B11-3

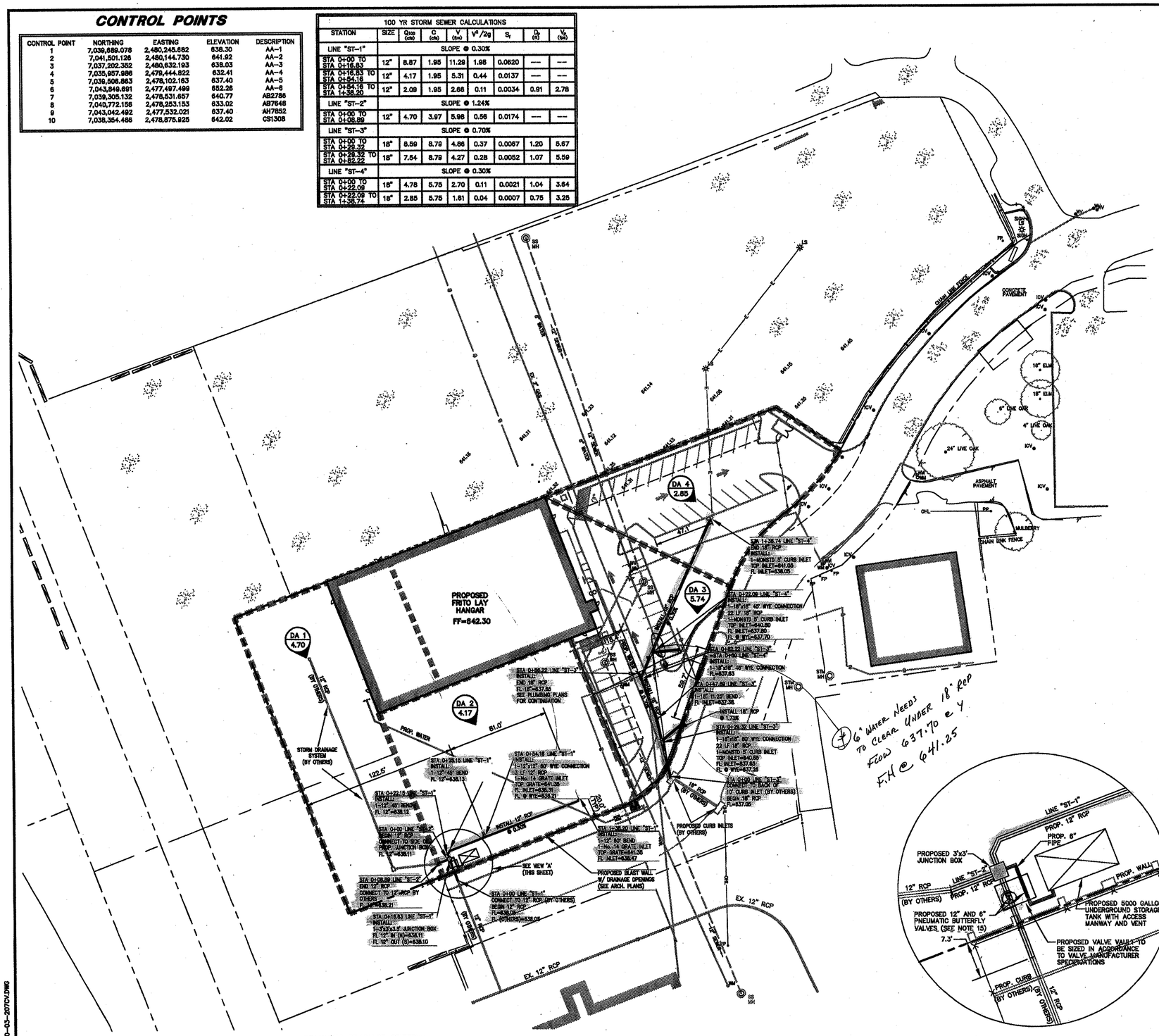
4601 Airport Pkwy
FRITO LAY HANGAR 9/03
AS-BUILT Drng + Utilities

## CONTROL POINTS

| CONTROL POINT | NORTHING | EASTING | ELEVATION | DESCRIPTION |
|---|---|---|---|---|
| 1 | 7,039,589.078 | 2,480,245.682 | 638.30 | AA–1 |
| 2 | 7,041,501.126 | 2,480,144.730 | 641.92 | AA–2 |
| 3 | 7,037,202.352 | 2,480,632.193 | 638.03 | AA–3 |
| 4 | 7,035,957.986 | 2,479,444.822 | 632.41 | AA–4 |
| 5 | 7,039,506.863 | 2,478,102.163 | 637.40 | AA–5 |
| 6 | 7,043,849.691 | 2,477,497.499 | 652.28 | AA–6 |
| 7 | 7,039,305.132 | 2,478,531.657 | 640.77 | AB2786 |
| 8 | 7,040,772.156 | 2,478,253.153 | 633.02 | AB7648 |
| 9 | 7,043,042.492 | 2,477,532.021 | 637.40 | AH7852 |
| 10 | 7,038,364.466 | 2,478,875.925 | 642.02 | GS1308 |

100 YR STORM SEWER CALCULATIONS

| STATION | SIZE | Qmax (cfs) | C (cfs) | V (fps) | $V^2/2g$ | $S_f$ | $D_f$ (ft) | $V_f$ (fps) |
|---|---|---|---|---|---|---|---|---|
| LINE "ST–1" | SLOPE @ 0.30% | | | | | | | |
| STA 0+00 TO STA 0+16.83 | 12" | 8.87 | 1.95 | 11.29 | 1.98 | 0.0620 | --- | --- |
| STA 0+16.83 TO STA 0+54.18 | 12" | 4.17 | 1.95 | 5.31 | 0.44 | 0.0137 | --- | --- |
| STA 0+54.18 TO STA 1+38.20 | 12" | 2.09 | 1.95 | 2.66 | 0.11 | 0.0034 | 0.91 | 2.78 |
| LINE "ST–2" | SLOPE @ 1.24% | | | | | | | |
| STA 0+00 TO STA 0+08.89 | 12" | 4.70 | 3.97 | 5.98 | 0.56 | 0.0174 | --- | --- |
| LINE "ST–3" | SLOPE @ 0.70% | | | | | | | |
| STA 0+00 TO STA 0+29.32 | 18" | 8.59 | 8.79 | 4.86 | 0.37 | 0.0067 | 1.20 | 5.67 |
| STA 0+29.32 TO STA 0+82.22 | 18" | 7.54 | 8.79 | 4.27 | 0.28 | 0.0052 | 1.07 | 5.59 |
| LINE "ST–4" | SLOPE @ 0.30% | | | | | | | |
| STA 0+00 TO STA 0+22.09 | 18" | 4.78 | 5.75 | 2.70 | 0.11 | 0.0021 | 1.04 | 3.64 |
| STA 0+22.09 TO STA 1+36.74 | 18" | 2.85 | 5.75 | 1.61 | 0.04 | 0.0007 | 0.75 | 3.25 |




PROPOSED DRAINAGE CRITERIA:

Q=(C)(I)(A)

C=0.90

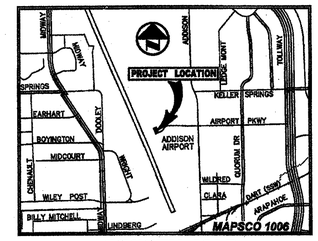
DRAINAGE AREA TABLE

| DRAINAGE AREA No. | AREA (acres) | C | Tc (minutes) | STORM FREQUENCY | Iᵢₙ (inch/hour) | Qmax (cfs) | COMMENTS |
|---|---|---|---|---|---|---|---|
| DA #1 | 0.60 | 0.90 | 10 | 100 YEAR | 8.74 | 4.70 | DRAINS TO GRATE INLET (BY OTHERS) |
| DA #2 | 0.53 | 0.90 | 10 | 100 YEAR | 8.74 | 4.17 | DRAINS TO PROP. GRATE INLETS |
| DA #3 | 0.73 | 0.90 | 10 | 100 YEAR | 8.74 | 5.74 | DRAINS TO PROP. CURB INLET |
| DA #4 | 0.36 | 0.90 | 10 | 100 YEAR | 8.74 | 2.85 | DRAINS TO PROP. CURB INLET |

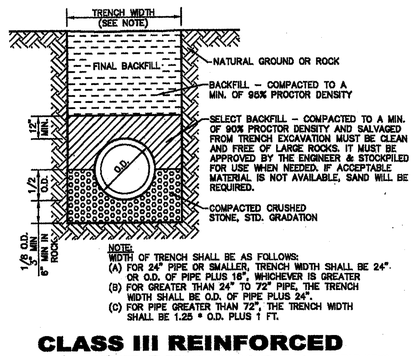



VIEW 'A'

SCALE: 1"=10'




VICINITY MAP




NOTE:
WIDTH OF TRENCH SHALL BE AS FOLLOWS:
(A) FOR 24" PIPE OR SMALLER, TRENCH WIDTH SHALL BE 24". OR O.D. OF PIPE PLUS 16", WHICHEVER IS GREATER
(B) FOR GREATER THAN 24" TO 72" PIPE, THE TRENCH WIDTH SHALL BE O.D. OF PIPE PLUS 24".
(C) FOR PIPE GREATER THAN 72", THE TRENCH WIDTH SHALL BE 1.25 * O.D. PLUS 1 FT.

## CLASS III REINFORCED CONCRETE PIPE EMBEDMENT

NOT TO SCALE

## GRADING AND DRAINAGE GENERAL NOTES

1. REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND M
2. UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTO 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 GREATER THAN 2% UNLESS NOTED OTHERWISE.
4. GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND
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–Q
   AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE–CAST PRODUCTS, INC." P SIZED AS SHOWN, OR APPROVED EQUAL.
7. FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03
8. ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, S OFFSITE AT CONTRACTOR'S EXPENSE.
9. TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2. MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 9 DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY
10. EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
11. A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
12. ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
13. IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CO
14. ALL EXTERIOR GRADES WITHIN 5 FEET OF THE BUILDING FACE ARE TO BE SLOPED AT A M FROM THE BUILDING (SEE DETAIL THIS SHEET).
15. CONTRACTOR IS TO COORDINATE WITH OWNER FOR THE SEQUENCE OF OPERATION OF THE P

AS BUILTS

FRITO LAY #ANGAR AS BUILTS

| NO. | DATE | REVISI |
|---|---|---|
| | | |

Pacheco Koch Consu

6380 N CENTRAL EXPWY SUITE 1000 DAL

# DRAINAGE P

## FRITO LAY (FLNA) CORPO

## AIRPORT PARKW

## ADDISON AIRP

## TOWN OF ADDISON

| DESIGN | DRAWN | DATE | SCALE | NOTES |
|---|---|---|---|---|
| BJM | DRI | SEPT 2003 | 1"=40' | |

PK FILE: 1830–03.207

STATE OF TEXAS — STEVEN A. MARKUSSEN — 70090 — REGISTERED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY STEVEN A. MARKUSSEN, P.E. 70090 ON 10/13/2003. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

BRAD MOSS
10/14/2003 – 10:12AM
M:\DWG\1830-03-207\DWG\1830-03-207CV.DWG

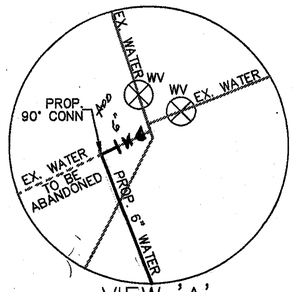
491-4729

208 C4.1

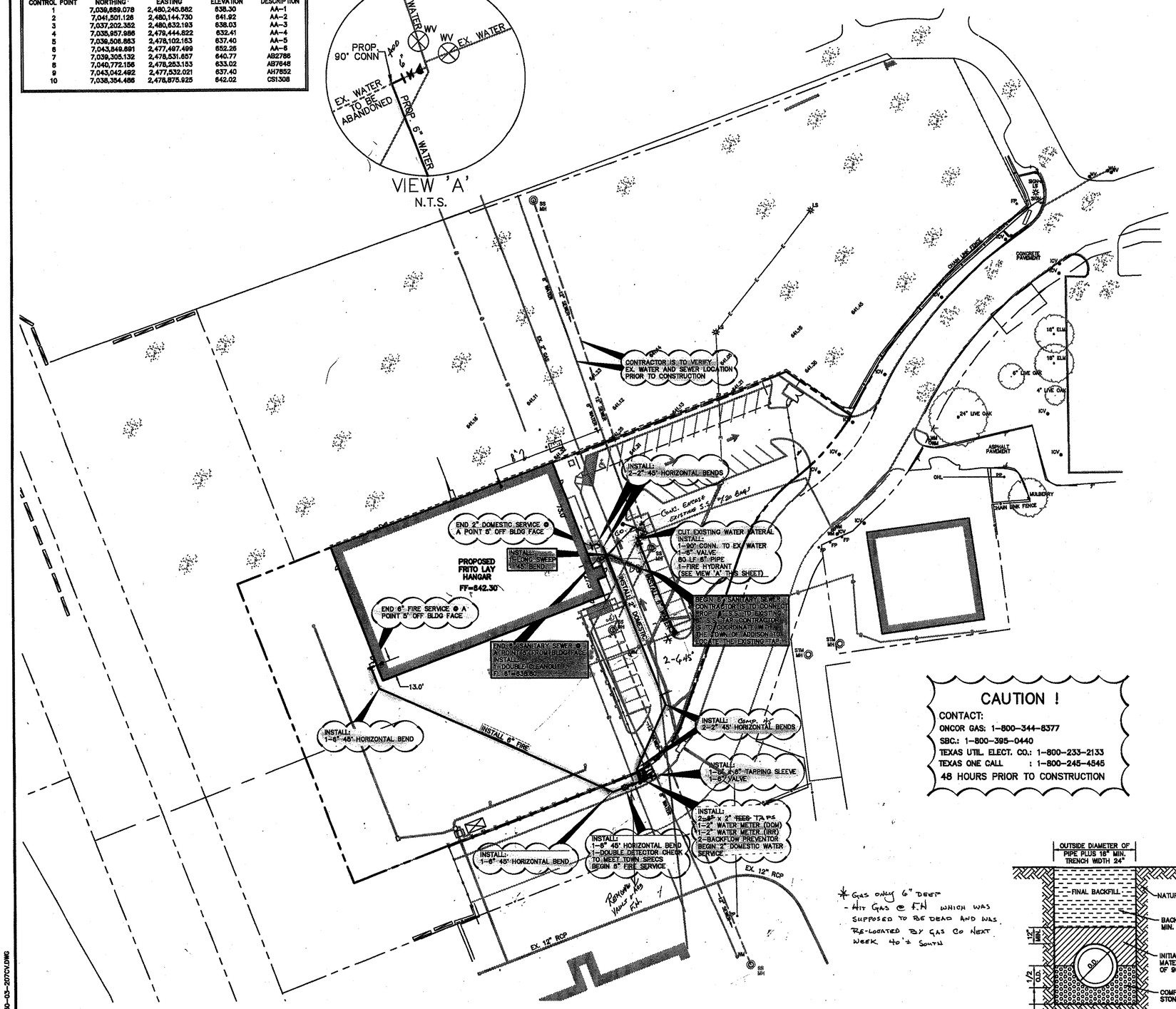
B11-3

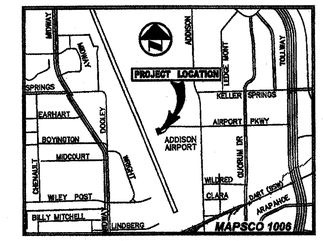
## CONTROL POINTS

| CONTROL POINT | NORTHING | EASTING | ELEVATION | DESCRIPTION |
|---|---|---|---|---|
| 1 | 7,039,689.078 | 2,480,245.882 | 638.30 | AA-1 |
| 2 | 7,041,501.126 | 2,480,144.730 | 641.92 | AA-2 |
| 3 | 7,037,202.352 | 2,480,632.193 | 638.03 | AA-3 |
| 4 | 7,035,957.986 | 2,479,444.822 | 632.41 | AA-4 |
| 5 | 7,036,506.863 | 2,478,102.163 | 637.40 | AA-5 |
| 6 | 7,043,849.891 | 2,477,497.499 | 652.26 | AA-6 |
| 7 | 7,039,305.132 | 2,478,531.657 | 640.77 | AB2786 |
| 8 | 7,040,772.156 | 2,478,253.153 | 633.02 | AB7646 |
| 9 | 7,043,042.492 | 2,477,532.021 | 637.40 | AH7852 |
| 10 | 7,038,354.486 | 2,478,875.925 | 642.02 | CS1308 |




VIEW 'A'
N.T.S.



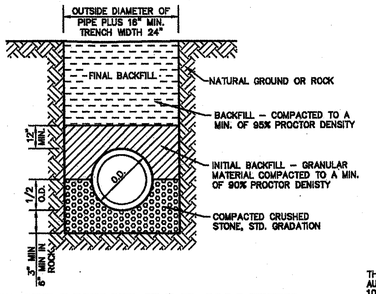




VICINITY MAP

CAUTION !
CONTACT:
ONCOR GAS: 1-800-344-8377
SBC.: 1-800-395-0440
TEXAS UTIL ELECT. CO.: 1-800-233-2133
TEXAS ONE CALL : 1-800-245-4545
48 HOURS PRIOR TO CONSTRUCTION

* GAS ONLY 6" DEEP - HIT GAS @ F.H WHICH WAS SUPPOSED TO BE DEAD AND WAS RE-LOCATED BY GAS CO NEXT WEEK 40'± SOUTH

2 EA - ADJUST M.H's LOWER APROX 7"TOB"
2 EA - RELOCATE 2" METERS APROX 2' "TAP ON 8" NOT 6"




**EMBEDMENT FOR WATER AND SANITARY SEWER PIPE**
NOT TO SCALE

## 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, DR 18, CLASS 150.
3. WATER AND SANITARY SEWER SERVICES SHALL MEET PLUMBING 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 CARRIER 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 6-8 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 NCTCOG ITEM 8.2.10 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.
15. ALL WATER SERVICES SHALL HAVE TOWN OF ADDISON APPROVED TESTABLE BACKFLOW PREVENTION DEVICES. THESE DEVICES SHALL BE INSTALLED, TESTED, AND CERTIFIED TO BE WORKING PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
16. ALL METERS SHALL HAVE ELECTRONIC ENDCODER REGISTERS WITH TOUCH PADS.

**AS BUILTS**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| NO. | DATE | REVISI |
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| | | |

Pacheco Koch Consu
8350 N CENTRAL EXPWY SUITE 1000 DAL

**WATER & SANITARY S**
**FRITO LAY (FLNA) CORPOR**
**AIRPORT PARKW**
**ADDISON AIRPO**
***TOWN OF ADDISON***

| DESIGN | DRAWN | DATE | SCALE | NOTES |
|---|---|---|---|---|
| BJM | DRI | SEPT 2003 | 1"=40' | |

PK FILE: 1830-03.207

209 C5.1

BRAD MOSS
10/14/2003 - 10:13AM
M:\DWG-1\1830-03-207\DWG\1830-03-207CVLDWG