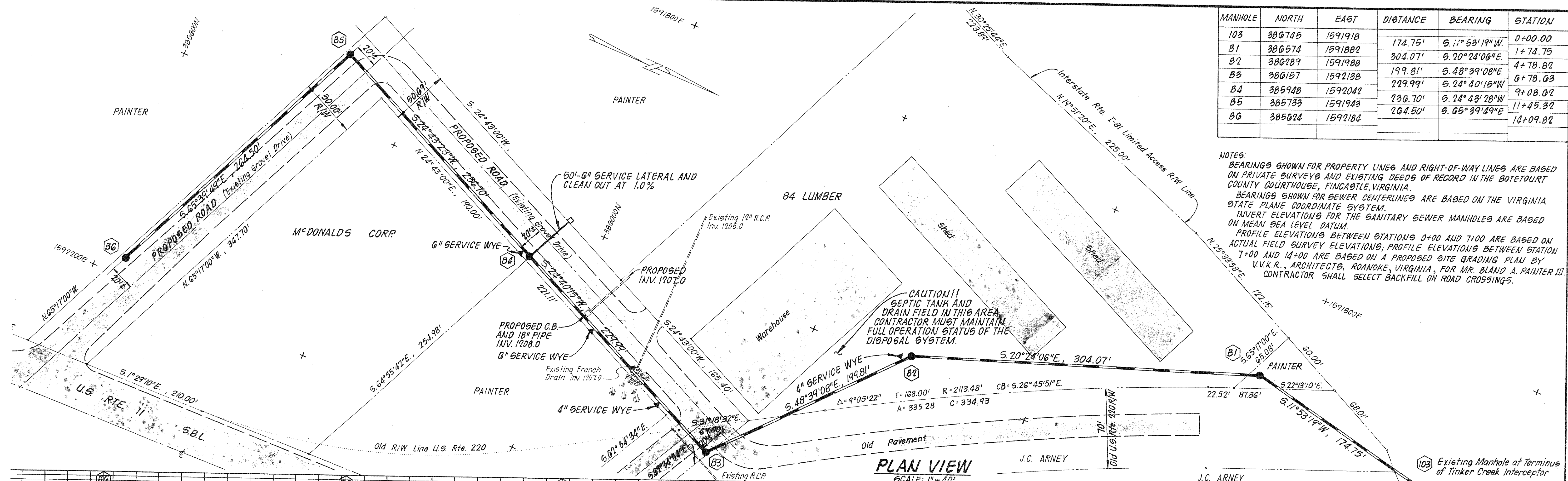
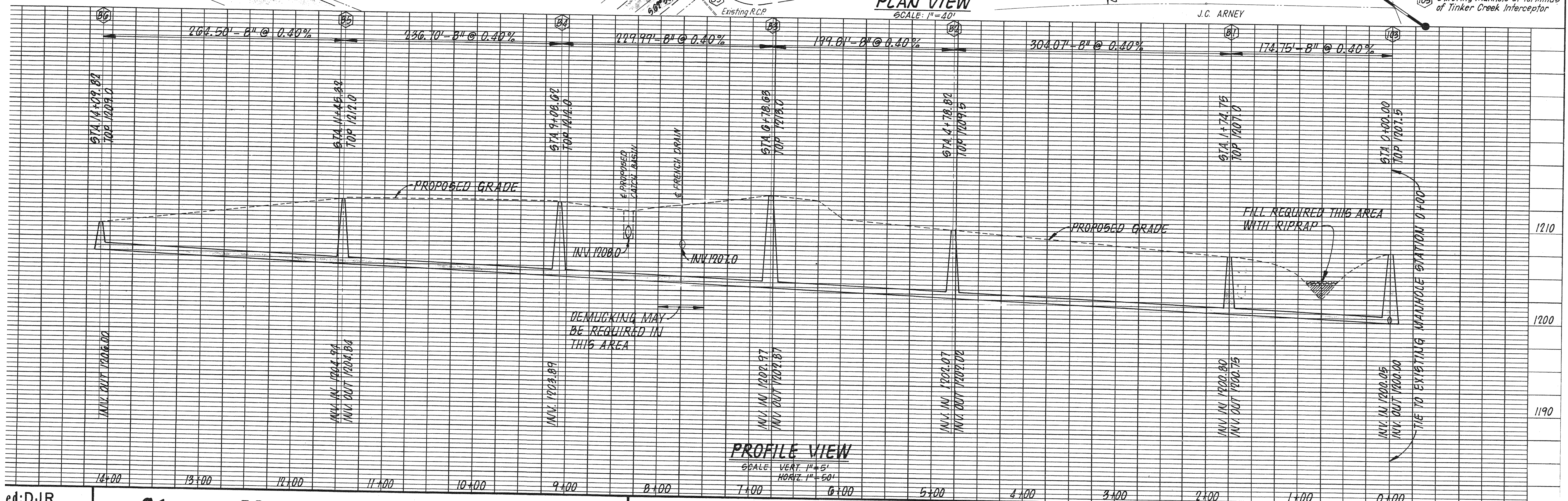


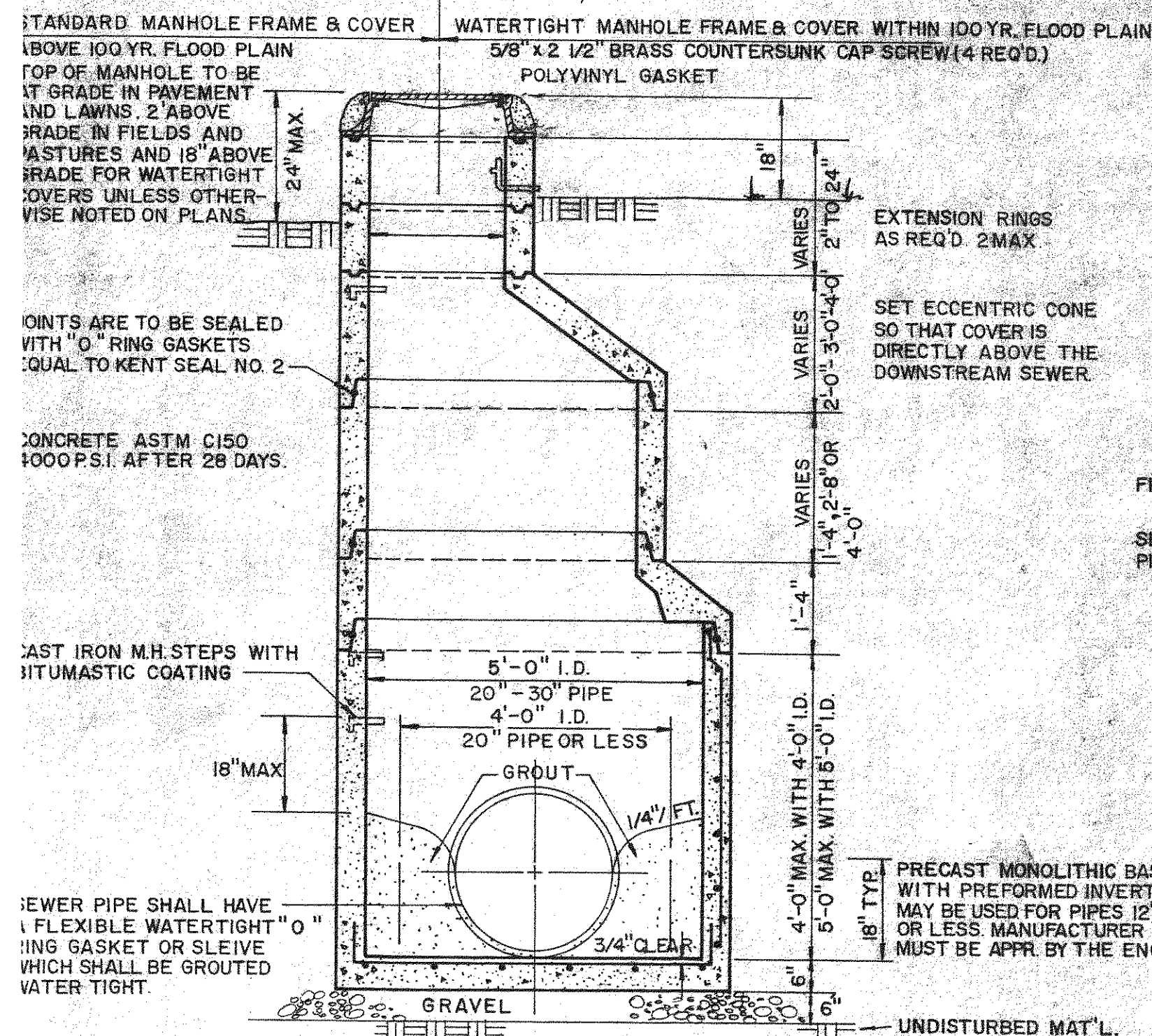


| MANHOLE | NORTH  | EAST    | DISTANCE | BEARING           | STATION  |
|---------|--------|---------|----------|-------------------|----------|
| 103     | 386745 | 1591918 | 174.75'  | S. 11° 53' 19" W. | 0+00.00  |
| B1      | 386574 | 1591882 | 304.07'  | S. 20° 24' 06" E. | 1+74.75  |
| B2      | 386789 | 1591988 | 199.81'  | S. 48° 39' 08" E. | 4+78.82  |
| B3      | 386157 | 1592138 | 229.99'  | S. 24° 40' 15" W. | 6+78.83  |
| B4      | 385948 | 1592042 | 230.70'  | S. 24° 43' 28" W. | 9+08.02  |
| B5      | 385733 | 1591943 | 264.50'  | S. 65° 39' 49" E. | 11+45.32 |
| B6      | 385624 | 1592184 |          |                   | 14+09.82 |

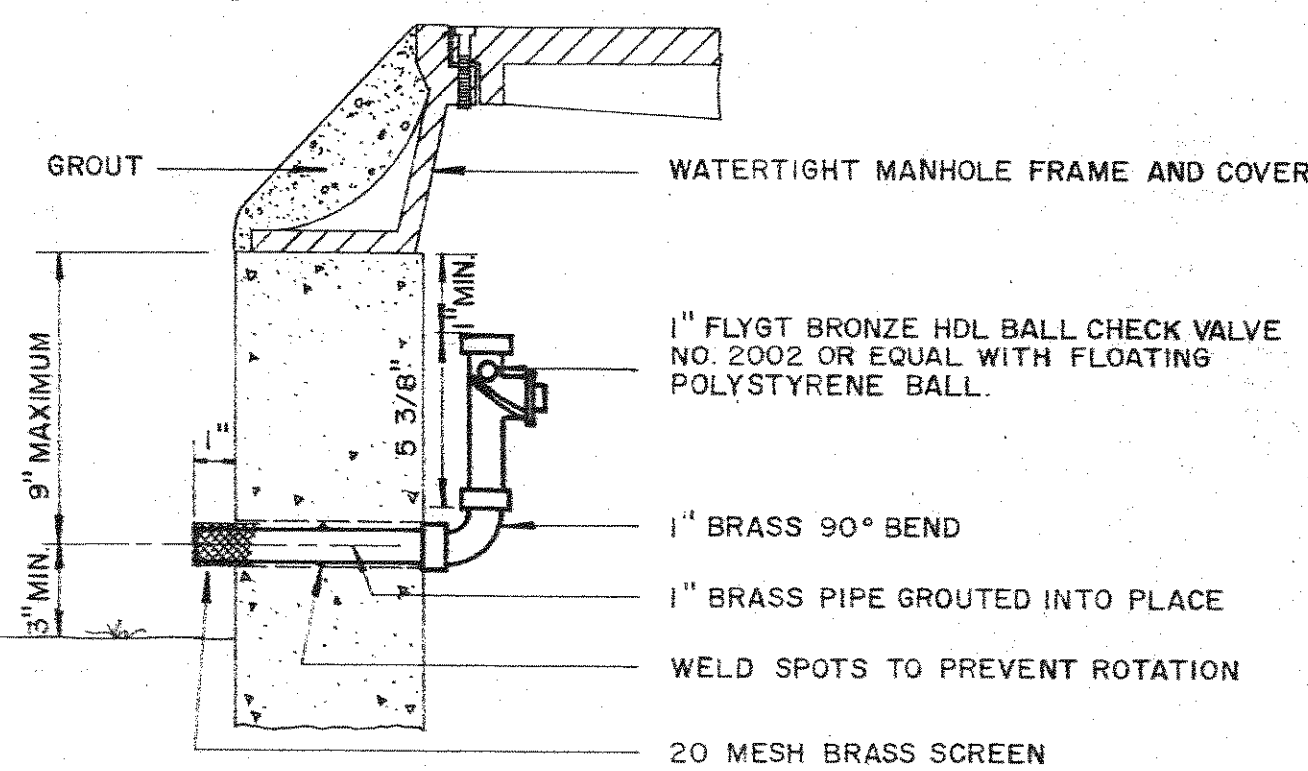
NOTES:  
 BEARINGS SHOWN FOR PROPERTY LINES AND RIGHT-OF-WAY LINES ARE BASED ON PRIVATE SURVEYS AND EXISTING DEEDS OF RECORD IN THE BOTETOURT COUNTY COURTHOUSE, FINCASTLE, VIRGINIA.  
 BEARINGS SHOWN FOR SEWER CENTERLINES ARE BASED ON THE VIRGINIA STATE PLANE COORDINATE SYSTEM.  
 INVERT ELEVATIONS FOR THE SANITARY SEWER MANHOLES ARE BASED ON MEAN SEA LEVEL DATUM.  
 PROFILE ELEVATIONS BETWEEN STATIONS 0+00 AND 7+00 ARE BASED ON ACTUAL FIELD SURVEY ELEVATIONS, PROFILE ELEVATIONS BETWEEN STATION 7+00 AND 14+00 ARE BASED ON A PROPOSED SITE GRADING PLAN BY V.V.K.R., ARCHITECTS, ROANOKE, VIRGINIA, FOR MR. BLAND A. PAINTER, III.  
 CONTRACTOR SHALL SELECT BACKFILL ON ROAD CROSSINGS.



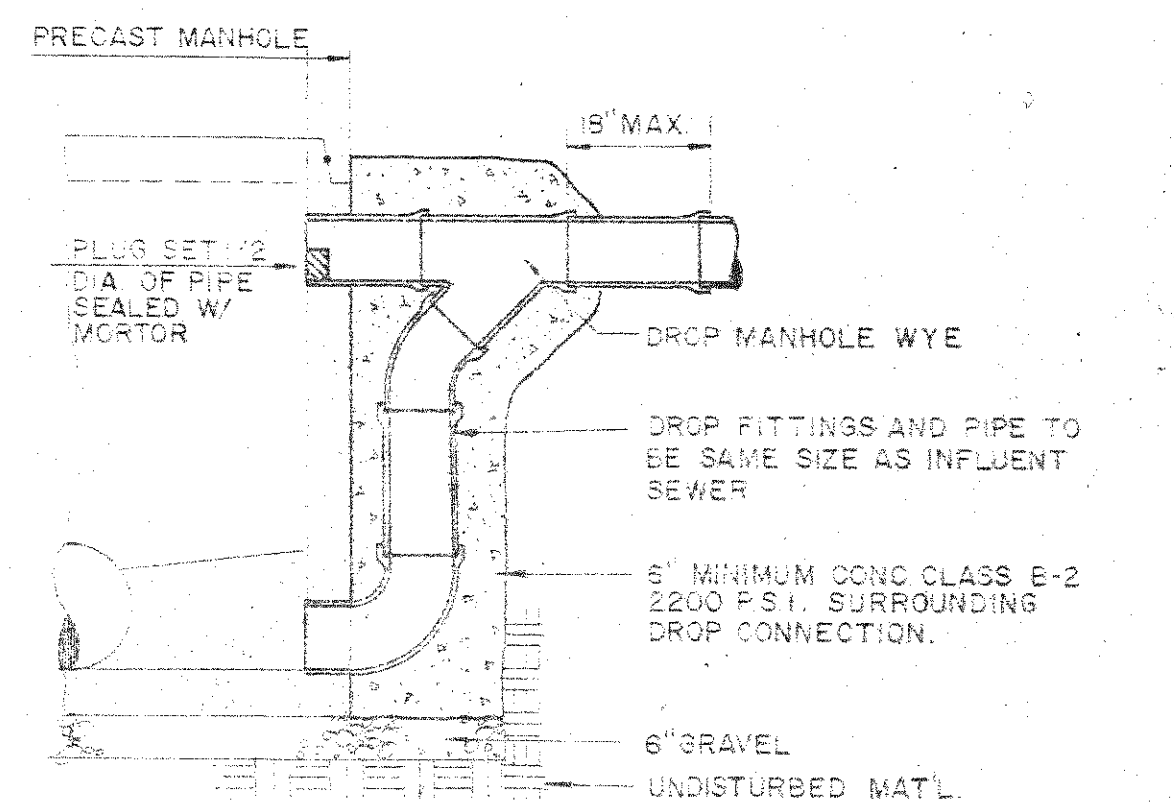




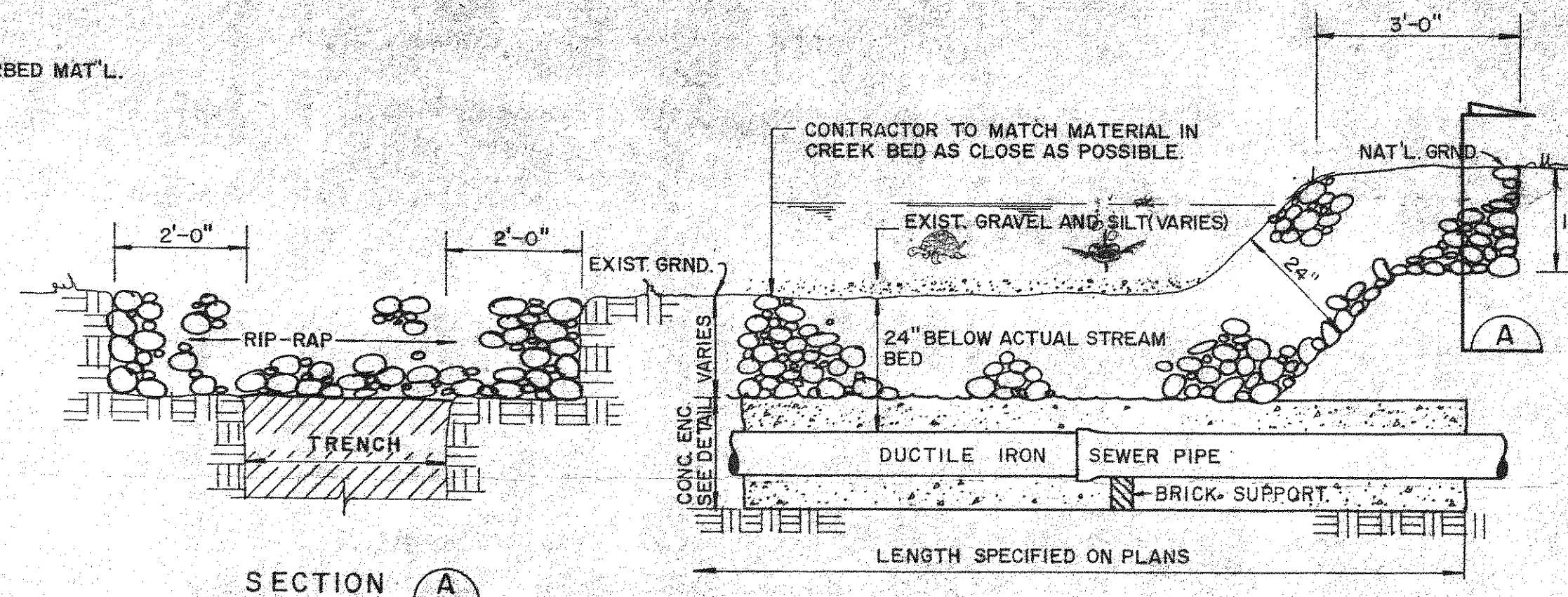
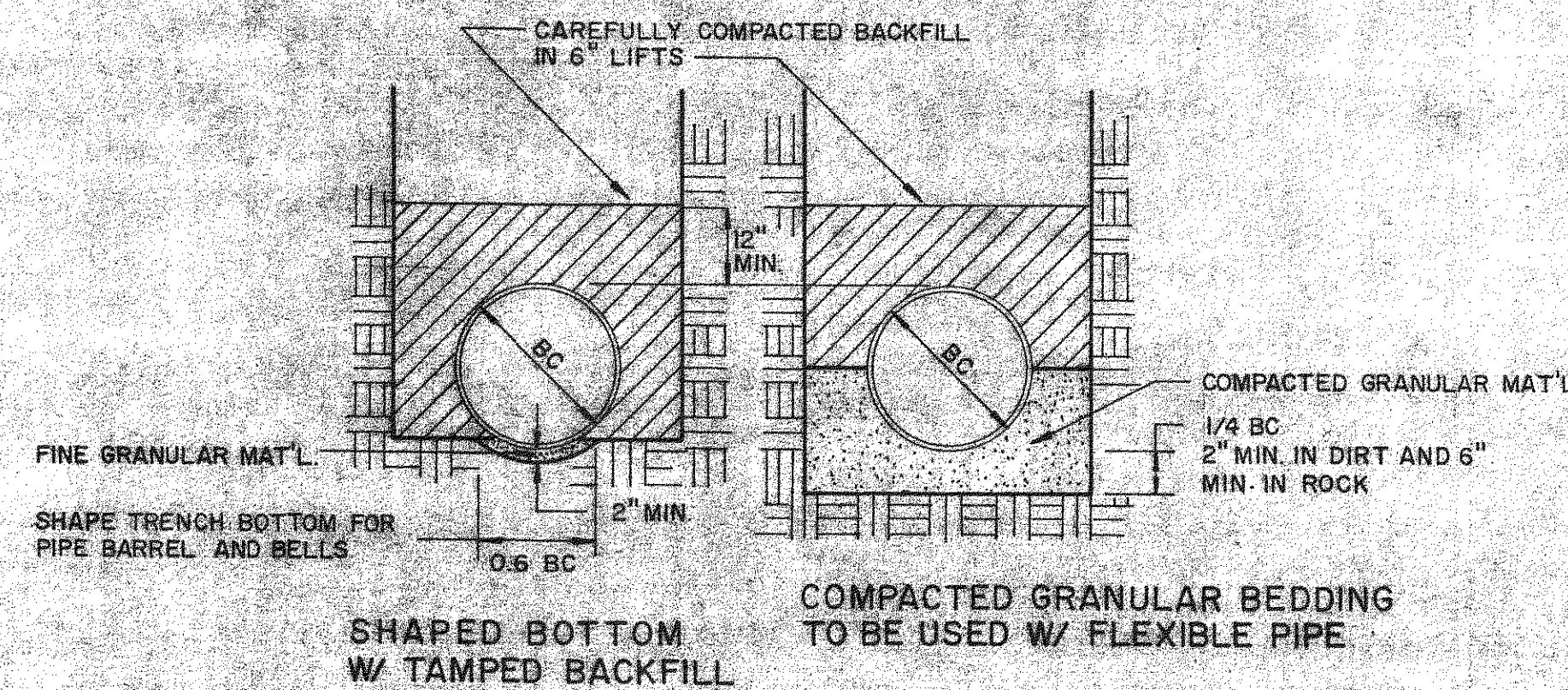
**PRECAST ECCENTRIC MANHOLE**



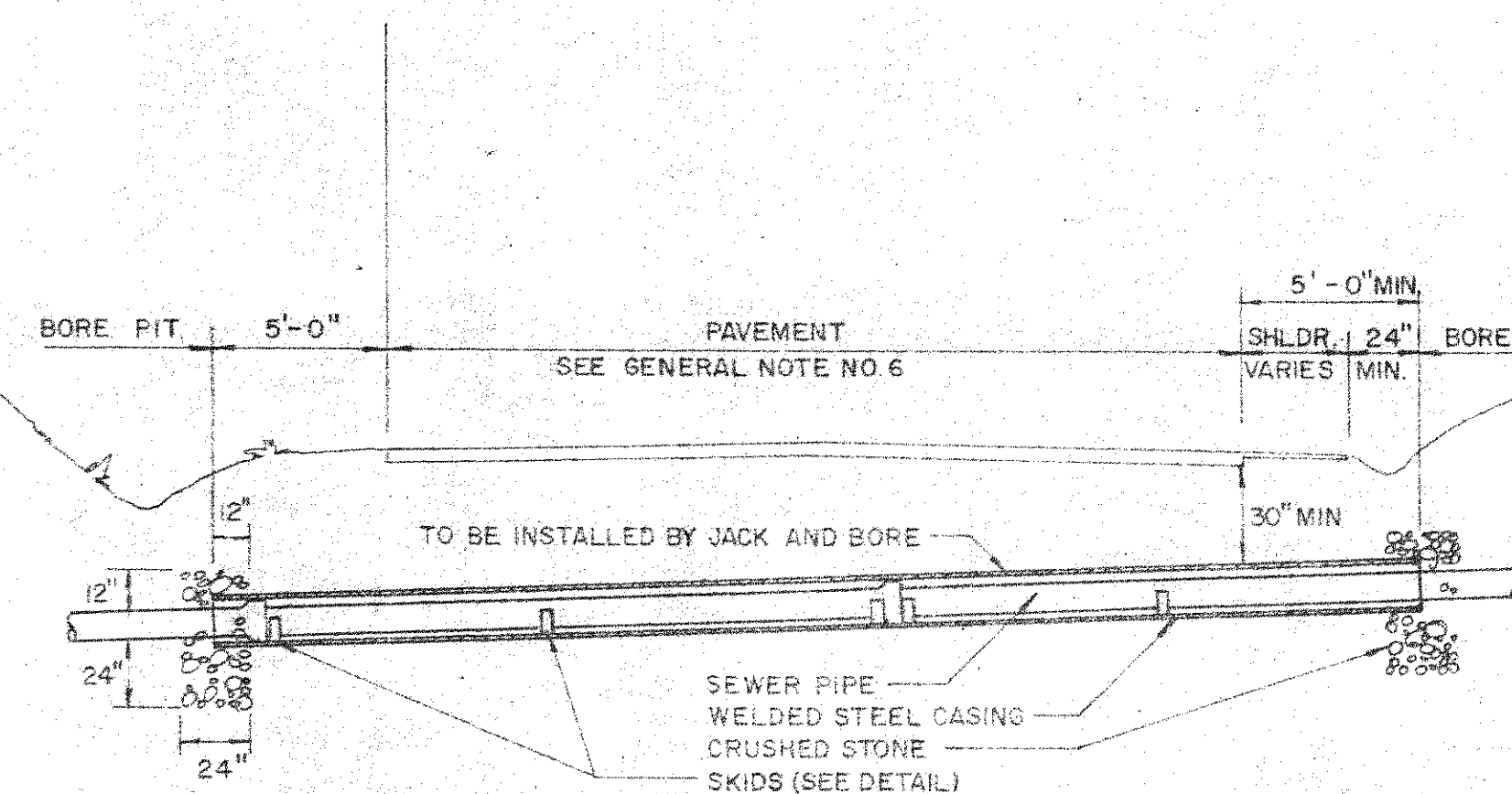
**WATERTIGHT MANHOLE VENT DETAIL**



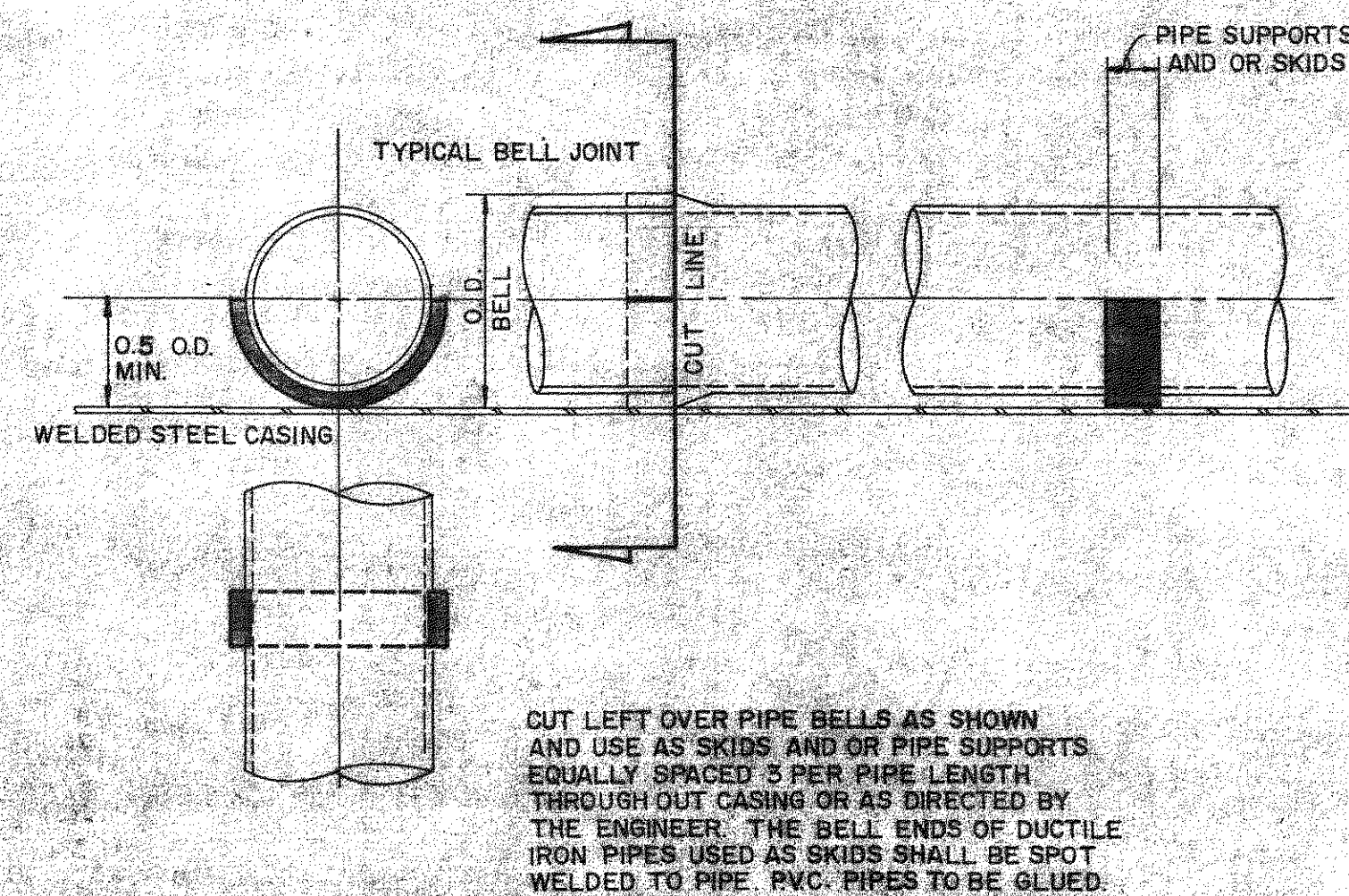
**DROP CONSTRUCTION AT STANDARD MANHOLE**



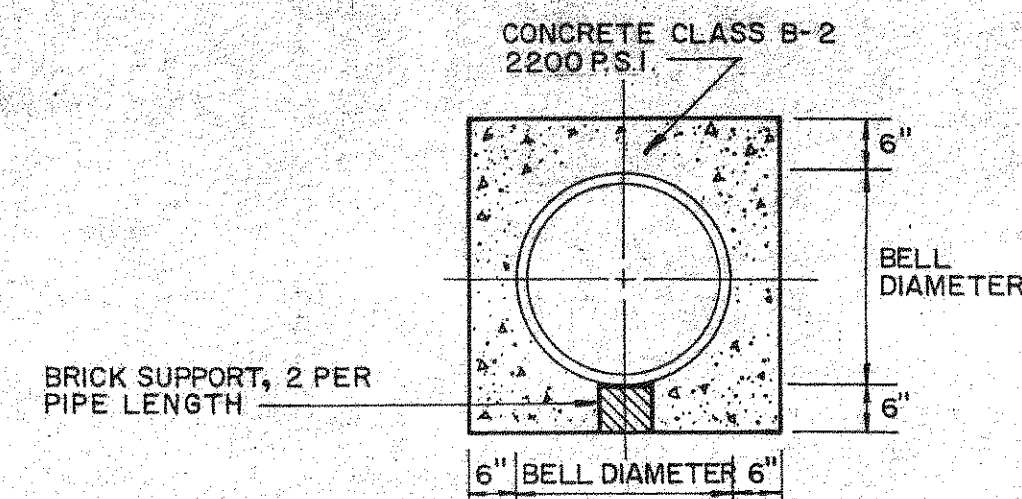
**TYPICAL CREEK CROSSING AND BANK PROTECTION**



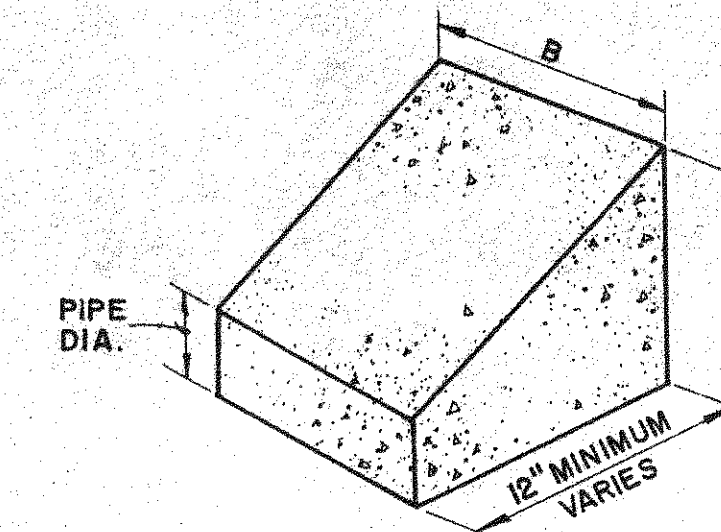
**PRIMARY AND SECONDARY ROAD CROSSING**



**SKID DETAIL**

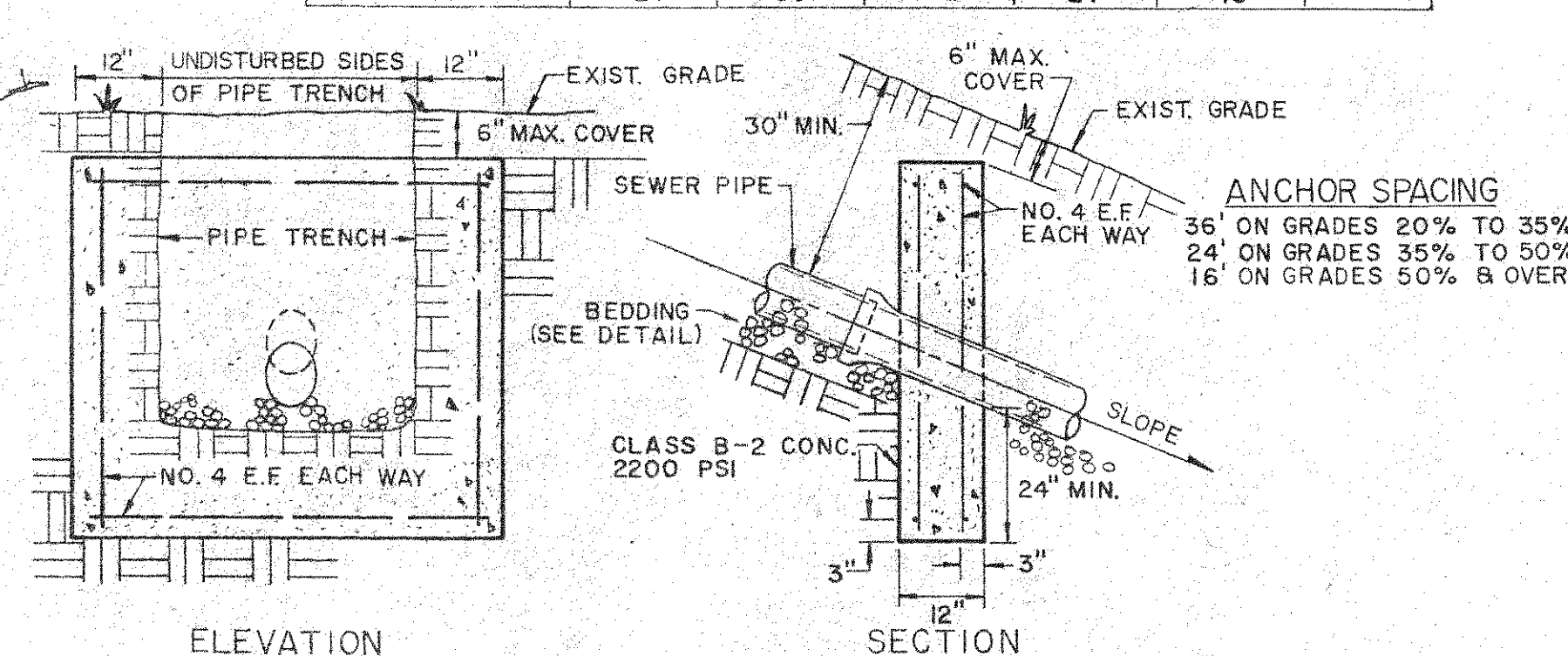


**CONCRETE ENCASED PIPE**

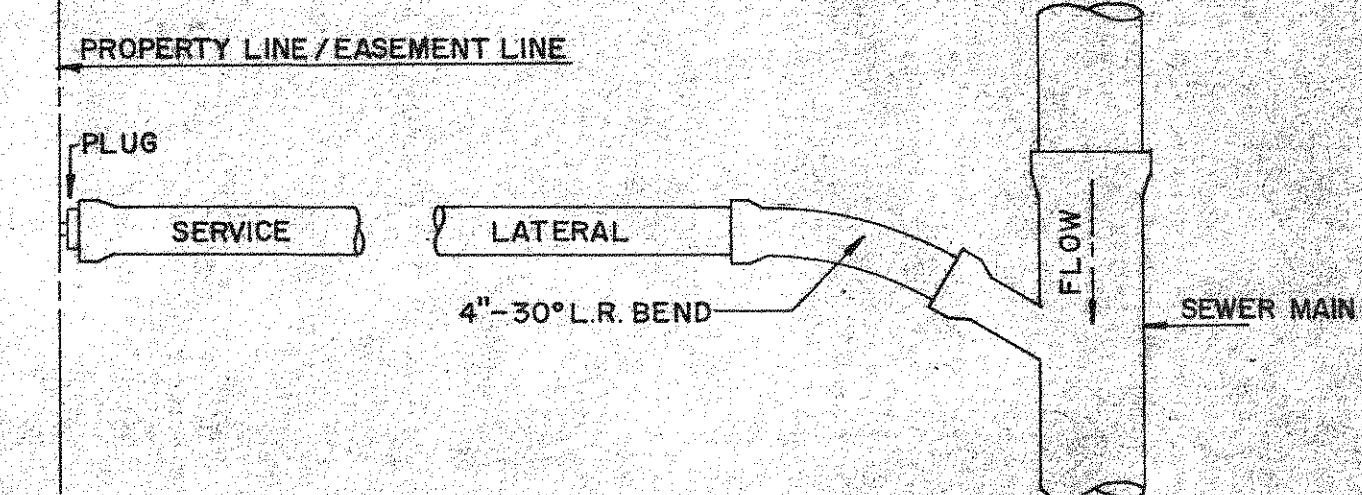


**THRUST BLOCK SIZES**

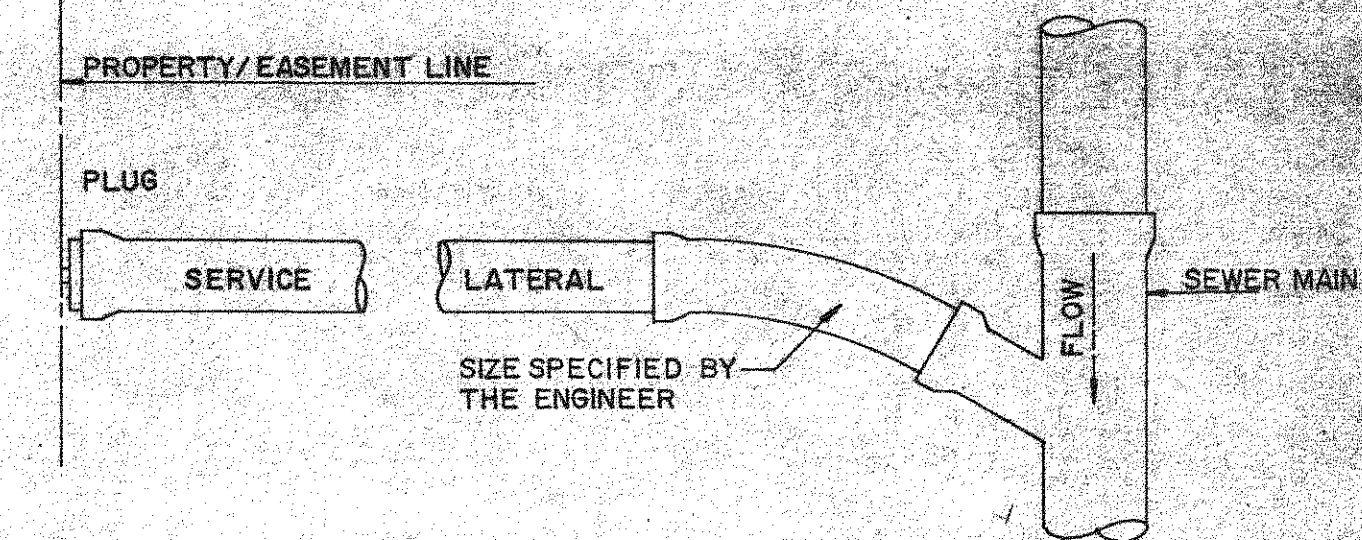
| PIPE DIAMETER | TEE, CROSS, 90° |     | 45° WYE |     | 22 1/2° |     |
|---------------|-----------------|-----|---------|-----|---------|-----|
|               | A               | B   | A       | B   | A       | B   |
| 4"            | 12"             | 12" | 12"     | 12" | 12"     | 12" |
| 6"            | "               | "   | "       | "   | "       | "   |
| 8"            | 15"             | 24" | "       | 18" | "       | "   |
| 10"           | 18"             | "   | 18"     | "   | "       | 18" |
| 12"           | 24"             | 30" | "       | 24" | 18"     | "   |



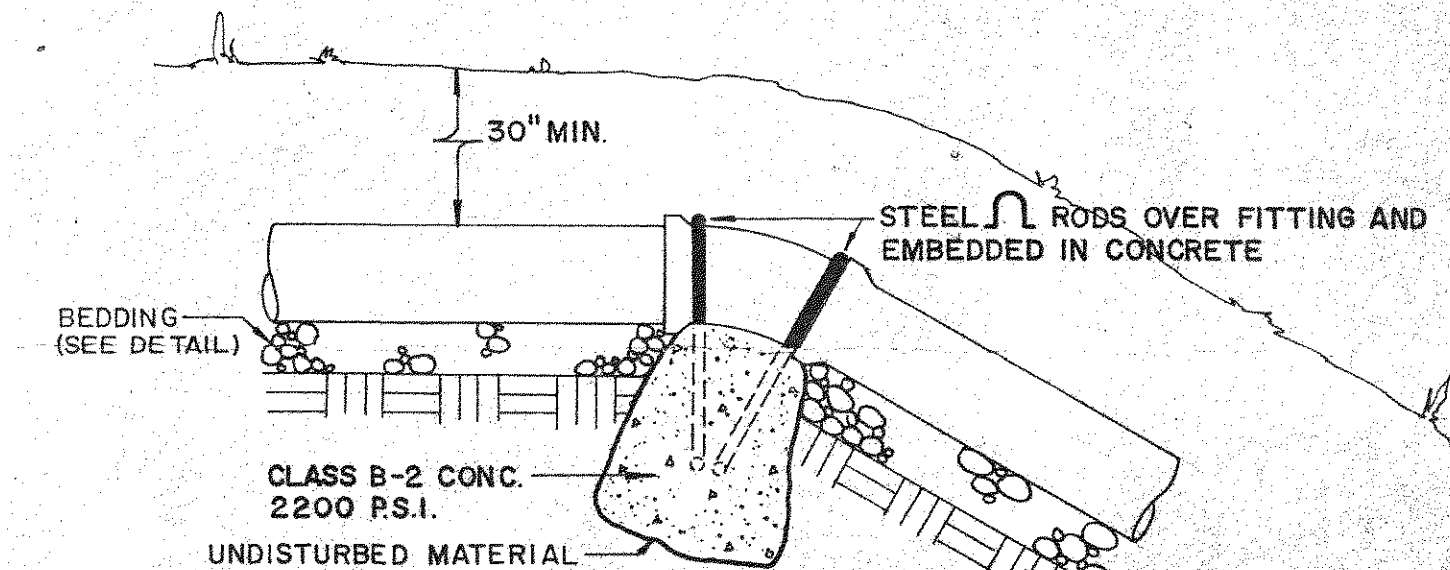
**CONCRETE ANCHOR DETAIL**



**RESIDENTIAL SERVICE CONNECTION**



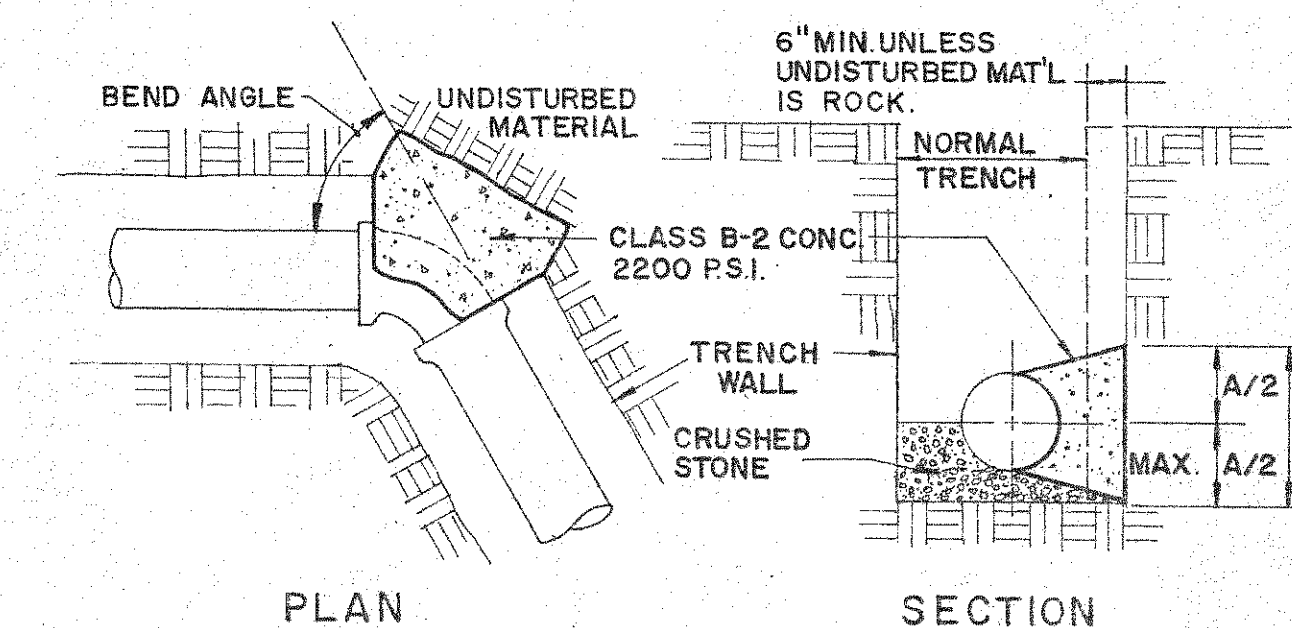
**COMMERCIAL SERVICE CONNECTION**



| FITTING SIZE | ROD SIZE                              | NO. OF RODS | EMBEDMENT |
|--------------|---------------------------------------|-------------|-----------|
| 4"-6"-8"     | No. 4                                 | 2           | 24"       |
| 10"-12"      | " 6                                   | " 2         | "         |
| FITTING SIZE | VOLUME OF THRUST BLOCK IN CUBIC YARDS |             |           |
|              | 90°                                   | 45°         | 22 1/2°   |
| 4            | 0.25                                  | 0.15        | 0.1       |
| 6            | 0.5                                   | 0.35        | 0.25      |
| 8            | 0.9                                   | 0.65        | 0.5       |
| 10           | 1.4                                   | 1.0         | 0.8       |
| 12           | 2.0                                   | 1.4         | 1.0       |

- KEEP CONC. CLEAR OF JOINT AND JOINT ACCESSORIES.
- THRUST BLOCKS FOR VERTICAL UP BENDS SHALL BE THE SAME VOLUME AS FOR HORIZONTAL BENDS.

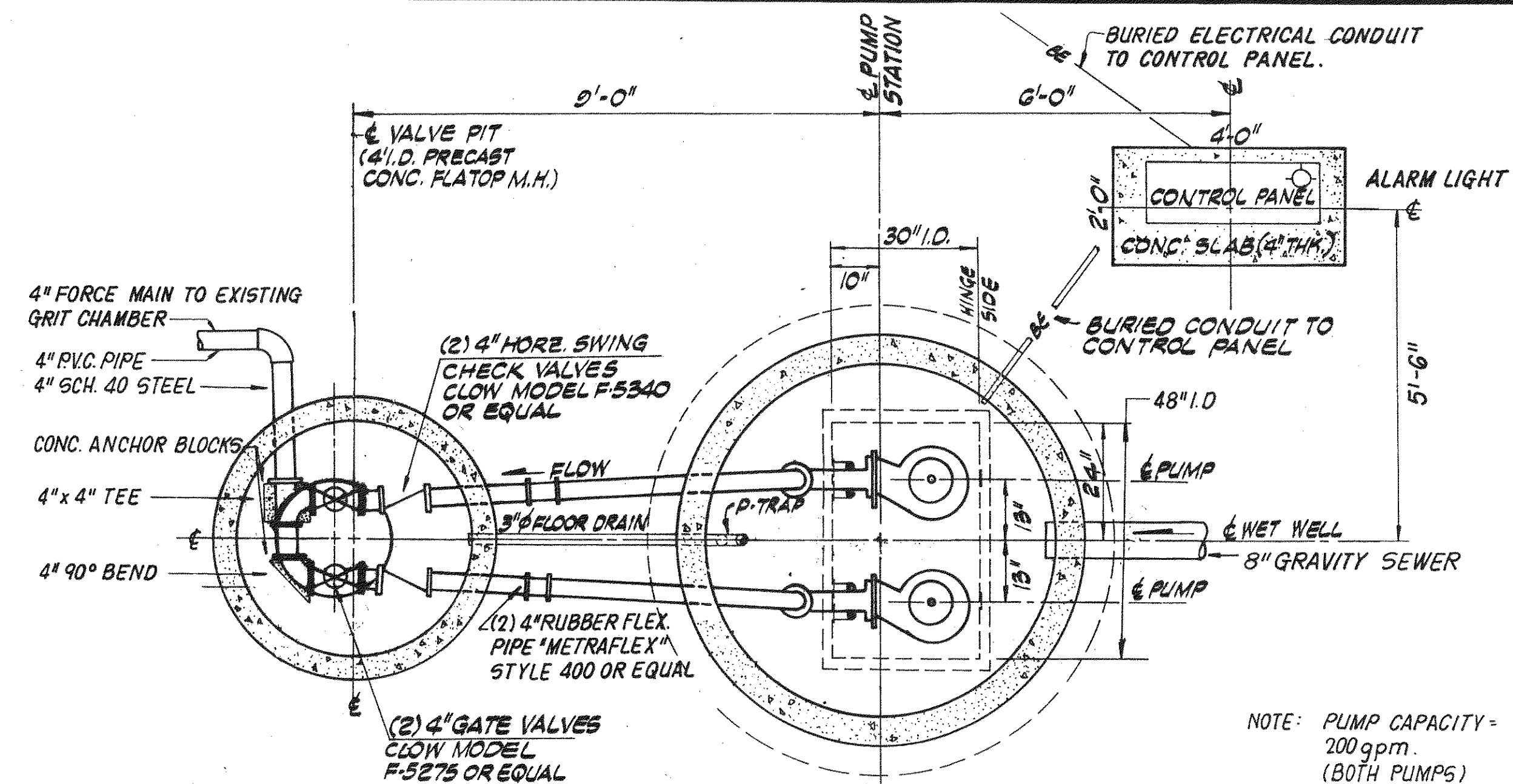
**VERTICAL THRUST BLOCK DETAIL**



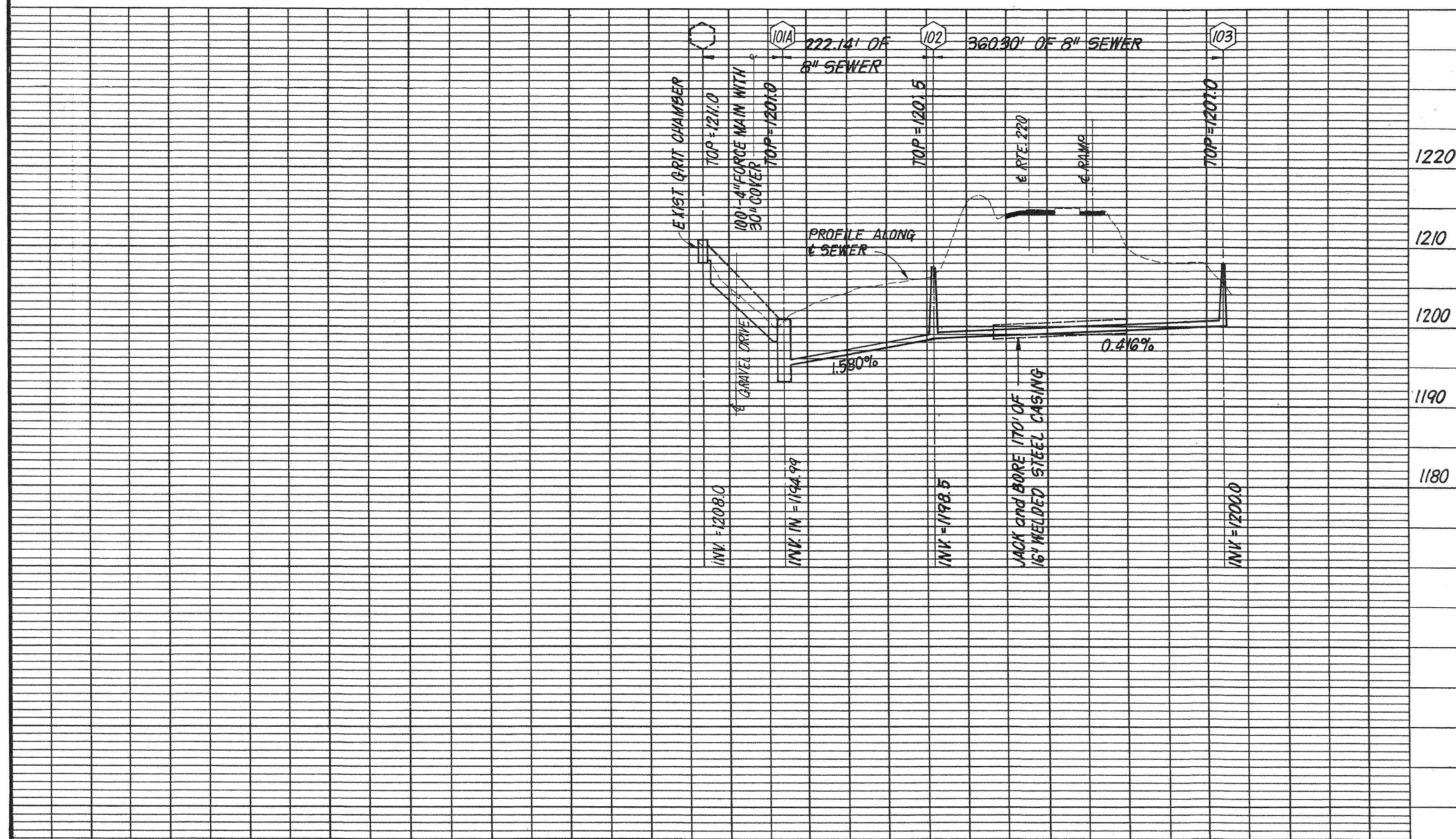
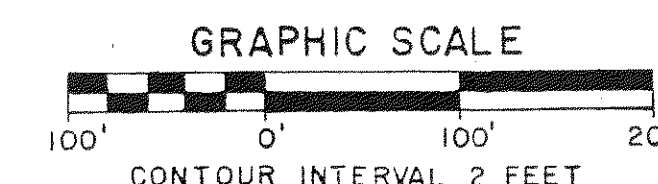
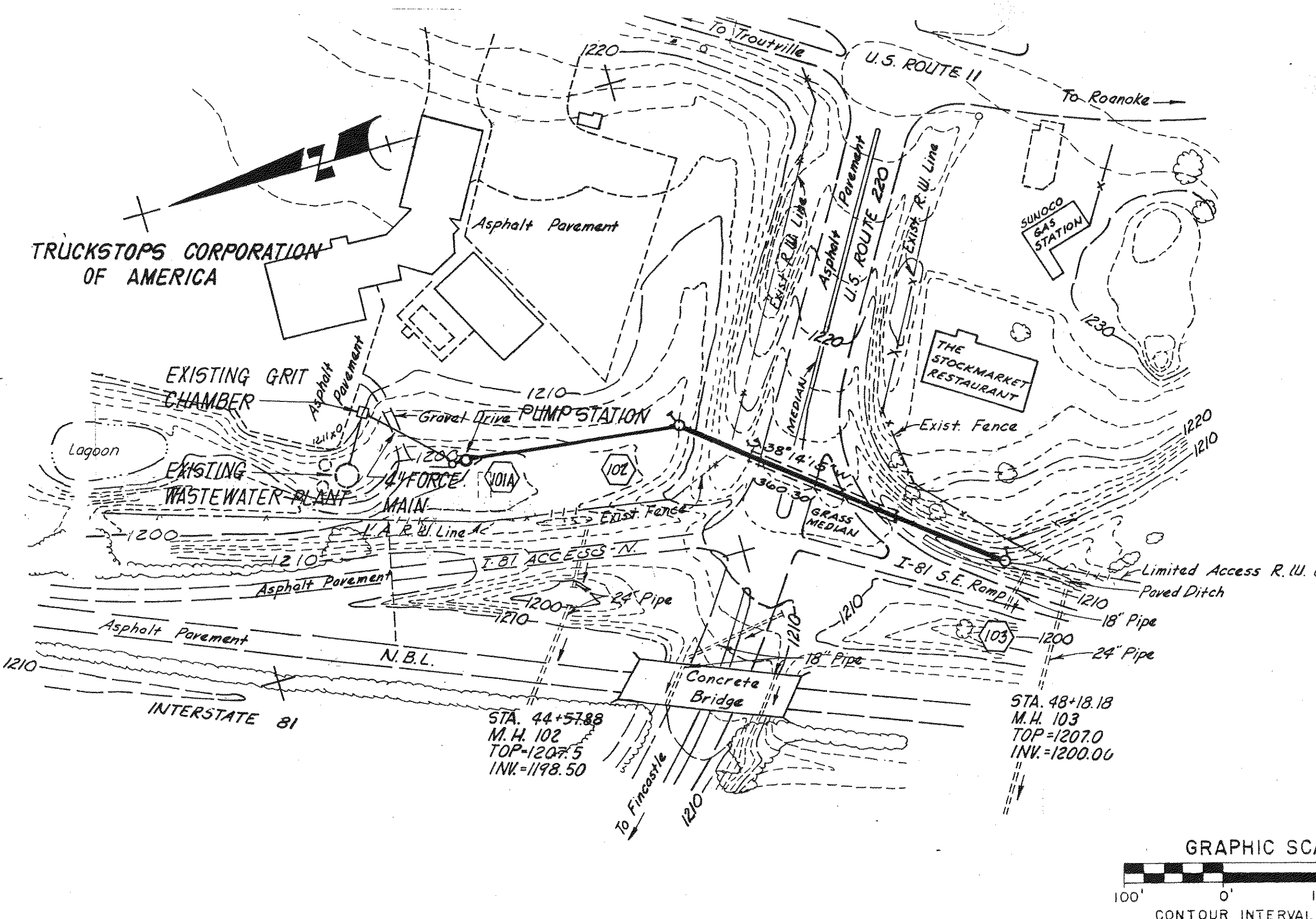
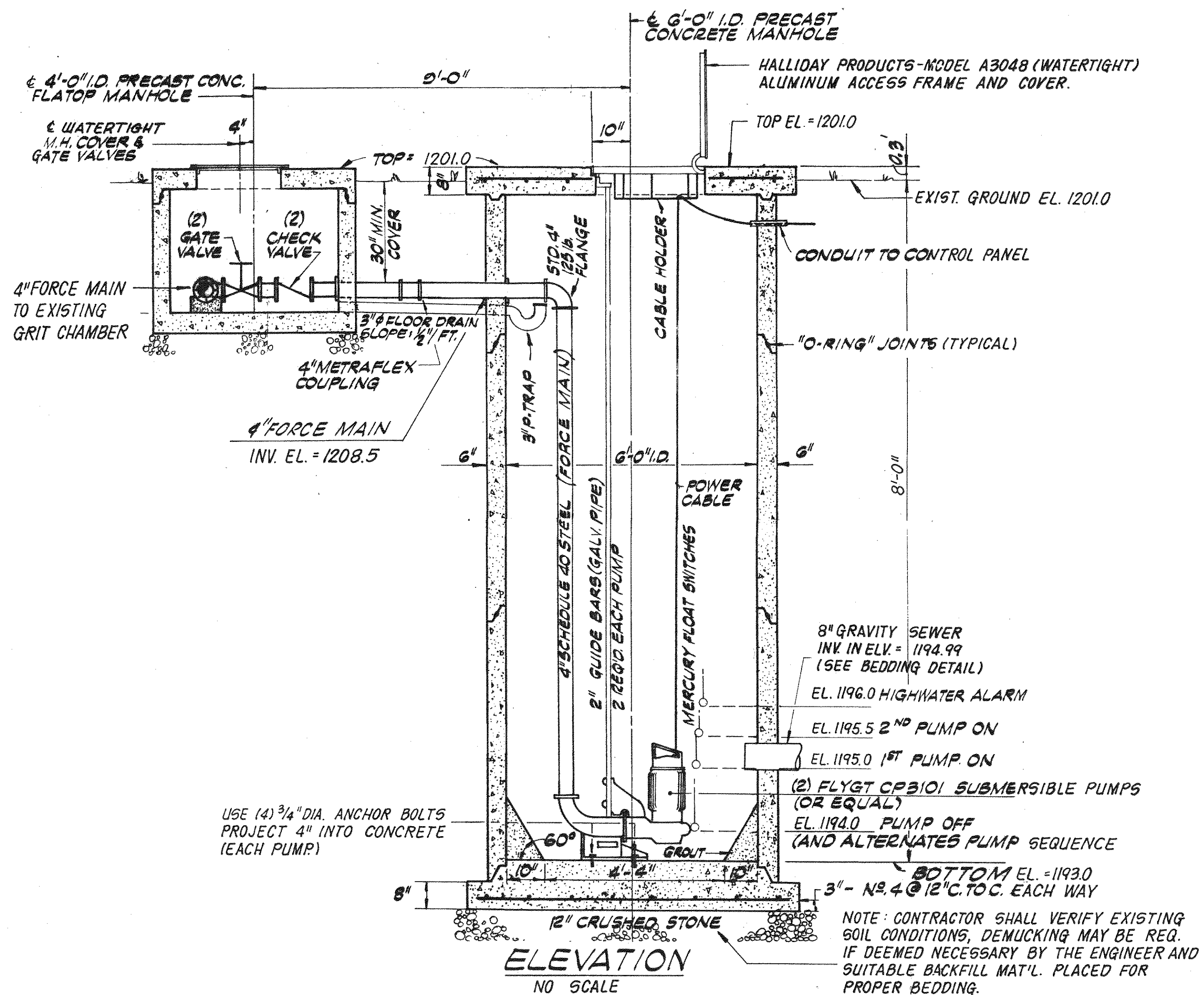
- AREA OF THRUST BLOCK BASED ON 1500 P.S.F. LATERAL BEARING PRESSURE AND A TEST PRESSURE WITHIN PIPE OF 150 P.S.I., VELOCITY OF 10 F.P.S.
- THRUST BLOCKS ARE REQUIRED AT ALL BENDS OF MORE THAN 10°.
- BEARING SURFACE OF THRUST BLOCKS MUST BE NORMAL TO RESULTANT THRUST OF BEND AND BEAR ON SUITABLE UNDISTURBED MATERIAL.
- KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES.

**HORIZONTAL THRUST BLOCK DETAIL**





PUMP STATION PLAN  
NO SCALE



ed: DJR  
d: CFA  
d: CFA  
ed: DJR

**Clean Water Engineers, Inc.**  
Fincastle, Virginia

PROPOSED 8" GRAVITY SEWER EXTENSION  
FOR  
BLAND A. PAINTER, III

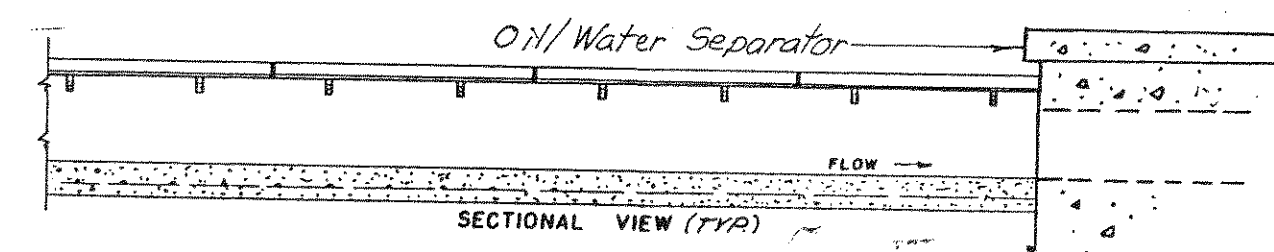
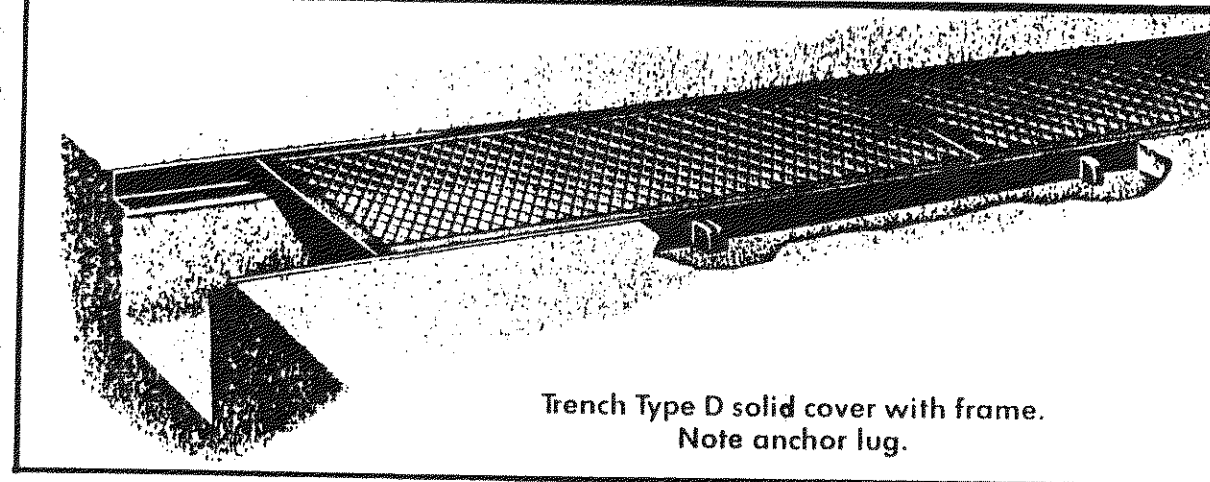
Sheet: 3 of 3  
Scale: 1" = 100' HORIZ.  
10' VERT.  
Date: FEB. 5, 1982  
Project: 8209



| CURVE DATA |            |          |         |         |         |
|------------|------------|----------|---------|---------|---------|
| Curve      | Delta      | Radius   | Arc     | Tangent | Dist.   |
| A          | 147°06'23" | 61.20'   | 157.13' | 207.31' | 117.39' |
| B          | 09°05'22"  | 2043.48' | 324.18' | 162.43' | 323.84' |

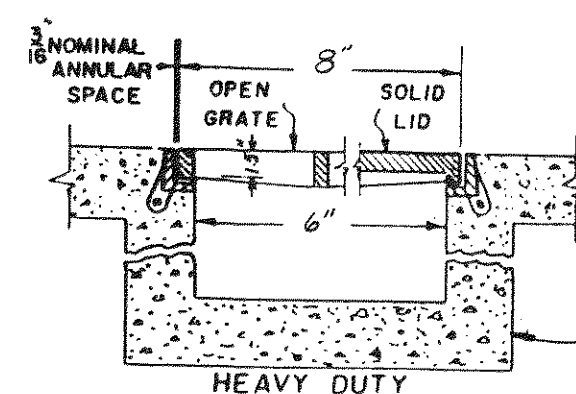
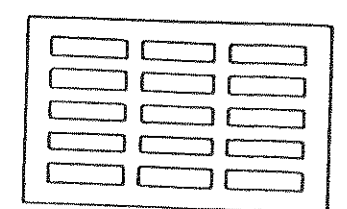
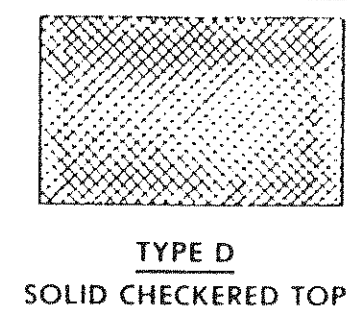
#### DEMOLITION NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING WATER AND SEWER CONNECTIONS PRIOR TO DEMOLITION. THEY SHALL BE CAPPED AND PLUGGED, THEN PRESERVED FOR FUTURE USE OF THE PROPOSED BUILDING.
- THE OVERHEAD ELECTRIC LINE SERVING THE EXISTING BUILDING SHALL BE REMOVED BETWEEN THE UTILITY POLE NEAR THE PROPERTY LINE (CURVE "B") AND THE BUILDING. THE POLE NEAR THE BUILDING SHALL BE RELOCATED AS NECESSARY. REFER TO PLANS BY OTHERS FOR PROPOSED LOCATION OF ELECTRIC SERVICE ENTRANCE INTO PROPOSED BUILDING.
- THE DEMOLITION DOCUMENTS PREPARED BY BALZER AND ASSOCIATES, INC., ARE TO BE ADHERED TO AS PART OF THIS PLAN.
- THE "CITCO" SIGN AT THE NORTHWEST CORNER OF THE PROPERTY SHALL REMAIN.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLAN, OR IF THE LOCATION OR ELEVATION OF ANY UTILITY DIFFERS FROM THAT SHOWN ON THE PLAN. TO MISS THE UTILITY, CALL "MISS UTILITY OF VIRGINIA" 24 HOURS BEFORE YOU DIG, TOLL FREE 1-800-552-7001.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL NECESSARY PERMITS. MECHANICAL PERMITS REQUIRED FOR REMOVAL OF OLD TANKS AND INSTALLATION OF NEW SHALL BE OBTAINED BY CONTRACTOR RESPONSIBLE FOR THAT PORTION OF THE WORK.

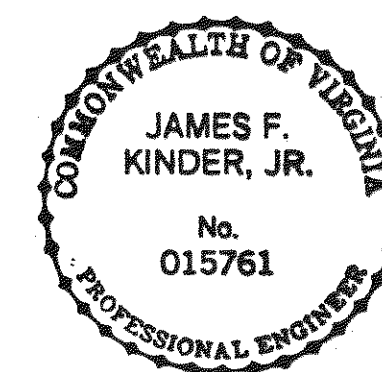
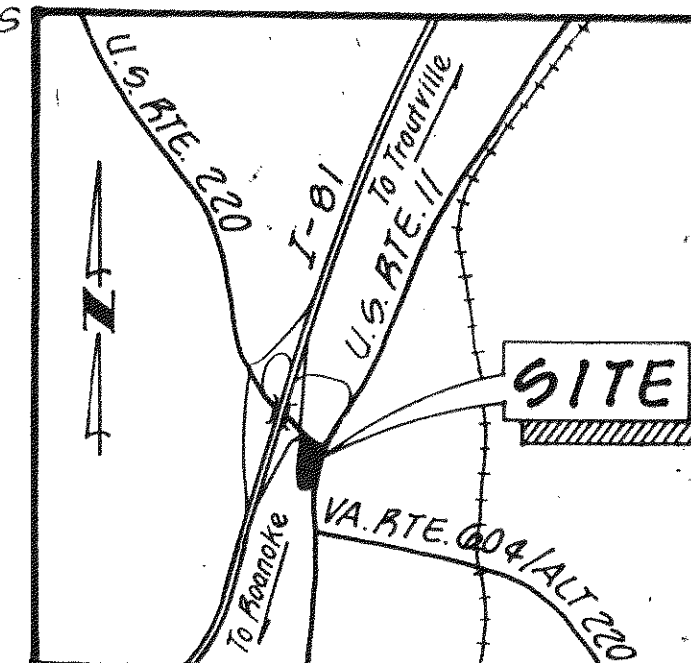


NEENAH R-4990-AX HEAVY DUTY TRENCH FRAMES  
WITH GRATED OR SOLID COVERS

NO SCALE



- REV. IN ACCORDANCE W/ COUNTY COMMENTS
- GENERAL REVISIONS (ARCH.)
- REV. UTILITIES



OWNER: SERVICE GAS CO.  
D.B. 275, PG. 136  
D.B. 278, PG. 604  
D.B. 325, PG. 74  
DEVELOPER: SERVICE GAS CO.  
ADDRESS: P.O. BOX 1038  
SUFFOLK, VIRGINIA  
TELEPHONE: (804) 539-2358  
TAX MAP NUMBERS: 101-142B, C & E  
TRACT SIZE: 1.624 ACRES  
ZONING: B-2  
PRESENT USE:

CONVENIENCE STORE  
PROPOSED USE: GAME  
BUILDING SIZE: 2208 S.F.  
PARKING REQUIRED: 8 SPACES  
PARKING PROPOSED: 8 SPACES  
WATER: PRIVATE COMPANY  
SEWER: BOTETOURT COUNTY  
BUILDING HEIGHT: < 35'



PLANNERS ARCHITECTS  
ENGINEERS SURVEYORS

16 S. College Avenue  
Salem, Virginia 24153  
Phone: 703/389-7323  
FAX: 703/389-5042

501 Branchway Road  
Suite 100  
Richmond, Virginia 23236  
Phone: 804/794-0571  
FAX: 804/794-2635

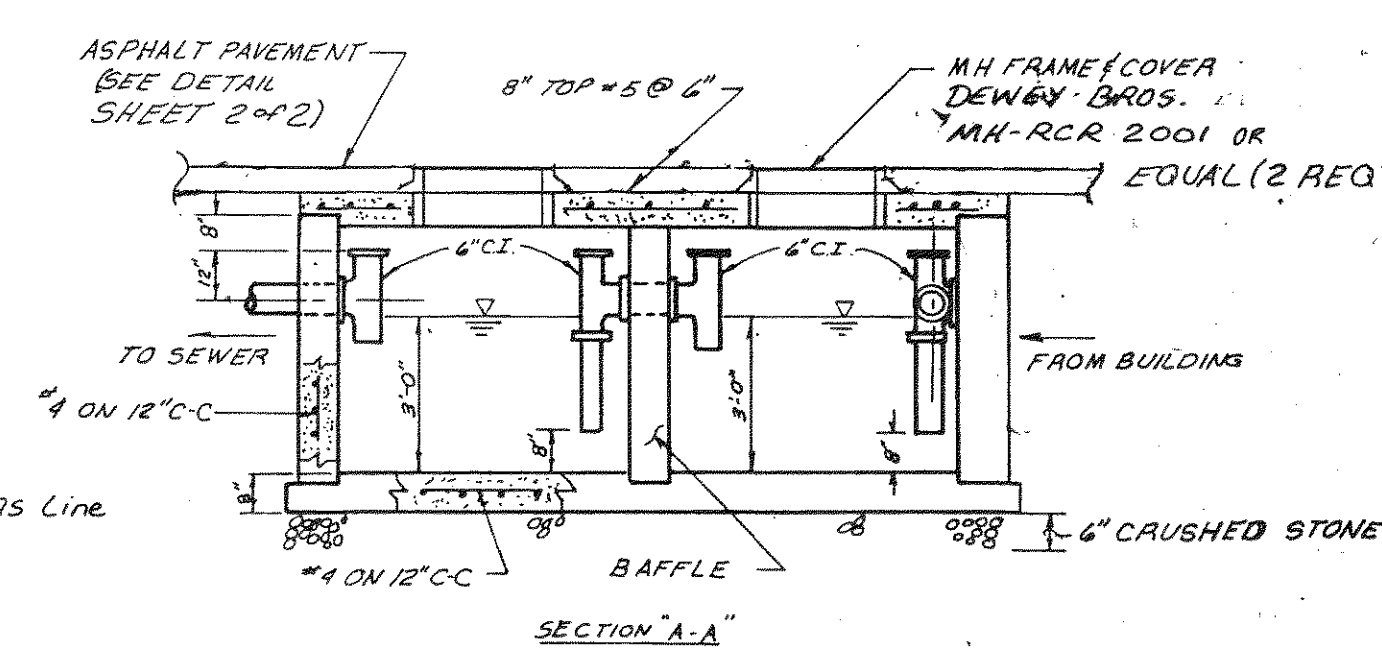
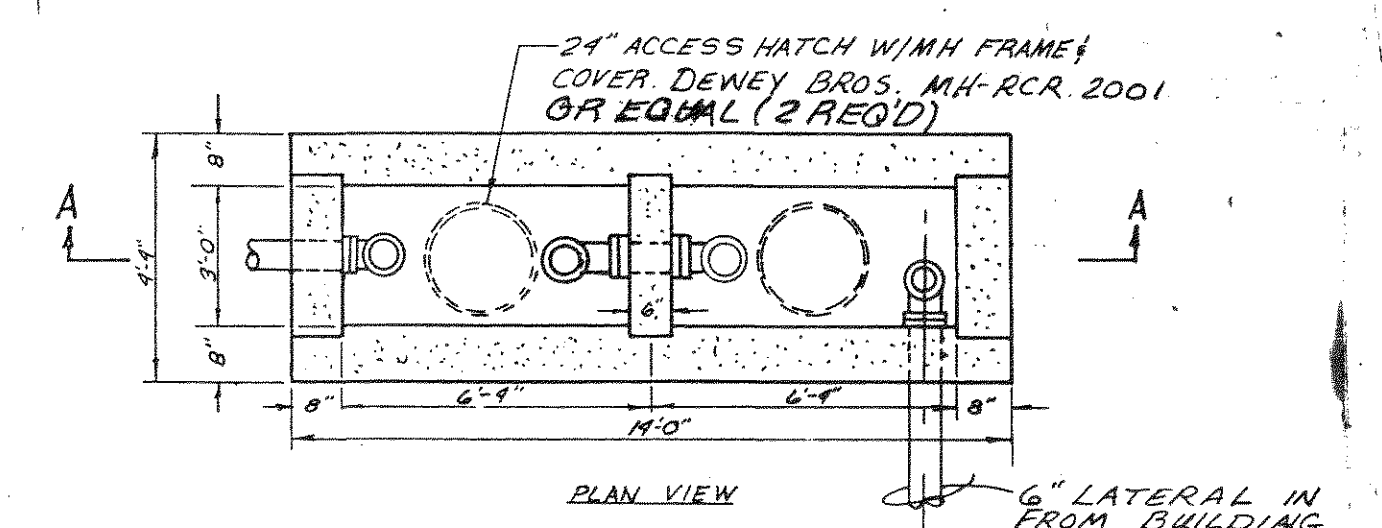
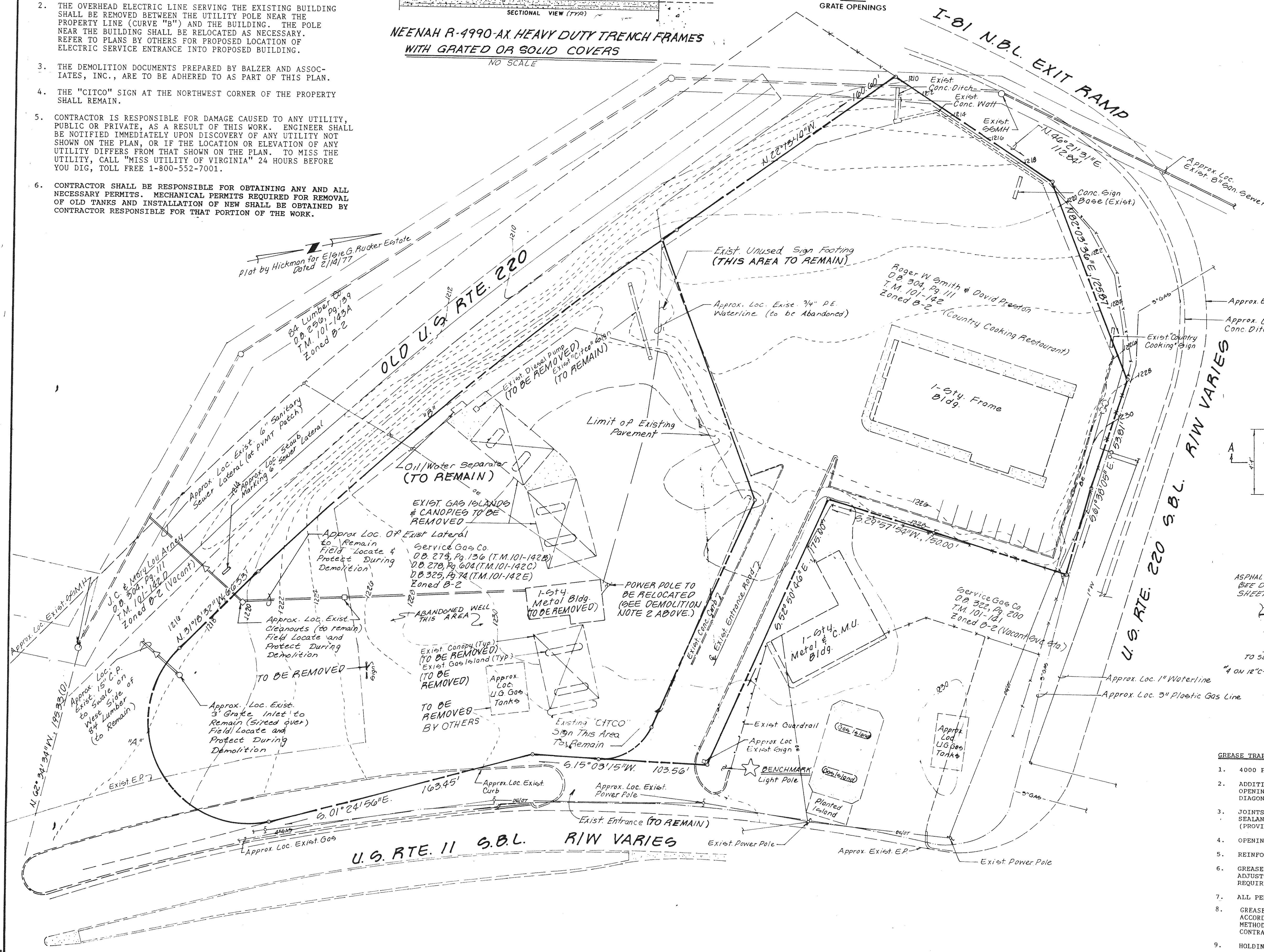
SENTRY FOOD MART  
DEMOLITION PLAN  
BOTETOURT COUNTY, VIRGINIA

DRAWN BY DAM  
DESIGNED BY CCB  
CHECKED BY JFK  
DATE SEPT. 10, 1990

REVISIONS  
① 10/16/90  
② 1/14/91  
③ 1/24/91

SCALE 1" = 30'  
SHEET NO.

C1  
JOB NO. 1163



- GREASE TRAP NOTES:
- 4000 PSI CONCRETE SHALL BE USED TO CONSTRUCT GREASE TRAP.
  - ADDITIONAL REINFORCING MAY BE INSERTED AROUND LIFT HOLES AND OPENINGS AS NEEDED FOR HANDLING. CONSISTING OF 4 EACH #4 DIAGONALLY AROUND OPENING MINIMUM.
  - JOINTS SHALL BE WATERTIGHT, SEALED WITH DOUBLE PREFORMED BUTYL SEALANT AND BOLTED WITH 3/4" LAG BOLTS INTO CONCRETE INSERTS (PROVIDED BY MANUFACTURER).
  - OPENINGS SHALL BE PROVIDED FOR PIPE CONNECTIONS AS SHOWN.
  - REINFORCING BARS GRADE 60.
  - GREASE TRAP SHALL BE FIELD ERECTED. MANHOLE FRAMES SHALL BE ADJUSTED TO GRADE USING GRADE RINGS AND NON-SHRINK GROUT AS REQUIRED.
  - ALL PENETRATIONS SHALL BE GROUTED WATERTIGHT.
  - GREASE TRAP SHALL BE TESTED IN PLACE FOR WATERTIGHTNESS IN ACCORDANCE WITH BOTETOURT COUNTY MANHOLE TESTING STANDARDS. METHOD OF TESTING MAY BE AIR, WATER OR VACUUM AT CONTRACTOR'S OPTION.
  - HOLDING CAPACITY OF TANK SHALL BE 1000 GALLONS.



# GENERAL NOTES:

- BENCHMARK: USGS BM @ BRIDGE NORTH OF U.S. 220 AND U.S. 11 INTERSECTION. ELEV. = 1213.45
- REFERENCE BOUNDARY AND TOPOGRAPHIC SURVEY BY BALZER AND ASSOCIATES, INC. DATED MARCH 2, 1989.
- THE EROSION AND SEDIMENT CONTROL NARRATIVE SHALL BE ADHERED TO AS PART OF THIS PLAN.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO GRADING ACTIVITIES.
- CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLAN, OR IF THE LOCATION OR ELEVATION OF ANY UTILITY DIFFERS FROM THAT SHOWN ON THE PLAN. TO MISS THE UTILITY, CALL "MISS UTILITY OF VIRGINIA" 24 HOURS BEFORE YOU DIG, TOLL FREE 1-800-552-7001.
- A PRECONSTRUCTION MEETING INVOLVING THE PROJECT ENGINEER AND SELECTED CONTRACTOR SHALL BE HELD ON SITE PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER WHEN THE LOCAL GOVERNING OFFICIAL HAS INSPECTED AND APPROVED ALL IN-PLACE EROSION AND SEDIMENT CONTROL DEVICES, REQUIRED BY LOCAL ORDINANCES TO BE IN PLACE PRIOR TO LAND DISTURBANCE.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER 24 HOURS IN ADVANCE OF BEGINNING CLEARING AND GRUBBING OPERATION.
- EXCESS EXCAVATION AS WELL AS ALL ORGANIC MATTER AND DEBRIS SHALL BE DISPOSED OF AS DIRECTED BY THE PROJECT ENGINEER.
- ALL DENUDE AREAS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER FINAL GRADING. TEMPORARY FALL AND EARLY SPRING SEEDING SHALL CONSIST OF CEREAL RYE AT 3 BUSHELS/ACRE (3 LBS/1000 S.F.), LIME AT 3 TONS/ACRE, 10-20-20 FERTILIZER AT 450 LB/ACRE, AND MULCH AT 2 TONS/ACRE OF STRAW.

PERMANENT FALL AND EARLY SPRING SEEDING SHALL CONSIST OF THE FOLLOWING:

| PER 1000 S.F. | PER ACRE                                                         |
|---------------|------------------------------------------------------------------|
| 1 LB          | 40 LBS TALL KENTUCKY 31 FESCUE                                   |
| 0.2 LB        | 8 LBS LADINO CLOVER, INNOCULATED AND SCARIFIED, IF NECESSARY     |
| 0.2 LB        | 8 LBS RED CLOVER, INNOCULATED AND SCARIFIED, IF NECESSARY        |
| 0.3 LB        | 12 LBS KOREAN LESPEDEZA, INNOCULATED AND SCARIFIED, IF NECESSARY |
| 0.3 LB        | 12 LBS ANNUAL RYEGRASS                                           |
| 140 LBS       | 3 TONS DOLOMITIC LIMESTONE                                       |
| 25 LBS        | 1000 LBS 10-20-20 FERTILIZER                                     |
| 90 LBS        | 2 TONS STRAW MULCH                                               |

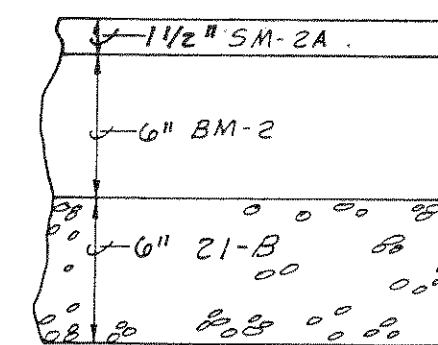
- ALL SIGNS SHALL BE IN ACCORDANCE WITH DIVISION 4, ARTICLE V, CHAPTER 25, ZONING, OF THE CODE OF ORDINANCES OF BOTETOURT COUNTY, VIRGINIA.
- WATER AND SEWER CONNECTIONS FOR THE PROPOSED BUILDING SHALL TIE INTO THE EXISTING SERVICES PROVIDED FOR THE PREVIOUS STRUCTURE.
- ALL AREAS NOT COVERED BY BUILDING, PAVEMENT OR OTHER STRUCTURES SHALL BE LANDSCAPED.
- CONTRACTOR SHALL TAKE SPECIAL CARE THAT RUNOFF FROM PARKING LOT SHALL BE ROUTED BY A DEFINED SWALE TO THE EXISTING OLD U.S. ROUTE 220 SIDE DITCH. NO SHEET FLOW TOWARD 84 LUMBER OR SHONEY'S RESTAURANT SHALL BE PERMITTED.
- SEWERLINE CONTRACTOR SHALL COORDINATE WORK WITH UNDERGROUND TANK INSTALLER TO AVOID HORIZONTAL CONFLICTS.

# PAVEMENT NOTES:

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE V.D.O.T. "ROAD AND BRIDGE STANDARDS & SPECIFICATIONS", LATEST EDITION.
- THE CONTRACTOR SHALL OBTAIN ENTRANCE PERMITS TO TIE TO EXISTING V.D.O.T. RIGHT-OF-WAY FROM THE RESIDENT ENGINEER OR LOCAL GOVERNING AUTHORITY PRIOR TO CONSTRUCTION WITHIN THE RIGHT-OF-WAY.
- LOCAL GOVERNMENT AND V.D.O.T. APPROVAL OF ROAD PLANS PRECLUDES THE RIGHT TO ADD ADDITIONAL FACILITIES WITHOUT REPEATING THE REVIEW PROCESS. APPROVAL OF THESE PLANS WILL EXPIRE THREE (3) YEARS FROM THE DATE OF APPROVAL.
- ALL VEGETATION AND OVERBURDEN SHALL BE REMOVED TO SIX (6) FEET BEYOND THE PROPOSED EDGE OF PAVEMENT (E.P.) PRIOR TO THE CONSTRUCTION/PREPARATION OF THE SUBGRADE OR TO THE EXTENT OF GRADING INDICATED ON THE GRADING PLAN.
- EXCESS EXCAVATION AND THAT WHICH IS UNSUITABLE FOR FILL, AS WELL AS ALL ORGANIC MATTER AND DEBRIS, SHALL BE DISPOSED OF AS DIRECTED BY THE PROJECT ENGINEER (OWNER'S REPRESENTATIVE).
- PAVING WITHIN THE RIGHT-OF-WAY SHALL CONSIST OF A ONE AND A HALF INCH OVERLAY (1 1/2") OF S-5 TAPERED TO MATCH EXISTING GRADE. OTHER PAVING AS SHOWN ON PLAN AND IN PAVEMENT DETAIL.

# ESC LEGEND

- CE CONSTRUCTION ENTRANCE  
 SF SILT FENCE

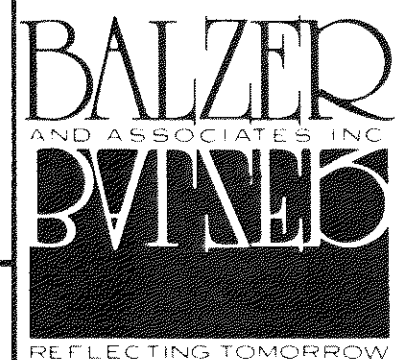
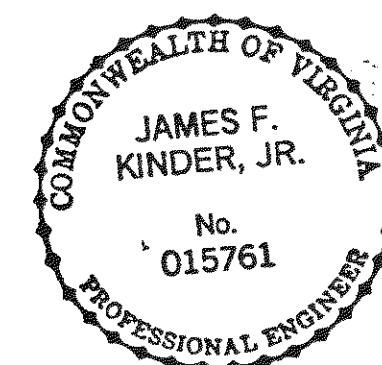


TYPICAL NEW PAVEMENT DETAIL

NO SCALE

| Curve | Delta      | Radius   | Arc     | Tangent Ch. Dist. | Ch. Brg.            |
|-------|------------|----------|---------|-------------------|---------------------|
| A     | 147°11'00" | 61.20'   | 157.21' | 207.83'           | 117.42' S72°10'34"W |
| B     | 08°58'12"  | 2043.48' | 319.92' | 160.29'           | 319.59' N26°49'26"W |
| C     | 67°54'01"  | 32.93'   | 39.03'  | 22.17'            | 36.78' S18°53'46"E  |

| BOUNDARY                | LEGEND |
|-------------------------|--------|
| PROPERTY LINE           | ---    |
| DEED LINE               | ---    |
| RIGHT-OF-WAY            | ---    |
| ENTER LINE              | ---    |
| EXIT LINE               | ---    |
| UTILITY                 | ---    |
| EXIST. STORM SEWER      | ---    |
| PROPOSED STORM SEWER    | ---    |
| EXIST. SANITARY SEWER   | ---    |
| PROPOSED SANITARY SEWER | ---    |
| EXIST. WATERLINE        | ---    |
| PROPOSED WATERLINE      | ---    |
| OVERHEAD ELECTRIC       | ---    |
| OVERHEAD TELEPHONE      | ---    |
| BURIED ELECTRIC         | ---    |
| BURIED TELEPHONE        | ---    |
| TOPOGRAPHY & ESC        | ---    |
| EXIST. CONTOUR          | ---    |
| PROPOSED CONTOUR        | ---    |
| ESC DETAIL SYMBOL       | ---    |
| MISCELLANEOUS           | ---    |
| EXIST. CURB & GUTTER    | ---    |
| PROPOSED CURB & GUTTER  | ---    |
| EXIST. CURE             | ---    |
| PROPOSED CURE           | ---    |
| EXIST. STRUCTURES       | ---    |
| PROPOSED STRUCTURES     | ---    |
| EXIST. EDGE OF PAVEMENT | ---    |
| PROPOSED PAVEMENT       | ---    |
| FENCE                   | ---    |
| FLOW ARROWS             | ---    |



PLANNERS ARCHITECTS  
ENGINEERS SURVEYORS

16 S. College Avenue  
Salem, Virginia 24153  
Phone: 703/389-7323  
FAX: 703/389-5042

501 Branchway Road  
Suite 100  
Richmond, Virginia 23236  
Phone: 804/794-0571  
FAX: 804/794-2635

1514 East Parham Road  
Richmond, Virginia 23228  
Phone: 804/262-6046  
FAX: 804/264-3037

# SENTRY FOOD MART SITE PLAN BOTETOURT COUNTY, VIRGINIA

DRAWN BY DAM  
DESIGNED BY CCB  
CHECKED BY JFK  
DATE SEPT. 10, 1990

REVISIONS  
① 10/16/90  
② 1/14/91  
③ 1/24/91

SCALE 1" = 30'  
SHEET NO.

C2  
JOB NO. 1163

