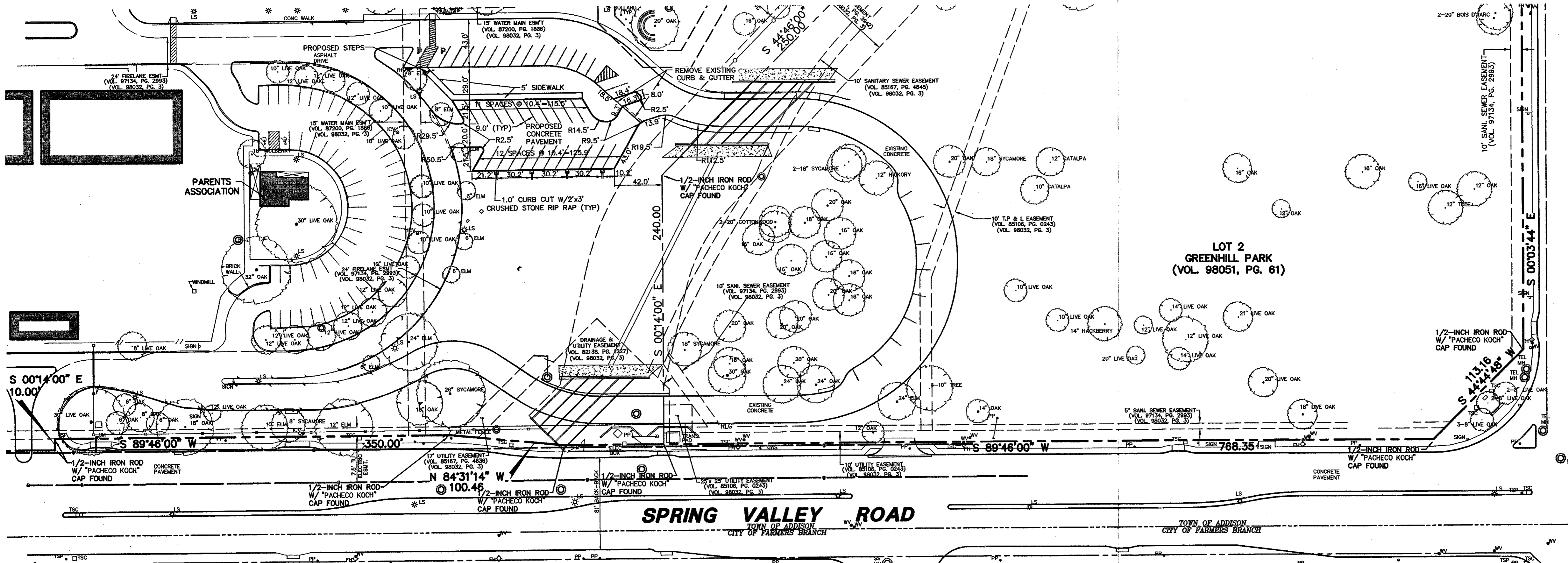


VICINITY MAP

LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CL. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TEB. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- X- FENCE
- OH. OVERHEAD UTILITY LINE
- 6" W. UNDERGROUND WATER LINE
- E. UNDERGROUND ELECTRIC LINE
- T. UNDERGROUND TELEPHONE LINE
- C. UNDERGROUND CABLE LINE
- 6" SS. UNDERGROUND SANITARY SEWER LINE



GENERAL NOTES

1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENT, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
2. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS INCLUDING ALL NOTES, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS AND THE CITY STANDARDS FOR CONSTRUCTION AND ANY OTHER APPLICABLE STANDARD AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATION PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
3. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC.. THEY MUST BE ADJUSTED TO PROPER LINE, AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
5. PROTECT AND MAINTAIN ROADWAY TRAFFIC THROUGHOUT THE PROJECT, PROVIDING A MINIMUM OF ONE (1) LANE OPEN IN EACH DIRECTION; PROVIDE AND MAINTAIN INTERIM ACCESS FROM ROADWAYS CURRENTLY IN USE TO ALL DRIVEWAYS AND INTERSECTING STREETS OR ALLEYS; MAINTAIN NORMAL PROJECT DRAINAGE UNTIL NEW DRAINAGE FACILITIES ARE FUNCTIONAL, INCLUDING, WHERE NECESSARY, INTERIM REPLACEMENT OF EXISTING DRAINAGE STRUCTURES REMOVED FOR CONSTRUCTION OF NEW DRAINAGE FACILITIES; MAINTAIN ALL WORK AND MATERIAL STORAGE AREAS IN ORDERLY CONDITION, FREE OF DEBRIS AND WASTE; ON COMPLETION OF CONSTRUCTION, CLEAN UP THE PROJECT AND ADJACENT AFFECTED AREAS TO ACCEPTABLE CONDITION, ALL AS PROVIDED IN THE GENERAL CONDITIONS.
6. PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
7. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
8. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
9. REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING ENTRANCE LAYOUTS, RAMPS, LANDSCAPE AND SIDEWALKS.
10. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO TEXAS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.

NO.	DATE	REVISION

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DIMENSIONAL CONTROL PLAN**

**PARKING LOT**

**GREENHILL SCHOOL ADDITION**

**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**

**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	DRI	MAY 2005	1"=50'			<b>C1.0</b>



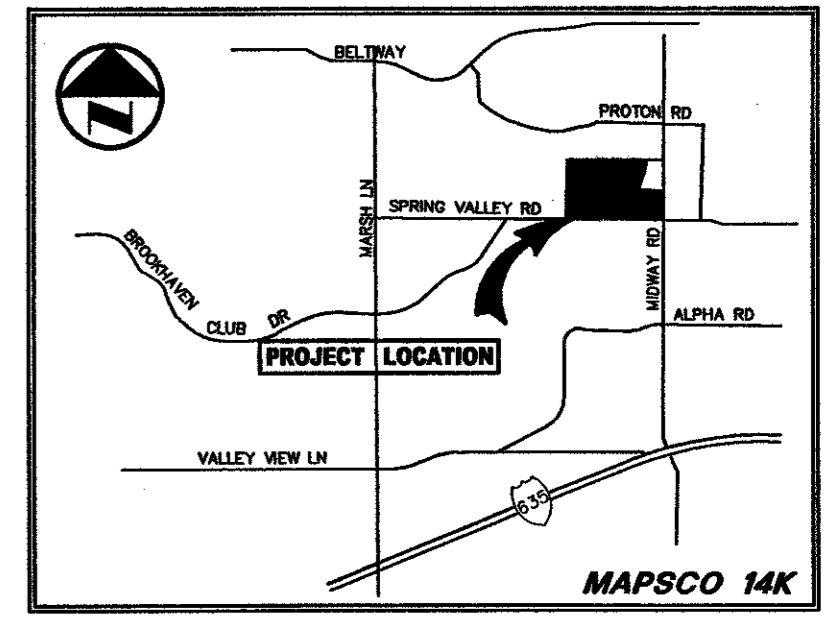
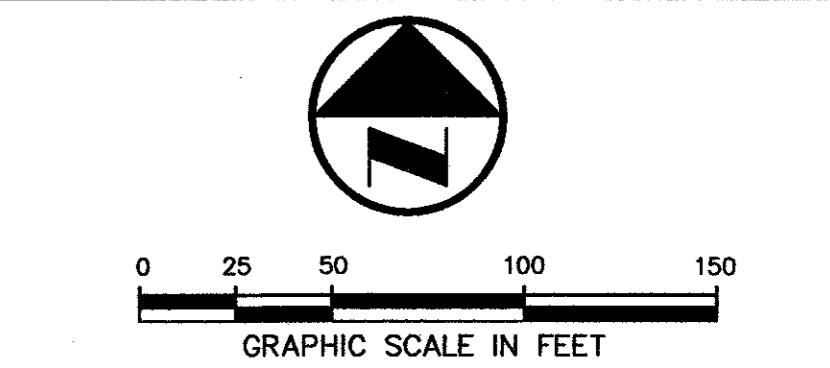
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GREENHILL SCHOOL

LES LECS VILLAGE PHASE I  
V. 83183, P. 4319

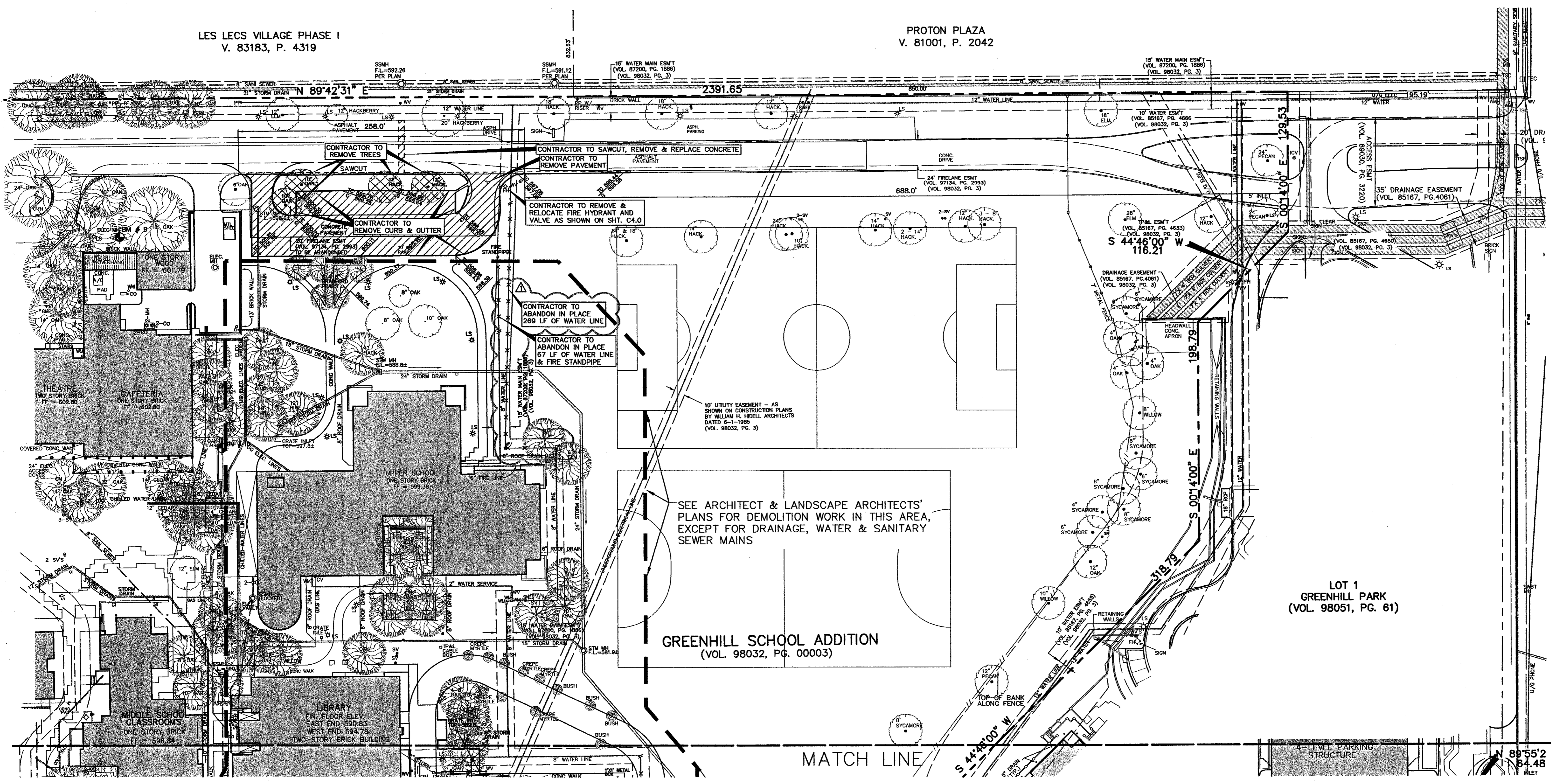
PROTON PLAZA  
V. 81001, P. 2042



VICINITY MAP

LEGEND

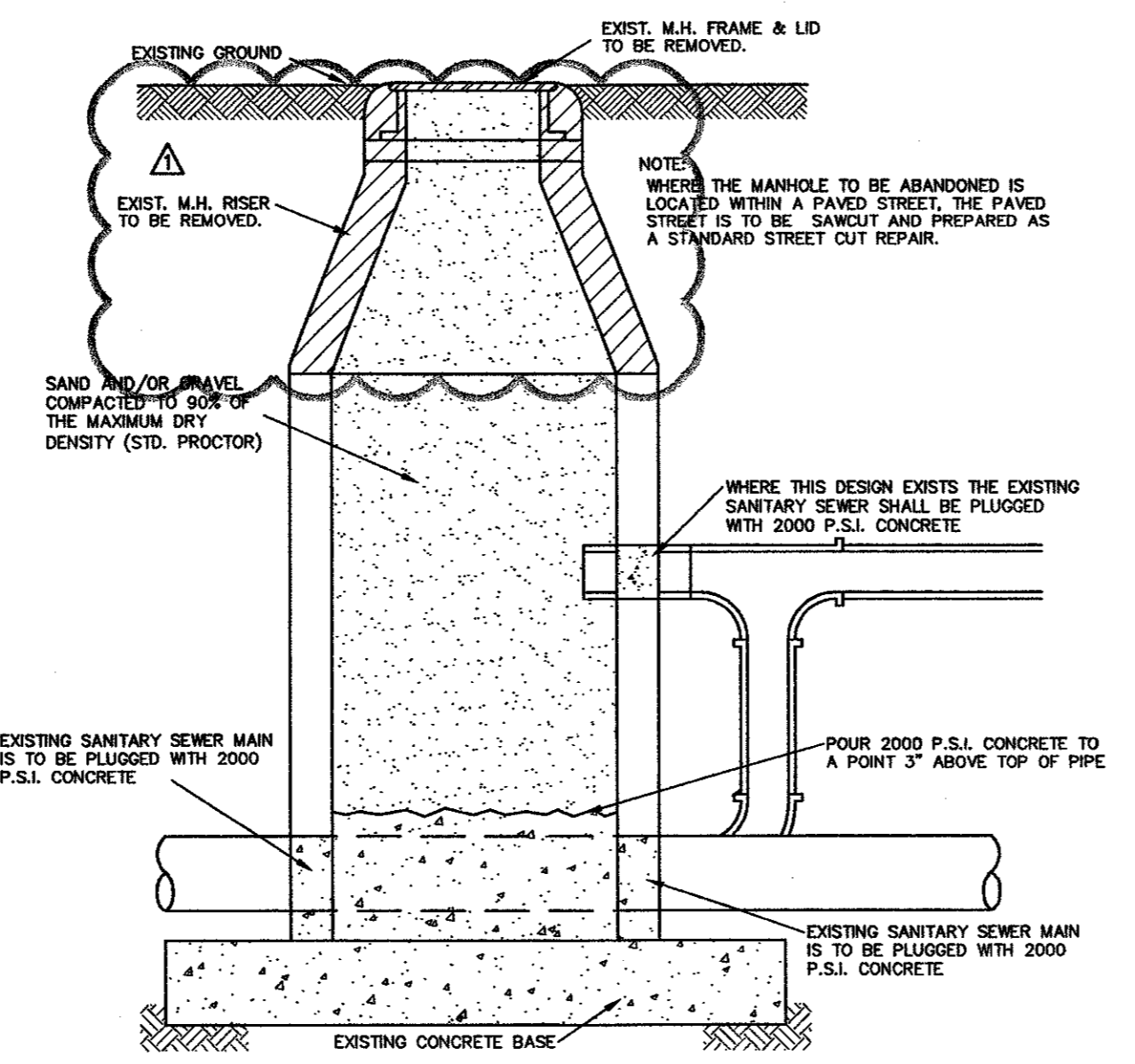
- B. BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
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- WM WATER METER
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- FH FIRE HYDRANT
- CO CLEANOUT
- MH MANHOLE
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TEL TELEPHONE BOX
- FL FLOOD LIGHT
- FP FLAG POLE
- TR TRAFFIC SIGN
- IRS 1/2" IRON ROD
- W/PACHICO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OH OVERHEAD UTILITY LINE
- UW UNDERGROUND WATER LINE
- EL UNDERGROUND ELECTRIC LINE
- UT UNDERGROUND TELEPHONE LINE
- UC UNDERGROUND CABLE LINE
- US UNDERGROUND SANITARY SEWER LINE
- PROPOSED DEMOLITION
- TREE REMOVAL



SEE ARCHITECT & LANDSCAPE ARCHITECTS' PLANS FOR DEMOLITION WORK IN THIS AREA, EXCEPT FOR DRAINAGE, WATER & SANITARY SEWER MAINS

GREENHILL SCHOOL ADDITION  
(VOL. 98032, PG. 00003)

LOT 1  
GREENHILL PARK  
(VOL. 98051, PG. 61)



Abandonment of Existing Manhole  
NOT TO SCALE

DEMOLITION NOTES

1. REVIEW ALL GENERAL NOTES.
2. REMOVE ALL EXISTING PAVEMENT AND STRUCTURES WITHIN THE SHADED AREA UNLESS OTHERWISE NOTED.
3. SAWCUT AND REMOVE ALL EXISTING DRIVE APPROACHES THAT ARE SHADED 2 FEET FROM THE BACK OF CURB.
4. CONSULT THE DIMENSIONAL CONTROL PLAN, VERIFY THE PORTION OF EXISTING CONCRETE CURBS WHICH ARE TO REMAIN.
5. COORDINATE WITH TXU, SOUTHWESTERN BELL TELEPHONE, AND THE LOCAL CABLE COMPANY PRIOR TO THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES.
6. ALL UTILITIES SHOULD BE CUT AND PLUGGED IN COORDINATION WITH THEIR RESPECTIVE UTILITY COMPANIES AND PRIOR TO THE DEMOLITION OF THE EXISTING BUILDINGS.
7. CONTRACTOR TO PLUG ALL EXPOSED ENDS AND ABANDONED UTILITIES.
8. CONTRACTOR TO DETERMINE SOURCE OF ALL EXPOSED UTILITIES AND IF REQUIRED, RECONNECT TO PROPOSED UTILITIES.
9. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL UNSUITABLE MATERIALS.
10. REMOVE ALL WATER, SANITARY SEWER, AND DRAINAGE APPURTENANCES THAT ARE ASSOCIATED WITH ALL REMOVED, RELOCATED, OR ABANDONED UTILITY LINES.

BENCH MARKS	
BM #3:	Cut "+" in walk on outside of curved drive near southeast corner of lower school. Elev. 586.06
BM #4:	"□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus. Elev. 578.47
BM #5:	"□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley. Elev. 588.20
BM #9:	"□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus. Elev. 602.80
BM #10:	"□" cut on conc. step near northwest corner of upper school. Elev. 598.85
BM #11:	"□" cut on conc step on walk exiting west side of library. Elev. 598.44
BM #12:	"□" cut at intersection of walk along west side of lower school and walk along south side Lower school. Elev. 587.78



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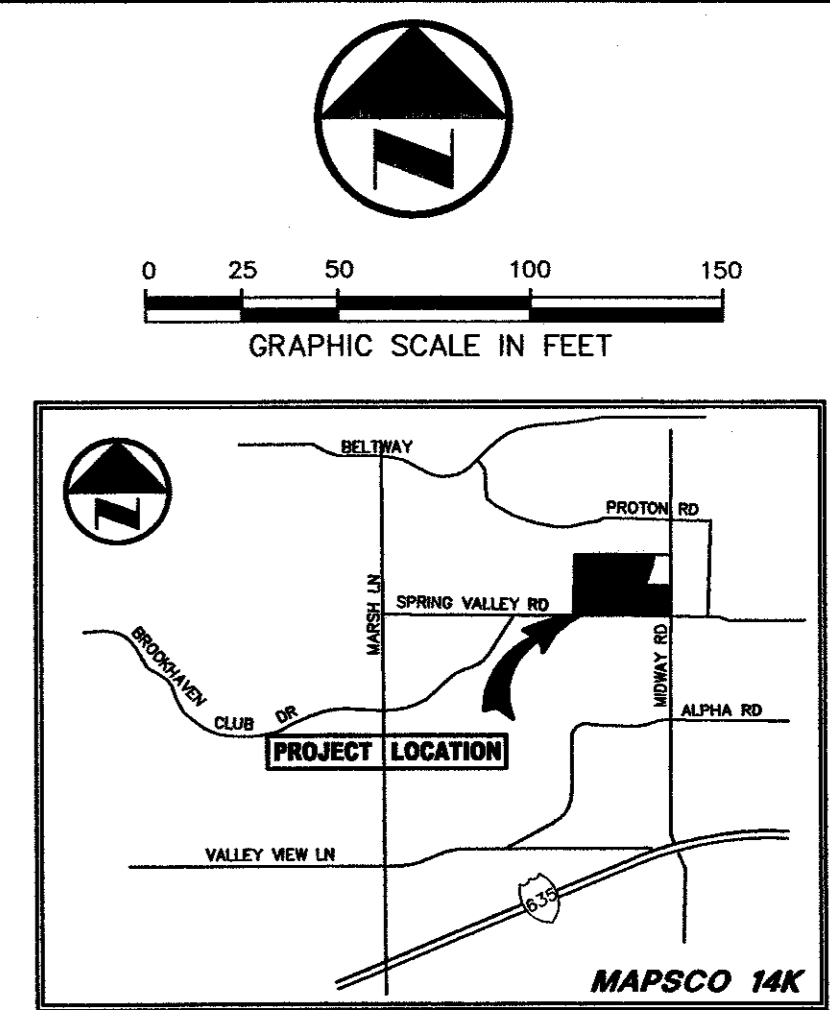
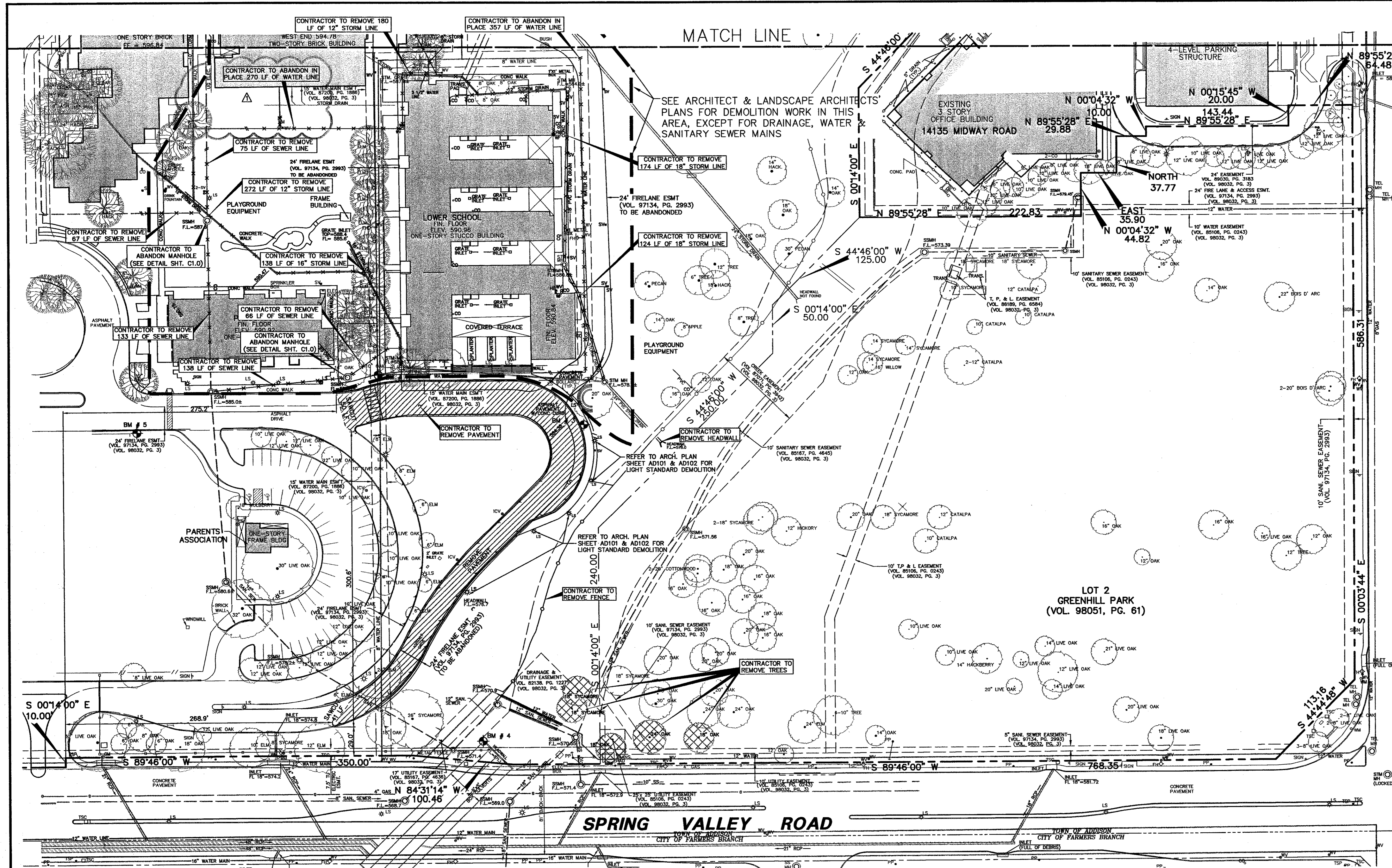
NO.	DATE	REVISION
1	04/30/2004	REVISED ABANDONED WATER LINE AND DETAIL

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DEMOLITION PLAN**  
**GREENHILL SCHOOL**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C1.0</b>

DWG: 1082-03.024 CV.DWG  
DATE: 04/30/2004 8:05 AM  
USER: JCHENOWETH



VICINITY MAP

LEGEND

- B BOLLARD
- EM<sub>6</sub> ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FH<sub>2</sub> FIRE HYDRANT
- CO CLEANOUT
- MH MANHOLE
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TELE TELEPHONE BOX
- FL FLOOD LIGHT
- FP FLAG POLE
- TRF TRAFFIC SIGN
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- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
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- OH<sub>1</sub> OVERHEAD UTILITY LINE
- UWL UNDERGROUND WATER LINE
- UEL UNDERGROUND ELECTRIC LINE
- UTL UNDERGROUND TELEPHONE LINE
- UCL UNDERGROUND CABLE LINE
- USL UNDERGROUND SANITARY SEWER LINE
- PROPOSED DEMOLITION
- TREE REMOVAL

- DEMOLITION NOTES**
- REVIEW ALL GENERAL NOTES.
  - REMOVE ALL EXISTING PAVEMENT AND STRUCTURES WITHIN THE SHADED AREA UNLESS OTHERWISE NOTED.
  - SAWCUT AND REMOVE ALL EXISTING DRIVE APPROACHES THAT ARE SHADED 2 FEET FROM THE BACK OF CURB.
  - CONSULT THE DIMENSIONAL CONTROL PLAN, VERIFY THE PORTION OF EXISTING CONCRETE CURBS WHICH ARE TO REMAIN.
  - COORDINATE WITH TXU, SOUTHWESTERN BELL TELEPHONE, AND THE LOCAL CABLE COMPANY PRIOR TO THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES.
  - ALL UTILITIES SHOULD BE CUT AND PLUGGED IN COORDINATION WITH THEIR RESPECTIVE UTILITY COMPANIES AND PRIOR TO THE DEMOLITION OF THE EXISTING BUILDINGS.
  - CONTRACTOR TO PLUG ALL EXPOSED ENDS AND ABANDONED UTILITIES.
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BENCH MARKS

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BM #11:	"+" cut on conc. step on walk exiting west side of library.	Elev. 598.44
BM #12:	"+" cut at intersection of walk along west side of lower school and walk along south side Lower school.	Elev. 587.78



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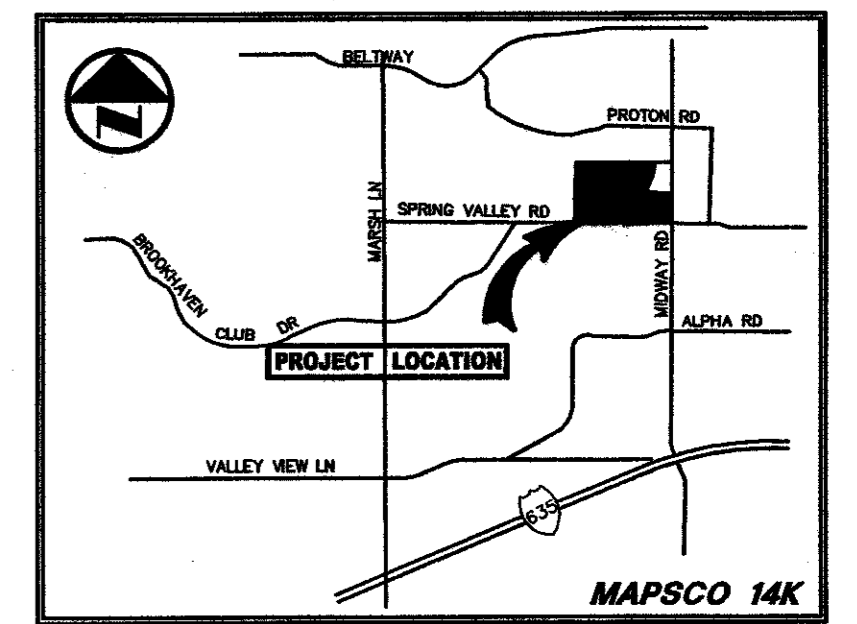
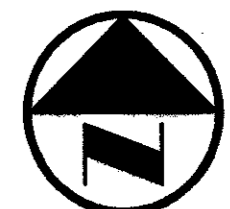
NO.	DATE	REVISION
1	04/30/2004	REVISED WATER LINE TO BE ABANDONED

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DEMOLITION PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C1.1</b>

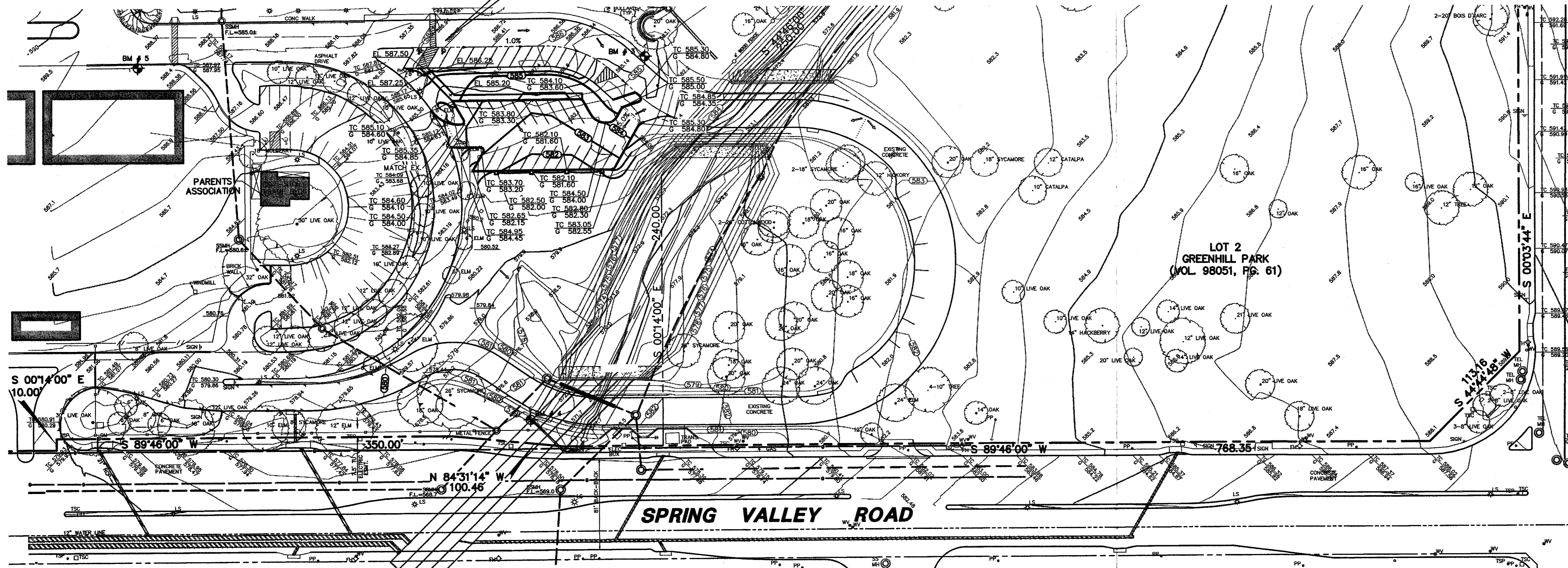
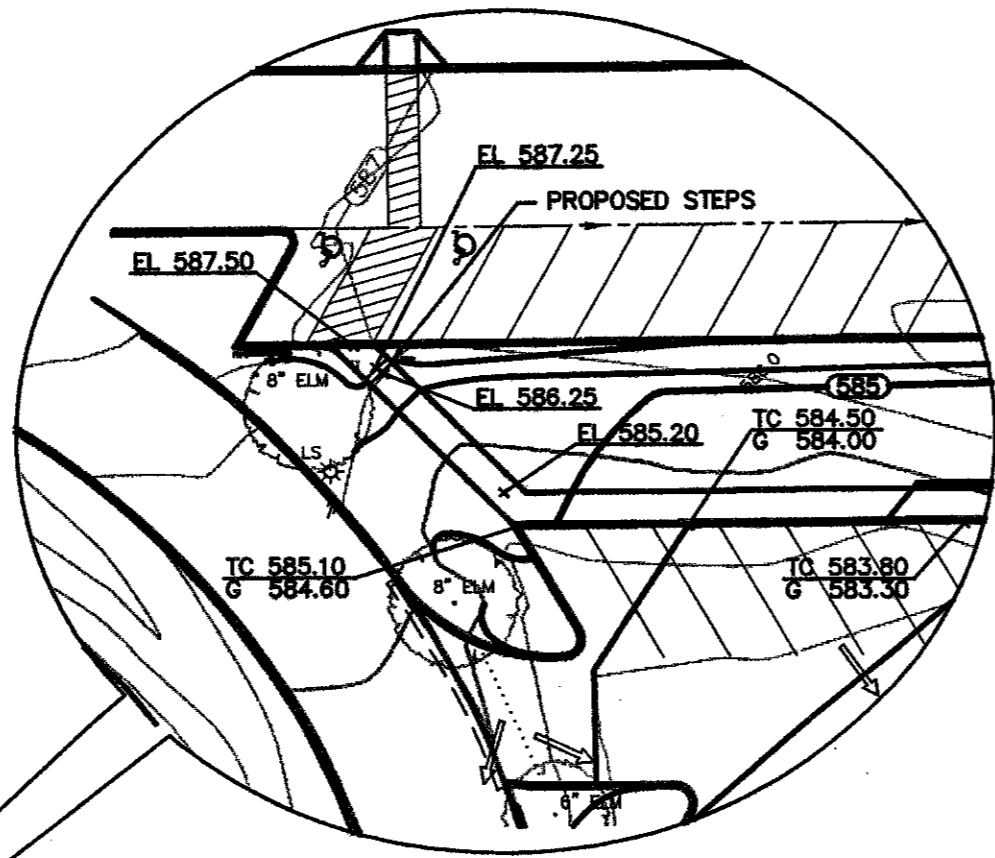
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VICINITY MAP

LEGEND

- Legend items: BOLLARD, ELECTRIC METER, POWER POLE, LIGHT STANDARD, WATER METER, WATER VALVE, IRRIGATION CONTROL VALVE, FIRE HYDRANT, CLEANOUT, MANHOLE, TRAFFIC SIGNAL CONTROL, TRAFFIC SIGNAL POLE, TELEPHONE BOX, FLOOD LIGHT, FLAG POLE, TRAFFIC SIGN, 1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP SET, CONTROLLING MONUMENT, PROPERTY LINE, FENCE, OVERHEAD UTILITY LINE, UNDERGROUND WATER LINE, UNDERGROUND ELECTRIC LINE, UNDERGROUND TELEPHONE LINE, UNDERGROUND CABLE LINE, UNDERGROUND SANITARY SEWER LINE, EXIST SPOT ELEVATION, EXIST TOP OF CURB ELEVATION, EXIST GUTTER ELEVATION, PROPOSED TOP OF CURB ELEVATION, PROPOSED GUTTER ELEVATION, PROPOSED SPOT ELEVATION, PROPOSED DRAINAGE FLOW DIRECTION, EXIST CONTOUR, PROPOSED CONTOUR.



GRADING AND DRAINAGE GENERAL NOTES

- 1. REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
2. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 0% TO +3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
3. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.
4. GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
5. UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
A. RCP C-76, CLASS III
B. ADS N-12
C. HANCOR H-Q
AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OR APPROVED EQUAL.
7. FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
8. REFER TO LANDSCAPE SPECIFICATION FOR SEEDING AND SODDING REQUIREMENTS.
9. ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
10. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
11. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
12. A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS. THE MANHOLE COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
13. ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
14. CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
15. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

BENCH MARKS

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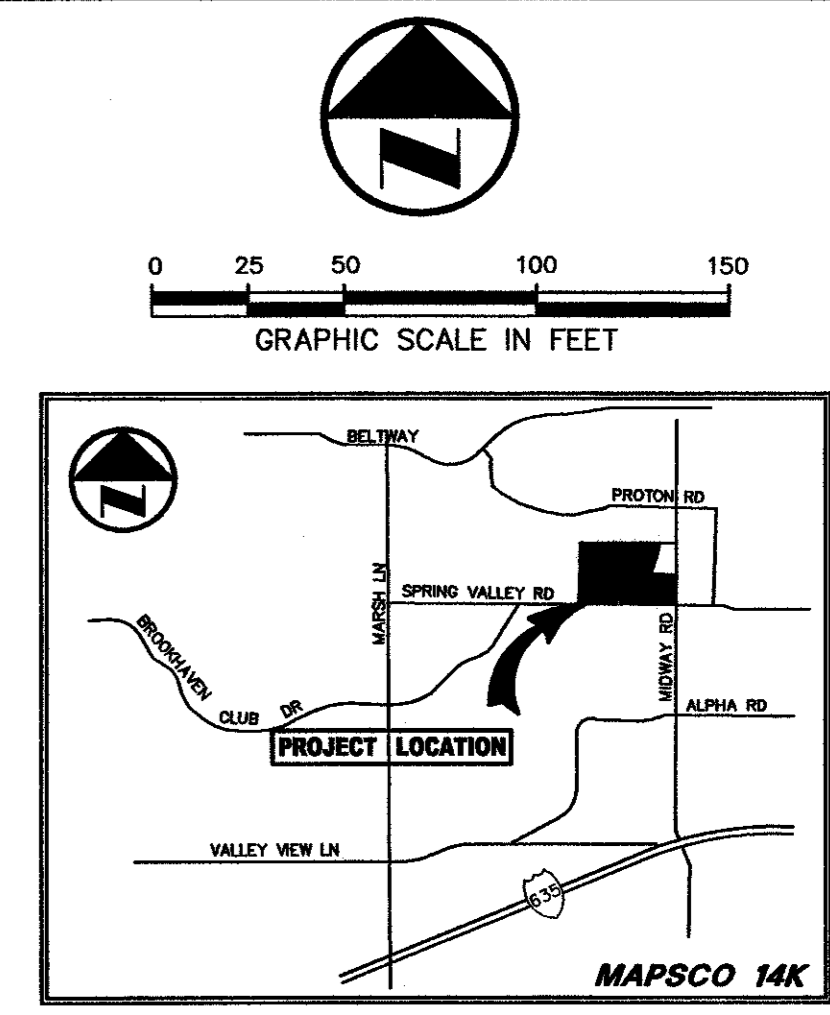


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Table with columns: NO., DATE, REVISION. Includes project title: GRADING PLAN, PARKING LOT, GREENHILL SCHOOL ADDITION, THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273, TOWN OF ADDISON, TEXAS. Design/Drawn: BJM/DRI, Date: MAY 2005, Scale: 1"=50', File: C2.0.

LES LECS VILLAGE PHASE I  
V. 83183, P. 4319

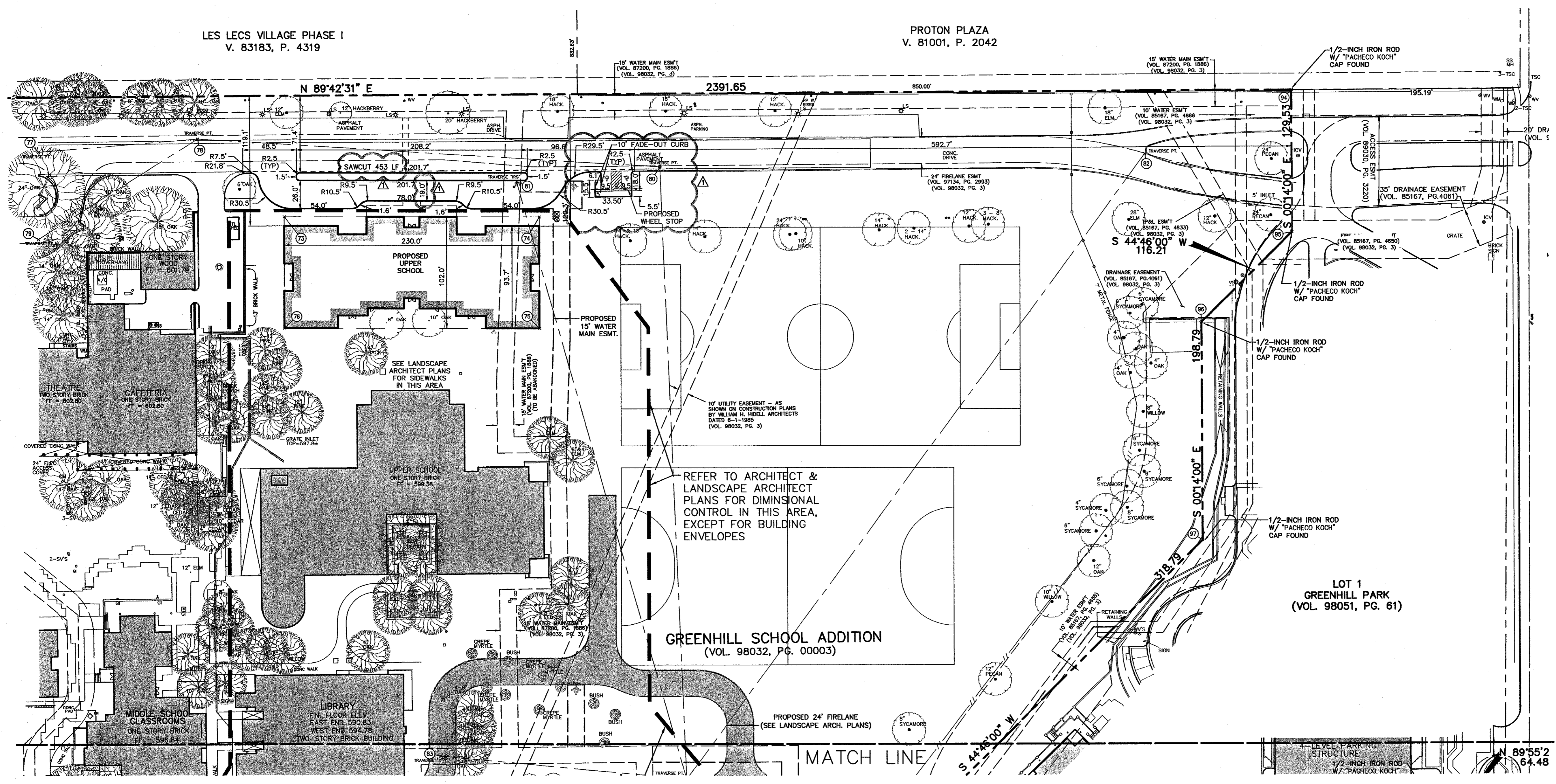
PROTON PLAZA  
V. 81001, P. 2042



VICINITY MAP

LEGEND

- B. BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
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- OH OVERHEAD UTILITY LINE
- UW UNDERGROUND WATER LINE
- UE UNDERGROUND ELECTRIC LINE
- UT UNDERGROUND TELEPHONE LINE
- UC UNDERGROUND CABLE LINE
- USS UNDERGROUND SANITARY SEWER LINE
- PROPOSED FIRELANE



REFER TO ARCHITECT & LANDSCAPE ARCHITECT PLANS FOR DIMENSIONAL CONTROL IN THIS AREA, EXCEPT FOR BUILDING ENVELOPES

GREENHILL SCHOOL ADDITION  
(VOL. 98032, PG. 00003)

LOT 1  
GREENHILL PARK  
(VOL. 98051, PG. 61)

DIMENSIONAL CONTROL COORDINATE TABLE

PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING
1	184.0808	E 1722.7034	41	499.6743	E 1743.1797	81	1388.7588	E 1860.5899
2	218.0366	E 1745.9137	42	494.1745	E 1743.2234	82	1411.9607	E 2427.1351
3	380.5633	E 1872.4919	43	489.6152	E 1740.1472	83	862.5503	E 1791.2912
4	229.4379	E 1788.3817	44	524.5533	E 1727.8372	84	840.8214	E 2012.9484
5	167.1381	E 1805.4590	45	525.8219	E 1887.7087	85	678.8974	E 2374.5294
6	227.0977	E 1846.2127	46	497.2288	E 1983.7477	86	723.7834	E 2758.7474
7	207.9853	E 1874.3272	47	475.1859	E 1987.8302	87	151.1724	E 2758.3104
8	288.5520	E 1935.8792	48	452.8547	E 2046.3304	88	481.7513	E 1976.5316
9	189.0520	E 1935.8792	49	452.8547	E 2109.9805	89	140.3280	E 2375.5873
10	189.0520	E 2109.9805	50	310.8547	E 2251.9805	90	47.5318	E 1913.2240
11	306.0520	E 2109.9805	51	306.0520	E 2251.9805	91	207.7759	E 1721.8991
12	192.4730	E 2138.0666	52	184.0520	E 2109.9805	92	455.5776	E 1429.2246
13	211.4028	E 2133.3856	53	184.0520	E 1935.8792	93	527.3229	E 1538.2246
14	203.7578	E 2151.3248	54	187.3128	E 1860.2742	94	1470.4389	E 2559.2877
15	195.7209	E 2170.1833	55	206.4213	E 1832.1597	95	1340.9101	E 2559.8152
16	213.7251	E 2180.3904	56	207.8545	E 1781.1670	96	1258.4032	E 2477.9776
17	305.9419	E 2110.1702	57	723.7679	E 2012.6545	97	1059.6149	E 2478.7872
18	306.0520	E 2215.1701	58	681.8097	E 2085.3283	98	833.2802	E 2254.2885
19	310.8547	E 2215.1701	59	531.4805	E 1998.5380	99	702.0713	E 2254.8228
20	310.7446	E 2110.1702	60	573.4398	E 1925.8648	100	702.3850	E 2477.6526
21	362.8000	E 2201.3581	61	634.8631	E 1777.6300	101	747.1835	E 2477.5935
22	372.9632	E 2210.1614	62	634.8631	E 1925.2987	102	747.1835	E 2913.4991
23	378.0988	E 2198.9027	63	572.8631	E 1925.2987	103	794.8623	E 2513.4991
24	378.0916	E 2179.6321	64	572.8631	E 1777.6300	104	794.8623	E 2543.3738
25	392.7269	E 2193.9825	65	697.7894	E 1838.0050	105	795.0197	E 2543.3606
26	310.8547	E 2109.9805	66	697.7894	E 1915.3384	106	795.0197	E 2686.8037
27	427.8547	E 2109.9805	67	644.7894	E 1915.3384	107	815.1907	E 2686.7121
28	427.8547	E 2046.3304	68	644.7894	E 1838.0050	108	815.2757	E 2751.1888
29	540.3547	E 2046.3304	69	803.6472	E 1542.0470	109	828.9648	E 2751.8253
30	436.8167	E 2002.3243	70	803.6430	E 1748.1717	110	148.5953	E 2672.1634
31	418.8598	E 1994.7284	71	537.2889	E 1748.1717	111	145.4662	E 1903.8988
32	437.3916	E 1988.6582	72	537.2889	E 1542.0470	112	155.0591	E 1803.8188
33	432.3105	E 1973.1410	73	1355.0159	E 1850.9673	113	153.6337	E 1453.8215
34	443.1751	E 1859.2307	74	1355.0159	E 1880.9679	114	143.6338	E 1453.8215
35	465.2078	E 1934.6482	75	1253.0159	E 1880.9679	115	205.7334	E 1939.2929
36	413.8254	E 1888.9554	76	1425.6886	E 1880.9673	116	412.8493	E 2045.8305
37	482.8233	E 1888.0479	77	1413.9781	E 1429.2246	117	487.8493	E 2069.9564
38	481.8231	E 1782.0009	78	1425.6886	E 1572.7820	118	412.8493	E 2125.7843
39	497.6447	E 1770.9889	79	1334.5872	E 1429.2246	119	191.4118	E 2135.7486
40	499.8843	E 1789.8521	80	1400.2619	E 1988.7834			

GENERAL NOTES

- ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENT, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS INCLUDING ALL NOTES, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS AND THE CITY STANDARDS FOR CONSTRUCTION AND ANY OTHER APPLICABLE STANDARD AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. THEY MUST BE ADJUSTED TO PROPER LINE, AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
- PROTECT AND MAINTAIN ROADWAY TRAFFIC THROUGHOUT THE PROJECT, PROVIDING A MINIMUM OF ONE (1) LANE OPEN IN EACH DIRECTION; PROVIDE AND MAINTAIN INTERIM ACCESS FROM ROADWAYS CURRENTLY IN USE TO ALL DRIVEWAYS AND INTERSECTING STREETS OR ALLEYS; MAINTAIN NORMAL PROJECT DRAINAGE UNTIL NEW DRAINAGE FACILITIES ARE FUNCTIONAL INCLUDING, WHERE NECESSARY, INTERIM REPLACEMENT OF EXISTING DRAINAGE STRUCTURES REMOVED FOR CONSTRUCTION OF NEW DRAINAGE FACILITIES; MAINTAIN ALL WORK AND MATERIAL STORAGE AREAS IN ORDERLY CONDITION, FREE OF DEBRIS AND WASTE; ON COMPLETION OF CONSTRUCTION, CLEAN UP THE PROJECT AND ADJACENT AFFECTED AREAS TO ACCEPTABLE CONDITION, ALL AS PROVIDED IN THE GENERAL CONDITIONS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING ENTRANCE LAYOUTS, RAMPS, LANDSCAPE AND SIDEWALKS.
- BARRICADING AND PROJECT SIGNS SHALL CONFORM TO TEXAS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

NO.	DATE	REVISION
04/30/2004		ADDED DIMENSIONS, REVISED NOTE & H.C. SPACES

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

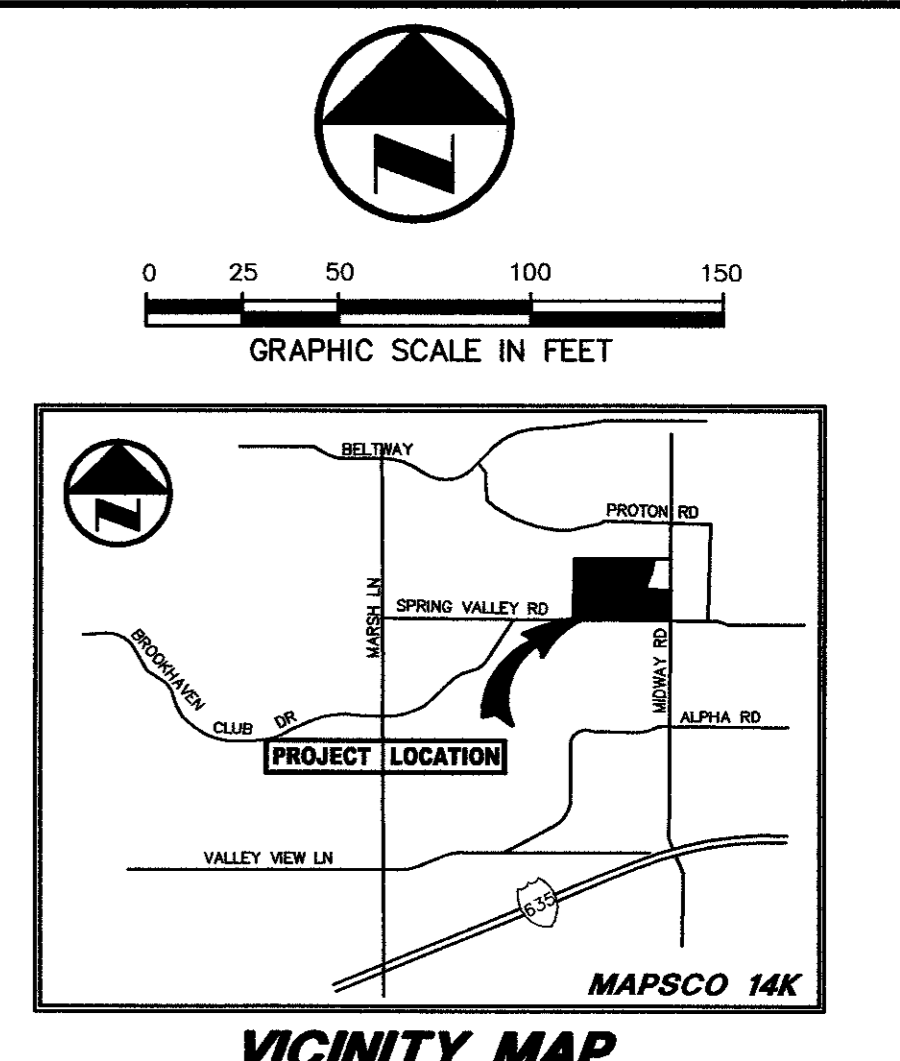
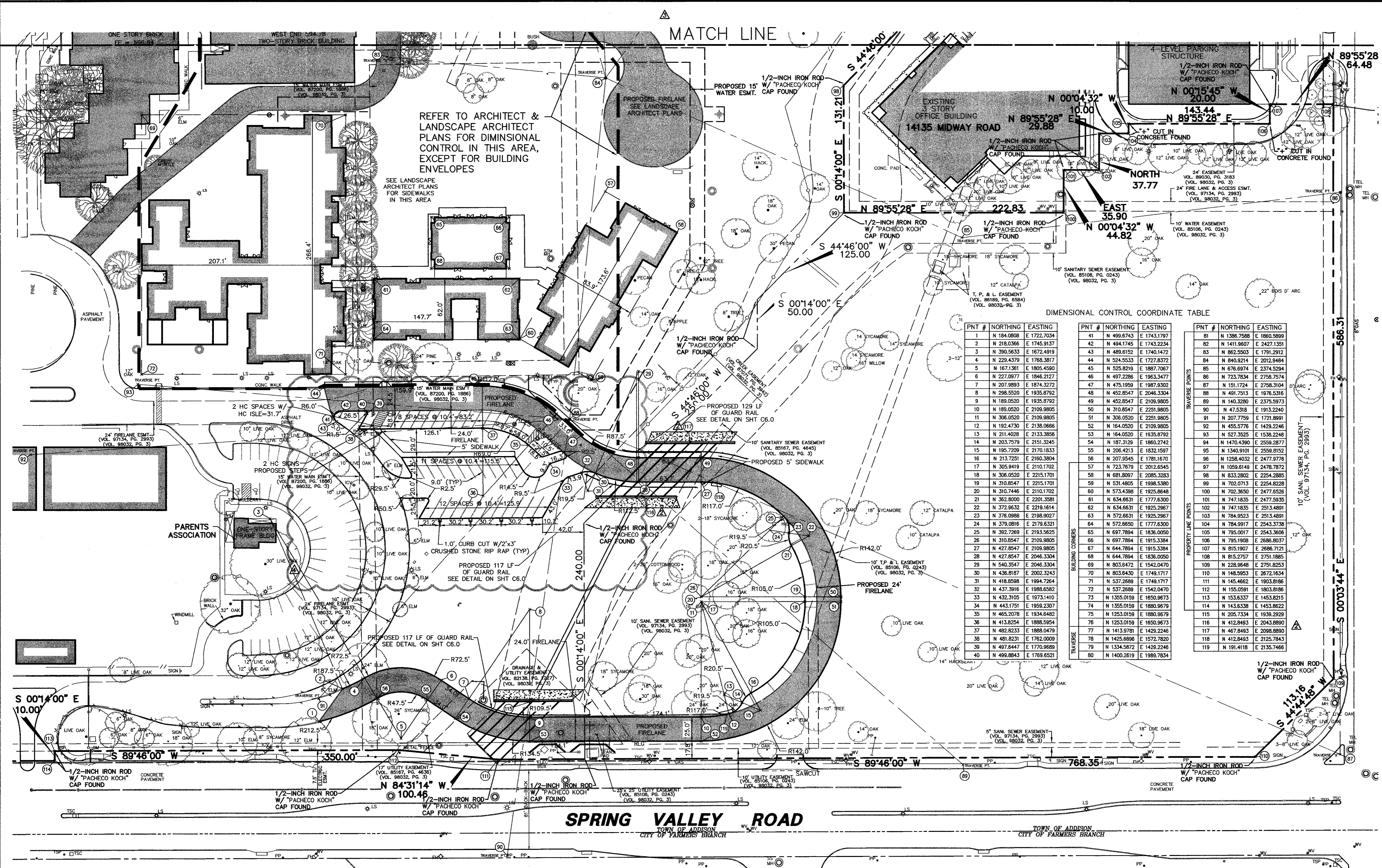
**DIMENSIONAL CONTROL PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV, 2003	1"=50'			<b>C2.0</b>



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70989 ON 03/31/2004. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

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**LEGEND**

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CQ	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TR	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP FOUND
(C.M.)	CONTROLLING MONUMENT
---	PROPERTY LINE
-X-	FENCE
OH	OVERHEAD UTILITY LINE
UW	UNDERGROUND WATER LINE
EL	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELEPHONE LINE
UC	UNDERGROUND CABLE LINE
S	UNDERGROUND SANITARY SEWER LINE
---	PROPOSED FIRELANE

**DIMENSIONAL CONTROL COORDINATE TABLE**

PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING
1	184.0808	1723.7034	41	499.6743	1743.1797	81	1411.9607	2422.1351
2	218.0366	1745.9137	42	484.1745	1743.2234	82	1411.9607	2422.1351
3	390.5633	1672.4919	43	489.6152	1672.4919	83	862.5503	1791.2412
4	229.4379	1768.3817	44	524.5533	1727.8372	84	840.9214	2012.9484
5	167.381	1805.4590	45	525.8290	1887.7067	85	876.8974	2374.5294
6	227.8977	1848.2127	46	497.5286	1963.3477	86	723.7834	2798.7574
7	207.9893	1874.3272	47	475.1959	1987.9302	87	151.1724	2758.3104
8	298.5520	1935.8792	48	452.8547	2046.3304	88	491.7513	1976.5316
9	189.0520	1935.8792	49	452.8547	2109.9805	89	140.3280	2375.9973
10	189.0520	2109.9805	50	310.5847	2251.9805	90	140.3280	2375.9973
11	306.0520	2109.9805	51	306.0520	2251.9805	91	207.7759	1721.8691
12	192.4730	2138.0686	52	164.0520	2109.9805	92	455.5776	1429.2246
13	211.4028	2133.3856	53	164.0520	1935.8792	93	527.3525	1536.2248
14	203.7579	2151.3345	54	187.3129	1860.2742	94	1470.4390	2598.2877
15	195.7209	2170.1833	55	206.4213	1832.1597	95	1340.9101	2558.8192
16	213.7251	2160.3004	56	207.9545	1781.1670	96	1258.4032	2477.9776
17	305.9419	2110.7102	57	723.7679	2012.8545	97	1059.6148	2478.7872
18	306.0520	2215.1701	58	681.8097	2085.3283	98	833.2802	2254.2880
19	310.8547	2215.1701	59	531.4805	1998.5380	99	702.0713	2254.8228
20	310.7446	2110.7102	60	573.4368	1925.8648	100	702.3650	2477.6528
21	362.8000	2201.3281	61	634.6631	1777.5305	101	834.6631	1777.5305
22	372.8632	2219.1614	62	634.6631	1925.2967	102	747.1835	2513.4891
23	376.9986	2198.8907	63	572.6031	1925.2967	103	784.8523	2513.4891
24	379.8816	2179.8321	64	579.8816	1777.8300	104	784.8523	2513.4891
25	382.7269	2193.5625	65	697.7894	1836.0050	105	795.0017	2543.3606
26	310.8547	2109.9805	66	697.7894	1915.3384	106	795.1908	2686.8037
27	427.8547	2109.9805	67	644.7894	1915.3384	107	815.1907	2686.7121
28	427.8547	2046.3304	68	644.7894	1836.0050	108	815.2757	1751.1885
29	540.3547	2046.3304	69	803.8472	1542.0470	109	228.9648	2751.8253
30	436.8187	2002.3243	70	803.8472	1749.1717	110	803.8472	2672.1634
31	418.8598	1994.7264	71	537.2689	1749.1717	111	145.4662	1903.8186
32	437.3916	1888.6582	72	537.2689	1542.0470	112	155.0591	1903.8186
33	432.3105	1973.1410	73	1325.0159	1650.0673	113	153.6337	1453.8215
34	443.1751	1959.2307	74	1355.0159	1890.9679	114	143.6338	1453.8222
35	465.2078	1934.6482	75	1253.0159	1890.9679	115	205.7334	1938.2929
36	413.8254	1888.5954	76	1253.0159	1650.9673	116	412.8493	2043.8890
37	482.8233	1888.0479	77	1413.9781	1429.2246	117	467.8493	2098.8890
38	481.8231	1762.0009	78	1425.6886	1572.7820	118	412.8493	2125.7843
39	497.6447	1770.9689	79	1334.5872	1429.2246	119	191.4118	2135.7466
40	499.8843	1769.6521	80	1400.2619	1989.7834			

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

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**ISSUED FOR PRELIMINARY PRICING PURPOSES ONLY**  
(SUBJECT TO REVISION PRIOR TO CONSTRUCTION)

THESE DOCUMENTS HAVE BEEN PREPARED BY THE ENGINEER WITH THE INTENT OF COMPLYING WITH ALL CITY STANDARD REQUIREMENTS. THESE DOCUMENTS HAVE NOT BEEN APPROVED AND RELEASED FOR CONSTRUCTION BY THE CITY AS OF THIS DATE AND, THEREFORE, REVISIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION. BY ANY USE OF THESE DOCUMENTS, THE USER AFFIRMS THEIR UNDERSTANDING OF THE PRELIMINARY STATUS OF THE PLANS AND THE POTENTIAL FOR REVISION PRIOR TO ANY CONSTRUCTION.

NO.	DATE	REVISION
1	02/16/2005	ADDED PARKING AREA
2	06/10/2004	REVISED FIRE LANE
3	04/30/2004	REVISED CONTROL POINTS FOR CENTERLINE OF MBC
4	04/30/2004	REVISED NOTE

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DIMENSIONAL CONTROL PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

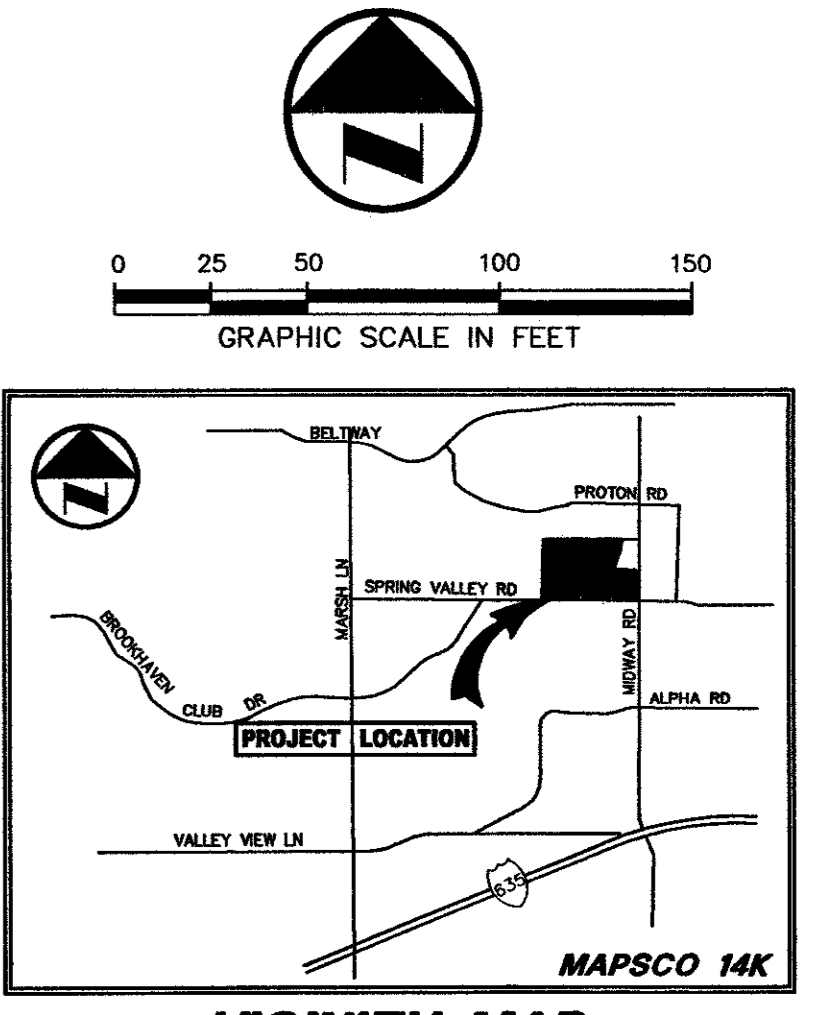
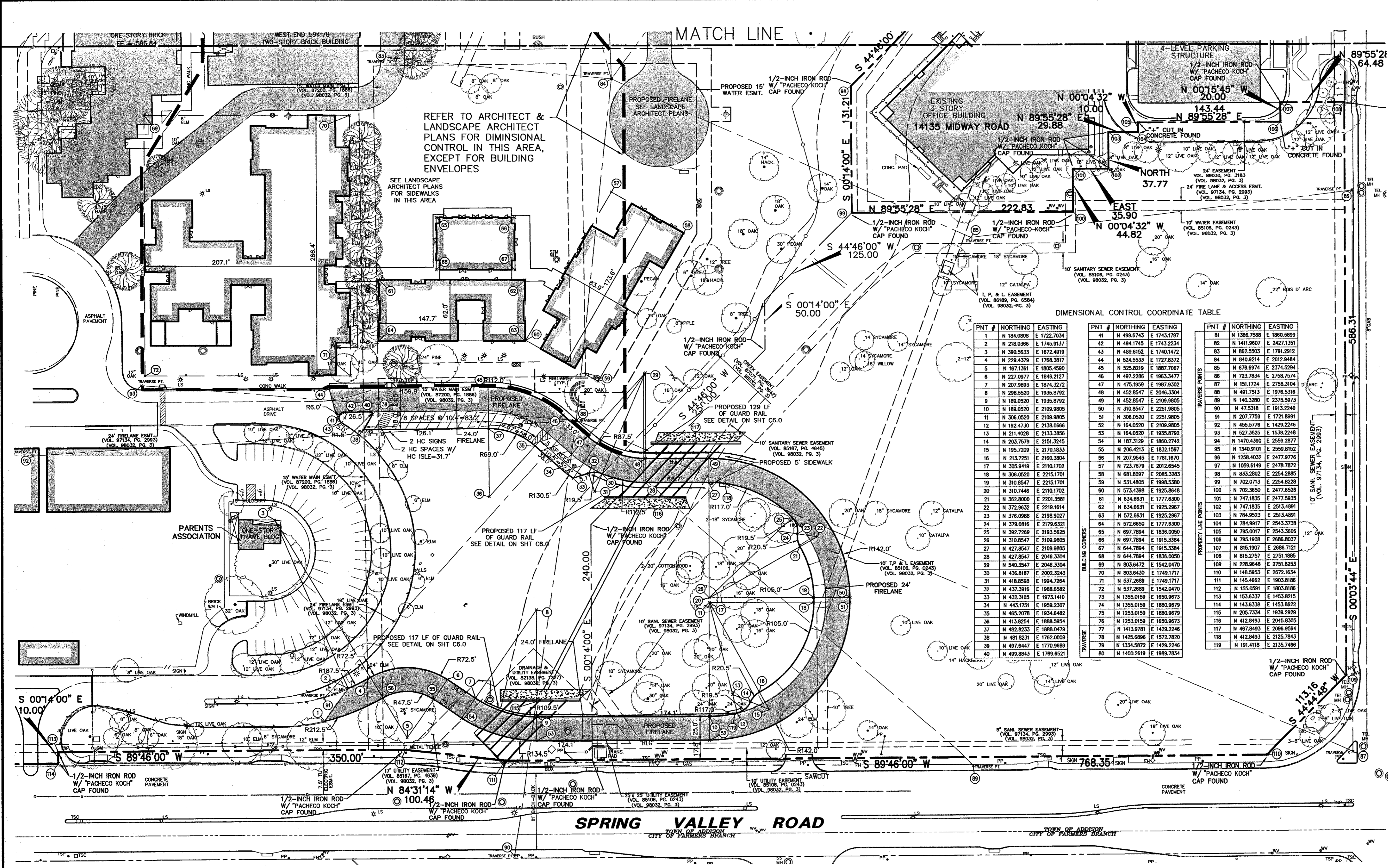
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C2.1</b>

**PRELIMINARY**  
NOT FOR CONSTRUCTION

THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.

PLANS PREPARED UNDER THE DIRECT SUPERVISION OF STEVEN A. MARKUSSON, P.E. TEXAS REGISTRATION NO. 70990 DATE: 02/27/2004

DWG. NO. 10-504M  
DATE: 04/28/2005  
BY: M. DWG-10-1082-03-024C/DWG



VICINITY MAP

LEGEND

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CL	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TSN	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP FOUND
CM	CONTROLLING MONUMENT
(C.M.)	PROPERTY LINE
---	FENCE
OH	OVERHEAD UTILITY LINE
UW	UNDERGROUND WATER LINE
EL	UNDERGROUND ELECTRIC LINE
TL	UNDERGROUND TELEPHONE LINE
CL	UNDERGROUND CABLE LINE
SS	UNDERGROUND SANITARY SEWER LINE
---	PROPOSED FIRELANE

DIMENSIONAL CONTROL COORDINATE TABLE

PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING	PNT #	NORTHING	EASTING
1	N 184.0808	E 1722.7034	41	N 499.6743	E 1743.1797	81	N 1386.7588	E 1860.5899
2	N 218.0368	E 1745.9137	42	N 494.1745	E 1745.9137	82	N 1411.9607	E 1842.1351
3	N 390.5633	E 1672.4819	43	N 489.6152	E 1740.1472	83	N 862.5503	E 1791.2912
4	N 229.4379	E 1788.3877	44	N 524.5533	E 1727.8372	84	N 840.9214	E 2012.9494
5	N 167.1381	E 1805.4599	45	N 525.8219	E 1807.7057	85	N 676.6974	E 2374.5294
6	N 227.0977	E 1848.2127	46	N 497.2288	E 1963.5477	86	N 723.7834	E 2758.7574
7	N 207.9893	E 1874.3272	47	N 475.1959	E 1987.8302	87	N 475.1274	E 2758.3104
8	N 298.5520	E 1935.8792	48	N 452.8547	E 2046.3304	88	N 491.7513	E 1978.5316
9	N 189.0520	E 1935.8792	49	N 452.8547	E 2109.9805	89	N 140.3280	E 2375.5973
10	N 189.0520	E 2109.9805	50	N 310.8547	E 2251.9805	90	N 47.5318	E 1913.2240
11	N 306.0520	E 2109.9805	51	N 306.0520	E 2251.9805	91	N 207.7759	E 1721.8891
12	N 182.4730	E 2138.0668	52	N 184.0520	E 2109.9805	92	N 455.5778	E 1429.2246
13	N 211.4028	E 2133.3656	53	N 184.0520	E 1838.2248	93	N 517.3525	E 1538.2248
14	N 203.7579	E 2051.3245	54	N 187.3129	E 1860.2742	94	N 1470.3380	E 2559.2877
15	N 185.7209	E 2170.1833	55	N 206.4213	E 1832.1597	95	N 1340.9101	E 2559.8152
16	N 213.7221	E 2160.3804	56	N 207.9545	E 1781.9776	96	N 1258.4032	E 2477.9776
17	N 305.9419	E 2110.1702	57	N 723.7679	E 2012.6545	97	N 1059.6149	E 2478.7872
18	N 306.0520	E 2215.1701	58	N 681.8087	E 2085.3283	98	N 833.2802	E 2254.2885
19	N 310.8547	E 2215.1701	59	N 531.4805	E 1998.5380	99	N 702.0713	E 2254.8228
20	N 310.7446	E 2210.1702	60	N 573.4398	E 1925.8648	100	N 702.3550	E 2477.8528
21	N 362.8000	E 2201.5581	61	N 534.8631	E 1777.6300	101	N 747.1830	E 2477.5835
22	N 372.9632	E 2216.1614	62	N 534.8631	E 1925.2967	102	N 747.1830	E 2513.4891
23	N 376.0998	E 2198.9027	63	N 572.6631	E 1925.2967	103	N 784.9523	E 2513.4891
24	N 379.0816	E 2179.6371	64	N 572.6650	E 1777.6300	104	N 784.9517	E 2543.3738
25	N 327.7289	E 2183.5625	65	N 697.7894	E 1836.0050	105	N 785.0159	E 2543.3738
26	N 310.8547	E 2109.9805	66	N 697.7894	E 1915.3384	106	N 795.1908	E 2686.8037
27	N 427.8547	E 2109.9805	67	N 644.7894	E 1915.3384	107	N 815.1907	E 2686.7121
28	N 427.8547	E 2046.3304	68	N 644.7894	E 1836.0050	108	N 815.2757	E 2751.1885
29	N 540.3547	E 2046.3304	69	N 803.6472	E 1542.0470	109	N 228.9648	E 2751.8253
30	N 436.8187	E 2022.3243	70	N 803.6450	E 1749.1717	110	N 148.9853	E 2672.6334
31	N 418.8588	E 1894.7584	71	N 537.2689	E 1749.1717	111	N 145.4682	E 1903.8188
32	N 437.3918	E 1898.6582	72	N 537.2689	E 1542.0470	112	N 155.0591	E 1803.8188
33	N 432.3105	E 1873.1410	73	N 1355.0159	E 1650.9673	113	N 153.6337	E 1453.8215
34	N 443.1751	E 1859.2307	74	N 1355.0159	E 1880.9679	114	N 143.6338	E 1453.8215
35	N 465.2078	E 1834.6482	75	N 1253.0159	E 1880.9679	115	N 205.7334	E 1939.2929
36	N 413.8254	E 1888.9954	76	N 1253.0159	E 1650.9673	116	N 412.8493	E 2045.8305
37	N 482.8233	E 1888.0479	77	N 1413.9791	E 1429.2246	117	N 467.8983	E 2096.9564
38	N 491.8231	E 1792.0029	78	N 1425.6896	E 1572.7620	118	N 412.8493	E 2125.7843
39	N 497.8447	E 1770.9689	79	N 1334.5672	E 1429.2246	119	N 191.4118	E 2125.7466
40	N 499.8843	E 1769.6521	80	N 1400.2619	E 1989.7834			

NOTE: ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

GENERAL NOTES

- ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENT, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS INCLUDING ALL NOTES, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS AND THE CITY STANDARDS FOR CONSTRUCTION AND ANY OTHER APPLICABLE STANDARDS AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATION PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC., THEY MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS DEVELOPMENT.
- PROTECT AND MAINTAIN ROADWAY TRAFFIC THROUGHOUT THE PROJECT, PROVIDING A MINIMUM OF ONE (1) LANE OPEN IN EACH DIRECTION. PROVIDE AND MAINTAIN INTERIM ACCESS FROM ROADWAYS CURRENTLY IN USE TO ALL DRIVEWAYS AND INTERSECTING STREETS OR ALLEYS. MAINTAIN NORMAL PROJECT DRAINAGE UNTIL NEW DRAINAGE FACILITIES ARE FUNCTIONAL, INCLUDING, WHERE NECESSARY, INTERIM REPLACEMENT OF EXISTING DRAINAGE STRUCTURES REMOVED FOR CONSTRUCTION OF NEW DRAINAGE FACILITIES. MAINTAIN ALL WORK AND MATERIAL STORAGE AREAS IN ORDERLY CONDITION, FREE OF DEBRIS AND WASTE. ON COMPLETION OF CONSTRUCTION, CLEAN UP THE PROJECT AND ADJACENT AFFECTED AREAS TO ACCEPTABLE CONDITION, ALL AS PROVIDED IN THE GENERAL CONDITIONS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TREESH SAFETY.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING ENTRANCE LAYOUTS, RAMPS, LANDSCAPE AND SIDEWALKS.
- BARRICADING AND PROJECT SIGNS SHALL CONFORM TO TEXAS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND LATEST UPDATES.

NO.	DATE	REVISION
	04/30/2004	REVISED NOTE

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DIMENSIONAL CONTROL PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C2.1</b>

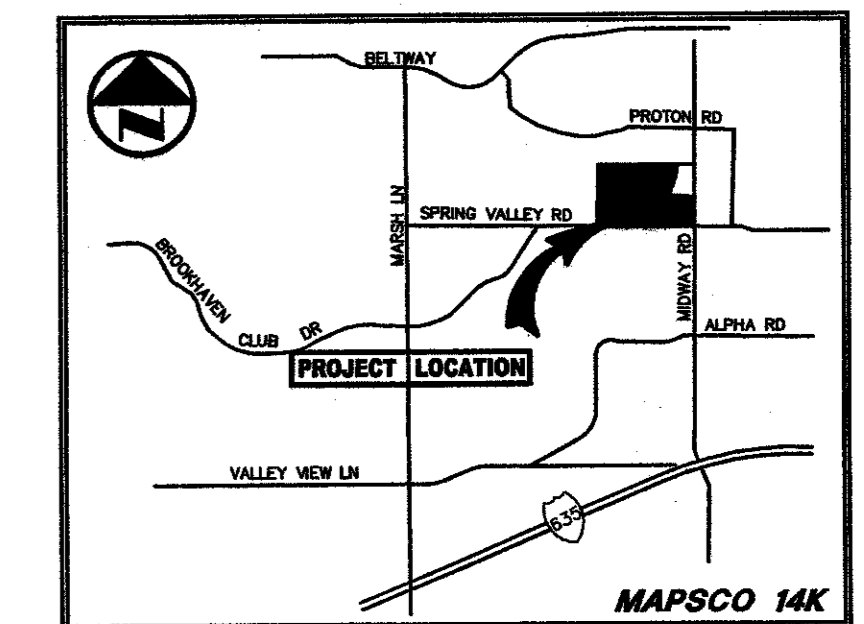
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STATE OF TEXAS  
STEVEN A. MARKUSSEN  
70090  
PROFESSIONAL ENGINEER

DWG FILE: 1082-03.024CVDWG  
XREF FILE: FSDWG

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GREENHILL SCHOOL



VICINITY MAP

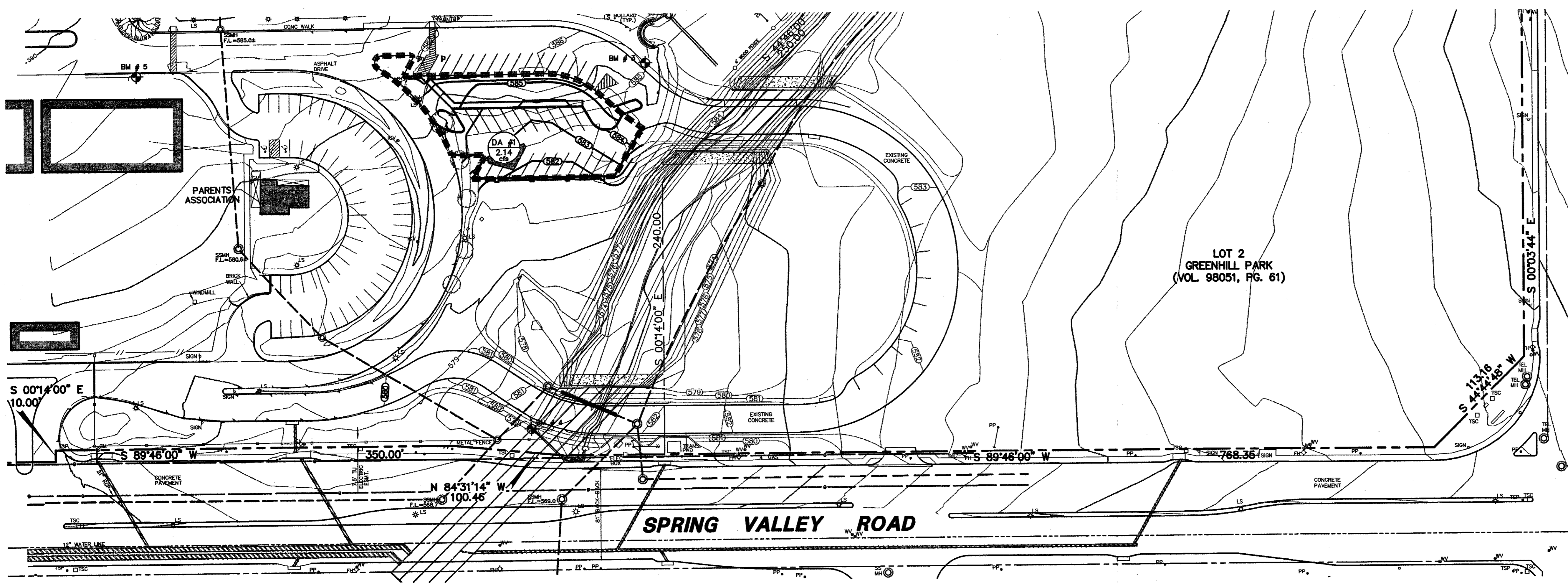
LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CQ. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- SG. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD
- W/P. "PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OVERHEAD UTILITY LINE
- UNDERGROUND WATER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- UNDERGROUND SANITARY SEWER LINE
- EXIST SPOT ELEVATION
- EXIST TOP OF CURB ELEVATION
- EXIST CUTTER ELEVATION
- PROPOSED DRAINAGE DIVIDE
- EXIST CONTOUR

PROPOSED DRAINAGE CRITERIA:

Q=(C)(A)  
C=0.70

DRAINAGE AREA TABLE							COMMENTS
DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY (inch/hour)	Q100 (cfs)	Q10 (cfs)	
DA #1	0.35	0.70	10	100 YEAR	8.74	2.14	DRAINS TO PROP. CURB CUT



GRADING AND DRAINAGE GENERAL NOTES

1. REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
2. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 0% TO +3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
3. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.
4. GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
5. UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
  - A. RCP C-76, CLASS III
  - B. ADS N-12
  - C. HANCOR HI-0
 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OR APPROVED EQUAL.
7. FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
8. REFER TO LANDSCAPE SPECIFICATION FOR SEEDING AND SODDING REQUIREMENTS.
9. ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
10. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
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13. ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
14. CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
15. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

BENCH MARKS

- BM #3: Cut "+" in walk on outside of curved drive near southeast corner of lower school. Elev. 586.06
- BM #4: "□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus. Elev. 578.47
- BM #5: "□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley. Elev. 588.20
- BM #9: "□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus. Elev. 602.80
- BM #10: "□" cut on conc. step near northwest corner of upper school. Elev. 598.85
- BM #11: "□" cut on conc step on walk exiting west side of library. Elev. 596.44
- BM #12: "□" cut at intersection of walk along west side of lower school and walk along south side Lower school. Elev. 587.78



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NO.	DATE	REVISION

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DRAINAGE PLAN**  
**PARKING LOT**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	DRI	MAY 2005	1"=50'			<b>C3.0</b>

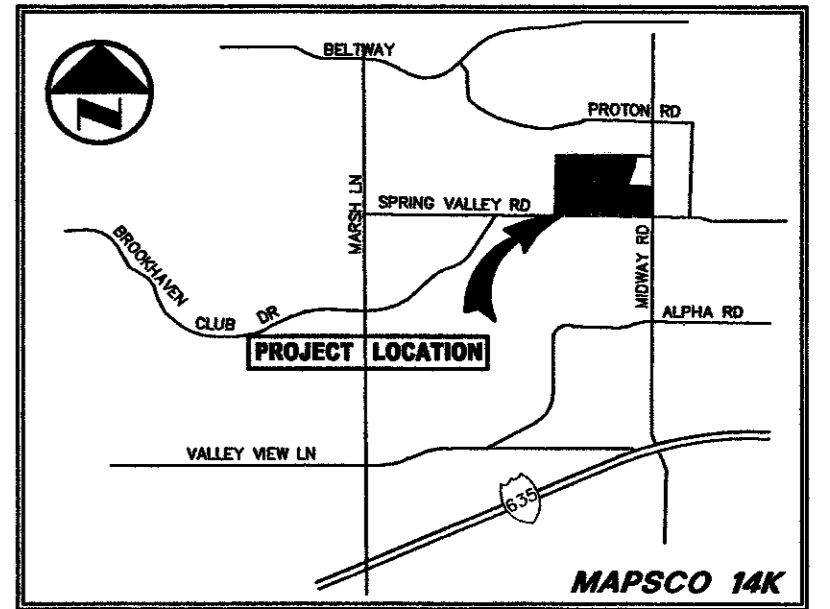
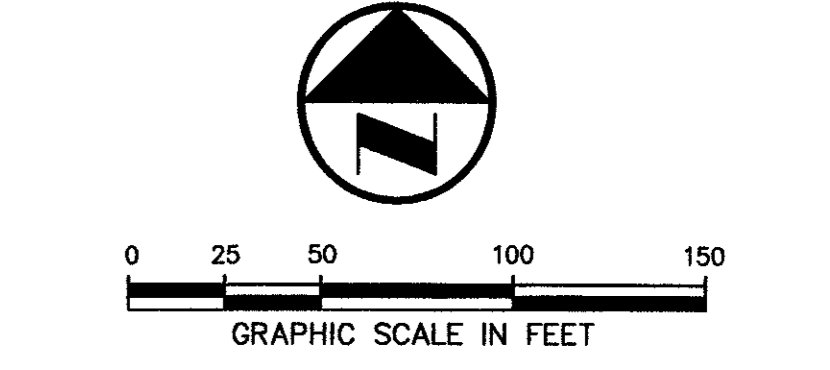
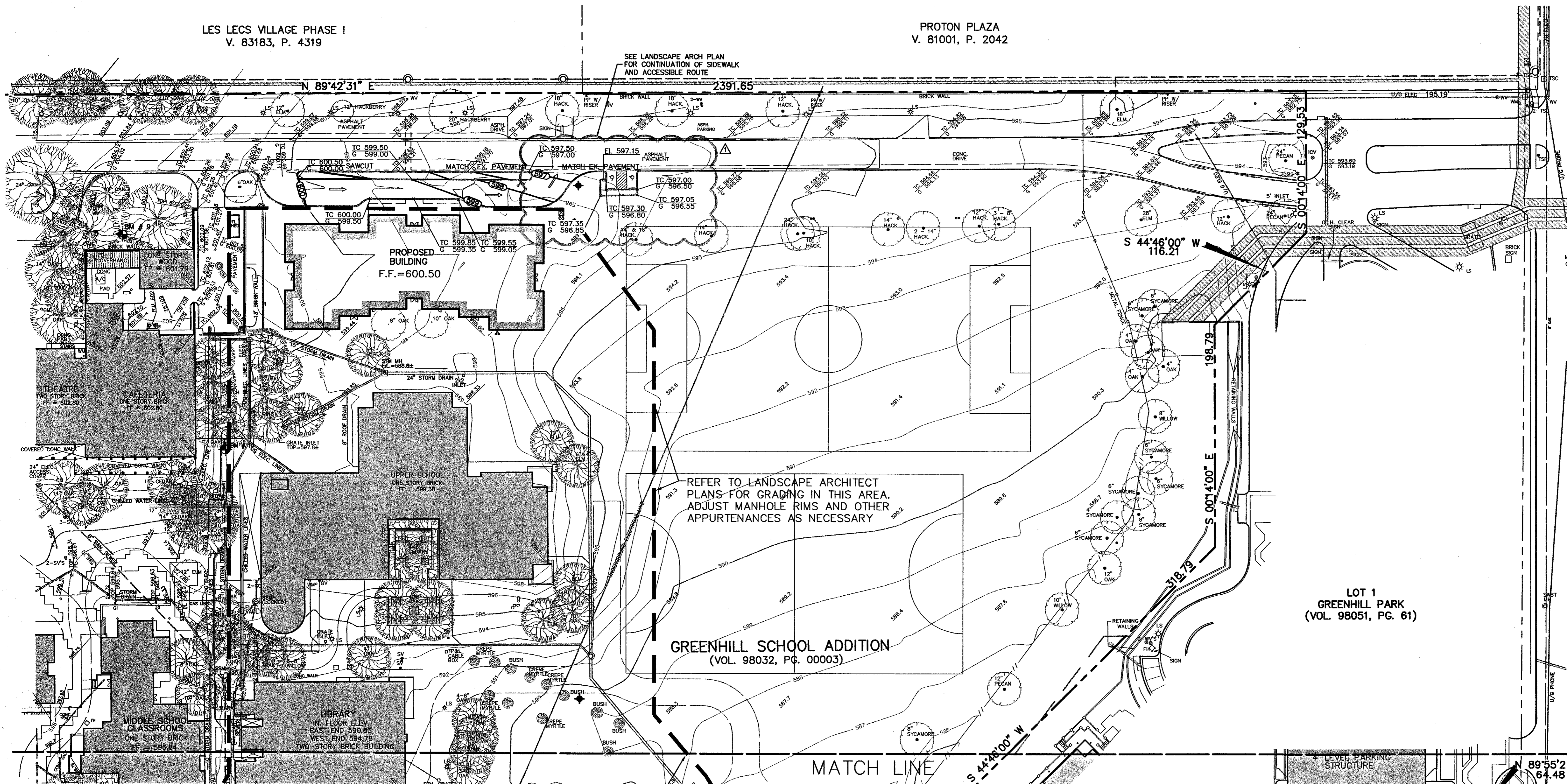
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GREENHILL SCHOOL



LES LECS VILLAGE PHASE I  
V. 83183, P. 4319

PROTON PLAZA  
V. 81001, P. 2042



**VICINITY MAP**

**LEGEND**

- B. BOLLARD
- EM ⊕ ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FY. FIRE HYDRANT
- CQ. CLEANOUT
- MH ⊙ MANHOLE
- TSC □ TRAFFIC SIGNAL CONTROL
- TSP □ TRAFFIC SIGNAL POLE
- TEL □ TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS 1/2-INCH IRON ROD  
W/PACHECO KOCH CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OH. OVERHEAD UTILITY LINE
- UW. UNDERGROUND WATER LINE
- E. UNDERGROUND ELECTRIC LINE
- T. UNDERGROUND TELEPHONE LINE
- C. UNDERGROUND CABLE LINE
- SS. UNDERGROUND SANITARY SEWER LINE
- 612.39 EXIST SPOT ELEVATION
- TC 612.39 EXIST TOP OF CURB ELEVATION
- G 611.92 EXIST GUTTER ELEVATION
- X 614.5 PROPOSED TOP OF CURB ELEVATION
- G 614.0 PROPOSED GUTTER ELEVATION
- X 614.5 PROPOSED SPOT ELEVATION
- PROPOSED DRAINAGE FLOW DIRECTION
- 611.3 EXIST CONTOUR
- (S.D.) PROPOSED CONTOUR

REFER TO LANDSCAPE ARCHITECT PLANS FOR GRADING IN THIS AREA. ADJUST MANHOLE RIMS AND OTHER APPURTENANCES AS NECESSARY

GREENHILL SCHOOL ADDITION  
(VOL. 98032, PG. 00003)

LOT 1  
GREENHILL PARK  
(VOL. 98051, PG. 61)

MATCH LINE

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  - B. ADS N-12
  - C. HANCOR HI-Q
 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
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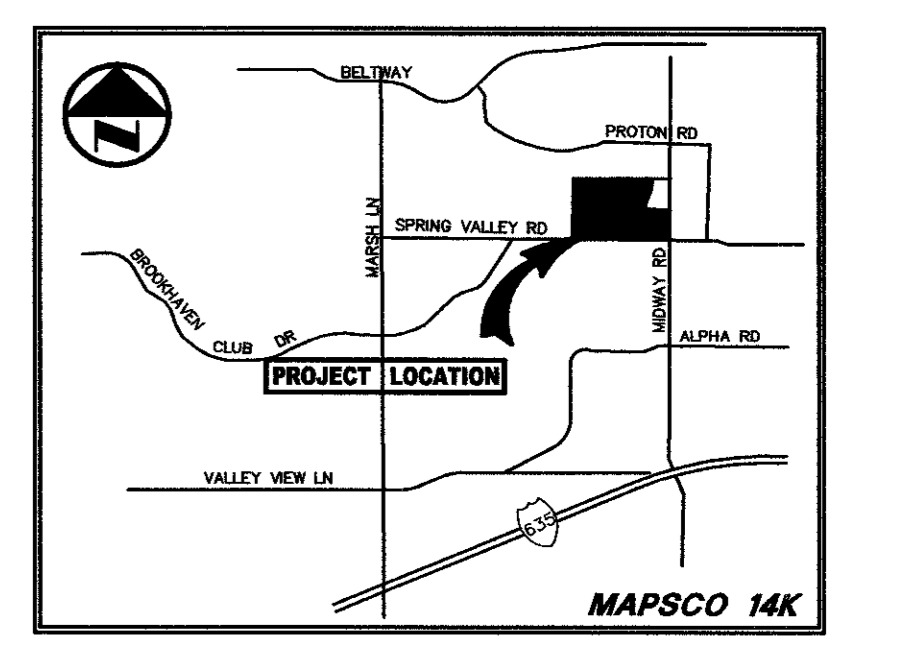
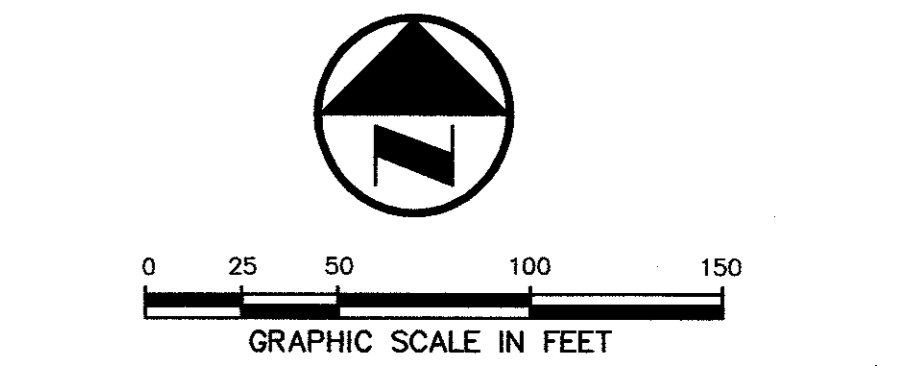
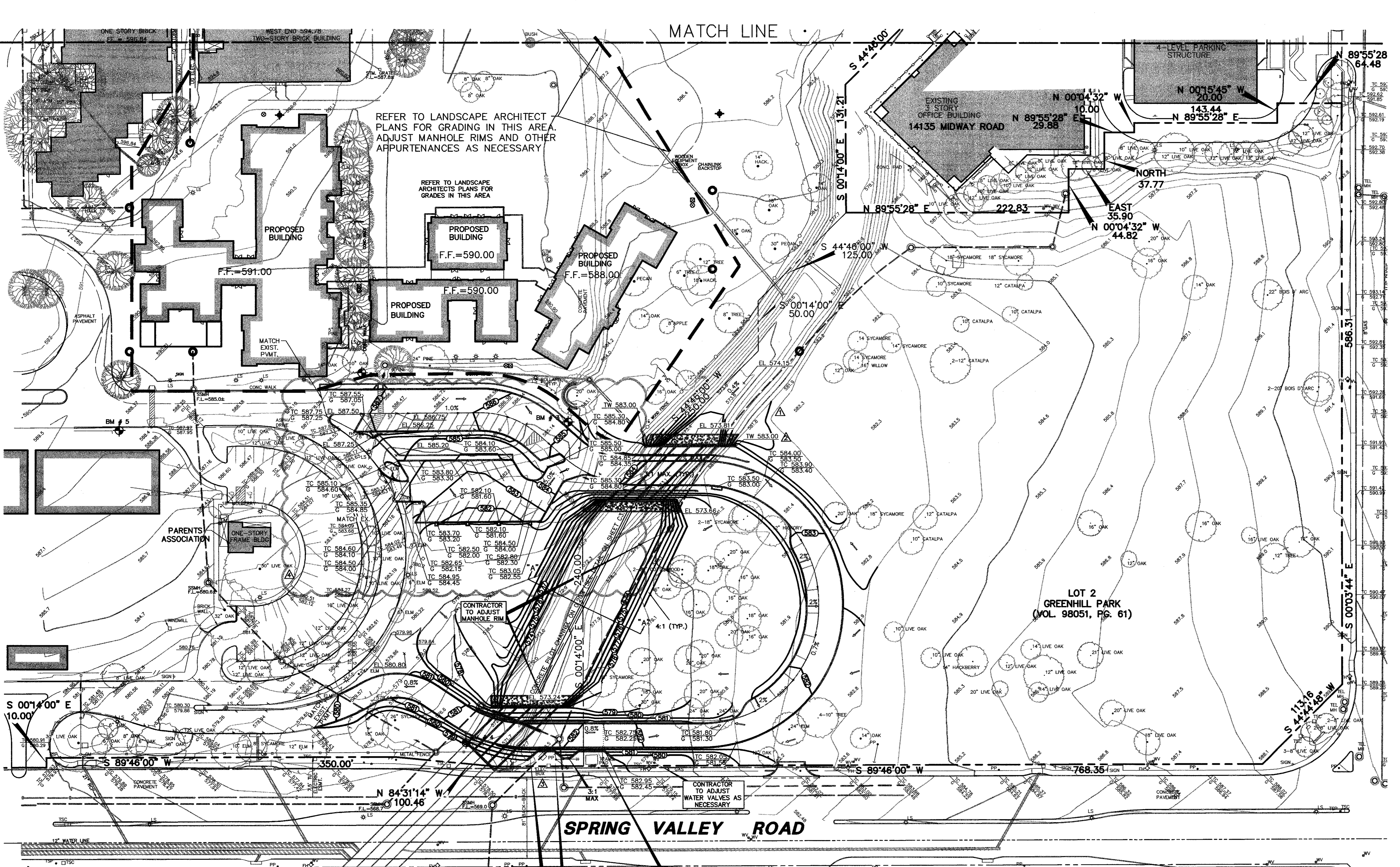
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04/30/2004		REVISED NOTE & H.C. SPACES
NO.	DATE	REVISION
<b>Pacheco Koch Consulting Engineers</b>		
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031		
<b>GRADING PLAN</b>		
<b>GREENHILL SCHOOL</b>		
<b>GREENHILL SCHOOL ADDITION</b>		
<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>		
<b>TOWN OF ADDISON, TEXAS</b>		
DESIGN	DRAWN	DATE
BJM	FJM	NOV, 2003
SCALE	NOTES	FILE
1"=50'		
		<b>NO.</b>
		<b>C3.0</b>

DWG: 1082-03-024.DWG  
 DATE: 04/30/2004 11:25PM  
 USER: DIVY



**LEGEND**

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
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TELE	TELEPHONE BOX
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TR	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD
(C.M.)	W/7-PACHECO KOCH CAP SET
	CONTROLLING MONUMENT
---	PROPERTY LINE
-X-	FENCE
OH	OVERHEAD UTILITY LINE
UW	UNDERGROUND WATER LINE
UE	UNDERGROUND ELECTRIC LINE
UL	UNDERGROUND TELEPHONE LINE
UC	UNDERGROUND CABLE LINE
US	UNDERGROUND SANITARY SEWER LINE
ES	EXIST SPOT ELEVATION
TC 612.39	EXIST TOP OF CURB ELEVATION
G 611.92	EXIST GUTTER ELEVATION
TC 614.5	PROPOSED TOP OF CURB ELEVATION
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---	EXIST CONTOUR
---	PROPOSED CONTOUR

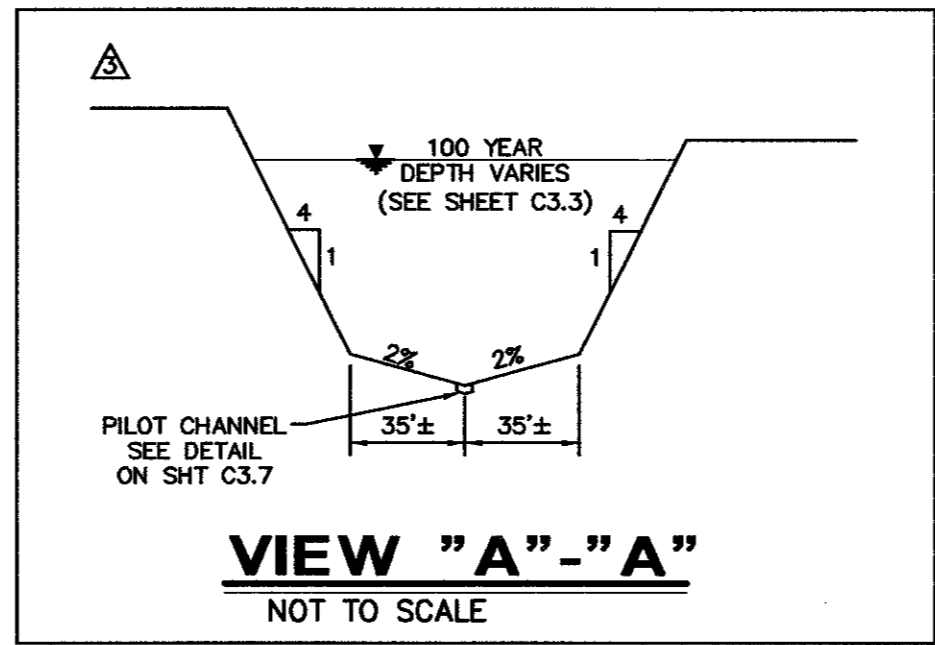
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CONTRACTOR TO INSTALL DRY STACK RETAINING WALL SEE LANDSCAPE ARCHITECT PLANS

CONTRACTOR IS TO LOCATE AND CONSTRUCT RETAINING WALL AS REQUIRED TO PREVENT IMPACT TO POWER POLE GUY ANCHOR, TRANSFORMER AND UNDERGROUND VAULT

CONTRACTOR TO ADJUST MANHOLE RIM TO ADJUST WATER VALVES AS NECESSARY



**BENCH MARKS**

BM #3:	Cut "4" in walk on outside of curved drive near southeast corner of lower school.	Elev. 586.06
BM #4:	"4" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus.	Elev. 578.47
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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.  
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF STEVEN A. MARKUSSEN, P.E. TEXAS REGISTRATION NO. 70990  
DATE: 02/27/2004

**ISSUED FOR PRELIMINARY PRICING PURPOSES ONLY**  
(SUBJECT TO REVISION PRIOR TO CONSTRUCTION)  
THESE DOCUMENTS HAVE BEEN PREPARED BY THE ENGINEER WITH THE INTENT OF COMPLYING WITH ALL CITY STANDARD REQUIREMENTS. THESE DOCUMENTS HAVE NOT BEEN APPROVED AND RELEASED FOR CONSTRUCTION BY THE CITY AS OF THIS DATE AND, THEREFORE, REVISIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION. BY ANY USE OF THESE DOCUMENTS, THE USER AFFIRMS THEIR UNDERSTANDING OF THE PRELIMINARY STATUS OF THE PLANS AND THE POTENTIAL FOR REVISION PRIOR TO ANY CONSTRUCTION.

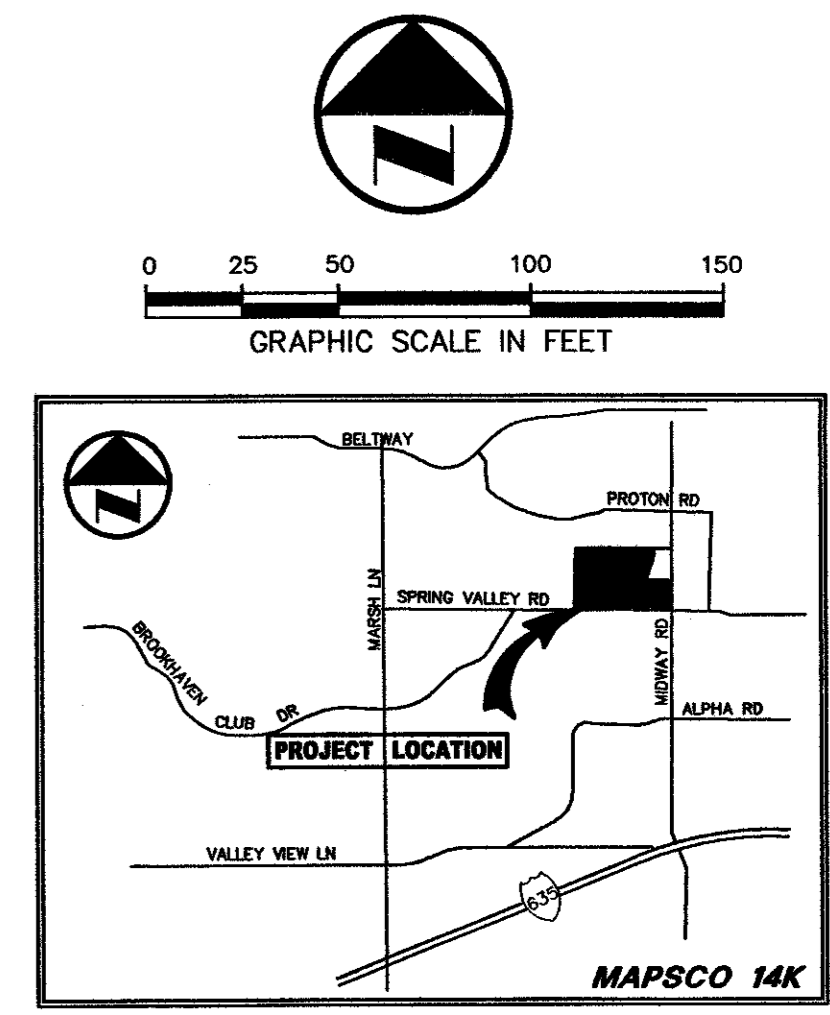
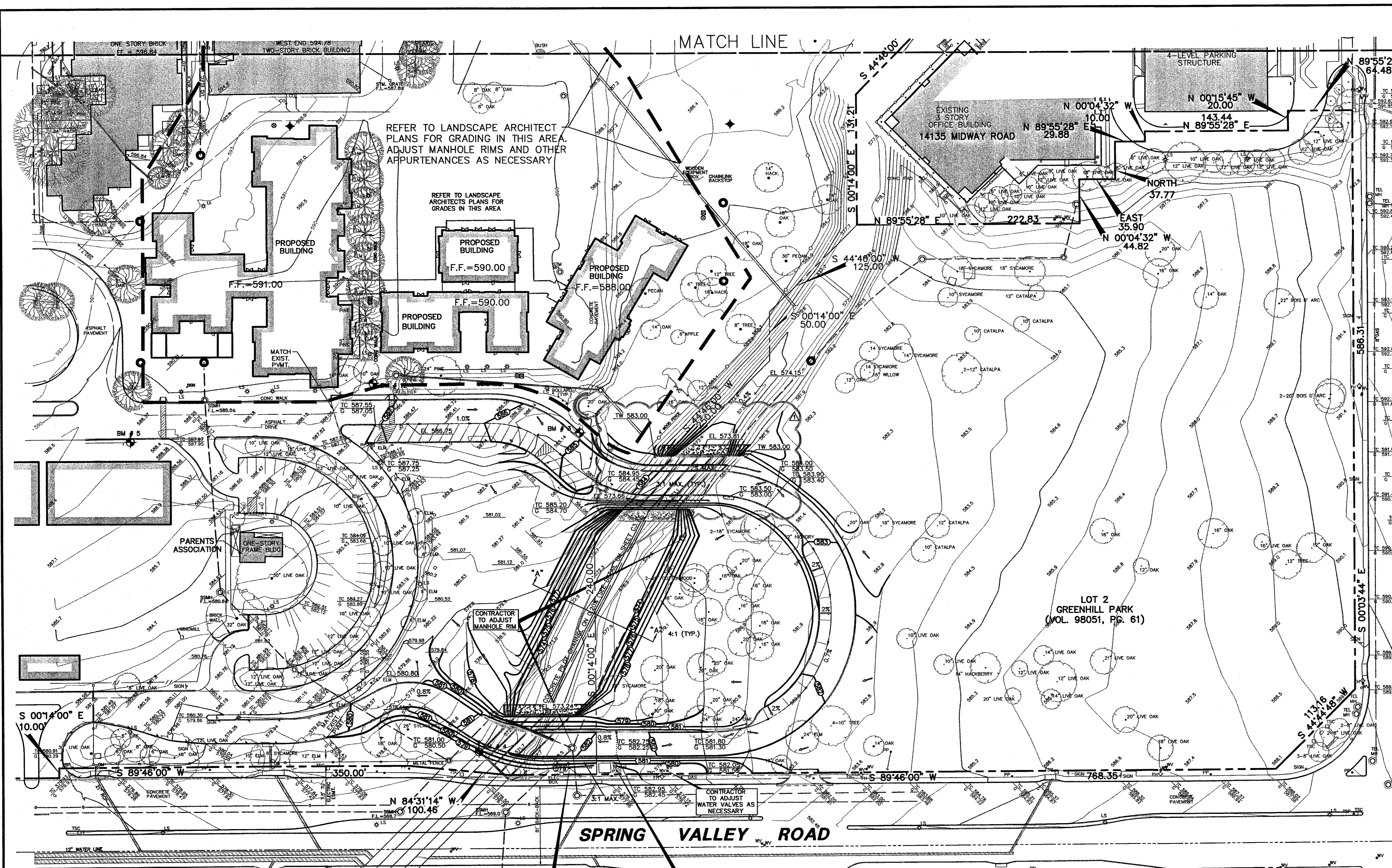
NO.	DATE	REVISION
1	08/24/2004	ADDED PARKING AREA
2	06/10/2004	ADDED TWO RETAINING WALLS AND REVISED DETAIL
3	04/30/2004	REVISED CULVERT & GRADES
4	04/30/2004	REVISED CULVERT, GRADES, & NOTE

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**GRADING PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C3.1</b>

DWG FILE: 1082-03.024C.V.DWG



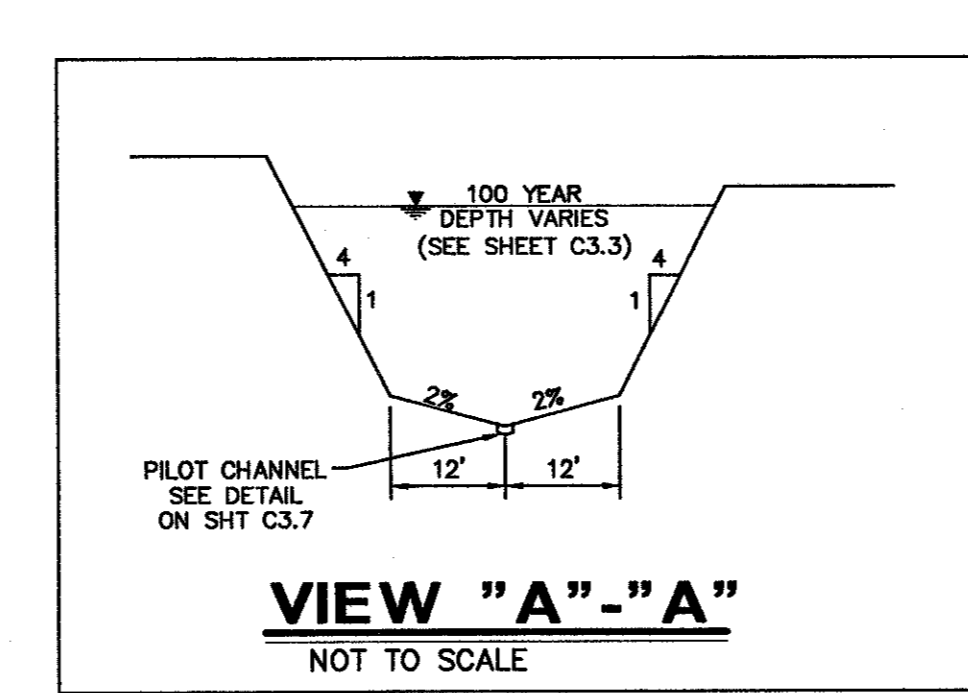
VICINITY MAP

LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FD. FIRE HYDRANT
- CL. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- X- FENCE
- OVERHEAD UTILITY LINE
- W- UNDERGROUND WATER LINE
- E- UNDERGROUND ELECTRIC LINE
- T- UNDERGROUND TELEPHONE LINE
- C- UNDERGROUND CABLE LINE
- SS- UNDERGROUND SANITARY SEWER LINE
- 612.39 EXIST SPOT ELEVATION
- TC 612.39 EXIST TOP OF CURB ELEVATION
- 6 512.32 EXIST GUTTER ELEVATION
- TC 614.5 PROPOSED TOP OF CURB ELEVATION
- 6 614.0 PROPOSED GUTTER ELEVATION
- EL 614.5 PROPOSED SPOT ELEVATION
- PROPOSED DRAINAGE FLOW DIRECTION
- 61.3 EXIST CONTOUR
- (CS) PROPOSED CONTOUR

GRADING AND DRAINAGE GENERAL NOTES

1. REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
2. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 0% TO +3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
3. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 2% AND A CROSS-FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.
4. GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
5. UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
  - A. RCP C-76, CLASS III
  - B. ADS N-12
  - C. HANDBOR 18-0
6. AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
7. UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OR APPROVED EQUAL.
8. FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
9. REFER TO LANDSCAPE SPECIFICATION FOR SEEDING AND SODDING REQUIREMENTS.
10. ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
11. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
12. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
13. A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS. THE MANHOLE COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
14. ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
15. CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
16. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.



VIEW "A" - "A"  
NOT TO SCALE

BENCH MARKS	
BM #3:	Cut "+" in walk on outside of curved drive near southeast corner of lower school. Elev. 586.06
BM #4:	"□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus. Elev. 578.47
BM #5:	"□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley. Elev. 588.20
BM #9:	"□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus. Elev. 602.80
BM #10:	"□" cut on conc. step near northwest corner of upper school. Elev. 598.85
BM #11:	"□" cut on conc step on walk exiting west side of library. Elev. 596.44
BM #12:	"□" cut at intersection of walk along west side of lower school and walk along south side Lower school. Elev. 587.78



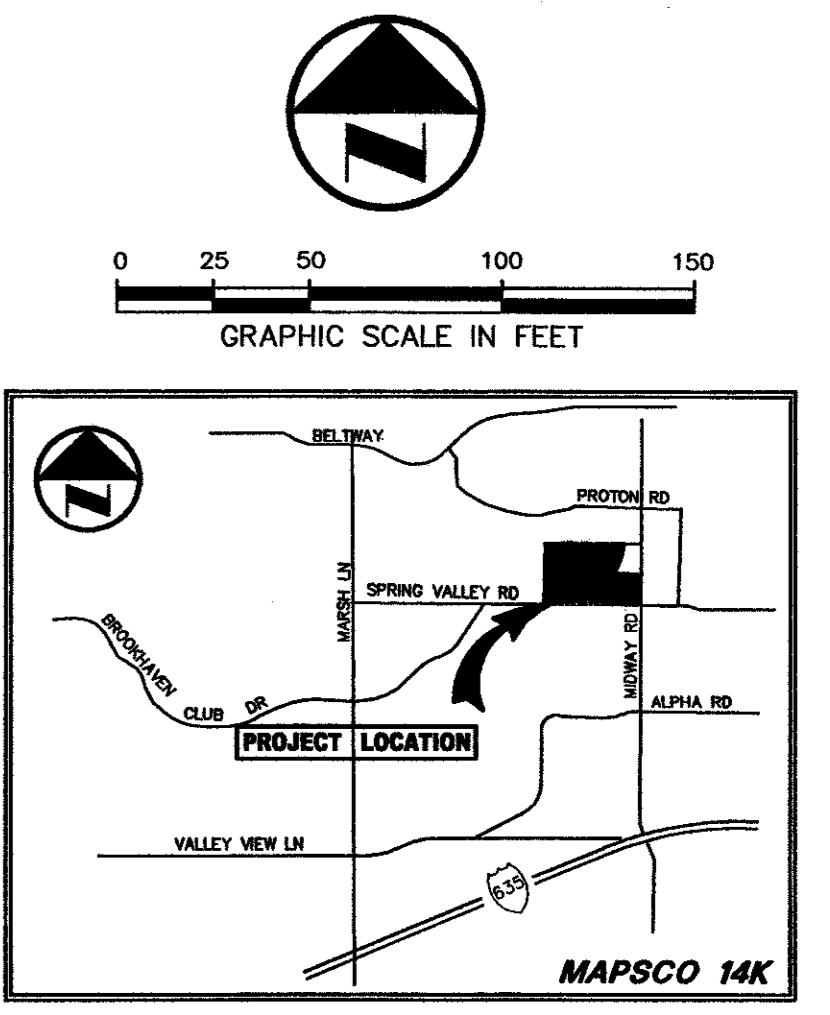
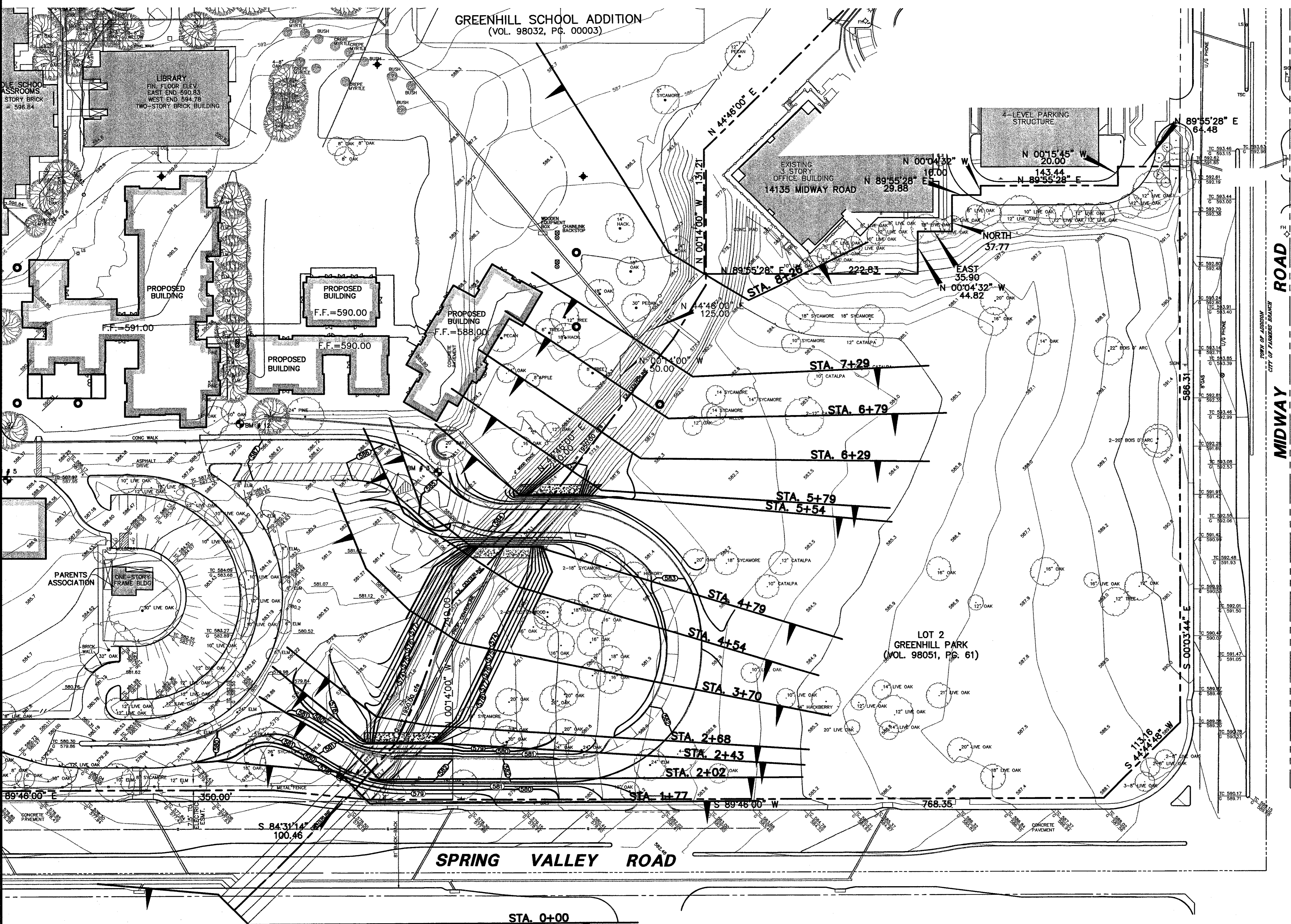
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70090 ON 03/21/2004. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

NO.		DATE		REVISION	
A		04/30/2004		REVISED CULVERT, GRADES, & NOTE	
<b>Pacheco Koch Consulting Engineers</b>					
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031					
<b>GRADING PLAN</b>					
<b>GREENHILL SCHOOL ADDITION</b>					
<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>					
<b>TOWN OF ADDISON, TEXAS</b>					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE NO.
BJM	FJM	NOV. 2003	1"=50'		<b>C3.1</b>

DIVEY 04/30/2004 - 1:25PM 04-DWG-10\1082-03-024.DWG\1082-03.024CVDWG

GREENHILL SCHOOL

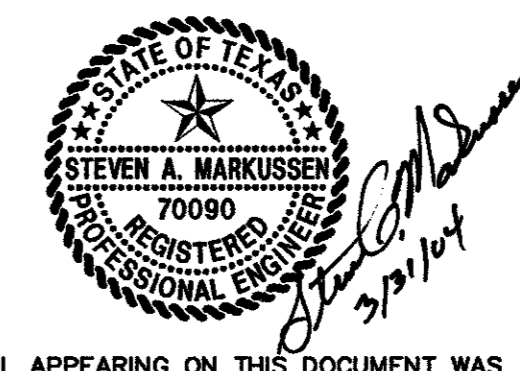
GREENHILL SCHOOL ADDITION  
(VOL. 98032, PG. 00003)



VICINITY MAP

- LEGEND**
- B. BOLLARD
  - EM ELECTRIC METER
  - PP POWER POLE
  - LS LIGHT STANDARD
  - WM WATER METER
  - WV WATER VALVE
  - ICV IRRIGATION CONTROL VALVE
  - FH FIRE HYDRANT
  - CO CLEANOUT
  - MH MANHOLE
  - TSC TRAFFIC SIGNAL CONTROL
  - TSP TRAFFIC SIGNAL POLE
  - TELE TELEPHONE BOX
  - FL FLOOD LIGHT
  - FP FLAG POLE
  - TR TRAFFIC SIGN
  - IRS 1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP SET
  - (C.M.) CONTROLLING MONUMENT
  - PROPERTY LINE
  - FENCE
  - OH OVERHEAD UTILITY LINE
  - UW UNDERGROUND WATER LINE
  - UE UNDERGROUND ELECTRIC LINE
  - UT UNDERGROUND TELEPHONE LINE
  - UC UNDERGROUND CABLE LINE
  - US UNDERGROUND SANITARY SEWER LINE
  - ES EXIST SPOT ELEVATION
  - EC EXIST TOP OF CURB ELEVATION
  - EG EXIST GUTTER ELEVATION
  - PC PROPOSED CONTOUR
  - PT PROPOSED TOP OF CURB ELEVATION
  - PG PROPOSED GUTTER ELEVATION
  - PE PROPOSED SPOT ELEVATION
  - PD PROPOSED DRAINAGE FLOW DIRECTION
  - 613 EXIST CONTOUR

THE 100 YEAR FLOW RATE WAS OBTAINED FROM THE FEMA FIS FOR FARMERS BRANCH CREEK. THE FLOW RATE SHOWN ON THE FIS IS LOCATED AT THE DOWNSTREAM END OF THE EXISTING BOX CULVERTS UNDER SPRING VALLEY ROAD.

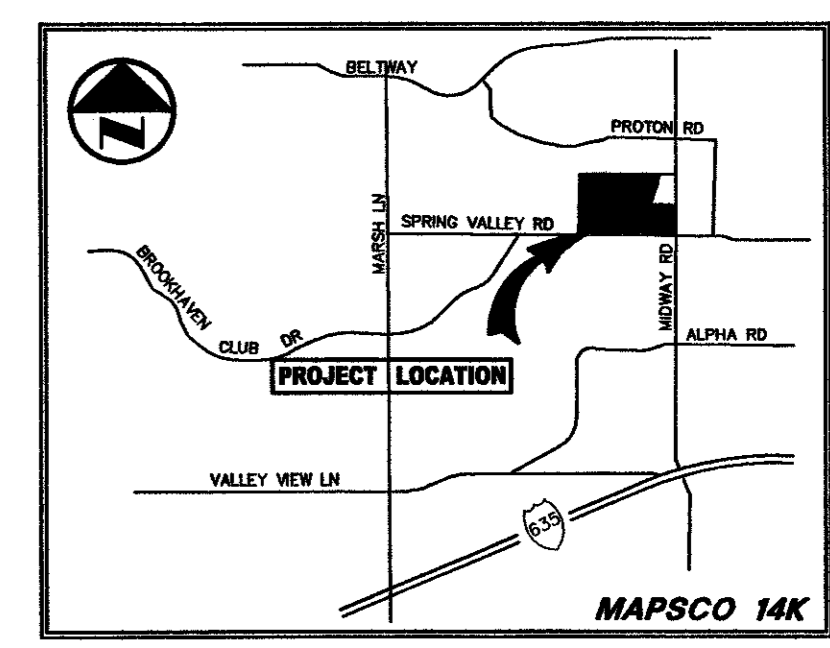
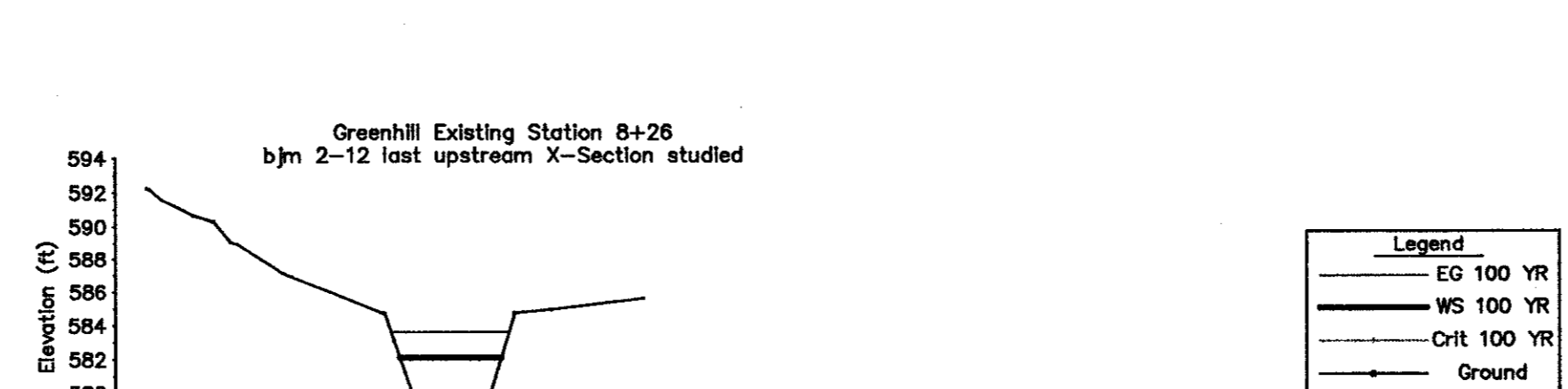
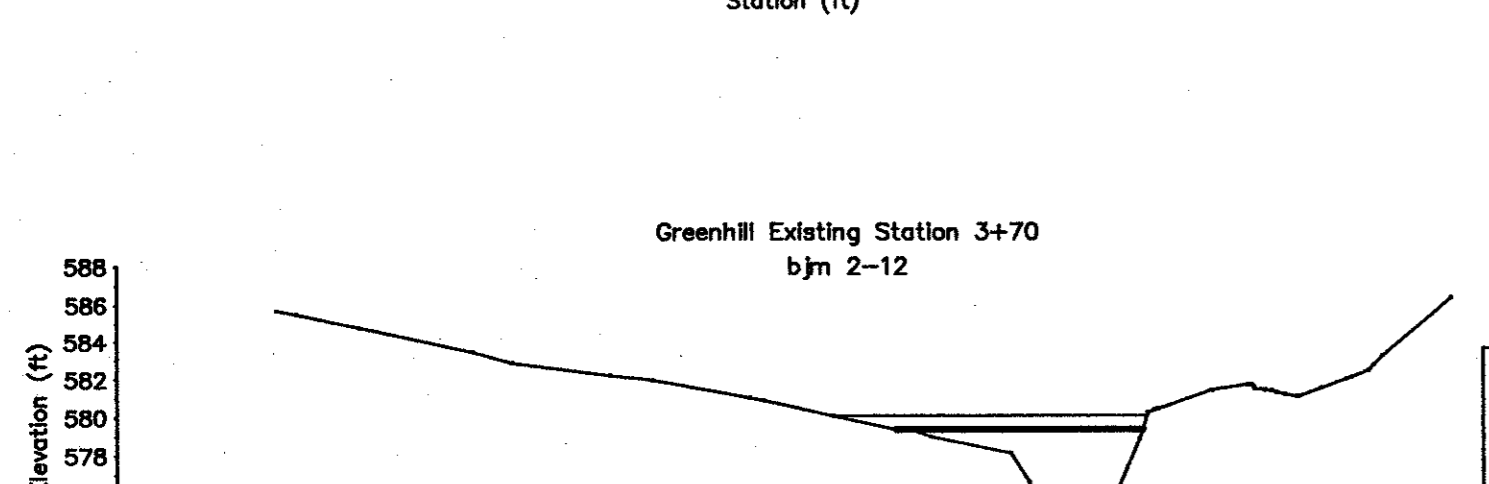
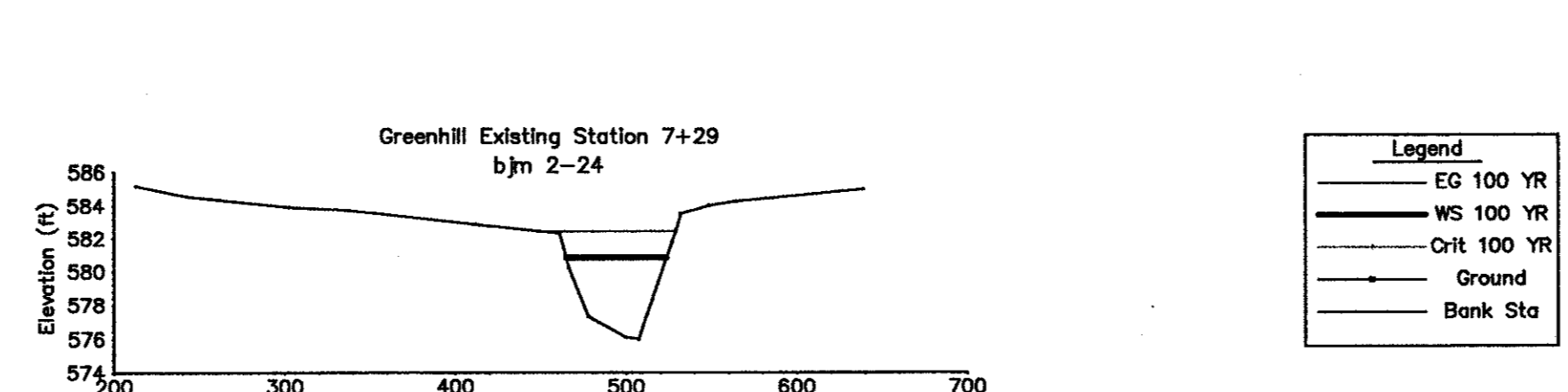
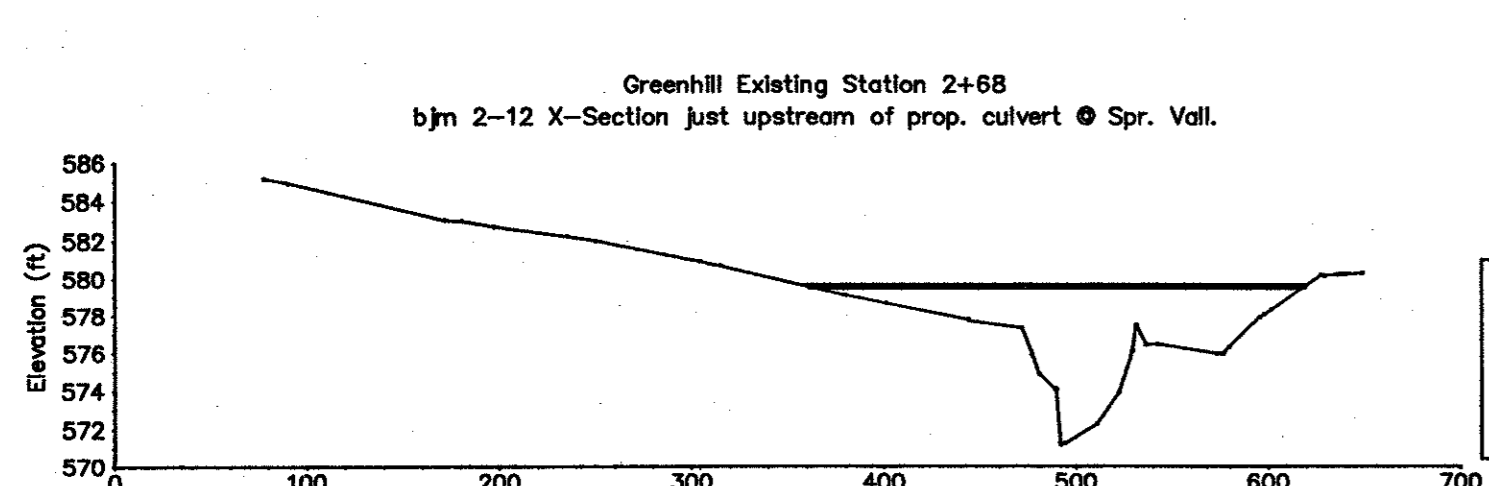
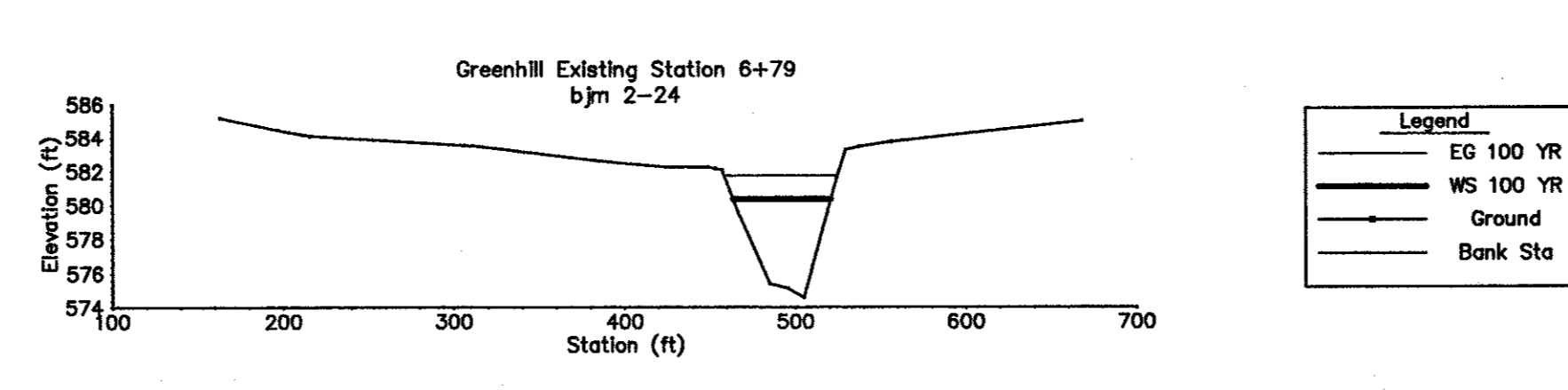
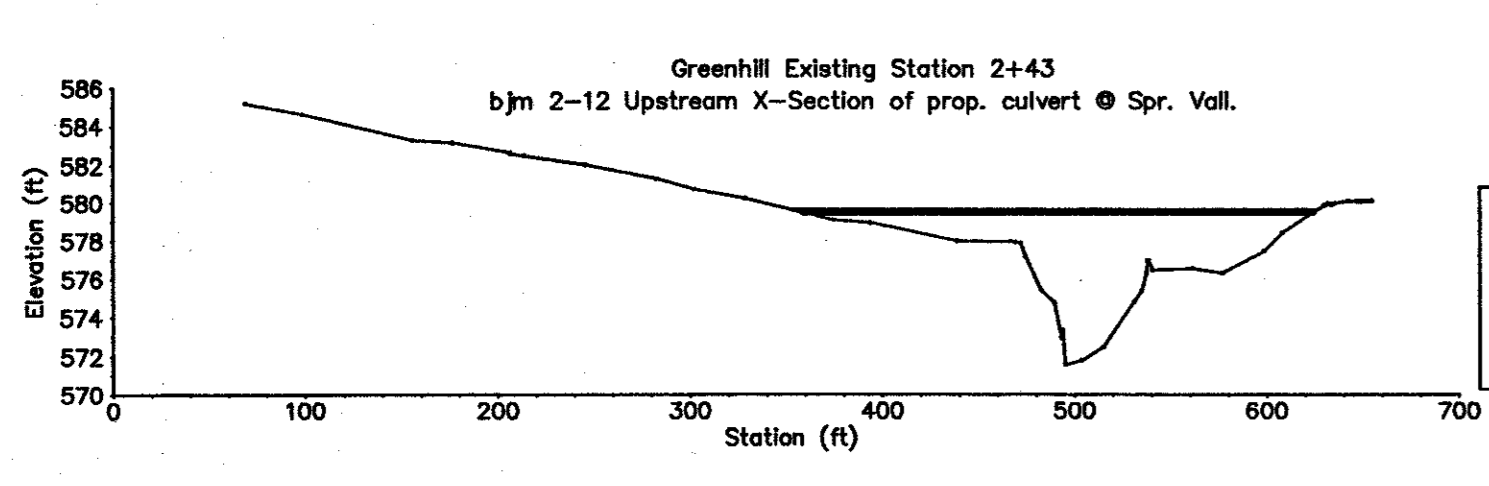
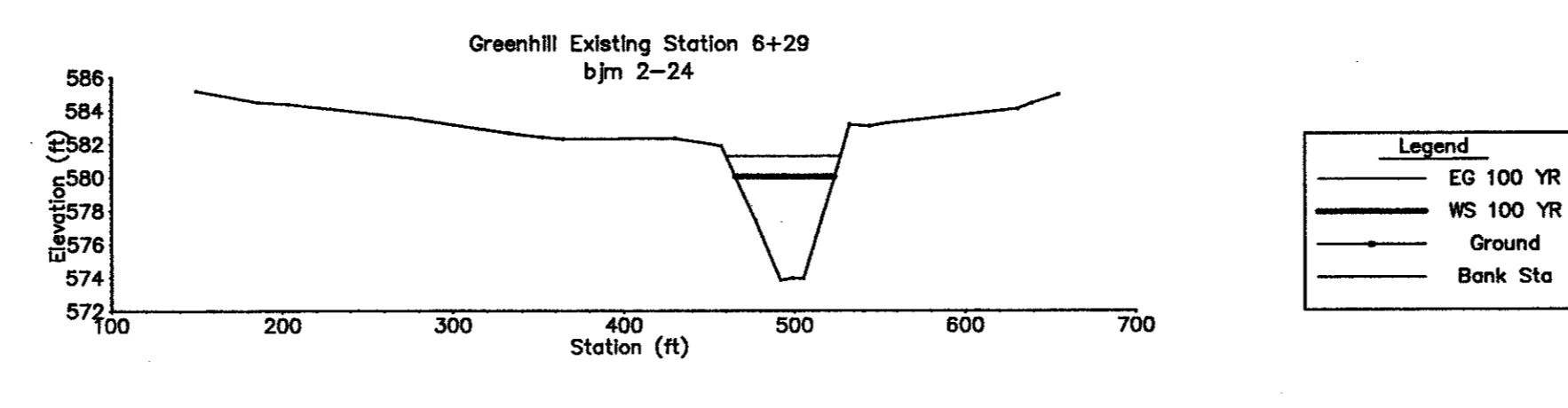
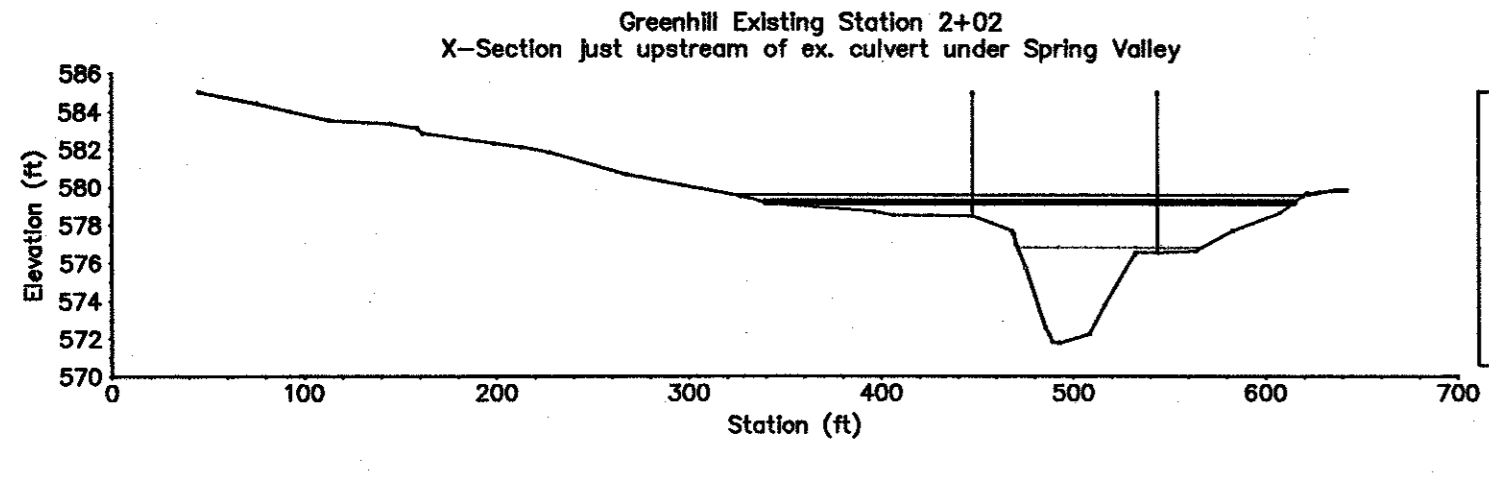
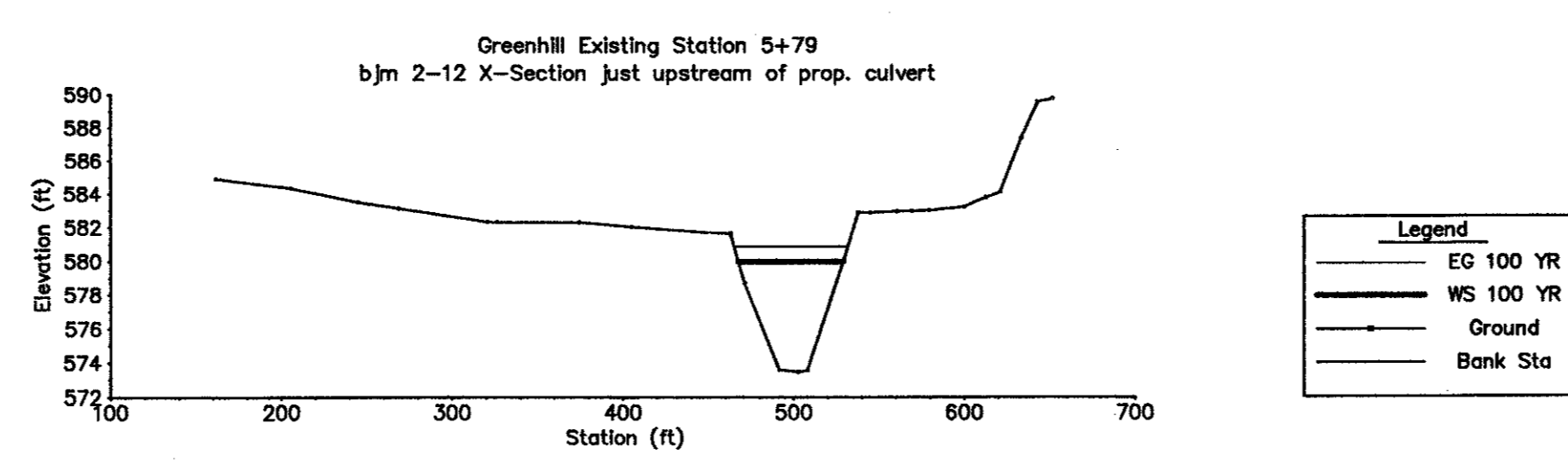
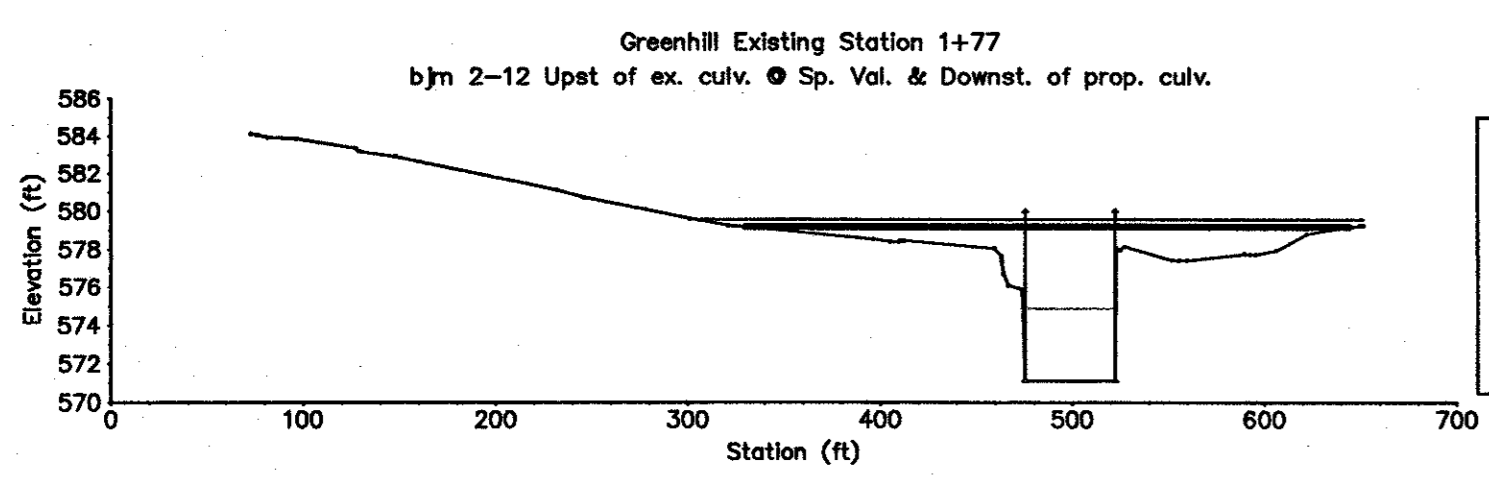
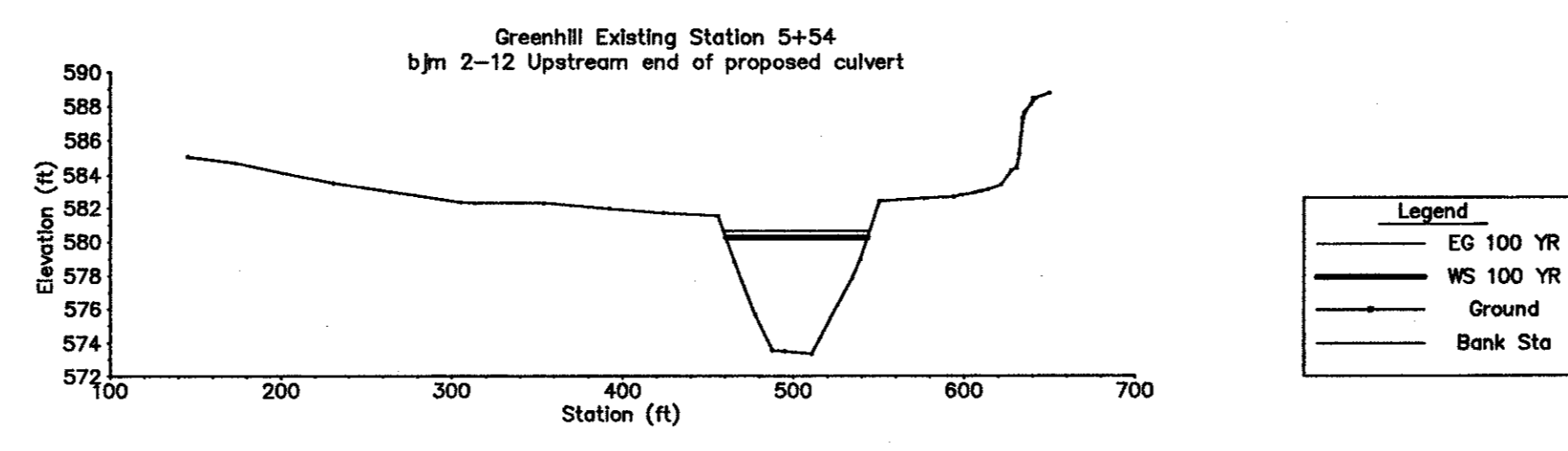
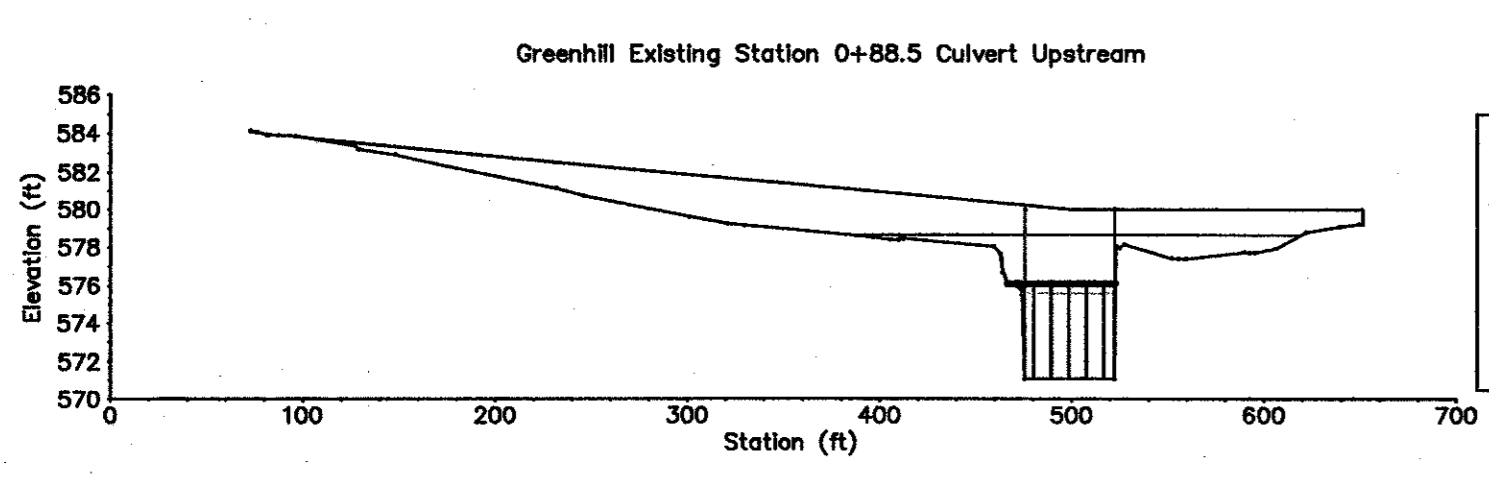
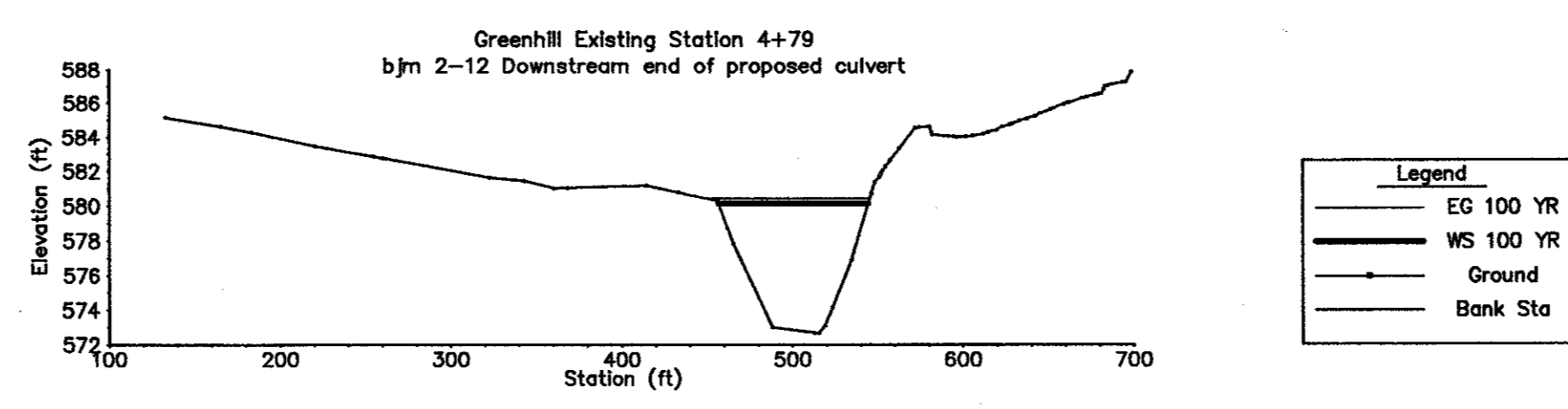
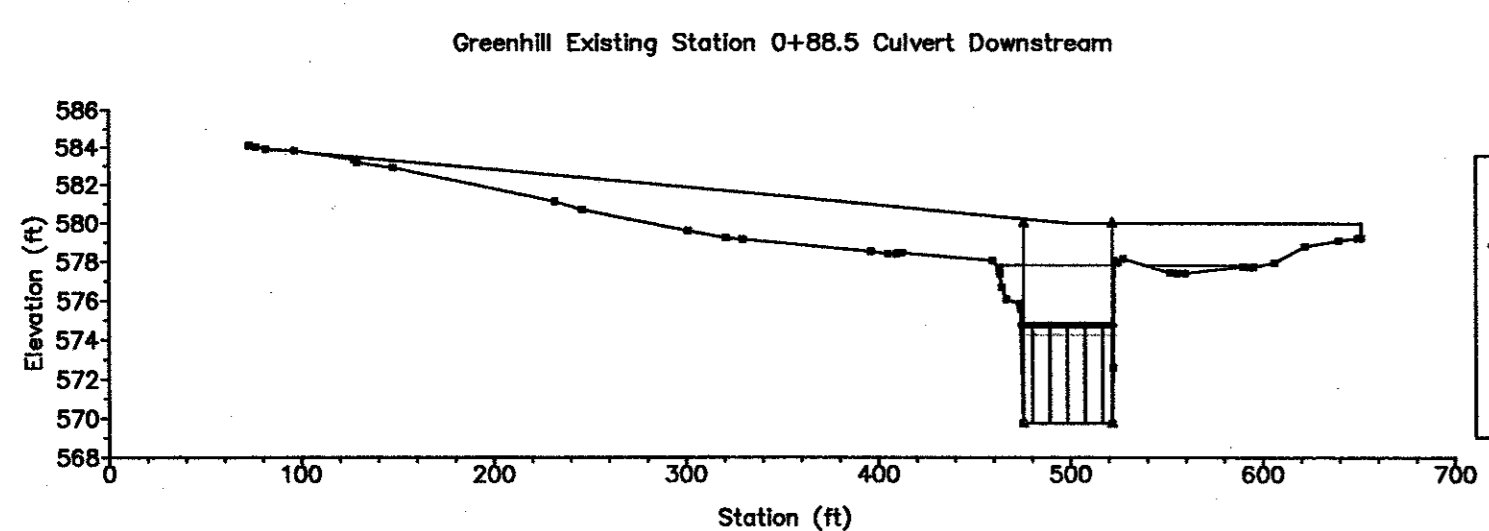
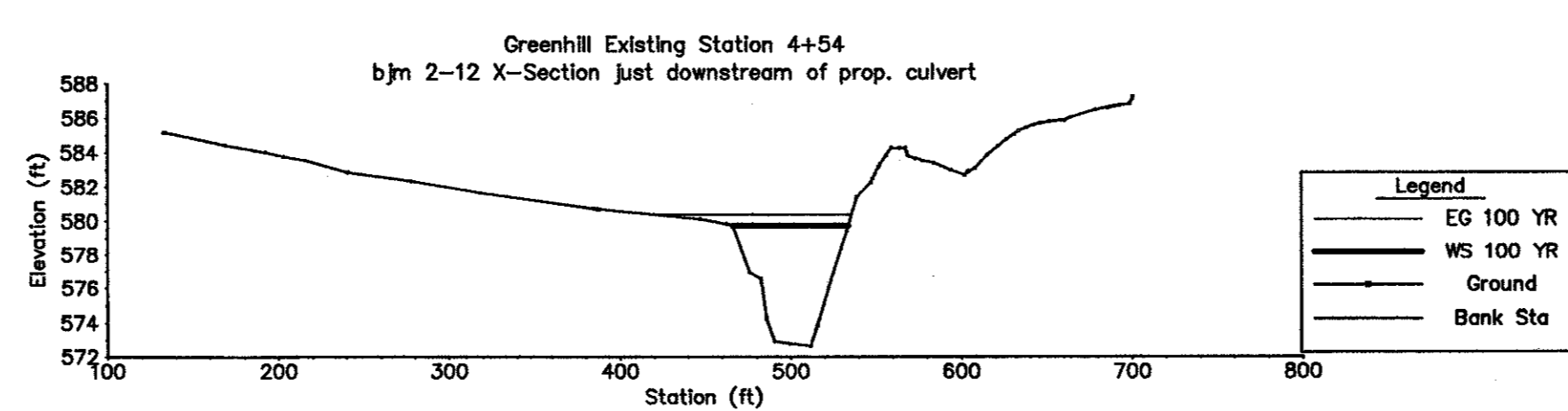
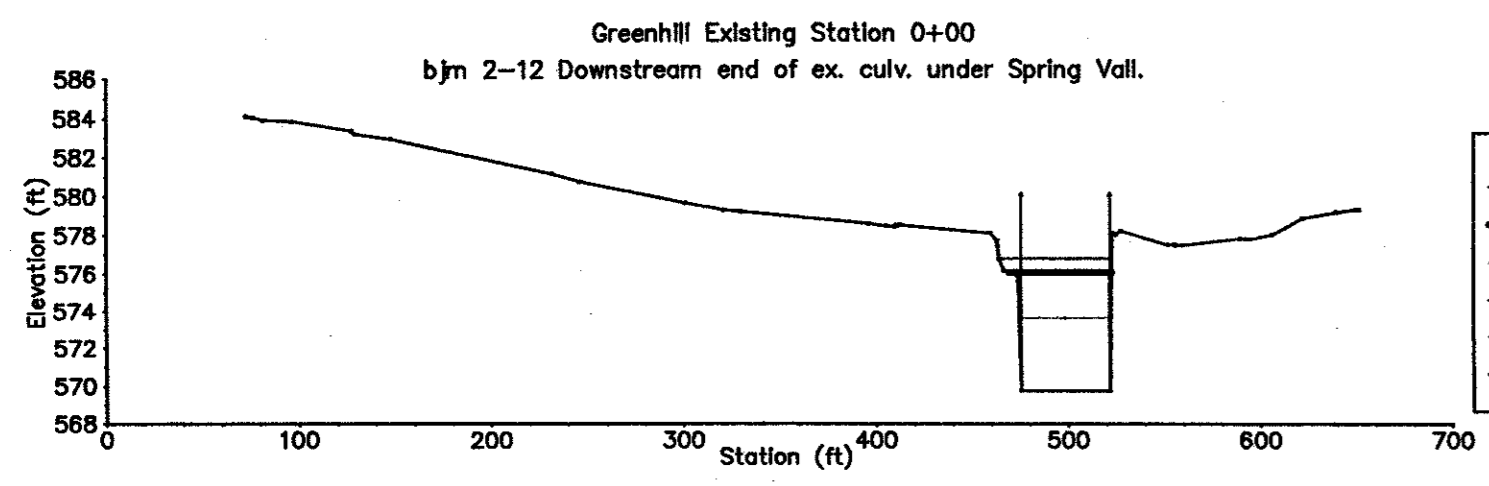


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NO.	DATE	REVISION				
Pacheco Koch Consulting Engineers 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031						
<b>FLOODPLAIN STUDY MAP</b>						
<b>GREENHILL SCHOOL</b>						
<b>GREENHILL SCHOOL ADDITION</b>						
<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>						
<b>TOWN OF ADDISON, TEXAS</b>						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C3.2</b>

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GREENHILL SCHOOL



**EXISTING PROFILE OUTPUT TABLE**

Profile Output Table - Standard Table 1  
HEC-RAS Plan: Plan 01 River: Farmers Branch C Reach: Greenhill Profile: 100 YR

Reach	River Sta	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)
Greenhill	826.00	1950.00	577.73	582.09	581.98	583.61	0.011456	9.92	196.57	59.63
Greenhill	729.00	1950.00	575.98	580.81	580.81	582.44	0.012504	10.24	190.37	58.85
Greenhill	629.00	1950.00	574.57	580.35	581.76	581.76	0.009517	9.52	204.84	57.17
Greenhill	529.00	1950.00	573.84	580.06	581.28	581.28	0.007743	8.88	219.67	56.25
Greenhill	429.00	1950.00	573.46	579.96	580.88	580.88	0.005146	7.69	253.62	51.42
Greenhill	329.00	1950.00	573.35	580.23	580.65	580.65	0.020909	5.22	373.31	53.01
Greenhill	229.00	1950.00	572.89	580.14	580.45	580.45	0.013177	4.44	438.88	87.80
Greenhill	129.00	1950.00	572.63	579.72	580.36	580.36	0.003248	6.43	303.31	67.60
Greenhill	29.00	1950.00	572.64	579.29	580.03	580.03	0.004686	7.03	302.83	128.44
Greenhill	288.00	1950.00	571.19	579.53	579.70	579.70	0.000761	3.73	700.24	256.97
Greenhill	243.00	1950.00	571.58	579.50	579.68	579.68	0.000868	3.76	672.31	265.41
Greenhill	202.00	1950.00	571.76	579.21	576.83	579.61	0.001609	5.18	401.85	274.93
Greenhill	177.00	1950.00	571.10	579.16	574.88	579.57	0.000925	5.19	375.87	313.99
Greenhill	88.50	1950.00	569.75	576.00	573.57	576.71	0.002210	6.77	287.94	53.50
Greenhill	0.00	1950.00	569.75	576.00	573.57	576.71	0.002210	6.77	287.94	53.50

**CULVERT OUTPUT TABLE 88.5**

Plan 01 Farmers Branch C Greenhill  
RS: 88.5 Profile: 100 YR  
Culvert ID: Culvert #1  
Culv Q (cfs)

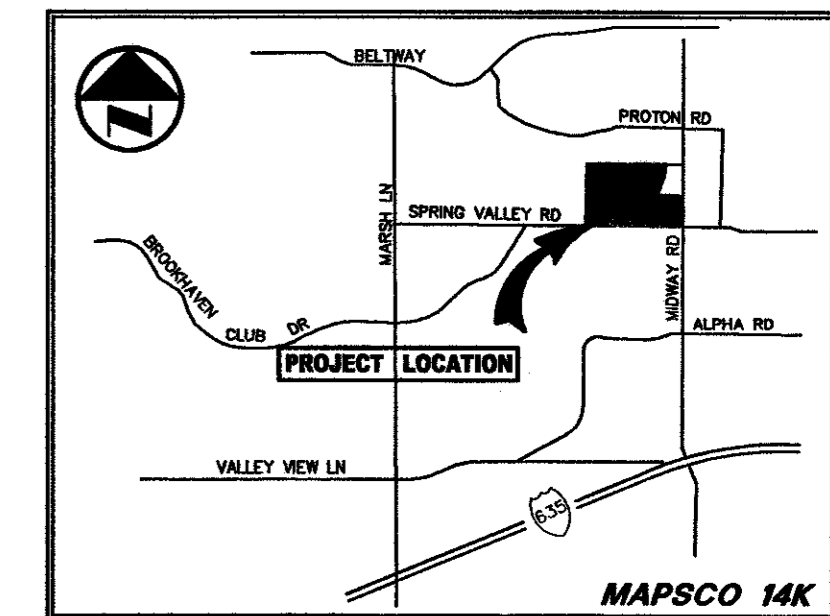
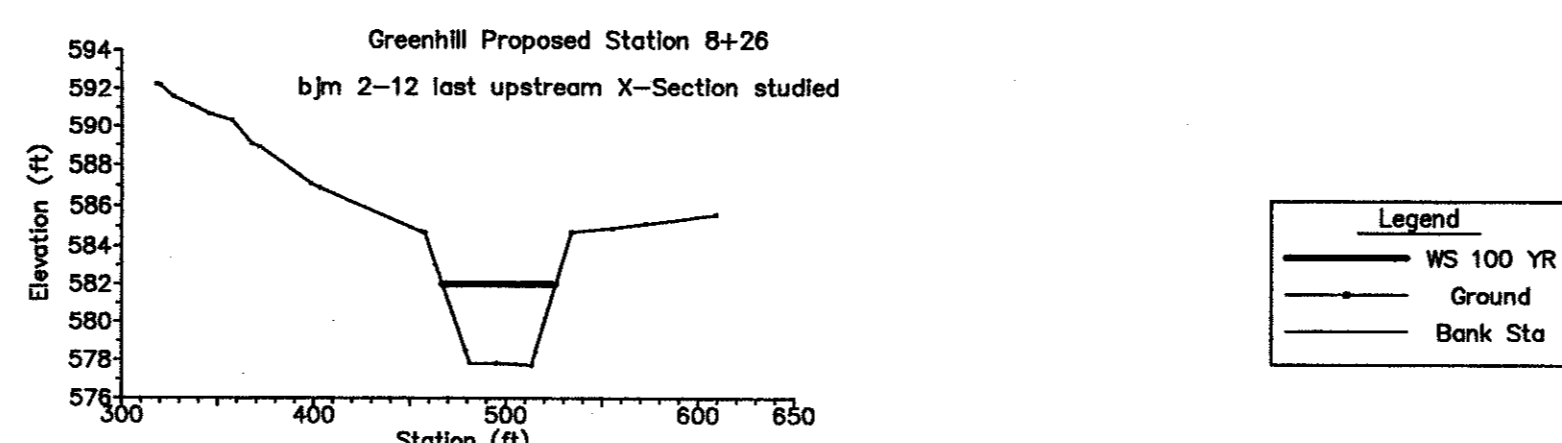
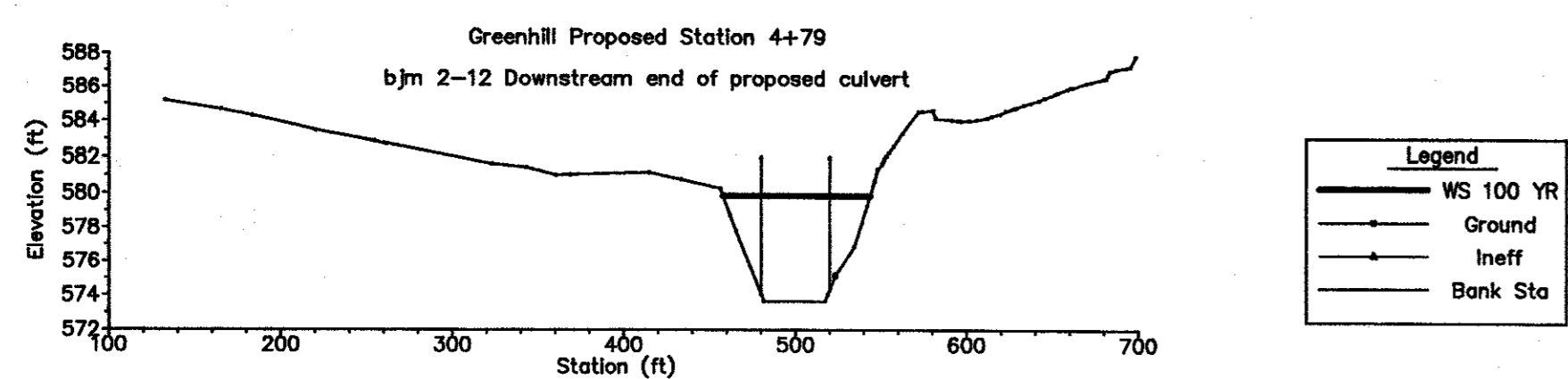
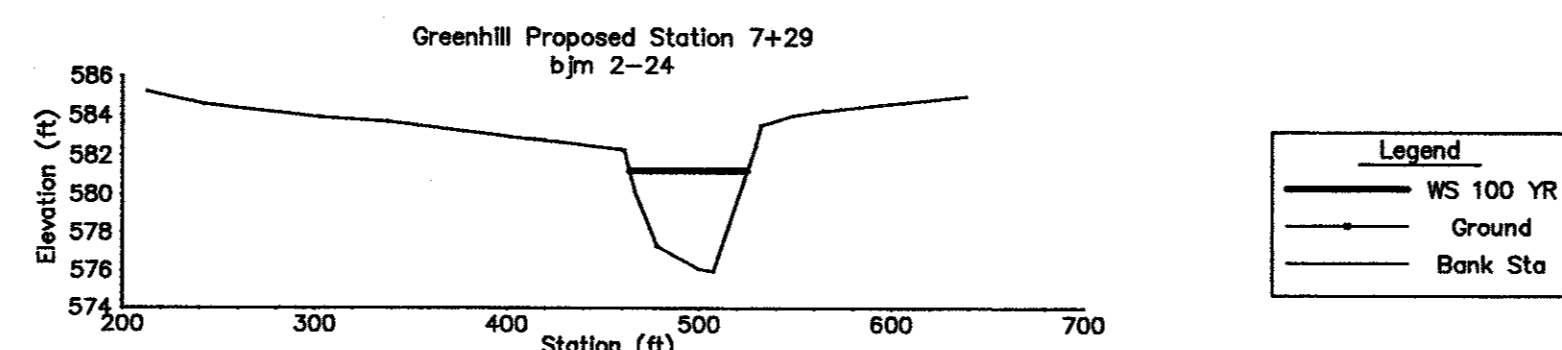
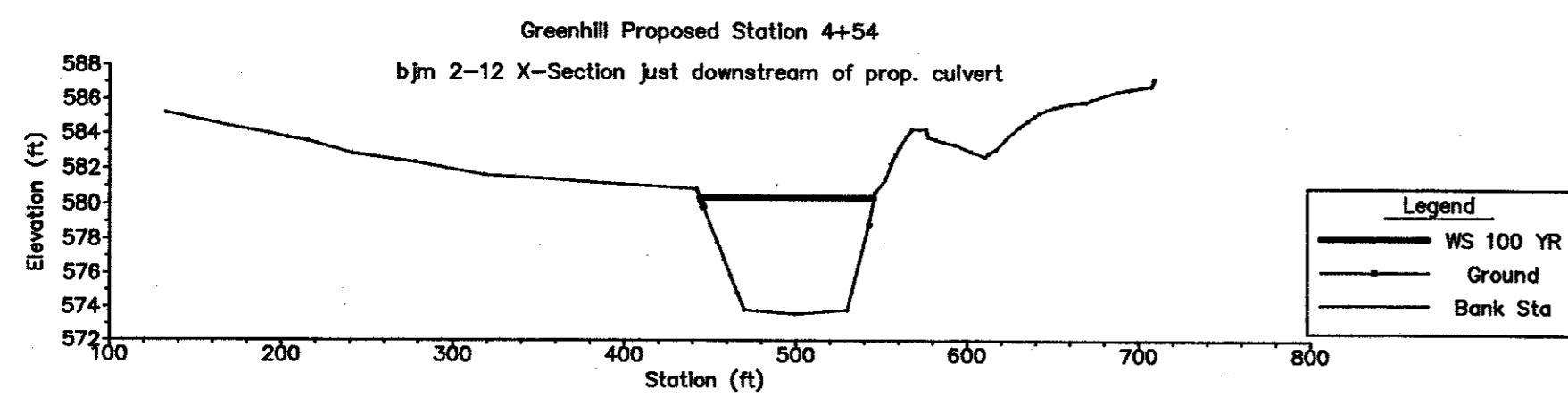
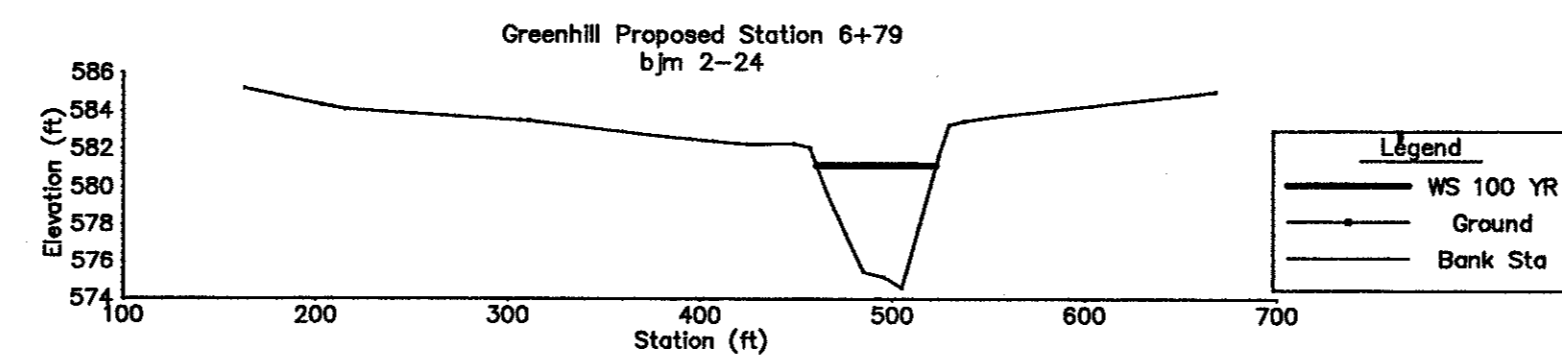
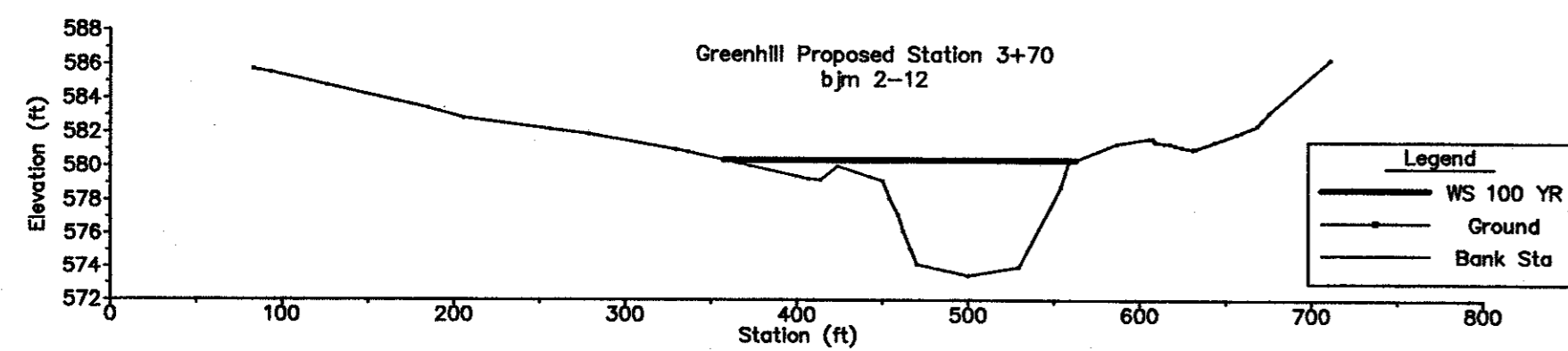
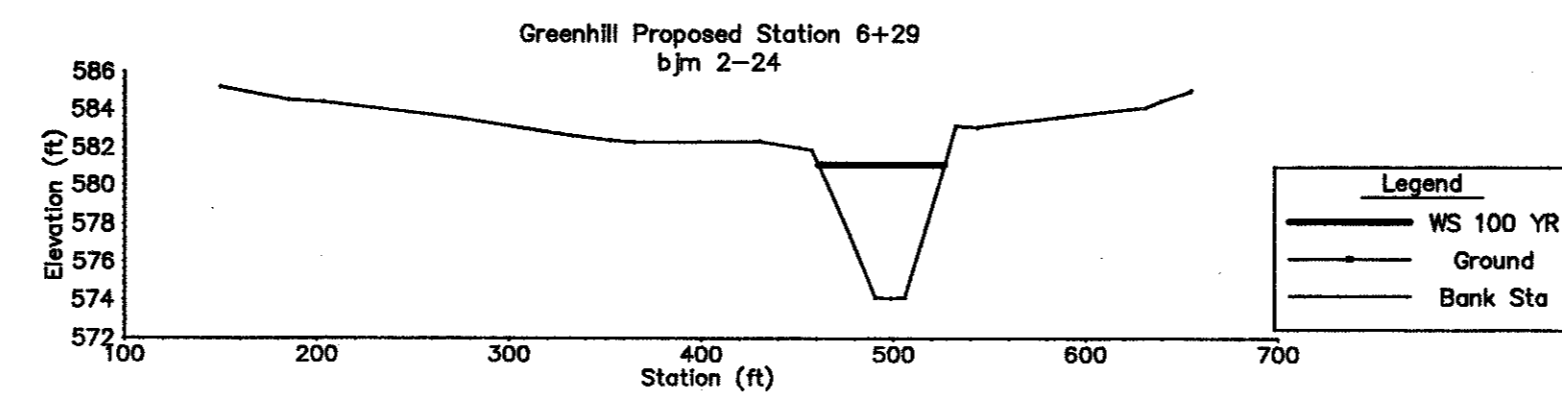
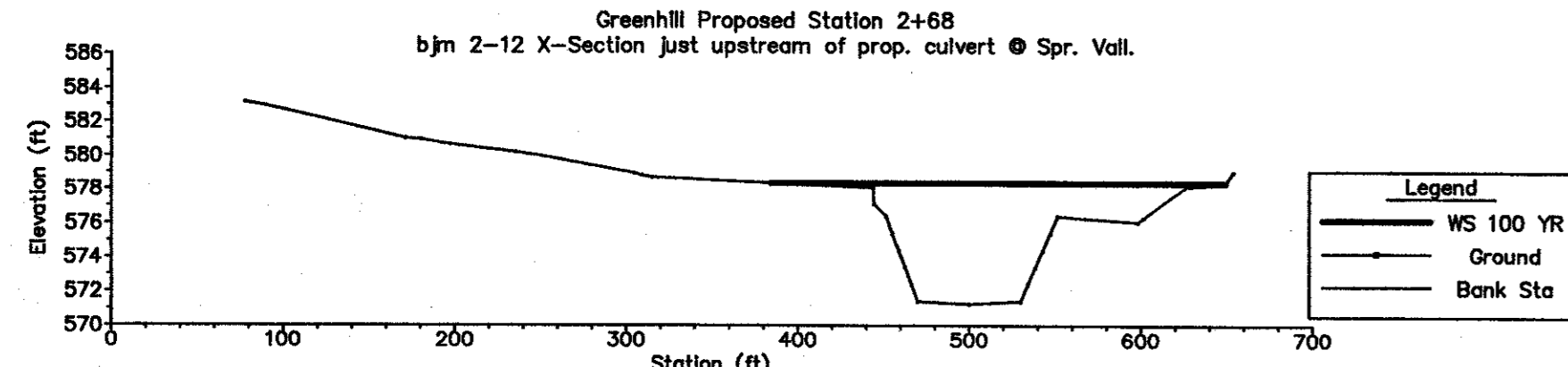
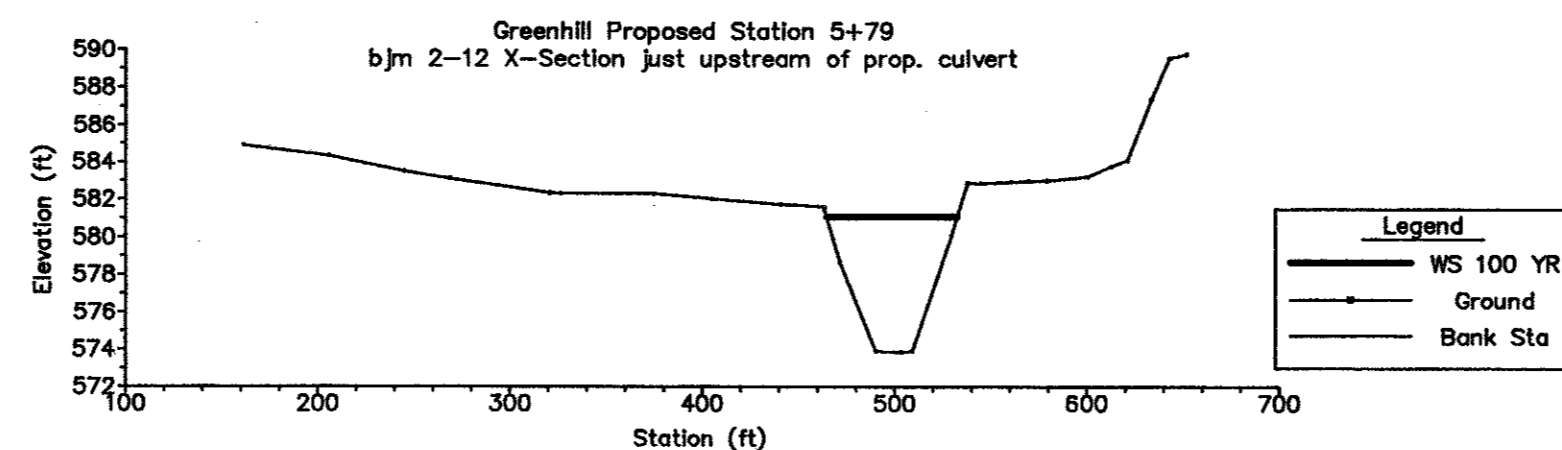
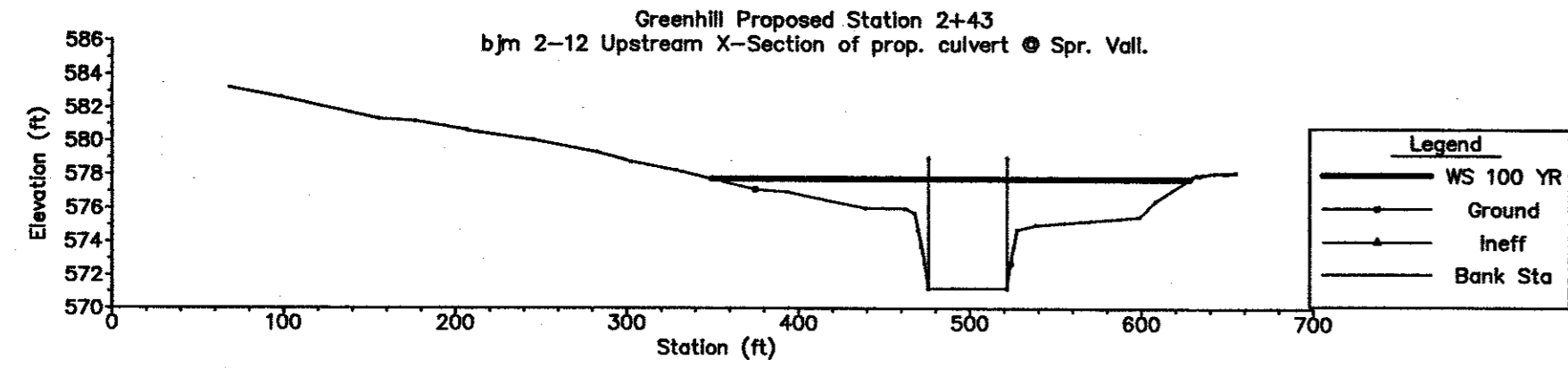
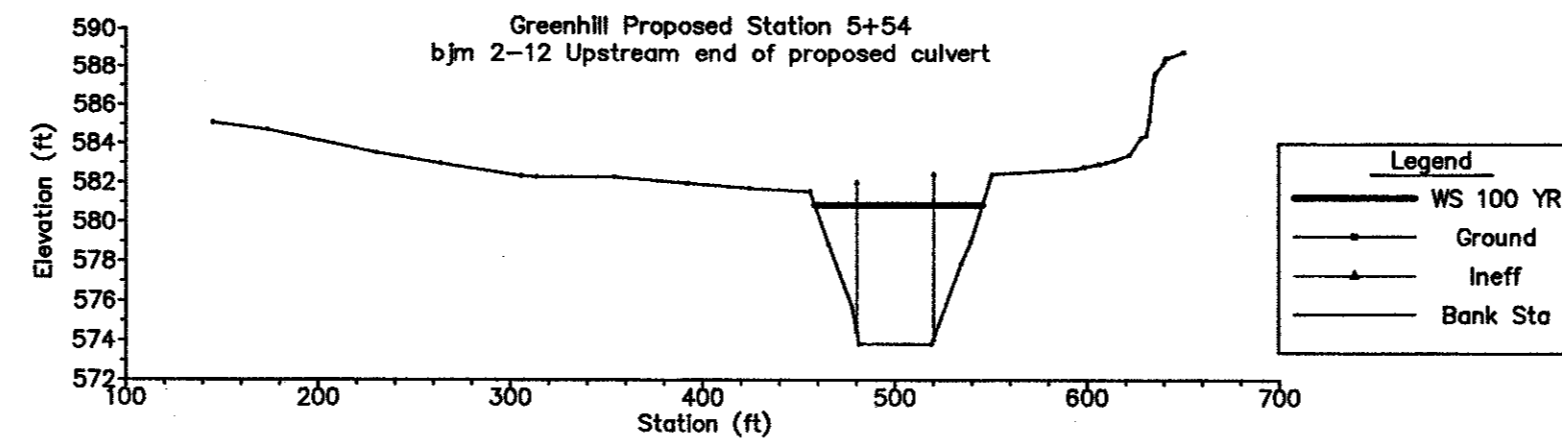
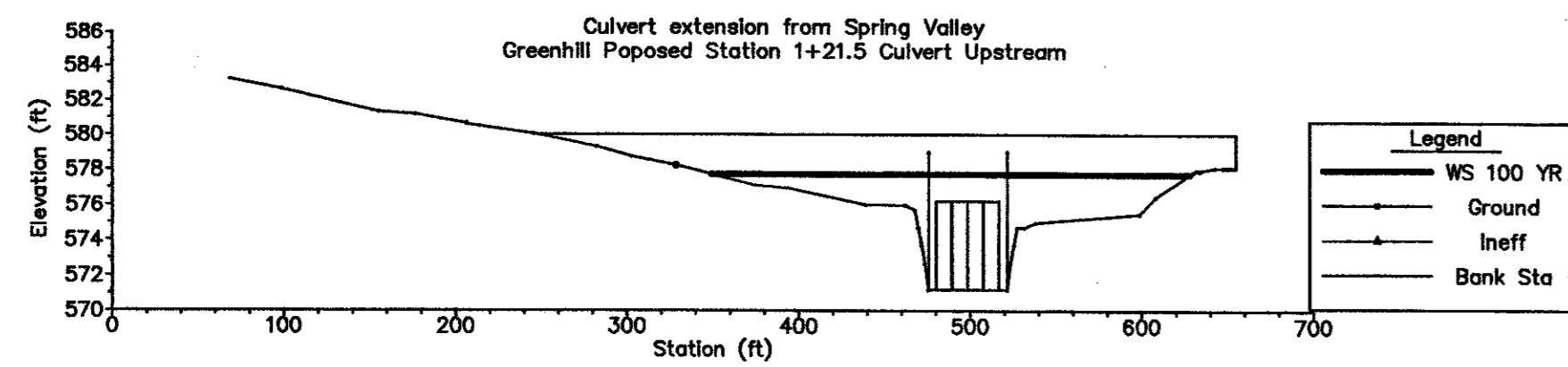
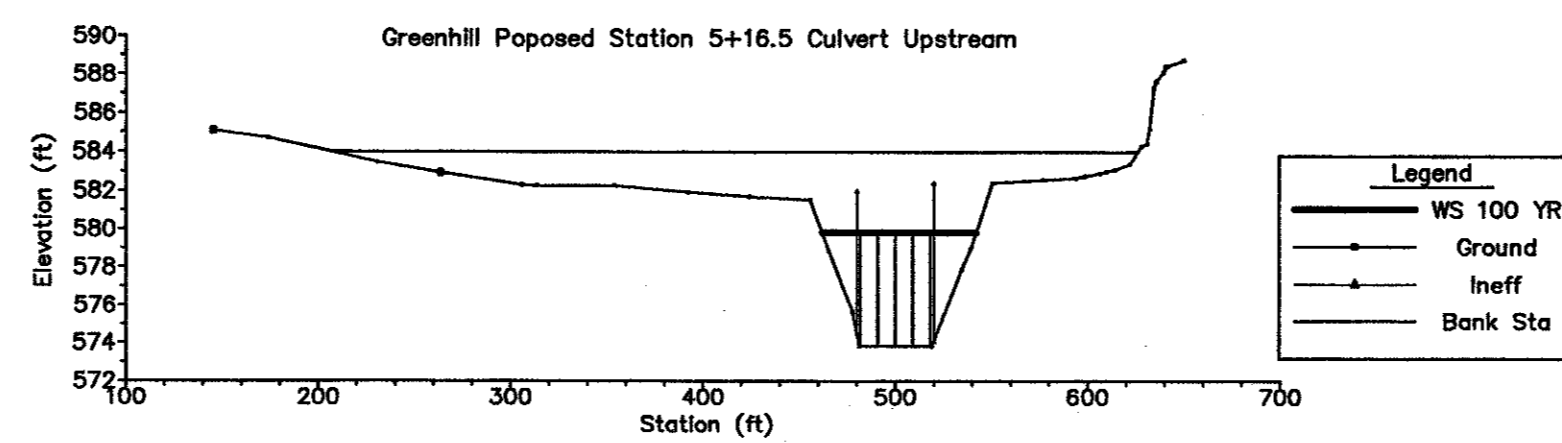
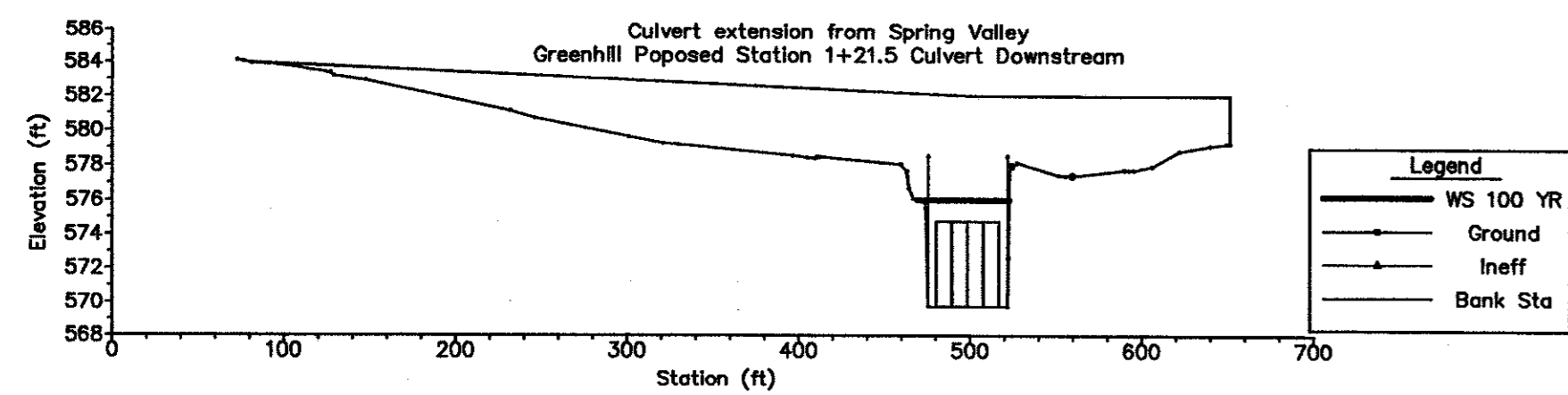
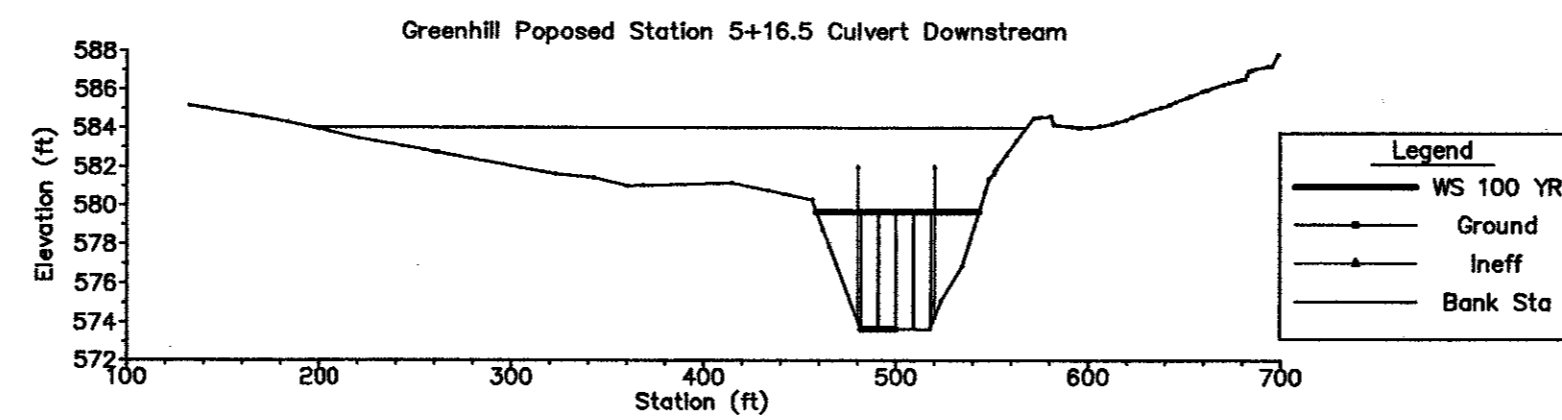
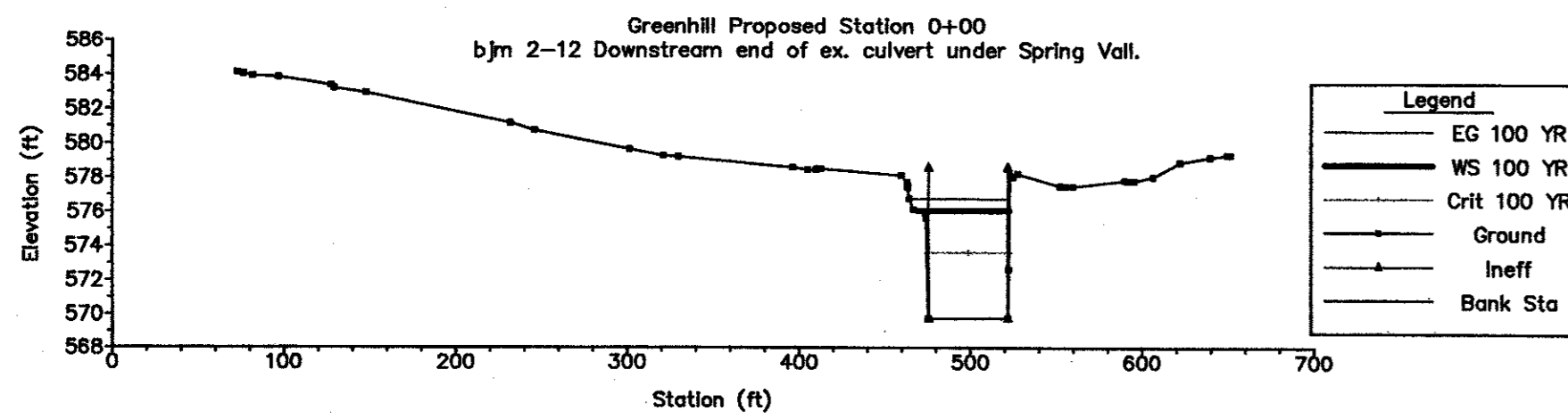
# Barrels	1950.00	Culv Full Lngth (ft)	176.00
Q Barrel (cfs)	487.5	Culv Vel US (ft/s)	16.83
E.G. US (ft)	679.57	Culv Vel DS (ft/s)	16.83
W.S. US (ft)	679.16	Culv Inv El Up (ft)	571.1
E.G. DS (ft)	576.71	Culv Inv El Dn (ft)	566.75
W.S. DS (ft)	576	Culv Frtn Ls (ft)	0.84
Delta EG (ft)	2.66	Culv Ext Lss (ft)	1.11
Delta WS (ft)	3.16	Culv Ent Lss (ft)	0.91
E.G. IC (ft)	579.45	Q Weir (cfs)	
E.G. OC (ft)	579.57	Weir Sta Lft (ft)	
Culvert Control	Outlet	Weir Sta Rgt (ft)	
Culv WS Inlet (ft)	576.1	Weir Submrg	
Culv WS Outlet (ft)	574.75	Weir Max Depth (ft)	
Culv Nml Depth (ft)	574.75	Weir Avg Depth (ft)	
Culv Crd Depth (ft)	4.5	W/Fiw Area (sq ft)	580.01
		Min El Weir Flow (ft)	



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NO.	DATE	REVISION
<b>Pacheco Koch Consulting Engineers</b> 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031		
<b>FLOODPLAIN STUDY DETAILS</b> <b>EXISTING CONDITIONS</b> <b>GREENHILL SCHOOL</b> <b>GREENHILL SCHOOL ADDITION</b> <b>TOWN OF ADDISON, TEXAS</b>		
DESIGN	DRAWN	DATE
BJM	FJM	NOV. 2003
SCALE	NOTES	FILE
		<b>C3.3</b>

DIVEY 04/29/2004 - 5:22PM M:\DWG-10\1082-03-02A\DWG\1082-03.024\KS.DWG



VICINITY MAP

PROPOSED PROFILE OUTPUT TABLE

Profile Output Table - Standard Table 1										
HEC-RAS Plan: Plan 01 River: Farmers Branch C Reach: Greenhill Profile: 100 YR										
# Rivers	= 1									
# Hydraulic Reaches	= 1									
# River Stations	= 14									
# Plans	= 1									
# Profiles	= 1									
Reach	River Sta	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	
Greenhill	826	1950.00	577.72	582.00	581.99	583.61	0.012372	10.19	191.35	
Greenhill	729	1950.00	575.98	581.25		582.51	0.008624	9.00	216.61	
Greenhill	679	1950.00	574.57	581.15		582.08	0.00534	7.73	252.34	
Greenhill	629	1950.00	574.07	581.08		581.83	0.002941	6.94	251.12	
Greenhill	579	1950.00	573.86	581.08		581.66	0.002003	6.10	319.78	
Greenhill	554	1950.00	573.81	580.85	578.01	581.6	0.001468	6.94	281.02	
Greenhill	516.4	culvert								
Greenhill	479	1950.00	573.66	579.87	577.87	580.83	0.002248	7.89	247.15	
Greenhill	454	1950.00	573.61	580.38		580.58	0.00601	3.63	537.31	
Greenhill	370	1950.00	573.44	580.35		580.53	0.00494	3.37	631.1	
Greenhill	268	1950.00	573.25	580.34		580.47	0.00359	2.97	755.17	
Greenhill	243	1950.00	573.2	579.74	577.02	580.4	0.001407	6.50	300.02	
Greenhill	121.5	culvert								
Greenhill	0	1950.00	569.75	576.00	573.57	576.71	0.00221	6.77	287.94	

CULVERT OUTPUT TABLE 121.5

Plan 01 Farmers Branch C	1950	Culv Full Lngth (ft)	131.79
Greenhill RS: 121.5 Profile: 100 YR Culvert ID: Culvert #1			
Culv Q (cfs)			
# Barrels	4	Culv Vel US (ft/s)	10.83
Q Barrel (cfs)	487.5	Culv Vel DS (ft/s)	10.83
E.G. US (ft)	588.4	Culv Inv El Up (ft)	573.2
W.S. US (ft)	578.74	Culv Inv El Dn (ft)	568.78
E.G. DS (ft)	576.71	Culv Frctn Ls (ft)	2.21
W.S. DS (ft)	576	Culv Ext Lss (ft)	1.11
Delta EG (ft)	3.69	Culv Ext Lss (ft)	0.36
Delta WS (ft)	3.74	Q Weir (cfs)	
E.G. IC (ft)	581.56	Weir Sta Lft (ft)	
E.G. OC (ft)	580.4	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	578.2	Weir Max Depth (ft)	
Culv WS Outlet (ft)	574.78	Weir Avg Depth (ft)	
Culv Nml Depth (ft)	2.77	Wt Flw Area (sq ft)	
Culv Crd Depth (ft)	4.5	Min El Weir Flow (ft)	582.01

CULVERT OUTPUT TABLE 516.5

Plan 01 Farmers Branch C	1950	Culv Full Lngth (ft)	74
Greenhill RS: 516.5 Profile: 100 YR Culvert ID: Culvert #1			
Culv Q (cfs)			
# Barrels	4	Culv Vel US (ft/s)	9.63
Q Barrel (cfs)	487.5	Culv Vel DS (ft/s)	9.63
E.G. US (ft)	581.6	Culv Inv El Up (ft)	573.81
W.S. US (ft)	580.85	Culv Inv El Dn (ft)	573.56
E.G. DS (ft)	580.83	Culv Frctn Ls (ft)	0.21
W.S. DS (ft)	579.87	Culv Ext Lss (ft)	0.3
Delta EG (ft)	0.76	Culv Ext Lss (ft)	0.25
Delta WS (ft)	0.98	Q Weir (cfs)	
E.G. IC (ft)	581.34	Weir Sta Lft (ft)	
E.G. OC (ft)	581.6	Weir Sta Rgt (ft)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (ft)	579.81	Weir Max Depth (ft)	
Culv WS Outlet (ft)	578.66	Weir Avg Depth (ft)	
Culv Nml Depth (ft)		Wt Flw Area (sq ft)	
Culv Crd Depth (ft)	4.5	Min El Weir Flow (ft)	584.01



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70090 ON 03/31/2004. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

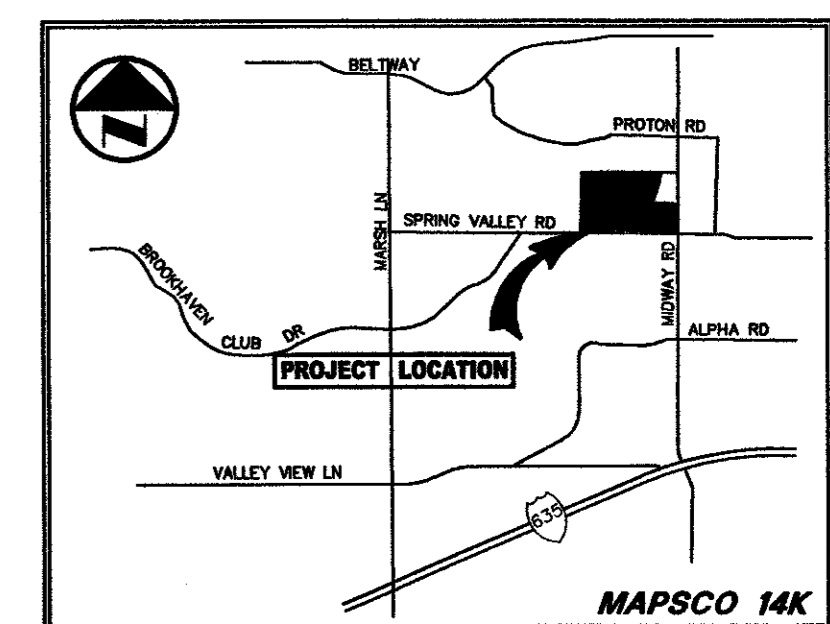
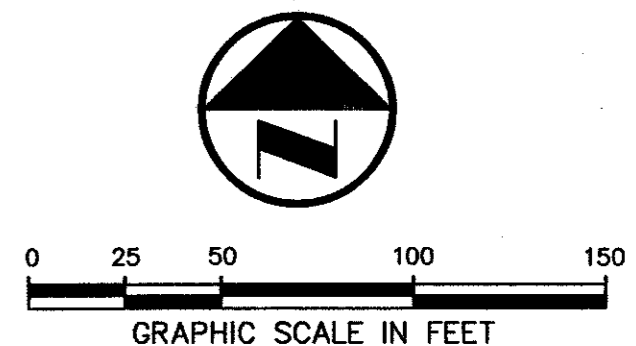
NO.		DATE		REVISION	
<b>Pacheco Koch Consulting Engineers</b> 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031					
<b>FLOODPLAIN STUDY DETAILS</b> <b>PROPOSED CONDITIONS</b> <b>GREENHILL SCHOOL</b> <b>GREENHILL SCHOOL ADDITION</b> <b>TOWN OF ADDISON, TEXAS</b>					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE
BJM	FJM	NOV, 2003			
					<b>C3.4</b>

D:\VE\2004\1082-03\DWG\1082-03.024X5.DWG 04/28/2004 5:23PM

GREENHILL SCHOOL

LES LECS VILLAGE PHASE I  
V. 83183, P. 4319

PROTON PLAZA  
V. 81001, P. 2042

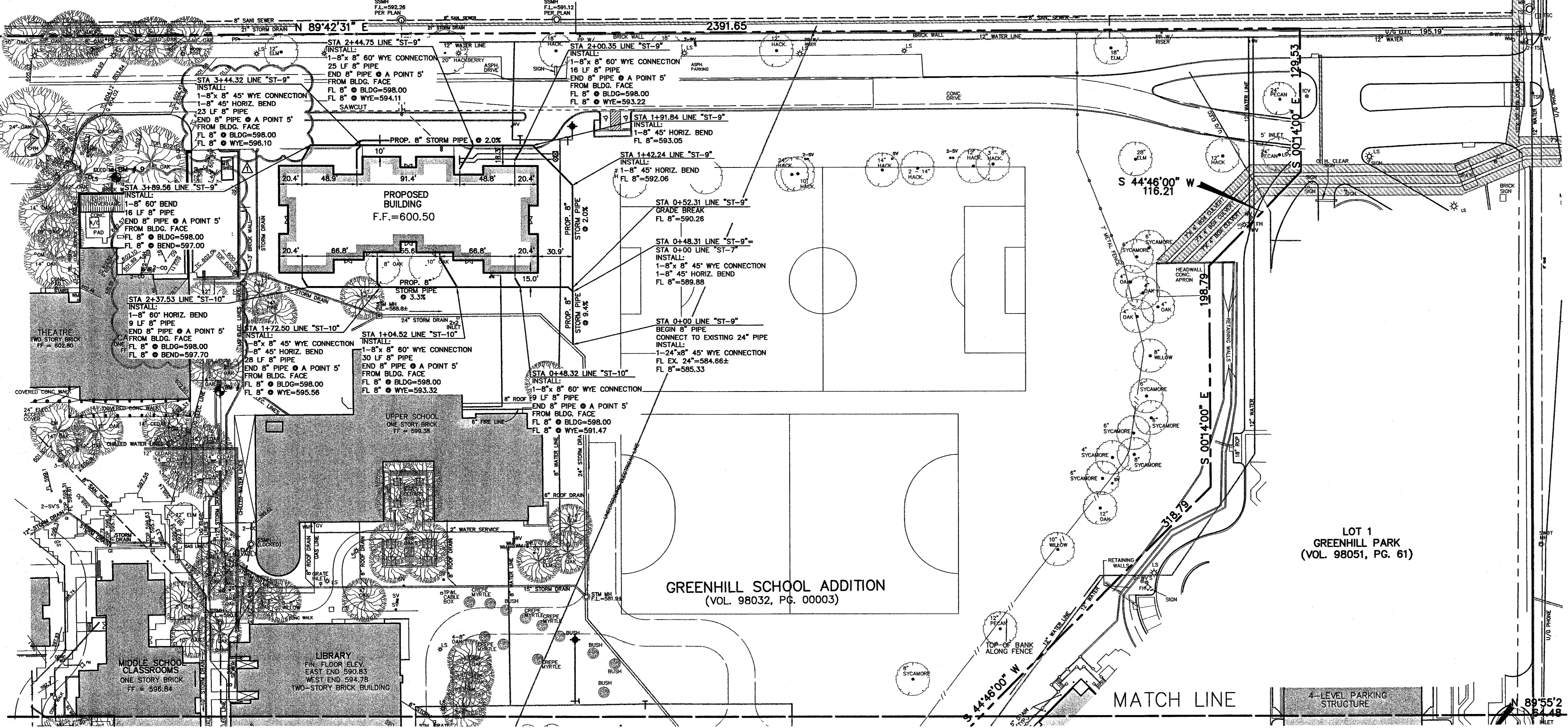


VICINITY MAP

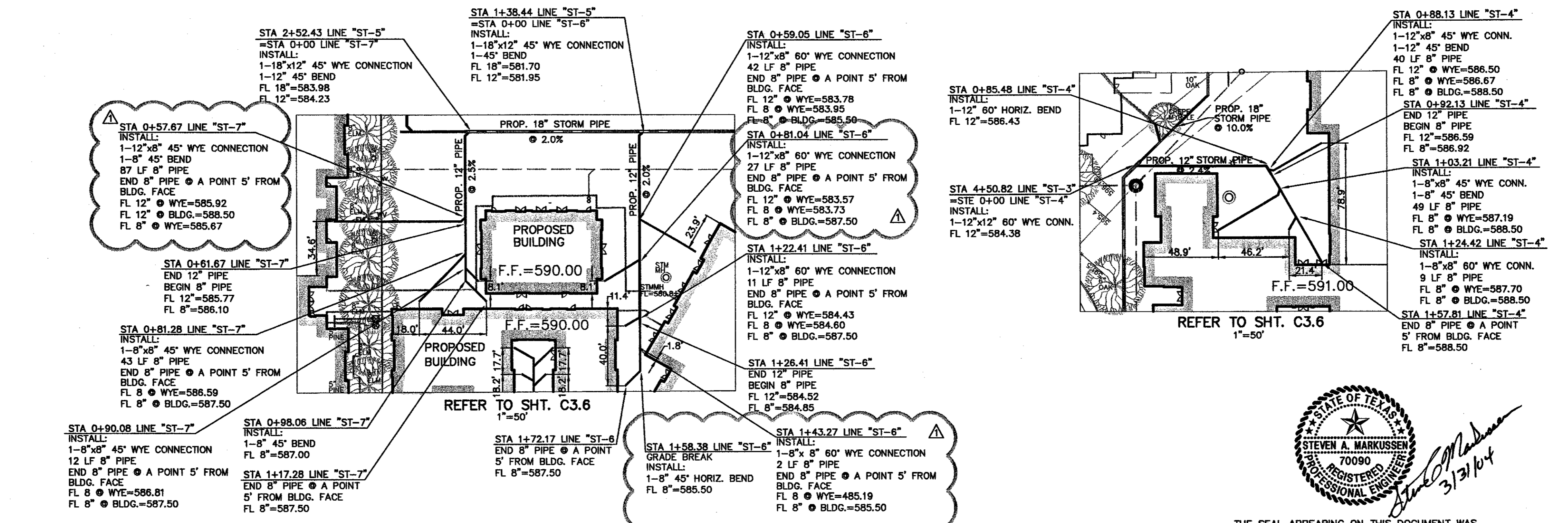
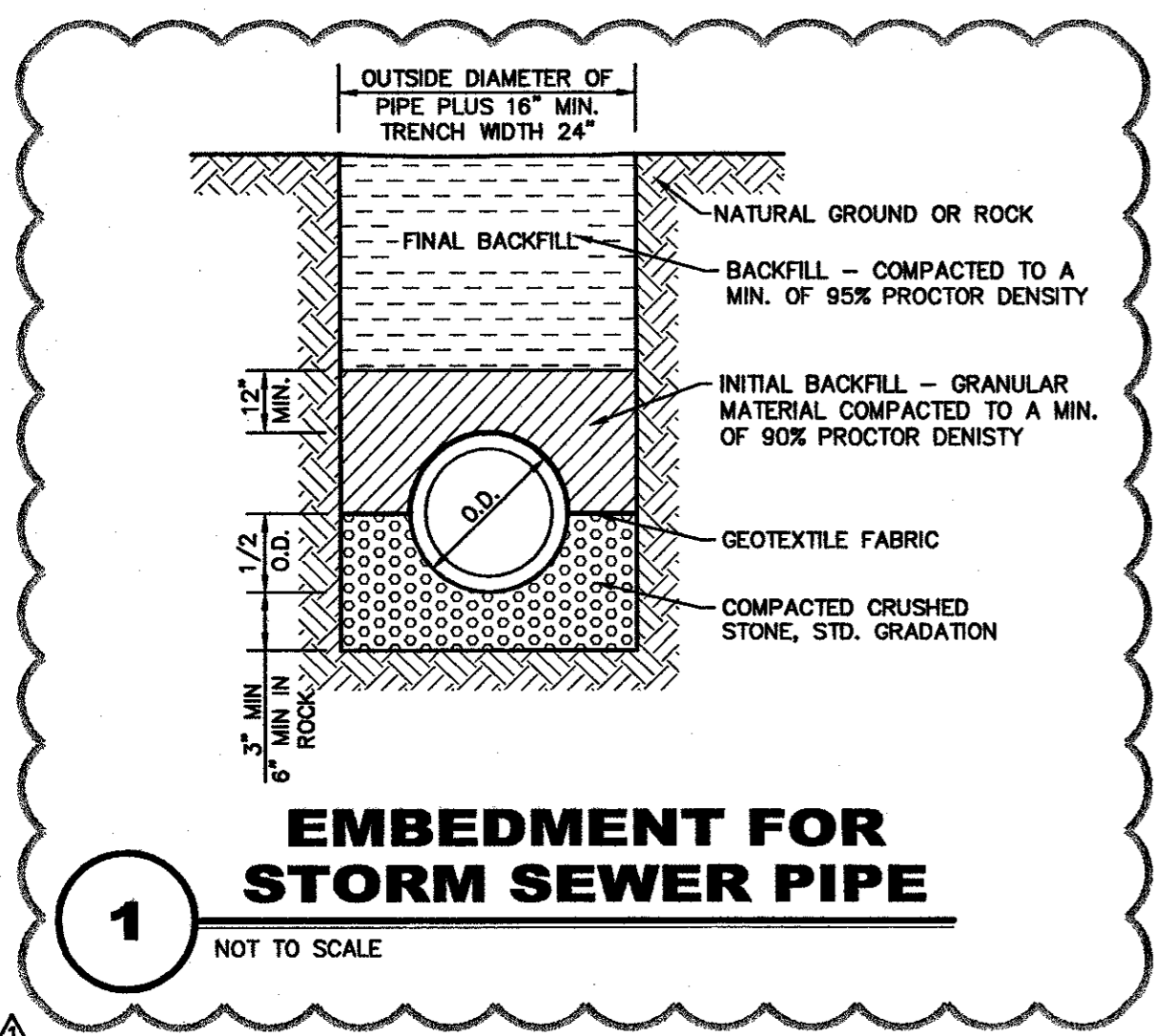
LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CO. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD
- W/P. W/PACHECO KOCH CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- - - FENCE
- OH. OVERHEAD UTILITY LINE
- UW. UNDERGROUND WATER LINE
- E. UNDERGROUND ELECTRIC LINE
- T. UNDERGROUND TELEPHONE LINE
- C. UNDERGROUND CABLE LINE
- SS. UNDERGROUND SANITARY SEWER LINE
- PROPOSED DRAINAGE DIVIDE

REFER TO SHT. C3.6 FOR GRADING & DRAINAGE NOTES



- BENCH MARKS**
- BM #3: Cut "+" in walk on outside of curved drive near southeast corner of lower school. Elev. 586.06
  - BM #4: "□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus. Elev. 578.47
  - BM #5: "□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley. Elev. 588.20
  - BM #9: "□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus. Elev. 602.80
  - BM #10: "□" cut on conc. step near northwest corner of upper school. Elev. 598.85
  - BM #11: "□" cut on conc. step on walk exiting west side of library. Elev. 596.44
  - BM #12: "□" cut at intersection of walk along west side of lower school and walk along south side Lower school. Elev. 587.78

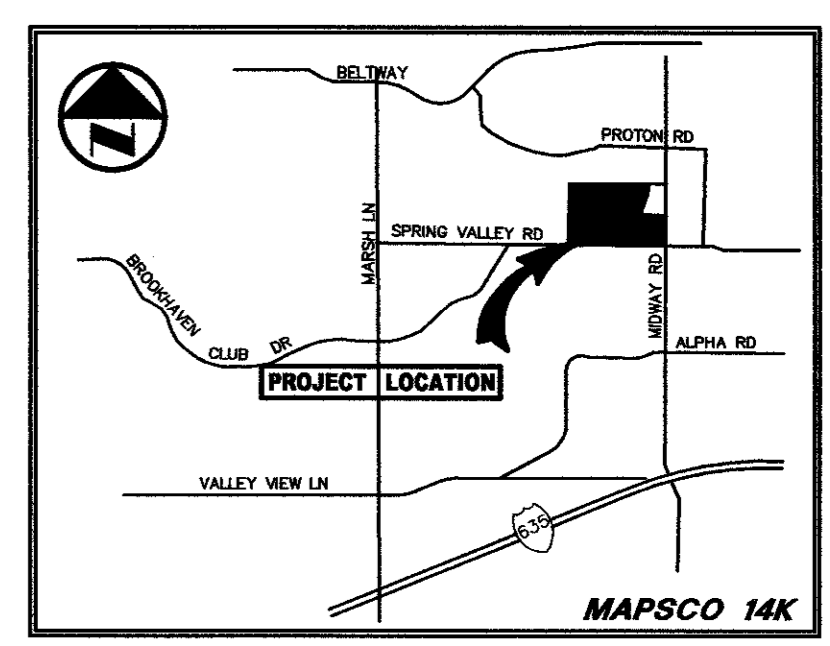
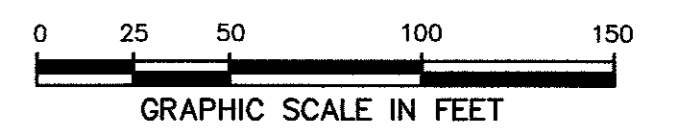
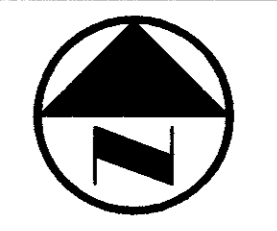


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NO.		DATE	REVISION
NO.		DATE	REVISION
Pacheco Koch Consulting Engineers			
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.236.3031			
<b>DRAINAGE PLAN</b>			
<b>GREENHILL SCHOOL</b>			
<b>GREENHILL SCHOOL ADDITION</b>			
<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>			
<b>TOWN OF ADDISON, TEXAS</b>			
DESIGN	DRAWN	DATE	SCALE
FILE	NO.		
BJM	FJM	NOV. 2003	1"=50'
			<b>C3.5</b>

DWG NO: 1082-03.024CVDWG  
 DATE: 04/30/2004  
 TIME: 11:28PM  
 USER: M:\DWG-10\1082-03-024\1082-03.024CVDWG

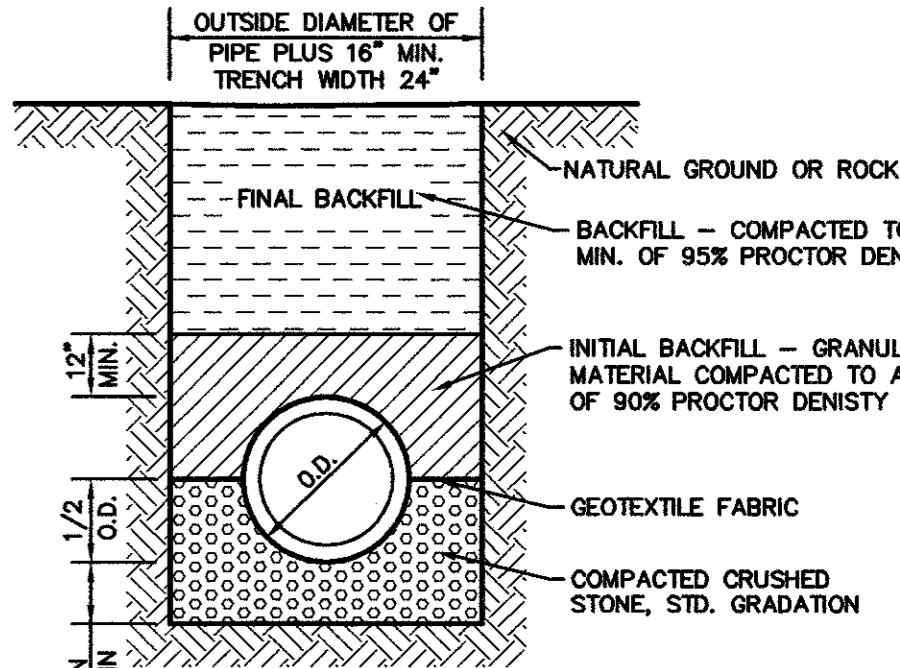
MATCH LINE



VICINITY MAP

LEGEND

- B<sub>1</sub> BOLLARD
- EM<sub>1</sub> ELECTRIC METER
- PP<sub>1</sub> POWER POLE
- LS<sub>1</sub> LIGHT STANDARD
- WM<sub>1</sub> WATER METER
- WV<sub>1</sub> WATER VALVE
- ICV<sub>1</sub> IRRIGATION CONTROL VALVE
- FH<sub>1</sub> FIRE HYDRANT
- CH<sub>1</sub> CLEANOUT
- MH<sub>1</sub> MANHOLE
- TSC<sub>1</sub> TRAFFIC SIGNAL CONTROL
- TSP<sub>1</sub> TRAFFIC SIGNAL POLE
- TELE<sub>1</sub> TELEPHONE BOX
- FL<sub>1</sub> FLOOD LIGHT
- FP<sub>1</sub> FLAG POLE
- TRF<sub>1</sub> TRAFFIC SIGN
- IRS<sub>1</sub> 1/2-INCH IRON ROD
- W/P<sub>1</sub> W/PACHCO KOCH' CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND WATER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND CABLE LINE
- UNDERGROUND SANITARY SEWER LINE
- PROPOSED DRAINAGE DIVIDE



EMBEDMENT FOR STORM SEWER PIPE

1 NOT TO SCALE

ISSUED FOR PRELIMINARY PRICING PURPOSES ONLY (SUBJECT TO REVISION PRIOR TO CONSTRUCTION)

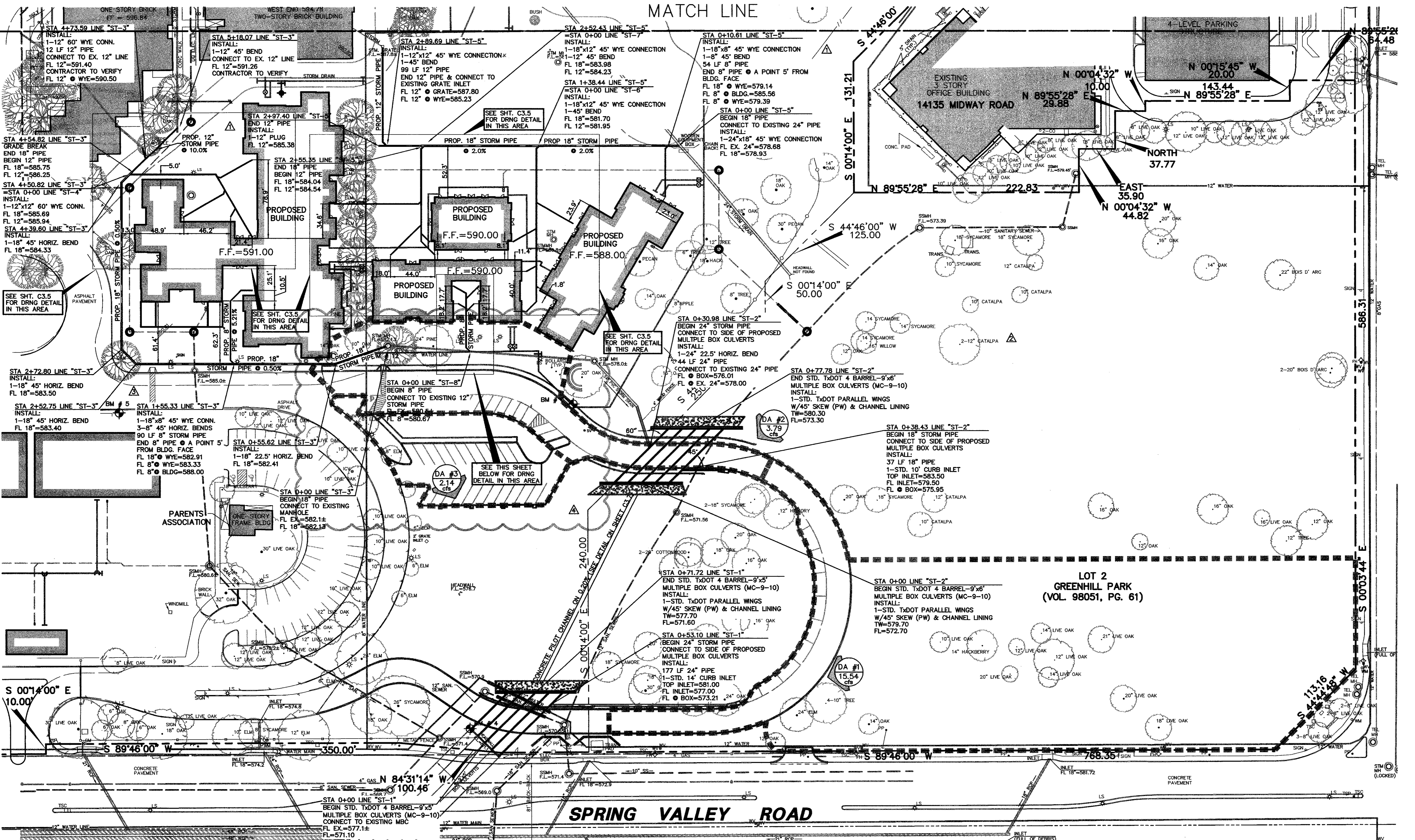
THESE DOCUMENTS HAVE BEEN PREPARED BY THE ENGINEER WITH THE INTENT OF COMPLYING WITH ALL CITY STANDARD REQUIREMENTS. THESE DOCUMENTS HAVE NOT BEEN APPROVED AND RELEASED FOR CONSTRUCTION BY THE CITY AS OF THIS DATE AND, THEREFORE, REVISIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION. BY ANY USE OF THESE DOCUMENTS, THE USER AFFIRMS THEIR UNDERSTANDING OF THE PRELIMINARY STATUS OF THE PLANS AND THE POTENTIAL FOR REVISION PRIOR TO ANY CONSTRUCTION.

NO.	DATE	REVISION
▲	10/25/2004	ADDED PARKING LOT REVISED DRAINAGE AREAS
▲	06/10/2004	ADDED 8" STORM PIPE
▲	04/30/2004	REVISED CULVERT
▲		REVISED APPURTENANCES & ADDED DETAIL

Pacheco Koch Consulting Engineers  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**DRAINAGE PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C3.6</b>



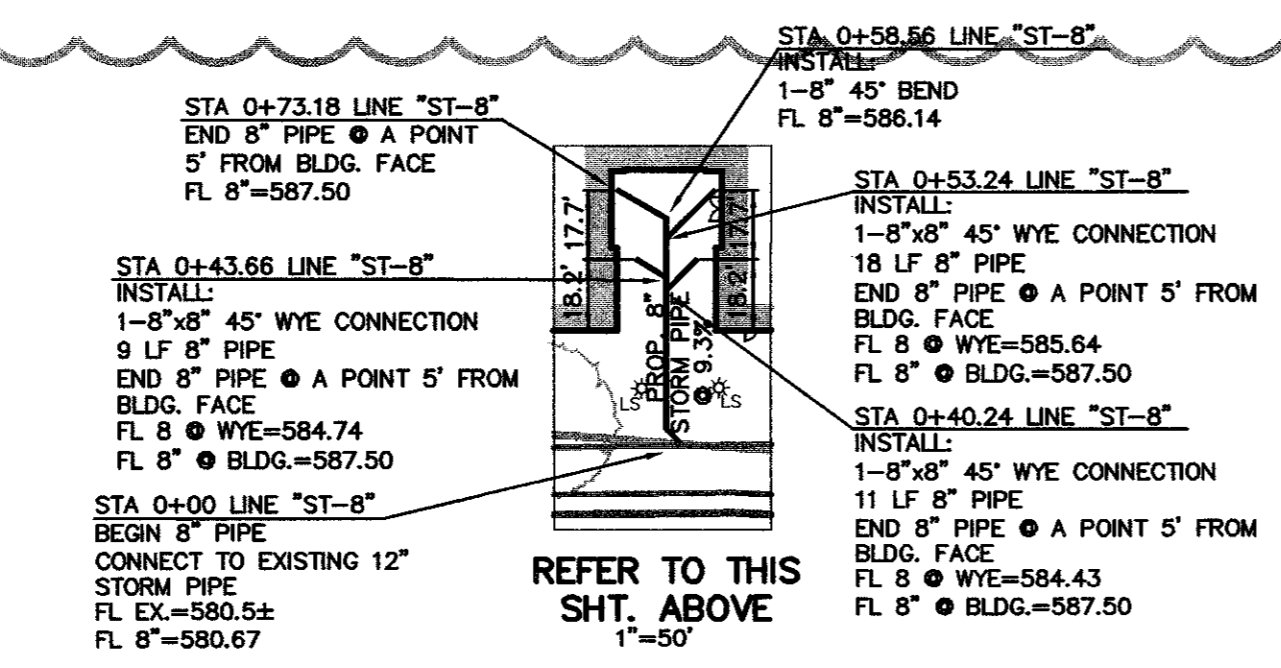
**GRADING AND DRAINAGE GENERAL NOTES**

- REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
- UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
- SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.
- GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
- UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
  - A. RCP C-76, CLASS III
  - B. ADS N-12
  - C. HANCOR HI-Q
 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OF APPROVED EQUAL.
- FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
- REFER TO LANDSCAPE SPECIFICATION FOR SEEDING AND SODDING REQUIREMENTS.
- ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
- TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.3 TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS. THE MANHOLE COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
- ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
- CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

**PROPOSED DRAINAGE CRITERIA:**

$Q = (C)(I)(A)$   
 $C = 0.70$

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY	Q <sub>100</sub> (cfs)	Q <sub>15.54</sub> (cfs)	COMMENTS
DA #1	2.54	0.70	10	100 YEAR	8.74	15.54	DRAINS TO PROP. CURB INLET
DA #2	0.62	0.70	10	100 YEAR	8.74	3.79	DRAINS TO PROP. CURB INLET
DA #3	0.35	0.70	10	100 YEAR	8.74	2.14	DRAINS TO PROP. CURB CUT



REFER TO THIS SHT. ABOVE

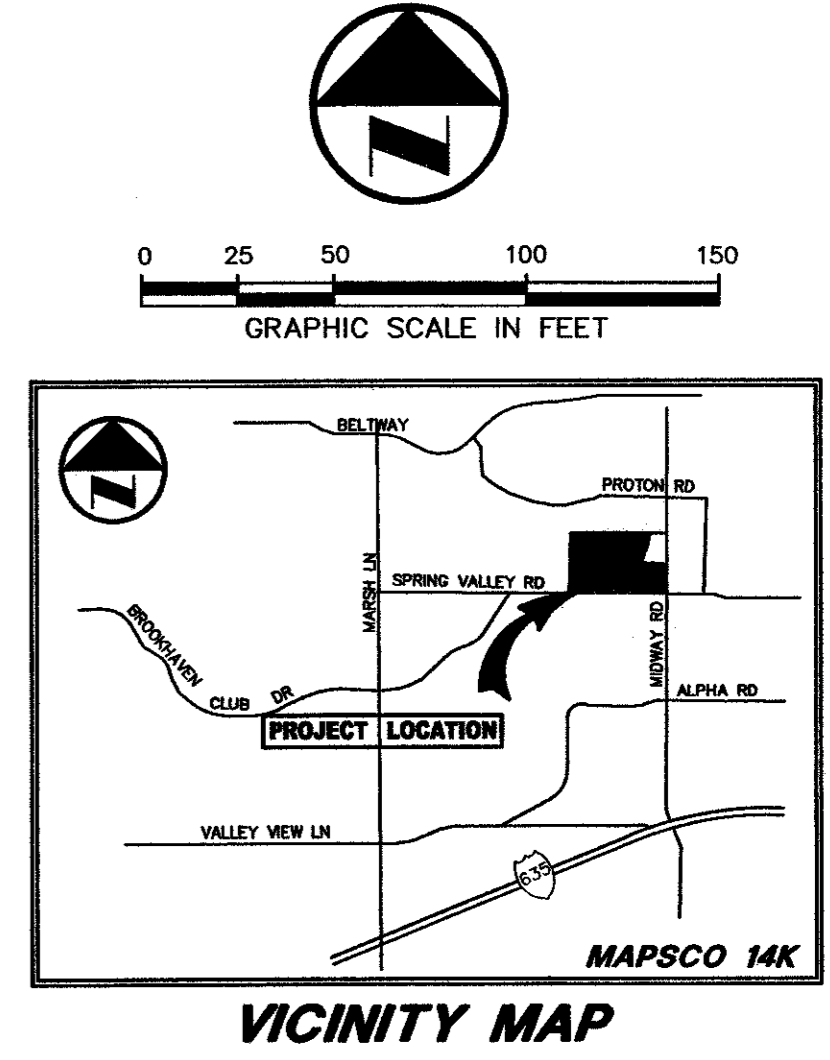
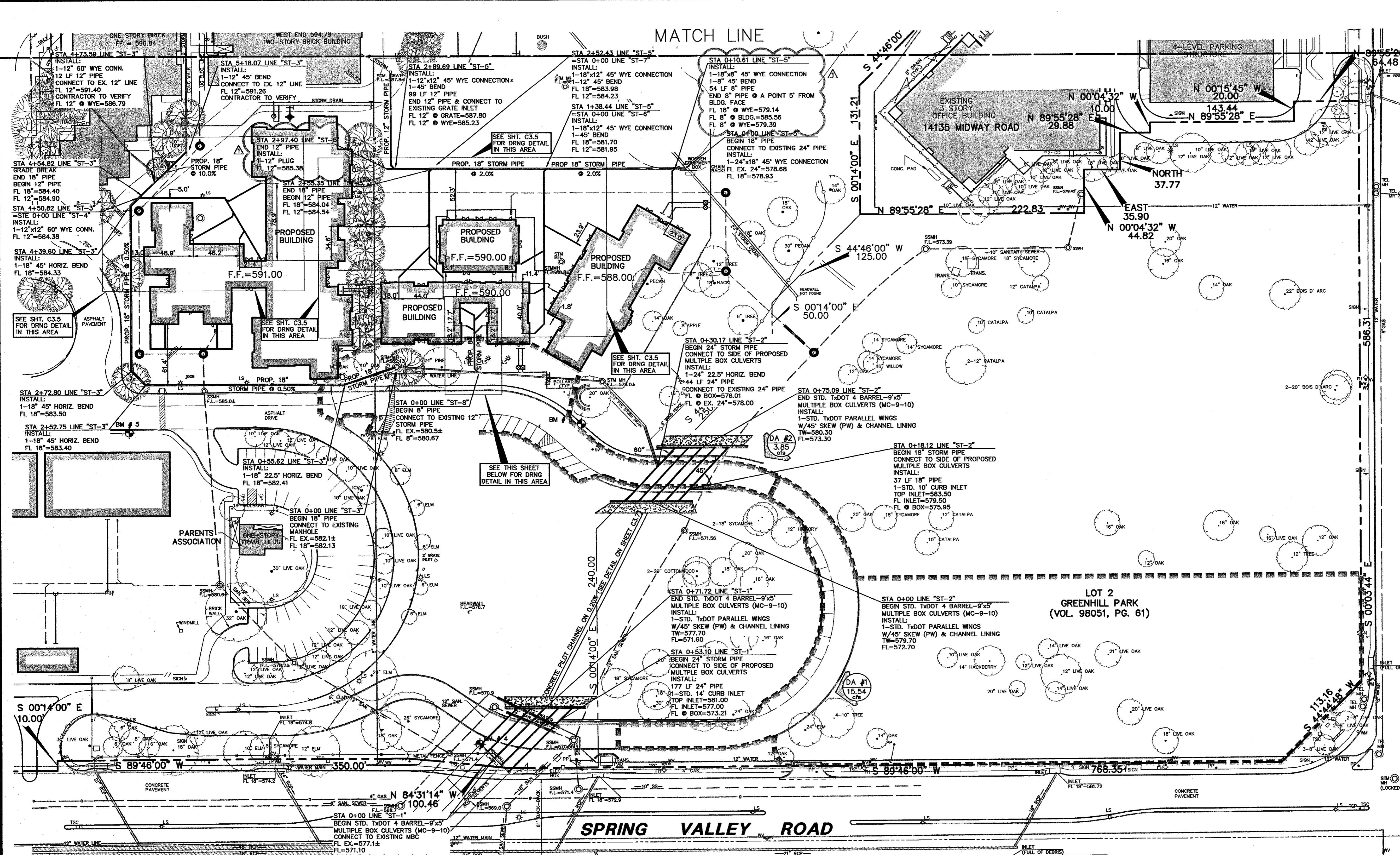
**BENCH MARKS**

- BM #3: "x" in walk on outside of curved drive near southeast corner of lower school. Elev. 586.06
- BM #4: "□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus. Elev. 578.47
- BM #5: "□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley. Elev. 588.20
- BM #9: "□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus. Elev. 602.80
- BM #10: "□" cut on conc. step near northwest corner of upper school. Elev. 598.85
- BM #11: "□" cut on conc. step on walk exiting west side of library. Elev. 596.44
- BM #12: "□" cut at intersection of walk along west side of lower school and walk along south side lower school. Elev. 587.78

**PRELIMINARY**  
**NOT FOR CONSTRUCTION**

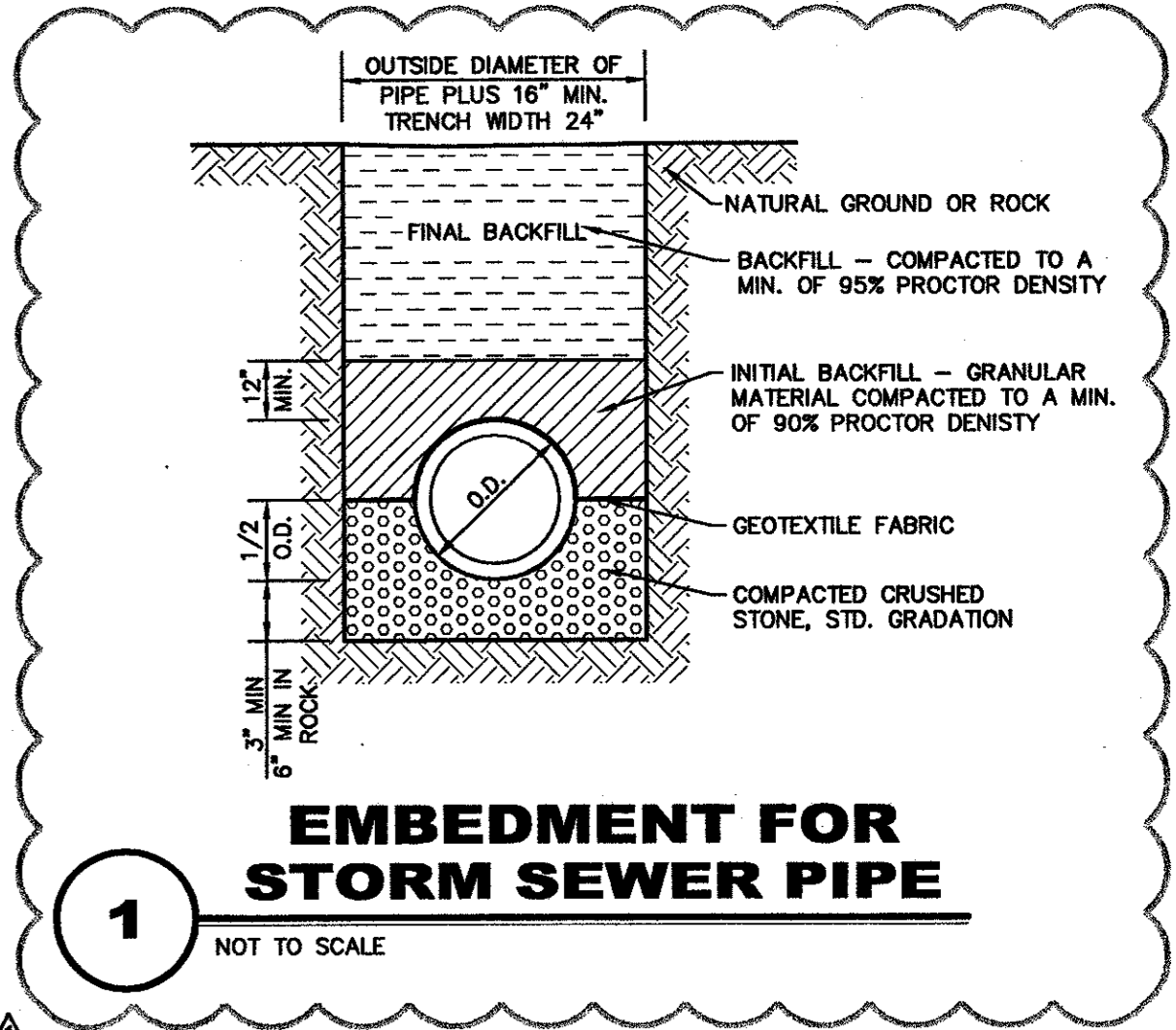
THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF STEVEN A. MARKUSSEN, P.E. TEXAS REGISTRATION NO. 70980 DATE: 02/27/2004





**LEGEND**

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CL	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
SD	TRAFFIC SIGN
IR	1/2-INCH IRON ROD
W	W/PACHECO KOCH" CAP SET
(C.M.)	CONTROLLING MONUMENT
---	PROPERTY LINE
-x-	FENCE
OH	OVERHEAD UTILITY LINE
UW	UNDERGROUND WATER LINE
EL	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELEPHONE LINE
UC	UNDERGROUND CABLE LINE
US	UNDERGROUND SANITARY SEWER LINE
---	PROPOSED DRAINAGE DIVIDE



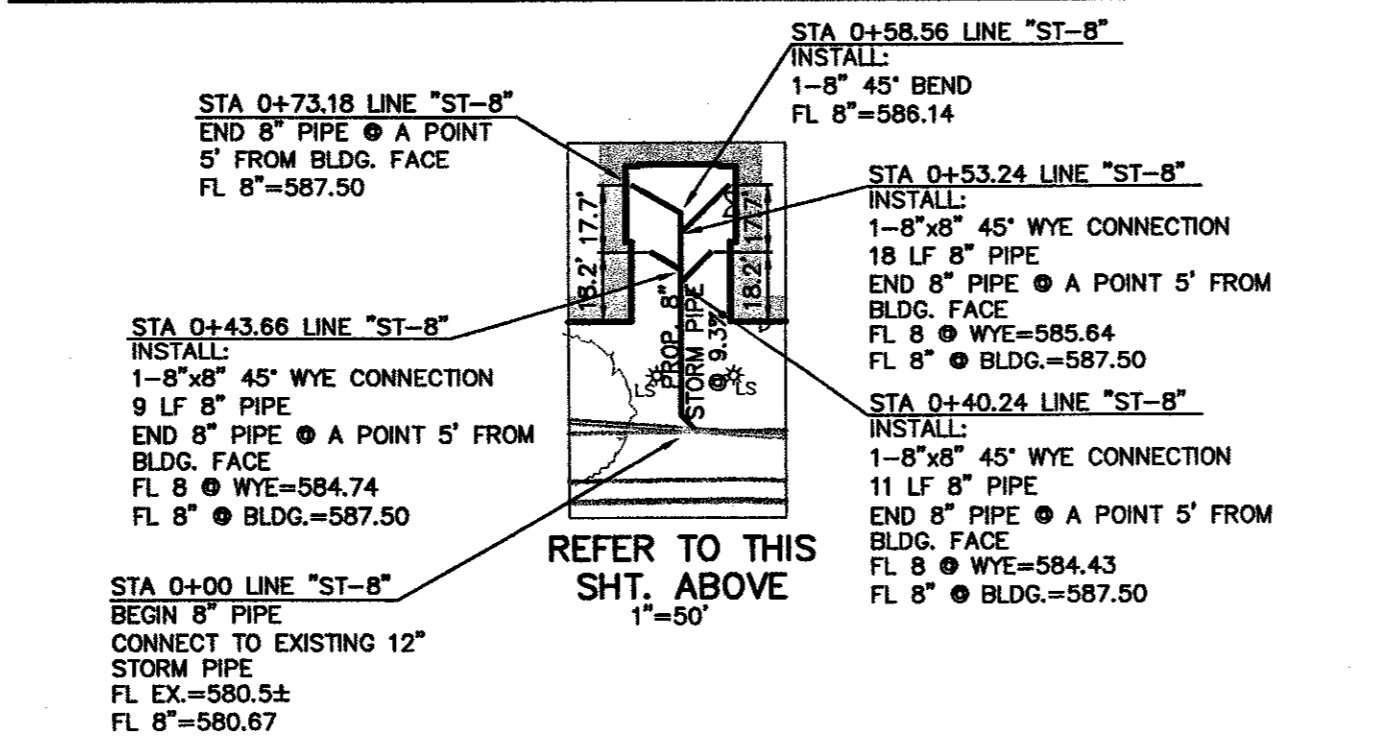
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  - ADS N-12
  - HANCOR HI-Q
- AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
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- ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
- CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

**PROPOSED DRAINAGE CRITERIA:**

Q=(C)(A)  
C=0.70

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	STORM FREQUENCY (100 YEAR)	I <sub>100</sub> (inch/hour)	Q <sub>100</sub> (cfs)	COMMENTS
DA #1	2.54	0.70	10	100 YEAR	8.74	15.54	DRAINS TO PROP. CURB INLET
DA #2	0.63	0.70	10	100 YEAR	8.74	3.85	DRAINS TO PROP. CURB INLET



**BENCH MARKS**

BM #3:	Cut "4" in walk on outside of curved drive near southeast corner of lower school.	Elev. 586.06
BM #4:	"4" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus.	Elev. 578.47
BM #5:	"4" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley.	Elev. 588.20
BM #9:	"4" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus.	Elev. 602.80
BM #10:	"4" cut on conc. step near northwest corner of upper school.	Elev. 598.85
BM #11:	"4" cut on conc step on walk exiting west side of library.	Elev. 596.44
BM #12:	"4" cut at intersection of walk along west side of lower school and walk along south side lower school.	Elev. 587.78



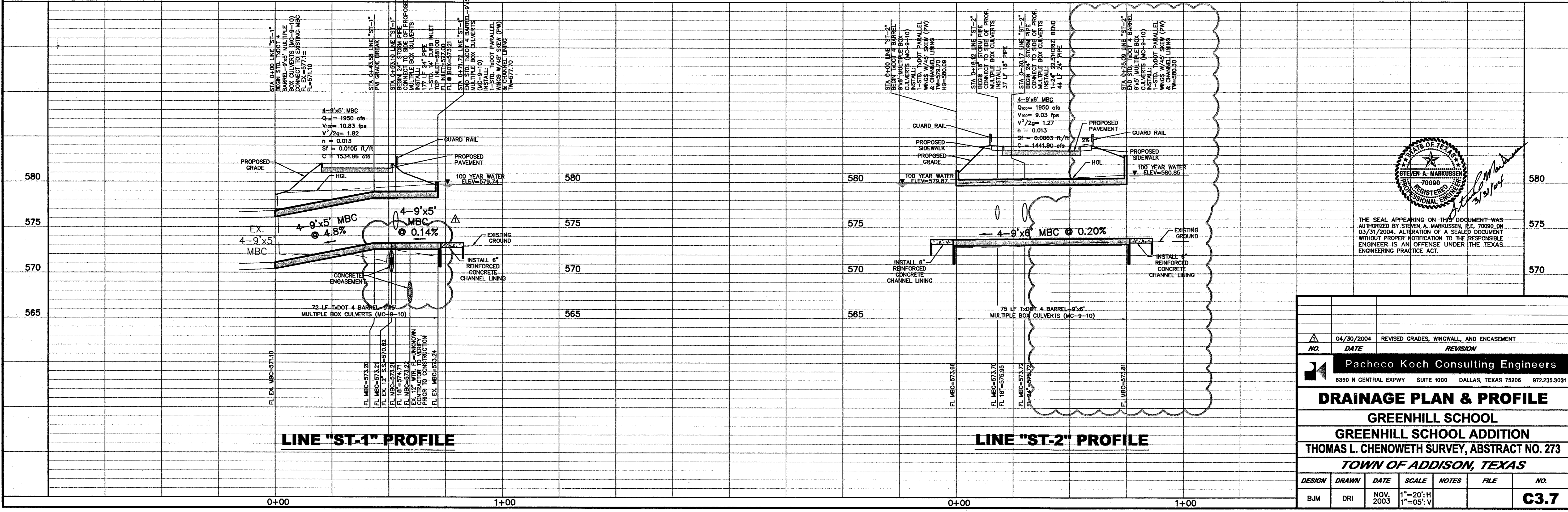
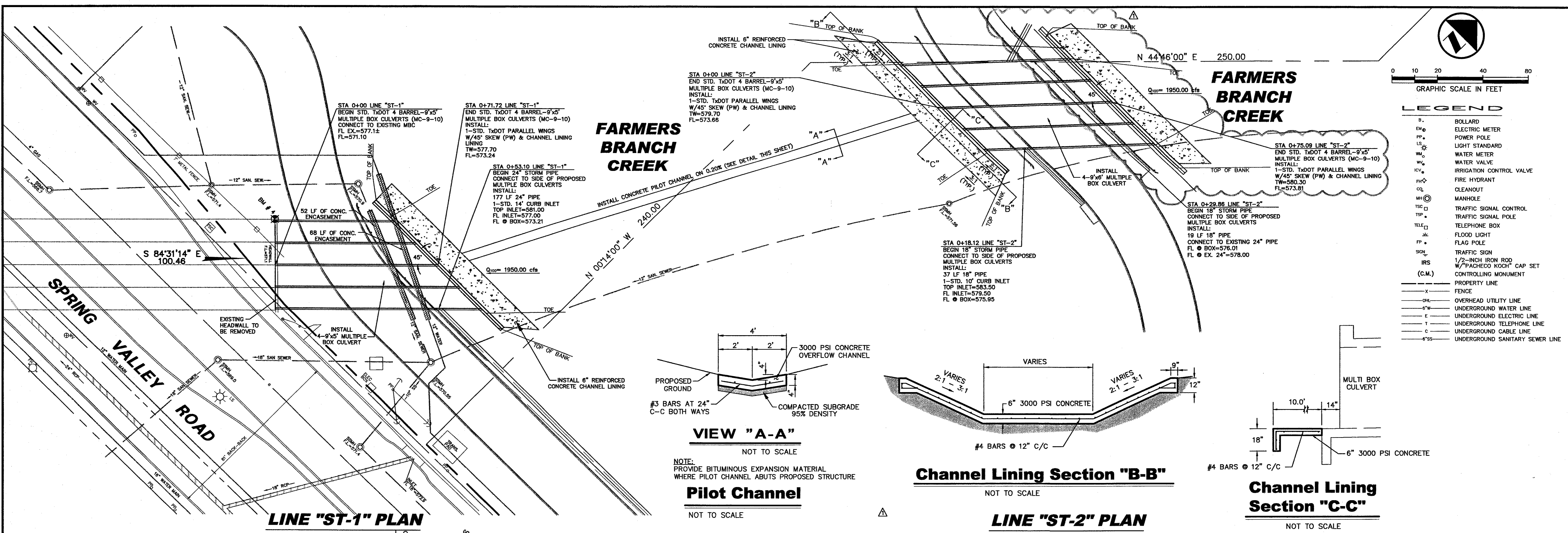
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NO.	DATE	REVISION
04/30/2004		REVISED APPURTENANCES & ADDED DETAIL

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

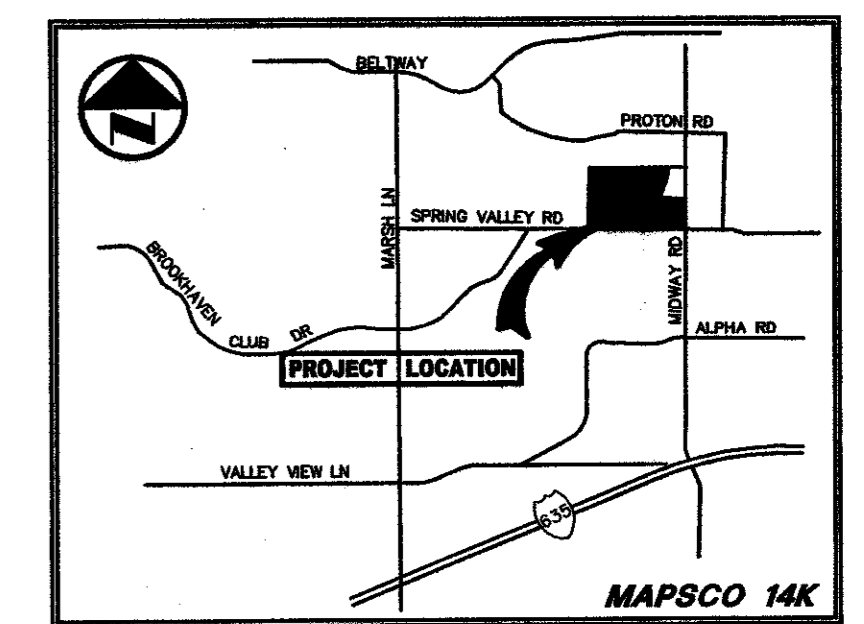
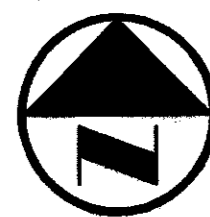
**DRAINAGE PLAN**  
**GREENHILL SCHOOL**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C3.6</b>



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 XREF FILE: FS.DWG  
 PK FILE: 2102-99.350  
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GREENHILL SCHOOL

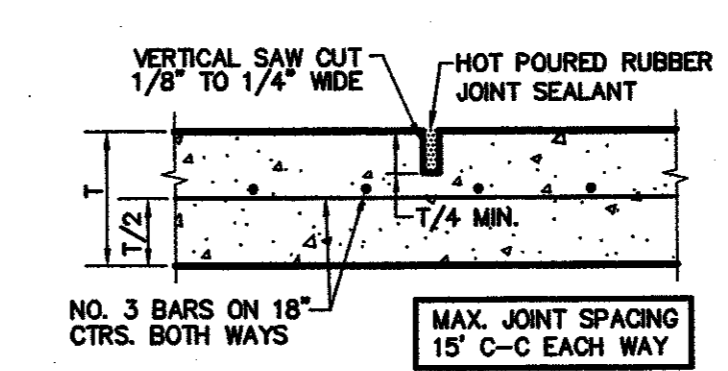
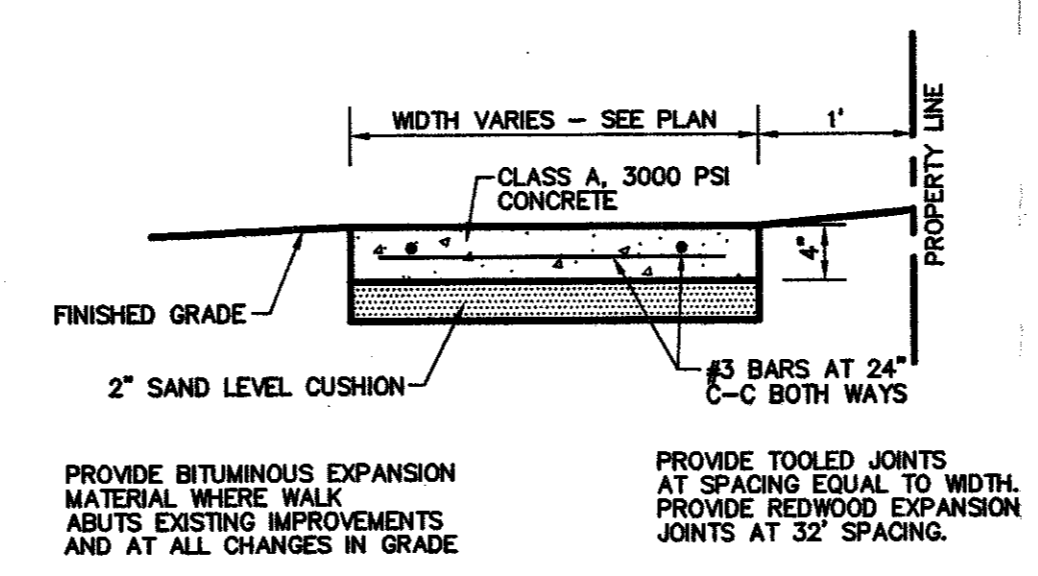
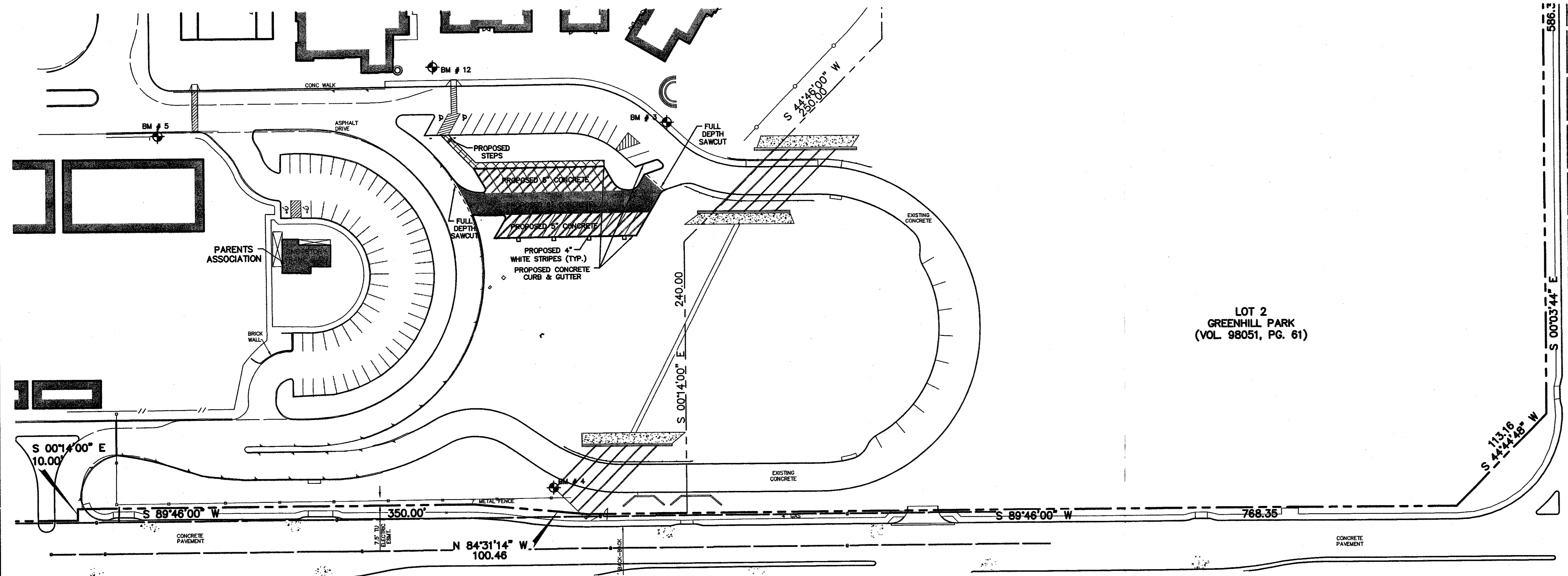


VICINITY MAP

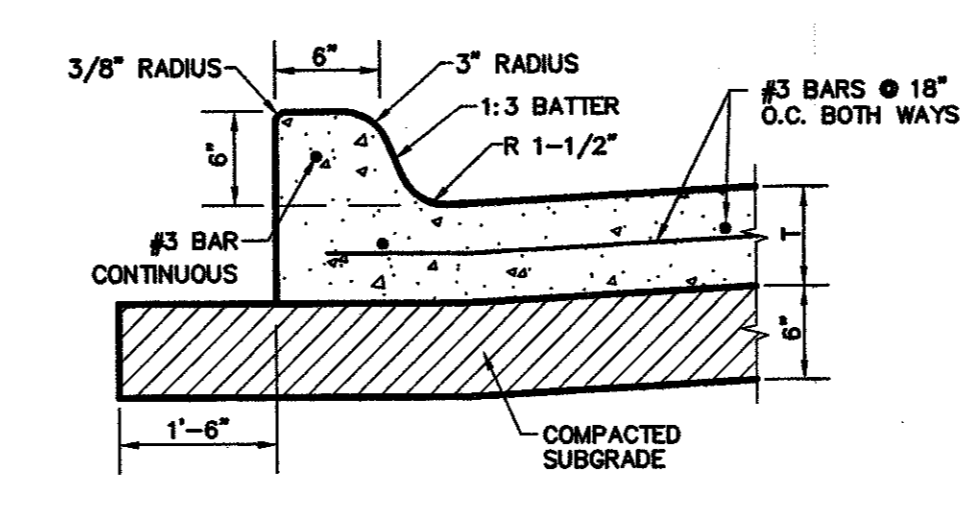
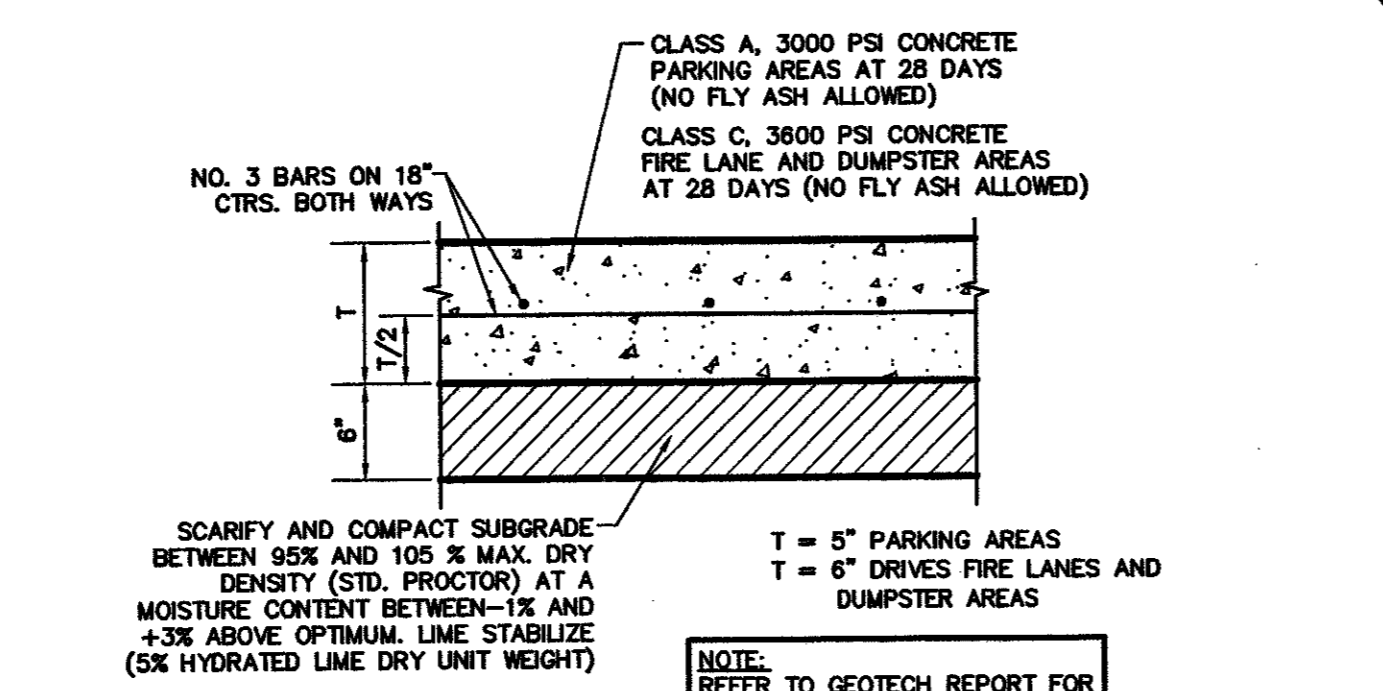
LEGEND

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FR. FIRE HYDRANT
- CH. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD
- W/P. W/PACHECO KOCH CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- X- FENCE
- O- OVERHEAD UTILITY LINE
- W- UNDERGROUND WATER LINE
- E- UNDERGROUND ELECTRIC LINE
- T- UNDERGROUND TELEPHONE LINE
- C- UNDERGROUND CABLE LINE
- S- UNDERGROUND SANITARY SEWER LINE

- PROPOSED 4" CLASS "A" CONCRETE SIDEWALK
- PROPOSED 5" CLASS "C" CONCRETE PAVEMENT LIGHT TRAFFIC AREAS
- PROPOSED 6" CLASS "C" CONCRETE PAVEMENT HEAVY TRAFFIC (FIRE LANES, SERVICE DRIVES)

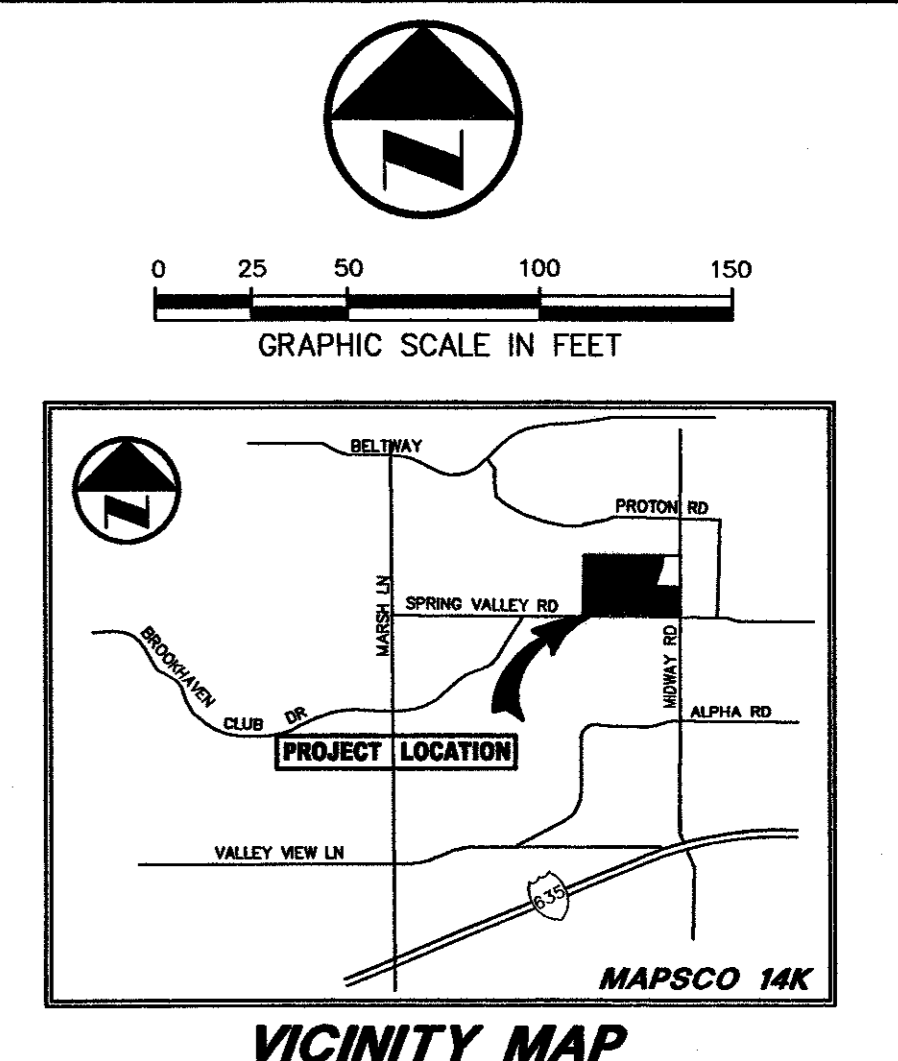
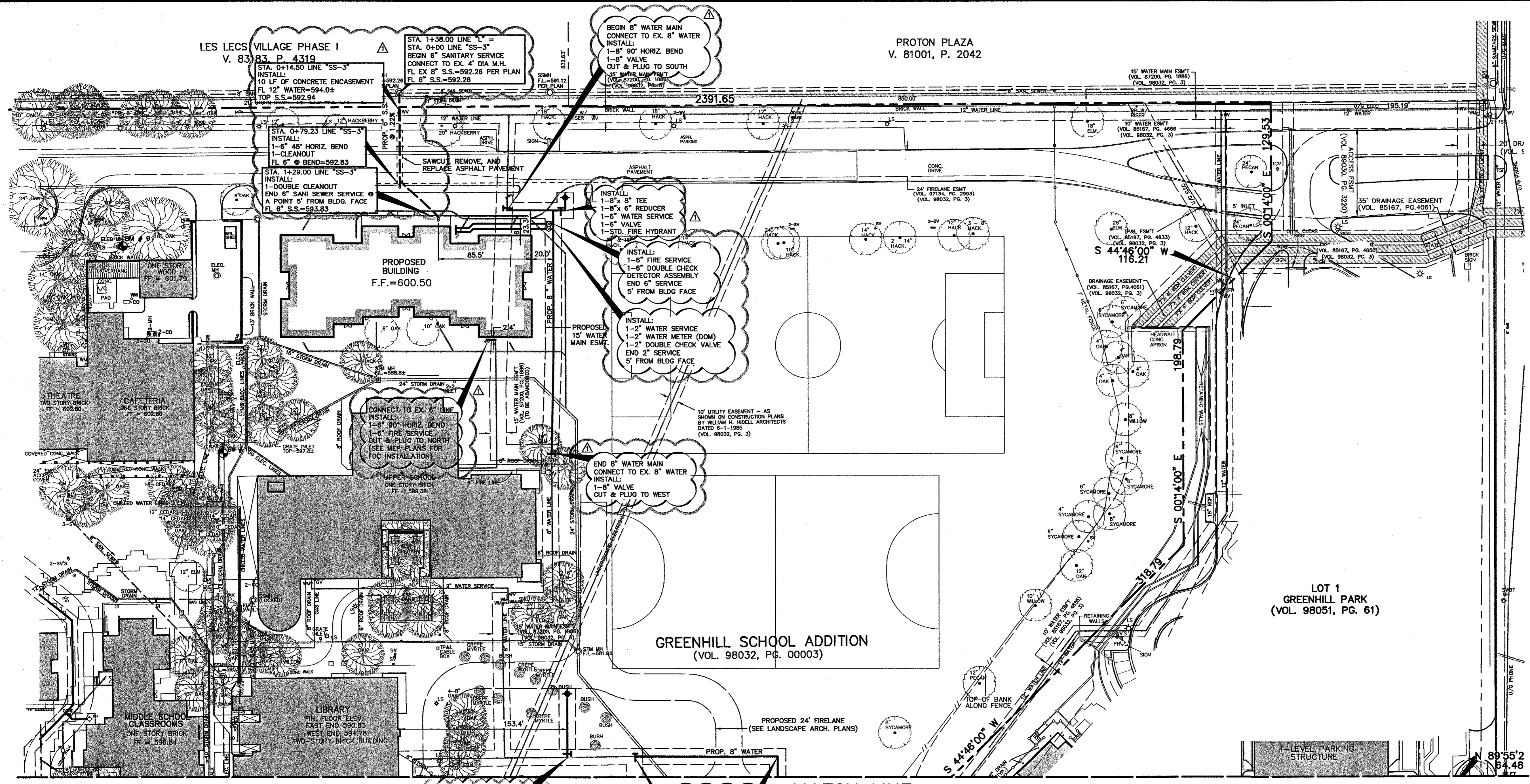


- PAVING NOTES**
- ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
  - UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
  - UNLESS NOTED, ALL FILL PLACED UNDER PAVING SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN 6 INCH LIFTS. REFER TO STRUCTURAL SPECIFICATION FOR FILL PLACED BENEATH BUILDING AREAS. ALL OTHER FILL AREAS TO BE COMPACTED TO 90% STANDARD PROCTOR.
  - THE CONTRACTOR SHALL SUBMIT A JOINT SPACING PLAN TO THE ENGINEER FOR APPROVAL. UNLESS NOTED, EXPANSION JOINT SPACING SHALL BE 90' MAXIMUM EACH WAY WITH NO KEYWAYS AND SAWED DUMMY JOINTS SHALL BE 15' EACH WAY.
  - TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED AT THE END OF EACH DAY'S PAVING AND WHERE INTERRUPTIONS SUSPEND OPERATIONS FOR 30 MINUTES OR MORE.
  - ALL PAVEMENTS TO BE REMOVED SHALL BE SAWCUT TO A NEAT LINE, MINIMUM 1-1/2" DEEP, AND THE PAVEMENT REMOVED IN SUCH A MANNER AS TO PRESERVE THE EXISTING TRANSVERSE REINFORCING STEEL TO THE MAXIMUM EXTENT POSSIBLE.
  - ALL CURB AND GUTTER SHALL BE INTEGRAL WITH THE PAVEMENT AND HAVE THE SAME COMPRESSIVE STRENGTH.
  - PAVEMENT REINFORCEMENT SHALL BE #3 BARS, SPACED AT 18" CENTER TO CENTER EACH WAY EXCEPT WHERE NOTED IN THE PLANS.
  - BAR LAPS SHALL BE 30 DIAMETERS IN LENGTH.
  - ALL STRIPES SHALL BE 4" WIDE, UNLESS OTHERWISE NOTED.
  - INSTALLATION AND PLACEMENT OF IRRIGATION SLEEVES AND UTILITY CONDUITS SHALL BE IN ACCORDANCE WITH LANDSCAPE ARCHITECTS AND MEP PLANS.
  - SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.



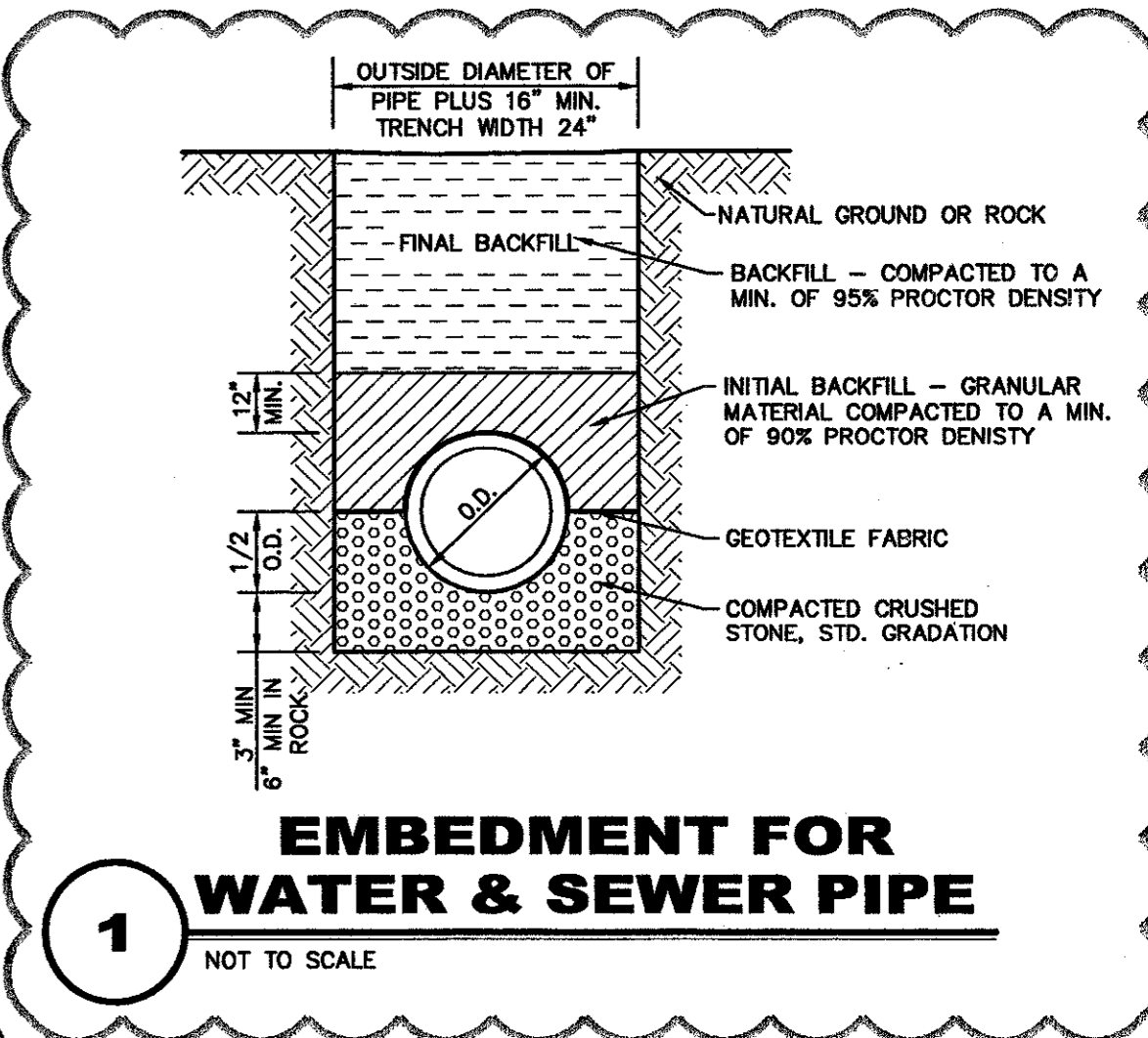
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NO.	DATE	REVISION				
Pacheco Koch Consulting Engineers 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031						
<b>PAVING PLAN &amp; DETAILS</b>						
<b>PARKING LOT</b>						
<b>GREENHILL SCHOOL ADDITION</b>						
THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	DRI	MAY 2005	1"=50'			<b>C4.0</b>



**LEGEND**

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CO	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TR	TRAFFIC SIGN
IR	1/2" INCH IRON ROD
W/P	"PACHECO KOCH" CAP SET
CM	CONTROLLING MONUMENT
---	PROPERTY LINE
-X-	FENCE
OH	OVERHEAD UTILITY LINE
UW	UNDERGROUND WATER LINE
E	UNDERGROUND ELECTRIC LINE
T	UNDERGROUND TELEPHONE LINE
C	UNDERGROUND CABLE LINE
6"SS	UNDERGROUND SANITARY SEWER LINE



**WATER AND SANITARY SEWER GENERAL NOTES**

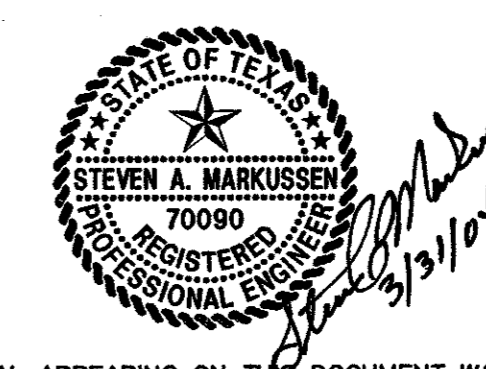
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
- ALL WATER MAINS SHALL BE PVC C909, OR 14, CLASS 150.
- WATER AND SANITARY SEWER SERVICES SHALL MEET DRAINAGE CODE REQUIREMENTS.
- ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
- SANITARY SEWER PIPE SHALL BE PVC SDR-35.
- WHEN WATER MAINS AND SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO EACH OTHER THAN NINE FEET IN ALL DIRECTIONS AND PARALLEL LINES MUST BE INSTALLED IN SEPARATE TRENCHES. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:
  - WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
  - WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM SEPARATION OF SIX INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
  - WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
  - WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE, THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASH SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.

- THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO BE INSTALLED PARALLEL TO AN EXISTING SEWER THAT SHOWS NO EVIDENCE OF LEAKAGE AND THE WATERLINE IS INSTALLED ABOVE THE SEWER A MINIMUM OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPHS (A) OR (D) OF THIS PARAGRAPH.
- THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO CROSS OVER (BY TWO FEET OR MORE) EXISTING SEWER SHOWING NO EVIDENCE OF LEAKAGE. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THEN THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBSECTIONS (C) OR (D).
- CONTRACTOR TO VERIFY ALL EXISTING SEWER FLOW LINES BEFORE BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL TIE A 1" WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AND SHALL LEAVE A MINIMUM OF 36" OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB OF ALLEY IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
- ALL SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
- THE UTILITY CONTRACTOR SHALL INSTALL THE WATER SERVICES TO A POINT TWO (2) FEET BACK OF THE CURB LINE AT A DEPTH OF 12 INCHES. THE METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE BACK OF THE CURB. EACH SERVICE LOCATION WILL BE MARKED ON THE CURB, WITH A BLUE LETTER "W" BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS".
- ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
- UTILITY TRENCHES SHALL BE BACKFILLED WITH MATERIAL MEETING NCTCOG ITEM 6.2.10 AND MECHANICALLY COMPACTED IN 8" LIFTS TO THE TOP OF THE SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
- VALVE BOXES SHALL BE FURNISHED AND SET ON EACH GATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE CONTRACTOR SHALL POUR A CONCRETE BOX 24"x24"x6" AROUND ALL VALVE BOXES TOPS SO THE FINISHED GRADE IS LEVEL WITH THE FINISHED GRADE.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

**BENCH MARKS**

BM #3:	Cut "+" in walk on outside of curved drive near southeast corner of lower school.	Elev. 586.06
BM #4:	"□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus.	Elev. 578.47
BM #5:	"□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley.	Elev. 588.20
BM #9:	"□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus.	Elev. 602.80
BM #10:	"□" cut on conc. step near northwest corner of upper school.	Elev. 596.85
BM #11:	"□" cut on conc step on walk exiting west side of library.	Elev. 596.44
BM #12:	"□" cut at intersection of walk along west side of lower school and walk along south side lower school.	Elev. 587.78

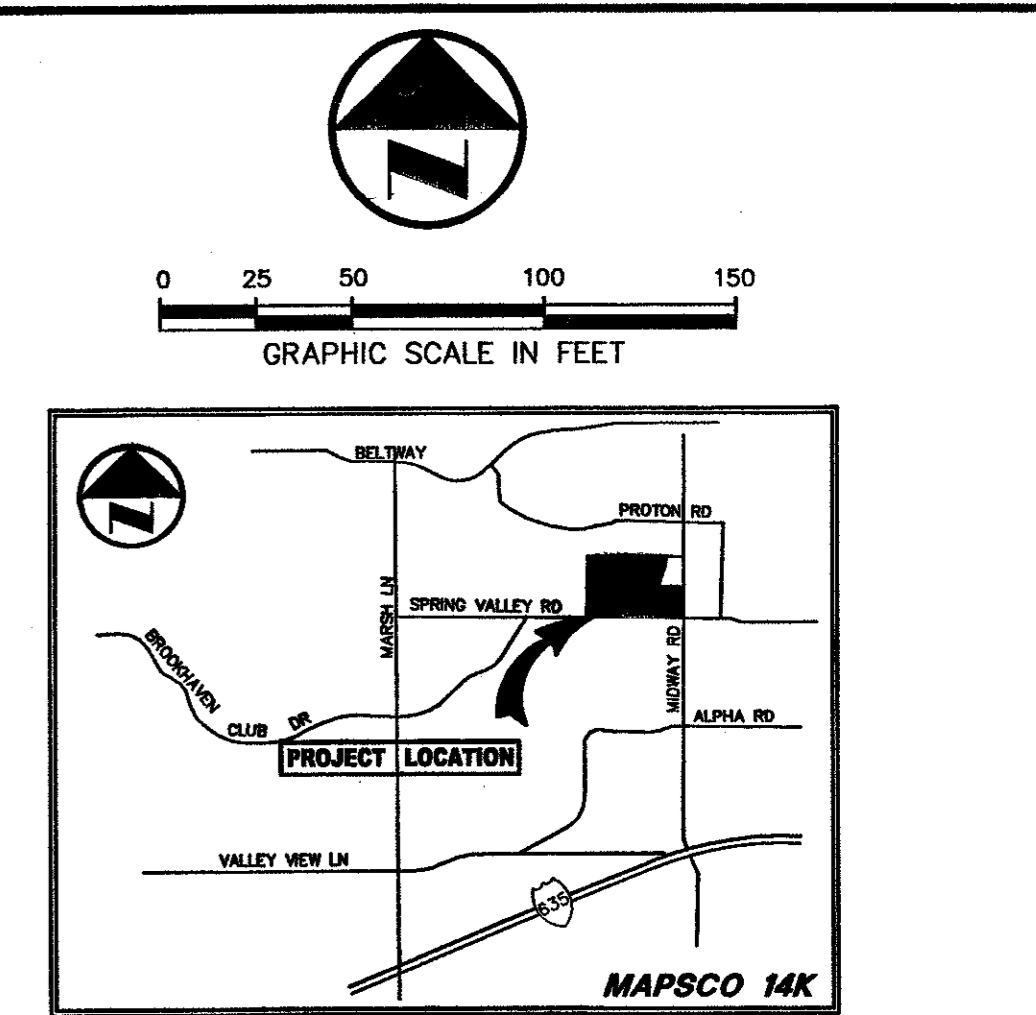
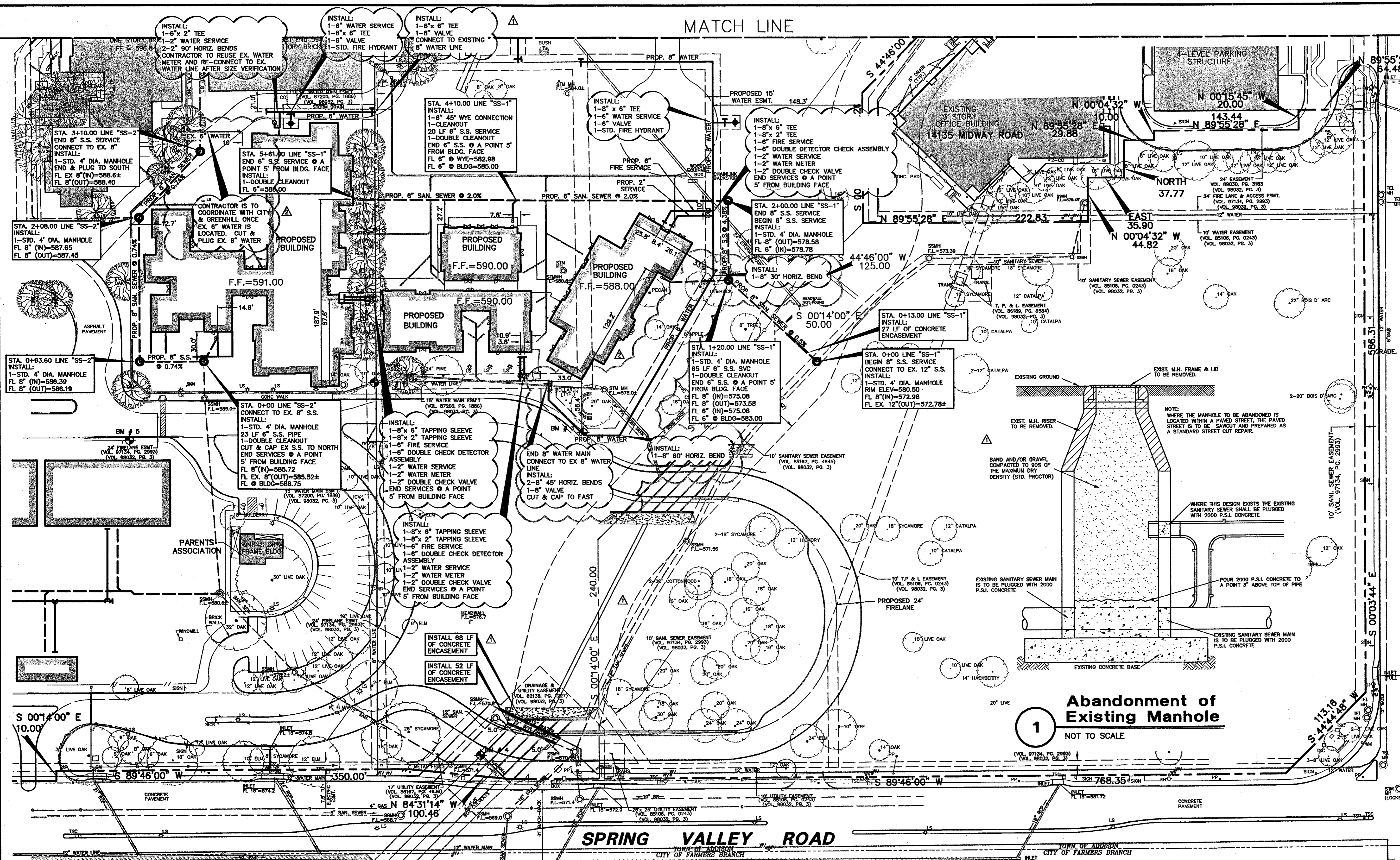
**NOTE:**  
ALL WATER LINES SHOWN TO BE REMOVED ARE TO BE ABANDONED IN PLACE.



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70980 ON 03/31/2004. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

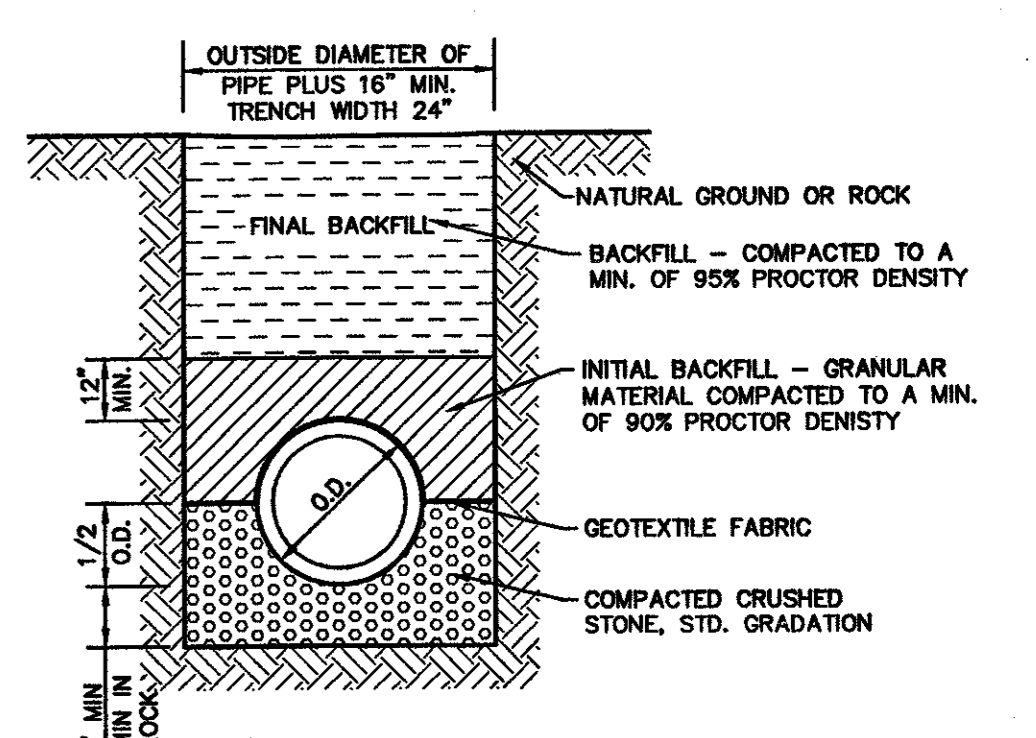
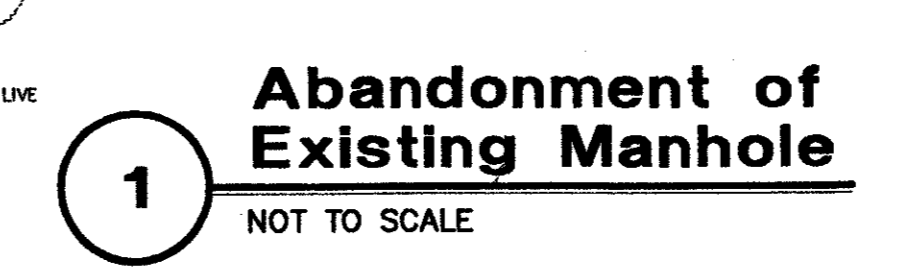
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8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031					
<b>WATER &amp; SANITARY SEWER PLAN</b>					
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<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>					
<b>TOWN OF ADDISON, TEXAS</b>					
DESIGN	DATE	SCALE	NOTES	FILE	NO.
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D:\DWG\10-1082-03-02A\DWG\1082-03-02A.CVDWG 04/30/2004 1:47PM M. DWG-10-1082-03-02A



**LEGEND**

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PP	POWER POLE
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**WATER AND SANITARY SEWER GENERAL NOTES**

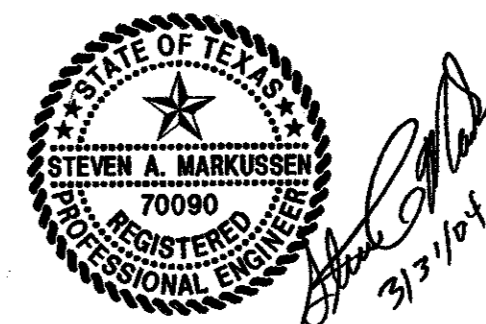
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**BENCH MARKS**

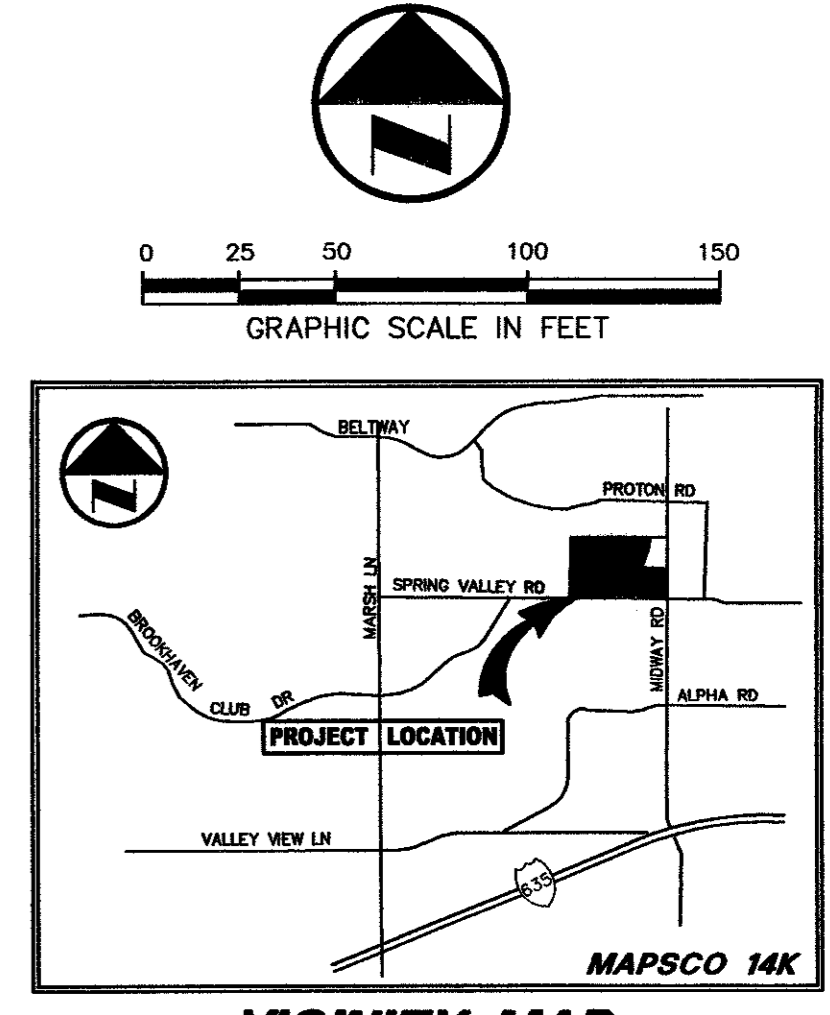
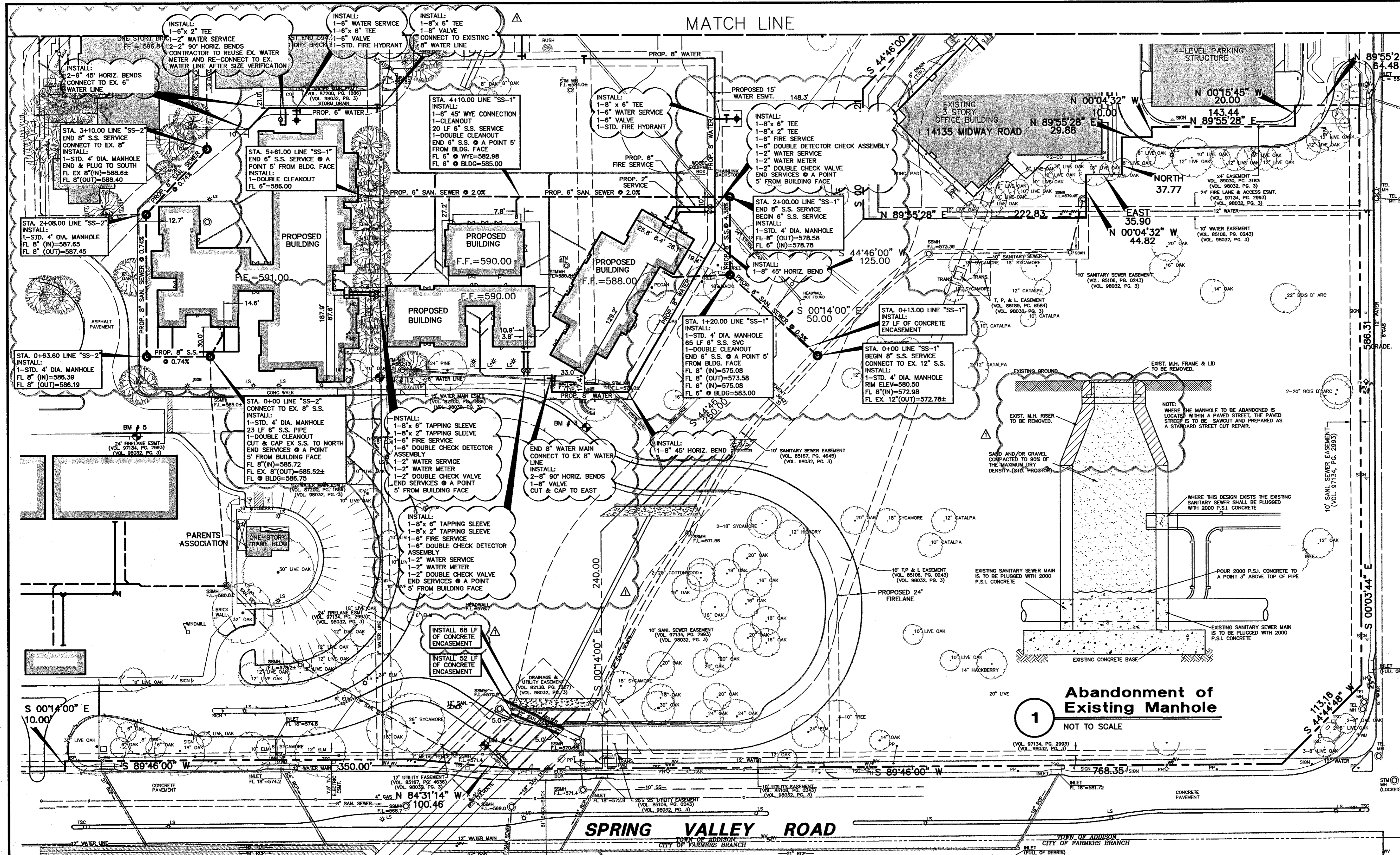
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BM #5:	"+" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley.	Elev. 588.20
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**CONSTRUCTION SET**  
ISSUED BY  
TOWN OF ADDISON  
PUBLIC WORKS DEPARTMENT  
NAME: *Steve Chisholm* DATE: *6/25/04*



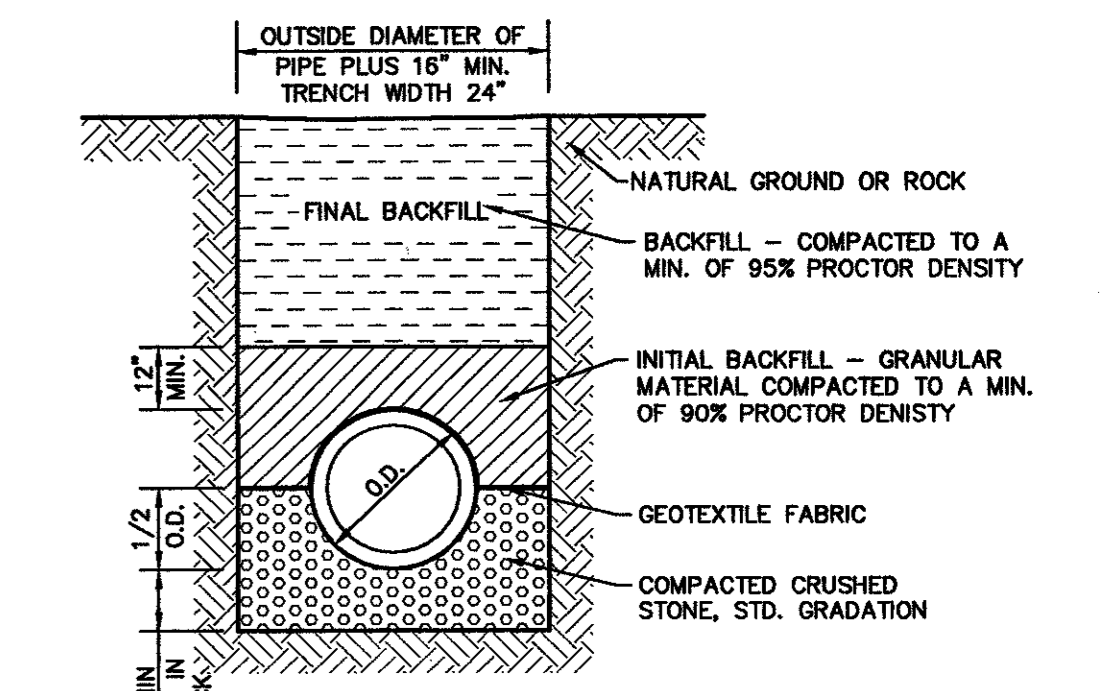
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<b>WATER &amp; SANITARY SEWER PLAN</b>					
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TOWN OF ADDISON, TEXAS					
DESIGN	DRAWN	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'		<b>C4.1</b>



VICINITY MAP

- LEGEND**
- B. BOLLARD
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  - CO. CLEANOUT
  - M. MANHOLE
  - TRC. TRAFFIC SIGNAL CONTROL
  - TSP. TRAFFIC SIGNAL POLE
  - TELE. TELEPHONE BOX
  - FL. FLOOD LIGHT
  - FP. FLAG POLE
  - SP. STREET SIGN
  - IRS. 1/2" INCH IRON ROD W/ "PACHICO KOCH" CAP SET
  - (C.M.) CONTROLLING MONUMENT
  - PROPERTY LINE
  - FENCE
  - OVERHEAD UTILITY LINE
  - UNDERGROUND WATER LINE
  - UNDERGROUND ELECTRIC LINE
  - UNDERGROUND TELEPHONE LINE
  - UNDERGROUND CABLE LINE
  - UNDERGROUND SANITARY SEWER LINE



**EMBEDMENT FOR WATER AND SANITARY SEWER PIPE**

NOTE:  
ALL WATER LINES SHOWN TO BE REMOVED ARE TO BE ABANDONED IN PLACE.

**WATER AND SANITARY SEWER GENERAL NOTES**

1. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
2. ALL WATER MAINS SHALL BE PVC C909, OR 14, CLASS 150.
3. WATER AND SANITARY SEWER SERVICES SHALL MEET FLOWING CODE REQUIREMENTS.
4. ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
5. SANITARY SEWER PIPE SHALL BE PVC SDR-35.
6. WHEN WATER MAINS AND SANITARY SEWERS ARE INSTALLED, THEY SHALL BE INSTALLED NO CLOSER TO EACH OTHER THAN NINE FEET IN ALL DIRECTIONS AND PARALLEL LINES MUST BE INSTALLED IN SEPARATE TRENCHES, WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE FOLLOWING GUIDELINES SHALL APPLY:
  - (A) WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE A MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
  - (B) WHERE A SANITARY SEWER CROSSES A WATERLINE AND THE SEWER IS CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, AN ABSOLUTE MINIMUM DISTANCE OF SIX INCHES BETWEEN OUTSIDE DIAMETERS SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
  - (C) WHERE A SEWER CROSSES UNDER A WATERLINE AND THE SEWER IS CONSTRUCTED OF ABS TRUSS PIPE, SIMILAR SEMI-RIGID PLASTIC COMPOSITE PIPE, CLAY PIPE OR CONCRETE PIPE WITH GASKETED JOINTS, A MINIMUM TWO FOOT SEPARATION DISTANCE SHALL BE MAINTAINED. IN ADDITION, THE SEWER SHALL BE LOCATED BELOW THE WATERLINE WHERE POSSIBLE AND ONE LENGTH OF THE SEWER PIPE MUST BE CENTERED ON THE WATERLINE.
  - (D) WHERE A SEWER CROSSES OVER A WATERLINE ALL PORTIONS OF THE SEWER WITHIN NINE FEET OF THE WATERLINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS. IN LIEU OF THIS PROCEDURE, THE NEW CONVEYANCE MAY BE ENCASED IN A JOINT OF 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE SPRING PIPE SHALL BE SUPPORTED AT FIVE FEET INTERVALS WITH SPACERS OR BE FILLED TO THE SPRING LINE WITH WASHED SAND. THE ENCASEMENT PIPE SHOULD BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEAL.

- (E) THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO BE INSTALLED PARALLEL TO AN EXISTING SEWER THAT SHOWS NO EVIDENCE OF LEAKAGE AND THE WATERLINE IS INSTALLED ABOVE THE SEWER A MINIMUM OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBPARAGRAPHS (A) OR (D) OF THIS PARAGRAPH.
- (F) THE SEWER NEED NOT BE DISTURBED WHERE A NEW WATERLINE IS TO CROSS OVER (BY TWO FEET OR MORE) EXISTING SEWER SHOWING NO EVIDENCE OF LEAKAGE. SHOULD EXCAVATION FOR THE WATERLINE PRODUCE EVIDENCE THAT THE SEWER IS LEAKING, THEN THE SEWER MUST BE REPAIRED OR REPLACED AS DESCRIBED IN SUBSECTIONS (C) OR (D).
7. CONTRACTOR TO VERIFY ALL EXISTING SEWER FLOW LINES BEFORE BEGINNING CONSTRUCTION.
8. CONTRACTOR SHALL TIE A 1" WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AN SHALL LEAVE A MINIMUM OF 36" OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB OF ALLEY IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
9. ALL SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
10. THE UTILITY CONTRACTOR SHALL INSTALL THE WATER SERVICES TO A POINT TWO (2) FEET BACK OF THE CURB LINE AT A DEPTH OF 12 INCHES. THE METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE BACK OF THE CURB. EACH SERVICE LOCATION WILL BE MARKED ON THE CURB, WITH A BLUE LETTER "W" BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS".
11. ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
12. UTILITY TRENCHES SHALL BE BACKFILLED WITH MATERIAL MEETING NCTCOE ITEM 6.2.10 AND MECHANICALLY COMPACTED IN 8" LIFTS TO THE TOP OF THE SUBGRADE TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
13. VALVE BOXES SHALL BE FURNISHED AND SET ON EACH GATE VALVE. AFTER THE FINAL CLEAN-UP AND ALIGNMENT HAS BEEN COMPLETED, THE CONTRACTOR (UTILITY) SHALL POUR A CONCRETE BLOCK 24"x24"x6" AROUND ALL VALVE BOXES TOPS SO THE FINISHED GRADE IS LEVEL WITH THE FINISHED GRADE.
14. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

**BENCH MARKS**

BM #3:	Cut "+" in walk on outside of curved drive near southeast corner of lower school.	Elev. 586.06
BM #4:	"□" cut - west end conc. headwall, north side Spring Valley, at southeast corner campus.	Elev. 578.47
BM #5:	"□" cut in walk at southeast corner intersection of drive along south side of preschool building and north-south drive into site from Spring Valley.	Elev. 585.20
BM #9:	"□" cut at NEC of electric MH on north side cafeteria, south side of drive along north side of campus.	Elev. 602.80
BM #10:	"□" cut on conc. step near northwest corner of upper school.	Elev. 598.85
BM #11:	"□" cut on conc step on walk exiting west side of library.	Elev. 596.44
BM #12:	"□" cut at intersection of walk along west side of lower school and walk along south side Lower school.	Elev. 587.78



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70980 ON 03/31/2004. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

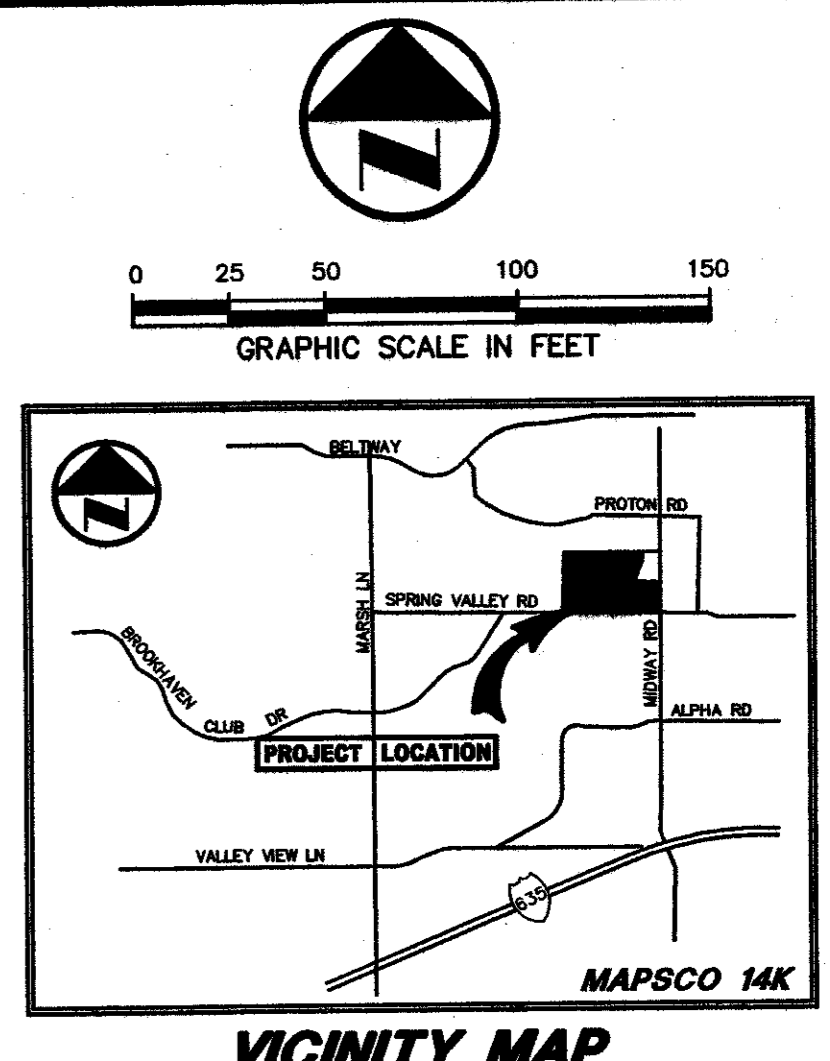
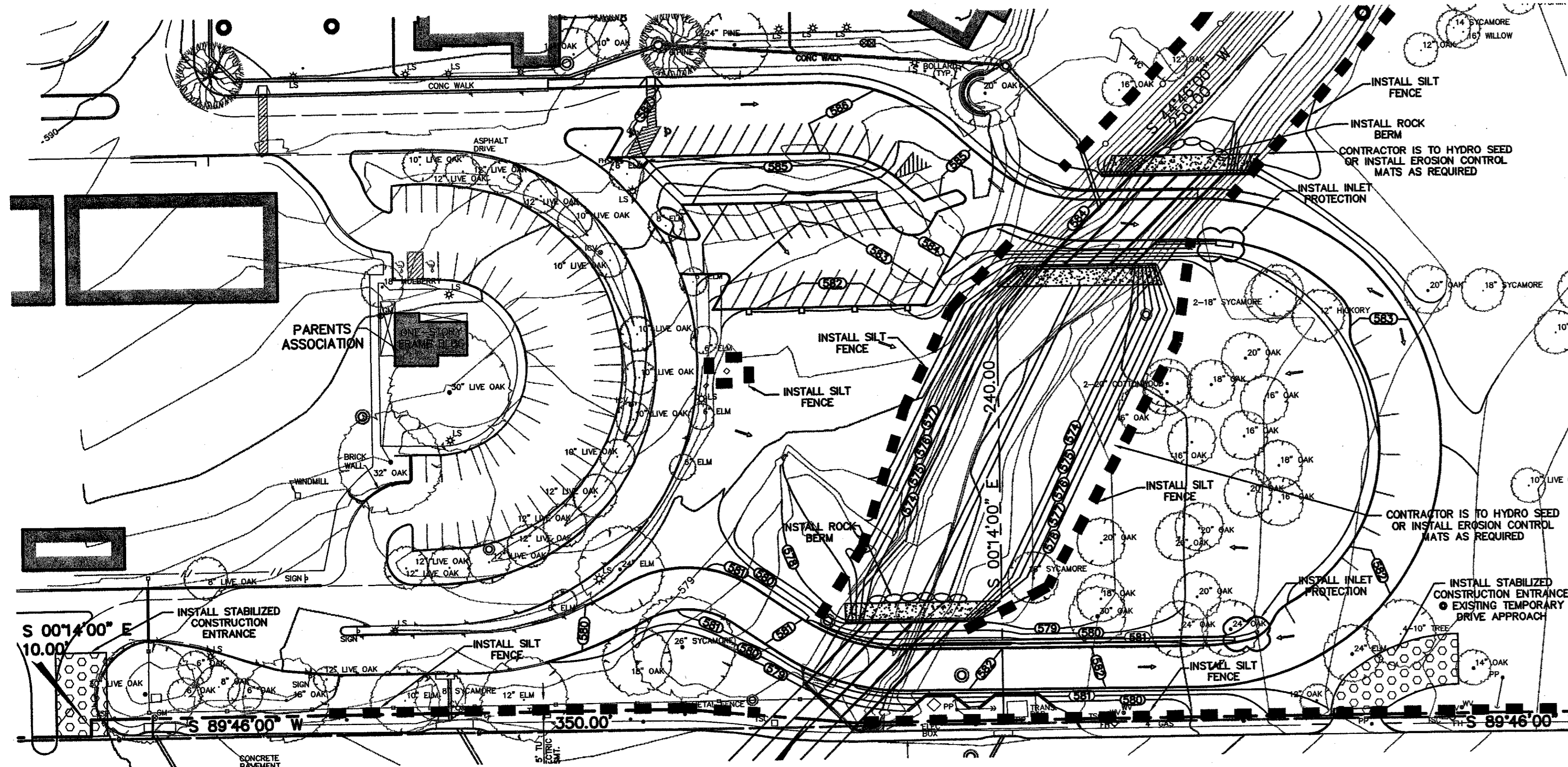
**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**WATER & SANITARY SEWER PLAN**  
**GREENHILL SCHOOL**  
**GREENHILL SCHOOL ADDITION**  
**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**  
**TOWN OF ADDISON, TEXAS**

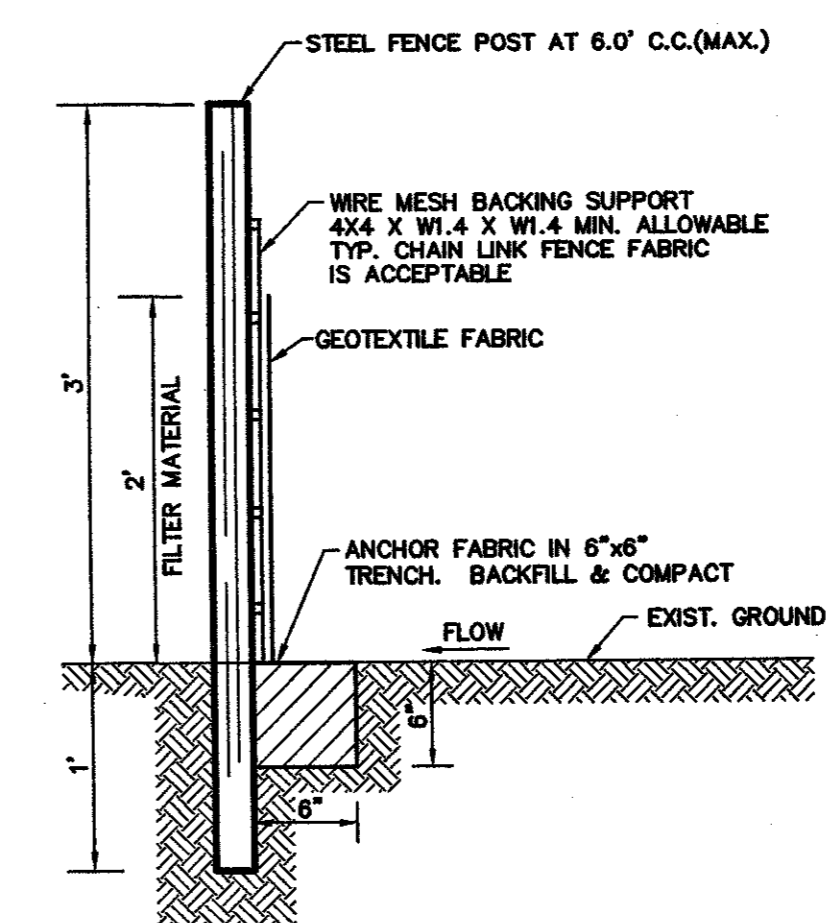
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PK FILE: 1082-03.024  
DWG FILE: 1082-03.024/DWG  
XREF FILE: FS.DWG

DIVEY 04/30/2004 - 2:29PM  
M:\VINGE\101082-03-024\DWG\1082-03.024C4.DWG



VICINITY MAP



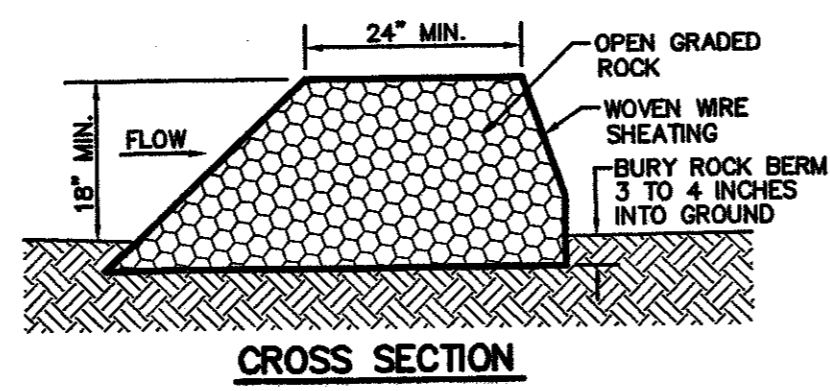
4 SILT FENCE  
NOT TO SCALE

**LEGEND**

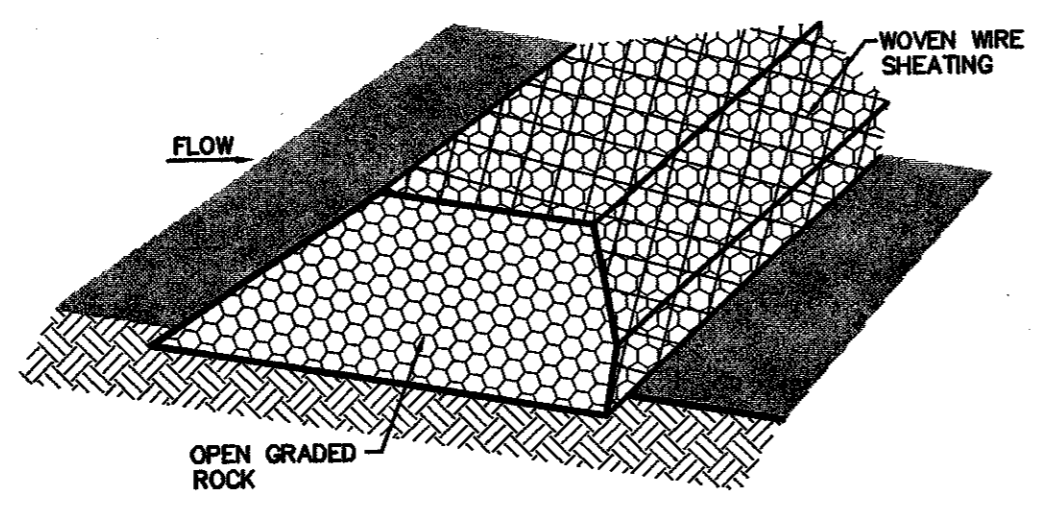
B.	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FH	FIRE HYDRANT
CL	CLEANOUT
MH	MANHOLE
TSC	TRAFFIC SIGNAL CONTROL
TSP	TRAFFIC SIGNAL POLE
TELE	TELEPHONE BOX
FL	FLOOD LIGHT
FP	FLAG POLE
TR	TRAFFIC SIGN
IRS	1/2-INCH IRON ROD W/ "PACHECO KOCH" CAP SET
(C.M.)	CONTROLLING MONUMENT
---	PROPERTY LINE
-x-	FENCE
-O-	OVERHEAD UTILITY LINE
-W-	UNDERGROUND WATER LINE
-E-	UNDERGROUND ELECTRIC LINE
-T-	UNDERGROUND TELEPHONE LINE
-C-	UNDERGROUND CABLE LINE
-SS-	UNDERGROUND SANITARY SEWER LINE
612.39	EXIST SPOT ELEVATION
612.39	EXIST TOP OF CURB ELEVATION
611.92	EXIST GUTTER ELEVATION
613	PROPOSED CONTOUR
614.5	PROPOSED TOP OF CURB ELEVATION
614.0	PROPOSED GUTTER ELEVATION
614.5	PROPOSED SPOT ELEVATION
613	PROPOSED DRAINAGE FLOW DIRECTION
613	EXIST CONTOUR
[Symbol]	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	PROPOSED INLET PROTECTION
[Symbol]	PROPOSED SILT FENCE
[Symbol]	PROPOSED ROCK BERM

**POLLUTION CONTROL GENERAL NOTES**

- THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
- THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
  - CLEARING AND GRUBBING
  - ROUGH GRADING
  - FINAL GRADING
  - UTILITY INSTALLATION
  - PAYMENT INSTALLATION
  - BUILDING CONSTRUCTION
- THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 12.5 ACRES.
- THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.7.
- THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS PRIOR TO COMMENCING WORK AND UNTIL THE WORK AREA HAS BEEN STABILIZED.
- THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
- ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 21 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION.
- THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
- THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
- A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.
- CONSTRUCTION SEQUENCING MUST PROVIDE FOR THE EXCAVATION OF AN ON-SITE BASIN AS A SEDIMENT COLLECTION BASIN PRIOR TO THE DISTURBANCE OF GREATER THAN 10 ACRES OF LAND.
- ALL FINISHED GRADES ARE TO BE HYDROMULCHED, SPOT SODDED OR SEEDED AND WATERED UNTIL GROWTH IS ESTABLISHED ON AND OFF-SITE.
- A PIT OR WASH OUT BASIN SHALL BE CONSTRUCTED ON-SITE BY THE CONTRACTOR FOR THE "WASH OUT" OF CONCRETE TRUCKS.
- A BERM OR OTHER SPILL PROTECTION MEASURE SHALL BE USED FOR ANY TEMPORARY FUEL STORAGE TANK ON SITE.
- IF "SLUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
- TO PREVENT DAMAGE TO VEGETATION IN DOWNSTREAM WATER COURSES, LIMIT ANY PROPOSED LINE STABILIZATION OPERATIONS TO THAT WHICH CAN BE MIXED AND COMPACTED BY THE END OF EACH WORK DAY. GEOTEXTILE FABRIC IS NOT EFFECTIVE IN FILTERING LIME SINCE THE GRAIN SIZE IS SMALLER THAN THE OPENING IN THE FABRIC.
- VEHICLE PARKING AREAS, STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCRUSTING THE AREAS WITH PROTECTIVE MEASURES SHALL BE NECESSARY.
- STORE ALL TRASH AND BUILDING MATERIALS WASTE IN AN ENCLOSURE UNTIL PROPER DISPOSAL AT OFF-SITE FACILITIES.



CROSS SECTION

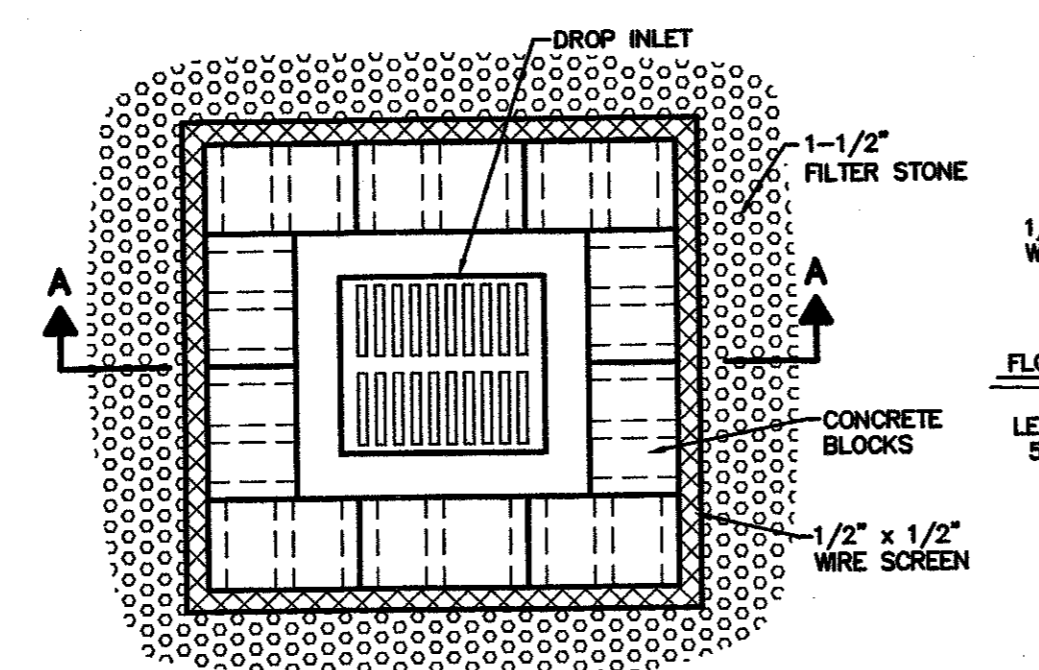


ISOMETRIC PLAN VIEW

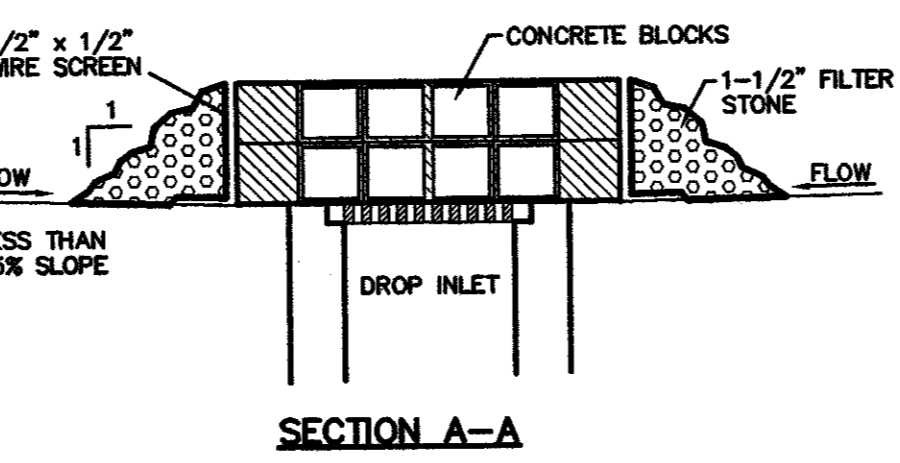
- NOTES**
- USE ONLY OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3-5 INCHES IN DIAMETER FOR OTHER CONDITIONS.
  - ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAX. OPENING OF 1 INCH AND A MIN. WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROX. 3 TO 4 INCHES DEEP.
  - THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASED TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASH OUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
  - WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
  - ROCK BERM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.

**2 ROCK BERM**

NOT TO SCALE



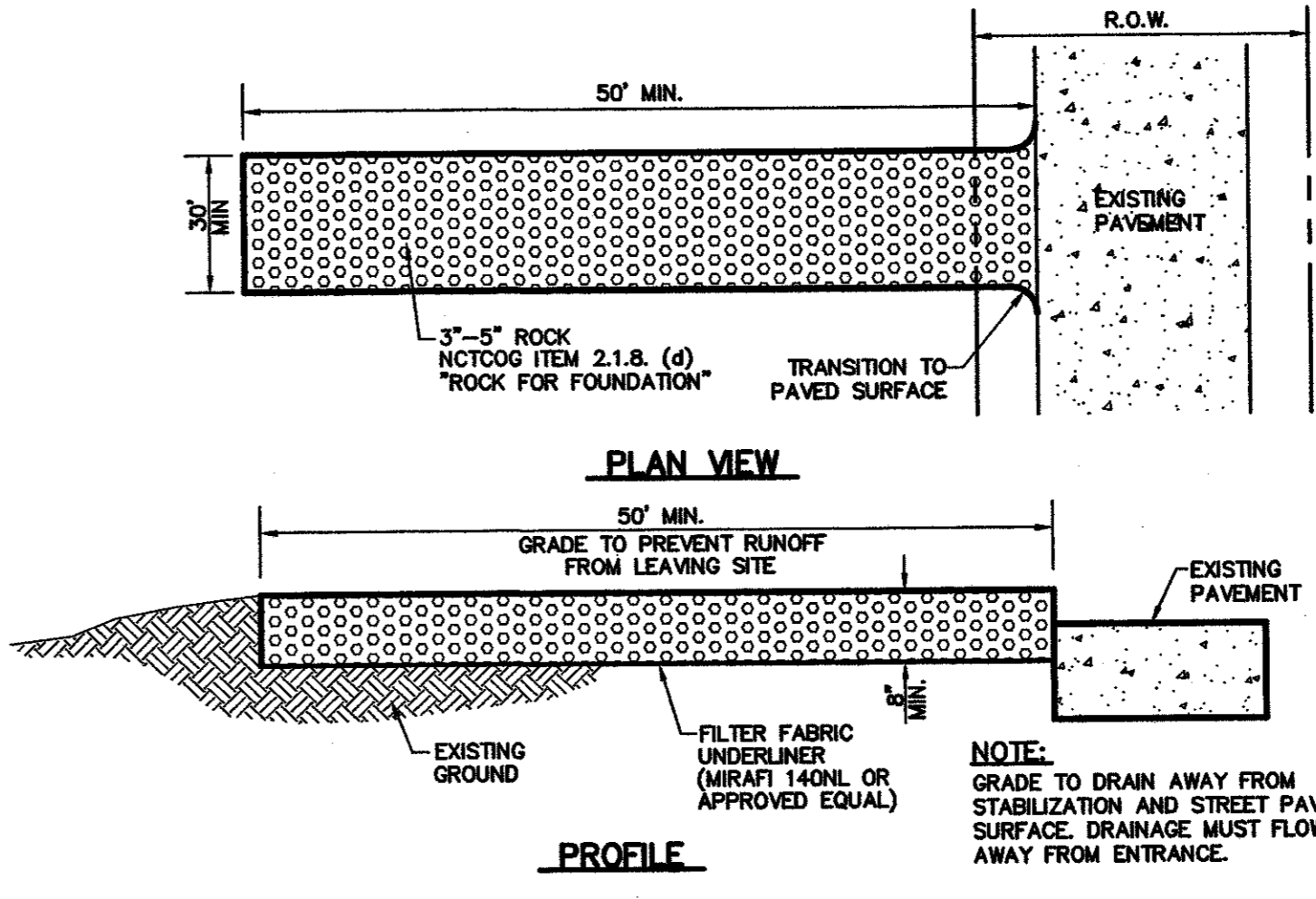
PLAN VIEW



SECTION A-A

**1 DROP INLET PROTECTION**

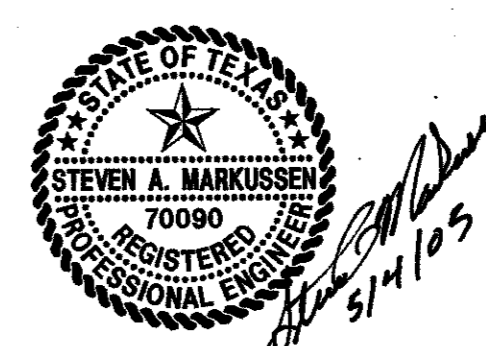
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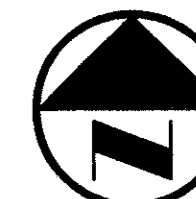
**3 STABILIZED CONSTRUCTION ENTRANCE**

NOT TO SCALE

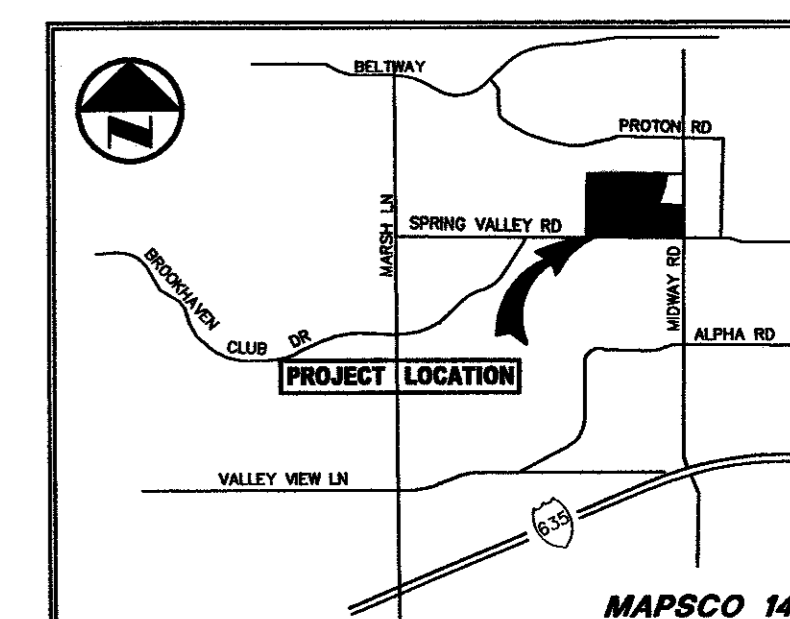
NO.	DATE	REVISION
Pacheco Koch Consulting Engineers 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75208 972.235.3031		
<b>EROSION CONTROL PLAN &amp; DETAILS</b>		
<b>PARKING LOT</b>		
<b>GREENHILL SCHOOL ADDITION</b>		
THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273		
TOWN OF ADDISON, TEXAS		
DESIGN	DRAWN	DATE
BUM	DRI	MAY 2005
SCALE	NOTES	FILE
1"=50'		
NO.	<b>C5.0</b>	



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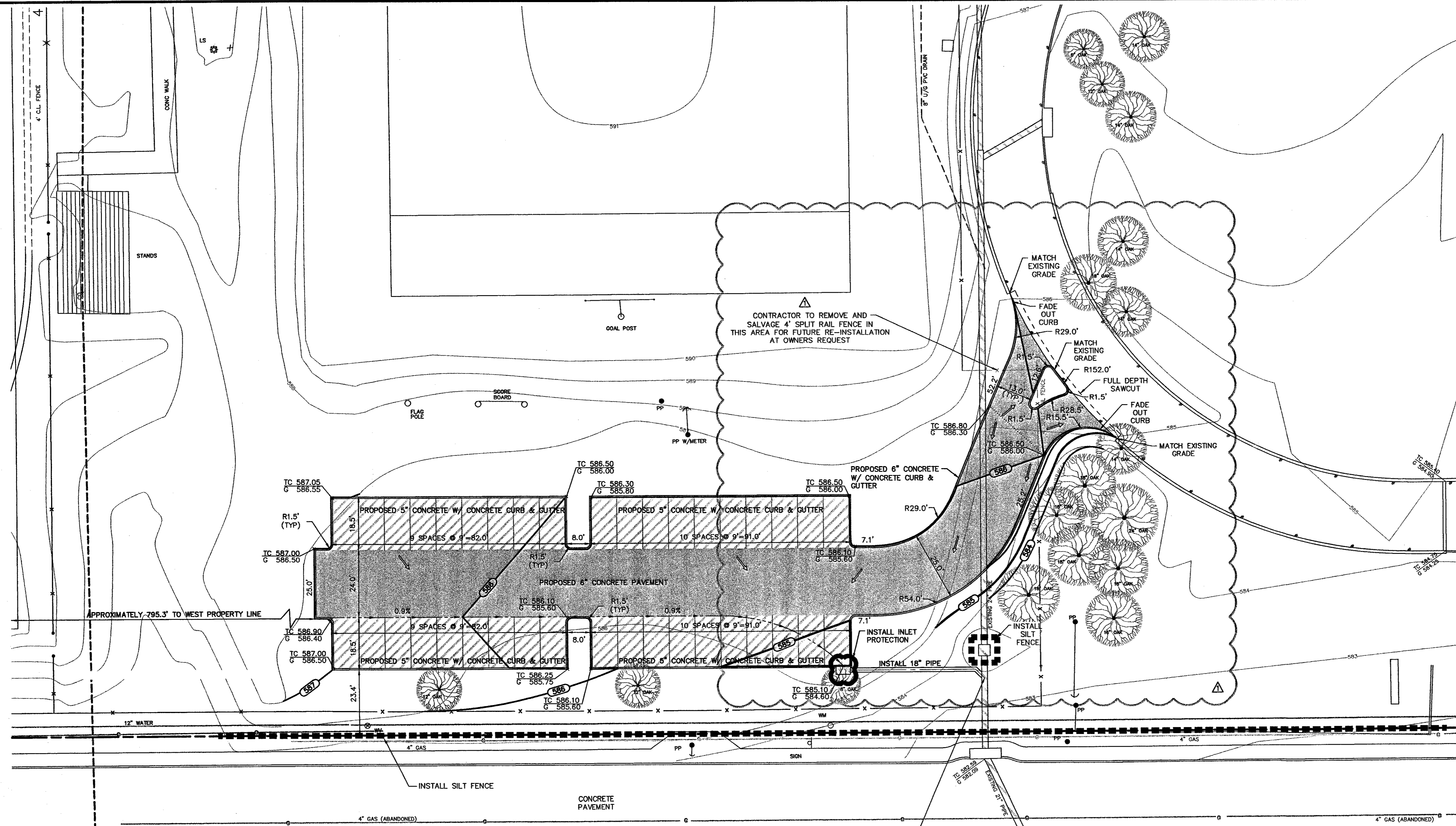
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GRAPHIC SCALE IN FEET



**VICINITY MAP**

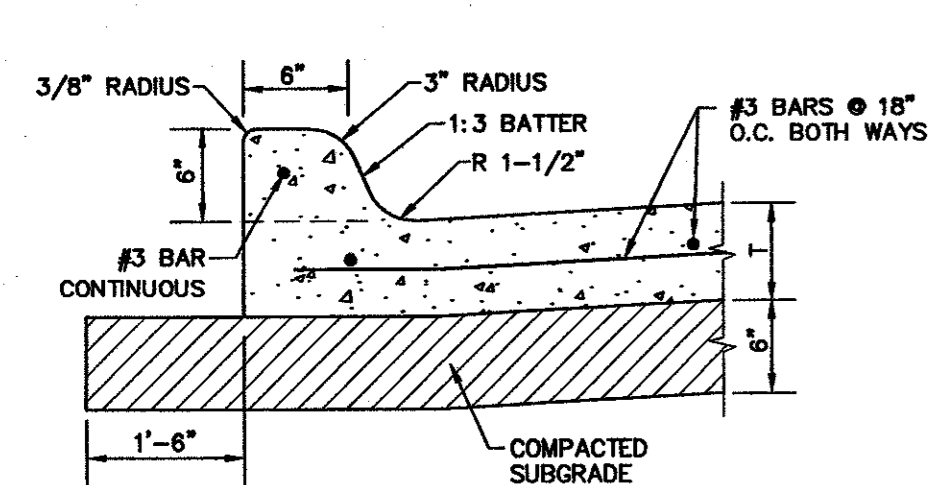
**LEGEND**

- B. BOLLARD
- EM ⊙ ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM ⊙ WATER METER
- WV ⊙ WATER VALVE
- ICV ⊙ IRRIGATION CONTROL VALVE
- FH ⊙ FIRE HYDRANT
- CH. CLEANOUT
- MH ⊙ MANHOLE
- TSC ⊙ TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE ⊙ TELEPHONE BOX
- FL ⊙ FLOOD LIGHT
- FP. FLAG POLE
- TR. TRAFFIC SIGN
- IRS 1/2-INCH IRON ROD
- W/PACHICO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- FENCE
- OHL OVERHEAD UTILITY LINE
- UWL UNDERGROUND WATER LINE
- UEL UNDERGROUND ELECTRIC LINE
- UTL UNDERGROUND TELEPHONE LINE
- UCL UNDERGROUND CABLE LINE
- USL UNDERGROUND SANITARY SEWER LINE
- 613.3 EXIST CONTOUR
- 612.39 EXIST SPOT ELEVATION
- TC 612.39 EXIST TOP OF CURB ELEVATION
- G 611.92 EXIST GUTTER ELEVATION
- 613.3 PROPOSED CONTOUR
- TC 614.5 PROPOSED TOP OF CURB ELEVATION
- G 614.0 PROPOSED GUTTER ELEVATION
- EL 614.5 PROPOSED SPOT ELEVATION
- PROPOSED DRAINAGE FLOW DIRECTION
- ▨ PROPOSED 5" CONCRETE PAVEMENT
- ▨ PROPOSED 6" CONCRETE PAVEMENT
- ▨ LIGHT TRAFFIC AREAS
- ▨ HEAVY TRAFFIC (DRIVES)
- ▨ PROPOSED SILT FENCE
- ⊙ PROPOSED INLET PROTECTION

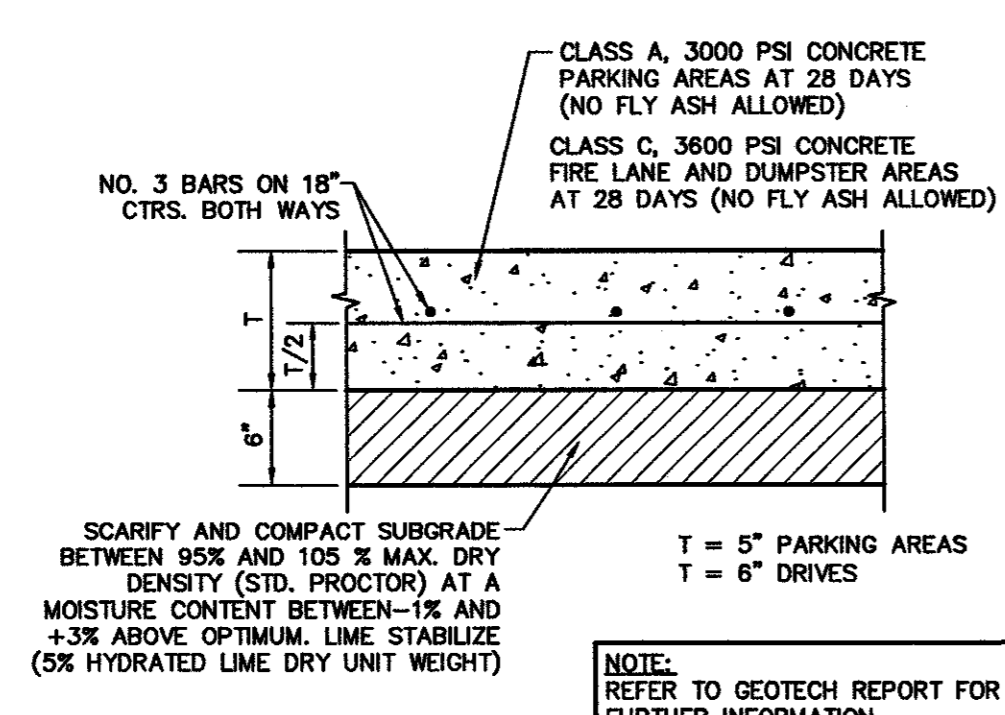


INSTALL:  
 1-24"x18" 45° WYE CONNECTION  
 1-18" 45° BEND  
 48 LF 18" STORM PIPE  
 1-STD. 5" CURB INLET  
 TC=585.10  
 FL INLET=581.10  
 FL @ WYE=579.40  
 FL EX 24"=579.15±  
 CONTRACTOR IS TO VERIFY EXISTING FL  
 PRIOR TO CONSTRUCTION

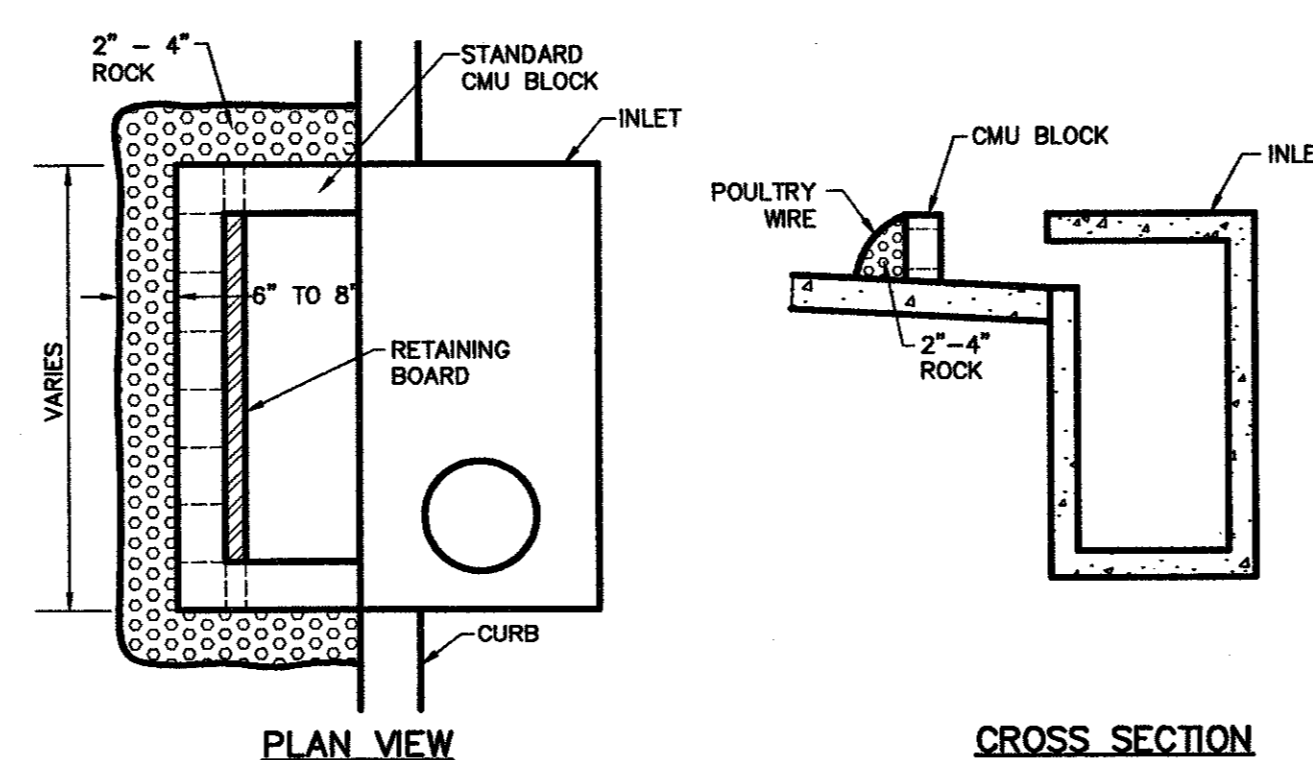
NOTE: ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.



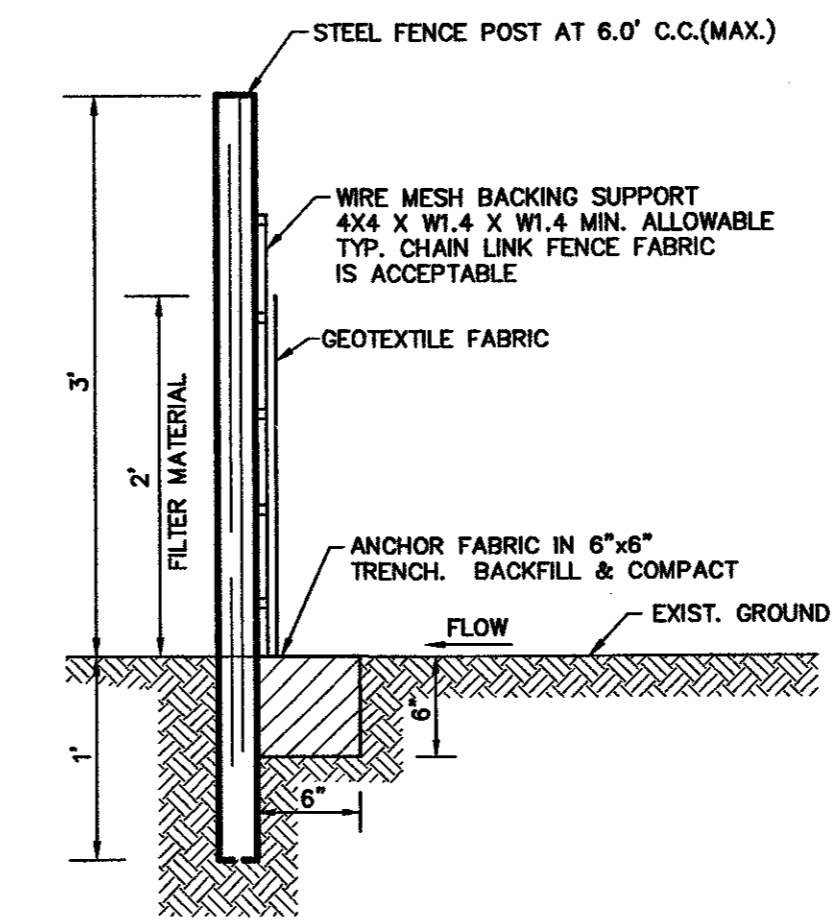
**1 INTEGRAL CURB**  
NOT TO SCALE



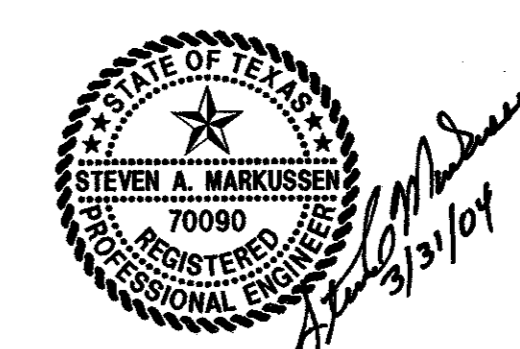
**2 CONCRETE PAVEMENT SECTION**  
NOT TO SCALE



**3 PROTECTION TYPE "B"**  
NOT TO SCALE



**4 SILT FENCE**  
NOT TO SCALE

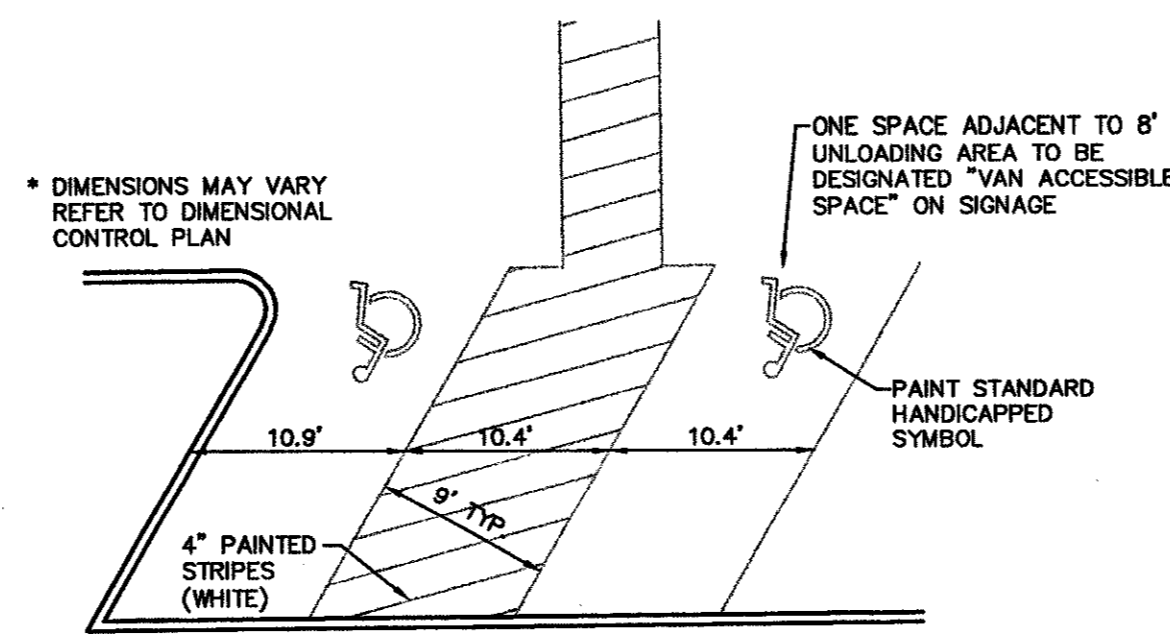
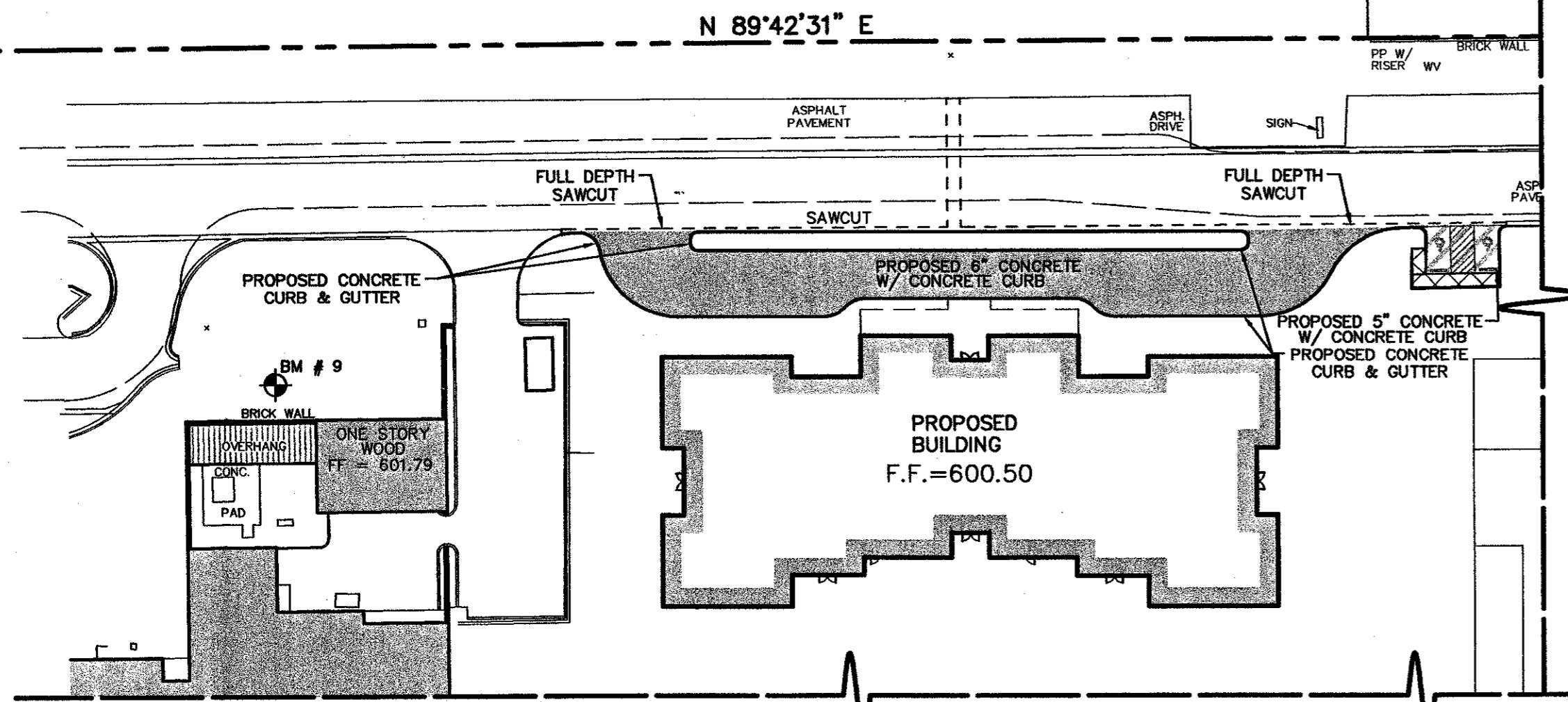


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NO.	DATE	REVISION
1	04/30/2004	REVISED DRIVE LAYOUT
<b>Pacheco Koch Consulting Engineers</b>		
8350 N CENTRAL EXP'Y SUITE 1000 DALLAS, TEXAS 75206 972.235.3031		
<b>WEST PARKING LOT PLAN</b>		
<b>GREENHILL SCHOOL</b>		
<b>LOT NUMBER, BLOCK NUMBER</b>		
<b>GREENHILL SCHOOL ADDITION</b>		
<b>TOWN OF ADDISON, TEXAS</b>		
DESIGN	DRAWN	DATE
BJM	BLT	NOV. 2003
SCALE	NOTES	FILE
1"=20'		
		<b>NO.</b>
		<b>C5.0</b>







HANDICAPPED SIGNS, INSTALL 2' FROM BACK OF CURB (TYP. EACH SPACE). SIGNAGE TO BE IN ACCORDANCE WITH TEXAS DEPARTMENT OF LICENSING AND REGULATION TEXAS ACCESSIBILITY STANDARDS (TAS) PER 4.6.4

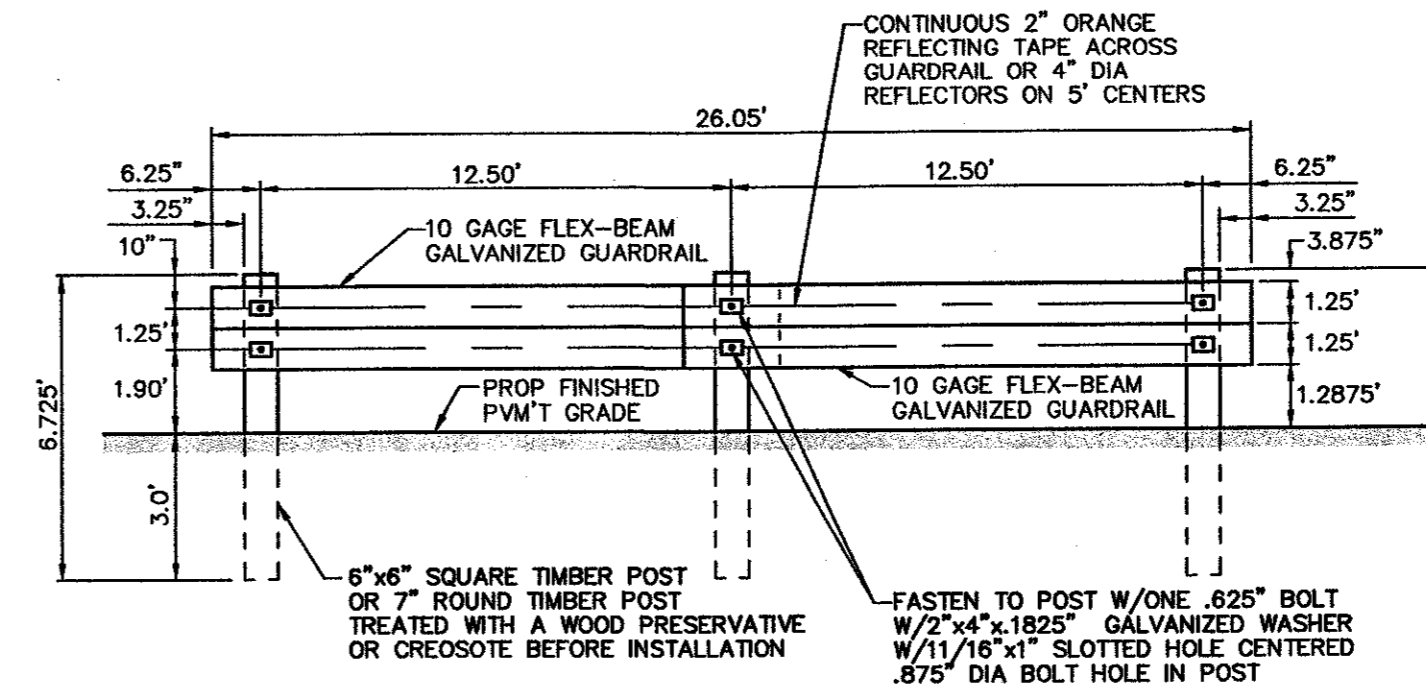
NOTE: SIGNAGE AND MARKINGS TO BE IN ACCORDANCE WITH FEDERAL STATE AND LOCAL REGULATIONS.

**4 HANDICAP PARKING**

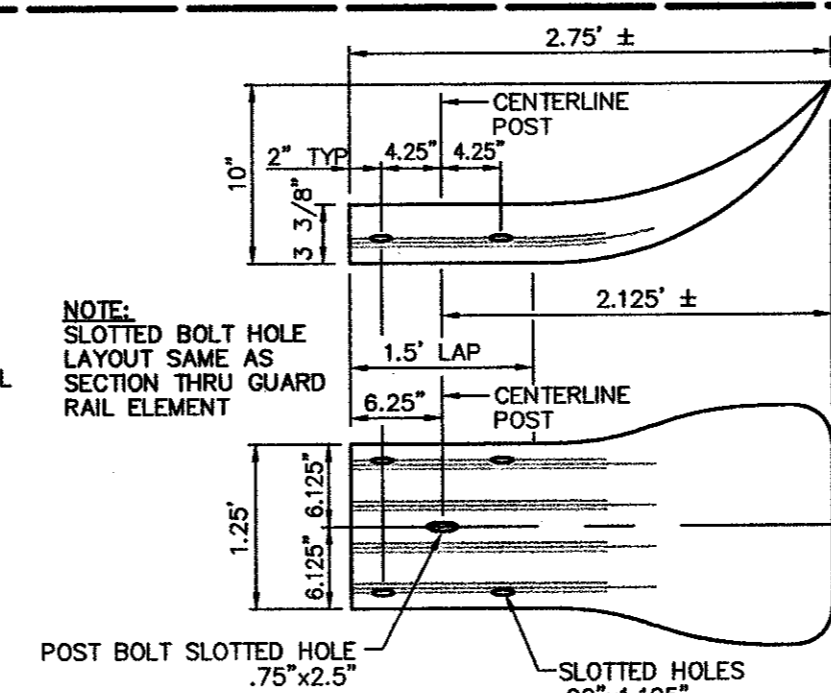
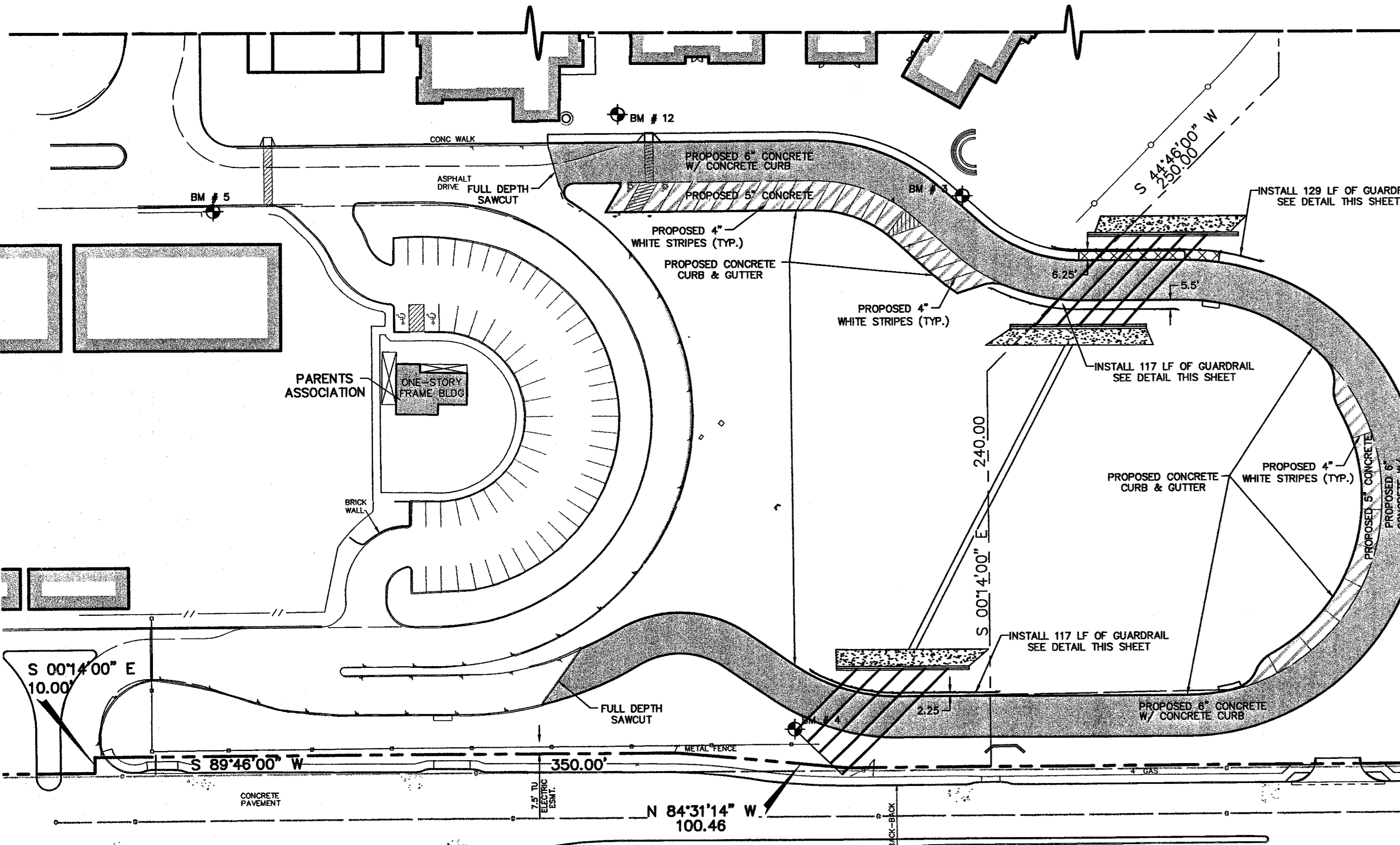
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**NOTE:**

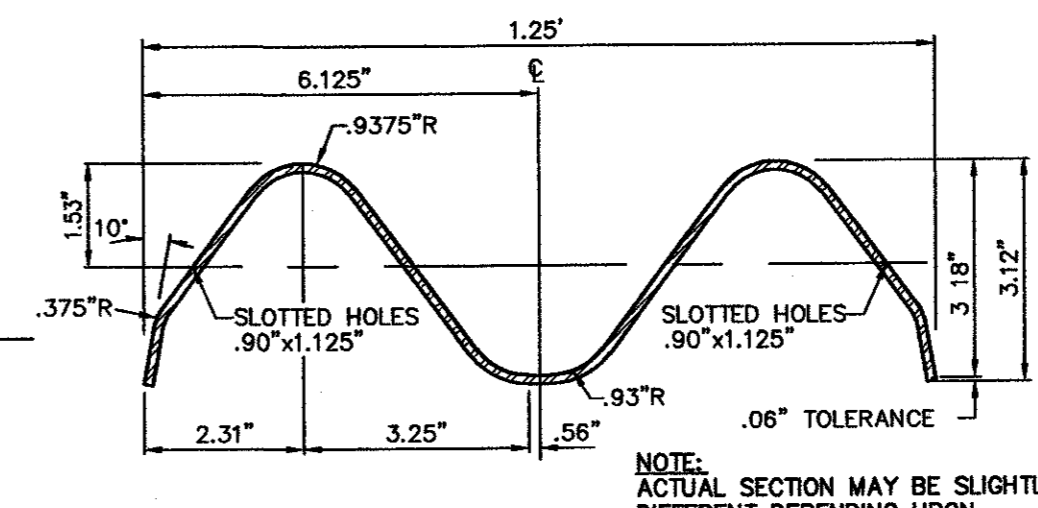
1. AT THE OPTION OF THE CONTRACTOR THE RAIL ELEMENT OF THE GUARD FENCE MAY BE FURNISHED IN EITHER 12.50 OR 25.00 FOOT NOMINAL LENGTHS. RAIL SHALL BE FURNISHED WITH POST BOLT SLOTS FOR 5/8" DIA BOLT CONNECTION TO POST.
2. BOLTS USED IN ATTACHING RAIL TO POST SHALL BE OF SUFFICIENT LENGTH THROUGH THE FULL THICKNESS OF THE NUT.
3. TIMBER POSTS MAY BE BEVELED AT APPROX 10' ON THE TOP OR BOTH ENDS WITH HIGH SIDE PLACES TOWARD THE ROADWAY OR THEY MAY BE DOME.
4. BOLTS USED IN ATTACHING RAIL TO RAIL REQUIRE FOUR 5/8" DIA x 1 1/4" OVAL SHOULDER BUTTON HEAD GALVANIZED BOLT W/5/8" GALVANIZED NUT.
5. ALL NUTS, BOLTS, & WASHERS TO BE GALVANIZED.
6. GUARD RAIL TO BE MOUNTED PER MANUFACTURERS REQUIREMENTS.



DOUBLE RAIL GUARD RAIL DETAIL



TERMINAL END SECTION

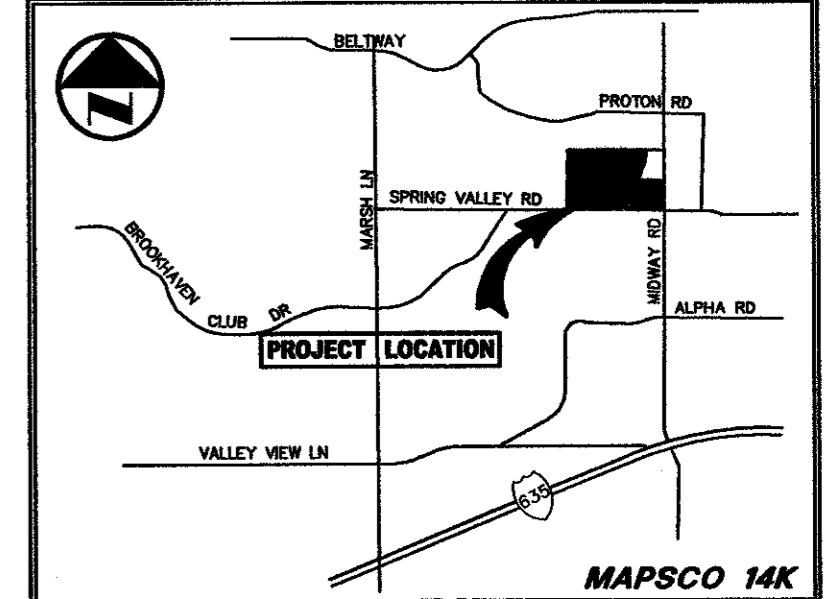
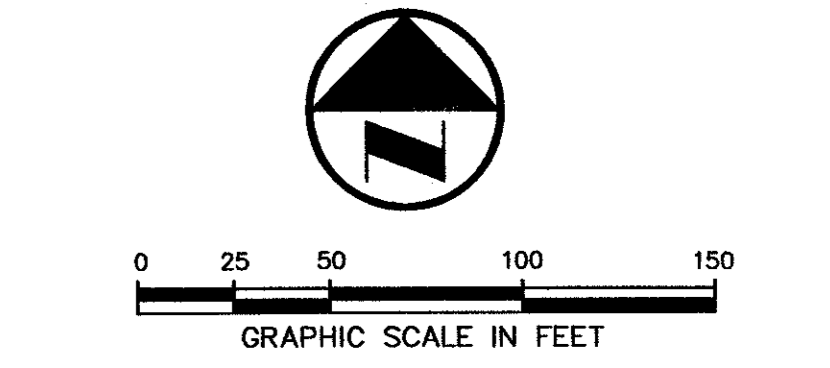


SECTION THRU RAIL ELEMENT

**3 GUARDRAIL DETAIL WITH SECTIONS**

NOT TO SCALE

LOT 2  
GREENHILL PARK  
(VOL. 98051, PG. 61)



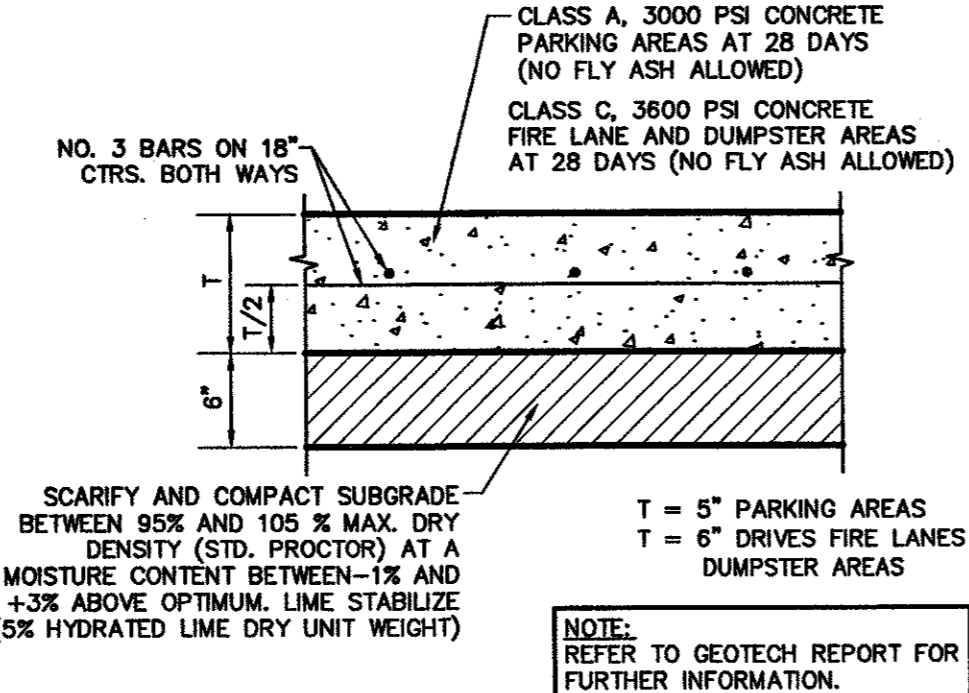
VICINITY MAP

**LEGEND**

- B. BOLLARD
- EM. ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CN. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- TS. TRAFFIC SIGN
- IRS. 1/2-INCH IRON ROD W/PACHECO KOCH" CAP SET
- (C.M.) CONTROLLING MONUMENT
- PROPERTY LINE
- X- FENCE
- OHL- OVERHEAD UTILITY LINE
- 6"W- UNDERGROUND WATER LINE
- E- UNDERGROUND ELECTRIC LINE
- T- UNDERGROUND TELEPHONE LINE
- C- UNDERGROUND CABLE LINE
- 6"SS- UNDERGROUND SANITARY SEWER LINE
- [Pattern] PROPOSED 4" CONCRETE SIDEWALK
- [Pattern] PROPOSED 5" CONCRETE PAVEMENT LIGHT TRAFFIC AREAS
- [Pattern] PROPOSED 6" CONCRETE PAVEMENT HEAVY TRAFFIC (FIRE LANES, SERVICE DRIVES)

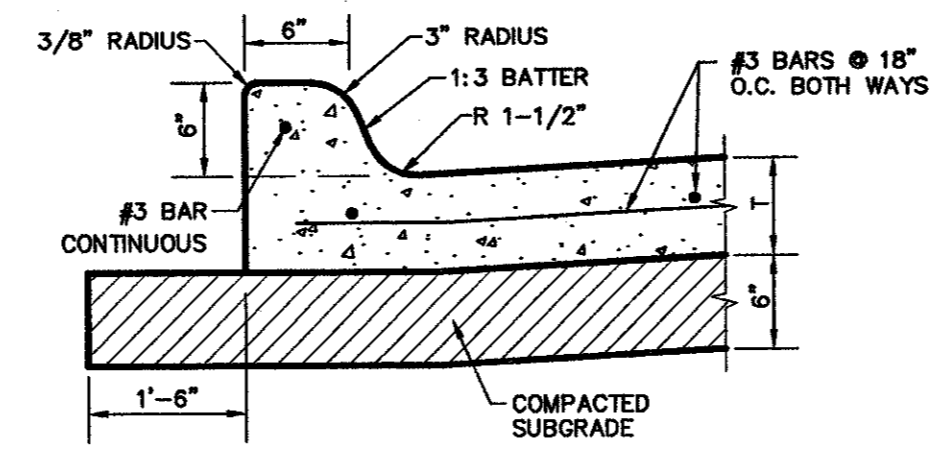
**PAVING NOTES**

1. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
2. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
3. UNLESS NOTED, ALL FILL PLACED UNDER PAVING SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN 6" INCH LIFTS. REFER TO STRUCTURAL SPECIFICATION FOR FILL PLACED BENEATH BUILDING AREAS. ALL OTHER FILL AREAS TO BE COMPACTED TO 90% STANDARD PROCTOR.
4. THE CONTRACTOR SHALL SUBMIT A JOINT SPACING PLAN TO THE ENGINEER FOR APPROVAL. UNLESS NOTED, EXPANSION JOINT SPACING SHALL BE 90' MAXIMUM EACH WAY WITH NO KEYWAYS AND SAWED DUMMY JOINTS SHALL BE 15' EACH WAY.
5. TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED AT THE END OF EACH DAY'S PAVING AND WHERE INTERRUPTIONS SUSPEND OPERATIONS FOR 30 MINUTES OR MORE.
6. ALL PAVEMENTS TO BE REMOVED SHALL BE SAWCUT TO A NEAT LINE, MINIMUM 1-1/2" DEEP, AND THE PAVEMENT REMOVED IN SUCH A MANNER AS TO PRESERVE THE EXISTING TRANSVERSE REINFORCING STEEL TO THE MAXIMUM EXTENT POSSIBLE.
7. ALL CURB AND GUTTER SHALL BE INTEGRAL WITH THE PAVEMENT AND HAVE THE SAME COMPRESSIVE STRENGTH.
8. PAVEMENT REINFORCEMENT SHALL BE #3 BARS, SPACED AT 18" CENTER TO CENTER EACH WAY EXCEPT WHERE NOTED IN THE PLANS.
9. BAR LAPS SHALL BE 30 DIAMETERS IN LENGTH.
10. ALL STRIPES SHALL BE 4" WIDE, UNLESS OTHERWISE NOTED.
11. INSTALLATION AND PLACEMENT OF IRRIGATION SLEEVES AND UTILITY CONDUITS SHALL BE IN ACCORDANCE WITH LANDSCAPE ARCHITECTS AND MEP PLANS.
12. SIDEWALKS AND ACCESSIBLE ROUTES SHALL HAVE A SLOPE NO GREATER THAN 5% AND A CROSS FALL NO GREATER THAN 2% UNLESS NOTED OTHERWISE.



**1 CONCRETE PAVEMENT SECTION**

NOT TO SCALE



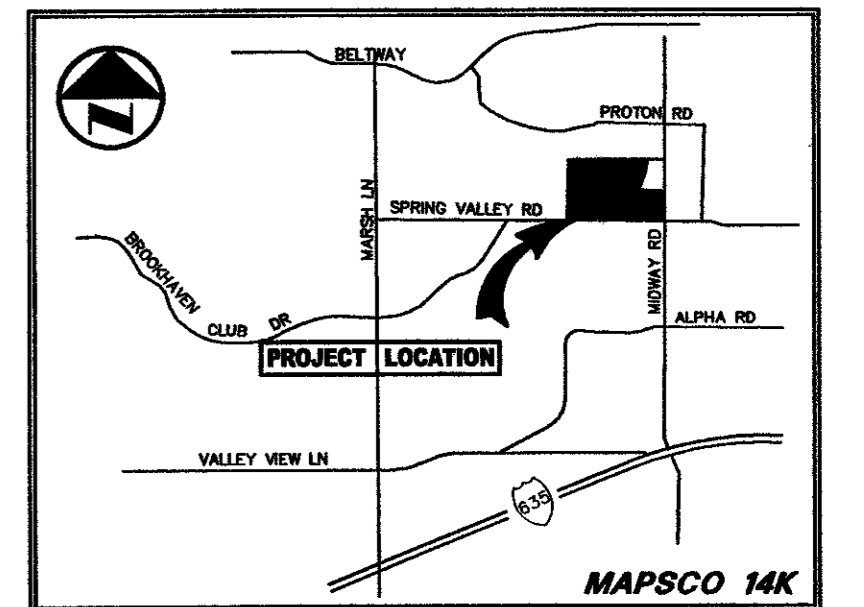
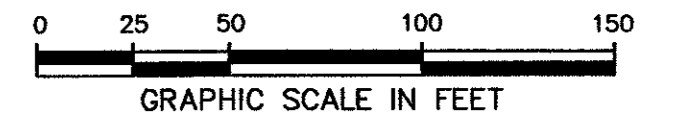
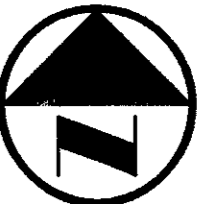
**2 INTEGRAL CURB**

NOT TO SCALE



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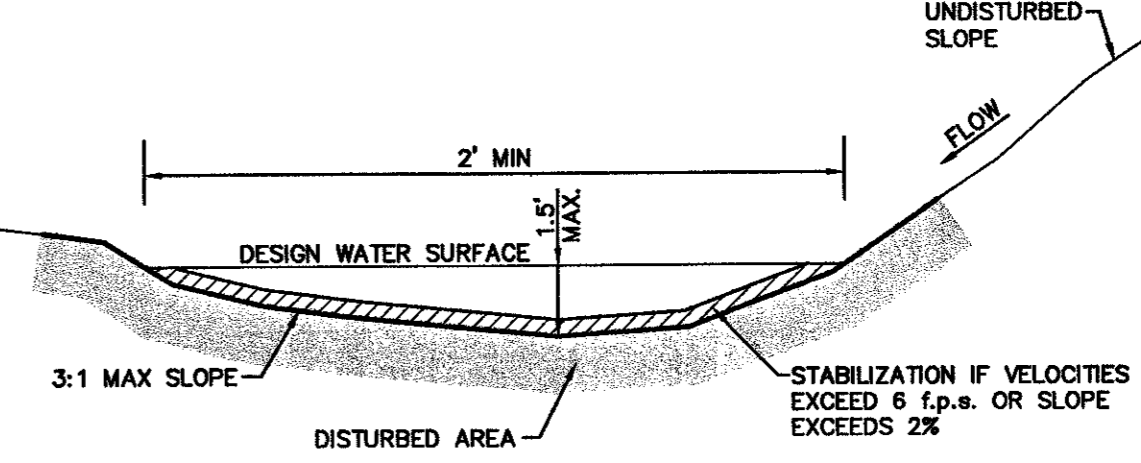
NO.	DATE	REVISION				
<b>Pacheco Koch Consulting Engineers</b>						
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031						
<b>PAVING PLAN &amp; DETAILS</b>						
<b>GREENHILL SCHOOL</b>						
<b>GREENHILL SCHOOL ADDITION</b>						
<b>THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273</b>						
<b>TOWN OF ADDISON, TEXAS</b>						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
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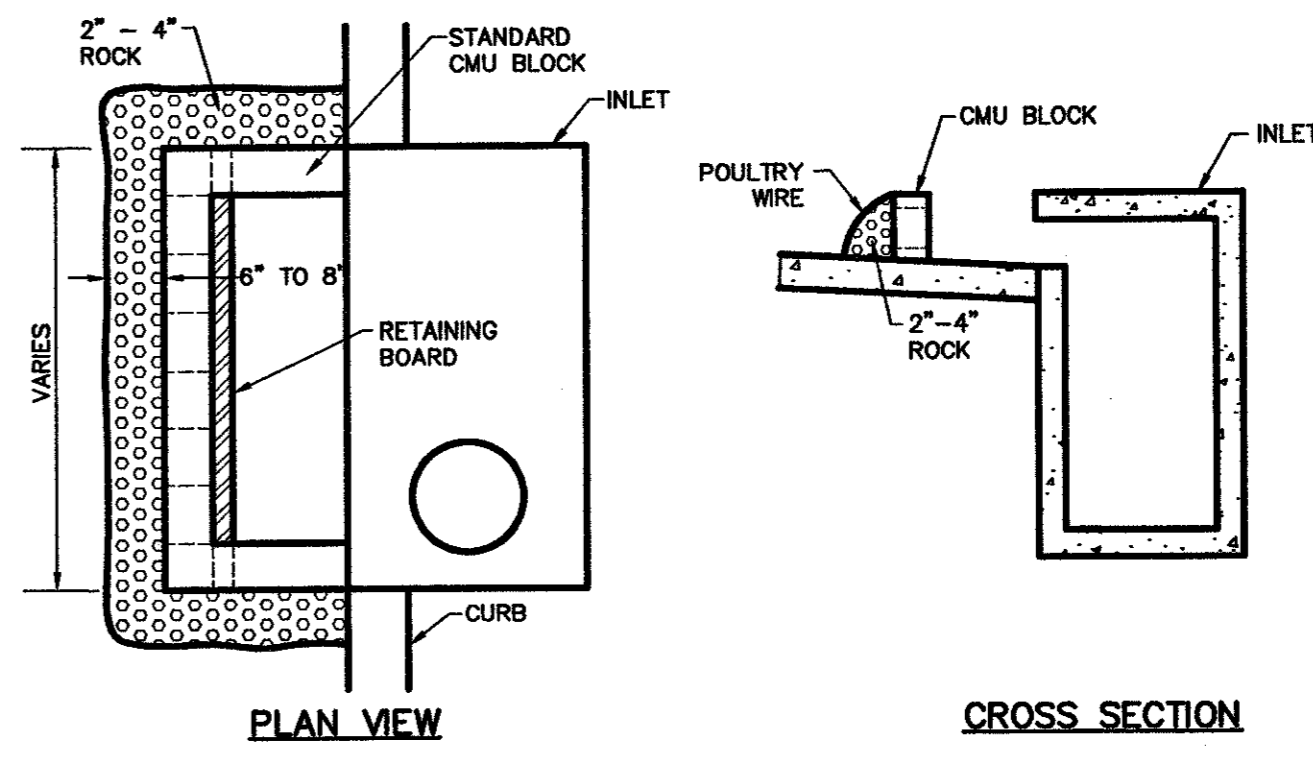
VICINITY MAP

LEGEND

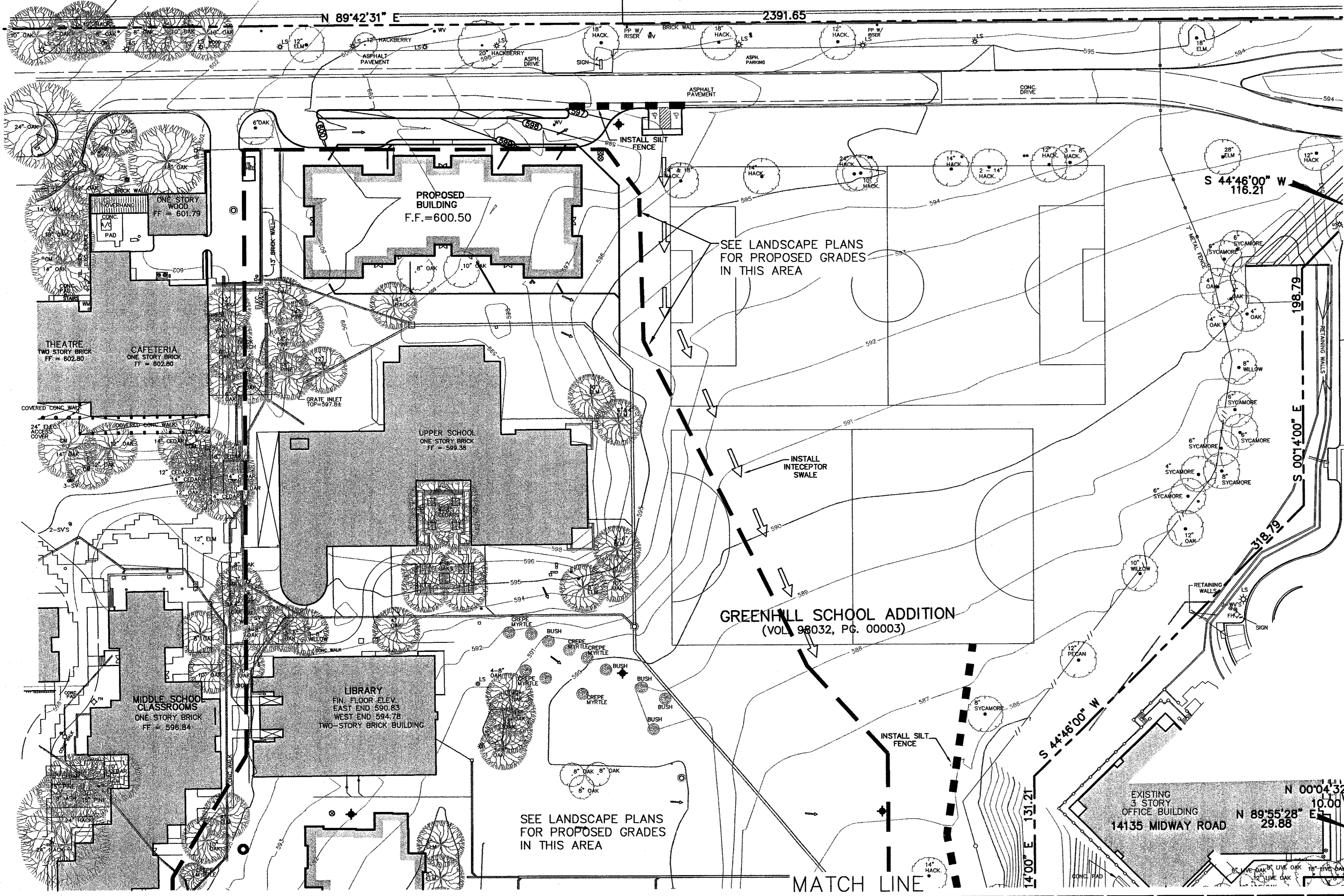
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- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
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- 1/2" IRON ROD W/ "PACHECO KOCH" CAP SET
- IRS. CONTROLLING MONUMENT
- (C.M.) PROPERTY LINE
- X- FENCE
- OR- OVERHEAD UTILITY LINE
- U- UNDERGROUND WATER LINE
- E- UNDERGROUND ELECTRIC LINE
- T- UNDERGROUND TELEPHONE LINE
- C- UNDERGROUND CABLE LINE
- S- UNDERGROUND SANITARY SEWER LINE
- 612.39 EXIST SPOT ELEVATION
- 612.39 EXIST TOP OF CURB ELEVATION
- 612.39 EXIST GUTTER ELEVATION
- 613 PROPOSED CONTOUR
- 614.5 PROPOSED TOP OF CURB ELEVATION
- 614.0 PROPOSED GUTTER ELEVATION
- 614.5 PROPOSED SPOT ELEVATION
- 613 PROPOSED DRAINAGE FLOW DIRECTION
- 613 EXIST CONTOUR
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED INLET PROTECTION
- PROPOSED SILT FENCE
- PROPOSED ROCK BERM
- PROPOSED INTERCEPTOR SWALE
- LIMITS OF DISTURBED AREA



3 INTERCEPTOR SWALE  
NOT TO SCALE



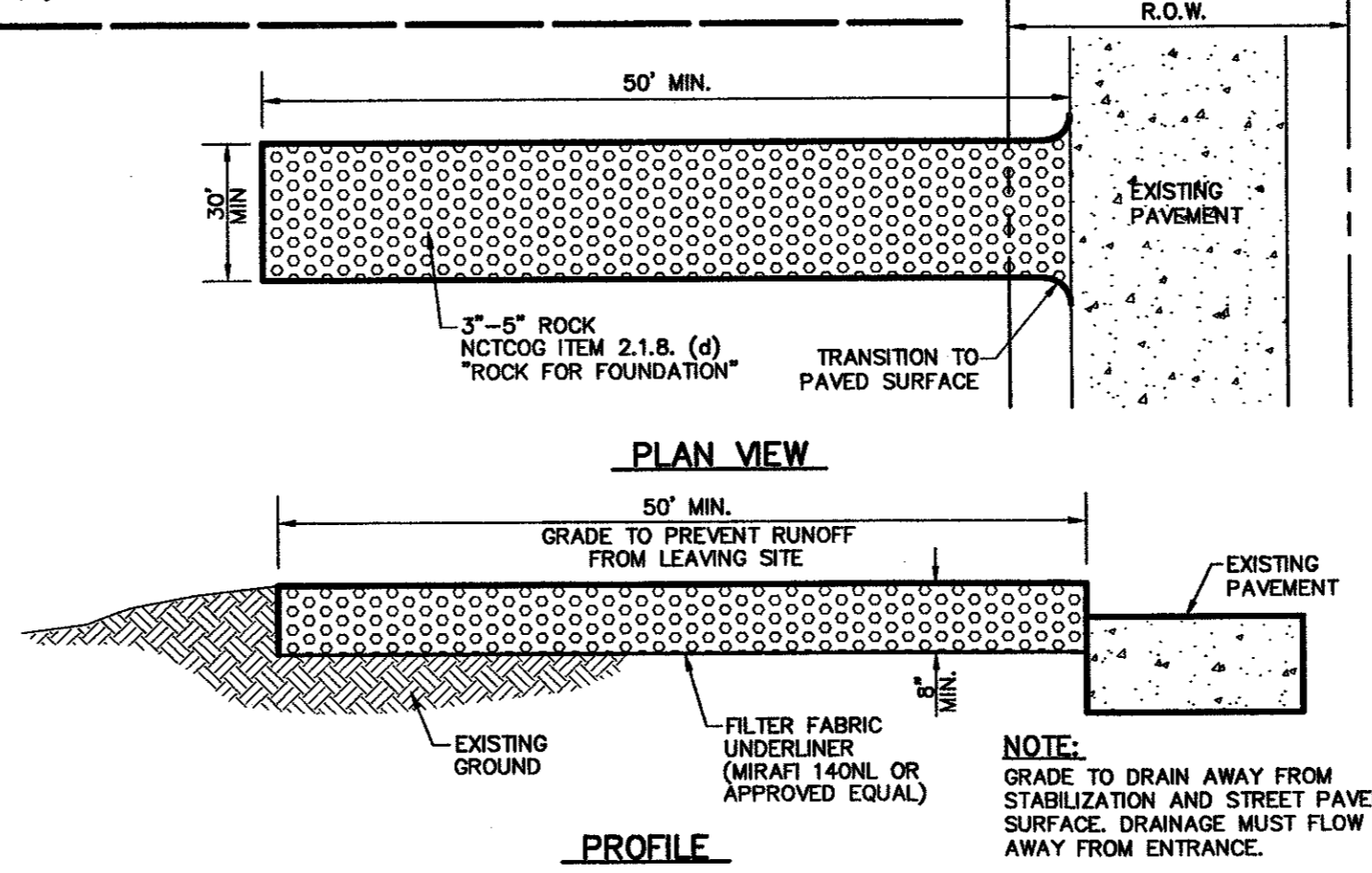
2 CURB INLET PROTECTION TYPE "B"  
NOT TO SCALE



MATCH LINE

POLLUTION CONTROL GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
2. THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
  - A. CLEARING AND GRUBBING
  - B. ROUGH GRADING
  - C. FINAL GRADING
  - D. UTILITY INSTALLATION
  - E. PAVEMENT INSTALLATION
  - F. BUILDING CONSTRUCTION
3. THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 12.5 ACRES.
4. THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.7.
5. THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
6. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS PRIOR TO COMMENCING WORK AND UNTIL THE WORK AREA HAS BEEN STABILIZED.
7. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
8. ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 21 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION.
9. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
10. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
11. A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.
12. CONSTRUCTION SEQUENCING MUST PROVIDE FOR THE EXCAVATION OF AN ON-SITE BASIN AS A SEDIMENT COLLECTION BASIN PRIOR TO THE DISTURBANCE OF GREATER THAN 10 ACRES OF LAND.
13. ALL FINISHED GRADES ARE TO BE HYDROMULCHED, SPOT SODDED OR SEEDED AND WATERED UNTIL GROWTH IS ESTABLISHED ON AND OFF-SITE.
14. A PIT OR WASH OUT BASIN SHALL BE CONSTRUCTED ON-SITE BY THE CONTRACTOR FOR THE "WASH OUT" OF CONCRETE TRUCKS.
15. A BERM OR OTHER SPILL PROTECTION MEASURE SHALL BE USED FOR ANY TEMPORARY FUEL STORAGE TANK ON SITE.
16. IF "SUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
17. TO PREVENT DAMAGE TO VEGETATION IN DOWNSTREAM WATER COURSES, LIMIT ANY PROPOSED LIME STABILIZATION OPERATIONS TO THAT WHICH CAN BE MIXED AND COMPACTED BY THE END OF EACH WORK DAY. GEOTEXTILE FABRIC IS NOT EFFECTIVE IN FILTERING LIME SINCE THE GRAIN SIZE IS SMALLER THAN THE OPENING IN THE FABRIC.
18. VEHICLE PARKING AREAS, STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCLOSED THE AREAS WITH PROTECTIVE MEASURES SHALL BE NECESSARY.
19. STORE ALL TRASH AND BUILDING MATERIALS WASTE IN AN ENCLOSURE UNTIL PROPER DISPOSAL AT OFF-SITE FACILITIES.



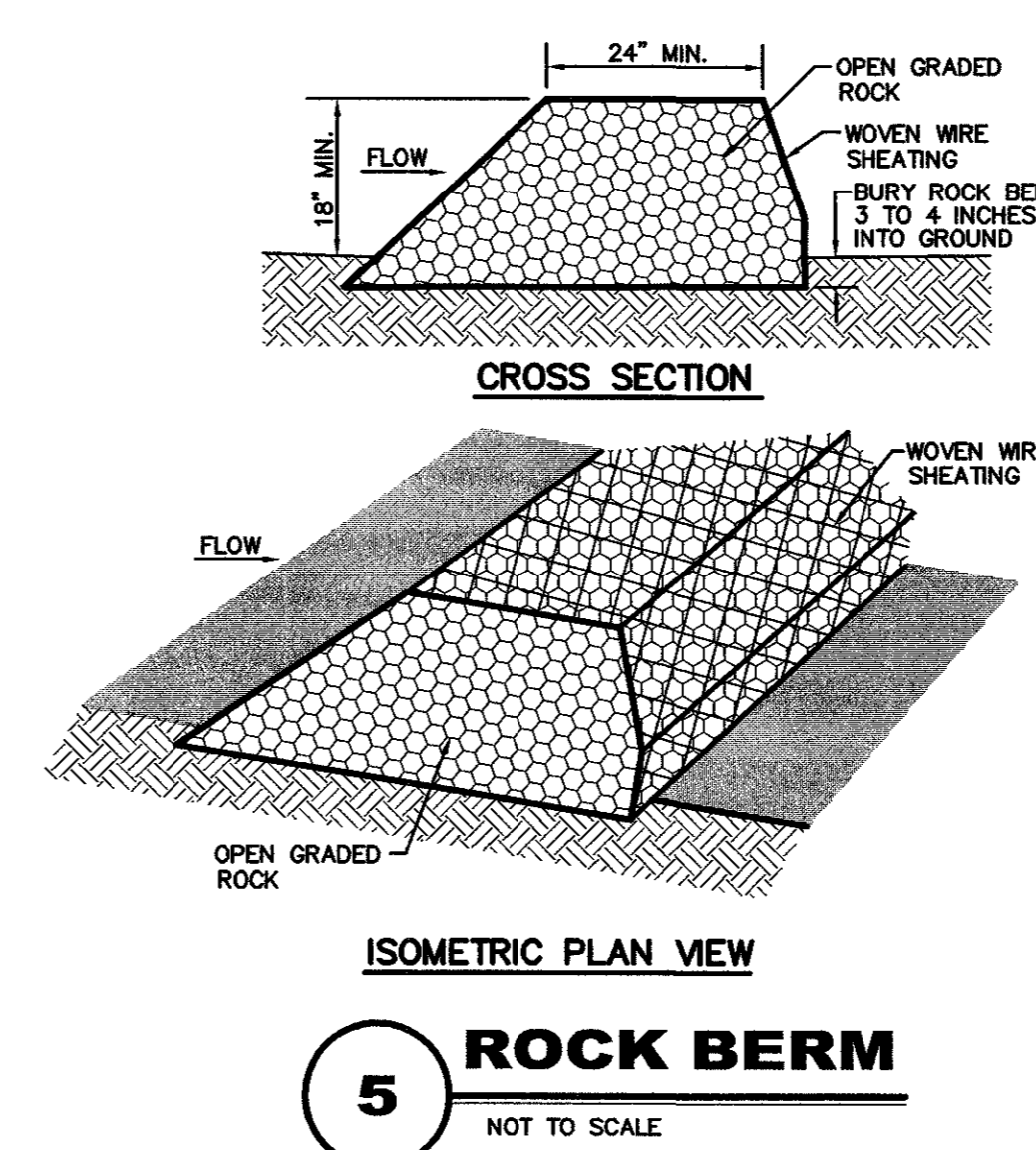
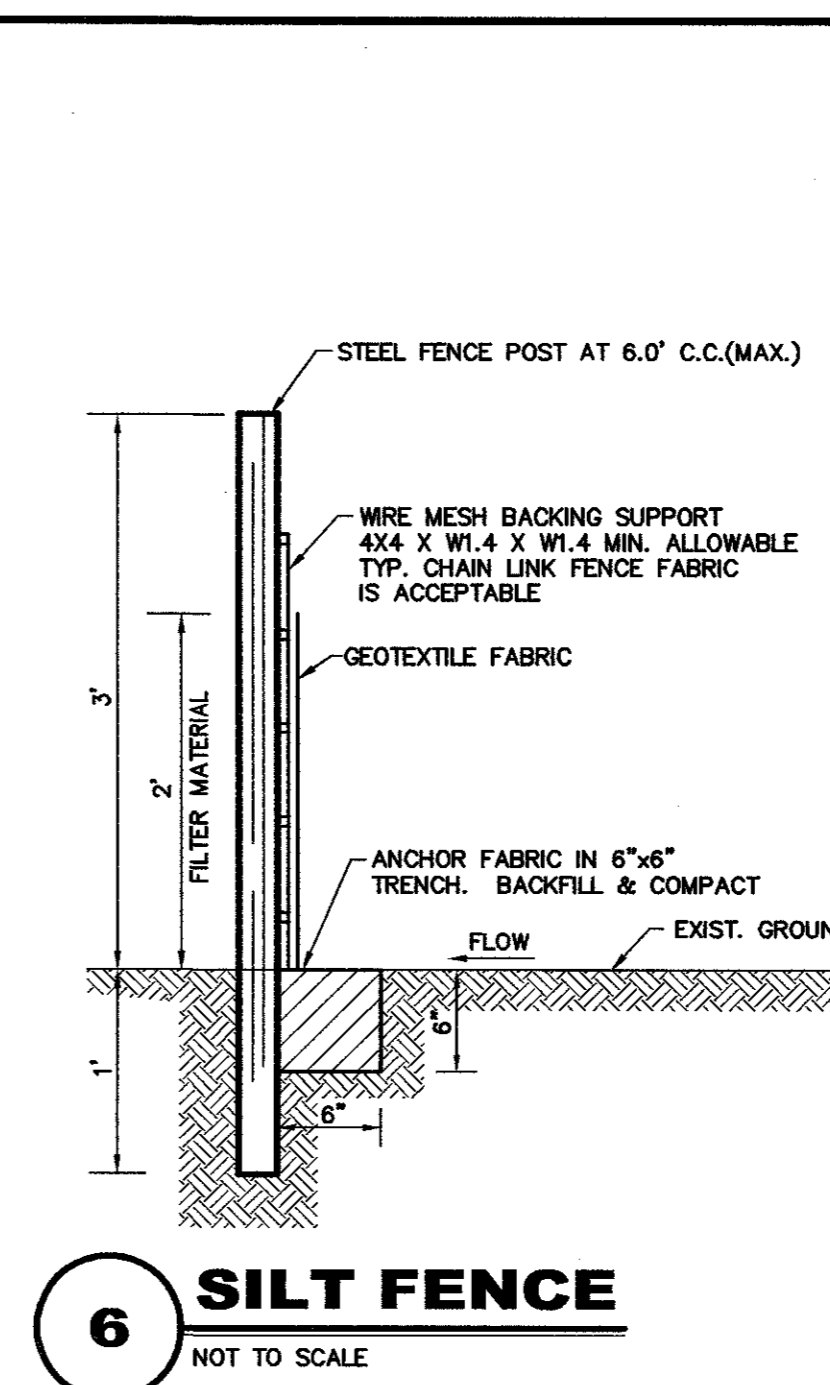
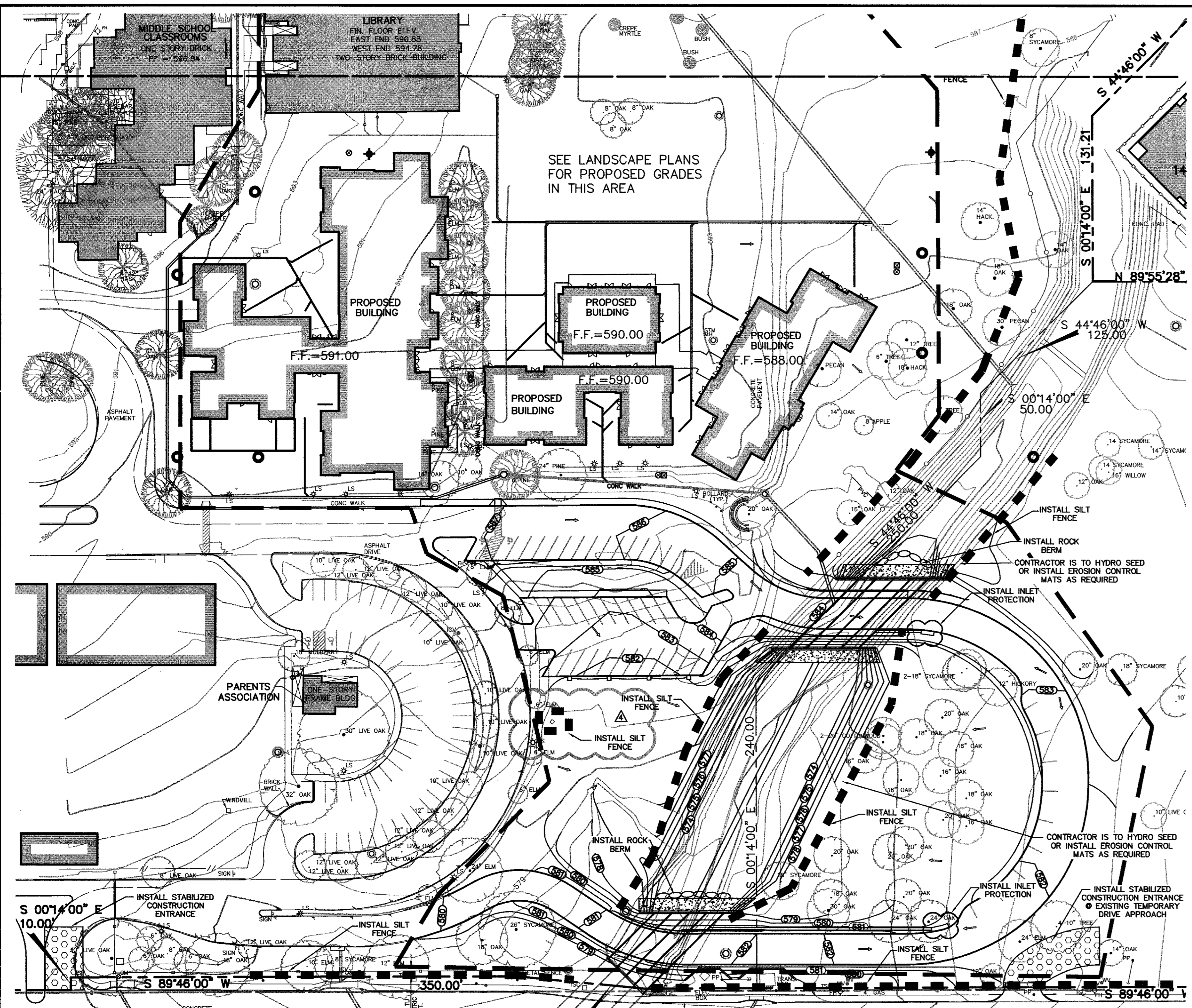
1 STABILIZED CONSTRUCTION ENTRANCE  
NOT TO SCALE

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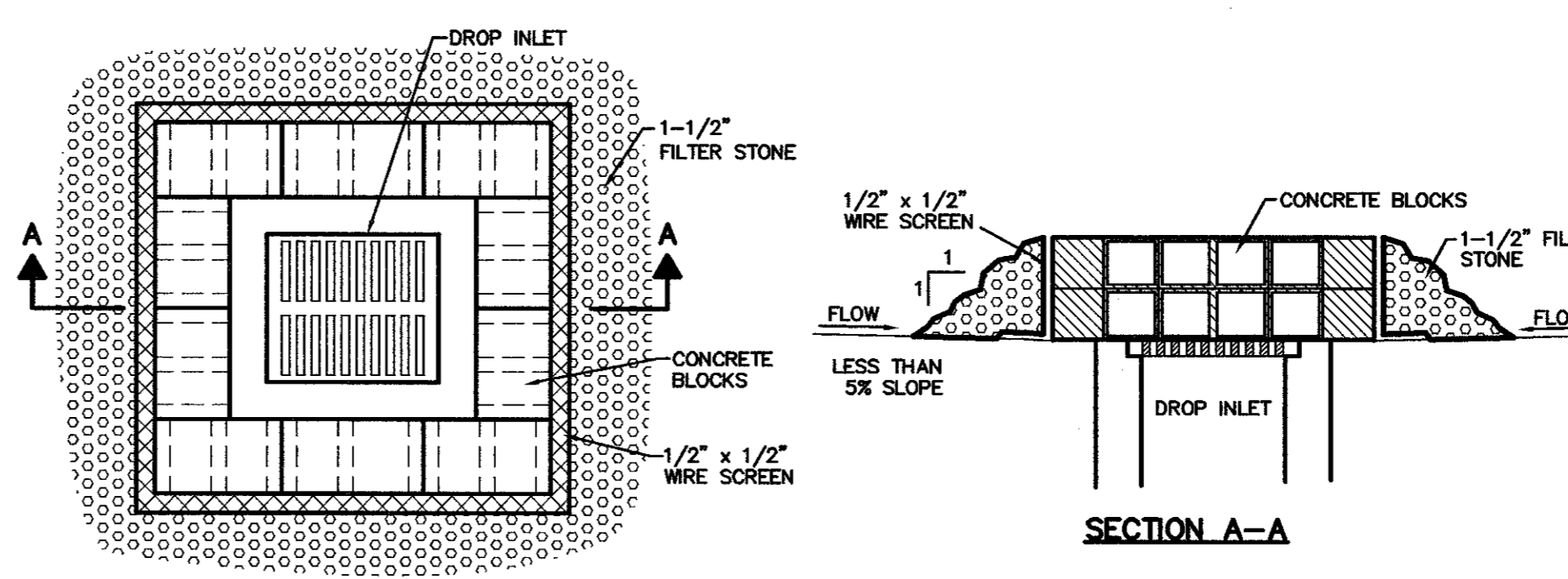
NO.	DATE	REVISION				
<b>Pacheco Koch Consulting Engineers</b> 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031						
<b>EROSION CONTROL PLAN &amp; DETAILS</b> <b>GREENHILL SCHOOL</b> <b>LOT NUMBER, BLOCK NUMBER</b> <b>GREENHILL SCHOOL ADDITION</b> <b>TOWN OF ADDISON, TEXAS</b>						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C7.0</b>

DWG: 04/29/2004 5:37PM  
 DR: XING-101082-03-024CVDWG  
 1082-03.024CVDWG

GREENHILL SCHOOL



- NOTES:
- USE ONLY OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3-5 INCHES IN DIAMETER FOR OTHER CONDITIONS.
  - ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAX. OPENING OF 1 INCH AND A MIN. WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROX. 3 TO 4 INCHES DEEP.
  - THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASED TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS. WASH OUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
  - WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
  - ROCK BERM SHOULD BE USED AS CHECK DAMS FOR CONCENTRATED FLOW AND ARE NOT INTENDED FOR USE IN PERIMETER PROTECTION.



**4 DROP INLET PROTECTION**  
NOT TO SCALE

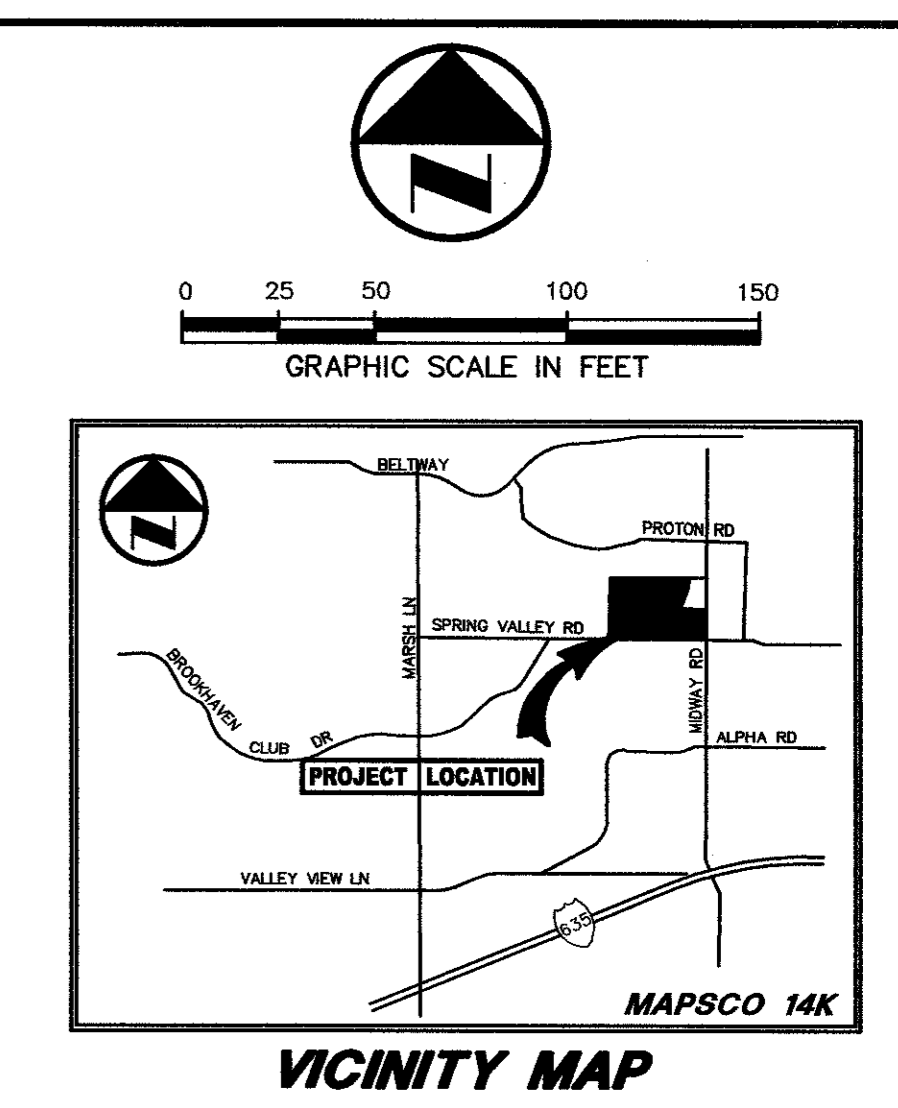
**PRELIMINARY NOT FOR CONSTRUCTION**

THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.

PLANS PREPARED UNDER THE DIRECT SUPERVISION OF STEVEN A. MARKUSSEN, P.E.  
TEXAS REGISTRATION NO. 70090  
DATE: 02/27/2004

**POLLUTION CONTROL GENERAL NOTES**

- THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
- THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
  - CLEARING AND GRUBBING
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  - FINAL GRADING
  - UTILITY INSTALLATION
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  - BUILDING CONSTRUCTION
- THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 12.5 ACRES.
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- THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS PRIOR TO COMMENCING WORK AND UNTIL THE WORK AREA HAS BEEN STABILIZED.
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- A BERM OR OTHER SPILL PROTECTION MEASURE SHALL BE USED FOR ANY TEMPORARY FUEL STORAGE TANK ON SITE.
- IF "SLIMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
- TO PREVENT DAMAGE TO VEGETATION IN DOWNSTREAM WATER COURSES, LIMIT ANY PROPOSED LIME STABILIZATION OPERATIONS TO THAT WHICH CAN BE MIXED AND COMPACTED BY THE END OF EACH WORK DAY. GEOTEXTILE FABRIC IS NOT EFFECTIVE IN FILTERING LIME SINCE THE GRAIN SIZE IS SMALLER THAN THE OPENING IN THE FABRIC.
- VEHICLE PARKING AREAS, STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCIRCLING THE AREAS WITH PROTECTIVE MEASURES SHALL BE NECESSARY.
- STORE ALL TRASH AND BUILDING MATERIALS WASTE IN AN ENCLOSURE UNTIL PROPER DISPOSAL AT OFF-SITE FACILITIES.



**LEGEND**

B	BOLLARD
EM	ELECTRIC METER
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
ICV	IRRIGATION CONTROL VALVE
FR	FIRE HYDRANT
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TSC	TRAFFIC SIGNAL CONTROL
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IRS	1/2-INCH IRON ROD
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U	UNDERGROUND TELEPHONE LINE
C	UNDERGROUND CABLE LINE
6"SS	UNDERGROUND SANITARY SEWER LINE
812.39	EXIST SPOT ELEVATION
TC 812.39	EXIST TOP OF CURB ELEVATION
G 811.92	EXIST GUTTER ELEVATION
613	PROPOSED CONTOUR
TC 814.5	PROPOSED TOP OF CURB ELEVATION
G 814.0	PROPOSED SPOT ELEVATION
EL 814.5	PROPOSED GUTTER ELEVATION
→	PROPOSED DRAINAGE FLOW DIRECTION
613	EXIST CONTOUR
○	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
○	PROPOSED INLET PROTECTION
— — —	PROPOSED SILT FENCE
○ ○ ○	PROPOSED ROCK BERM
→	PROPOSED INTERCEPTOR SWALE
— — —	LIMITS OF DISTURBED AREA

**ISSUED FOR PRELIMINARY PRICING PURPOSES ONLY**  
(SUBJECT TO REVISION PRIOR TO CONSTRUCTION)

THESE DOCUMENTS HAVE BEEN PREPARED BY THE ENGINEER WITH THE INTENT OF COMPLYING WITH ALL CITY STANDARD REQUIREMENTS. THESE DOCUMENTS HAVE NOT BEEN APPROVED AND RELEASED FOR CONSTRUCTION BY THE CITY AS OF THIS DATE AND, THEREFORE, REVISIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION. BY ANY USE OF THESE DOCUMENTS, THE USER AFFIRMS THEIR UNDERSTANDING OF THE PRELIMINARY STATUS OF THE PLANS AND THE POTENTIAL FOR REVISION PRIOR TO ANY CONSTRUCTION.

NO.	DATE	REVISION
△		ADDED SILT FENCE
△	04/30/2004	ADDED STABILIZED ENTRANCE

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

**EROSION CONTROL PLAN & DETAILS**

**GREENHILL SCHOOL**

**GREENHILL SCHOOL ADDITION**

**THOMAS L. CHENOWETH SURVEY, ABSTRACT NO. 273**

**TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BJM	FJM	NOV. 2003	1"=50'			<b>C7.1</b>

DWG: 04/28/2005 - 10:51AM  
 M: DWG-101082-03-024.DWG\1082-03.024CVDWG




# CONSTRUCTION PLANS FOR

# **GREENHILL UPPER SCHOOL ADDITION/ NEW PRE-SCHOOL & LOWER SCHOOL**

## TOWN OF ADDISON, DALLAS COUNTY, TEXAS

FOR

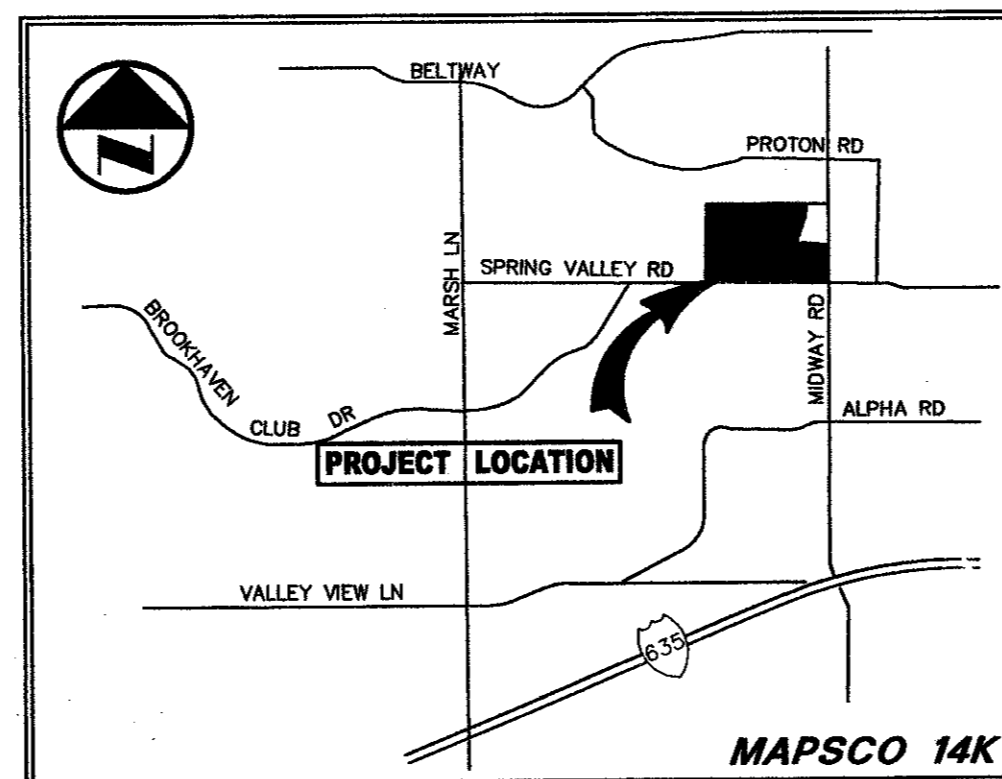

 8350 North Central Expressway  
 Suite 500  
 Dallas, Texas 75206  
 214.559.4851

OWNER/DEVELOPER

Greenhill School  
 4141 Spring Valley Road  
 Addison, TX 75001

PREPARED BY


**Pacheco Koch Consulting Engineers**  
 8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031



**VICINITY MAP**



THE SEAL APPEARING ON THIS DOCUMENT WAS  
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 03/31/2004. ALTERATION OF A SEALED DOCUMENT  
 WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE  
 ENGINEER IS AN OFFENSE UNDER THE TEXAS  
 ENGINEERING PRACTICE ACT.

**CONSTRUCTION SET**  
 ISSUED BY  
 TOWN OF ADDISON  
 PUBLIC WORKS DEPARTMENT  
 NAME: *Steve Chetani* DATE: 5/11/04

DRAWING SHEET INDEX

SHEET	DESCRIPTION
-	REPLAT (SHEET 1 OF 2)
-	REPLAT (SHEET 2 OF 2)
C1.0	DEMOLITION PLAN (SHEET 1 OF 2)
C1.1	DEMOLITION PLAN (SHEET 2 OF 2)
C2.0	DIMENSIONAL CONTROL PLAN (SHEET 1 OF 2)
C2.1	DIMENSIONAL CONTROL PLAN (SHEET 2 OF 2)
C3.0	GRADING PLAN (SHEET 1 OF 2)
C3.1	GRADING PLAN (SHEET 2 OF 2)
C3.2	FLOODPLAIN STUDY MAP
C3.3	FLOODPLAIN STUDY DETAILS (EXISTING CONDITIONS)
C3.4	FLOODPLAIN STUDY DETAILS (PROPOSED CONDITIONS)
C3.5	DRAINAGE PLAN (SHEET 1 OF 2)
C3.6	DRAINAGE PLAN (SHEET 2 OF 2)
C3.7	DRAINAGE PLAN & PROFILE
C4.0	WATER & SEWER PLAN (SHEET 1 OF 2)
C4.1	WATER & SEWER PLAN (SHEET 2 OF 2)
C5.0	WEST PARKING PLAN
C6.0	PAVING PLAN & DETAILS
C7.0	EROSION CONTROL PLAN (SHEET 1 OF 2)
C7.1	EROSION CONTROL PLAN (SHEET 2 OF 2)

**TxDOT STANDARD DETAILS**  
 (PW) PARALLEL WINGS  
 (MC-9-10) MULTIPLE BOX CULVERTS

# CONSTRUCTION PLANS FOR **GREENHILL SCHOOL ADDITION PARKING LOT**

TOWN OF ADDISON, DALLAS COUNTY, TEXAS

**DRAWING SHEET INDEX**

SHEET	DESCRIPTION
C1.0	DIMENSIONAL CONTROL PLAN
C2.0	GRADING PLAN
C3.0	DRAINAGE PLAN
C4.0	PAVING PLAN & DETAILS
C5.0	EROSION CONTROL PLAN & DETAILS

**FOR**

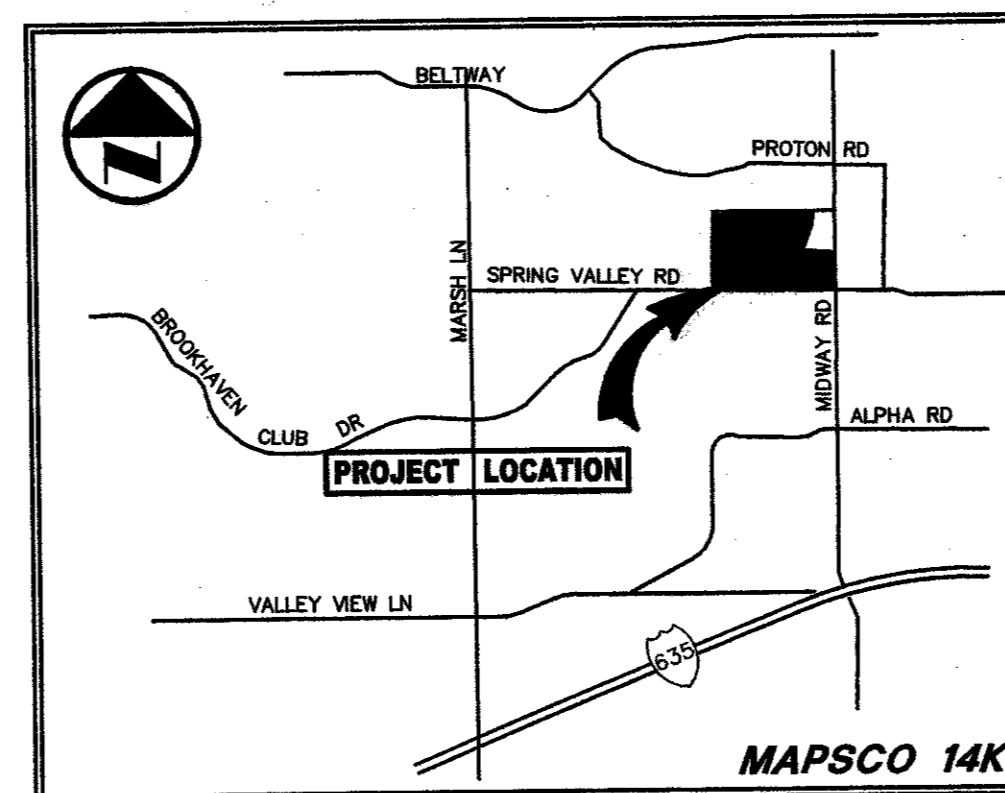
**F&S PARTNERS**  
8350 North Central Expressway  
Suite 500  
Dallas, Texas 75206  
214.559.4851

**OWNER/DEVELOPER**

Greenhill School  
4141 Spring Valley Road  
Addison, TX 75001

**PREPARED BY**

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75208 972.235.3031



**VICINITY MAP**



*Steven A. Markussen*  
5/11/05

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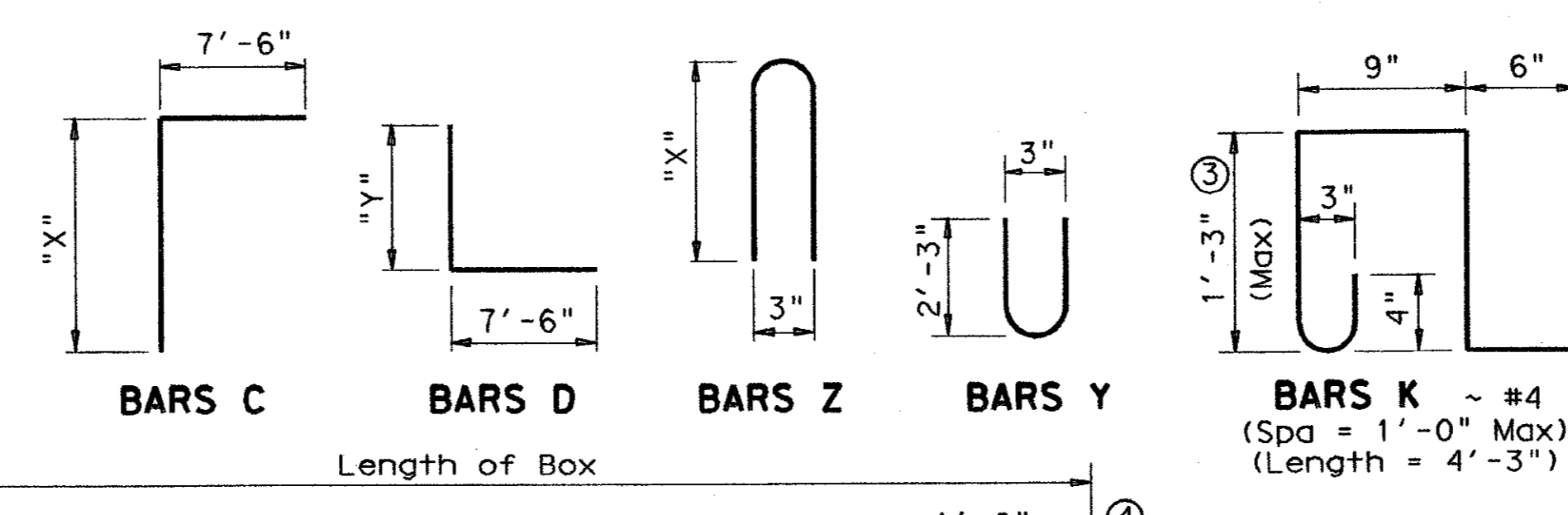
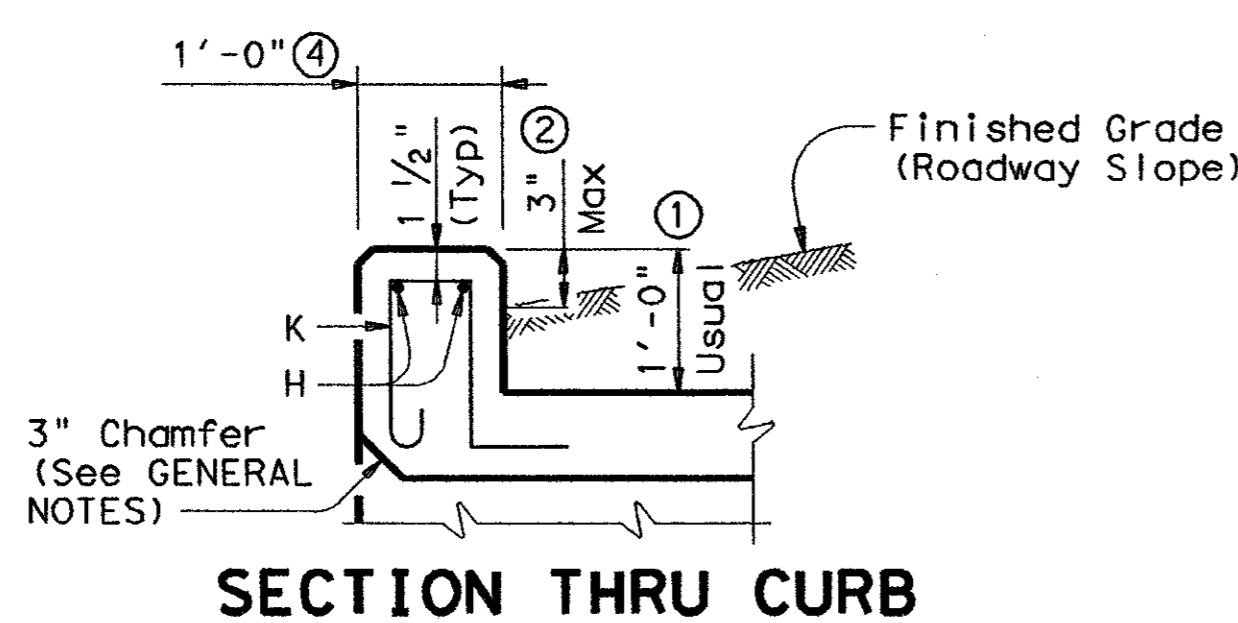
**CONSTRUCTION SET**  
ISSUED BY  
TOWN OF ADDISON  
PUBLIC WORKS DEPARTMENT  
NAME: *Joe Chisham* DATE: *5/15/05*

**BILLS OF REINFORCING STEEL (For Box Length = 40 feet)**

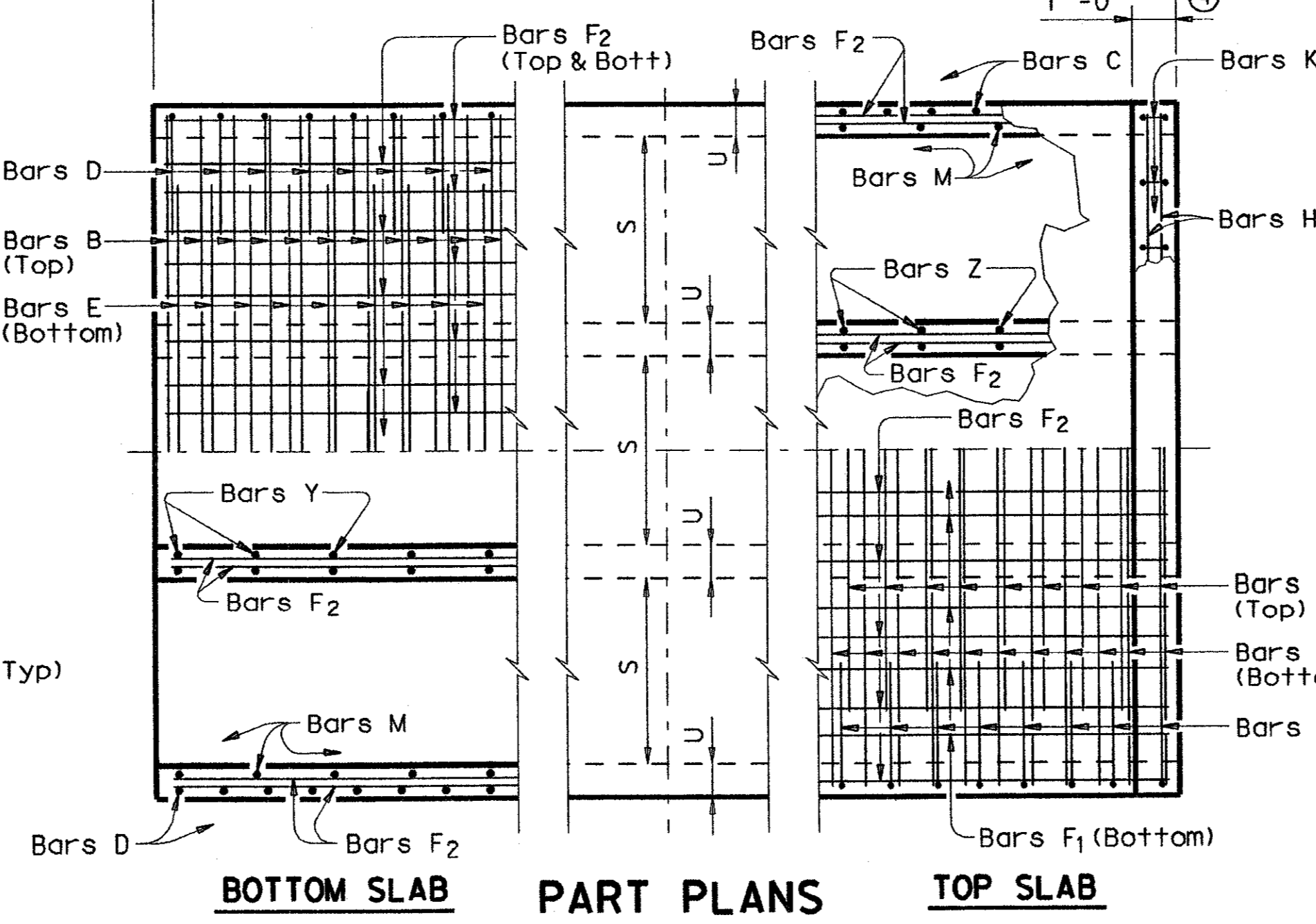
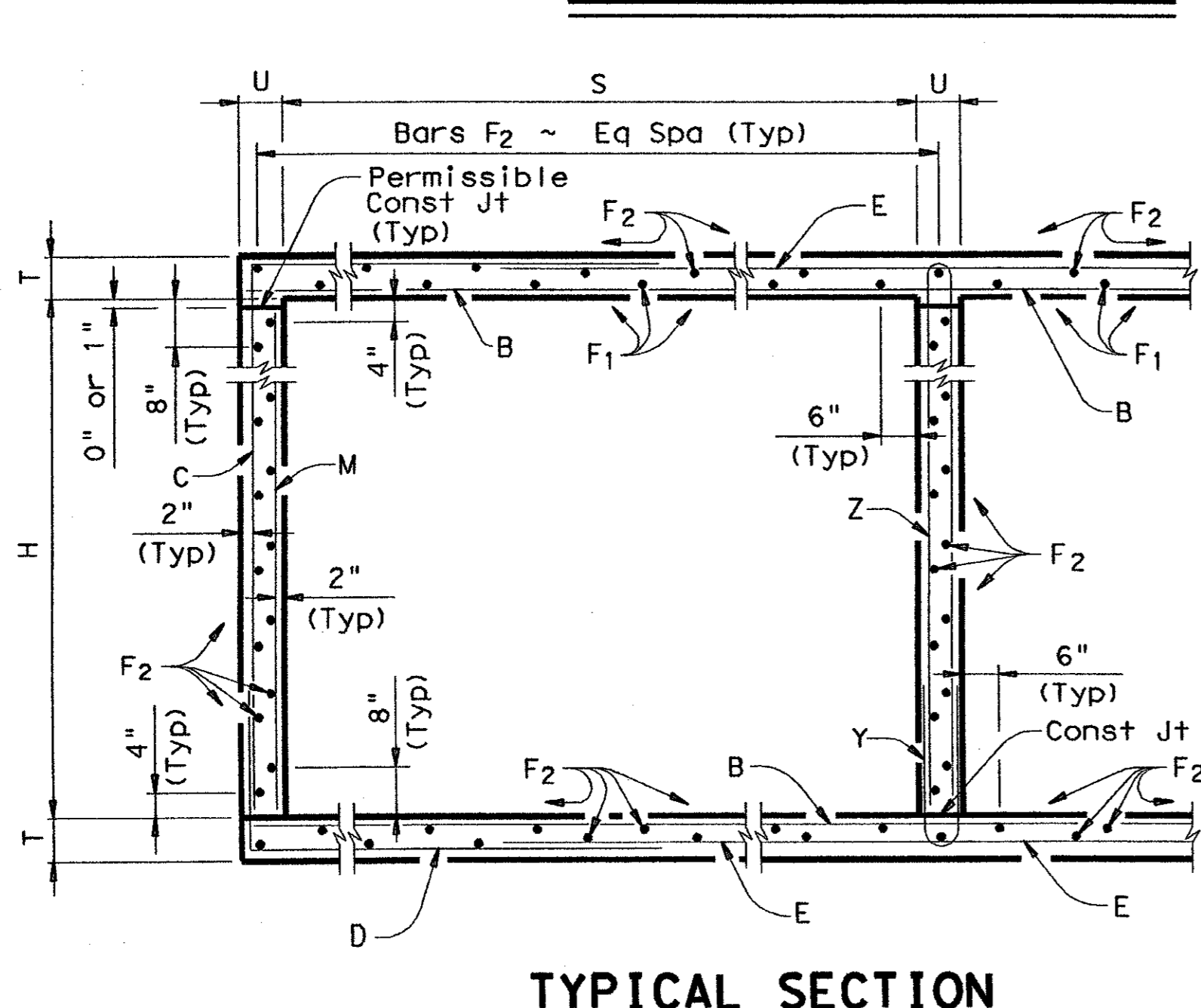
NUMBER OF SPANS	SECTION DIMENSIONS		BILLS OF REINFORCING STEEL (For Box Length = 40 feet)																								QUANTITIES																			
			Bars B				Bars C & D				Bars E		Bars F1 ~#4		Bars F2 ~#4 at 1'-6" Max		Bars M~#4 at 1'-6" Max		Bars Y & Z~#4 at 9" Max				Bars H 4~#4		Bars K		Per foot of Barrel		Curb		Total															
			S	H	T	U	No.	Size	Spa	Length	Wt	No.	Size	Spa	Length	Wt	Length	Wt	No.	Spa	Length	Wt	No.	Spa	Length	Wt	No.	Length	Wt	No.	Length	Wt	No.	Bar Y Length	Bar Y Wt	Bar Z Length	Bar Z Wt	Length	Weight	No.	Weight	Conc (CY)	Reinf (Lb)	Conc (CY)	Reinf (Lb)	Conc (CY)
2	9'-0"	5'-0"	8"	7"	194	#5	5"	19'-6"	3,946	194	#4	5"	13'-0"	1,685	9'-9"	1,264	194	#6	5"	8'-10"	2,574	24	9"	39'-9"	637	68	39'-9"	1,806	56	5'-0"	187	54	4'-8"	168	11'-2"	403	19'-6"	52	42	119	1,299	316.8	1.5	171	53.5	12,841
3	9'-0"	5'-0"	8"	7"	194	#5	5"	29'-1"	5,885	194	#4	5"	13'-0"	1,685	9'-9"	1,264	194	#6	5"	18'-5"	5,366	36	9"	39'-9"	956	97	39'-9"	2,576	56	5'-0"	187	108	4'-8"	337	11'-2"	806	29'-1"	78	60	170	1,881	476.6	2.2	248	77.4	19,310
4	9'-0"	5'-0"	8"	7"	194	#5	5"	38'-8"	7,824	194	#4	5"	13'-0"	1,685	9'-9"	1,264	194	#6	5"	28'-0"	8,159	48	9"	39'-9"	1,275	126	39'-9"	3,346	56	5'-0"	187	162	4'-8"	505	11'-2"	1,208	38'-8"	103	80	227	2,462	636.3	2.9	330	101.4	25,783
5	9'-0"	5'-0"	8"	7"	194	#5	5"	48'-3"	9,763	194	#4	5"	13'-0"	1,685	9'-9"	1,264	194	#6	5"	37'-7"	10,951	60	9"	39'-9"	1,593	155	39'-9"	4,116	56	5'-0"	187	216	4'-8"	673	11'-2"	1,611	48'-3"	129	100	284	3,043	796.1	3.6	413	125.3	32,256
6	9'-0"	5'-0"	8"	7"	194	#5	5"	57'-10"	11,702	194	#4	5"	13'-0"	1,685	9'-9"	1,264	194	#6	5"	47'-2"	13,744	72	9"	39'-9"	1,912	184	39'-9"	4,886	56	5'-0"	187	270	4'-8"	842	11'-2"	2,014	57'-10"	155	118	335	3,624	955.9	4.3	490	149.3	38,726
2	9'-0"	6'-0"	8"	7"	194	#5	5"	19'-6"	3,946	194	#4	5"	14'-0"	1,814	9'-9"	1,264	194	#6	5"	8'-10"	2,574	24	9"	39'-9"	637	74	39'-9"	1,965	56	6'-0"	224	54	4'-8"	168	13'-2"	475	19'-6"	52	42	119	1,364	326.7	1.5	171	56.1	13,238
3	9'-0"	6'-0"	8"	7"	194	#5	5"	29'-1"	5,885	194	#4	5"	14'-0"	1,814	9'-9"	1,264	194	#6	5"	18'-5"	5,366	36	9"	39'-9"	956	105	39'-9"	2,788	56	6'-0"	224	108	4'-8"	337	13'-2"	950	29'-1"	78	60	170	1,967	489.6	2.2	248	80.9	19,832
4	9'-0"	6'-0"	8"	7"	194	#5	5"	38'-8"	7,824	194	#4	5"	14'-0"	1,814	9'-9"	1,264	194	#6	5"	28'-0"	8,159	48	9"	39'-9"	1,275	136	39'-9"	3,611	56	6'-0"	224	162	4'-8"	505	13'-2"	1,245	38'-8"	103	80	227	2,570	652.5	2.9	330	105.7	26,431
5	9'-0"	6'-0"	8"	7"	194	#5	5"	48'-3"	9,763	194	#4	5"	14'-0"	1,814	9'-9"	1,264	194	#6	5"	37'-7"	10,951	60	9"	39'-9"	1,593	167	39'-9"	4,434	56	6'-0"	224	216	4'-8"	673	13'-2"	1,900	48'-3"	129	100	284	3,173	815.4	3.6	413	130.5	33,029
6	9'-0"	6'-0"	8"	7"	194	#5	5"	57'-10"	11,702	194	#4	5"	14'-0"	1,814	9'-9"	1,264	194	#6	5"	47'-2"	13,744	72	9"	39'-9"	1,912	198	39'-9"	5,257	56	6'-0"	224	270	4'-8"	842	13'-2"	2,375	57'-10"	155	118	335	3,776	978.4	4.3	490	155.3	39,624
2	9'-0"	7'-0"	8"	7"	194	#5	5"	19'-6"	3,946	162	#5	6"	15'-0"	2,534	10'-2"	1,718	194	#6	5"	8'-10"	2,574	24	9"	39'-9"	637	74	39'-9"	1,965	56	7'-0"	262	54	4'-8"	168	15'-2"	547	19'-6"	52	42	119	1,429	358.8	1.5	171	58.7	14,522
3	9'-0"	7'-0"	8"	7"	194	#5	5"	29'-1"	5,885	162	#5	6"	15'-0"	2,534	10'-2"	1,718	194	#6	5"	18'-5"	5,366	36	9"	39'-9"	956	105	39'-9"	2,788	56	7'-0"	262	108	4'-8"	337	15'-2"	1,094	29'-1"	78	60	170	2,053	523.5	2.2	248	84.3	21,188
4	9'-0"	7'-0"	8"	7"	194	#5	5"	38'-8"	7,824	162	#5	6"	15'-0"	2,534	10'-2"	1,718	194	#6	5"	28'-0"	8,159	48	9"	39'-9"	1,275	136	39'-9"	3,611	56	7'-0"	262	162	4'-8"	505	15'-2"	1,641	38'-8"	103	80	227	2,678	688.2	2.9	330	110.0	27,859
5	9'-0"	7'-0"	8"	7"	194	#5	5"	48'-3"	9,763	162	#5	6"	15'-0"	2,534	10'-2"	1,718	194	#6	5"	37'-7"	10,951	60	9"	39'-9"	1,593	167	39'-9"	4,434	56	7'-0"	262	216	4'-8"	673	15'-2"	2,188	48'-3"	129	100	284	3,302	852.9	3.6	413	135.7	34,529
6	9'-0"	7'-0"	8"	7"	194	#5	5"	57'-10"	11,702	162	#5	6"	15'-0"	2,534	10'-2"	1,718	194	#6	5"	47'-2"	13,744	72	9"	39'-9"	1,912	198	39'-9"	5,257	56	7'-0"	262	270	4'-8"	842	15'-2"	2,735	57'-10"	155	118	335	3,927	1,017.7	4.3	490	161.4	41,196
2	9'-0"	8'-0"	8"	7"	194	#5	5"	19'-6"	3,946	162	#5	6"	16'-0"	2,703	10'-2"	1,718	194	#6	5"	8'-10"	2,574	24	9"	39'-9"	637	80	39'-9"	2,124	56	8'-0"	299	54	4'-8"	168	17'-2"	619	19'-6"	52	42	119	1,494	369.7	1.5	171	61.3	14,959
3	9'-0"	8'-0"	8"	7"	194	#5	5"	29'-1"	5,885	162	#5	6"	16'-0"	2,703	10'-2"	1,718	194	#6	5"	18'-5"	5,366	36	9"	39'-9"	956	113	39'-9"	3,000	56	8'-0"	299	108	4'-8"	337	17'-2"	1,238	29'-1"	78	60	170	2,140	537.6	2.2	248	87.8	21,750
4	9'-0"	8'-0"	8"	7"	194	#5	5"	38'-8"	7,824	162	#5	6"	16'-0"	2,703	10'-2"	1,718	194	#6	5"	28'-0"	8,159	48	9"	39'-9"	1,275	146	39'-9"	3,877	56	8'-0"	299	162	4'-8"	505	17'-2"	1,858	38'-8"	103	80	227	2,786	705.5	2.9	330	114.3	28,548
5	9'-0"	8'-0"	8"	7"	194	#5	5"	48'-3"	9,763	162	#5	6"	16'-0"	2,703	10'-2"	1,718	194	#6	5"	37'-7"	10,951	60	9"	39'-9"	1,593	179	39'-9"	4,753	56	8'-0"	299	216	4'-8"	673	17'-2"	2,477	48'-3"	129	100	284	3,432	873.3	3.6	413	140.9	35,343
6	9'-0"	8'-0"	8"	7"	194	#5	5"	57'-10"	11,702	162	#5	6"	16'-0"	2,703	10'-2"	1,718	194	#6	5"	47'-2"	13,744	72	9"	39'-9"	1,912	212	39'-9"	5,629	56	8'-0"	299	270	4'-8"	842	17'-2"	3,096	57'-10"	155	118	335	4,078	1,041.1	4.3	490	167.4	42,135
2	9'-0"	9'-0"	8"	7"	194	#5	5"	19'-6"	3,946	194	#5	5"	17'-0"	3,440	10'-2"	2,057	194	#6	5"	8'-10"	2,574	24	9"	39'-9"	637	86	39'-9"	2,284	56	9'-0"	337	54	4'-8"	168	19'-2"	691	19'-6"	52	42	119	1,559	403.4	1.5	171	63.9	16,305
3	9'-0"	9'-0"	8"	7"	194	#5	5"	29'-1"	5,885	194	#5	5"	17'-0"	3,440	10'-2"	2,057	194	#6	5"	18'-5"	5,366	36	9"	39'-9"	956	121	39'-9"	3,213	56	9'-0"	337	108	4'-8"	337	19'-2"	1,383	29'-1"	78	60	170	2,226	574.4	2.2	248	91.2	23,222
4	9'-0"	9'-0"	8"	7"	194	#5	5"	38'-8"	7,824	194	#5	5"	17'-0"	3,440	10'-2"	2,057	194	#6	5"	28'-0"	8,159	48	9"	39'-9"	1,275	156	39'-9"	4,142	56	9'-0"	337	162	4'-8"	505	19'-2"	2,074	38'-8"	103	80	227	2,894	745.3	2.9	330	118.7	30,143
5	9'-0"	9'-0"	8"	7"	194	#5	5"	48'-3"	9,763	194	#5	5"	17'-0"	3,440	10'-2"	2,057	194	#6	5"	37'-7"	10,951	60	9"	39'-9"	1,593	191	39'-9"	5,072	56	9'-0"	337	216	4'-8"	673	19'-2"	2,766	48'-3"	129	100	284	3,562	916.3	3.6	413	146.1	37,065
6	9'-0"	9'-0"	8"	7"	194	#5	5"	57'-10"	11,702	194	#5	5"	17'-0"	3,440	10'-2"	2,057	194	#6	5"	47'-2"	13,744	72	9"	39'-9"	1,912	226	39'-9"	6,001	56	9'-0"	337	270	4'-8"	842	19'-2"	3,457	57'-10"	155	118	335	4,229	1,087.3	4.3	490	173.5	43,982

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

H	Bar Dimensions	
	"X"	"Y"
5'-0"	5'-6"	2'-3"
6'-0"	6'-6"	2'-3"
7'-0"	7'-6"	2'-8"
8'-0"	8'-6"	2'-8"
9'-0"	9'-6"	2'-8"



**GENERAL NOTES:**  
 Designed according to current AASHTO Standard and Interim Specifications. Designed to the maximum fill height shown. All reinforcing steel shall be Grade 60. All concrete shall be Class "C" with these exceptions: use Class "S" for top slabs of culverts with overlay, with 1-to-2 course surface treatment, or with the top slab as the final riding surface. Class "C" concrete shall have a minimum compressive strength of 3600 psi. Class "S" concrete shall have a minimum compressive strength of 4000 psi. The bottom edge of the top slab shall be chamfered 3" at the entrance. Reinforcing bars shall be adjusted to provide a minimum of 1 1/4" clear cover. Construction joints shown at the flow line may be raised a maximum of 6" at the Contractor's option. If this option is used, Bars M may be cut off or raised, Bars C and D may be reversed, and Bars Y and Z may be reversed. See standard MC-MD for skewed ends, angle sections and lengthening details.



- 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures without railing and curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with bridge rail, other than T6, refer to RAC standard.
- For vehicle safety, the following requirements must be met:
  - For structures without bridge rail, curbs shall project no more than 3" above finished grade.
  - For structures with bridge rail, curbs shall be flush with finished grade. Curb heights shall be reduced, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- For curbs less than 1'-0" high, tilt bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, bars K may be omitted.
- 1'-0" typical, 2'-0" when RAC standard is referred to elsewhere in the plans.

**HS20 LOADING**

Texas Department of Transportation  
 Bridge Division

**MULTIPLE BOX CULVERTS  
 CAST-IN-PLACE  
 9'-0" SPAN  
 0' TO 10' FILL**

**MC-9-10**

FILE: mc910ste.dgn	DW: GAF	CK: LMM	DW: BWH/TXDOT	CK: GAF
© TxDOT December 2003		DISTRICT		FEDERAL AID PROJECT
REVISIONS				
COUNTY	CONTROL	SECT	JOB	HIGHWAY



**TABLE OF DIMENSIONS & REINFORCING STEEL**  
(Wings for One Structure End)

Dimensions					Variable Reinforcing				Estimated Quantities per ft of wing (2-Wings)		Estimated Quantities per ft of Toewall (1-Toewall)	
Maximum Wingwall Height Hw	W	X	Y	Z	Bars J1		Bars J2		Reinf (Lb/Ft)	Conc (CY/Ft)	Reinf (Lb/Ft)	Conc (CY/Ft)
					Size	Spa	Size	Spa				
2'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	43.13	0.406	6.85	0.071
2'-9"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	43.80	0.424	6.85	0.071
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	44.47	0.444	6.85	0.071
3'-3"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	47.81	0.462	6.85	0.071
3'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	48.48	0.480	6.85	0.071
4'-0"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	50.26	0.532	6.85	0.071
4'-6"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	54.27	0.568	6.85	0.071
5'-0"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	57.94	0.632	6.96	0.075
5'-6"	3'-9"	1'-7"	1'-2"	7"	#4	1'-0"	#4	1'-0"	61.95	0.668	6.96	0.075
6'-0"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	75.16	0.730	7.07	0.078
6'-6"	4'-4"	2'-0"	1'-4"	7"	#5	1'-0"	#5	1'-0"	79.54	0.768	7.07	0.078
7'-0"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	86.65	0.864	8.07	0.093
7'-6"	5'-0"	2'-3"	1'-9"	8"	#5	1'-0"	#5	1'-0"	91.03	0.902	8.07	0.093
8'-0"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	133.54	0.962	8.13	0.095
8'-6"	5'-6"	2'-8"	1'-10"	8"	#5	6"	#5	6"	138.96	1.000	8.13	0.095
9'-0"	6'-0"	2'-10"	2'-2"	9"	#5	6"	#5	6"	151.43	1.136	8.41	0.110
10'-6"	6'-5"	3'-0"	2'-5"	9"	#6	6"	#5	6"	190.76	1.234	8.57	0.117
11'-6"	7'-2"	3'-6"	2'-8"	11"	#6	6"	#6	6"	224.62	1.438	9.52	0.140
12'-6"	7'-8"	3'-9"	2'-11"	1'-0"	#7	6"	#6	6"	277.90	1.592	9.74	0.157
13'-6"	8'-2"	4'-0"	3'-2"	1'-2"	#8	6"	#6	6"	343.21	1.804	10.02	0.186
14'-6"	8'-10"	4'-5"	3'-5"	1'-4"	#9	6"	#6	6"	427.43	2.046	10.30	0.218
15'-6"	9'-6"	4'-10"	3'-8"	1'-6"	#9	6"	#7	6"	484.01	2.302	11.24	0.253
16'-0"	9'-11"	5'-0"	3'-11"	1'-7"	#9	6"	#7	6"	500.21	2.448	11.47	0.279

**TABLE OF WINGWALL REINFORCING (2-Wings)**

Bar	Size	No.	Spa
D1	#5	~	1'-0"
D2	#5	~	1'-0"
E1	#4	~	1'-0"
F	#4	~	1'-0"
G	#5	~	1'-0"
M1	#4	4	~
P	#4	~	1'-0"
V	#4	~	1'-0"

**TABLE OF TOEWALL REINFORCING**

Bar	Size	No.	Spa
J3	#4	~	1'-0"
M2	#4	2	~
E2	#4	~	1'-0"

**WING DIMENSION CALCULATIONS:**

Formulas: (All values are in Feet)  
 $H_w = H + T + C$   
 $L_w = (H_w) (SL) \div \text{Cosine } (\phi)$   
 For Cast-in-place culverts:  
 $L_{tw} = [(N) (S) + (N + 1) (U)] \div (\text{Cosine } \phi)$   
 For Precast culverts:  
 $L_{tw} = [(N) (2U + S) + (N - 1) (0.5'U)] \div (\text{Cosine } \phi)$   
 Total Wingwall Area (Two Wings ~ S.F.)  
 $= (2) (H_w) (L_w)$

$H_w$  = Height of Wingwall  
 $L_w$  = Length of Wingwall  
 $L_{tw}$  = Culvert Toewall Length  
 $N$  = Number of Culvert Spans  
 $SL:1$  = Channel Slope ratio. (Horizontal: 1 Vertical, Usual value is 2:1)  
 $\phi$  = Culvert Skew

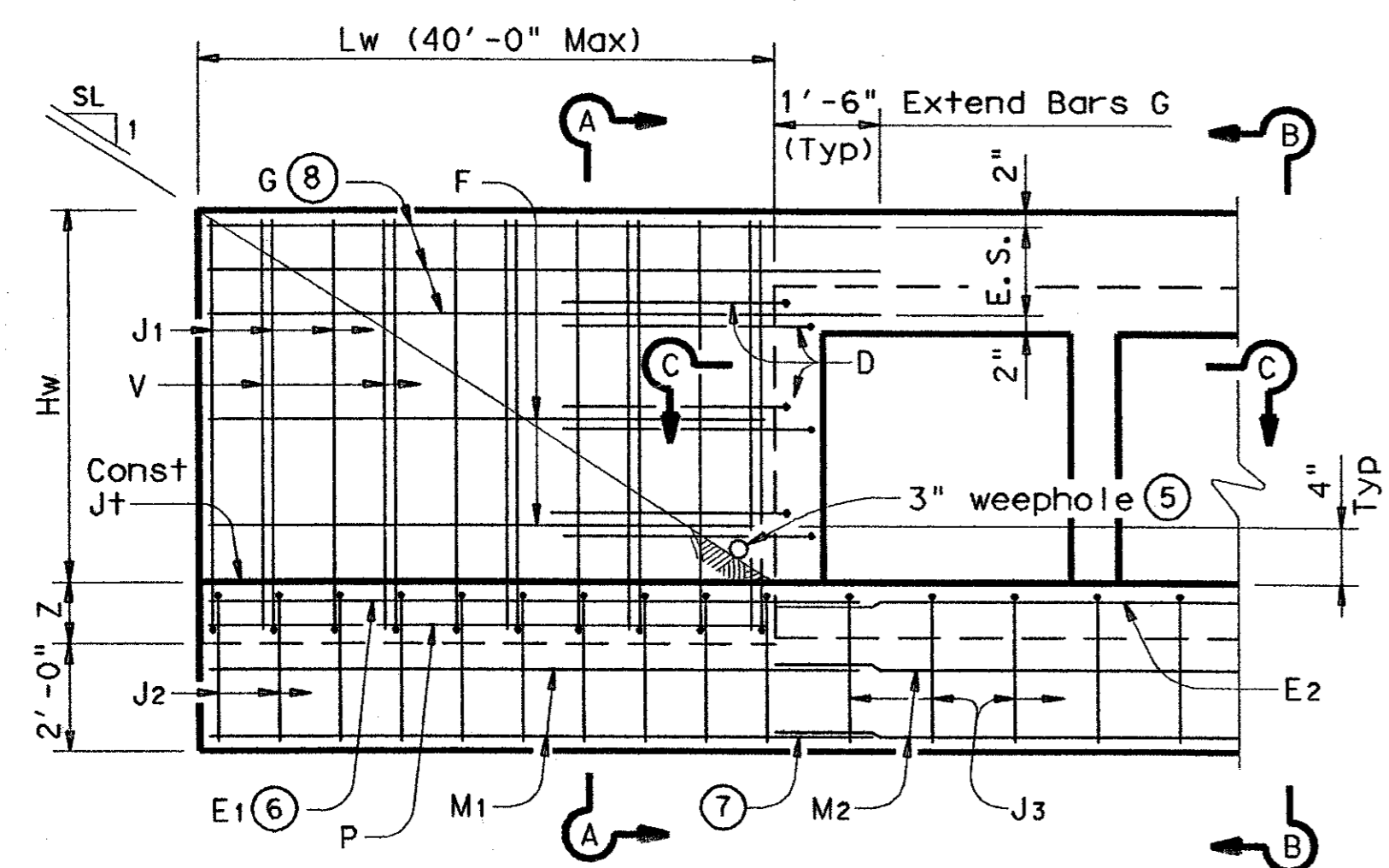
See applicable box culvert standard for S, H, T and U values.

- Skew Angle = 0°
- At discharge end, chamfer may be 3/4".
- For 15° Skew ~ 1"  
For 30° Skew ~ 2"  
For 45° Skew ~ 3"
- Quantities shown are for two wings. To determine total quantities for two wings, multiply the tabulated values by Lw.
- Provide weepholes for Hw = 5'-0" and greater. Fill around weepholes with coarse gravel.
- Extend Bars E1 1'-6" minimum into the bottom slab of the culvert.
- Lap Bars M1 1'-6" minimum with Bars M2.
- Bars G shall be equally spaced at 1'-0" maximum, placed as shown. There shall be at least 4 Bars G per wing.
- 0" min to 5'-0" max. For T6 or C6 Rail, see T6-CM standard for additional details. For all other rail types, refer to the RAC standard. For curbs without rail and greater than 1'-0" high, see ECD standard for additional details. Estimated curb heights are shown elsewhere in the plans.
- For vehicle safety, the following requirements must be met:  
 - For structures without bridge rail, curbs shall project no more than 3" above finished grade.  
 - For structures with bridge rail, curbs shall be flush with finished grade.  
 Curb heights shall be reduced, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- 1'-0" typical. 2'-0" typical when RAC standard is referenced elsewhere in the plans.

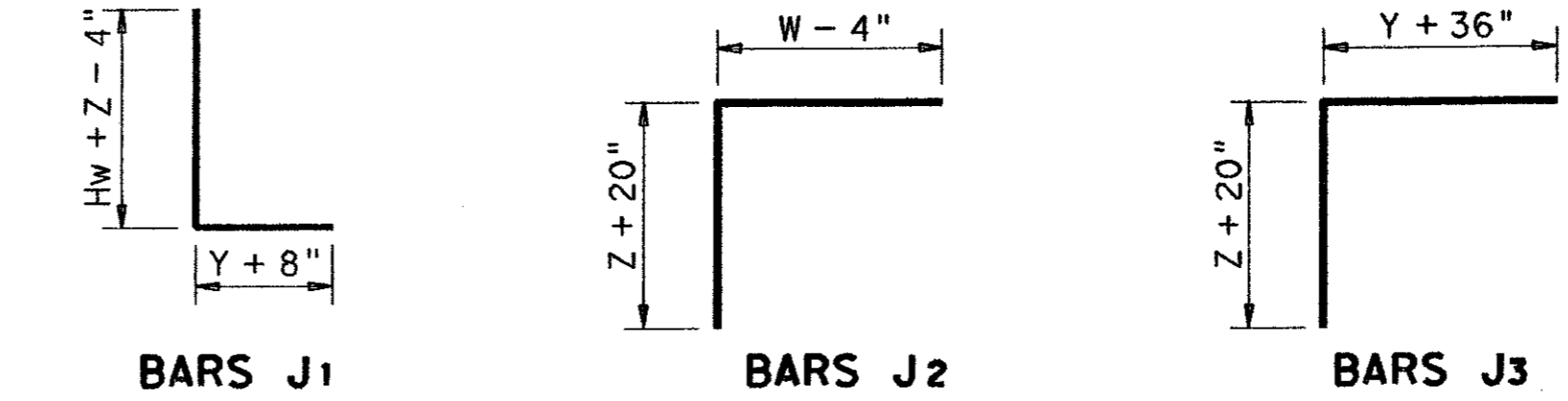
**GENERAL NOTES:**

Designed according to current AASHTO Standard and Interim Specifications.  
 All reinforcing steel shall be Grade 60.  
 All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.  
 All reinforcing bars shall be adjusted to provide a minimum of 1 1/4" clear cover.  
 When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer.  
 See BCS sheet for additional dimensions and information.  
 The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

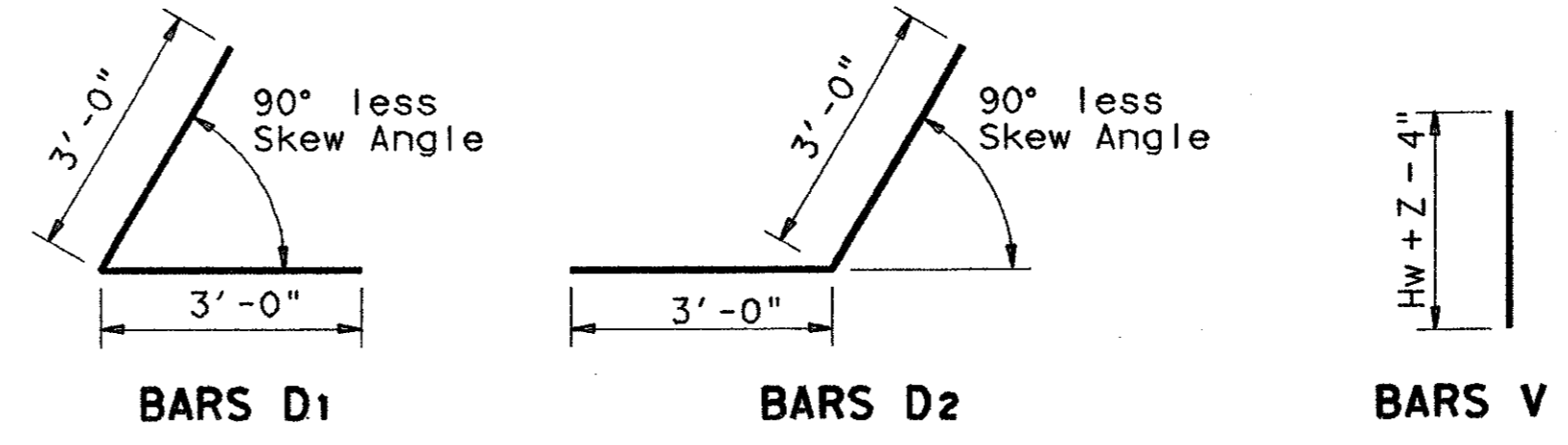
DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



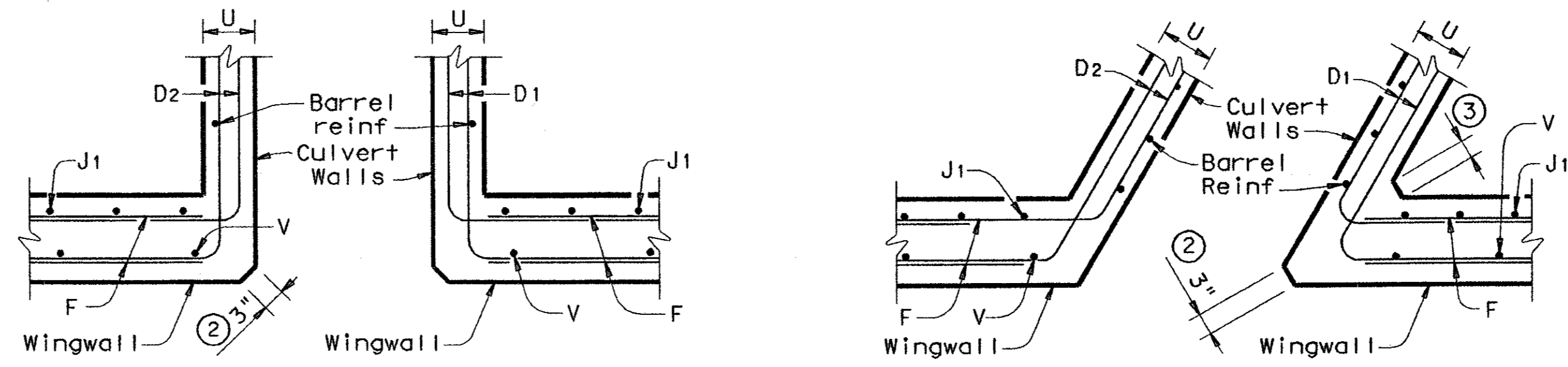
**PARTIAL ELEVATION**



**BARS J1 BARS J2 BARS J3**

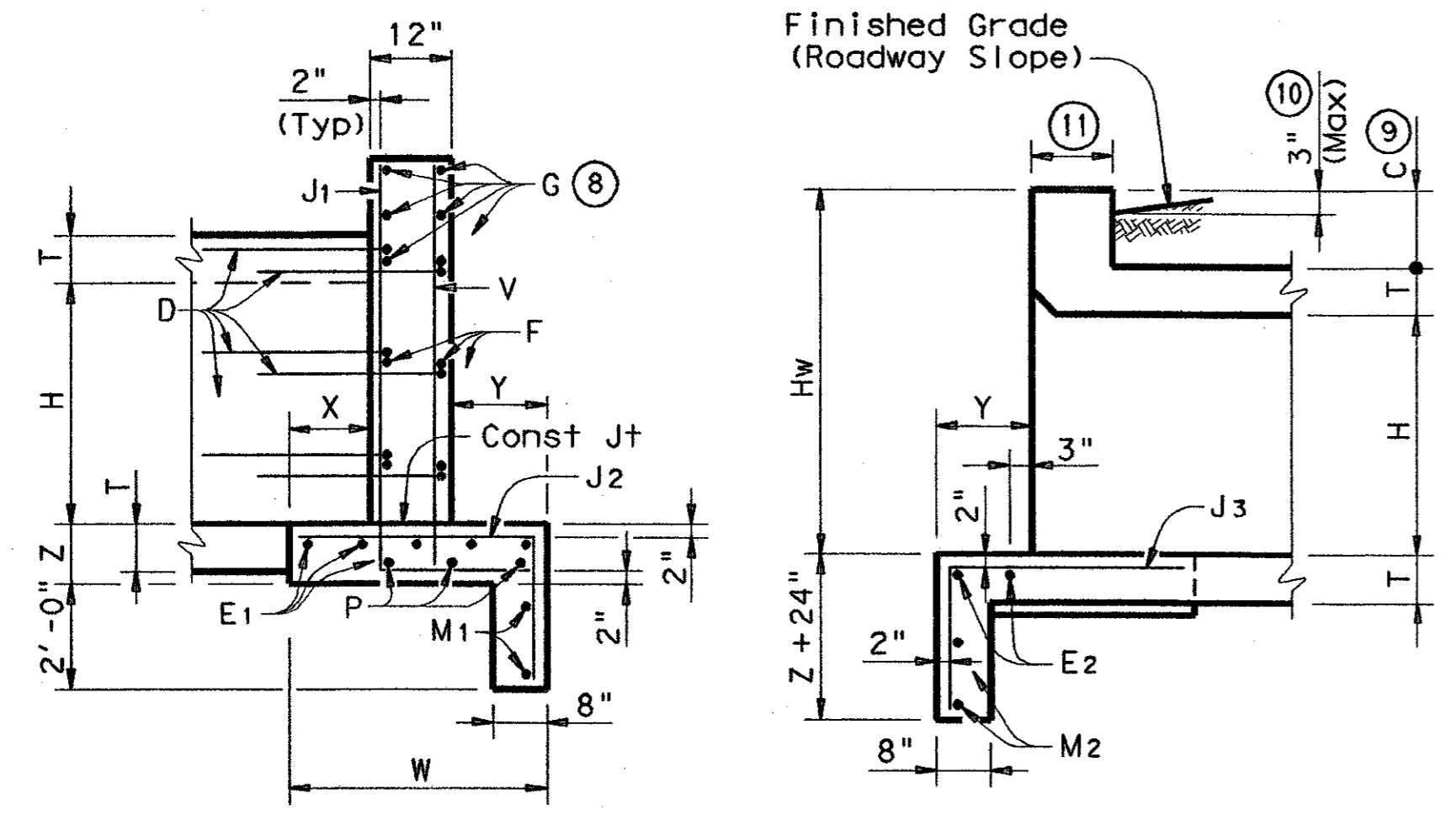


**BARS D1 BARS D2 BARS V**



**SECTION C-C**

**SECTION C-C**

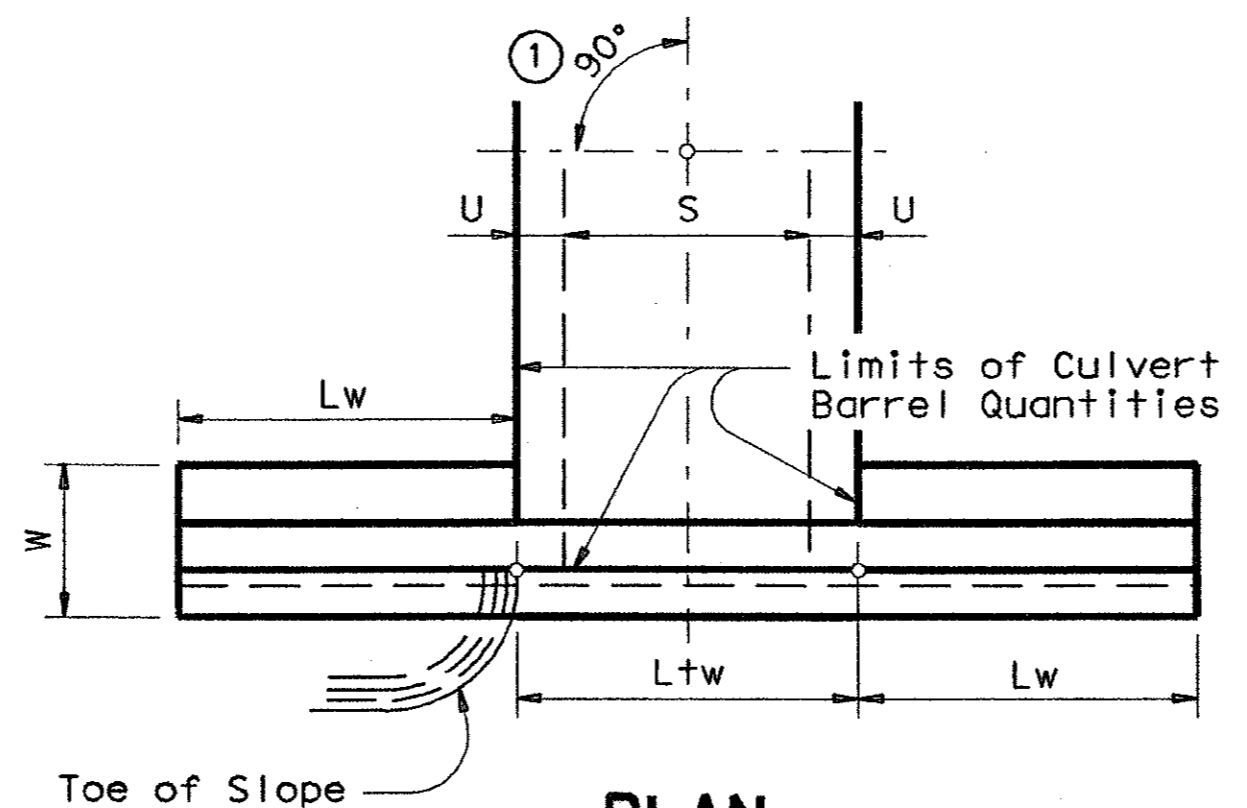


**SECTION A-A**

**SECTION B-B**

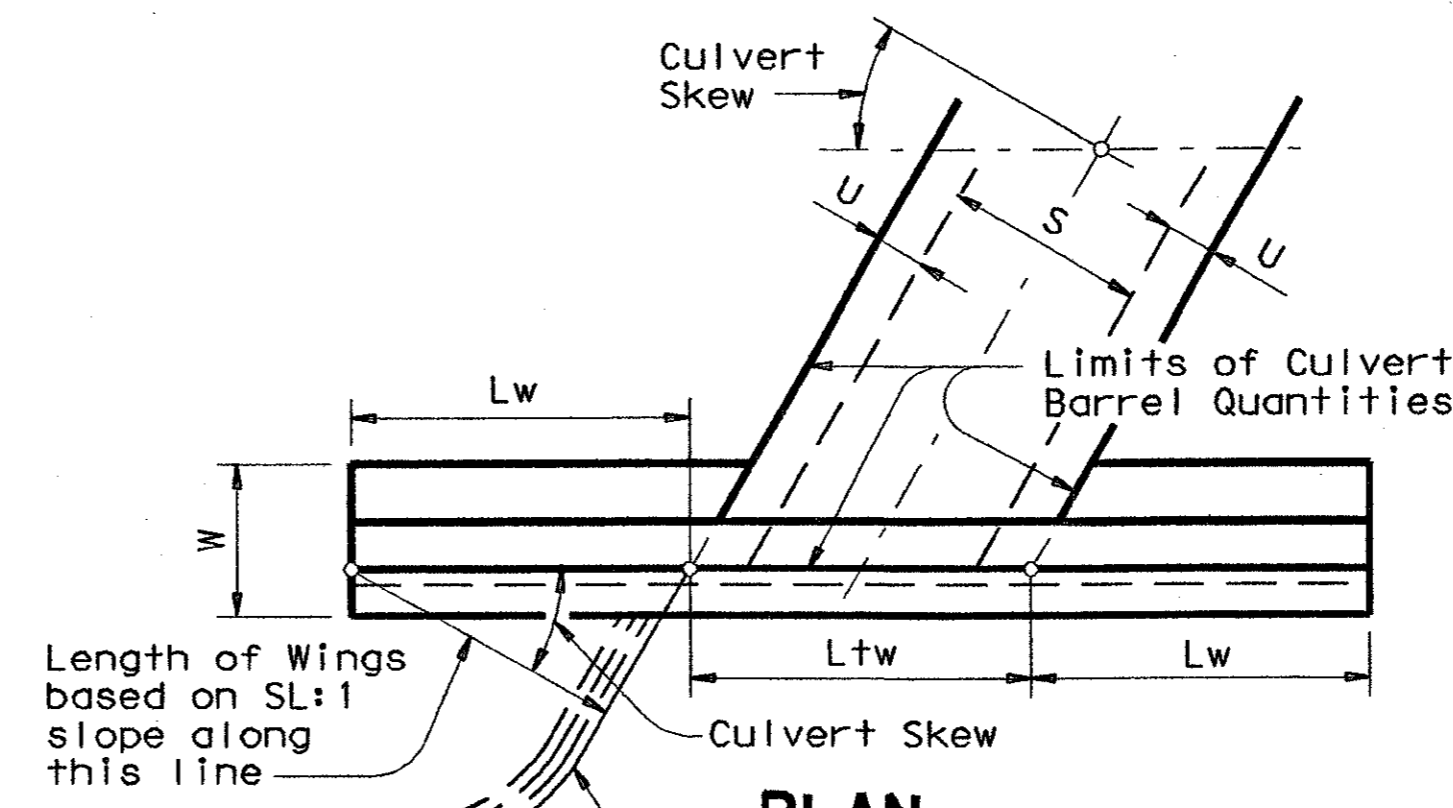
(Showing Wing Reinf)

(Showing Toewall Reinf)



**PLAN**

**DETAILS FOR NON-SKEWED BOX CULVERTS**



**PLAN**

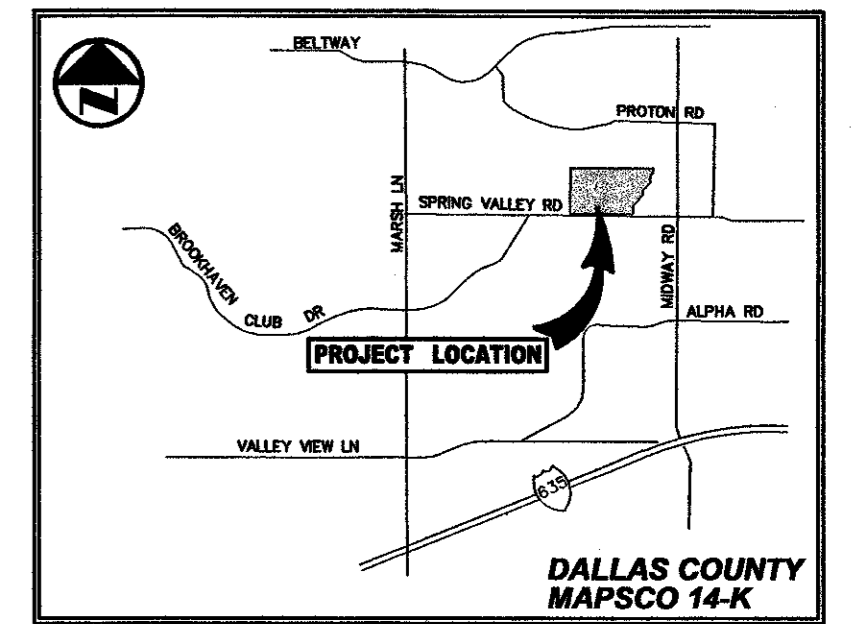
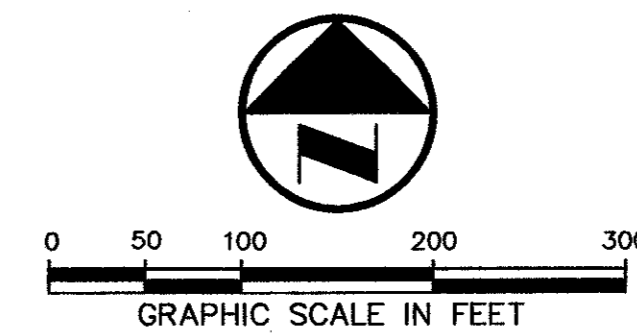
**DETAILS FOR SKEWED BOX CULVERTS**

(Showing 30° Skew)

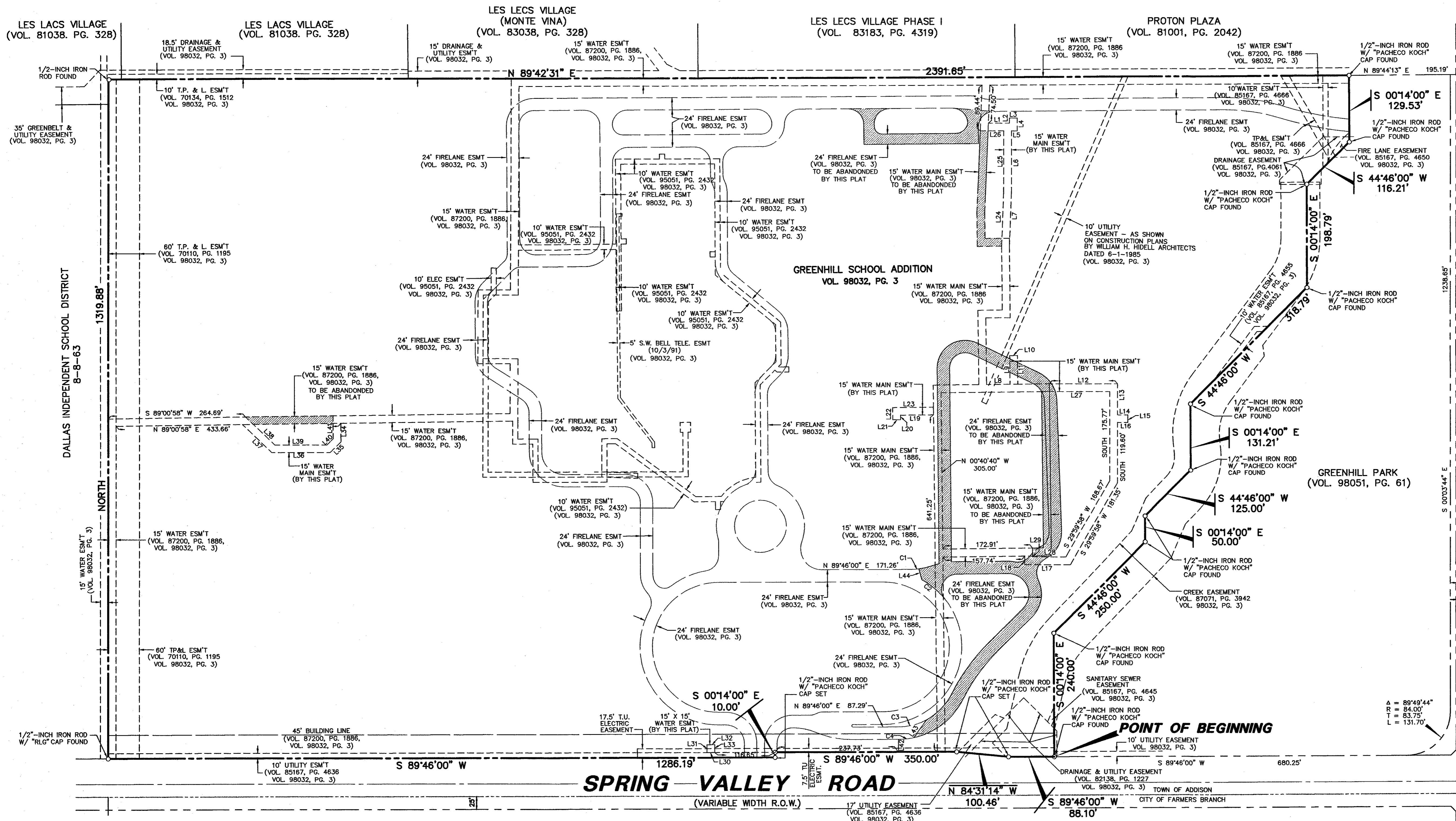
**CONCRETE WINGWALLS WITH PARALLEL WINGS FOR SKEWED AND NON-SKEWED BOX CULVERTS**

**PW**

FILE: pwstde01.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: GAF
©TxDOT December 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				
	COUNTY	CONTROL	SECT	JOB
				HIGHWAY



VICINITY MAP  
(NOT TO SCALE)



**LINE TABLE**

LINE	BEARING	LENGTH
L1	N 90°00'00" E	40.59
L2	N 00°00'00" W	10.07
L3	S 90°00'00" E	15.00
L4	S 00°00'00" E	25.07
L5	S 90°00'00" W	10.92
L6	S 00°00'00" E	119.71
L7	S 01°59'53" W	103.97
L8	N 89°19'20" E	45.20
L9	N 00°40'40" W	56.27
L10	N 89°19'20" E	15.00
L11	S 00°40'40" E	56.27
L12	N 90°00'00" E	131.51
L13	S 00°00'00" E	60.28
L14	S 90°00'00" E	19.67
L15	S 00°00'00" E	15.00
L16	N 90°00'00" W	19.67
L17	S 90°00'00" W	80.14
L18	N 90°00'00" W	16.35
L19	S 89°19'20" W	63.54
L20	S 00°40'40" E	8.87
L21	S 89°19'20" W	15.00
L22	N 00°40'40" W	23.87
L23	N 89°19'20" E	78.54
L24	N 01°59'53" E	103.71
L25	N 00°00'00" W	119.13
L26	S 90°00'00" W	45.27
L27	N 90°00'00" E	116.34
L28	S 90°00'00" W	64.48
L29	S 00°00'00" W	16.53
L30	N 89°46'00" W	15.00
L31	N 00°00'00" E	15.00
L32	N 89°46'00" E	15.00
L33	S 00°00'00" W	15.00
L34	S 00°18'11" E	37.27
L35	S 44°41'49" W	29.81
L36	S 89°41'49" W	112.84
L37	N 45°18'11" W	79.33
L38	S 45°18'11" E	79.43
L39	N 89°41'49" E	100.41
L40	N 44°41'49" E	17.38
L41	N 00°18'11" W	45.88
L42	N 00°00'14" W	24.02
L43	S 35°28'31" W	42.11
L44	S 15°06'42" E	21.62

**CURVE TABLE**

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD BEARING	CHORD
C1	7°33'41"	126.00	16.63	8.33	N 85°59'10" E	16.62
C2	22°10'30"	151.50	58.63	29.69	N 49°31'39" W	58.27
C3	27°44'40"	115.50	55.93	28.52	N 75°53'40" E	55.38
C4	12°04'46"	139.50	29.41	14.76	S 83°43'57" W	29.36

NOTE:  
1. Bearing system for this survey is based on the Greenhill School Addition, an addition to the Town of Addison according to the replat recorded in Volume 95051, Page 2432 of the Deed Records of Dallas County, Texas.

APPROVED BY THE ADDISON TOWN COUNCIL  
ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2004.

MAYOR \_\_\_\_\_

CITY SECRETARY \_\_\_\_\_

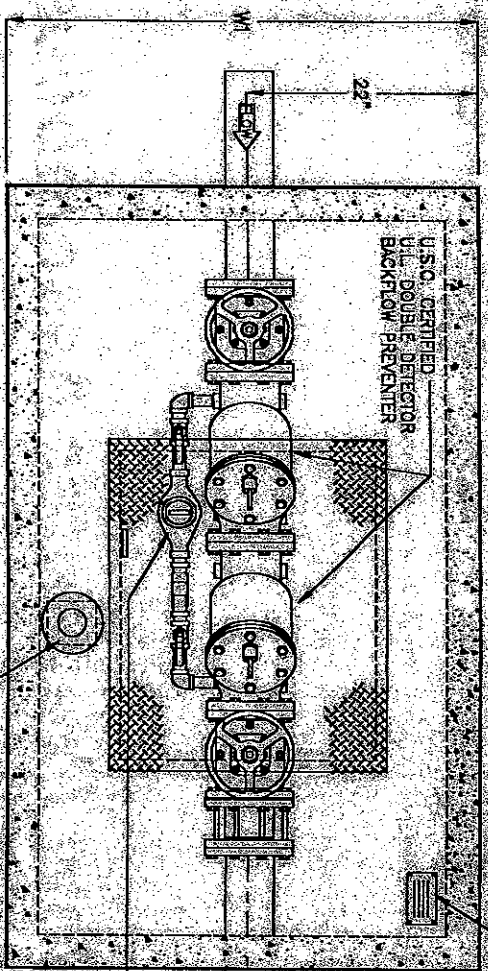
SHEET 1 OF 2  
REPLAT  
OF THE  
**GREENHILL SCHOOL ADDITION**  
AN ADDITION TO THE TOWN OF ADDISON, TEXAS  
AND BEING OUT OF THE  
THOMAS L. CHENOWETH SURVEY, ABSTRACT NO 273  
DALLAS COUNTY, TEXAS

**Pacheco Koch Consulting Engineers**  
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.3031

DRAWN BY CMW	CHECKED BY JAK	SCALE 1"=100'	DATE 03/17/04	JOB NUMBER 1082-03.024
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DIVEY 04/30/2004 - 2:57PM M:\DWG-10\1082-03-024.DWG\1082-03-024RPL.DWG

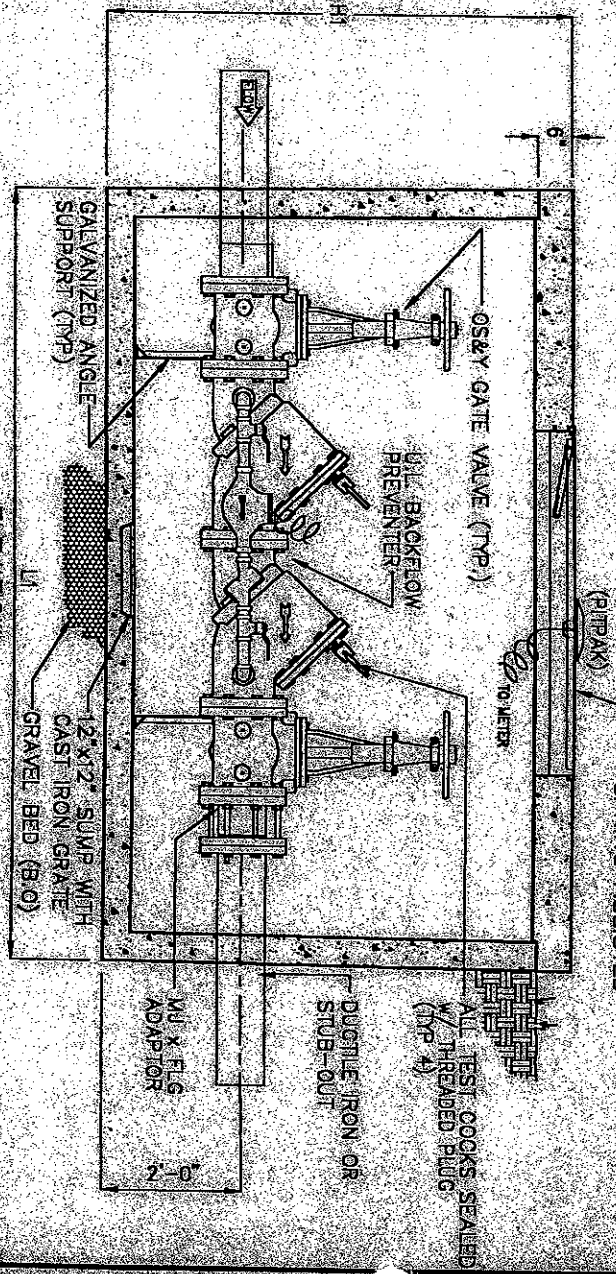
DWG FILE: 1082-03-024RPL.DWG XREF FILE: FS.DWG



NAME/PLATE INDICATING:  
 JFG. PARK EQUIP. CO.  
 (800) 236-8041  
 MODEL: DBBP-AD  
 DATE MANUFACTURED

HERSEY - PIT-PAK  
 3/4" DETECTOR METER W/  
 2 SHUT-OFF VALVES AND  
 BACKFLOW PREVENTER  
 REMOTE REGISTER  
 SENSOR TOUCH PAD  
 (PITPAK)

MODEL	SIZE	L1	W1	H1	WEIGHT LBS.
DBBP-AD5	4"	7'-10"	4'-4"	6'-0"	9,000
DBBP-AD6	6"	7'-10"	4'-4"	6'-0"	9,200
DBBP-AD8	8"	8'-8"	5'-0"	6'-0"	15,000
DBBP-AD10	10"	9'-2"	5'-8"	7'-0"	18,000



**Specifications**

**CONCRETE:** Class 1 concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional fiber to required depth.

**REINFORCEMENT:** Grade 60 reinforced. Steel rebar conforming to ASTM A615, on required centers or equal.

**HATCHWAY:** 1/4" Aluminum diamond plate cover with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel snap lock & hinges.

**Engineering Data**

The Backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:



PROJECT :  
 CUSTOMER :  
 ENGINEER :  
**JFG. PARK EQUIPMENT COMPANY**



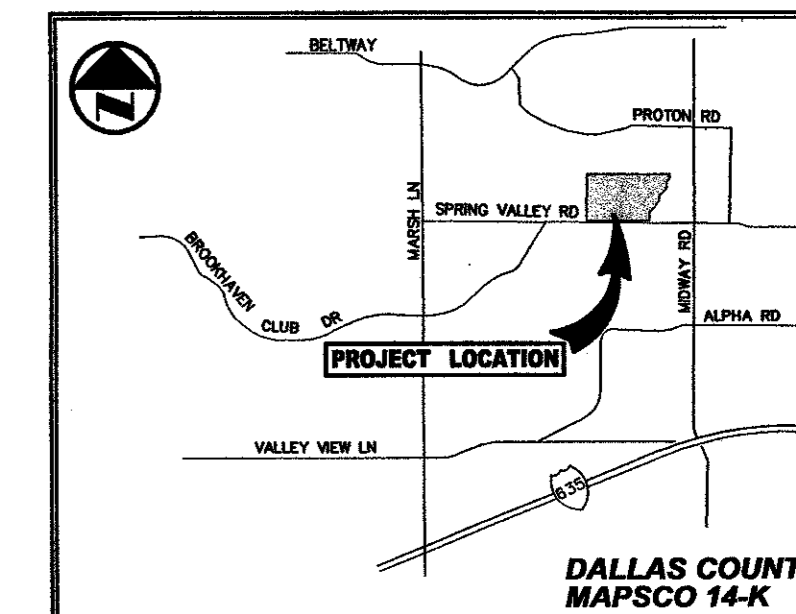
ADDISON



1-800-236-8041

4" THRU 10" DOUBLE DETECTOR CHECK  
 BACKFLOW PREVENTER ASSEMBLY

SCALE : NONE	DWG. NO. : DBBP-AD	REV. : A
DATE : 8/97		



VICINITY MAP  
(NOT TO SCALE)

STATE OF TEXAS  
COUNTY OF DALLAS

OWNER'S CERTIFICATE

WHEREAS, GREENHILL SCHOOL, a Texas Corporation, is the owner of a tract of land situated in the Thomas L. Chenoweth Survey, Abstract No. 273, Town of Addison, Dallas County, Texas; said tract being a part of a 83.97 acre tract of land conveyed to said Greenhill School as recorded in Volume 5320, Page 453 of the Deed Records, Dallas County, Texas, and being all of the Greenhill School Addition, an addition to the Town of Addison, Texas according to the amended plat thereof recorded in Volume 98032, Page 3 of the Deed Records of Dallas County, Texas; said 63.845 acre tract being more particularly described as follows:

BEGINNING, at a 1/2-inch iron rod with "Pacheco Koch" cap found for corner in the north right-of-way line of Spring Valley Road (A variable width right-of-way); said point also being the most southwesterly corner of the Greenhill Park, an addition to the Town of Addison as recorded in Volume 98051, Page 61 of the Deed Records of Dallas County, Texas;

THENCE, along said north line of Spring Valley Road the following five (5) calls;

South 89 degrees, 46 minutes, 00 seconds West, a distance of 88.10 feet to a 1/2-inch iron rod with "Pacheco Koch" cap set at an angle point;

North 84 degrees, 31 minutes, 14 seconds West, a distance of 100.46 feet to a 1/2-inch iron rod with "Pacheco Koch" cap set at an angle point;

South 89 degrees, 46 minutes, 00 seconds West, a distance of 350.00 feet to a 1/2-inch iron rod with "Pacheco Koch" cap set for corner;

South 00 degrees, 14 minutes, 00 seconds East, a distance of 10.00 feet to a 1/2-inch iron rod with "Pacheco Koch" cap set for corner;

South 89 degrees, 46 minutes, 00 seconds West, a distance of 1286.19 feet to a 1/2-inch iron rod with "RLG" cap found for corner; said point also being the most southeasterly corner of a tract of land conveyed to the Dallas Independent School District on August 8, 1963 as recorded in the Deed Records, Dallas County, Texas;

THENCE, due North along a line with the said Dallas Independent School District tract, a distance of 1,319.88 feet to a 1/2-inch iron rod found for corner in the southerly line of a tract of land conveyed to Les Lacs Village as recorded in Volume 81038, Page 328 of the Deed Records, Dallas County, Texas;

THENCE, North 89 degrees, 42 minutes, 31 seconds East, along the southerly line of said Les Lacs Village Tract, passing at 1,138.55 feet the southwesterly corner of Les Lacs Village Phase 1, an addition to the Town of Addison as recorded in Volume 83183, Page 4319 of the Deed Records, Dallas County, Texas; passing at 1,749.60 feet the southwesterly corner of Proton Plaza, an addition to the Town of Addison, Texas as recorded in Volume 81001, Page 2042, Deed Records, Dallas County, Texas, in all a total distance of 2,391.65 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found for corner; said point also being the most northwesterly corner of said Greenhill Park;

THENCE, South 00 degrees, 14 minutes, 00 seconds East, along the westerly common line of said Greenhill Park, a distance of 129.53 feet to a point;

THENCE, South 44 degrees, 46 minutes, 00 seconds West, continuing along said common line, a distance of 116.21 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 00 degrees, 14 minutes, 00 seconds East, continuing along said common line, a distance of 198.79 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 44 degrees, 46 minutes, 00 seconds West, continuing along said common line, a distance of 318.79 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 00 degrees, 14 minutes, 00 seconds East, continuing along said common line, a distance of 131.21 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 44 degrees, 46 minutes, 00 seconds West, continuing along said common line, a distance of 125.00 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 00 degrees, 14 minutes, 00 seconds East, continuing along said common line, a distance of 50.00 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 44 degrees, 46 minutes, 00 seconds West, continuing along said common line, a distance of 250.00 feet to a 1/2-inch iron rod with "Pacheco Koch" cap found;

THENCE, South 00 degrees, 14 minutes, 00 seconds East, continuing along said common line, a distance of 240.00 feet to the POINT OF BEGINNING; CONTAINING, 2,781,125 square feet or 63.845 acres of land, more or less.

That GREENHILL SCHOOL, a Texas Corporation, ("Owner") does hereby adopt this plat designating the hereinabove property as Greenhill School, an addition to the Town of Addison, Texas, and, subject to the conditions, restrictions and reservations stated hereinafter, owner dedicates to the public use forever the streets and alleys shown hereon.

The easements shown on this plat are hereby reserved for the purposes as indicated, including, but not limited to, the installation and maintenance of water, sanitary sewer, storm sewer, drainage, electric, telephone, gas and cable television. Owner shall have the right to use the easements, provided however, that it does not unreasonably interfere or impede with the provision of the services to others. Said utility accommodation of all public utilities using or desiring to use the same. An express easement of ingress and egress is hereby expressly granted on, over and across all such easements for the benefit of the provider of services for which easements are granted.

Any drainage and floodway easement shown hereon is hereby dedicated to the public's use forever, but including the following covenants with regards to maintenance responsibilities. The existing channels or creeks traversing the drainage and floodway easement will remain as an open channel, unless required to be enclosed by ordinance, at all times and shall be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage and floodway easement. The Town will not be responsible for the maintenance and operation of said creek or creeks or for any damage or injury of private property or person that results from the flow of water along said creek, or for the control of erosion. No obstruction to the natural flow of water run-off shall be permitted by construction of any type building, fence or any other structure within the drainage and floodway easement. Provided, however, it is understood that in the event it becomes necessary for the Town to channelize or consider erecting any type of drainage structure in order to improve the storm drainage, then in such event, the Town shall have the right, but not the obligation, to enter upon the drainage and floodway easement at any point, or points, with all rights of ingress and egress to investigate, survey, erect, construct or maintain any drainage facility deemed necessary by the Town for drainage purposes. Each property owner shall keep the natural drainage channels and creeks traversing the drainage and floodway easement adjacent to his property clean and free of debris, silt, growth, vegetation, weeds, rubbish, refuse, matter and any substance which would result in unsanitary conditions or obstruct the flow of water, and the Town shall have the right of ingress and egress for the purpose of inspection and supervision and maintenance work by the property owner to alleviate any undesirable conditions which may occur. The natural drainage channels and creeks through the drainage and floodway easement, as in the case of all natural channels, are subject to storm water overflow and natural bank erosion to an extent that cannot be definitely defined. The Town shall not be held liable for any damages or injuries of any nature resulting from the occurrence of the se natural phenomena, nor resulting from the failure of any structure or structures, within the natural drainage channels, and the owners hereby agree to indemnify and hold harmless the Town from any such damages and injuries. Building areas outside the drainage and floodway easement line shall be filled to a minimum elevation as shown on the plat. The minimum floor of elevation of each lot shall be shown on the plat.

The maintenance or paving of the utility and fire lane easements is the responsibility of the property owner. All public utilities shall at all times have upon the said utility easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or parts of its respective system without the necessity at anytime of procuring the permission of anyone. Any public utility shall have the right of ingress and egress to private property for the purpose of reading meters and any maintenance and service required or ordinarily performed by the utility. Buildings, fences, trees shrubs or other improvements or growth may be constructed, reconstructed or placed upon, over or across the utility easement as shown; provided, however, that owner shall at its sole cost and expense be responsible under any and all circumstances for the maintenance and repair of such improvements or growth, and any public utility shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or other improvements or growth which in any way endanger or interfere with the construction, maintenance or efficiency of its respective system or service.

Water main and sanitary sewer easements shall also include additional area of working space for construction and maintenance of the systems. Additional easement area is also conveyed for installation and maintenance of manholes, cleanouts, fire hydrants, water service and sewer services from the main to curb or pavement line, and the descriptions of such additional easements herein granted shall be determined by their locations as installed.

This plat is approved subject to all platting ordinances, rules, regulations and resolutions of the Town of Addison, Texas.

WITNESS my hand at Dallas, Texas, this the \_\_\_\_ day of \_\_\_\_\_, 2004.

GREENHILL SCHOOL

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared \_\_\_\_\_ known to me 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 consideration therein expressed.

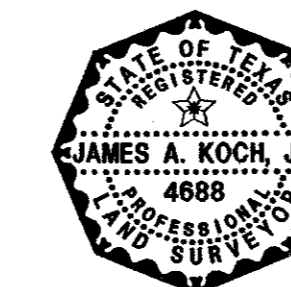
GIVEN UNDER MY HAND AND SEAL OF OFFICE this \_\_\_\_ day of \_\_\_\_\_, 2004.

My commission expires:

\_\_\_\_\_  
Notary Public in and for Dallas County, Texas

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT I, JAMES A. KOCH, JR., Registered Professional Land Surveyor, do hereby certify that this plat was prepared from an actual and accurate survey of the land made on the ground and that the corner monuments shown thereon were properly placed under my personal supervision in accordance with the platting rules and regulations of the Town of Addison, Texas.



RELEASED 03/26/04 FOR REVIEW PURPOSES ONLY. THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE.

James A. Koch, Jr.  
Registered Professional Land Surveyor  
No. 4688

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared James A. Koch, Jr., known to me 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 consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this \_\_\_\_ day of \_\_\_\_\_, 2004.

My commission expires:

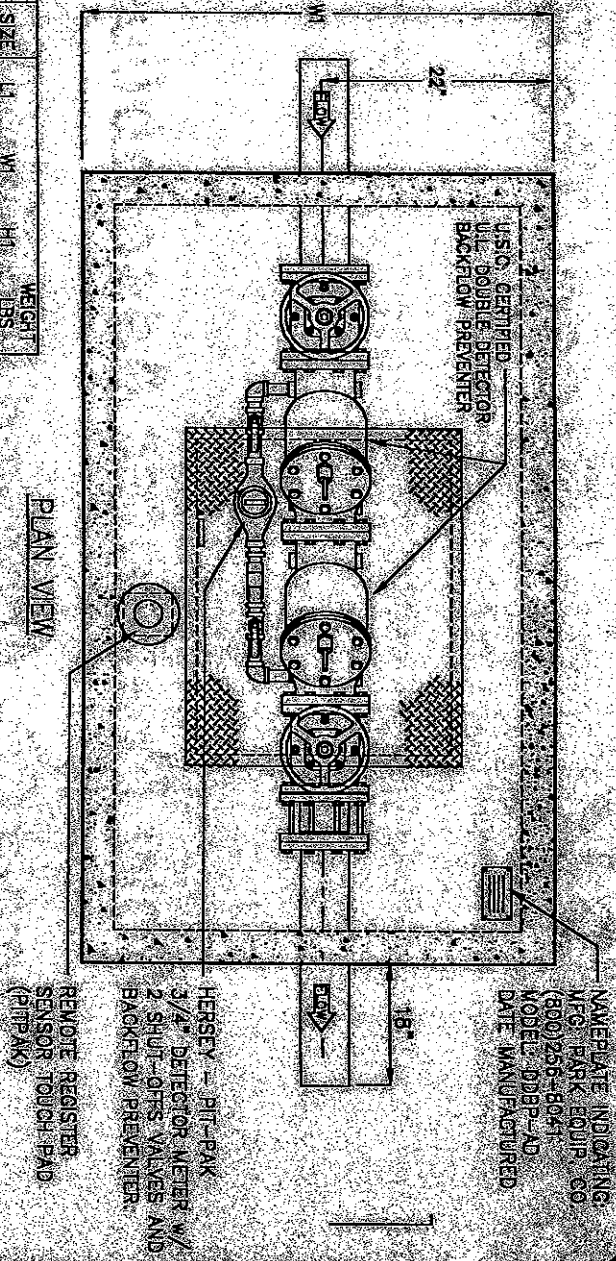
\_\_\_\_\_  
Notary Public in and for Dallas County, Texas

SHEET 2 OF 2  
REPLAT  
OF THE

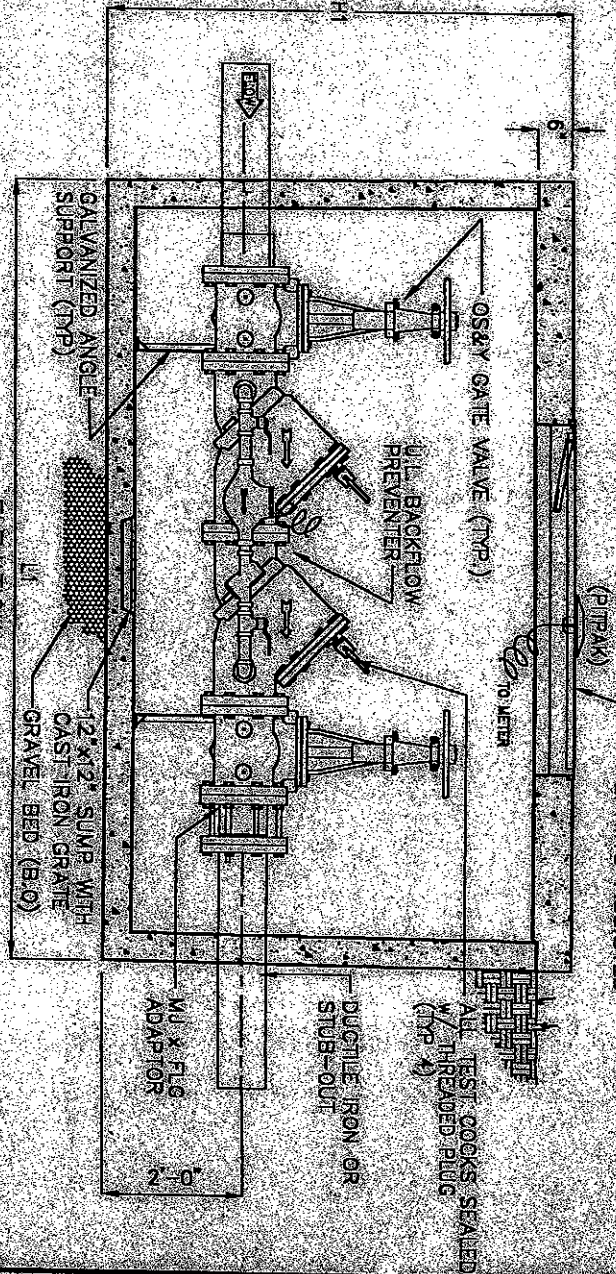
**GREENHILL SCHOOL ADDITION**

AN ADDITION TO THE TOWN OF ADDISON, TEXAS  
AND BEING OUT OF THE  
THOMAS L. CHENOWETH SURVEY, ABSTRACT NO 273  
DALLAS COUNTY, TEXAS

Pacheco Koch Consulting Engineers				
8350 N CENTRAL EXPWY SUITE 1000 DALLAS, TEXAS 75206 972.235.0311				
DRAWN BY	CHECKED BY	SCALE	DATE	JOB NUMBER
CMW	JAK	1"=100'	03/17/04	1082-03.024



MODEL	SIZE	LI.	WI.	HI.	WEIGHT LBS.
DBBP-AD1	4"	7-10"	4-4"	6-0"	9,000
DBBP-AD6	6"	7-10"	4-4"	6-0"	9,200
DBBP-AD8	8"	8-8"	5-0"	6-0"	15,000
DBBP-AD10	10"	9-2"	5-8"	7-0"	18,000



**Specifications**

**CONCRETE:** Class 1 concrete with design strength of 4500 PSI at 28 days. Units of monolithic construction of floor and first stage of well with sectioned near to required depth.

**REINFORCEMENT:** Grade 60 reinforced. Steel rebar conforming to ASTM A615 or required centers of eq'd.

**HATCHWAY:** 1/4" Aluminum diamond plate cover, with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel snap lock & hinges.

**Engineering Data**

The backflow assembly shall be factory assembled in vault & hydraulically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:



NAME/PART INDICATING  
H.C. PARK EQUIP. CO.  
(800) 256-8064  
MODEL: DBBP-AD  
DATE MANUFACTURED:

HERSEY - HIT-PAK  
3/4" DETECTOR METER W/  
2 SHUT-OFFS VALVES AND  
BACKFLOW PREVENTER.

REMOTE REGISTER  
SENSOR TOUCHPAD  
(HITPAK)

PRECAST CONCRETE UB W/ CAST-IN  
30" X 48" ALUMINUM HATCHWAY  
SPRING ASSISTED

ALL TEST COCKS SEALED  
W/ THREADED PLUG  
(TYP.)

DUCTILE IRON OR  
STUB-OUT

M4 X FLG  
ADAPTOR

PROJECT: \_\_\_\_\_  
CUSTOMER: \_\_\_\_\_  
ENGINEER: \_\_\_\_\_

**H.C. PARK**  
EQUIPMENT COMPANY

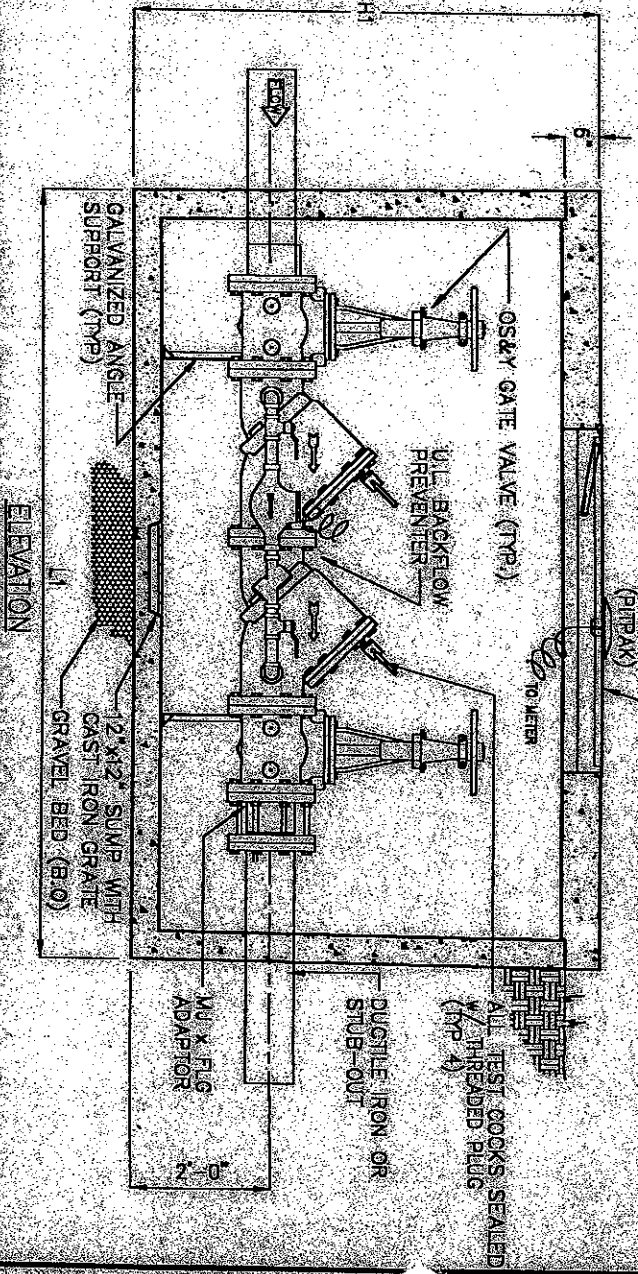
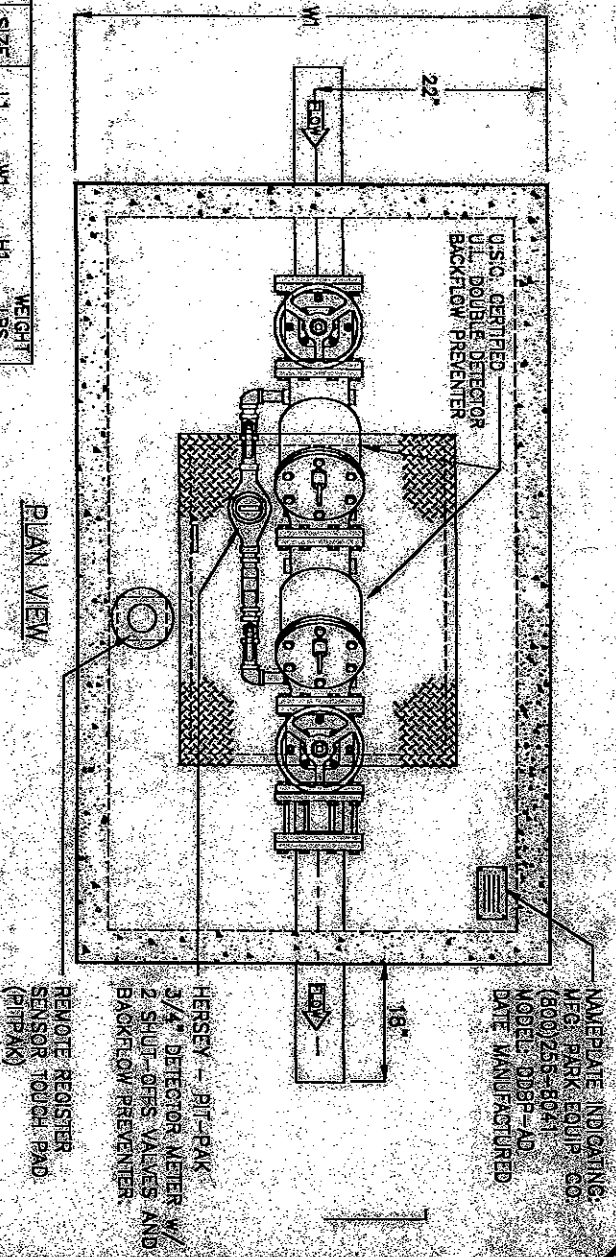
11111  
ADDISON  
TOWN OF THE

WRITE: 800-256-8064

4" THRU 10" DOUBLE DETECTOR CHECK  
BACKFLOW PREVENTER ASSEMBLY

SCALE: NONE	DWG. NO. DBBP-AD	REV. A
DATE: 8/97		

MODEL	SIZE	L1	W1	H1	WEIGHT LBS.
DDBP-AD4	4"	7'-10"	4'-4"	6'-0"	9,000
DDBP-AD6	6"	7'-10"	4'-4"	6'-0"	9,200
DDBP-AD8	8"	8'-8"	5'-0"	6'-0"	15,000
DDBP-AD10	10"	9'-2"	5'-6"	7'-0"	18,000



### Specifications

**CONCRETE:** Class 1 concrete with design strength of 4500 PSI at 28 days. This is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

**REINFORCEMENT:** Grade 60 reinforced. Steel rebar conforming to ASTM A615 or required centers or equal.

**HATCHWAY:** 1/4" Aluminum diamond plate cover, with 1/4" extruded aluminum frame. Hatch to be furnished with 316 Stainless Steel strip lock & hinges.

### Engineering Data

The backflow assembly shall be factory assembled in vault & hydrostatically tested prior to delivery. Field excavation & preparation shall be complete prior to delivery. Pipe, valves and fittings of the assembly shall be approved by one or more of the following associations:



PROJECT: \_\_\_\_\_  
 CUSTOMER: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_

**PARK**  
EQUIPMENT COMPANY

WTS 800-245-3041



4" THRU 10" DOUBLE DETECTOR CHECK BACKFLOW PREVENTER ASSEMBLY

SCALE: NONE DWG. NO. DDBP-AD

DATE: 8/97

REV. A