

CITY OF KINGMAN, ARIZONA

EASTERN STREET DESIGN PHASE 1

I-40 NORTH RIGHT-OF-WAY LIMITS TO AIRWAY AVENUE

CITY OF KINGMAN PROJECT NO. ENG 21-0001

DATE: SEPTEMBER 2023

DRAINAGE NOTES			
NO.	DESCRIPTION	QTY	UNIT
①	18" RGRCP, CLASS III	104	LF
⑤	8" WATERLINE PVC C-900, CLASS 235 AND THRUST BLOCKS PER STD DTL 381, TRENCH PER COK 392, REMOVE FLUSH VALVE AND EXTEND WATERLINE AS SHOWN	86	LF
⑦	CATCH BASIN PER MAG STD DET 531 L=5.5'	3	EA
⑫	FIVE BARREL 10' X 6' BOX CULVERT PER ADOT STD DET SD 6.05, SEE SHEET DT06 & DT07	139	LF
⑭	INLET WING PER ADOT STD DET SD 6.10, LENGTH PER PLAN, SEE SHEET DT08 & DT09	2	EA
⑮	OUTLET WING PER ADOT STD DET SD 6.10, LENGTH PER PLAN, SEE SHEET DT08 & DT09	2	EA
⑯	SAFETY RAIL PER MAG STD DET 145, TYPE 1	242	LF
⑰	RIPRAP WITH GEOTEXTILE FABRIC PER MAG SECTION 220, D50=6", T=12"	51	CY
⑱	GROUTED RIPRAP PER MAG SECTION 220, D50=12", T=24"	130	CY
⑲	MATCH EXISTING 6" CONCRETE CHANNEL LINING PER DETAIL ON SHEET DR06	1,206	SY
⑳	FLUSHING PIPE ASSEMBLY PER COK STD DET 390	2	EA
㉑	8" SDR 35 SEWER PIPE, REMOVE CLEANOUT AND EXTEND SEWERLINE AS SHOWN	57	LF
㉒	NEW FENCE TO TIE INTO OLD FENCE	2	EA
㉓	INSTALL FENCE PER COK STD DET 160 WITHOUT BARBED WIRE	371	LF
㉔	SEWER CLEANOUT PER COK STD DET 441	2	EA

WATERLINE NOTES			
NO.	DESCRIPTION	QTY	UNIT
①	12" DIP (CLASS 350) WATERLINE WITH RESTRAINED JOINTS, PER MAG STD DET 302-1, 302-2, 303-1, AND 303-2 TRENCH PER COK DET 392	42	LF
②	CONNECT TO EXISTING 12" WATERLINE WITH AN 12" X 12" TAPPING SLEEVE AND VALVE, BOX AND COVER PER COK STD DET 340	2	EA
③	12" WATERLINE PVC C-900, CLASS 235 AND THRUST BLOCKS PER STD DET 381, TRENCH PER COK SET 392	296	LF

BENCHMARKS

PRIMARY HORIZONTAL CONTROL
BENCHMARK #1
 3 INCH BRASS CAP FLUSH IN CONCRETE SOUTHEAST CORNER OF SECTION 7 NAVD88 EL = 3508.33'
 N 15323735519'
 E 622033.7759'
 #565

PRIMARY VERTICAL CONTROL
BENCHMARK #2
 NGS BENCHMARK DESIGNATION D 525 4 IN BRASS CAP FLUSH IN CONCRETE SOUTHWEST CORNER OF INTERSECTION OF EASTERN STREET WITH LOUISE AVENUE NAVD88 EL = 3564.67'
 N 1528314.7549'
 E 622013.2833'
 #900

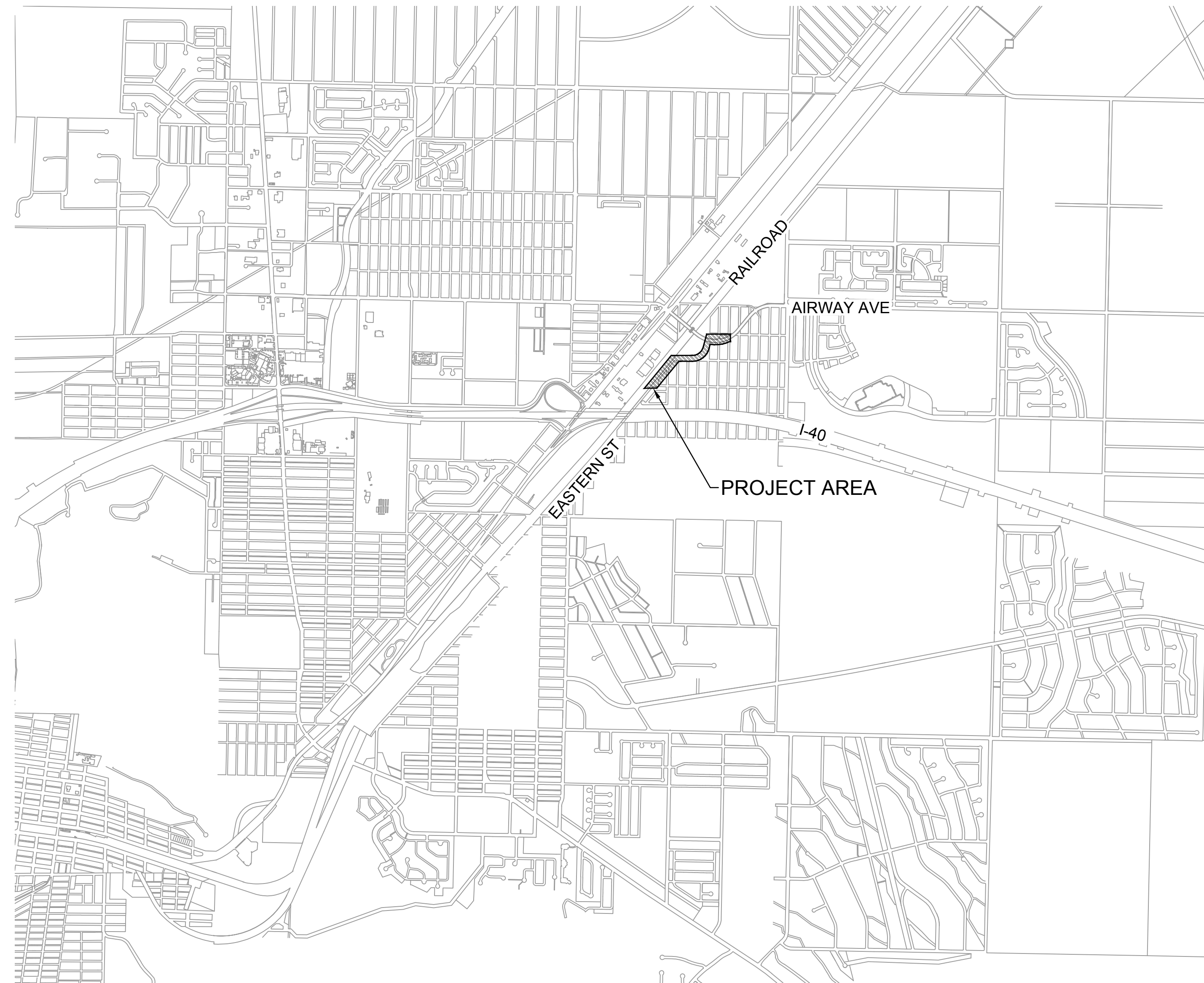
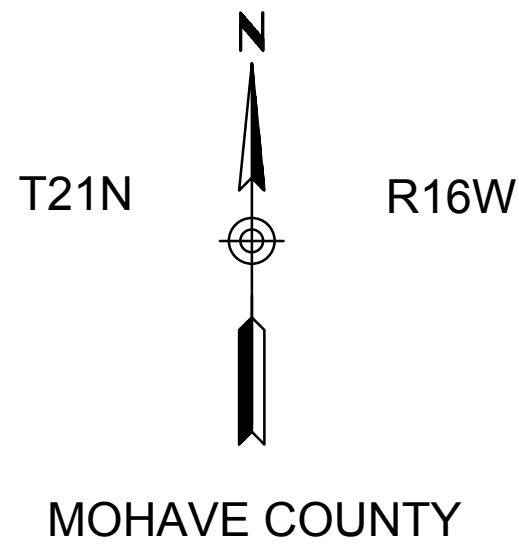
SECONDARY HORIZONTAL AND VERTICAL CONTROL

BENCHMARK #3
 GLO BRASS CAP IN HANDHOLE EAST QUARTER CORNER OF SECTION 18 NAVD88 EL=3541.82'
 N 1529730.6415'
 E 622033.8721'
 HORIZONTAL=#566

BENCHMARK #4
 2 INCH ALUMINUM CAP IN CONCRETE WEST QUARTER CORNER OF SECTION 8 NAVD88 EL=3467.20'
 N 1535014.3409'
 E 622040.3899'
 #567

BENCHMARK #5
 3 INCH GLO BRASS CAP IN CONCRETE WEST QUARTER CORNER OF SECTION 8 NAVD88 EL=3440.03'
 N 1537650.8357'
 E 624688.3788'
 #571

BENCHMARK #6
 2 INCH ALUMINUM CAP FLUSH IN CONCRETE SOUTH QUARTER CORNER OF SECTION 8 NAVD88 EL=3526.72'
 N 1532369.2597'
 E 624674.1332'
 #580



VICINITY MAP
 SCALE: 1"=2000'

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT IS S89°54'25"E OF THE SOUTHWEST QUARTER OF SECTION 8, T21N, R16W OF THE GILA & SALT RIVER MERIDIAN, MOHAVE COUNTY, ARIZONA CALCULATED FROM COORDINATE VALUES SHOWN ON THE RETRACEMENT AND DEPENDENT RESURVEY BY TRIMBLE GPS OF SECTIONS 1-23 AND 26-35 OF T.21 N., R.16 W., G.&S.R.M., MOHAVE COUNTY, ARIZONA. THIS SURVEY WAS PERFORMED BY THE CITY OF KINGMAN SURVEYING DEPARTMENT, SIGNED & SEALED BY JACK M. KESSLER PLS#8904 ON 10/28/03 AND RECORDED IN THE MOHAVE COUNTY RECORDER'S OFFICE AS RECEPTION NUMBER 2003-92693.

CONTROL INFORMATION

ALL BEARINGS ARE GROUND/GRID BEARINGS

ALL DISTANCES ARE GROUND DISTANCES (INTERNATIONAL FEET)

COORDINATES SHOWN ARE BASED ON NAD83 ARIZONA STATE PLANE PROJECTION SYSTEM - WEST ZONE - GROUND COORDINATES (INTERNATIONAL FEET)

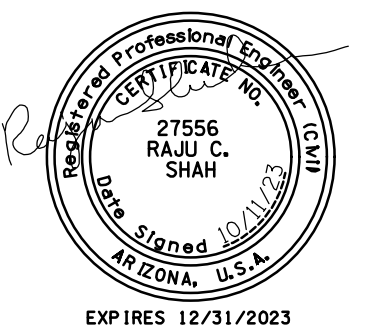
ELEVATIONS SHOWN ARE BASED ON NAVD88

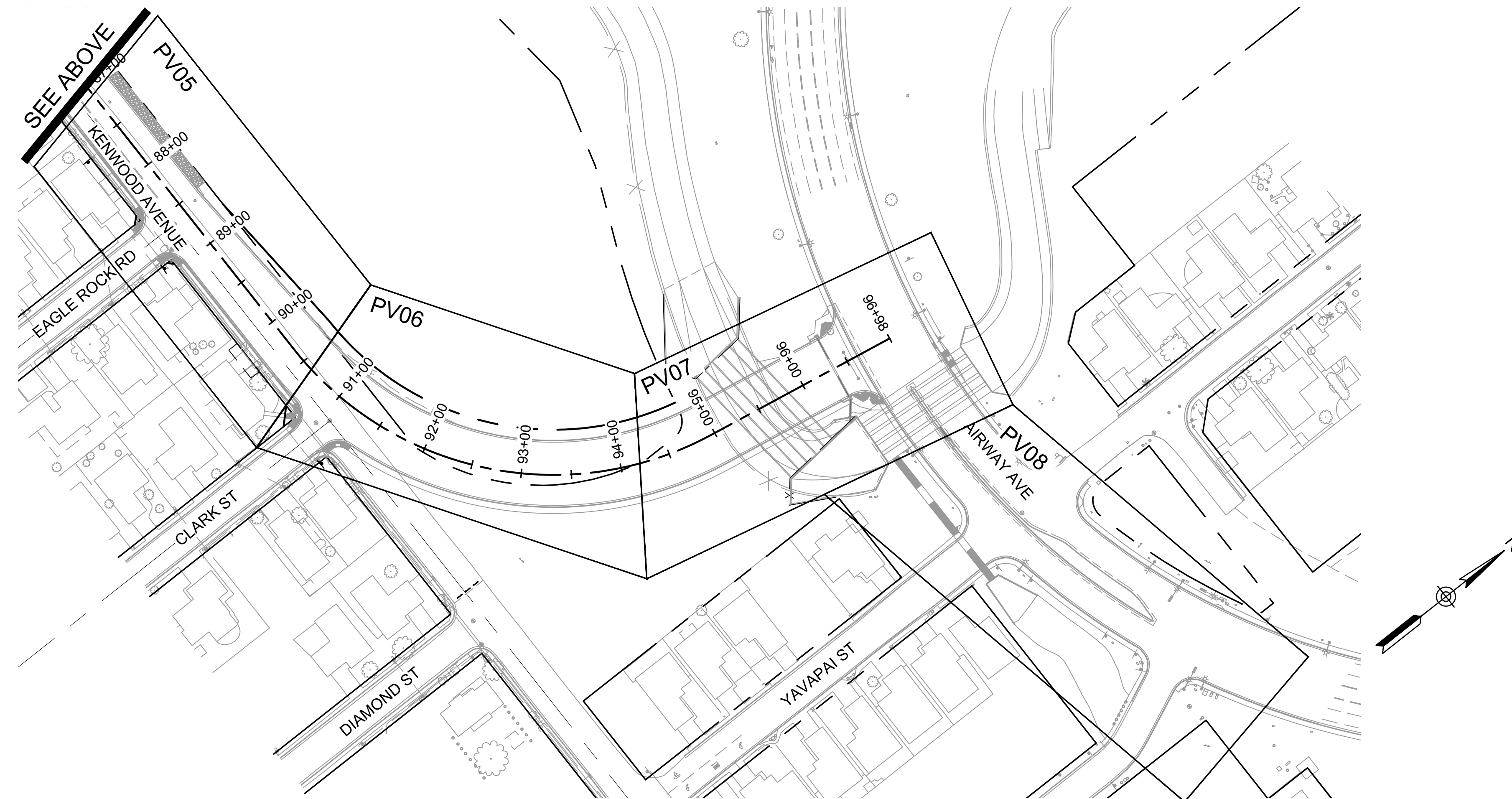
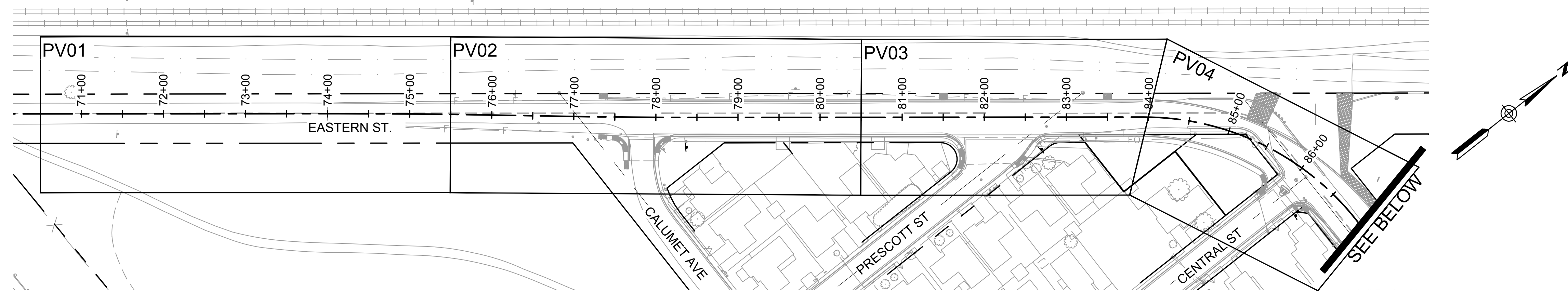
THE GRID TO GROUND SCALE FACTOR UTILIZED FOR THIS PROJECT IS 1.00023215388

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PAVING NOTES				REMOVAL NOTES			
NO.	DESCRIPTION	QTY	UNIT	NO.	DESCRIPTION	QTY	UNIT
①	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	13,536	SY	A	SAWCUT & REMOVE EXISTING PAVEMENT	71,640	SF
②	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	13,536	SY	B	REMOVE & RELOCATE EXISTING FIRE HYDRANT PER COK STD DET 360	1	EA
③	CURB & GUTTER PER MAG STD DET 220	3,858	LF	C	REMOVE & RELOCATE EXISTING POWER POLE BY OTHERS	3	EA
④	SIDEWALK PER COK STD DET 230	10,579	SF	D	REMOVE SIDEWALK	5,170	SF
⑤	SIDEWALK RAMP PER COK STD DET 233	7	EA	E	REMOVE CONCRETE CURB & GUTTER	1,710	LF
⑥	CONCRETE DRIVEWAY PER MAG STD DET 250-2 MATCH EXST WIDTH, MIN 16'	1	EA	F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	8	EA
⑦	RESET FRAME AND COVER FOR MANHOLE PER COK STD DET 422	3	EA	G	EXISTING CONCRETE TO BE REMOVED	283	SF
⑧	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	17	EA	H	RELOCATE EXISTING UTILITY BOX	3	EA
⑨	SINGLE CURB PER MAG STD DET 222 TYPE A	392	LF	I	RELOCATE EXISTING WATER METER	1	EA
⑩	SIDEWALK RAMP PER MAG STD DET 238-2	1	EA	J	RELOCATE EXISTING WATER VALVE	0	EA
⑪	RAMP PER DETAIL SHEET DT02	168	SF	M	REMOVE EXISTING ACCESS GATE	1	EA
⑫	CURB TERMINATION PER MAG STD DET 222	8	EA	K	REMOVE EXISTING WING WALL	1	EA
⑬	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	8	EA	L	REMOVE EXISTING CHANNEL LINING AND BACKFILL PER MAG STD DTL 200-1 TYPE "A"	18,567	SF
⑭	SIDEWALK RAMP PER MAG STD DET 237-1	2	EA				
⑮	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	6	EA				
⑯	CURB TRANSITION TYPE A TO TYPE E PER MAG STD DET 220-2	2	EA				
⑰	6" REMOVABLE TYPE-2 BOLLARD PER MAG STD DET 140	4	EA				
⑱	SIDEWALK RAMP PER MODIFIED COK DET 236	1	EA				
⑲	VALLEY GUTTER PER MAG STD DET 240	1,257	SF				
⑳	PRESERVE EXISTING LANDSCAPING BETWEEN NEW SAW AND EXISTING BLOCK WALL	1	EA				
㉑	MODIFIED SIDEWALK RAMP PER COK STD DET 233 SEE DETAIL G ON SHEET DT02	1	EA				





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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 02-221038-KM01.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET KEY MAP		SHEET NO. KM01 02 OF 52

ABBREVIATIONS

ACRES	AC	MAXIMUM	MAX
AGGREGATE BASE	AB	MEASURED	(M)
AHEAD	AHD	MILE POST	MP
AIR RELEASE VALVE	ARV	MILLIMETER	MM
ALUMINUM	AL	MINIMUM	MIN
ANGLE POINT	AP	MINUTES	'
APPROXIMATE	APPROX	MISCELLANEOUS	MISC
ARIZONA DEPARTMENT OF TRANSPORTATION	ADOT	MONUMENT	MON
ASPHALTIC CONCRETE	AC	NATIONAL GEODETIC VERTICAL DATUM	NGVD
ASSESSORS PARCEL NUMBER	APN	NATURAL GROUND	NG
AVENUE	AVE	NORTH	N
BACK OF CURB	B/C	NOT TO SCALE	NTS
BACK OF CURB RETURN	BCR	NUMBER	NO
BACKFLOW PREVENTER	BFP	OFFSET	OFF
BEGIN	BEG	OUTSIDE DIAMETER	OD
BLACK	BK	PARCEL	PAR
BOULEVARD	BLVD	PARKWAY	PKWY
BRASS CAP	BC	PAVEMENT	PVMT
CALCULATED	C	PEDESTRIAN	PED
CATCH BASIN	CB	PLACE	PL
CENTERLINE	C/L OR ϵ	POINT OF COMPOUND CURVE	PCC
CITY OF KINGMAN	COK	POINT OF CURVATURE	PC
CONCRETE BOX CULVERT	CBC	POINT OF INTERSECTION	PI
CAST IN PLACE CONCRETE PIPE	CIP / C.I.P.	POINT OF REVERSE CURVE	PRC
CONSTRUCTION	CONSTR	POINT OF TANGENT	PT
CORNER	COR	POINT ON CURVE	POC
COUNTY	CO	POINT ON TANGENT	POT
DEGREES	°	POINT ON SEMI-TANGENT	POST
DEGREE OF CURVE	D	PORTLAND CEMENT CONCRETE PAVEMENT	PCCP
DELTA	Δ	PROPOSED	PROP
DEPARTMENT	DEPT	PROTECT IN PLACE	PIP
DETAIL	DET	PUBLIC UTILITY EASEMENT	PUE
DRAWING	DWG	RADIUS	R
DRAINAGE	DRAIN	RAILROAD	RR
DRIVE	DR	REBAR AND CAP	R&C
DRIVEWAY	D/W	RECORD	(R)
DUCTILE IRON PIPE	DIP / D.I.P.	REINFORCED CONCRETE PIPE	RCP
EACH	EA	RUBBER GASKET REINFORCED CONCRETE PIPE	RGRCP
EASEMENT	ESMT	RIGHT	CP
EAST	E	RIGHT-TURN LANE	R / RT
EDGE OF PAVEMENT	EP	RIGHT-OF-WAY	RTL
ELECTRIC JUNCTION BOX	EJB	ROAD	R/W
ELECTRIC CABINET	CAB	ROAD	RD
ELECTRIC METER	EM	SCUPPER	SCPR
ELECTRIC STUB UP	ESU	SECONDS	"
ELECTRIC VAULT	EV	SECTION	SEC
ELECTRICAL	ELEC	SHEET	SHT
ELEVATION	ELEV	SIDEWALK	S/W
END CURB RETURN	ECR	SIGN OR STREET SIGN	SGN
EQUATION	EQUA	SOUTH	S
EXISTING	EXIST	SOUTHWEST GAS	SWG
FACE OF CURB	F/C	STORM DRAIN MANHOLE	SQ
FEDERAL	FED	SQUARE	SQ
FEET	FT OR ' "	SQUARE FEET	SF
FINISHED GRADE	FG	SQUARE YARD	SY
FIBER OPTICS	FO	STANDARD	STD
FLOWLINE	FL	STATE ROUTE	SR
FOUND	FD	STATION	STA
GREEN	GN	STREET	ST
GUTTER	G	SUBDIVISION	SUBD
HANDHOLE	HH	TANGENT LENGTH	TL
HEADWALL	HDWL	TELEPHONE	T
HIGHWAY	HWY	TELEVISION	TV
HIGH WATER ELEVATION	HWE	TEMPORARY CONSTRUCTION ESMT	TCE
HYDRAULIC GRADE LINE	HGL	TEMPORARY	TEMP
INCH	IN OR "	TO BE VERIFIED	TBV
INVERT	INV	TOP OF CURB	TC
IRRIGATION	IRR	TOP OF WALL	TW
JUNCTION	JCT	TOWNSHIP	T
LANE	LN	TRAFFIC INTERCHANGE	TI
LINEAR FEET	LF	TRANSFORMER	TSFM
LEFT	L / LT	TWO-WAY LEFT-TURN LANE	TWLTL
LEFT-TURN LANE	LTL	TYPICAL	TYP
LENGTH OF CURVE	L	UNKNOWN	UNKN
MOHAVE COUNTY RECORDER	MCR	VALLEY GUTTER	VG
MARICOPA COUNTY HIGHWAY DEPARTMENT	MCHD	VEHICULAR NON-ACCESS EASEMENT	VNA
MARICOPA ASSOCIATION OF GOVERNMENTS	MAG	VOLUME	VOL
		WATER	WTR / WAT
		WATER METER	WM
		WELL WATER LINE	WELL
		WATER VAULT/MANHOLE	WMH
		WEST	W
		WITH	W/

SYMBOL LEGEND

	HANDHOLE		STREETLIGHT
	BRASS CAP		STREETLIGHT
	ALUMINUM CAP		STREETLIGHT
	CURB & GUTTER (VERTICAL TYPE)		ELECTRICAL PULLBOX
	CURB TRANSITION		BOLLARD
	CONCRETE DRIVEWAY OR DRIVEWAY ENTRANCE		LANDSCAPE LIGHT
	SIDEWALK RAMP		ELECTRIC PULLBOX
	EXISTING IRRIGATION STRUCTURE		WATER PUMP
	EXISTING WATER/GAS VALVE		MONUMENT / SECTION LINE
	NEW WATER/GAS VALVE		EXISTING R/W LINE
	EXISTING WATER METER		NEW R/W LINE
	NEW WATER METER		PROPERTY LINE
	EXISTING FIRE HYDRANT		CROWN LINE
	NEW OR RELOCATED FIRE HYDRANT		EASEMENT LINE
	EXISTING UTILITY POLE		SECTION LINE
	EXISTING STREET LIGHT		ROADWAY CENTERLINE
	MAIL BOX		EXISTING FENCE
	DOWN GUY ANCHOR		EXISTING OVERHEAD ELECTRIC
	NEW STREET LIGHT		EXISTING UNDERGROUND ELECTRIC
	NEW PEDESTRIAN LIGHT		EXISTING UNDERGROUND TELEPHONE
	TREE		EXISTING UNDERGROUND TV CABLE
	PALM TREE		EXISTING SANITARY SEWER PIPE
	TRAFFIC SIGNAL		EXISTING SANITARY SEWER FORCE MAIN
	BACKFLOW ASSEMBLY		EXISTING STORM DRAIN PIPE
	AIR RELEASE VALVE		EXISTING WATER PIPE
	TELEPHONE MANHOLE		EXISTING NATURAL GAS PIPE
	TELEPHONE PEDESTAL		NEW PIPE FOR STORM DRAIN
	CABLE TV STRUCTURE		TOE OF SLOPE
	PLUG/ CAP		CUT LIMITS
	SEWER MANHOLE		FILL LIMITS
	WATER VAULT/MANHOLE		EXISTING CMU WALL
	STORM DRAIN MANHOLE		NEW FENCE
	IRRIGATION MANHOLE		HIGH WATER LEVEL
	CONCRETE BOX CULVERT		SAWCUT LINE
	DETECTABLE WARNING		NEW LIGHTING CONDUIT
	STAMPED ASPHALT PAVEMENT		FIBER OPTIC
	REMOVALS		NEW CMU WALL
	NEW AC PAVEMENT		EXIST BLOCK WALL
	NEW CONCRETE (RAMP, D/W, VG)		NEW GUARDRAIL W/ END TREATMENT
	NEW SIDEWALK		ROADSIDE SWALE / FLOWLINE
	BRICK PAVERS		
	CATCH BASIN ACCESS		
	GASLINE MARKER		
	STREET LIGHT POLE		
	FIRE DEPARTMENT CONNECTION		
	ELECTRIC PULLBOX		
	GAS MANHOLE		
	NEW TRAFFIC SIGN		
	EXIST TRAFFIC SIGN		
	RIPRAP		
	CUT OFF WALL		
	STORM DRAIN PIPE		



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CITY OF KINGMAN
ENGINEERING DEPARTMENT
310 NORTH 4TH STREET
KINGMAN, ARIZONA 86401
PHONE (928) 753-8122 FAX (928) 753-8118



EASTERN STREET
ABBREVIATIONS/LEGEND

SHEET NO.
IX01
03 OF 52

ARDURRA GENERAL NOTES

1. THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE PRESENTED TO THE ENGINEER. ANYONE WHO TAKES IT UPON THEMSELVES THE INTERPRETATION OF THE DRAWINGS OR MAKES REVISIONS TO THE SAME WITHOUT CONFERRING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THEREOF.
2. THE ESTIMATED QUANTITIES SHOWN ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETENESS AND ACCURACY OF A DETAILED ESTIMATE BASED ON THESE PLANS, CURRENT CODES, AND SITE VISITATION.
3. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, REQUIREMENTS OF THE WORK AND EXCESS OR DEFICIENCY IN QUANTITIES. NO CLAIMS SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.
4. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
6. THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE SURVEYOR REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE SURVEYOR UNLESS ALL SURVEY STAKES SET BY THE ENGINEER ARE MAINTAINED INTACT AND CAN BE VERIFIED AS TO THEIR ORIGIN. IF, IN THE OPINION OF THE SURVEYOR, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, ANY REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OF IMPROPER CONSTRUCTION WORK SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.
7. THE SURVEYOR WILL MAKE FIELD AS-BUILT MEASUREMENTS OF THE WORK UPON NOTIFICATION BY THE CLIENT OR HIS REPRESENTATIVE THAT THE WORK IS COMPLETE AND READY FOR AS-BUILT SURVEY. FOR PIPE WORK, THE CONTRACTOR IS RESPONSIBLE FOR LEAVING TRENCHES OPEN SO THAT AS-BUILTS CAN BE PERFORMED TO COMPLY WITH THE CITY REQUIREMENTS. IF THE TRENCHES ARE BACKFILLED AND OBSCURED TO THE POINT THAT AS-BUILT MEASUREMENTS CANNOT BE PERFORMED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POTHOLE UTILITY TRENCHES AS NECESSARY TO COMPLETE AN AS-BUILT SURVEY.
8. THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
9. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED ACCORDING TO INFORMATION PROVIDED BY THE AGENCY OPERATING EACH UTILITY. LOCATIONS SHOWN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. CALL ARIZONA 811 FOR FIELD LOCATION AT (602) 263-1100. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.
10. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION, OR VARIANCE FROM THESE PLANS. ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER.
11. ANY INSPECTION BY THE CITY, COUNTY, ENGINEER, OR OTHER JURISDICTIONAL AGENCY, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH APPLICABLE CODES AND AGENCY REQUIREMENTS.

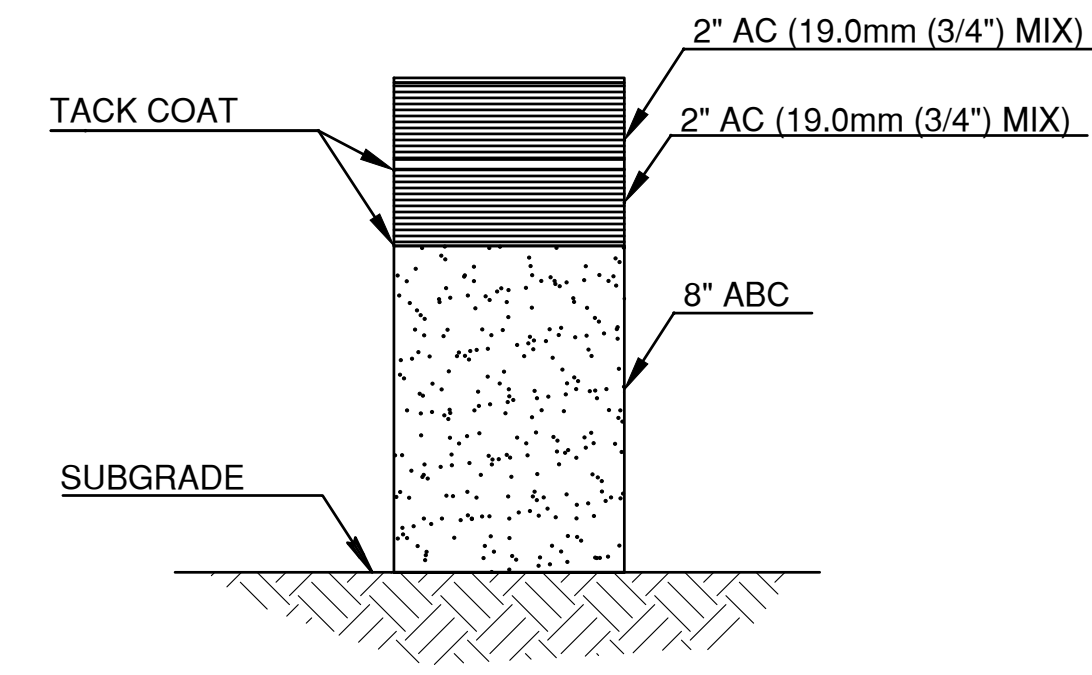
ARDURRA GENERAL NOTES (CONT.)

12. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL STORM DRAIN PIPES, STORM WATER RETENTION PIPES AND DRAINAGE FACILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION. THE DEPTH OF COVER ON THE STORM DRAIN PIPE IS DESIGNED FOR FINAL GRADE. THEREFORE, EXTRA CARE SUCH AS BERMING OVER PIPES, FLAGGING OR SIGNAGE SHOULD BE USED DURING CONSTRUCTION TO MAINTAIN COVER OR PROTECT THE PIPES.
13. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES FOR THIS PROJECT DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
14. UNDERGROUND UTILITIES SHALL BE MARKED IN ACCORDANCE WITH SECTION 40-360 OF THE ARIZONA REVISED STATUTES AND LOCAL MUNICIPALITY REQUIREMENTS.
15. ALL STATIONS, OFFSETS, ROADWAY DIMENSIONS, & CONTROL POINTS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
16. THE CONTRACTOR MUST VERIFY VERTICAL CLEARANCE WITH ADJACENT AND/OR UNDERLYING UTILITIES PRIOR TO AND DURING EXCAVATION.
17. ALL CONSTRUCTION TO BE PERFORMED ACCORDING TO APPLICABLE COK STREETS AND SIDEWALKS DEVELOPMENT RULES AND REGULATIONS, COK UTILITY REGULATIONS, MAG STANDARD DETAILS AND MAG SPECIFICATIONS, REVISIONS THROUGH 2020.
18. FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL HORIZONTAL AND VERTICAL CONTROLS ARE APPROXIMATE AND TO THE BEST AVAILABLE INFORMATION.
19. EXISTING UTILITIES AND OTHER FACILITIES HAVE BEEN PLACED ON THE PLANS FROM FIELD SURVEYS, EXISTING MAPS AND OTHER CURRENT PLANS WITHIN THE AREA OF THIS PROJECT. THE CONTRACTOR WILL DETERMINE THE EXACT LOCATION AND/OR ELEVATION OF EXISTING UTILITIES WHICH PERTAIN TO AND AFFECT THE CONSTRUCTION OF THIS PROJECT.
20. A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING, THE CONTRACTOR SHALL CALL FOR BLUE STAKES AT THE ARIZONA 811 CENTER (PHONE: 1800-STAKEIT) OR (602)-263-1100.
21. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION. PERMITS FROM THE CITY OF KINGMAN SHALL BE AT NO COST TO THE CONTRACTOR.
22. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE FLOOD CONTROL DISTRICT AND/OR THE ENGINEER AND ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. A FLOOD PLAIN USE PERMIT WILL BE REQUIRED FROM MCFC.
23. THE ENGINEER WILL DETERMINE THE NUMBER AND LOCATION OF THE REQUIRED COMPACTION TESTS FOR STRUCTURAL BACKFILL.
24. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECIFICATION 401 & PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION), AND SPECIFICATIONS INCLUDED IN THIS CONTRACT.
25. NO JOB WILL BE CONSIDERED COMPLETED UNTIL ROADS, CURBS, PAVEMENT AND SIDEWALKS HAVE BEEN SWEEPED CLEAN OF ALL DIRT AND DEBRIS.
26. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE CONTRACTOR WILL BE REQUIRED TO CLEAN ADJACENT (OFF-PROJECT) ROADWAYS USED DURING THE COURSE OF CONSTRUCTION.
27. CATCH BASIN CONNECTOR PIPES SHALL BE LAID ON A STRAIGHT ALIGNMENT AND SLOPE UNLESS OTHERWISE SPECIFIED. IF BREAKS IN ALIGNMENT AND SLOPE ARE NECESSARY TO MEET FIELD CONDITIONS, THE MAXIMUM DEFLECTION SHALL BE 22.5 DEGREES. CONTRACTOR SHALL PROVIDE A PIPE COLLAR PER MAG DETAIL 505 AT EACH DEFLECTION.

ESTIMATED EARTHWORK

VOLUMES LISTED BELOW WERE CALCULATED USING AVAILABLE TOPOGRAPHIC DATA AND EXISTING FIELD CONDITIONS. VOLUME INFORMATION DOES NOT REFLECT SHRINK/SWELL, CLEAR/GRUB, PRE-COMPACTION, LOSSES DUE TO OVER EXCAVATION, ETC. CONTRACTOR SHALL SATISFY HIMSELF AS TO ACTUAL FIELD CONDITIONS, AND ANTICIPATED CONDITIONS DURING THE TIME OF CONSTRUCTION, AND SHALL BASE THEIR QUANTITY TAKE OFF AND BID ACCORDINGLY.

CUT: 2,851 C.Y.
 FILL: 2,236 C.Y.
 NET (CUT): 615 C.Y.



PAVEMENT STRUCTURAL SECTION NO. 1



O: 602.263.1177
 1001 N. CENTRAL AVE
 SUITE 900
 PHOENIX, AZ 85004
www.ardurra.com

EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 04-221038-GN01.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET GENERAL NOTES		SHEET NO. GN01 04 OF 52

**CITY OF KINGMAN
NOTES FOR STREET/PAVING PLANS**

- ENGINEERING DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOUR BEFORE ANY CONSTRUCTION BEGINS TELEPHONE (928) 753-8195.
- ALL CONSTRUCTION TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF KINGMAN SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
- COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 & CITY OF KINGMAN SUPPLEMENTS.
- THIS SET OF PLANS HAS BEEN INITIALLY REVIEWED BY THE CITY OF KINGMAN. SUCH REVIEW IS PART OF THE PROCESS THAT DEVELOPER(S)/CONTRACTOR(S) MUST GO THROUGH IN ORDER TO OBTAIN A CONSTRUCTION PERMIT. THE RESULTS OF SUCH INITIAL REVIEW SHALL NOT DICTATE THE CITY OF KINGMAN'S FINAL DETERMINATION AS TO THE ACCEPTABILITY OF THE PLANS, NOR SHALL IT PREVENT THE CITY OF KINGMAN FROM REQUIRING ERRORS AND OMISSIONS, AS FOUND ON PLANS, BE ADDRESSED BY DEVELOPER(S) /CONTRACTOR(S), WHERE SUCH ERRORS AND OMISSIONS CAUSE THE PLANS TO BE IN VIOLATION OF OR INADEQUATE UNDER APPLICABLE FEDERAL/STATE/COUNTY/LOCAL CODES, ORDINANCES, REGULATIONS, OR OTHER LAWS. THIS REVIEWED AND STAMPED SET OF PLANS MUST BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY.
- ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- EXISTING OR NEWLY DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.
- EXACT POINT OF PAVEMENT MATCHING, TERMINATION AND OVERLAY, IF NECESSARY SHALL B DETERMINED IN THE FIELD BY THE CITY ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE
- AN APPROVED PAVING PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- OBSTRUCTIONS TO PROPOSED IMPROVEMENTS IN THE RIGHT-OF-WAY SHALL BE REMOVED OR RELOCATED BEFORE BEGINNING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- ALL EXISTING CATCH BASINS MUST BE RE-LOCATED WHEN THEY ARE SHOWN IN A NEWLY PROPOSED DRIVEWAY.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY, OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UTILITY LINES ARE COMPLETED UNDER PROPOSED PAVED AREAS.
- THE PERMIT HOLDER SHALL ARRANGE FOR THE RELOCATION AND RELOCATION COSTS OF ALL UTILITIES, INCLUDING ANY STREET LIGHTS, AND SUBMIT A UTILITY RELOCATION SCHEDULE PRIOR TO THE ISSUANCE OF A CONSTRUCTION PERMIT.
- UTILITY FACILITIES IN CONFLICT WITH THIS WORK SHALL BE RELOCATED BY THE DEVELOPER. THIS ACTIVITY SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY TO PREVENT ANY UNNECESSARY INTERRUPTION OF SERVICE.
- THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADJUSTMENT AND PLACEMENT OF CONCRETE COLLARS, FRAMES, COVERS, AND VALVE BOXES AS NECESSARY FOR A COMPLETE JOB AS APPROVED BY THE CITY ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND PRIOR TO FINAL INSPECTION.
- GRADING BETWEEN BACK OF CURB AND PROPERTY LINE SHALL BE LIMITED TO 4:1 SLOPE.
- BASE COURSE SHALL NOT BE PLACED UNTIL SUB-GRADE HAS BEEN APPROVED BY THE CITY ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE.
- NO JOB WILL BE CONSIDERED COMPLETED UNTIL, CURBS, PAVEMENTS AND SIDEWALKS HAVE BEEN SWEEP CLEAN OF ALL DIRT AND DEBRIS; AND SURVEY MONUMENTS ARE INSTALLED.
- THE LOCATION OF ALL WATER VALVES, FIRE HYDRANTS AND MANHOLES MUST AT ALL TIMES DURING CONSTRUCTION BE REFERENCED BY THE CONTRACTOR AND MADE AVAILABLE TO THE CITY.
- EXISTING STREET AND TRAFFIC SIGNS WILL BE MAINTAINED DURING CONSTRUCTION AND RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE CITY ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE.
- CERTIFICATE OF OCCUPANCY (C OF O) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL OFFSITE IMPROVEMENTS ARE COMPLETED.
- TREES AND SHRUBBERY IN THE RIGHT-OF-WAY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT APPROVAL OF THE ENGINEERING INSPECTOR.
- ALL HDPE STORM DRAIN PIPE SHALL BE MANUFACTURED, DESIGNED AND INSTALLED IN ACCORDANCE WITH AASHTO M252, AASHTO M294, MAG AND THESE SPECIAL PROVISIONS.
- ALL HDPE STORM DRAIN PIPE SHALL BE TYPE 'S' CORRUGATED, WITH WATERTIGHT JOINTS.
- AT A MINIMUM, ALL HDPE STORM DRAIN PIPE JOINTS SHALL MEET THE ASTM D-3212 WATERTIGHT REQUIREMENT OF 10.8 PSI (25 COLUMN FEET OF WATER HEAD).
- THE CONTRACTOR SHALL PROVIDE A COPY OF AN ACCEPTED INDEPENDENT 3RD PARTY LAB CERTIFICATION THAT ALL THE PIPE AND JOINTS TO BE USED ON THE PROJECT MEET THE ASTM D-3212 WATERTIGHT STANDARD.
- ALL HDPE PIPE CONNECTIONS TO MANHOLES SHALL MEET ASTM C-923 REQUIREMENTS.

**CITY OF KINGMAN
NOTES FOR SEWER PLANS**

- ENGINEERING DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS TELEPHONE (928) 753-8195.
- ANY SEWER MAIN 15" IN SIZE OR 12' IN DEPTH, OR GREATER, REQUIRES 5' MANHOLES.
- ALL CONSTRUCTION TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF KINGMAN SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
- COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 & CITY OF KINGMAN SUPPLEMENTS.
- NEW SEWER LINES ARE TO BE BUILT IN STANDARD UTILITY LOCATIONS PER CITY OF KINGMAN DETAIL 120.
- THIS SET OF PLANS HAS BEEN INITIALLY REVIEWED BY THE CITY OF KINGMAN. SUCH REVIEW IS PART OF THE PROCESS THAT DEVELOPER(S)/CONTRACTOR(S) MUST GO THROUGH IN ORDER TO OBTAIN A CONSTRUCTION PERMIT. THE RESULTS OF SUCH INITIAL REVIEW SHALL NOT DICTATE THE CITY OF KINGMAN'S FINAL DETERMINATION AS TO THE ACCEPTABILITY OF THE PLANS, NOR SHALL IT PREVENT THE CITY OF KINGMAN FROM REQUIRING ERRORS AND OMISSIONS, AS FOUND ON PLANS, BE ADDRESSED BY DEVELOPER(S) /CONTRACTOR(S), WHERE SUCH ERRORS AND OMISSIONS CAUSE THE PLANS TO BE IN VIOLATION OF OR INADEQUATE UNDER APPLICABLE FEDERAL/STATE/COUNTY/LOCAL CODES, ORDINANCES, REGULATIONS, OR OTHER LAWS. THIS REVIEWED AND STAMPED SET OF PLANS MUST BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.
- ALL LINES MUST BE TESTED FOR UNIFORM SLOPE BY LAMP LIGHTING OR REMOTE CAMERA BEFORE THEY ARE ACCEPTED AS COMPLETE. TESTING METHOD MUST BE APPROVED IN ADVANCE BY THE ENGINEERING DEPARTMENT. THE RESULTS SHALL BE RECORDED AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- DEFLECTION TESTING FOR THE ENTIRE LENGTH OF PVC SEWER LINES SHALL BE PERFORMED IN ACCORDANCE WITH MAG STANDARD SPECIFICATION 615.11(C) AND AAC R18-9-E301(D)(2)(I).
- ALL MANHOLES SHALL BE TESTED USING ONE OF THE FOLLOWING PROCEDURES:
 - WATER TESTING
IN ACCORDANCE WITH AAC R-18-9-E301(D)(3)(E), THE ENTIRE MANHOLE SHALL BE FILLED WITH WATER AND EXFILTRATION SHALL BE LIMITED TO 0.0034 OF THE TOTAL MANHOLE VOLUME IN ONE HOUR.
 - VACUUM TESTING
IN ACCORDANCE WITH AAC R-18-9-E301(D)(3)(E), MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244-02, "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
- THE CONTRACTOR SHALL PERFORM MANHOLE TESTING AFTER INSTALLATION OF THE MANHOLE CONE TO VERIFY WATER TIGHTNESS OF THE MANHOLE FROM THE TOP CONE DOWN. UPON SATISFACTORY TEST RESULTS, THE CONTRACTOR SHALL INSTALL THE MANHOLE RINGS AND SPACERS, COMPLETE WITH THE JOINTS AND SEAL THE MANHOLE TO A WATER TIGHT CONDITION.
- THE ENTIRE SEWER LINE SHALL BE TESTED FOR TIGHTNESS FOR EACH PIPE MATERIAL IN ACCORDANCE WITH AAC R18-9- E301(D)(2)(J).
- ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- NEW MANHOLES ARE TO BE BUILT WITHOUT STEPS.
- A SIX (6) FOOT MINIMUM HORIZONTAL SEPARATION FROM ANY UNDERGROUND UTILITY SHALL BE PROVIDED FOR SEWER MAINS, AND WATER MAINS. THE MINIMUM HORIZONTAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, OR WATER MAIN TO OUTSIDE OF UNDERGROUND UTILITY.
- A ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ANY DRY UNDERGROUND UTILITY CROSSING SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF DRY UNDERGROUND UTILITY.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN ANY WATER MAIN OR STORM DRAIN CROSSING A SEWER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN TO OUTSIDE OF WATER MAIN OR STORM DRAIN MAIN. SEE CITY OF KINGMAN STANDARD DETAIL 404 FOR ADDITIONAL INFORMATION AND/OR PROVISIONS FOR CLEARANCE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY, OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

- ANY SEWER LINES THAT ARE INSTALLED WITH LESS THAN .004 FT/FT SLOPE MUST BE INSTALLED USING A LASER.
- WHEN DIP SEWER PIPE IS USED, AN EPOXY LINING IS REQUIRED AS APPROVED BY THE CITY ENGINEER.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND PRIOR TO FINAL INSPECTION.
- PLAN APPROVAL IS VALID FOR ONE YEAR.

**CITY OF KINGMAN
NOTES FOR WATER PLANS**

- ENGINEERING DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS TELEPHONE (928) 753-8195.
- ALL WATER VALVE BOXES SHALL BE PER CITY OF KINGMAN DETAIL 391-1 & 391-2.
- ALL CONSTRUCTION TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF KINGMAN SUPPLEMENT TO SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
- COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601 & CITY OF KINGMAN SUPPLEMENTS.
- NEW WATER LINES ARE TO BE BUILT IN STANDARD UTILITY LOCATIONS PER CITY OF KINGMAN DETAIL 120.
- THIS SET OF PLANS HAS BEEN INITIALLY REVIEWED BY THE CITY OF KINGMAN. SUCH REVIEW IS PART OF THE PROCESS THAT DEVELOPER(S)/CONTRACTOR(S) MUST GO THROUGH IN ORDER TO OBTAIN A CONSTRUCTION PERMIT. THE RESULTS OF SUCH INITIAL REVIEW SHALL NOT DICTATE THE CITY OF KINGMAN'S FINAL DETERMINATION AS TO THE ACCEPTABILITY OF THE PLANS, NOR SHALL IT PREVENT THE CITY OF KINGMAN FROM REQUIRING ERRORS AND OMISSIONS, AS FOUND ON PLANS, BE ADDRESSED BY DEVELOPER(S) /CONTRACTOR(S), WHERE SUCH ERRORS AND OMISSIONS CAUSE THE PLANS TO BE IN VIOLATION OF OR INADEQUATE UNDER APPLICABLE FEDERAL/STATE/COUNTY/LOCAL CODES, ORDINANCES, REGULATIONS, OR OTHER LAWS. THIS REVIEWED AND STAMPED SET OF PLANS MUST BE KEPT AT THE CONSTRUCTION SITE AT ALL TIMES.
- PIPE DEFLECTION SHALL NOT EXCEED ONE-HALF (½) THE MANUFACTURERS' RECOMMENDATIONS.
- ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE CONTRACTOR IS TO NOTIFY THE PUBLIC THAT WILL BE AFFECTED BY ANY SHUTDOWNS A MINIMUM OF 48 HOURS IN ADVANCE.
- A SIX (6) FOOT MINIMUM HORIZONTAL SEPARATION FROM ANY UNDERGROUND UTILITY SHALL BE PROVIDED FOR SEWER MAINS AND WATER MAINS. THE MINIMUM HORIZONTAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN OR WATER MAIN TO OUTSIDE OF UNDERGROUND UTILITY.
- A ONE (1) FOOT MINIMUM VERTICAL SEPARATION FROM ANY DRY UNDERGROUND UTILITY CROSSING SHALL BE PROVIDED FOR SEWER MAINS, SEWER SERVICES, WATER MAINS, AND WATER SERVICES. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF SEWER MAIN, SEWER SERVICE, WATER MAIN, OR WATER SERVICE TO OUTSIDE OF DRY UNDERGROUND UTILITY.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN ANY SEWER MAIN AND STORM DRAIN CROSSING A WATER MAIN. THE MINIMUM VERTICAL SEPARATION IS MEASURED FROM OUTSIDE OF WATER MAIN TO OUTSIDE OF SEWER MAIN OR STORM DRAIN MAIN. SEE CITY OF KINGMAN STANDARD DETAIL 404 FOR ADDITIONAL INFORMATION AND/OR PROVISIONS FOR CLEARANCE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY, OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- WATER SERVICES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN. WATER SERVICES AT THE END OF CUL-DE SACS MAY VARY AS NECESSARY, BUT WILL BE APPROVED ON A CASE BY CASE BASIS.
- ALL SERVICES SHALL RUN IN A STRAIGHT LINE FROM THE WATER MAIN TO THE METER BOX.
- NEITHER WATER SERVICE METER BOX NOR ANY PORTION OF A WATER SERVICE SHALL BE INSTALLED UNDER AN EXISTING OR PROPOSED DRIVEWAY OR SIDEWALK RAMP.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND PRIOR TO FINAL INSPECTION.
- PLAN APPROVAL IS VALID FOR ONE YEAR.



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**EASTERN STREET
CALUMET TO AIRWAY AVE**

C.O.K. PROJECT NO.
ENG 21-0001

FILENAME
05-221038-GN02.dwg

**CITY OF KINGMAN
ENGINEERING DEPARTMENT**

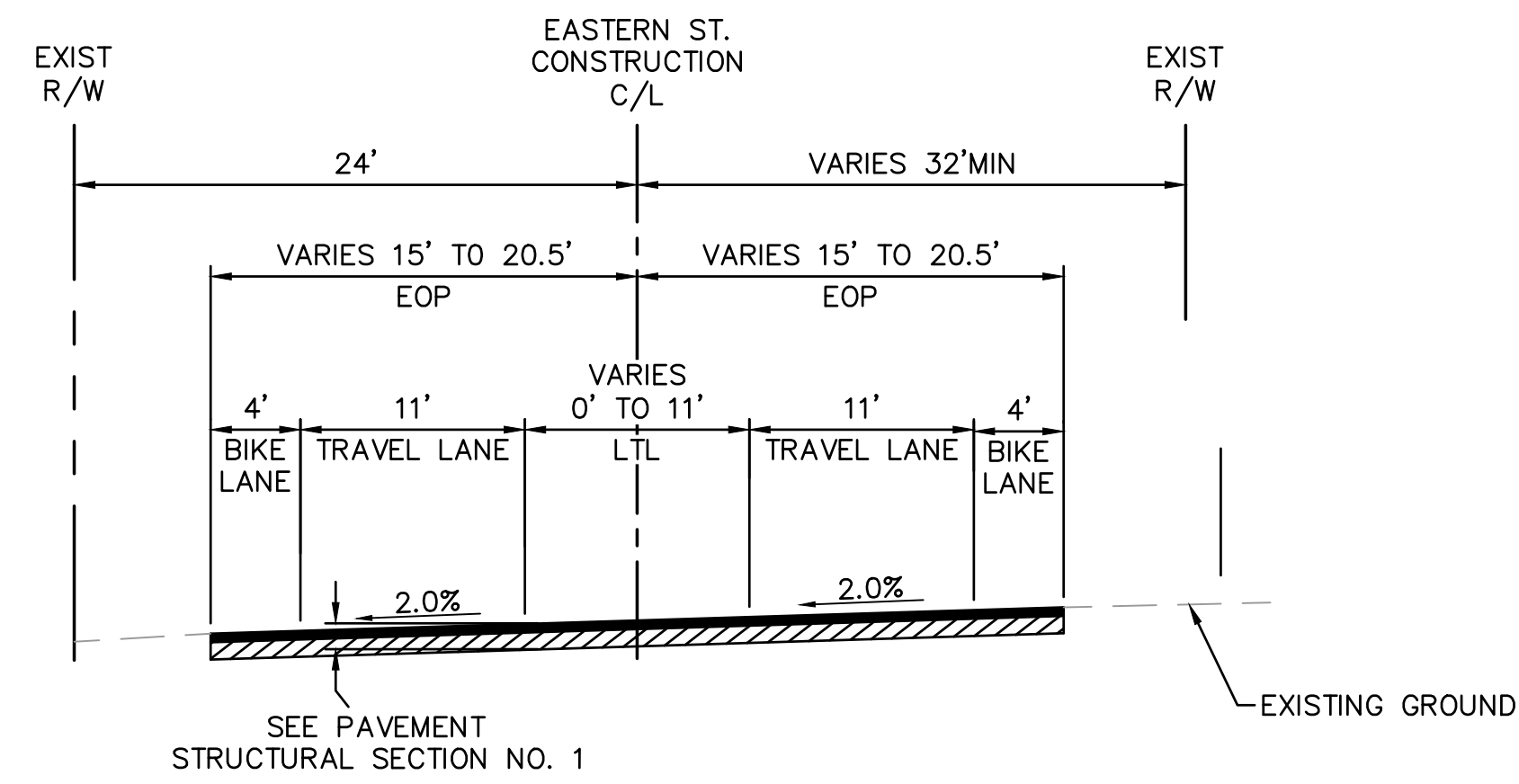
310 NORTH 4TH STREET
KINGMAN, ARIZONA 86401
PHONE (928) 753-8122 FAX (928) 753-8118



EASTERN STREET

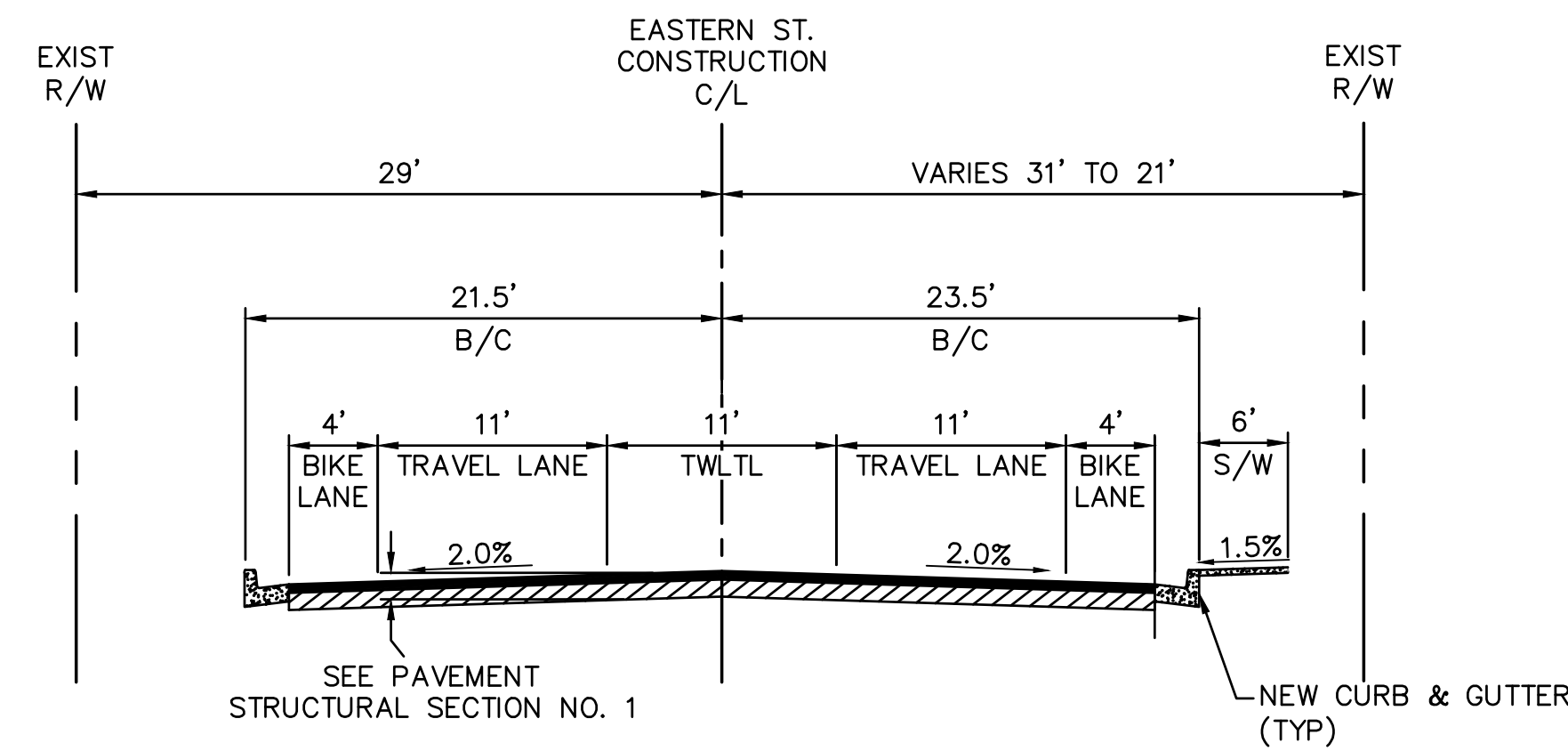
GENERAL NOTES

SHEET NO.
GN02
05 OF 52



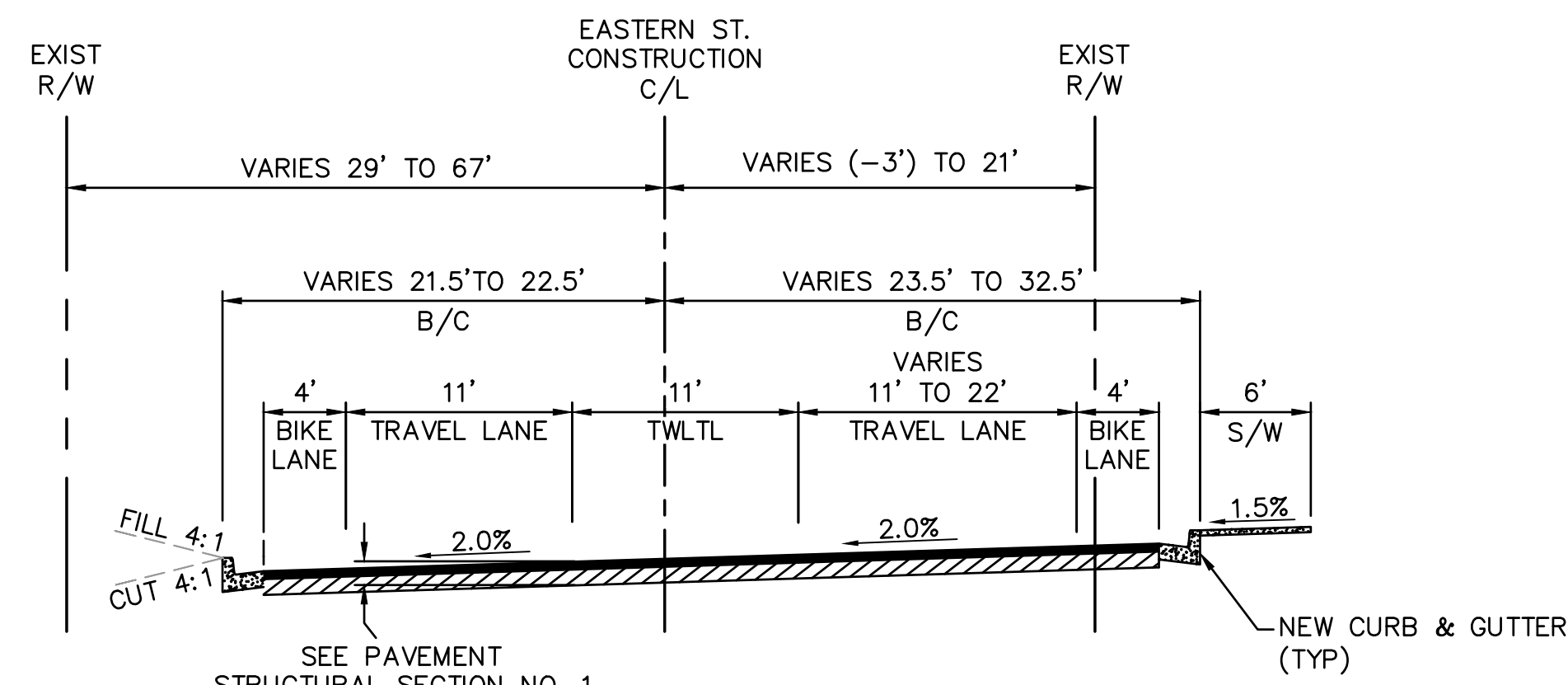
TYPICAL PAVED ROADWAY SECTION - EASTERN STREET

N.T.S.
 STA 75+00.00 TO STA 76+57.88
 *STA 76+57.88 TO STA 77+40.55
 - TRANSITION FROM ONE-WAY CROWN TO NORMAL CROWN



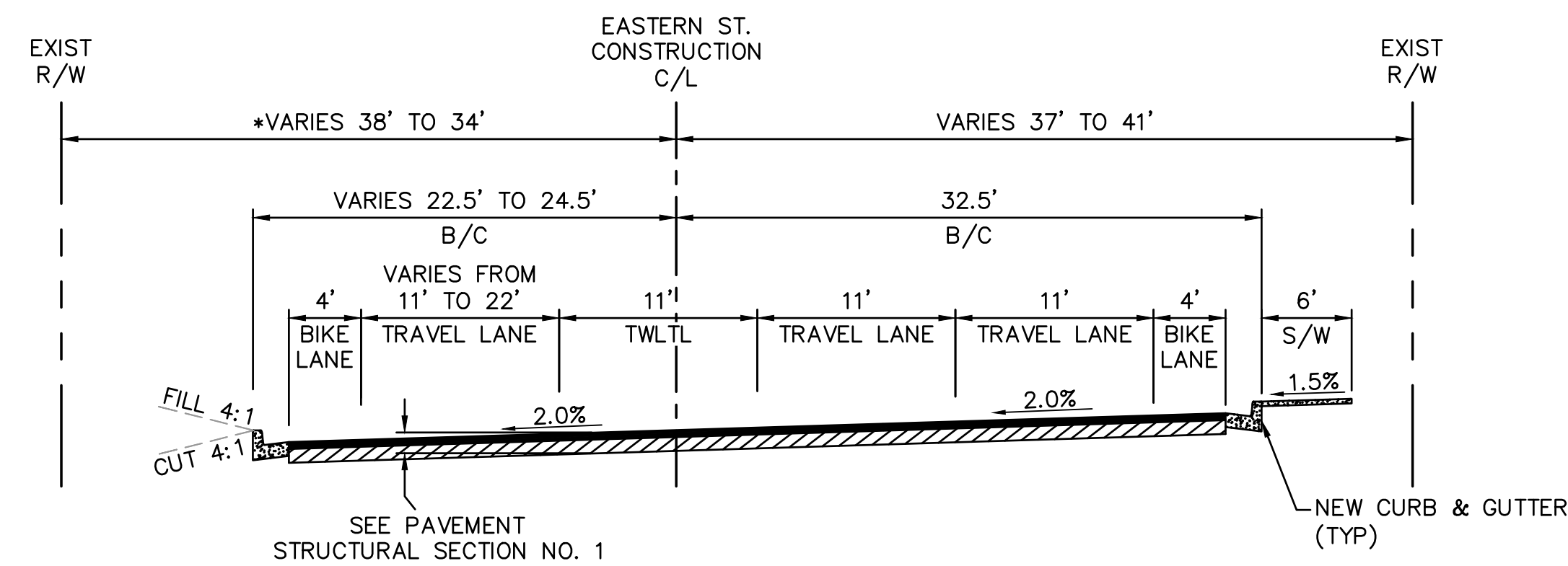
TYPICAL PAVED ROADWAY SECTION - EASTERN STREET

N.T.S.
 STA 78+18.85 TO STA 82+30.00
 *STA 82+30.00 TO STA 83+30.00
 - TRANSITION FROM NORMAL CROWN TO ONE-WAY CROWN



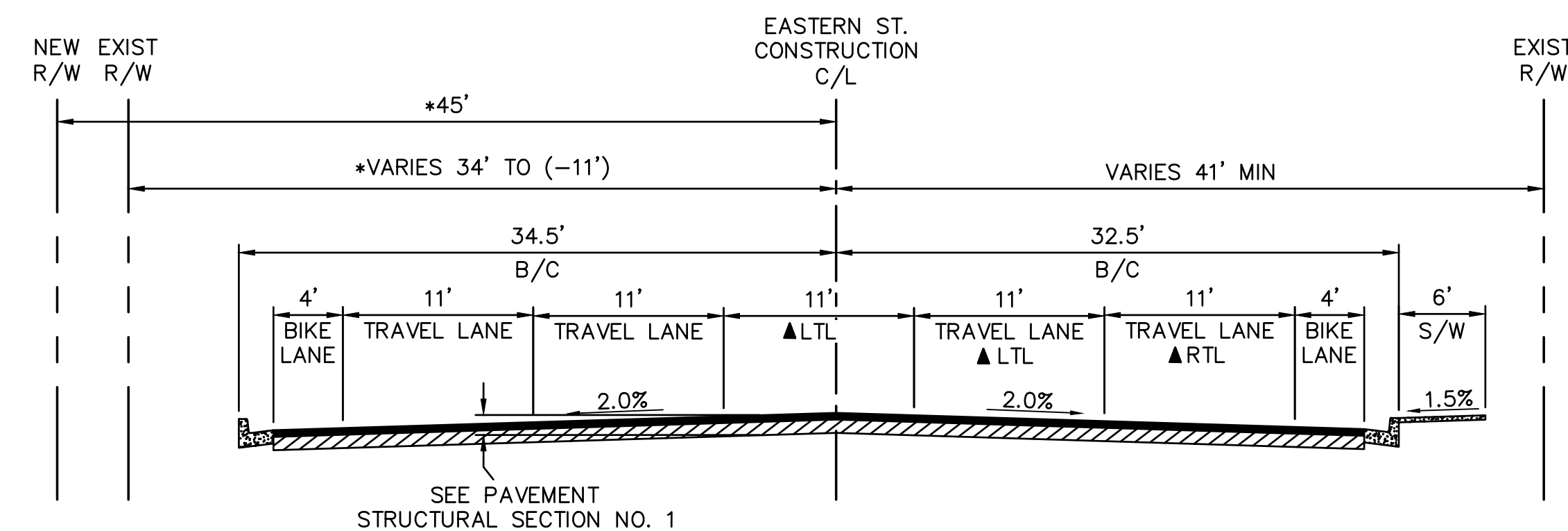
TYPICAL PAVED ROADWAY SECTION - EASTERN STREET

N.T.S.
 STA 83+80.00 TO STA 86+41.66



TYPICAL PAVED ROADWAY SECTION - KENWOOD AVENUE

N.T.S.
 STA 86+41.66 TO STA 90+34.35
 *STA 90+34.35 TO STA 91+34.35
 - TRANSITION FROM ONE-WAY CROWN TO NORMAL CROWN



TYPICAL PAVED ROADWAY SECTION - KENWOOD AVENUE

N.T.S.
 STA 91+34.35 TO 96+66.78
 *STA 91+34.35 TO STA 94+77.24
 ▲ STA 94+50.00 TO STA 96+38.81



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EASTERN STREET
 CALUMET TO AIRWAY AVE

C.O.K. PROJECT NO.
 ENG 21-0001

CITY OF KINGMAN
 ENGINEERING DEPARTMENT

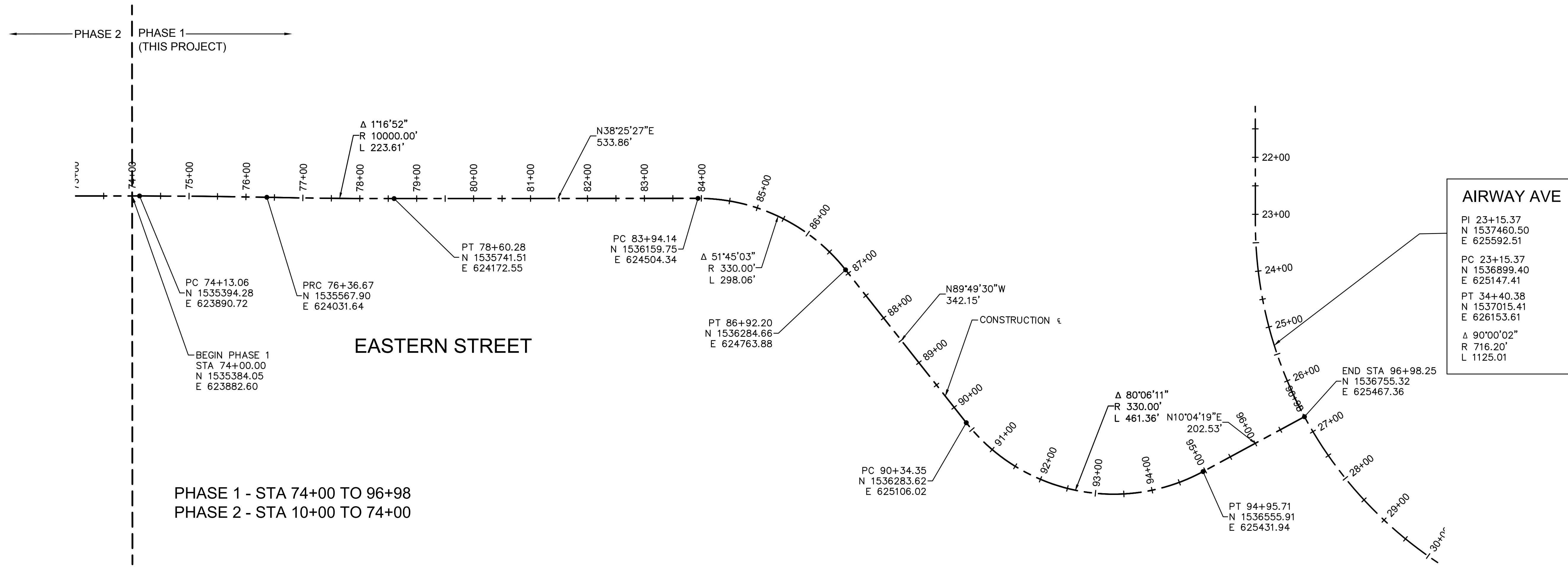
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310 NORTH 4TH STREET
 KINGMAN, ARIZONA 86401
 PHONE (928) 753-8122 FAX (928) 753-8118



EASTERN STREET
 TYPICAL SECTIONS

SHEET NO.
 TX01
 06 OF 52



PHASE 1 - STA 74+00 TO 96+98
 PHASE 2 - STA 10+00 TO 74+00

AIRWAY AVE
 PI 23+15.37
 N 1537460.50
 E 625592.51
 PC 23+15.37
 N 1536899.40
 E 625147.41
 PT 34+40.38
 N 1537015.41
 E 626153.61
 Δ 90°00'02"
 R 716.20'
 L 1125.01'



EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 07-221038-GC01.dwg
EASTERN STREET GEOMETRIC CONTROL		 SHEET NO. GC01 07 OF 52

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT IS S89°54'25"E FOR THE NORTH LINE FOR THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 8, T21N, R16W OF THE GILA & SALT RIVER MERIDIAN, MOHAVE COUNTY, ARIZONA, CALCULATED FROM COORDINATE VALUES SHOWN ON THE RETRACEMENT AND DEPENDENT RESURVEY BY TRIMBLE GPS OF SECTIONS 1-23 AND 26-35 OF T.21 N., R.16 W., G.&S.R.M., MOHAVE COUNTY, ARIZONA. THIS SURVEY WAS PERFORMED BY THE CITY OF KINGMAN SURVEYING DEPARTMENT, SIGNED & SEALED BY JACK M. KESSLER PLS#8904 ON 10/28/03 AND RECORDED IN THE MOHAVE COUNTY RECORDER'S OFFICE AS RECEPTION NUMBER 2003-92693.

CONTROL INFORMATION

ALL BEARINGS ARE GROUND/GRID BEARINGS

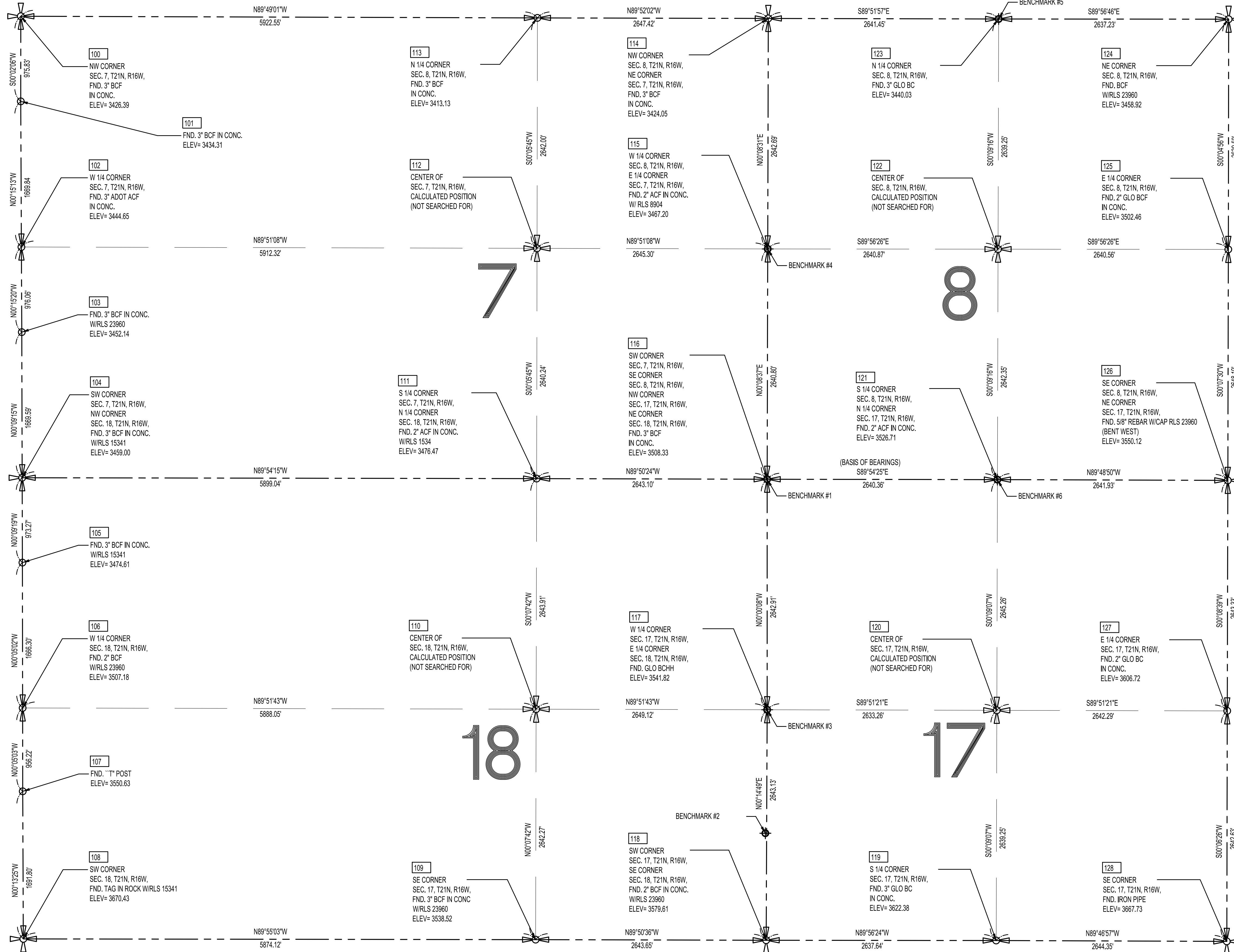
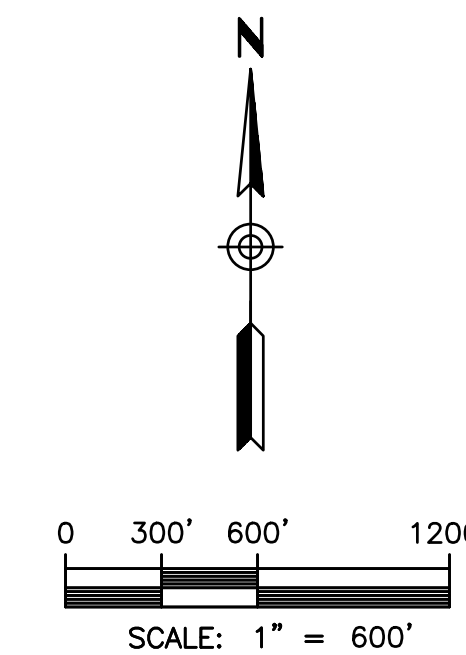
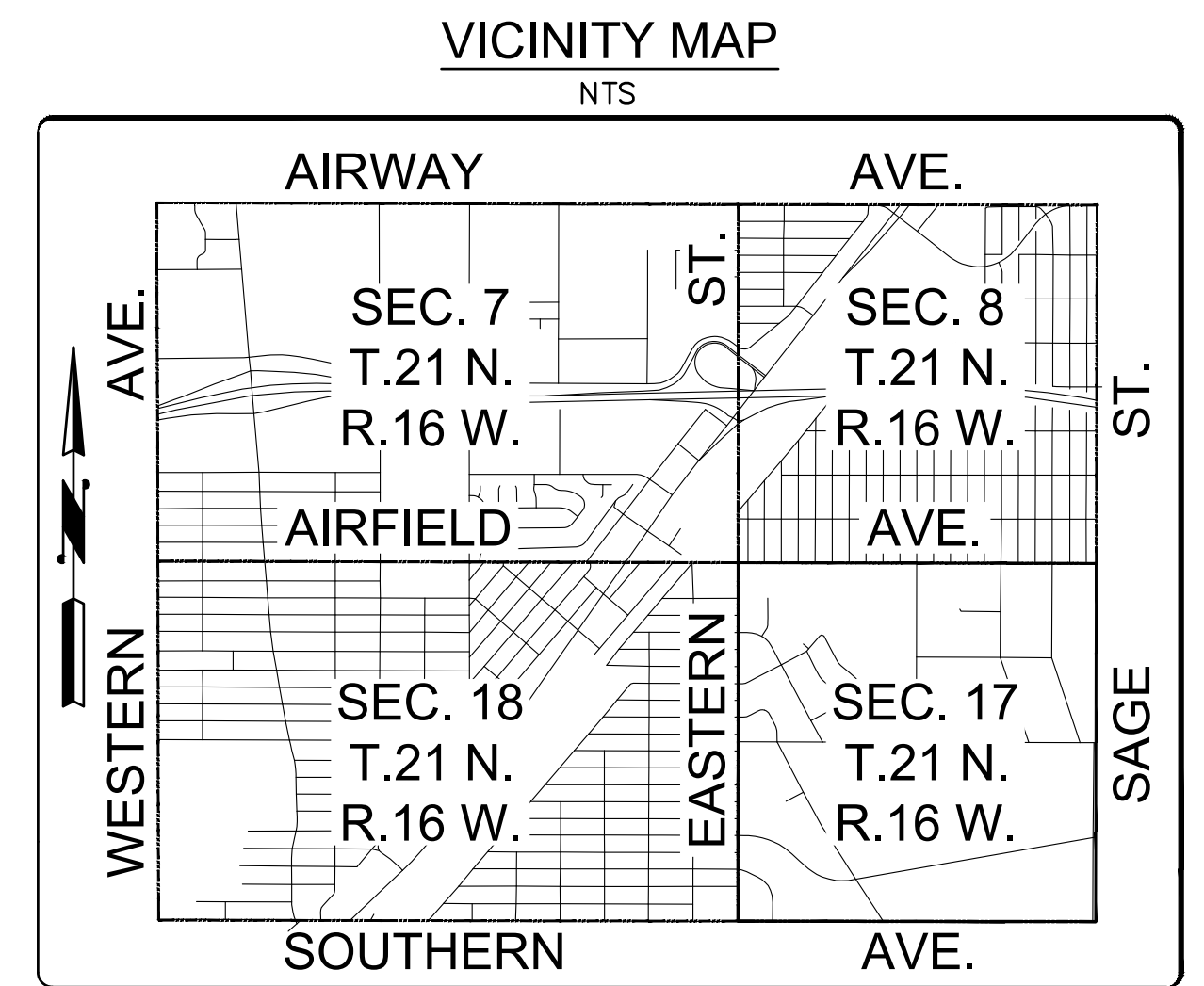
ALL DISTANCES ARE GROUND DISTANCES (INTERNATIONAL FEET)

COORDINATES SHOWN ARE BASED ON NAD83 ARIZONA STATE PLANE PROJECTION SYSTEM - WEST ZONE - GROUND COORDINATES (INTERNATIONAL FEET)

ELEVATIONS SHOWN ARE BASED ON NAVD88

THE GRID TO GROUND SCALE FACTOR UTILIZED FOR THIS PROJECT IS 1.00023215388

GEOMETRIC CONTROL FOR SECTIONS 7, 8, 17 & 18, TOWNSHIP 21 NORTH, RANGE 16 WEST OF THE GILA AND SALT RIVER MERIDIAN, CITY OF KINGMAN, MOHAVE COUNTY, ARIZONA



TABLE

PT.	NORTHING	EASTING	ELEV
100	1537682.08	613476.00	3426.39
101	1536706.25	613475.41	3434.31
102	1535036.42	613482.80	3444.65
103	1534060.37	613487.16	3452.14
104	1532990.79	613491.65	3459.00
105	1531417.52	613494.29	3474.61
106	1529751.22	613496.73	3507.18
107	1528795.01	613498.13	3550.63
108	1527103.22	613504.73	3670.43
109	1527094.77	619378.84	3538.52
110	1529737.03	619384.76	-
111	1532380.93	619390.69	3476.47
112	1535021.16	619395.10	-
113	1537663.16	619399.52	3413.13
114	1537657.02	622046.93	3424.05
115	1535014.34	622040.39	3467.20
116	1532373.55	622033.78	3508.33
117	1529730.64	622033.87	3541.82
118	1527087.54	622022.48	3622.38
119	1527084.77	624660.12	3622.38
120	1529724.01	624667.12	-
121	1532369.26	624674.13	3526.71
122	1535011.60	624681.26	-
123	1537621.69	624692.80	3440.03
124	1537648.36	627325.61	3458.92
125	1535008.86	627321.82	3502.46
126	1532360.68	627316.05	3550.12
127	1259717.35	627309.40	3606.72
128	1527074.73	627304.45	3667.73

BENCHMARKS

PRIMARY HORIZONTAL CONTROL:
 BENCHMARK #1: 3 INCH BRASS CAP FLUSH IN CONC. SOUTHEAST CORNER OF SEC. 7 NAVD88 EL = 3508.33'
 BENCHMARK #2: NGS BENCHMARK DESIGNATION D 525 4 IN BRASS CAP FLUSH IN CONC. SOUTHWEST CORNER OF INTERSECTION OF EASTERN ST. WITH LOUISE AVE. NAVD88 EL = 3564.67'
 BENCHMARK #3: GLO BRASS CAP IN HANDHOLE EAST QUARTER CORNER OF SEC. 18 NAVD88 EL = 3541.82'
 BENCHMARK #4: 2 INCH ALUMINUM CAP IN CONC. WEST QUARTER CORNER OF SEC. 8 NAVD88 EL = 3467.20'
 BENCHMARK #5: 3 INCH GLO BRASS CAP IN CONC. NORTH QUARTER CORNER OF SEC. 8 NAVD88 EL = 3544.03'
 BENCHMARK #6: 2 INCH ALUMINUM CAP FLUSH IN CONC. SOUTH QUARTER CORNER OF SEC. 8 NAVD88 EL = 3526.72'
PRIMARY VERTICAL CONTROL:
 BENCHMARK #1: N 1532373.5519' E 622033.7759' #565
 BENCHMARK #2: N 1528314.7549' E 622013.2833' #900
 BENCHMARK #3: N 1529730.6415' E 622033.8721' #566
 BENCHMARK #4: N 1535014.3409' E 622040.3899' #567
 BENCHMARK #5: N 1537650.8357' E 624688.3788' #571
 BENCHMARK #6: N 1532369.2597' E 624674.1332' #580

PREPARED FOR

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 ENGINEERING DEPARTMENT
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 KINGMAN, ARIZONA 86401
 PHONE: 928.753.8134
 CONTACT: ERIC SPARKMAN

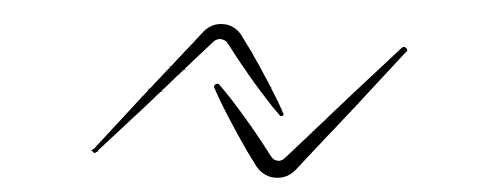
PREPARED BY

ARDURRA
 1001 N CENTRAL AVENUE
 SUITE 900
 PHOENIX, ARIZONA 85004
 PHONE: 602.263.1177
 CONTACT: TROY A. RAY

CERTIFICATION

I, TROY A. RAY, HEREBY CERTIFY THAT THIS DRAWING AND THE FIELD SURVEYS IT WAS BASED ON WERE PERFORMED AND PREPARED UNDER MY SUPERVISION DURING THE MONTH OF JUNE 2017 AND OCTOBER 2016 RESPECTIVELY. THE SURVEY AND THE MONUMENTS IT IS BASED ON ARE CORRECT AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Troy A. Ray
 TROY A. RAY
 R.L.S. 33868

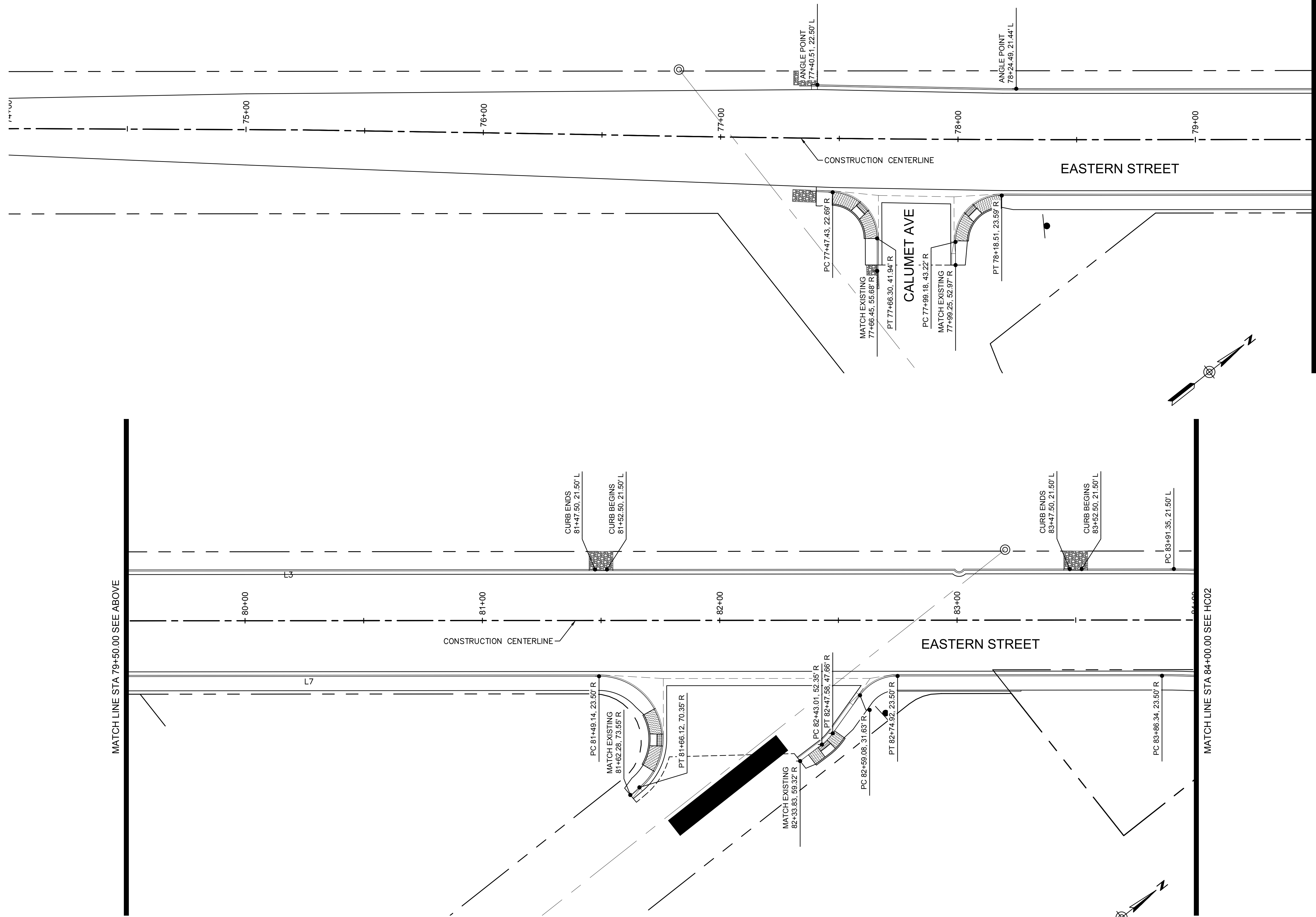


LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- PROJECT BENCHMARKS AS NOTED
- FOUND MONUMENT AS NOTED
- ACF ALUMINUM CAP FLUSH
- ADOT ARIZONA DEPARTMENT OF TRANSPORTATION
- BC BRASS CAP
- BCF BRASS CAP FLUSH
- BCHH BRASS CAP IN HANDHOLE
- CONC. CONCRETE
- ELEV. ELEVATION
- FND. FOUND
- GLO GOVERNMENT LAND OFFICE
- RLS REGISTERED LAND SURVEYOR
- SEC. SECTION
- ACF ALUMINUM CAP FLUSH

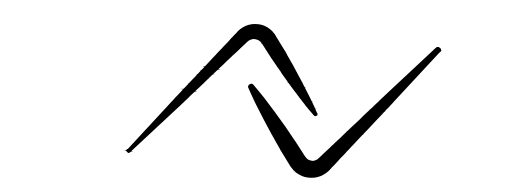
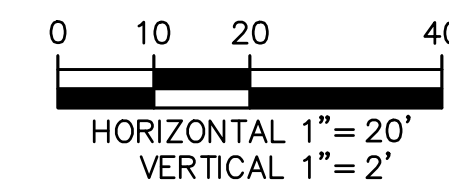


EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001	
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 08-221038-GC02.dwg	
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EASTERN STREET BENCHMARK CONTROL SHEET			
		SHEET NO. GC02 08 OF 52	



CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH

LINE TABLE		
LINE	BEARING	LENGTH

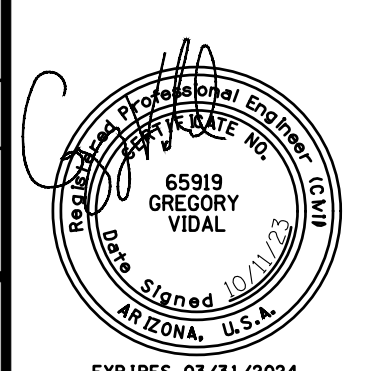


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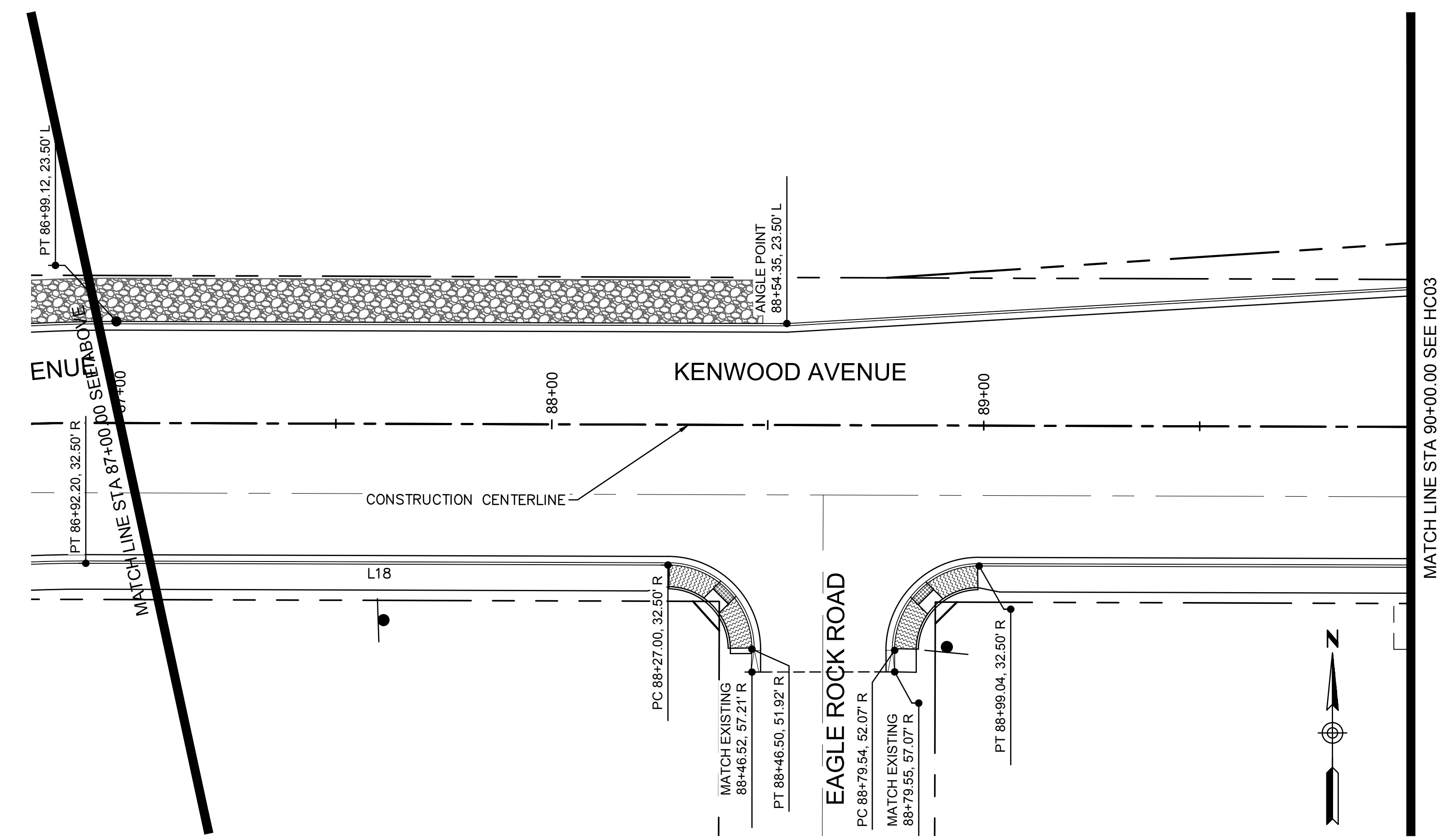
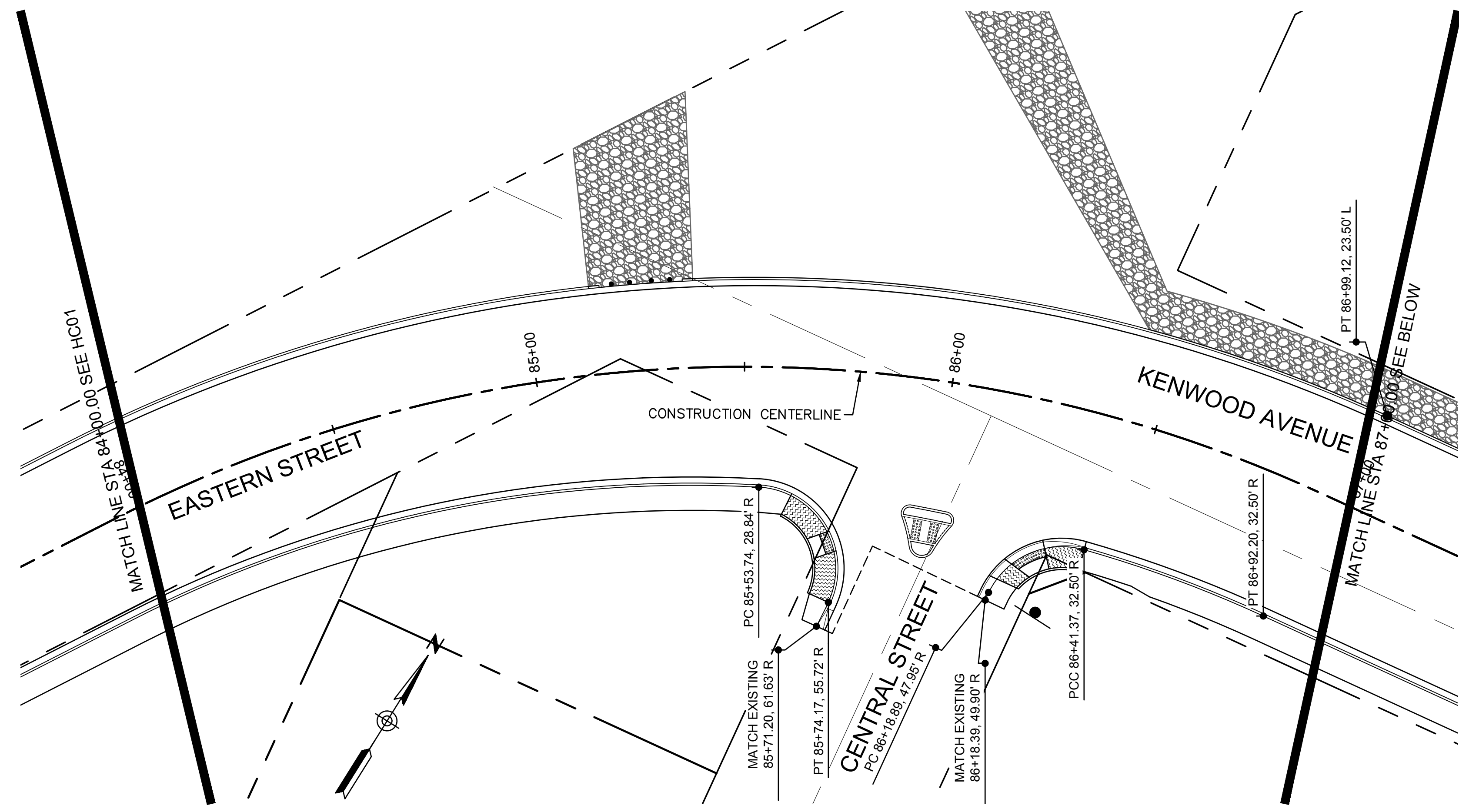
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ENG 21-0001
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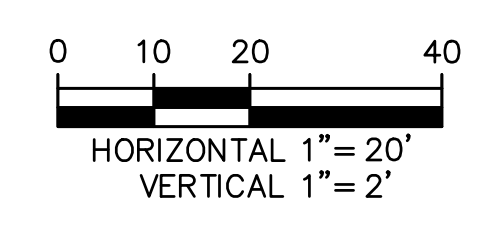
EASTERN STREET
HORIZONTAL CONTROL

SHEET NO.
HC01
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CURVE TABLE			
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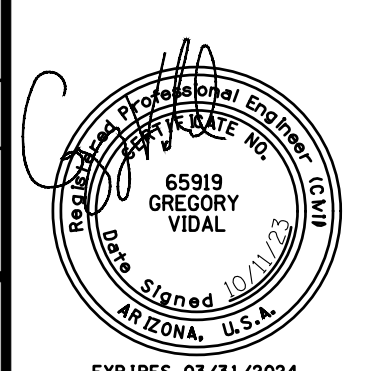
LINE TABLE		
LINE	BEARING	LENGTH



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C.O.K. PROJECT NO.
ENG 21-0001
FILENAME
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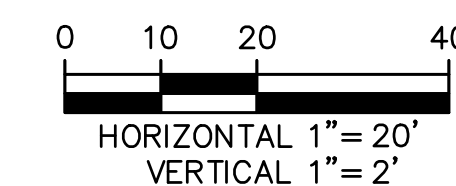
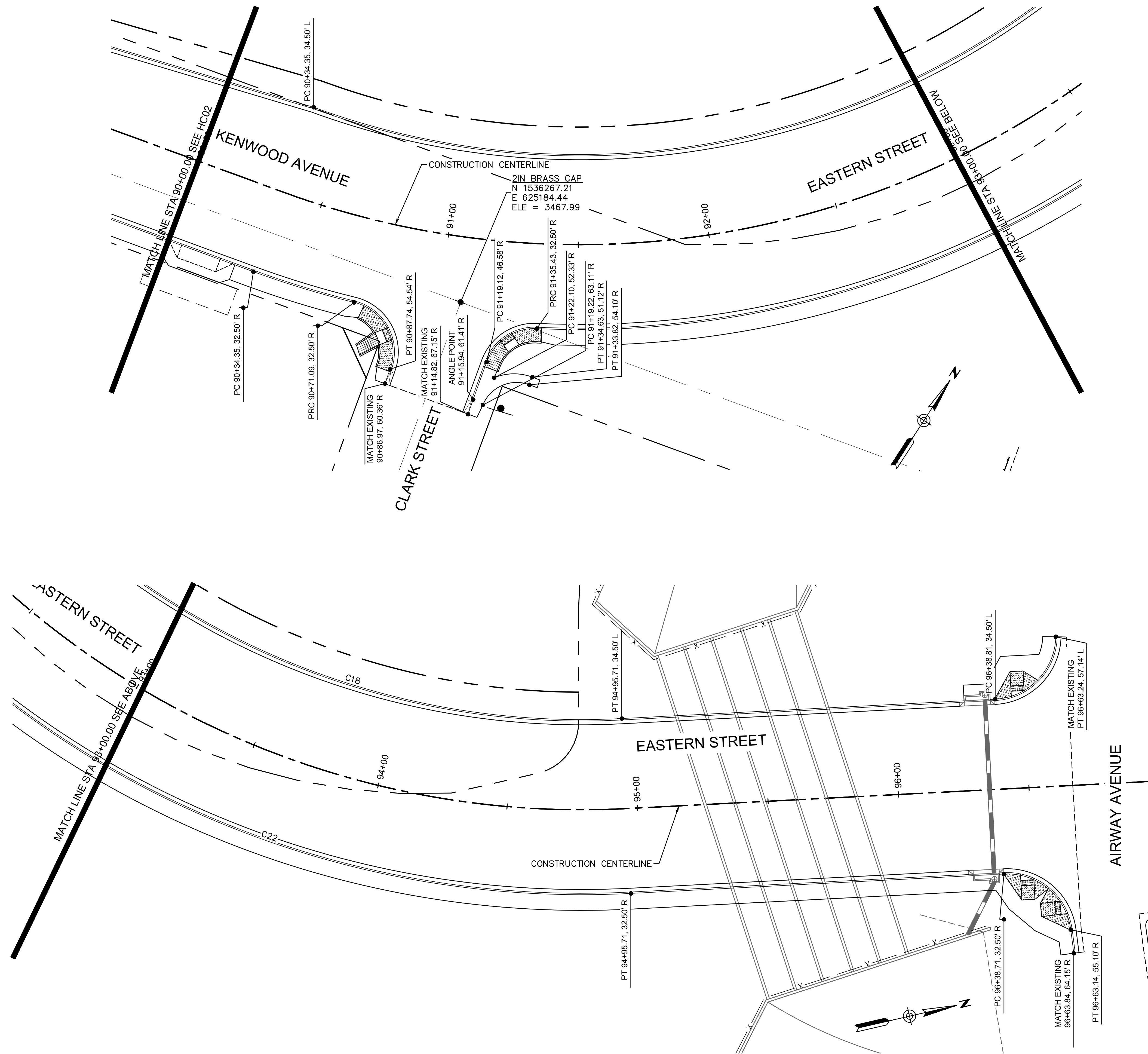


EASTERN STREET
HORIZONTAL CONTROL

SHEET NO.
HC02
10 OF 52

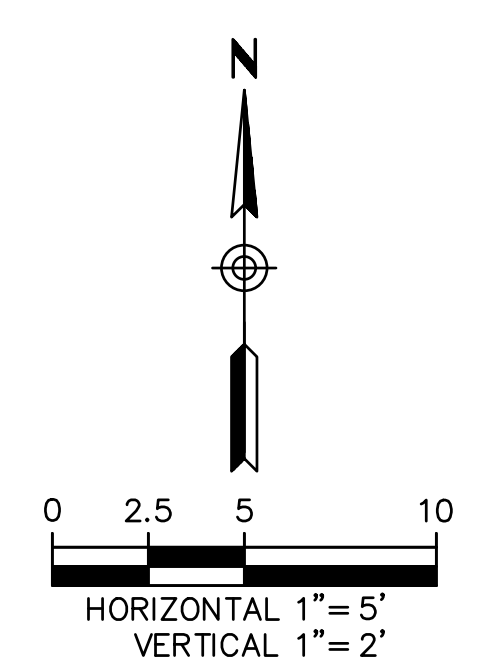
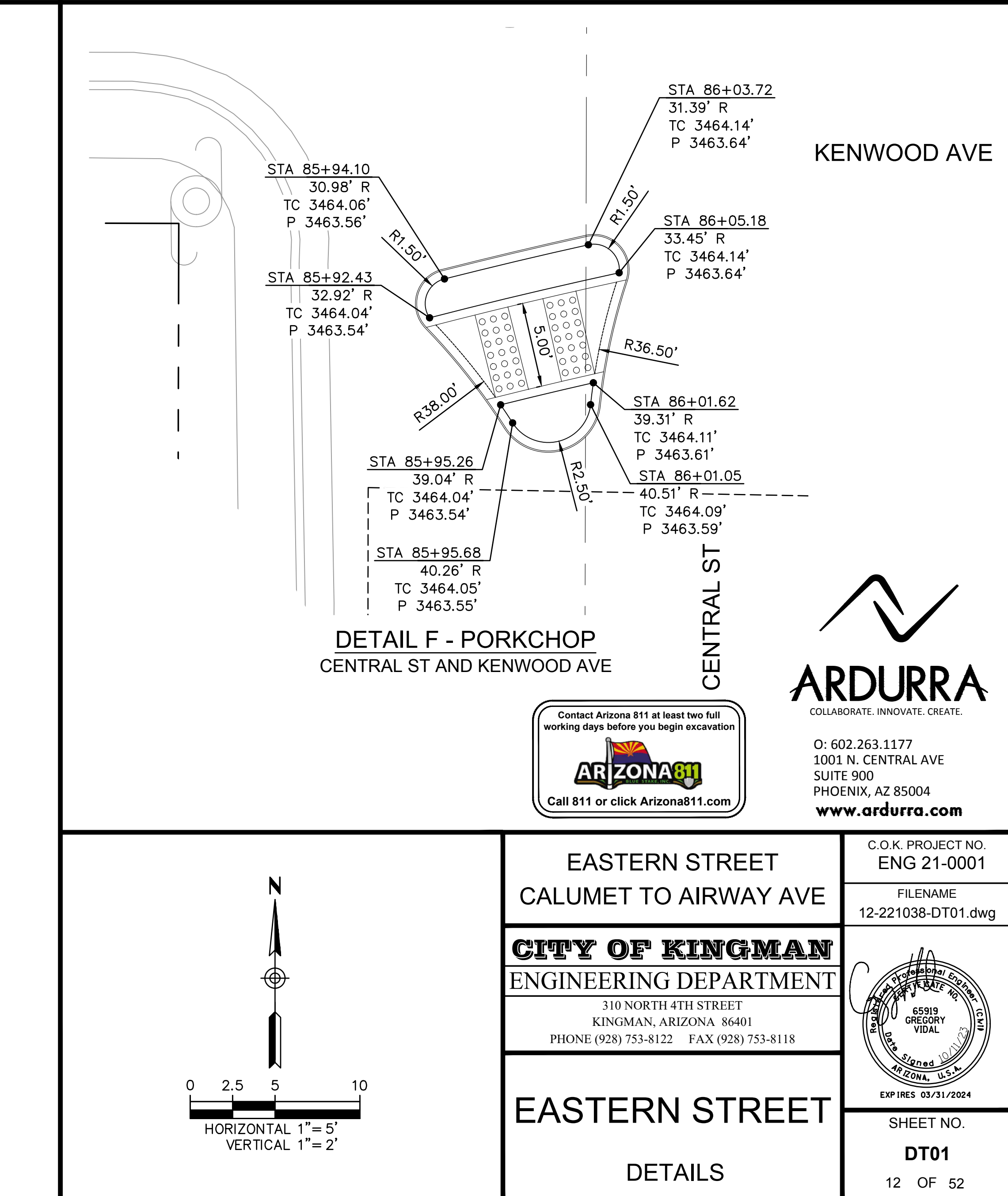
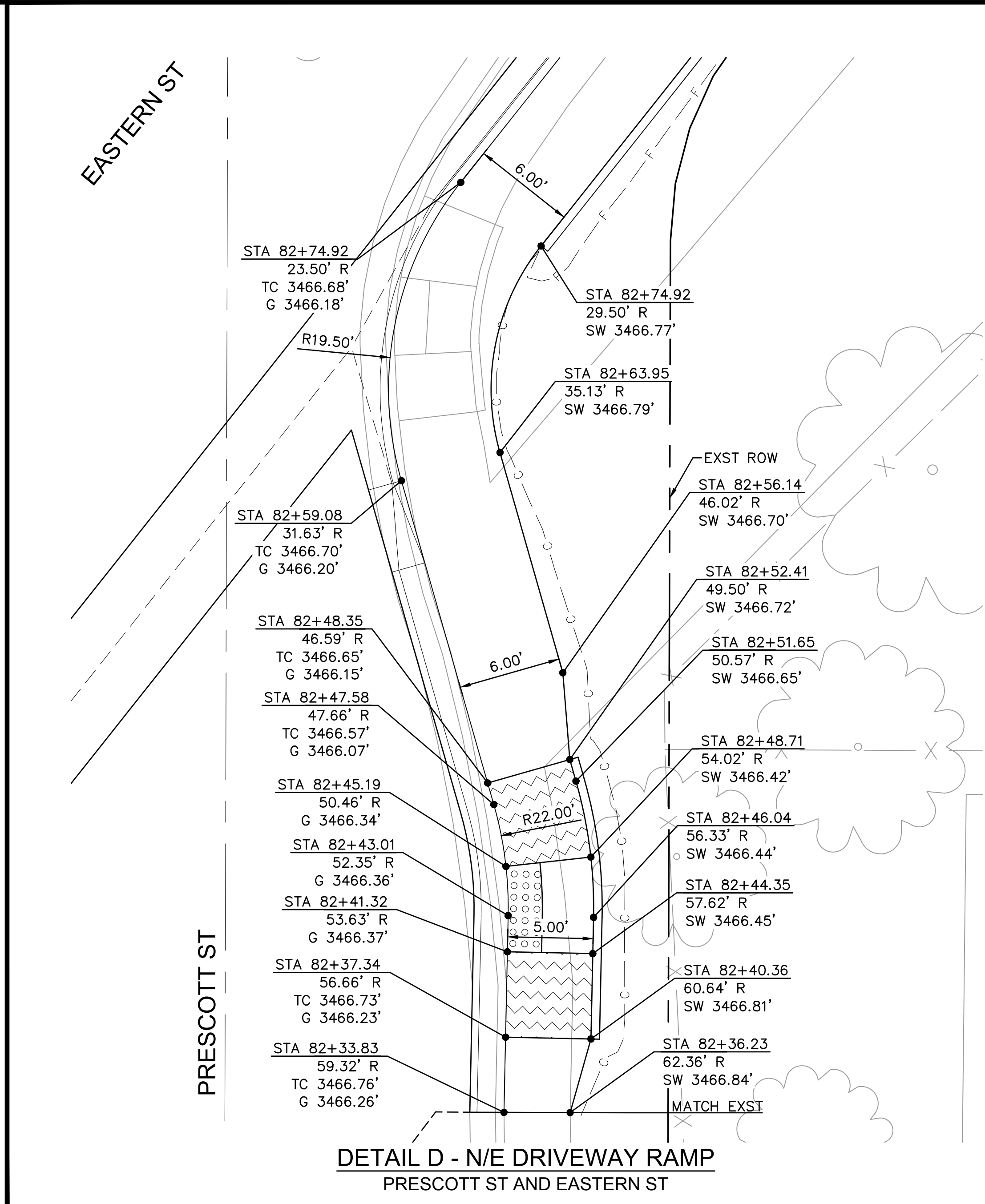
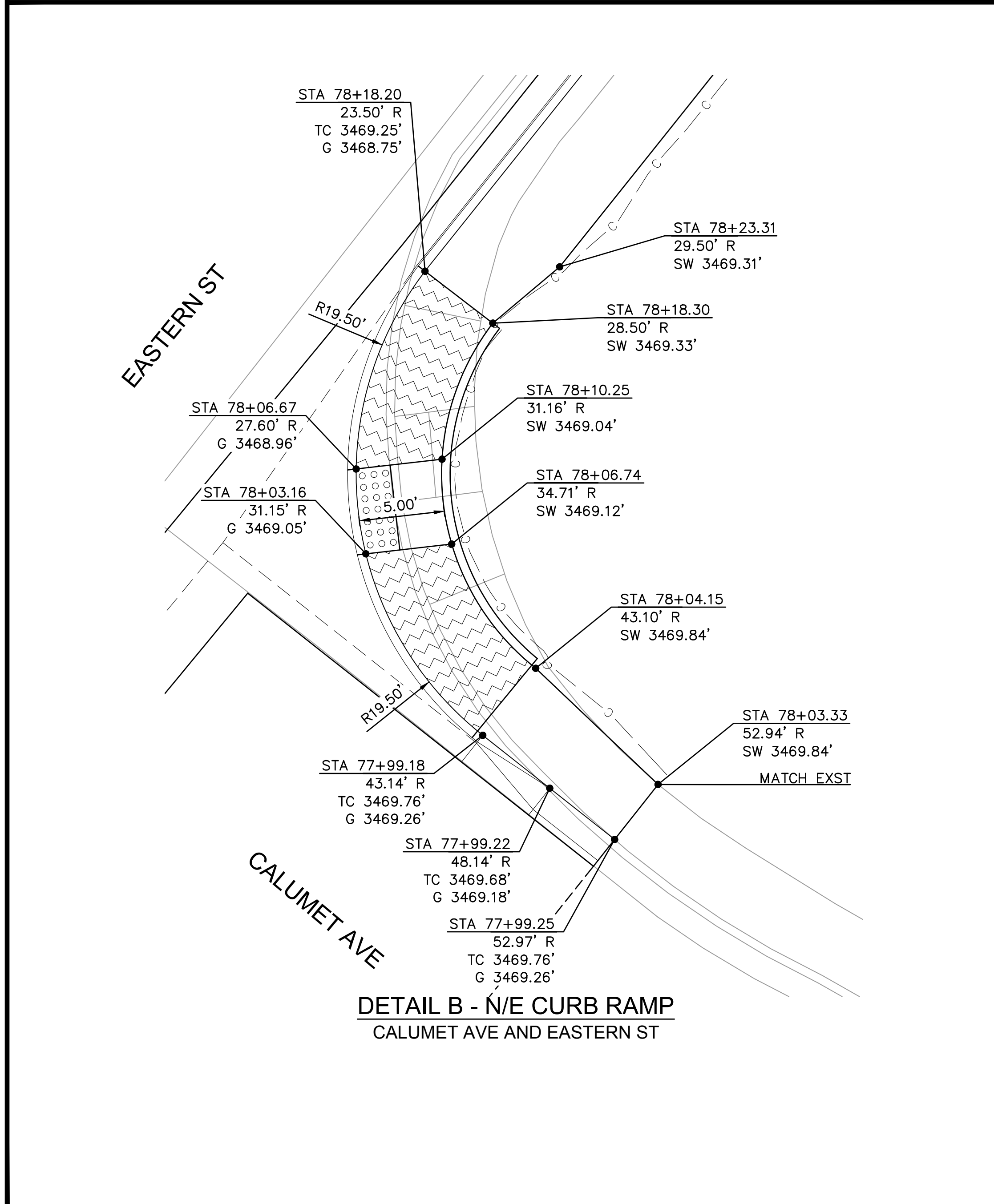
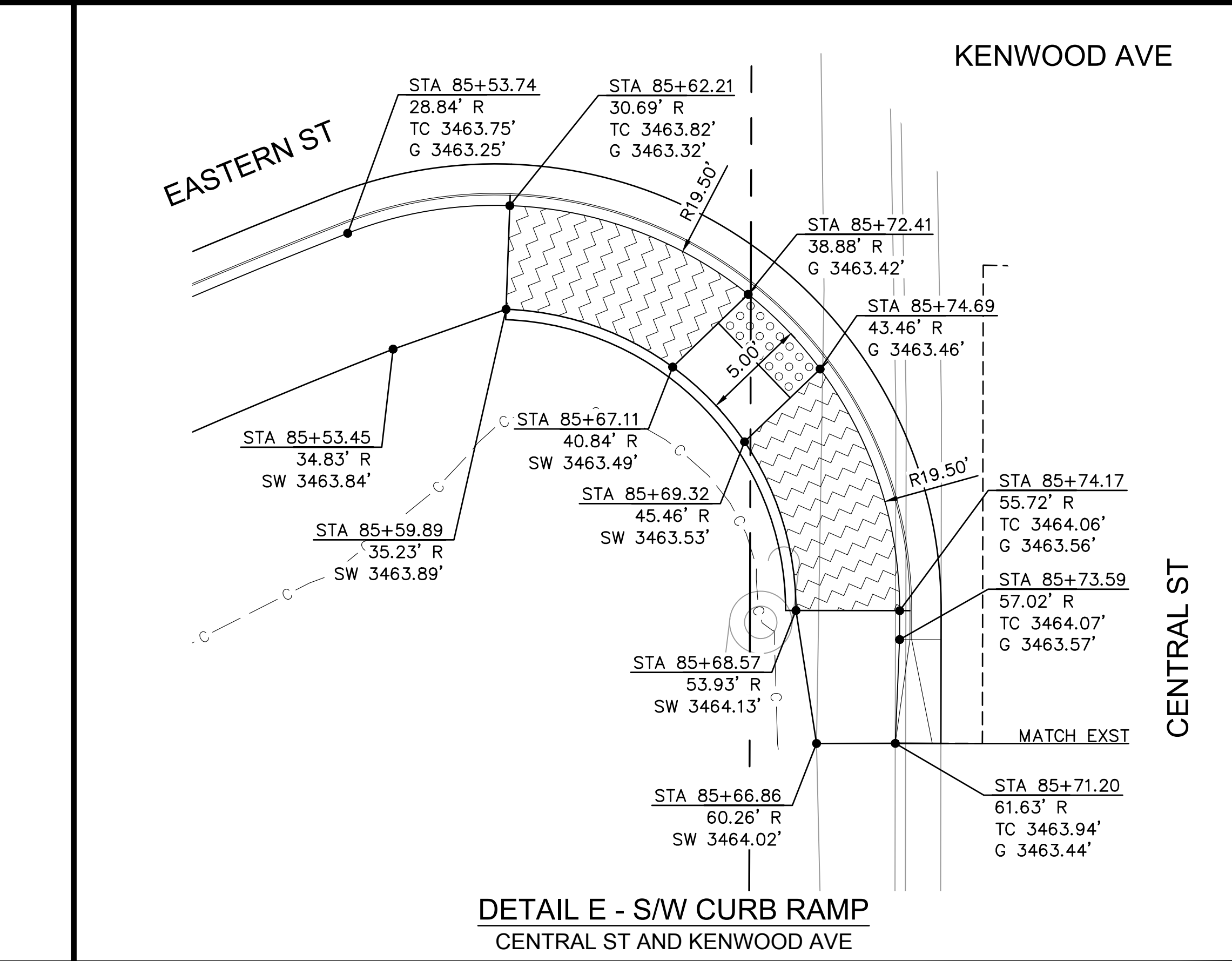
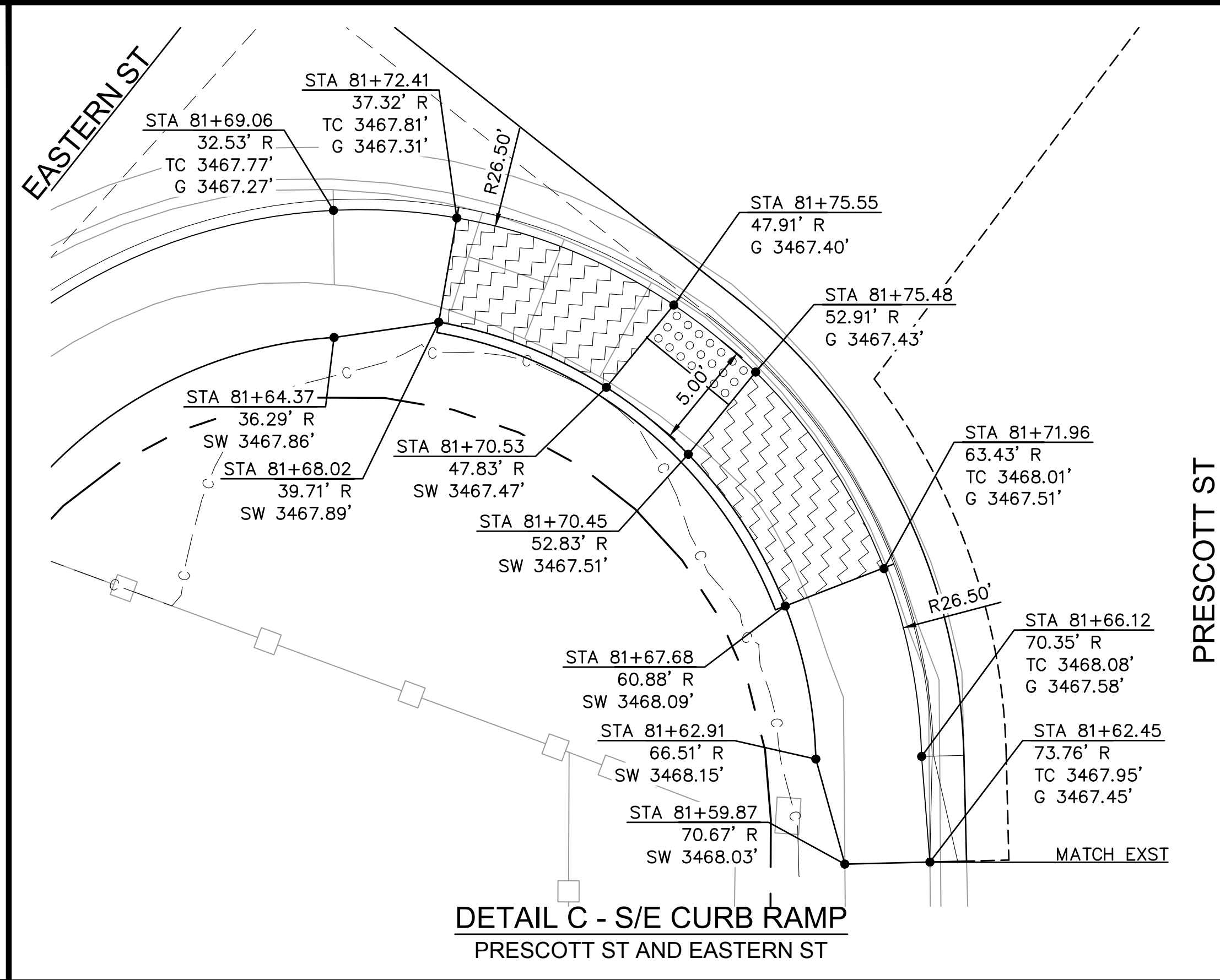
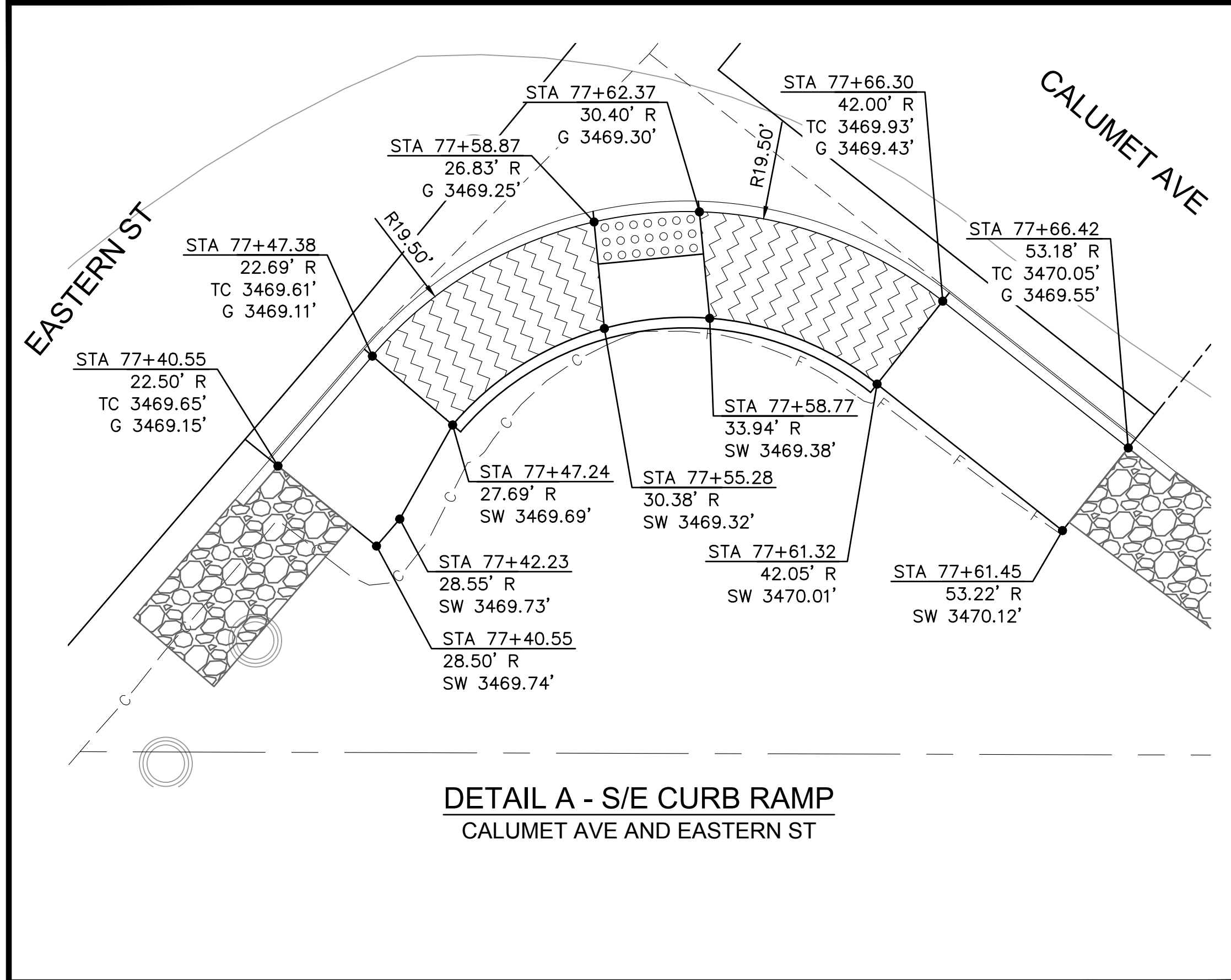
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CURVE	DELTA	RADIUS	LENGTH

LINE TABLE		
LINE	BEARING	LENGTH



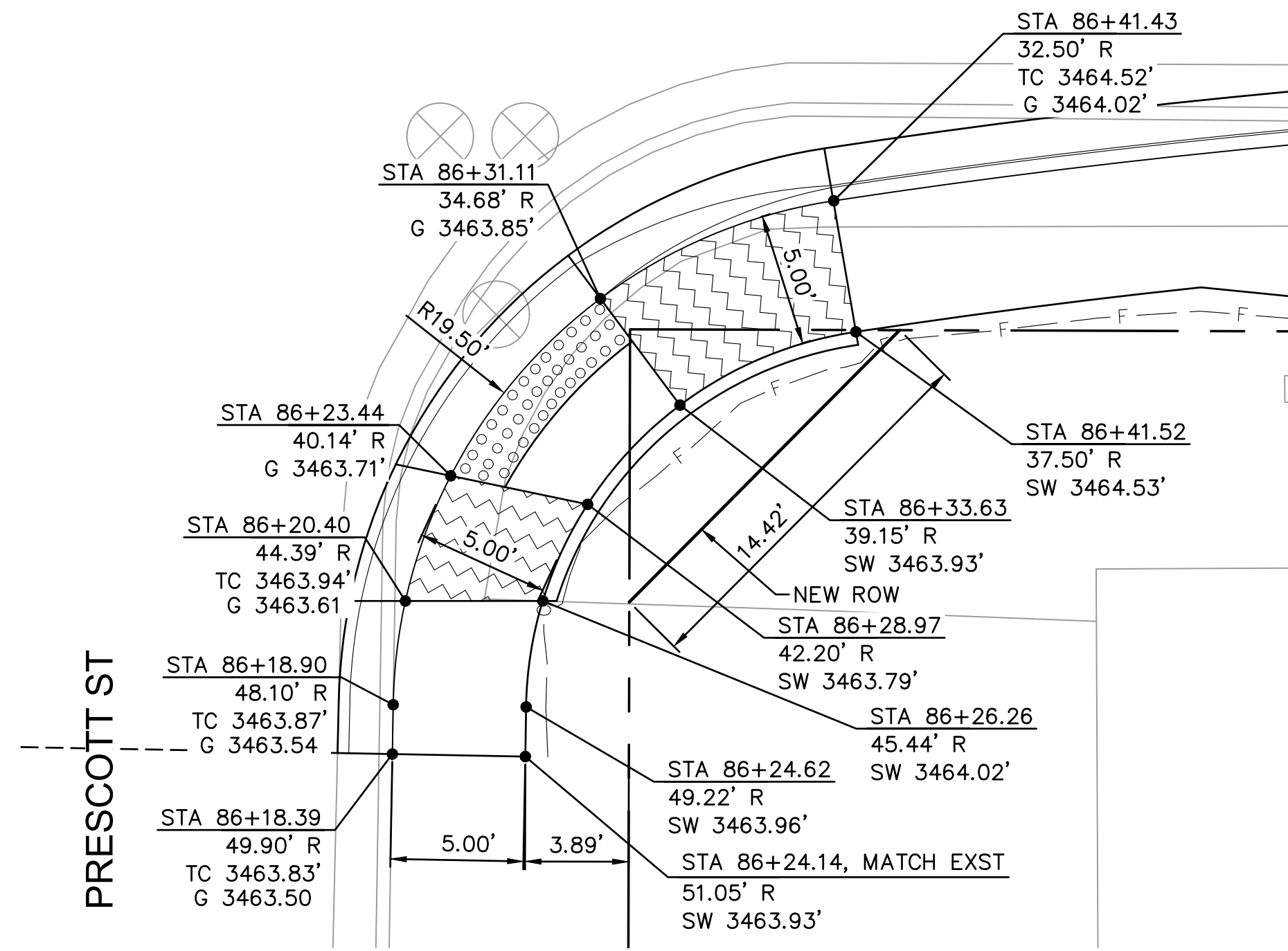
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EASTERN STREET HORIZONTAL CONTROL		 SHEET NO. HC03 11 OF 52



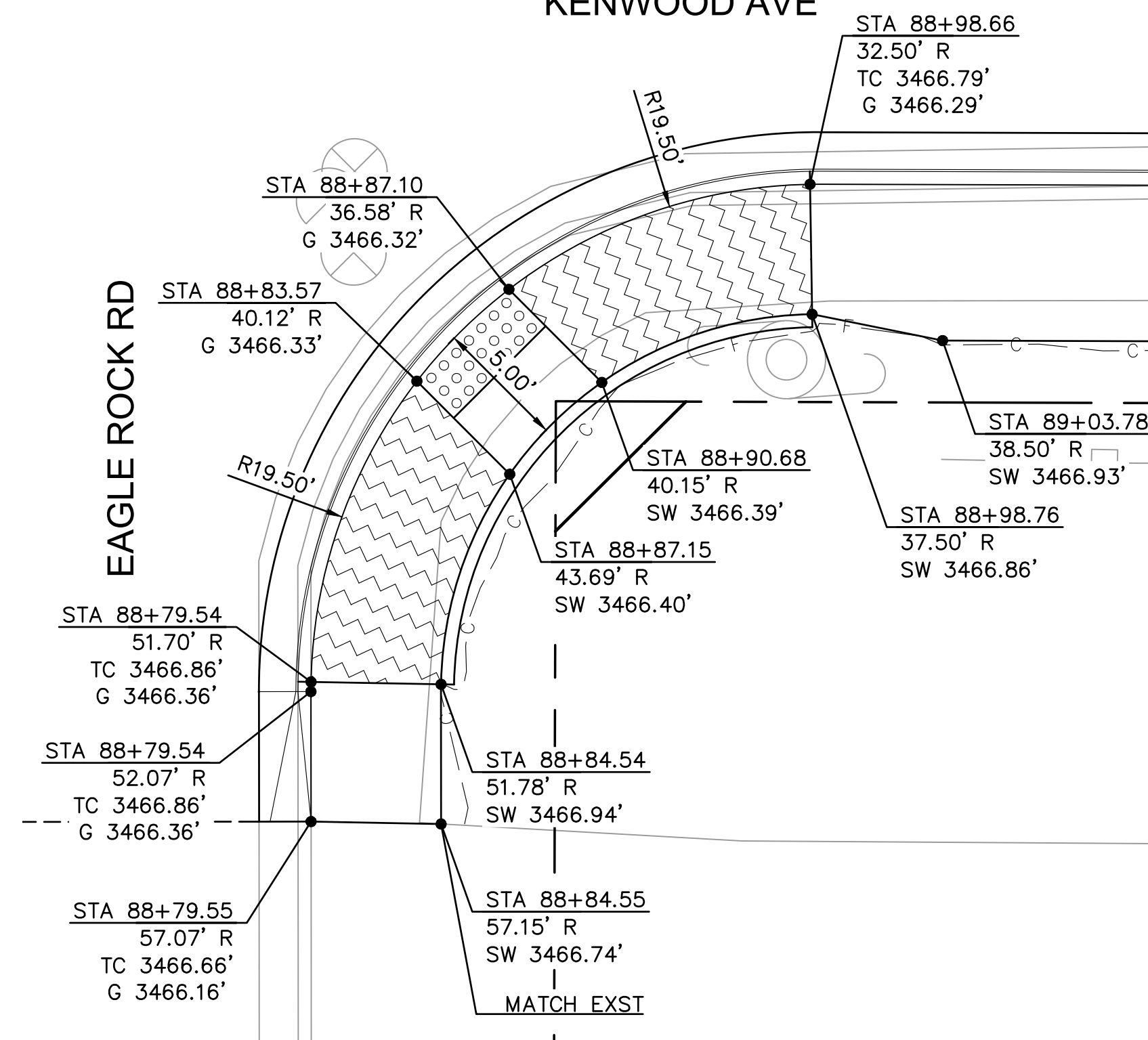
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EASTERN STREET DETAILS		SHEET NO. DT01 12 OF 52

KENWOOD AVE



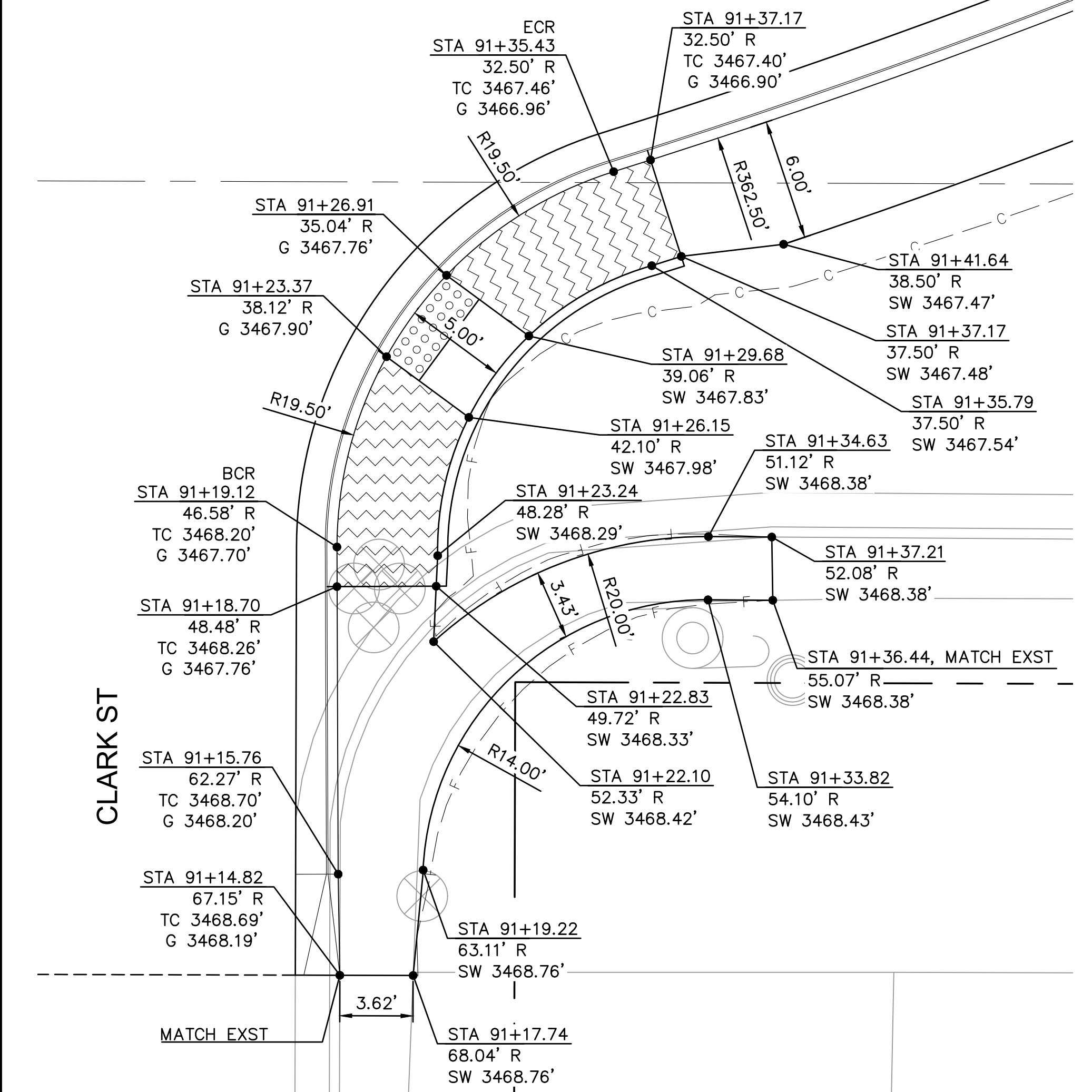
DETAIL G - S/E CURB RAMP
CENTRAL ST AND KENWOOD AVE

KENWOOD AVE



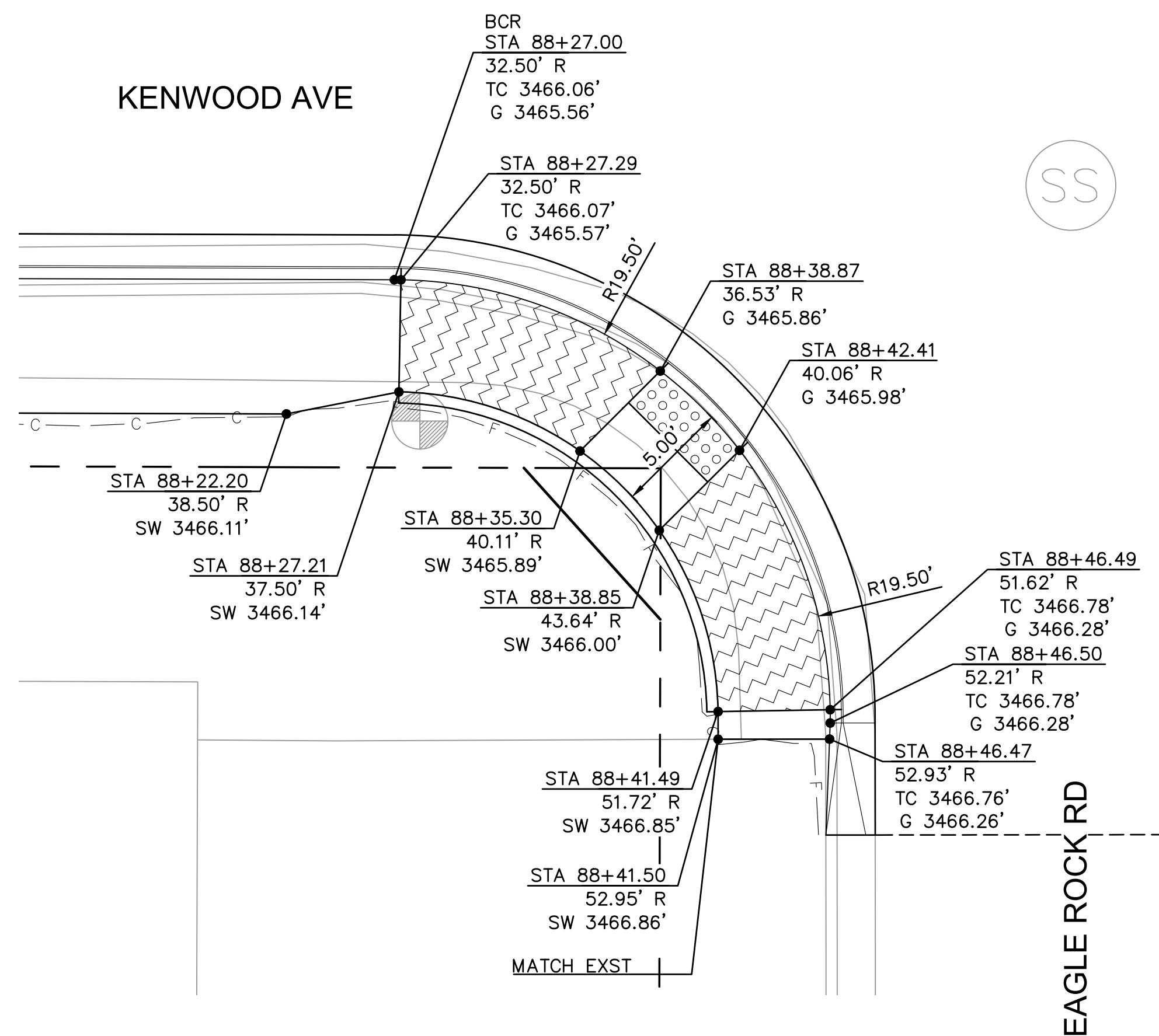
DETAIL I - S/E CURB RAMP
EAGLE ROCK RD AND KENWOOD AVE

KENWOOD AVE



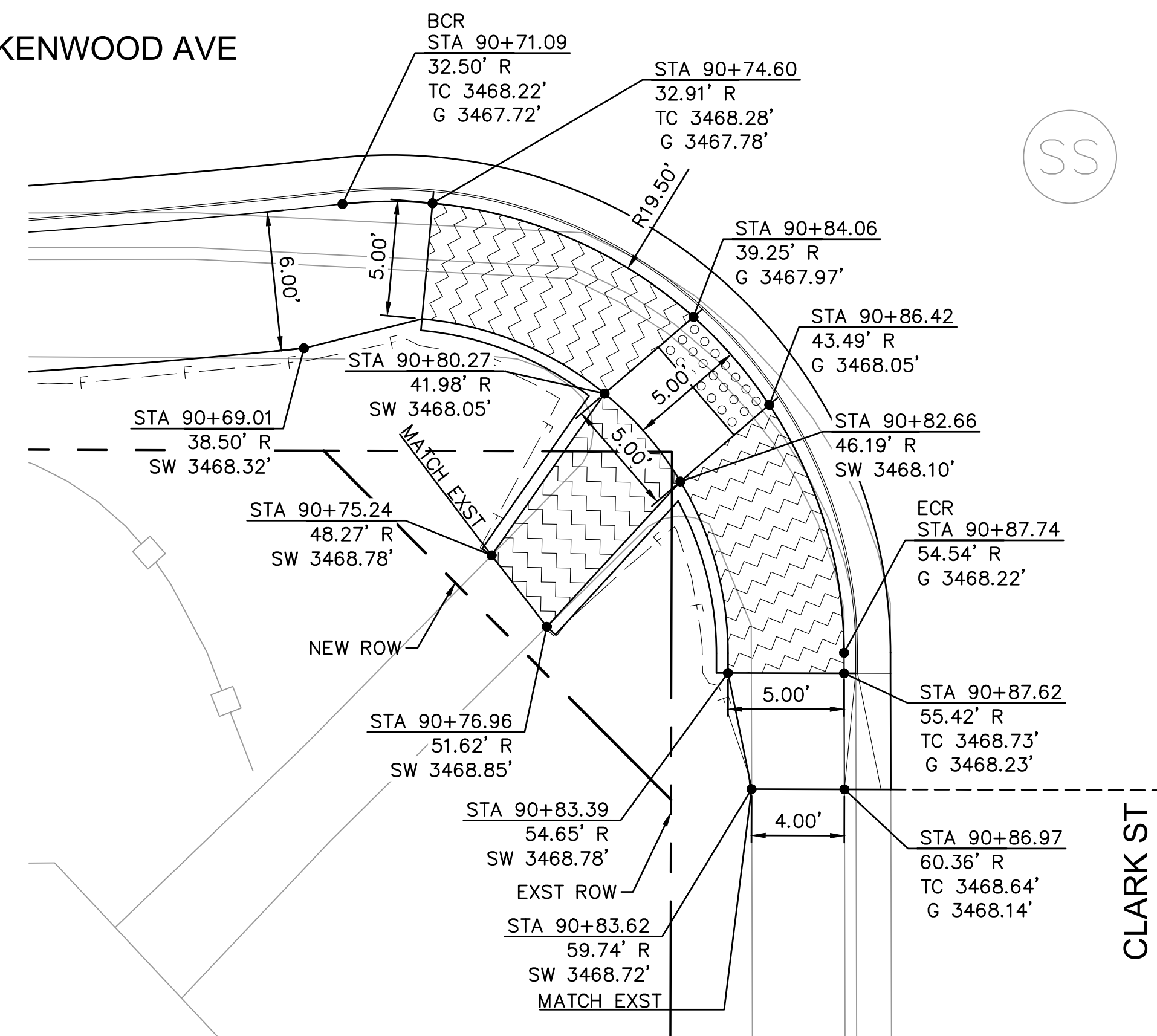
DETAIL K - S/E CURB RAMP
CLARK ST AND KENWOOD AVE

KENWOOD AVE



DETAIL H - S/W CURB RAMP
EAGLE ROCK RD AND KENWOOD AVE

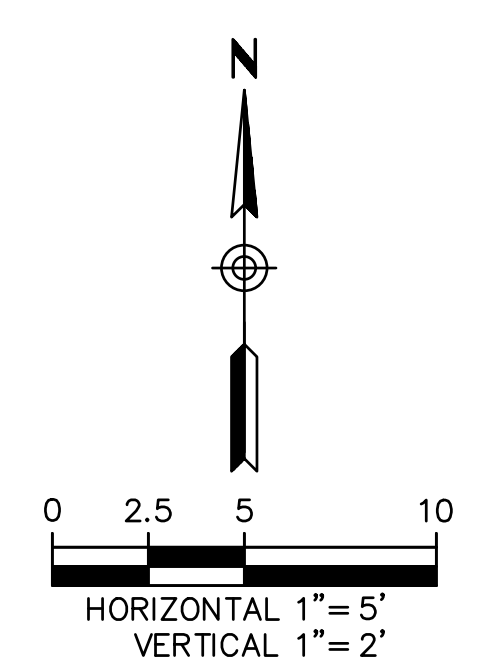
KENWOOD AVE



DETAIL J - S/W CURB RAMP
CLARK ST AND KENWOOD AVE

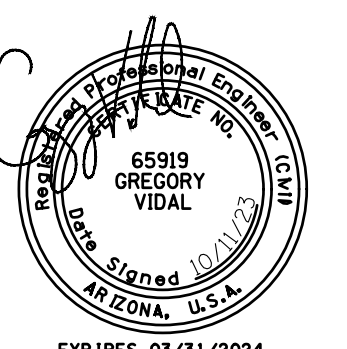


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ENG 21-0001
FILENAME
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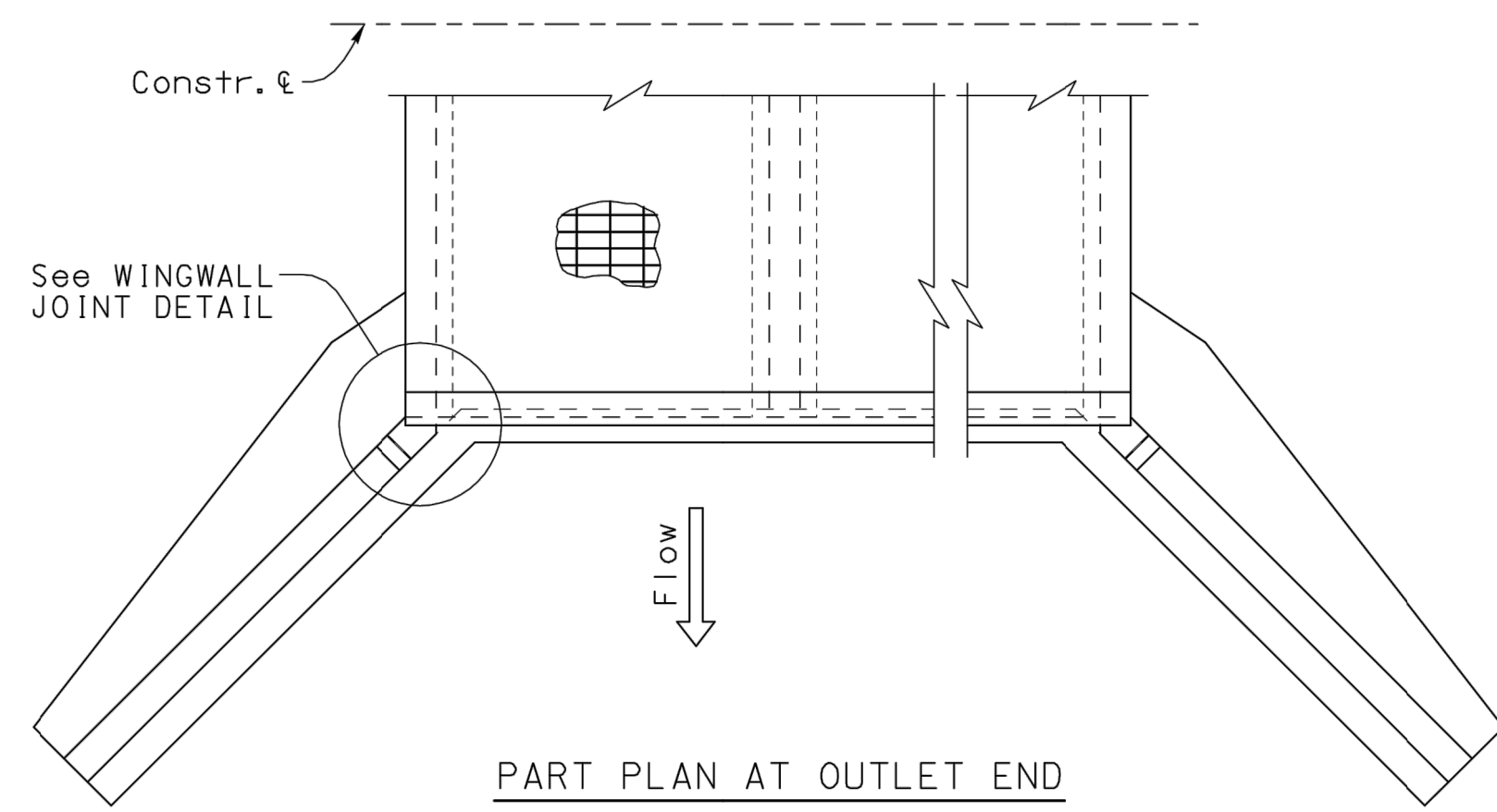


EASTERN STREET
DETAILS

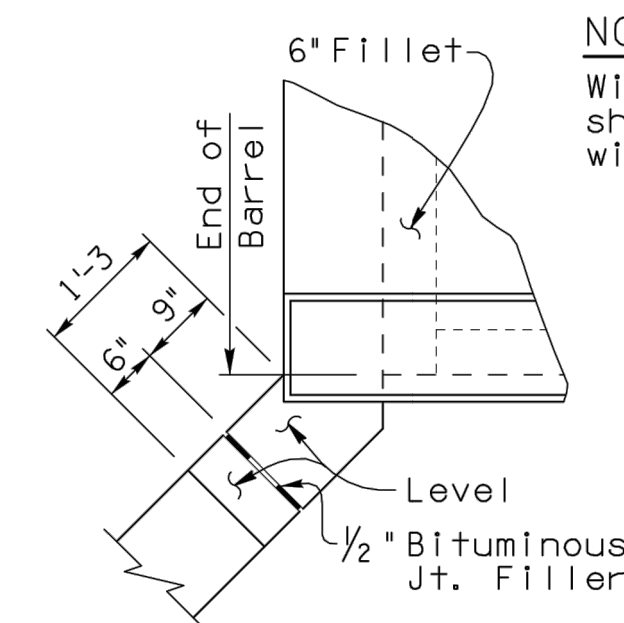
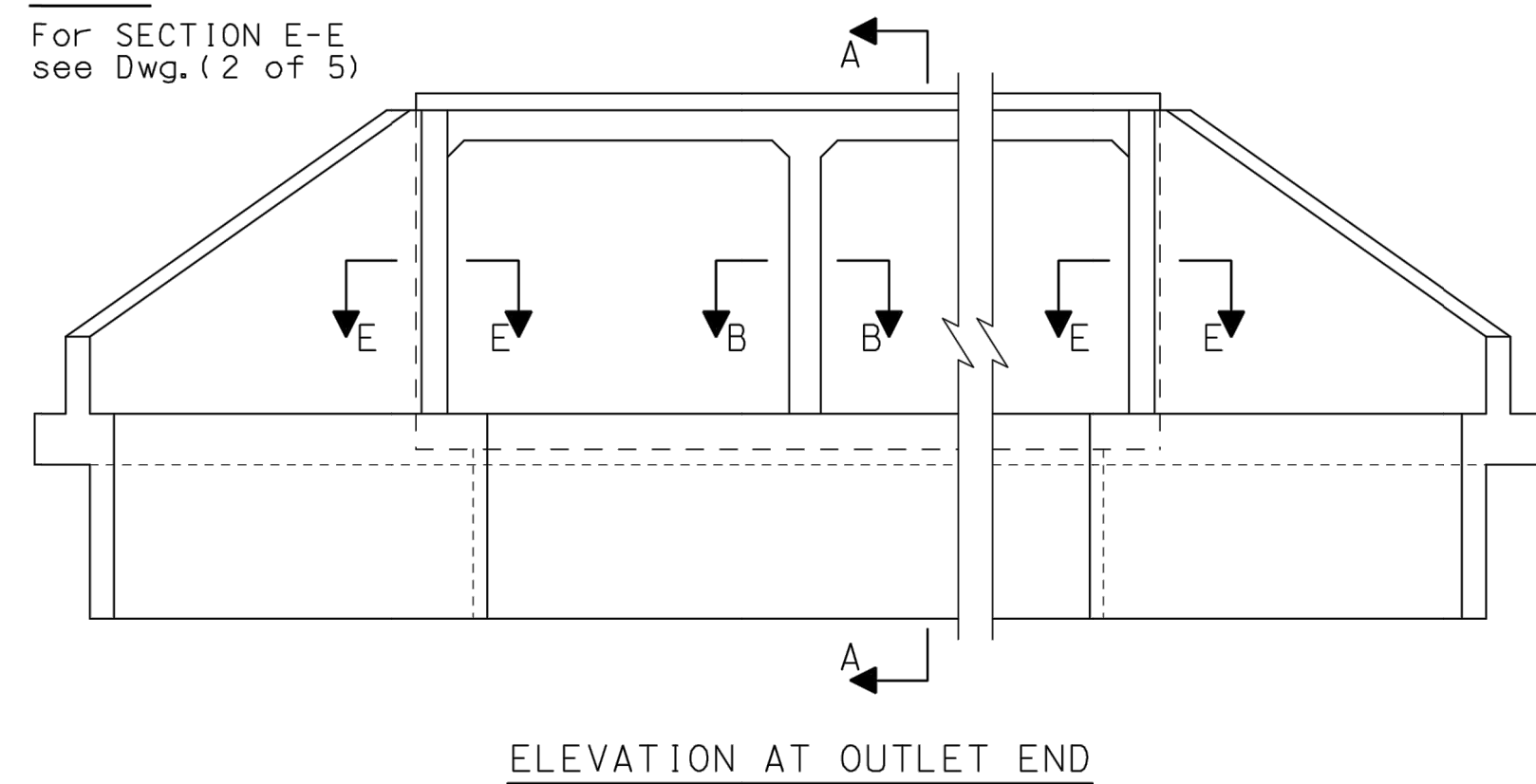
SHEET NO.
DT02
13 OF 52

Note to Designers: This Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Comments within the inner border line shall not be entered.

NO.	DESCRIPTION OF REVISIONS	DATE	BY
1.	Original Issue		
2.			
3.			
4.			

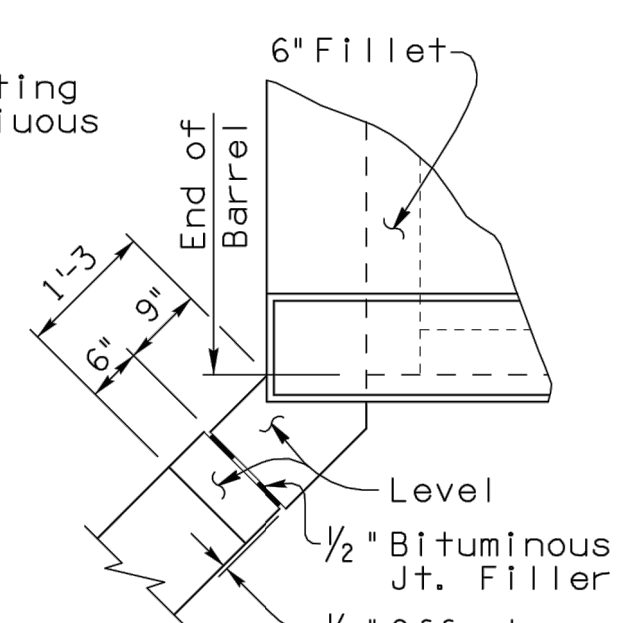


NOTE:
For SECTION E-E see Dwg. (2 of 5)



WINGWALL JOINT DETAIL
(For Barrel Height < 8 Ft.)

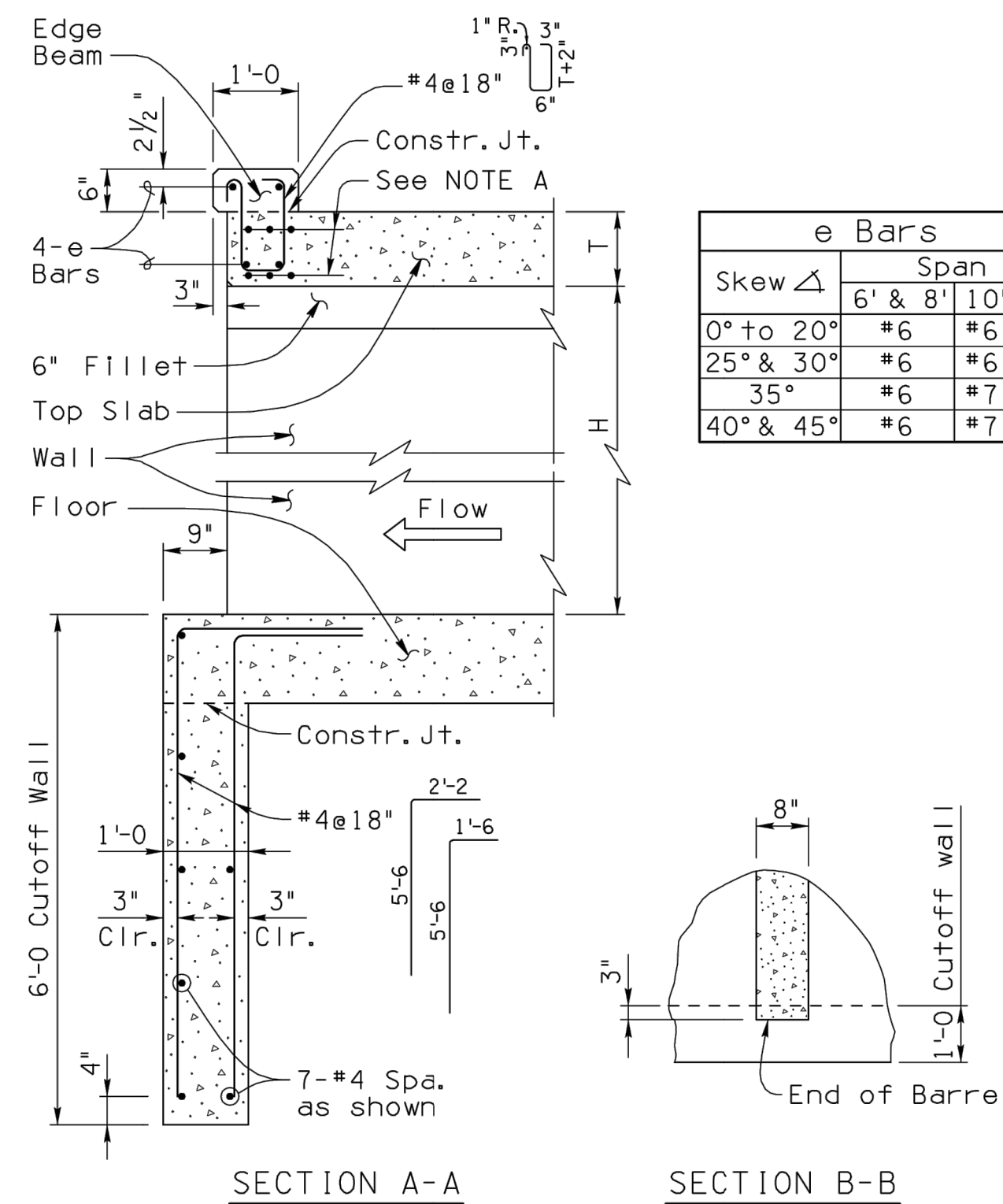
NOTE:
Wing wall footing shall be continuous with no joint.



WINGWALL JOINT DETAIL
(For Barrel Height ≥ 8 Ft.)

NOTE A:

Use 3-#7 @3' spa. top and bott bars for culverts skewed 6° to 30°. Use 3-#8 @3' spa. top and bott bars for culverts skewed 31° to 45°. Culverts skewed over 45° require a special edge beam design. Edge beam reinforcing quantity shall be added to table quantities.



NOTE:

Special design sections shall be adjoined with standard barrels when necessary. Culvert barrels always begin and end with Table No. 1.

Thickness of top and bottom slabs vary with depths of fill as shown.

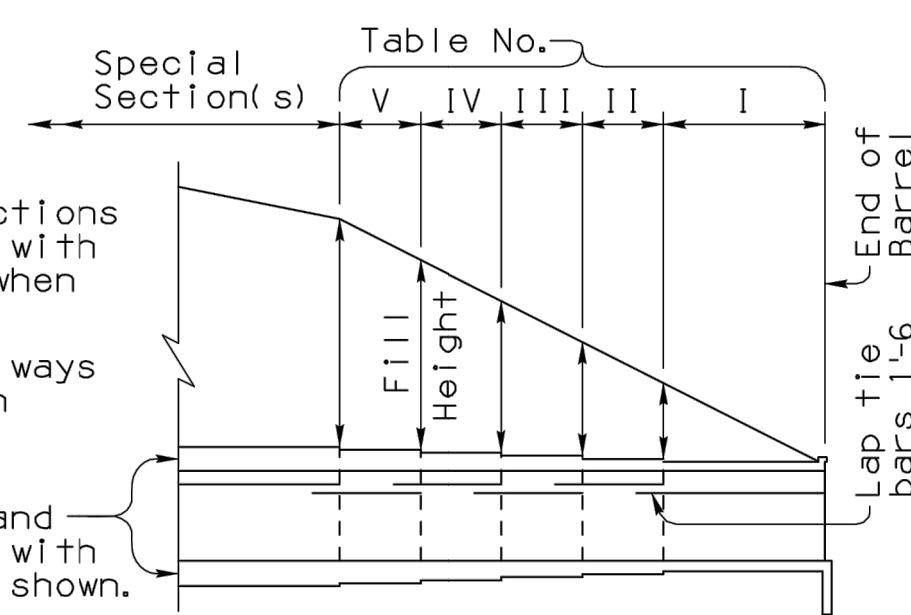


DIAGRAM SHOWING TABLE NO. TO BE USED FOR VARIOUS FILL HEIGHTS

GENERAL NOTES:

Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 5th Edition 2010.

Loading Class - HL-93.

Design:
Soil weight = 120 p.c.f.

All Concrete shall be Class "S" (f'c = 3000 psi).

Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60.

All bends and hooks shall meet the requirements of AASHTO LRFD Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

All reinforcing steel shall have 2 inch clear cover unless noted otherwise.

Chamfer all exposed corners 3/4" unless noted otherwise. Compact backfill for footing and wing base minimum 95 percent of ASTM D698 maximum dry density.

All structures shall have formed Construction joints in the top slab and walls (optional in floor slab) and spaced not more than 38'-6" apart or as shown in Project Plans. Joints shall be perpendicular to the centerline of the box. Reinforcing steel shall project 1'-6" thru the joint. The joint shall be made with a 1/4" plywood bulkhead which shall be left in place or the alternate joint detail shown on Dwg. (2 of 5) may be used.

See Project Plans for culvert layout, invert elevations, finished grade elevations, headwall, apron, and other site specific details.

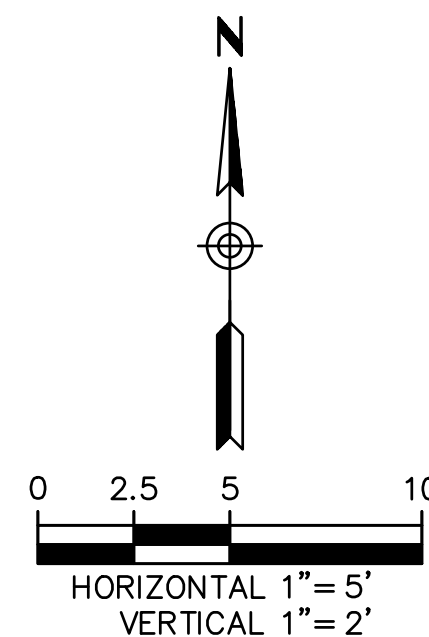
Dimensions shall not be scaled from drawings.

Pay item quantities of concrete and reinforcing steel include all labor and materials for box culvert, footing, headwalls and aprons. Total Quantities include Barrel and Headwall Quantities shown in Tables (plus added quantity for apron when used). Barrel Quantities Table is per linear foot of box (multiply by length of box to obtain barrel total). Headwall Quantities Table includes wings, edge beam and cutoff wall.

NOTE:

For Dimensions, Quantities and additional Details, see SD 6.01 (2 to 5).

DESIGN APPROVED <i>Shafiq H. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Tean A. Nehme</i>	REINFORCED CONCRETE BOX CULVERTS MISCELLANEOUS DETAILS
ROUTE	PROJECT NO.
LOCATION	FA NO.
	DRAWING NO. SD 6.01 (1 of 5)
	SHEET NO. OF



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EASTERN STREET
DETAILS

C.O.K. PROJECT NO.
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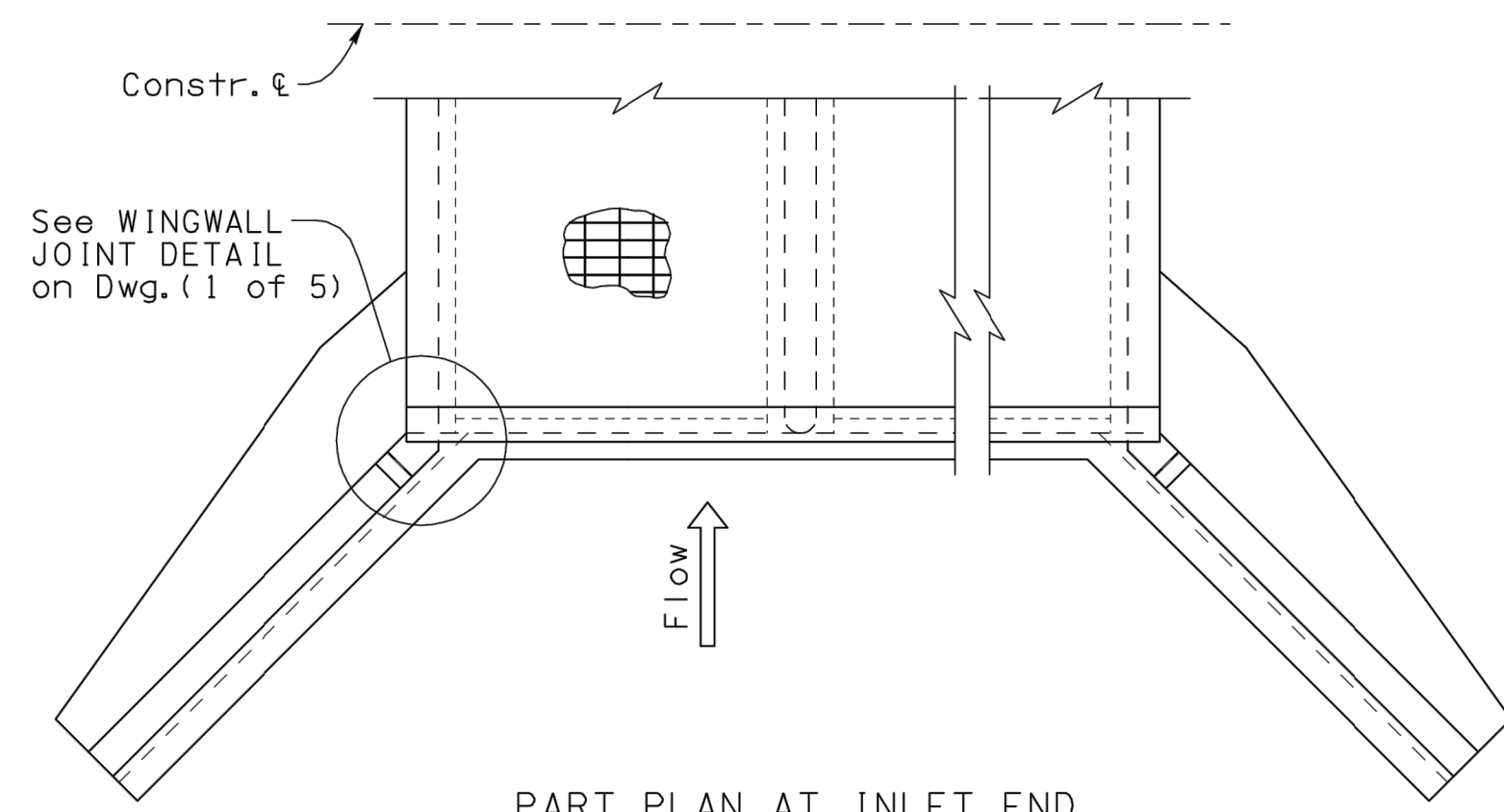
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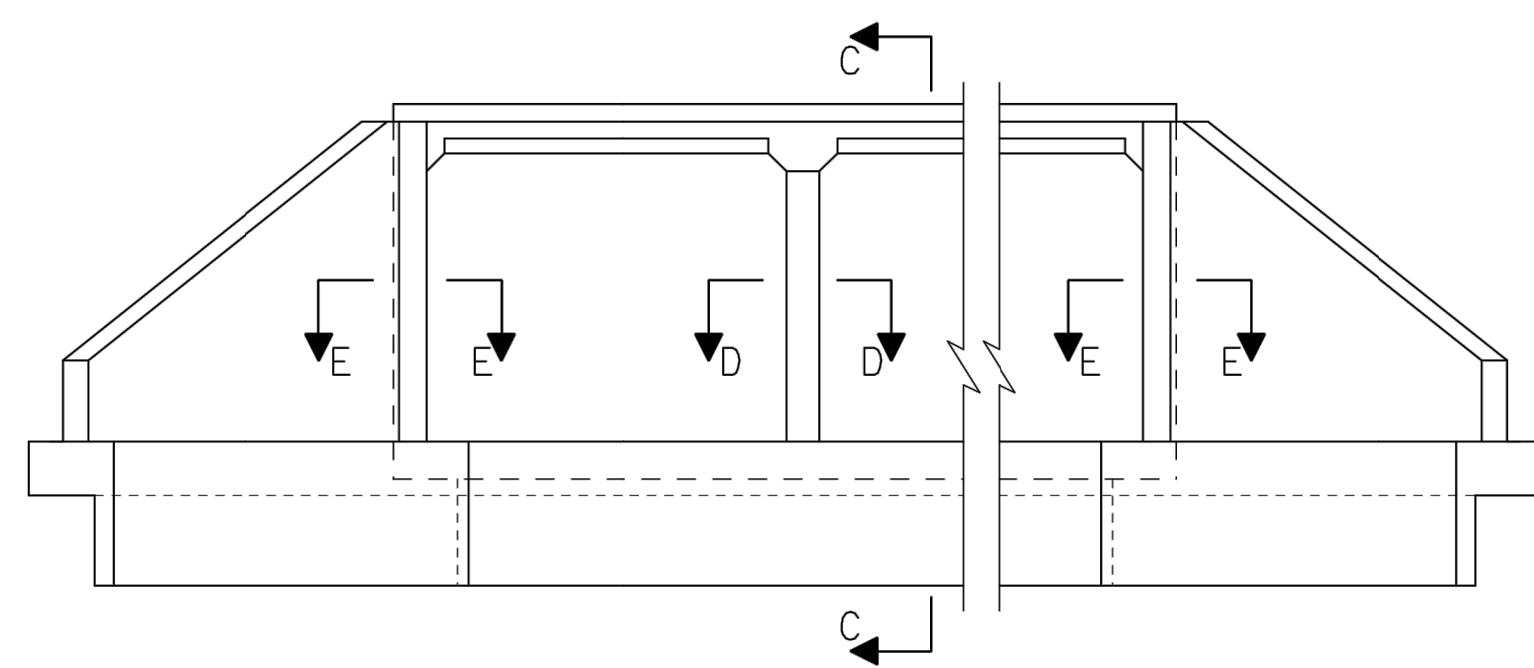
SHEET NO.
DT03
14 OF 52

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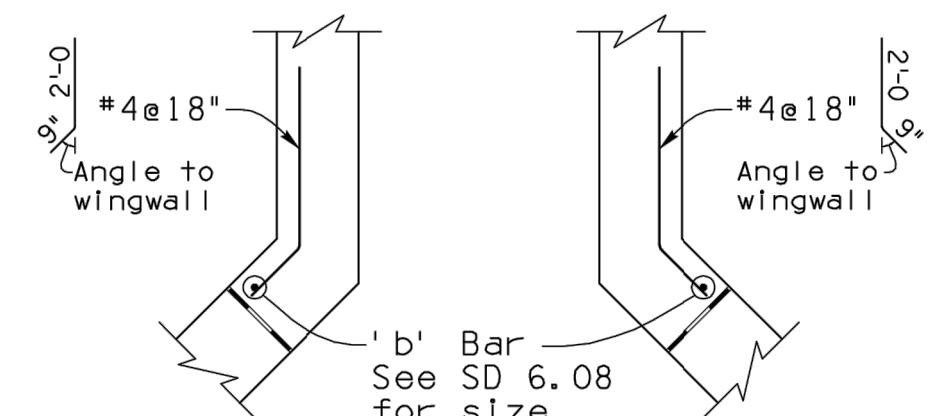
NO.	DESCRIPTION OF REVISIONS	DATE
1	Original Issue	
2		
3		
4		



PART PLAN AT INLET END

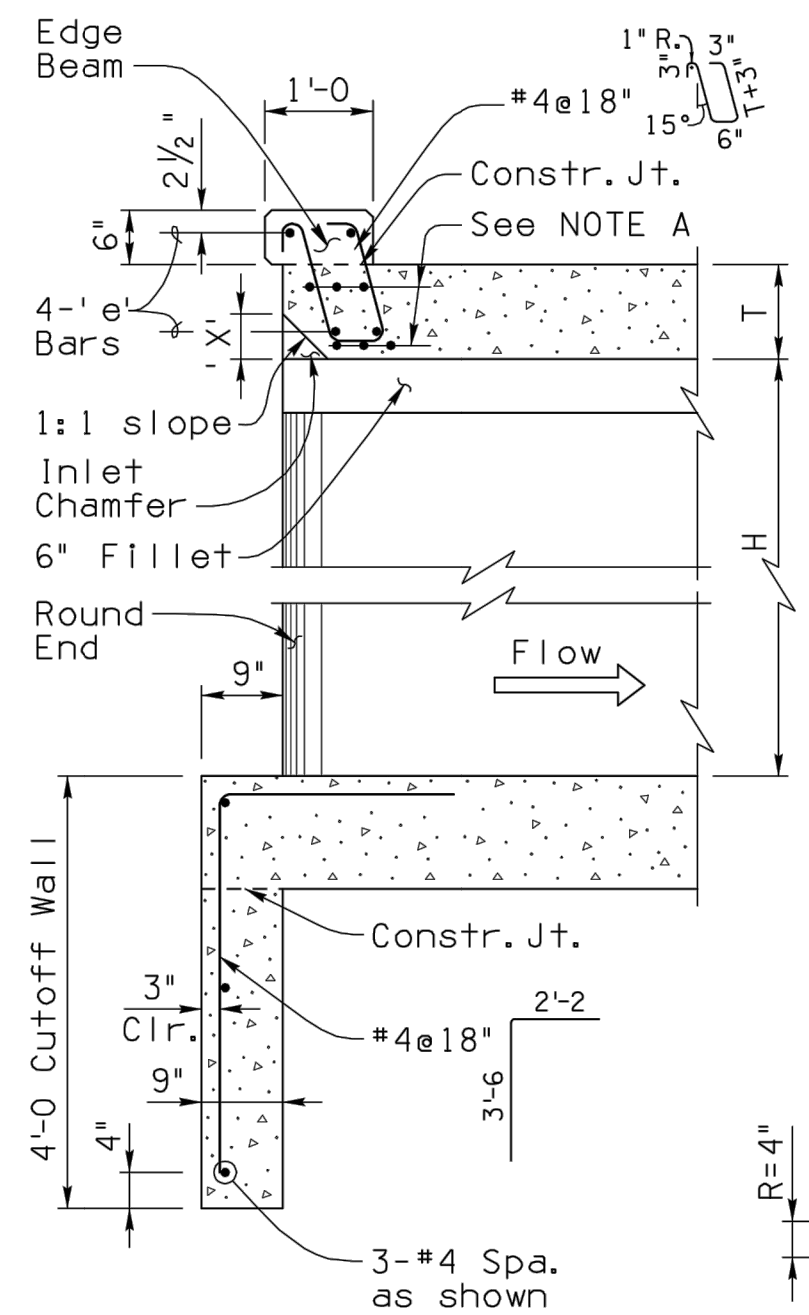


ELEVATION AT INLET END

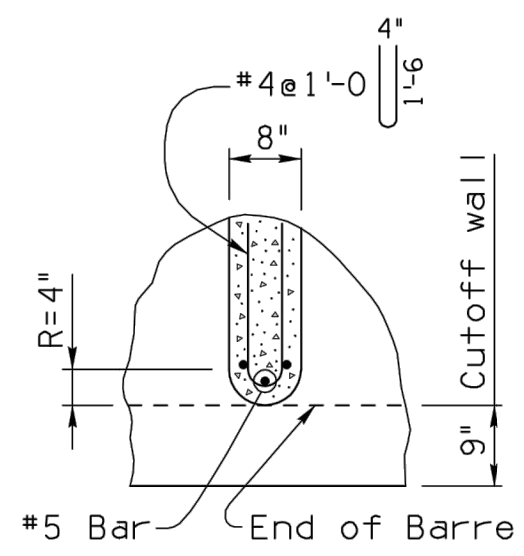


SECTION E-E

NOTE A:
 Use 3-#7 @3' spa. top and bott bars for culverts skewed 6° to 30°. Use 3-#8 @3' spa. top and bott bars for culverts skewed 31° to 45°. Culverts skewed over 45° require a special edge beam design. Edge beam reinforcing quantity shall be added to table quantities.

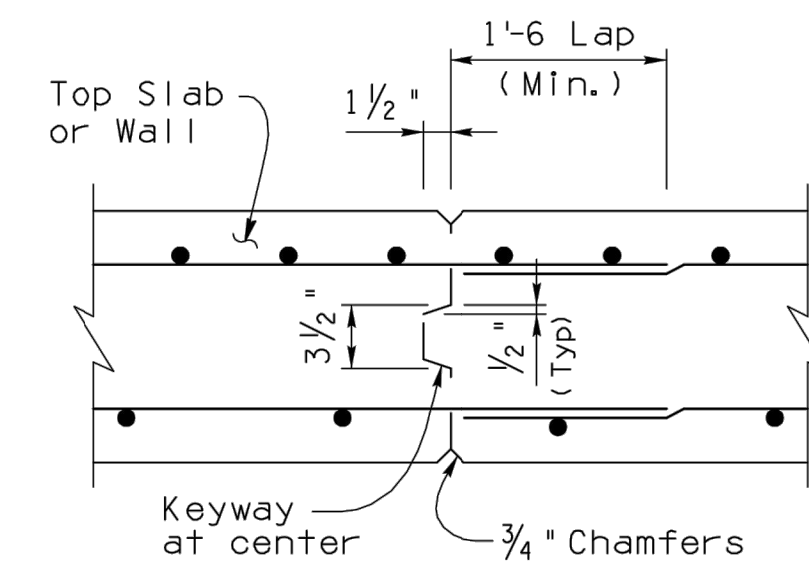


SECTION C-C



SECTION D-D

Span 'S'	Dim. 'X'
6'	3"
8'	4"
10'	5"
12'	6"



ALT. CONSTRUCTION JOINT DETAIL

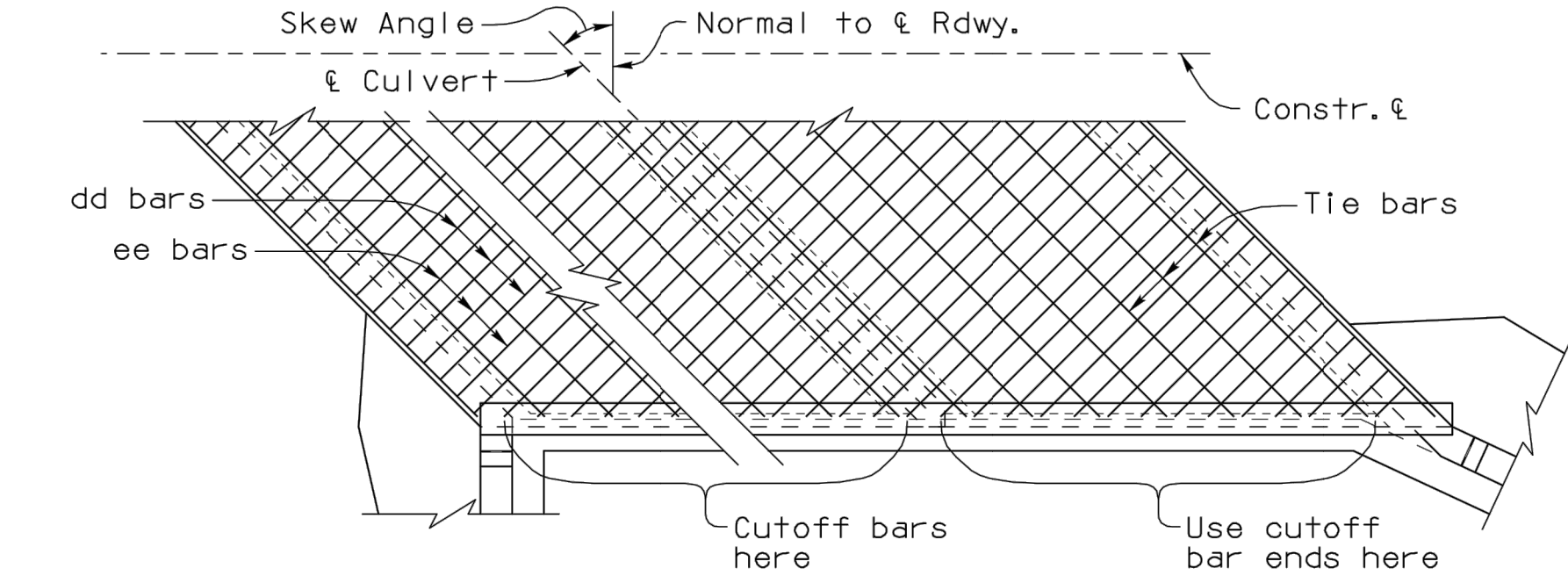
NOTE:
 For 'e' Bars table, see Dwg. (1 of 5)

Span 'S'	Dim. 'X'
6'	3"
8'	4"
10'	5"
12'	6"

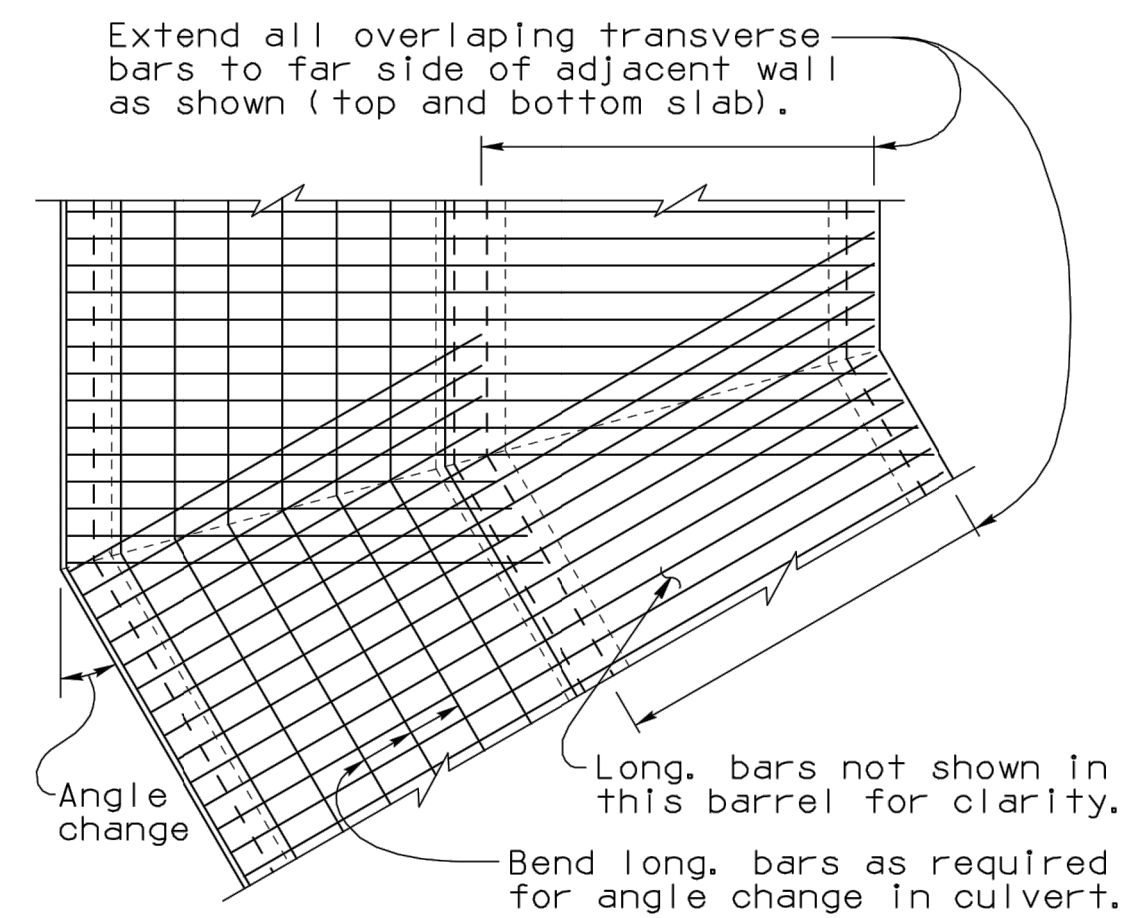
SECTION D-D

NOTE:
 For General Notes, Dimensions, Quantities and additional Details, see SD 6.01 (1 & 3, 4, 5).

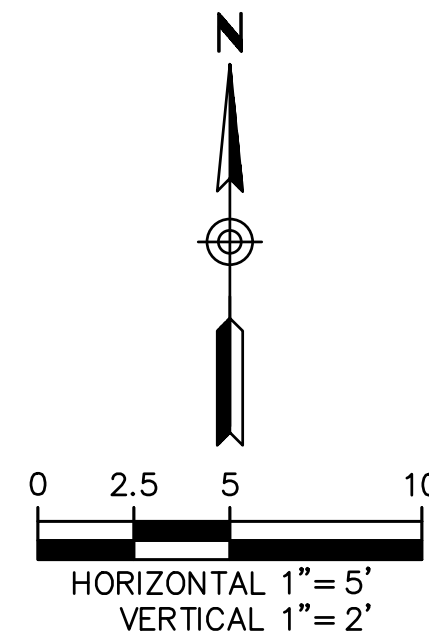
DESIGN APPROVED <i>Shafiq H. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Tean A. Nehme</i>	REINFORCED CONCRETE BOX CULVERTS MISCELLANEOUS DETAILS
ROUTE	PROJECT NO.
LOCATION	FA NO.
	DRAWING NO. SD 6.01 (2 of 5)
	SHEET NO. OF



PART PLAN - SKEWED CULVERT
 (Showing Reinf. Steel Placement)



PART PLAN - ANGLED CULVERT
 (Showing Reinf. Steel Placement)



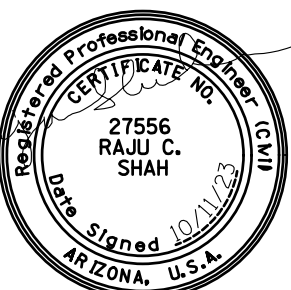
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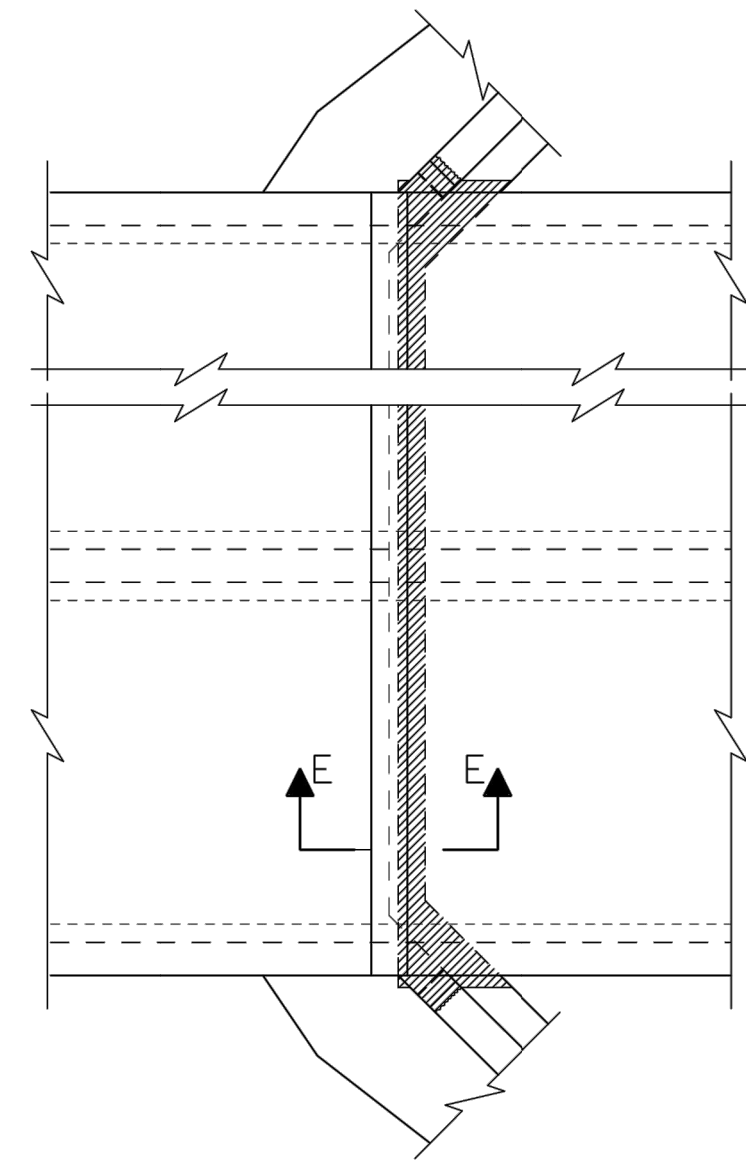


EASTERN STREET
 DETAILS

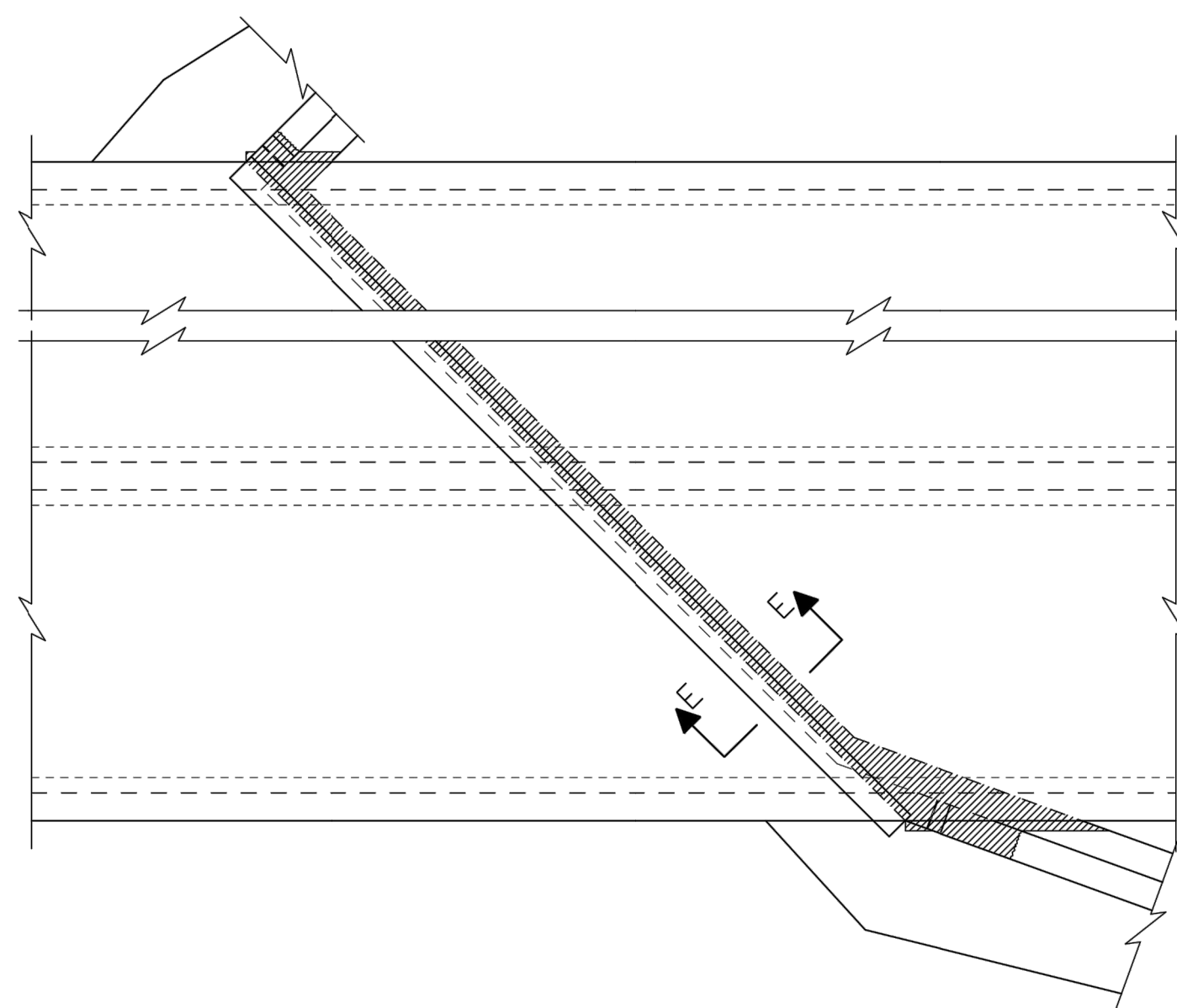
SHEET NO.
DT04
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Note to Designer: All information presented in this Standard Detail has been prepared in accordance with established engineering practices. It is the responsibility of the user to verify the suitability and applicability of this detail to their specific project conditions. The user should consult with a competent professional engineer for verification of the suitability and applicability of this detail to their specific project conditions. Comments within the inner border line shall not be altered.

NO.	REVISION	DATE
1	Original Issue	
2		
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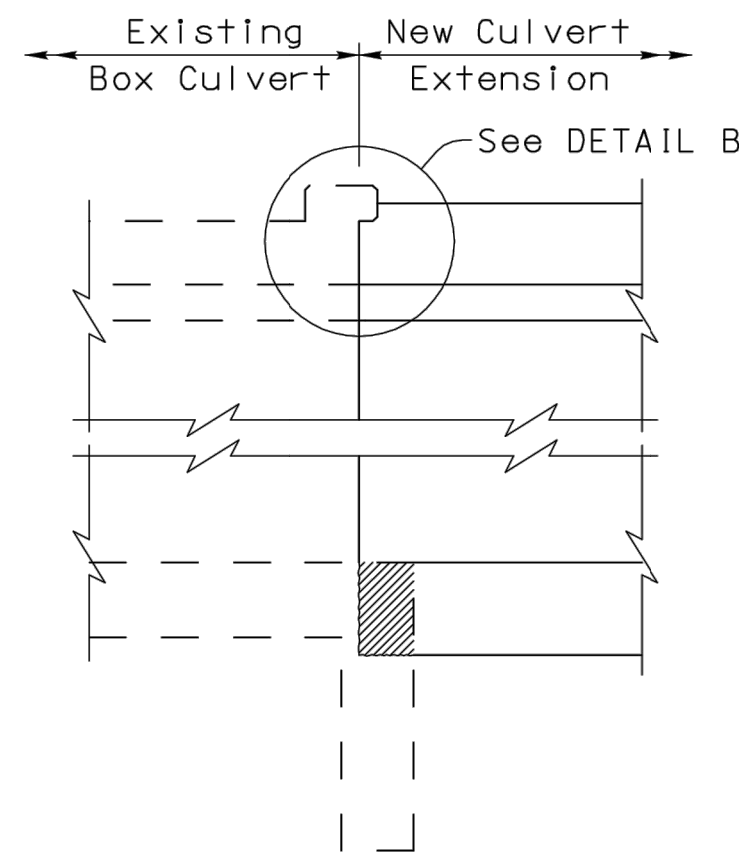


PART PLAN CULVERT EXTENSION
(Showing Right Angle Culvert)



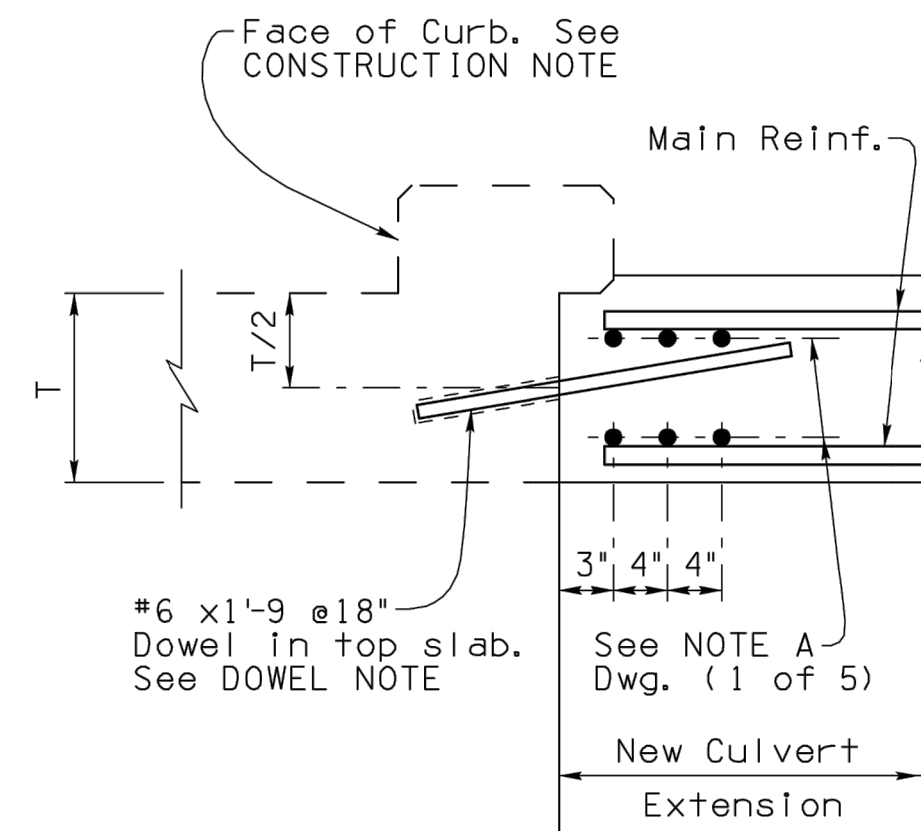
PART PLAN CULVERT EXTENSION
(Showing Skewed Culvert)

REMOVAL NOTE:
 Indicates payment limits for removal of concrete.



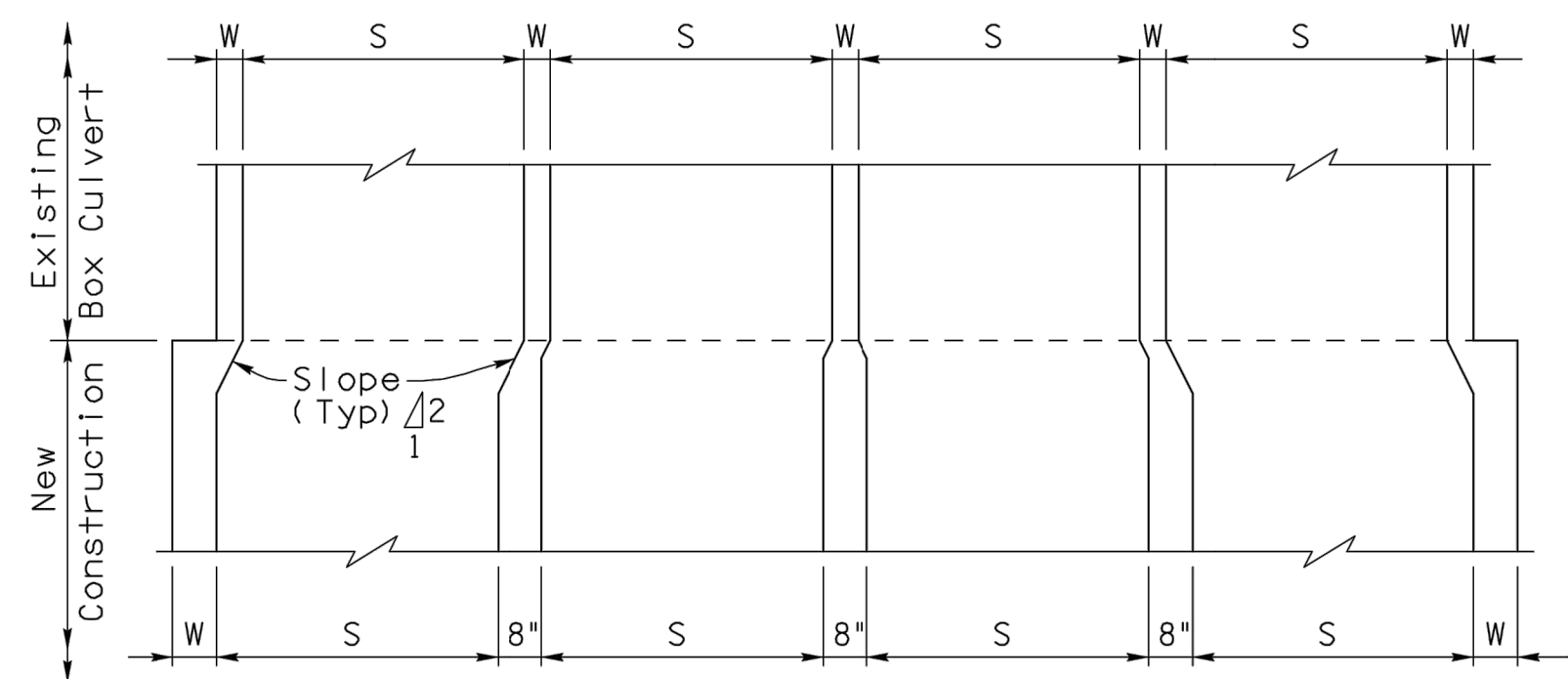
SECTION E-E

DOWEL NOTE:
 Drill 1"Ø hole, 8" deep, for #6 dowel. Epoxy dowel in hole with an approved epoxy adhesive. Epoxy anchorage shall develop a min. tensile pullout strength of 13 kips. Details of the Anchorage System shall be submitted to the Engineer for approval prior to installation.

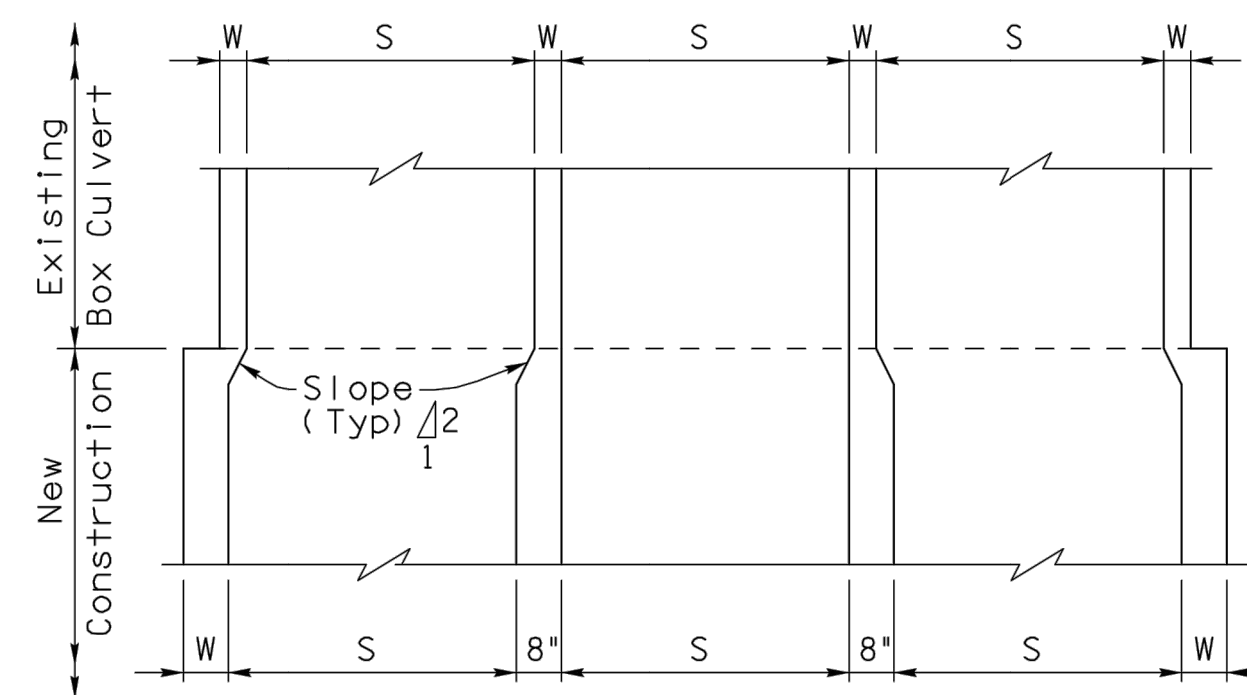


DETAIL B

CONSTRUCTION NOTE:
 Remove existing headwall as required for new construction. If concrete headwall is removed to face of curb, no dowels are needed. Use projecting reinforcing steel for bond in new concrete. Curb to remain unless within 1'-0" of finish grade. Wingwalls to be removed a Min. of 1'-6" to provide steel for bond.



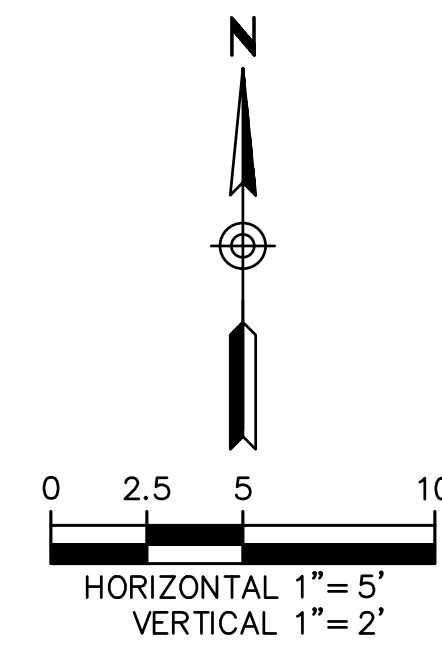
SECTION THRU CULVERT WALLS
(Even Number of Cells)



SECTION THRU CULVERT WALLS
(Odd Number of Cells)

NOTE:
 For General Notes, Dimensions, Quantities and additional Details, see SD 6.01 (1, 2 & 4, 5).

DESIGN APPROVED <i>Shafiq H. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Tean A. Nehme</i>	REINFORCED CONCRETE BOX CULVERTS EXTENSION DETAILS
ROUTE	PROJECT NO.
LOCATION	FA NO.
	DRAWING NO. SD 6.01 (3 of 5)
	SHEET NO. OF



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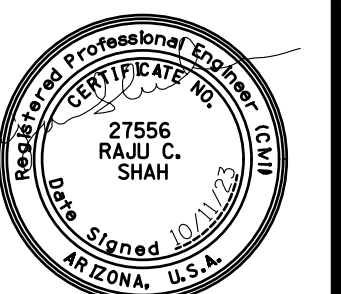
EASTERN STREET
 CALUMET TO AIRWAY AVE

C.O.K. PROJECT NO.
 ENG 21-0001

CITY OF KINGMAN
 ENGINEERING DEPARTMENT

FILENAME
 16-221038-DT05.dwg

310 NORTH 4TH STREET
 KINGMAN, ARIZONA 86401
 PHONE (928) 753-8122 FAX (928) 753-8118



EASTERN STREET

SHEET NO.

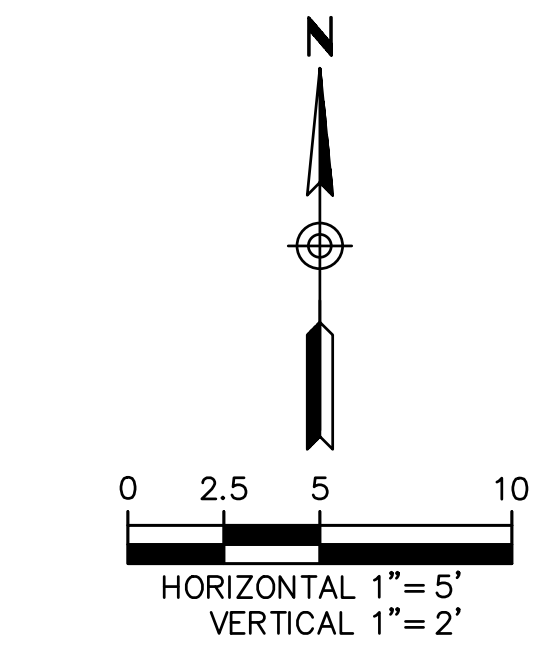
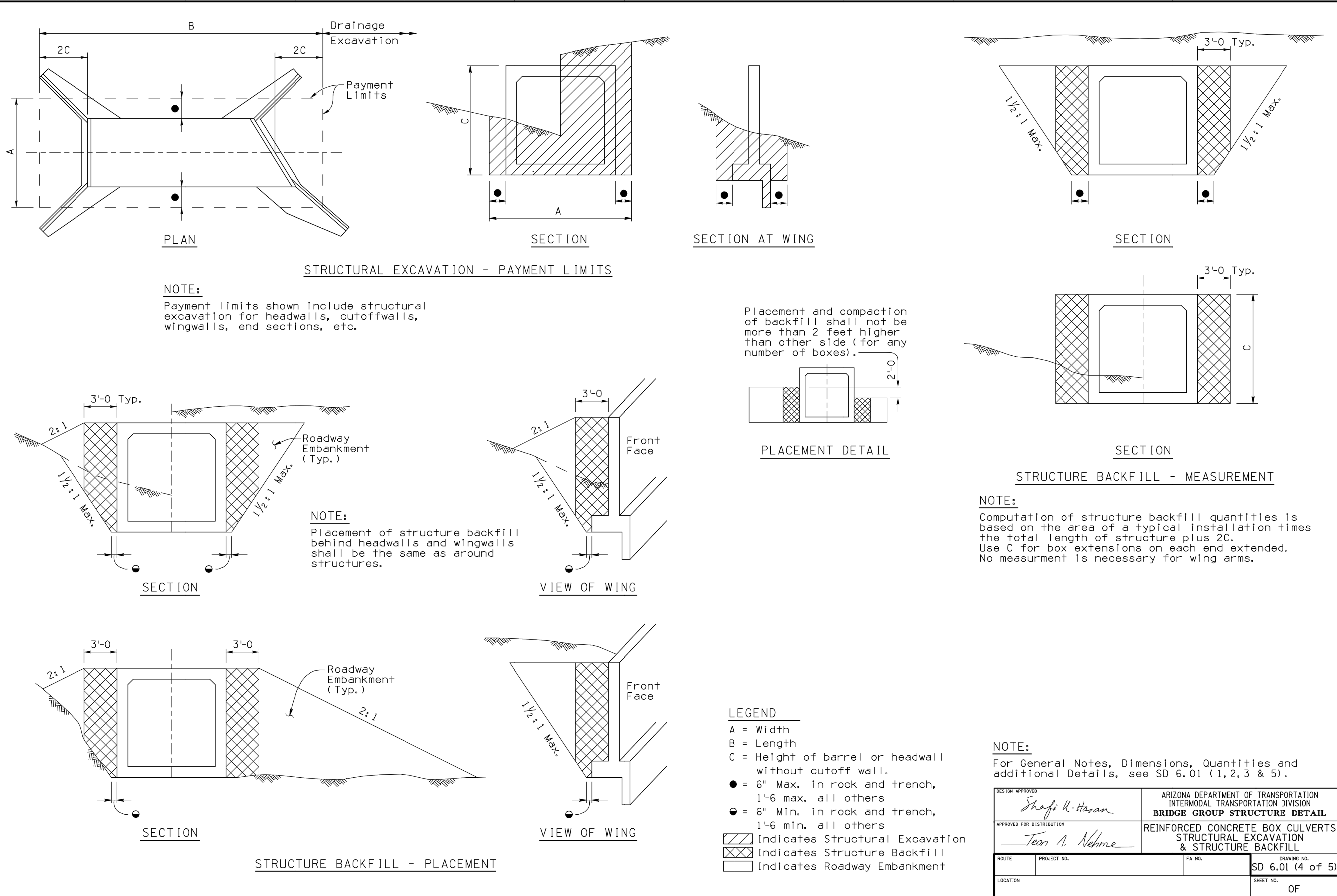
DETAILS

DT05

16 OF 52

Note to Designer: This drawing is for informational purposes only. It is not intended to be used for any specific application without the approval of the design engineer. The design engineer is responsible for the design and verification of the submittal and applicability by a licensed professional engineer. Comments within the inner border line shall not be altered.

NO.	DESCRIPTION OF REVISIONS	DATE	BY
1	Original Issue		
2			
3			
4			



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EASTERN STREET CALUMET TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT	FILENAME 17-221038-DT06.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118	
EASTERN STREET	SHEET NO. DT06 17 OF 52
DETAILS	

Notes to Designer:
 The information presented in this Standard Detail has been prepared in accordance with recognized engineering practices and is for general use. It should not be used for specific applications without the approval of a professional engineer. Comments within the liner border line shall not be altered.

NO.	REVISION	DATE
1	Original Issue	2/23/2012
2		
3		
4		

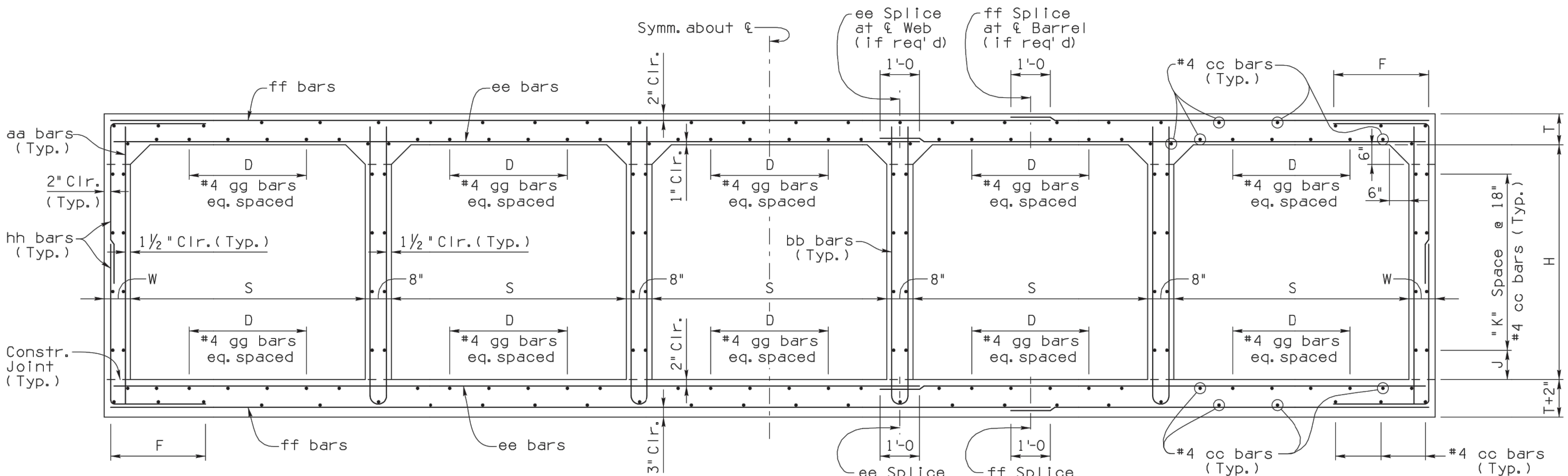
TABLE I
 0'-10' FILL

Span * S'	Height * H'	aa		bb		cc		ee		ff		gg		hh								
		Top Slab * T'	Walls * W'	Bar Size	Spacing	Bar Size	Spacing	Number #	Bar Size	Spacing	Bar Size	Spacing	Number #	D	Bar Size	Spacing						
5'	9 1/2'	8"	8"	5	12"	6'-4"	5	12"	12'-9"	120	5	8"	34'-8"	5	8"	34'-8"	40	3'-0"	4	8"	6'-1"	2'-5"
6'	9 1/2'	8"	8"	5	12"	7'-4"	5	12"	14'-9"	132	5	8"	34'-8"	5	8"	34'-8"	40	3'-0"	4	8"	6'-7"	2'-5"
7'	9 1/2'	8"	8"	5	12"	8'-4"	5	12"	16'-9"	144	5	8"	34'-8"	5	8"	34'-8"	40	3'-0"	4	8"	7'-1"	2'-5"
8'	9 1/2'	9"	9"	5	12"	6'-4"	5	12"	12'-8"	120	5	7"	44'-10"	6	8"	44'-10"	60	4'-0"	5	8"	6'-6"	2'-6"
	9 1/2'	9"	9"	5	12"	7'-4"	5	12"	14'-8"	132	5	7"	44'-10"	6	8"	44'-10"	60	4'-0"	5	8"	7'-0"	2'-6"
	9 1/2'	9"	9"	5	12"	8'-4"	5	12"	16'-8"	144	5	7"	44'-10"	6	8"	44'-10"	60	4'-0"	5	8"	7'-5"	2'-6"
10'	10 1/2'	11"	11"	5	12"	7'-6"	5	12"	14'-11"	132	5	6"	55'-2"	6	6"	55'-2"	100	5'-0"	5	6"	7'-2"	2'-8"
	10 1/2'	11"	11"	5	12"	8'-6"	5	12"	16'-11"	144	5	6"	55'-2"	6	6"	55'-2"	100	5'-0"	5	6"	7'-9"	2'-8"
	10 1/2'	11"	11"	5	12"	9'-6"	5	12"	18'-11"	144	5	6"	55'-2"	6	6"	55'-2"	100	5'-0"	5	6"	8'-3"	2'-8"
12'	12 1/2'	13"	13"	5	12"	9'-10"	5	12"	19'-7"	144	6	7"	65'-6"	7	7"	65'-6"	130	6'-0"	6	7"	8'-6"	2'-10"
	12 1/2'	13"	13"	5	12"	10'-10"	5	12"	21'-7"	156	6	7"	65'-6"	7	7"	65'-6"	130	6'-0"	6	7"	9'-0"	2'-10"
	12 1/2'	13"	13"	5	12"	11'-10"	5	12"	23'-7"	168	6	7"	65'-6"	7	7"	65'-6"	130	6'-0"	6	7"	9'-6"	2'-10"

TABLE II
 10'-15' FILL

Span * S'	Height * H'	aa		bb		cc		ee		ff		gg		hh								
		Top Slab * T'	Walls * W'	Bar Size	Spacing	Bar Size	Spacing	Number #	Bar Size	Spacing	Bar Size	Spacing	Number #	D	Bar Size	Spacing						
5'	8'	8"	8"	5	12"	6'-1"	5	12"	12'-3"	120	5	8"	34'-8"	5	7"	34'-8"	40	3'-0"	4	7"	6'-0"	2'-5"
6'	8'	8"	8"	5	12"	7'-1"	5	12"	14'-3"	132	5	8"	34'-8"	5	7"	34'-8"	40	3'-0"	4	7"	6'-6"	2'-5"
7'	8'	8"	8"	5	12"	8'-1"	5	12"	16'-3"	144	5	8"	34'-8"	5	7"	34'-8"	40	3'-0"	4	7"	7'-0"	2'-5"
8'	10 1/2'	9"	9"	5	12"	6'-6"	5	12"	13'-1"	120	5	7"	44'-10"	6	7"	44'-10"	50	4'-0"	4	7"	6'-3"	2'-6"
	10 1/2'	9"	9"	5	12"	7'-6"	5	12"	15'-1"	132	5	7"	44'-10"	6	7"	44'-10"	50	4'-0"	4	7"	6'-9"	2'-6"
	10 1/2'	9"	9"	5	12"	8'-6"	5	12"	17'-1"	144	5	7"	44'-10"	6	7"	44'-10"	50	4'-0"	4	7"	7'-3"	2'-6"
10'	10 1/2'	9"	9"	5	12"	9'-6"	5	12"	19'-1"	144	5	7"	44'-10"	6	7"	44'-10"	50	4'-0"	5	7"	7'-9"	2'-6"
	12 1/2'	11"	11"	5	12"	7'-10"	5	12"	15'-7"	132	5	6"	55'-2"	7	7"	55'-2"	60	5'-0"	5	7"	7'-4"	2'-8"
	12 1/2'	11"	11"	5	12"	8'-10"	5	12"	17'-7"	144	5	6"	55'-2"	7	7"	55'-2"	60	5'-0"	5	7"	7'-10"	2'-8"
12'	12 1/2'	11"	11"	5	12"	9'-10"	5	12"	19'-7"	144	5	6"	55'-2"	7	7"	55'-2"	60	5'-0"	5	7"	8'-4"	2'-8"
	12 1/2'	11"	11"	5	12"	10'-10"	5	12"	21'-7"	156	5	6"	55'-2"	7	7"	55'-2"	60	5'-0"	5	7"	8'-10"	2'-8"
	12 1/2'	11"	11"	5	12"	11'-10"	5	12"	23'-7"	168	5	6"	55'-2"	7	7"	55'-2"	60	5'-0"	5	7"	9'-4"	2'-8"

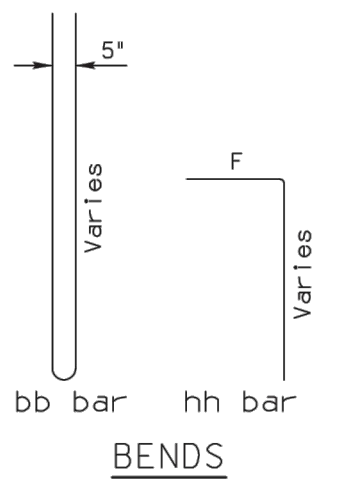
* Total number of bars in the cross-section.
 * Includes lap splice length.



Height * H'	J' D Im.	K' Spacing
5'	2'	2'
6'	3'	3'
7'	4'	4'
8'	4'	4'
9'	5'	5'
10'	6'	6'
11'	6'	6'
12'	7'	7'

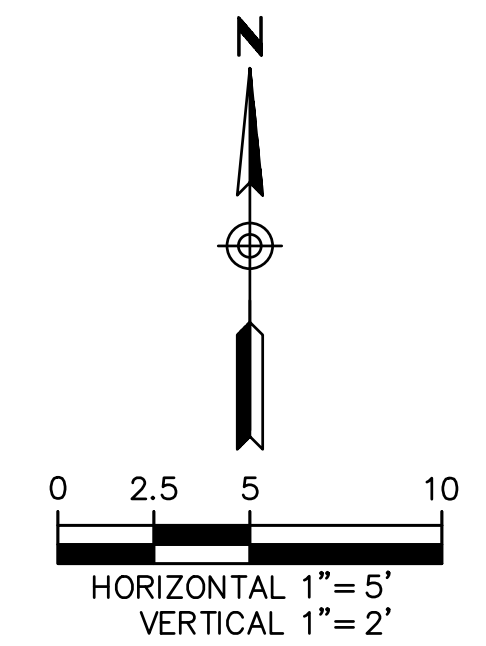
TYPICAL SECTION
 (Shown as 6'-0 x 6'-0 Table I)

NOTE:
 Reinforcing shown for 6'-0 x 6'-0 Table I box. Use the appropriate table to determine the reinforcing requirements of selected box.



NOTE:
 For General Notes, Dimensions, and additional Details, see SD 6.01 (1 to 4). For Quantities and Tables III thru V see SD 6.05 (2 of 2).

DESIGN APPROVED <i>Shafiq U. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Jason A. Nohme</i>	REINFORCED CONCRETE BOX CULVERTS FIVE BARREL (0' - 15' FILLS)
ROUTE: PROJECT NO.:	FA NO.:
LOCATION:	DRAWING NO. SD 6.05 (1 of 2)
	SHEET NO. 0F



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EASTERN STREET
 CALUMET TO AIRWAY AVE

C.O.K. PROJECT NO.
 ENG 21-0001
 FILENAME
 18-221038-DT07.dwg

CITY OF KINGMAN
 ENGINEERING DEPARTMENT
 310 NORTH 4TH STREET
 KINGMAN, ARIZONA 86401
 PHONE (928) 753-8122 FAX (928) 753-8118

EXPIRES 12/31/2023

EASTERN STREET
 DETAILS

SHEET NO.
DT07
 18 OF 52

Note to Designer:
 The information presented in this Standard Detail has been prepared in accordance with recognized engineering practices and is for general use. It is not intended to be used for any specific application without the approval of a professional engineer. Comments within the liner border line shall not be altered.

DATE	DESCRIPTION OF REVISION

TABLE NO. III
 15'-20' FILL

Span * S'	Height * H'	Top Slab * T'	Walls * W'	aa	bb	cc	ee	ff	gg	hh	F	
Span * S'	Height * H'	Top Slab * T'	Walls * W'	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	
5'	9 1/2"	8"	5"	12"	6'-4"	120	5"	7"	34'-8"	40	3'-0"	2'-5"
6'	9 1/2"	8"	5"	12"	7'-4"	132	5"	7"	34'-8"	40	3'-0"	2'-5"
7'	9 1/2"	8"	5"	12"	8'-4"	144	5"	7"	34'-8"	40	3'-0"	2'-5"
8'	12"	9"	5"	12"	6'-9"	120	5"	7"	44'-10"	50	4'-0"	2'-6"
6'	12"	9"	5"	12"	7'-9"	132	5"	7"	44'-10"	50	4'-0"	2'-6"
7'	12"	9"	5"	12"	8'-9"	144	5"	7"	44'-10"	50	4'-0"	2'-6"
8'	12"	9"	5"	12"	9'-9"	144	5"	7"	44'-10"	50	4'-0"	2'-6"
10'	15"	11"	5"	12"	8'-3"	132	6"	8"	55'-2"	60	5'-0"	2'-9"
7'	15"	11"	5"	12"	9'-3"	144	6"	8"	55'-2"	60	5'-0"	2'-9"
8'	15"	11"	5"	12"	10'-3"	144	6"	8"	55'-2"	60	5'-0"	2'-9"
9'	15"	11"	5"	12"	11'-3"	156	6"	8"	55'-2"	60	5'-0"	2'-9"
10'	15"	11"	5"	12"	12'-3"	168	6"	8"	55'-2"	60	5'-0"	2'-9"
8'	18"	13"	5"	12"	10'-9"	144	6"	6"	65'-6"	70	6'-0"	3'-5"
9'	18"	13"	5"	12"	11'-9"	156	6"	6"	65'-6"	70	6'-0"	3'-5"
10'	18"	13"	5"	12"	12'-9"	168	6"	6"	65'-6"	70	6'-0"	3'-5"
11'	18"	13"	5"	12"	13'-9"	168	6"	6"	65'-6"	70	6'-0"	3'-5"
12'	18"	13"	5"	12"	14'-9"	180	6"	6"	65'-6"	70	6'-0"	3'-5"

* Total number of bars in the cross-section.
 * Includes lap splice length.

TABLE NO. V
 25'-30' FILL

Span * S'	Height * H'	Top Slab * T'	Walls * W'	aa	bb	cc	ee	ff	gg	hh	F	
Span * S'	Height * H'	Top Slab * T'	Walls * W'	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	
5'	12 1/2"	8"	5"	12"	6'-10"	120	5"	7"	34'-8"	40	3'-0"	2'-5"
6'	12 1/2"	8"	5"	12"	7'-10"	132	5"	7"	34'-8"	40	3'-0"	2'-5"
7'	12 1/2"	8"	5"	12"	8'-10"	144	5"	7"	34'-8"	40	3'-0"	2'-5"
8'	16"	9"	5"	12"	7'-5"	120	5"	6"	44'-10"	50	4'-0"	2'-6"
6'	16"	9"	5"	12"	8'-5"	132	5"	6"	44'-10"	50	4'-0"	2'-6"
7'	16"	9"	5"	12"	9'-5"	144	5"	6"	44'-10"	50	4'-0"	2'-6"
8'	16"	9"	5"	12"	10'-5"	144	5"	6"	44'-10"	50	4'-0"	2'-6"
10'	19"	11"	5"	12"	8'-11"	132	6"	6"	55'-2"	60	5'-0"	2'-9"
7'	19"	11"	5"	12"	9'-11"	144	6"	6"	55'-2"	60	5'-0"	2'-9"
8'	19"	11"	5"	12"	10'-11"	144	6"	6"	55'-2"	60	5'-0"	2'-9"
9'	19"	11"	5"	12"	11'-11"	156	6"	6"	55'-2"	60	5'-0"	2'-9"
10'	19"	11"	5"	12"	12'-11"	168	6"	6"	55'-2"	60	5'-0"	2'-9"
8'	23"	13"	5"	12"	11'-7"	144	7"	7"	65'-6"	70	6'-0"	3'-5"
9'	23"	13"	5"	12"	12'-7"	156	7"	7"	65'-6"	70	6'-0"	3'-5"
10'	23"	13"	5"	12"	13'-7"	168	7"	7"	65'-6"	70	6'-0"	3'-5"
11'	23"	13"	5"	12"	14'-7"	168	7"	7"	65'-6"	70	6'-0"	3'-5"
12'	23"	13"	5"	12"	15'-7"	180	7"	7"	65'-6"	70	6'-0"	3'-5"

2/23/2012

TABLE NO. IV
 20'-25' FILL

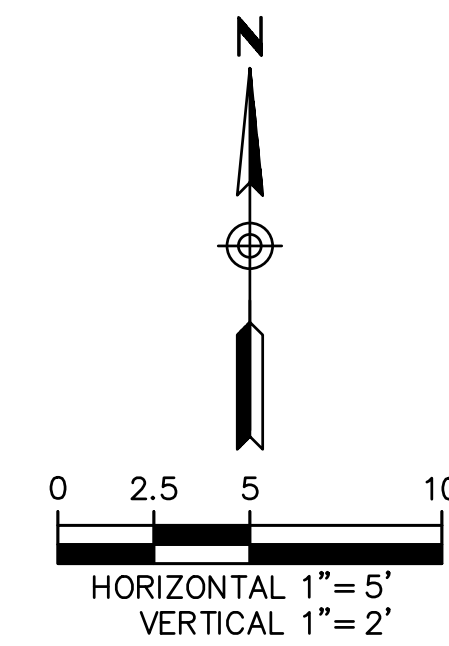
Span * S'	Height * H'	Top Slab * T'	Walls * W'	aa	bb	cc	ee	ff	gg	hh	F	
Span * S'	Height * H'	Top Slab * T'	Walls * W'	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	Bar Size	
5'	11"	8"	5"	12"	6'-7"	120	5"	7"	34'-8"	40	3'-0"	2'-5"
6'	11"	8"	5"	12"	7'-7"	132	5"	7"	34'-8"	40	3'-0"	2'-5"
7'	11"	8"	5"	12"	8'-7"	144	5"	7"	34'-8"	40	3'-0"	2'-5"
8'	14"	9"	5"	12"	7'-1"	120	5"	7"	44'-10"	50	4'-0"	2'-6"
6'	14"	9"	5"	12"	8'-1"	132	5"	7"	44'-10"	50	4'-0"	2'-6"
7'	14"	9"	5"	12"	9'-1"	144	5"	7"	44'-10"	50	4'-0"	2'-6"
8'	14"	9"	5"	12"	10'-1"	144	5"	7"	44'-10"	50	4'-0"	2'-6"
10'	17"	11"	5"	12"	8'-7"	132	6"	7"	55'-2"	60	5'-0"	2'-9"
7'	17"	11"	5"	12"	9'-7"	144	6"	7"	55'-2"	60	5'-0"	2'-9"
8'	17"	11"	5"	12"	10'-7"	144	6"	7"	55'-2"	60	5'-0"	2'-9"
9'	17"	11"	5"	12"	11'-7"	156	6"	7"	55'-2"	60	5'-0"	2'-9"
10'	17"	11"	5"	12"	12'-7"	168	6"	7"	55'-2"	60	5'-0"	2'-9"
8'	20 1/2"	13"	5"	12"	11'-2"	144	6"	6"	65'-6"	70	6'-0"	3'-5"
9'	20 1/2"	13"	5"	12"	12'-2"	156	6"	6"	65'-6"	70	6'-0"	3'-5"
10'	20 1/2"	13"	5"	12"	13'-2"	168	6"	6"	65'-6"	70	6'-0"	3'-5"
11'	20 1/2"	13"	5"	12"	14'-2"	168	6"	6"	65'-6"	70	6'-0"	3'-5"
12'	20 1/2"	13"	5"	12"	15'-2"	180	6"	6"	65'-6"	70	6'-0"	3'-5"

QUANTITIES PER LINEAR FOOT OF BARREL (FIVE BARREL)

Span * S'	Height * H'	Table I		Table II		Table III		Table IV		Table V	
		Concrete C. Y.	Reinf. Steel Lbs.	Concrete C. Y.	Reinf. Steel Lbs.	Concrete C. Y.	Reinf. Steel Lbs.	Concrete C. Y.	Reinf. Steel Lbs.	Concrete C. Y.	Reinf. Steel Lbs.
5'	2.991	417.7	2.616	434.2	2.391	452.6	3.306	455.6	3.620	465.4	
6'	3.139	438.2	2.824	454.9	3.139	473.4	3.454	476.4	3.769	506.6	
7'	3.287	458.6	2.972	475.6	3.287	524.3	3.602	519.3	3.917	553.4	
8'	3.681	593.8	3.953	606.6	4.362	610.0	4.907	613.5	5.453	689.7	
6'	3.835	615.4	4.108	627.3	4.516	630.7	5.062	634.3	5.607	710.9	
7'	3.989	636.4	4.262	648.1	4.671	670.5	5.216	678.3	5.761	759.2	
8'	4.144	650.5	4.416	680.7	4.825	688.6	5.370	692.7	5.916	774.2	
6'	4.915	860.3	5.588	885.8	6.429	909.7	7.102	949.8	7.775	1077.3	
7'	5.082	883.6	5.755	907.8	6.596	931.7	7.269	971.8	7.941	1099.9	
8'	5.248	898.2	5.921	921.8	6.762	945.7	7.435	985.8	8.108	1114.5	
9'	5.415	920.8	6.088	943.8	6.929	967.8	7.602	1036.9	8.275	1177.0	
10'	5.582	943.4	6.255	965.8	7.096	1019.7	7.769	1065.8	8.441	1205.4	
8'	6.881	1176.0	7.882	1114.9	9.082	1269.8	10.083	1306.8	11.083	1384.1	
9'	7.060	1199.6	8.061	1137.0	9.261	1292.4	10.262	1331.2	11.262	1413.8	
10'	7.239	1223.2	8.240	1189.7	9.440	1321.1	10.441	1361.2	11.441	1438.7	
11'	7.418	1238.7	8.419	1215.9	9.619	1376.8	10.620	1384.0	11.620	1455.6	
12'	7.597	1262.3	8.598	1239.9	9.798	1401.7	10.799	1413.1	11.799	1497.2	

NOTE:
 For General Notes, Dimensions, and additional Details, see SD 6.01 (1 to 4). For Typical Section and Details, see SD 6.05 (1 of 2).

DESIGN APPROVED <i>Shafiq U. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Jason A. Nahme</i>	REINFORCED CONCRETE BOX CULVERTS FIVE BARREL (15' - 30' FILLS)
ROUTE	PROJECT NO.
FA NO.	DRAWING NO. SD 6.05 (2 of 2)
LOCATION	SHEET NO. OF



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EASTERN STREET
 CALUMET TO AIRWAY AVE

C.O.K. PROJECT NO.
 ENG 21-0001
 FILENAME
 19-221038-DT08.dwg

CITY OF KINGMAN
 ENGINEERING DEPARTMENT
 310 NORTH 4TH STREET
 KINGMAN, ARIZONA 86401
 PHONE (928) 753-8122 FAX (928) 753-8118

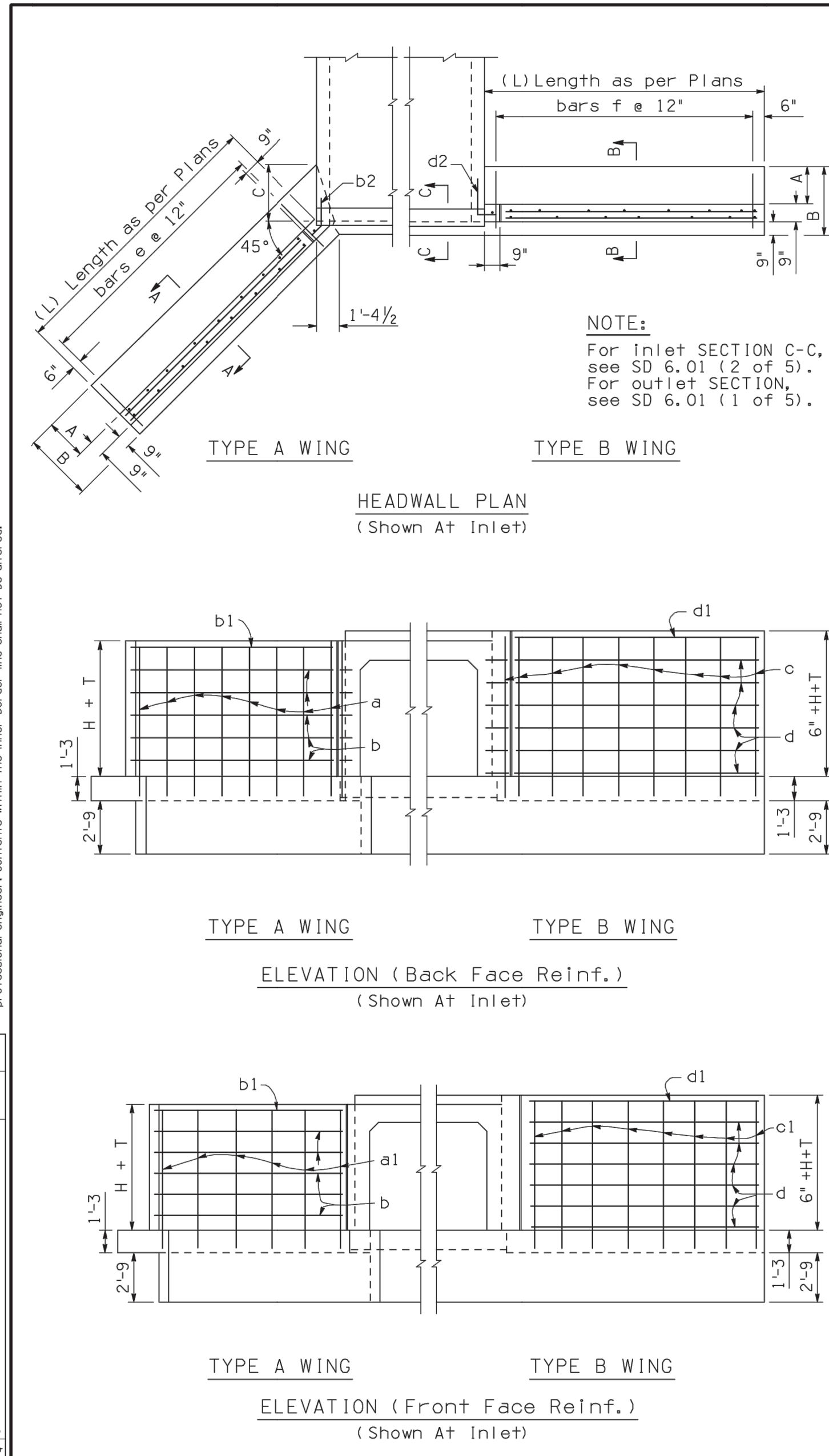


EASTERN STREET
 DETAILS

SHEET NO.
DT08
 19 OF 52

Notes to Designer:
 This Standard Detail has been prepared in accordance with recognized engineering practices and is for general use. It should not be used for specific applications without the approval of a professional engineer. Contents within the inner border line shall not be altered.

NO.	REVISIONS	DATE
1	Original Issue	
2		
3		
4		

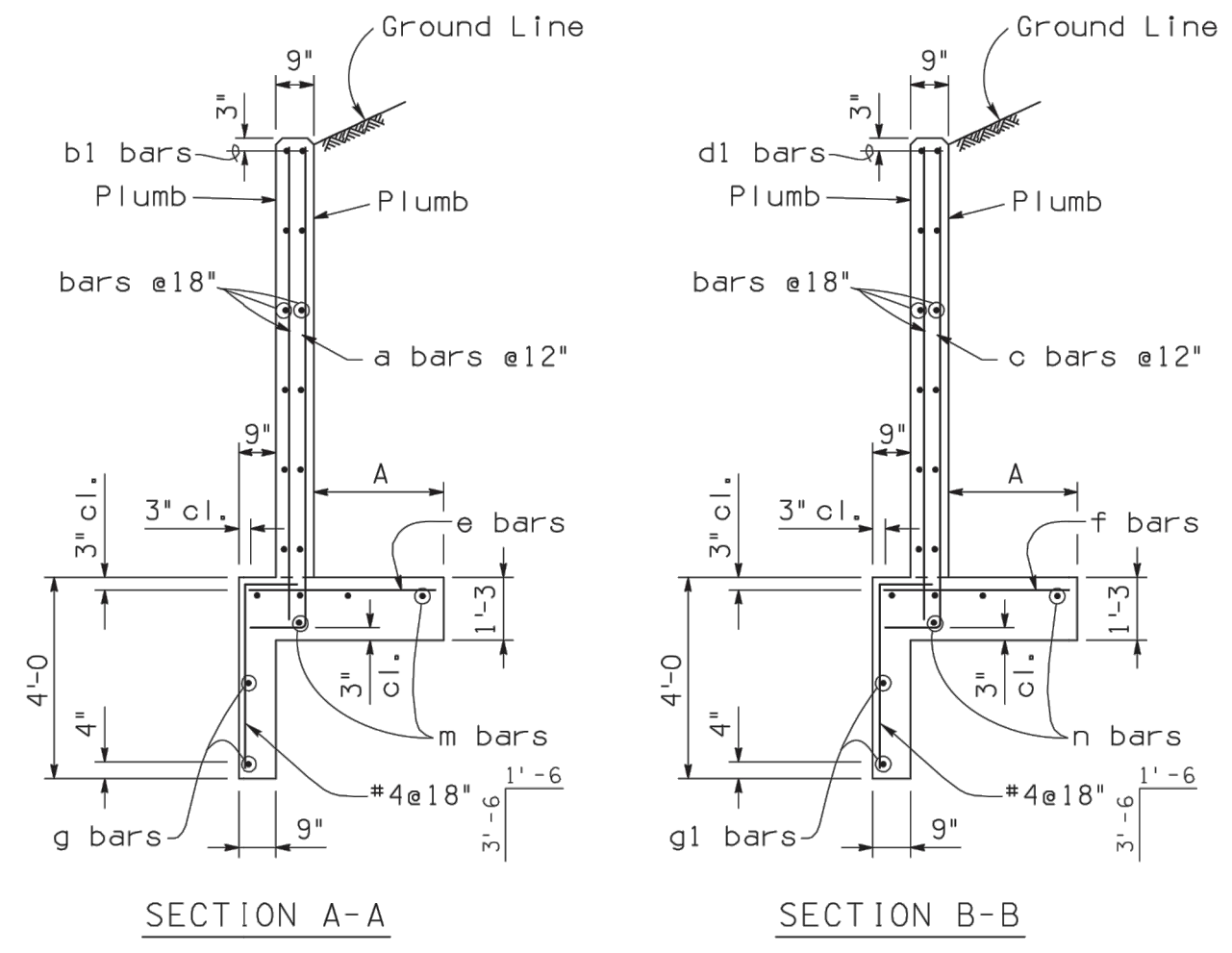
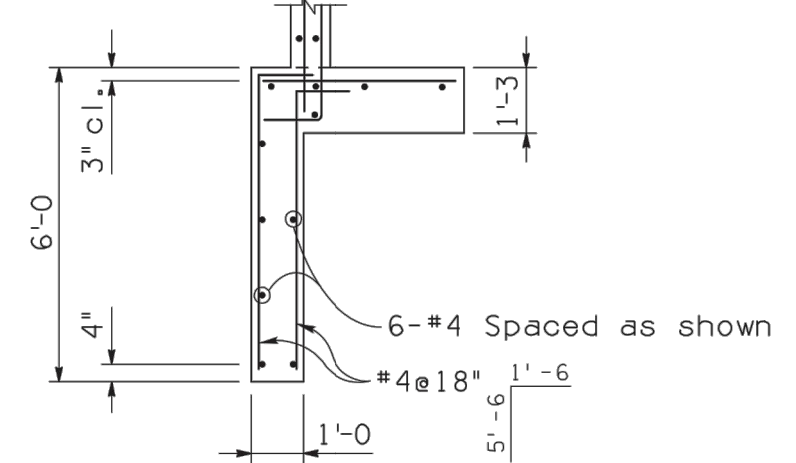


DIMENSIONS

HEIGHT OF OPENING	A	B	C
5'	2'-6"	4'-0"	3'-6"
6'	3'-0"	4'-6"	4'-3"
7'	3'-3"	4'-9"	4'-7"

NOTE:
 For Inlet SECTION C-C, see SD 6.01 (2 of 5).
 For Outlet SECTION, see SD 6.01 (1 of 5).

For details not shown, see SECTION A-A or SECTION B-B.



WINGS STEEL LIST (L=H+2)

Mark	Bend	5' Height			6' Height			7' Height		
		No.	Size	Length	No.	Size	Length	No.	Size	Length
TYPE A WING										
a	A	16	#5	7'-6"	18	#6	8'-6"	20	#7	9'-6"
al	str.	8	#4	6'-6"	10	#4	7'-6"	10	#4	8'-6"
b	str.	12	#4	6'-0"	16	#4	7'-0"	20	#4	8'-0"
bl	str.	4	#6	6'-0"	4	#6	7'-0"	4	#6	8'-0"
b2	B	8	#4	2'-3"	10	#4	2'-3"	12	#4	2'-3"
e	str.	16	#5	3'-6"	18	#5	4'-0"	20	#5	4'-3"
g	B	4	#4	8'-9"	4	#4	9'-9"	4	#4	10'-9"
m	str.	10	#4	7'-0"	10	#4	8'-0"	10	#4	9'-0"
TYPE B WING										
c	A	16	#5	8'-0"	18	#6	9'-0"	20	#7	10'-0"
cl	str.	8	#4	7'-0"	10	#4	8'-0"	10	#4	9'-0"
d	str.	12	#4	6'-0"	16	#4	7'-0"	20	#4	8'-0"
dl	str.	4	#6	6'-0"	4	#6	7'-0"	4	#6	8'-0"
d2	D	8	#4	2'-3"	10	#4	2'-3"	12	#4	2'-3"
f	str.	14	#5	3'-6"	16	#5	4'-0"	18	#5	4'-3"
gl	str.	4	#4	8'-3"	4	#4	9'-3"	4	#4	10'-3"
n	str.	10	#4	7'-0"	10	#4	8'-0"	10	#4	9'-0"

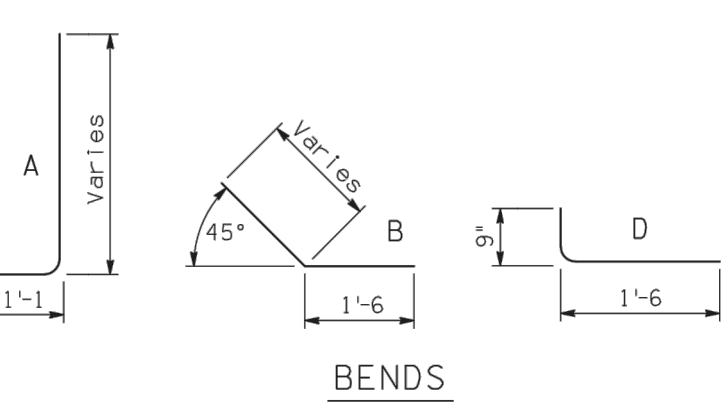
APPROXIMATE HEADWALL QUANTITIES*

Span	Height	HW, Type A Wings		HW, Type B Wings	
		For L=H+2	Per each Add Ft	For L=H+2	Per each Add Ft
5'	5'	Conc.	Steel	Conc.	Steel
		0.4164	0.4164	0.4329	0.4329
6'	6'	Conc.	Steel	Conc.	Steel
		0.4673	0.4673	0.4838	0.4838
7'	7'	Conc.	Steel	Conc.	Steel
		0.5067	0.5067	0.5231	0.5231
8'	8'	Conc.	Steel	Conc.	Steel
		0.4176	0.4176	0.4340	0.4340
9'	9'	Conc.	Steel	Conc.	Steel
		0.4685	0.4685	0.4849	0.4849
10'	10'	Conc.	Steel	Conc.	Steel
		0.5090	0.5090	0.5255	0.5255
6'	6'	Conc.	Steel	Conc.	Steel
		0.4731	0.4731	0.4896	0.4896
7'	7'	Conc.	Steel	Conc.	Steel
		0.5125	0.5125	0.5290	0.5290

* Includes curb and cut-off wall quantities for a single barrel.

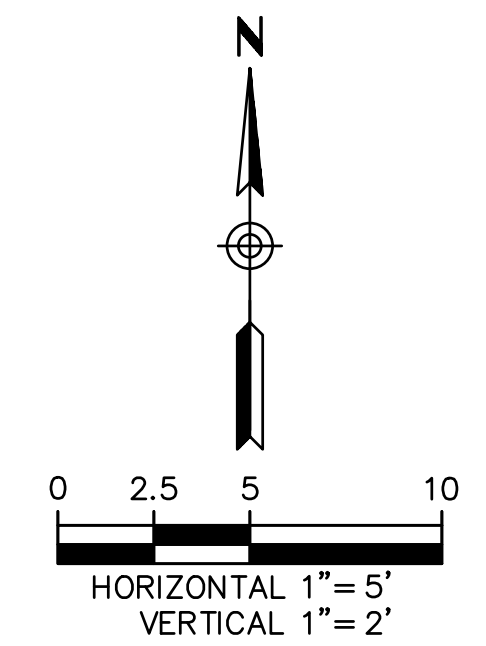
CURB & CUT-OFF QUANTITIES PER EACH ADDITIONAL BARREL

6' Spans		8' Spans		10' Spans	
Conc.	Steel	Conc.	Steel	Conc.	Steel
.859	76	1.114	103	1.370	130



NOTE:
 For General Notes, Dimensions, and additional Details, see SD 6.01 (1 & 2 of 5).

DESIGN APPROVED: <i>Shafeq H. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION: <i>Jason A. Nohme</i>	REINFORCED CONCRETE BOX CULVERTS INLET OR OUTLET - LEVEL WINGS CULVERT HEIGHT 5' to 7'
ROUTE: PROJECT NO. FA NO. DRAWING NO. SD 6.10 (1 of 2)	SHEET NO. 0F



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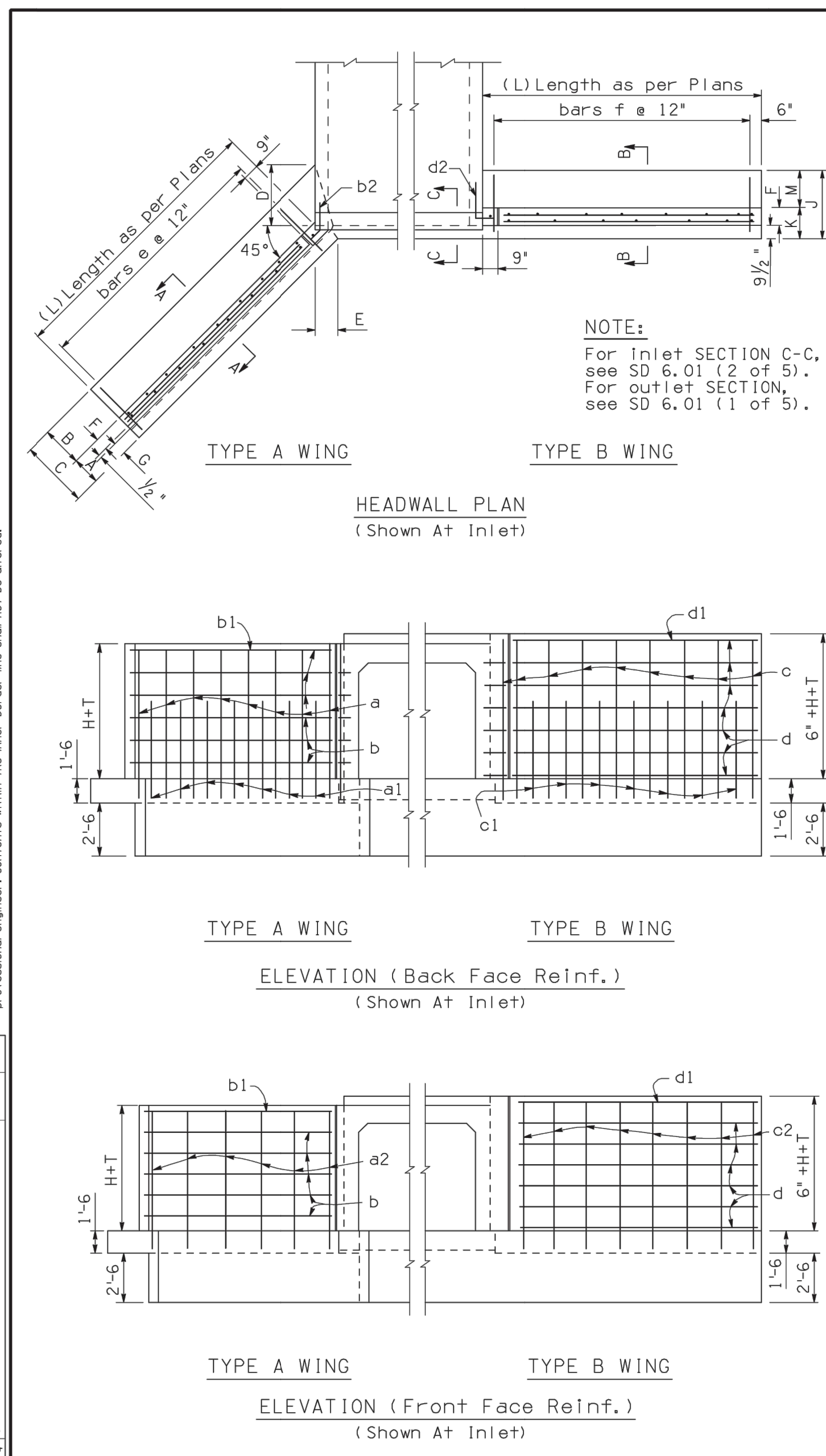
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EASTERN STREET CALUMET TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT	FILENAME 20-221038-DT09.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118	
EASTERN STREET	SHEET NO. DT09 20 OF 52
DETAILS	

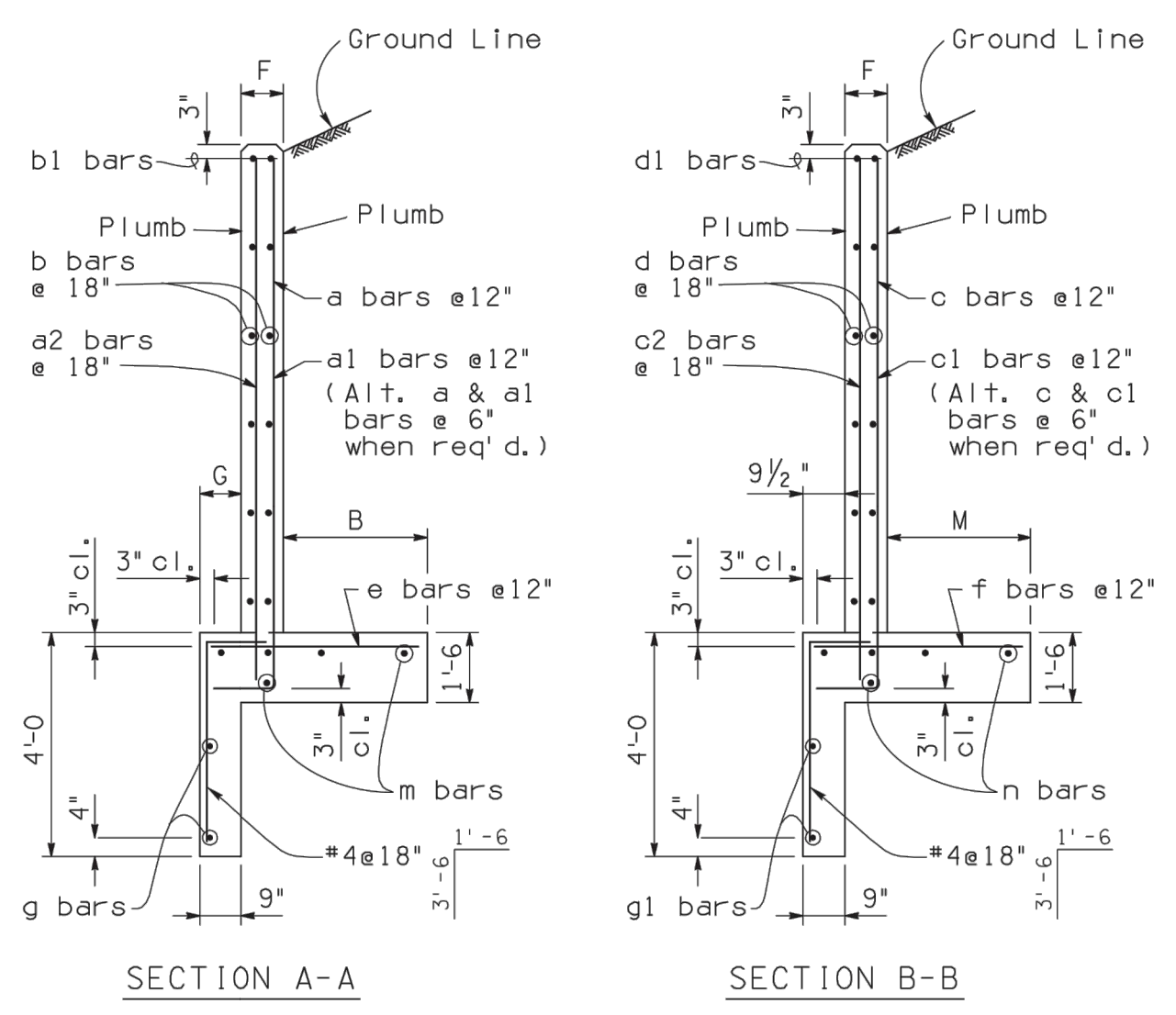
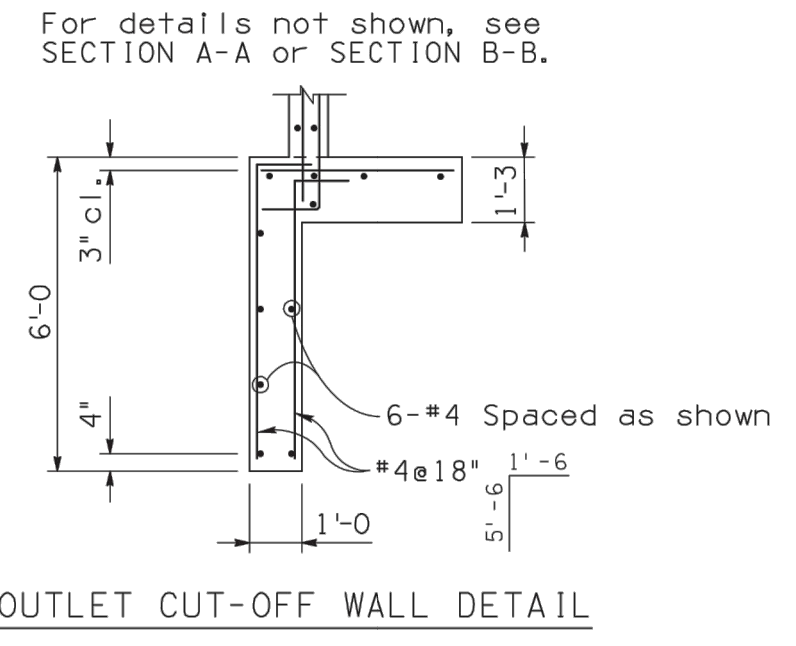
Note: As Designer, The Information Presented In This Standard Detail has been prepared in accordance with recognized engineering practices and is for general use. It is not intended to be used for any specific application without the approval of a professional engineer. Contents within the inner border line shall not be altered.

NO.	DESCRIPTION OF REVISION	DATE
1	DIGITAL DRAW	
2		
3		
4		



Height of Opening	DIMENSIONS										
	A	B	C	D	E	F	G	J	K	M	
8'	1'-9"	3'-9"	5'-6"	5'-4"	1'-0 1/4"	11 1/2"	0'-9"	5'-6"	1'-9"	3'-9"	
9'	2'-0"	4'-0"	6'-0"	5'-8"	2'-1"	11 1/2"	1'-0"	6'-0"	1'-9"	4'-3"	
10'	2'-0"	4'-6"	6'-6"	6'-4"	2'-1"	11 1/2"	1'-0"	6'-6"	1'-9"	4'-3"	
11'	2'-4"	4'-8"	7'-0"	6'-7"	2'-6 1/2"	1'-0 1/2"	1'-3"	7'-0"	1'-10"	5'-2"	
12'	2'-6"	4'-9"	7'-3"	6'-9"	2'-9 1/2"	1'-1 1/2"	1'-4"	8'-0"	1'-11"	6'-1"	

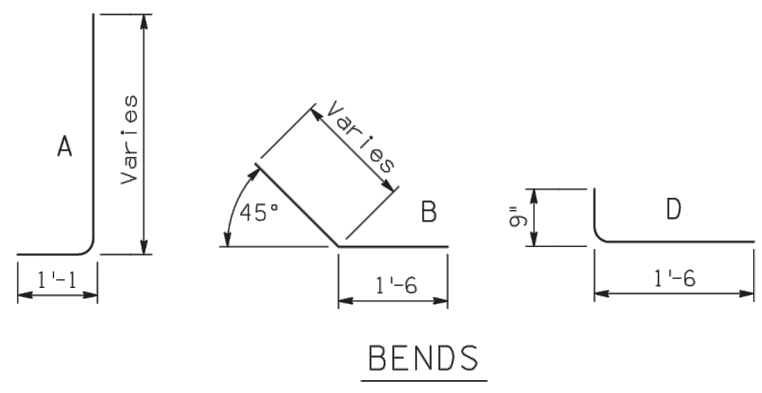
NOTE:
For Inlet SECTION C-C, see SD 6.01 (2 of 5).
For Outlet SECTION, see SD 6.01 (1 of 5).



Mark	Bend	WINGS STEEL LIST (L=H+2)														
		8' Height		9' Height		10' Height		11' Height		12' Height						
		No.	Size	No.	Size	No.	Size	No.	Size	No.	Size					
TYPE A WING																
a	A	20	#7	11'-0"	22	#8	12'-3"	24	#6	13'-3"	26	#7	14'-3"	28	#7	15'-3"
a1	A							24	#6	6'-6"	26	#7	6'-9"	28	#7	7'-0"
a2	str.	14	#4	9'-0"	14	#4	11'-0"	16	#4	12'-0"	18	#4	13'-0"	18	#4	14'-0"
b	str.	20	#4	9'-0"	24	#4	10'-0"	28	#4	11'-0"	28	#4	12'-0"	32	#4	13'-0"
b1	str.	4	#6	9'-0"	4	#6	10'-0"	4	#6	11'-0"	4	#6	12'-0"	4	#6	13'-0"
b2	B	12	#4	2'-3"	14	#4	2'-3"	16	#4	2'-3"	16	#4	2'-3"	18	#4	2'-3"
e	str.	20	#5	5'-0"	22	#6	5'-6"	24	#7	6'-0"	26	#7	6'-6"	28	#8	6'-9"
g	B	4	#4	12'-3"	4	#4	13'-9"	4	#4	14'-9"	4	#4	16'-0"	4	#4	17'-0"
m	str.	10	#4	9'-6"	10	#4	10'-6"	10	#4	11'-6"	10	#4	12'-6"	10	#4	13'-6"
TYPE B WING																
c	A	20	#7	11'-6"	22	#8	12'-9"	24	#6	13'-9"	26	#7	14'-9"	28	#7	15'-9"
c1	A							24	#6	6'-6"	26	#7	6'-9"	28	#7	7'-0"
c2	str.	14	#4	10'-3"	14	#4	11'-6"	16	#4	12'-6"	18	#4	13'-6"	18	#4	14'-6"
d	str.	24	#4	9'-0"	28	#4	10'-0"	28	#4	11'-0"	32	#4	12'-0"	36	#4	13'-0"
d1	str.	4	#6	9'-0"	4	#6	10'-0"	4	#6	11'-0"	4	#6	12'-0"	4	#6	13'-0"
d2	B	14	#4	2'-3"	16	#4	2'-3"	16	#4	2'-3"	18	#4	2'-3"	20	#4	2'-3"
f	str.	20	#5	5'-0"	22	#6	5'-6"	24	#7	6'-0"	26	#7	6'-6"	28	#8	7'-6"
g1	str.	4	#4	11'-3"	4	#4	12'-3"	4	#4	13'-3"	4	#4	14'-3"	4	#4	15'-3"
n	str.	10	#4	9'-6"	10	#4	10'-6"	10	#4	11'-6"	10	#4	12'-6"	10	#4	13'-6"

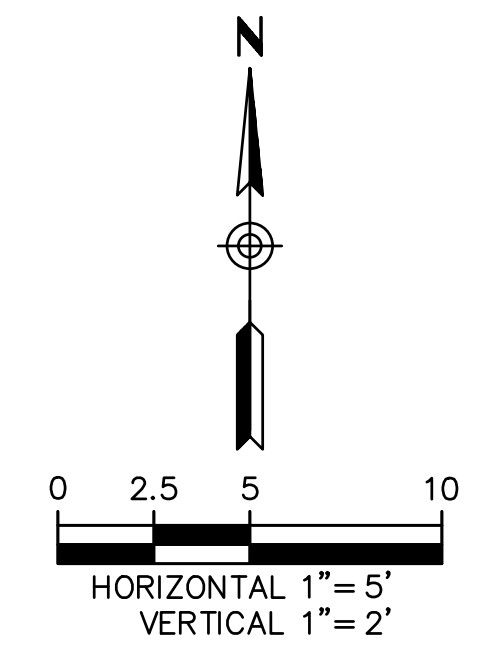
Span	Height	APPROXIMATE HEADWALL QUANTITIES*					
		Hw. Type A Wings			Hw. Type B Wings		
		For L=H+2	For each Add Ft	For L=H+2	For each Add Ft	For L=H+2	For each Add Ft
8'	8'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		15.07	1017	0.682	46	15.05	1095
10'	8'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		15.44	1045	0.690	46	15.41	1128
10'	10'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		18.30	1462	0.753	61	18.18	1556
12'	10'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		21.49	1655	0.817	64	21.20	1708
12'	12'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		15.78	1071	0.696	46	15.80	1155
12'	12'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		18.67	1488	0.759	61	18.59	1582
12'	12'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		21.86	1680	0.822	64	21.61	1734
12'	12'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		25.95	2197	0.963	78	25.61	2295
12'	12'	Conc.	Steel	Conc.	Steel	Conc.	Steel
		30.03	2596	1.015	87	30.86	2908

CURB & CUT-OFF QUANTITIES PER EACH ADDITIONAL BARREL					
8' Spans		10' Spans		12' Spans	
Conc.	Steel	Conc.	Steel	Conc.	Steel
1.114	103	1.370	130	1.625	155



NOTE:
For General Notes, Dimensions, and additional Details, see SD 6.01 (1 & 2 of 5).

DESIGN APPROVED <i>Shafa U. Hasan</i>	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION BRIDGE GROUP STRUCTURE DETAIL
APPROVED FOR DISTRIBUTION <i>Jason A. Nahme</i>	REINFORCED CONCRETE BOX CULVERTS INLET OR OUTLET - LEVEL WINGS CULVERT HEIGHT 8' TO 12'
ROUTE	PROJECT NO.
LOCATION	FA NO.
	DRAWING NO. SD 6.10 (2 of 2)
	SHEET NO. OF



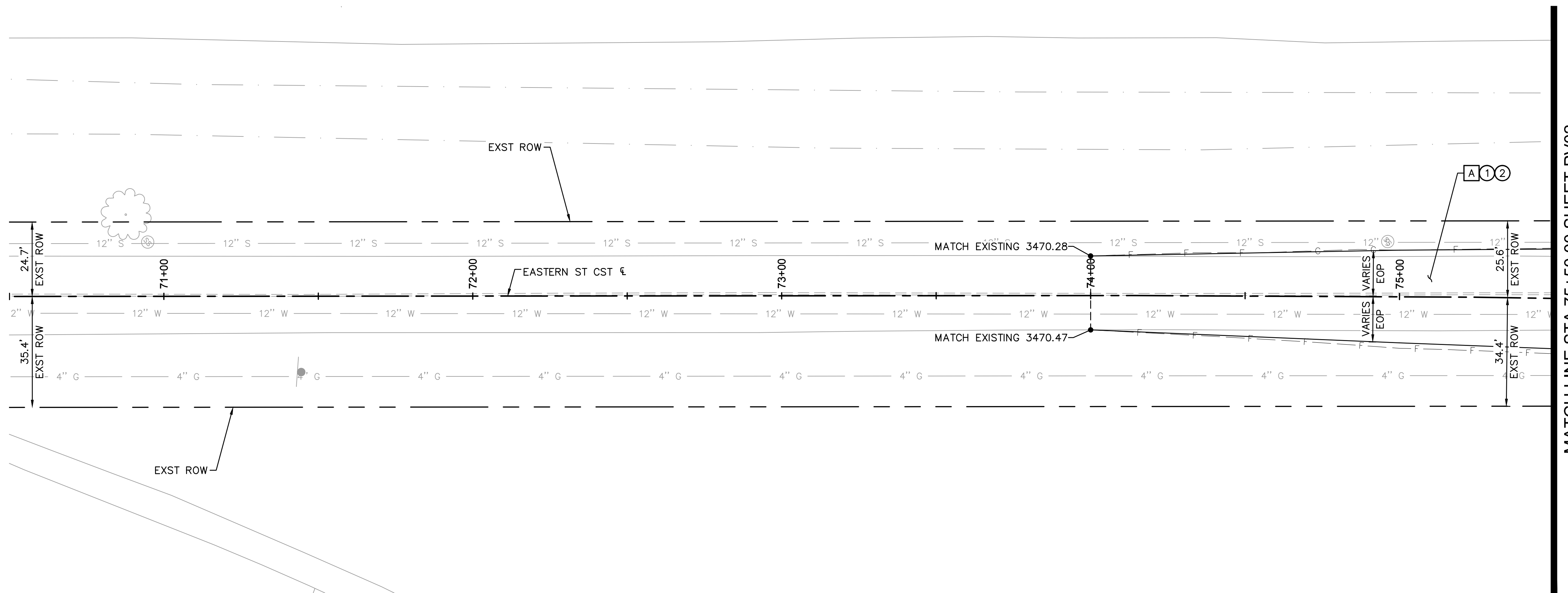
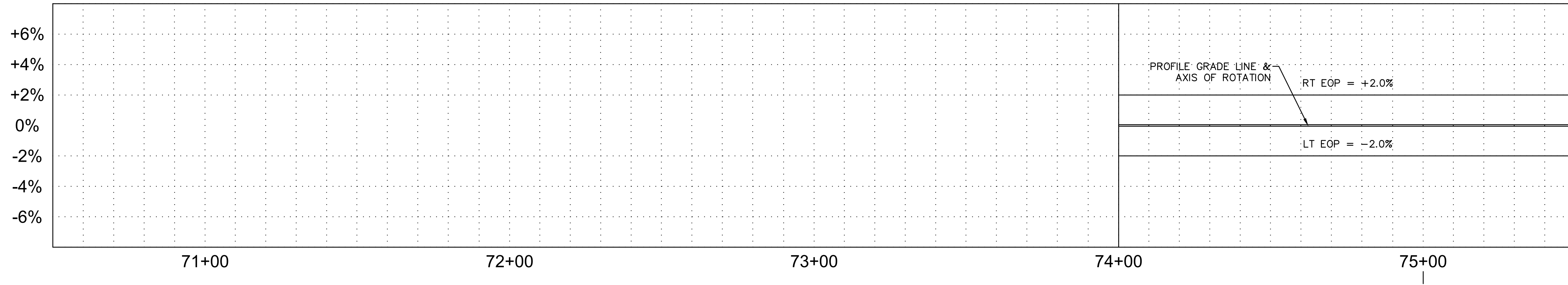
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CITY OF KINGMAN ENGINEERING DEPARTMENT	FILENAME 21-221038-DT10.dwg
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EASTERN STREET	SHEET NO. DT10
DETAILS	21 OF 52



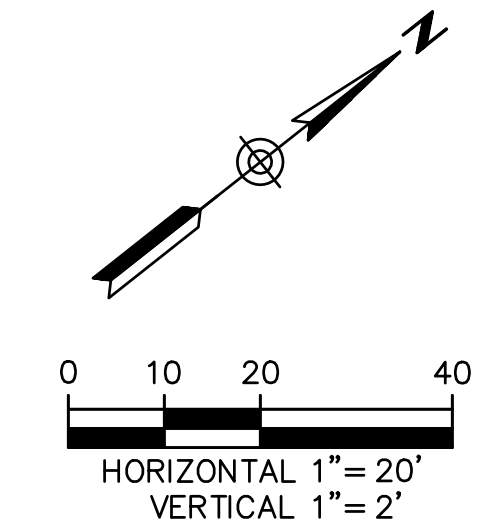
EASTERN STREET

MATCH LINE STA 75+50.00 SHEET PV02

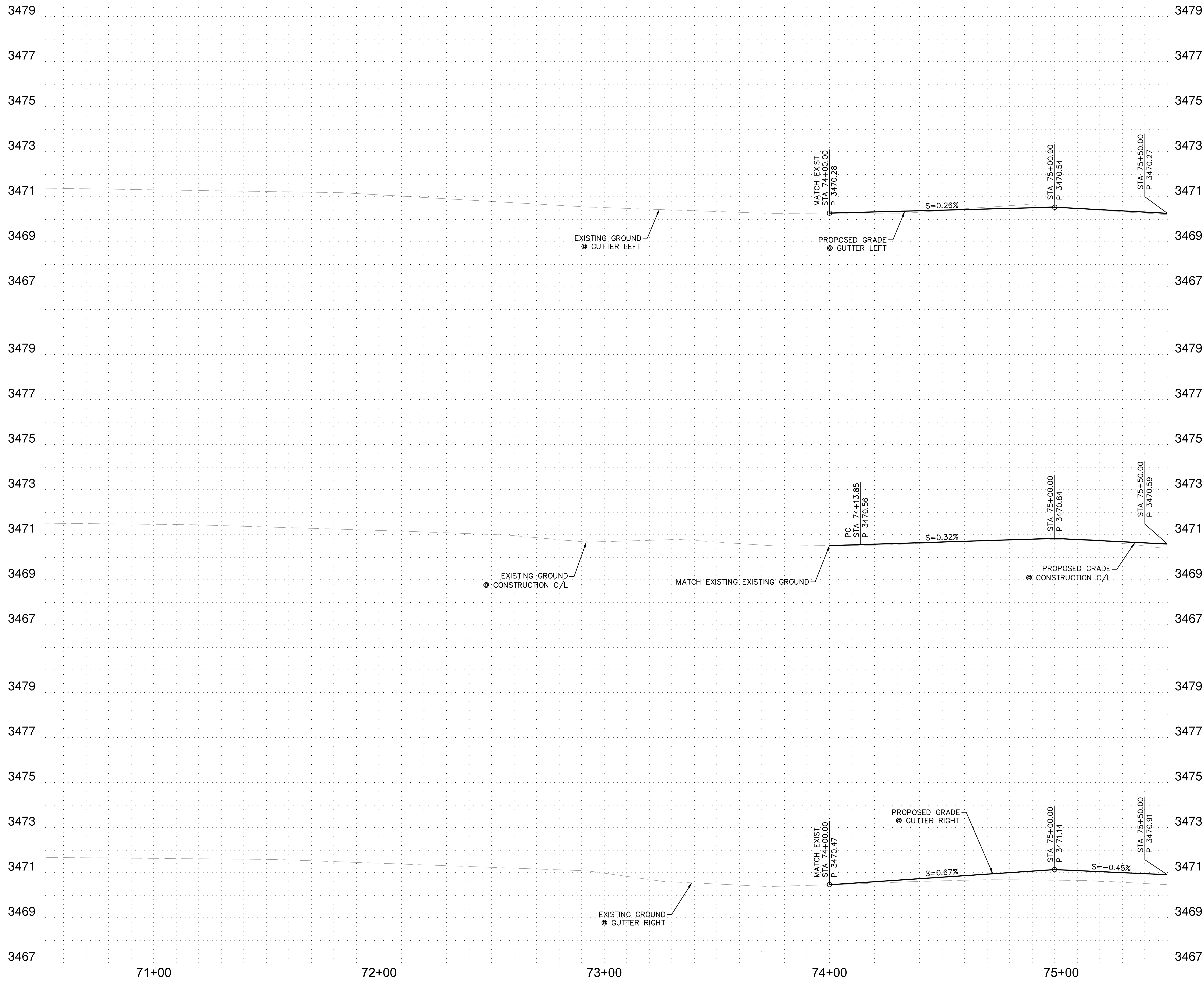
REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	3,582	SF

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
①	ASPHALT CONCRETE PAVT PER PVMT STRUCTURAL SECTION NO.1	472	SY
②	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	472	SY

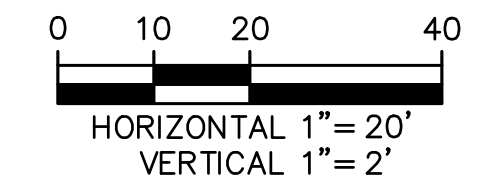
NOTE:
 1. EXISTING SIGNS TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. COK WILL SUPPLY NEW SIGNS. NEW POST AND BASE IS COK DETAIL 132.



EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001	
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 22-221038-PV01.dwg	
EASTERN STREET ROADWAY PLAN		 SHEET NO. PV01 22 OF 52	

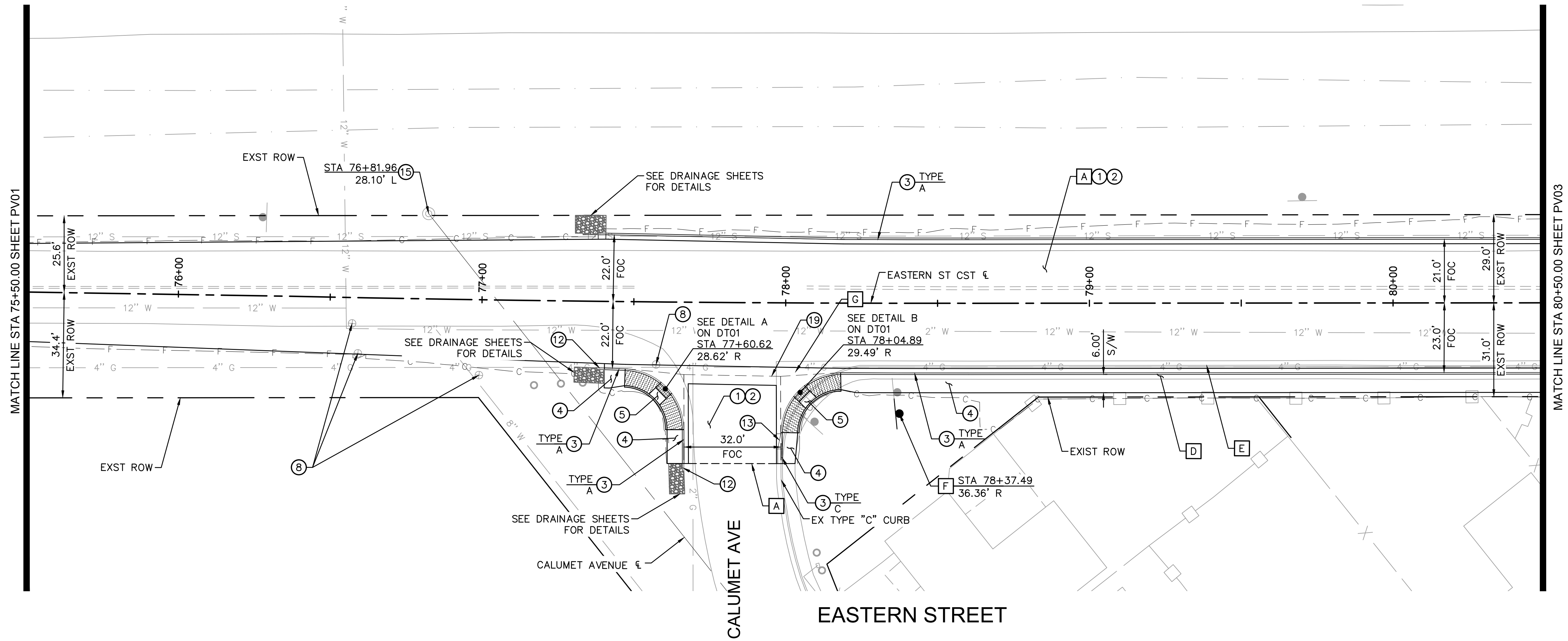
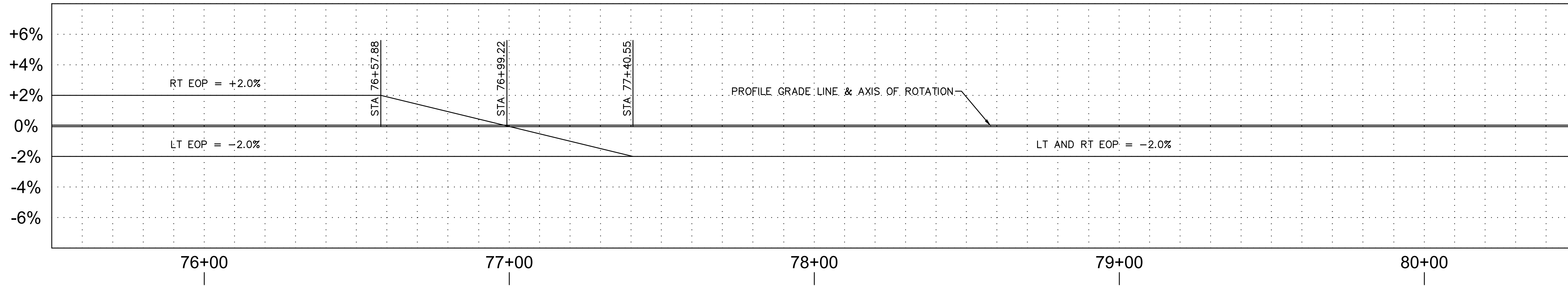


NOTE:
 1. ALL MEASUREMENTS AND ELEVATIONS ARE TO THE TOP OF FACE OF CURB AND GUTTER LINE
 2. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN IS BASED ON RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.



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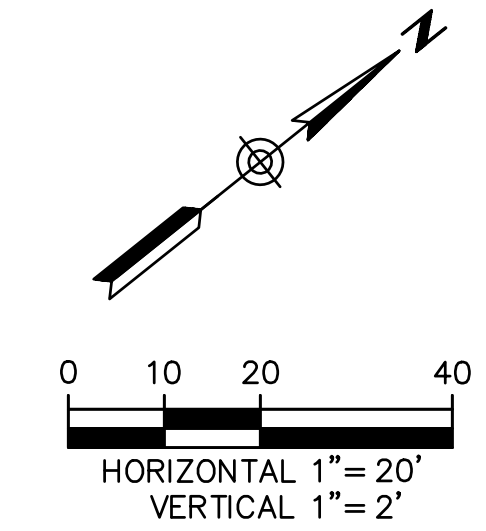
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 23-221038-PR01.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET ROADWAY PROFILE		
SHEET NO. PR01		EXPIRES 03/31/2024
23 OF 52		



REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	16,704	SF
D	REMOVE SIDEWALK	1,089	SF
E	REMOVE CONCRETE CURB & GUTTER	271	LF
F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	1	EA
G	EXISTING CONCRETE TO BE REMOVED	283	SF

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
1	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	2,272	SY
2	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	2,272	SY
3	CURB & GUTTER PER MAG STD DET 220	567	LF
4	SIDEWALK PER COK STD DET 230	1,528	SF
5	SIDEWALK RAMP PER COK STD DET 233	2	EA
8	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	4	EA
12	CURB TERMINATION TYPE A PER MAG STD DET 222	2	EA
13	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	1	EA
15	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	1	EA
19	VALLEY GUTTER PER MAG STD DET 240	470	SF

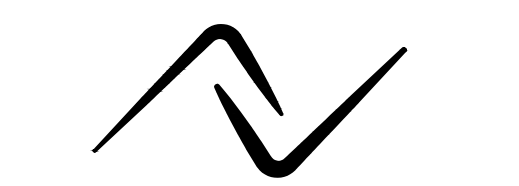
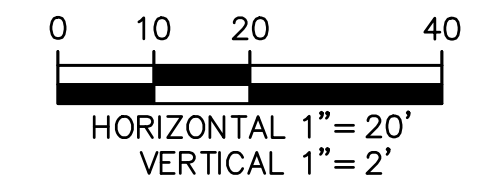
NOTE:
 1. EXISTING SIGNS TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. COK WILL SUPPLY NEW SIGNS. NEW POST AND BASE IS COK DETAIL 132.



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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 24-221038-PV02.dwg
EASTERN STREET ROADWAY PLAN		 SHEET NO. PV02 24 OF 52

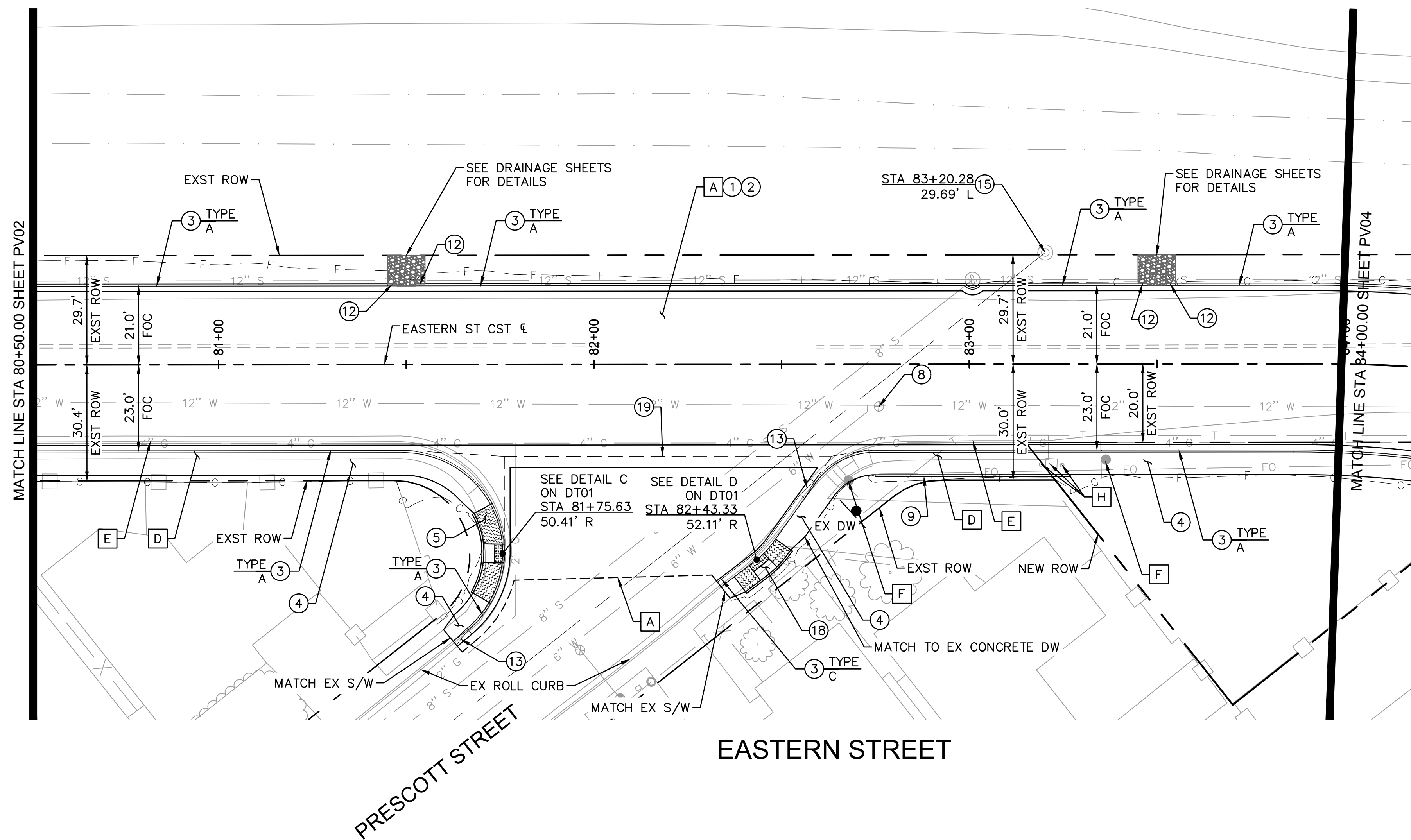
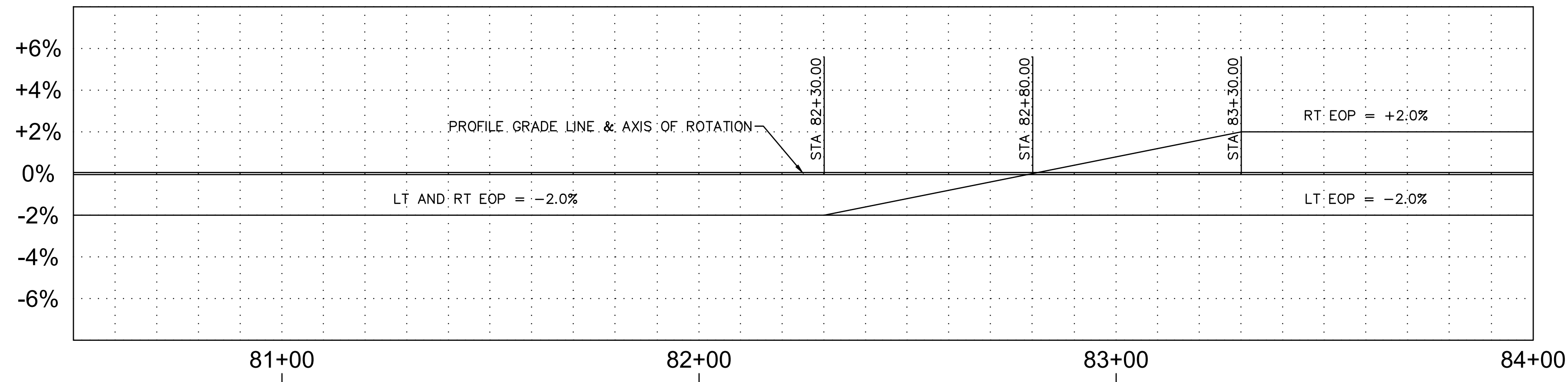
NOTE:
 1. ALL MEASUREMENTS AND ELEVATIONS ARE TO THE TOP OF FACE OF CURB AND GUTTER LINE
 2. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN IS BASED ON RECORD DRAWINGS OF THE VARIOUS UTILITY COMPANIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.



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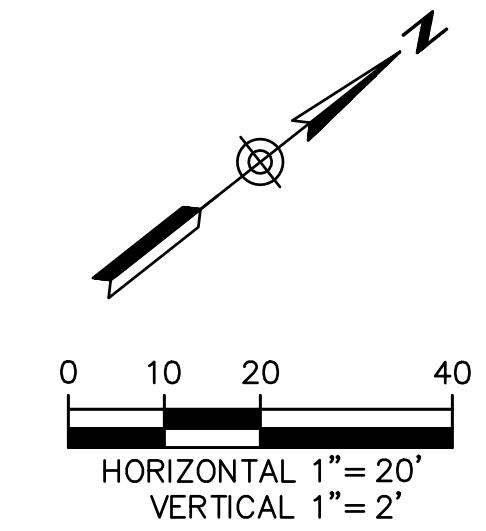
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001	
		FILENAME 25-221038-PR02.dwg	
CITY OF KINGMAN ENGINEERING DEPARTMENT			
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118			
EASTERN STREET		SHEET NO. PR02	
ROADWAY PROFILE		25 OF 52	



REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	15,705	SF
D	REMOVE SIDEWALK	1,206	SF
E	REMOVE CONCRETE CURB & GUTTER	276	LF
F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	2	EA
H	RELOCATE EXISTING UTILITY BOX	2	EA

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
1	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	1,908	SY
2	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	1,908	SY
3	CURB & GUTTER PER MAG STD DET 220	697	LF
4	SIDEWALK PER COK STD DET 230	1,743	SF
5	SIDEWALK RAMP PER COK STD DET 233	1	EA
8	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	1	EA
9	SINGLE CURB PER MAG STD DET 222 TYPE A	52	LF
12	CURB TERMINATION PER MAG STD DET 222	4	EA
13	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	2	EA
15	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	1	EA
18	SIDEWALK RAMP PER MODIFIED COK DET 236	1	EA
19	VALLEY GUTTER PER MAG STD DET 240	787	SF

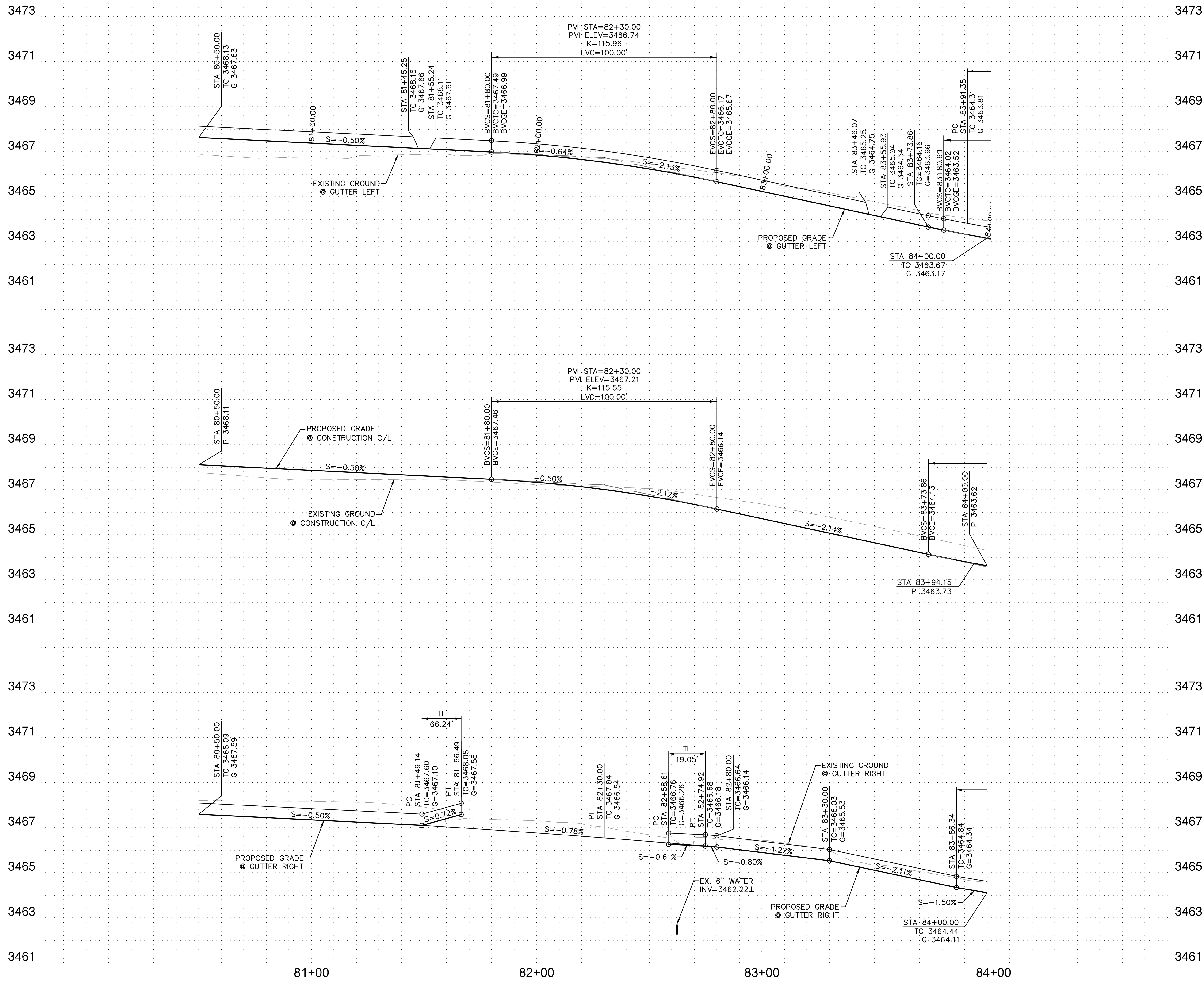
NOTE:
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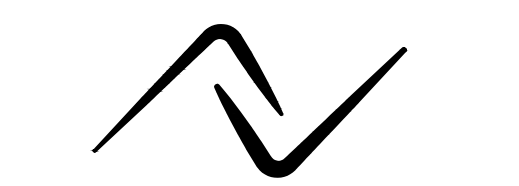
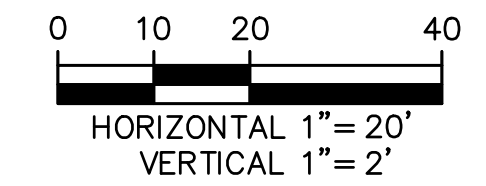
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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 26-221038-PV03.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET ROADWAY PLAN		SHEET NO. PV03 26 OF 52



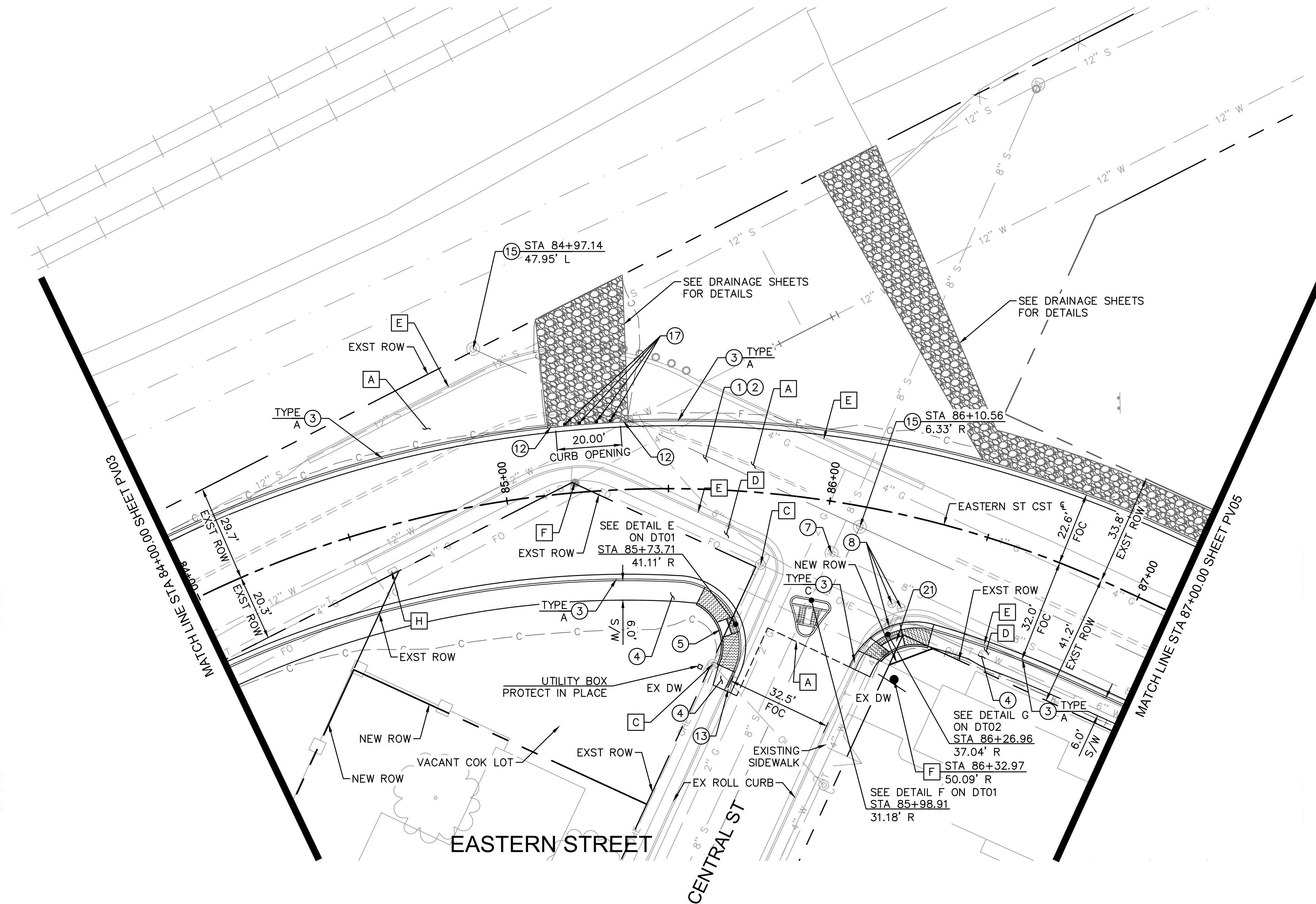
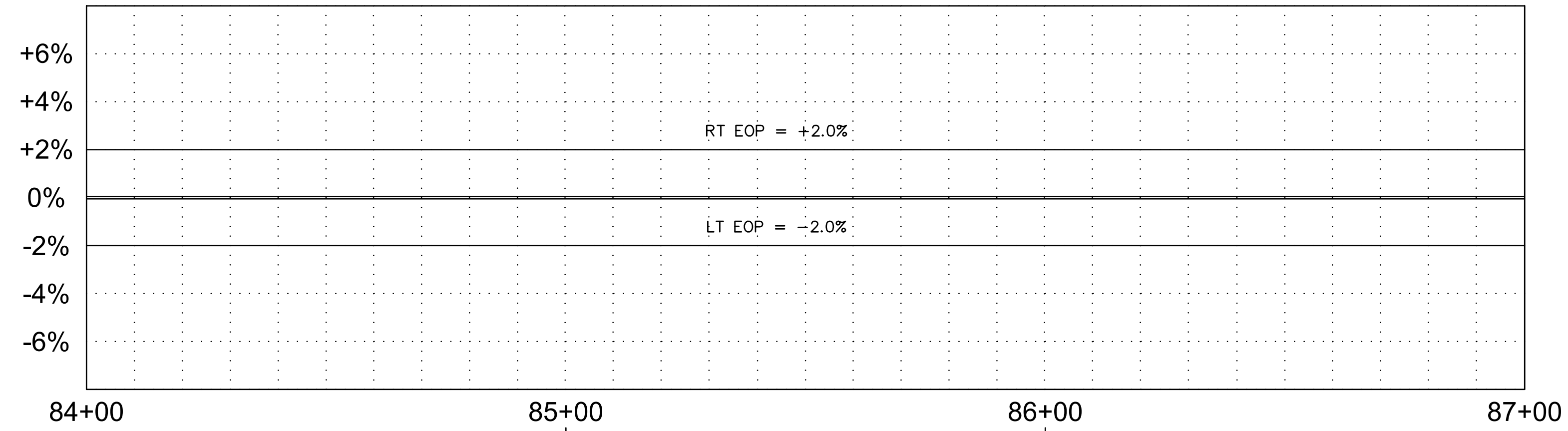
NOTE:
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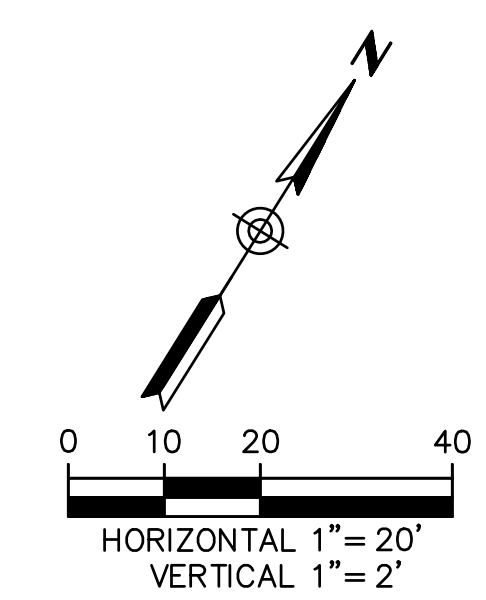
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 27-221038-PR03.dwg
EASTERN STREET ROADWAY PROFILE		 SHEET NO. PR03 27 OF 52



REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	11,574	SF
C	REMOVE & RELOCATE EXISTING POWER POLE BY OTHERS	2	EA
D	REMOVE SIDEWALK	1,062	SF
E	REMOVE CONCRETE CURB & GUTTER	517	LF
F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	2	EA
H	RELOCATE EXISTING UTILITY BOX	1	EA

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
1	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	1,634	SY
2	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	1,634	SY
3	CURB & GUTTER PER MAG STD DET 220	540	LF
4	SIDEWALK PER COK STD DET 230	1,323	SF
5	SIDEWALK RAMP PER COK STD DET 233	1	EA
7	RESET FRAME AND COVER FOR MANHOLE PER COK STD DET 422	1	EA
8	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	3	EA
12	CURB TERMINATION PER MAG STD DET 222	2	EA
13	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	1	EA
15	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	2	EA
17	6" REMOVABLE TYPE-2 BOLLARD PER MAG STD DET 140	4	EA
21	MODIFIED SIDEWALK RAMP PER COK STD DET 233 SEE DETAIL G ON SHEET DT02	1	EA

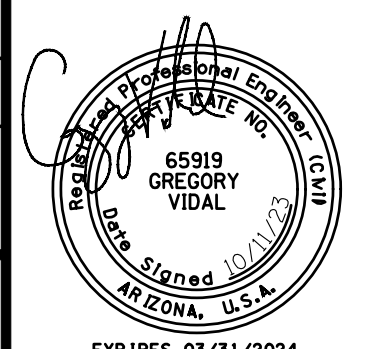
NOTE:
 1. EXISTING SIGNS TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. COK WILL SUPPLY NEW SIGNS. NEW POST AND BASE IS COK DETAIL 132.



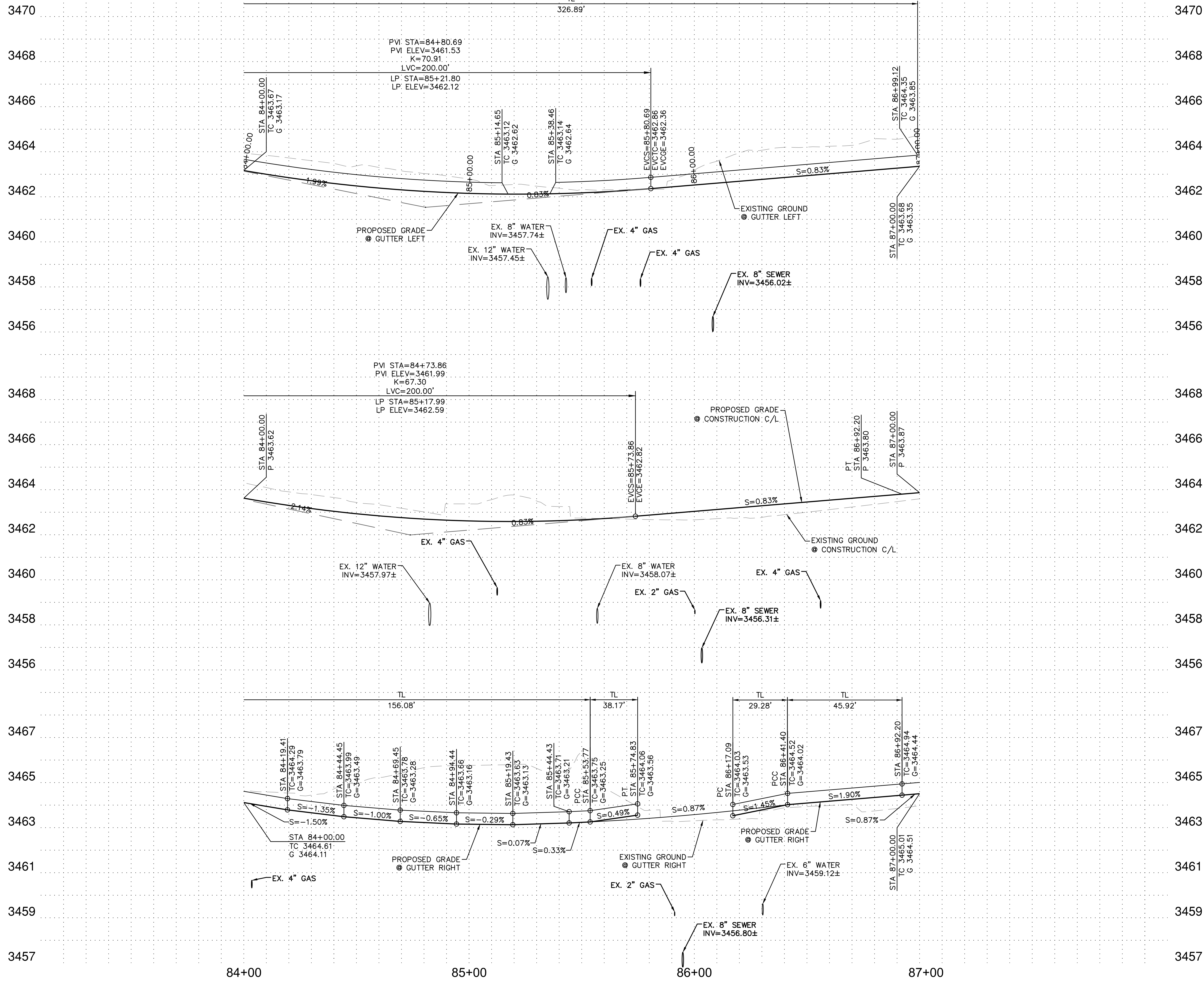
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EASTERN STREET
CALUMET TO AIRWAY AVE
 C.O.K. PROJECT NO. ENG 21-0001
 FILENAME 28-221038-PV04.dwg

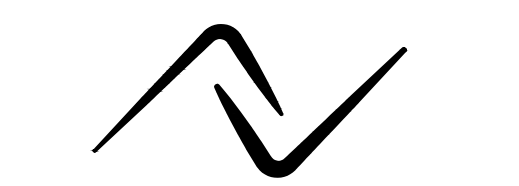
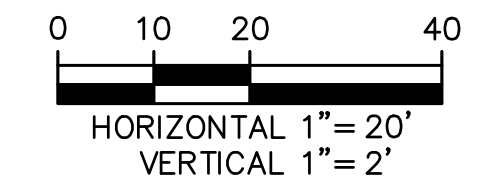
CITY OF KINGMAN
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EASTERN STREET
ROADWAY PLAN
 SHEET NO. **PV04**
 28 OF 52



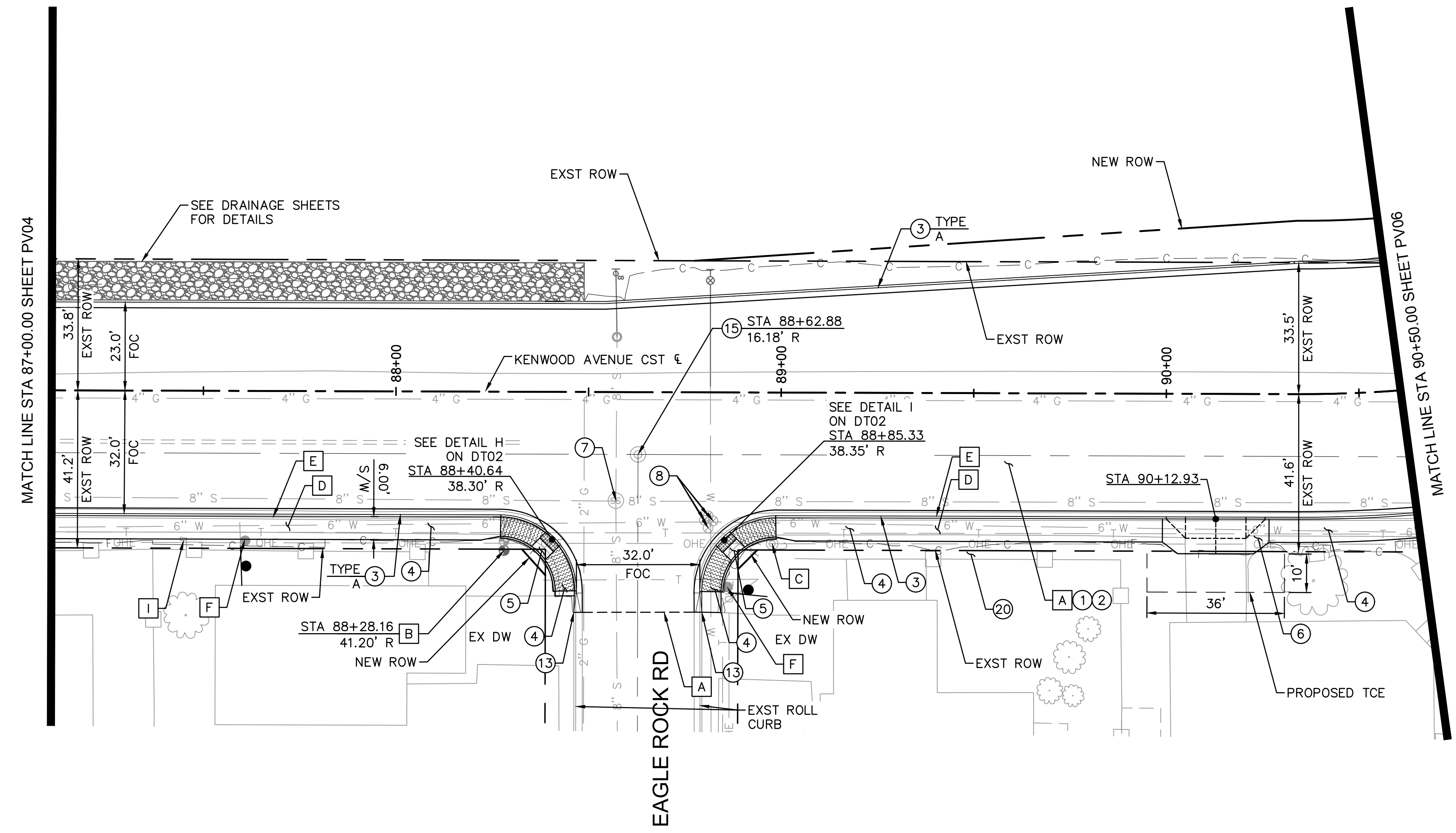
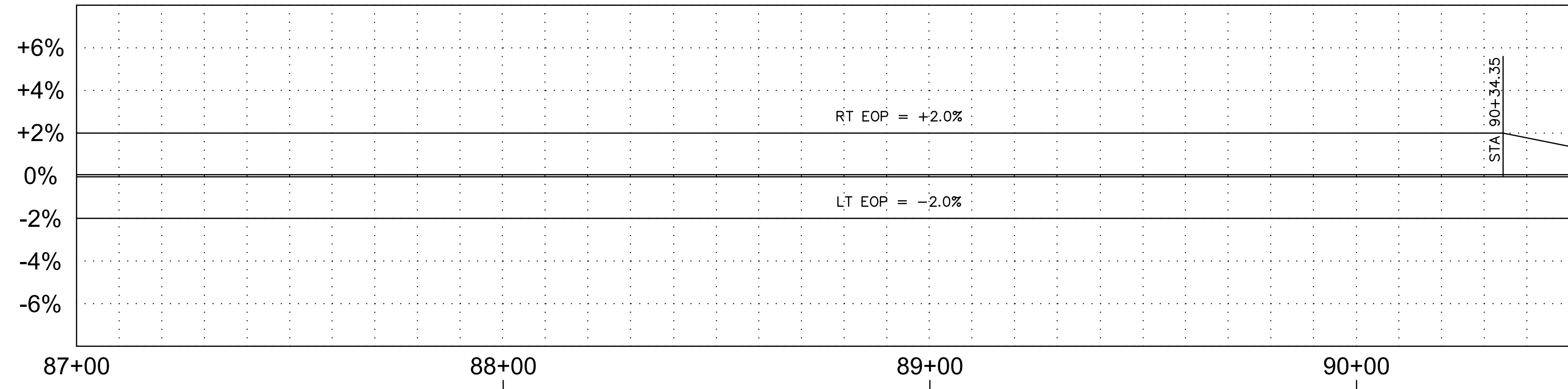
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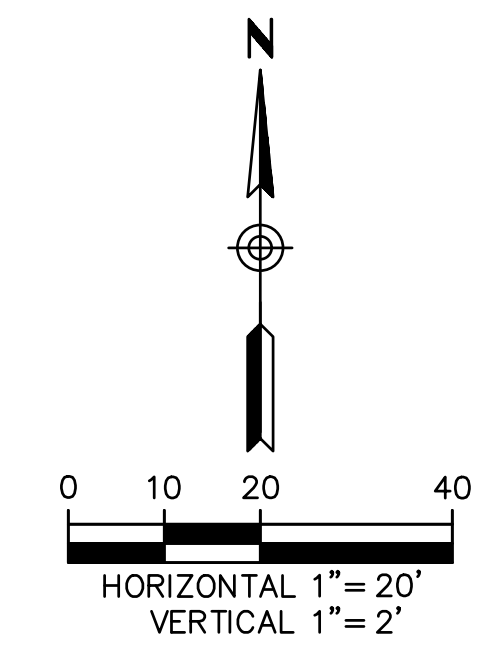
EASTERN STREET CALUMET TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 21-0001
	FILENAME 29-221038-PR04.dwg
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118	
EASTERN STREET ROADWAY PROFILE	



REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	14,085	SF
B	REMOVE & RELOCATE EXISTING FIRE HYDRANT PER COK STD DET 360	1	EA
C	REMOVE & RELOCATE EXISTING POWER POLE BY OTHERS	1	EA
D	REMOVE SIDEWALK	1,377	SF
E	REMOVE CONCRETE CURB & GUTTER	353	LF
F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	2	EA
I	RELOCATE EXISTING WATER METER	1	EA

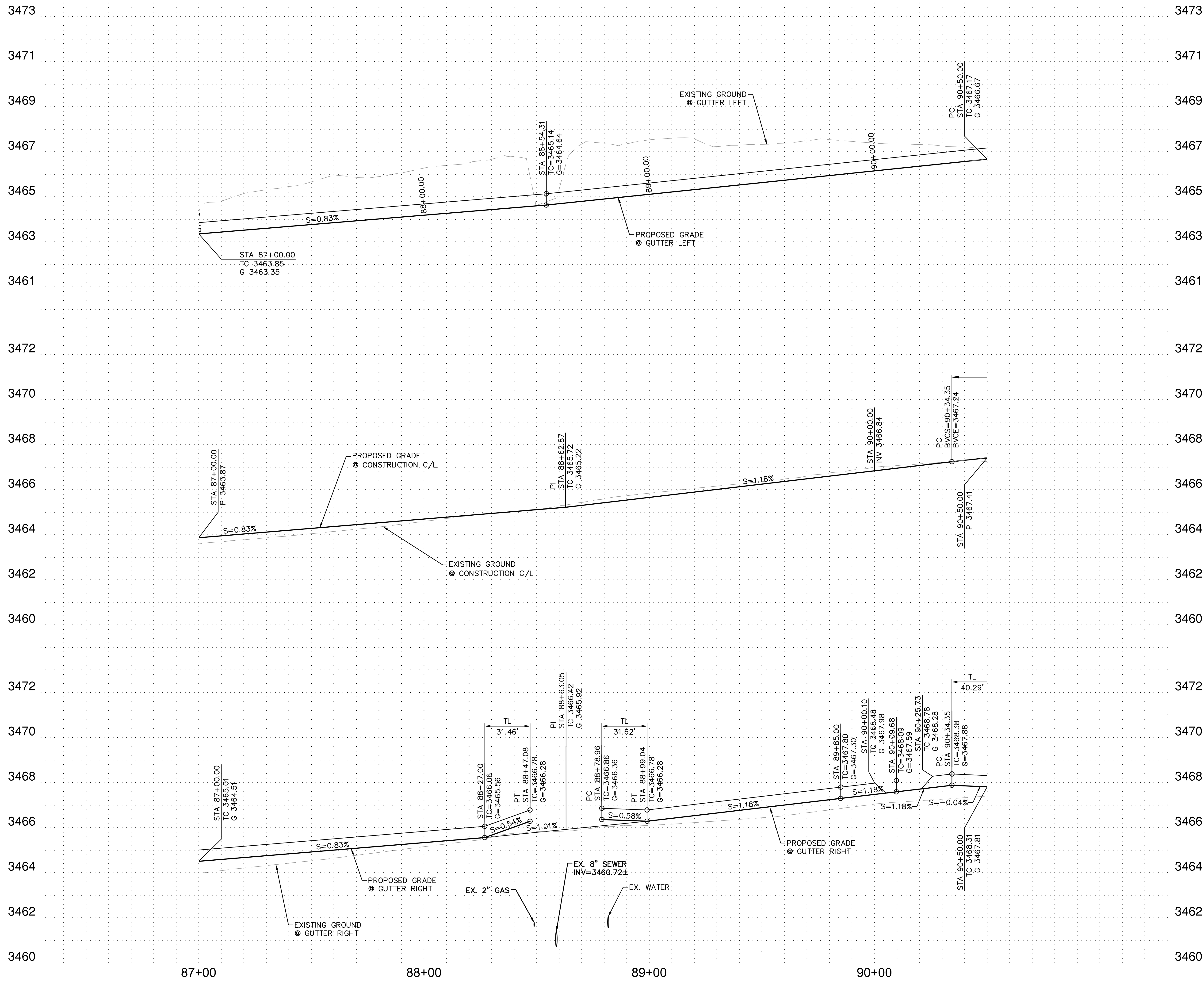
CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
①	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	2,303	SY
②	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	2,303	SY
③	CURB & GUTTER PER MAG STD DET 220	502	LF
④	SIDEWALK PER COK STD DET 230	1,787	SF
⑤	SIDEWALK RAMP PER COK STD DET 233	2	EA
⑥	CONCRETE DRIVEWAY PER MAG STD DET 250-2 MATCH EXST WIDTH, MIN 16'	1	EA
⑦	RESET FRAME AND COVER FOR MANHOLE PER COK STD DET 422	1	EA
⑧	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	4	EA
⑬	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	2	EA
⑮	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	1	EA
⑳	PRESERVE EXISTING LANDSCAPING BETWEEN NEW S/W AND EXISTING BLOCK WALL	1	EA

NOTE:
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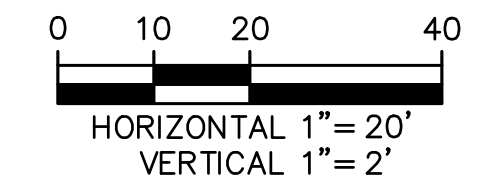


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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 30-221038-PV05.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET ROADWAY PLAN		SHEET NO. PV05 30 OF 52

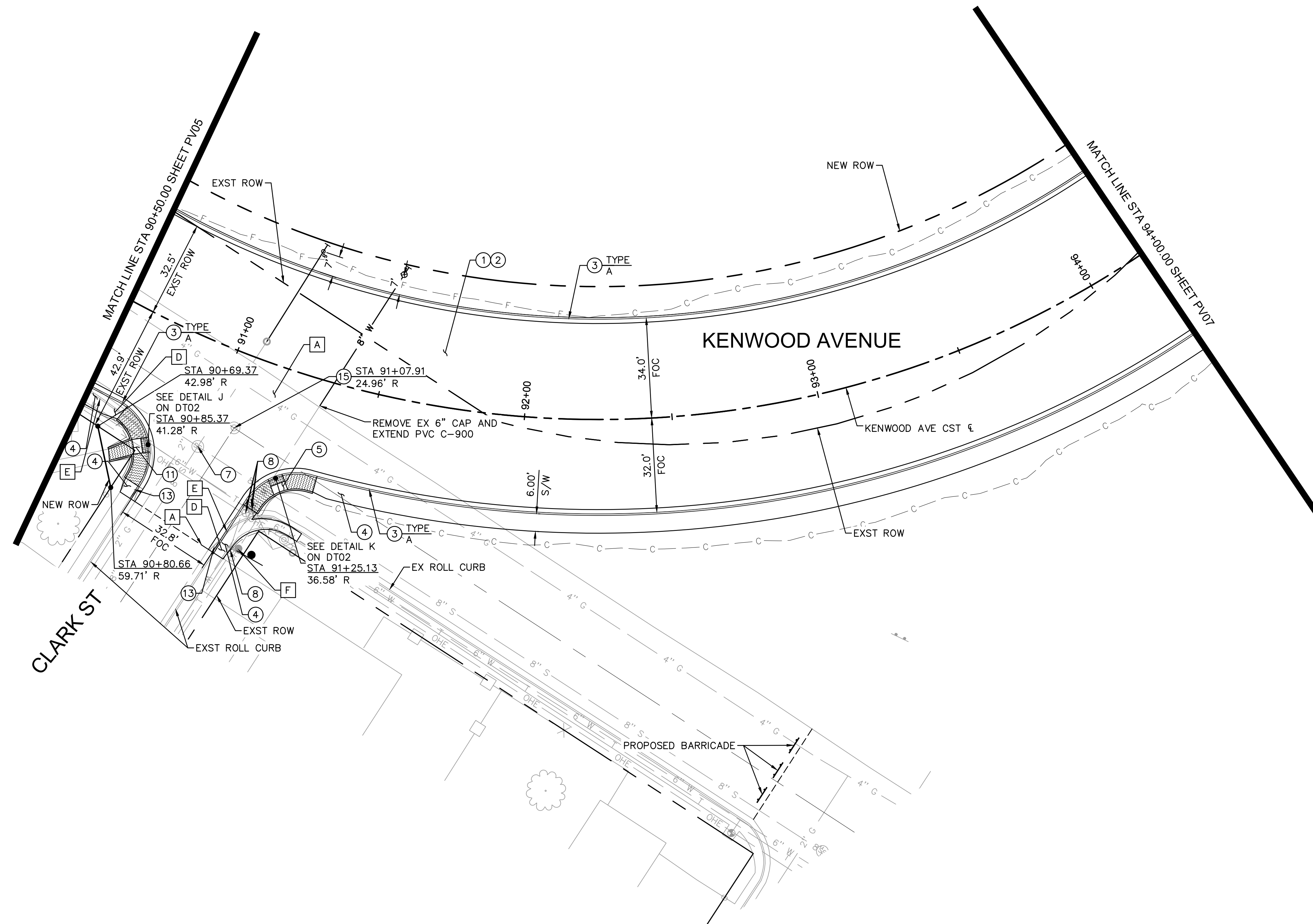
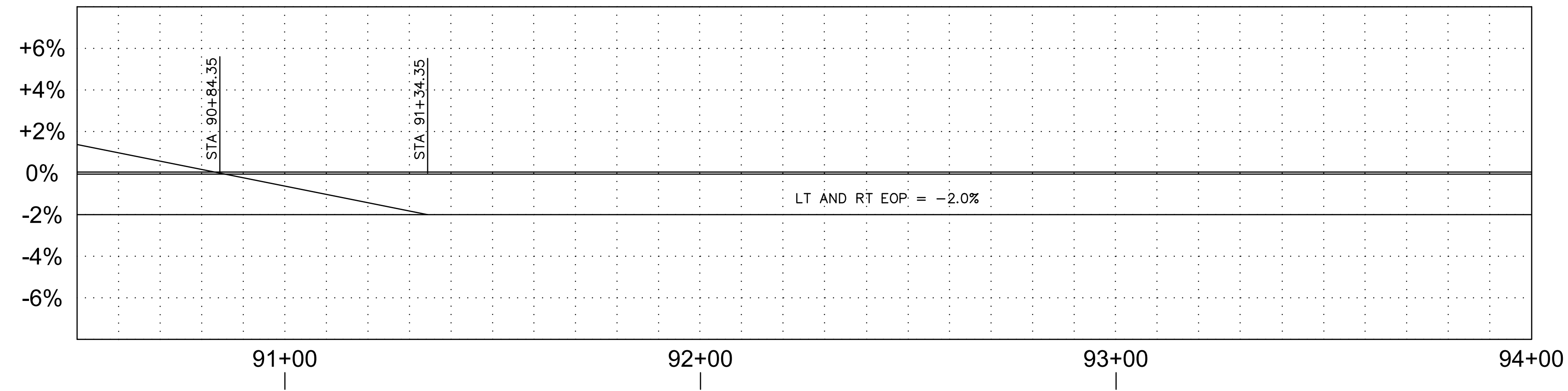


NOTE:
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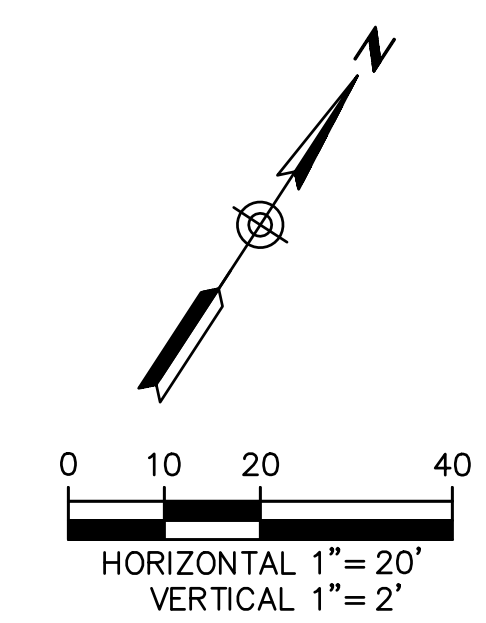
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 31-221038-PR05.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET ROADWAY PROFILE		
SHEET NO. PR05		31 OF 52



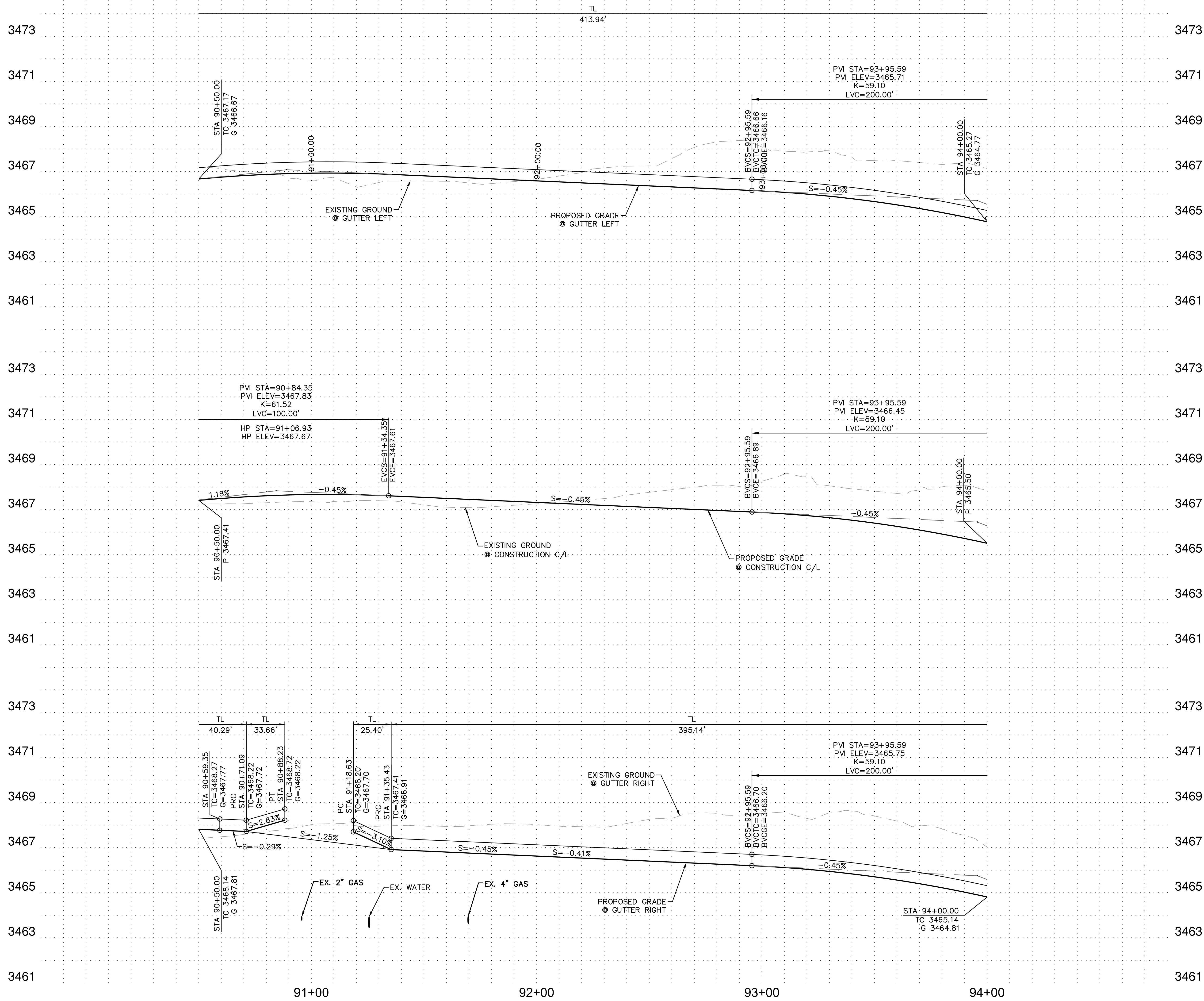
REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	5,310	SF
D	REMOVE SIDEWALK	349	SF
E	REMOVE CONCRETE CURB & GUTTER	88	LF
F	EXISTING SIGN TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. WHERE APPLICABLE COK WILL SUPPLY NEW SIGNS. NEW BASE AND POST TO BE INSTALLED PER COK DET 132	1	EA

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
1	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	2,578	SY
2	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	2,578	SY
3	CURB & GUTTER PER MAG STD DET 220	713	LF
4	SIDEWALK PER COK STD DET 230	1,993	SF
5	SIDEWALK RAMP PER COK STD DET 233	1	EA
7	RESET FRAME AND COVER FOR MANHOLE PER COK STD DET 422	1	EA
8	RESET FRAME & COVER FOR WATER VALVE PER COK DET. 391.1	5	EA
11	RAMP PER DETAIL SHEET DT02	168	SF
13	CURB TRANSITION TYPE A TO TYPE C PER MAG STD DET 221	2	EA
15	EXISTING SURVEY MARKER TO BE RESET BY COK SURVEY DEPARTMENT (NON PAYMENT ITEM)	1	EA

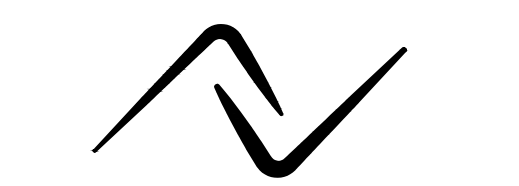
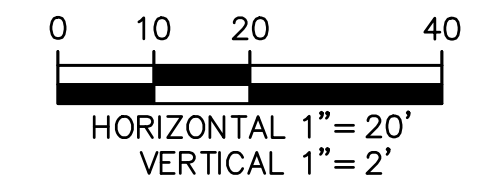
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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 32-221038-PV06.dwg
EASTERN STREET ROADWAY PLAN		 SHEET NO. PV06 32 OF 52



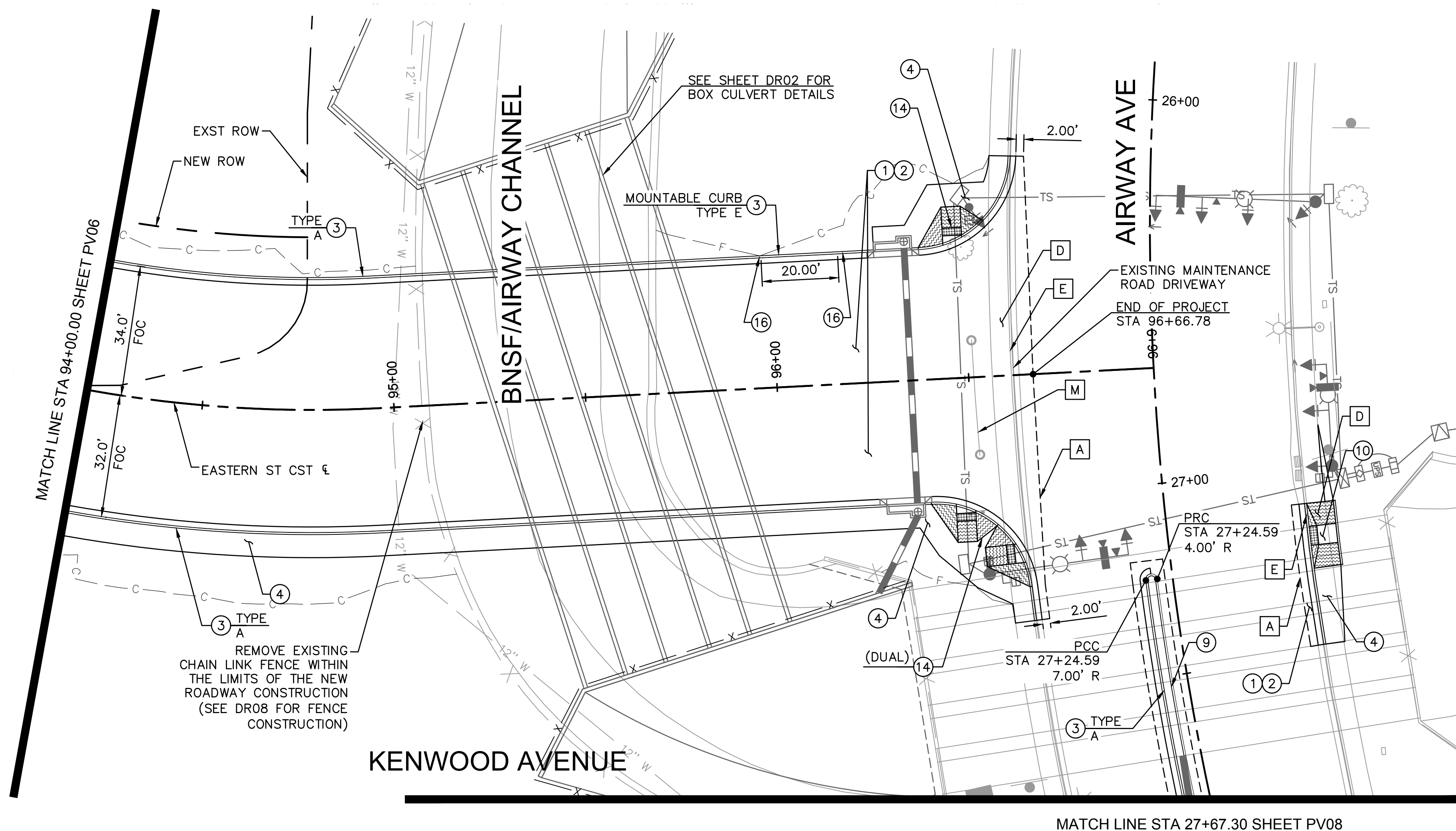
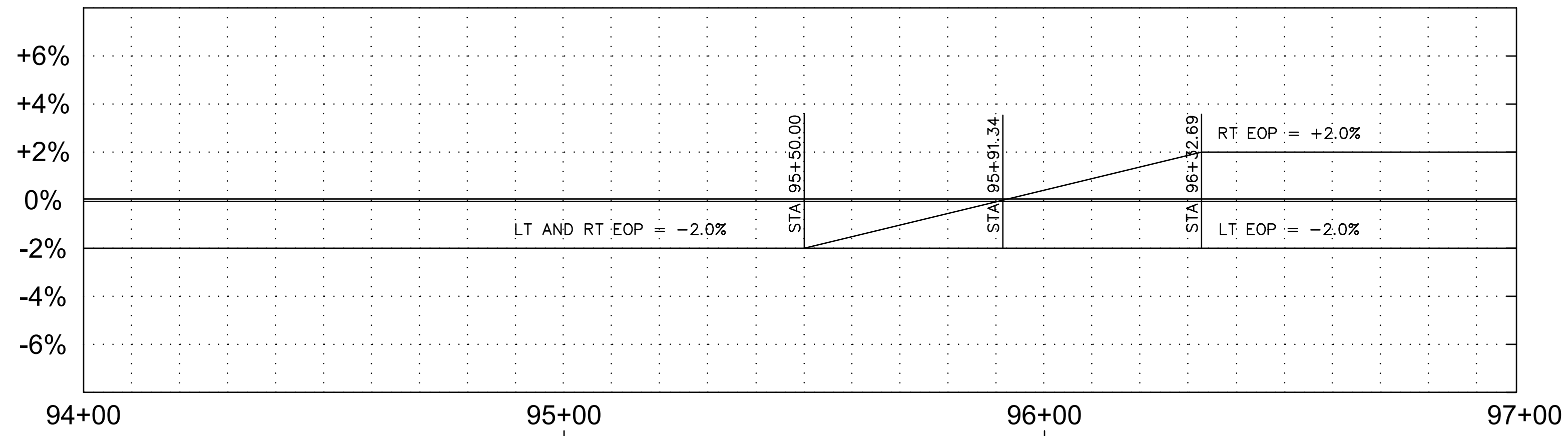
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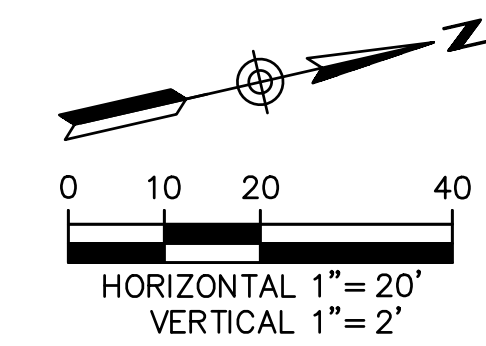
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 33-221038-PR06.dwg
EASTERN STREET ROADWAY PROFILE		 SHEET NO. PR06 33 OF 52



REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	837	SF
D	REMOVE SIDEWALK	87	SF
E	REMOVE CONCRETE CURB & GUTTER	205	LF
M	REMOVE EXISTING ACCESS GATE	1	EA

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
①	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	1,942	SY
②	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	1,942	SY
③	CURB & GUTTER PER MAG STD DET 220	545	LF
④	SIDEWALK PER COK STD DET 230	2,205	SF
⑨	SINGLE CURB PER MAG STD DET 222 TYPE A	45	LF
⑩	SIDEWALK RAMP PER MAG STD DET 238-2	1	EA
⑭	SIDEWALK RAMP PER MAG STD DET 237-1	2	EA
⑯	CURB TRANSITION TYPE A TO TYPE E PER MAG STD DET 220-2	2	EA

NOTE:
 1. EXISTING SIGNS TO BE SALVAGED AND RETURNED TO COK PUBLIC WORKS. COK WILL SUPPLY NEW SIGNS. NEW POST AND BASE IS COK DETAIL 132.



Contact Arizona 811 at least two full working days before you begin excavation

Call 811 or click Arizona811.com

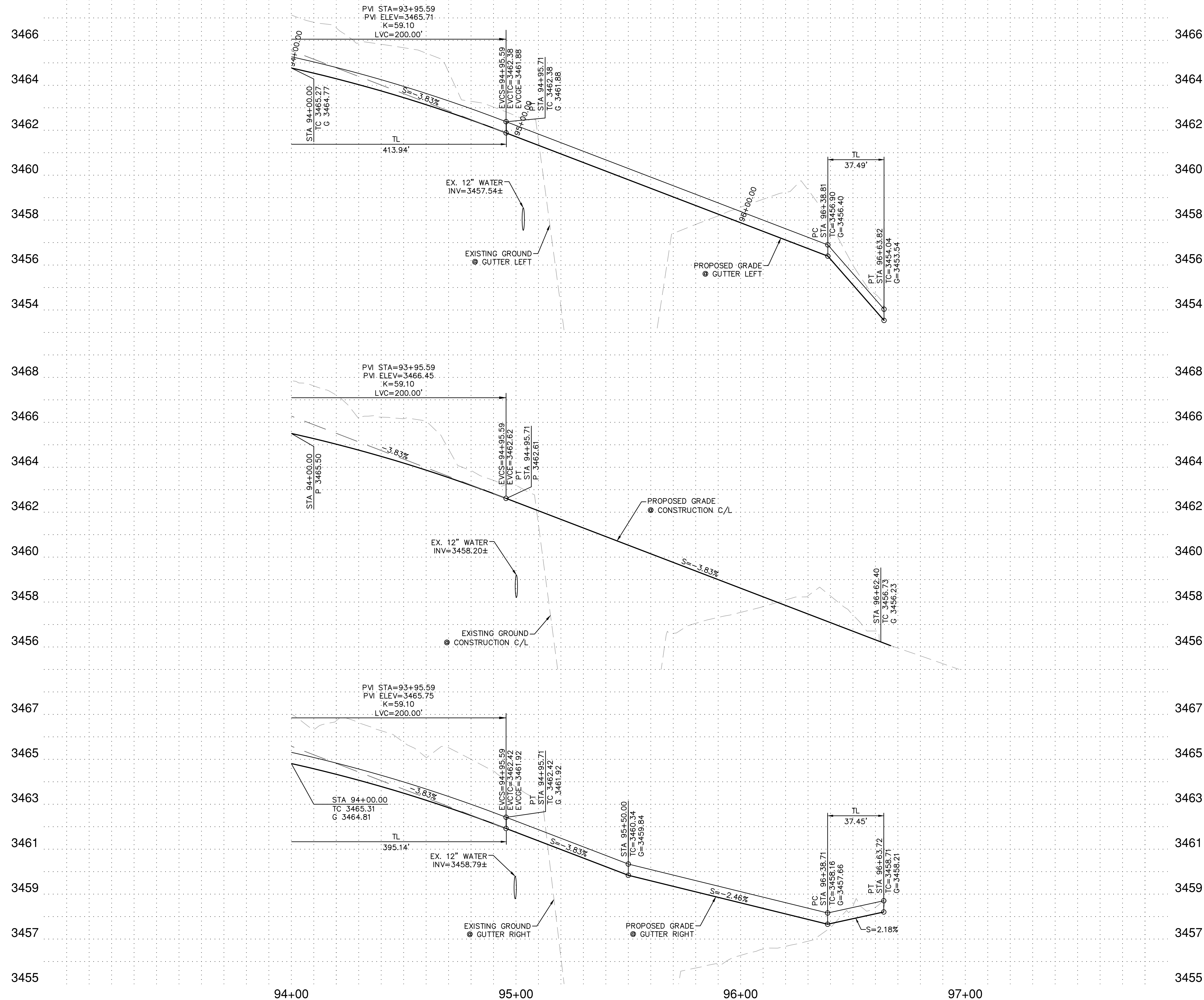
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EASTERN STREET CALUMET TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 21-0001
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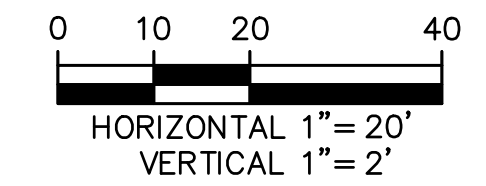
CITY OF KINGMAN
 ENGINEERING DEPARTMENT

310 NORTH 4TH STREET
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EASTERN STREET ROADWAY PLAN	SHEET NO. PV07 34 OF 52
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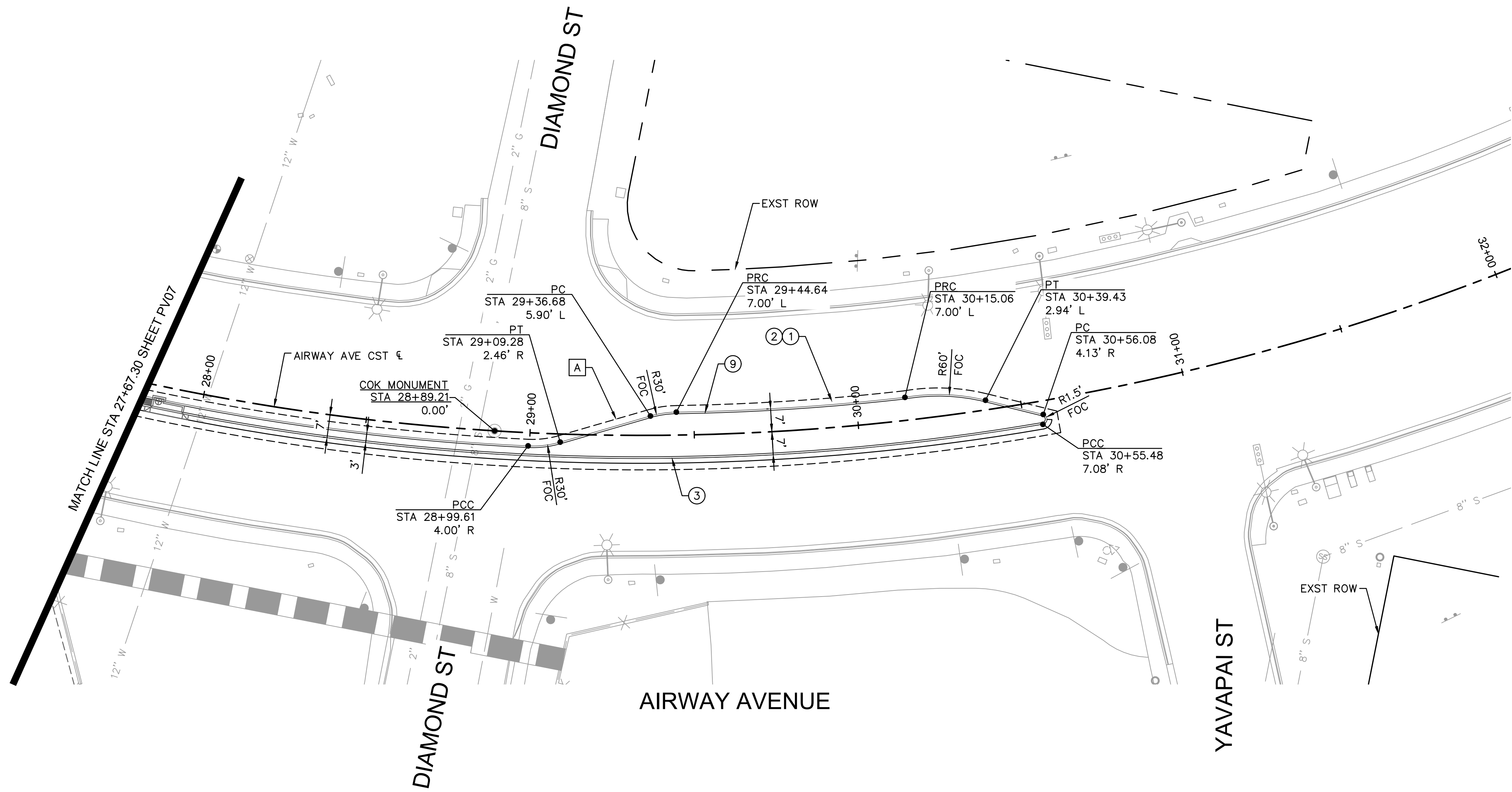


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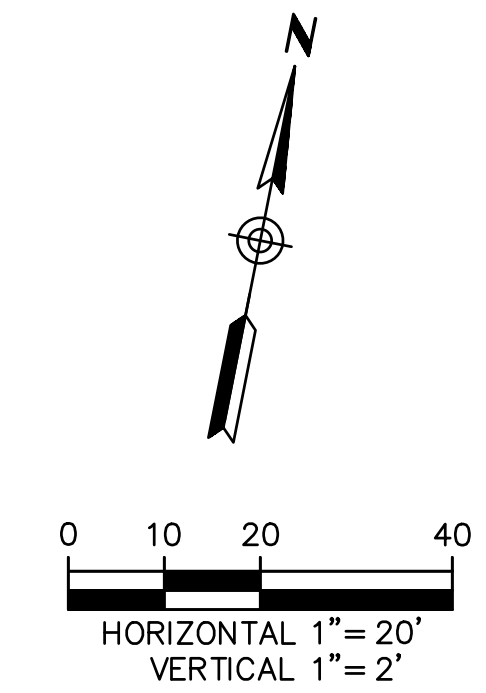
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CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 35-221038-PR07.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET ROADWAY PROFILE		SHEET NO. PR07 35 OF 52



CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
A	SAWCUT & REMOVE EXISTING PAVEMENT	3843	SF

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
①	ASPHALT CONCRETE PVMT PER PVMT STRUCTURAL SECTION NO.1	427	SY
②	AGGREGATE BASE COURSE PER PVMT STRUCTURAL SECTION NO. 1 (INCLUDES SUBGRADE PREP)	427	SY
③	CURB & GUTTER PER MAG STD DET 220	294	LF
⑨	SINGLE CURB PER MAG STD DET 222 TYPE A	295	LF

NOTE:
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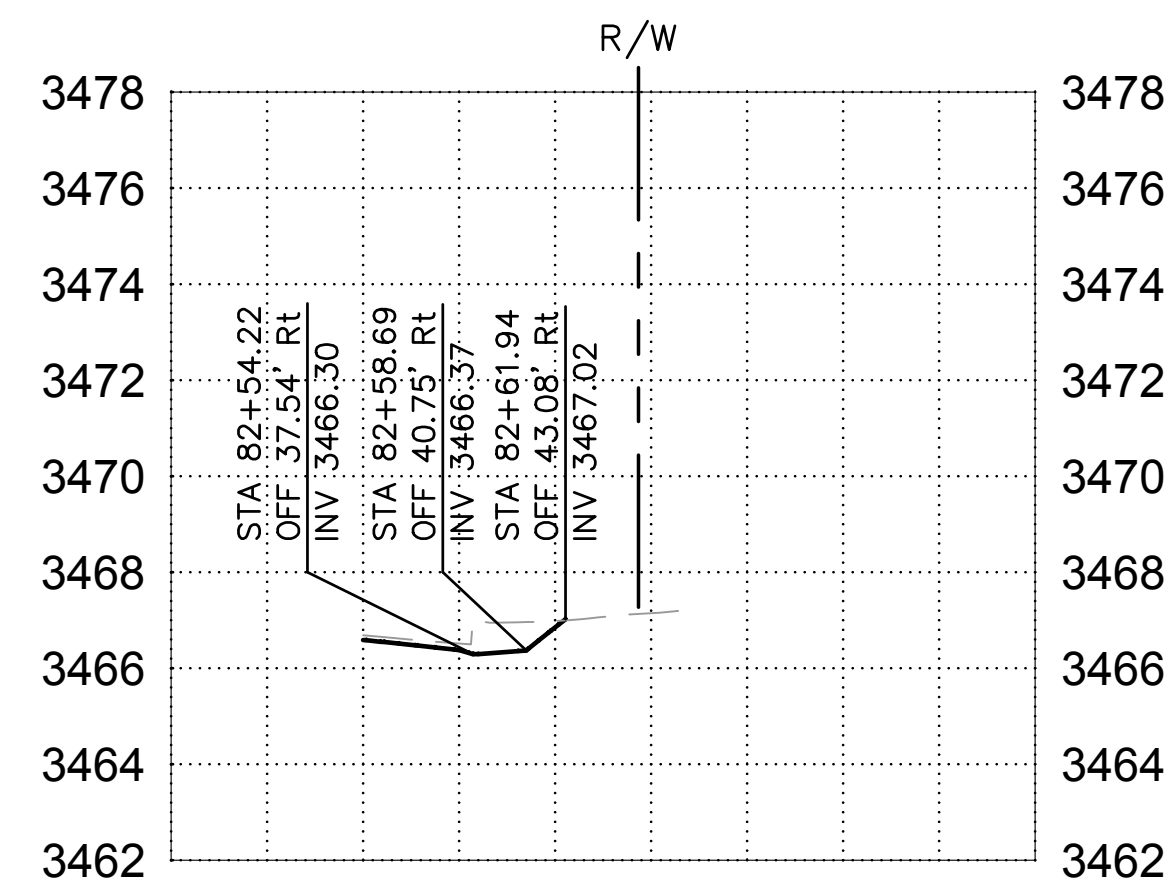
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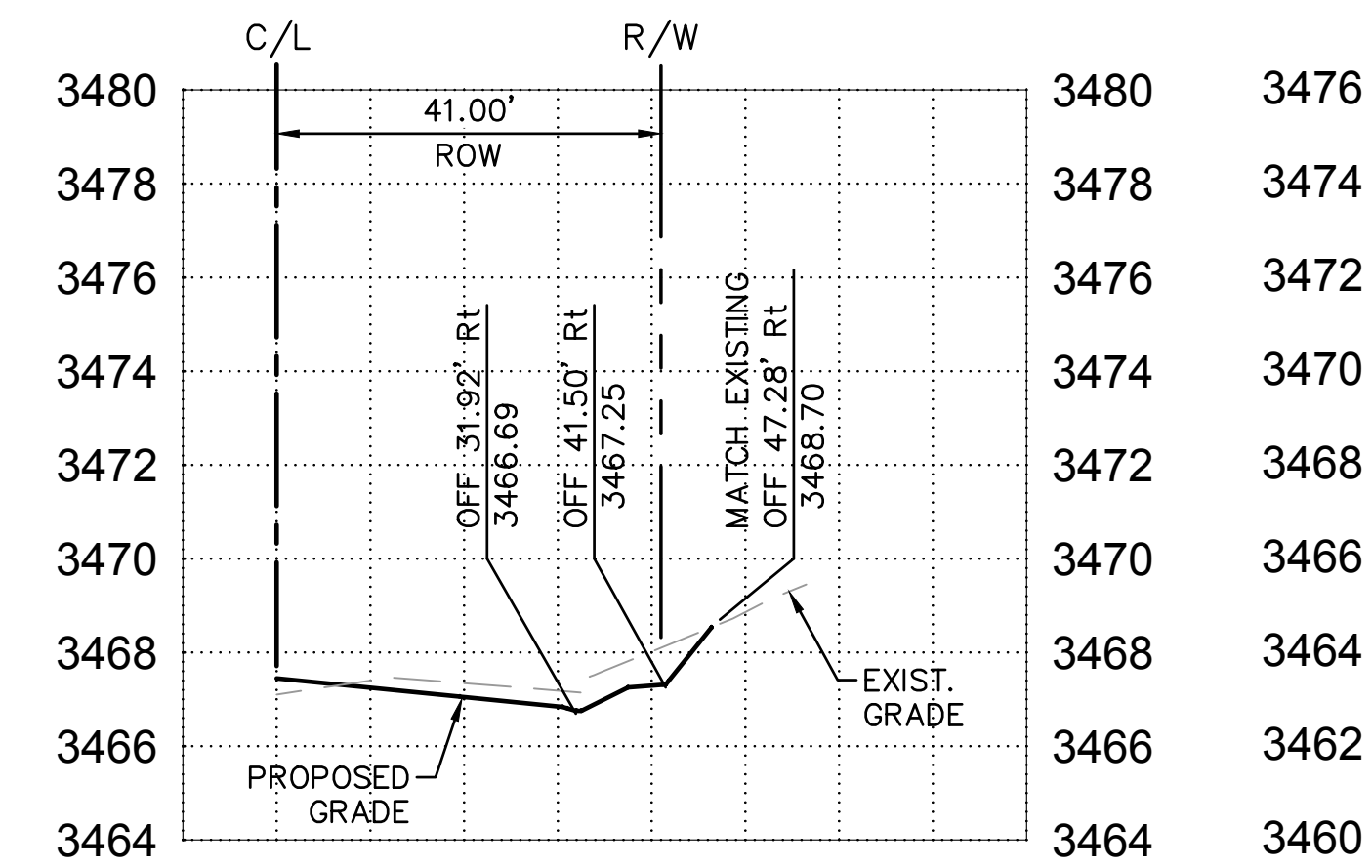
EASTERN STREET CALUMET TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 21-0001
	FILENAME 36-221038-PV08.dwg

CITY OF KINGMAN
 ENGINEERING DEPARTMENT
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 KINGMAN, ARIZONA 86401
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EASTERN STREET ROADWAY PLAN	SHEET NO. PV08 36 OF 52
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Prescott St DW

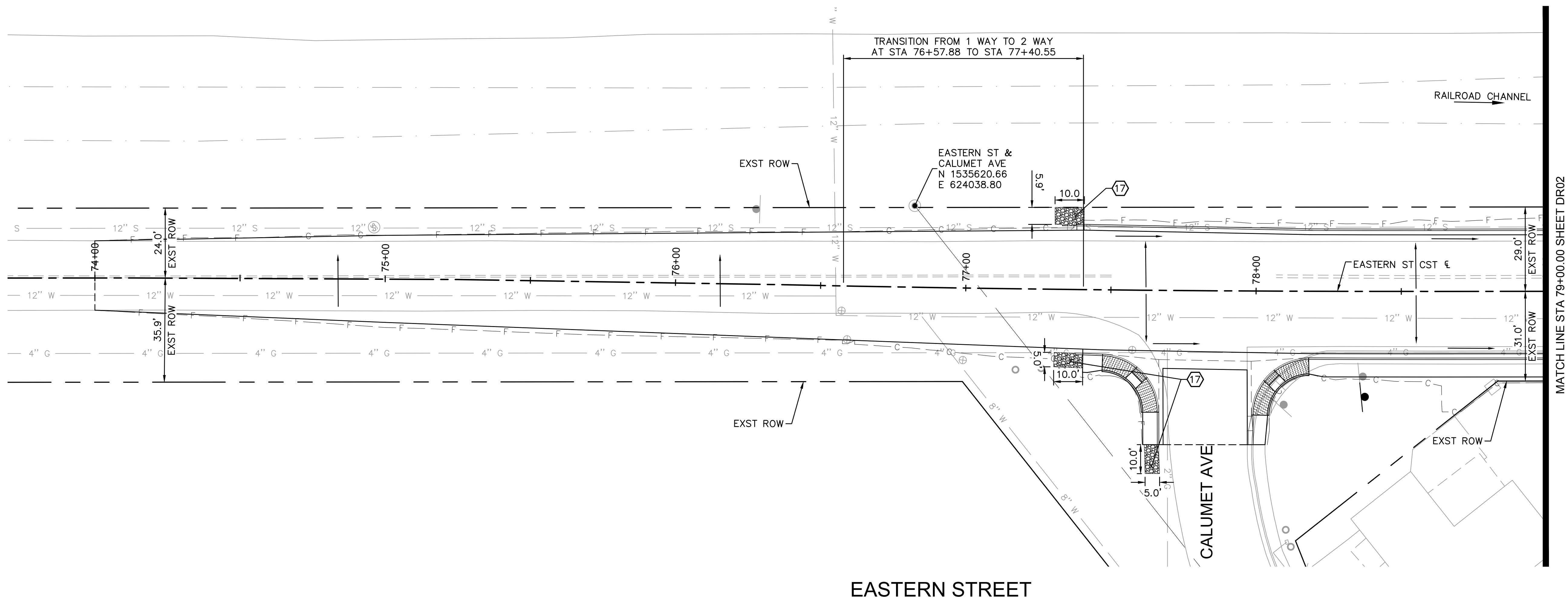


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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 37-221038-DW01.dwg
EASTERN STREET DRIVEWAY PROFILE		 SHEET NO. DW01 37 OF 52

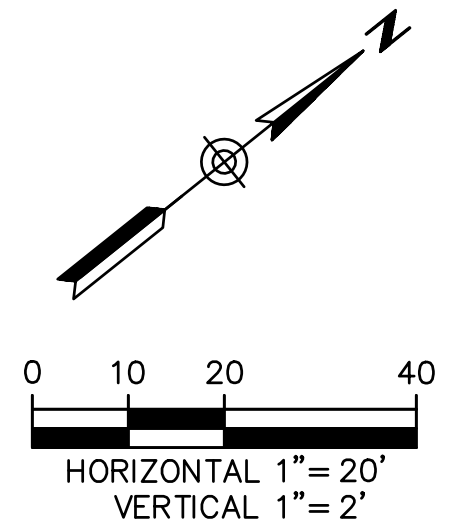


EASTERN STREET

DRAINAGE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
17	RIPRAP WITH GEOTEXTILE FABRIC PER MAG SECTION 220, D50=6", T=12"	6	CY

3478		3478			
3476		3476			
3474		3474			
3472		3472			
3470		3470			
3468		3468			
3466		3466			
3464		3464			
3462		3462			
3460		3460			
3458		3458			
3456		3456			
	76+00	77+00	78+00	79+00	80+00

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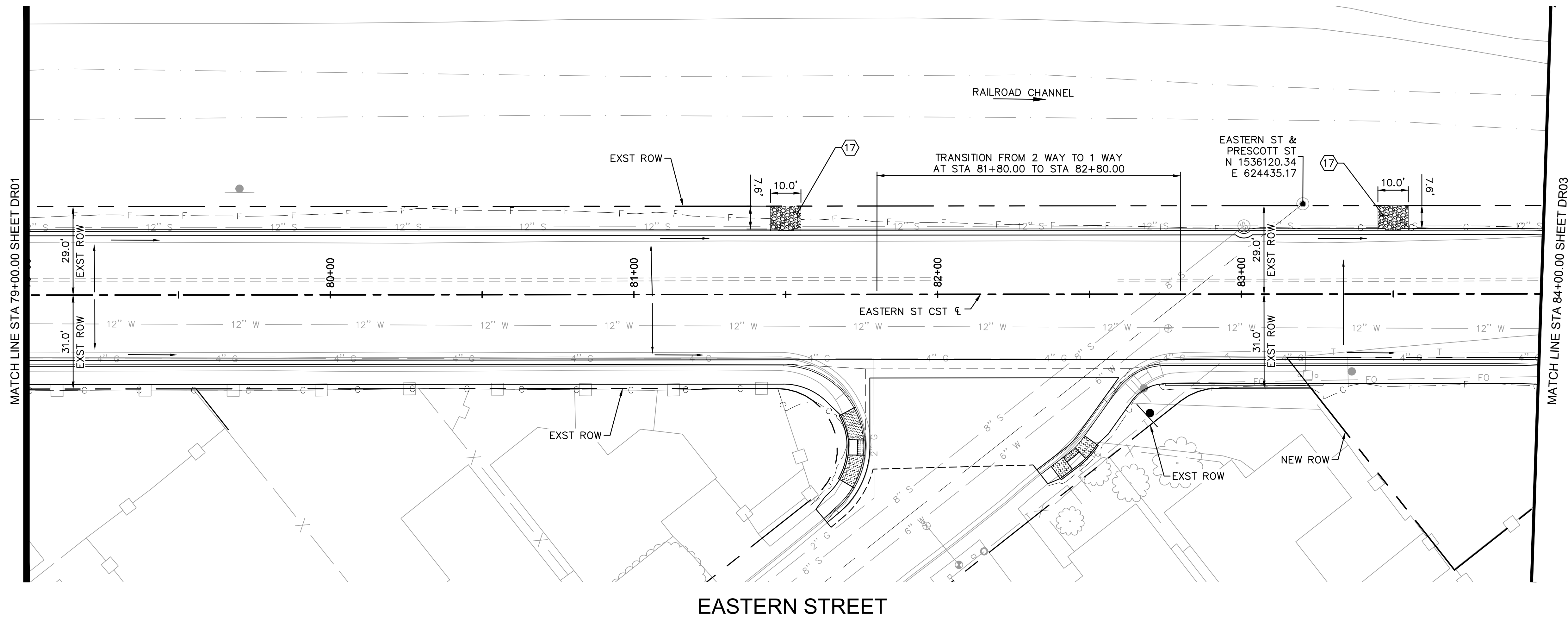
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EASTERN STREET DRAINAGE PLAN AND PROFILE		
		SHEET NO. DR01 38 OF 52

DRAINAGE NOTES

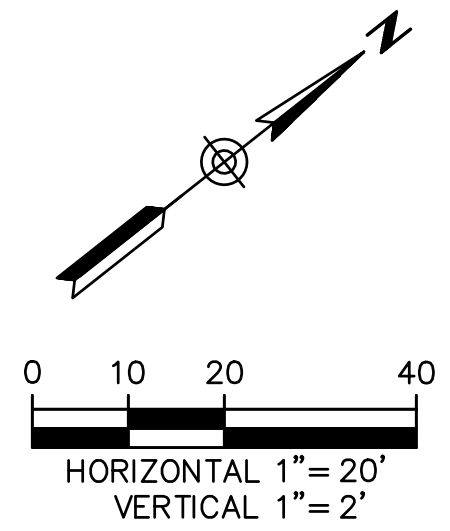
NO.	DESCRIPTION	QTY.	UNITS
17	RIPRAP WITH GEOTEXTILE FABRIC PER MAG SECTION 220, D50=6", T=12"	6	CY



EASTERN STREET

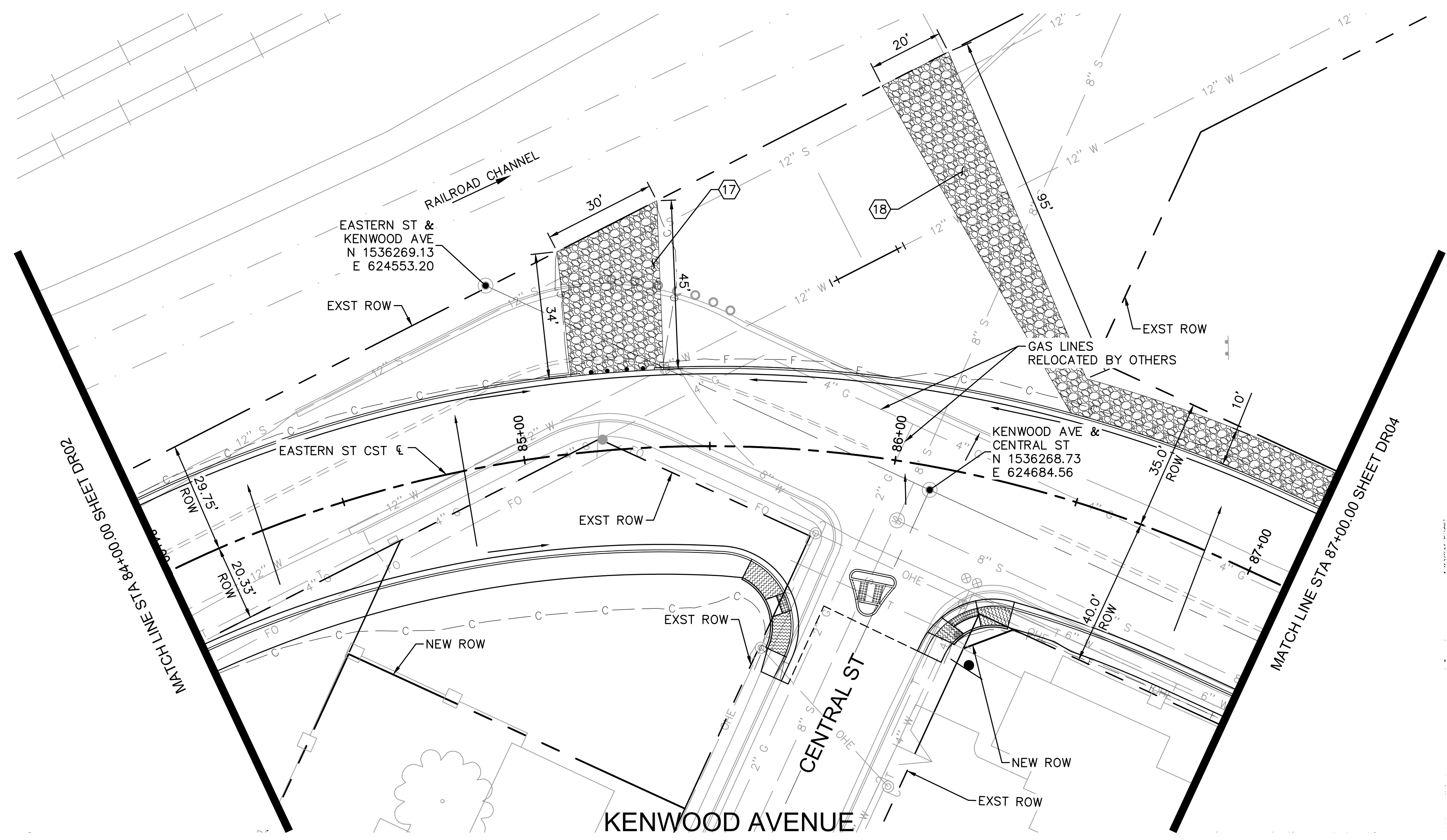
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3472		3472
3470		3470
3468		3468
3466		3466
3464		3464
3462		3462
3460		3460
3458		3458
3456		3456
3454		3454
	81+00	82+00
		83+00
		84+00

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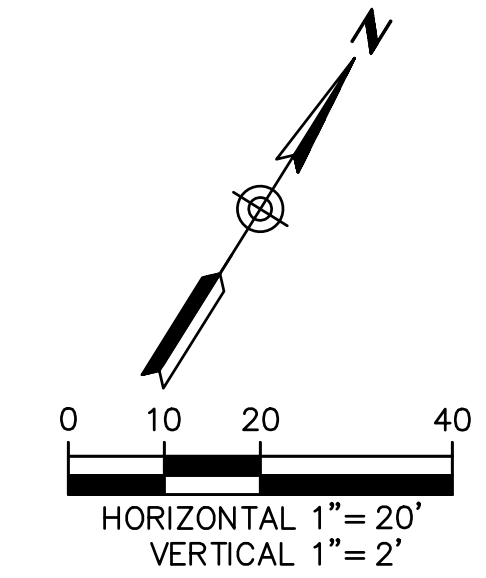
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CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 39-221038-DR02.dwg
EASTERN STREET DRAINAGE PLAN AND PROFILE		
		SHEET NO. DR02 39 OF 52



3472		3472	
3470		3470	
3468		3468	
3466		3466	
3464		3464	
3462	FOR INFORMATION ONLY	3462	
3460		3460	
3458		3458	
3456		3456	
3454		3454	
3452		3452	
3450		3450	
	85+00	86+00	87+00

CONSTRUCTION NOTES			
NO.	DESCRIPTION	QTY.	UNITS
17	RIPRAP WITH GEOTEXTILE FABRIC PER MAG SECTION 220, D50=6", T=12"	39	CY
18	GROUTED RIPRAP PER MAG SECTION 220, D50=12", T=24"	72	CY

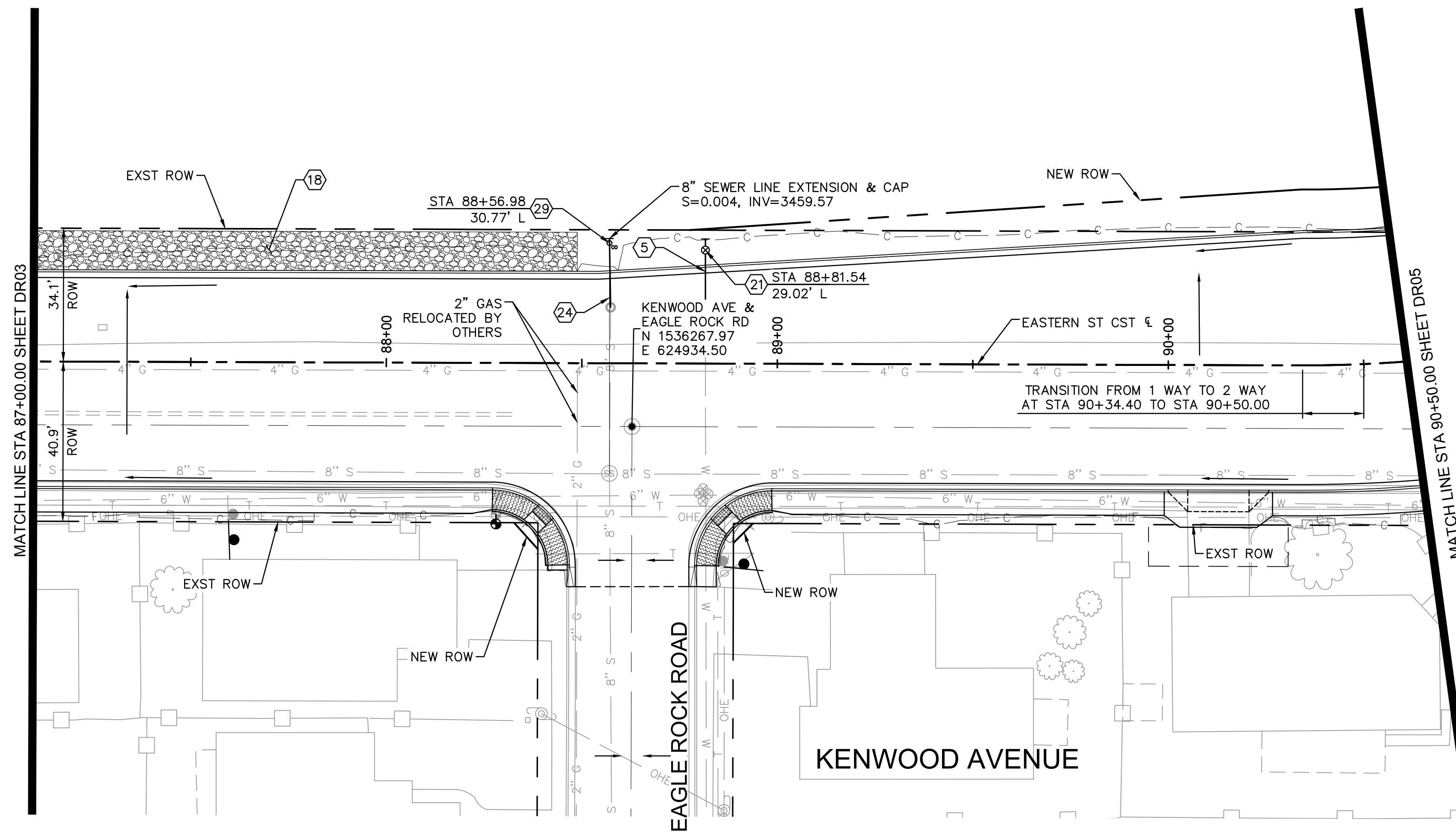


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EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 40-221038-DR03.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET DRAINAGE PLAN AND PROFILE		SHEET NO. DR03 40 OF 52

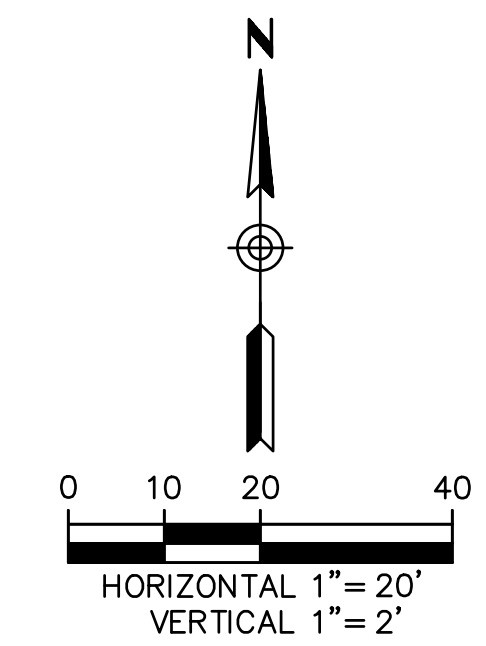


DRAINAGE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
(5)	8" WATERLINE PVC C-900, CLASS 235 AND THRUST BLOCKS PER STD DTL 381, TRENCH PER COK 392, REMOVE FLUSH VALVE AND EXTEND WATERLINE AS SHOWN	30	LF
(18)	GROUTED RIPRAP PER MAG SECTION 220, D50=12", T=24"	58	CY
(21)	FLUSHING PIPE ASSEMBLY PER COK STD DET 390	1	EA
(24)	8" SDR 35 SEWER PIPE, REMOVE CLEANOUT AND EXTEND SEWERLINE AS SHOWN	18	LF
(29)	SEWER CLEANOUT PER COK STD DET 441	1	EA

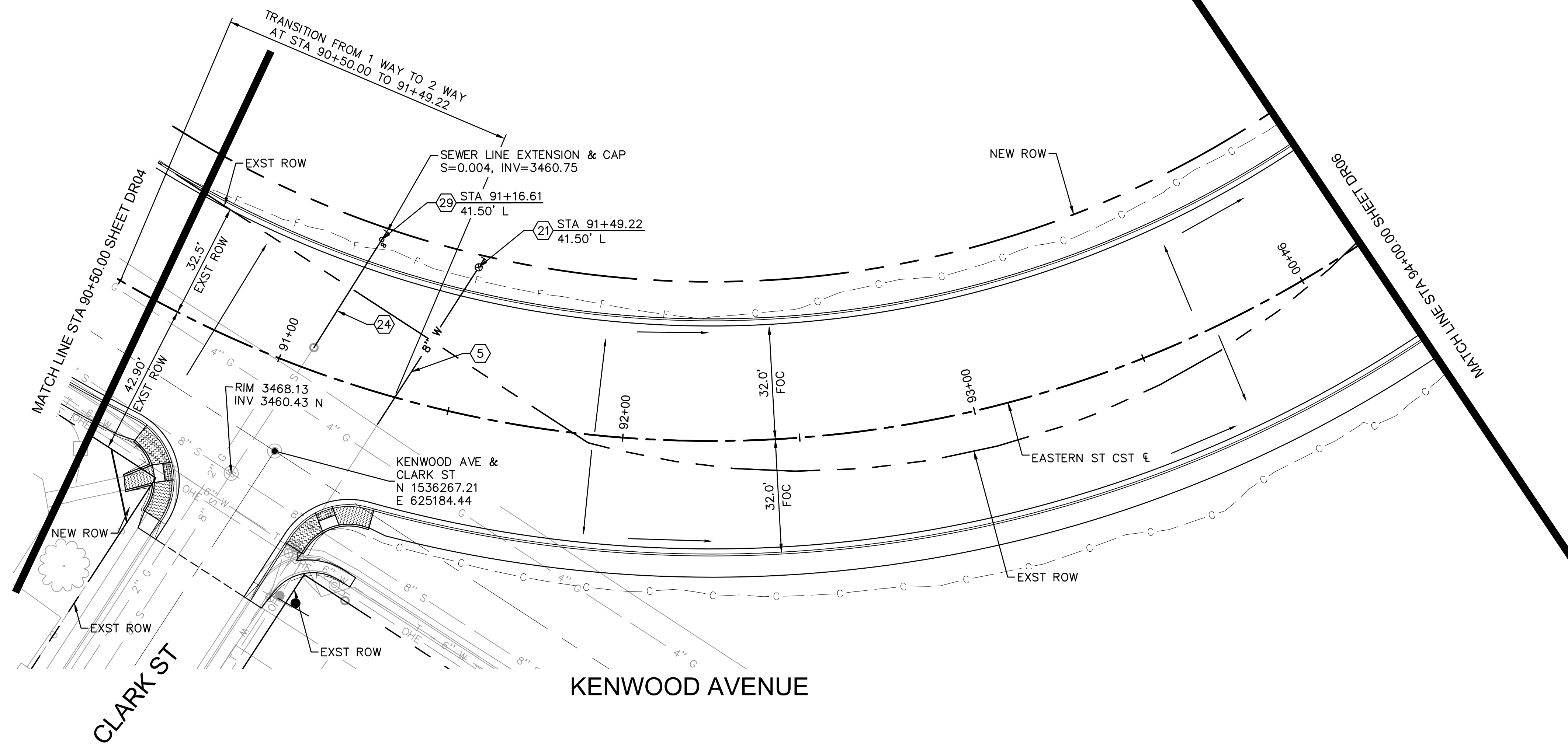
* CONTRACTOR TO CONFIRM EXISTING 8" SEWER LINE INVERTS PRIOR TO CONSTRUCTING NEW SEWER LINE

3476		3476
3474		3474
3472		3472
3470		3470
3468		3468
3466		3466
3464		3464
3462		3462
3460		3460
3458		3458
3456		3456
3454		3454

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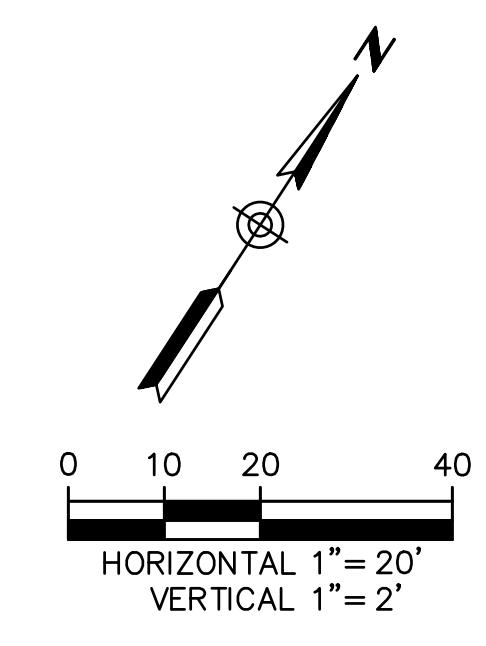
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 41-221038-DR04.dwg
EASTERN STREET DRAINAGE PLAN AND PROFILE		
		SHEET NO. DR04 41 OF 52



DRAINAGE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
(5)	8" WATERLINE PVC C-900, CLASS 235 AND THRUST BLOCKS PER STD DTL 381, TRENCH PER COK 392, REMOVE FLUSH VALVE AND EXTEND WATERLINE AS SHOWN	56	LF
(21)	FLUSHING PIPE ASSEMBLY PER COK STD DET 390	1	EA
(24)	8" SDR 35 SEWER PIPE, REMOVE CLEANOUT AND EXTEND SEWERLINE AS SHOWN	39	LF
(29)	SEWER CLEANOUT PER COK STD DET 441	1	EA

* CONTRACTOR TO CONFIRM EXISTING 8" SEWER LINE INVERTS PRIOR TO CONSTRUCTING NEW SEWER LINE

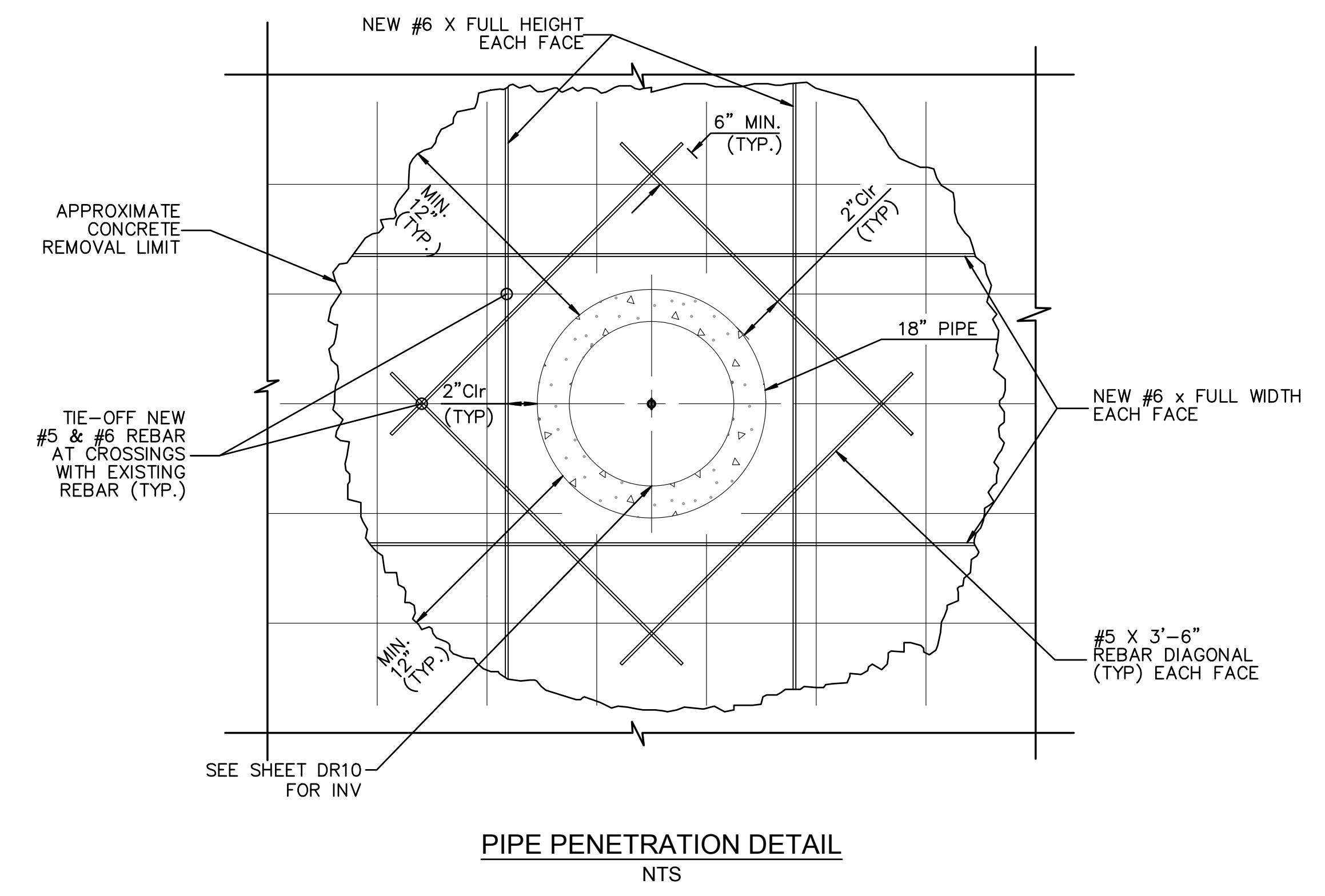
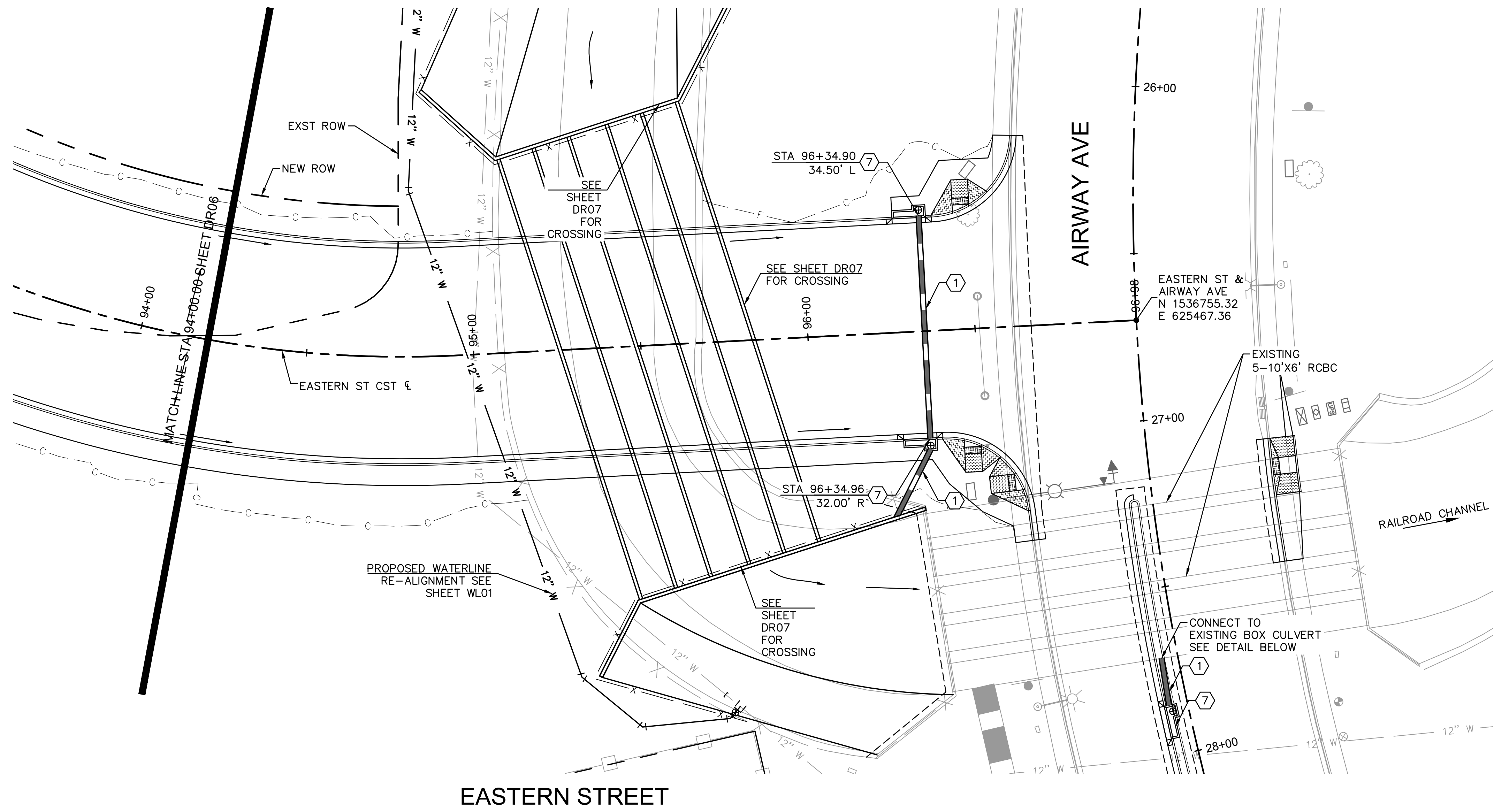
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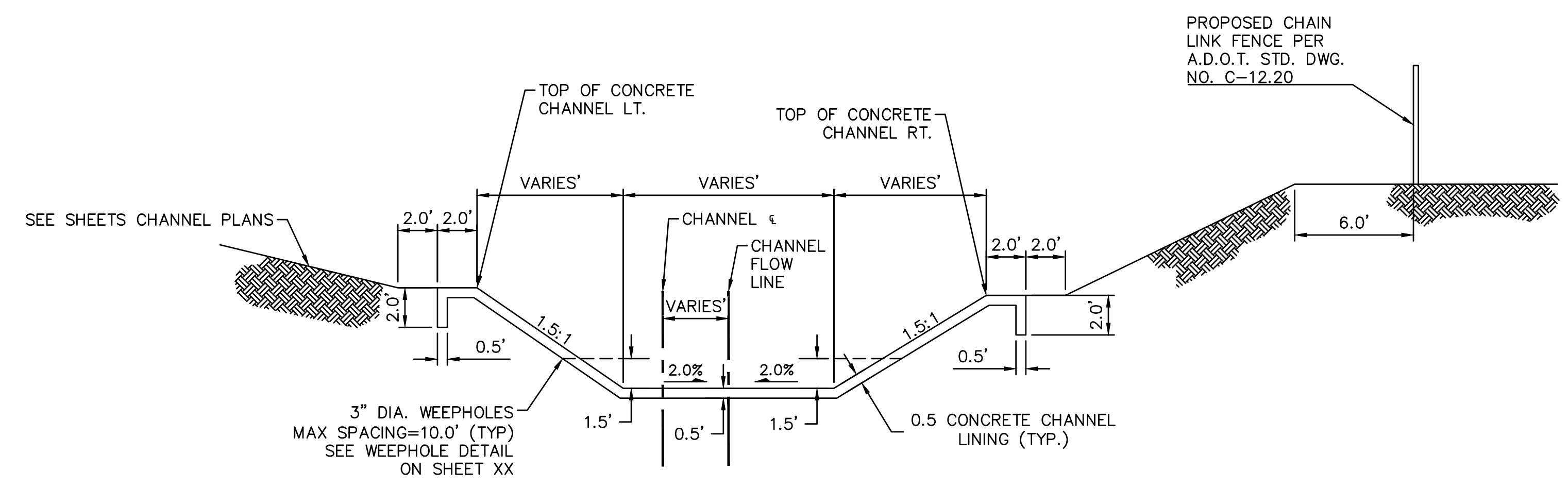
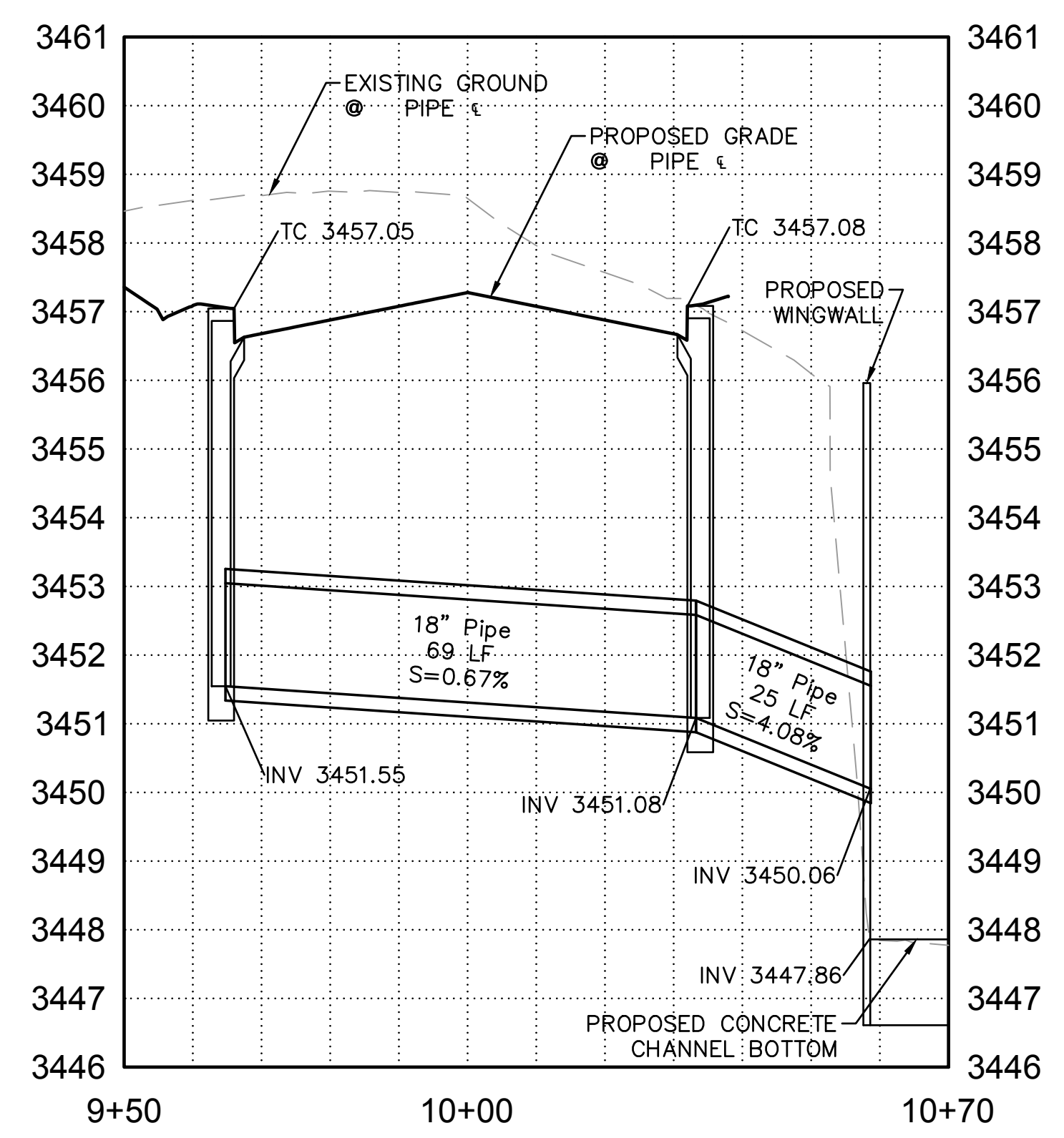
3478		3478
3476		3476
3474		3474
3472		3472
3470		3470
3468		3468
3466		3466
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3462		3462
3460		3460
3458		3458
3456		3456

EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 42-221038-DR05.dwg
EASTERN STREET DRAINAGE PLAN AND PROFILE		
		SHEET NO. DR05 42 OF 52

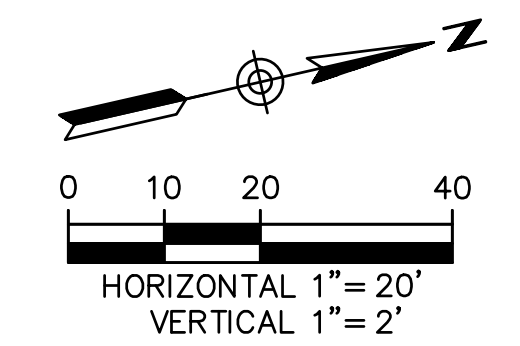
DRAINAGE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
①	18" RGRCP, CLASS III	104	LF
⑦	CATCH BASIN PER MAG STD DET 531 L=5.5'	3	EA



EASTERN STREET



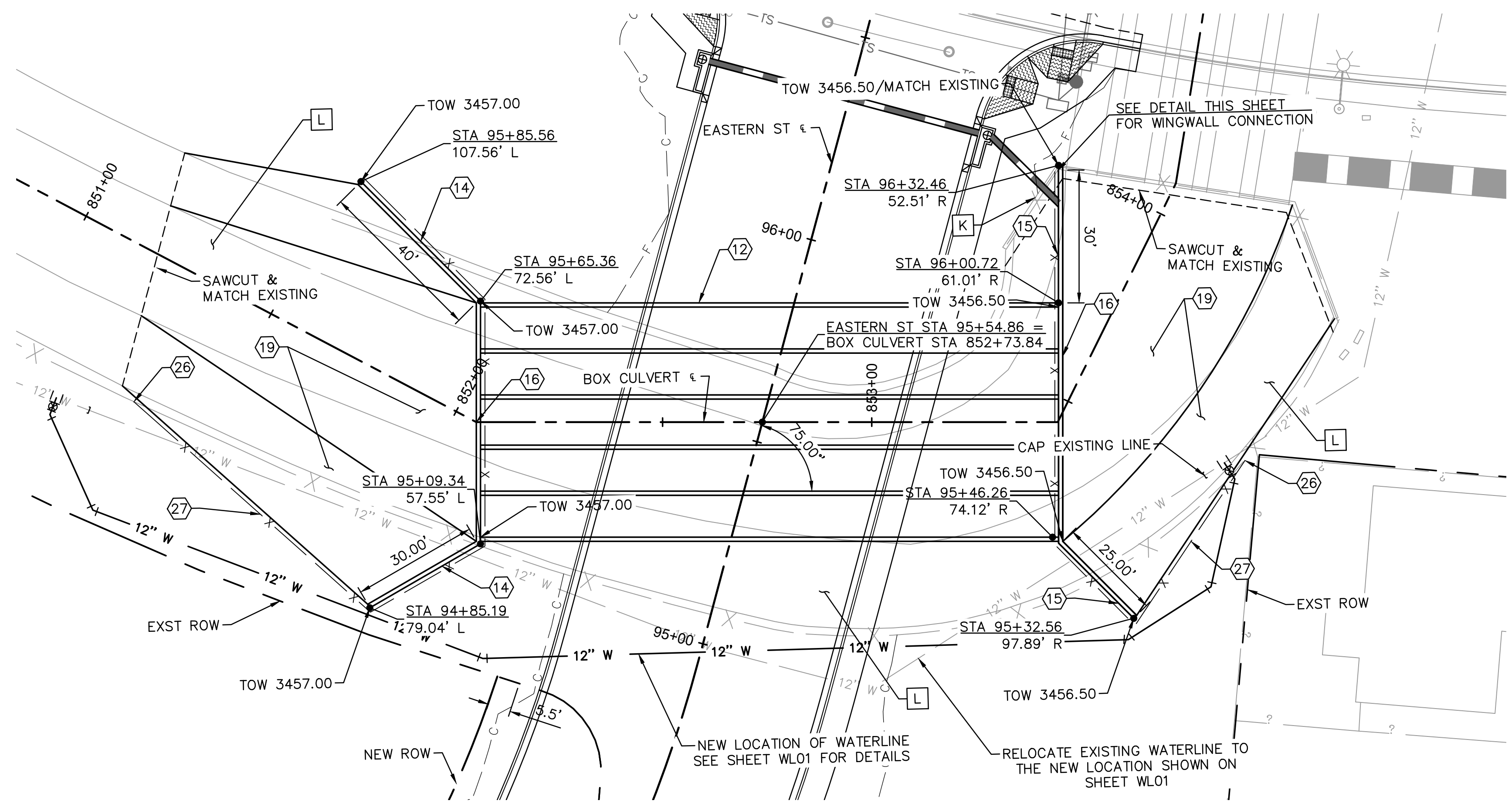
CHANNEL SECTION TYPICAL



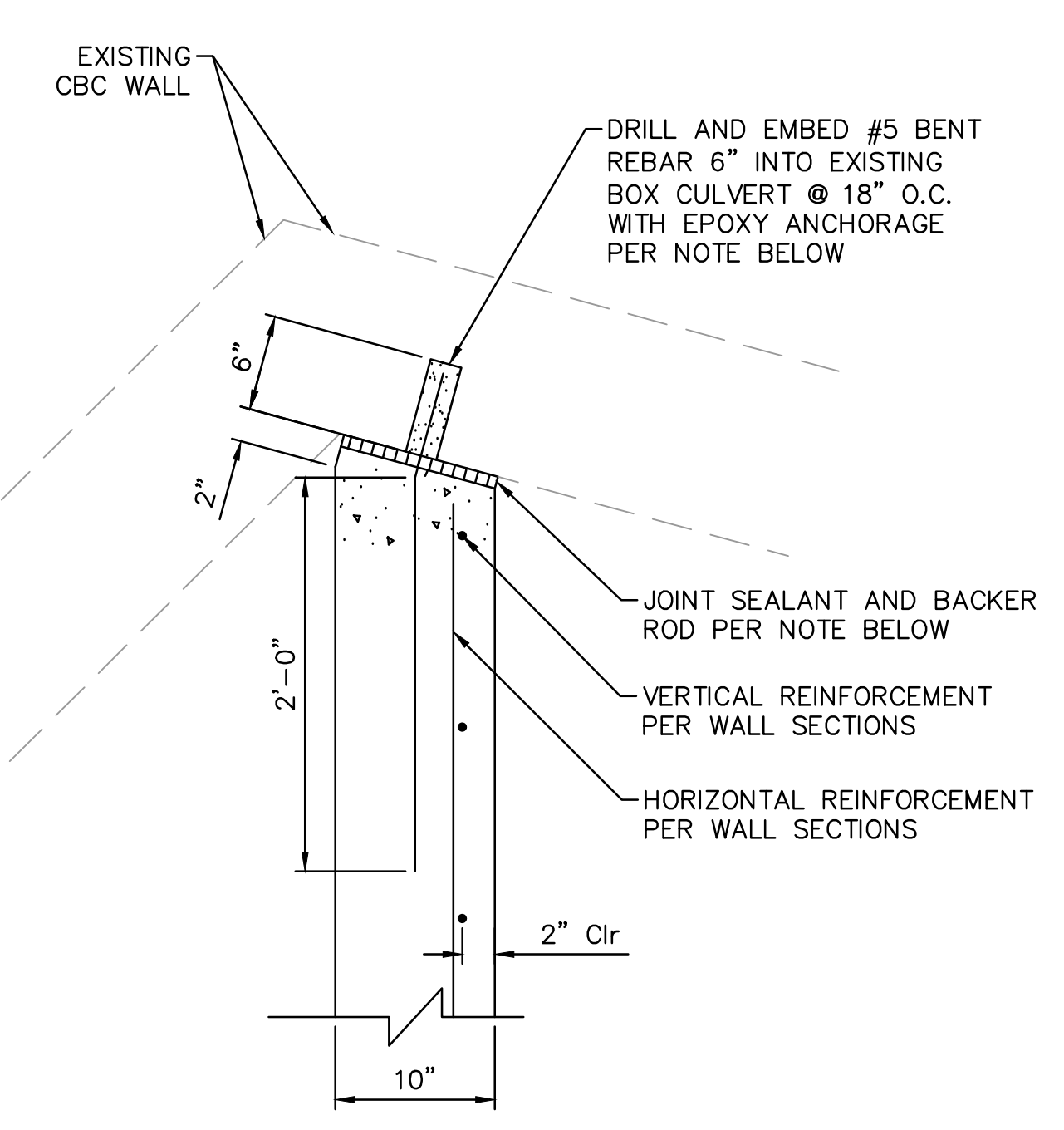
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CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 43-221038-DR06.dwg
EASTERN STREET DRAINAGE PLAN AND PROFILE		 SHEET NO. DR06 43 OF 52



NOTE:
WING WALL STATION OFFSETS ARE BASED OFF EASTERN ST



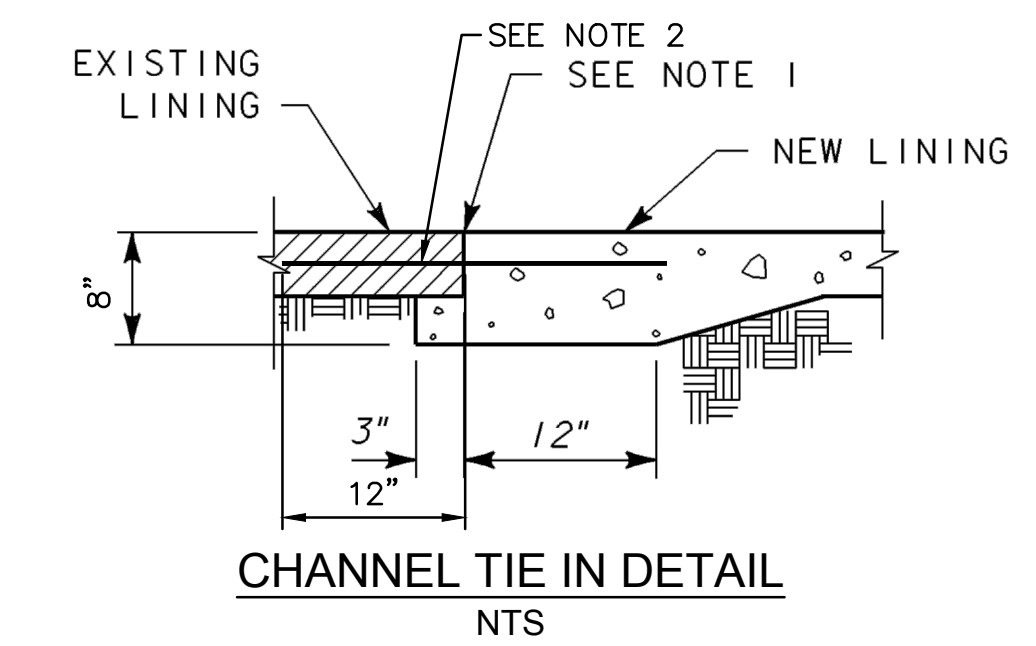
CONNECTION TO EXISTING CBC
CONNECTION TO EXISTING CBC
NTS

NOTE:
EPOXY ANCHORAGE SHALL BE HILTI HIT-RE500 OR APPROVED EQUAL.

CONCRETE JOINT SEALANT: SILICONE SEALANT AS MANUFACTURED BY DOW CORNING FOR HORIZONTAL CONTRACTION JOINTS IN FLAT CONCRETE SLABS, OR APPROVED EQUAL, PROVIDE BOND BREAKER OR BACK-UP ROD AS RECOMMENDED BY THE MANUFACTURER. INSTALL SEALANT AS RECOMMENDED BY THE MANUFACTURER.

REMOVAL NOTES			
NO.	DESCRIPTION	QTY.	UNITS
K	REMOVE EXISTING WING WALL	1	EA
L	REMOVE EXISTING CHANNEL LINING AND BACKFILL PER MAG STD DTL 200-1 TYPE "A"	1856 7	SF

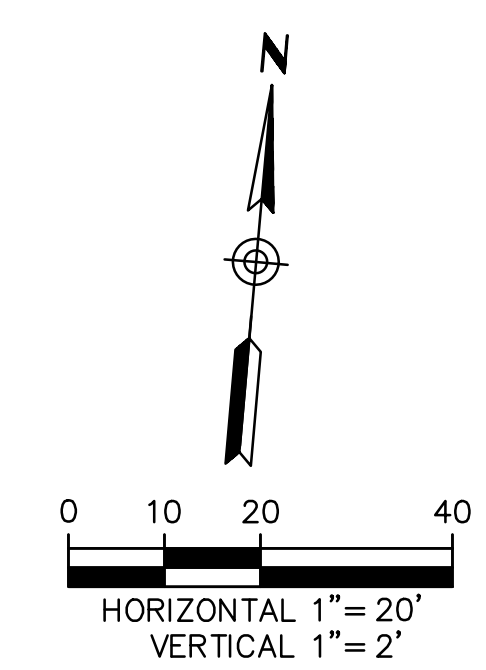
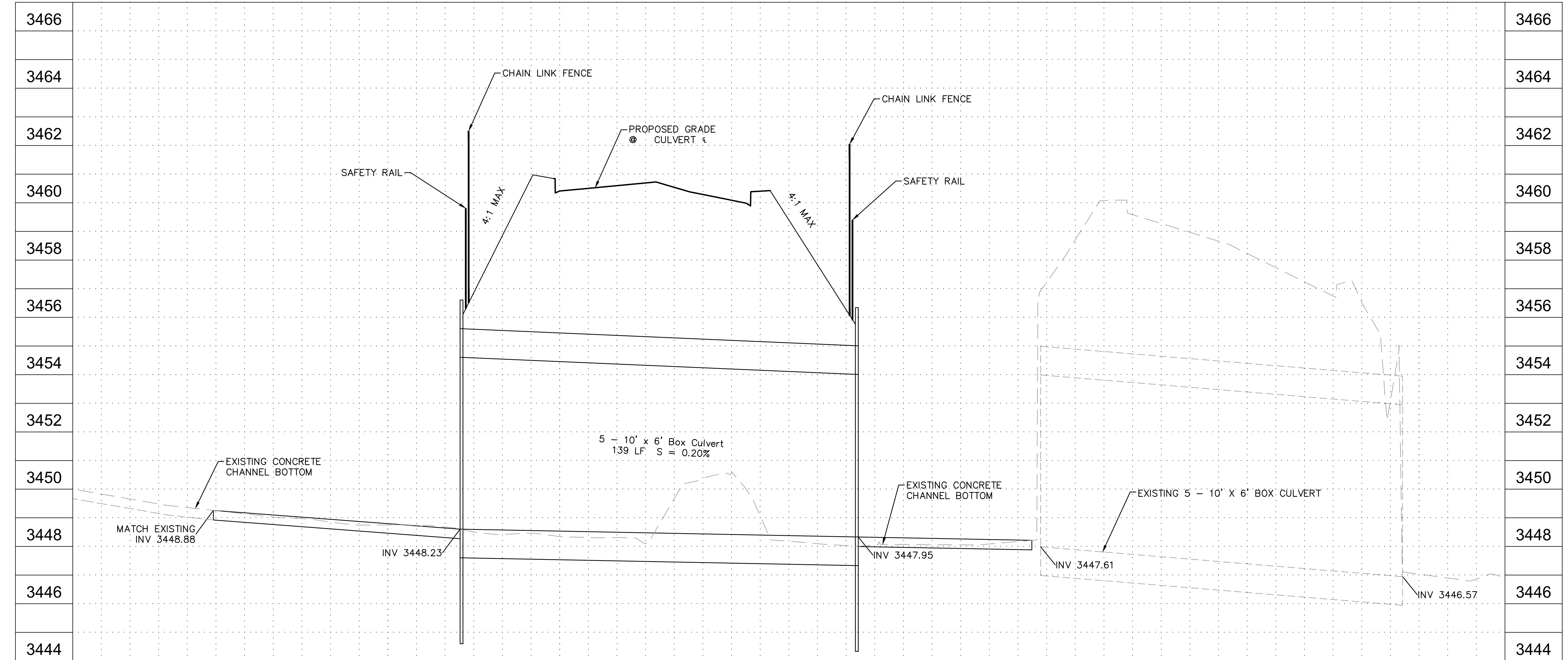
DRAINAGE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
12	FIVE BARREL 10' X 6' BOX CULVERT PER ADOT STD DET SD 6.05, SEE SHEET DT06 & DT07	139	LF
14	INLET WING PER ADOT STD DET SD 6.10, LENGTH PER PLAN, SEE SHEET DT08 & DT09	2	EA
15	OUTLET WING PER ADOT STD DET SD 6.10, LENGTH PER PLAN, SEE SHEET DT08 & DT09	2	EA
16	SAFETY RAIL PER MAG STD DET 145, TYPE 1	242	LF
19	MATCH EXISTING 6" CONCRETE CHANNEL LINING PER DETAIL ON SHEET DR06	1,206	SY
26	NEW FENCE TO TIE INTO OLD FENCE	2	EA
27	INSTALL FENCE PER COK STD DET 160 WITHOUT BARBED WIRE	371	LF



CHANNEL TIE IN DETAIL
NTS

NOTE 1: EXISTING BANK AND BOTTOM LINING SHALL BE SAWCUT OR MECHANICALLY SCORED AND REMOVED 36 INCHES (EACH SIDE) FROM THE EDGE OF EXCAVATION TO A NEAT VERTICAL EDGE. REMOVE ANY LOOSE OR FOREIGN MATERIAL.

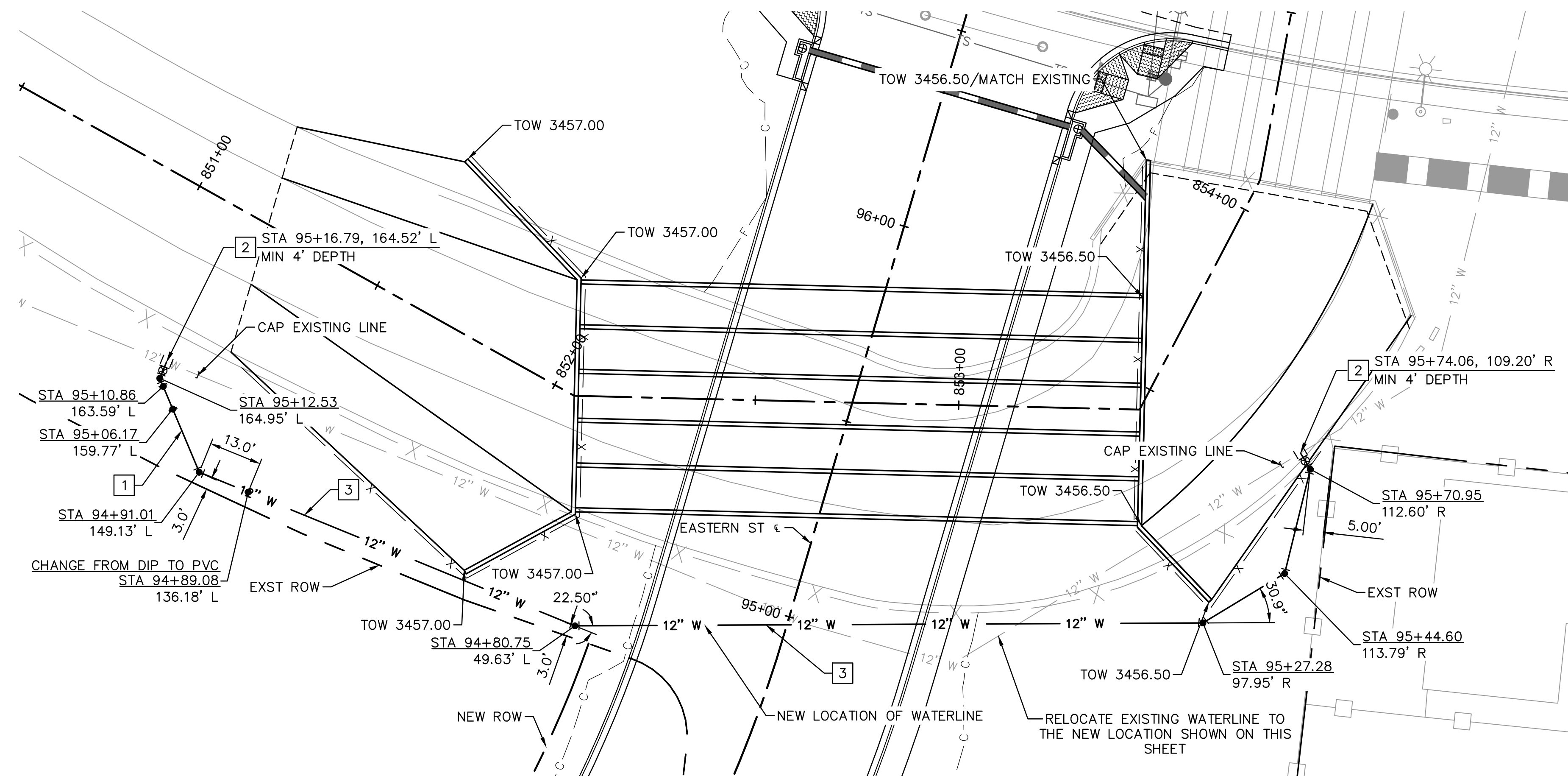
NOTE 2: #5 REBAR, 18" CENTER TO CENTER



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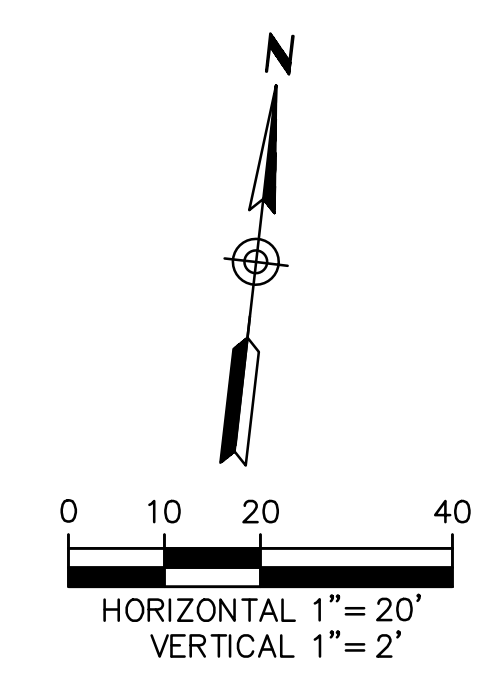
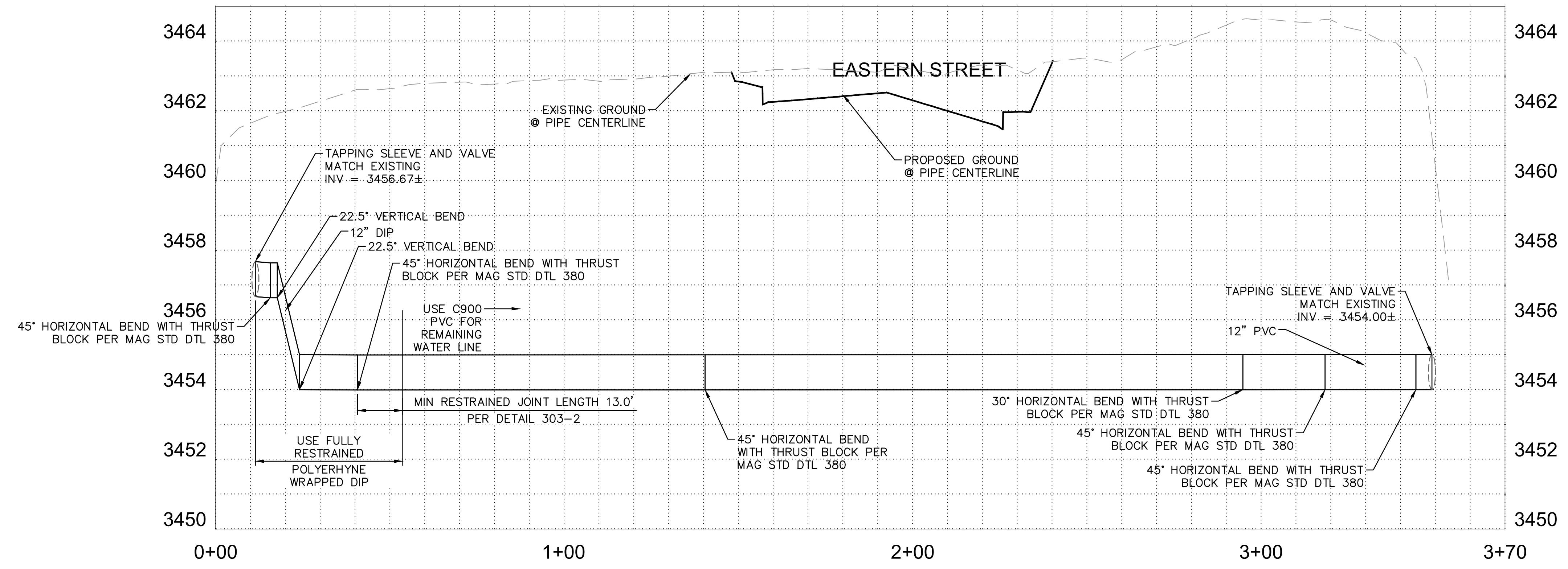
EASTERN STREET CALUMET TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 21-0001
CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 44-221038-DR07.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		Professional Engineer Seal 27556 RAJU C. SHAH ARIZONA, U.S.A. EXPIRES 12/31/2023
EASTERN STREET DRAINAGE PLAN AND PROFILE		SHEET NO. DR07 44 OF 52



WATERLINE NOTES			
NO.	DESCRIPTION	QTY.	UNITS
1	12" DIP (CLASS 350) WATERLINE WITH RESTRAINED JOINTS, PER MAG STD DET 302-1, 302-2, 303-1, AND 303-2 TRENCH PER COK DET 392	42	LF
2	CONNECT TO EXISTING 12" WATERLINE WITH AN 12" X 12" TAPPING SLEEVE AND VALVE, BOX AND COVER PER COK STD DET 340	2	EA
3	12" WATERLINE PVC C-900, CLASS 235 AND THRUST BLOCKS PER STD DET 381, TRENCH PER COK SET 392	296	LF

TOW = TOP OF HEADWALL

NOTE:
CONTRACTOR TO VERIFY DEPTH OF EXISTING WATERLINE BEFORE CONSTRUCTION



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	EASTERN STREET WATERLINE PROFILE

PAVEMENT MARKING NOTES:

FINAL STRIPING

1. FINAL STRIPING SHALL BE 90 MIL (0.090 INCHES) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED STRIPING PLACED OVER THE EXISTING STRIPING, PLACED AT A MINIMUM OF 30 CALENDAR DAYS AFTER THE INITIAL STRIPING. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. AT THE COMPLETION OF THE FINAL PAVEMENT SURFACE, CENTER LINES, LANE LINES, EDGE LINES AND STOP BARS SHALL BE STRIPED WITH ONE APPLICATION OF STANDARD REFLECTORIZED TRAFFIC PAINT AT THE LOCATIONS OF THE PERMANENT STRIPING. THE PAINT SHALL HAVE A MAXIMUM THICKNESS OF 15 MILS WET (5 MILS DRY).

RAISED / REFLECTIVE PAVEMENT MARKERS

3. ALL REFLECTIVE RAISED / RECESSED PAVEMENT MARKERS SHALL BE INSTALLED SO THAT THE REFLECTIVE FACE OF EACH MARKER IS FACING THE DIRECTION OF TRAFFIC AND IS PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW. TYPE C PAVEMENT MARKERS SHALL BE INSTALLED SO THAT THE CLEAR REFLECTIVE FACE OF EACH MARKER IS FACING APPROACHING TRAFFIC AND IS PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW.
4. ALL REFLECTIVE RAISED / RECESSED PAVEMENT MARKERS SHALL HAVE AN ABRASION-RESISTANT COATING ON THE FACE OF THE PRISMATIC REFLECTORS AND SHALL CONFORM TO DETAIL M-19 OF THE ADOT STANDARD DRAWINGS. THEY SHALL BE INSTALLED WITH A BITUMINOUS ADHESIVE WHICH IS ON THE ADOT APPROVED PRODUCTS LIST.
5. WHERE RAISED / RECESSED PAVEMENT MARKERS ARE PLACED ALONG SOLID STRIPING, THE NEAREST EDGE OF EACH MARKER SHALL BE OFFSET TWO INCHES FROM THE NEAREST EDGE OF THE STRIPE.

PAVEMENT PREPARATION

6. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE ENGINEER, BY SWEEPING AND AIR-JET BLOWING, IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS. THE ROADWAY SURFACE SHALL BE DRY AND THE AIR AND PAVEMENT TEMPERATURES SHALL BE A MINIMUM OF 55 DEGREE F AND RISING FOR THE PLACEMENT OF THERMOPLASTIC STRIPING. THE ROADWAY SURFACE SHALL BE DRY AND THE AIR AND PAVEMENT TEMPERATURES SHALL NOT BE LESS THAN 60 DEGREES F FOR THE INSTALLATION OF TYPE I, II, OR III PAVEMENT MARKING TAPE. TYPE I TAPE SHALL NOT BE INSTALLED IF RAIN IS ANTICIPATED 48 HOURS PRIOR TO OR AFTER INTENDED INSTALLATION DATE.

STRIPING AND LEGENDS

7. SINGLE ARROW LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH ADOT STANDARD DRAWINGS. "ONLY" LEGENDS SHALL BE INSTALLED PER CITY OF KINGMAN STANDARD DETAIL NO. 138-1.
8. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS SHALL BE 90 MIL (0.090 INCH) THICK, EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINAL SURFACE COURSE IS PLACED SO THAT THE STRIPING IS OFFSET ONE FOOT CLEAR OF ANY CONSTRUCTION JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF PERMANENT PAVEMENT MARKINGS ON THE FINAL SURFACE COURSE FOLLOWING CONTROL POINTS THAT HAVE BEEN SET NO MORE THAN 50 FEET APART ALONG THE LINES TO BE STRIPED.
11. THE CONTRACTOR SHALL BREAK THE CENTER LINES AND EDGE LINES ACROSS ANY INTERSECTIONS WITH DEDICATED ROADWAYS OR AS OTHERWISE DIRECTED BY THE ENGINEER. IN ADDITION, THE CONTRACTOR SHALL NOT PLACE ANY CENTER LINES WITHIN 10 FEET OF THE NEAREST EDGE OF PAVEMENT OF THE INTERSECTING ROADWAY.

OBLITERATION

12. WHEN STRIPE OBLITERATION IS NECESSARY, IT SHALL BE ACCOMPLISHED BY AN APPROVED METHOD. PAINTING OVER STRIPING, REMOVAL OF PAVEMENT, AND OVERLAYING PAVEMENT DO NOT CONSTITUTE STRIPE OBLITERATION.

GENERAL

13. THE CONTRACTOR SHALL PRESERVE ALL ROADWAY SIGNS, SIGN SUPPORTS, OBJECT MARKERS, AND MILEPOST MARKERS. THE CONTRACTOR SHALL REPLACE ANY SIGNS, SIGN SUPPORTS OR MARKERS DAMAGED AS A RESULT OF THE CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.
14. THE PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY AND NOT TO SCALE. THE CONTRACTOR SHALL FOLLOW ALL DIMENSIONS AND DETAILS WHEN INSTALLING PAVEMENT MARKINGS.

SIGNING NOTES:

GENERAL

1. ALL SIGNS SHALL BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (ADOT SIGNING AND MARKING STANDARD DRAWINGS, AND THE ADOT TRAFFIC ENGINEERING MANUAL OF APPROVED SIGNS.

LOCATION

2. THE SIGN LOCATIONS AND THE POST LENGTHS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE SIGN LOCATIONS AND ACTUAL POST LENGTHS WITH THE ENGINEER PRIOR TO INSTALLING SIGNS.
3. THE BOTTOM OF EACH SIGN SHALL BE AT LEAST 7 FEET ABOVE THE NEAREST EDGE OF PAVEMENT AND AT LEAST 7 FEET ABOVE THE GROUND UNDER THE SIGN.

4. OFFSETS FOR ALL SIGNS SHALL BE MEASURED FROM THE EDGE OF THE ROADWAY TO THE NEAREST EDGE OF THE SIGN.

PANEL

5. ALL NEW SIGNS SHALL BE FABRICATED OF FLAT SHEET ALUMINUM AS INDICATED IN SECTION 608 OF THE ADOT STANDARD SPECIFICATIONS.

SHEETING

6. THE RETROREFLECTIVE SHEETING ON ALL NEW SIGNS SHALL MEET CRITERIA ESTABLISHED IN SECTION 1007 OF THE ADOT STANDARD SPECIFICATIONS AND IN SECTION 380 OF ADOT'S TRAFFIC POLICIES, GUIDELINES AND PROCEDURES

POSTS

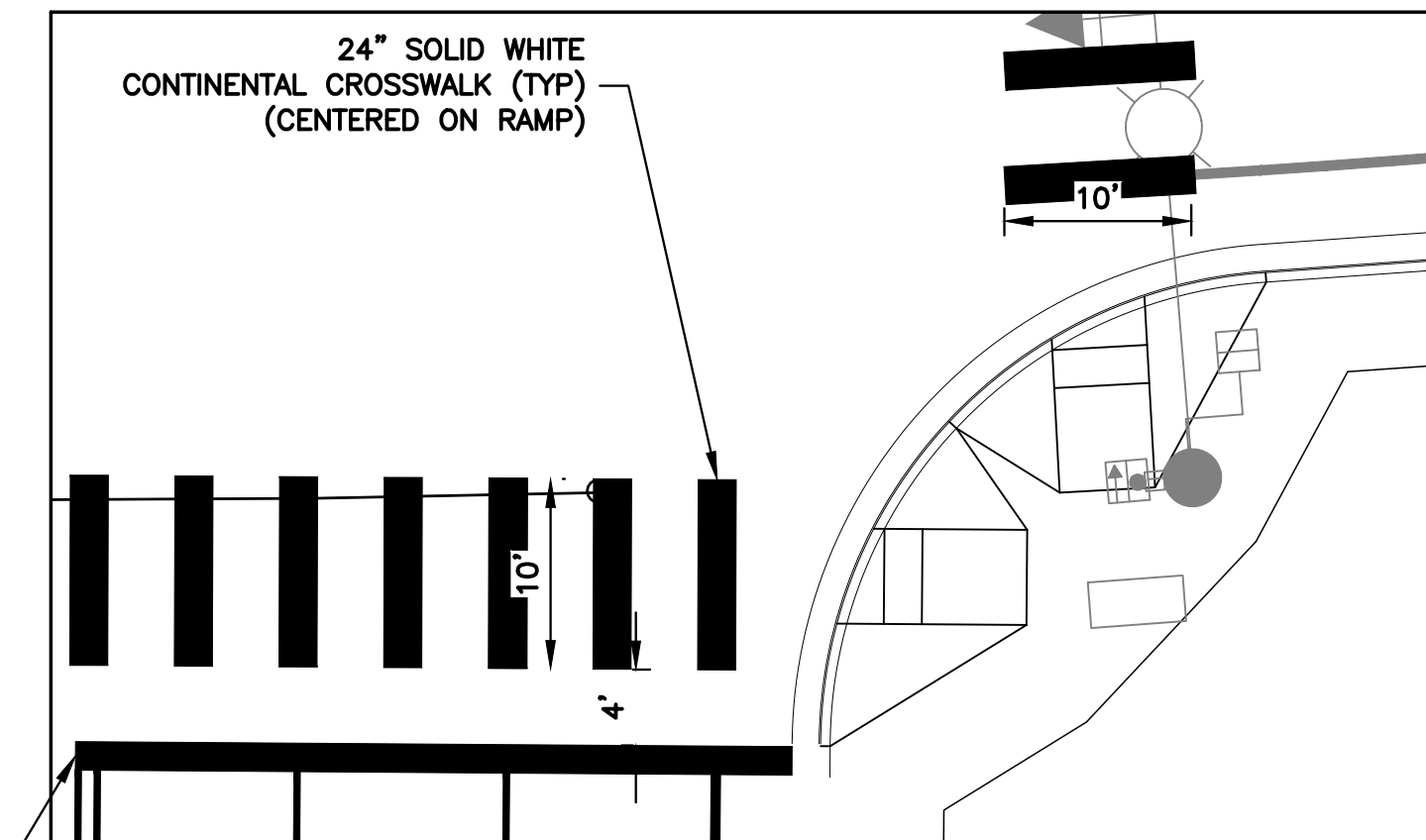
7. ALL NEW SIGNS SHALL BE INSTALLED ON NEW SQUARE TUBE POSTS WITH FOUNDATIONS AS INDICATED PER ADOT STANDARD DRAWING S-3 SHT 15.
8. THE ENGINEER MAY MODIFY THE SIGNING PLANS.

SHOP DRAWINGS

9. SHOP DRAWINGS WILL BE REQUIRED.

REMOVALS

10. THE CONTRACTOR SHALL REMOVE EXISTING SIGNING WHERE INDICATED IN THE SIGN SUMMARY.
11. THE CONTRACTOR SHALL INVENTORY ALL SIGNS TO BE REMOVED OR COVERED AND NOTE DAMAGED SIGNS TO THE ENGINEER AT THE TIME OF COVERING OR REMOVAL. ALL SIGNS DAMAGED BY COVERING OR REMOVAL SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
12. REMOVALS OF SIGNS/SIGN ASSEMBLIES INCLUDE REMOVAL OF POST AND RESTORATION OF EXISTING GROUND WHEN ALL SIGNS ARE REMOVED.



CROSSWALK DETAIL

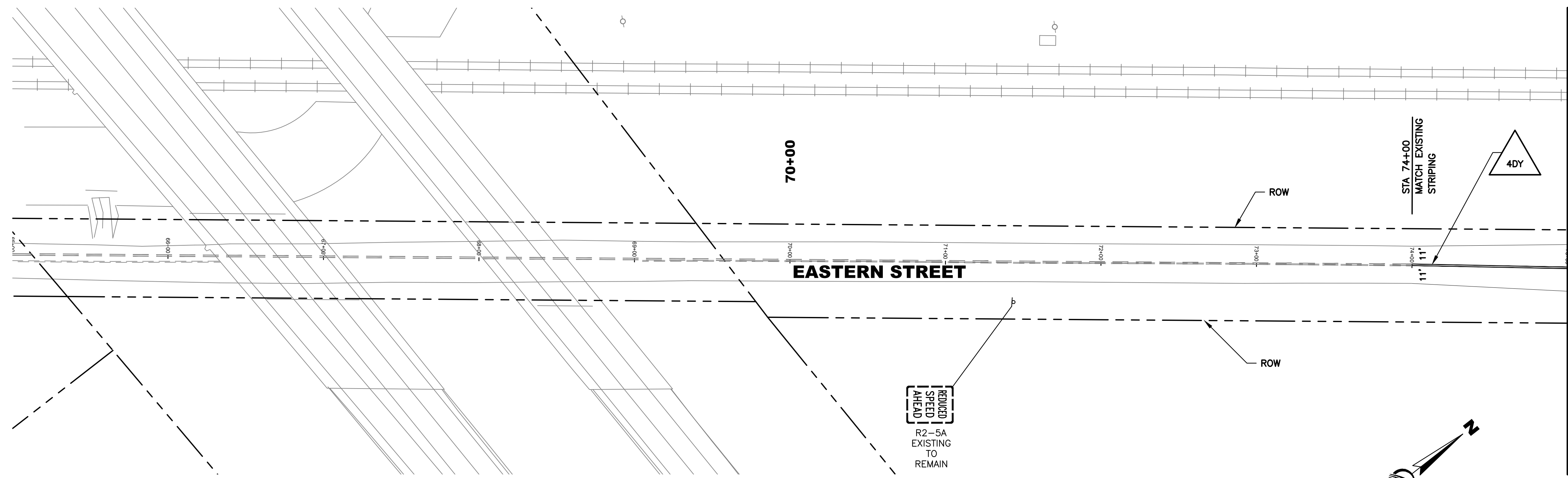
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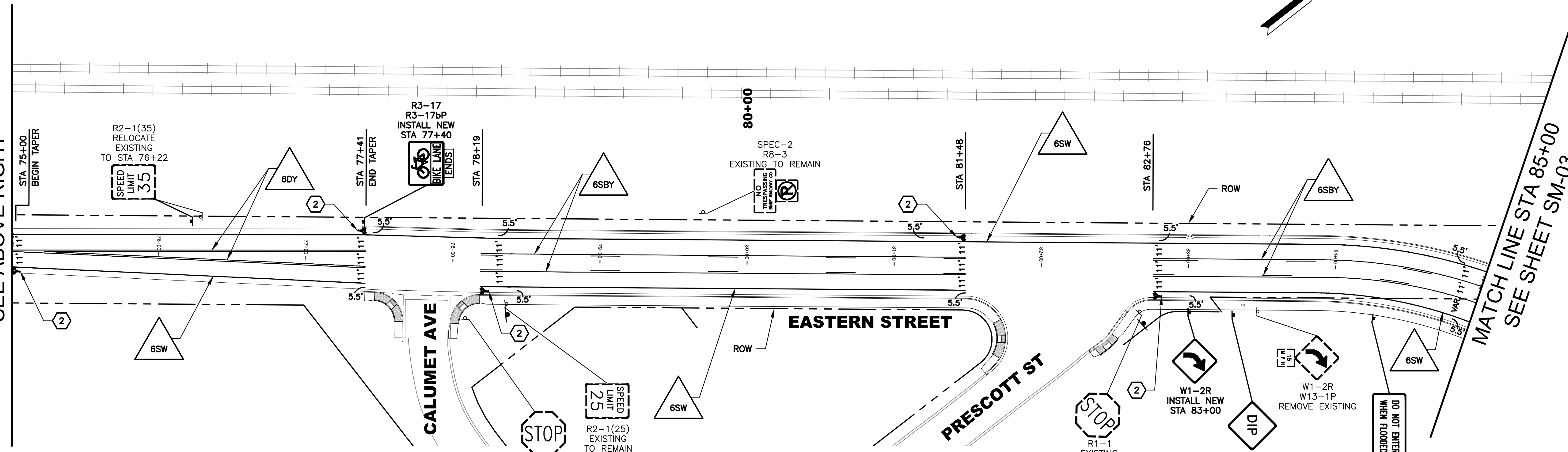
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EASTERN STREET PASADENA TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 15-048
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 15-1150-SMPL01.dwg
EASTERN STREET SIGNING AND MARKING GENERAL NOTES		
		SHEET NO. SM-01 46 OF 52



MATCH LINE STA 75+00
SEE BELOW LEFT



MATCH LINE STA 75+00
SEE ABOVE RIGHT

MATCH LINE STA 85+00
SEE SHEET SM-03

CONSTRUCTION NOTES:

- 1 OBLITERATE EXISTING STRIPING IN CONFLICT WITH THE PROPOSED STRIPING.
- 2 BIKE LANE SYMBOL TO BE INSTALLED PER CITY OF KINGMAN STD DET 138-2-D10.
- 3 INSTALL WHITE DIRECTIONAL ARROW, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D4.
- 4 INSTALL "ONLY" LEGEND, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D6.

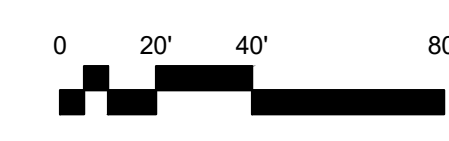
STRIPING LEGEND

- 6DY 6" DOUBLE YELLOW LINE
- 6SW 6" SOLID WHITE LINE
- 6SBY 6" SOLID YELLOW LINE AND 6" BROKEN YELLOW LINE WITH A 10' LINE SEGMENT AND A 30' GAP
- 6BW 6" BROKEN WHITE LINE, 10' SEGMENT WITH A 30' GAP
- 12SW 12" SOLID WHITE LINE
- 16SW 16" SOLID WHITE LINE



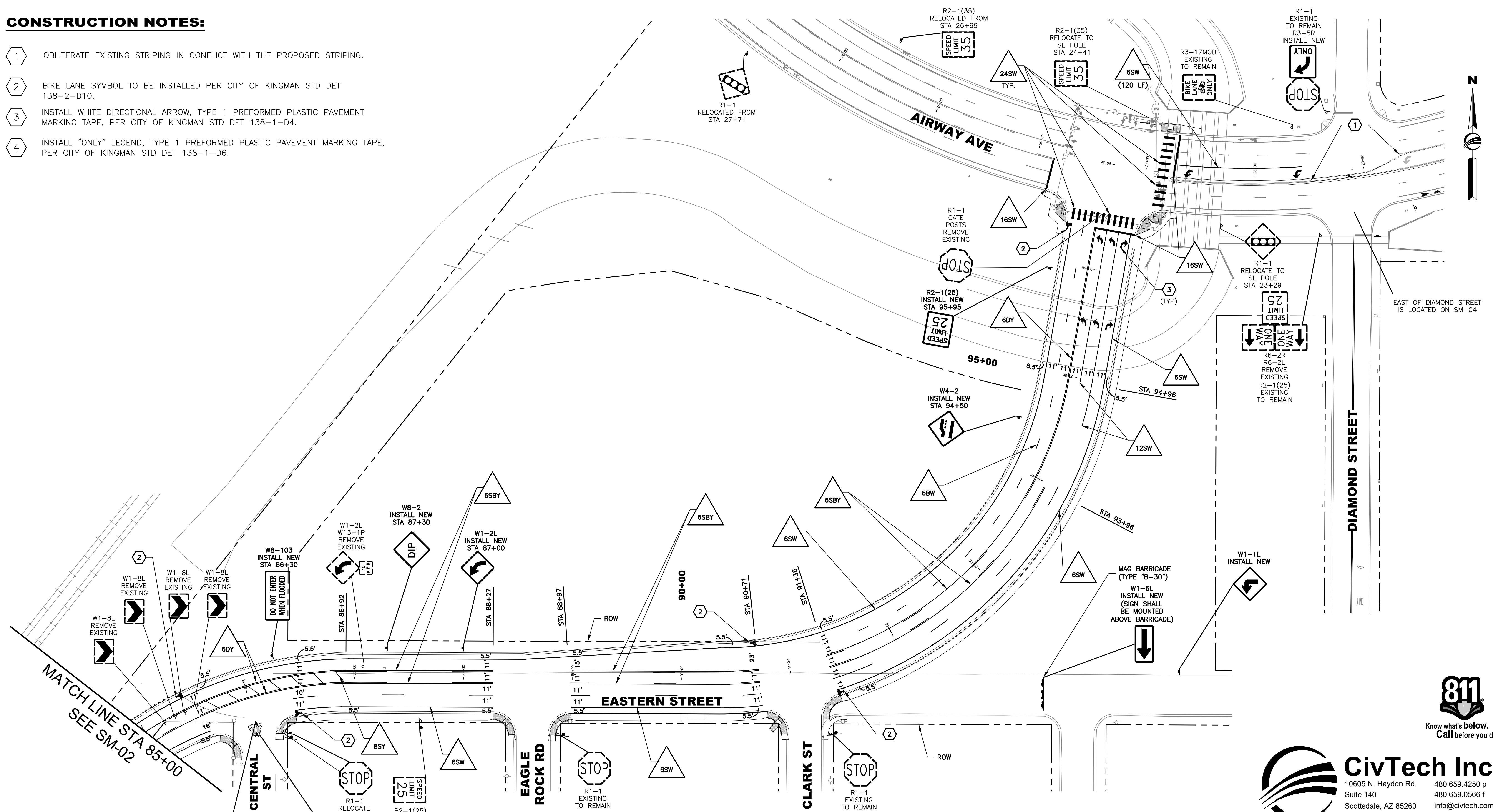
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EASTERN STREET SIGNING AND MARKING STA 65+00 TO 85+00		SHEET NO. SM-02 47 OF 52



CONSTRUCTION NOTES:

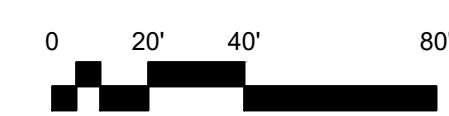
- 1 OBLITERATE EXISTING STRIPING IN CONFLICT WITH THE PROPOSED STRIPING.
- 2 BIKE LANE SYMBOL TO BE INSTALLED PER CITY OF KINGMAN STD DET 138-2-D10.
- 3 INSTALL WHITE DIRECTIONAL ARROW, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D4.
- 4 INSTALL "ONLY" LEGEND, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D6.



EAST OF DIAMOND STREET IS LOCATED ON SM-04

STRIPING LEGEND

- | | | | |
|--|--|--|--|
| | 6" DOUBLE YELLOW LINE | | 6" BROKEN WHITE LINE, 10' SEGMENT WITH A 30' GAP |
| | 6" SOLID WHITE LINE | | 12" SOLID WHITE LINE |
| | 6" SOLID YELLOW LINE AND 6" BROKEN YELLOW LINE WITH A 10' LINE SEGMENT AND A 30' GAP | | 16" SOLID WHITE LINE |
| | 8" SOLID YELLOW LINE | | |

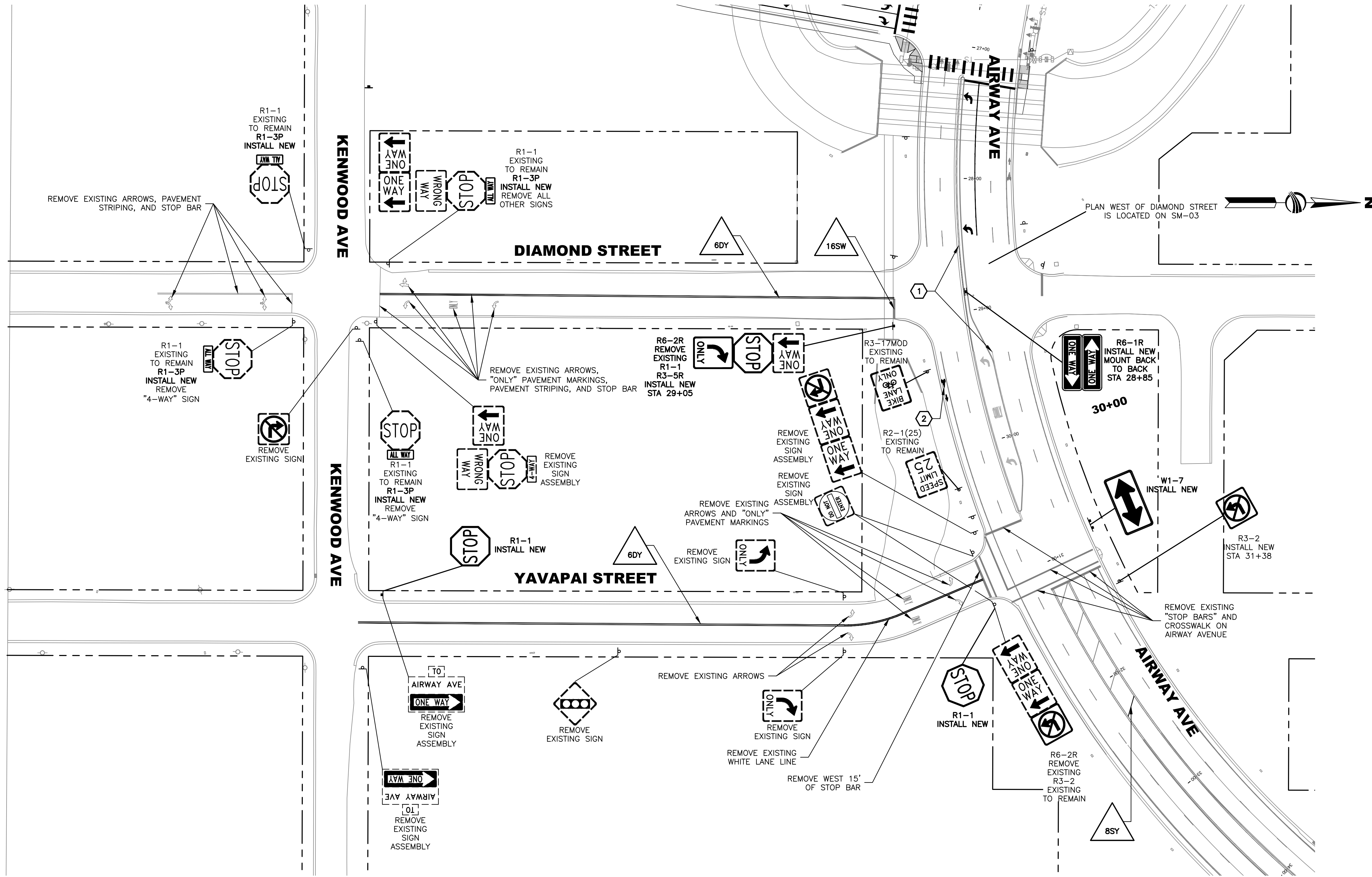


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EASTERN STREET PASADENA TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 15-048
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 15-1150-SMPL01.dwg
EASTERN STREET SIGNING AND MARKING STA 85+00 TO AIRWAY AVENUE		SHEET NO. SM-03 48 OF 52



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CONSTRUCTION NOTES:

- 1 OBLITERATE EXISTING STRIPING IN CONFLICT WITH THE PROPOSED STRIPING.
- 2 BIKE LANE SYMBOL TO BE INSTALLED PER CITY OF KINGMAN STD DET 138-2-D10.
- 3 INSTALL WHITE DIRECTIONAL ARROW, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D4.
- 4 INSTALL "ONLY" LEGEND, TYPE 1 PREFORMED PLASTIC PAVEMENT MARKING TAPE, PER CITY OF KINGMAN STD DET 138-1-D6.

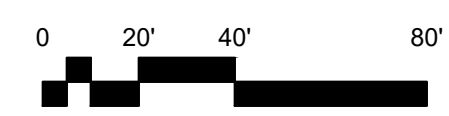
STRIPING LEGEND

- 6DY 6" DOUBLE YELLOW LINE
- 6SW 6" SOLID WHITE LINE
- 6SBY 6" SOLID YELLOW LINE AND 6" BROKEN YELLOW LINE WITH A 10' LINE SEGMENT AND A 30' GAP
- 8SY 8" SOLID YELLOW LINE
- 6BW 6" BROKEN WHITE LINE, 10' SEGMENT WITH A 30' GAP
- 12SW 12" SOLID WHITE LINE
- 16SW 16" SOLID WHITE LINE

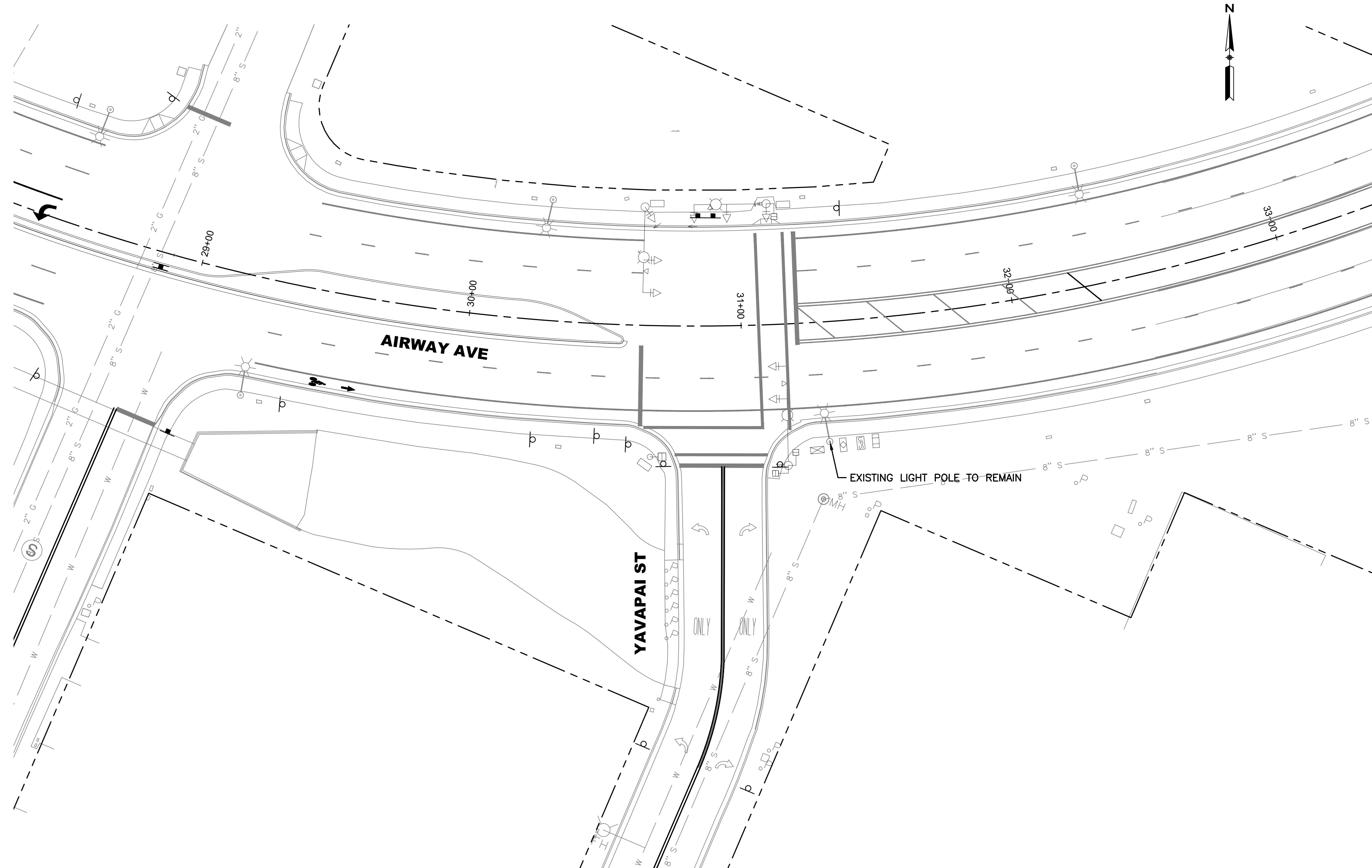


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EASTERN STREET PASADENA TO AIRWAY AVE		C.O.K. PROJECT NO. ENG 15-048
CITY OF KINGMAN ENGINEERING DEPARTMENT 310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		FILENAME 15-1150-SMPL01.dwg
EASTERN STREET SIGNING AND MARKING STA 65+00 TO 85+00		SHEET NO. SM-04 49 OF 52



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- GENERAL REMOVAL NOTES:**
- EXISTING SIGNALS SHALL REMAIN IN OPERATION UNTIL SIGNALS AT INTERSECTION OF EASTERN STREET AND AIRWAY AVENUE ARE OPERATIONAL.
 - REMOVE AND SALVAGE EXISTING POLES, MAST ARMS, LUMINAIRES, MOUNTING ASSEMBLIES, CONTROL CABINET, UPS, SIGNS AND SIGNAL FACES. ALL SIGNAL EQUIPMENT NOT BEING RELOCATED SHALL BE DELIVERED TO THE CITY OF KINGMAN PUBLIC WORKS YARD. THE CONTRACTOR SHALL CONTACT CITY OF KINGMAN STREET SUPERINTENDENT AT 928-692-3135 TO COORDINATE THE DELIVERY OF SALVAGED SIGNAL EQUIPMENT.
 - ALL EXISTING PULL BOXES AND CONDUITS TO REMAIN IN PLACE.
 - REMOVE AND DISPOSE OF THE EXISTING CONDUCTORS, PER SECTION 737-3.03 OF THE ADOT STANDARD SPECIFICATIONS, OR AS DIRECTED BY THE CITY INSPECTOR.
 - EXISTING FOOTINGS SHALL REMAIN IN PLACE. EXISTING ANCHOR BOLTS SHALL BE SPRAYED WITH A ZINC-RICH PRIMER AND COVERED WITH AN ORANGE MUSHROOM CAP.
 - EXISTING CONDUITS SHALL BE CUT SQUARE TO FOOTING, A MINIMUM OF 2" ABOVE FOOTING AND CAPPED.

PULL BOX SCHEDULE			
NO.	TYPE	LOCATION*	REMARKS
1	NO. 7 W/ EXTENSION	SE CORNER	LEAVE IN PLACE
2	NO. 7	SW CORNER	LEAVE IN PLACE
3	NO. 7	NW CORNER	LEAVE IN PLACE
4	NO. 7	NE CORNER	LEAVE IN PLACE



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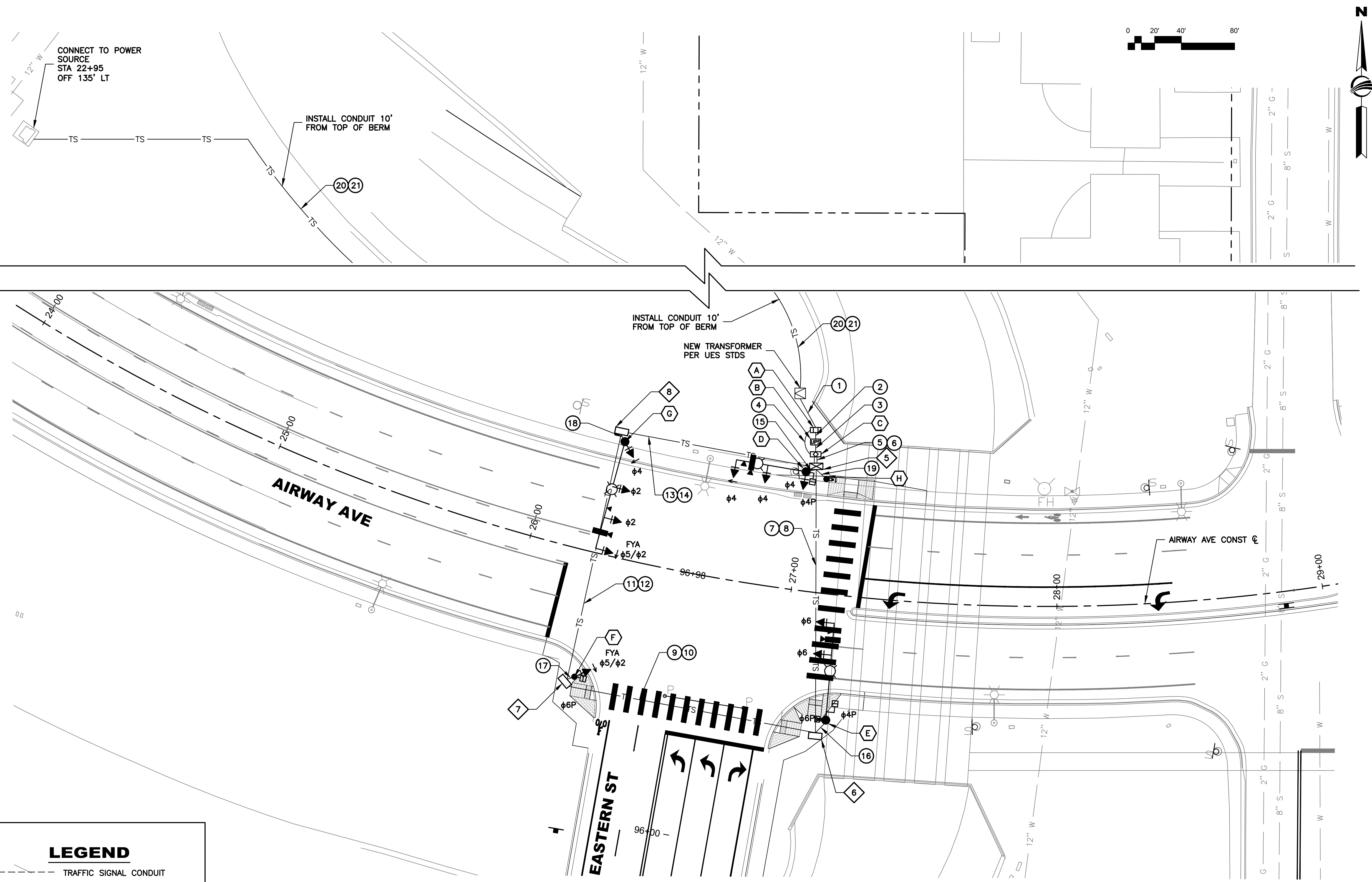


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EASTERN STREET PASADENA TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 15-048
CITY OF KINGMAN ENGINEERING DEPARTMENT <small>310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118</small>	
EASTERN STREET TRAFFIC SIGNAL REMOVAL SHEET	SHEET NO. TS-01 50 OF 52

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CONSTRUCTION NOTES

- UNDERGROUND ELECTRICAL CONDUIT AND FITTINGS TO BE INSTALLED PER ADOT SPECS 732-3. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND PLACE CONDUIT TO AVOID SUCH UTILITIES.
- NEW ADOT #7 PULL BOXES PER ADOT STD DWG T.S. 1-4 AND ADOT SPECS 732-2 SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AS SPECIFIED ON THE PLANS.
- VIDEO DETECTION SHALL BE INSTALLED. DETECTION SHALL BE ECONOLITE AUTOSCOPE VISION OR APPROVED EQUAL.
- THE VIDEO DETECTORS SHALL EACH HAVE A SEPARATE CHANNEL IN THE CONTROL CABINET AND THE DETECTOR RACK.
- VIDEO DETECTORS SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE DAY OF TURN-ON.
- THE ELEVATION OF THE TOP OF THE POLE FOUNDATIONS SHALL MATCH THE TOP OF THE ADJACENT RAMP CURB, AND SHALL BE INSPECTED BY THE CITY PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL PROVIDE COMPACTED FILL AROUND THE FOUNDATIONS FOR COMPLETE STRUCTURAL SUPPORT.
- THE CONTRACTOR SHALL PERFORM A GROUND RESISTANCE TEST FOR EACH INSTALLED GROUND ROD AND POLE FOUNDATION GROUNDING COIL IN ACCORDANCE WITH ADOT STANDARDS SUBSECTION 732-3.03.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING HEIGHT OF SIGNAL MAST ARMS IS NOMINAL 21- FEET ABOVE PAVEMENT.
- PAVEMENT MARKINGS ARE SHOWN FOR REFERENCE ONLY. SEE SIGNING & STRIPING PLAN FOR INSTALLATION REQUIREMENTS.
- CONTRACTOR TO PROVIDE 90° BEND ON CONDUIT RUN NO. 1, ALONG WITH A 30- FEET LENGTH OF ELECTRIC SERVICE CABLE FOR CONNECTION TO EXISTING TRANSFORMER BY UNISOURCE ENERGY ELECTRIC CO. CONTRACTOR TO COORDINATE THIS EFFORT PER TRAFFIC SIGNAL NOTE 3 ON THIS SHEET.
- ALL PULL BOXES SHALL BE LEFT IN A CLEAN CONDITION, FREE OF DIRT AND DEBRIS UPON COMPLETION OF THE WORK.
- CONDUIT RUNS TO BE DIRECTIONAL BORE ACROSS AIRWAY AVENUE.
- A POLICE OFFICER SHALL BE ON SITE DURING SIGNAL START-UP.

LEGEND

- TRAFFIC SIGNAL CONDUIT
- METER PEDESTAL
- CONTROLLER CABINET
- NO. 5 PULLBOX
- NO. 8 PULLBOX
- NO. 7 PULLBOX
- TRAFFIC SIGNAL HEAD
- VIDEO DETECTION
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN SIGNAL HEAD
- VIDEO DETECTION ZONE AND PHASE NUMBER
- TRAFFIC SIGNAL (SEE POLE SCHEDULE)
- CONDUIT RUN NUMBER (SEE CONDUCTOR SCHEDULE)
- CONSTRUCTION NOTES
- EXISTING PULLBOX (SEE PULLBOX SCHEDULE)
- NEW PULLBOX (SEE PULLBOX SCHEDULE)
- ADA COMPLIANT PAD

GENERAL NOTES

- ALL MATERIAL AND INSTALLATION SHALL CONFORM TO THE ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) 2021 STANDARD SPECIFICATIONS AND ADOT'S MOST CURRENT TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS.
- THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. ALL INVOLVED UTILITIES MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE, PER SECTION 730-6 OF THE ADOT STANDARD SPECIFICATIONS, FOR CONTACTING ALL UTILITIES FOR EXACT LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- FOR ELECTRICAL SERVICE, THE CONTRACTOR SHALL COORDINATE WITH MARVIN YARBOROUGH OF UNISOURCE ENERGY SERVICES AT (928) 681-8928. ALL APPLICATIONS FEES AND CONNECTIONS FEES HAVE BEEN PAID BY THE KINGMAN TO UNISOURCE ENERGY SERVICES AFTER REVIEW BY THE CITY INSPECTOR.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION OF TWO AND A HALF (2.5) INCH CONDUIT FOR THE PRIMARY CIRCUIT BETWEEN THE NEW TRANSFORMER LOCATION AND THE POWER PEDESTAL AS SHOWN ON THE PLANS. THE BURY DEPTH OF THE CONDUIT SHALL BE A MINIMUM OF 59 INCHES AND SHALL BE INSTALLED IN ACCORDANCE WITH UES STANDARD DETAILS AND SPECIFICATIONS. AS WELL, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION OF A NEW TRANSFORMER BASEMENT. UNISOURCE ELECTRIC WILL PROVIDE THE CONDUIT, CONDUCTORS AND THE TRANSFORMER BASEMENT BUT, THE CONTRACTOR WILL BE RESPONSIBLE FOR PICKUP FROM UNISOURCE'S OPERATIONS YARD AND INSTALLATION. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUIT INTO THE EXISTING TRANSFORMER WITH UES ELECTRIC. UES ELECTRIC WILL SUPPLY AND INSTALL THE TRANSFORMER AND PRIMARY CONDUCTORS. UES ELECTRIC WILL LAND THE CONDUCTORS ON EACH END. UES ELECTRIC SHALL BE NOTIFIED PRIOR TO BACKFILL SO THEY MAY INSPECT THEIR FACILITIES. A GREEN TAG FROM THE CITY OF KINGMAN BUILDING AND LIFE SAFETY DIVISION WILL BE REQUIRED BEFORE THE PANEL IS ENERGIZED.

NO.	TYPE	LOCATION*	REMARKS
5	NO. 7 W/ EXTENSION	STA 27+03, 47' LT	PER ADOT DETAILS T.S. 1-2 & 1-4
6	NO. 7	STA 27+14, 52 RT	PER ADOT DETAILS T.S. 1-2 & 1-4
7	NO. 7	STA 26+25, 50' RT	PER ADOT DETAILS T.S. 1-2 & 1-4
8	NO. 7	STA 26+24, 47' LT	PER ADOT DETAILS T.S. 1-2 & 1-4

*ALL STATIONING FROM AIRWAY AVENUE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE INSPECTOR PRIOR TO PULL BOX INSTALLATION.



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CITY OF KINGMAN ENGINEERING DEPARTMENT		FILENAME 15-1150-TSPL01.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118		
EASTERN STREET SIGNAL PLAN SHEET		SHEET NO. TS-02 51 OF 52

CABINET AND POLE SCHEDULE

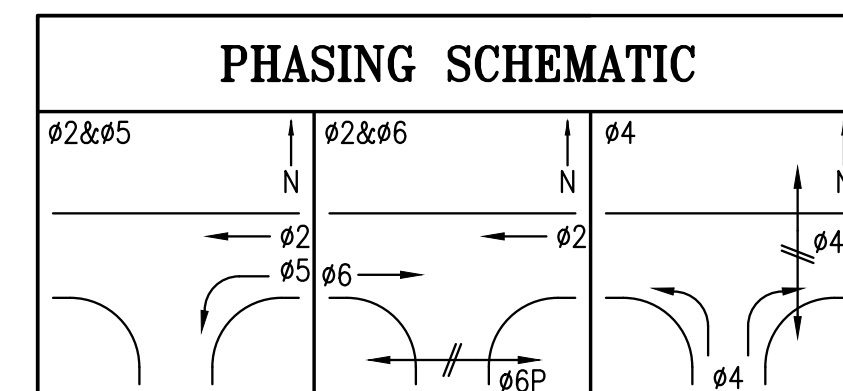
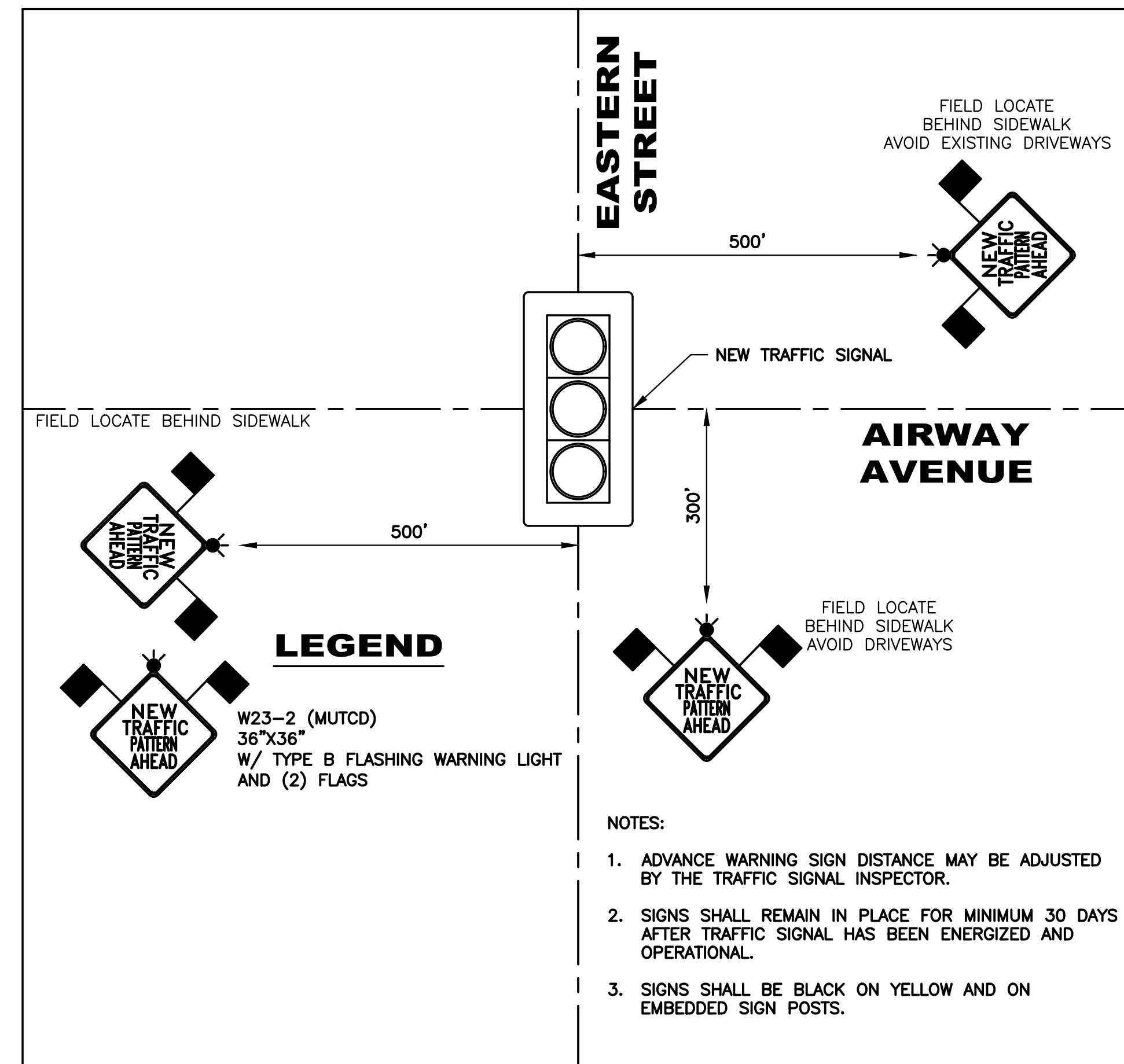
TRAFFIC SIGNAL CONTROLLER				REMARKS	LOCATION*			
CABINET	TYPE	CONTROLLER	AUX. CONTROL					
A	METER PEDESTAL WITH BYPASS		PER ADOT DETAILS T.S. 2-6 T.S. 3-10 T.S. 3-11	SEE NOTE 1 SERVICE ADDRESS: 3368 AIRWAY AVENUE KINGMAN, ARIZONA 86401	STA 27+01, 61' LT			
B	UPS			SEE NOTE 1	STA 27+02, 56' LT			
C	PEC	IV	MPS, 8Ø MENU DRIVEN W/LED DISPLAY, ECONOLITE COLBALT	20 AMP FUSED LIGHTING CONTACTOR AND PEC.	STA 27+03, 52' LT			
NO.	POLE	TYPE	MAST ARM	SIGNALS	P.B. SIGN	REMARKS	LOCATION	
			SIG.	LUM.	MTG.	FACE		
D		Q	35'	20'	2-II 1-V 1-V	1-R 1-F 1-M/H 1-F	R10-4b(R) 250 WATT, 240V HPS LUMINAIRE TYPE III, MEDIUM CUTOFF. (1) ADA PED PUSH BUTTON. (1) COUNTDOWN PEDESTRIAN SIGNAL. (1) NEW EMERGENCY VEHICLE DETECTOR	STA 27+00, 45' LT
E		Q	35'	20'	2-II 1-VII	2-F 2-M/H	R10-4b(L) 250 WATT, 240V HPS LUMINAIRE TYPE III, MEDIUM CUTOFF. (1) ADA PED PUSH BUTTON. (2) COUNTDOWN PEDESTRIAN SIGNALS. (1) NEW EMERGENCY VEHICLE DETECTOR	STA 27+16, 45' RT
F		A	-	-	1-V 1-IV	1-M/H 1-FYA	(1) COUNTDOWN PEDESTRIAN SIGNAL.	STA 26+28, 47' RT
G		Q	40'	20'	1-II 2-II 1-V	1-FYA 2-F 1-R	250 WATT, 240V HPS LUMINAIRE TYPE III, MEDIUM CUTOFF. (1) NEW EMERGENCY VEHICLE DETECTOR	STA 26+26, 43' LT
H		PB	-	-	-	-	(1) ADA PED PUSH BUTTON.	STA 27+08, 43' LT

PEC = PHOTO ELECTRIC CELL
 UPS = UNINTERRUPTIBLE POWER SUPPLY
 M/H = MAN/HAND WITH COUNTDOWN SIGNAL
 P.B. = PUSH BUTTON
 EVPE = EMERGENCY VEHICLE PREEMPTION

* ALL STATIONING FROM AIRWAY DRIVE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR PRIOR TO PULL BOX INSTALLATION.

ADVANCE WARNING SIGNING FOR NEW TRAFFIC SIGNAL INSTALLATION

SCALE: NTS



IMSA CABLE 19-1, #14AWG, 4 CONDUCTOR

SIGNAL HEADS INBOARD & SIDEMOUNT		PEDESTRIAN HEADS		PUSH BUTTON	
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	PUSH BUTTON STATION
RED	RED	RED	DON'T WALK	RED	PUSH BUTTON
BLACK	YELLOW	GREEN	WALK	WHITE	P.B. COM.
GREEN	GREEN	WHITE	PED. COM.	GREEN	SPARE
WHITE	VEH. COM.	BLACK	SPARE	BLACK	SPARE

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE

CONDUCTOR SCHEDULE

CONDUIT RUN NO.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
CONDUIT SIZE (INCH)		2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2.5	2.5
AWG	CIRCUIT PHASE																					
IMSA *	IMSA CABLE NO. OF CONDUCTORS						2	2	2	2	2	2	2	2	2	5	5	4	5	1		
	SIGNAL φ2						3	3	3				3					3	9			
	SIGNAL φ4						3						3							3		
	SIGNAL φ5						1	1	1	1			1						1	1		
	SIGNAL φ6						3	3	1									6	1	1		
	SIGNAL COMMON						1	1	1				1			3	2	2	5			
	PEDESTRIAN SIGNAL φ4						2	2								2	2					
	PEDESTRIAN SIGNAL φ6						2	2	2							2	2					
	PEDESTRIAN SIGNAL COMMON						1	1	1							1	2	1				
	PEDESTRIAN P.B. φ4						1	1	1							1				1		
PEDESTRIAN P.B. COMMON						1	1	1							2	1			1			
SPARES						22	25	30	40	32					5	5	5	1	2			
#14	CAMERA DETECTION φ4								1							1						
	CAMERA DETECTION φ2/φ5								1						1				1			
	CAMERA DETECTION φ6								1	1												
#12	LIGHTING 240V						2	2	2	2					2	2	2					
	GROUND INSULATED BOND (GREEN) □						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	SERVICE						3	3													3	3
◇	EMERGENCY VEHICLE PRE-EMPTION								3	1					1	1	1		1			

ALL CONDUCTORS ARE NEW.

□ THE INSULATED BOND SHALL HAVE THE INSULATION STRIPPED INSIDE THE PULL BOXES.

* THE ISMA 20-CONDUCTOR, 7-CONDUCTOR, AND 4-CONDUCTOR CABLES SHALL BE #12 AWG ISMA 19-01.

◇ CONDUCTORS BY POWER COMPANY. CONDUIT BY CONTRACTOR PER POWER COMPANY REQUIREMENTS.

◇ EMERGENCY VEHICLE PER-EMPTION SHALL BE OPTICOM CABLE, 3M #138, OR APPROVED EQUAL. THE CABLE SHALL RUN CONTINUOUSLY (NO SPACES) FROM THE END OF THE SIGNAL MAST ARM TO THE CONTROL CABINET.

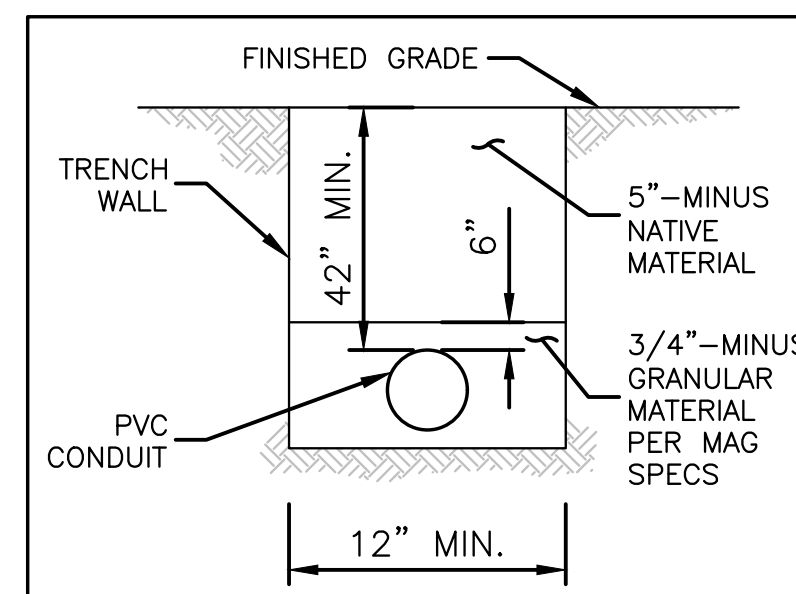
TRAFFIC SIGNAL EQUIPMENT NOTES

- THE SIGNAL CONTROLLER CABINET, METER PEDESTAL CABINET, AND UNINTERRUPTIBLE POWER CABINET SHALL BE PROVIDED BY THE CITY OF KINGMAN. FOUNDATIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR. THE EQUIPMENT SHALL BE INSTALLED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH CITY OF KINGMAN STREET SUPERINTENDENT AT 928-692-3135 TO COORDINATE PICK-UP AND TO DETERMINE FOUNDATION REQUIREMENTS.
- CONTRACTOR SHALL INSTALL CITY PROVIDED ELECTRICAL SERVICE CABINET, CONTROL CABINET, UNINTERRUPTIBLE POWER SUPPLY CABINET, SIGNAL POLES, ARMS, PEDESTALS, SIGNAL HEADS, PUSH BUTTONS, PEDESTRIAN POSTS, LUMINAIRES, VIDEO DETECTION EQUIPMENT AND EMERGENCY VEHICLE DETECTION EQUIPMENT. CONTRACTOR SHALL CONSTRUCT FOUNDATIONS, INCLUDING ANCHOR BOLTS, FOR POLES AND CABINETS. CONTRACTOR SHALL SUPPLY CONDUIT, CONDUCTORS AND CABLES NECESSARY TO PROVIDE A FULLY FUNCTIONAL SYSTEM. IF EQUIPMENT PROVIDED BY CITY DOES NOT ALLOW FOR A FULLY FUNCTIONAL SYSTEM TO BE INSTALLED, THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF KINGMAN FOR DELIVERY OF NECESSARY EQUIPMENT.
- NEW SIGNAL ARM MOUNTED SIGNS SHALL BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FIELD VERIFY ALL POLE LOCATIONS AND ELEVATIONS WITH THE CITY OF KINGMAN INSPECTOR, PRIOR TO ANY CONSTRUCTION ACTIVITY. ALL EXPOSED CONDUIT AND FITTINGS INSTALLED ABOVE GROUND, SHALL BE RIGID METAL TYPE PER THE STANDARD SPECIFICATIONS.
- ALL 12" SIGNAL FACES SHALL HAVE 5" LOUVERED BACKPLATES.
- THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE SIGNAL CABINET AND THE NEW CONTROLLER TURN-ON, A MINIMUM OF 10 DAYS IN ADVANCE, WITH THE CITY OF KINGMAN. ALL TRAFFIC SIGNAL INDICATIONS SHALL BE LED MODULES. DUAL ARC TUBE LAMPS SHALL BE USED ON ALL HORIZONTAL MOUNTED LUMINAIRES.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ADVANCE WARNING SIGNING PER DETAIL ON THIS SHEET. THE COST OF FURNISHING AND INSTALLING SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SIGNAL EQUIPMENT.

IMSA CABLE 19-1, #14AWG, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR		SIGNAL INTERVAL
		BASIC COLOR	TRACER STRIPE	
φ1	φ5	RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
φ2	φ6	RED	---	RED
		ORANGE	---	YELLOW
		GREEN	---	GREEN
φ3	φ7	BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
φ4	φ8	RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
φ2 PED	φ6 PED	BLUE	---	WALK
		BLACK	---	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
φ4 PED	φ8 PED	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
ALL PHASES	ALL PHASES	WHITE	---	P.B. COM.
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE STAINLESS STEEL BANDS SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT EACH PULL BOX LOCATION. INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.



Know what's below.
 Call before you dig.

CivTech Inc.
 10605 N. Hayden Rd. 480.659.4250 p
 Suite 140 480.659.0566 f
 Scottsdale, AZ 85260 info@civtech.com

EASTERN STREET PASADENA TO AIRWAY AVE	C.O.K. PROJECT NO. ENG 15-048
CITY OF KINGMAN ENGINEERING DEPARTMENT	FILENAME 15-1150-TSPL01.dwg
310 NORTH 4TH STREET KINGMAN, ARIZONA 86401 PHONE (928) 753-8122 FAX (928) 753-8118	
EASTERN STREET CONDUCTOR AND POLE SCHEDULE SHEET	SHEET NO. TS-03 52 OF 52