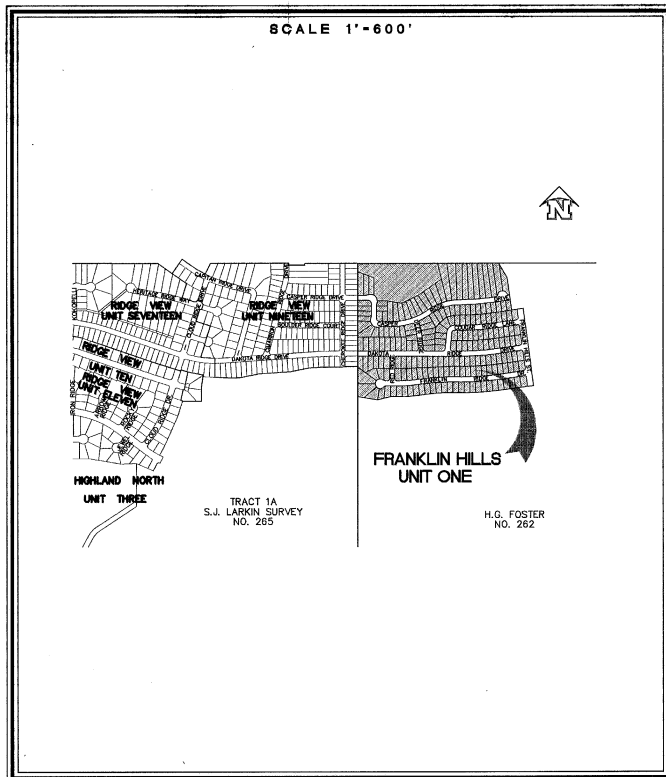


FRANKLIN HILLS UNIT ONE

SUBDIVISION IMPROVEMENT PLANS

LOCATION MAP



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OWNER / DEVELOPER
 COLONY PARTNERS JOINT VENTURE
 4487 N. MESA ST. SUITE 201
 EL PASO, TEXAS 79902
 (915) 533-7900 OFFICE
 (915) 533-7926 FAX

Proe Engineering, L.C.
 601 N. Cotton St. Suite No.8 El Paso, Tx, 79902
 (915) 533-1418 FAX: (915) 533-4972
 Email: roeeng@wbell.net
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING



600599

600599

PORTION OF S.J. LARKIN SURVEY No. 266

FRANKLIN HILLS UNIT ONE

BEING A PORTION OF H.G. FOSTER SURVEY No. 262, CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING IN ALL 2,218,482.501 SQUARE FEET OR 50.929 ACRES MORE OR LESS

STATE OF TEXAS
COUNTY OF EL PASO

COLONY PARTNERS L.P., A TEXAS LIMITED PARTNERSHIP, PROPERTY OWNER(S) OF THIS LAND, HEREBY PRESENT THIS MAP AND DEDICATE TO THE USE OF THE PUBLIC THE STREET RIGHT-OF-WAYS AND UTILITY EASEMENTS AS HEREON Laid DOWN AND DESIGNATED, INCLUDING EASEMENTS FOR OVERHANG OF SERVICE WIRES FOR POLE TIE UTILITIES, AND BURIED SERVICE WIRES, CONDUNTS AND PIPES FOR UNDERGROUND UTILITIES AND THE RIGHT TO INGRESS AND EGRESS FOR SERVICE AND CONSTRUCTION AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS.

BY EL PASO COLONY INC., A TEXAS CORPORATION

(S) RUSSELL HANSON
RUSSELL HANSON, PRESIDENT

ACKNOWLEDGEMENT

STATE OF TEXAS
COUNTY OF EL PASO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED RUSSELL HANSON, PRESIDENT OF EL PASO COLONY INC., AS PARTNER OF COLONY PARTNERS L.P., A TEXAS LIMITED PARTNERSHIP KNOWN BY IT TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL THIS 19th DAY OF SEPTEMBER, 2001 A.D.

(S) NELDA RODRIGUEZ
NELDA RODRIGUEZ, CLERK
MY COMMISSION EXPIRES 12/19/2004

CITY PLAN COMMISSION

THIS SUBDIVISION IS HEREBY APPROVED AS TO THE PLATING AND AS TO THE CONDITIONS OF THE DEDICATION IN ACCORDANCE WITH CHAPTER 212 OF THE LOCAL GOVERNMENT CODE OF TEXAS THIS 22nd DAY OF MARCH, 2001 A.D.

(S) RUDY VALDEZ (S) JOSEPH C. WEISSMILLER
RUDY VALDEZ, SECRETARY JOSEPH C. WEISSMILLER, CHAIRPERSON

APPROVED FOR FILING THIS 5th DAY OF OCTOBER, 2001 A.D.

(S) TERRY WILLIAMS
TERRY WILLIAMS, CLERK
DEPUTY DIRECTOR FOR BUILDING SERVICES

FILING

FILED AND RECORDED IN THE OFFICE OF THE COUNTY CLERK OF EL PASO COUNTY, TEXAS THIS 19th DAY OF OCTOBER, 2001 A.D. IN VOLUME 76 OF THE PLAT RECORDS, PAGE 78
FILE NO. 20010078698

(S) HECTOR HERNANDEZ JR. (S) ESTELA HERNANDEZ
HECTOR HERNANDEZ JR., COUNTY CLERK ESTELA HERNANDEZ, BY DEPUTY

I HEREBY CERTIFY THAT THIS PLAN REPRESENTS A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND IS IN COMPLIANCE WITH THE CURRENT TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, PROFESSIONAL AND TECHNICAL STANDARDS, REGISTERED PUBLIC LAND SURVEYOR NO. 2449

THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO FRANKLIN HILL UNIT ONE BY THE EL PASO WATER UTILITIES/PUBLIC SERVICE BOARD IN ACCORDANCE WITH THEIR RULES AND REGULATIONS AND WITH SECTION 16.543 OF THE TEXAS WATER CODE. WATER AND SEWER SERVICES WILL BE PROVIDED TO THE SUBDIVISION FROM EXISTING FACILITIES LOCATED ON DAKOTA RIDGE DRIVE AND NINTH STREET. THIS SUBDIVISION WITHIN TWO YEARS OF THE DATE OF RECORDING OF THIS PLAN.

PREPARED BY AND UNDER THE SUPERVISION OF BRADLEY ROE, REGISTERED PROFESSIONAL LAND SURVEYOR NO. 24498

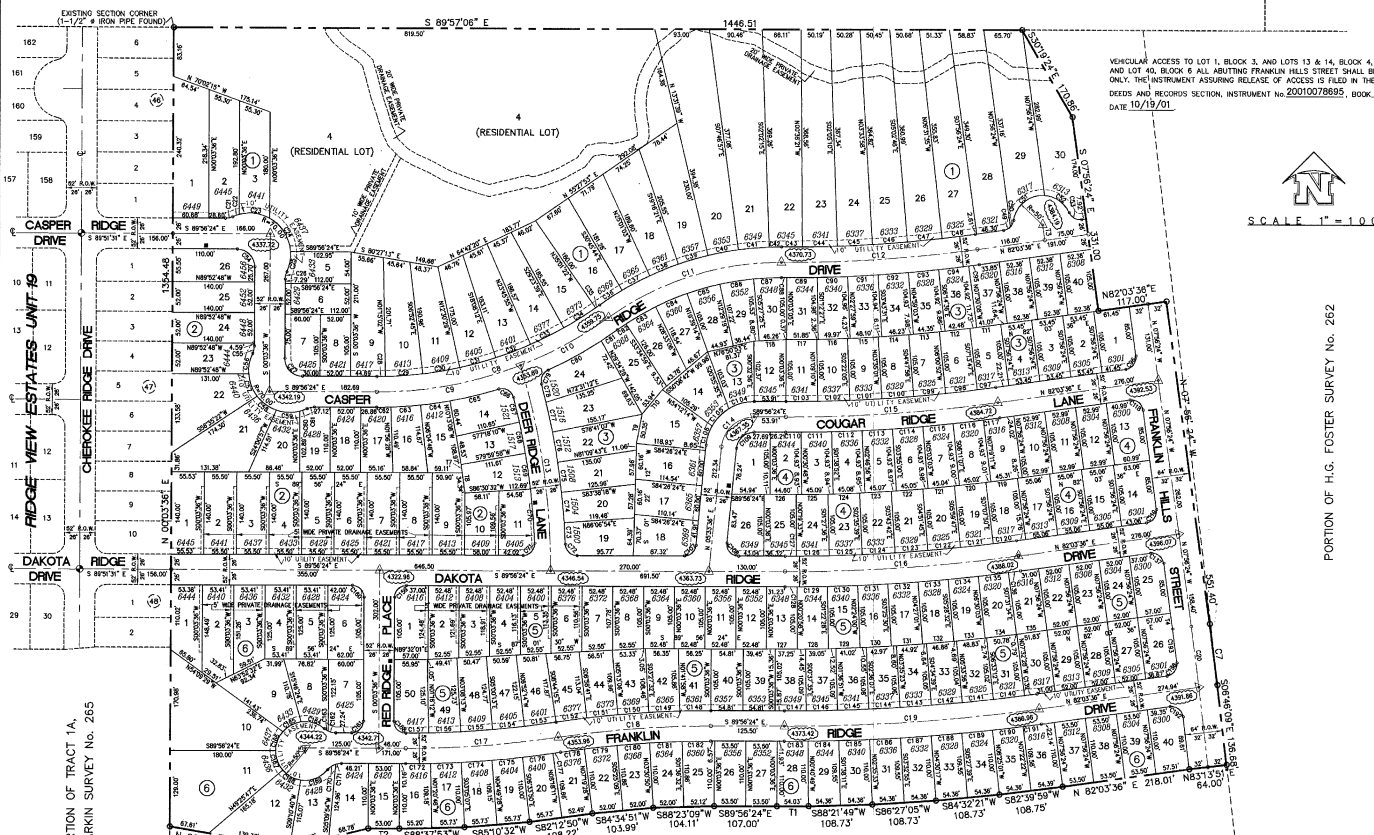
RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEEDS AND RECORDS SECTION, INSTRUMENT NO. 20010078698, BOOK _____, PAGE _____, DATE 10/19/01.

TAX CERTIFICATES FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEEDS AND RECORDS SECTION, INSTRUMENT NO. 20010078698, BOOK _____, PAGE _____, DATE 10/19/01.

Roe Engineering, L.C.
EL PASO, TEXAS

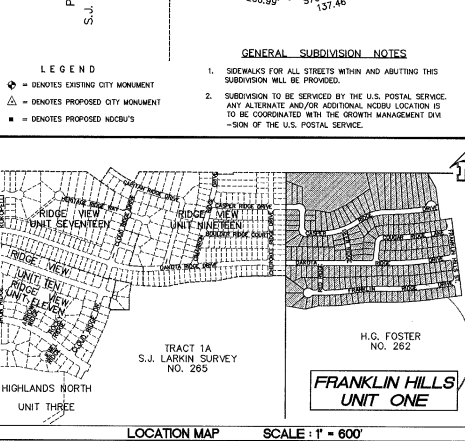
FILENAME: FHNPLT.DWG
WORK ORDER NO. 111000-44
DATE OF PREPARATION: APR. 30, 2001

600599



LINE TABLE

LINE NO.	SECTION	START	END	LENGTH
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PORTION OF H.G. FOSTER SURVEY No. 262

GENERAL SUBDIVISION NOTES

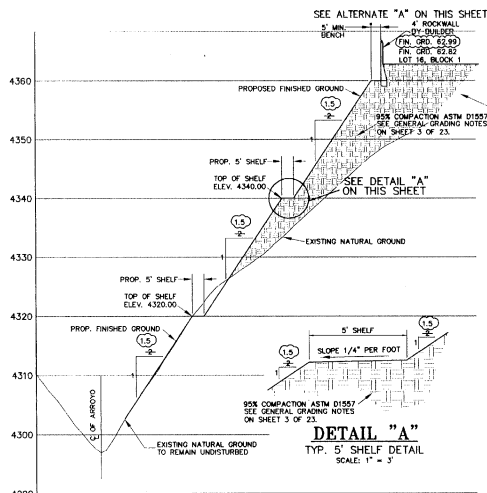
- SIDEWALKS FOR ALL STREETS WITHIN AND ADJACENT TO THIS SUBDIVISION WILL BE PROVIDED.
- SUBDIVISION TO BE SERVICED BY THE U.S. POSTAL SERVICE. ANY ALTERNATE AND/OR ADDITIONAL SERVICE LOCATION IS TO BE COORDINATED WITH THE GROWTH MANAGEMENT DIVISION OF THE U.S. POSTAL SERVICE.

LEGEND

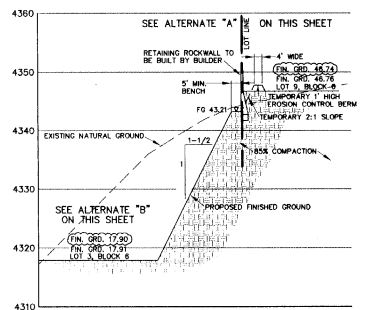
- ◻ DENOTES EXISTING CITY MONUMENT
- ◻ DENOTES PROPOSED CITY MONUMENT
- ◻ DENOTES PROPOSED NDCB/S

CURVE TABLE

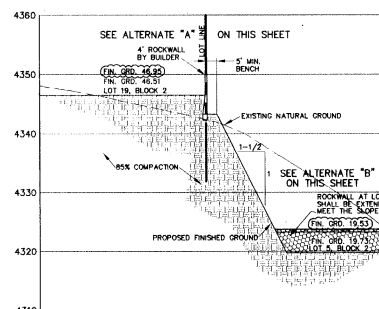
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C6	000	0.00	0.00	0.00	000°00'00"	0.00
C7	000	0.00	0.00	0.00	000°00'00"	0.00
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C9	000	0.00	0.00	0.00	000°00'00"	0.00
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C11	000	0.00	0.00	0.00	000°00'00"	0.00
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C17	000	0.00	0.00	0.00	000°00'00"	0.00
C18	000	0.00	0.00	0.00	000°00'00"	0.00
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C21	000	0.00	0.00	0.00	000°00'00"	0.00
C22	000	0.00	0.00	0.00	000°00'00"	0.00
C23	000	0.00	0.00	0.00	000°00'00"	0.00
C24	000	0.00	0.00	0.00	000°00'00"	0.00
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C65	000	0.00	0.00	0.00	000°00'00"	0.00
C66	000	0.00	0.00	0.00	000°00'00"	0.00
C67	000	0.00	0.00	0.00	000°00'00"	0.00
C68	000	0.00	0.00	0.00	000°00'00"	0.00
C69	000	0.00	0.00	0.00	000°00'00"	0.00
C70	000	0.00	0.00	0.00	000°00'00"	0.00
C71	000	0.00	0.00	0.00	000°00'00"	0.00
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C73	000	0.00	0.00	0.00	000°00'00"	0.



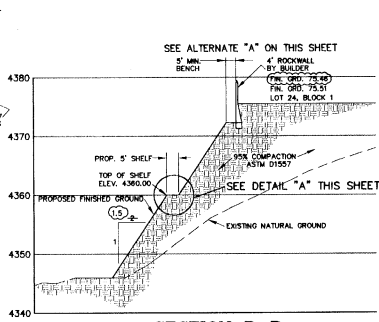
SECTION A-A
SCALE: HORIZONTAL 1" = 30'; VERTICAL 1" = 10'



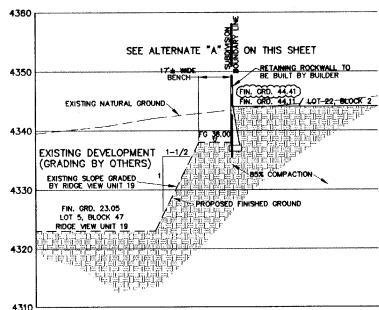
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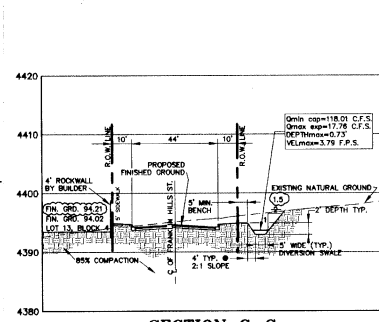
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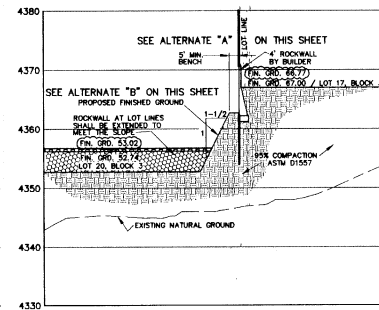
SECTION B-B
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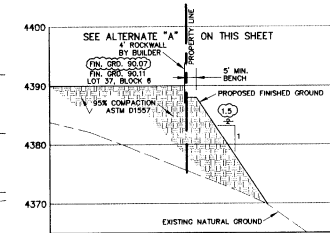
SECTION G-G
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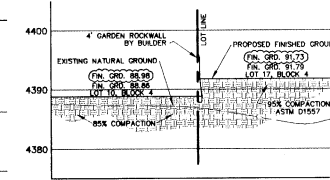
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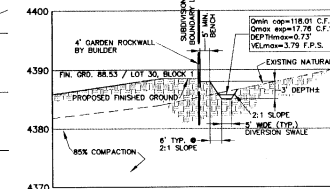
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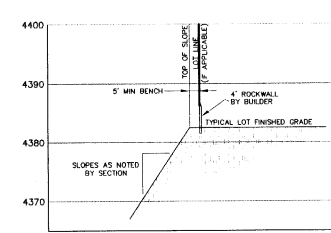
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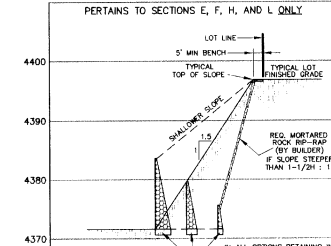
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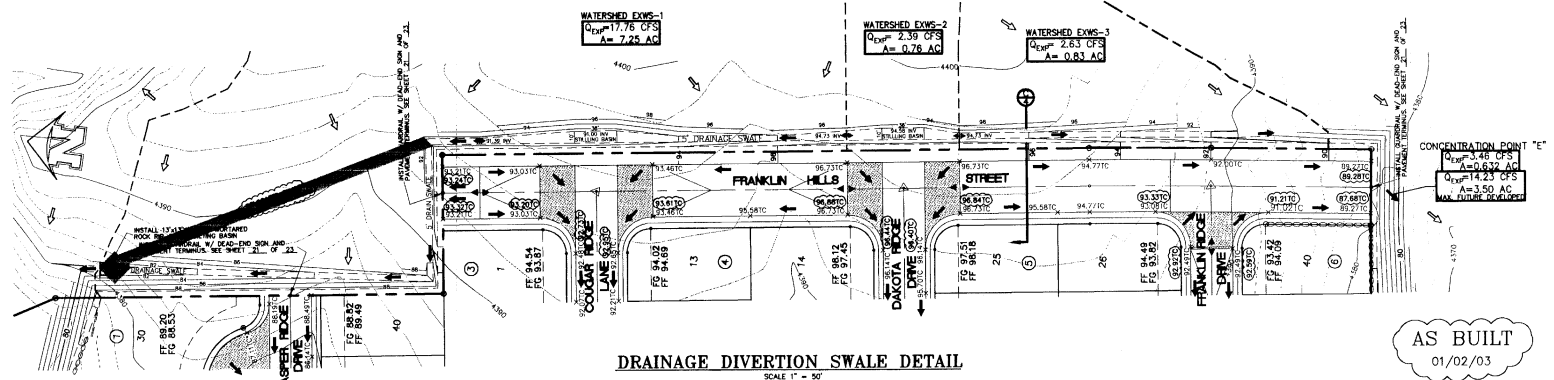
SECTION M-M
SCALE: HORIZONTAL 1" = 30'; VERTICAL 1" = 10'



ALTERNATE "A"
BUILDER'S HIGH LOT
SCALE: HORIZONTAL 1" = 30'; VERTICAL 1" = 10'



ALTERNATE "B"
BUILDER'S LOW LOT
SCALE: HORIZONTAL 1" = 30'; VERTICAL 1" = 10'



DRAINAGE DIVERSION SWALE DETAIL
SCALE: 1" = 30'

DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)	HOR: 1" = 30' VER: N/A W.O. 111000-4A FILE: FRANKHILLS.DWG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / C.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.	STATE OF TEXAS BRADLEY J. ROE 1186

CROSS SECTIONS
FRANKLIN HILLS UNIT ONE
GRADING CROSS-SECTION
DRAINAGE DIVERSION SWALE DETAIL

AS BUILT
01/02/03
brp Roe Engineering, L.C.
801 S. COLLIER ST., SUITE 100, FORT WORTH, TEXAS 76106
(817) 520-1418 FAX: (817) 520-4876
Email: brp@roeeng.com
ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
SHEET 4 OF 23

600599

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

- TEMPORARY SEEDING
- PERMANENT PLANTING, SOODING, OR SEEDING
- MULCHING
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERMETER DIKES
- DIVERSION, INTERCEPTOR, OR PERMETER SWALES
- DIVERSION DIKE AND SWALE COMBINATIONS
- PIPE SLOPE DRAINS
- CONCRETE FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT BASINS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM DRAINS
- VELOCITY CONTROL DEVICES
- VEGETATED SWALES & NATURAL DEPRESSIONS

OTHER: _____

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROL (e.g. SILT FENCE AND/OR EARTHEN BERM, AND STABILIZED CONSTRUCTION ENTRANCE).
2. PERFORM CLEARING AND GROUNDING.
3. EXCAVATION FOR UTILITIES.
4. COMPLETE LOT GRADING.
5. CONSTRUCTION OF SITE IMPROVEMENTS.
6. AFTER STABILIZATION OF JOB OF SITE IS COMPLETE, REMOVE TEMPORARY CONTROLS IN # 1 ABOVE, AND SUBMIT NOTICE OF TERMINATION FORM TO CITY ENGINEERING AND E.P.A.

BEST MANAGEMENT PRACTICES CONTROLS

I. WASTE MATERIALS

ALL WASTE MATERIALS, INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURELY LOCKED METAL DUMPSTER. NO CONSTRUCTION WASTE MATERIAL SHALL BE HEAVED ON SITE. THE TRASH DUMPSTER SHALL COMPLY WITH ORDINANCE 18-20.00 (ENCLOSURE & REMOVAL OF WASTE MATERIALS DURING CONSTRUCTION), THE DUMPSTER SHALL BE EMPLOYED AS NECESSARY OR AS REQUIRED BY ORDINANCE 18-6 (SOIL WASTE MANAGEMENT) AND THE TRASH SHALL BE HAULED TO A LICENSED LANDFILL.

II. HAZARDOUS WASTE:

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS PAINT, ADGES FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, DURING COMPOUNDS AND ADDITIVES, IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPARTMENT AND INRCC.

III. SANITARY WASTE:

ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY OR AS REQUIRED, CHAPTER 18-08 (BUILDING CODE), BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IV. SPILL PREVENTION:

THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OF OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

V. GOOD HOUSEKEEPING:

- A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
- B. NEARLY STORE MATERIALS ON-SITE IN AN ORDERLY MANNER
- C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
- D. DO NOT MIX SUBSTANCES WITH ONE ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER
- E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING OF THE CONTAINER
- F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

VI. HAZARDOUS PRODUCTS:

- PRACTICES USED TO REDUCE RISKS:
- A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
 - B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
 - C. DISPOSE SUPERFLUOUS PRODUCT IN ACCORDANCE WITH MANUFACTURER'S OR LOCAL & STATE RECOMMENDED METHODS

VII. PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

VIII. SPILL CONTROL PROCEDURES:

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES.
- B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE.
- C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN.
- E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

IX. MAINTENANCE AND INSPECTION PROCEDURES:

ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE A MONTH OR WITHIN 24-HOURS PRIOR TO ANTICIPATED STORM EVENT AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE. INSPECTION IN FINAL STABILIZED AREAS OR DURING AND PERIODS WILL BE CONDUCTED MONTHLY. BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY. A REPORT SUBMITTING THE SCOPE OF INSPECTION SHALL BE DONE & RETAINED ALONG WITH THE SDPAP.

X. REMARKS:

DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MANAGE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATERBODY OR STREAMBED. CONSTRUCTION STAGING AREAS AND MATERIAL MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEANED AS SOON AS PRACTICABLE OF TEMPORARY EMBARASSMENT (TEMPORARY BRIDGES, MATTING, FALSOWORK, PILING DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.

XI. OFFSITE VEHICLE TRACKING:

IN ADDITION TO THE STABILIZED CONSTRUCTION ENTRANCES, THE FOLLOWING MEASURES SHALL BE OBSERVED DURING CONSTRUCTION:

- HAUL ROADS SHALL BE DAMPENED FOR DUST CONTROL
 - LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPULIN
 - EXCESS DIRT ON ROAD SHALL BE REMOVED IMMEDIATELY
 - STABILIZED CONSTRUCTION ENTRANCE
- OTHER: _____

GENERAL CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT THAT AUTHORIZES STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNED: _____ COMPANY: _____
 NAME: _____ ADDRESS: _____
 TITLE: _____ TELEPHONE: _____
 DATE: _____

SUB - CONTRACTOR CERTIFICATION

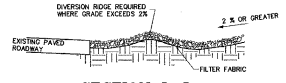
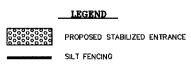
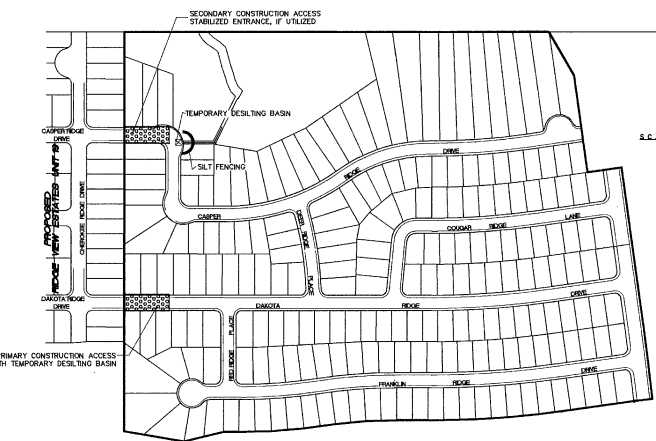
I CERTIFY UNDER PENALTY OF LAW THAT I WILL COORDINATE, EITHER THROUGH THE GENERAL CONTRACTOR, OWNER, OR DIRECTLY WITH THE CONTRACTOR(S) AND/OR SUBCONTRACTOR(S) IDENTIFIED IN THE POLLUTION PREVENTION PLAN HAVING RESPONSIBILITY FOR IMPLEMENTING STORM WATER CONTROL MEASURES TO MINIMIZE ANY IMPACT MY ACTIONS MAY HAVE ON THE EFFECTIVENESS OF THESE STORM WATER CONTROL MEASURES.

SIGNED: _____ COMPANY: _____
 NAME: _____ ADDRESS: _____
 TITLE: _____ TELEPHONE: _____
 DATE: _____

OWNER CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED, BASED ON MY KNOWLEDGE AND BELIEF, IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPROVEMENT FOR KNOWING VIOLATIONS.

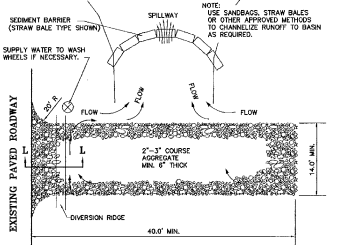
OWNER SIGNED: _____ DATE: _____
 OWNER NAME: _____ DATE: _____
 TITLE: _____ DATE: _____



- INSPECTION AND MAINTENANCE**
1. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED WEEKLY AND AFTER EACH SIGNIFICANT STORM (1" OR MORE). ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 2. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 6 INCHES MAXIMUM.
 3. THE REMOVED SEDIMENT SHALL VEGETATE OR OTHERWISE BE STABILIZED.

DUST AND PROSION PLAN

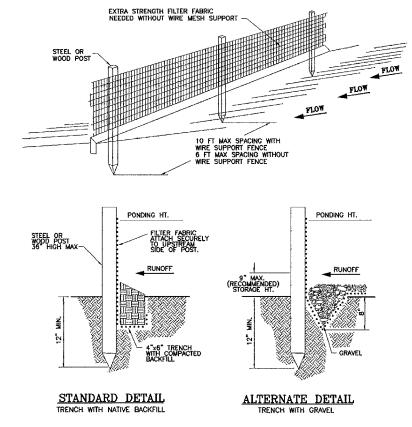
1. CONTRACTOR SHALL WATER DOWN THE GRADING AREA PERIODICALLY, SO AS TO LIMIT THE DISTRIBUTION OF DUST FROM THE WORK SITE IN COMPLIANCE WITH THE CITY APPROVED GRADING ORDINANCE.
2. CONTRACTOR SHALL INSTALL SILT FENCING IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS OUTLINED ON THIS SHEET.
3. CONTRACTOR SHALL TAKE ADDITIONAL MEASURES AS NEEDED TO CONTROL EROSION AND SEDIMENTATION WITHIN THE PROJECT AREA IN COMPLIANCE WITH THE CITY APPROVED GRADING ORDINANCE.



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

CONSTRUCTION SPECIFICATIONS

1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES. STORAGE HEIGHT SHALL NEVER EXCEED 18".
2. THE FENCE LINE SHALL FOLLOW THE CONTOUR AS CLOSELY AS POSSIBLE.
3. IF POSSIBLE, THE FILTER FABRIC SHALL BE CUT FROM AN OVERSIZED WHEEL TO AVOID THE USE OF CUTTING WHEELS. WHEN POINTS ARE REQUIRED, THE FABRIC SHALL BE SPACED ONLY AT A SUPPORT POSTS WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POSTS.
4. POSTS SHALL BE SPACED A MINIMUM OF 10 FEET APART AND OTHER SPACING SHALL NOT EXCEED 6 FEET.
5. TURN THE ENDS OF THE FENCE UPWIND.
6. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPFLOW FROM THE BARRIER.
7. WHEN STANDARD-STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPFLOW SIDE OF THE TRENCH USING HEAVY DUTY WIRE STAPLES AT LEAST 1 FOOT LONG. THE WIRES OR RODS MUST BE SECURELY FASTENED TO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
8. THE STANDARD-STRENGTH FILTER FABRIC SHALL BE STAPLED OR WROD TO THE FENCE, AND 6 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
9. WHEN EXTRA-STRENGTH FILTER FABRIC IS USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WROD DIRECTLY TO THE POSTS.
10. SILT FENCES PLACED AT THE TOE OF A SLOPE SHALL BE SET AT LEAST 5 FEET FROM THE TOE IN ORDER TO INCREASE FLOWING VOLUME.
11. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPFLOW AREA HAS BEEN PERMANENTLY STABILIZED, AND ANY SEDIMENT STORED BEHIND THE SILT FENCE HAS BEEN REMOVED.



SILT FENCE DETAIL

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C" (EXPLANATION AREA OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 480214 0017, DATED FEBRUARY 5, 1998 AND 480214 0022, DATED JANUARY 3, 1997.

DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL
			BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.29 (CITY DATUM)	AS NOTED N/A 111000-4A FRNCD:DMG JANUARY 12, 2001	

BRADLEY ROE, P.E. 31686

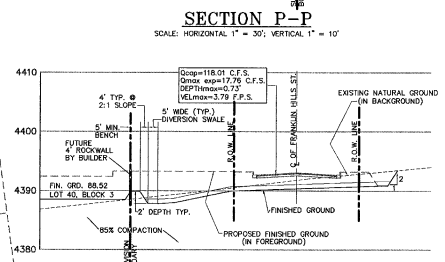
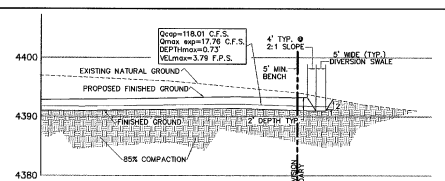
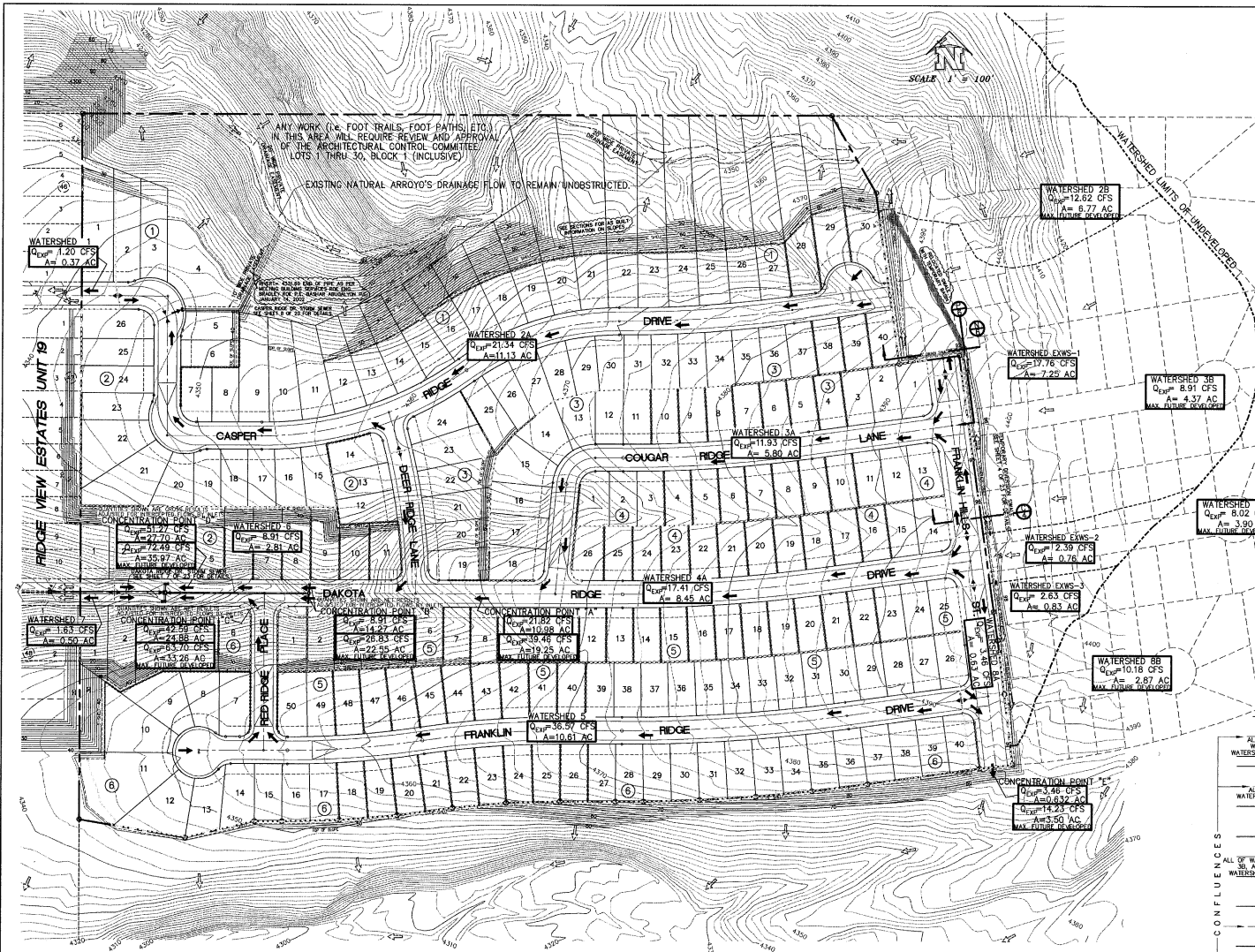
FRANKLIN HILLS UNIT ONE

DUST / EROSION CONTROL PLAN

Roe Engineering, L.C.
 8501 N. COOPER ST. SUITE 200 • DALLAS, TX 75246
 (972) 929-1418 • FAX: (972) 929-6972
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

SHEET **5** OF **23**

600599



NOTE: DRAINAGE QUANTITIES BASED ON 100 YEAR STORM FREQUENCY.
 1. PERTINENT DATA LISTED IN TABLE BELOW WAS OBTAINED FROM SHEETS 2-10, 2-12, 2-13 AND 2-14 OF THE CITY OF EL PASO SUBDIVISION DESIGN STANDARDS. REV. 3/11/97 AMENDED 12/15/98
 2. SOME REMAINING QUANTITIES OF RUNOFF AND AVERAGE WERE OBTAINED FROM MORNING-CARDENAS H.E.C. STUDY FOR "RIDGE VIEW / FRANKLIN HILLS". SEE RIDGE VIEW / FRANKLIN HILLS CLINAR.

DRAINAGE COMPUTATIONS

COMPUTATIONS BASED ON NATIONAL FORMULA $Q = C \cdot I \cdot A$ & RIDGE VIEW / FRANKLIN HILLS H.E.C. STUDY RESULTS

WATERSHED	(MINUTES)	COEFFICIENT	ACRES	INCHES/HOUR CLIF. PER SECOND	REMARKS	STREET CENTERLINE CAPACITY @ CONC. CONCENTRATION POINT
1	5.0*	0.50	0.373	6.45	1.20	DEVELOPED
2A	26.0	0.579**	11.134	3.31	21.34	DEVELOPED
2B	26.0	0.579**	6.771	3.32	12.62	MAX. FUTURE DEVELOPED
3A	23.0	0.579**	5.802	3.55	11.93	DEVELOPED
3B	23.0	0.579**	4.372	3.52	6.91	MAX. FUTURE DEVELOPED
EXWS-1	5.0*	0.49*	7.248	5.0	17.76	EXISTING WATERSHED
4A	23.0	0.579**	8.468	3.55	17.41	DEVELOPED
4B	23.0	0.579**	5.903	3.55	8.02	MAX. FUTURE DEVELOPED
EXWS-2	5.0*	0.49*	0.755	6.45	2.39	EXISTING WATERSHED
23	5.56*	10.977	3.55	21.82	DEVELOPED	104.94 C.F.S.
23	0.579**	18.252	3.54	39.45	MAX. FUTURE DEVELOPED	104.94 C.F.S.
23	0.560**	14.270	3.55	28.37 (DEVELOPED (GROSS) -48.39 INTERCEPTED BY INLETS -18.91 BYPASS (NET)	DEVELOPED	126.00 C.F.S.
23	0.580**	22.545	3.55	19.46 (DEVELOPED (GROSS) -19.46 INTERCEPTED BY INLETS -26.83 BYPASS (NET)	MAXIMUM FUTURE DEVELOPED	126.00 C.F.S.
5	5.5	0.58**	10.614	5.94	36.57	DEVELOPED
15.0	0.568**	24.884	4.39	62.09 (DEVELOPED (GROSS) -19.46 INTERCEPTED BY INLETS -42.59 (NET)	DEVELOPED	126.00 C.F.S.
15.0	0.570**	33.258	4.39	19.46 (DEVELOPED (GROSS) -19.46 INTERCEPTED BY INLETS -43.70 (NET)	MAXIMUM FUTURE DEVELOPED	126.00 C.F.S.
6	5.4	0.500	2.914	6.33	8.91	DEVELOPED
14.00	0.570**	27.688	4.48	70.73 (DEVELOPED (GROSS) -19.46 INTERCEPTED BY INLETS -51.27 (NET)	DEVELOPED	91.44 C.F.S.
14.00	0.5693**	35.973	4.49	31.05 (DEVELOPED (GROSS) -19.46 INTERCEPTED BY INLETS -12.49 (NET)	MAXIMUM FUTURE DEVELOPED	91.44 C.F.S.
7	5.0*	0.50	0.504	6.45	1.63	DEVELOPED
8A	5.0*	0.55	0.632	6.45	3.45	DEVELOPED
8B	5.0*	0.55**	2.869	6.45	10.18	MAX. FUTURE DEVELOPED
5.0*	0.63**	3.501	6.45	14.23	MAX. FUTURE DEVELOPED	72.54 C.F.S.
EXWS-3	5.0*	0.49**	0.832	6.45	2.63	EXISTING WATERSHED

* SIGNIFIES MINIMUM TIME OF CONCENTRATION

LEGEND
 → EXISTING DRAINAGE FLOWS
 ⇨ PROPOSED DRAINAGE FLOWS
 ◆ PROPOSED DRAINAGE HIGH-POINT
 ◆ PROPOSED DRAINAGE LOW-POINT
 --- PROPOSED WATERSHED LIMITS

AS BUILT
01/02/03

DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL	DRAINAGE
01/02/03	AS BUILT	SA	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF FEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)	1" = 100'		FRANKLIN HILLS UNIT ONE
						DRAINAGE PLAN



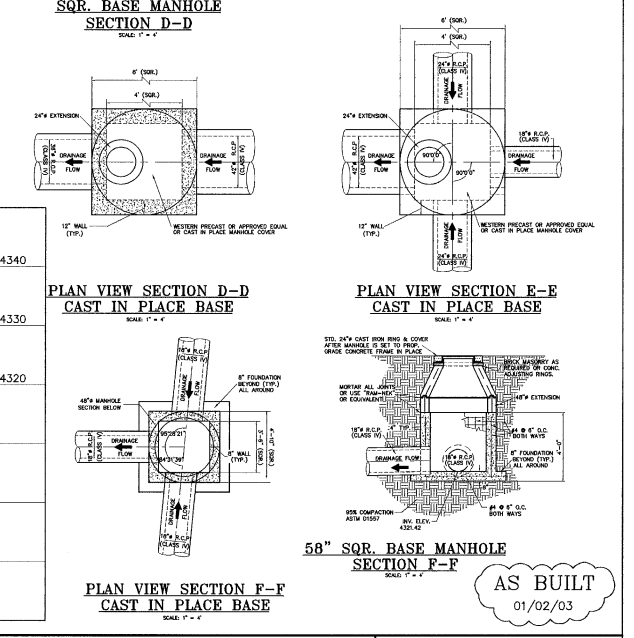
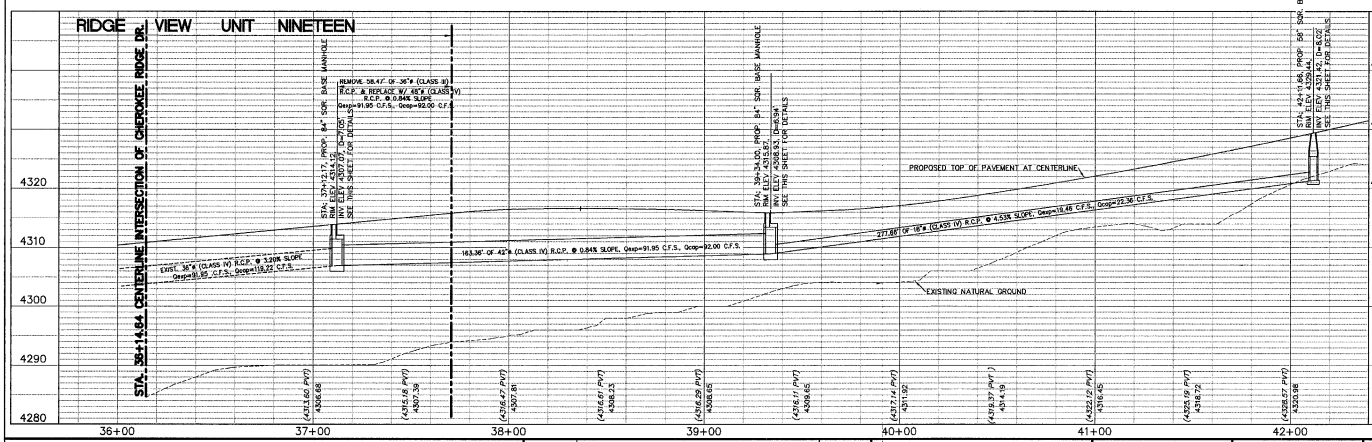
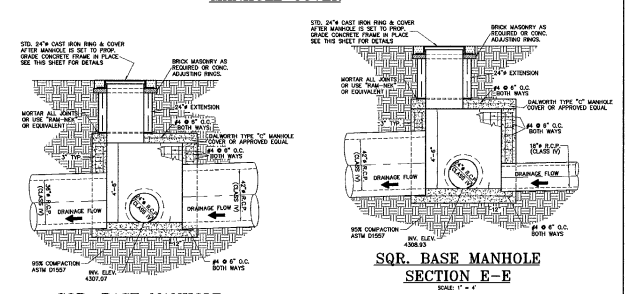
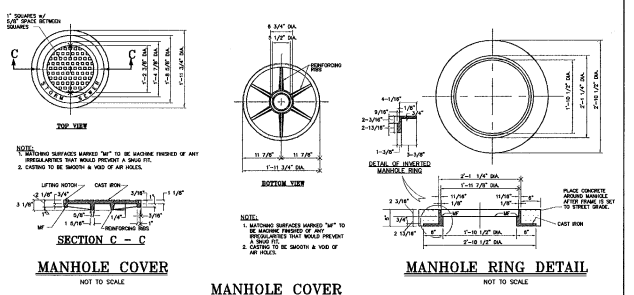
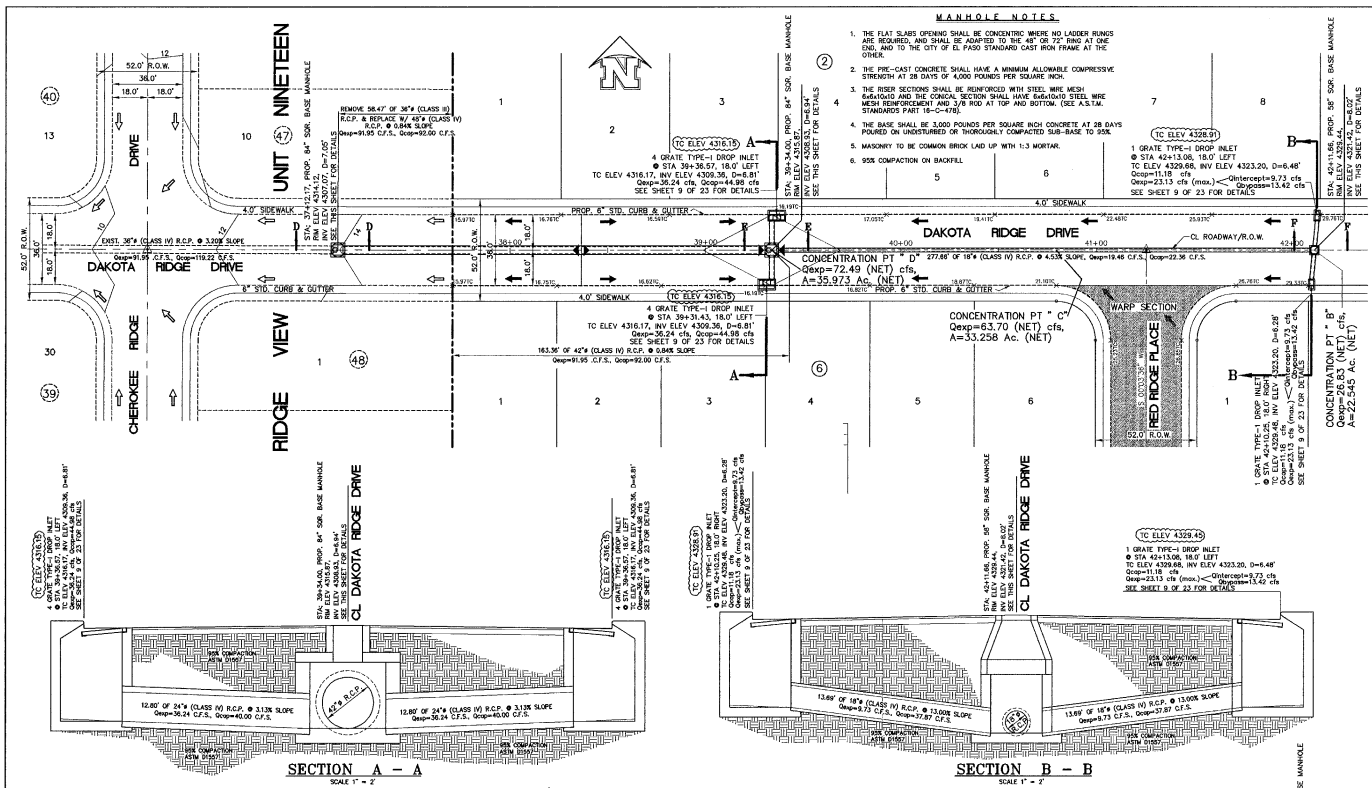
FRANKLIN HILLS UNIT ONE

DRAINAGE PLAN

Pro Engineering, L.C.
 602 N. Dallas St. Suite No. 6 El Paso, TX 79906
 (915) 631-1414 FAX: (915) 631-1475
 Email: proeng@proeng.net
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

SHEET 6 OF 23

600599



LEGEND

- ▲ PROPOSED DRAINAGE HIGH-POINT
- ▼ PROPOSED DRAINAGE LOW-POINT
- ⊙ DENOTES EXISTING CITY MONUMENT
- △ PROPOSED CITY MONUMENT
- PROPOSED DRAINAGE FLOWS
- ⇄ EXISTING DRAINAGE FLOWS

STATION NUMBER

INVERT ELEVATION

PROPOSED ELEVATION

DATE	REVISIONS	BY	BENCHMARK
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND CORKER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)

SCALE	ENGINEER'S SEAL
HOR: 1" = 30'	
VER: N/A	
PROJ: 111000-3A	
FILE: FHSSWR1.DWG	
DATE: JANUARY 12, 2001	
DESIGN BY: R.L.A. / G.P.	
DRAWN BY: R.L.A. / G.P.	
CHKD. BY: H.P.	
APPD. BY: B.R.	

STORM-SEWER SYSTEM

FRANKLIN HILLS UNIT ONE

DAKOTA RIDGE DR. STORM SEWER

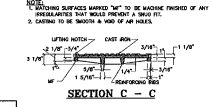
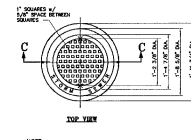
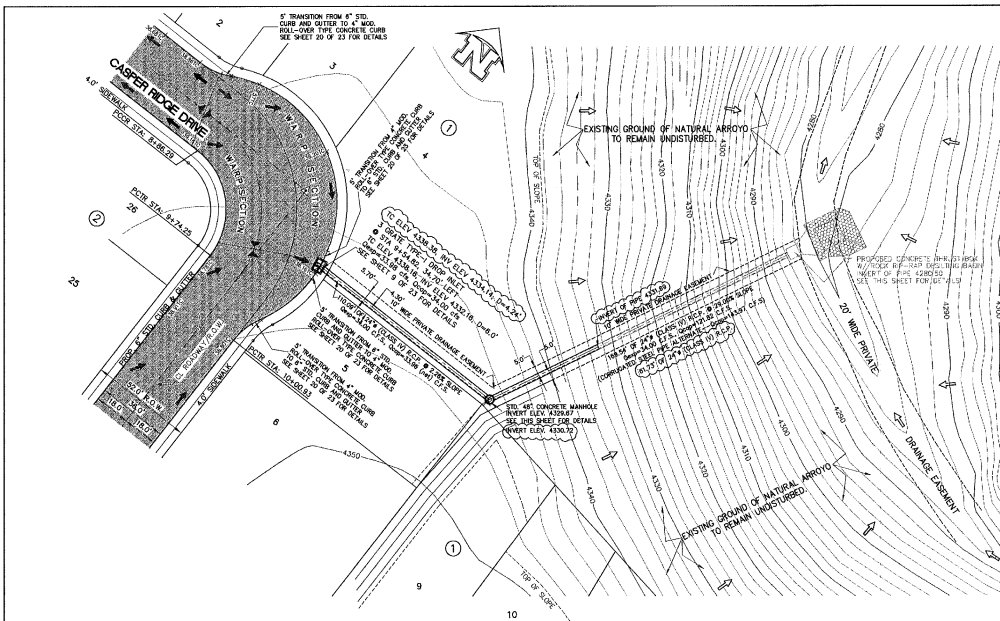
AS BUILT
01/02/03

Roe Engineering, L.C.
803 N. Central St., Suite 300 E., Ft. Worth, TX, 76102
(817) 593-1418 FAX: (817) 593-4972
Email: roe@roeeng.com

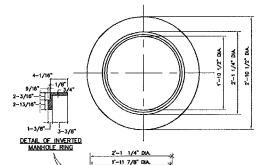
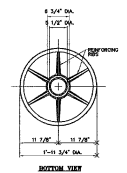
ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

SHEET 7 OF 23

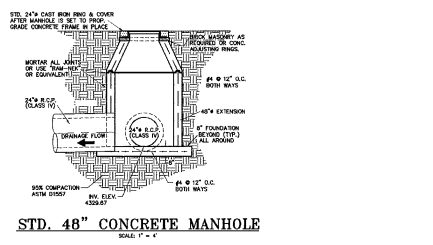
600599



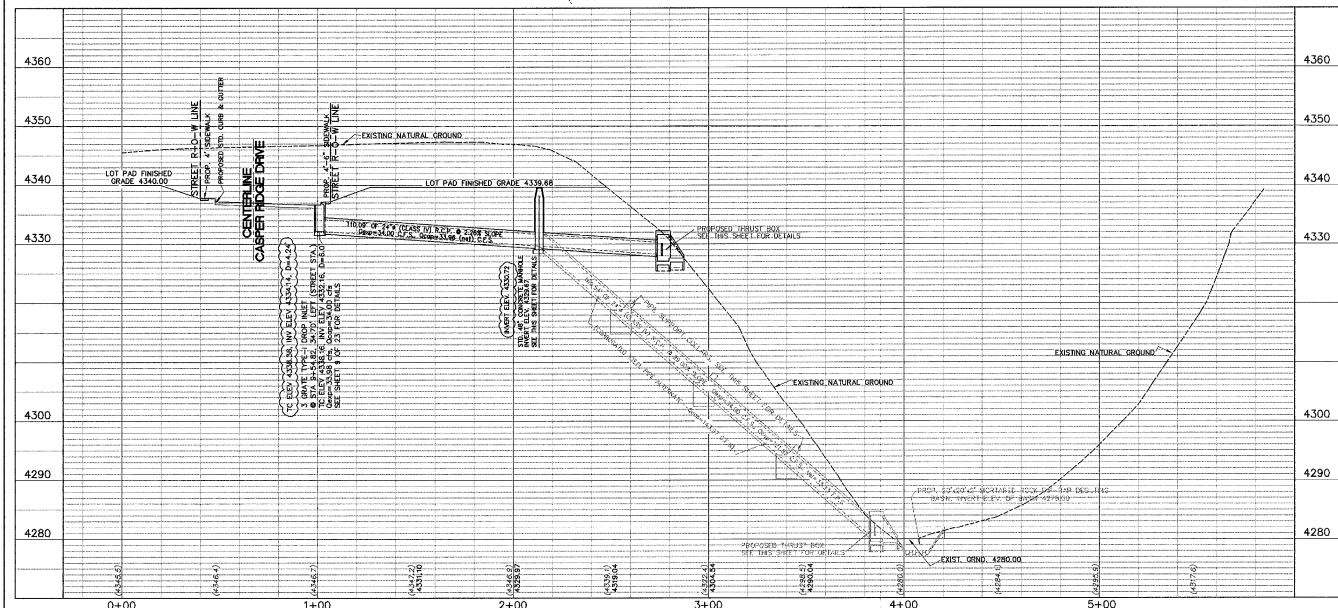
MANHOLE COVER
NOT TO SCALE



MANHOLE RING DETAIL
NOT TO SCALE



STD. 48" CONCRETE MANHOLE
SCALE: 1" = 4'



LEGEND	
	PROPOSED DRAINAGE HIGH-POINT
	PROPOSED DRAINAGE LOW-POINT
	EXISTING CITY MONUMENT
	PROPOSED CITY MONUMENT
	PROPOSED DRAINAGE FLOWS
	EXISTING DRAINAGE FLOWS
	INVERT ELEVATION
	STATION NUMBER

DATE	REVISIONS	BY	BENCHMARK
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.29 (CITY DATUM)

SCALE	ENGINEER'S SEAL
1" = 30'	
HOR: 1" = 30'	
VER: 1" = 4'	
W.G. 111000-4A	
FILE: FHSSWR2.DWG	
DATE: JANUARY 12, 2001	
DESIGN BY: R.L.A. / G.P.	
DRAWN BY: R.L.A. / G.P.	
CHKD. BY: H.P.	
APPD. BY: B.R.	

STORM-SEWER SYSTEM

FRANKLIN HILLS UNIT ONE

CASPER RIDGE DR. STORM SEWER



AS BUILT
01/02/03

Pro Engineering, L.C.
902 N. Dallas St., Suite No. 8, Ft. Worth, TX, 76102
(817) 933-1118 Fax: (817) 533-4992
Email: rosen@proeng.com

ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

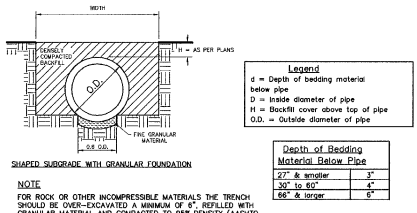
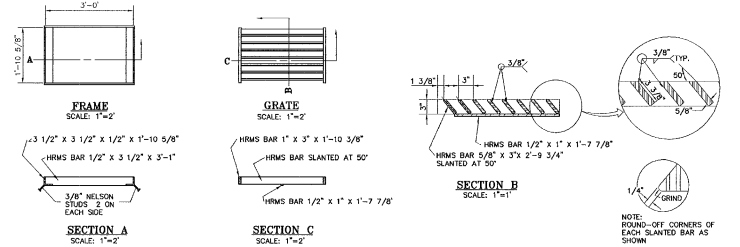
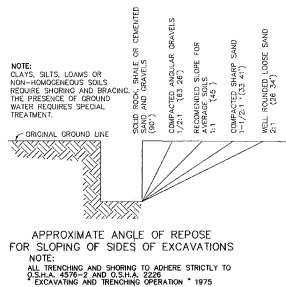
SHEET **8** OF **23**

600599

TRENCH SHORING - MINIMUM REQUIREMENTS

TRENCH JACKS MAY BE USED IN LIEU OF OR IN COMBINATION WITH CROSS BRACES. SHORING IS NOT REQUIRED IN SOLID ROCK, HARD SHALE, OR HARD SLATE. WHERE SEPARATE, STEEL SHEET PILING AND BRACING OF EQUAL STRENGTH MAY BE SUBSTITUTED FOR WOOD.

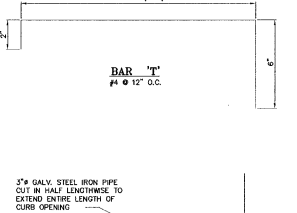
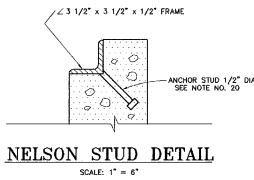
DEPTH OF TRENCH	SIZE AND SPACING OF MEMBERS												
	UPRIGHTS		STRENGTHS		CROSS BRACES		MAXIMUM SPACING		VERTICAL		HORIZONTAL		
	MINIMUM DIMENSION	MAXIMUM SPACING	MINIMUM DIMENSION	MAXIMUM SPACING	WIDTH OF HURCH								
FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES	FEET	INCHES
5 TO 10	HARD, COMPACT	3 x 4 or 2 x 6	6	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 6	4	6	6
LIKELY TO CRACK		3 x 4 or 2 x 6	3	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 6	4	6	6
SOFT, SANDY, OR FILLED		3 x 4 or 2 x 6	3	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 6	4	6	6
HYDROSTATIC PRESSURE		3 x 4 or 2 x 6	3	4 x 6	4	2 x 6	4 x 4	4 x 6	6 x 6	6 x 6	4	6	6
10 TO 15	HARD	3 x 4 or 2 x 6	4	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 6	6 x 6	4	6	6
LIKELY TO CRACK		3 x 4 or 2 x 6	2	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 6	6 x 6	4	6	6
SOFT, SANDY, OR FILLED		3 x 4 or 2 x 6	2	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 6	6 x 6	4	6	6
HYDROSTATIC PRESSURE		3 x 4 or 2 x 6	2	4 x 6	4	4 x 4	4 x 6	6 x 6	6 x 6	6 x 6	4	6	6



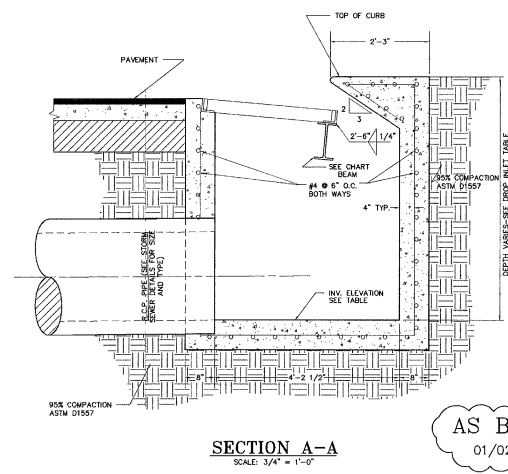
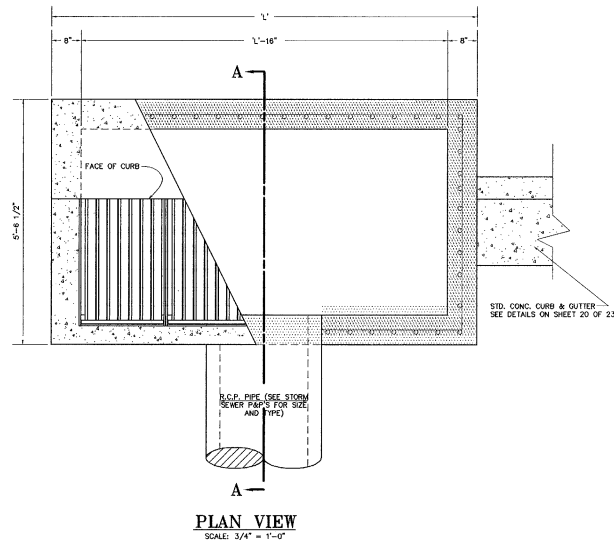
DROP INLET TABLE									
INLET	STATION	STREET	TOP OF CURB ELEVATION (N.T.)	INVERT ELEVATION (N.T.)	DEPTH (ft.)	No. OF GRATES	Comp.	Depth (10/64)	Depth (10/64)
DAKOTA RIDGE STORM SEWER	30+31.45	DAKOTA RIDGE DR.	4315.17	4309.36	5.81'	4	44.98 c.f.s.	51.28 c.f.s.	(max. development)
DAKOTA RIDGE STORM SEWER	18+35.57	DAKOTA RIDGE DR.	4315.17	4309.36	5.81'	4	44.98 c.f.s.	72.49 c.f.s.	(max. development)
DAKOTA RIDGE STORM SEWER	42+10.25	DAKOTA RIDGE DR.	4323.48	4323.20	0.28'	1	8.73 c.f.s.	4.48 c.f.s.	(EPWAFS) (intercepted)
DAKOTA RIDGE STORM SEWER	42+11.68	DAKOTA RIDGE DR.	4323.48	4323.20	0.28'	1	9.73 c.f.s.	13.42 c.f.s.	(EPWAFS) (intercepted)
CASPER RIDGE STORM SEWER	81+01.58	CASPER RIDGE DR.	4338.16	4332.16	6.00'	3	34.10 c.f.s.	34.08 c.f.s.	(max. development)

BEAM TABLE

NO. OF GRATES	L'	LENGTH	MINIMUM SIZES
1	3' - 2 5/8"	2' - 0 5/8"	W 8x12, S 8x12, MC 6x8.2
3	7' - 1 7/8"	6' - 7 7/8"	W 8x15, S 7x15.3, MC 7x17.6
4	9' - 1 1/2"	8' - 7 1/2"	W 8x18, S 8x18.4, MC 10x21.9



TRENCH BEDDINGS FOR CIRCULAR PIPES
SCALE: 1" = 4'



- DROP INLET NOTES**
- WELDED STEEL OR CAST GRATES AS DETAILLED ARE ALL ACCEPTABLE GRATES. MINOR ALTERNATE TYPES OF GRATES ON THE SAME PROJECT WILL BE PERMITTED WITH THE APPROVAL OF THE CITY ENGINEER.
 - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.
 - SHARP EDGES RESULTING FROM FABRICATION SHALL BE DULLED BY ANY ACCEPTABLE METHOD FOR SAFETY AND HANDLING.
 - GRATES SHALL BE INSTALLED IN FRAME WITH FLOW ARROW POINTING DOWNSTREAM OR TOWARD THE LOW POINT IN A SWAMP.
 - WELDED GRATES SHALL BE STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-183 OR OF CORROSION RESISTANT STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-181 OR M-222 OR BE MADE OF OTHER APPROVED TYPES OF EQUAL QUALITY. MINOR GRATES OF STEEL ON THE SAME GRADE WILL NOT BE FORWARDED.
 - GRATES MADE OF M-183 STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111 SPECIFICATIONS OR SHALL BE PAINTED WITH INORGANIC ZINC PAINTS MEETING THE REQUIREMENTS OF CURRENT STANDARD SPECIFICATIONS.
 - ALL WELDS SHALL BE A MINIMUM OF 1/4" FILLET AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-103, GRADE 60-35 OR OF DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF ASTM A-536, SPECIAL GRADE 60-40, OR OF GREY IRON CONFORMING TO THE REQUIREMENTS OF AASHTO M-103, CLASS 20B OR ASTM A-48 CLASS 20B. THE SPECIFICATIONS OF GENERAL APPLICATION FOR CAST STEEL GRATES SHALL BE AASHTO M-103 SCOPE 1.2.1, GRADE N-1.
 - FERRULES CASTINGS SHALL BE OF SUPERIOR QUALITY FREE OF BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SPOUT BLASTING OR OTHER APPROVED CLEANING METHOD. AFTER CLEANING THEY SHALL BE COATED WITH ASPHALT BASE PAINT RESULTING IN A SMOOTH COATING TOUGH AND TENACIOUS WHEN COLD, NOT TACKY NOR BRITTLE.
 - ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN. COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
 - ALL CONCRETE TO BE 3000 p.s.i. CHAMFER ALL EXPOSED EDGES 3/4". ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
 - MINIMUM CONCRETE COVER SHALL BE 1 1/2" FOR STEEL REINFORCING.
 - EXPANSION MATERIAL TO BE 1/2" DIAMETER FIBER AND TO BE PLACED WHERE PROPOSED CONCRETE COMES IN CONTACT WITH ANY EXISTING OR PROPOSED CONCRETE OR MASONRY STRUCTURE.
 - STRUCTURAL STEEL SHALL BE SHOP PAINTED IN ACCORDANCE WITH A.I.A. ITEM 448 "PAINT AND PAINTING".
 - SHORING OF ALL EXPOSED CONCRETE SHALL CONFORM IN SIZE AND GRADE TO EXISTING OR PROPOSED CURBS AND WALK ADJACENT TO INLETS.
 - ALL REINFORCING BARS TO BE # 4 BARS AT 8" O.C. GRADE 60. BEND BARS AROUND PIPE SPECIFIC.
 - INLETS TO BE DESIGNATED IN PLANS BY NUMBER OF GRATES REQUIRED.
 - LOCATION OF SEWER PIPES SHOWN ELSEWHERE IN PLANS.
 - 2 - 1/2" DIA. x 4" LONG CONC. ANCHOR STUDS REQUIRED FOR EACH SIDE OF FRAME WHERE RESTING ON CONCRETE. USE NELSON STUDS OR EQUAL.
 - THE GRATES OF ALL INLETS WITHIN THE STREET PAVEMENT MUST BE CONSTRUCTED WITH THE GRATE BARS PERPENDICULAR TO THE CURB.
 - EXCAVATION WHICH WILL EXCEED FIVE (5) FEET IN DEPTH SHALL PROVIDE FOR TRENCH SAFETY AS PER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) GUIDELINES.

1 GRATE DROP INLET CALCULATIONS

WEIR FORMULA
 $Q_{weir} = 3.087 L^{1/2} H^{3/2}$
 $Q_{weir} = 3.087 \times 1.88 \times 0.5^{3/2}$ (6" HEAD)
 $Q_{weir} = 6.33$ C.F.S.

FLOW THRU ORIFICES FORMULA
 $Q_{orif} = C_d A \sqrt{2gh}$
 $Q_{orif} = 0.7 \times 1.414 \times \sqrt{2} \times 32.2 \times 0.5$ (6" HEAD)
 $Q_{orif} = 13.83$ C.F.S.

SUMMATION
 $Q_{total} = 2.05$ C.F.S. + [13.83 + 2/3] (CLOSING)
 $Q_{total} = 11.19$ C.F.S. (NET)
 $Q_{total} = 9.73$ C.F.S. (intercepted)
 $Q_{total} = 4.46$ C.F.S. (excess this development)
 $Q_{total} = 13.42$ C.F.S. (excess max. development)

3 GRATE DROP INLET CALCULATIONS

WEIR FORMULA
 $Q_{weir} = 3.087 L^{1/2} H^{3/2}$
 $Q_{weir} = 3.087 \times 5.80 \times 0.5^{3/2}$ (6" HEAD)
 $Q_{weir} = 41.45$ C.F.S.

FLOW THRU ORIFICES FORMULA
 $Q_{orif} = C_d A \sqrt{2gh}$
 $Q_{orif} = 0.7 \times 1.414 \times \sqrt{2} \times 32.2 \times 0.5$ (6" HEAD)
 $Q_{orif} = 41.45$ C.F.S.

SUMMATION
 $Q_{total} = 6.33$ C.F.S. + [41.45 + 2/3] (CLOSING)
 $Q_{total} = 21.34$ C.F.S. (this development)
 $Q_{total} = 33.99$ C.F.S. (max. development)

4 GRATE DROP INLET CALCULATIONS

WEIR FORMULA
 $Q_{weir} = 3.087 L^{1/2} H^{3/2}$
 $Q_{weir} = 3.087 \times 2.76 \times 0.5^{3/2}$ (6" HEAD)
 $Q_{weir} = 8.47$ C.F.S.

FLOW THRU ORIFICES FORMULA
 $Q_{orif} = C_d A \sqrt{2gh}$
 $Q_{orif} = 0.7 \times 1.414 \times \sqrt{2} \times 32.2 \times 0.5$ (6" HEAD)
 $Q_{orif} = 94.50$ C.F.S.

SUMMATION
 $Q_{total} = 8.47$ C.F.S. + [94.50 + 2/3] (CLOSING)
 $Q_{total} = 23.84$ C.F.S. (this development)
 $Q_{total} = 25.25$ C.F.S. (max. development)

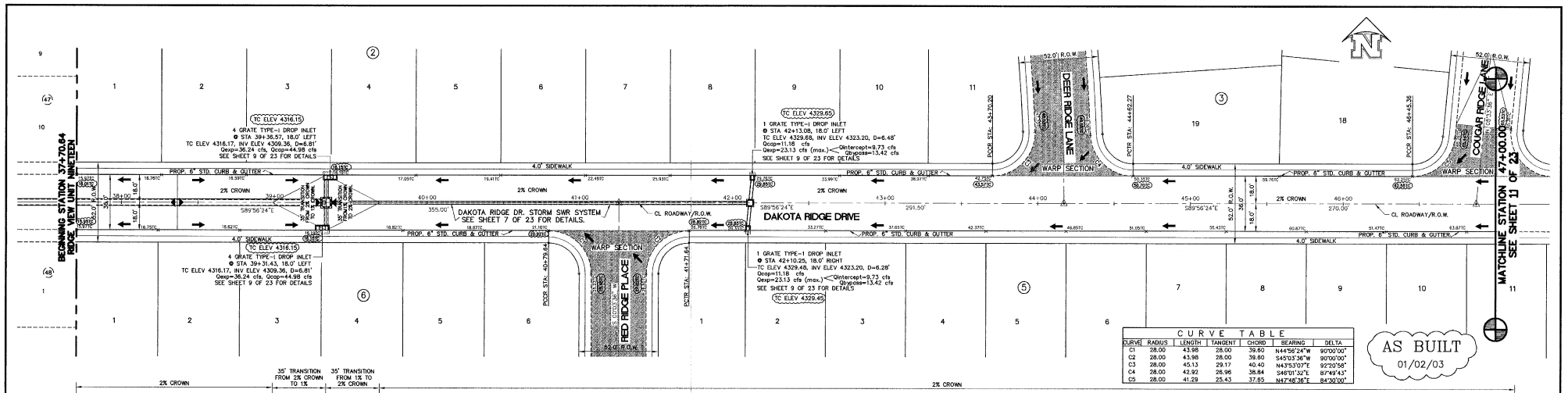
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C" (EXPLANATION AREA OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 480214 0017C, DATED FEBRUARY 5, 1986 AND 480214 0022E DATED JANUARY 3, 1997.

DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL
01/02/03	AS BUILT	RLA	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.20 (CITY DATUM)	1" = 20'	

FRANKLIN HILLS UNIT ONE
TYPE-I DROP INLET

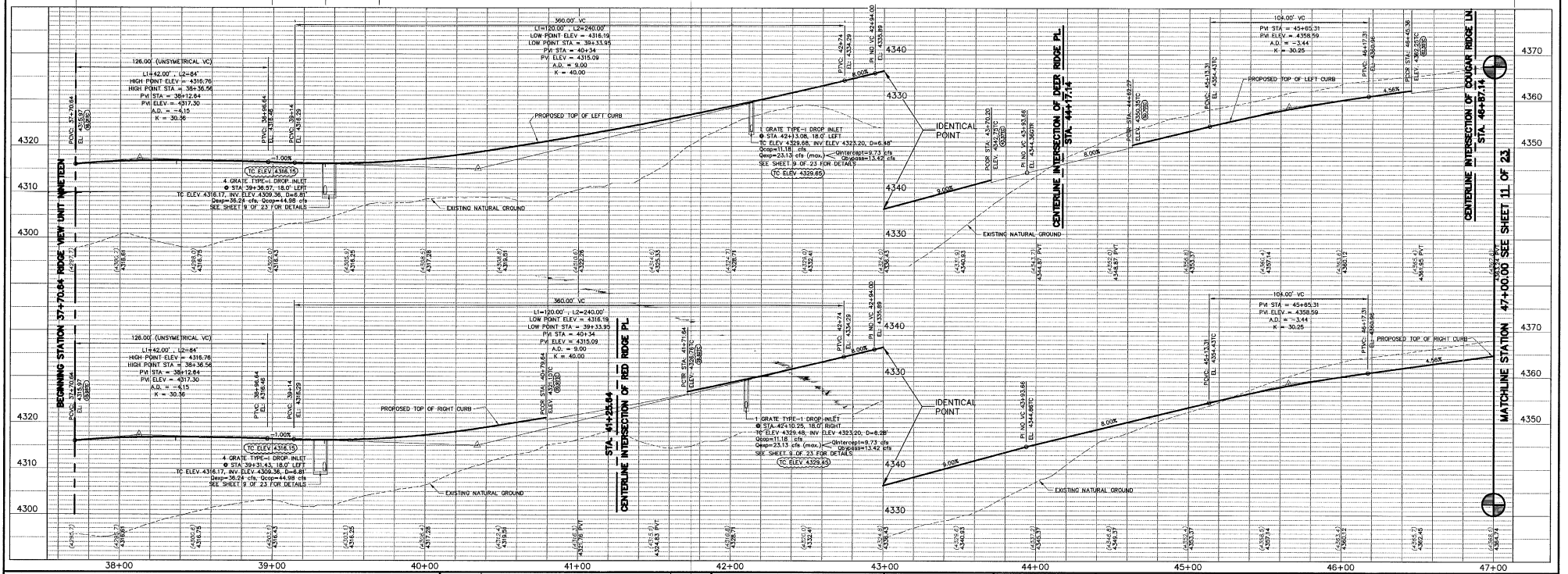
Roe Engineering, L.C.
 1021 N. Central Ex. Suite 1010 Ft. Worth, TX 76102
 (817) 533-1416 Fax: (817) 533-4972
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
SHEET 9 OF 23

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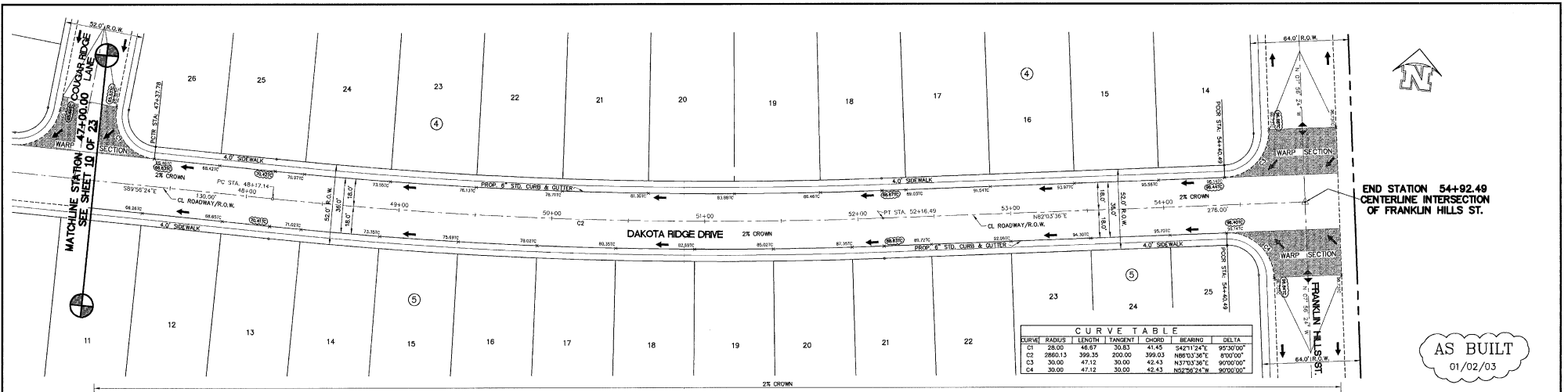


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	28.00	43.98	28.00	38.80	S44°52'54"W	90°00'00"
C2	28.00	43.98	28.00	38.80	S45°03'36"W	90°00'00"
C3	28.00	45.13	29.17	40.40	N42°53'07"E	92°20'58"
C4	28.00	42.92	28.96	38.84	S48°03'27"E	87°46'43"
C5	28.00	41.29	25.43	37.85	N47°48'38"E	84°50'00"

AS BUILT
 01/02/03



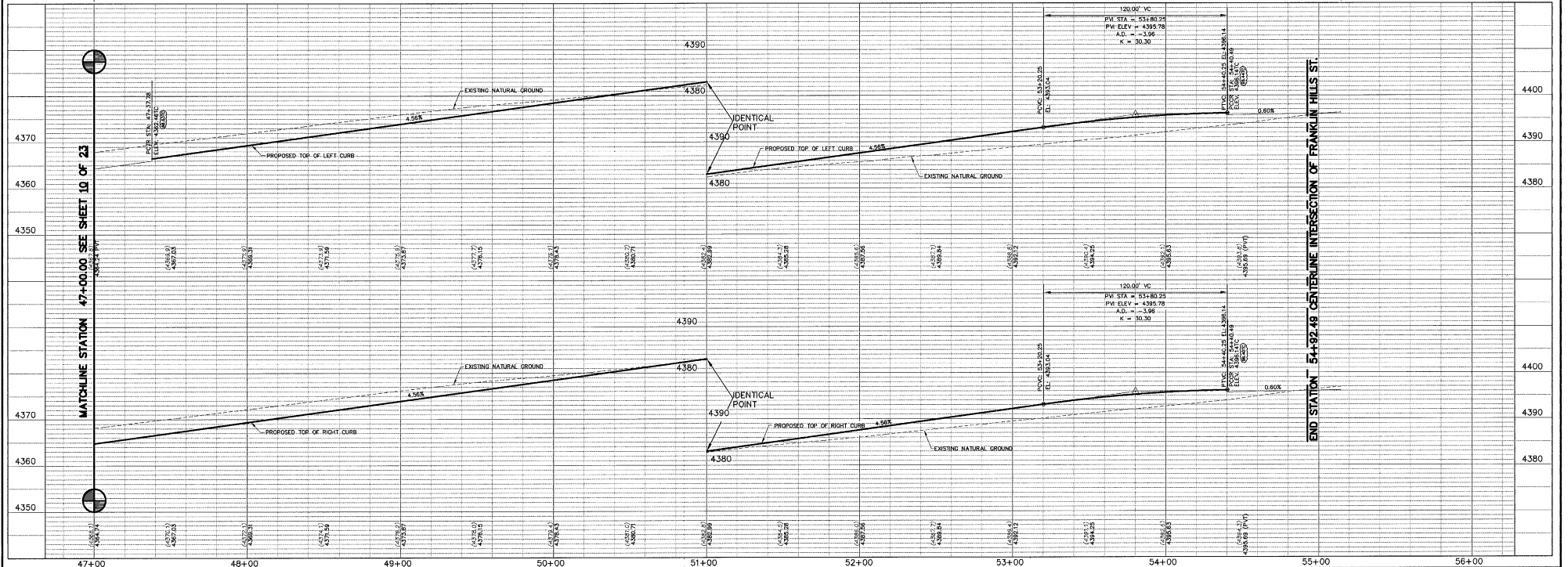
<p>LEGEND</p> <p>▲ PROPOSED DRAINAGE HIGH-POINT</p> <p>▼ PROPOSED DRAINAGE LOW-POINT</p> <p>○ DENOTES EXISTING CITY MONUMENT</p> <p>▲ PROPOSED CITY MONUMENT</p> <p>→ PROPOSED DRAINAGE FLOWS</p> <p>⇄ EXISTING DRAINAGE FLOWS</p> <p>EXISTING GRADE</p> <p>NEW GRADE</p> <p>STATION NUMBER</p>	<p>DATE</p> <p>01/02/03</p>	<p>REVISIONS</p> <p>AS BUILT</p>	<p>BY</p> <p>S.R.</p>	<p>BENCHMARK</p> <p>BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.23 (CITY DATUM)</p>	<p>SCALE</p> <p>HOR: 1" = 30'</p> <p>VER: 1" = 10'</p> <p>W.O. 11000-4A</p> <p>FILE: FHX00P1E.DWG</p> <p>DATE: JANUARY 12, 2001</p> <p>DESIGN BY: R.L.A. / G.P.</p> <p>DRAWN BY: R.L.A. / G.P.</p> <p>CHKD. BY: H.F.</p> <p>APPD. BY: B.R.</p>	<p>ENGINEER'S SEAL</p> <p>FRANKLIN HILLS UNIT ONE</p> <p>DAKOTA RIDGE DRIVE (STA. 37+70.64 TO STA. 47+00.00)</p>	<p>PLAN AND PROFILE</p> <p>FRANKLIN HILLS UNIT ONE</p> <p>DAKOTA RIDGE DRIVE (STA. 37+70.64 TO STA. 47+00.00)</p>	<p>PROE Engineering, L.C.</p> <p>601 W. GARDNER ST., SUITE 200-13, FORT WORTH, TEXAS 76102</p> <p>(817) 533-1410 FAX: (817) 533-4870</p> <p>EMAIL: rproe@proe.com</p> <p>ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING</p>
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CURVE TABLE

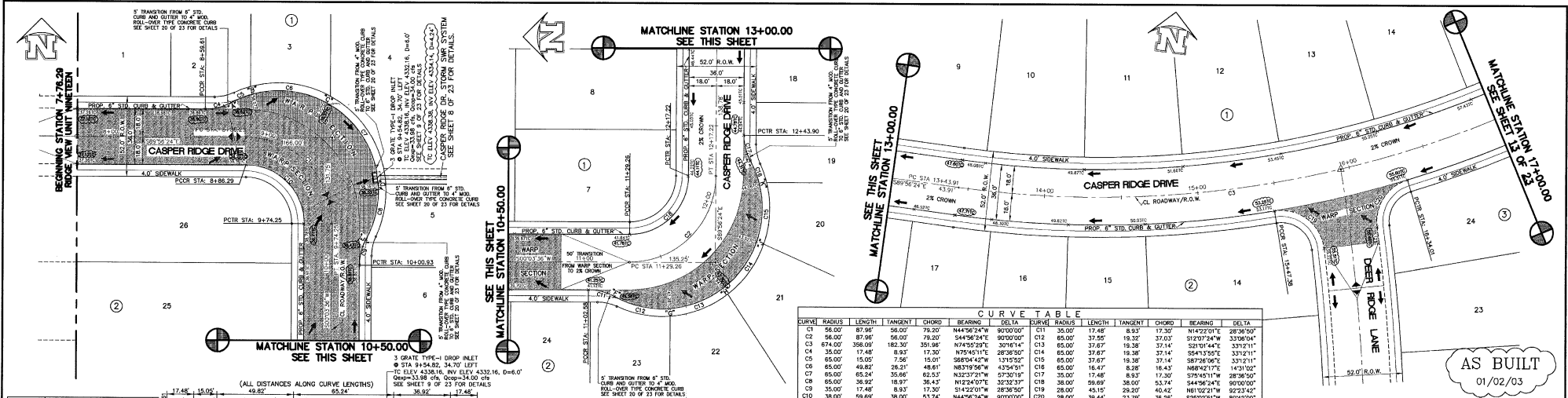
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	28.00	48.87	30.83	41.45	S42°12'24"E	80°00'00"
C2	2865.13	399.35	200.00	399.03	N63°03'36"E	87°00'00"
C3	30.00	47.12	30.00	42.43	N37°03'36"E	80°00'00"
C4	30.00	47.12	30.00	42.43	N52°56'24"W	80°00'00"

AS BUILT
01/02/03

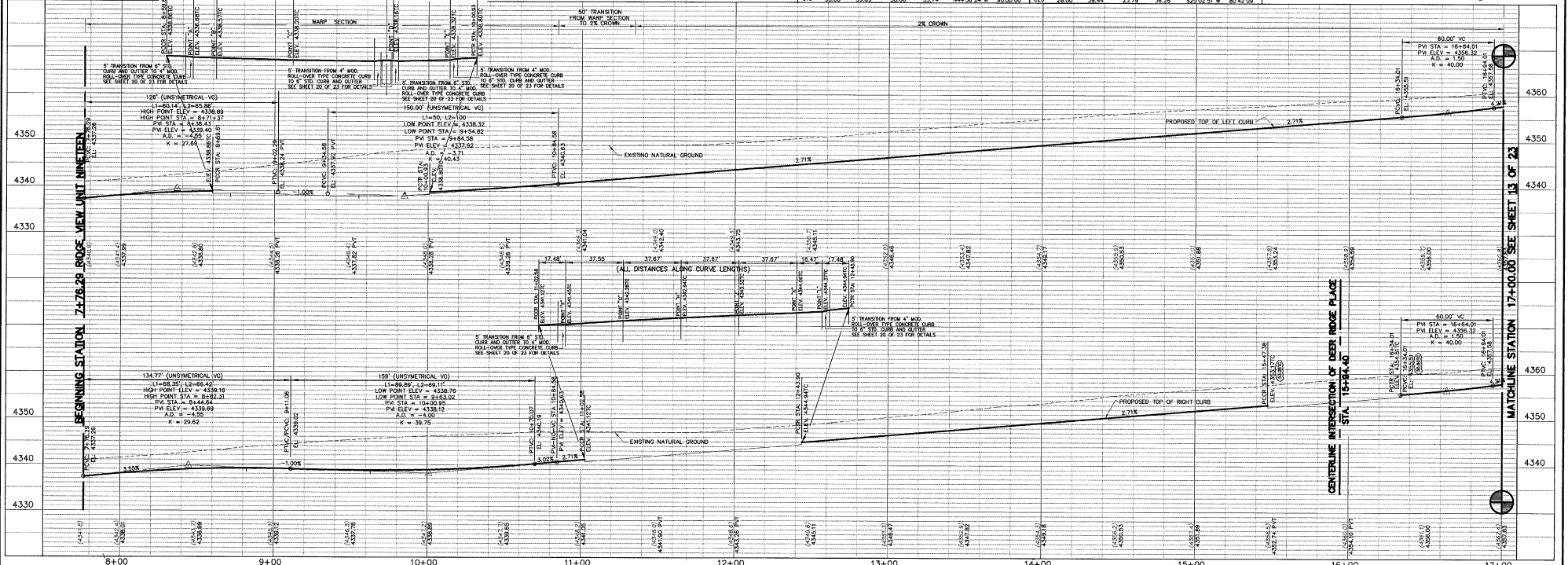


<p>LEGEND</p> <ul style="list-style-type: none"> ▲ PROPOSED DRAINAGE HIGH-POINT ▼ PROPOSED DRAINAGE LOW-POINT ⊕ DENOTES EXISTING CITY MONUMENT ▲ PROPOSED CITY MONUMENT → EXISTING DRAINAGE FLOWS → EXISTING DRAINAGE FLOWS 	<p>DATE: 01/02/03</p> <p>REVISIONS: AS BUILT</p> <p>BY: S.R.</p>	<p>BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)</p>	<p>SCALE: HOR: 1" = 30', VER: 1" = 10'</p> <p>W.O.: 111000-4A</p> <p>FILE: FNDOPDFE CMO</p> <p>DATE: JANUARY 12, 2001</p> <p>DESIGN BY: R.L.A. / G.P.</p> <p>DRAWN BY: R.L.A. / G.P.</p> <p>CHKD. BY: H.P.</p> <p>APPD. BY: B.R.</p>	<p>ENGINEER'S SEAL: BRADLEY ROE, No. 31886</p>	<p>PLAN AND PROFILE: FRANKLIN HILLS UNIT ONE</p> <p>DAKOTA RIDGE DRIVE (STA. 47+00.00 TO STA. 54+92.49)</p>	<p>brp Bradley Roe Engineering, L.C. 601 W. Oakdale St., Suite 1000 • St. Paul, MN 55106 (612) 633-1418 • FAX: (612) 633-4876 E-mail: cmo@bradleyroe.com</p> <p>ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING</p>
	<p>SHEET 11 OF 23</p>					

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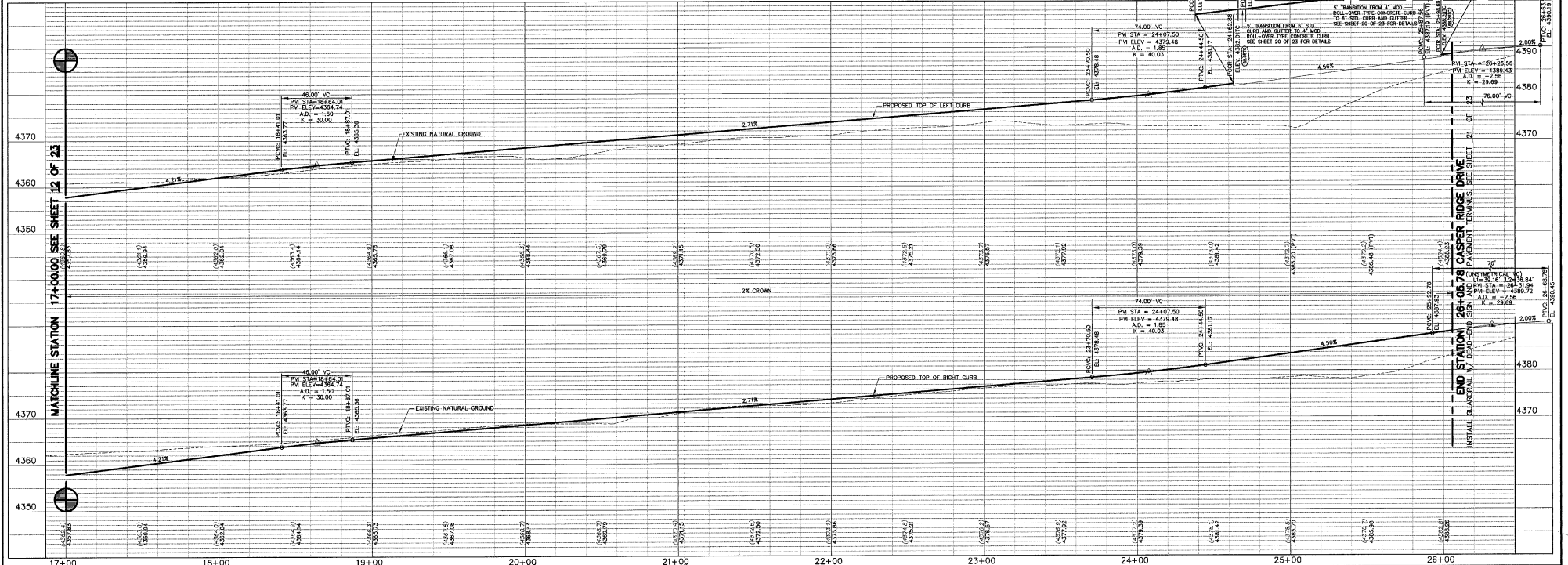
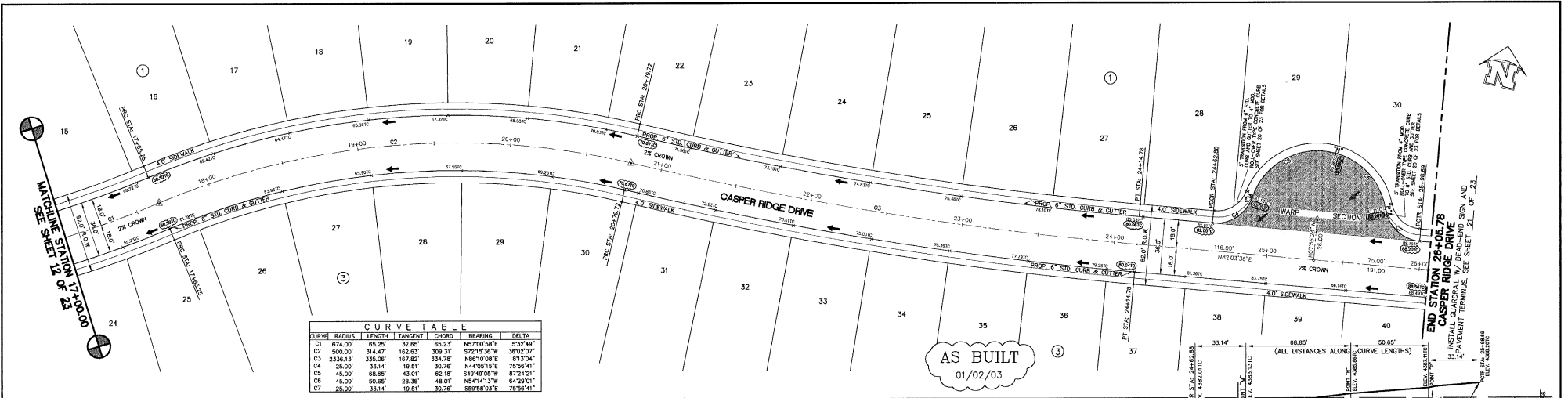
AS BUILT
01/02/03



DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL	PLAN AND PROFILE
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)	HOR: 1" = 10' VER: 1" = 10' W.O.: 111000-4A FILE: FHCSPPE.DWG DATE: JANUARY 12, 2003 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.		FRANKLIN HILLS UNIT ONE CASPER RIDGE DRIVE (STA. 7+76.29 TO STA. 17+00.00)

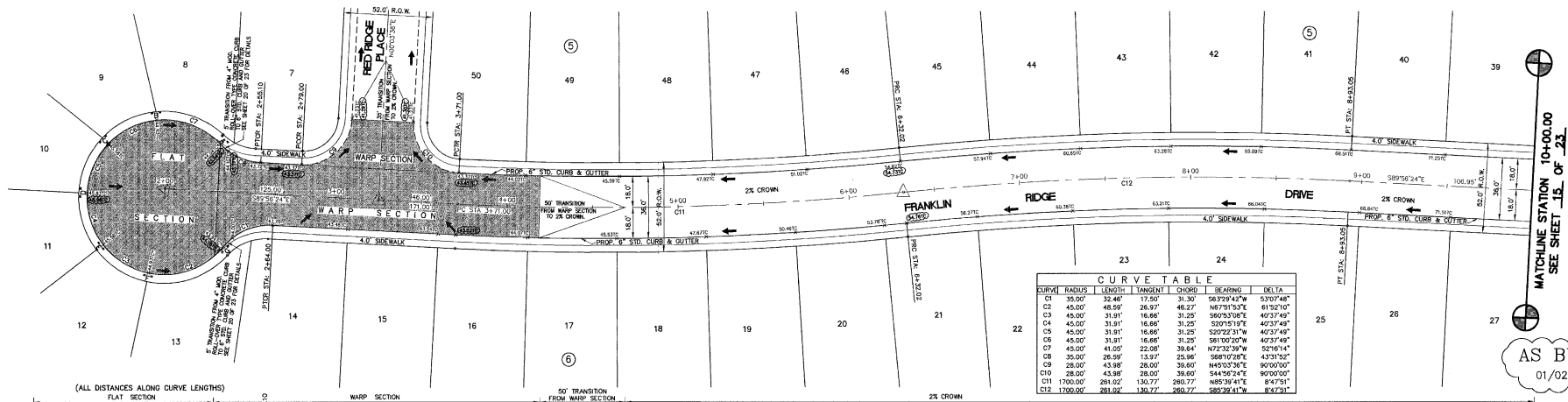
Proe Engineering, L.C.
600 N. Collins St., Suite 1000, Ft. Worth, TX 76102
(817) 352-1418 FAX: (817) 352-4979
Email: rproe@proe.com
ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

600599



<p>LEGEND</p> <ul style="list-style-type: none"> ▲ PROPOSED DRAINAGE HIGH-POINT ▼ PROPOSED DRAINAGE LOW-POINT ⊙ DENOTES EXISTING CITY MONUMENT ▲ PROPOSED CITY MONUMENT → PROPOSED DRAINAGE FLOWS ⇄ EXISTING DRAINAGE FLOWS 	<p>DATE 01/02/03</p> <p>REVISIONS AS BUILT</p> <p>BY S.R.</p>	<p>BENCHMARK BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND CASPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)</p>	<p>SCALE HOR: 1" = 30' VER: 1" = 10' W.D: 111000-4A FILE: FHCSPP2.DWG</p> <p>DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.</p>	<p>ENGINEER'S SEAL FRANKLIN HILLS UNIT ONE</p>	<p>PLAN AND PROFILE CASPER RIDGE DRIVE (STA. 17+00.00 TO STA. 26+05.78)</p>	<p>FRANKLIN HILLS UNIT ONE CASPER RIDGE DRIVE (STA. 17+00.00 TO STA. 26+05.78)</p>	<p>ENGINEERING, PLANNING, SURVEYING Roe Engineering, L.C. 601 N. Canton St., Suite 305-B, El Paso, TX 79902 (940) 553-1418 FAX (940) 553-4972 Email: roning@roelc.com</p>
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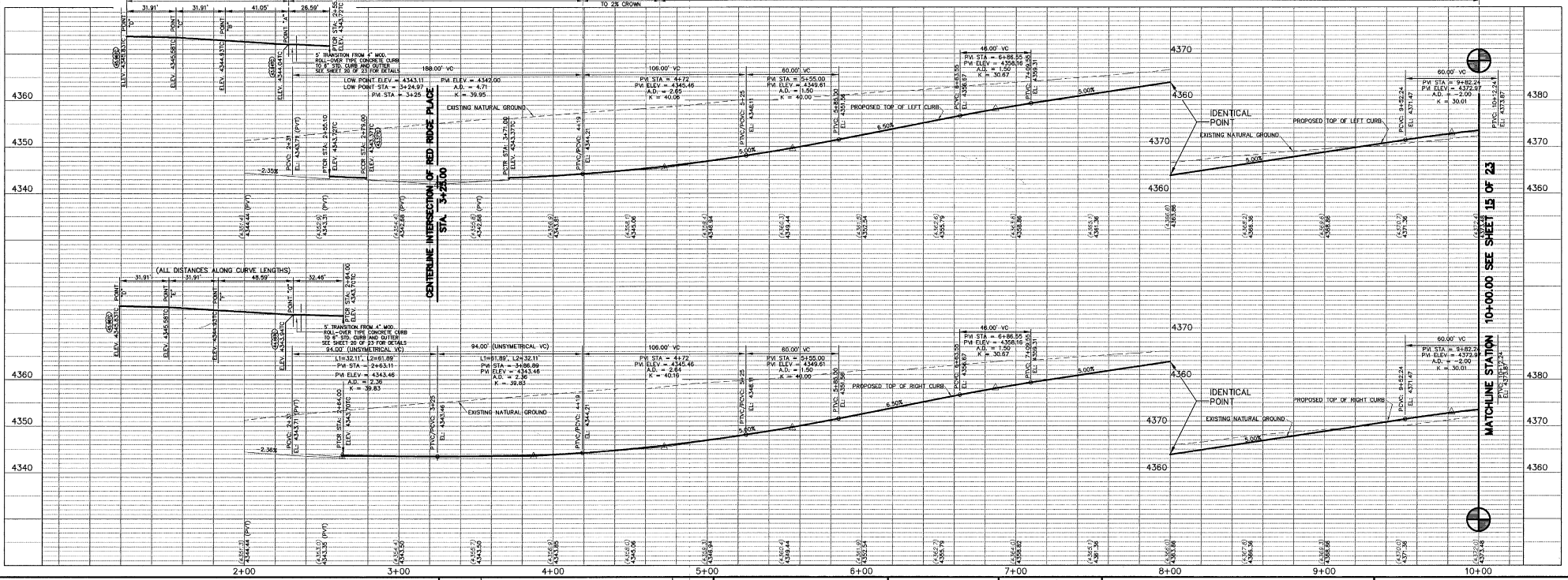


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	38.00'	32.44'	17.00'	31.30'	S89°34'47\"	53°07'48\"
C2	45.00'	48.59'	26.97'	46.27'	N67°31'53\"	61°52'10\"
C3	45.00'	31.91'	16.66'	31.25'	S89°53'08\"	40°37'49\"
C4	45.00'	31.91'	16.66'	31.25'	S20°15'17\"	40°37'49\"
C5	45.00'	31.91'	16.66'	31.25'	S20°22'31\"	40°37'49\"
C6	45.00'	31.91'	16.66'	31.25'	S61°00'29\"	40°37'49\"
C7	45.00'	41.05'	22.00'	39.64'	N72°32'39\"	52°16'14\"
C8	35.00'	26.59'	13.97'	25.96'	S68°10'28\"	43°31'52\"
C9	28.00'	43.98'	28.00'	39.60'	N45°03'36\"	90°00'00\"
C10	28.00'	43.98'	28.00'	39.60'	S44°56'24\"	90°00'00\"
C11	1700.00'	281.02'	130.77'	260.77'	S68°03'41\"	8°47'31\"
C12	1700.00'	281.02'	130.77'	260.77'	S88°39'31\"	8°47'31\"

AS BUILT
01/02/03

MATCHLINE STATION 10+00.00
SEE SHEET 15 OF 23

MATCHLINE STATION 10+00.00 SEE SHEET 15 OF 23



LEGEND

- ▲ PROPOSED DRAINAGE HIGH-POINT
- ▼ PROPOSED DRAINAGE LOW-POINT
- DENOTES EXISTING CITY MONUMENT
- ▲ PROPOSED CITY MONUMENT
- PROPOSED DRAINAGE FLOWS
- ⇄ EXISTING DRAINAGE FLOWS
- STATION NUMBER

DATE	REVISIONS	BY	BENCHMARK
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE ELEVATION 4174.29 (CITY DATUM)

SCALE	ENGINEER'S SEAL
HOR: 1" = 30'	
VER: 1" = 10'	
W.O. 111000-43	
FILE: FHRRDPE.DWG	
DATE: JANUARY 12, 2001	
DESIGN BY: R.L.A. / G.P.	
DRAWN BY: R.L.A. / G.P.	
CHKD. BY: H.P.	
APPD. BY: B.R.	

FRANKLIN HILLS UNIT ONE

FRANKLIN RIDGE DRIVE
(STA. 1+50.00 TO STA. 10+00.00)

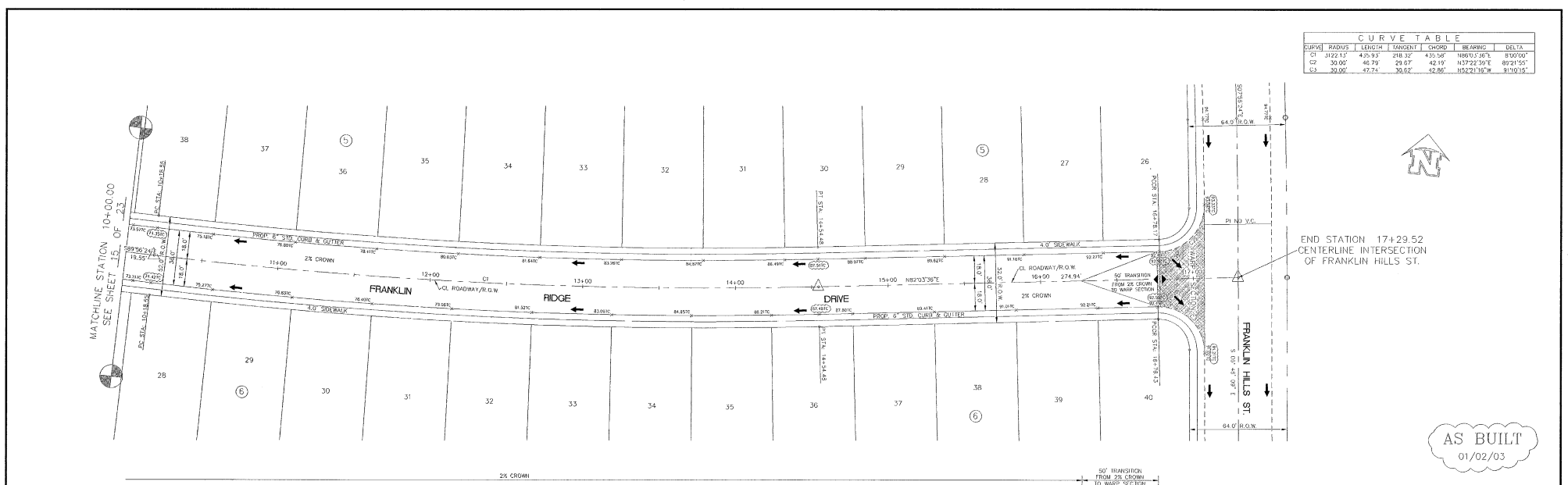
Roe Engineering, L.C.
600 N. Dallas St. Suite 400 St. Paul, TX 75660
(915) 333-0118 FAX: (915) 333-4972
Email: roeeng@roecivil.com

ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

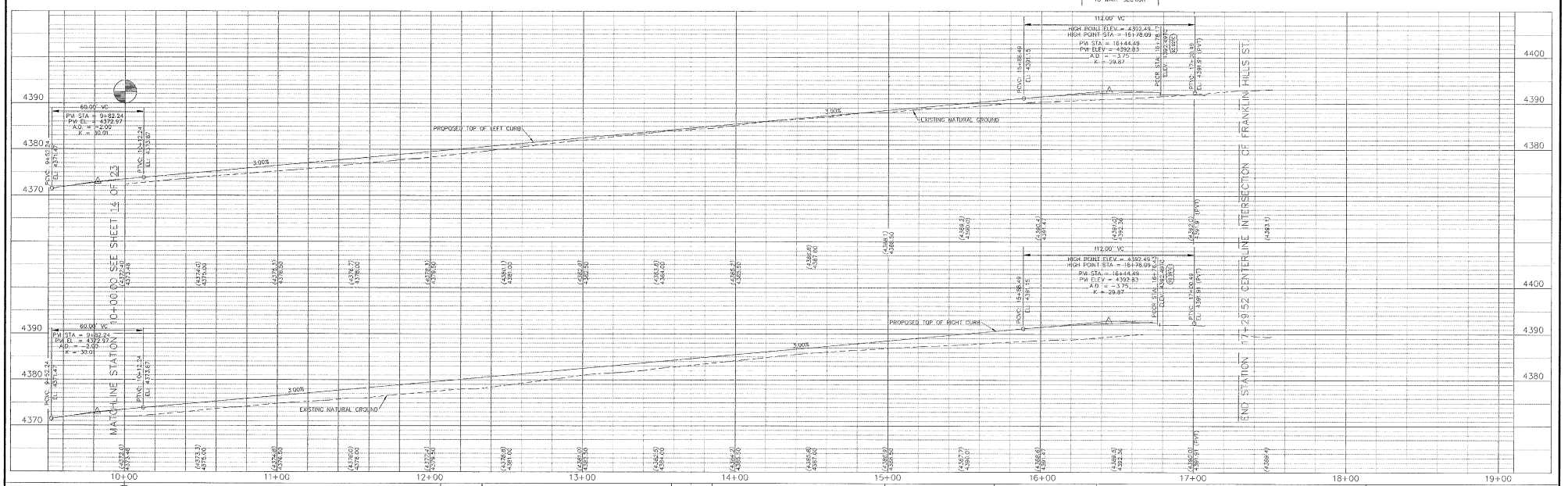
SHEET 14 OF 23

600599

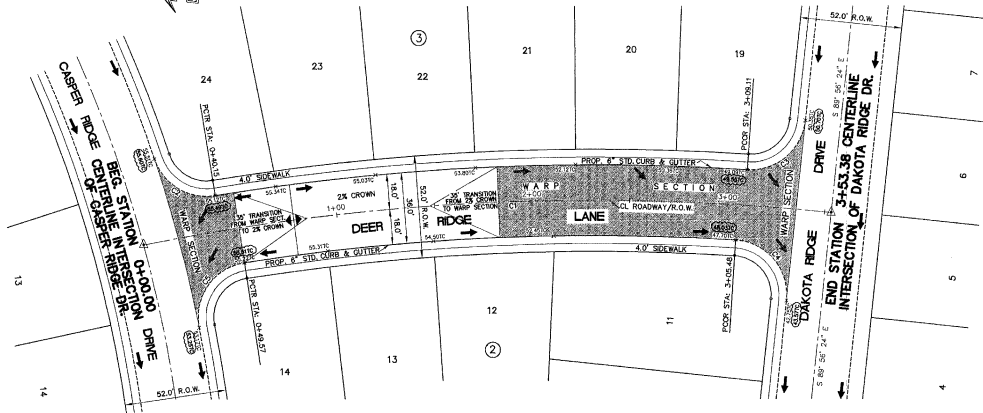
CURVE	RADIUS	LENGTH	ANGST	CHORD	BEARING	DELTA
C1	2122.15	423.93	288.32°	423.56'	N88°57.50'E	89°00'00"
C2	30.00	46.79	29.67°	42.19'	N37°22.35'E	89°21'55"
C3	30.00	47.74	30.64°	42.86'	N52°21'16"W	87°10'15"



AS BUILT
01/02/03



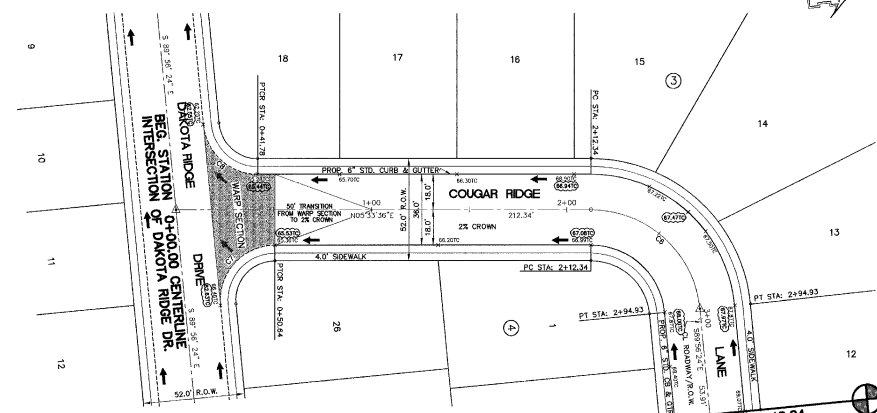
LEGEND PROPOSED DRAINAGE HIGH-POINT PROPOSED DRAINAGE LOW-POINT DENOTES EXISTING CITY MONUMENT PROPOSED CITY MONUMENT PROPOSED DRAINAGE FLOWS EXISTING DRAINAGE FLOWS STATIONING PROPOSED GRADE EXISTING GRADE	DATE 01/02/03 REVISIONS AS BUILT BY SR	BENCHMARK BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.29 (CITY DATUM)	SCALE HOR: 1" = 30' VER: 1" = 10' W.O. 111000-1A FILE: FHRIDP2E.DWG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.S.P. DRAWN BY: R.L.A. / G.S.P. CHKD. BY: H.P. APPD. BY: B.R.	ENGINEER'S SEAL 	PLAN AND PROFILE FRANKLIN HILLS UNIT ONE FRANKLIN RIDGE DRIVE (STA. 10+00.00 TO STA. 17+29.52)	 Proe Engineering, L.C. 800 N. COVING, SU. 300, WACO, TX, 76798 (817) 533-1418 FAX: (817) 533-4092 Email: roe@proe.com ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
	SHEET 15 OF 23		600599			



CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	1168.10'	353.38'	178.05'	352.03'	N08°36'24"W	172°00'00"
C2	28.00'	39.44'	23.79'	36.26'	S25°02'51"W	87°42'09"
C3	28.00'	42.82'	28.98'	38.84'	S48°01'32"E	87°44'43"
C4	28.00'	45.13'	29.17'	40.42'	N43°53'07"E	92°20'58"
C5	28.00'	45.16'	29.20'	40.42'	N81°02'21"E	92°23'52"

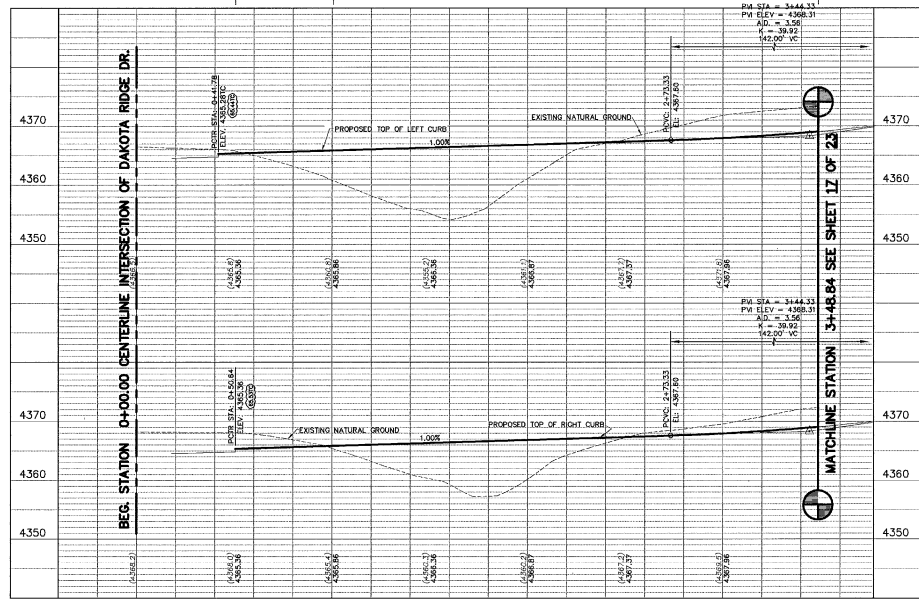
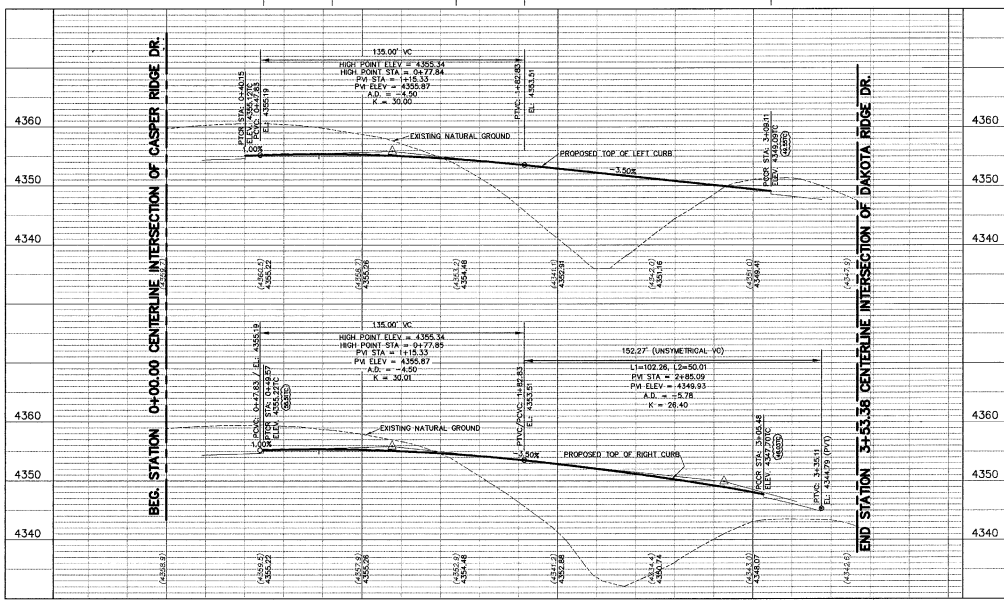
50' TRANSITION FROM WARP SECTION TO 2% CROWN
2% CROWN
50' TRANSITION FROM 2% CROWN TO WARP SECTION
WARP SECTION

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C6	58.00'	82.89'	50.87'	75.31'	S47°48'36"W	84°30'00"
C7	28.00'	46.87'	30.83'	41.45'	S42°11'24"E	95°30'00"
C8	28.00'	41.92'	29.43'	37.69'	N47°48'50"E	94°30'00"



AS BUILT
01/02/03

50' TRANSITION FROM WARP SECTION TO 2% CROWN
2% CROWN
50' TRANSITION FROM 2% CROWN TO WARP SECTION
WARP SECTION



LEGEND

- PROPOSED DRAINAGE HIGH-POINT
- PROPOSED DRAINAGE LOW-POINT
- EXISTING CITY MONUMENT
- PROPOSED CITY MONUMENT
- PROPOSED DRAINAGE FLOWS
- EXISTING DRAINAGE FLOWS
- EXISTING CITY MONUMENT
- STATION NUMBER

DATE	REVISIONS	BY	BENCHMARK
01/02/03	AS BUILT	S.R.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.29 (CITY DATUM)

SCALE	ENGINEER'S SEAL
HOR: 1" = 30' VER: 1" = 10'	

PLAN AND PROFILE

FRANKLIN HILLS UNIT ONE

DEER RIDGE LANE
(STA. 0+00.00 TO 3+53.38)

COUGAR RIDGE LANE
(STA. 0+00.00 TO STA. 3+48.84)

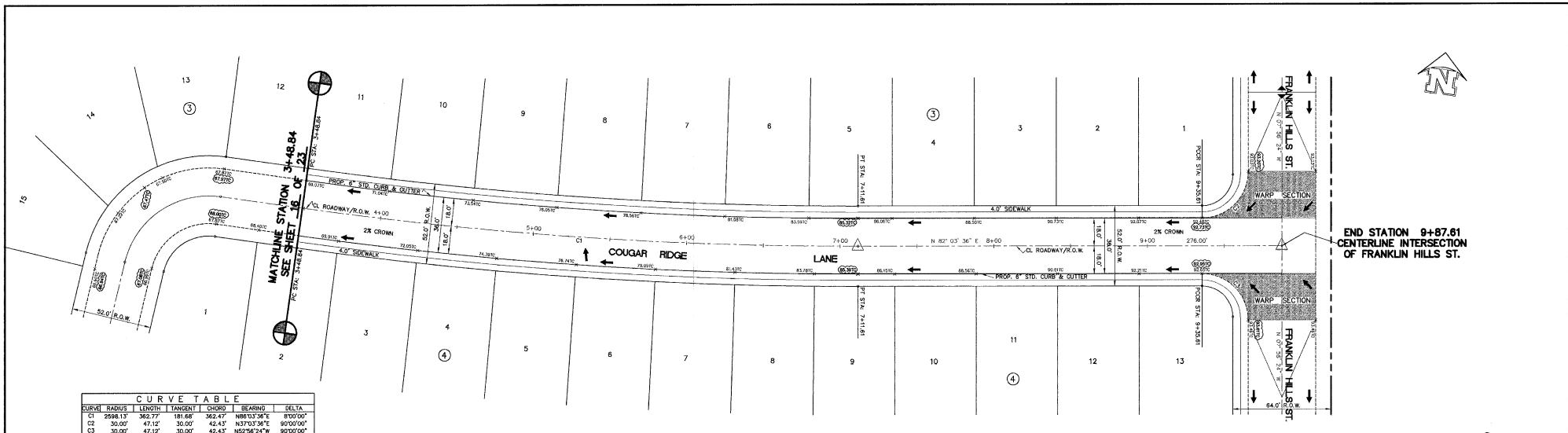
BRADLEY ROE, P.E. 31886

DATE: JANUARY 12, 2001
DESIGN BY: R.L.A. / G.P.
DRAWN BY: R.L.A. / G.P.
CHKD. BY: H.P.
APPD. BY: B.R.

BRADLEY ROE ENGINEERING, L.C.
981 N. Cotton St. Suite 506-B, Ft. Worth, TX 76102
(817) 553-4118 Fax: (817) 553-4972
Email: roe@bradleyroe.com

ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING

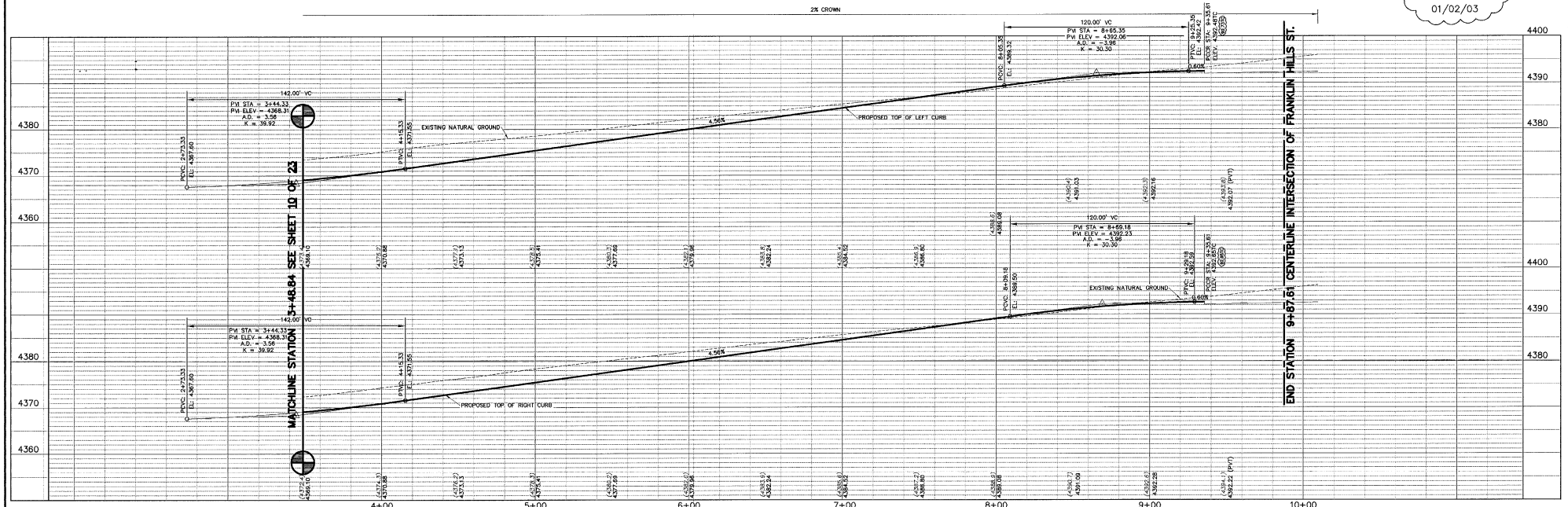
SHEET 16 OF 23



CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	2598.13'	382.77'	181.66'	362.47'	N87°03'36"E	90°00'00"
C2	30.00'	47.12'	30.00'	42.43'	N37°03'36"E	90°00'00"
C3	30.00'	47.12'	30.00'	42.43'	S82°56'24"W	90°00'00"

END STATION 9+87.61
CENTERLINE INTERSECTION
OF FRANKLIN HILLS ST.

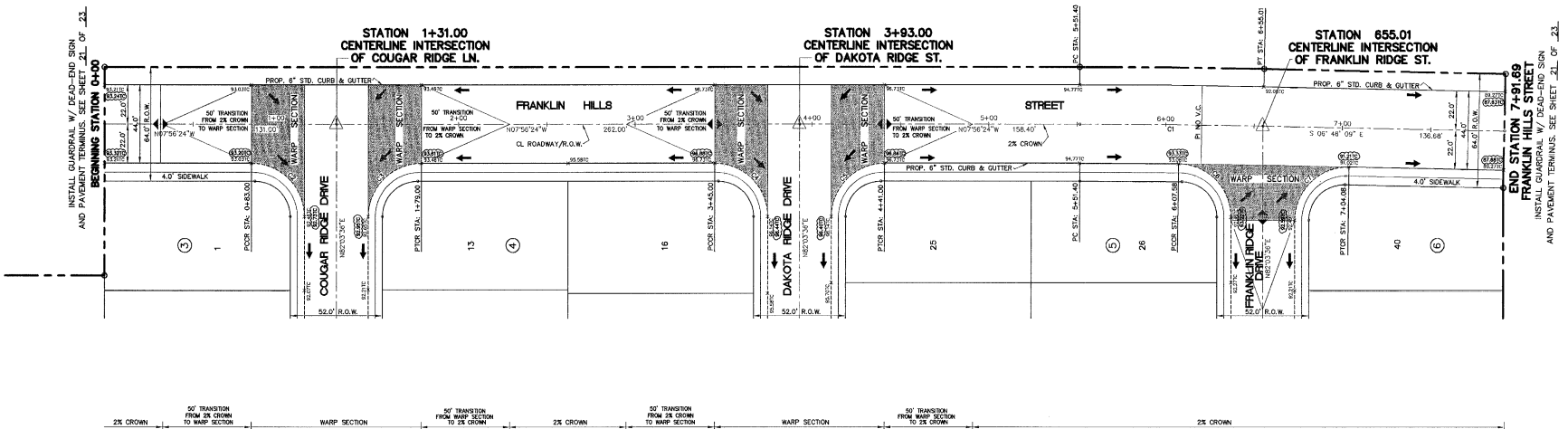
AS BUILT
01/02/03



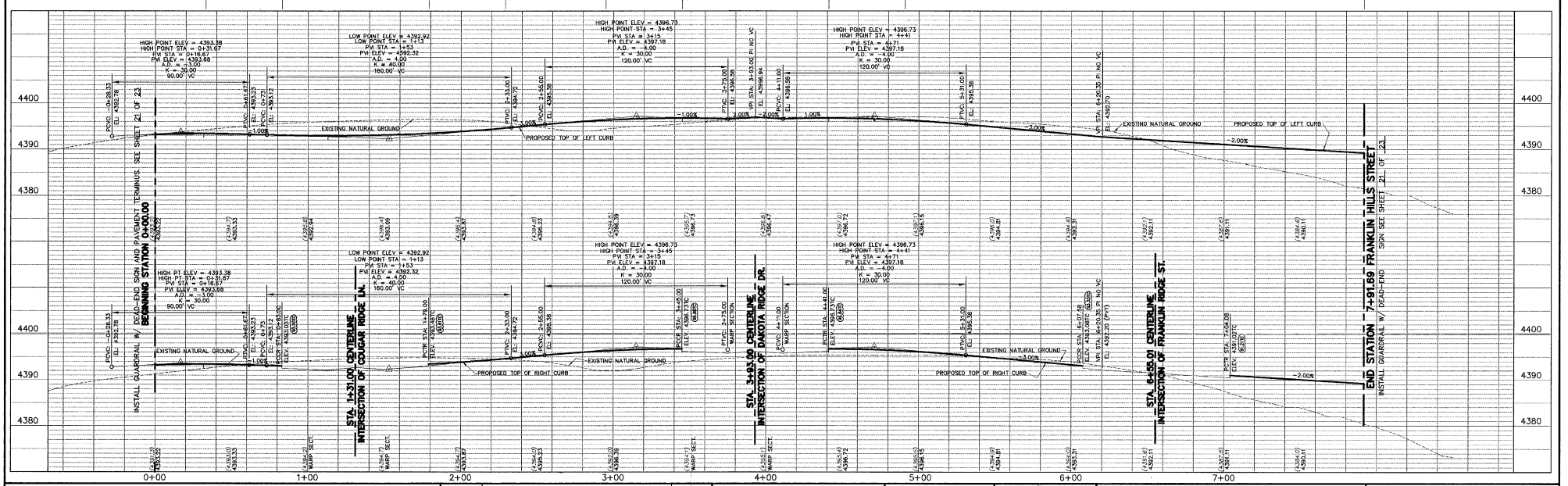
LEGEND		DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL	PLAN AND PROFILE
▲	PROPOSED DRAINAGE HIGH-POINT	01/02/03	AS BUILT	S.S.	BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.29 (CITY DATUM)	HOR: 1" = 30' VER: 1" = 10'		FRANKLIN HILLS UNIT ONE COUGAR RIDGE LANE (STA. 3+48.84 TO STA. 9+87.61)
▼	PROPOSED DRAINAGE LOW-POINT					FILE: FHCRP2E.DWG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.		
⊕	DENOTES EXISTING CITY MONUMENT							PROE Engineering, L.C. <small>201 N. Coates St. Suite 106 & 117, Ft. Worth, TX 76102 (817) 533-1418 Fax: (817) 533-4972 Email: roe@proe.net</small>
→	PROPOSED CITY MONUMENT							ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING SHEET 17 OF 23
↔	PROPOSED DRAINAGE FLOWS							600599
⇄	EXISTING DRAINAGE FLOWS							



CURVE TABLE						
SURV. PT.	RADIUS	LENGTH	TANGENT	BEARING	DELTA	DELTA
C1	5000.00'	103.81'	51.91'	103.81'	N07°11'16" W	110°10'
C2	30.00'	47.12'	30.00'	42.43'	N37°03'34" E	90°00'00"
C3	30.00'	47.12'	30.00'	42.43'	S62°56'24" W	90°00'00"
C4	30.00'	47.12'	30.00'	42.43'	N37°03'34" E	90°00'00"
C5	30.00'	47.12'	30.00'	42.43'	S62°56'24" W	90°00'00"
C6	30.00'	45.74'	28.67'	45.11'	N37°02'34" E	99°21'55"
C7	30.00'	47.74'	30.62'	42.85'	N62°21'16" W	91°10'14"

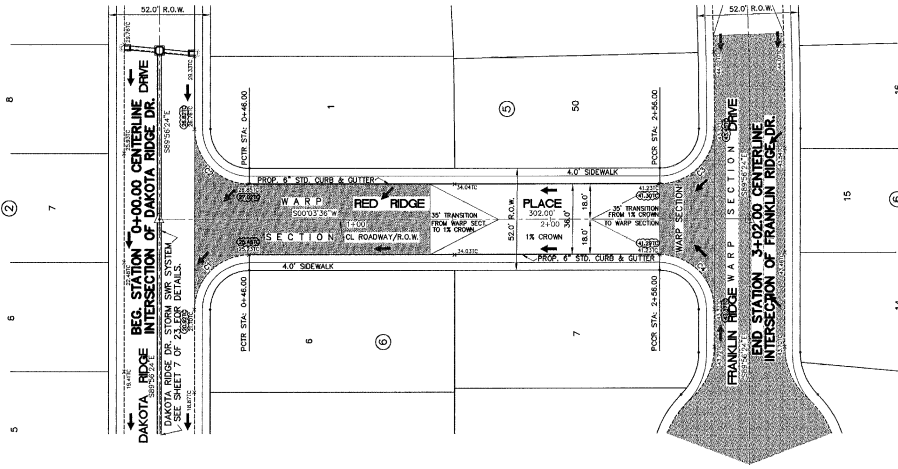


AS BUILT
01/02/03



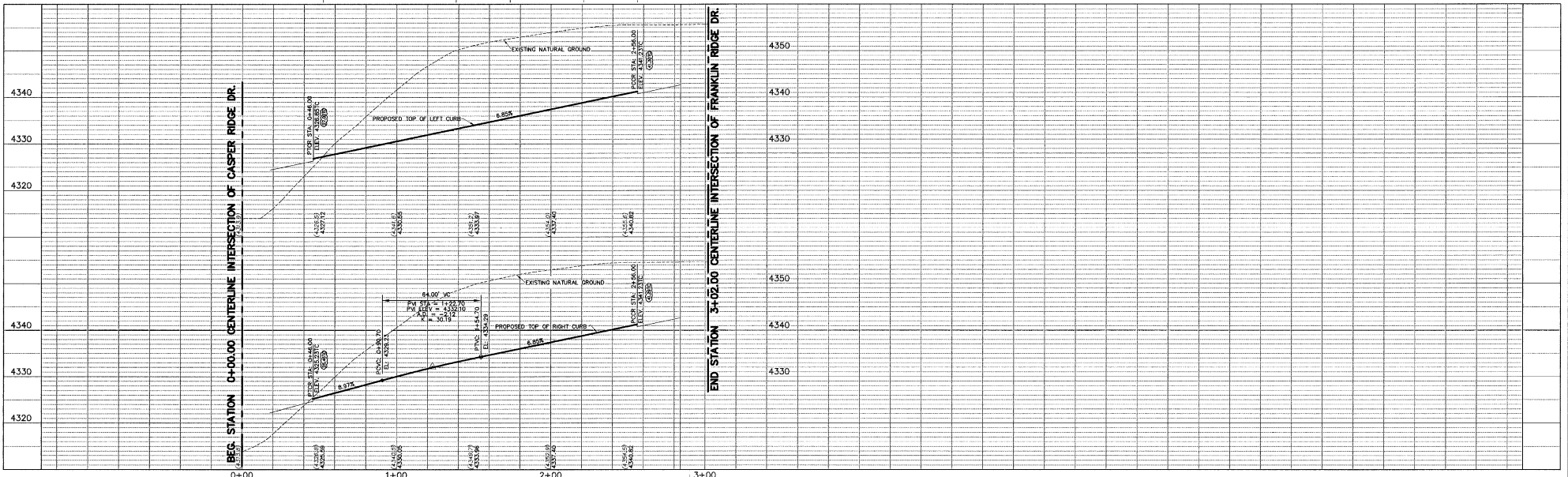
LEGEND 	DATE 01/02/03	REVISIONS AS BUILT	BY S/R	BENCHMARK BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE. ELEVATION 4174.23 (CITY DATUM)	SCALE 1" = 30' 1" = 10' N.O. 111000-4A FILE: FHRKPIE.DWG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.	ENGINEER'S SEAL 	FRANKLIN HILLS UNIT ONE FRANKLIN HILLS STREET (STA. 0+00.00 TO STA. 7+91.69)	

600599

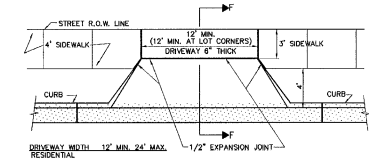


CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	28.00'	43.98'	28.00'	39.60'	N44°56'24"W	90°00'00"
C2	28.00'	43.98'	28.00'	39.60'	S45°03'36"W	90°00'00"
C3	28.00'	43.98'	28.00'	39.60'	S44°58'24"E	90°00'00"
C4	28.00'	43.98'	28.00'	39.60'	N45°02'36"E	90°00'00"

AS BUILT
01/02/03

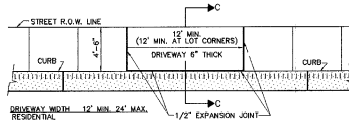


LEGEND PROPOSED DRAINAGE HIGH-POINT PROPOSED DRAINAGE LOW-POINT DENOTES EXISTING CITY MONUMENT PROPOSED CITY MONUMENT PROPOSED DRAINAGE FLOWS EXISTING DRAINAGE FLOWS EXISTING GRADE PROPOSED GRADE STATION NUMBER	DATE 01/02/03	REVISIONS AS BUILT	BY S.R.	BENCHMARK BENCHMARK: CITY MONUMENT AT THE CENTERLINE INTERSECTION OF PEARL RIDGE DRIVE AND COPPER RIDGE DRIVE, ELEVATION 4174.29 (CITY DATUM)	SCALE HOR: 1" = 30' VER: 1" = 10' W.G.: 111000-44 FILE: FHREDP1.EWDG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.	ENGINEER'S SEAL 	PLAN AND PROFILE FRANKLIN HILLS UNIT ONE RED RIDGE PLACE (STA. 0+00.0 TO STA. 3+02.00)	 Bnp Engineering, L.C. 801 N. Dallas St., Suite No. 6, Ft. Worth, TX, 76102 (817) 533-1418 FAX: (817) 533-8972 Email: rroese@bnpengineer.com ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING SHEET 19 OF 23
	600599							



PLAN VIEW/STANDARD CURB & GUTTER
SCALE: 1" = 6"

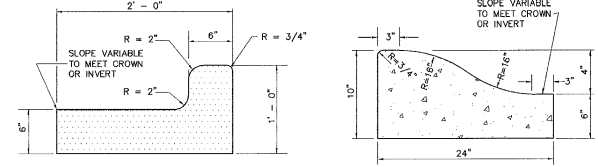
(TYPICAL APPLICATION FOR 8' PARKWAY WIDTH; INCL. HEELS)



PLAN VIEW/ROLL-OVER TYPE CURB
SCALE: 1" = 6"

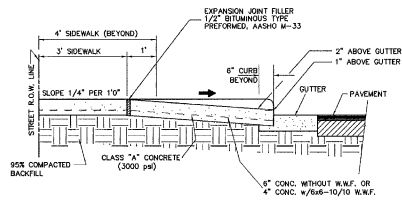
(TYPICAL APPLICATION FOR CUL-DE-SAC W/ 5' PARKWAY WIDTH)

- NOTES FOR CURB AND GUTTER:**
1. EXPANSION JOINTS WILL BE REQUIRED AT THE END OF CURB RETURNS, AT 50' O.C. & POINT OF TANGENCY WITH STRAIGHT RUNS OF CURB AT EVERY INTERSECTION
 2. CONTRACTION JOINTS 1/2" MIN. SPOURED JOINTS) MUST BE INSTALLED EVERY 10 FEET IN CURB OR GUTTER AND GUTTER.
 3. ALL EXPANSION JOINTS WILL BE PERFORMED BITUMINOUS FIBER 1/2" INCH THICK.
 4. CONCRETE TO BE CLASS "A", 3000 P.S.I.

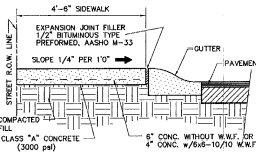


STANDARD CURB AND GUTTER DETAIL
SCALE 1 1/2" = 1"

ROLL-OVER CURB
SCALE 1 1/2" = 1"

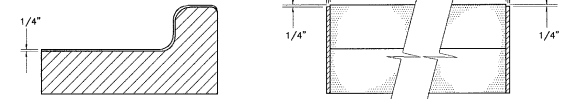


SECTION F - F
SCALE: 1" = 2"

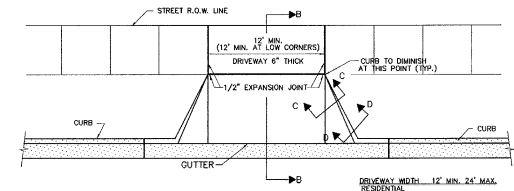


SECTION C - C
SCALE: 1" = 2"

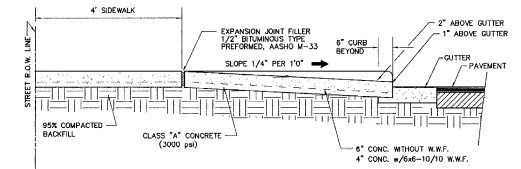
(TYPICAL APPLICATION FOR CUL-DE-SAC W/ 5' PARKWAY WIDTH)



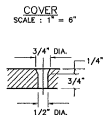
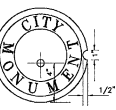
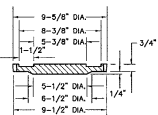
CURB AND GUTTER EXPANSION JOINT DETAIL
END ELEVATION SCALE 1 1/2" = 1"
SIDE ELEVATION



PLAN VIEW
SCALE: 1" = 6"



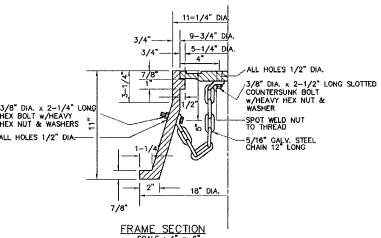
SECTION B - B
SCALE: 1" = 2"



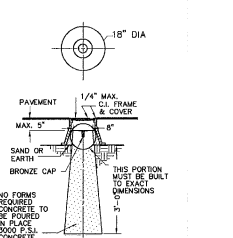
COVER
SCALE: 1" = 6"

SIZE AND CONSTRUCTION:
THE STANDARD CITY MONUMENT SHALL BE POURED-IN-PLACE CONCRETE CONC. EIGHT (8) INCHES MINIMUM DIAMETER AT THE TOP, EIGHTEEN (18) INCHES MINIMUM DIAMETER AT THE BOTTOM, THIRTY-SIX (36) INCHES MINIMUM IN DEPTH WITH THE MONUMENT CAP IN PLACE ON TOP.
THE MONUMENT SHALL BE COVERED WITH A CAST IRON BOX AND COVER.
NUMBER AND LOCATIONS:
THE MONUMENTS SHALL BE INSTALLED WHERE SHOWN ON THE SUBDIVISION PLAT AS APPROVED BY THE CITY ENGINEER.
ANY MONUMENT MUST BE WITHIN THE LINE OF SIGHT OF ANY OTHER MONUMENT (2000 FEET MAXIMUM DISTANCE BETWEEN MONUMENTS).
THE SIZE, TOPOGRAPHY AND LAYOUT OF THE SUBDIVISION SHALL GOVERN THE NUMBER OF MONUMENTS REQUIRED.

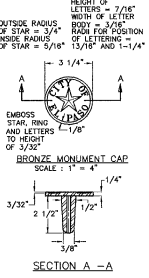
NO FEWER THAN TWO MONUMENTS SHALL BE PLACED IN A ONE STREET SUB-DIVISION.
AT LEAST ONE (1) MONUMENT SHALL BE PLACED ON EACH HORIZONTAL CURVE. TWO SHALL BE PLACED IF THE POINT OF INTERSECTION (P.I.) OF THE TANGENTS LEADING INTO THE CURVE FALLS OUTSIDE OF CITY RIGHT-OF-WAY. MONUMENTS SHALL BE INSTALLED SO THAT ALL POINTS PROPERTY CORNERS OF ALL LOTS IN THE SUBDIVISION ARE WITHIN LINE OF SIGHT OF A MONUMENT, OR WITHIN SIGHT OF LINE BETWEEN TWO ADJACENT MONUMENTS.



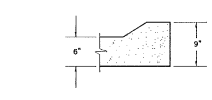
CITY MONUMENT DETAIL
SCALE: 1" = 6"



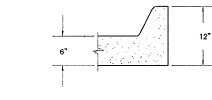
BRONZE MONUMENT CAP
SCALE: 1" = 4"



SECTION A - A
SCALE: 1" = 4"



SECTION C - C
SCALE: 1" = 1"



SECTION D - D
SCALE: 1" = 1"

TYPICAL CONCRETE DRIVEWAY

SCALE	
HOR:	AS NOTED
VER:	N/A
W.O.:	111000-4A
FILE:	FHTYD01.DWG
DATE:	JANUARY 12, 2001
DESIGN BY:	R.L.A. / G.P.
DRAWN BY:	R.L.A. / G.P.
CHKD. BY:	H.P.
APPD. BY:	B.R.

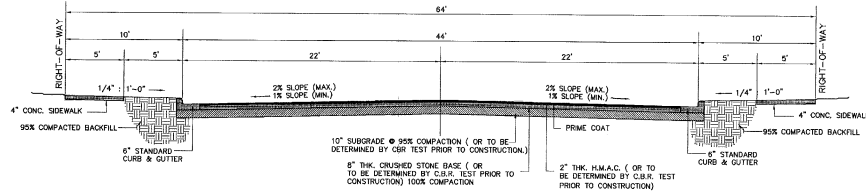
TYPICAL DETAILS
FRANKLIN HILLS UNIT ONE
TYPICAL DETAILS

hnp roe and associates
601 N. Collins St., Suite No. 6, Ft. Worth, TX 76102
(817) 533-1418 FAX: (817) 533-4492
Email: hnp@hnpae.com
ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
SHEET 20 OF 23

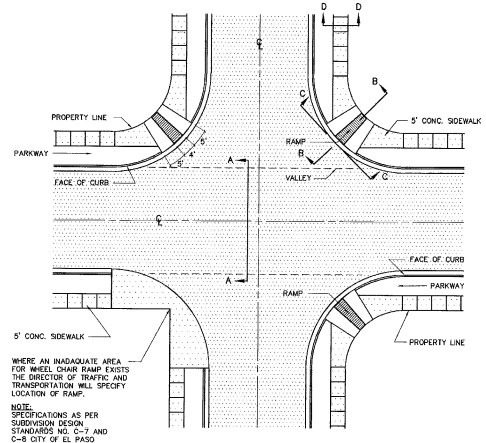
600599

NOTES FOR STREETS:

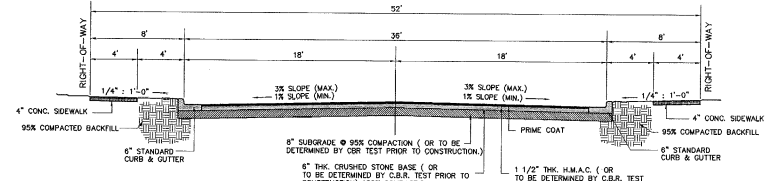
- BASE TO BE COMPACTED TO 100% COMPACTION BY A.S.T.M. D1557
- H.M.A.C. BASE, AND SUBGRADE WILL PLACED BE IN STRICT ACCORDANCE WITH THE LATEST CITY OF EL PASO SPECIFICATIONS
- SURGRADE TO BE COMPACTED TO 95% COMPACTION BY A.S.T.M. D1557
- PRIME COAT TO BE 0.25 GALLON PER SQUARE YARD (MIN. COVERAGE)
- ALL ELEVATIONS ON PLANS BASED ON CITY DATUM
- SURGRADE UNDER CURBS MUST BE FORMED AND COMPACTED AS SHOWN OR EXCESS CUT MUST BE BACKFILLED WITH CONCRETE
- COMPACTION BEHIND CURB A. ONE FOOT MIN. ON CUTS B. TWO FOOT MIN. ON FILLS
- C.B.R. TEST TO BE APPROVED BY THE CITY ENGINEER PRIOR TO PAVING
- COMPACTION TEST WHERE REQUIRED BY THE CITY ENGINEER MUST BE PAID FOR BY THE DEVELOPER. THIS INCLUDES BUT IS NOT LIMITED TO SUBGRADE AND BASE COURSE
- ALL PLANS MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF EL PASO SUBDIVISION DESIGN AND IMPROVEMENT STANDARDS
- C.B.R. TEST REQUIRED AT EVERY 500' AFTER SURGRADE IS IN PLACE OR A MIN. OF TWO TESTS IF STREET IS LESS THAN 500'
- STREET VERTICAL CONTROL OF ALL CURB AND GUTTER ELEVATIONS WILL BE MAINTAINED. (BLUE TOPPING REQUIRED THROUGHOUT)



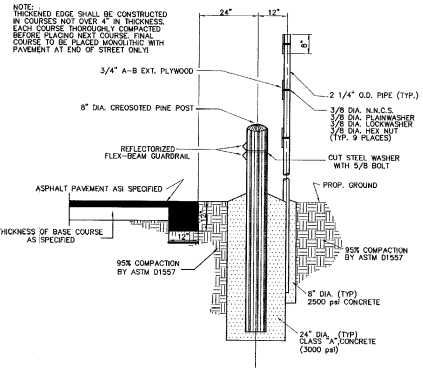
64' RIGHT-OF-WAY TYPICAL CROWN STREET SECTION
SCALE 1" = 5'



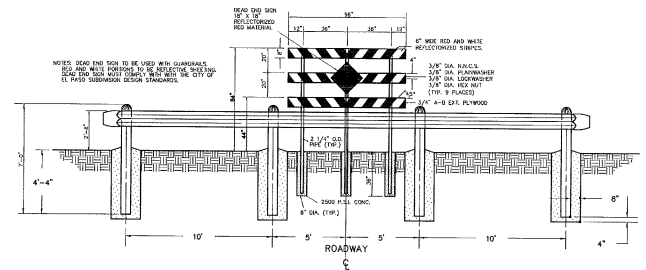
PLAN VIEW DETAIL
SCALE 1" = 20'



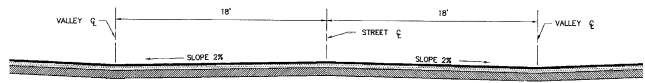
52' RIGHT-OF-WAY TYPICAL CROWN STREET SECTION
SCALE 1" = 5'



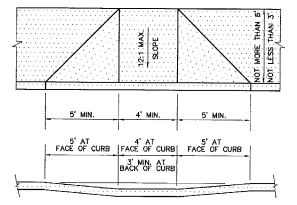
GUARDRAIL SECTION W/ PAVEMENT TERMINUS
SCALE 1" = 2'



GUARD RAIL DETAIL
SCALE: 1" = 4'

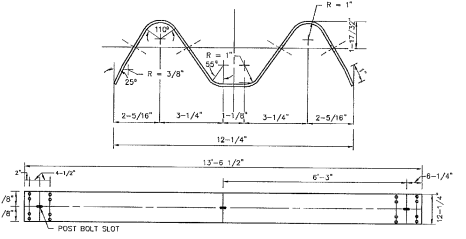


SECTION A - A
VALLEY DETAIL SCALE: 1" = 4'

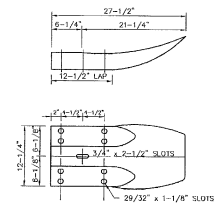


SECTION C - C
SCALE: 1" = 4'

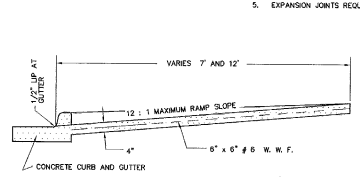
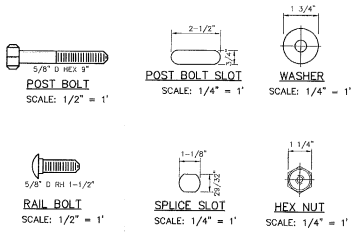
- NOTES FOR SIDEWALKS**
- CONCRETE TO BE 3000 P.S.I. MINIMUM
 - GUMMY JOINT REQUIRED AT 10' O.C. FOR HEADERS AND 5' O.C. FOR SIDEWALKS
 - EXPANSION MATERIAL REQUIRED AT CURB RETURNS WITH 1/2\"/>



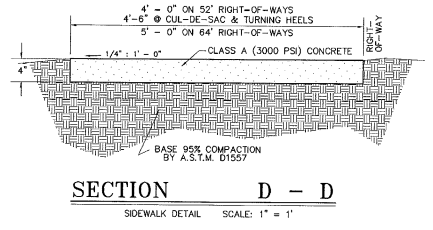
RAIL PLATE
SCALE: 1" = 2'



TERMINAL PLATE
SCALE: 1" = 1'



SECTION B - B
HANDICAP RAMP SCALE: 1" = 2'



SECTION D - D
SIDEWALK DETAIL SCALE: 1" = 1'

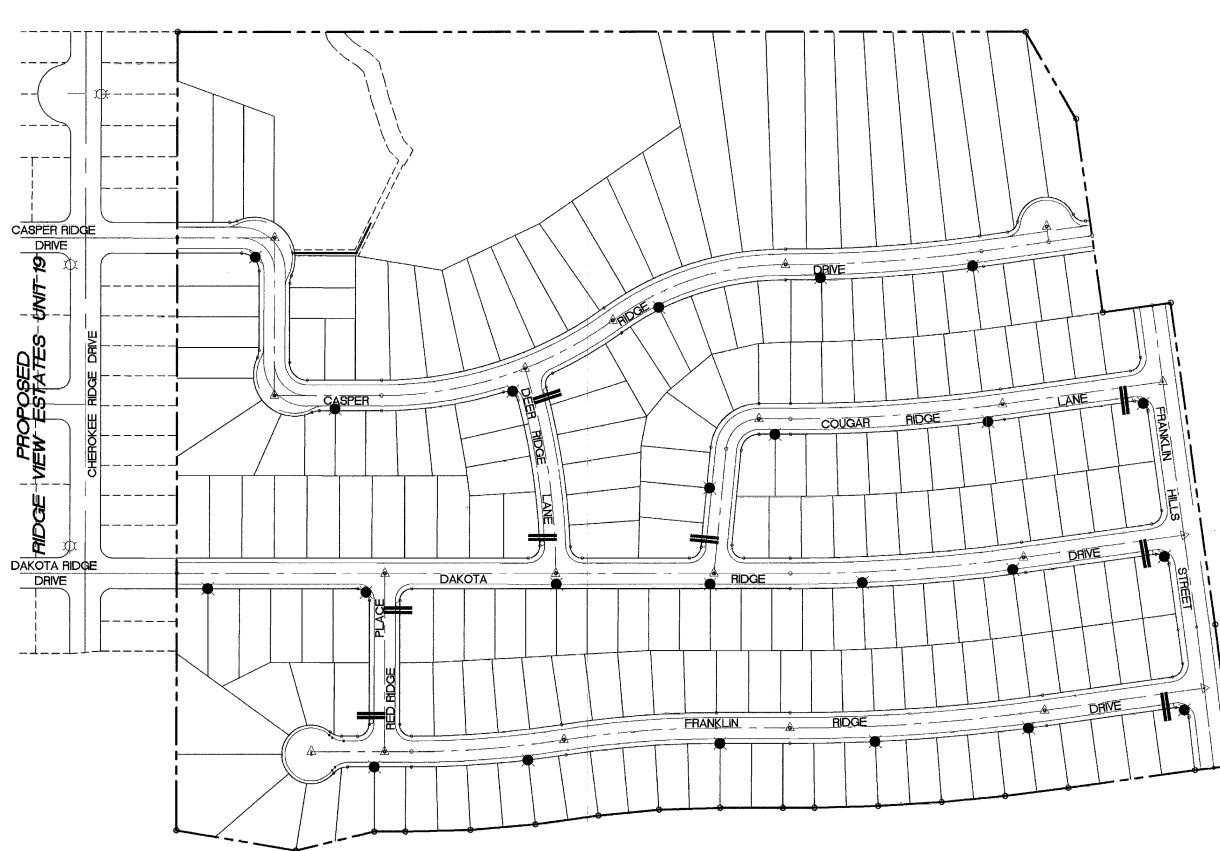
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HOR:	AS NOTED
VER:	N/A
W.O.	111000-4A
FILE:	FHTYPT2.DWG
DATE:	JANUARY 19, 2001
DESIGN BY:	R.L.A. / G.P.
DRAWN BY:	R.L.A. / G.P.
CHECK BY:	H.P.
APP'D BY:	B.B.



TYPICAL DETAILS
FRANKLIN HILLS UNIT ONE

TYPICAL DETAILS

brp **roe and associates**
 801 N. Collier St. Suite No. 6 El Paso, TX 79902
 (915) 555-1410 FAX: (915) 555-4992
 Email: rroeing@earthlink.net
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING



SCALE 1" = 100'

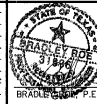
NOTE: SEE SHEET 23 OF 23 FOR DETAILS

- DENOTES LOCATION OF PROPOSED LIGHT POLE (12 POLES TOTAL)
- DENOTES LOCATION OF NCDBU (4' x 6'-3 SITES TOTAL)
- ⊙ DENOTES LOCATION OF EXISTING LIGHT POLE
- ⊕ EXISTING SNS
- ⊖ DENOTES LOCATION OF PROPOSED 9" SNS
- ⊖ DENOTES LOCATION OF PROPOSED 9" SNS WITH 24" STS

DEVELOPER'S GENERAL CONTRACTOR TO COORDINATE WITH THE EL PASO ELECTRIC COMPANY, BILL CONNER (915) 543-4166, (MOBILE 644-2815) FOR PROPER SCHEDULING AND CONSTRUCTION OF THESE FACILITIES.

DATE	REVISIONS	BY	BENCHMARK

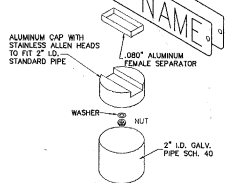
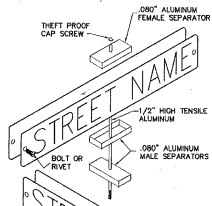
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 FILE: FHILL.DWG
 DATE: JANUARY 12, 2001
 DESIGN BY: R.L.A. / G.P.
 DRAWN BY: R.L.A. / G.P.
 CHKD BY: H.P.
 APPD BY: B.R.



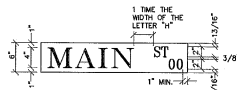
ILLUMINATION
FRANKLIN HILLS UNIT ONE
 ILLUMINATION PLAN
 U.S. POSTAL SERVICE NCDBU LOCATIONS
 TRAFFIC SIGNAGE PLAN

hnp Roe Engineering, L.C.
 503 N. Dallas St., Suite No. 8 El Paso, Tx, 79902
 (915) 533-1410 FAX: (915) 533-1972
 Email: roe@hnpeng.com
 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
 SHEET 22 OF 23

600599

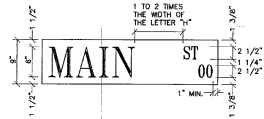


SIGN CLASS	SIGN LENGTH	PRIMARY LETTERS SIZE & SERIES	SUFFIX & BLOCK NUMBER SIZE AND SERIES
6" ARTERIAL STREETS	24" 30" 36"	4" C.D. SERIES 4" C.D. SERIES 4" A.B.C.D. SERIES	2" C SERIES 3" C SERIES 4" C SERIES

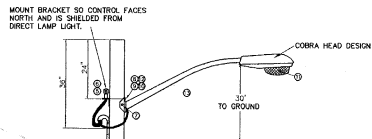


LAYOUT FOR 6" STREET NAME SIGN
SCALE: 1" = 1'

SIGN CLASS	SIGN LENGTH	PRIMARY LETTERS SIZE & SERIES	SUFFIX & BLOCK NUMBER SIZE AND SERIES
9" ARTERIAL STREETS	36" 42" 48"	6" C.D. SERIES 6" C.D. SERIES 6" A.B.C.D. SERIES	3" C SERIES 3" C SERIES 4" C SERIES



LAYOUT FOR 9" STREET NAME SIGN
SCALE: 1" = 1'



MAXIMUM DISTANCE BETWEEN RIGID METAL CONDUIT SUPPORTS IS 10 FEET.

ITEM	QTY.	DESCRIPTION
1	1	POLE, PENTA TREATED PINE 35' CLASS II
2	2'	1/2" RIGID GALVANIZED STEEL CONDUIT
3	4	TWO HOLE STEEL PIPE STRAP FOR 1/2" CONDUIT
4	8	1/4" x 1" LAG BOLT
5	1	PHOTO CELL RECEPTACLE WITH 1/2" THREADED BASE AND MOUNTING BRACKET
6	1	PHOTO CELL - 240 VOLTS
7	4	1/2" x 4" LAB BOLTS
8	1	WASHER, SO. GALV. 2-1/4" x 2-1/4"
9	1	MACHINE BOLT 5/8" x 8"
10	1	LOOKOUT 5/8"
11	1	HIGH PRESSURE SODIUM FIXTURE 100 WATT
12	1	WASHER, COIL SPRING 5/8"
13	1	STEEL LUMINAIRE SUPPORT (10" OR 8" UNION METAL MANUF. CO. DESIGN 348 OR EQUIVALENT)
14	1	2-#12 COPPER WIRES WITH THW INSULATION
15	1	GROUND CLAMP FOR 1/2" RIGID CONDUIT

EXHIBIT "A"
SCALE: 1" = 2'

- NOTES
- THE DEPTH OF THE 35' CLASS II STREET LIGHT POLE SHALL BE 6'.
 - THE HOLE SHALL BE DRILLED WITH A 12" DIAMETER AWES.
 - COMPACTION OF HOLE AND TRENCH WORK SHALL COMPLY WITH DSU 14-1.
 - DISTRIBUTION BUTT GROUNDING (SEE DSU 6-13) SHALL BE USED.

ITEM	QTY.	DESCRIPTION
1	1	1/2" SCHEDULE 40 PVC COUPLING
2	1	1/2" SCHEDULE 40 PVC 18" RADIAL BEND
3	1	1/2" SCHEDULE 40 PVC FEMALE ADAPTER
14	1	1/2" x 6" PVC COATED RIGID STEEL CONDUIT NIPPLE
15	1	1/2" PVC COATED RIGID STEEL COUPLING

* - MUST MEET OCCIDENTAL COATING CO. SPECIFICATIONS.

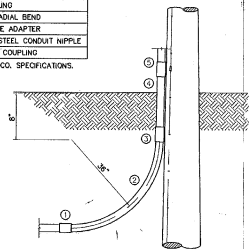
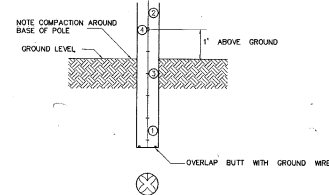


EXHIBIT "B"
SCALE: 1" = 2'



ITEM	QTY.	DESCRIPTION
1	1	COPPER WIRE, #8 BARE SOLID HARD DRAWN
2	1	ALUMINUM WIRE, #4 BARE SOLID HARD DRAWN
3	1/2	STAPLE, GALVANIZED 1-1/2" NO. 9
4	1	SPLICE, #4 SOLID ALUMINUM TO #8 SOLID COPPER

EXHIBIT "C"
SCALE: 1" = 2'

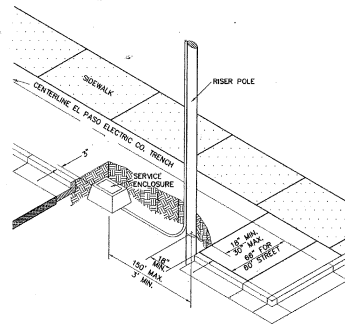


EXHIBIT "D"
SCALE: 1" = 5'

STREET LIGHT LOCATION
THE FOLLOWING GENERAL STANDARDS SHALL GOVERN THE INSTALLATION OF STREET LIGHT IN RESIDENTIAL SUBDIVISIONS.

THE CENTER OF THE INTERSECTION AND THE CENTER OF THE CURVE'S ARC SHALL HAVE A MINIMUM ILLUMINATION OF 0.2 FOOTCANDLES. ILLUMINATION MAY DERIVE FROM MORE THAN ONE SOURCE. A CITY OF EL PASO STANDARD 30-FOOT HIGH, 100-WATT, HIGH PRESSURE, SODIUM RESIDENTIAL STREET LIGHT HAS AN ILLUMINATION OF 0.2 FOOTCANDLES AT A DISTANCE OF APPROXIMATELY 185 FEET FROM THE LIGHT.

EXHIBIT "E"

ITEM NO.	DESCRIPTION	STOCK/DSO NO.	QTY.
1	STEEL POLE VALMONT, CAT. # DS30660A3055V OR EQUIVALENT.		1
2	ALUMINUM TRANSFORMER BASE VALMONT CAT. # M104 WITH PLASTIC DOOR		1
3	PHOTOCELL, 240 V - SEE NOTE 1	21-225	1
4	LUMINAIRE, 100 W H.P.S	21-335	1
5	HPS LAMP, 100 W	21-085	1
6	#10 SOLID CABLE 600 V	13-600	40' FEET
7	CABLE, #10, 2 CONDUCTOR.	13-600	40' FEET
8	BREAKAWAY FUSES 30 AMP	21-250	2
9	5/8" GROUND ROD CLAMP	07-461	1
10	5/8"x10' CU BONDED GROUND ROD	08-628	1

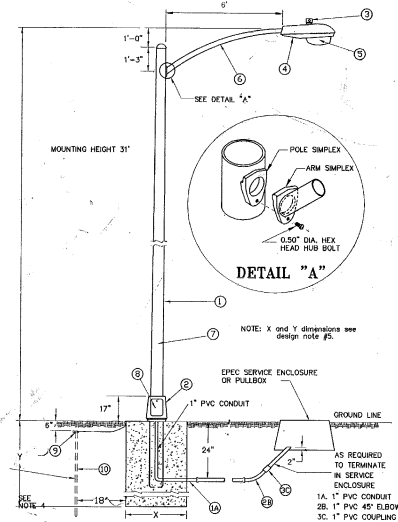
KEYED NOTES

- MOUNT SO THAT CONTROL FACES NORTH.
- DESIGN NOTES
- INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS.
- STEEL POLE TO HAVE A BREAKAWAY BASE AS REQUIRED BY THE CITY OF EL PASO.
- FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING CODE INTERPRETATION, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
- POLE SHALL BE GROUND AS REQUIRED BY N.E.C. - LATEST EDITION.
- A GROUND ROD MUST BE USED.
- FOR NORMAL SOIL, THE DIMENSIONS ARE X=24" AND Y=72". THE DIMENSIONS FOR ROCKY SOIL ARE X=24" AND Y=80".

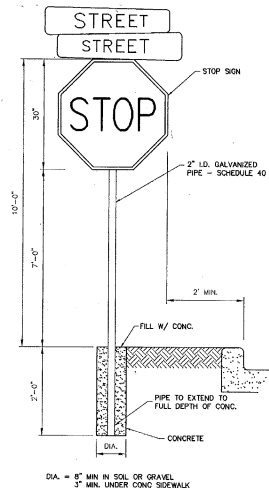
STREET LIGHT LOCATION

THE FOLLOWING GENERAL STANDARDS SHALL GOVERN THE INSTALLATION OF STREET LIGHT IN RESIDENTIAL SUBDIVISIONS.

THE CENTER OF THE INTERSECTION AND THE CENTER OF THE CURVE'S ARC SHALL HAVE A MINIMUM ILLUMINATION OF 0.2 FOOTCANDLES. ILLUMINATION MAY DERIVE FROM MORE THAN ONE SOURCE. A CITY OF EL PASO STANDARD 30-FOOT HIGH, 100-WATT, HIGH PRESSURE, SODIUM RESIDENTIAL STREET LIGHT HAS AN ILLUMINATION OF 0.2 FOOTCANDLES AT A DISTANCE OF APPROXIMATELY 185 FEET FROM THE LIGHT.



ALTERNATE UNDERGROUND RESIDENTIAL BREAKAWAY STREET LIGHT POLE
N.T.S.



SIGN POST INSTALLATION
NOT TO SCALE

DATE	REVISIONS	BY	BENCHMARK	SCALE	ENGINEER'S SEAL	ILLUMINATION DETAILS
				HOR: N/A VER: N/A W.O.: 111000-4A FILE: THLLUNZ.DWG DATE: JANUARY 12, 2001 DESIGN BY: R.L.A. / G.P. DRAWN BY: R.L.A. / G.P. CHKD. BY: H.P. APPD. BY: B.R.		FRANKLIN HILLS UNIT ONE ILLUMINATION PLAN AND TRAFFIC SIGNAGE DETAILS

Roe Engineering, L.C.
 601 N. Cotton St. Suite No. 8 El Paso, TX, 79902
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 ENGINEERING/LAND DEVELOPMENT/PLANNING/SURVEYING
 SHEET 23 OF 23

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