	7.5	LB	
11	39	23	17.5	4	8.75	LT	
12	24	23	15	2	7.5	LB	
13	43	23	17.5	4	8.75	LT	
14	36	23	17.5	4	8.75	LB	
15	39	23	15	2	7.5	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 7 Ames/ 240 Leroy	0	Straight	
2 3	No. 7 Ames/ 240 Leroy	3	Straight	
4	No. 6 Ames/ 200 Leroy	0	Straight	
5 6 10 12				
12 15 16	No. 5 Ames/ 175 Leroy	0	Slant	
7 8 9 11				
13 14	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	28	4	0	
2	◑	1	0	◑ LV/CO shall be the same LV/CO as Text placed for item
3	28	4	0	ADOT Standard Line Terminator; modify scale 4 times larger
4	-	-	-	ADOT Standard Line Terminator, typical

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.60, and P-00.61 for Leader Line and Dimension Layout
3	See Std P-00.30 for Graphic Representation of Pipe

NOTE : For project related sheets, see standards:
P-02.20; P-03.20; P-03.30; P-08.20

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

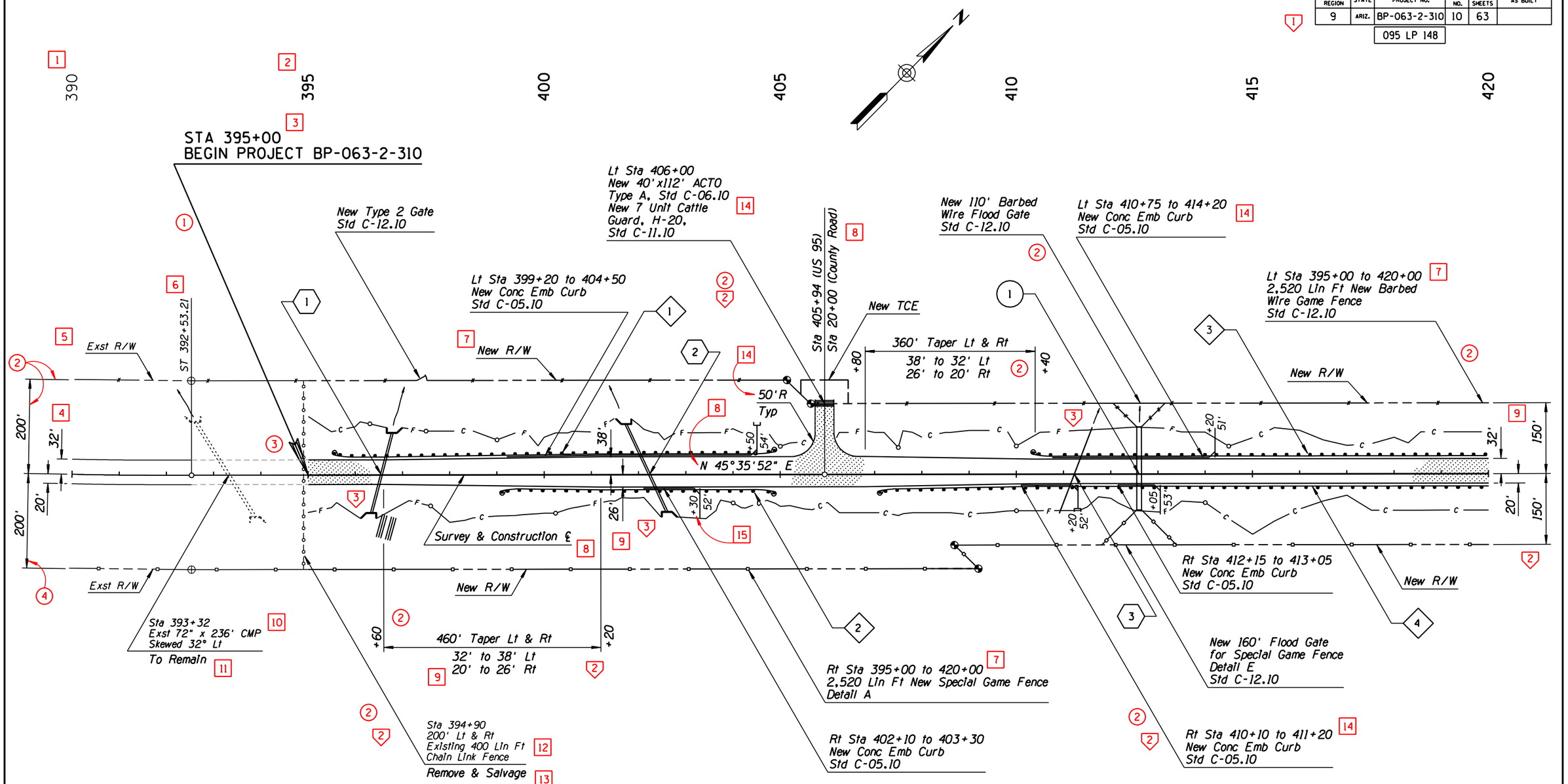
▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet, (scale - 1"=100') using ADOT's Standard Working Units.

APPROVED FOR DISTRIBUTION	STATE OF ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STANDARD DRAWINGS	REV.
	SAMPLE PLAN SHEET FOR RURAL UNDIVIDED ROADWAY	DRAWING NO. P-07.20

NO. | DESCRIPTION OF REVISION

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BP-063-2-310	10	63	
		095 LP 148			



SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE
8721L				

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

PLAN SHEET
Sta 390+00 to 420+00

ROUTE US 95 | LOCATION OSBORN WASH - NORTH (UNIT II)

SHEET 2 OF 15

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28 OCT 99

TRACS NO. H0000 01 C

___ OF ___

STD P-07.20

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	13	23	15	2	7.5	LB	
2	39	23	17.5	4	8.75	LB	
3	27	1	22	6	11	LC	
4	19	23	15	2	7.5	LB	
5	28	1	22	6	11	CB	
6	28	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
7	25	23	17.5	4	8.75	CB	
8	30	23	17.5	4	8.75	LB	
9	36	23	17.5	4	8.75	LB	
10	51	23	17.5	4	8.75	LB	
11	62	23	15	2	7.5	LB	
12	62	1	20	6	-	CB	Use Text Nodes supplied with cell
13	62	23	15	2	7.5	LB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the same LV/CO as Text placed for item
2	35	3	0	
3	16	1	3	
4	48	1	0	
5	59	1	0	
6	27	6	0	
7	38	3	0	

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-03.10; P-03.25; P-05.10; P-05.20; P-05.30

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 4 11 13	No. 5 Ames/ 175 Leroy	0	Slant	
2 6 7 8				
9 10	No. 6 Ames/ 200 Leroy	2	Slant	
3 5 12	No. 7 Ames/ 240 Leroy	3	Straight	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

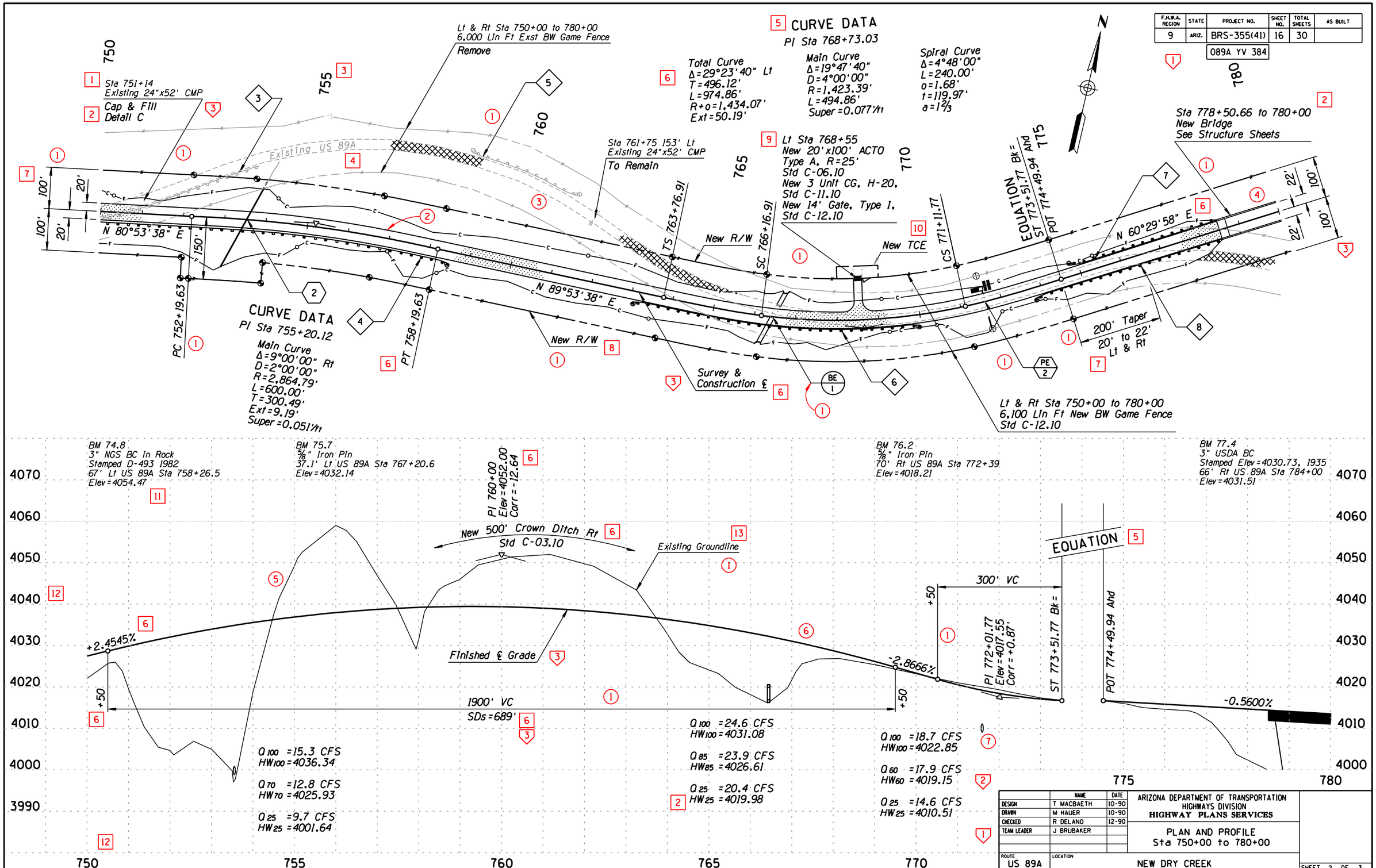
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

EXAMPLE PLAN & PROFILE SHEET FOR RURAL UNDIVIDED ROADWAY

DRAWING NO. P-07.25

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BRS-355(41)	16	30	
		089A YV 384			



	NAME	DATE
DESIGN	T MACBAETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

PLAN AND PROFILE
Sta 750+00 to 780+00

ROUTE: US 89A
LOCATION: NEW DRY CREEK

SHEET 2 OF 3

STD P-07.25

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\P07725.DGN
28 OCT 99

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	27	1	17.5	4	8.75	LC	
2	28	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
3	25	23	17.5	4	8.75	CB	
4	45	23	17.5	4	8.75	LB	TJ is LB unless otherwise shown
5	30	23	17.5	4	8.75	LB	
6	36	23	17.5	4	8.75	LB	
7	10	23	17.5	4	8.75	CB	
8	29	23	15	2	7.5	LB	
9	10	23	15	2	7.5	LB	
10	10	23	17.5	4	8.75	LB	
11	3	23	15	2	7.5	LB	
12	20	23	15	2	7.5	LB	
13	54	1	17.5	4	8.75	CB	
14	55	23	17.5	4	8.75	LB	
15	12	23	15	2	7.5	LB	
16	12	23	17.5	4	8.75	LB	
17	45	23	15	2	7.5	LB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall be the same LV/CO as Text placed for item
2	-	-	-	ADOT Standard Line Terminator, typical

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-02.30; P-02.31; P-08.30; P-12.20; P-13.20

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 13	No. 7 Ames/ 240 Leroy	3	Straight	
2 3 4 5				
10 14 16	No. 6 Ames/ 200 Leroy	2	Slant	
6 8 9 11				
12 15 17	No. 5 Ames/ 175 Leroy	0	Slant	
7	No. 4 Ames/ 120 Leroy	00	Slant	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

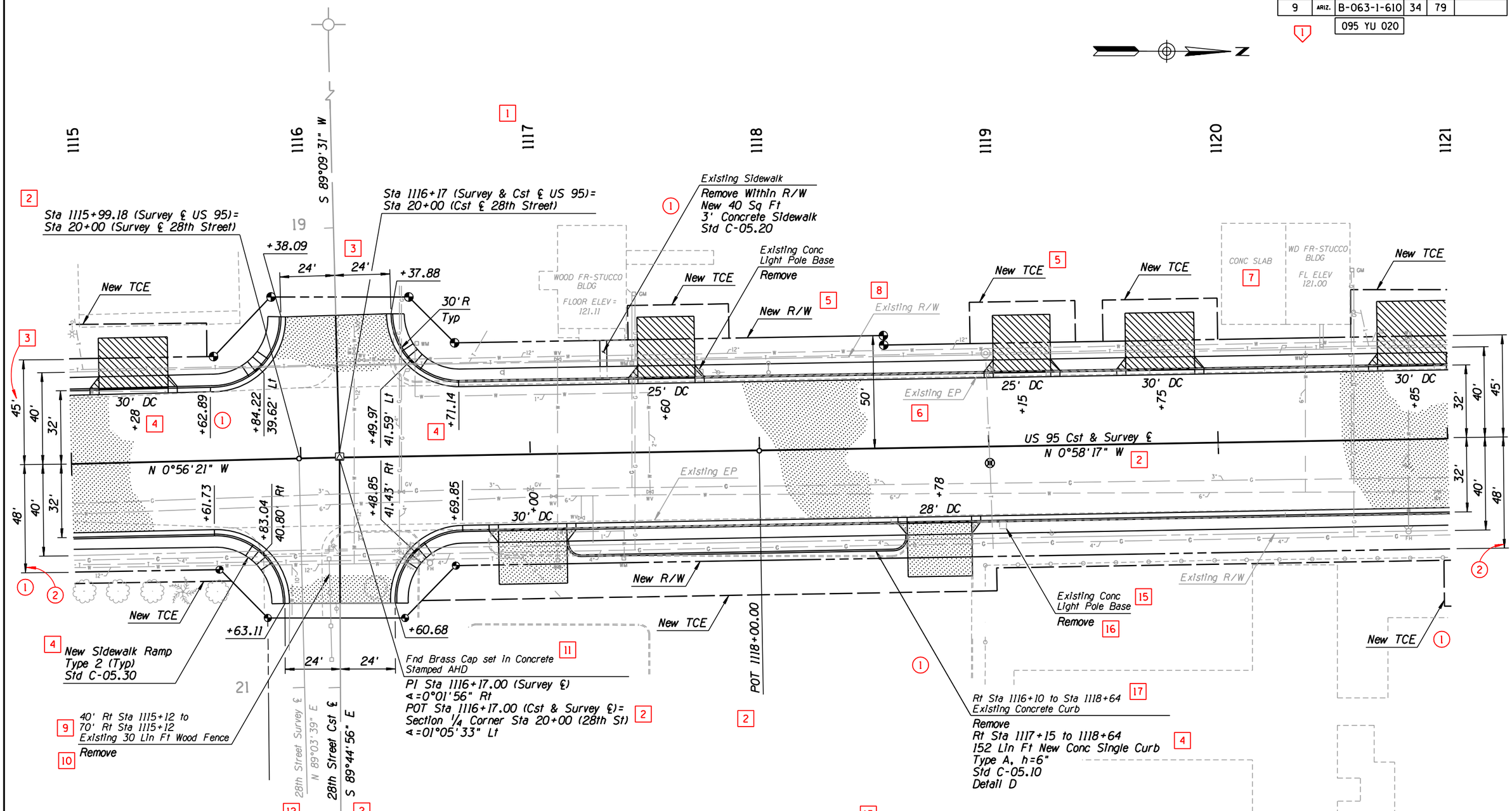
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE PLAN SHEET FOR
URBANIZED AREA ROADWAY

DRAWING NO.
P-07.30

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	34	79	
		095 YU 020			



LIST OF QUANTITIES

3,888 Sq Ft New 4" Concrete Sidewalk, Std C-05.20
3,775 Sq Ft New 6" Concrete Driveway, Std C-05.20
162 Sq Yd New AC Driveway, Std C-05.20
1,078 Lin Ft New Type A Curb & Gutter, h=7", Std C-05.10
152 Lin Ft New Type A Single Curb, h=7", Std C-05.10
340 Sq Ft New Concrete Sidewalk Ramp, Type 2, Std C-05.30

	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HALER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

PLAN SHEET
Sta 1115+00 to 1121+00

ROUTE: US 95
LOCATION: 32nd ST - 26th ST (YUMA)

SHEET 6 OF 7

TRACS NO. H0000 01 C

___ OF ___

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\STD0730.DGN
28 OCT 99

STD P-07.30

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	62	23	15	2	7.5	LB	
2	62	1	20	2	-	CC	Use Text Node supplied with cell and change weight
3	62	1	20	6	-	CC	Use Text Nodes supplied with cell
4	39	23	17.5	4	8.75	LB	
5	28	23	17.5	4	8.75	CB	TJ=CT if text string is placed under text line
6	28	1	22	6	11	LB	TJ=LT if text string is placed under text line
7	28	23	17.5	4	8.75	LB	
8	21	23	15	2	7.5	CB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 8	No. 5 Ames/ 175 Leroy	0	Slant	
3 6	No. 7 Ames/ 240 Leroy	3	Straight	
4 5	No. 6 Ames/ 200 Leroy	2	Slant	
7	No. 6 Ames/ 200 Leroy	2	Straight	
2	No. 7 Ames/ 240 Leroy	0	Straight	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	20	1	3	
2	28	4	0	ADOT Standard Line Terminator; modify scale 4 times larger
3	59	1	0	
4	◑	1	0	◑ LV/CO shall be the same LV/CO as text placed for the item
5	-	-	-	ADOT Standard Line Terminator, typical
6	38	3	0	
7	13	1	5	
8	27	6	0	
9	28	4	0	
10	48	3	0	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	Double arrows are shown for continuation on the adjacent sheet
4	Identify plus station for other than +00

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards: P-02.20; P-03.20; P-03.30; P-07.20

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

APPROVED FOR DISTRIBUTION

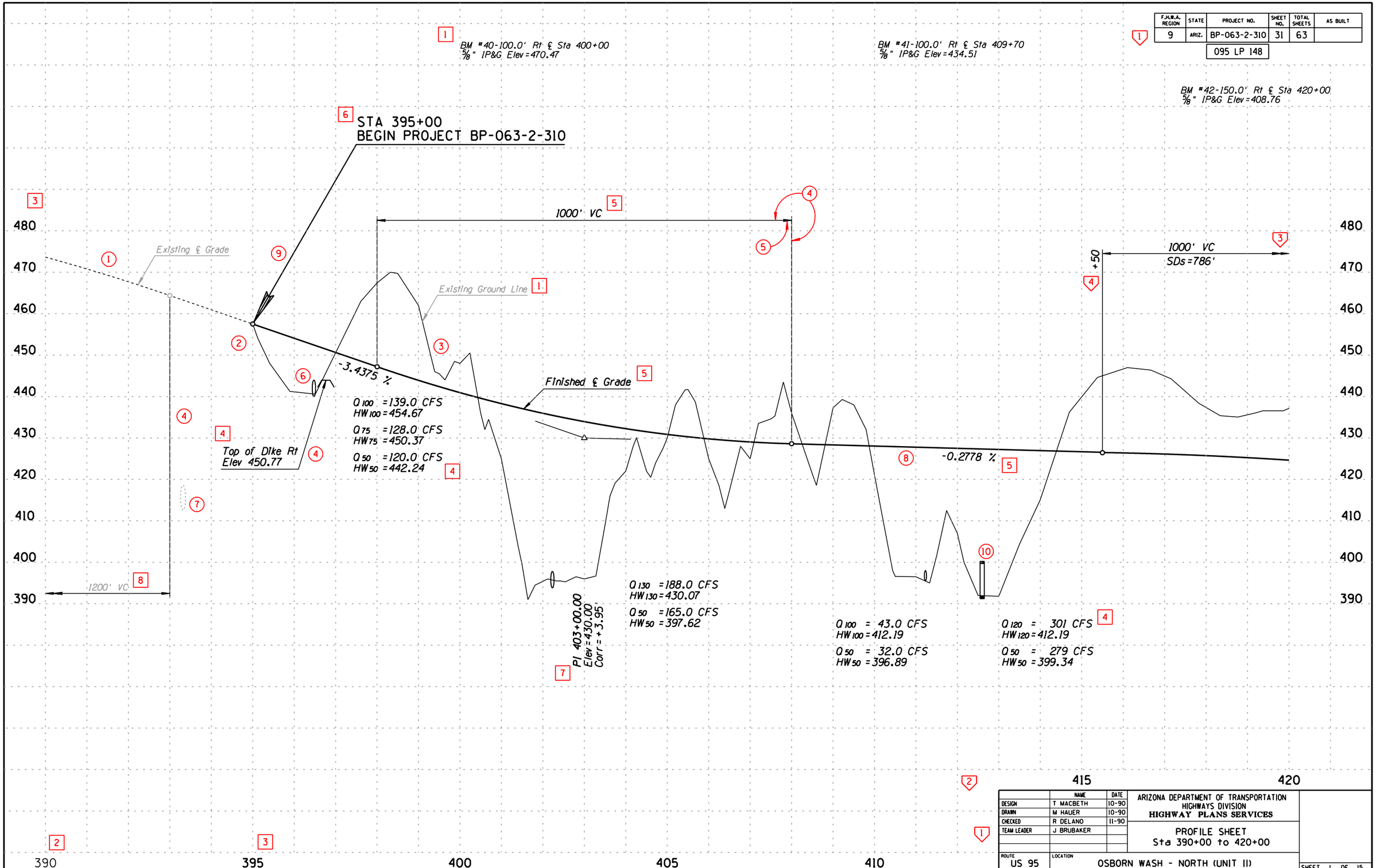
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

PROFILE SHEET FOR
RURAL UNDIVIDED ROADWAY

DRAWING NO.
P-08.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	BP-063-2-310	31	63	

095 LP 148



	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

PROFILE SHEET
Sta 390+00 to 420+00

ROUTE: US 95
LOCATION: OSBORN WASH - NORTH (UNIT II)

SHEET 1 OF 15

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-08.20

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\P08020.DGN
28 OCT 99

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	62	1	20	6	11	CB	
2	28	23	17.5	4	8.75	LB	
3	62	23	15	2	7.5	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 7 Ames/ 240 Leroy	3	Straight	
2	No. 6 Ames/ 200 Leroy	2	Slant	
3	No. 5 Ames/ 175 Leroy	0	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1		◑ LV/CO shall match the LV/CO of text placed for item
2	-	-	-	ADOT Standard Line Terminator; Typical
3	27	6	0	
4	59	1	3	
5	59	1	0	

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-02.30; P-02.31; P-07.30; P-12.20; P-13.20

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Double arrows are shown to signify continuation on the adjacent sheet
3	See Std P-00.70 for Profile Sheet Overlay
4	See Stds P-00.60 & P-00.61 for Dimension & Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

- Text Reference Callout
- Graphic Reference Callout
- User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION

NO.

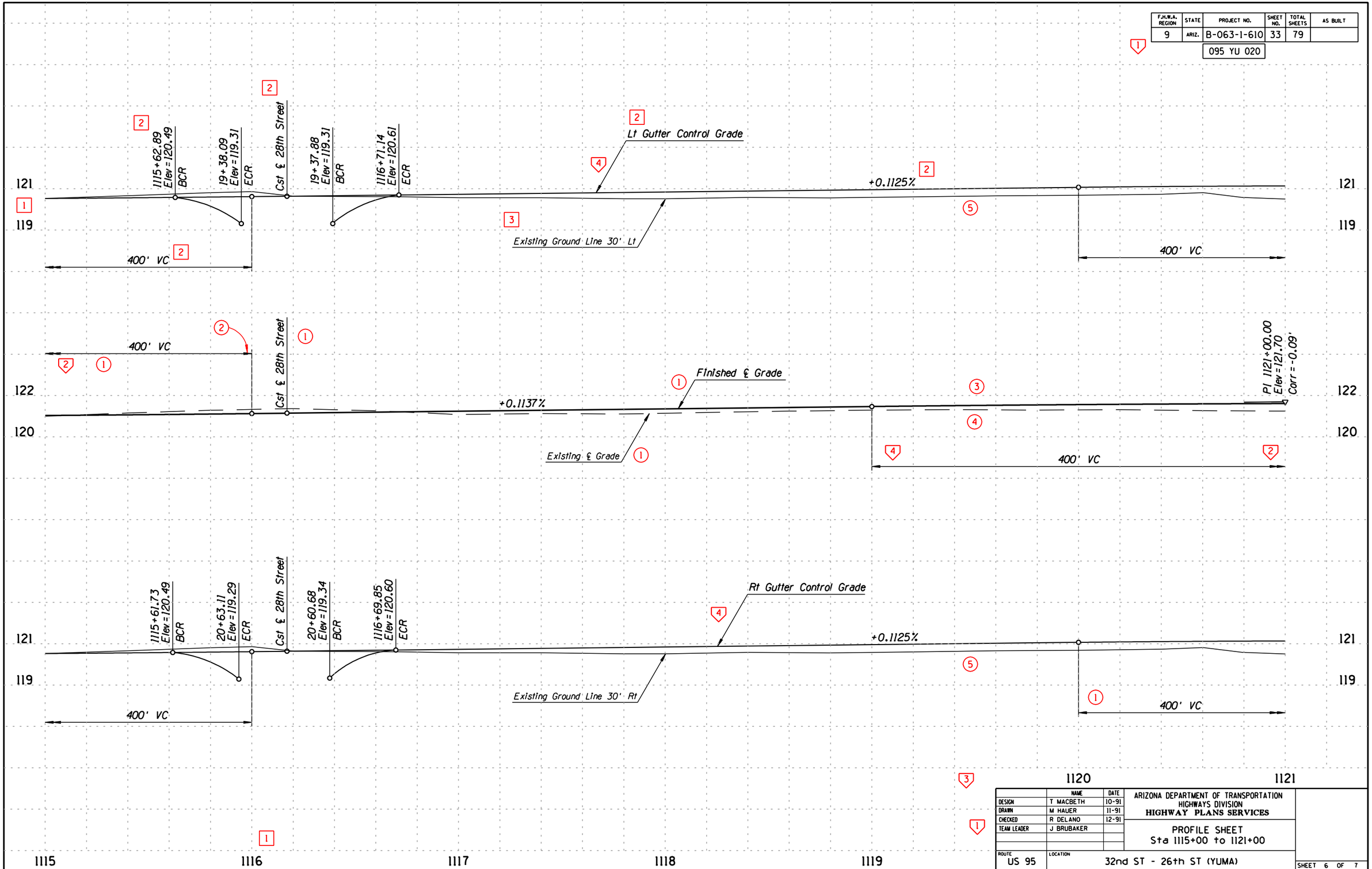
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE ROADWAY PROFILE SHEET
FOR URBANIZED AREA

DRAWING NO.
P-08.30

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	33	79	
		095 YU 020			



	NAME	DATE
DESIGN	T MACBETH	10-91
DRAWN	M HAUER	11-91
CHECKED	R DELANO	12-91
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

PROFILE SHEET
Sta 1115+00 to 1121+00

ROUTE: US 95
LOCATION: 32nd ST - 26th ST (YUMA)

SHEET 6 OF 7

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\P08030.DGN
29 OCT 99

TRACS NO. H0000 01 C

___ OF ___

STD P-08.30

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	28	23	17.5	4	8.75	LB	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	27	3	0	New Centerlines shall be a weight of 3 when shown on Storm Drain plan sheet only

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-13.10

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 6 Ames/ 200 Leroy	2	Slant	

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Represents Slotted Drain; One symbol for all sizes

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

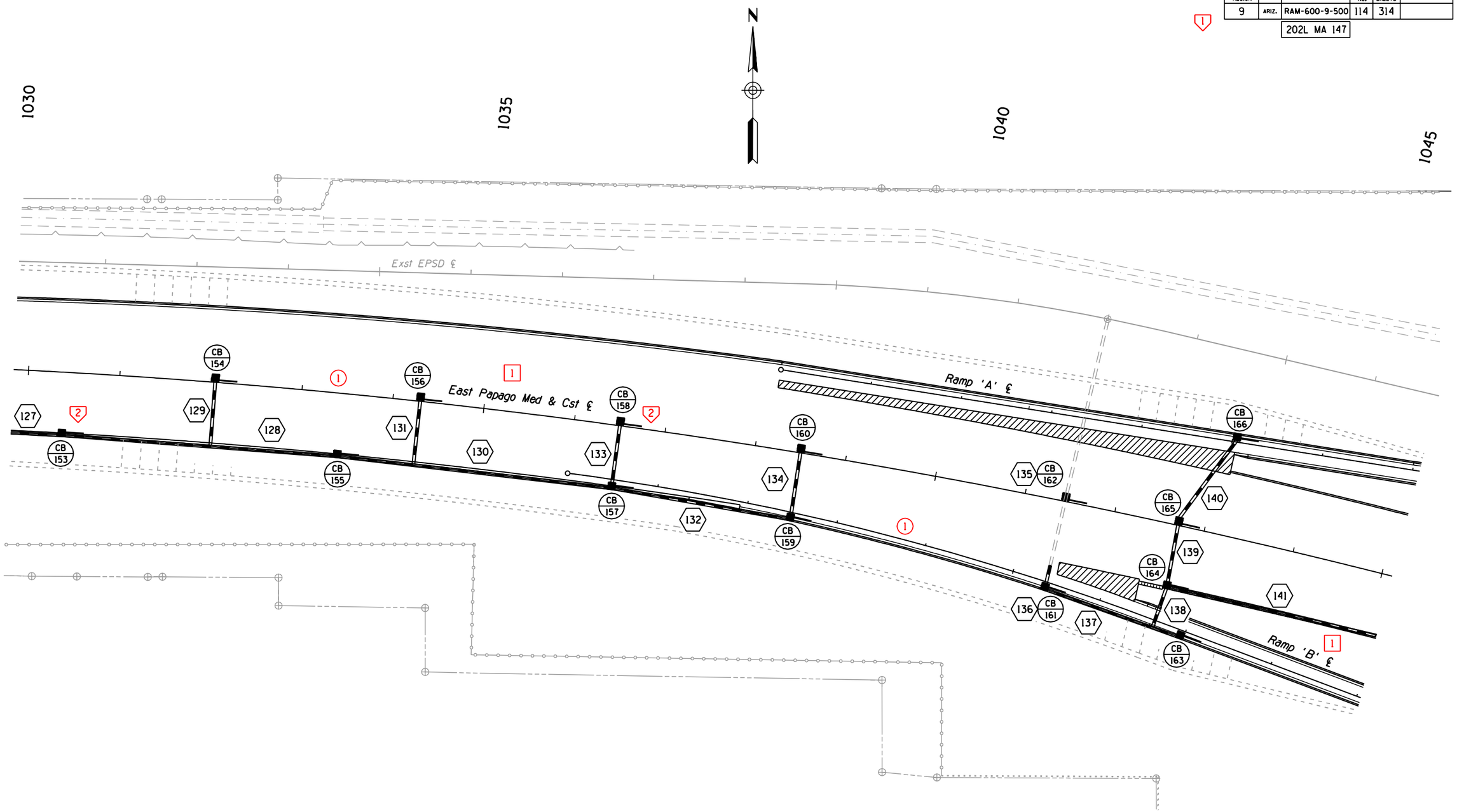
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE STORM DRAIN PLAN FOR URBAN FREEWAY MAINLINE

DRAWING NO. P-12.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RAM-600-9-500	114	314	

202L MA 147



	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

EAST PAPAGO MAINLINE
STORM DRAIN PLAN
Sta 1030+00 to 1045+00

ROUTE 202L

LOCATION JCT I-10 - 40th STREET

SHEET 3 OF 11

TRACS NO.

___ OF ___

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

S:\STANDARDS\HP_DEV\ENGLISH\P_STANDARDS\1210.DGN
29 OCT 99

STD P-12.10

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	28	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	38	3	0	
2	27	3	0	New Centerline shall be a weight of 3 when shown on Storm Drain plan sheet only

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-13.15

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

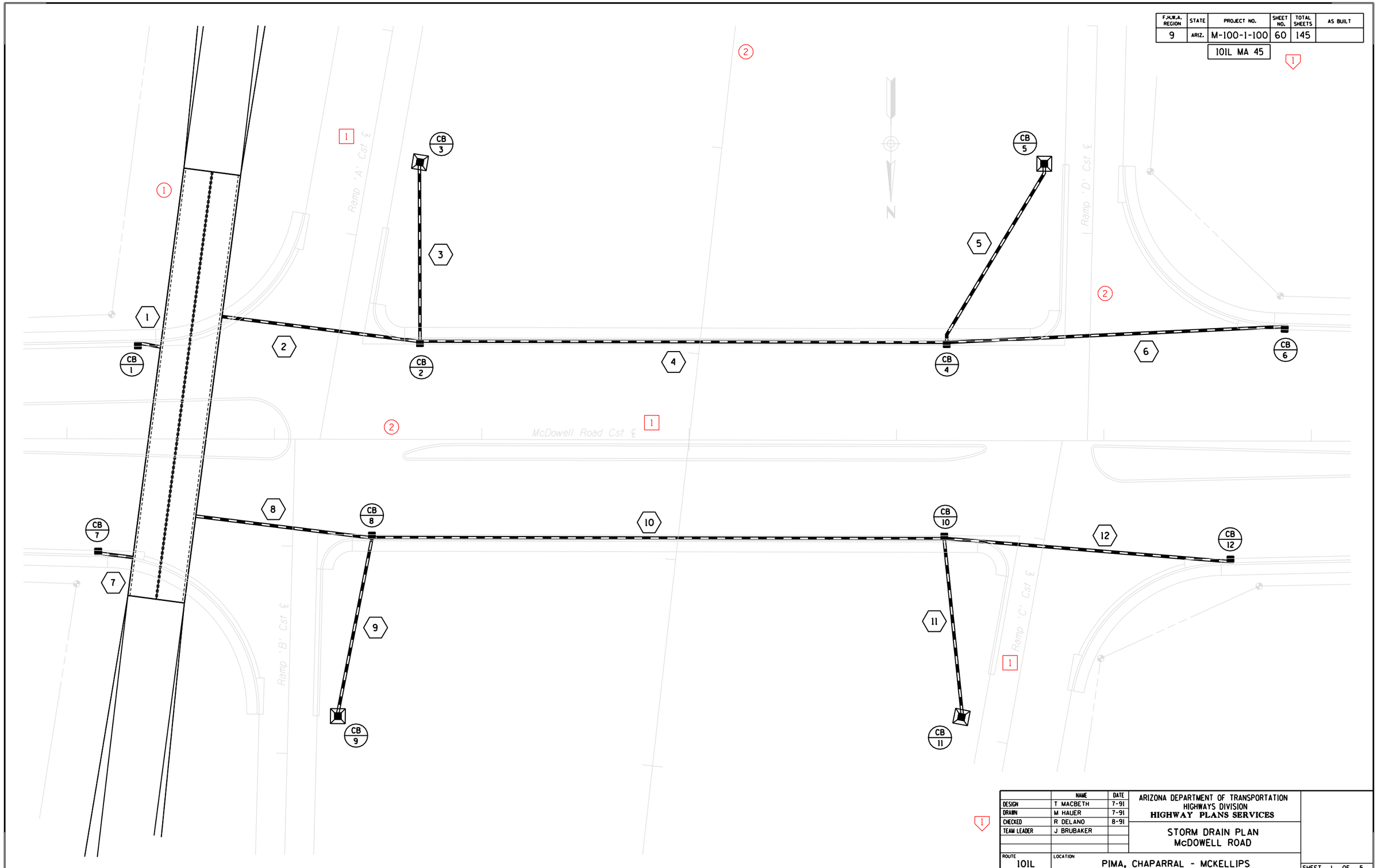
REV.

SAMPLE STORM DRAIN PLAN SHEET
FOR URBAN FREEWAY CROSSROAD

DRAWING NO. P-12.15

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	M-100-1-100	60	145	

101L MA 45



	NAME	DATE
DESIGN	T MACBETH	7-91
DRAWN	M HAUER	7-91
CHECKED	R DELANO	8-91
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

STORM DRAIN PLAN
McDOWELL ROAD

ROUTE 101L

LOCATION PIMA, CHAPARRAL - MCKELLIPS

SHEET 1 OF 5

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC

VIEW NAME:

TRACS NO. H2409 01 C

___ OF ___

STD P-12.15

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	39	23	17.5	4	8.75	LB	
2	25	23	17.5	4	8.75	LB	
3	28	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1 2 3	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall be the same LV/CO as Text placed for item
2	-	-	-	ADOT Standard Line Terminator, typical
3	38	3	0	
4	27	3	0	New Centerline shall be a weight of 3 when shown on Strom Drain plan sheet only

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-02.30; P-02.31; P-07.30; P-08.30; P-13.20

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Enlarge Manhole Symbol 2 Times Larger for 20 Scale
3	See Std P-00.61 for Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

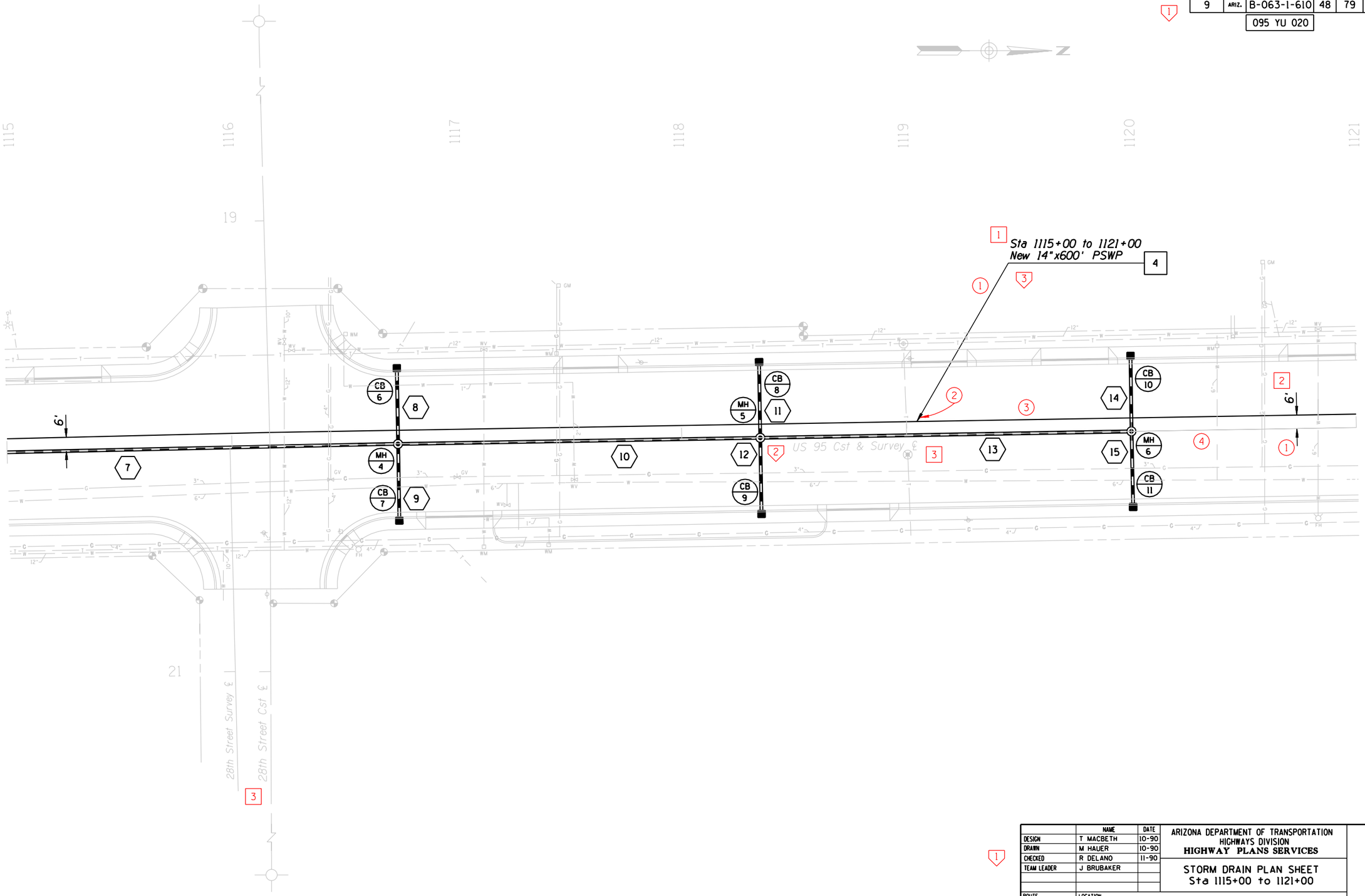
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE STORM DRAIN PLAN SHEET FOR URBANIZED AREA ROADWAY

DRAWING NO. P-12.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	48	79	
		095 YU 020			



	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	11-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

STORM DRAIN PLAN SHEET
Sta 1115+00 to 1121+00

ROUTE: US 95
LOCATION: 32nd ST - 26th ST (YUMA)

SHEET 10 OF 11

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

STD P-12.20

CCCCCDGNCSPECIFICATIONCCCCC
CCCCCSYSTIMECCCCC
VIEW NAME:

TRACS NO. H0000 01 C

___ OF ___

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	39	23	17.5	4	8.75	LB	
2	62	1	22	6	11	CB	
3	14	23	15	2	7.5	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 6 Ames/ 200 Leroy	2	Slant	
2	No. 7 Ames/ 240 Leroy	3	Straight	
3	No. 5 Ames/ 175 Leroy	0	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of the Text placed for item
2	38	3	0	
3	13	1	5	

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-12.10

NOTE: Do not use arrow heads to callout elevations

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	See Std P-00.70 for Profile Sheet Overlay
3	Show Slope in feet per foot to 4 decimal places
4	Show elevations to 2 decimal places
5	See Std P-00.61 for Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

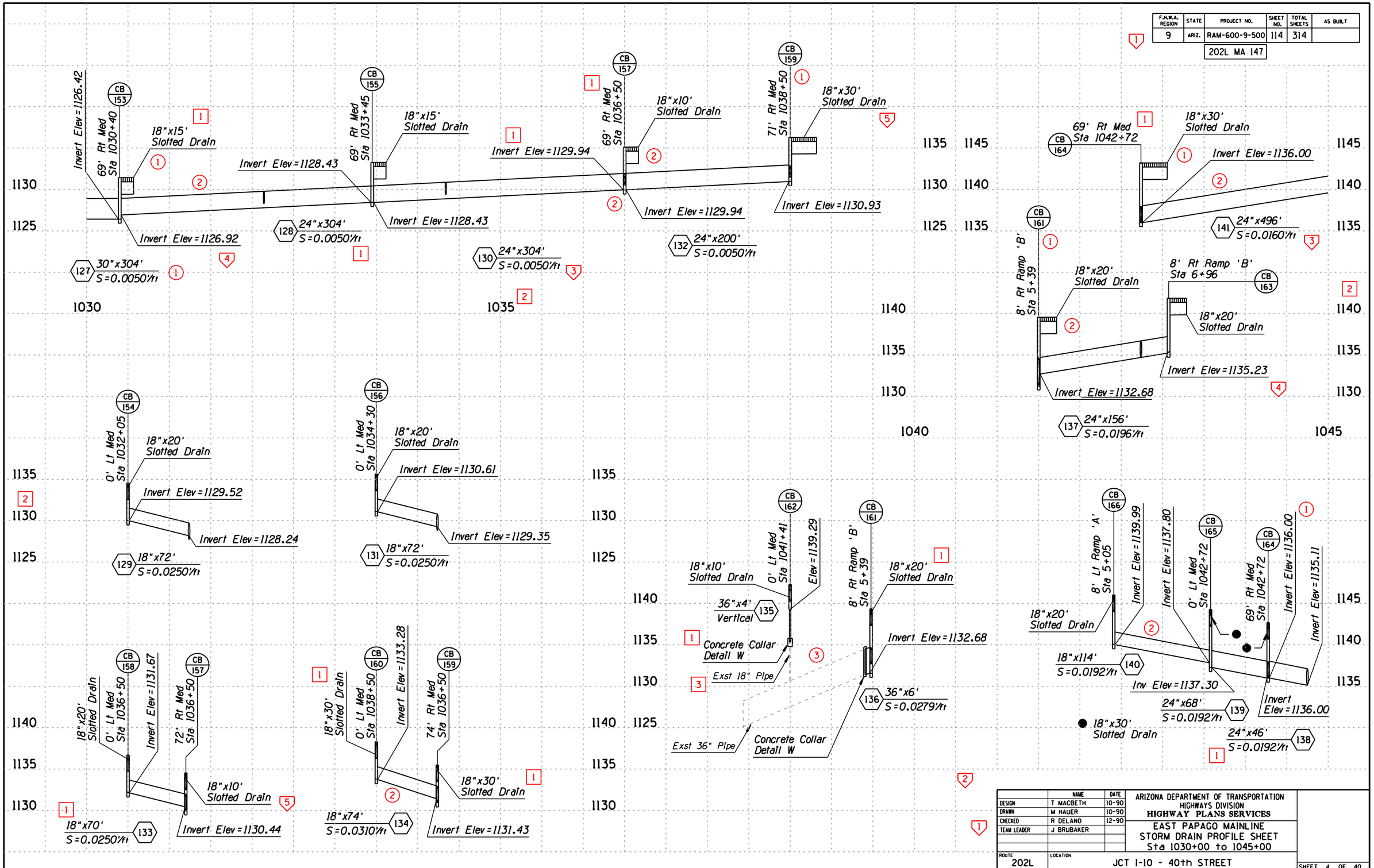
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE STORM DRAIN PROFILE
FOR URBAN FREEWAY MAINLINE

DRAWING NO. P-13.10

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RAM-600-9-500	114	314	

202L MA 147



	NAME	DATE
DESIGN	T MACBETH	10-90
DRAWN	M HAUER	10-90
CHECKED	R DELANO	12-90
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

EAST PAPAGO MAINLINE
STORM DRAIN PROFILE SHEET
Sta 1030+00 to 1045+00

ROUTE 202L | LOCATION JCT I-10 - 40th STREET

SHEET 4 OF 40

STD P-13.10

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CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	62	1	20	6	-	CB	Use text node supplied with cell
2	39	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 7 Ames/ 240 Leroy	3	Straight	
2	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	38	3	0	
2	◑	1	0	◑ LV/CO shall match the same LV/CO of Text placed for item

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-12.15

NOTE: Do not use arrow heads to callout elevations

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Show Slope in feet per foot to 4 decimal places
3	Show elevations to 2 decimal places
4	See Std P-00.61 for Leader Line Layout
5	See Std P-00.70 for Profile Sheet Overlay

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
TJ - TEXT JUSTIFICATION
AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table forManual Construction

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

NO.	DESCRIPTION OF REVISION

APPROVED FOR DISTRIBUTION

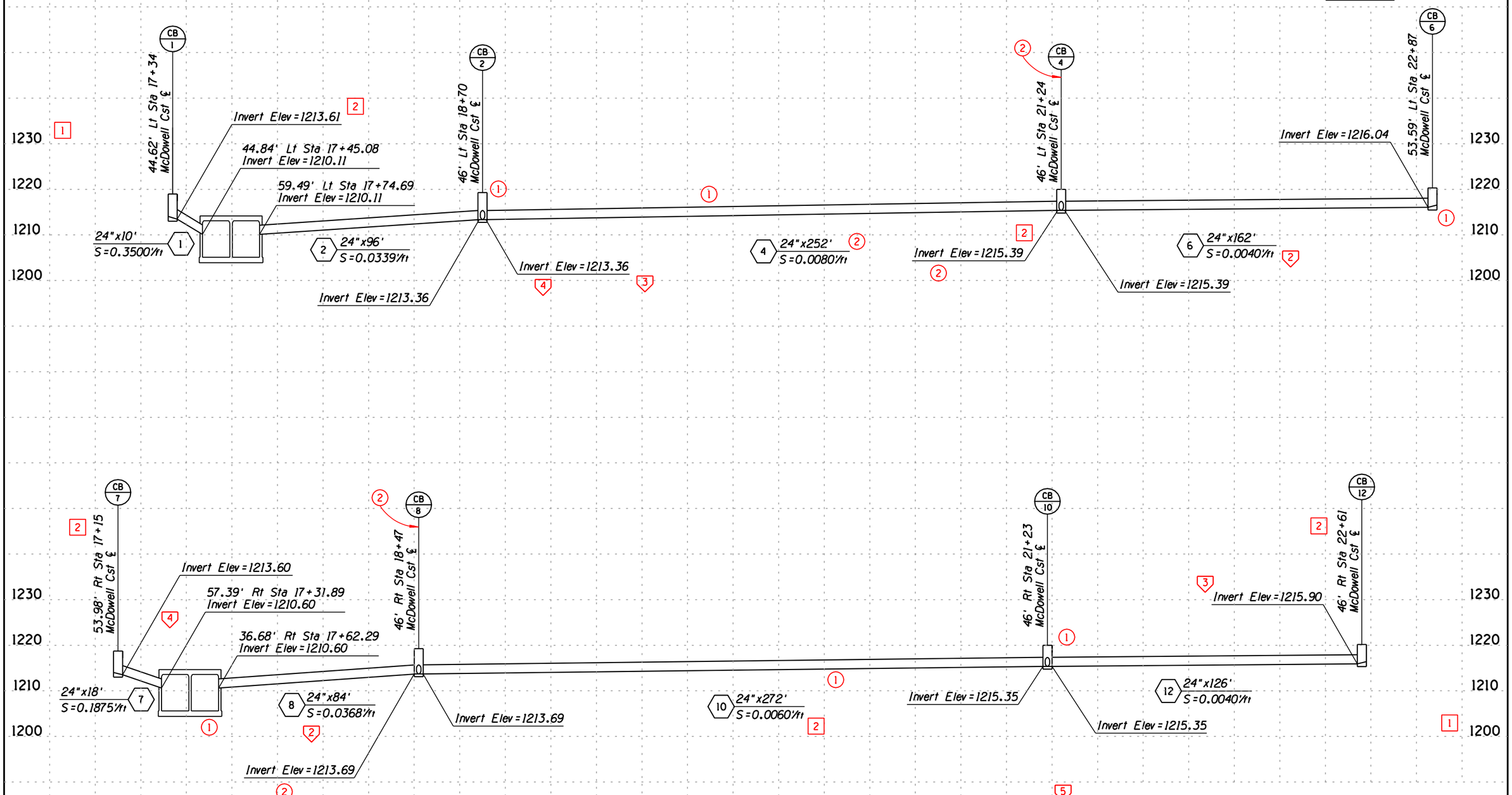
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE STORM DRAIN PROFILE SHEET
FOR URBAN FREEWAY CROSSROAD

DRAWING NO. P-13.15

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	M-100-1-100	69	145	

101L MA 45



	NAME	DATE
DESIGN	T MACBETH	7-91
DRAWN	M HAUER	7-91
CHECKED	R DELANO	8-91
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

STORM DRAIN PROFILE
McDOWELL ROAD

ROUTE 101L

LOCATION PIMA, CHAPARRAL - MCKELLIPS

SHEET 1 OF 8

TRACS NO.

___ OF ___

DATE | LOCATION | REVISIONS | FINISHED PLANS | SURVEY NO.

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29 OCT 99

STD P-13.15

CADD TEXT PARAMETERS

Reference No.	LV/CO=	FT=	TX=	WT=	LS=	TJ=	Comments
1	62	1	20	6	11	CB	Use text node supplied with cell
2	39	23	17.5	4	8.75	LB	

MANUAL TEXT PARAMETERS

Reference No.	Text Size	Rapidograph Pen Size	Style	Comments
1	No. 7 Ames/ 240 Leroy	3	Straight	
2	No. 6 Ames/ 200 Leroy	2	Slant	

GRAPHIC PARAMETERS

Reference No.	LV/CO=	▲WT=	LC=	Comments
1	◑	1	0	◑ LV/CO shall match the LV/CO of text placed for item
2	38	3	0	

NOTE: The subdued background shown can be produced by an electrostatic plotter using a modified pen table or by using conventional layering methods with screens. While this procedure is recommended to enhance the clarity of certain plan sheets, the use of this process is optional.

NOTE: For project related sheets, see standards:
P-02.30; P-02.31; P-07.30; P-08.30; P-12.20

NOTE: Do not use arrow heads to callout elevations

USER NOTES

Reference No.	Comments
1	See Std P-00.70 for Title Block & Project Number Block Layout
2	Show Pipe Slope in feet per foot to 4 decimal places
3	See Std P-00.70 for Profile Sheet Overlay
4	Show Elevations to 2 decimal places
5	See Std P-00.61 for Leader Line Layout

Abbreviations:
LV - LEVEL
CO - COLOR
FT - FONT
TX - TEXT SIZE
WT - LINE WEIGHT
LS - LINE SPACING
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AC - ACTIVE CELL

□ - Text Reference Callout
○ - Graphic Reference Callout
▽ - User Note Reference Callout

▲ See Std P-00.60 Line Weight Table for Manual Construction.

Units of measure for 'TX=' and 'LS=' are expressed in feet (scale - 1"=100') using ADOT's Standard Working Units.

DESCRIPTION OF REVISION
NO.

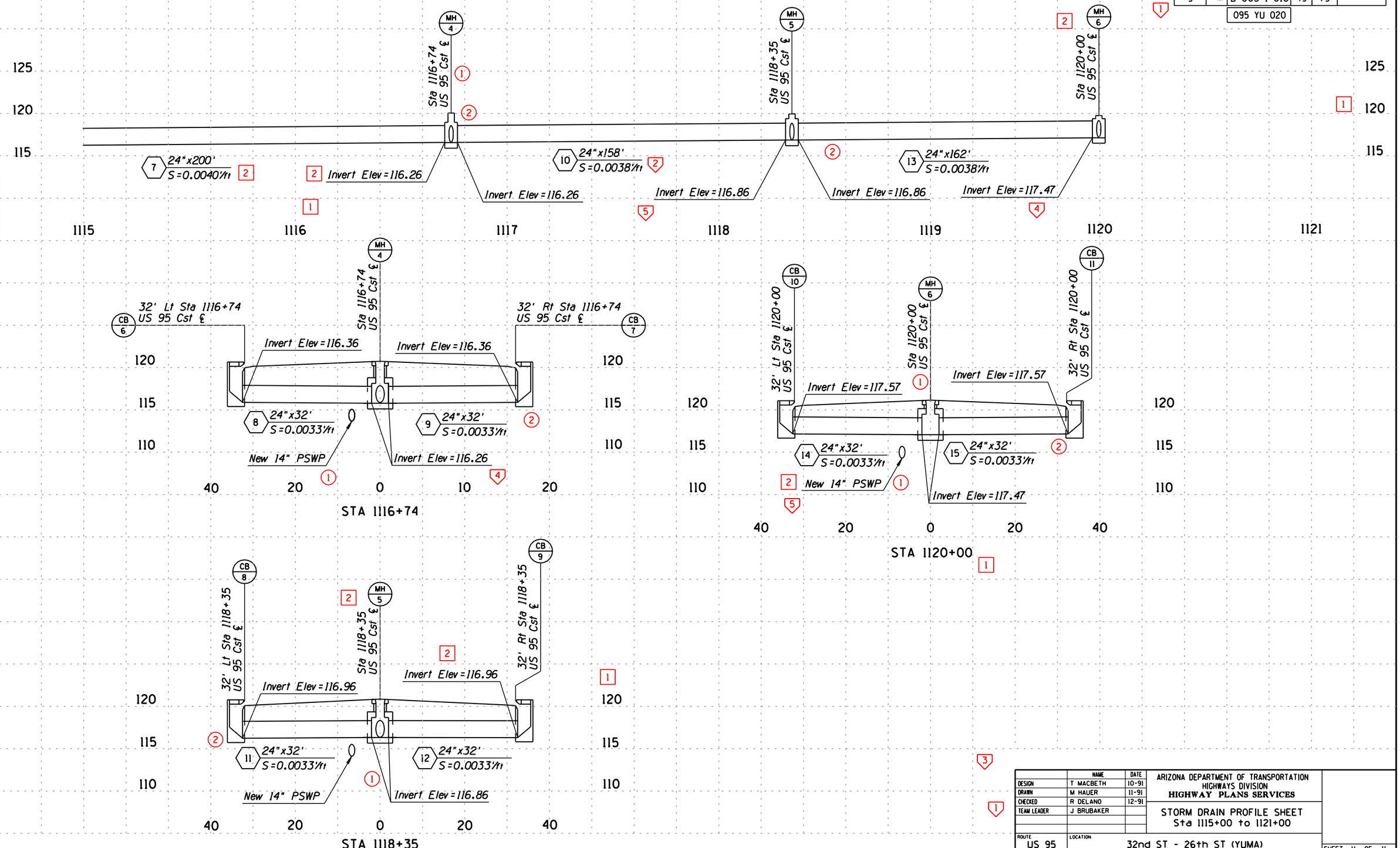
APPROVED FOR DISTRIBUTION

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DRAWINGS

SAMPLE STORM DRAIN PROFILE SHEET
FOR URBANIZED AREA

DRAWING NO.
P-13.20

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	B-063-1-610	49	79	
		095 YU 020			



	NAME	DATE
DESIGN	T MACBETH	10-91
DRAWN	M HAUER	11-91
CHECKED	R DELANO	12-91
TEAM LEADER	J BRUBAKER	

ARIZONA DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY PLANS SERVICES

STORM DRAIN PROFILE SHEET
Sta 1115+00 to 1121+00

ROUTE: US 95
LOCATION: 32nd ST - 26th ST (YUMA)

SHEET 11 OF 11

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

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29 OCT 99

TRACS NO. H0000 01 C

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STD P-13.20