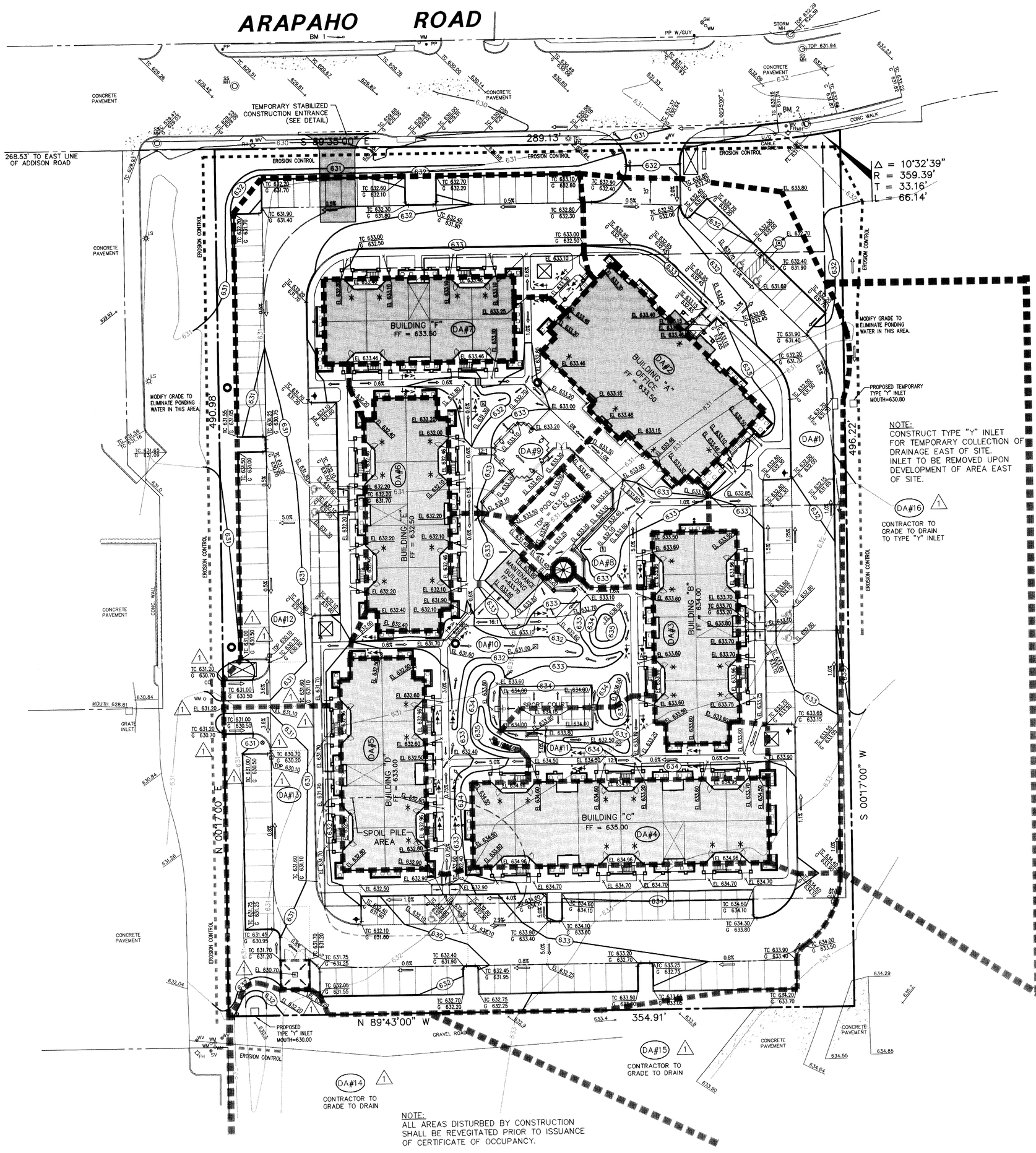
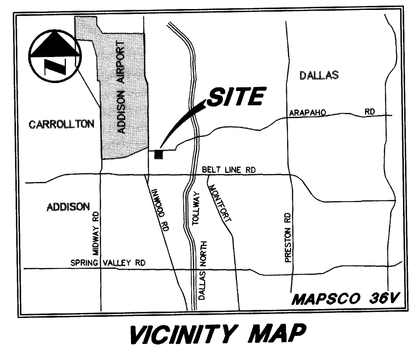



## LEGEND

- FIRE HYDRANT
- POWER POLE
- LIGHT STANDARD
- WATER METER
- WATER VALVE
- CLEANOUT
- MANHOLE
- GAS METER
- PROPERTY LINE
- EXIST CONTOUR
- EXIST SPOT ELEVATION
- EXIST TOP OF CURB ELEVATION / EXIST GUTTER ELEVATION
- PROPOSED CONTOUR
- PROP TOP OF CURB ELEVATION / PROP GUTTER ELEVATION
- PROP SPOT ELEVATION
- PROP DRAINAGE FLOW DIRECTION
- PROP DRAINAGE DIVIDE
- PROP EROSION CONTROL
- HANDICAPPED ACCESSIBLE ENTRANCE

GRAPHIC SCALE IN FEET (0, 15, 30, 60, 90)




## VICINITY MAP

**CAUTION!!!** GAS LINE IN AREA—CONTACT LONE STAR GAS 48 HOURS PRIOR TO CONSTRUCTION PHONE:(214)263-3444

**CONTACT:** MR ED KEAH, OPERATING SUPPORT SECTION DISTRIBUTION DEPARTMENT, 2 WORKING DAYS PRIOR TO EXCAVATING T.U. ELECTRIC FACILITIES. PHONE:(214)698-7239 OR (214)698-7207

**CAUTION!!** UNDERGROUND TELEPHONE IN AREA — CONTACT S.W.B.T. 48 HOURS PRIOR TO CONSTRUCTION PHONE:(214)698-7239 (UNDERGROUND) PHONE:(214)698-7240 (OVER-HEAD)

### DRAINAGE CRITERIA

Q = CIA
C = 0.90, 0.30 for DA#15 & DA#16
Tc = 10 minutes, 15 minutes for DA#15 & DA#16
I = 8.74 inch/hour, 7.52 inch/hour for DA#15 & DA#16
DRAINAGE BASED ON 100 YEAR FLOOD

### DRAINAGE AREA TABLE (DA#2)

| DRAINAGE AREA # | AREA (acres) | $Q_{100}$ (cfs) | COLLECTED INTO |
|---|---|---|---|
| DA#1 | 0.63 | 4.96 | 10' CURB INLET (NORTH SYSTEM) |
| DA#2 | 0.17 | 1.34 | ROOF DRAIN (WEST SYSTEM) |
| DA#3 | 0.13 | 1.02 | ROOF DRAIN (WEST SYSTEM) |
| DA#4 | 0.19 | 1.49 | ROOF DRAIN (WEST SYSTEM) |
| DA#5 | 0.13 | 1.02 | ROOF DRAIN (WEST SYSTEM) |
| DA#6 | 0.14 | 1.10 | ROOF DRAIN (WEST SYSTEM) |
| DA#7 | 0.12 | 0.94 | ROOF DRAIN (WEST SYSTEM) |
| DA#8 | 0.12 | 0.94 | 12" GRATE INLET (WEST SYSTEM) |
| DA#9 | 0.18 | 1.42 | 12" GRATE INLET (WEST SYSTEM) |
| DA#10 | 0.34 | 2.67 | 24" GRATE INLET (WEST SYSTEM) |
| DA#11 | 0.11 | 0.87 | 12" GRATE INLET (WEST SYSTEM) |
| DA#12 | 0.64 | 5.04 | 24" GRATE INLET (WEST SYSTEM) |
| DA#13 | 0.79 | 6.21 | 24" GRATE INLET (WEST SYSTEM) |
| DA#14 | 1.64 | 12.90 | TYPE "Y" INLET (WEST SYSTEM) |
| DA#15 | 1.05 | 2.37 | 36" GRATE INLET (WEST SYSTEM) |
| DA#16 | 0.70 | 1.58 | TYPE "Y" INLET (NORTH SYSTEM) |

NORTH SYSTEM: DRAINS INTO ARAPAHO DRIVE STORM DRAIN
WEST SYSTEM: DRAINS INTO ADDISON ROAD STORM DRAIN

### GRATE INLET CALCULATIONS

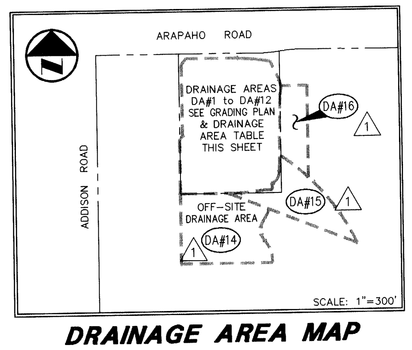
$Q = CA\sqrt{2gh}$
C = 0.7 (Clogging Factor)
A = AREA GRATE INLET OPENING (sq ft)
g = 32.2 ft/sec
h = 0.5 ft
AREA FOR GRATE No.12 = 0.28 sq ft
MAX Q FOR GRATE No.12 = 1.11 cfs
AREA FOR GRATE No.24 = 1.42 sq ft
MAX Q FOR GRATE No.24 = 5.65 cfs
AREA FOR GRATE No.36 = 3.61 sq ft
MAX Q FOR GRATE No.36 = 14.37 cfs

NOTE:
DRAINAGE AREA #16 INDICATE TEMPORARY COLLECTION OF DRAINAGE. UPON DEVELOPMENT OF THE AREA EAST OF SITE, DA#16 TO DRAIN INTO ARAPAHO ROAD AND THE TYPE "Y" INLET AT THE NORTHEAST CORNER IS TO BE REMOVED, PLUG BACK OF CURB INLET UPON REMOVAL OF 18" DRAIN PIPE.

DRAINAGE AREA #15 INDICATE TEMPORARY COLLECTION OF DRAINAGE. UPON DEVELOPMENT OF THE AREA SOUTH AND EAST OF SITE, DA#13 TO DRAIN INTO ARAPAHO ROAD AND DRAINAGE COLLECTION SYSTEM OF AREA SOUTH OF SITE AND COLLECTED IN 24" DRAIN PIPE SERVING TYPE "Y" INLET AT THE SOUTHWEST CORNER OF SITE.

### GRATE INLETS TO BE

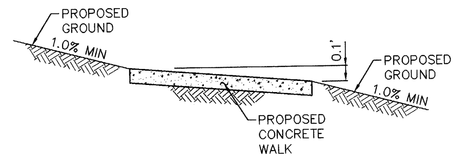
"American Industrial Pre-cast Products, Inc." CATCH BASIN No.12, No.20 & No.36 OR APPROVED EQUAL




## DRAINAGE AREA MAP

### BENCH MARKS:

1. "□" CUT ON S.E. CORNER OF SIDEWALK AT THE ENTRANCE TO 4805 ARAPAHO RD, APPROX ±400 FEET EAST OF ADDISON RD.
   ELEV. 630.66
2. "□" ON SOUTH RIM OF MANHOLE LOCATED ON THE SOUTH SIDE OF ARAPAHO RD AT THE NORTHEAST CORNER OF SITE, APPROX. 16.5' EAST OF THE WEST END OF SIDEWALK.
   ELEV. 632.25




## VIEW "A-A"

NTS

### 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 4 ACRE.
4. THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.90%.
5. THE STORM WATER EXITING THE SITE IS COLLECTED IN AN EXISTING DRAINAGE SYSTEM MAINTAINED BY THE CITY OF ADDISON, TEXAS.
6. THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
7. THE CONTRACTOR SHALL PROVIDE EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS DURING CONSTRUCTION.
8. THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
9. ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 21 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION.
10. THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
11. THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
12. A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.

NOTE:
SEE DETAIL SHEET FOR GENERAL NOTES & DETAILS

**RECORD DRAWING**

THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.

CONTRACTOR: UNLIMITED CONSTRUCTION, INC.
P.O. BOX 462213
DALLAS, TEXAS 75046-2213

DATE REVISED: 29 MARCH 1996

2 REVISED: MARCH 29, 1996
1 REVISED: JULY 13, 1995

STATE OF TEXAS — JAMES A. KOCH, JR. — 62218 — REGISTERED PROFESSIONAL ENGINEER — 4/11/96

PACHECO KOCH Consulting Engineers, Inc.
Civil Engineering • Land Surveying
9401 LBJ Freeway, Suite 300
Dallas, Texas 75243
(214) 235-3031

# GRADING & EROSION CONTROL PLAN
## SUMMERFIELD SUITES HOTEL
## ARAPAHO ROAD
## QUORUM CENTER ADDITION
## TOWN OF ADDISON, TEXAS

| DESIGN | DRAWN | DATE | SCALE | NOTES | FILE | NO. |
|---|---|---|---|---|---|---|
| JAK | BB | 5/3/95 | 1"=30' | | | |

PK NO: 1467-95.011 DWG NO: 1467-03B

PRINTS ISSUED

| DATE | PURPOSE | NO. |
|---|---|---|

FOR CONSTRUCTION:

REVISIONS

| DATE | ITEM | NO. |
|---|---|---|

LAW/KINGDON, INC.
ARCHITECTS & ENGINEERS
345 RIVERVIEW, WICHITA, KS 67203
Phone (316) 269-6230 Fax (316) 268-0205
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| DRAWN | CHECKED |
|---|---|
| BB | JAK |

RELATED DRAWINGS

| | |
|---|---|
| SHELL | |
| DETAILS | |
| STRUCTURE | |
| MECHANICAL | |
| ELECTRICAL | |
| OTHER | |

SEQUENCE NUMBER

OF ____ SHEETS

SUMMERFIELD SUITES® HOTEL
ADDISON, TEXAS
PROJECT NUMBER 94780

GRADING PLAN
SHEET TITLE

SHEET NUMBER
C-2
2 OF 7 SHEETS