

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: BR 2B23(020)

CONTROL: 0314-05-046

COUNTY: EASTLAND

LETTING: 08/02/2023

REFERENCE NO: 0719

**PROPOSAL ADDENDUMS**

-----

X PROPOSAL COVER

X BID INSERTS (SH. NO.: ALL

\_ GENERAL NOTES (SH. NO.:

\_ SPEC LIST (SH. NO.:

\_ SPECIAL PROVISIONS:

ADDED:

DELETED:

\_ SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: PLAN SHEET AND OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES

(INCLUDING PLANS SHEET CHANGES)

\*\*\*\*\* BID INSERTS \*\*\*\*\*

REVISED QUANTITIES FOR THE FOLLOWING BID ITEMS:

416-6004, 420-6038

\*\*\*\*\* PLAN SHEETS \*\*\*\*\*

REPLACED SHEETS: 14, 149-153, 157-158, 165-166



# Estimate & Quantity Sheet

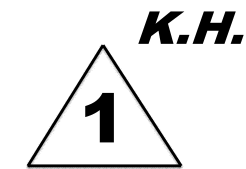
CONTROLLING PROJECT ID 0314-05-046

DISTRICT Brownwood  
HIGHWAY IH 20

COUNTY Eastland

CONTROL SECTION JOB				0007-06-278		0314-05-046		0314-05-047		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00189808		A00183867		A00183868			
COUNTY				Eastland		Eastland		Eastland			
HIGHWAY				IH 20		IH 20		IH 20			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL	EST.	FINAL	EST.	FINAL		
	100-6002	PREPARING ROW	STA			4.000		5.000		9.000	
	104-6001	REMOVING CONC (PAV)	SY					44.000		44.000	
	104-6010	REMOVING CONC (RIPRAP)	CY			77.000		730.000		807.000	
	104-6019	REMOVING CONC (OTHER APPURTENANCES)	SY			178.000		722.000		900.000	
	104-6054	REMOVING CONCRETE(MOW STRIP)	LF			1,344.000		1,345.000		2,689.000	
	105-6005	REMOVING STAB BASE AND ASPH PAV (3")	SY					1,377.000		1,377.000	
	105-6026	REMOVE STAB BASE & ASPH PAV (13"-18")	SY			477.000				477.000	
	110-6001	EXCAVATION (ROADWAY)	CY			3,504.000		3,669.000		7,173.000	
	132-6006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY			1,842.000		1,022.000		2,864.000	
	150-6001	BLADING	STA	81.000		148.000				229.000	
	160-6001	FURNISHING AND PLACING TOPSOIL (4")	STA			4.000		5.000		9.000	
	164-6035	DRILL SEEDING (PERM) (RURAL) (CLAY)	SY			4,000.000		4,000.000		8,000.000	
	168-6001	VEGETATIVE WATERING	MG			180.000		180.000		360.000	
	247-6053	FL BS (CMP IN PLC)(TYD GR1-2)(FNAL POS)	CY			1,370.000		484.000		1,854.000	
	275-6001	CEMENT	TON			153.000		73.000		226.000	
	275-6003	CEMENT TREAT (NEW BASE) (6")	SY			8,220.000		2,905.000		11,125.000	
	275-6011	CEMENT TREAT(EXIST MATL)(8")	SY			8,220.000		6,768.000		14,988.000	
	334-6080	HMCL ACP TY-D AC-1.5	TON					1,175.000		1,175.000	
	351-6008	FLEXIBLE PAVEMENT STRUCTURE REPAIR(12")	SY	400.000		600.000				1,000.000	
	354-6048	PLANE ASPH CONC PAV (3")	SY	37,528.000		95,893.000		4,293.000		137,714.000	
	360-6006	CONC PVMT (CONT REINF - CRCP) (12")	SY					4,789.000		4,789.000	
	400-6005	CEM STABIL BKFL	CY			324.700		479.700		804.400	
	416-6001	DRILL SHAFT (18 IN)	LF			160.000		160.000		320.000	
	416-6004	DRILL SHAFT (36 IN)	LF			2,258.000		2,096.000		4,354.000	
	416-6087	CORE HOLE	EA			16.000				16.000	
	420-6014	CL C CONC (ABUT)(HPC)	CY			119.000		141.500		260.500	
	420-6030	CL C CONC (CAP)(HPC)	CY			134.000		134.000		268.000	
	420-6038	CL C CONC (COLUMN)(HPC)	CY			56.600		47.200		103.800	
	420-6066	CL C CONC (RAIL FOUNDATION)	CY			56.000		56.000		112.000	
	422-6002	REINF CONC SLAB (HPC)	SF			18,318.000		38,975.000		57,293.000	
	422-6016	APPROACH SLAB (HPC)	CY			205.400		245.000		450.400	
	425-6035	PRESTR CONC GIRDER (TX28)	LF			2,092.500				2,092.500	
	425-6038	PRESTR CONC GIRDER (TX46)	LF					4,776.000		4,776.000	
	429-6005	CONC STR REPAIR(DECK REP (FULL DEPTH))	SF			110.000		2,400.000		2,510.000	
	432-6035	RIPRAP (STONE PROTECTION)(24 IN)	CY			4,020.000		6,724.000		10,744.000	
	432-6045	RIPRAP (MOW STRIP)(4 IN)	CY					7.000		7.000	
	450-6024	RAIL (TY SSTR)(HPC)	LF			314.000		648.000		962.000	

ADDENDUM #1, 7/19/2023, REPLACE SHEET



DISTRICT	COUNTY	CCSJ	SHEET
Brownwood	Eastland	0314-05-046	14



**GENERAL NOTES:**

- DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (2020) 9TH AND TXDOT BRIDGE DESIGN MANUAL (NOV 2021)
- SEE RDWY PLANS FOR LOCATION OF BENCHMARKS FOR HORIZONTAL AND VERTICAL CONTROL.
- SEE EXISTING UTILITY PLANS FOR IDENTIFICATION OF EXISTING UTILITIES.
- SAW-CUT GROOVING OF THE BRIDGE DECK AND APPROACH SLAB IS REQUIRED.
- ENUMERATED GEOTECHNICAL BORING TEST HOLES ARE LABELED AND LOCATED IN PLAN. FOR LOGS OF CORRESPONDING HOLE NUMBER, SEE BORING LOG SHEET.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, EXCAVATION, OR DRILLING.
- ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND MUST BE CORRECTED FOR VERTICAL GRADE AND SUPERELEVATION WHERE APPROPRIATE.
- "D" DENOTES BENTS WITH DOWEL BARS FOR EXTERIOR BEAMS.
- "H" HEIGHTS SHOWN ARE ESTIMATED COLUMN HEIGHTS. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATING THE ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
- REMOVE EXISTING INTERIOR COLUMN 3 FT BELOW GROUND.
- SEE RDWY PLANS FOR LIMITS OF MBGF NOT SHOWN HERE.

DESIGN SPEED = 70 MPH  
AADT (2021) = 25,859  
AADT (2041) = 34,134  
FUNCT CLAS = INTERSTATE  
S FORK PALO PINTO CREEK EBML  
EXIST NBI NO: 23-068-0-0314-05-037  
NEW NBI NO: 23-068-0-0314-05-237



**HL 93 LOADING**  
Superstructure Inv/Opr Ratings: 1.18 / 1.53

NO.	DATE	DESCRIPTION	APPROV.
1	07/18/23	ADDENDUM 01 ADDED 1 COLUMN AT INT BENTS	KH

**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPB REGISTRATION NO. 264

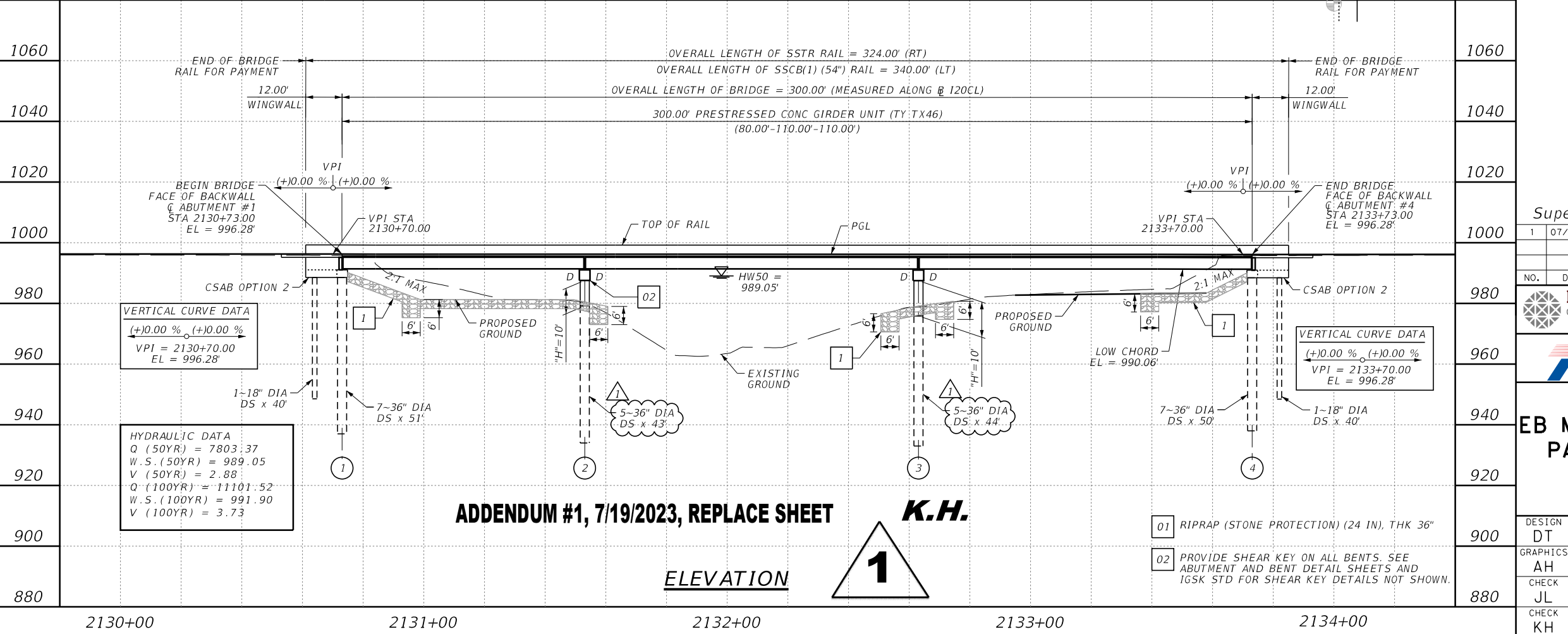
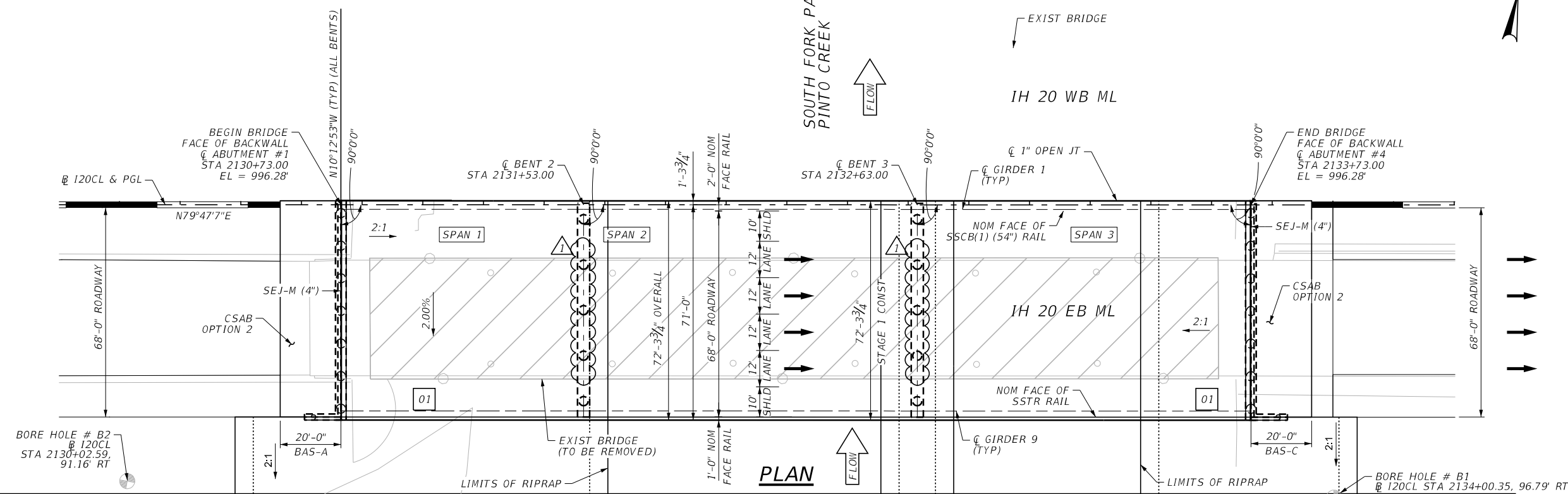


**IH-20  
EB ML IH 20 OVER SOUTH FORK  
PALO PINTO CREEK BRIDGE  
BRIDGE LAYOUT**

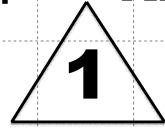
SHEET 1 OF 2

DESIGN DT	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
GRAPHICS AH	23	SEE TITLE SHEET	IH-20
CHECK JL	STATE	DISTRICT	COUNTY
CHECK KH	TEXAS	BWD	EASTLAND
	CONTROL	SECTION	JOB
	0314	05	046, ETC

REMOVE EXISTING CONCRETE PAN GIRDER BRIDGE  
280'-0" IN LENGTH, CONSISTING OF 7 - 40'-0" SPANS,  
40'-0" BRIDGE WIDTH AND NO SKEW.



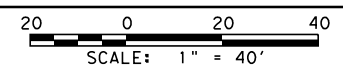
**ADDENDUM #1, 7/19/2023, REPLACE SHEET**



**ELEVATION**

7/18/2023 7:42:53 PM  
KH  
c:\bms\br\dgefarmer-pw\ke\vin.hernandez\dms17915\129-038401-BR-04-PP-01.dgn

7/18/2023 7:43:47 PM  
KH  
c:\bms\br\dgefarmer-pw\ke\vin.hernandez\dms17915\130-038401-BR-03-PP-01.dgn



**GENERAL NOTES:**

1. DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (2020) 9TH AND TXDOT BRIDGE DESIGN MANUAL (NOV 2021)
2. SEE RDWY PLANS FOR LOCATION OF BENCHMARKS FOR HORIZONTAL AND VERTICAL CONTROL.
3. SEE EXISTING UTILITY PLANS FOR IDENTIFICATION OF EXISTING UTILITIES.
4. SAW-CUT GROOVING OF THE BRIDGE DECK AND APPROACH SLAB IS REQUIRED.
5. ENUMERATED GEOTECHNICAL BORING TEST HOLES ARE LABELED AND LOCATED IN PLAN. FOR LOGS OF CORRESPONDING HOLE NUMBER, SEE BORING LOG SHEET.
6. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, EXCAVATION, OR DRILLING.
7. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND MUST BE CORRECTED FOR VERTICAL GRADE AND SUPERELEVATION WHERE APPROPRIATE.
8. "D" DENOTES BENTS WITH DOWEL BARS FOR EXTERIOR BEAMS.
9. "H" HEIGHTS SHOWN ARE ESTIMATED COLUMN HEIGHTS. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATING THE ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
10. REMOVE EXISTING INTERIOR COLUMN 3 FT BELOW GROUND.
11. SEE RDWY PLANS FOR LIMITS OF MBGF NOT SHOWN HERE.

DESIGN SPEED = 70 MPH  
 AADT (2021) = 25,859  
 AADT (2041) = 34,134  
 FUNCT CLAS = INTERSTATE  
 S FORK PALO PINTO CREEK WBML  
 EXIST NBI NO: 23-068-0-0314-05-036  
 NEW NBI NO: 23-068-0-0314-05-239



**HL 93 LOADING**  
 Superstructure Inv/Opr Ratings: 1.22 / 1.58

NO.	DATE	DESCRIPTION	APPROV.
1	07/18/23	ADDENDUM 01 ADDED 1 COLUMN AT INT BENTS	KH

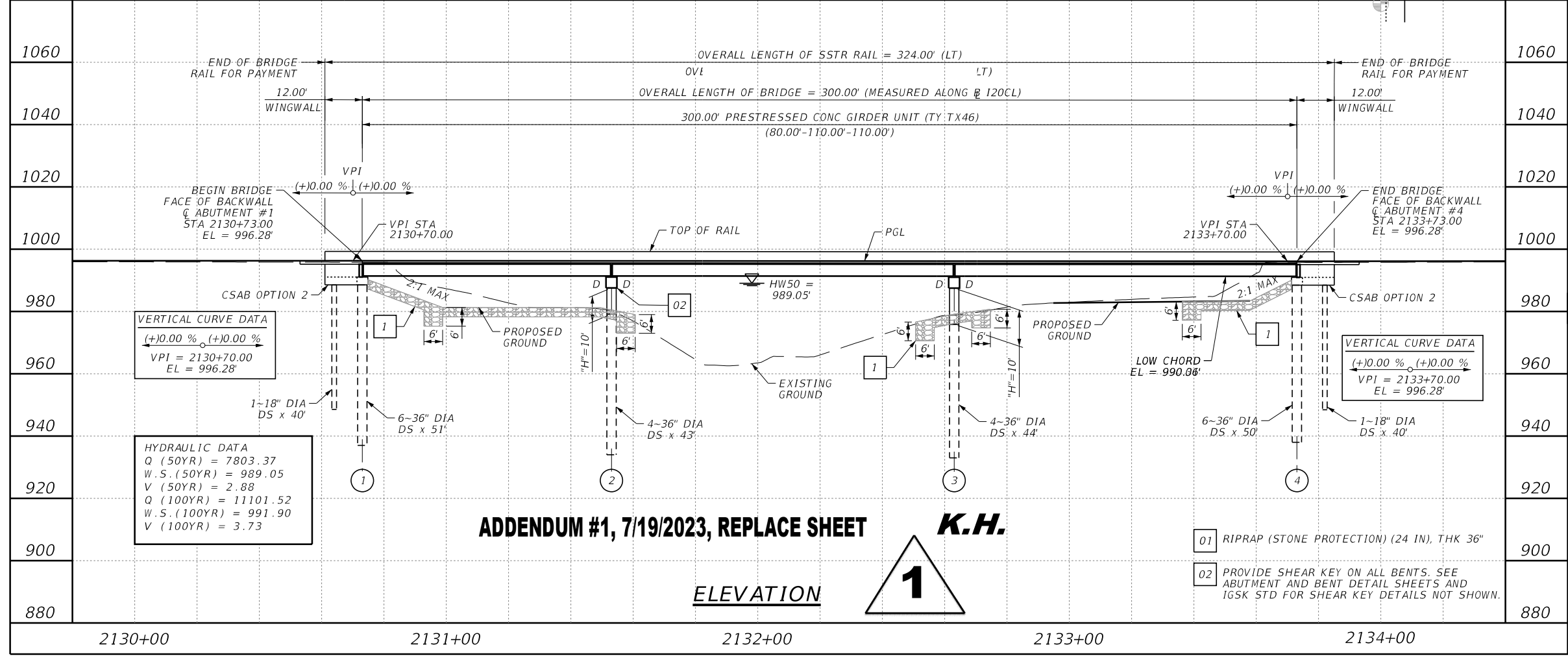
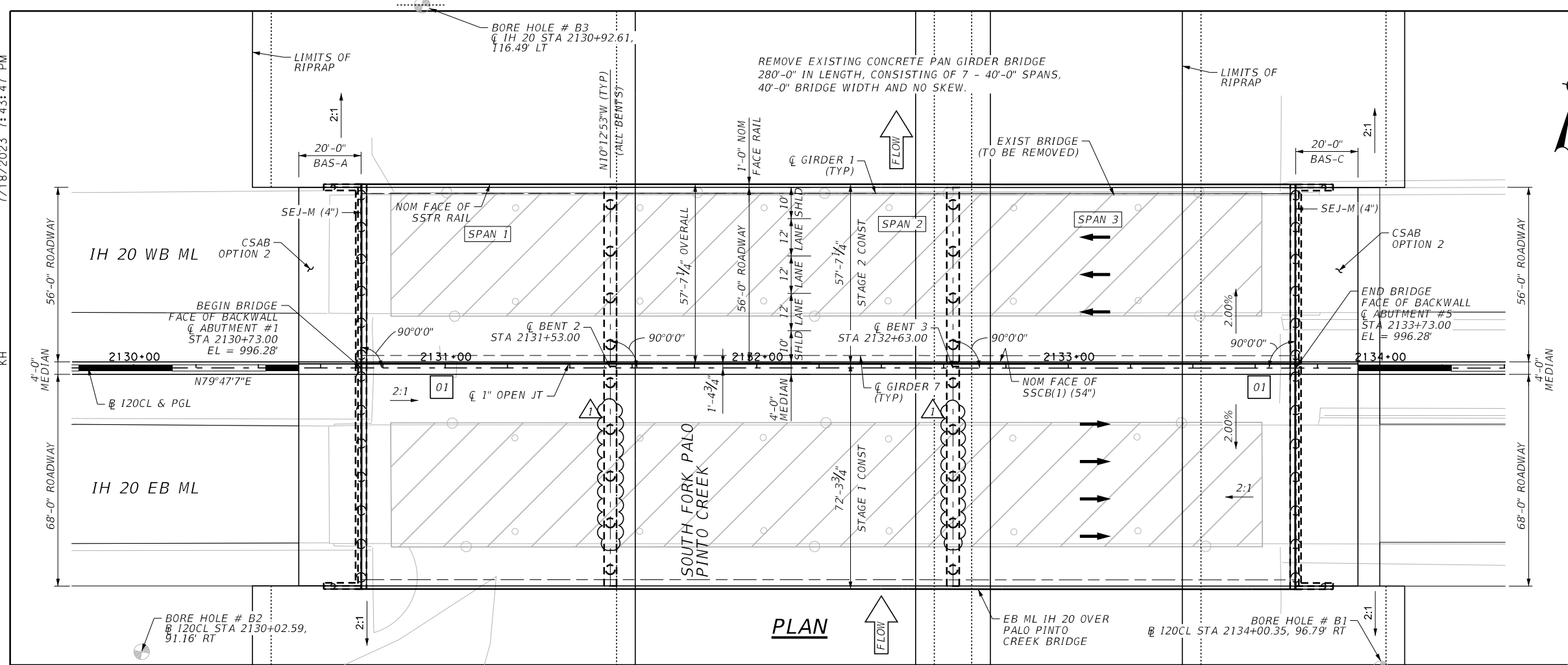
**BRIDGEFARMER & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 TBPE REGISTRATION NO. 264



**IH-20  
 WB ML IH 20 OVER SOUTH FORK  
 PALO PINTO CREEK BRIDGE  
 BRIDGE LAYOUT**

SHEET 2 OF 2

DESIGN DT	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
GRAPHICS AH	23	SEE TITLE SHEET	IH-20
CHECK JL	STATE	DISTRICT	COUNTY
CHECK KH	TEXAS	BWD	EASTLAND
	CONTROL	SECTION	JOB
	0314	05	046, ETC



**ADDENDUM #1, 7/19/2023, REPLACE SHEET**

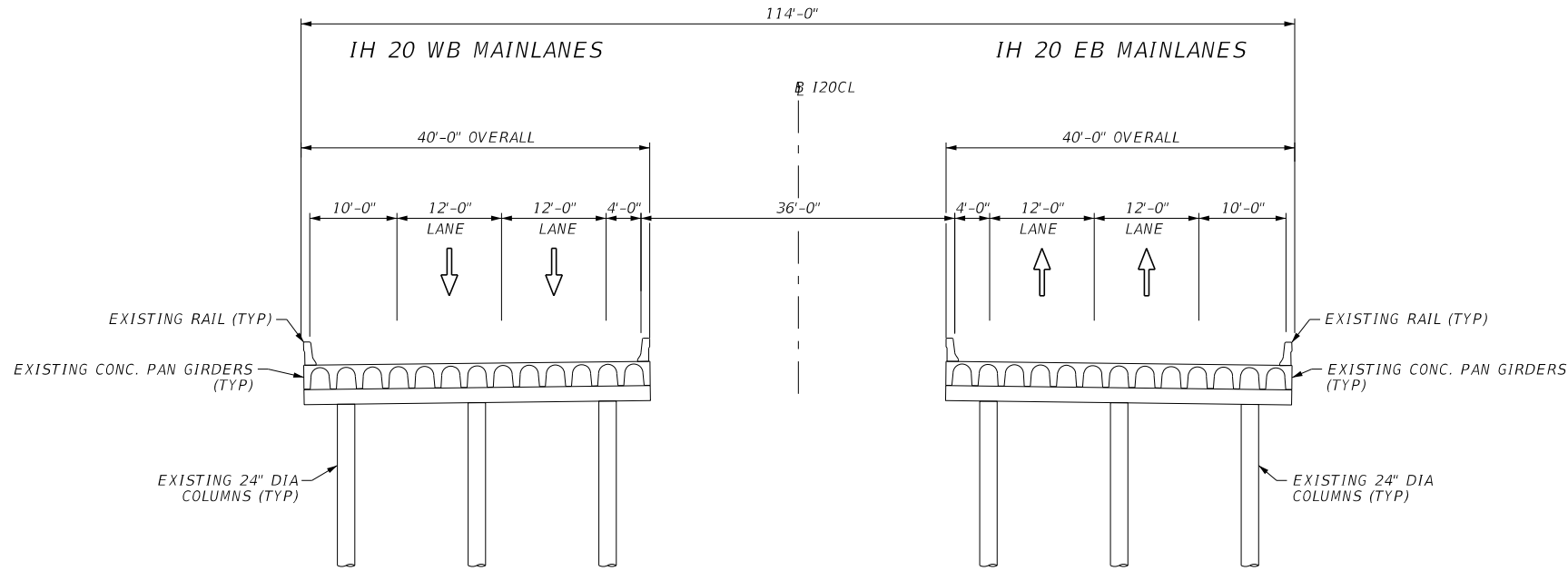
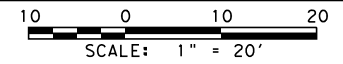


**ELEVATION**

7/18/2023 8:19:48 PM

KH

c:\bms\br\idgfarmer-pw\ke\vin.hernandez\dms17916\131-038401-BR-03-04-TS-01.dgn



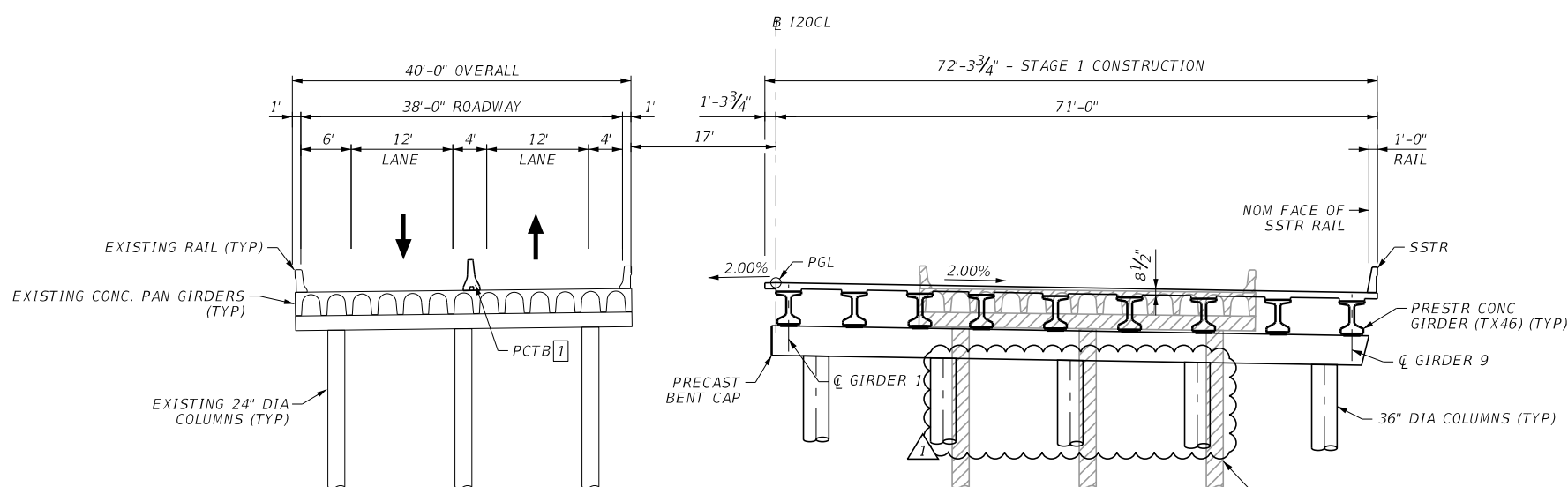
**EXISTING BRIDGE TYPICAL SECTION**

STA 2130+72.81 TO STA 2133+72.81

- NOTES:**
- DENOTES AREA OF EXISTING BRIDGE TO BE REMOVED DURING THIS PHASE.
  - 1 SSCB TO USE X-JOINT INSTALLATION. SEE TXDOT STANDARD SSCB(2)-10 TYPE X JOINT INSTALLATION DETAIL

**ADDENDUM #1, 7/19/2023, REPLACE SHEET**

**K.H.**



**STAGE 1 TYPICAL SECTION**

(TCP PHASE 1 STEP 1)



1	07/18/23	ADDENDUM 01	ADDED 1 COLUMN AT INT BENTS	KH
NO.	DATE	DESCRIPTION		APPROV.

**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264



**IH-20  
SOUTH FORK PALO PINTO  
BRIDGE  
TYPICAL SECTION**

SHEET 1 OF 2

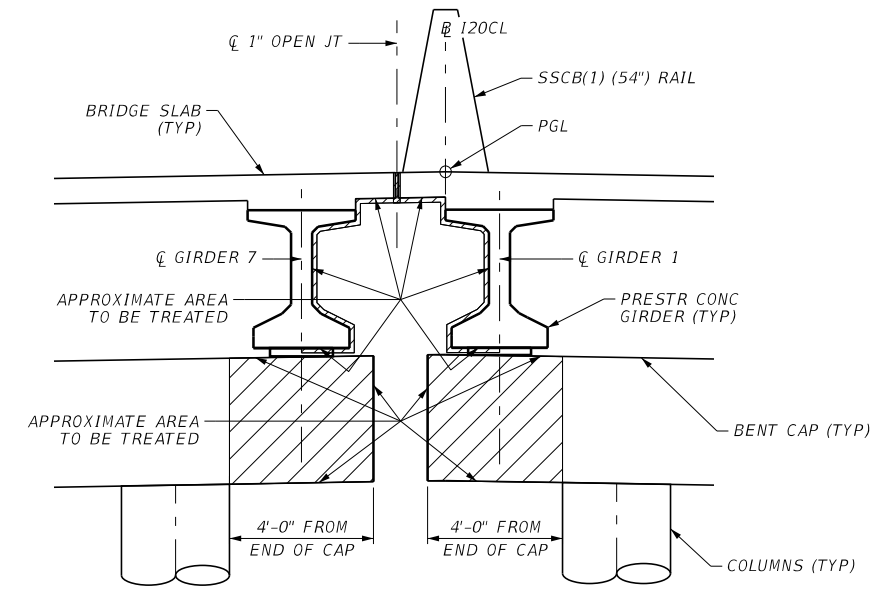
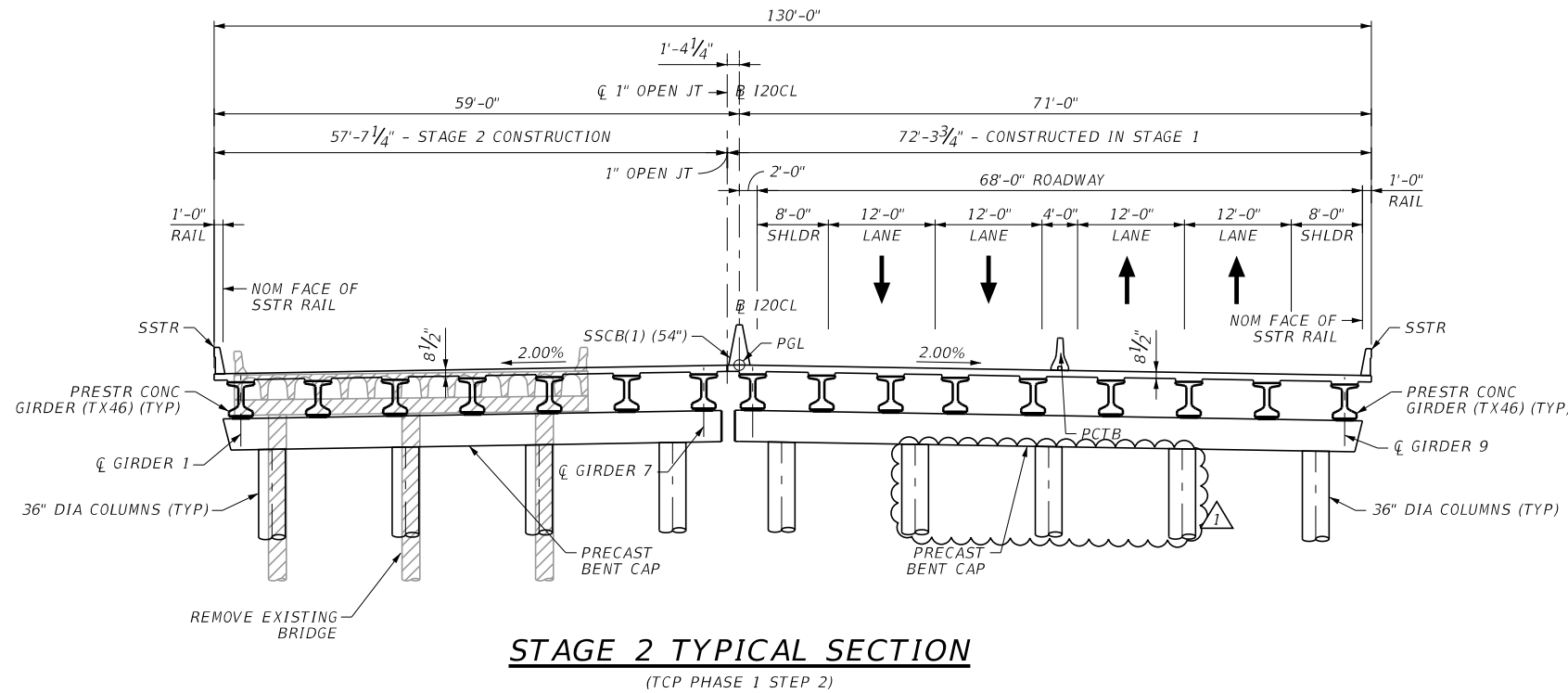
DESIGN DT	FED. RD. DIV. NO. 23	FEDERAL AID PROJECT NO. SEE TITLE SHEET		HIGHWAY NO. IH-20
GRAPHICS AH	STATE TEXAS	DISTRICT BWD	COUNTY EASTLAND	SHEET NO. 151
CHECK JL	CONTROL 0314	SECTION 05	JOB 046, ETC	

7/18/2023 8:21:43 PM

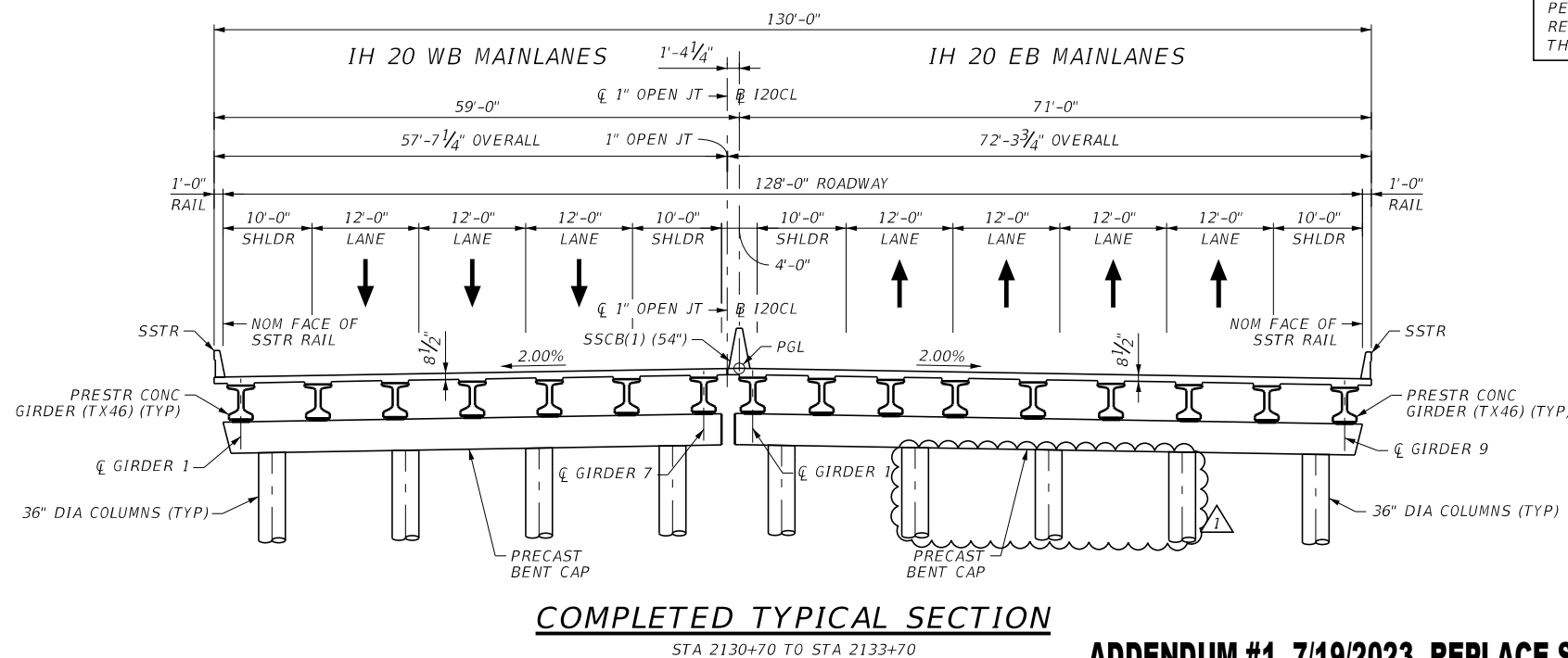
KH

c:\bms\br\dgefarmer-pw\ke\vin.hernandez\dms17916\132-038401-BR-03-04-TS-02.dgn

10 0 10 20  
SCALE: 1" = 20'



- NOTES:**
- Denotes area of existing bridge to be removed during the phase.
  - SSCB to use X-JOINT INSTALLATION. SEE TXDOT STANDARD SSCB(2)-10 TYPE X JOINT INSTALLATION DETAIL.
- PER STD PPBC-RC, THE ALTERNATE METHOD SHOWN IS REQUIRED TO BE USED FOR THE CONSTRUCTION OF THESE BRIDGES. PRECAST BENT CAPS ARE REQUIRED.



ADDENDUM #1, 7/19/2023, REPLACE SHEET

K.H.



NO.	DATE	DESCRIPTION	APPROV.
1	07/18/23	ADDENDUM 01 ADDED 1 COLUMN AT INT BENTS	KH

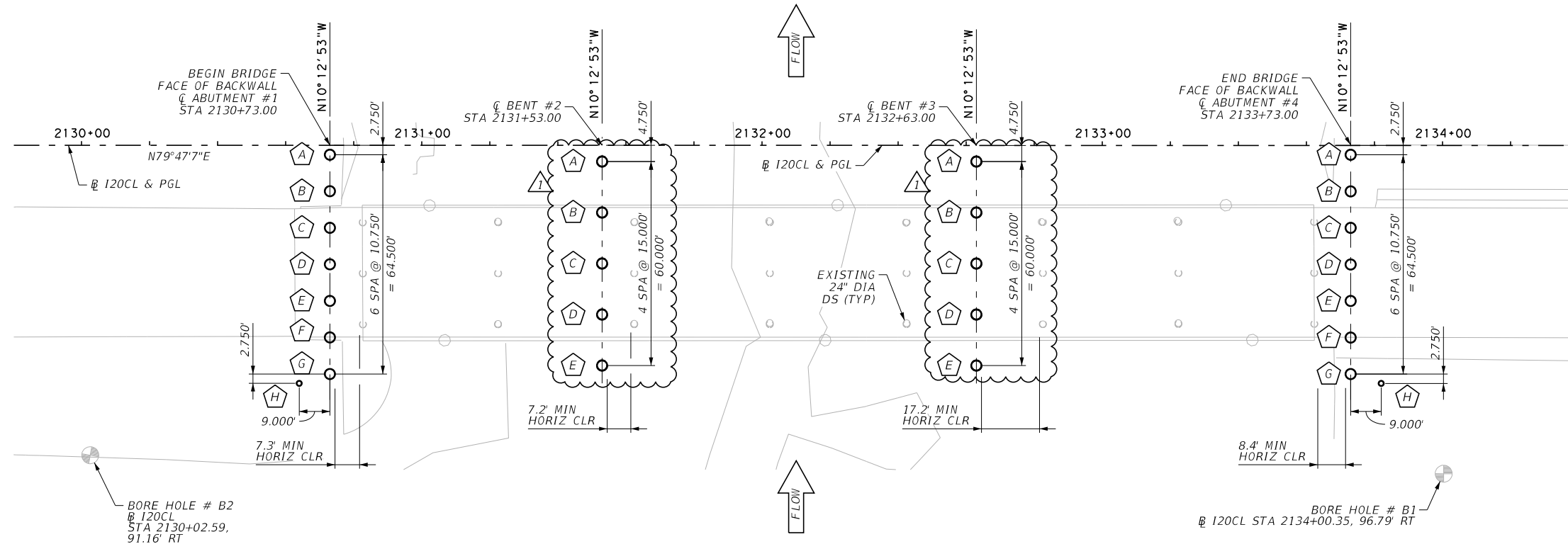
**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264

Texas Department of Transportation ©2023

**IH-20  
SOUTH FORK PALO PINTO  
BRIDGE  
TYPICAL SECTION**

SHEET 2 OF 2

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
DT	23	SEE TITLE SHEET	IH-20
GRAPHICS	STATE	DISTRICT	COUNTY
AH	TEXAS	BWD	EASTLAND
CHECK	CONTROL	SECTION	JOB
JL	0314	05	046, ETC
CHECK			
KH			



**FOUNDATION LAYOUT**

**NOTES:**

1. FOR SOIL BORING INFORMATION SEE "BORING LOG" SHEETS.
2. DRILLED SHAFTS HAVE BEEN DESIGNED FOR BOTH END BEARING AND SKIN FRICTION. ALL DRILLED SHAFTS SHALL BE FOUNDED AT THE TIP ELEVATIONS SHOWN OR DEEPER AS NECESSARY TO OBTAIN THE MINIMUM PENETRATIONS INTO BEARING STRATUM AS SHOWN IN THE DRILLED SHAFT ELEVATIONS TABLE.
3. DEVELOPER SHALL COORDINATE WITH UTILITY PLANS REGARDING THE EXISTING AND PROPOSED UTILITY LOCATIONS.

⊗ DENOTES 36" DIA DS

DRILLED SHAFT ELEVATION (FEET U.N.O.)									
LOCATION	DS	DIA	TOP EL	PLAN TIP EL	ACTUAL TIP EL	PLAN LENGTH	ACTUAL LENGTH	MIN REQ DEPTH INTO	BEARING STRATUM/FORMATION
ABUT 1	A	36"	988.619	937.0		51.6		6	SHALE, VERY HARD, MOIST, DARK GRAY
	B	36"	988.404	937.0		51.4		6	SHALE, VERY HARD, MOIST, DARK GRAY
	C	36"	988.189	937.0		51.2		6	SHALE, VERY HARD, MOIST, DARK GRAY
	D	36"	987.974	937.0		51.0		6	SHALE, VERY HARD, MOIST, DARK GRAY
	E	36"	987.759	937.0		50.8		6	SHALE, VERY HARD, MOIST, DARK GRAY
	F	36"	987.544	937.0		50.5		6	SHALE, VERY HARD, MOIST, DARK GRAY
	G	36"	987.329	937.0		50.3		6	SHALE, VERY HARD, MOIST, DARK GRAY
	H	18"	987.254	947.3		40.0		3	SHALE, VERY HARD, MOIST, DARK GRAY
BENT 2	A	36"	977.306	934.0		43.3		6	SHALE, VERY HARD, MOIST, DARK GRAY
	B	36"	976.610	934.0		42.6		6	SHALE, VERY HARD, MOIST, DARK GRAY
	C	36"	976.745	934.0		42.7		6	SHALE, VERY HARD, MOIST, DARK GRAY
	D	36"	976.879	934.0		42.9		6	SHALE, VERY HARD, MOIST, DARK GRAY
	E	36"	976.668	934.0		42.7		6	SHALE, VERY HARD, MOIST, DARK GRAY
BENT 3	A	36"	976.255	933.0		43.3		6	SHALE, VERY HARD, MOIST, DARK GRAY
	B	36"	977.386	933.0		44.4		6	SHALE, VERY HARD, MOIST, DARK GRAY
	C	36"	977.756	933.0		44.8		6	SHALE, VERY HARD, MOIST, DARK GRAY
	D	36"	977.158	933.0		44.2		6	SHALE, VERY HARD, MOIST, DARK GRAY
ABUT 4	E	36"	977.773	933.0		44.8		6	SHALE, VERY HARD, MOIST, DARK GRAY
	A	36"	988.508	938.0		50.5		6	SHALE, VERY HARD, MOIST, DARK GRAY
	B	36"	988.292	938.0		50.3		6	SHALE, VERY HARD, MOIST, DARK GRAY
	C	36"	988.078	938.0		50.1		6	SHALE, VERY HARD, MOIST, DARK GRAY
	D	36"	987.862	938.0		49.9		6	SHALE, VERY HARD, MOIST, DARK GRAY
	E	36"	987.648	938.0		49.6		6	SHALE, VERY HARD, MOIST, DARK GRAY
	F	36"	987.432	938.0		49.4		6	SHALE, VERY HARD, MOIST, DARK GRAY
	G	36"	987.218	938.0		49.2		6	SHALE, VERY HARD, MOIST, DARK GRAY
H	18"	987.156	947.2		40.0		3	SHALE, VERY HARD, MOIST, DARK GRAY	

**ADDENDUM #1, 7/19/2023, REPLACE SHEET**

**K.H.**



**HL 93 LOADING**

1	07/18/23	ADDENDUM 01	ADDED 1 COLUMN AT INT BENTS	KH
---	----------	-------------	-----------------------------	----

**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264



**IH-20**  
**EB MAINLANES IH 20 OVER SOUTH FORK PALO PINTO CREEK BRIDGE FOUNDATION LAYOUT**

SHEET 1 OF 2

DESIGN DT	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS AH	23	SEE TITLE SHEET		IH-20
CHECK JL	TEXAS	BWD	EASTLAND	SHEET NO.
CHECK KH	0314	05	046, ETC	153

7/18/2023 7:44:27 PM  
 KH  
 c:\bms\br\dgefarmer-pw\ke\vin.hernandez\dms17915\133-038401-BR-04-FND-01.dgn

SUMMARY OF BRIDGE QUANTITIES - EB IH 20 - STAGE 1

ITEM CODE	400 6005	416 6001	416 6004	420 6014	420 6030	420 6038	422 6002	422 6016	425 6038	432 6035	450 6024	454 6018	514 6009
BID ITEM DESCRIPTION	CEM STABIL BKFL	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC) *	CL C CONC (CAP)(HPC) *	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	APPROACH SLAB (HPC)	PRESTR CONC GIRDER (TX46)	RIPRAP (STONE PROTECTION) (24 IN)	RAIL (TY SSTR)(HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CONC TRF BARR (SGL SLOPE) (TY 1) (54)
BRIDGE NO. - BRIDGE NAME	CY	LF	LF	CY	CY	CY	SF	CY	LF	CY	LF	LF	LF
EB IH20 OVER SOUTH FORK PALO PINTO CREE	267.4	80	1142	77.8	74.6	26.2	21,694	136.6	2686.50	3090.0	324.00	144.6	340.00
SUBTOTAL	267.4	80	1,142	77.8	74.6	26.2	21,694	136.6	2,686.50	3,090.0	324.00	144.6	340.00

\* SHEAR KEY QUANTITIES HAVE BEEN INCLUDED IN AND ARE SUBSIDIARY TO ABUTMENT CONCRETE AND CAP CONCRETE QUANTITIES FOR PAYMENT.

BEARING SEAT ELEVATIONS

		GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9
ABUT 1 (FWD)	991.269	991.114	990.959	990.814	990.639	990.464	990.289	990.114	989.939	
BENT 2 (BK)	991.269	991.114	990.959	990.814	990.639	990.464	990.289	990.114	989.939	
(FWD)	991.154	990.999	990.844	990.699	990.524	990.349	990.174	989.999	989.824	
BENT 3 (BK)	991.154	990.999	990.844	990.699	990.524	990.349	990.174	989.999	989.824	
(FWD)	991.154	990.999	990.844	990.699	990.524	990.349	990.174	989.999	989.824	
ABUT 4 (BK)	991.156	991.001	990.846	990.701	990.526	990.351	990.176	990.001	989.826	



1	07/18/23	ADDENDUM 01	ADDED 1 COLUMN AT INT BENTS	KH
NO.	DATE	DESCRIPTION		APPROV.

**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264



IH-20  
**EB MAINLANES IH 20 OVER SOUTH FORK PALO PINTO CREEK BRIDGE QTY & BRNG SEAT ELEVS**  
SHEET 3 OF 4

DESIGN DT	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS AH	23	SEE TITLE SHEET		IH-20
CHECK JL	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK KH	TEXAS	BWD	EASTLAND	157
	CONTROL	SECTION	JOB	
	0314	05	046, ETC	

**ADDENDUM #1, 7/19/2023, REPLACE SHEET** **K.H.**  
**1**



SUMMARY OF BRIDGE QUANTITIES - WB IH 20 - STAGE 2

ITEM CODE	400 6005	416 6001	416 6004	420 6014	420 6030	420 6038	422 6002	422 6016	425 6038	429 6005	432 6035	450 6024	454 6018	514 6009
BID ITEM DESCRIPTION	CEM STABIL BKFL	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC) *	CL C CONC (CAP)(HPC) *	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	APPROACH SLAB (HPC)	PRESTR CONC GIRDER (TX46)	CONC STR REPAIR(DECK REP (FULL DEPTH)) **	RIPRAP (STONE PROTECTION) (24 IN)	RAIL (TY SSTR)(HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CONC TRF BARR (SGL SLOPE) (TY 1) (54)
BRIDGE NO. - BRIDGE NAME	CY	LF	LF	CY	CY	CY	SF	CY	LF	SF	CY	LF	LF	LF
WB IH20 OVER SOUTH FORK PALO PINTO CREE	212.3	80	954	63.7	59.4	21.0	17,281	108.4	2089.50	2,400	3634.0	324.00	115.2	0.00
<b>SUBTOTAL</b>	212.3	80	954	63.7	59.4	21.0	17,281	108.4	2,089.50	2,400	3,634.0	324.00	115.2	0.00
<b>PROJECT TOTAL</b>	479.7	160	2,096	141.5	134.0	47.2	38,975	245.0	4,776.00	2,400	6,724.0	648.00	259.8	340.00

\* SHEAR KEY QUANTITIES HAVE BEEN INCLUDED IN AND ARE SUBSIDIARY TO ABUTMENT CONCRETE AND CAP CONCRETE QUANTITIES FOR PAYMENT.

\*\* NOTE: CONCRETE STRUCTURE DECK REPAIR (FULL DEPTH) SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 429 WITH UP TO 2200 SF. SEE CONCRETE SLAB AND GIRDER SPANS REPAIR DETAILS FOR REFERENCE. LOCATIONS TO BE FIELD VERIFIED BY THE CONTRACTOR. LOCATIONS OF REPAIR MUST BE APPROVED BY THE ENGINEER PRIOR TO BEGINNING WORK. LOCATIONS MAY BE ADJUSTED BY THE ENGINEER.

BEARING SEAT ELEVATIONS

		GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7
ABUT 1 (FWD)	990.179	990.352	990.525	990.699	990.872	991.045	991.219	
BENT 2 (BK)	990.179	990.352	990.525	990.699	990.872	991.045	991.219	
(FWD)	990.085	990.258	990.432	990.605	990.778	990.952	991.125	
BENT 3 (BK)	990.085	990.258	990.432	990.605	990.778	990.952	991.125	
(FWD)	990.075	990.248	990.421	990.595	990.768	990.941	991.114	
ABUT 4 (BK)	990.077	990.250	990.424	990.597	990.770	990.943	991.117	



1	07/18/23	ADDENDUM 01	ADDED 1 COLUMN AT INT BENTS	KH
---	----------	-------------	-----------------------------	----

BRIDGEFARMER & ASSOCIATES, INC.  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264



IH-20  
WB MAINLANES IH 20 OVER  
SOUTH FORK PALO PINTO CREEK  
BRIDGE QTY & BRNG SEAT ELEVS

SHEET 4 OF 4

DESIGN DT	FED. RD. DIV. NO. 23	FEDERAL AID PROJECT NO. SEE TITLE SHEET		HIGHWAY NO. IH-20
GRAPHICS AH	STATE TEXAS	DISTRICT BWD	COUNTY EASTLAND	SHEET NO. 158
CHECK JL	CONTROL 0314	SECTION 05	JOB 046, ETC	

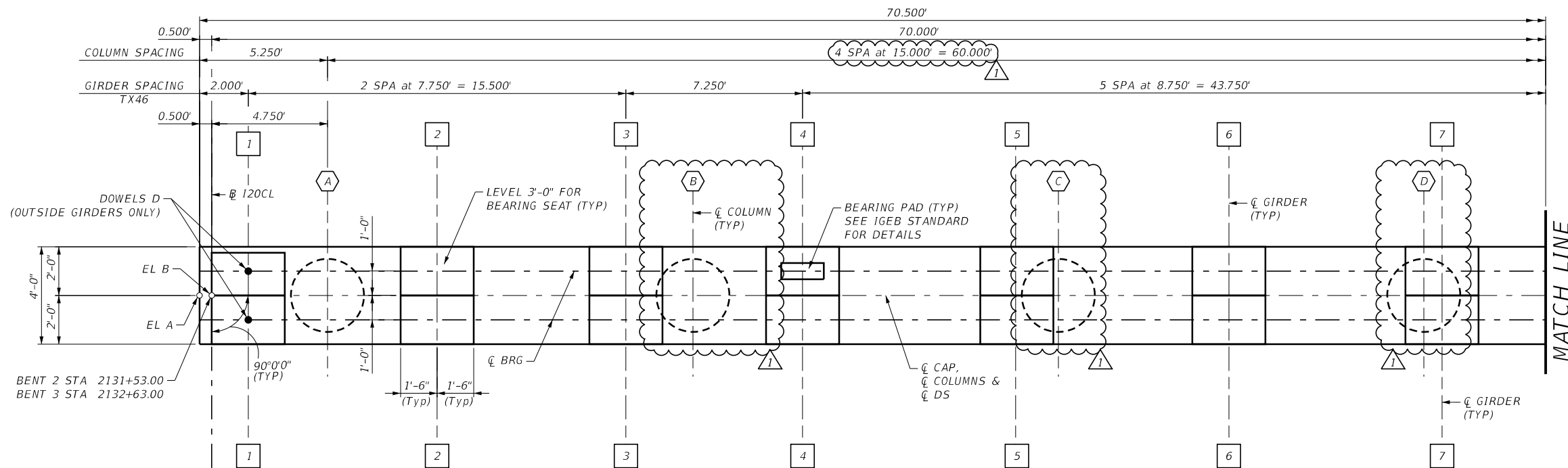
ADDENDUM #1, 7/19/2023, REPLACE SHEET

K.H.



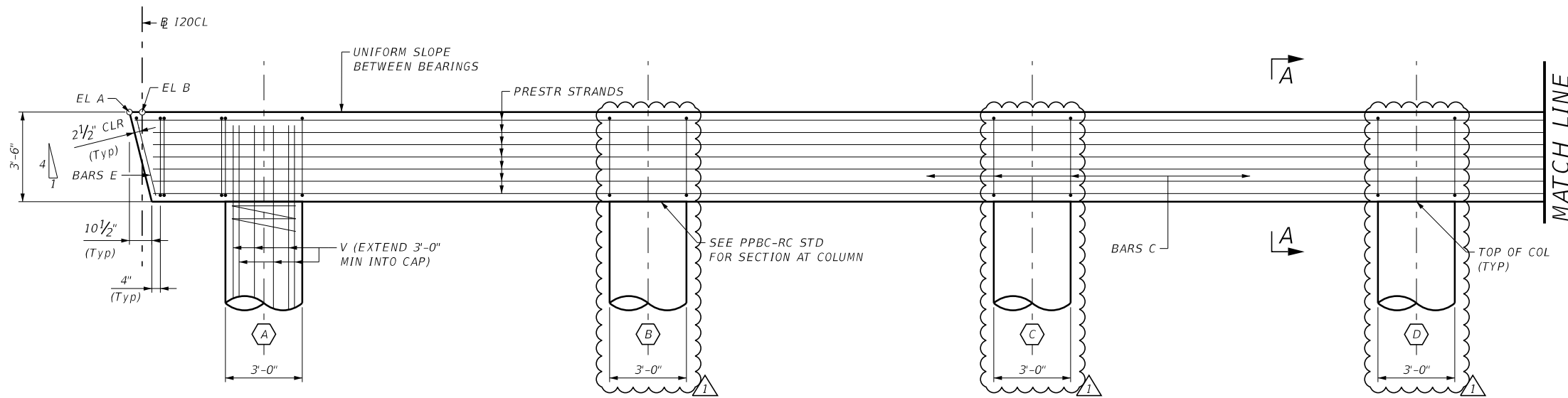
7/18/2023 7:48:09 PM  
KH

c:\bms\br\idgfarmer-pw\kvh\in.hernandez\dms17918\145-038401-BR-04-BT-02-03-1.dgn





**PLAN**

SCALE: 3/16" = 1'-0"



**ELEVATION**

SCALE: 3/16" = 1'-0"

-  DENOTES  $\varnothing$  36" DIA COL
-  DENOTES  $\varnothing$  GIRDER



NO.	DATE	DESCRIPTION	APPROV.
1	07/18/23	ADDENDUM 01 ADDED 1 COLUMN AT INT BENTS	KH

**BRIDGEFARMER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
TBPE REGISTRATION NO. 264



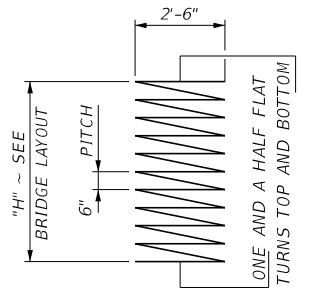
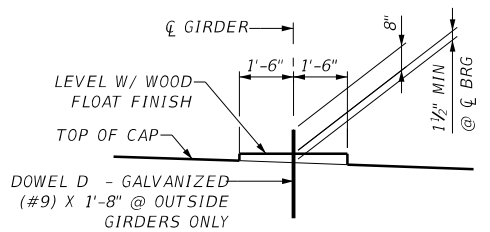
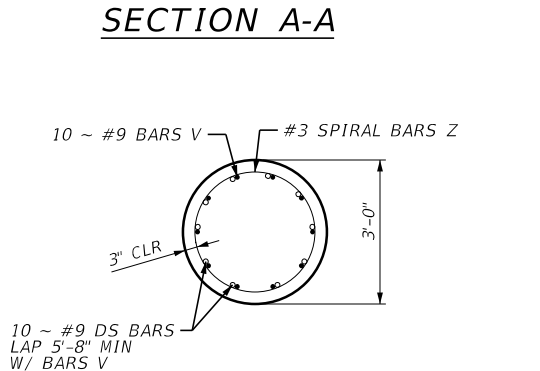
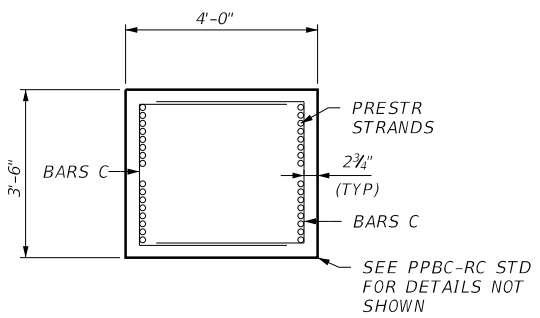
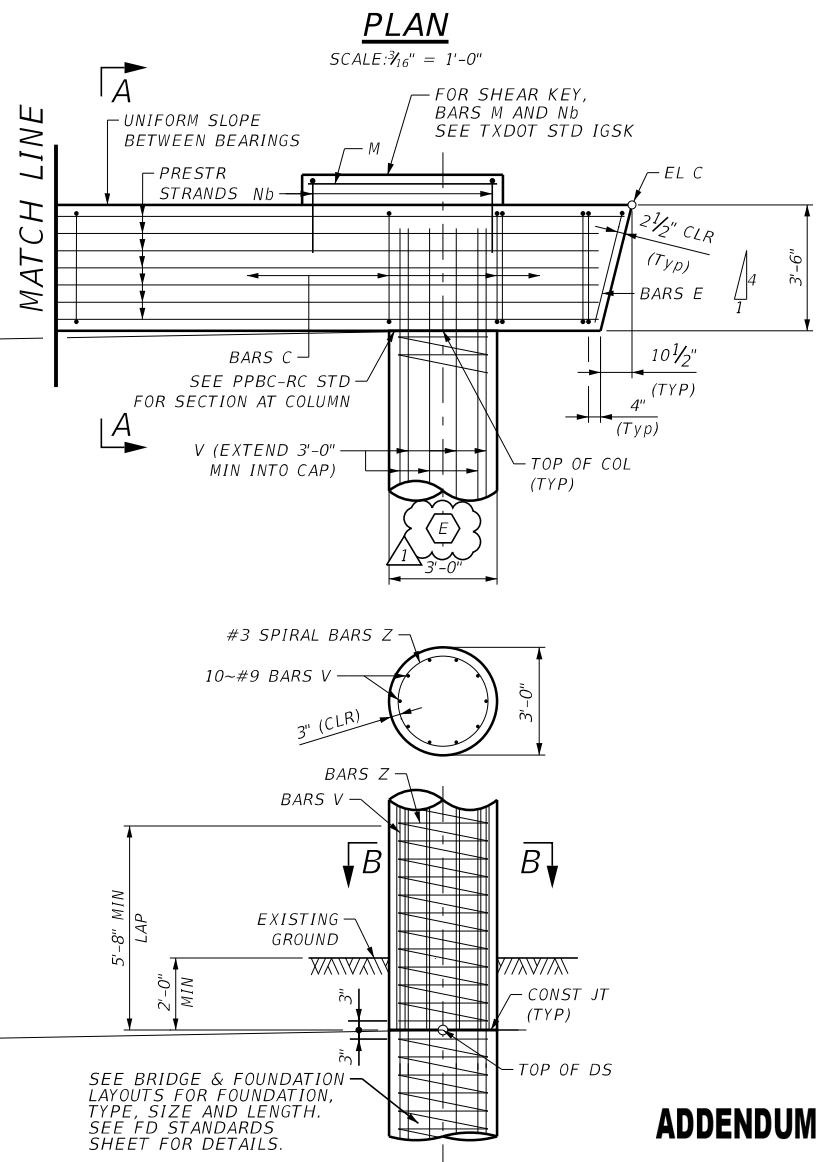
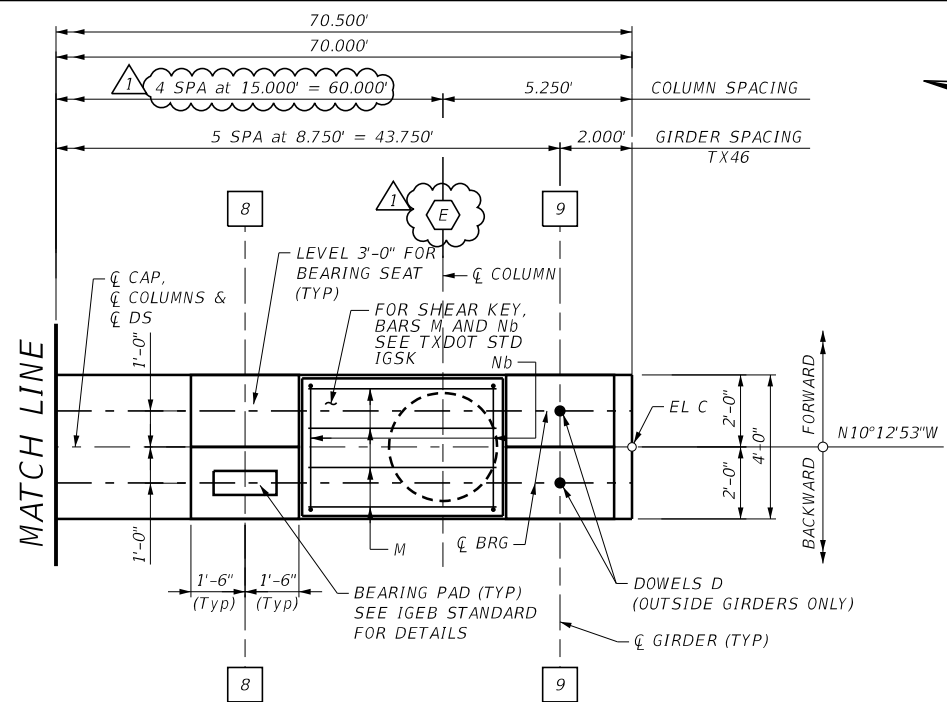
IH-20  
**EB MAINLANES IH 20 OVER  
SOUTH FORK PALO PINTO CREEK BRIDGE  
BENTS 2 & 3 DETAILS**

SHEET 1 OF 2

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
DT	23	SEE TITLE SHEET		IH-20
GRAPHICS	AH	STATE	DISTRICT	COUNTY
CHECK	JL	TEXAS	BWD	EASTLAND
CHECK	KH	CONTROL	SECTION	JOB
		0314	05	046, ETC

**ADDENDUM #1, 7/19/2023, REPLACE SHEET** **K.H.**

1



"H"	10 BARS V-#9	BAR Z-#4 SPIRAL	REINF. STEEL	CLASS C CONC.		
FT	LENGTH	WEIGHT	LENGTH	WEIGHT		
9	11'-9"	400	285'	190	2,950	11.8
10	12'-9"	434	316'	211	3,225	13.1
11	13'-9"	468	347'	232	3,500	14.4
12	14'-9"	502	378'	253	3,775	15.7
13	15'-9"	536	409'	273	4,045	17.0
14	16'-9"	570	440'	294	4,320	18.3

ADJUST SPIRAL Z LENGTH BY 15.5' AND BARS V LENGTH BY 0.5' FOR EACH 0.5' VARIATION IN "H" VALUE.  
 ADJUST ESTIMATED QUANTITY OF CONCRETE FOR EACH COLUMN BY 0.131 CY FOR EACH 0.5' VARIATION IN "H" VALUE.  
 ADJUST ESTIMATED QUANTITY OF REINFORCING STEEL FOR EACH COLUMN BY 27.4 LB FOR EACH 0.5' VARIATION IN "H" VALUE.

	TOP OF CAP			TOP OF COLUMN				
	EL A	EL B	EL C	COL A	COL B	COL C	COL D	COL E
BENT 2	991.05	991.06	989.66	987.46	987.16	986.86	986.56	986.26
BENT 3	991.05	991.06	989.66	987.46	987.16	986.86	986.56	986.26

ITEM	UNIT	BENT 02	BENT 03
DRILL SHAFT (36")	LF	215	220
CL C CONC(COLUMN)(HPC)	CY	13.1	13.1
CL H CONC(CAP)(HPC)	CY	37.3	37.3
REINF STEEL	LB	3,225	3,225

NOTES:

- SEE "BRIDGE LAYOUT SHEET" FOR "H" VALUES AND FOR FOUNDATION TYPE, SIZE AND LENGTH.
- SEE COMMON FOUNDATION DETAILS (FD) STANDARD SHEET FOR ALL FOUNDATION DETAILS AND NOTES.
- INCLUDE THE REINFORCING EXTENDING FROM THE SHAFT INTO THE COLUMN IN THE PRICE BID PER FOOT OF DRILL SHAFT.
- FOR FRAMING DETAILS NOT SHOWN, SEE "FRAMING PLAN".
- FINISH BEARING SEATS WITH A WOOD FLOAT.
- CALCULATED DRILLED SHAFT FOUNDATION LOADS: 340 TONS/DS (BENT 2) 380 TONS/DS (BENT 3)

MATERIAL NOTES:

FOR CAP CONCRETE, PROVIDE CLASS "H" (HPC) CONCRETE (f'c = 5,000 PSI)  
 FOR COLUMN CONCRETE, PROVIDE CLASS C (HPC) CONCRETE (f'c = 3,600 PSI)  
 PROVIDE GRADE 60 REINFORCING STEEL  
 GALVANIZE DOWEL BARS D

- (X) DENOTES  $\phi$  36" DIA COL
- (X) DENOTES  $\phi$  GIRDER



NO.	DATE	DESCRIPTION	APPROV.
1	07/18/23	ADDENDUM 01 ADDED 1 COLUMN AT INT BENTS	KH

**BRIDGEFARMER & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 TBPE REGISTRATION NO. 264

Texas Department of Transportation ©2023

**IH-20**  
**EB MAINLANES IH 20 OVER**  
**SOUTH FORK PALO PINTO CREEK BRIDGE**  
**BENTS 2 & 3 DETAILS**

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
DT	23	SEE TITLE SHEET	IH-20
CHECK	STATE	DISTRICT	COUNTY
AH	TEXAS	BWD	EASTLAND
CHECK	CONTROL	SECTION	JOB
JL	0314	05	046, ETC

**ADDENDUM #1, 7/19/2023, REPLACE SHEET**



**K.H.**