

Drain: SAIL PLACE DRAIN **Drain #:** 298
Improvement/Arm: SAIL PLACE - FALL CREEK HARBOUR - SECTION 1
Operator: SLM/JOH **Date:** 4-27-04
Drain Classification: Urban/Rural **Year Installed:** 1998

GIS Drain Input Checklist

- Pull Source Documents for Scanning SLM/JOH
- Digitize & Attribute Tile Drains N/A
- Digitize & Attribute Storm Drains SLM/JOH
- Digitize & Attribute SSD N/A
- Digitize & Attribute Open Ditch N/A
- Stamp Plans SLM/JOH
- Sum drain lengths & Validate JOH
- Enter Improvements into Posse JOH
- Enter Drain Age into Posse JOH
- Sum drain length for Watershed in Posse JOH
- Check Database entries for errors JOH

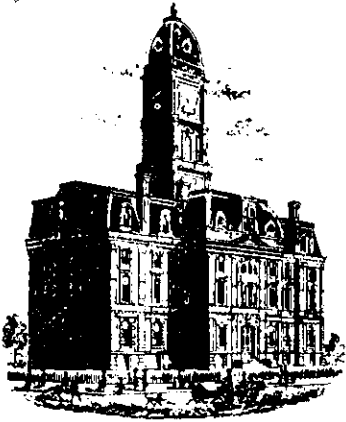
Gasb 34 Footages for Historical Cost
Drain Length Log

Drain-Improvement: SAIL PLACK DRAIN-SAIL PLACK-FALL CREEK HARBOR-SECTION 1

Drain Type:	Size:	Length <small>SURVEYORS REPORT</small>	Length (DB Query)	Length Reconcile	If Applicable	
					Price:	Cost:
RCP	12"	40'	40'	∅		
	15"	22'	22'	∅		
	24"	140'	140'	∅		
Sum:		<u>202'</u>	<u>202'</u>	<u>∅</u>		

Final Report: _____

Comments:



SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 146

One Hamilton County Square

Noblesville, Indiana 46060-2230

August 7, 1998

TO: HAMILTON COUNTY DRAINAGE BOARD

RE: Sail Place Drain, Fall Creek Harbour Arms

Attached is a petition and plans for the extension of the Sail Place Drain filed by Mattingley Corporation for Fall Creek Harbour. The proposed extensions are both which carry drainage from the North side of Fall Creek Road, South into the Sail Place drain system.

The West arm is located approximately 360 feet West of the Center/line of Brooks School Road. The pipe shall be seventy-two (72') feet of 24" RCP, which will connect to Sail Place structure number 708. The North end of the pipe is located in the North R/W of Fall Creek Road and is listed as structure number 7 on the Fall Creek Harbour Development Plan.

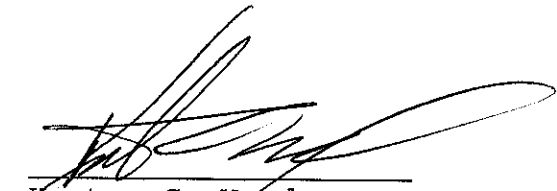
The East arm is located approximately fifty (50') feet West of the centerline of Brooks School Road. The pipe shall be sixty-five (65') of 24" RCP under Fall Creek Road, which enters the manhole on the South side of the road. This manhole is structuring number 711 on the Sail Place Development plan. The section of pipe between Structures 1 and 2 on the Fall Creek Harbour Development Plan (21 feet of 15" RCP) is also included, as is the section of pipe between structures 1 and 3 on the plan

(40 feet of 12" RCP). The total length of the extension is 198 feet.

All of the proposed extension is located in the R/W's for Fall Creek Road and Brooks School Road. Therefore, easements on the Fall Creek Harbour are not required.

The assessments for Sail Place have been set at \$50.00 per lot with a minimum of \$50.00 and \$5.00 per acre for roads. Because this is a commercial site which, due to the increased area of roof and paved parking, I recommend the Commercial assessment rate be set at \$50.00 per acre, with a minimum of \$50.00.

I recommend that a hearing for this proposal be set for September 1998.



Kenton C. Ward
Hamilton County Surveyor
KCW/neo

FINDINGS AND ORDER

CONCERNING THE MAINTENANCE OF THE

Sail Place Drain, Fall Creek Harbour Arm

On this *28th day of September, 1998*, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Sail Place Drain, Fall Creek Harbour Arm*.

Evidence has been heard. Objections were presented and considered. The Board then adopted the original/amended Schedule of Assessments. The Board now finds that the annual maintenance assessment will be less than the benefits to the landowners and issues this order declaring that this Maintenance Fund be established.

HAMILTON COUNTY DRAINAGE BOARD

Sharon R. Clark

President

Dwain A. Abel

Member

Member

Attest: *Kimberly Wallace*

CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor's Office

From: Mid-States Engineering, LLC

Subject: **Fall Creek Harbour Section 1 - Storm Sewer As-Builts**

I hereby certify that:

- 1) I am familiar with the plans and specifications for the above-referenced project;
- 2) I have personally observed the completion of the above-referenced project; and
- 3) To the best of my knowledge, information and belief, the above-referenced project has been performed and completed in conformity with all plans and specifications, *except as noted on 'Record Drawings' as submitted.*

Signature Jonathan P. Moen Date: 1/04/01

Typed or Printed Name: Jonathan P. Moen

Business Address: 350 E. New York Street, Suite 300
Indianapolis, IN 46204

Telephone: 317-634-6434

Seal



Professional Registration No. 10000418



SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 188

*One Hamilton County Square
Noblesville, Indiana 46060-2230*

To: Hamilton County Drainage Board

September 30, 2002

Re: Sail Place Drain: Fall Creek Harbour Arm

Attached are as-builts, certificate of completion & compliance, and other information for Fall Creek Harbour Arm. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated August 7, 1998. The report was approved by the Board at the hearing held September 28, 1998. (See Drainage Board Minutes Book 4, Pages 589-590)

The changes are as follows:

STR 1 - 2 length of 15" RCP was increased from 21 feet to 22 feet.

STR 1-711 length of 24" RCP was increased from 65 feet to 68 feet.

The length of the drain due to the changes described above is now **202 feet**.

The non-enforcement for this project was not needed because all structures were placed within existing right of way.

The bond or letter of credit from Ohio Casualty, number 34688367 & 34688377; dated July 24, 1998; in the amount of \$2500 each; was released August 10, 1998.

I recommend the Board approve the drain's construction as complete and acceptable.

Sincerely,

Kenton C. Ward,
Hamilton County Surveyor

KCW/slm

AS-BUILT CONSTRUCTION DRAWINGS FOR FALL CREEK HARBOUR

SECTION 10, TOWNSHIP 17 NORTH, RANGE 5 EAST
FALL CREEK TOWNSHIP
HAMILTON COUNTY, INDIANA

INDEX	
1	TITLE SHEET
2	SPECIFICATIONS
3	DEMOLITION PLAN
4	SITE DEVELOPMENT PLAN
5	EROSION CONTROL PLAN
6	SANITARY SEWER PLAN AND PROFILES
7-8	STORM SEWER PLAN AND PROFILES
9-10	ENTRANCE PLANS
11-12	CONSTRUCTION DETAILS
13-14	SANITARY SEWER DETAILS AND SPECIFICATIONS

REVISIONS		
DATE	SHEET	DESCRIPTION
3-10-98	3,4,6-11	Per Owner.
4-3-98	1,3-11	Per TAC Comments
4-29-98	4,9-11	Per Hamilton County Highway Comments
5-27-98	3,4,6,7,9,10	Per HSE, drafting check
6-10-98	4,6	Revised F.F. and T.C. elevations
7-10-98	4,6,7,8	Per Client
7-13-98	4,6	Per Architect
8-17-98	4	Per I.W.C.
8-20-98	4	Per I.W.C.
9-1-98	4	Per I.W.C.
10-8-98	9	Per Hamilton County Highway Dept.
11-10-98	4,5,9,10	Added storm structure, cut & cur

LAND DESCRIPTION
FALL CREEK HARBOUR

Lot #9, 10, 11, 12, 13, and 16 in Lake-View Addition, (as per plat of said addition, recorded in Deed Record 130, page 612), a 3 acre tract of real estate described in Deed Record 160, page 166, and that part of the Northwest Quarter of Section 10, Township 17 North, Range 5 East, described in Deed Record 131, page 296 adjacent to said Lot #11, 12, 13, and 16, being described as follows:

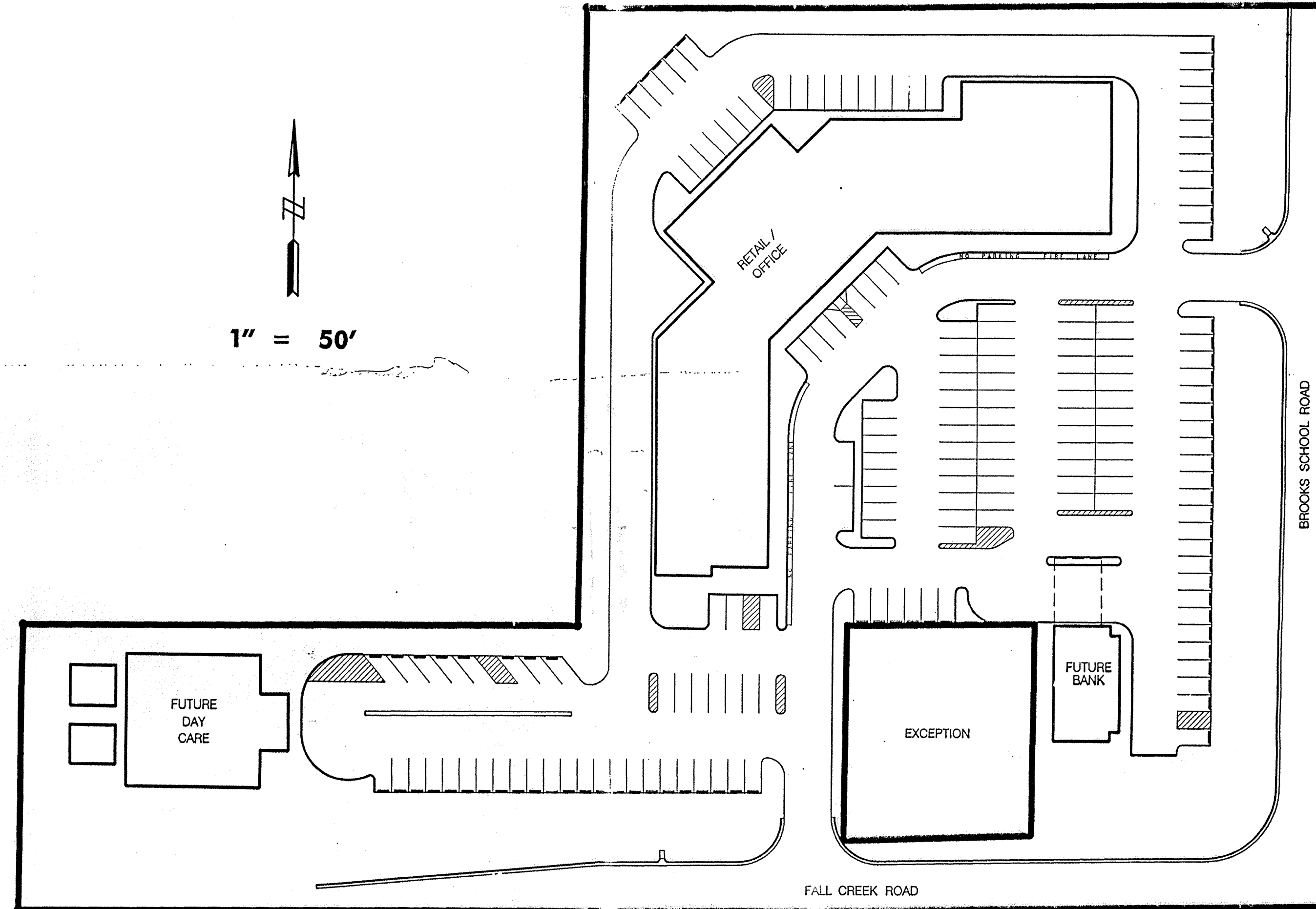
Beginning at a railroad spike at the Southeast corner of the Northwest Quarter of Section 10, Township 17 North, Range 5 East; thence North 00°31'23" East 476.70 feet on and along the East line of said Northwest Quarter to a mag nail; thence South 89°26'51" West 400.00 feet parallel with the South line of said Northwest Quarter to a 3/8" iron rod with P.I. Cripe cap; thence South 00°31'23" West 326.70 feet parallel with the East line of said Northwest Quarter to a 3/8" iron rod with P.I. Cripe cap on the North line of Lake-View Addition; thence South 89°26'51" West 295.99 feet to a 3/8" iron rod with yellow cap stamped S0083 at the Northwest corner of Lot #9 in said Lake-View Addition, said Northwest corner being North 89°26'51" East 640.00 feet from the West line of the East Half of said Northwest Quarter; thence South 00°32'24" West 150.00 feet to the point of intersection of the West line of said Lot #9 and the South line of said Northwest Quarter, said point of intersection being North 89°26'51" East 640.00 feet from the Southwest corner of the East Half of said Northwest Quarter; thence North 89°26'51" East 380.00 feet on and along the South line of said Northwest Quarter to the point of intersection of the South line of said Northwest Quarter and the East line of Lot #13 in said Lake-View Addition extended Southerly; thence North 00°32'24" East 150.00 feet to a 3/8" iron rod with yellow cap stamped S0083 at the Northeast corner of said Lot #13; thence North 89°26'51" East 160.00 feet to a 3/8" iron rod with yellow cap stamped S0083 at the Northwest corner of Lot #16 in said Lake-View Addition; thence South 00°32'24" West 150.00 feet on and along the West line of said Lot #16 and said West line extended Southerly to the South line of said Northwest Quarter; thence North 89°26'51" East 156.03 feet to the point of beginning. Containing 4.84 acres, more or less and being subject to all applicable easements and rights-of-way of record.

TOGETHER WITH:

Lot numbered 14 in Lake-View Addition, an addition in Hamilton County, Indiana, located in part of the East Half of the Northwest Quarter of Section 10, Township 17 North, Range 5 East as per plat thereof recorded in Deed Record 130, page 612 in the office of the Recorder of Hamilton County, Indiana.

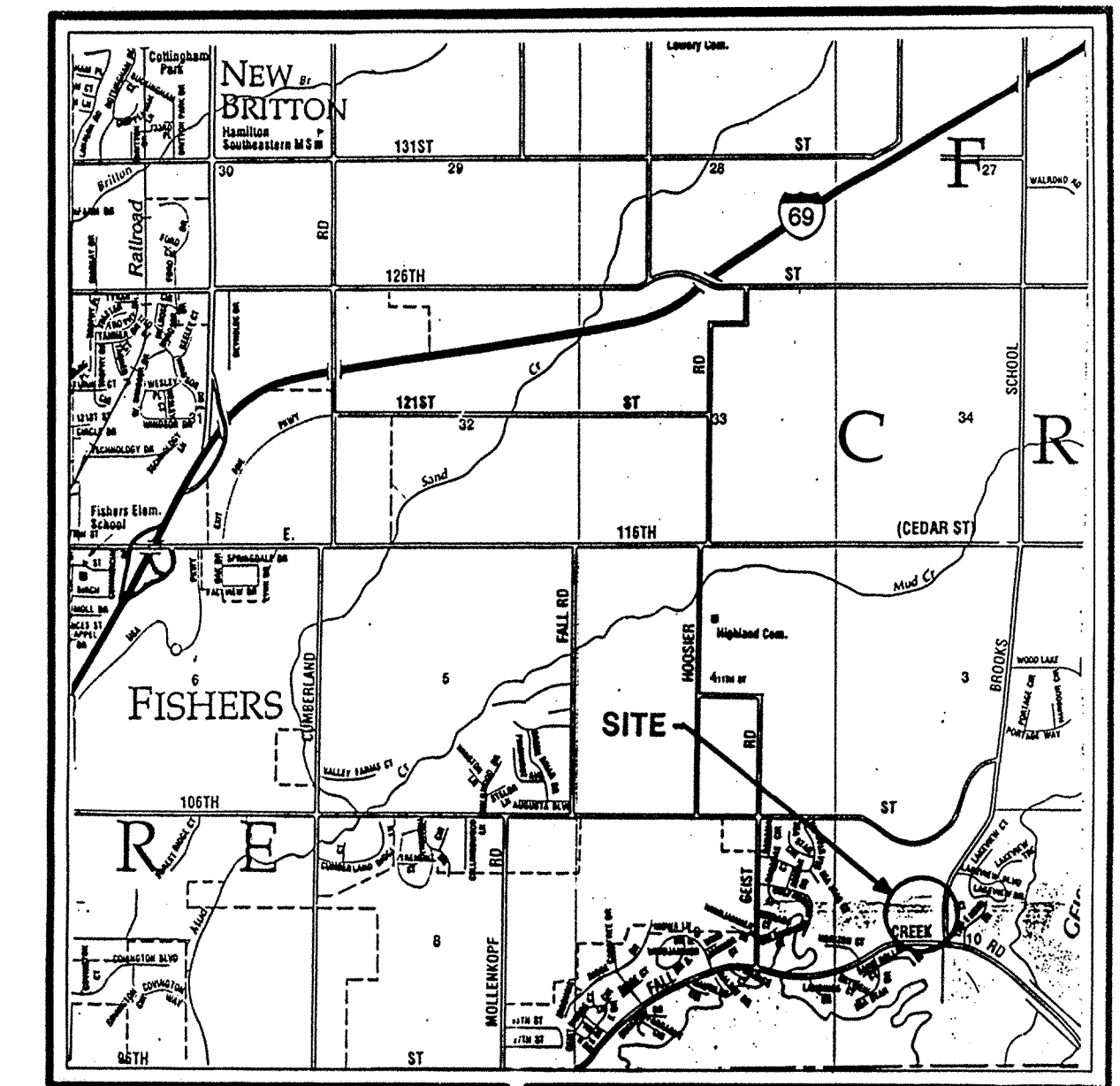
ALSO:

Beginning at the Southwest corner of Lot numbered 14 in said Lake-View Addition, running thence South 35.79 feet, thence East 160 feet, thence North 38.54 feet to the Southeast corner of Lot number 15 in said Lake-View Addition, thence West 160.17 feet, along the South line of Lots 15 and 14 in said Lake-View Addition to the Place of Beginning.

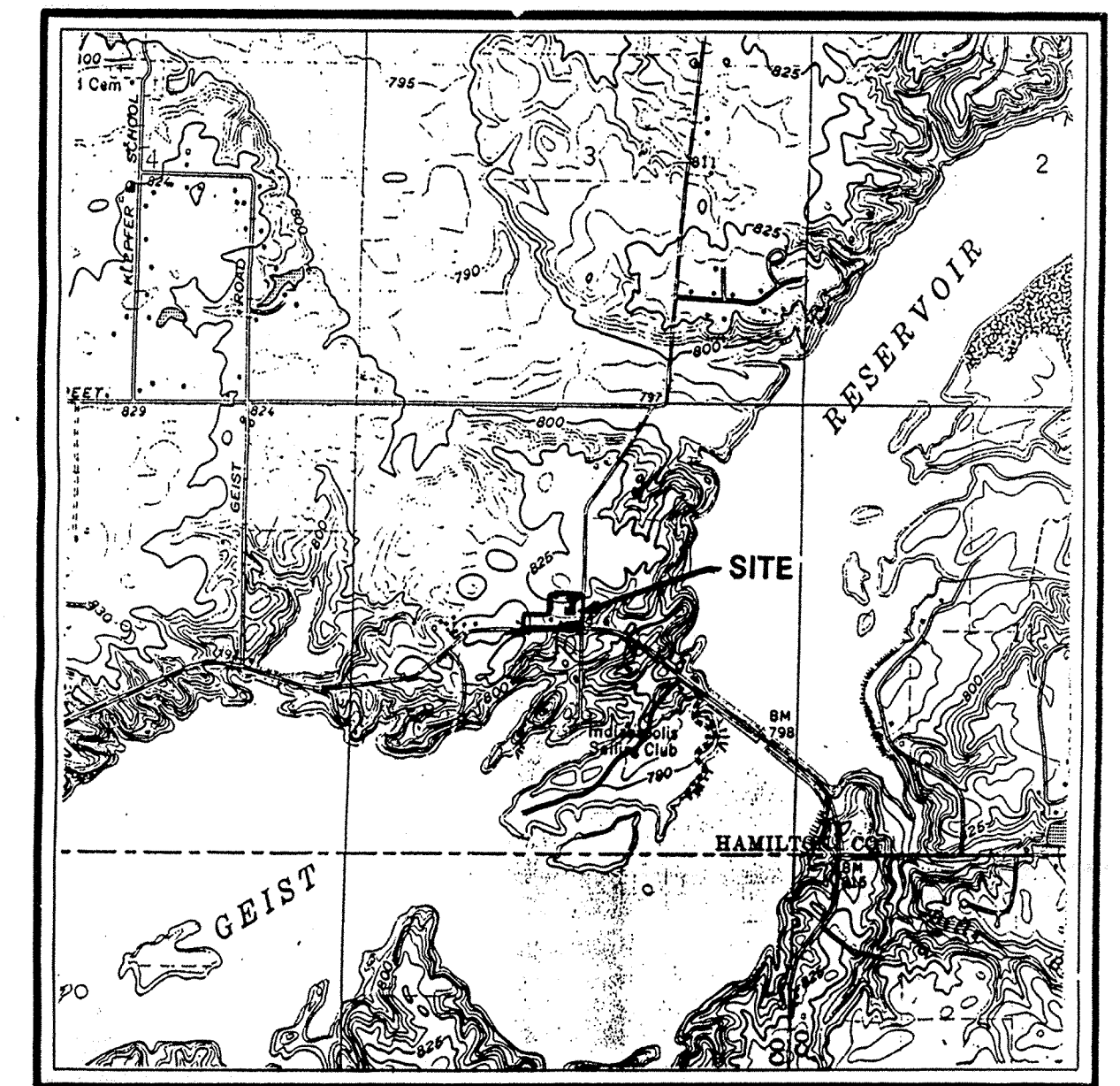


SITE MAP

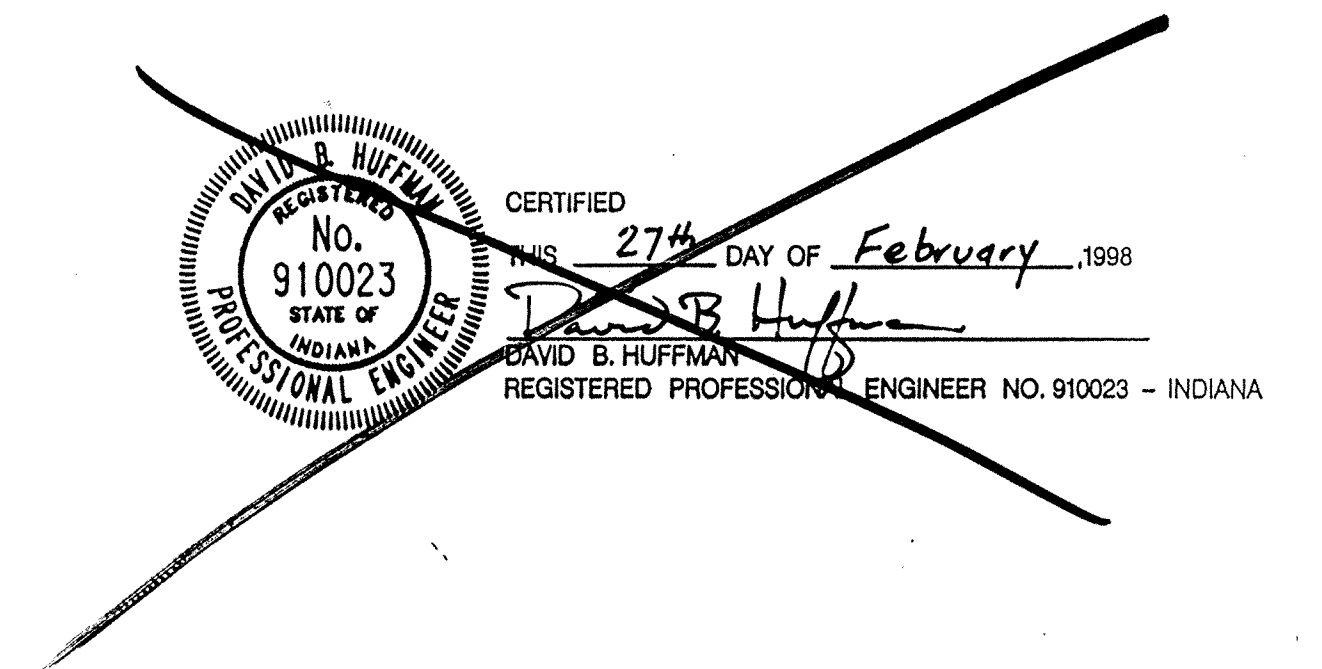
AS-BUILT INFORMATION STORM SEWERS



AREA MAP

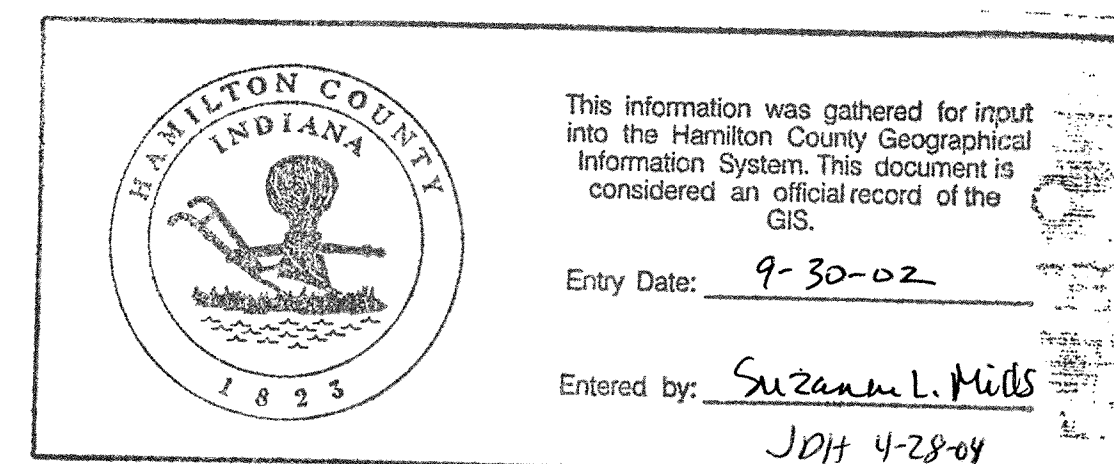


VICINITY MAP



PLANS PREPARED FOR

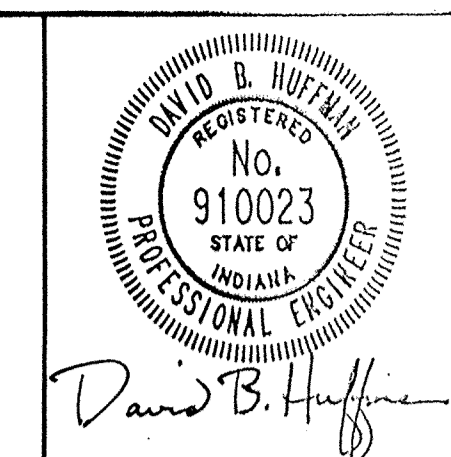
PARAMOUNT REALTY GROUP.
5987 E. 71ST STREET, SUITE 106
INDIANAPOLIS, INDIANA 46220
CONTACT: STEVE SHEA
317-579-6926



MSE Corporation

941 North Meridian Street
Indianapolis, IN 46204-1061
317 634-1000
317 634-3576 FAX
www.msecorp.com

FILED 121-4725
JAN 05 2004
OFFICE OF HAMILTON COUNTY SURVEYOR



Designed by: GSS
Drawn by: WFC
Checked by: DAH
Approved by: DBH

REVISIONS AND DATES

FALL CREEK HARBOUR SPECIFICATIONS

PREPARED BY:
MSE Corporation
941 North Meridian Street, Indianapolis, IN 46204-1061
317 634-1000 • 317 634-3576 FAX • <http://www.msecorp.com>
PREPARED FOR:
PARAMOUNT REALTY GROUP

DATE: February 27, 1993
SCALE: NA
PROJECT NO. 111-0980
SHEET NO.

2
OF 14

FILED

JAN 05 2001

0980SPEC.DGN

OFFICE OF HAMILTON COUNTY SURVEYOR

SITE WORK GENERAL NOTES AND SPECIFICATIONS

- I. GENERAL CONDITIONS
- A. The Contractor shall be responsible for obtaining, or verifying that all permits and approvals are obtained from the respective city, county and state agencies prior to starting construction.
 - B. It shall be the Contractor's responsibility to determine the exact location of all existing utilities in the vicinity of the construction area prior to starting construction.
 - C. It shall be the Contractor's responsibility for notification and coordination of all construction with the respective utility companies.
 - D. It shall be the responsibility of the developer and Contractor to maintain quality control throughout the project. Failure to do so may result in removal and replacement of the defective work. It is required that the Contractor have a qualified Superintendent on the job site at all times during construction.
 - E. It is essential that the work to be done in conjunction with this project shall be installed according to these specifications. The Engineer will be required to certify to certain portions of this project upon completion. Therefore, it is necessary to obtain approval and acceptance by the Town that construction was done in compliance with these plans and specifications.
 - F. The designation A.S.T.M. shall refer to the American Society of Testing and Materials standards. The latest revision of listed A.S.T.M. standards shall prevail.
 - G. The designation IN.D.O.T. shall refer to the Indiana Department of Transportation Standard Specifications dated 1993 and all subsequent revisions.
- II. CLEARING AND GRUBBING
- A. Clearing and grubbing shall consist of cutting, removal and satisfactory disposal of all trees, down timber, brush, projecting roots, stumps, rubbish, boulders, broken concrete, fencing (as designated) and other material on the project site and within the boundary as shown on the Construction Documents and/or as designated by "construction limits".
 - B. Special care shall be taken to insure that trees to be left remaining in the project area shall not receive limb, bark or root injuries. When such injuries occur, all rough edges of scarred areas shall be removed in accordance with accepted horticultural practice and the scars coated thoroughly with an asphaltum base tree paint.
 - C. All "unsuitable material" from clearing operations stated in Item II-A shall be removed to disposal area(s) off of the project site, unless a "Bury Pit" shall be utilized in an area and shall not be located in an area where storm drainage structures shall be located or where impoundment of surface drainage may occur. Written permission of project owner must be obtained for bury pit construction on site, including location.
 - D. Materials shall not be disposed of by burning unless approved by the local Fire Marshal.
- III. TREE REMOVAL AND PROTECTION
- A. Trees shall be removed from the project site only where the area is to be occupied by road and surfaced areas.
 - B. Trees shall be removed from the project site as directed by the Owner, and so designated.
 - C. Trees may be removed from the project site where they interfere with the placement of storm or sanitary sewers. Contractor shall coordinate all tree removal with owner.
 - D. The Contractor shall endeavor to save and protect trees of value and worth which do not impair construction of improvements as designated. In the event cut or fill exceeds 0.5 foot over the root area, the Owner shall be consulted with respect to protective measures to be taken, if any, to preserve such trees.
 - E. The Contractor shall be responsible for determining the method for protection of tops, trunks and roots of existing trees on the project site that are to remain. Existing trees subject to construction damage shall be boxed, fenced or otherwise protected before any adjacent work is started. Earth or material and equipment shall not be stockpiled or stored within the spread of branches. Branches which need to be removed or are broken shall be neatly trimmed and scars shall be covered with tree paint.

- IV. STRIPPING OF TOPSOIL
- A. The Contractor shall verify that all topsoil has been removed in the areas to be occupied by road and walks. Topsoil shall be removed to a typical depth of 6 inches to remove vegetative matter where required. The subsurface investigation indicated topsoil up to 2 feet in isolated areas. Consult the geotechnical report for specific information.
 - B. Topsoil shall be kept separated from suitable fill materials and shall not be used as fill under pavement and/or building areas.
 - C. Topsoil shall be stored at a location where it does not interfere with construction operations. Excess topsoil shall be removed from the site. Topsoil storage areas shall be approved in writing by the Owner.
 - D. Topsoil shall be reasonably free from sub-soil debris and stones.
- V. GRADING
- A. The Contractor shall perform all grading operations to bring sub-grades, after final compaction, to the required grades and sections for site improvement.
 - B. Subgrade shall be proofrolled with suitable equipment and all spongy and otherwise unsuitable material shall be removed and replaced with suitable material.
 - C. Subgrade for parking lot shall be prepared to INDOT specifications. Subgrade shall be compacted to 95% of standard proctor in the upper 6" of depth. Depins of embankment below the upper 6" shall be compacted to 93% of standard proctor.
 - D. All fill material shall be formed from soil free of deleterious material. Prior to placement of fill, a sample of the proposed fill material should be submitted to the soils engineer for his approval. The fill material should be placed in layers not to exceed eight (8) inches in loose thickness and should be spread and dried to a moisture content which will permit proper compaction.
 - E. All fill material in areas outside of building and pavement areas shall be compacted lightly and protected from erosion. Areas of building construction shall not have unsuitable material placed in that location, and fill shall be compacted in accordance with the Soils Engineer's report (minimum of 95% standard proctor). These areas shall be determined by the developer's representative.
- VI. SANITARY SEWER CONSTRUCTION
- See sheet 13 and 14 for Hamilton Southeastern Utility details and specifications.
- VII. EROSION PROTECTION DURING CONSTRUCTION
- A. The Contractor shall provide adequate erosion protection measures during construction. See sheet 5 for recommended erosion control measures.
 - B. Construction operations conducted within public right-of-way shall be neatly finished graded and mulch seeded.
- VIII. STORM SEWER CONSTRUCTION
- A. Storm sewer construction shall comply with requirements of the Hamilton County Surveyor, the Hamilton County Highway Department and the Hamilton County Surveyor and the Town of Fishers.
 - B. All storm sewer construction inside public right-of-way, either existing or to be dedicated, shall be in accordance with the Town of Fishers, and the Hamilton County Highway Department. Contractor shall notify the Town of Fishers, and the Hamilton County Highway Department 48 hours prior to commencement of storm sewer construction within public right-of-way.
 - C. Where reinforced concrete pipe is shown on the construction plans, it shall be in accordance with A.S.T.M. C-76 Class III, IV or V with a minimum "B" wall thickness unless otherwise specified on the plans.

- IX. UTILITIES
- A. Water Line
- 1. See sheets 14 and 15 for vertical and horizontal separations between sanitary sewer.
 - 2. All water lines shall be in accordance with the Standards and Specifications of the Indiana Department of Environmental Management. Sterilization of water mains shall be in accordance with the I.D.E.M. for procedures and time of treatment.
 - 3. Pressure tests for the water system shall be done in accordance with manufacturer's recommendations.
 - 4. Granular backfill shall be required for all utility crossings under pavement areas and 5 feet beyond the edge of pavement, sidewalk curbs, gutters, or similar structures.
 - 5. All water lines within the existing or proposed right-of-way or special easements requested by Indianapolis Water Company shall be PVC or PE and shall be installed in accordance with the Indianapolis Water Company Specifications.
 - 6. Where private water lines for potable water lines are shown on the contract plans, they shall be type "C" copper pipe for sizes up to 2 1/2". Copper water service lines and fittings shall conform to A.S.T.M. B-88.
 - 7. Thrust blocks shall be installed in accordance with the details contained within the plans, or the Indianapolis Water Company standard specifications, as applicable.
 - 8. Felt material not to exceed 3/4 inch thick shall be placed between pipes and concrete thrust blocks.
 - 9. All valves and appurtenances for domestic and fire protection water mains shall be approved by the Underwriters Laboratories and Factory Mutual for critical use.
 - 10. Refer to separate water line plans for this section for more detailed water line pipe sizes, materials, hydrant and valve locations. Water lines shown on these plans are for coordination purposes only.
- B. Electric and Telephone
- 1. 4" pvc conduit shall be required for all crossings under pavement areas.
 - 2. Granular backfill shall be required for all crossings under pavement areas.
 - 3. Concrete pads for electric and telephone transformers shall be set at the approximate ground grade as shown on the Site Development Plan for the respective locations.
- X. GRANULAR BACKFILL
- Shall be in accordance with IN.D.O.T. Standard Specifications.

- XI. PAVEMENT CONSTRUCTION
- A. Subgrade shall be prepared in compliance with Section 207.02 of the IN.D.O.T. standard specifications. No traffic shall be permitted on the prepared subgrade prior to paving.
 - B. Contractor shall notify the Town of Fishers 48 hours prior to commencement of construction within the proposed right-of-way of Brooks School Road. Notify the Hamilton County Highway Department 48 hours prior to construction within the right-of-way of Fall Creek Road.
- XII. CONCRETE CURB AND WALKS
- A. See Detail Sheets for type and details. Curbs and walks within existing or proposed right-of-way shall be constructed in accordance with the Town of Fishers and the Hamilton County Highway Department.
 - B. Concrete shall be ready mixed Portland cement conforming to A.S.T.M. C-150, and water. Aggregate shall conform to A.S.T.M. C-33. Compressive strength of concrete at 28 days shall be 4000 p.s.i. Where required, reinforcement shall be welded steel wire fabric conforming to A.S.T.M. A-185.
 - C. Application
 - 1. Place concrete only on a moist, compacted subgrade or base free from loose material. Place no concrete on muddy or frozen subgrade.
 - 2. Concrete shall be deposited so as to require as little rehandling as practical. When concrete is to be placed at an atmospheric temperature of 35°F. or less, Paragraph 702.10 of the IN.D.O.T. Specifications, 1993 edition, shall apply.
 - 3. Except as otherwise specified, cure all concrete by one of the methods described in Section 501.17 of the IN.D.O.T. Specifications, 1993 edition.
- XIII. FINISH GRADING AND SODDING (Owner shall designate location if required.)
- A. Over the approved rough grade (see Section VI), spread 4" minimum of topsoil or approved fill to such depth as will finish to the required finish grades and contours after rolling and natural settlement. New grades shall slope uniformly between levels established on the plans, and intersections of new grades with existing grades shall be uniform and smooth.
 - B. Contractor shall have soil PH tested by independent soil testing laboratory as directed by owner. Topsoil shall be adjusted to a PH range of 6.0 to 7.0. A fertilizer mixture with a N-P-K ratio of 1-2-2 shall be applied at a rate of 2 pounds phosphorus (P) per 1000 square feet to a depth of 3 inches.
 - C. Areas where stripping, cuts, or fills have been graded and where additional work is not scheduled for a period of 2 months to a year shall be temporarily seeded as shown in the seasonal soil protection chart in the construction details.
 - D. In areas of permanent seeding behind curbs, the areas shall be constantly damp (DO NOT OVERWATER) with full soakings as required for a healthy thick stand of grass to be established.

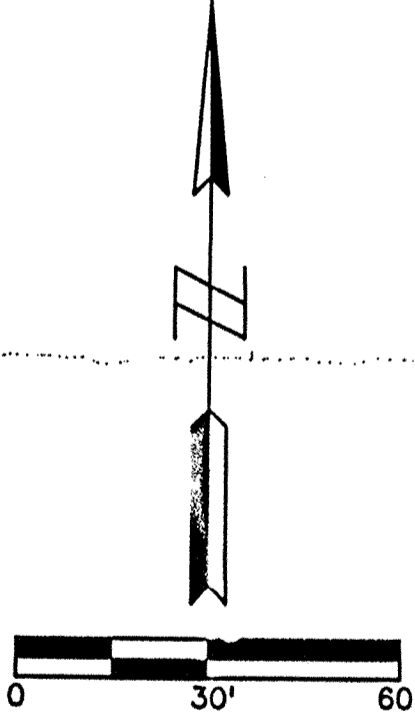
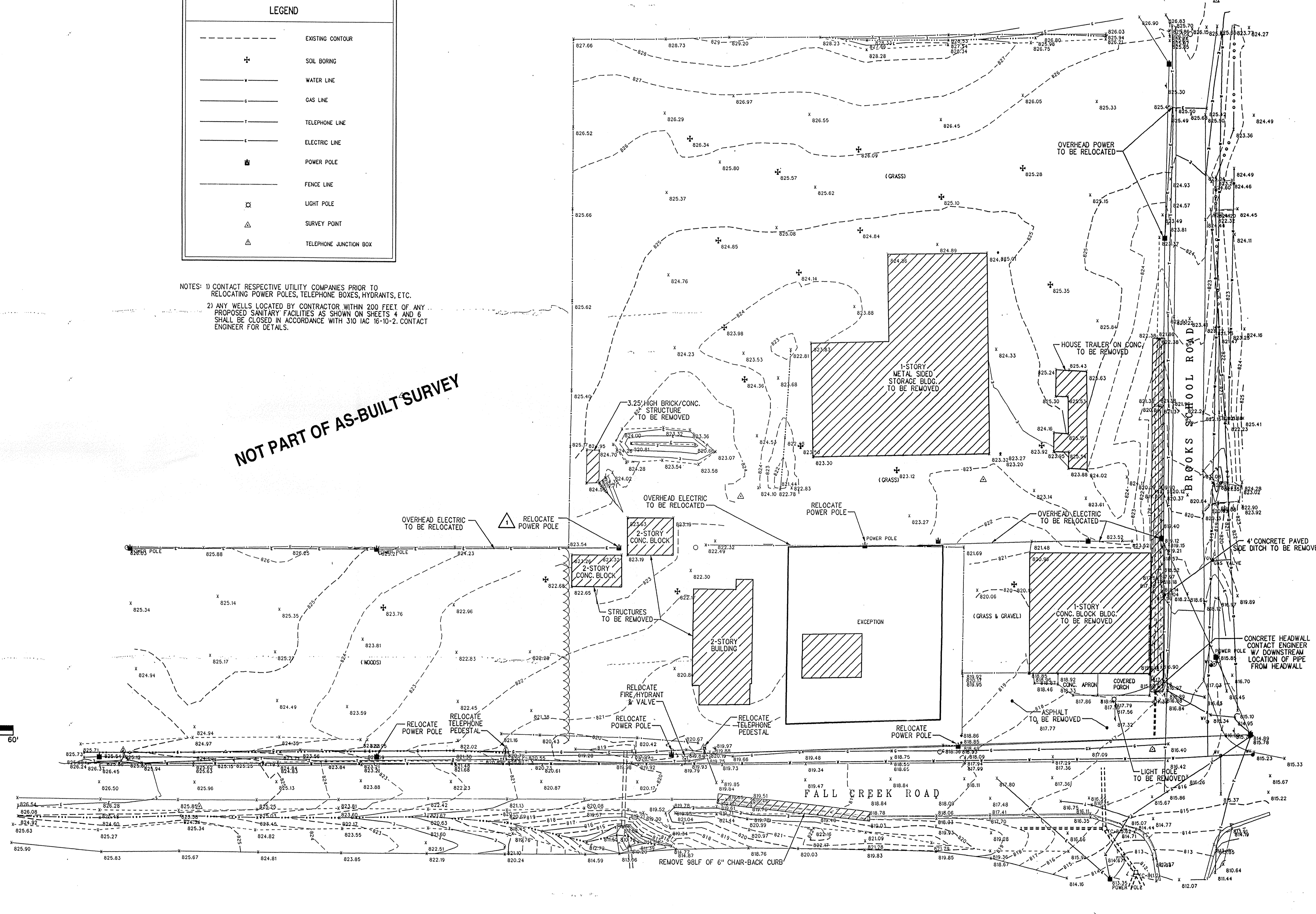
NOT PART OF AS-BUILT SURVEY

David B. Huffman

LEGEND	
---	EXISTING CONTOUR
+	SOL BORING
— —	WATER LINE
— —	GAS LINE
— —	TELEPHONE LINE
— —	ELECTRIC LINE
⊕	POWER POLE
— —	FENCE LINE
⊠	LIGHT POLE
△	SURVEY POINT
△	TELEPHONE JUNCTION BOX

NOTES: 1) CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO RELOCATING POWER POLES, TELEPHONE BOXES, HYDRANTS, ETC.
 2) ANY WELLS LOCATED BY CONTRACTOR WITHIN 200 FEET OF ANY PROPOSED SANITARY FACILITIES AS SHOWN ON SHEETS 4 AND 6 SHALL BE CLOSED IN ACCORDANCE WITH 310 IAC 16-10-2. CONTACT ENGINEER FOR DETAILS.

NOT PART OF AS-BUILT SURVEY



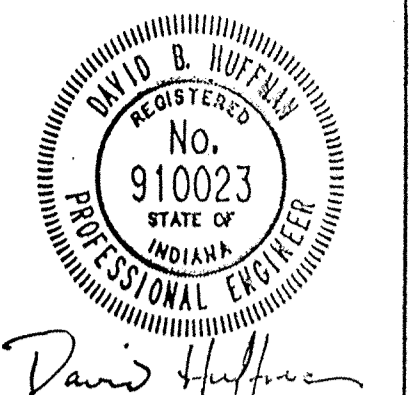
DESIGNED BY:	
GSS	Additional Notes:
Drawn by:	4-3-98 Additional Notes:
Checked by:	5-27-98 Additional Notes:
DAH	
DBH	

REVISIONS AND DATES	
1	

**FALL CREEK HARBOUR
DEMOLITION PLAN**

PREPARED BY:	MSE Corporation
DATE:	February 27, 1998
SCALE:	1" = 30'
PROJECT NO.:	111-0980
SHEET NO.:	3
PREPARED FOR:	PARAMOUNT REALTY GROUP

This copy printed from the Digital Archive of the Hamilton County Surveyor's Office, One Hamilton Co. Square, Ste. 188, Noblesville, IN 46060



Designed by:	GSS
Drawn by:	WCH
Checked by:	DAH
Approved by:	DBH

FALL CREEK HARBOUR

SITE DEVELOPMENT PLAN

PREPARED BY:
MSE Corporation
 841 North Madison Street
 Indianapolis, IN 46204-6067
 317 634-1000 • 317 634-3575 FAX
 http://www.mscorp.com

PREPARED FOR:
 PARAMOUNT REALTY GROUP

DATE: February 27, 1998
 SCALE: 1" = 30'
 PROJECT NO. 111-0980
 SHEET NO. 4 OF 14

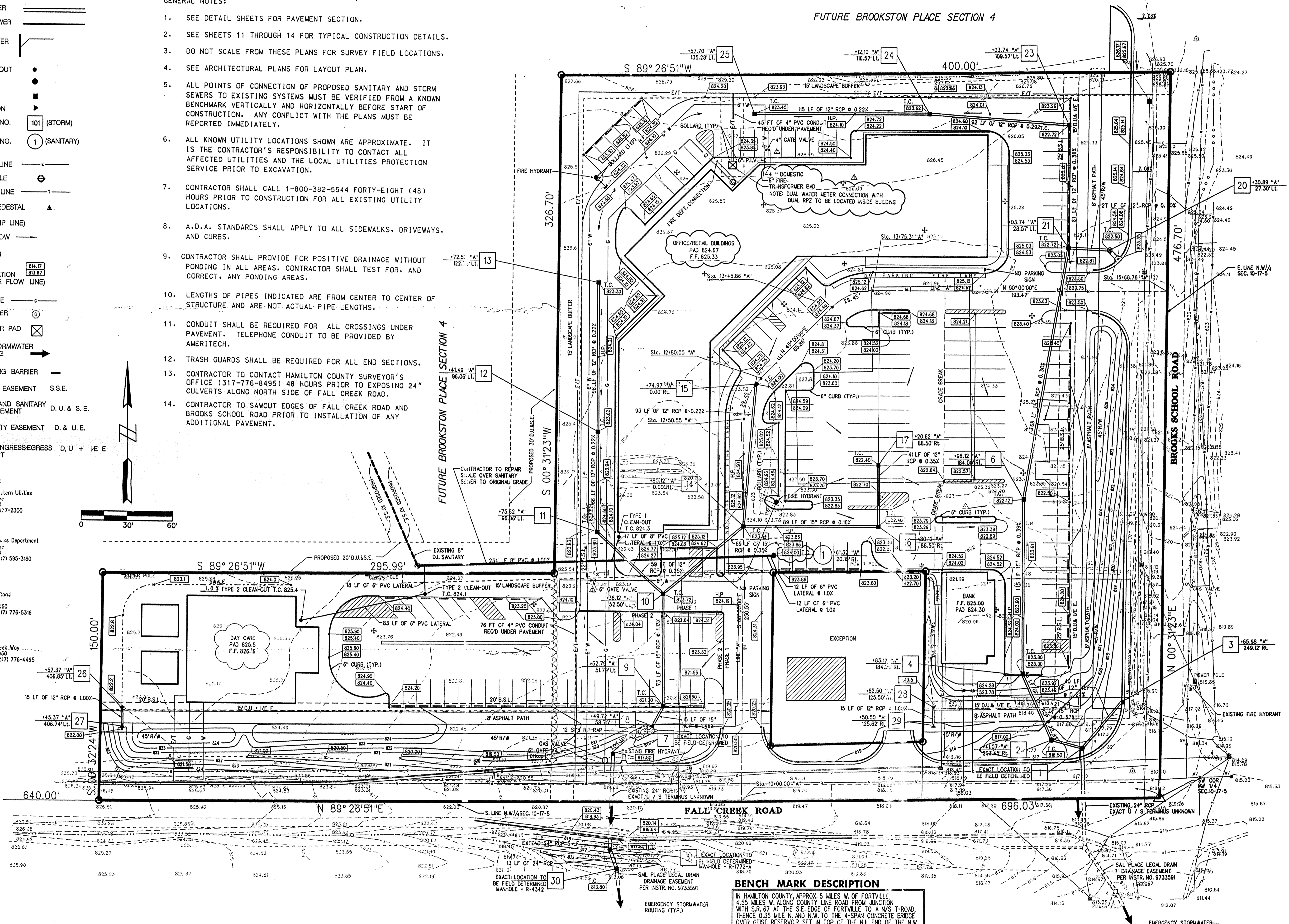
LEGEND

- | EXISTING | PROPOSED |
|---|---------------------|
| --- S W --- | --- S W --- |
| --- S S W --- | --- S S W --- |
| --- S S W L --- | --- S S W L --- |
| ○ TYPE 2 CLEANOUT | ● |
| ○ MANHOLE | ● |
| □ INLET | ■ |
| △ END SECTION | ▶ |
| □ STRUCTURE NO. 101 (STORM) | ○ |
| □ STRUCTURE NO. 1 (SANITARY) | ○ |
| --- E --- | --- E --- |
| ○ LIGHT POLE | ○ |
| --- T --- | --- T --- |
| △ TELEPHONE PEDESTAL | △ |
| --- T L --- | --- T L --- |
| --- F A --- | --- F A --- |
| --- 823 --- | --- 823 --- |
| ○ SPOT ELEVATION (TOP OF CURB OVER FLOW LINE) | ○ |
| --- G L --- | --- G L --- |
| ○ GAS METER | ○ |
| □ TRANSFORMER PAD | □ |
| --- E M R --- | --- E M R --- |
| --- C P B --- | --- C P B --- |
| --- S S E --- | --- S S E --- |
| --- D U & S E --- | --- D U & S E --- |
| --- D & U E --- | --- D & U E --- |
| --- D U + I E E --- | --- D U + I E E --- |

SITE GENERAL NOTES:

- SEE DETAIL SHEETS FOR PAVEMENT SECTION.
- SEE SHEETS 11 THROUGH 14 FOR TYPICAL CONSTRUCTION DETAILS.
- DO NOT SCALE FROM THESE PLANS FOR SURVEY FIELD LOCATIONS.
- SEE ARCHITECTURAL PLANS FOR LAYOUT PLAN.
- ALL POINTS OF CONNECTION OF PROPOSED SANITARY AND STORM SEWERS TO EXISTING SYSTEMS MUST BE VERIFIED FROM A KNOWN BENCHMARK VERTICALLY AND HORIZONTALLY BEFORE START OF CONSTRUCTION. ANY CONFLICT WITH THE PLANS MUST BE REPORTED IMMEDIATELY.
- ALL KNOWN UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL AFFECTED UTILITIES AND THE LOCAL UTILITIES PROTECTION SERVICE PRIOR TO EXCAVATION.
- CONTRACTOR SHALL CALL 1-800-382-5544 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION FOR ALL EXISTING UTILITY LOCATIONS.
- A.D.A. STANDARDS SHALL APPLY TO ALL SIDEWALKS, DRIVEWAYS, AND CURBS.
- CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE WITHOUT PONDING IN ALL AREAS. CONTRACTOR SHALL TEST FOR, AND CORRECT, ANY PONDING AREAS.
- LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURE AND ARE NOT ACTUAL PIPE LENGTHS.
- CONDUIT SHALL BE REQUIRED FOR ALL CROSSINGS UNDER PAVEMENT. TELEPHONE CONDUIT TO BE PROVIDED BY AMERITECH.
- TRASH GUARDS SHALL BE REQUIRED FOR ALL END SECTIONS.
- CONTRACTOR TO CONTACT HAMILTON COUNTY SURVEYOR'S OFFICE (317-776-8495) 48 HOURS PRIOR TO EXPOSING 24" CULVERTS ALONG NORTH SIDE OF FALL CREEK ROAD.
- CONTRACTOR TO SAWCUT EDGES OF FALL CREEK ROAD AND BROOKS SCHOOL ROAD PRIOR TO INSTALLATION OF ANY ADDITIONAL PAVEMENT.

- | STORM SEWER | SANITARY SEWER |
|---|--|
| Fishers Public Works Department
One Municipal Drive
Fishers, IN 46038
ERIC PETRITEL (317) 595-3161 | HAMILTON Southeastern Utilities
191 Lakeside Drive
Fishers, IN 46038
JIM HART (317) 517-2300 |
| WATER | STREETS |
| Indianapolis Water Company
1220 Waterway Boulevard
Indianapolis, IN 46202
PAUL WAGGONER (317) 263-6469 | Fishers Public Works Department
One Municipal Drive
Fishers, IN 46038
JIM BRAMBURY (317) 595-3160 |
| GAS | ELECTRIC |
| PG Energy
15900 Allisonville Road
P.O. Box 312
Noblesville, IN 46060
JIM REBUCK (317) 776-5531 | PC Energy
100 S. Mill Creek Road
P.O. Box 312
Noblesville, IN 46060
DEAN GROVES (317) 776-5316 |
| TELEPHONE | CABLE TV |
| Ameritech
5855 North College Avenue
Indianapolis, IN 46220
DAVE ADEL (317) 252-5005 | Inlight Cablevision
15219 Stony Creek Way
Noblesville, IN 46060
DALE LAMBERT (317) 776-4495 |



BENCH MARK DESCRIPTION
 IN HAMILTON COUNTY, APPROX. 5 MILES W. OF FORTVILLE,
 4.55 MILES W. ALONG COUNTY LINE ROAD FROM JUNCTION
 WITH S.R. 67 AT THE S.E. EDGE OF FORTVILLE TO A N/S T-ROAD,
 THENCE 0.35 MILE N. AND N.W. TO THE 4-SPAN CONCRETE BRIDGE
 OVER BEST RESERVOIR, SET IN TOP OF THE N.E. END OF THE N.W.
 ABUTMENT OF THE BRIDGE, 19 FEET N.E. FROM C.L. OF ROAD, 1.3
 FT. E. FROM THE N. CORNER OF THE BRIDGE, 0.6 FT. ABOVE THE
 ROAD; A STANDARD INDIANA FLOOD CONTROL AND WATER RESOURCES
 COMMISSION BRONZE BENCHMARK TABLET, STAMPED "HAM 2 1956"
 ELEVATION = 798.214 NGVD-1929

NOT PART OF AS-BUILT SURVEY
 FILED
 JAN 05 2001
 HAMILTON COUNTY SURVEYOR



EROSION CONTROL NOTES

1. CONSTRUCTION ACTIVITY SHALL GENERALLY CONSIST OF 5 COMMERCIAL BUILDINGS, SIDEWALKS AND PARKING LOTS.
2. THE PRELIMINARY CONSTRUCTION SCHEDULE IS AS FOLLOWS: CLEARING AND ROUGH GRADING TO BEGIN IN NOVEMBER, 1997. CURBING AND FINAL GRADING ANTICIPATED TO BE COMPLETED IN THE SUMMER OF 1998.
3. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING EROSION AND SEDIMENT MIGRATION FROM THE SITE.
4. THE CONTRACTOR SHALL USE SILT FENCE, SEDIMENT TRAPS AND DIVERSION DITCHES AS SHOWN ON THE PLANS AND WHERE NECESSARY TO PREVENT SEDIMENT RUNOFF.
5. ADJACENT LAND IS PRIMARILY COMMERCIAL.
6. NO EVIDENCE OF HYDRIC SOILS HAS BEEN FOUND ON SITE.
7. STORM WATER DOES NOT APPEAR TO ENTER GROUNDWATER ON THE SITE.
8. EXISTING VEGETATIVE COVER SHALL BE PRESERVED IN AREAS NOT DISTURBED BY CONSTRUCTION ACTIVITY.
9. ALL EXCESS SOIL SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE DEVELOPER. A RECOMMENDED STOCKPILE AREA IS SHOWN ON THIS PLAN.
10. ALL DISTURBED AREAS SHALL BE TEMPORARILY SEEDED IMMEDIATELY UPON COMPLETION OF ROUGH GRADING.
11. THE SITE IS NOT LOCATED IN A 100-YEAR FLOOD PLAIN PER FEMA FLOOD HAZARD BOUNDARIES.

SILT FENCE MAINTENANCE REQUIREMENTS

1. INSPECT THE SILT FENCE PERIODICALLY AND AFTER EACH STORM EVENT.
2. IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY.
3. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT OR WHEN IT IS CAUSING THE FABRIC TO BULGE.
4. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEAN OUT.
5. AFTER CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND REPLACE SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE MAINTENANCE REQUIREMENTS

1. INSPECT ENTRANCE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER STORM EVENTS OR HEAVY USE.
2. RE-SHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
3. TOP DRESS WITH CLEAN STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO WESTPOINT DRIVE BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN.
5. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.

SOIL CHARACTERISTICS

CROSBY SILT LOAM (CrA)

THE CROSBY SILT LOAM CONSISTS OF NEARLY LEVEL, DEEP, SOMEWHAT POORLY-DRAINED SOIL ON BROAD, UNULATING TILL PLAINS. AREAS ARE IRREGULAR IN SHAPE AND ARE 3 TO 200 ACRES IN SIZE.

IN A REPRESENTATIVE PROFILE THE SURFACE LAYER IS DARK GRAYISH BROWN SILT LOAM ABOUT 8 INCHES THICK. THE SUBSURFACE LAYER IS DARK GRAYISH BROWN SILT LOAM ABOUT 3 INCHES THICK. THE SUBSOIL IS DARK YELLOWISH BROWN AND YELLOWISH BROWN, MOTTLED, FIRM SILTY CLAY LOAM AND CLAY LOAM ABOUT 21 INCHES THICK. THE UNDERLYING MATERIAL TO A DEPTH OF 60 INCHES IS BROWN, CALCAREOUS LOAM.

ORGANIC MATTER CONTENT IS MODERATE IN THE SURFACE LAYER. PERMEABILITY IS SLOW. THE WATER TABLE IS COMMONLY 1 TO 3 FEET IN WINTER AND EARLY SPRING. FURTHERMORE, THE SOIL HAS A HIGH SHRINK-SWELL POTENTIAL AND HIGH POTENTIAL FROST ACTION.

THE SOIL HAS SEVERE LIMITATIONS FOR BUILDING SITES. THE SITES NEED TO BE ARTIFICIALLY DRAINED TO PREVENT WETNESS FROM BECOMING A PROBLEM. USING PROPERLY DESIGNED FOUNDATIONS AND FOOTINGS HELPS PREVENT STRUCTURAL DAMAGE FROM LOW STRENGTH AND SHRINKING AND SWELLING OF THE SOIL. THE SOIL ALSO HAS SEVERE LIMITATIONS FOR ROAD FILL. THE BASE MATERIAL FOR ROADS NEEDS TO BE STRENGTHENED OR REPLACED WITH SUITABLE MATERIAL.

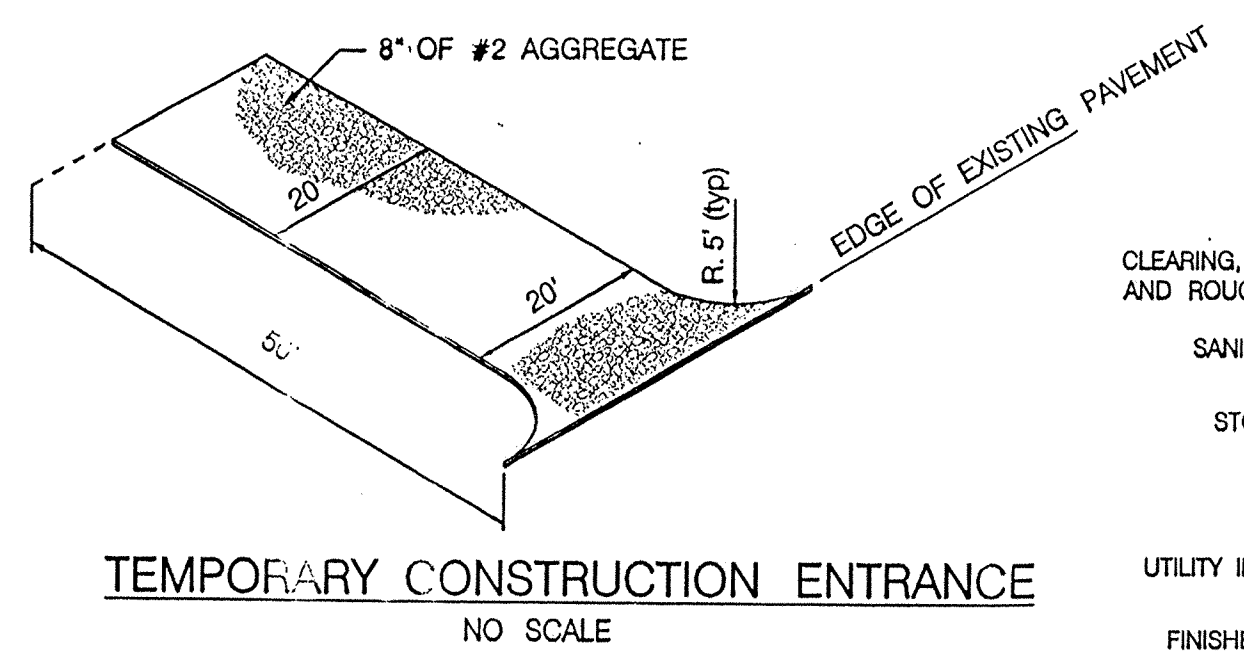
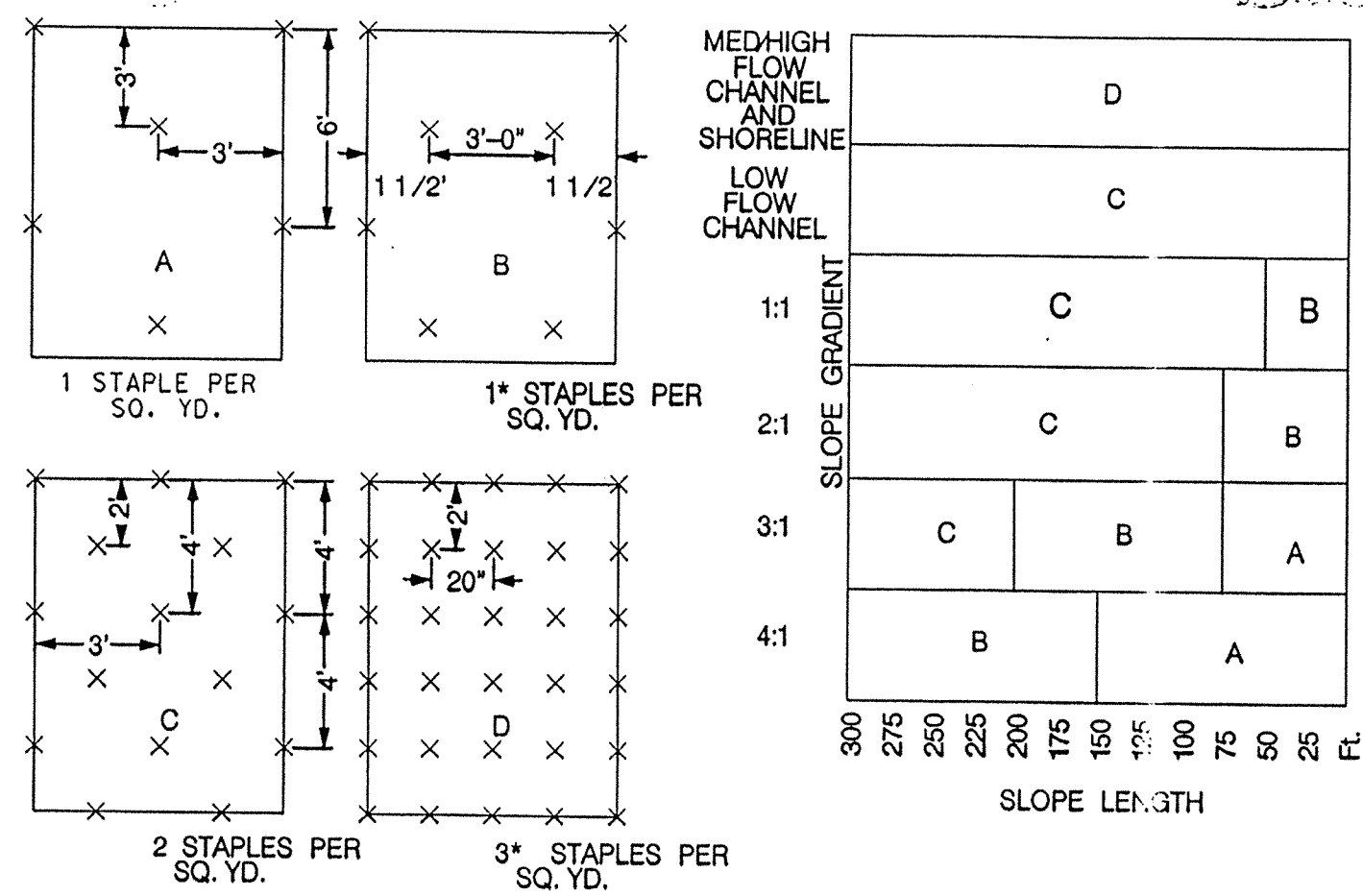
BROOKSTON SILTY CLAY LOAM (Br)

THE BROOKSTON SILTY CLAY LOAM CONSISTS OF NEARLY LEVEL, DEEP, VERY POORLY-DRAINED SOIL ON BROAD DEPRESSIONS, SWALES, AND NARROW DRAINAGE WAYS ON TILL PLAINS. AREAS ARE MOSTLY OVAL OR FINGER-LIKE IN SHAPE AND ARE 3 TO 250 ACRES IN SIZE.

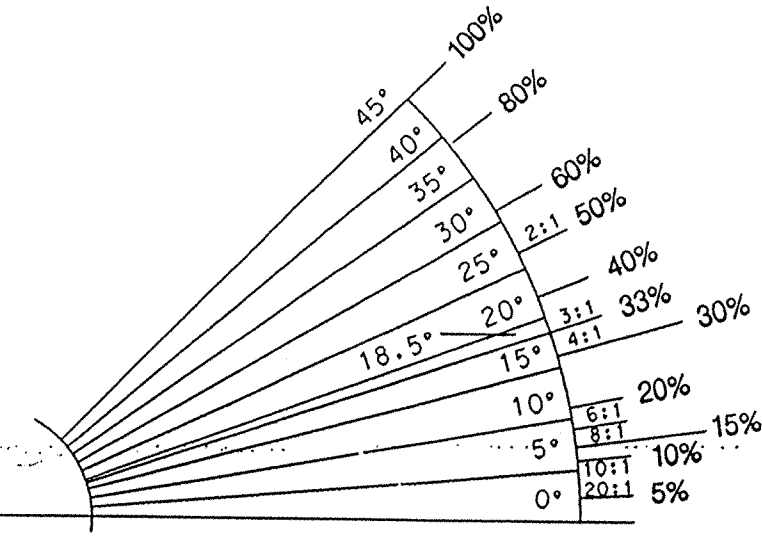
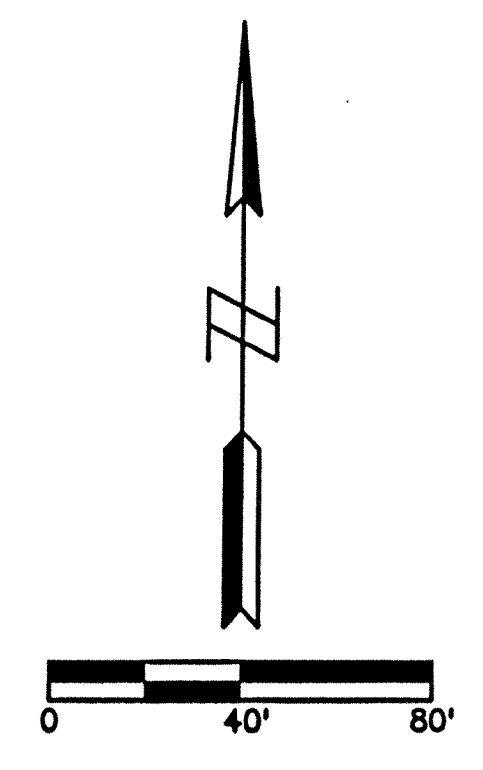
IN A REPRESENTATIVE PROFILE THE SURFACE LAYER IS VERY DARK GRAYISH BROWN AND VERY DARK GRAY SILTY CLAY LOAM ABOUT 11 INCHES THICK. THE SUBSOIL IS DARK GRAY, GRAY, AND GRAYISH BROWN, MOTTLED, FIRM CLAY LOAM AND LOAM ABOUT 58 INCHES THICK. THE UNDERLYING MATERIAL TO A DEPTH OF 70 INCHES IS BROWN LOAM.

PERMEABILITY IS MODERATE AND THE WATER TABLE IS COMMONLY AT THE SURFACE OR AT A DEPTH OF LESS THAN 1 FOOT IN WINTER AND EARLY SPRING. FURTHERMORE, THE SOIL HAS A MODERATE SHRINK-SWELL POTENTIAL AND A HIGH POTENTIAL FROST ACTION.

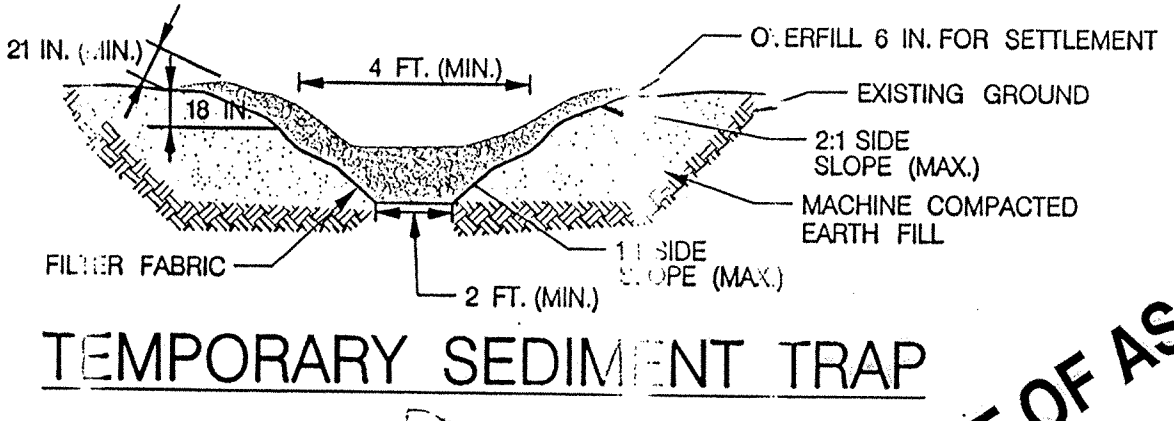
THE SOIL HAS SEVERE LIMITATIONS FOR BUILDING SITES. THE SITES NEED TO BE ARTIFICIALLY DRAINED TO PREVENT WETNESS FROM BECOMING A PROBLEM. USING PROPERLY DESIGNED FOUNDATIONS AND FOOTINGS HELPS PREVENT STRUCTURAL DAMAGE FROM LOW STRENGTH AND SHRINKING AND SWELLING OF THE SOIL. THE SOIL ALSO HAS SEVERE LIMITATIONS FOR ROAD FILL. THE BASE MATERIAL FOR ROADS NEEDS TO BE STRENGTHENED OR REPLACED WITH SUITABLE MATERIAL.



	MAY	JUNE	JULY	1998 AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
CLEARING, EXCAVATION, AND ROUGH GRADING	Install Silt Fence, Construction Entrance	Temp. Seeding					
SANITARY SEWER							
STORM SEWER			Place Sandbag Inlet Protection				
PAVING							
UTILITY INSTALLATION							
FINISHED GRADING					Perm. Seeding		



EROSION CONTROL BLANKET STAPLE PATTERN
NO SCALE

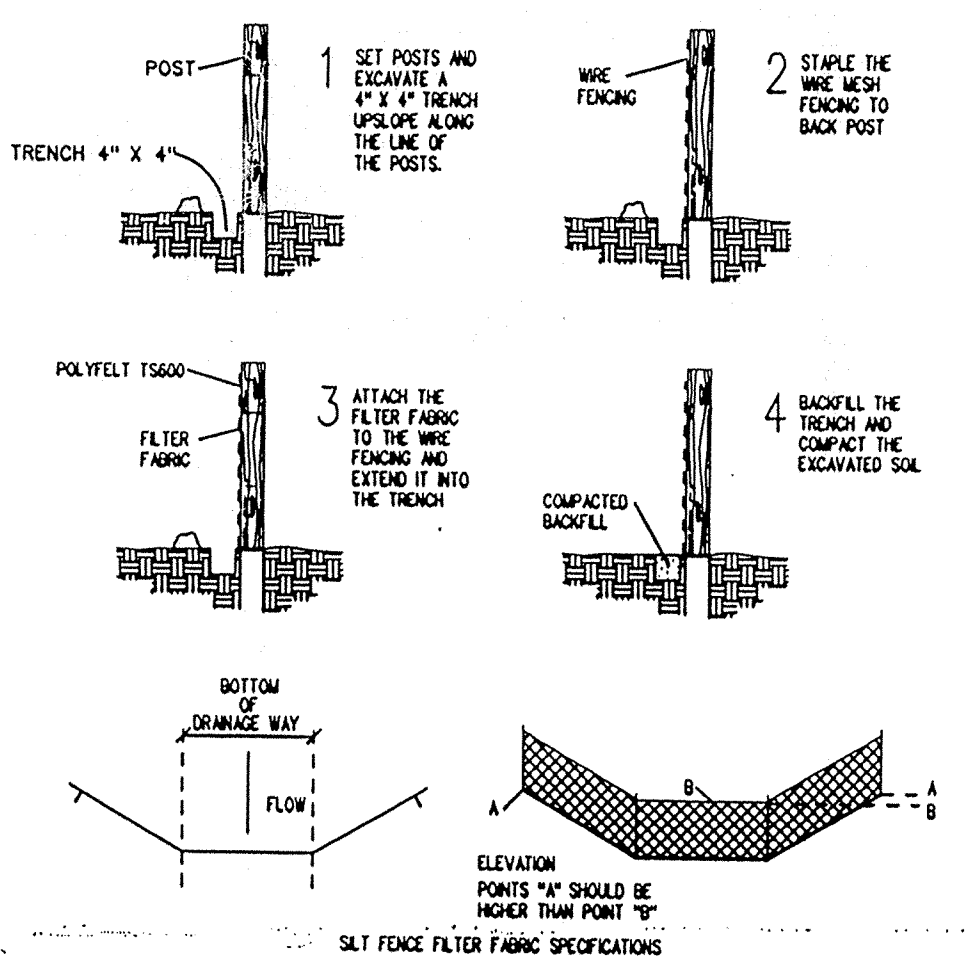


TEMPORARY SEDIMENT TRAP

SEASONAL SOIL PROTECTION CHART

STABILIZATION PRACTICE	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING	A											
DORMANT SEEDING	B											
SEEDING	C, E, D											
SODDING	F											
MULCHING	G											

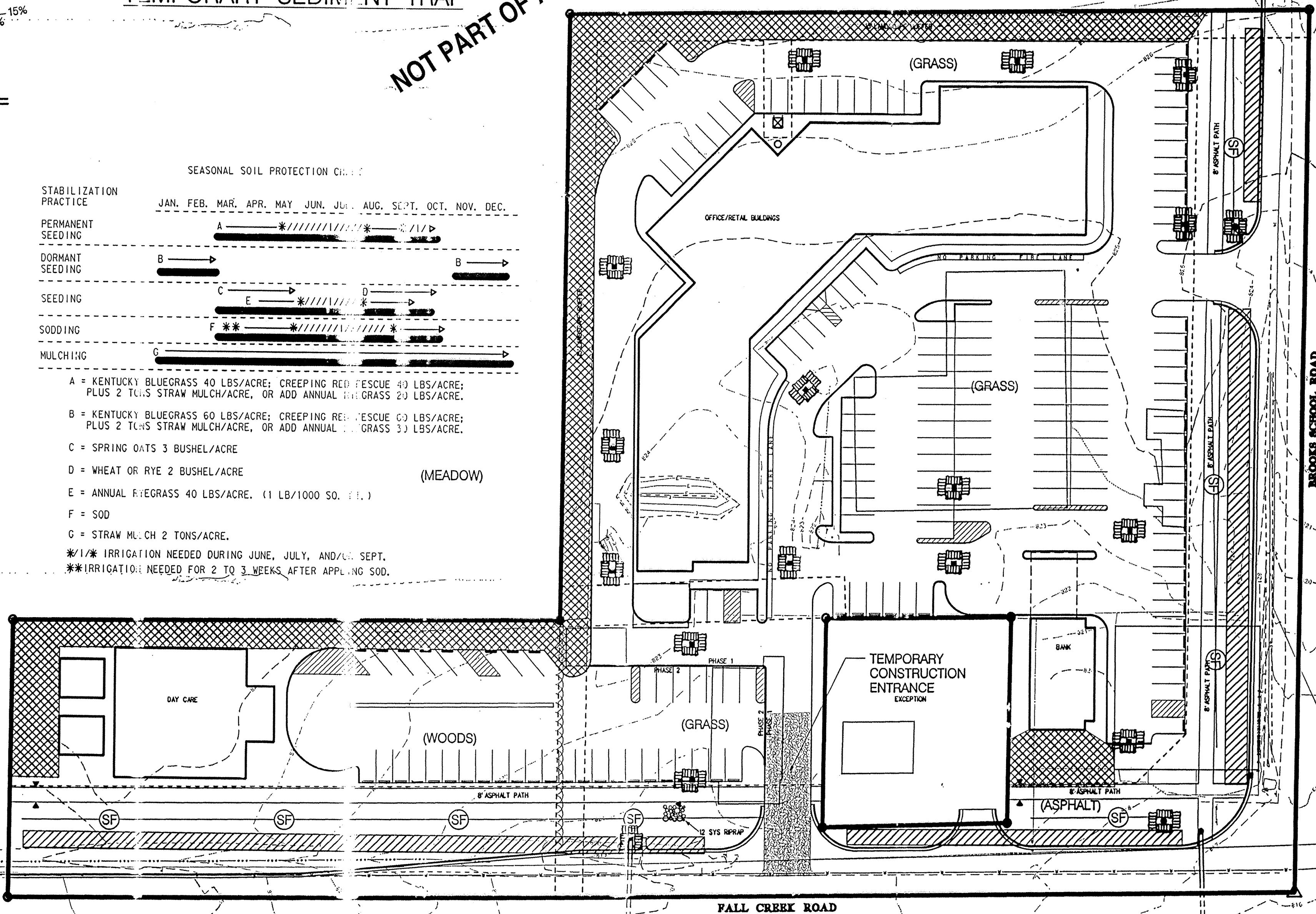
A = KENTUCKY BLUEGRASS 40 LBS/ACRE; CREEPING RED FESCUE 40 LBS/ACRE; PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL GRASS 20 LBS/ACRE.
 B = KENTUCKY BLUEGRASS 60 LBS/ACRE; CREEPING RED FESCUE 60 LBS/ACRE; PLUS 2 TONS STRAW MULCH/ACRE, OR ADD ANNUAL GRASS 30 LBS/ACRE.
 C = SPRING OATS 3 BUSH/ACRE
 D = WHEAT OR RYE 2 BUSH/ACRE
 E = ANNUAL FESCUE 40 LBS/ACRE. (1 LB/1000 SQ. FT.)
 F = SOD
 G = STRAW MULCH 2 TONS/ACRE.
 1 IRRIGATION NEEDED DURING JUNE, JULY, AND/OCT. SEPT.
 **IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.



SILT FENCE DETAIL
NO SCALE

LEGEND

(SF)	SILT FENCE
(SEEDING)	SEEDING
(EROSION CONTROL BLANKET)	EROSION CONTROL BLANKET
(CrA)	SOIL CLASSIFICATION
(STRAW BALE)	STRAW BALE



NOT PART OF AS-BUILT SURVEY

EROSION CONTROL SCHEDULE



DESIGNED BY: GSS
 DRAWN BY: WHC
 CHECKED BY: DAH
 APPROVED BY: DBH

REVISIONS AND DATES:
 4-3-98 Per/TAC Comments
 11-10-98 Added str. s. 30.31, protection around 30

FALL CREEK HARBOUR
EROSION CONTROL PLAN

PREPARED BY: MSE Corporation
 941 North Meridian Street, Indianapolis, IN 46204-1051
 317 634-1000 • 317 634-3576 FAX http://www.msecorp.com

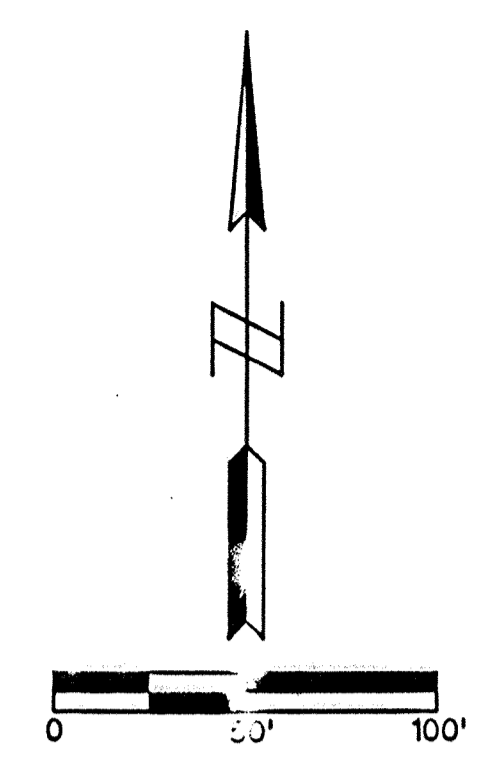
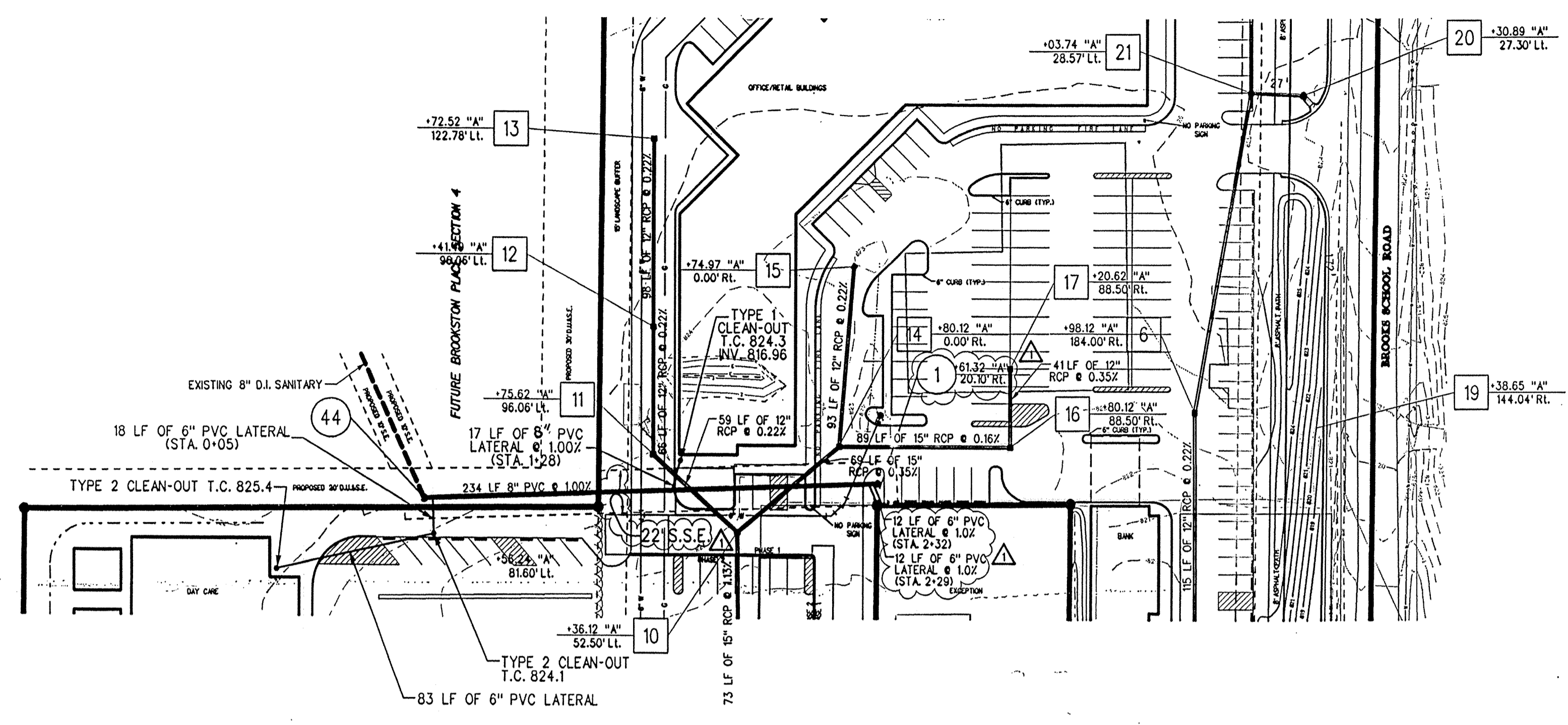
PREPARED FOR: PARAMOUNT REALTY GROUP

DATE: February 27, 1998
 SCALE: 1" = 40'
 PROJECT NO. 111-0990
 SHEET NO. 5 OF 14



Designed by: GSS
Drawn by: WHC
Checked by: DAH
Approved by: DBH

- NOTES:
- (1) MANHOLE OR CLEAN-OUT CASTINGS MAY NEED TO BE ELEVATED AFTER FINAL GRADING TO INSURE DRAINAGE AWAY FROM STRUCTURES.
 - (2) PAVEMENT OR CONCRETE, INCLUDING DRIVEWAYS AND SIDEWALKS, MUST NOT BE CONSTRUCTED ON OR WITHIN ONE (1) FOOT HORIZONTAL DISTANCE OF SANITARY SEWER MANHOLE CASTINGS.
 - (3) ALL ROUGH GRADING (ON-SITE AND OFF-SITE) MUST BE FINISHED TO WITHIN (3) FOOT OF FINAL GRADE PRIOR TO THE START OF CONSTRUCTION OF THE SANITARY SEWER INFRASTRUCTURE.
 - (4) ALL LATERALS SHALL TERMINATE WITHIN A SANITARY SEWER EASEMENT.
 - (5) AT THE INSPECTOR'S DISCRETION, A CONCRETE CRADLE MAY BE REQUIRED FOR ALL LATERAL/UTILITY CROSSINGS.
 - (6) CONTRACTOR MUST FIELD VERIFY INVERT ELEVATIONS OF EXISTING MANHOLE PRIOR TO CONSTRUCTION. IF A VARIATION EXISTS, THEN CONTACT SAMCO.
 - (7) SANITARY SEWER FACILITIES, INCLUDING MAINS AND LATERALS, MUST MAINTAIN FIVE(5) FEET OF COVER FROM THE TOP OF PIPE TO GRADE. IF ADEQUATE COVER CAN NOT BE MAINTAINED, THEN CONCRETE CAPPING MUST BE INSTALLED WHEN COVER IS FOUR(4) TO FIVE(5) FEET AND CONCRETE ENCASEMENT MUST BE INSTALLED WHEN COVER IS THREE(3) TO FOUR(4) FEET. UNDER NO CIRCUMSTANCES WILL COVER BE PERMITTED TO BE LESS THAN THREE(3) FEET.
 - (8) THE LATERAL SERVICING THE BANK AND EXCEPTION PARCEL (OR OTHER FACILITY STRUCTURES AT THOSE LOCATIONS) MUST BE INSTALLED AT MAXIMUM DEPTH, DEPENDING ON COVER. THE LATERALS MAY REQUIRE CONCRETE CAPPING OR ENCASEMENT.



BENCH MARK DESCRIPTION

IN HAMILTON COUNTY, APPROX. 5 MILES W. OF FORTVILLE, 4.55 MILES W. ALONG COUNTY LINE ROAD FROM JUNCTION WITH S.R. 67 AT THE S.E. EDGE OF FORTVILLE TO A N/S T-ROAD, THENCE 0.35 MILE N. AND N.W. TO THE 4-SPAN CONCRETE BRIDGE OVER CIST RESERVOIR, SET IN TOP OF THE N.E. END OF THE N.W. ABUTMENT OF THE BRIDGE, 19 FEET N.E. FROM C.L. OF ROAD, 13 FT. E. FROM THE N. CORNER OF THE BRIDGE, 0.6 FT. ABOVE THE ROAD; A STANDARD INDIANA FLOOD CONTROL AND WATER RESOURCES COMMISSION BRONZE BENCH MARK TABLET, STAMPED "HAM 2 1956"

ELEVATION = 798.214 NGVD-1929

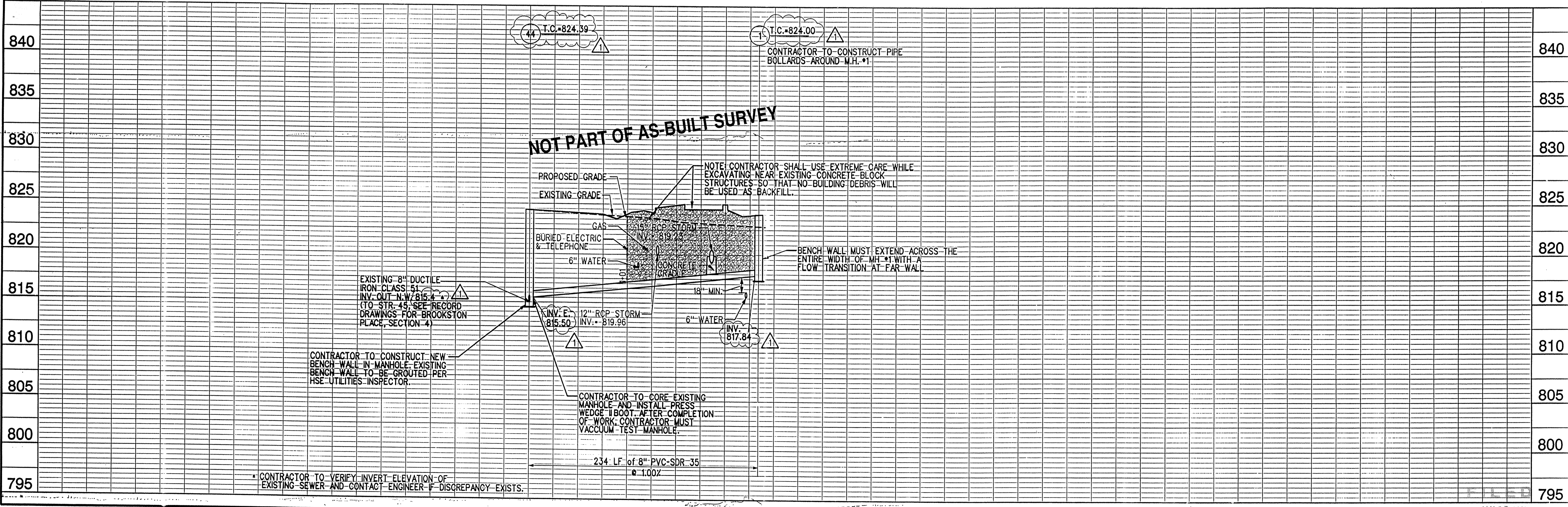
NOTES:
LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

PLAN SCALE: 1"=50'
PROFILE SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



1-800-382-5544
CALL BEFORE YOU DIG



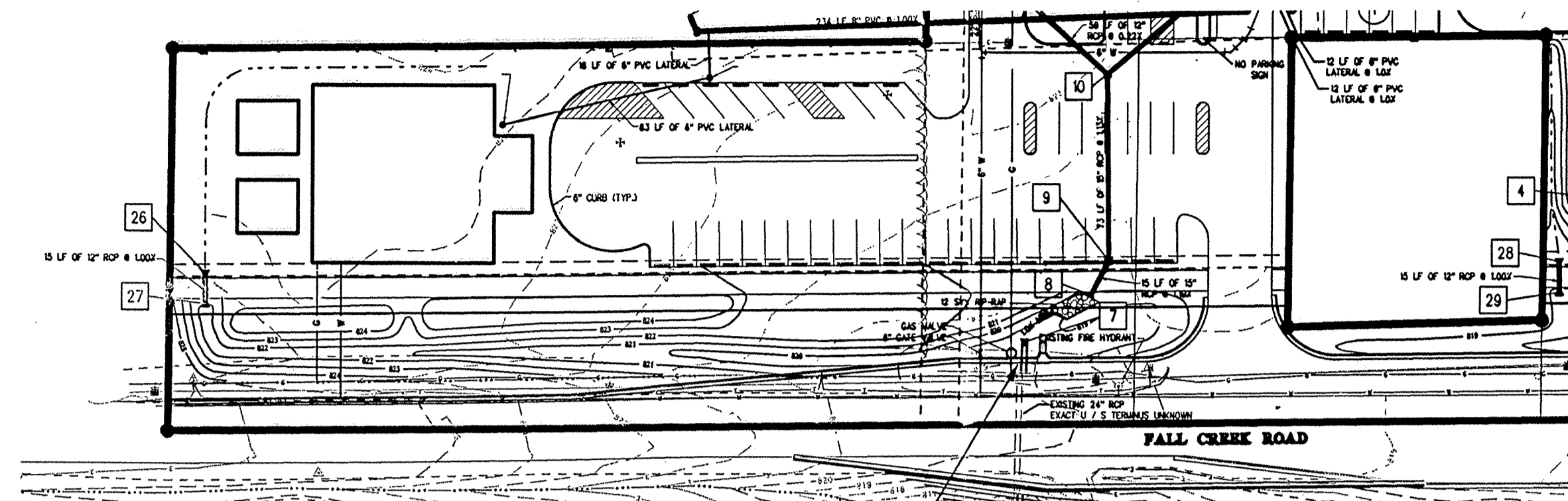
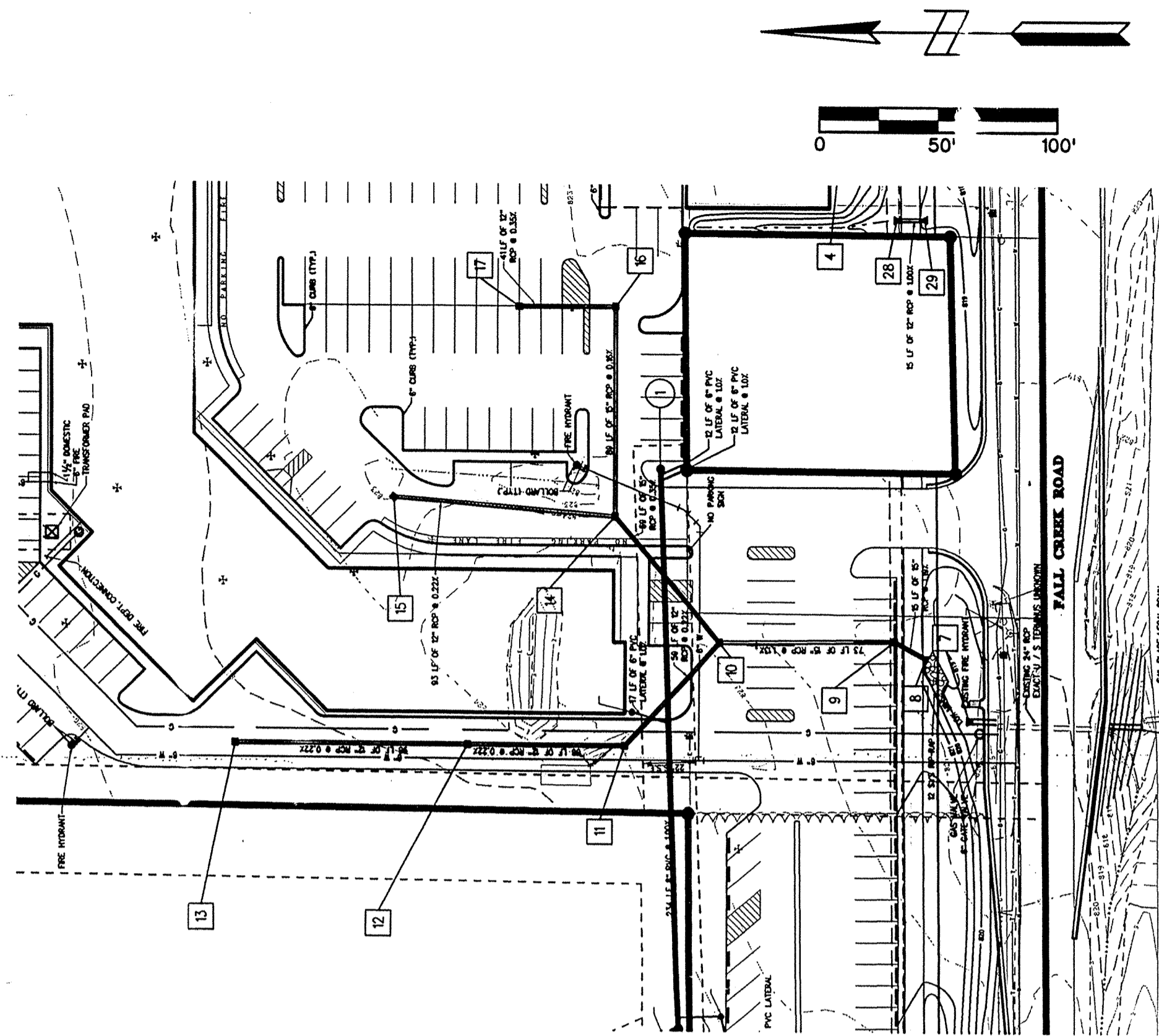
FALL CREEK HARBOUR

SANITARY SEWER PLAN & PROFILE

PREPARED BY: **MSE Corporation**
941 North Meridian Street Indianapolis, IN 46204-1081
317 694-1000 • 317 694-3576 FAX <http://www.msecorp.com>
PREPARED FOR: **PARAMOUNT REALTY GROUP**

DATE: February 27, 1998
SCALE: SEE NOTES
PROJECT NO. 111-0980

SHEET NO. **6**
OF 14



BENCH MARK DESCRIPTION

IN HAMILTON COUNTY, APPROX. 5 MILES W. OF FORTVILLE, 4.55 MILES W. ALONG COUNTY LINE ROAD FROM JUNCTION WITH S.R. 67 AT THE S.E. EDGE OF FORTVILLE TO A N/S T-ROAD, THENCE 0.35 MILE N. AND N.W. TO THE 4-SPAN CONCRETE BRIDGE OVER GEIST RESERVOIR, SET IN TOP OF THE N.E. END OF THE N.W. ABUTMENT OF THE BRIDGE, 19 FEET N.E. FROM C.L. OF ROAD, 1.3 FT. E. FROM THE N. CORNER OF THE BRIDGE, 0.6 FT. ABOVE THE ROAD; A STANDARD INDIANA FLOOD CONTROL AND WATER RESOURCES COMMISSION BRONZE BENCH MARK TABLE, STAMPED "HAM 2 1956"

ELEVATION = 798.214 NGVD-1929

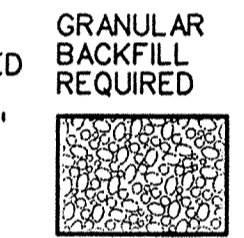
NOTES:

1. LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.
 3. CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY FACILITIES AND STORM SEWER IS 18" OR LESS.
- PLAN SCALE: 1"=50'
 PROFILE SCALES: HORIZONTAL - 1"=50'
 VERTICAL - 1"=5'

"DON'T DIG BLIND"

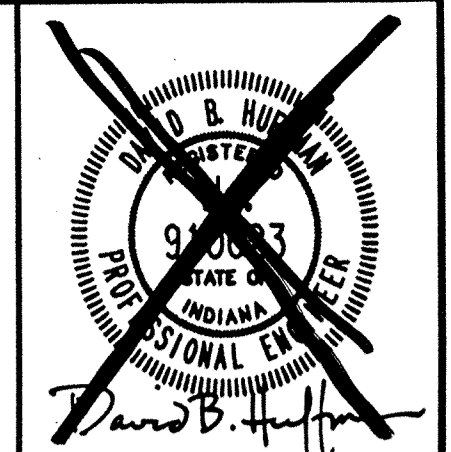


1-800-382-5544
CALL BEFORE YOU DIG



I hereby certify that the as-built information on this drawing was provided by Mid-States Engineering and is correct to the best of my knowledge, information, and belief. May 12th, 2000.

Bryan F. Catlin
 Bryan F. Catlin Registered Land Surveyor No. 910012



Designed by: GSS
 Drawn by: WHC
 Checked by: DAH
 Approved by: DBH

REVISIONS AND DATES
 3-10-98 Sanitary crossings: Added note.
 4-3-98 Per TAC Comments
 5-27-98 Per Hamilton, Southeastern Utilities.
 7-10-98 Revised T.C.'s - S.F.s. 10-15; Revised INV's, S.F.s. 6 & 11-15.

FALL CREEK HARBOUR

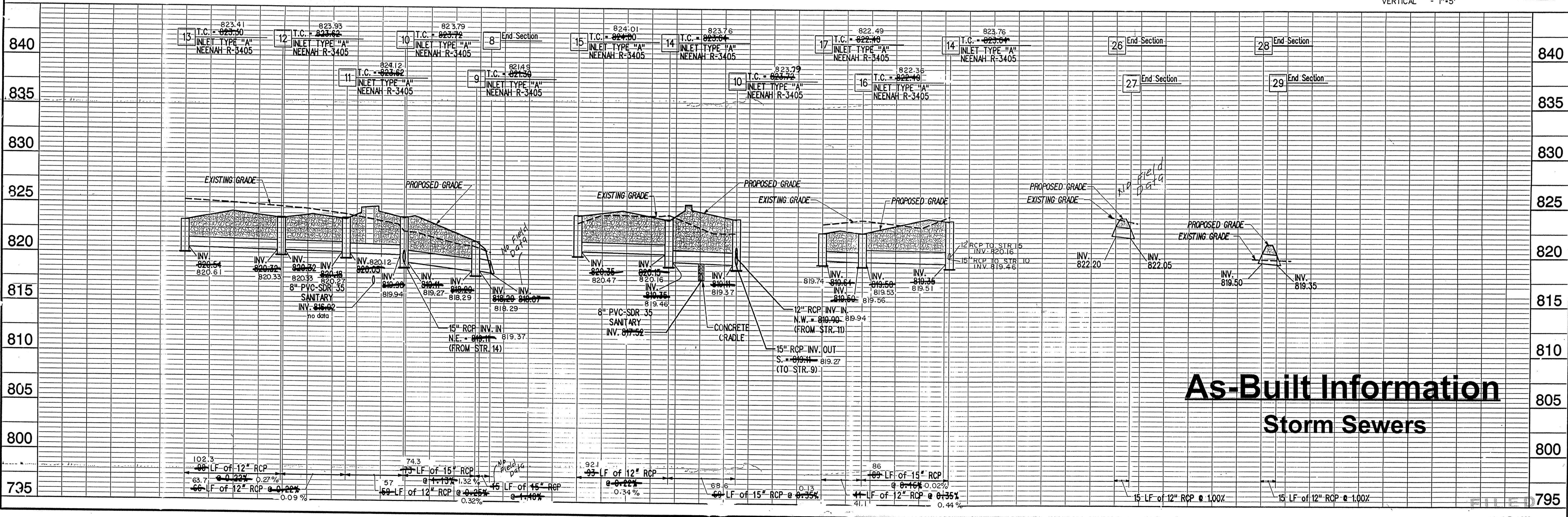
STORM SEWER PLAN & PROFILE

PARAMOUNT REALTY GROUP

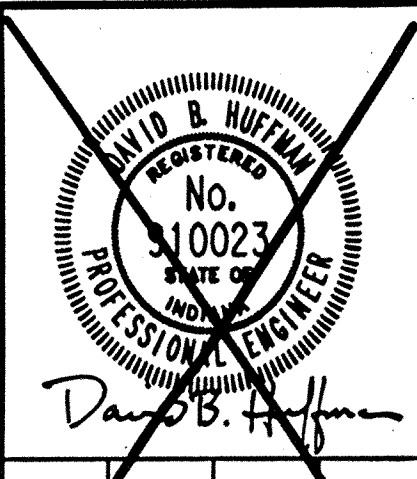
PREPARED BY:
MSE Corporation
 941 North Meridian Street Indianapolis, IN 46204-0611
 317 634-0000 • 317 634-3576 FAX http://www.msecorp.com

DATE: February 1998
 SCALE: SEE NOTES
 PROJECT NO.: H-0980

SHEET NO. **7**
 OF 14



**As-Built Information
 Storm Sewers**



Designed by: GSS
Drawn by: WFC
Checked by: DAH
Approved by: DBH

REVISIONS AND DATES
3-10-98 Revisions per Owner; Added note.
4-2-98 Per TAC Comments
7-10-98 Revised T.C.s, Str.s 24 & 25.



I hereby certify that the as-built information on this drawing was provided by Mid-States Engineering and is correct to the best of my knowledge, information and belief. May 12th, 2000.

Bryan F. Catlin
Bryan F. Catlin Registered Land Surveyor #910012

BENCH MARK DESCRIPTION

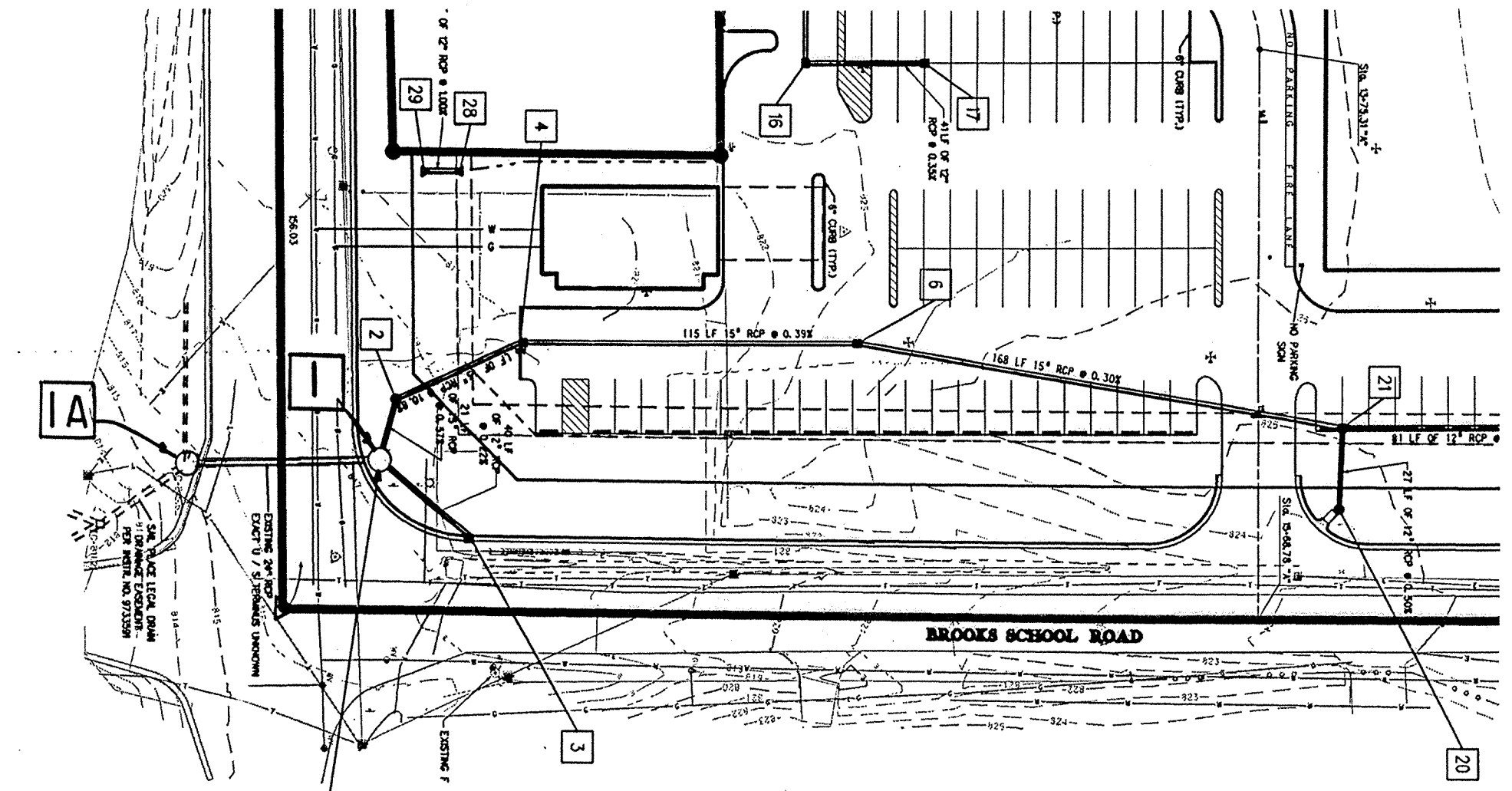
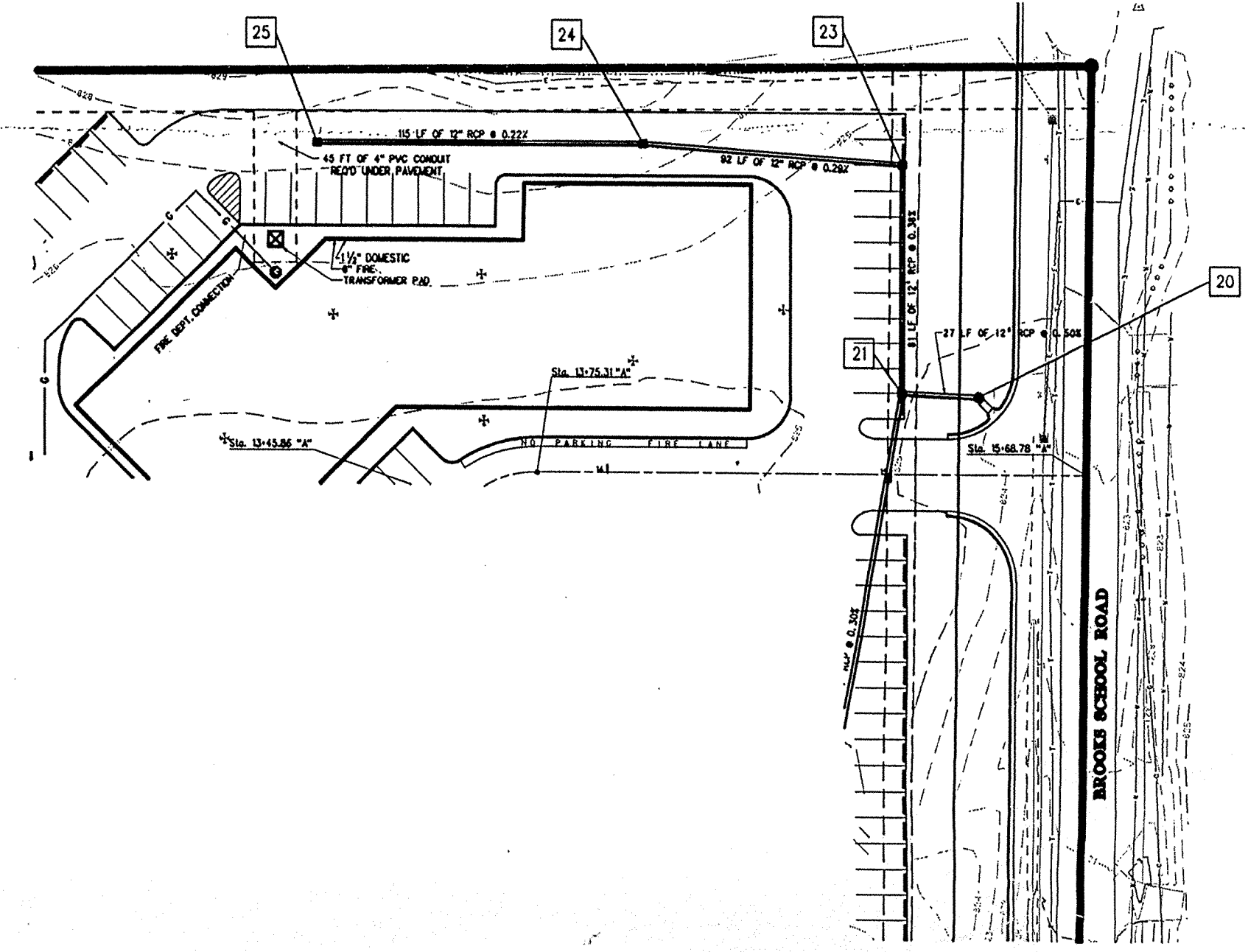
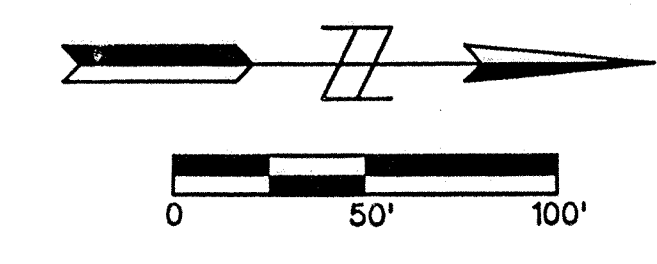
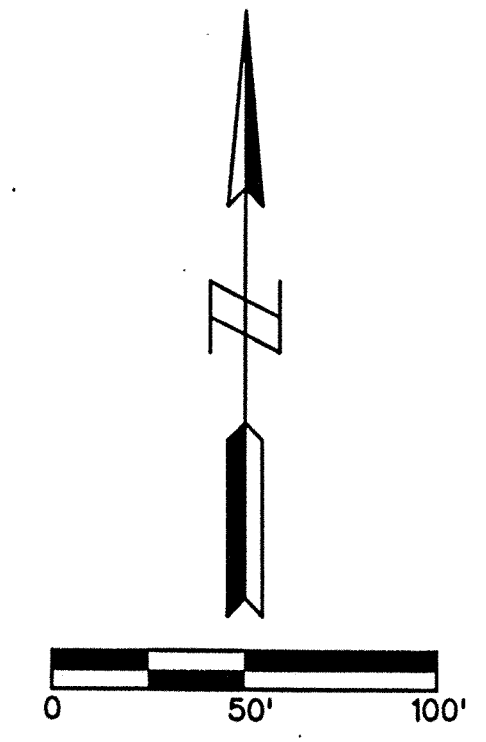
IN HAMILTON COUNTY, APPROX. 5 MILES W. OF FORTVILLE, 4.55 MILES W. ALONG COUNTY LINE ROAD FROM JUNCTION WITH S.R. 67 AT THE S.E. EDGE OF FORTVILLE TO A N/S T-ROAD, THENCE 0.35 MILE N. AND N.W. TO THE 4-SPAN CONCRETE BRIDGE OVER GEIST RESERVOIR, SET IN TOP OF THE N.E. END OF THE N.W. ABUTMENT OF THE BRIDGE, 19 FEET N.E. FROM C.L. OF ROAD, 1.3 FT. E. FROM THE N. CORNER OF THE BRIDGE, 0.6 FT. ABOVE THE ROAD; A STANDARD INDIANA FLOOD CONTROL AND WATER RESOURCES COMMISSION BRONZE BENCH MARK TABLE, STAMPED "HAM 2 1956"
ELEVATION = 798.214 NGVD-1929

NOTES:

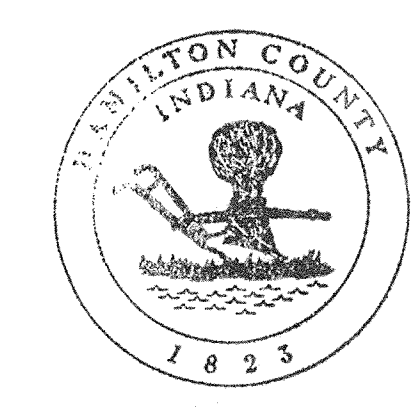
- LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR TO INSTALL CONCRETE CRADLES WHEN THE VERTICAL SEPARATION (AS MEASURED FROM THE EXTERIOR OF THE PIPES) BETWEEN SANITARY FACILITIES AND STORM SEWER IS 18" OR LESS.

GRANULAR BACKFILL REQUIRED

PLAN SCALE: 1"=50'
PROFILE SCALES: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



NOTE: CONTRACTOR TO LOCATE UPSTREAM END OF 24" RCP NORTH OF FALL CREEK ROAD PRIOR TO INSTALLATION OF ANY STORM SEWER. CONTACT ENGINEER WITH LOCATION AND ELEVATION OF PIPE. ADJUSTMENTS TO LOCATION AND HEIGHT OF STRUCTURE 1 WILL DEPEND ON THIS INFORMATION.



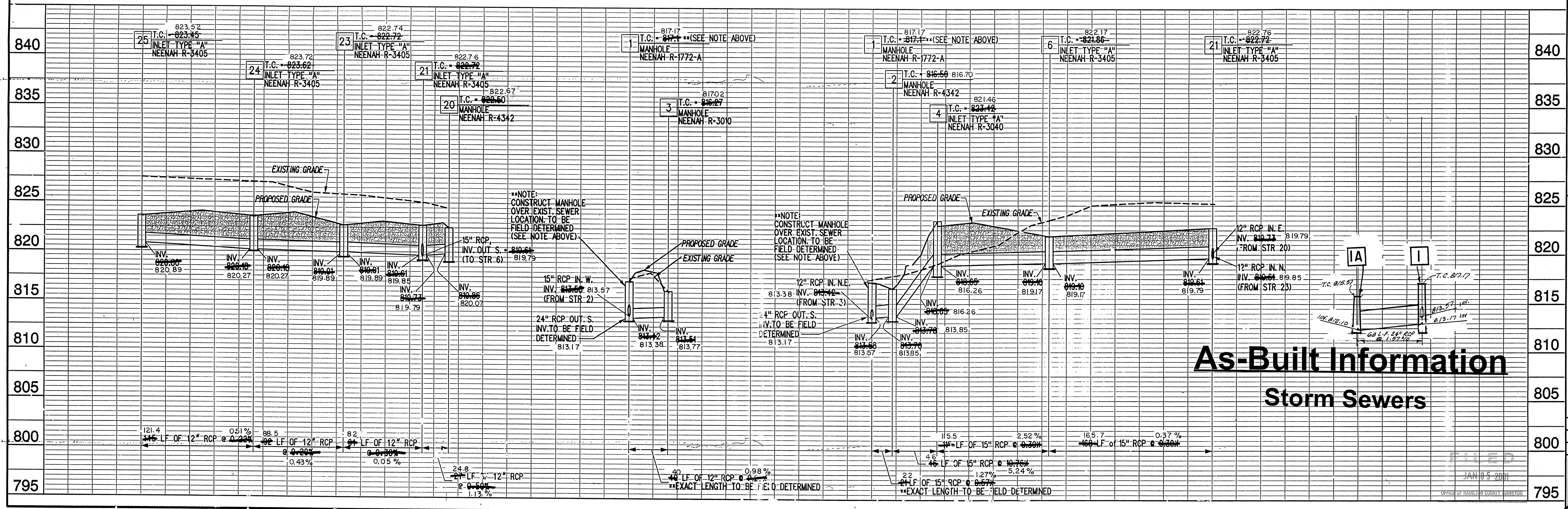
This information was gathered for input into the Hamilton County Geographical Information System. This document is considered an official record of the GIS.

"DON'T DIG BLIND"

Entry Date: 9-30-02

Entered by: Suzanne L. Mills

JOH 4-28-04 1-800-382-5644
CALL BEFORE YOU DIG



FALL CREEK HARBOUR STORM SEWER PLAN & PROFILE

PREPARED BY: MSE Corporation
941 North Meridian Street, Indianapolis, IN 46204-1001
317-634-1000 • 317-634-3076 FAX • <http://www.msecorp.com>
PREPARED FOR: PARAMOUNT REALTY GROUP

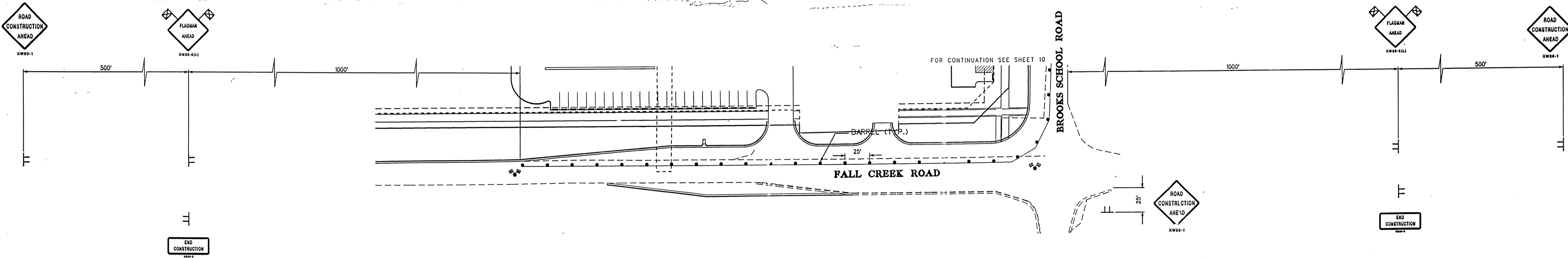
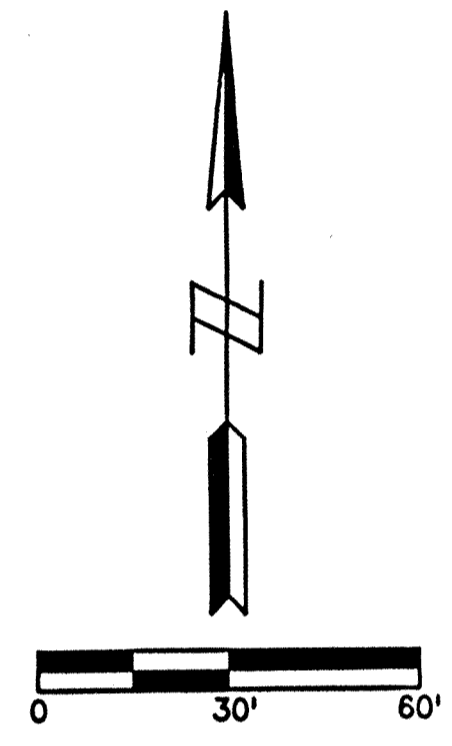
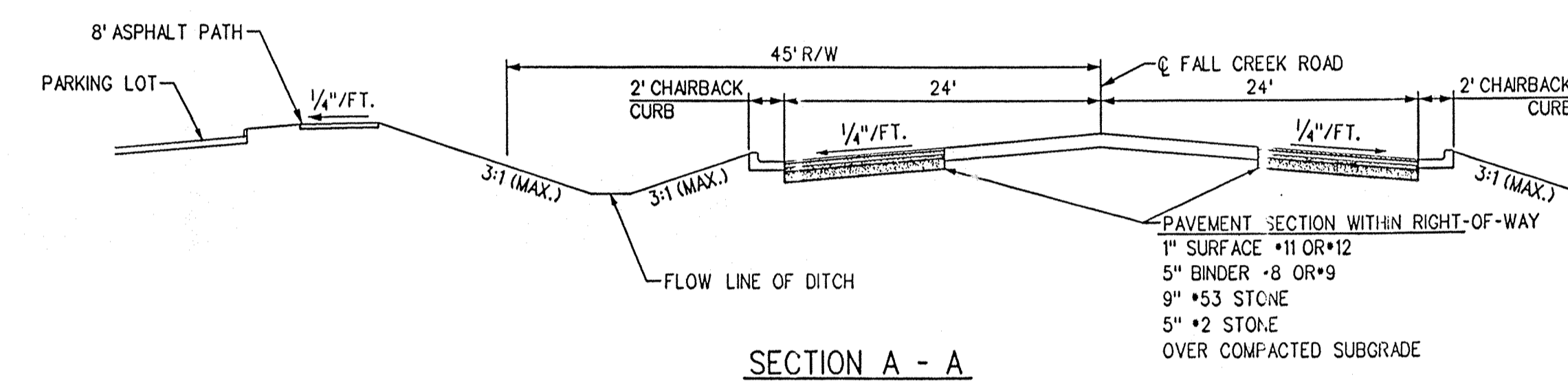
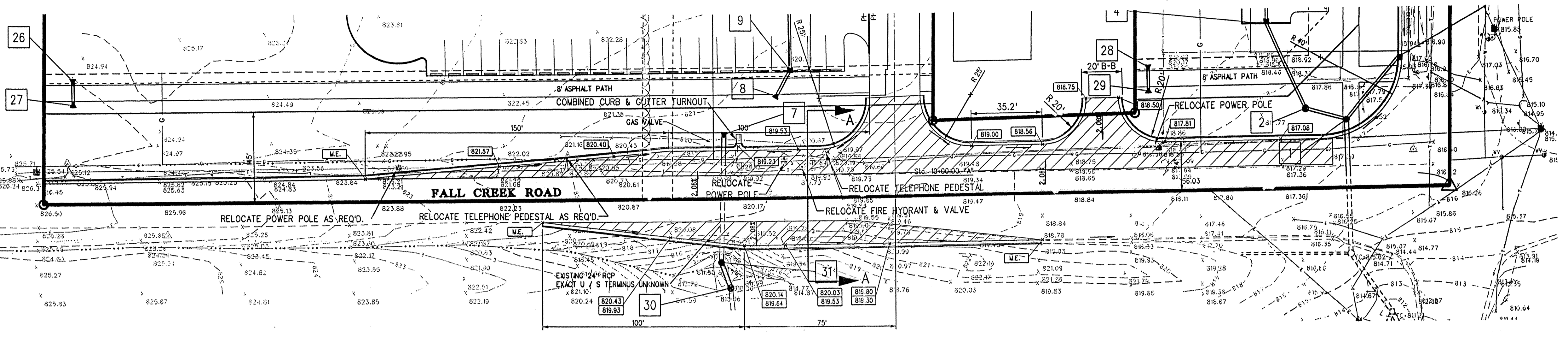
DATE: February, 1998
SCALE: SEE NOTES
PROJECT NO. 1110980
SHEET NO. 8 OF 14

LEGEND

EXISTING PROPOSED

- STORM SEWER
- SANITARY SEWER
- MANHOLE
- INLET
- ▣ END SECTION
- 101 (STORM) STRUCTURE NO.
- 1 (SANITARY) STRUCTURE NO.
- - - - - ELECTRIC LINE
- POWER POLE
- LIGHT POLE
- - - - - TELEPHONE LINE
- ▲ TELEPHONE PEDESTAL
- FLOW ARROW
- CONTOUR
- 818.09 SPOT ELEVATION (TOP OF CURB OVER FLOW LINE)
- GAS LINE

SEE SHEET 10 FOR ENTRANCE PLANS ALONG BROOKS SCHOOL ROAD



NOT PART OF AS-BUILT SURVEY

LEGEND

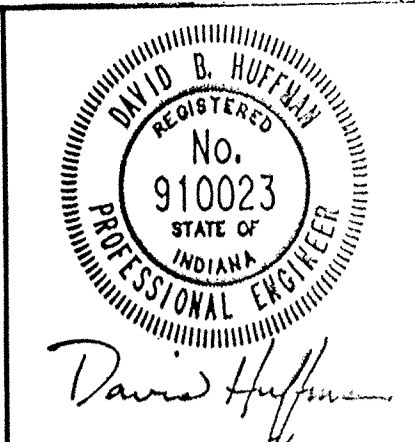
- BARREL
- TEMPORARY CONSTRUCTION SIGN
- FLAGMAN

MAINTENANCE OF TRAFFIC PLAN

SCALE 1" = 50'

- NOTES:
1. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTACT EACH RESPECTIVE UTILITY COMPANY PRIOR TO EXCAVATION
 2. BARRELS TO BE PLACED ALONG EDGE OF EXISTING PAVEMENT.
 3. TRAFFIC FLOW AND ACCESS TO PRIVATE DRIVE TO SOUTH TO BE MAINTAINED AT ALL TIMES
 4. SEE SHEET 10 FOR COMBINED CURB & GUTTER TURNOUT DETAIL.

FILED JAN 05 2001



Designed by: GSS
 Drawn by: WFC
 Checked by: DAH
 Approved by: DBH

REVISIONS AND DATES

3-10-88	Notes for relocation of utilities.
4-3-88	Per IAC Comments
4-28-88	Revised placement section and extended curb per IACD
5-27-88	Drafting Check
11-10-88	Added storm str.'s 50.01; removed headwall.

FALL CREEK HARBOUR

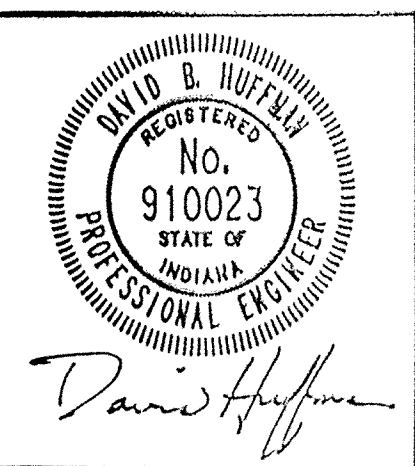
ENTRANCE PLAN

PREPARED BY: MSE Corporation
 941 North Meridian Street, Indianapolis, IN 46204-1061
 317 624-1000 • 317 624-3576 FAX http://www.msecorp.com

PREPARED FOR: PARAMOUNT REALTY GROUP

DATE: February 27, 1998
 SCALE: N/A
 PROJECT NO. 111-0990

SHEET NO. 9 OF 14



Designed by:	DBH
Drawn by:	WCH
Checked by:	DAH
Approved by:	DBH

REVISIONS AND DATES	
3-10-99	Revised Typical Cross Section.
4-25-99	Per TAC Comments
4-25-99	Revised pavement section per HCHD
5-27-99	Drafting Check.
11-10-99	Added curb cut to Ameritech facility.

FALL CREEK HARBOUR

ENTRANCE PLAN

PREPARED BY: **MSE Corporation**
 541 North Meridian Street, Indianapolis, IN 46204-1061
 317 634-1000 • 317 634-3576 FAX • http://www.msecorp.com

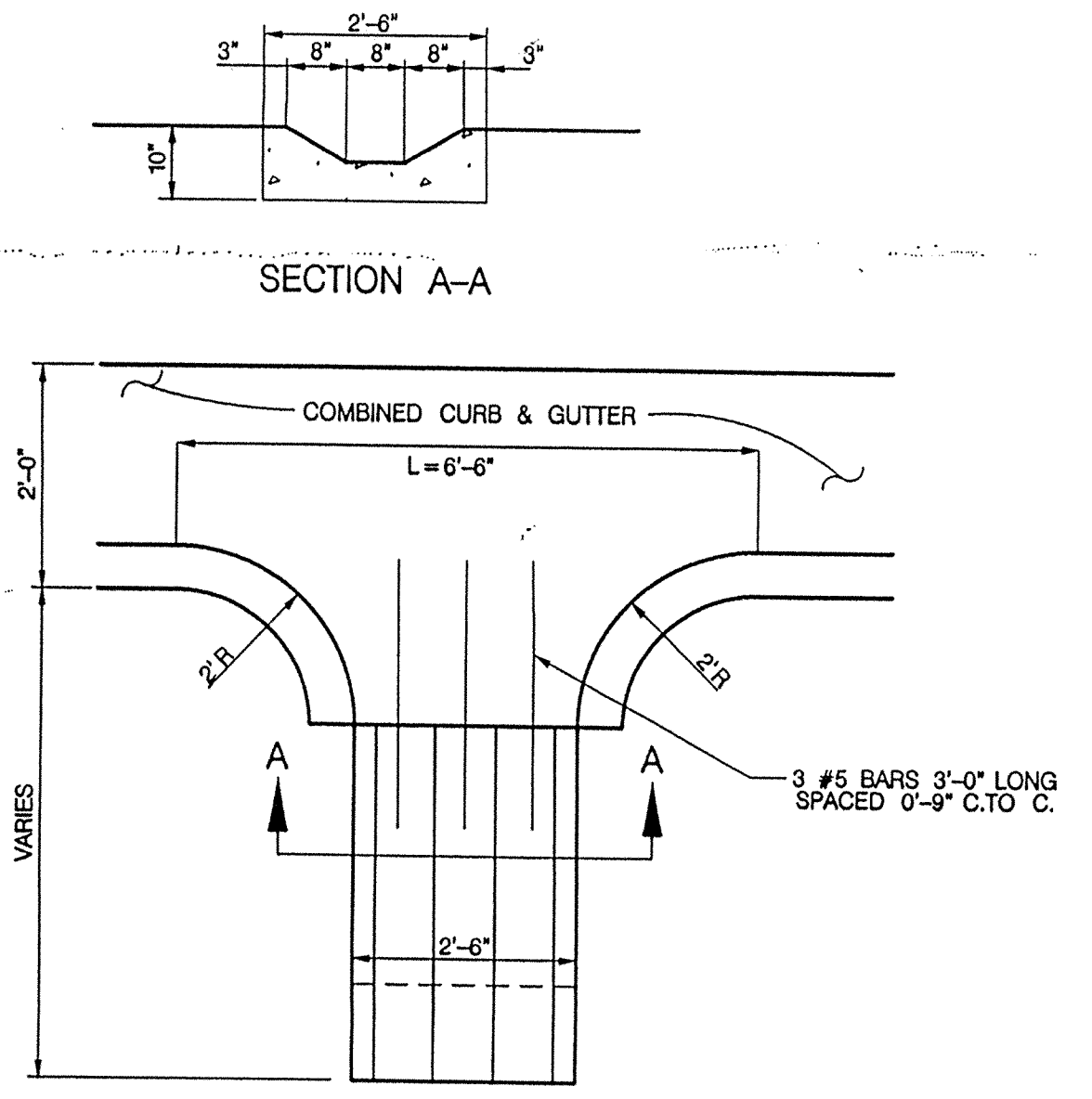
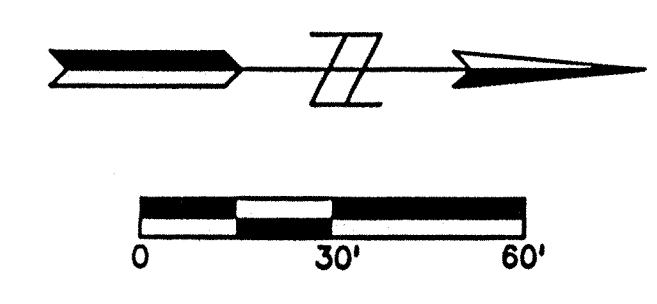
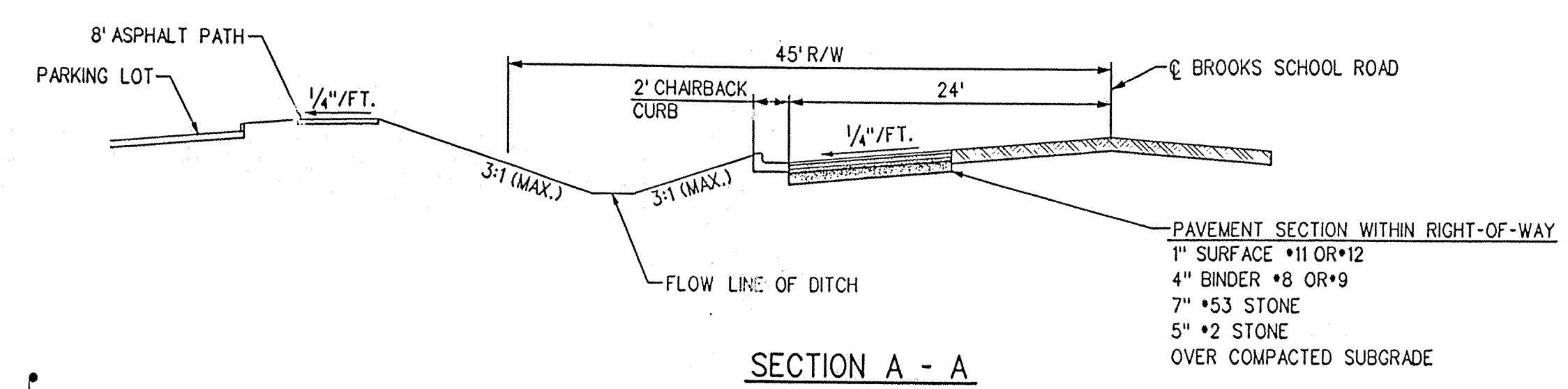
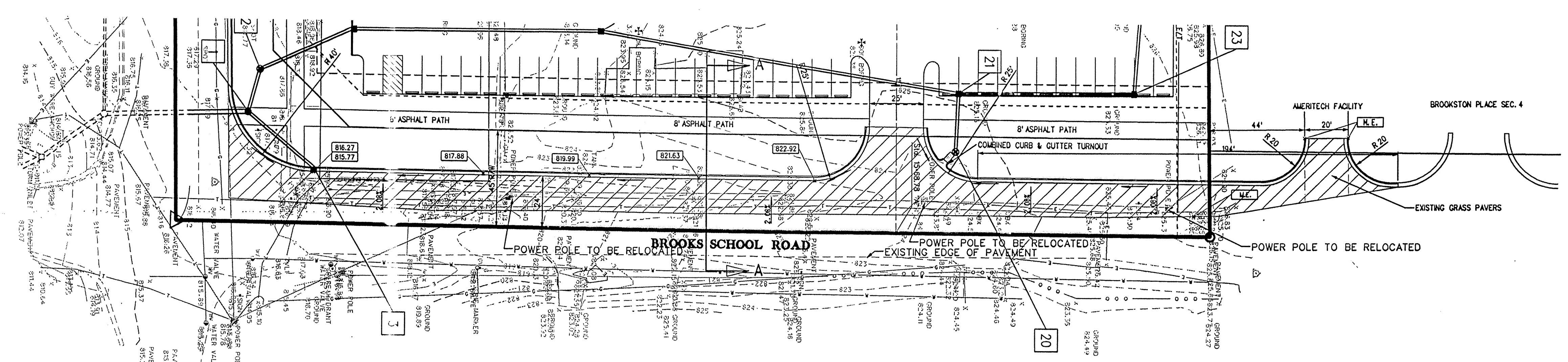
PREPARED FOR: **PARAMOUNT REALTY GROUP**

DATE: February 27, 1999
 SCALE: 1" = 30'
 PROJECT NO. 111-0980
 SHEET NO. **10**

LEGEND

EXISTING	PROPOSED

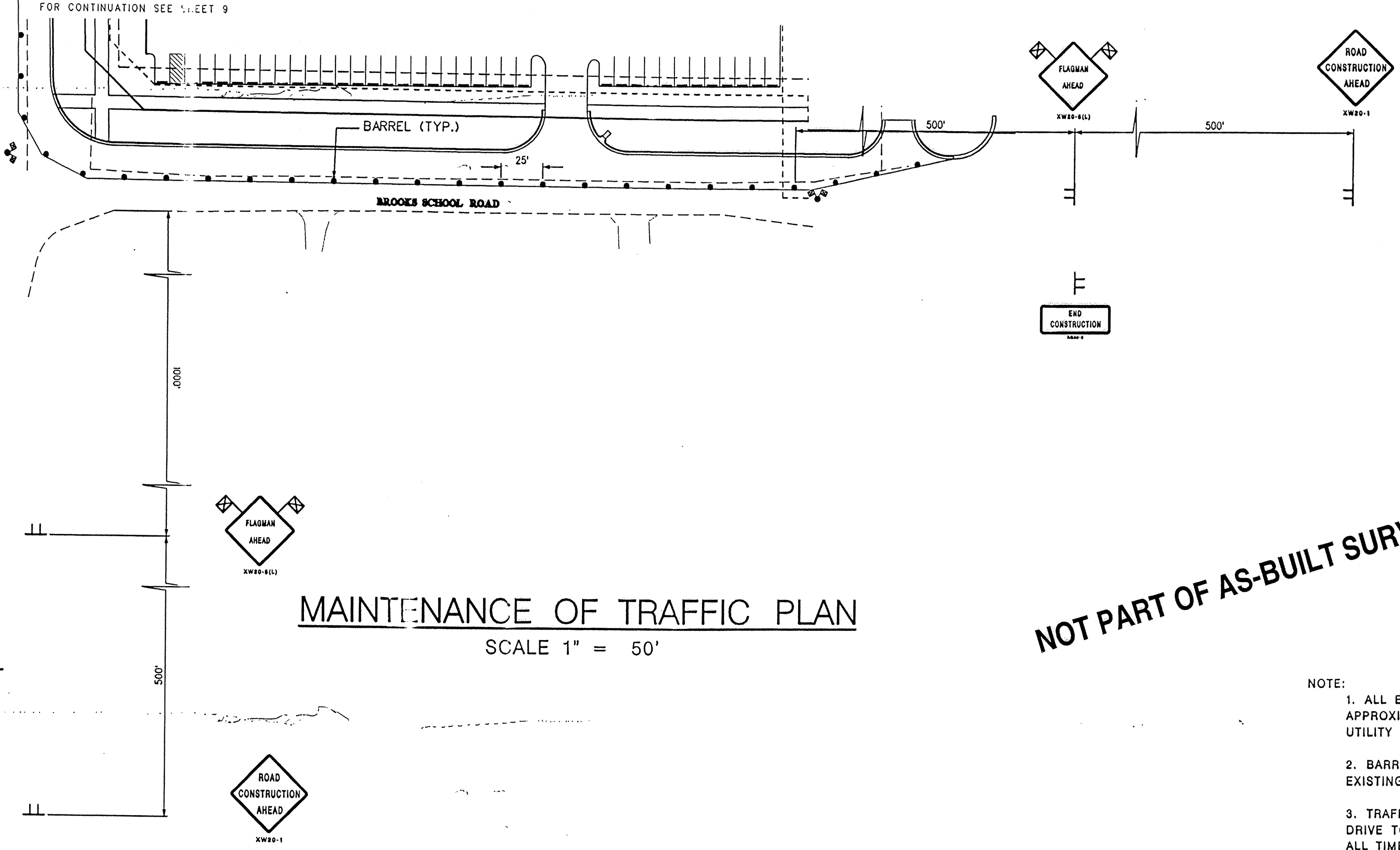
SEE SHEET 9 FOR FALL CREEK ROAD ENTRANCE PLAN



COMBINED CURB & GUTTER TURNOUTS

LEGEND

	BARREL
	TEMPORARY CONSTRUCTION SIGN
	FLAGMAN

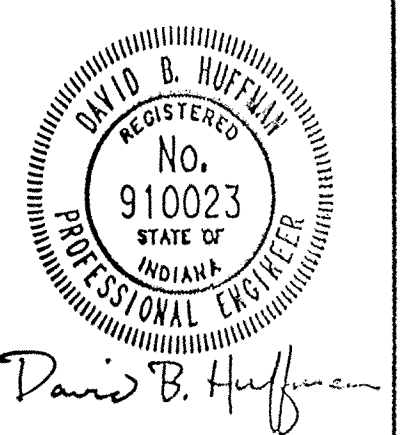


MAINTENANCE OF TRAFFIC PLAN
SCALE 1" = 50'

NOT PART OF AS-BUILT SURVEY

- NOTE:
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTACT EACH RESPECTIVE UTILITY COMPANY PRIOR TO EXCAVATION
 - BARRELS TO BE PLACED ALONG EDGE OF EXISTING PAVEMENT.
 - TRAFFIC FLOW AND ACCESS TO PRIVATE DRIVE TO SOUTH TO BE MAINTAINED ALL TIMES

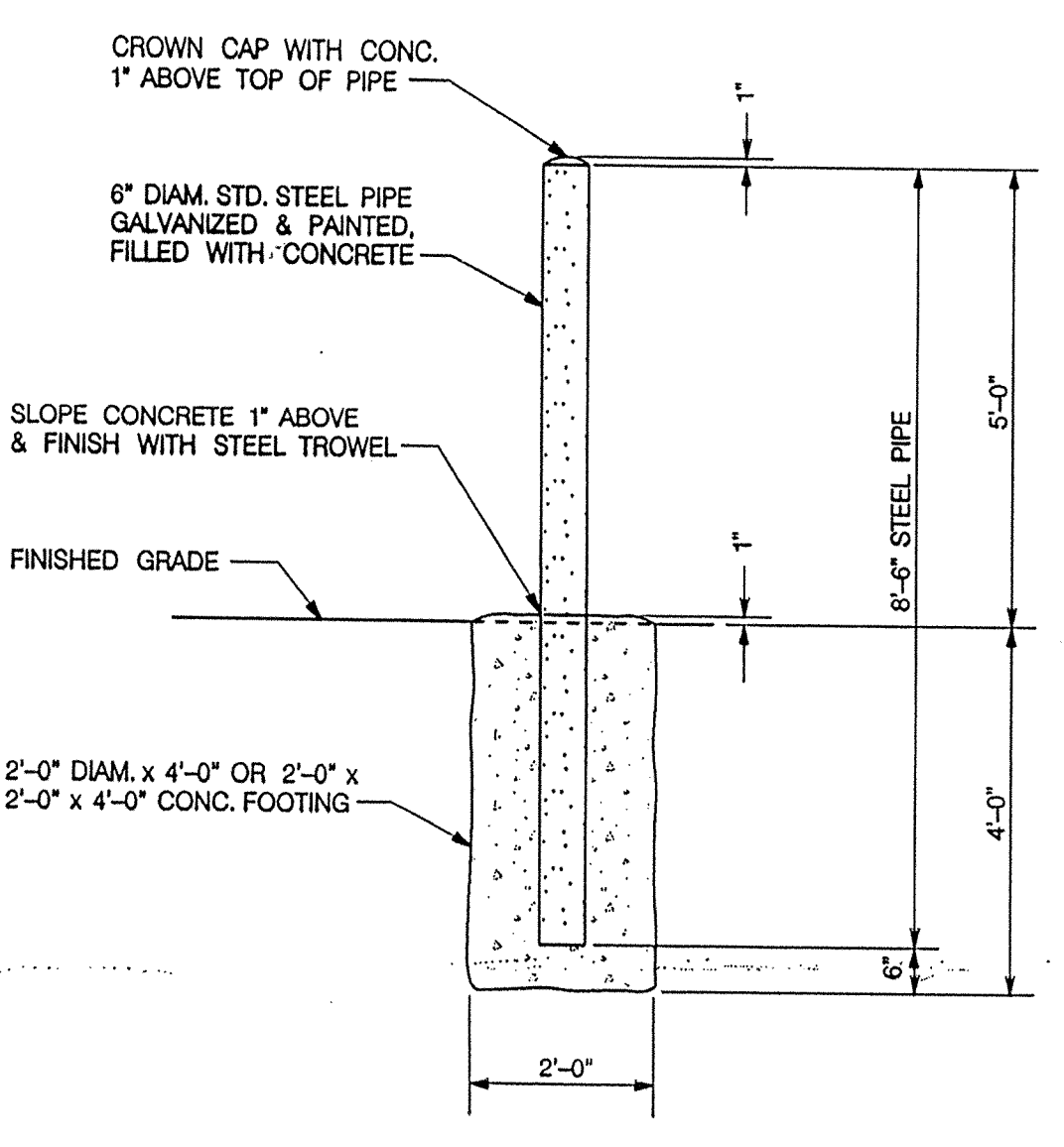
OFFICE OF HAMILTON COUNTY SURVEYOR



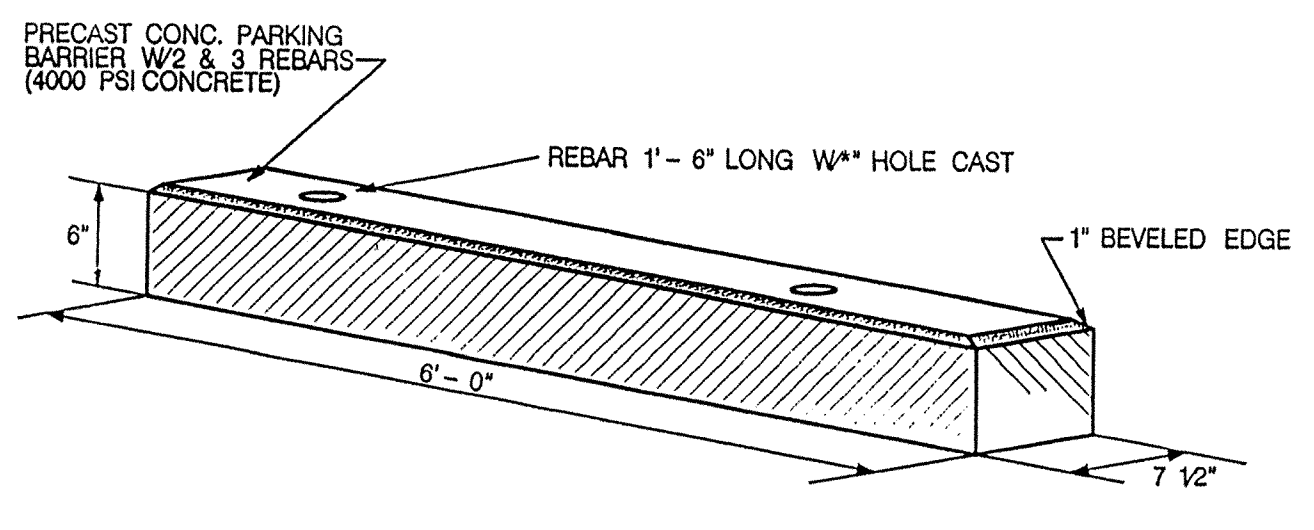
Designed by:	GSS
Drawn by:	WHC
Checked by:	DAH
Approved by:	DBH

FALL CREEK HARBOUR
CONSTRUCTION DETAILS

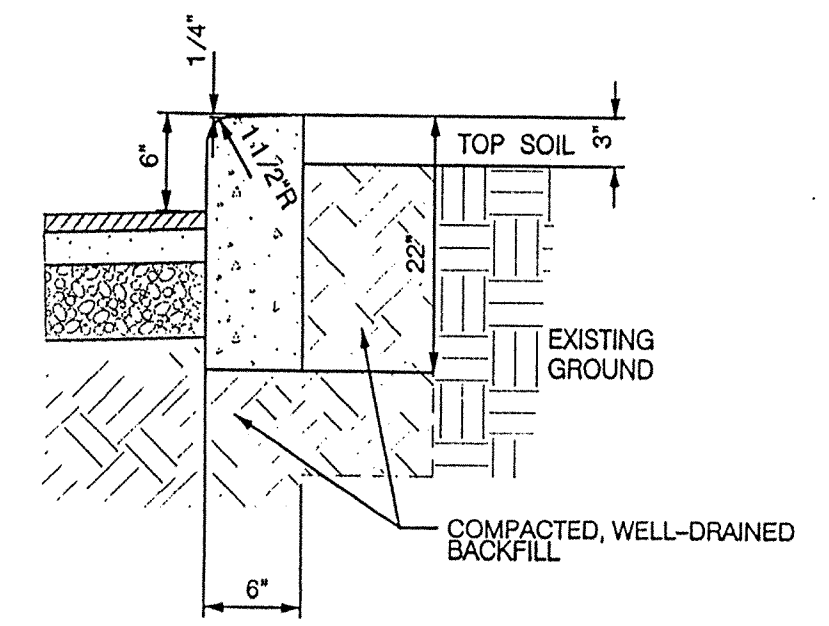
PREPARED BY: MSE Corporation
 841 North Madison Street, Indianapolis, IN 46204-0021
 317 634-1000 • 317 634-5575 FAX http://www.mscorp.com
 PREPARED FOR: PARAMOUNT REALTY GROUP
 DATE: February 27, 1998
 SCALE: N/A
 PROJECT NO. 111-0990
 SHEET NO. **11** OF 14



6" STEEL GUARD POST DETAIL

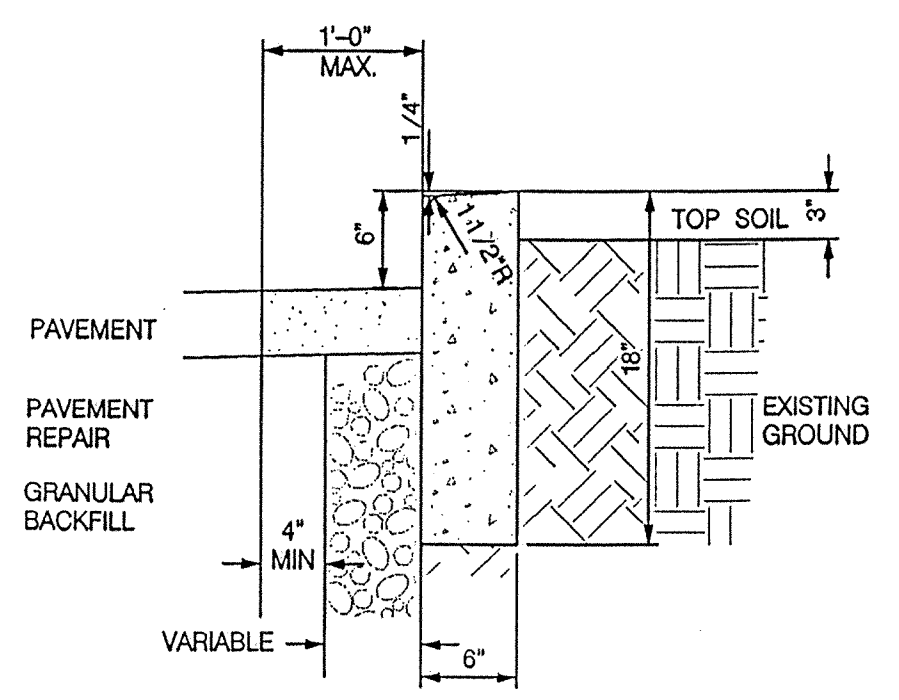


PRECAST CONCRETE PARKING BARRIER

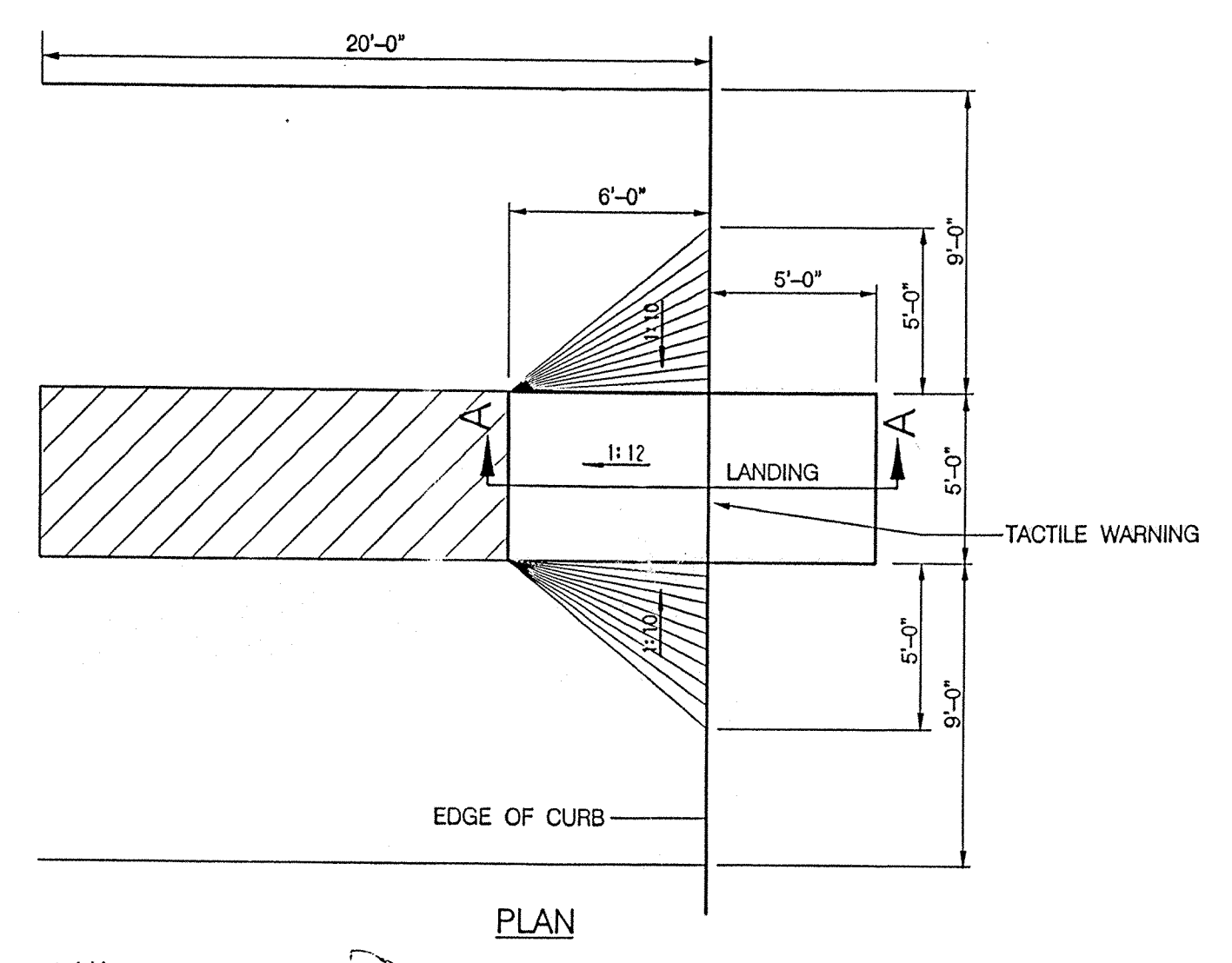


* COMPACTED SUBGRADE - THE UPPER 6 INCHES SHALL COMPLY WITH THE DENSITY REQUIREMENTS OF THE CONTRACT IMMEDIATELY PRIOR TO PLACING THE MATERIAL THEREON. ALL SOFT, YIELDING OR UNSUITABLE MATERIAL, WHICH CANNOT BE COMPACTED SATISFACTORILY, SHALL BE REMOVED. ALL ROCK ENCOUNTERED SHALL BE REMOVED OR BROKEN OFF AT LEAST 6 INCHES BELOW THE SUBGRADE SURFACE. ANY HOLES OR DEPRESSIONS RESULTING FROM THE REMOVAL OF UNSUITABLE MATERIAL SHALL BE FILLED WITH SATISFACTORY MATERIAL AND COMPACTED TO CONFORM WITH THE SURROUNDING SUBGRADE SURFACE.
 ** WHERE SIDEWALK IS CONSTRUCTED ADJACENT TO THE CURB, THE SPACE BEHIND THE NEW CURB SHALL BE FILLED WITH GRANULAR MATERIAL TO THE REQUIRED ELEVATION AND COMPACTED IN LAYERS NOT TO EXCEED 4".
 *** WHERE SIDEWALK IS NOT CONSTRUCTED ADJACENT TO THE CURB THE SPACE BEHIND THE CURB SHALL BE FILLED WITH SUITABLE MATERIAL TO THE REQUIRED ELEVATION AND COMPACTED IN LAYERS NOT TO EXCEED 4".

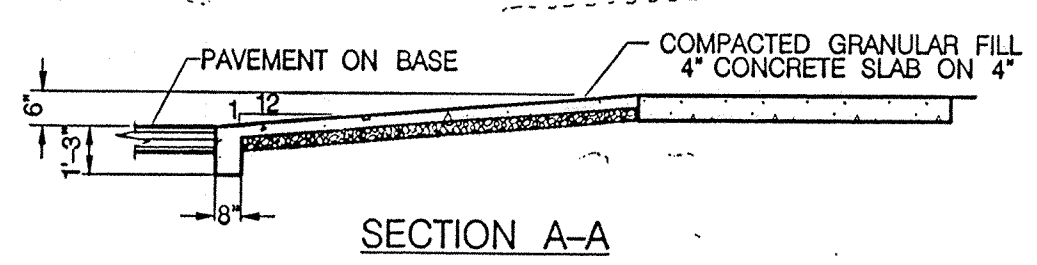
STRAIGHT CONCRETE CURB



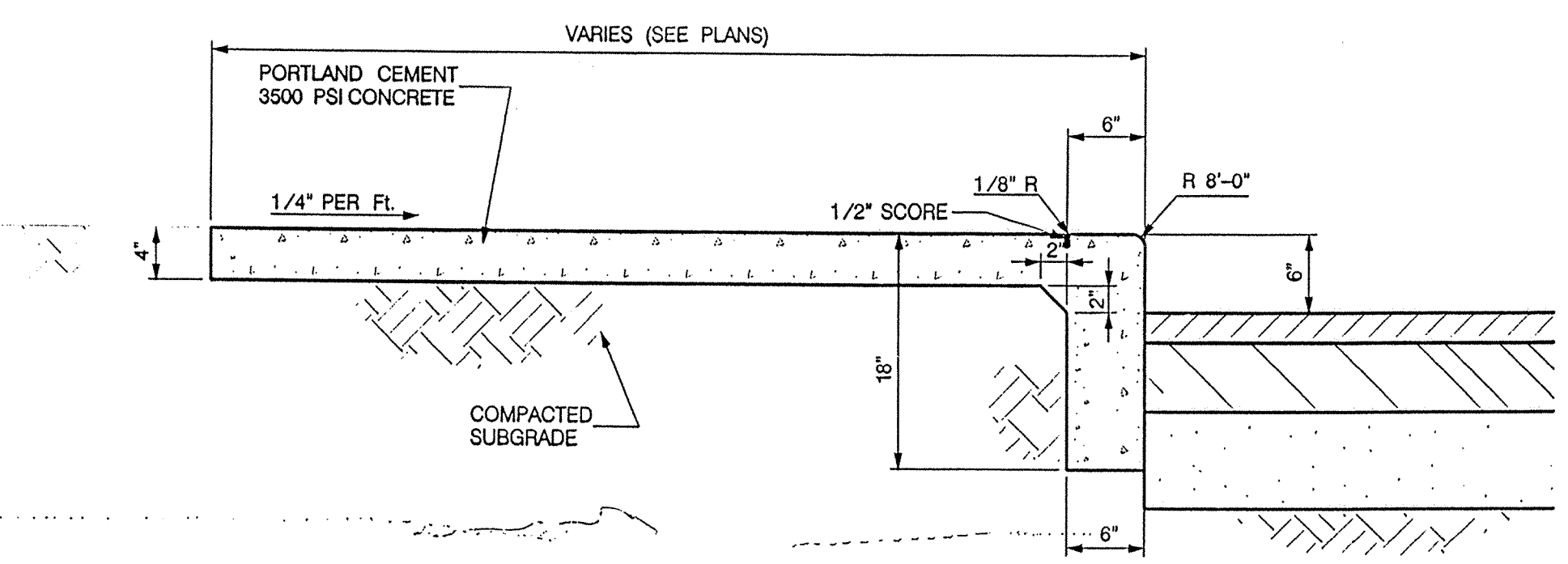
STRAIGHT CONCRETE CURB (TYPE V)



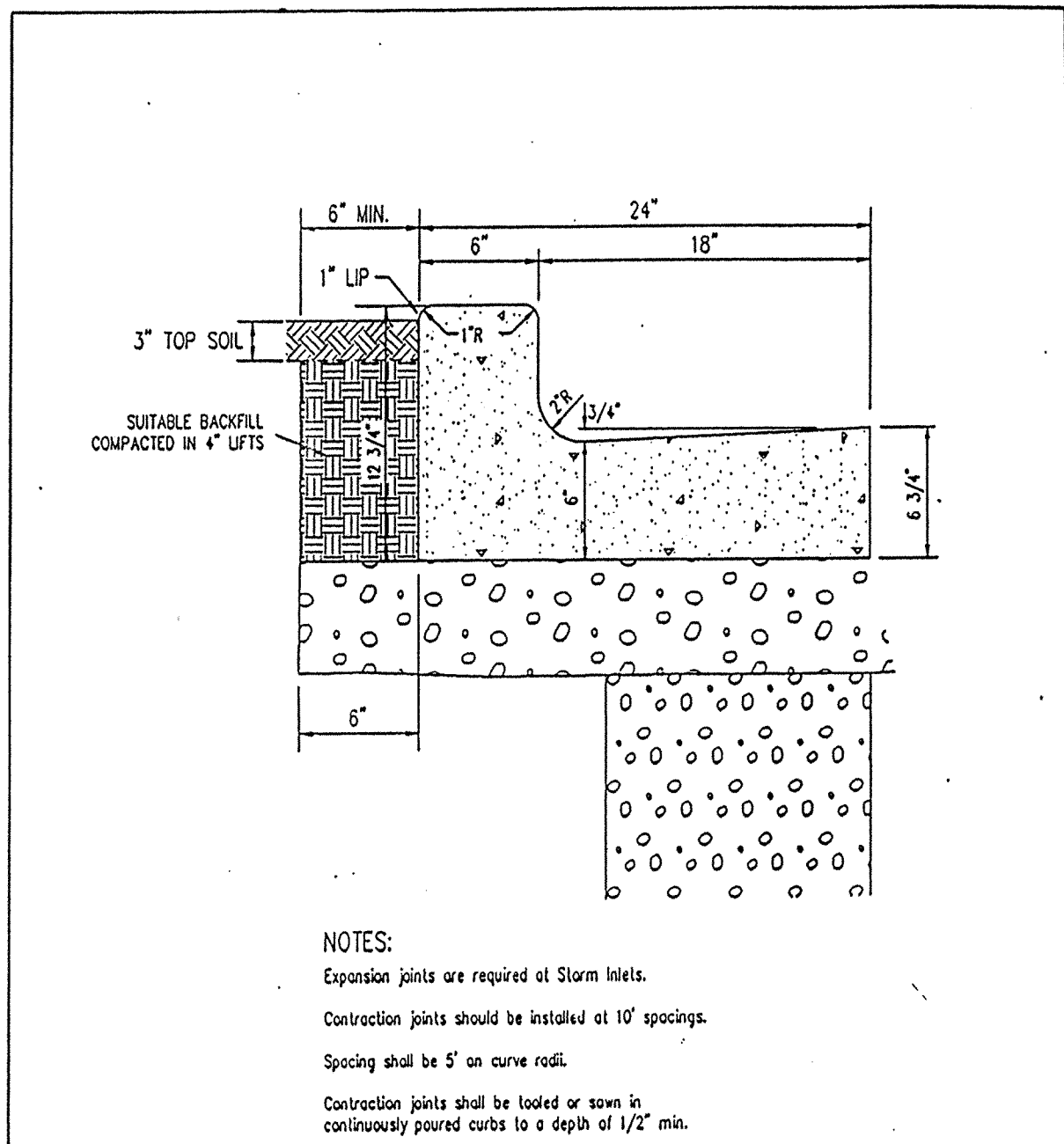
HANDICAPPED RAMP DETAIL FROM 6" CURB



SECTION A-A



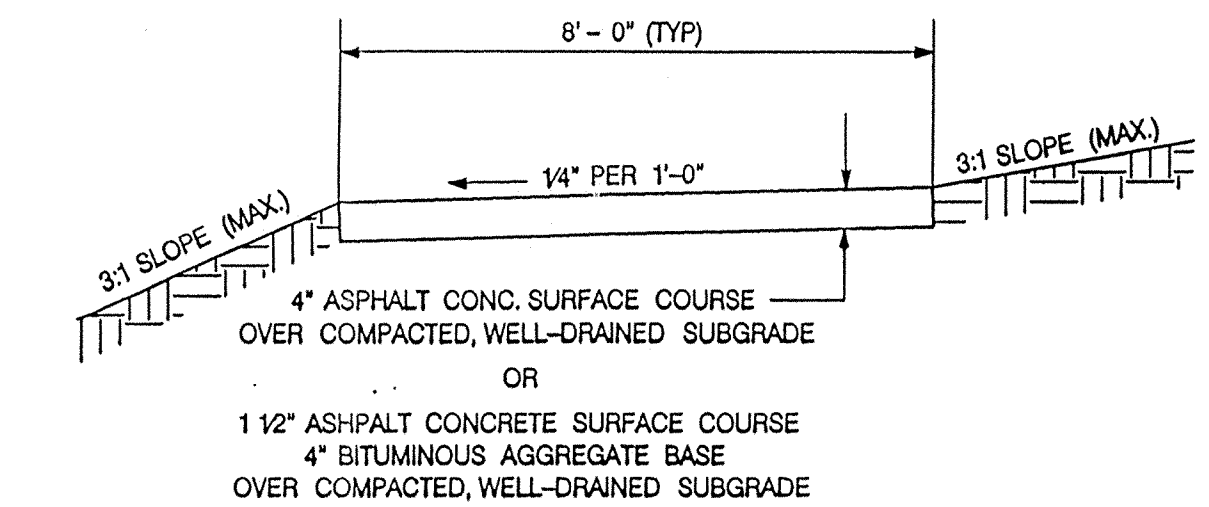
INTEGRAL WALK AND CURB DETAIL



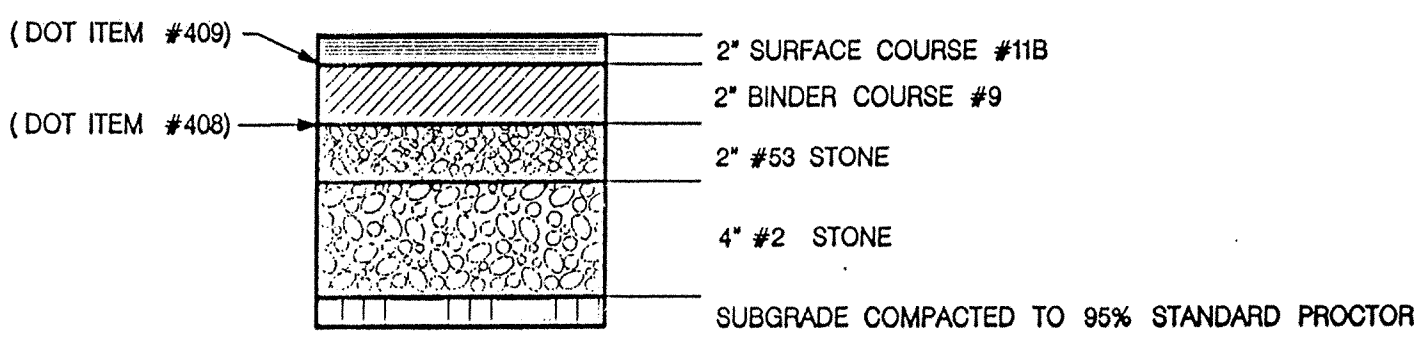
COMBINED CONCRETE CURB & GUTTER (TYPE II)

HAMILTON COUNTY HIGHWAY DEPARTMENT	
RECOMMENDED: [Signature]	REVISED: [Blank]
APPROVED: [Signature]	STANDARD PLAN C-4

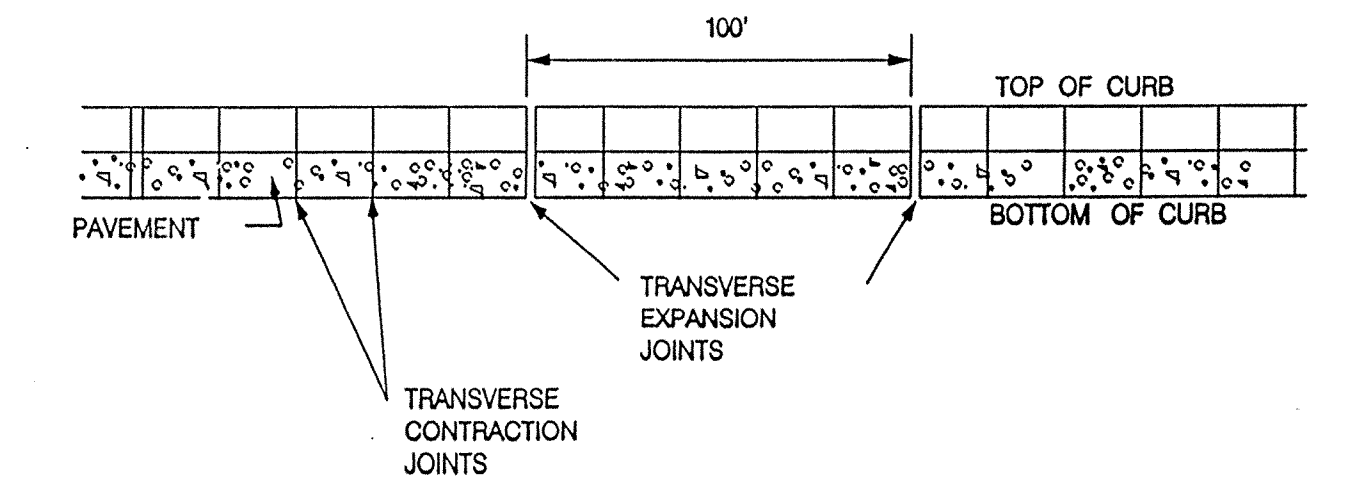
COMBINED CONCRETE CURB & GUTTER (TYPE II)



ASPHALT PATH TYPICAL CROSS SECTION



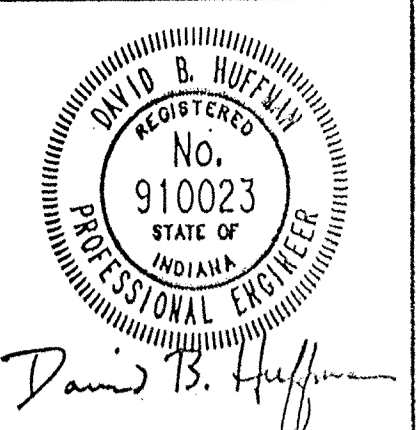
TYPICAL PAVEMENT SECTION - PARKING LOT



WHEN BUILT IN CONJUNCTION WITH CONCRETE PAVEMENT, EXPANSION AND CONTRACTION JOINTS SHOULD BE PLACED AT THE SAME LOCATIONS AS IN THE PAVEMENT SLAB. THE CURB AND GUTTER SHOULD BE TIED TO THE PAVEMENT BY 12" ROUND DEFORMED BARS OF ABOUT 3 FOOT INTERVALS. IF NO CONCRETE PAVEMENT IS BEING BUILT, AT THE TIME THE CURB IS CONSTRUCTED, EXPANSION JOINTS SHOULD BE PLACED AT THE ENDS OF ALL RETURNS AND AT INTERVALS NOT TO EXCEED 100 FEET. CONTRACTION JOINTS SHOULD BE INSTALLED AT 20 FOOT SPACING. * CURB CONTRACTION JOINTS TO BE INSTALLED AT 10' SPACING IN THE RADII OF ANY CURVES.

CURB JOINT DETAIL (WITHIN PARKING LOT)

FILED
JAN 05 2001



Designed by: GSS
 Drawn by: WHC
 Checked by: DAH
 Approved by: DBH

REVISIONS AND DATES
 4-3-98 Per TAC Comments

FALL CREEK HARBOUR

CONSTRUCTION DETAILS

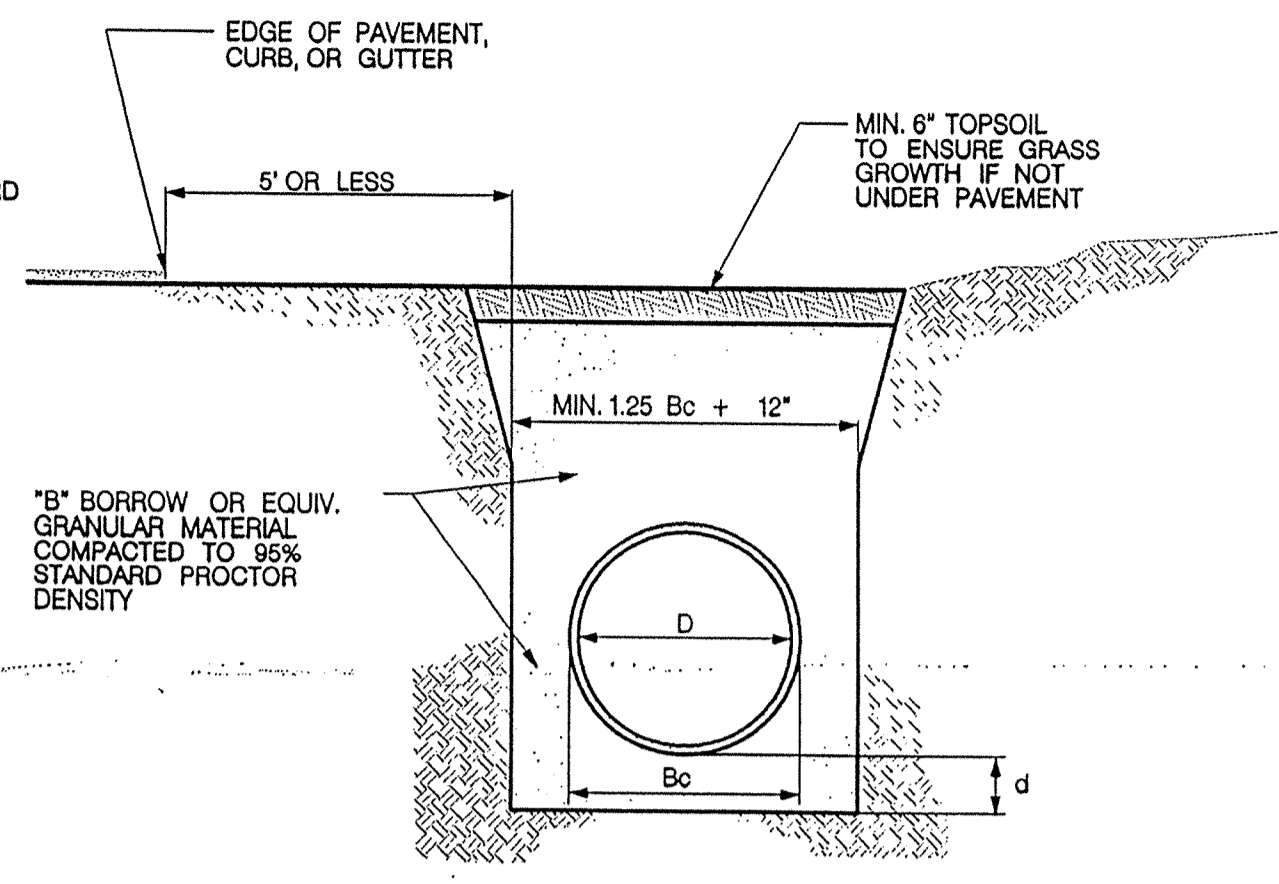
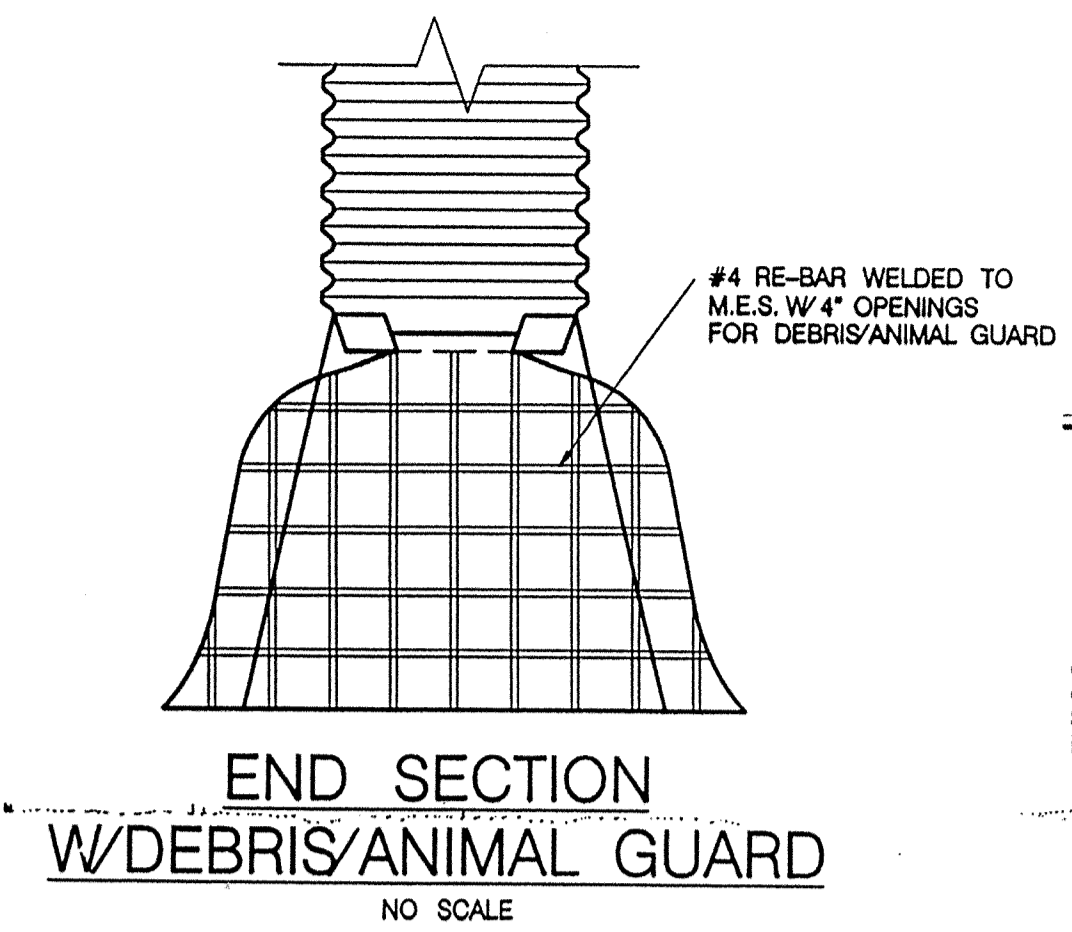
PREPARED BY: MSE Corporation
 941 North Meridian Street, Indianapolis, IN 46204-1061
 317 634-1000 • 317 634-5776 FAX • http://www.msecorp.com

PREPARED FOR: PARAMOUNT REALTY GROUP

DATE: February 27, 1999
 SCALE: NA
 PROJECT NO. 111-0980

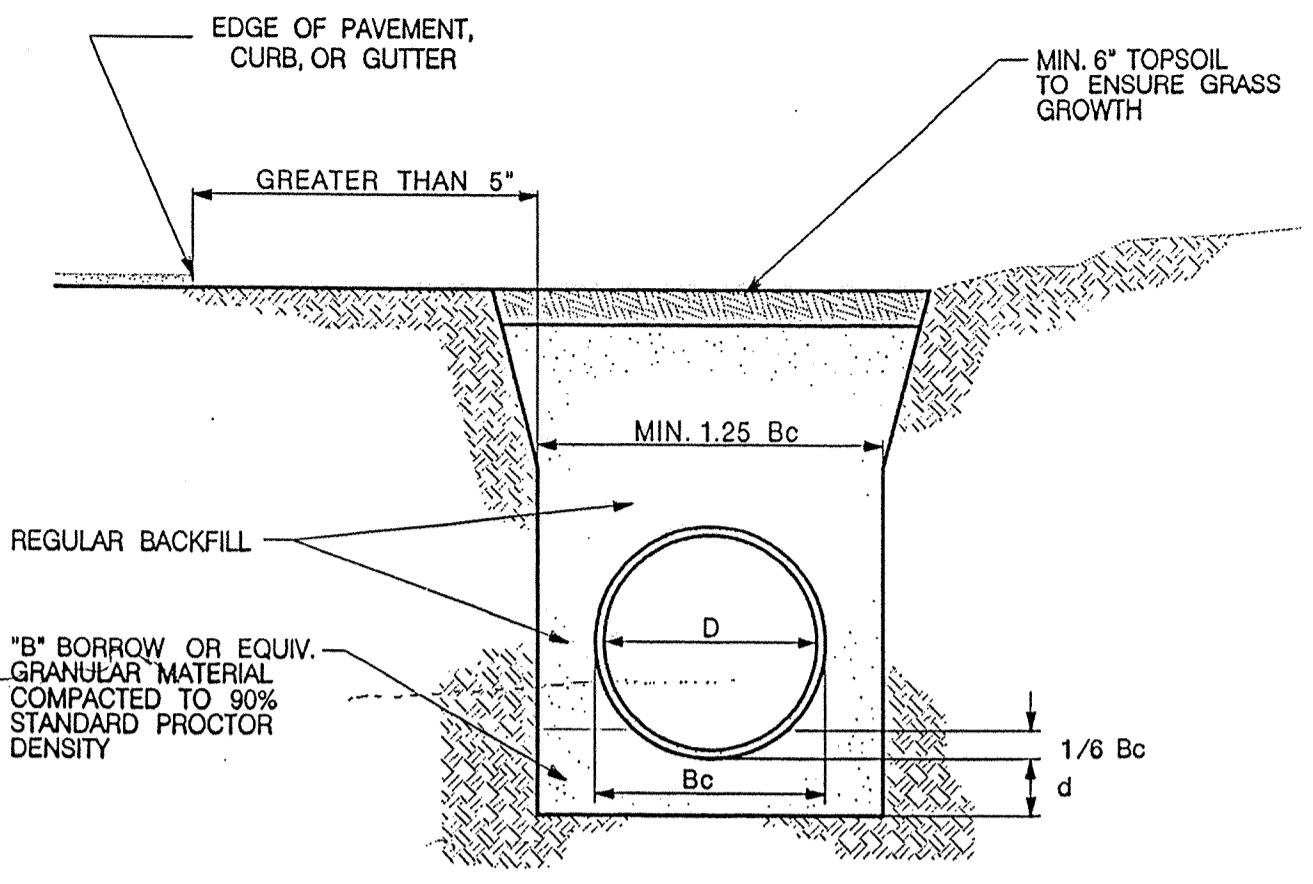
SHEET NO. 12

OF 14



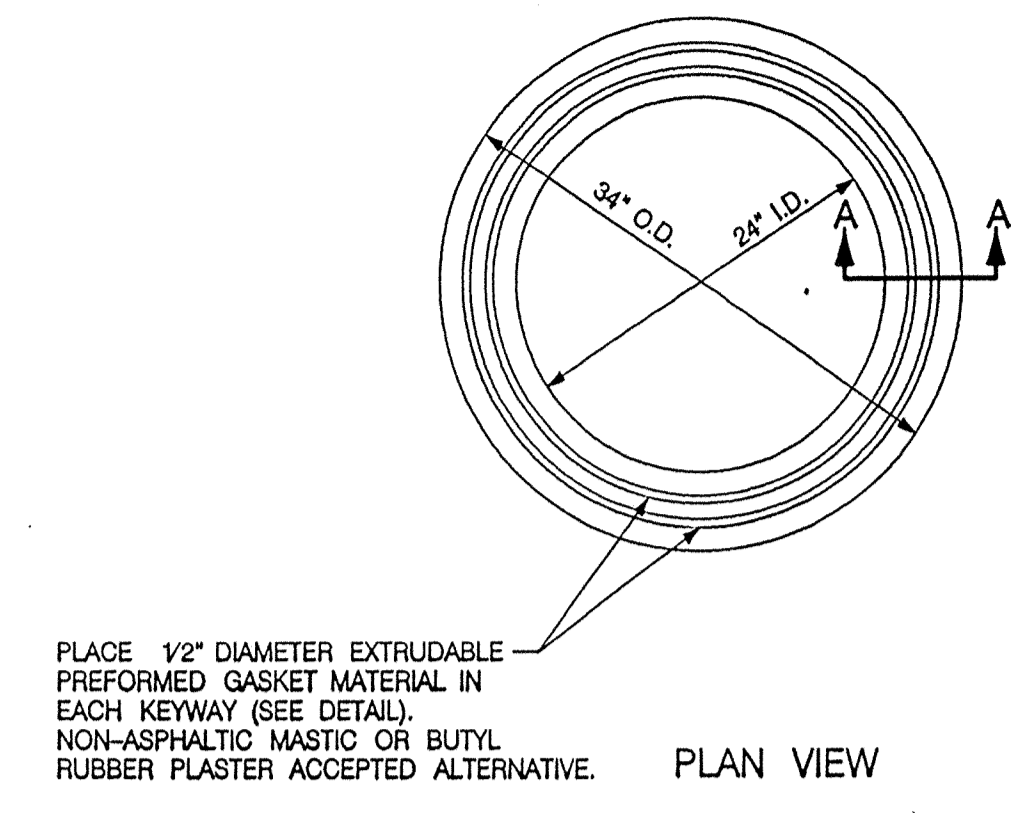
NOTE:
 ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS
 MIN. 9" CLEARANCE EACH SIDE OF INSTALLED PIPE

LEGEND	DEPTH FOR BEDDING MATERIAL BELOW PIPE	
	D	(d) MIN.
Bc = OUTSIDE DIAMETER	27" & SMALLER	3"
D = INSIDE DIAMETER	30" TO 60"	4"
d = DEPTH OF BEDDING MATERIAL BELOW PIPE	66" & LARGER	6"

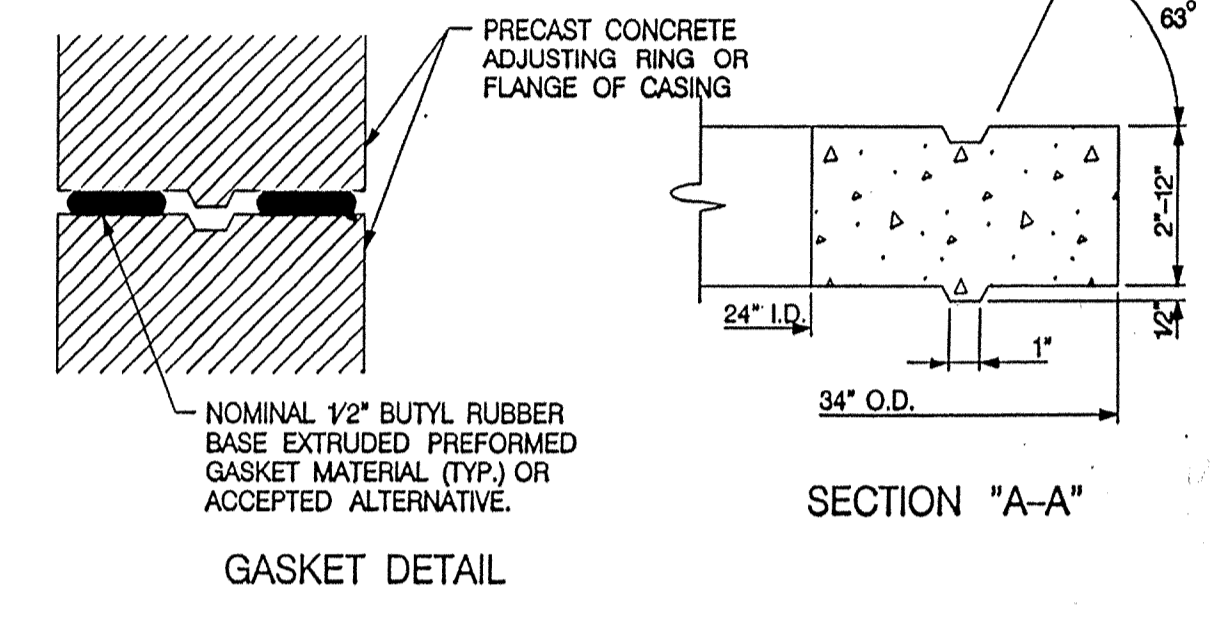


NOTE:
 ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS
 MIN. 9" CLEARANCE EACH SIDE OF INSTALLED PIPE

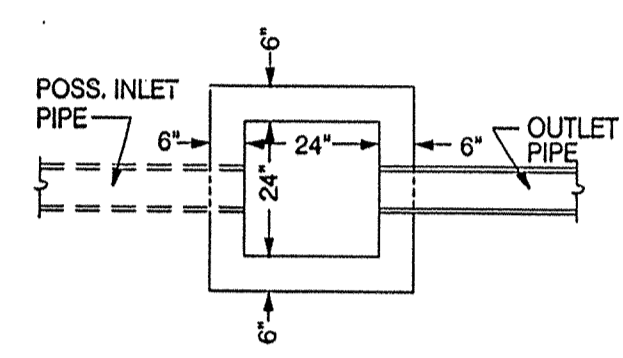
LEGEND	DEPTH FOR BEDDING MATERIAL BELOW PIPE	
	D	(d) MIN.
Bc = OUTSIDE DIAMETER	27" & SMALLER	3"
D = INSIDE DIAMETER	30" TO 60"	4"
d = DEPTH OF BEDDING MATERIAL BELOW PIPE	66" & LARGER	6"



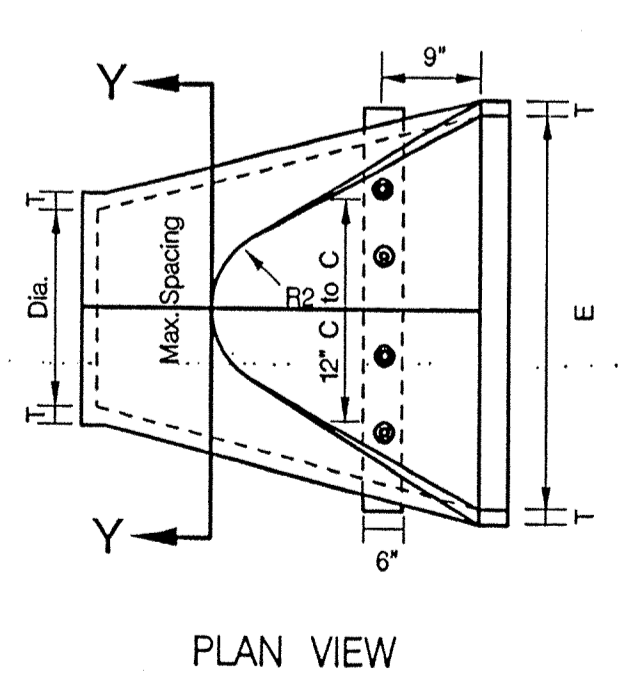
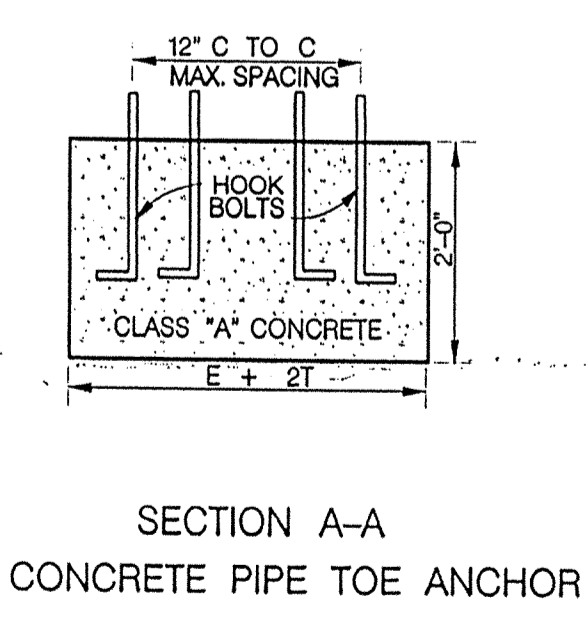
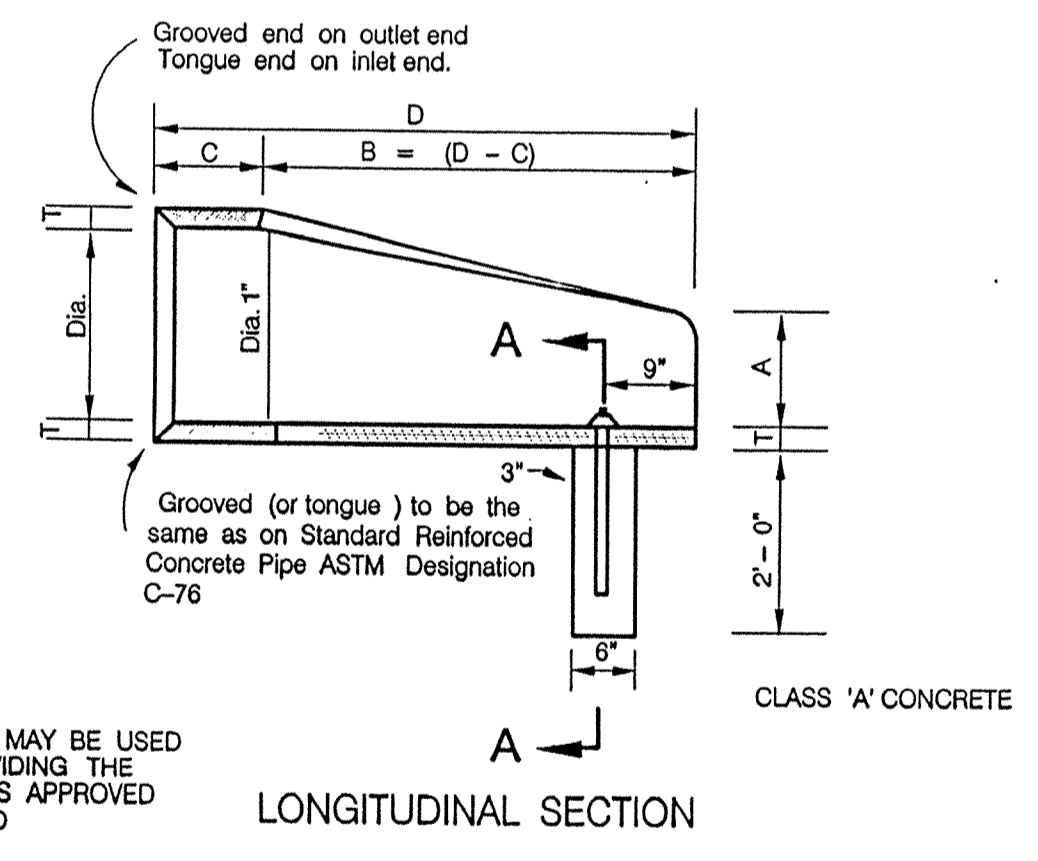
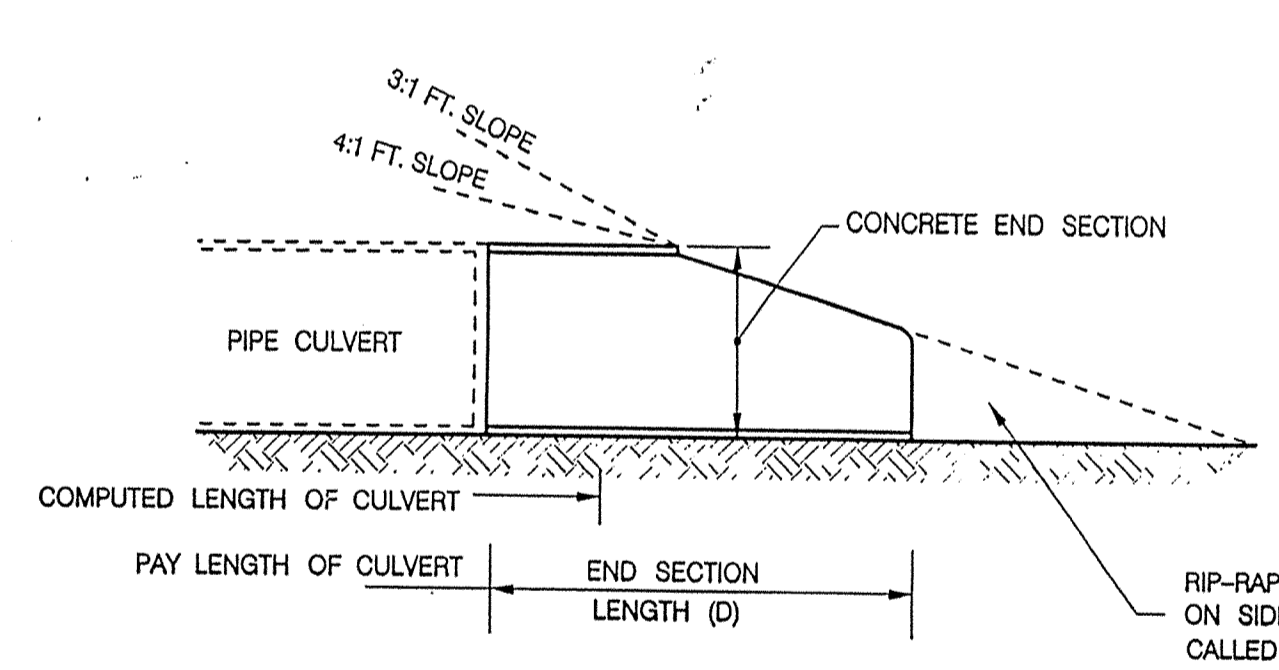
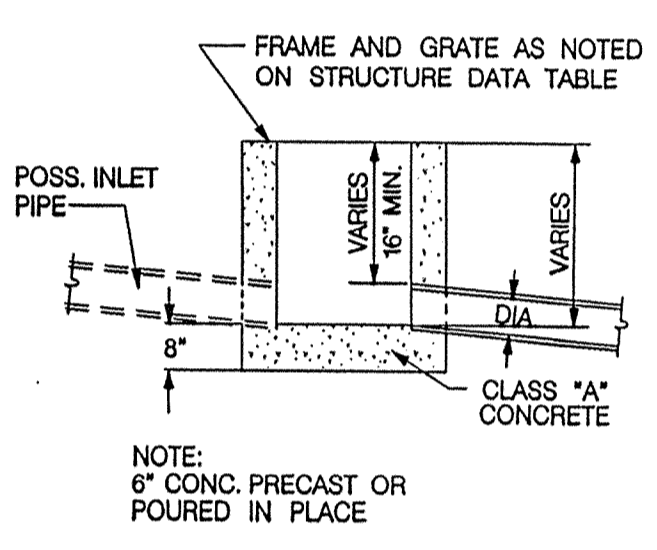
PLACE 1/2" DIAMETER EXTRUDABLE PREFORMED GASKET MATERIAL IN EACH KEYWAY (SEE DETAIL). NON-ASPHALTIC MASTIC OR BUTYL RUBBER PLASTER ACCEPTED ALTERNATIVE.



PRECAST CONCRETE ADJUSTING RING DETAIL



INLET TYPE "A"
 (12" TO 18")
 NO SCALE



PRECAST CONCRETE END SECTION

REINFORCED CONCRETE PIPE (RCP) TRENCH DETAIL
 GREATER THAN 5' OF EDGE OF PAVEMENT

DIA.	T (Min.)	A x	C x	D x	E x	K	R1	R2	Approx. Weight
12"	2"	4"	4'-3"	6'-2"	2'-0"	1.3	10 1/8"	9"	800
15"	2 1/4"	6"	4'-0"	6'-3"	2'-6"	1.5	12 1/2"	11"	1100
18"	2 1/2"	9"	4'-1"	6'-2"	3'-0"	1.8	15 1/2"	12"	1300
21"	2 3/4"	9"	3'-6"	6'-3"	3'-6"	2.1	16 1/8"	13"	1500
24"	3"	9 1/2"	2'-8"	6'-3"	4'-0"	2.3	16 3/16"	14"	1800
27"	3 1/4"	10 1/2"	2'-5"	6'-3"	4'-6"	2.6	16 3/16"	14 1/2"	2100
30"	3 1/2"	12"	1'-10"	6'-3"	5'-0"	2.9	18 1/2"	15"	2400
33"	3 3/4"	13 1/2"	3'-6"	8'-3"	5'-6"	3.1	23 3/4"	17 1/2"	4100
36"	4"	15"	3'-1"	8'-3"	6'-0"	3.4	24 5/16"	20"	4200

X Tolerance +/- 1"

CONCRETE IN THESE END SECTIONS SHALL BE THE SAME GRADE AND STRENGTH AS SPECIFIED FOR REINFORCED CONCRETE PIPE, A.S.T.M. DESIGNATION C-76 CLASS II (AS SET OUT IN STANDARD SPECIFICATIONS)

REINFORCEMENT IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR REINFORCED CONCRETE, A.S.T.M. DESIGNATION C-76 CLASS II FOR THE SIZE OF CONNECTING PIPE.

REINFORCEMENT IN THE "B" PORTION SHALL HAVE A CROSS SECTIONAL AREA EQUAL TO THAT OF ONE LAYER OF STEEL IN THE "C" PORTION.

THE END OF THE PIPE CULVERT SHALL BE PLACED IN THE CONCRETE END SECTION SO THAT THE FLOW LINES ARE FLUSH. THE JOINT SHALL BE COMPLETELY FILLED WITH MORTAR.

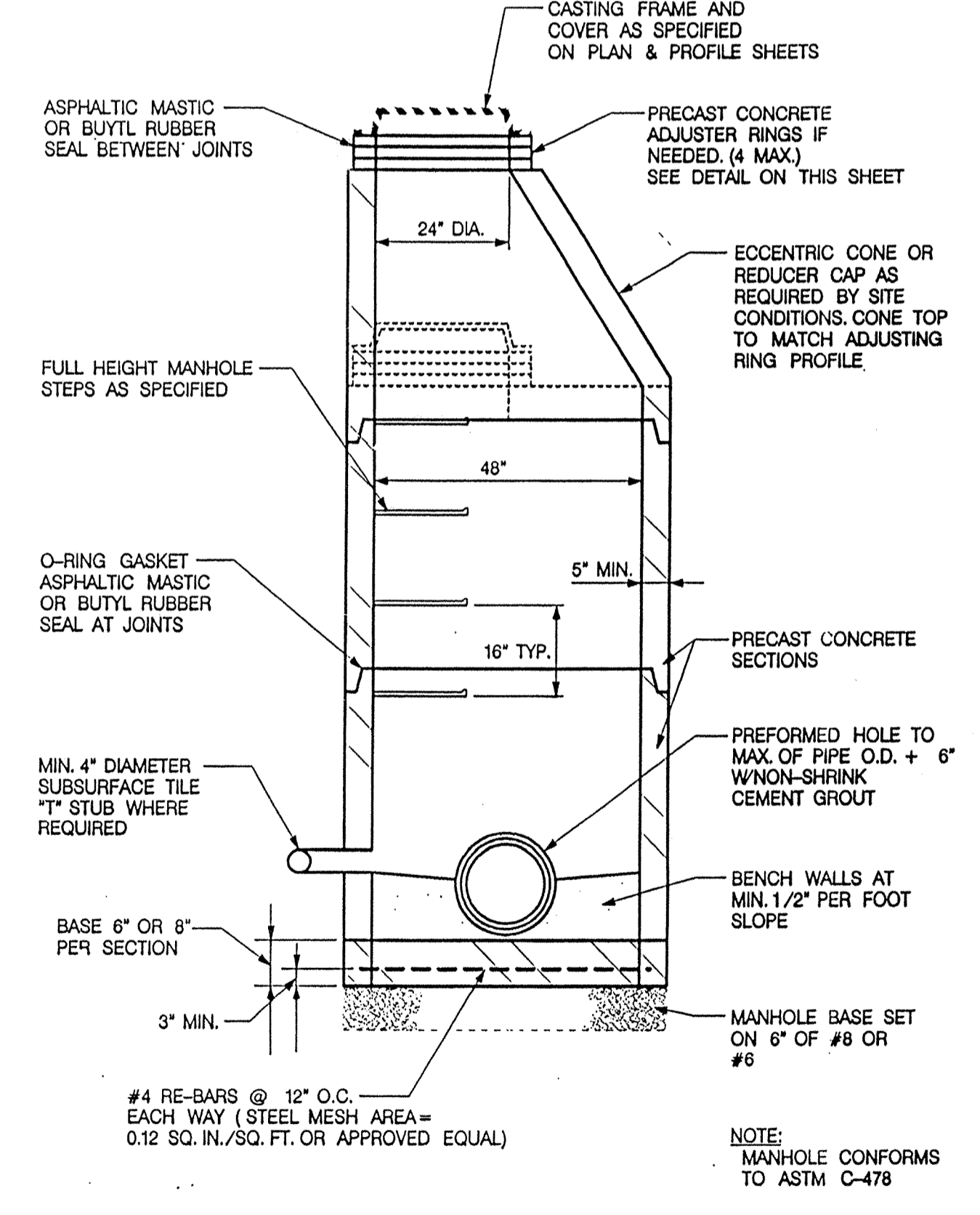
IN 3:1 OR 4:1 FILL SLOPE, CHANGE TO THE SLOPE OF THE END SECTION IN A SMOOTH, PLEASING TRANSITION APPROXIMATELY 10'-0" IN LENGTH.

VARIATIONS IN DIMENSIONS - THE THICKNESS OF THE CONCRETE, THE POSITION OF STEEL, AND THE INTERNAL DIAMETER OF THE PIPE SHALL CONFORM WITH THE VARIATIONS IN DIMENSIONS AS PROVIDED IN THE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, A.S.T.M. DESIGNATION C-76.

WHERE VITRIFIED CLAY CULVERT OR CAST IRON CULVERT IS USED, A "PIPE END SECTION" COMPARABLE TO THAT AS SHOWN FOR METAL OR CONCRETE SHALL BE FURNISHED AND SHALL BE APPROVED BY THE ENGINEER EXCEPT IN AREAS OF ACID OR MINE WATER THEN THE USE OF METAL END SECTION IS PROHIBITED.

END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "PIPE END SECTION" COMPLETE IN PLACE AND ACCEPTED.

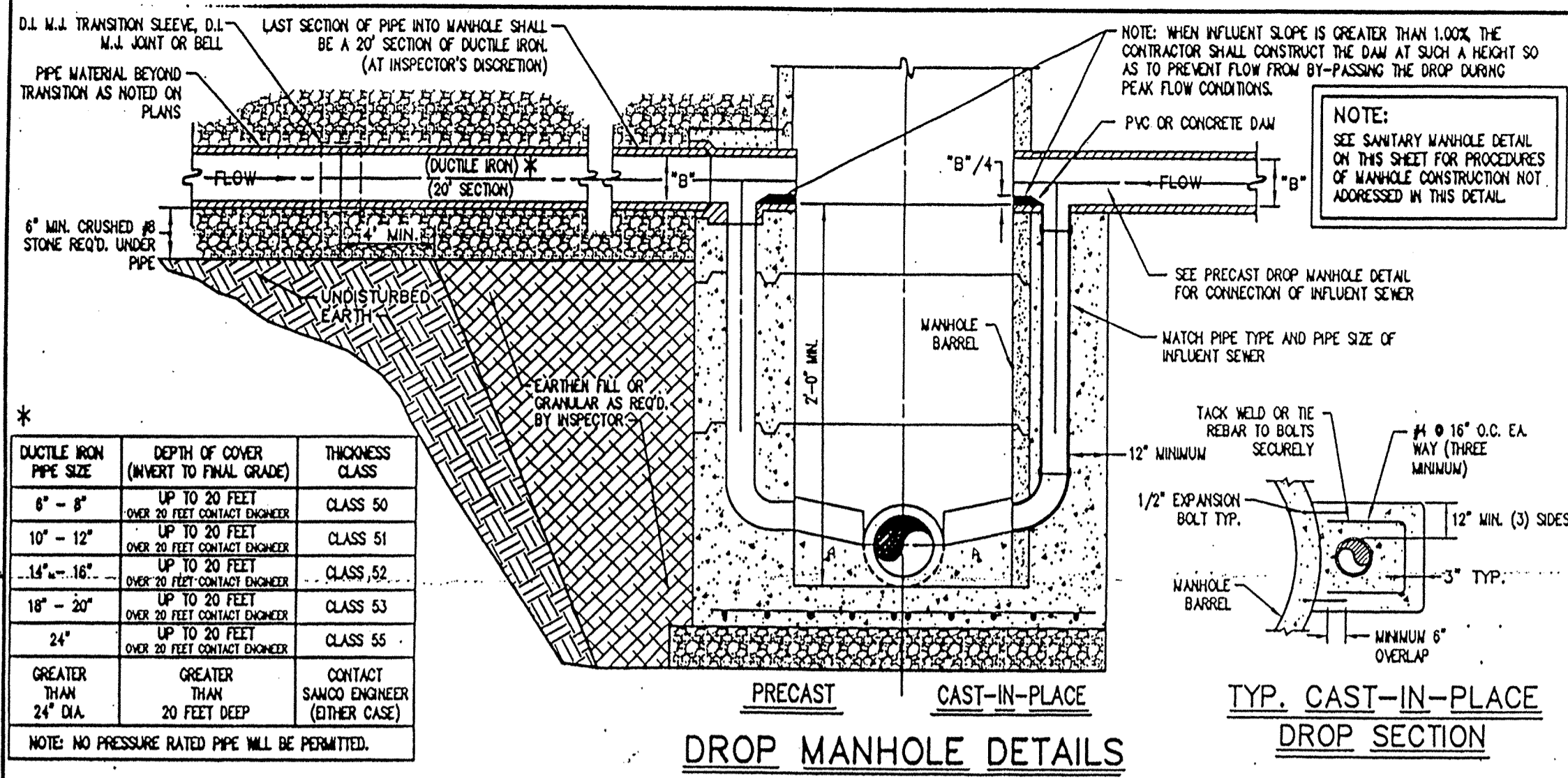
CONCRETE PIPE TOE ANCHORS SHALL BE REQUIRED ON ALL CONCRETE PIPE END SECTIONS. THE COST THEREOF SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR "PIPE END SECTION."



STANDARD STORM MANHOLE
 FOR PIPE SIZES 12" THRU 24"

NOT PART OF AS-BUILT SURVEY

FILED
 JAN 05 2001
 OFFICE OF HAMILTON COUNTY SURVEYOR



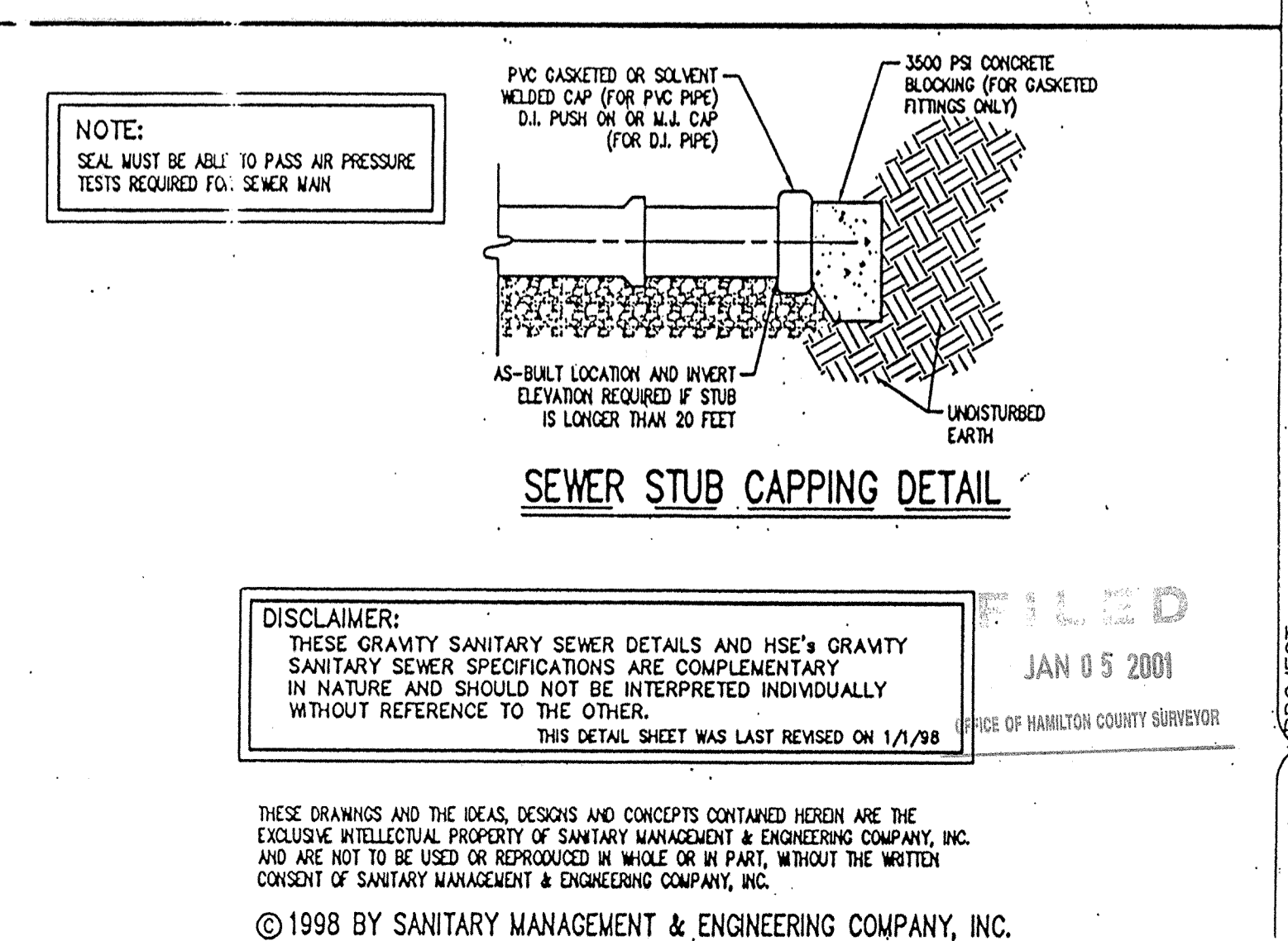
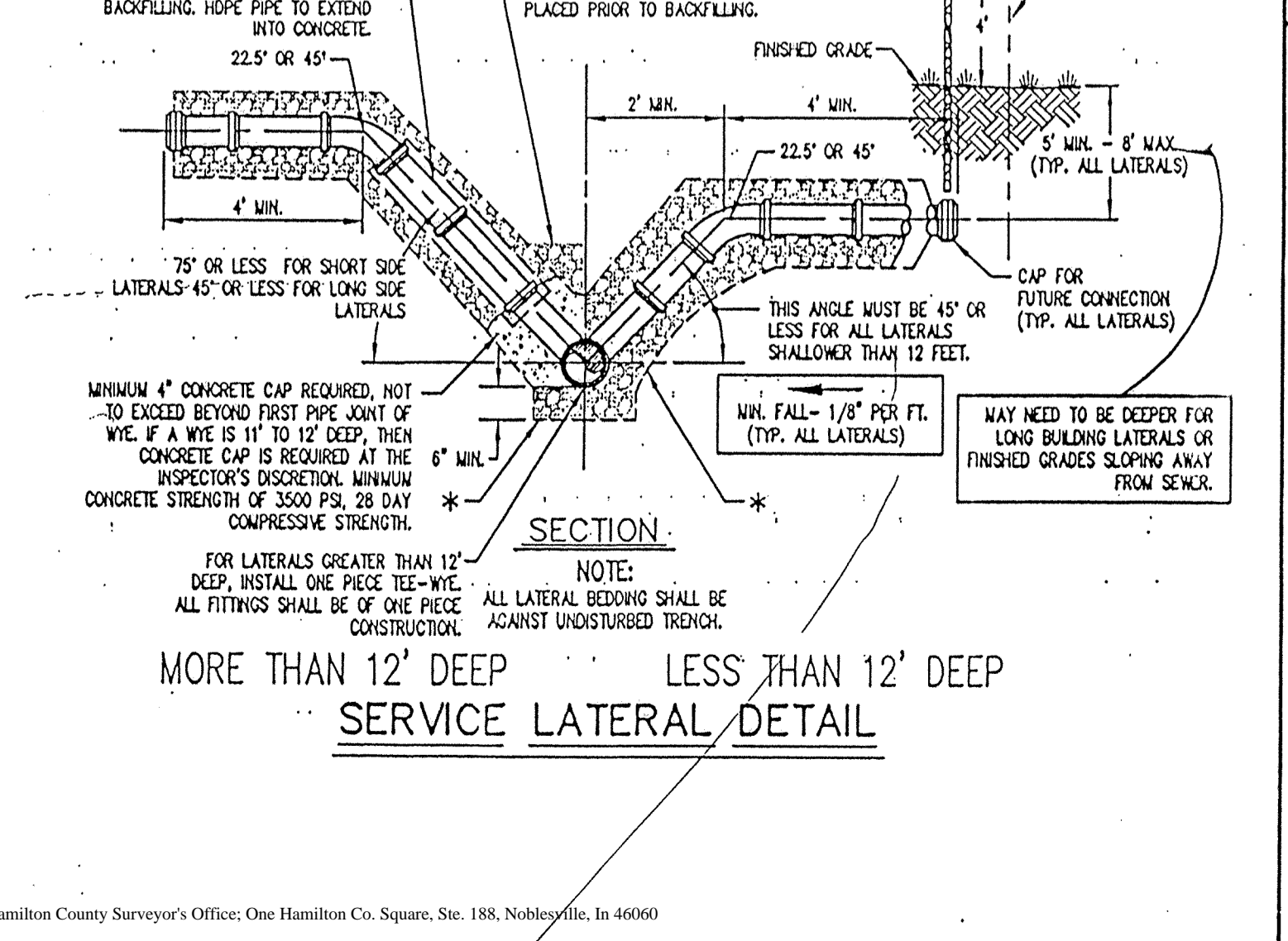
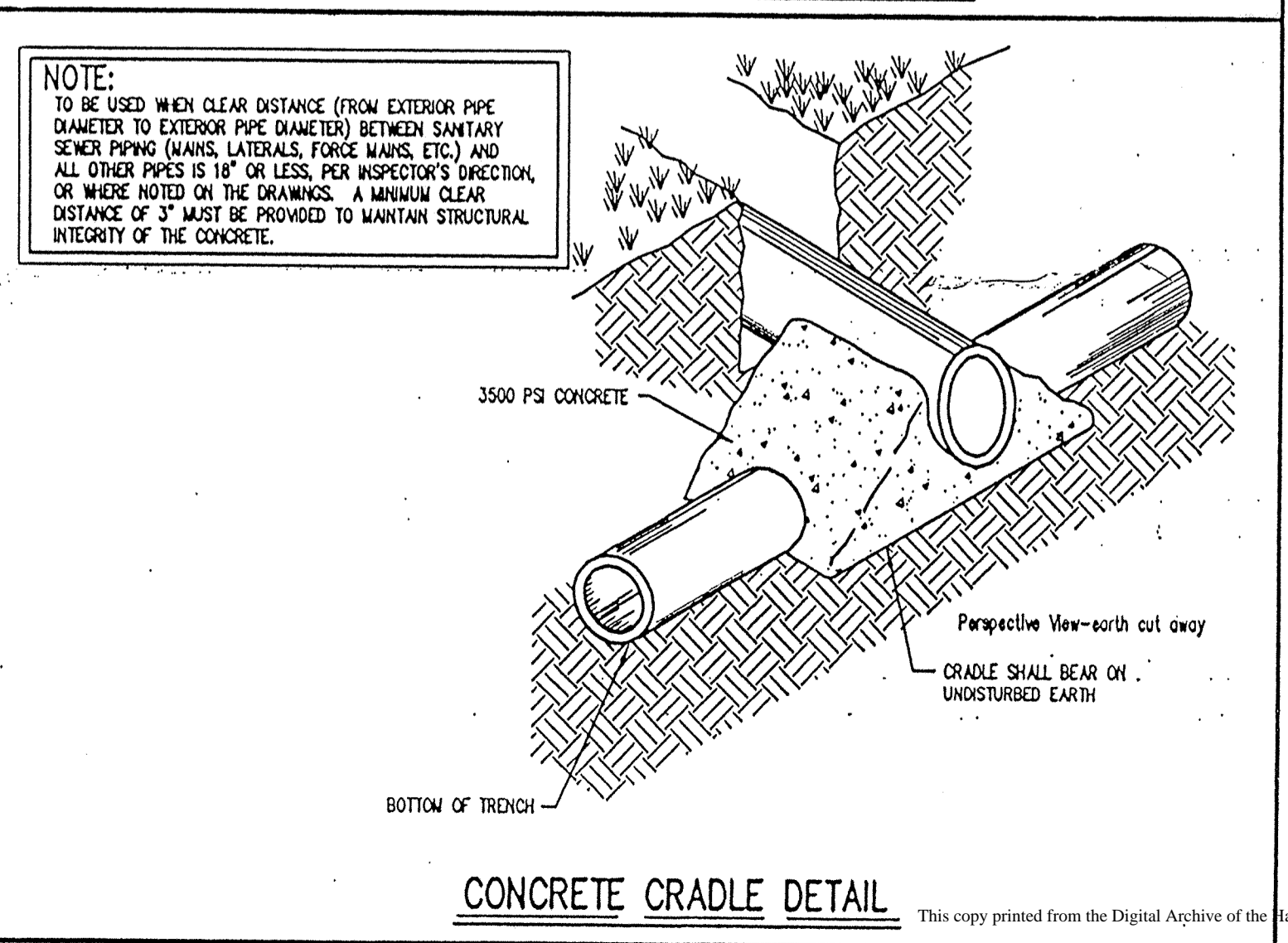
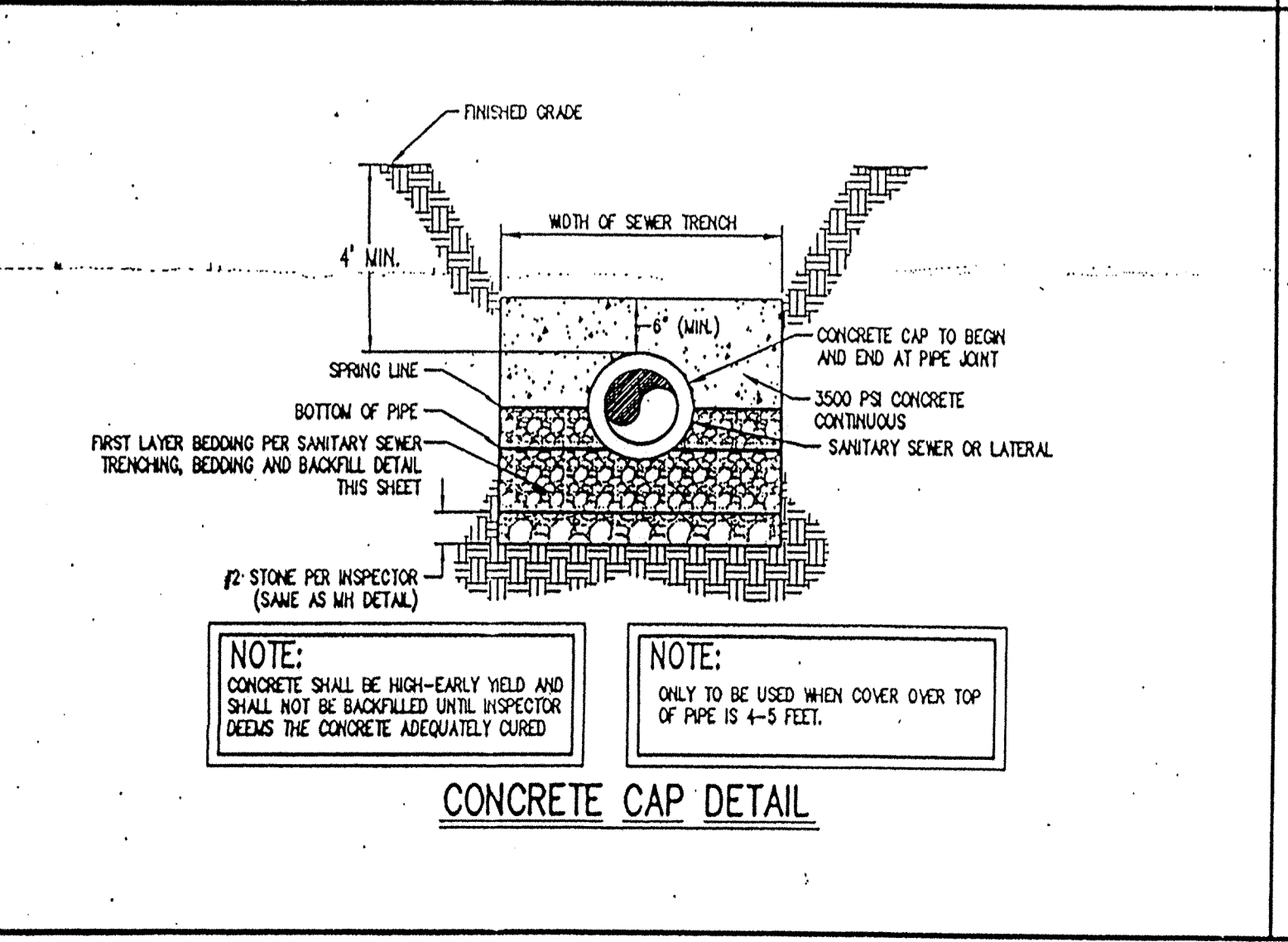
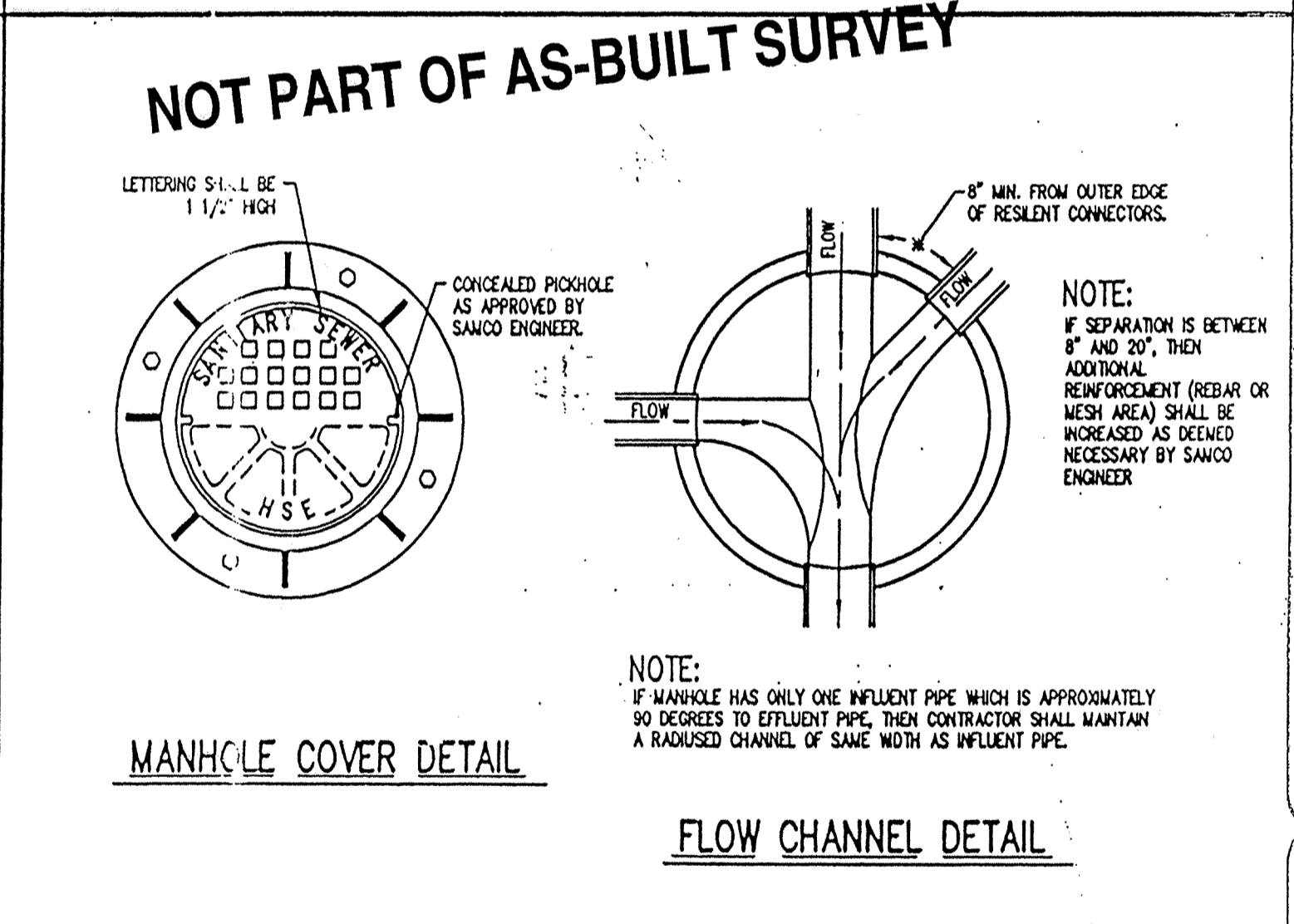
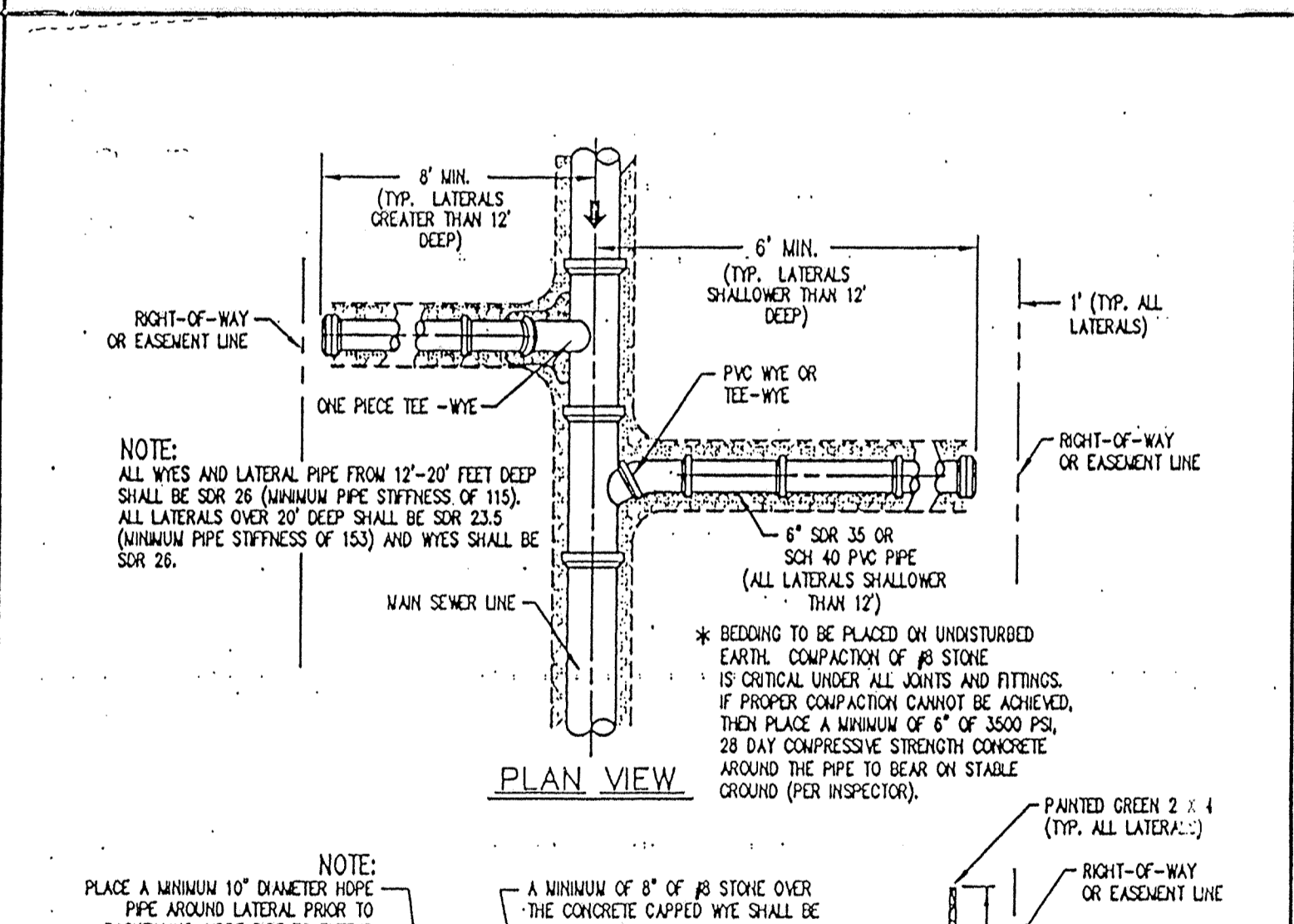
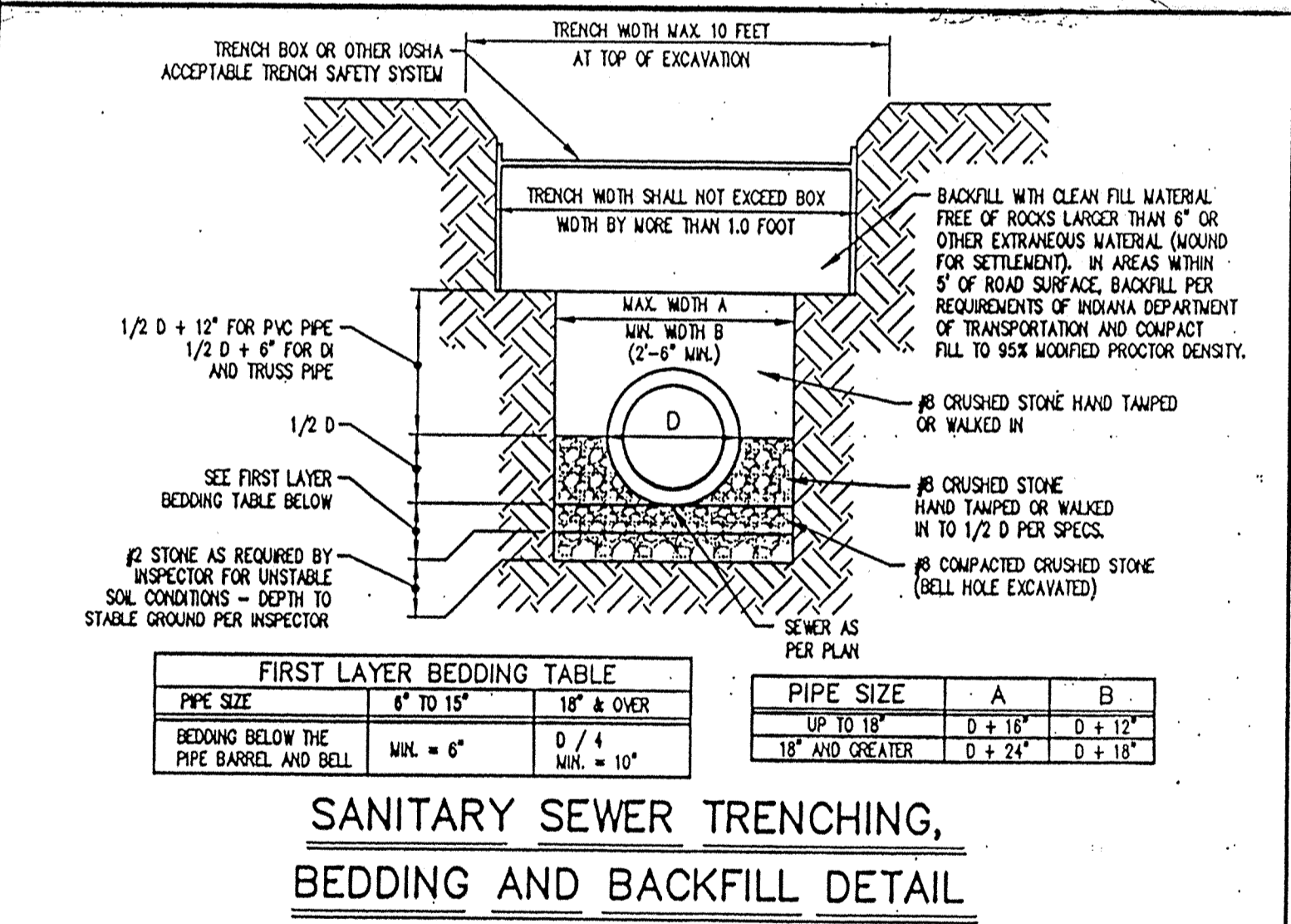
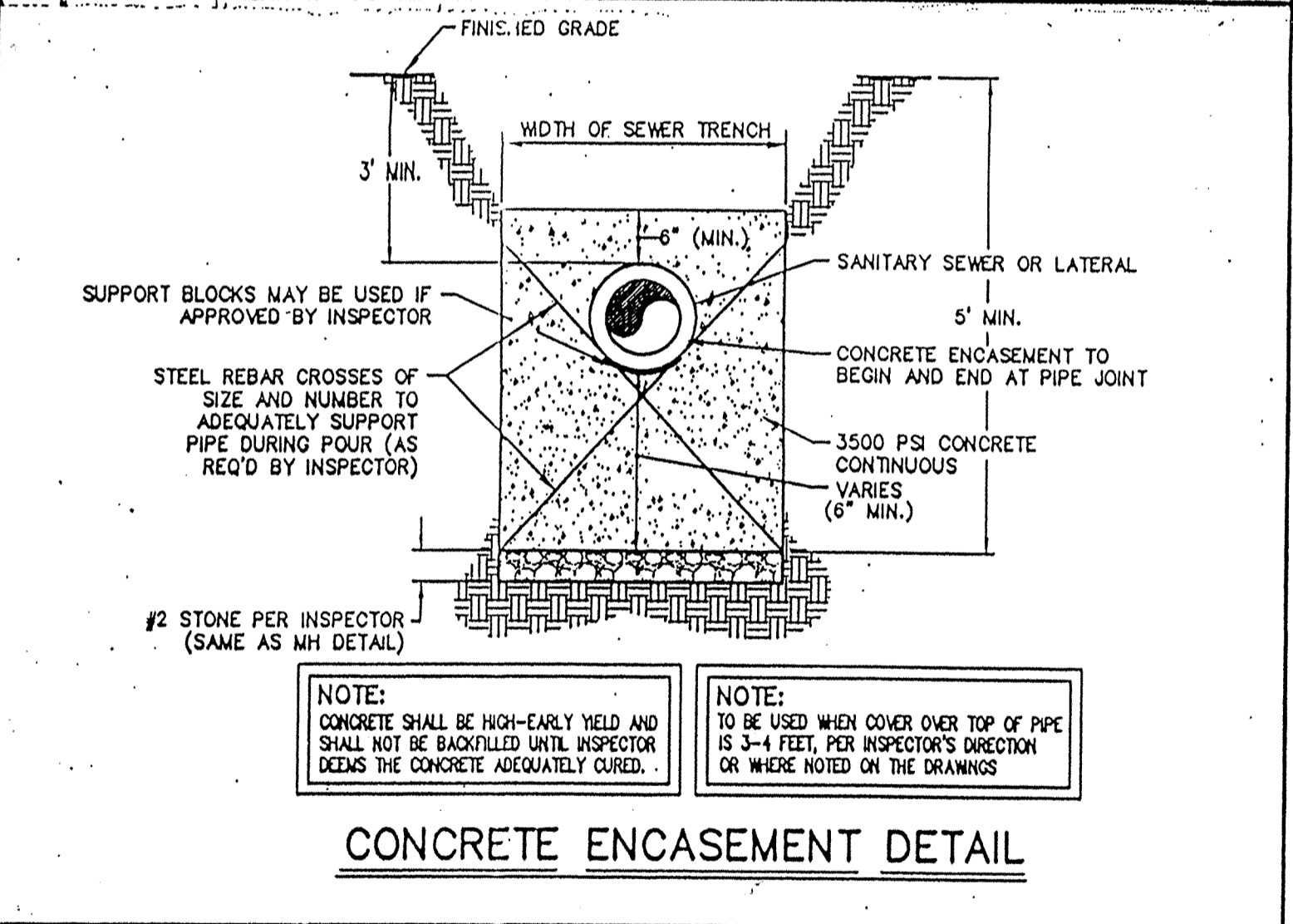
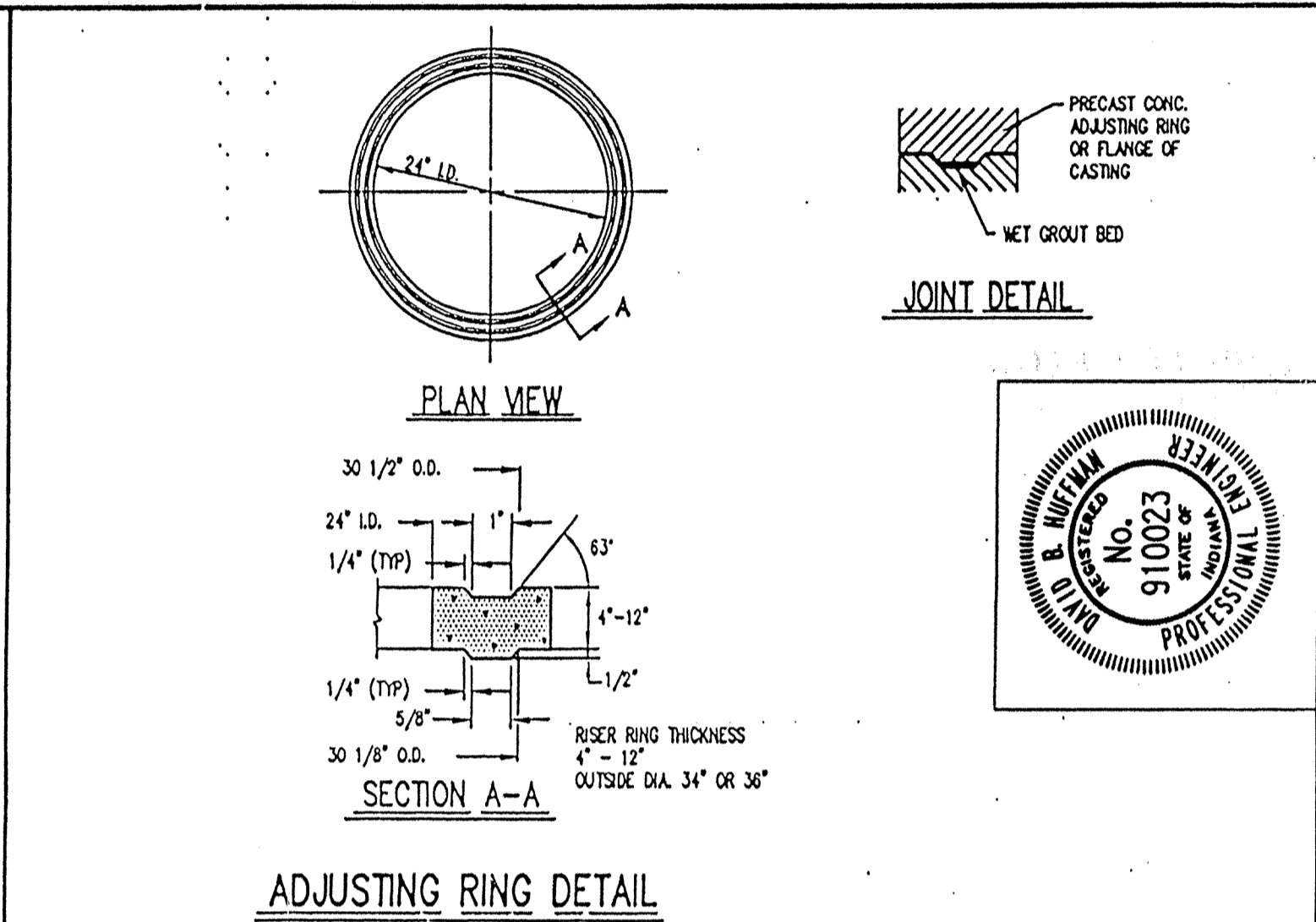
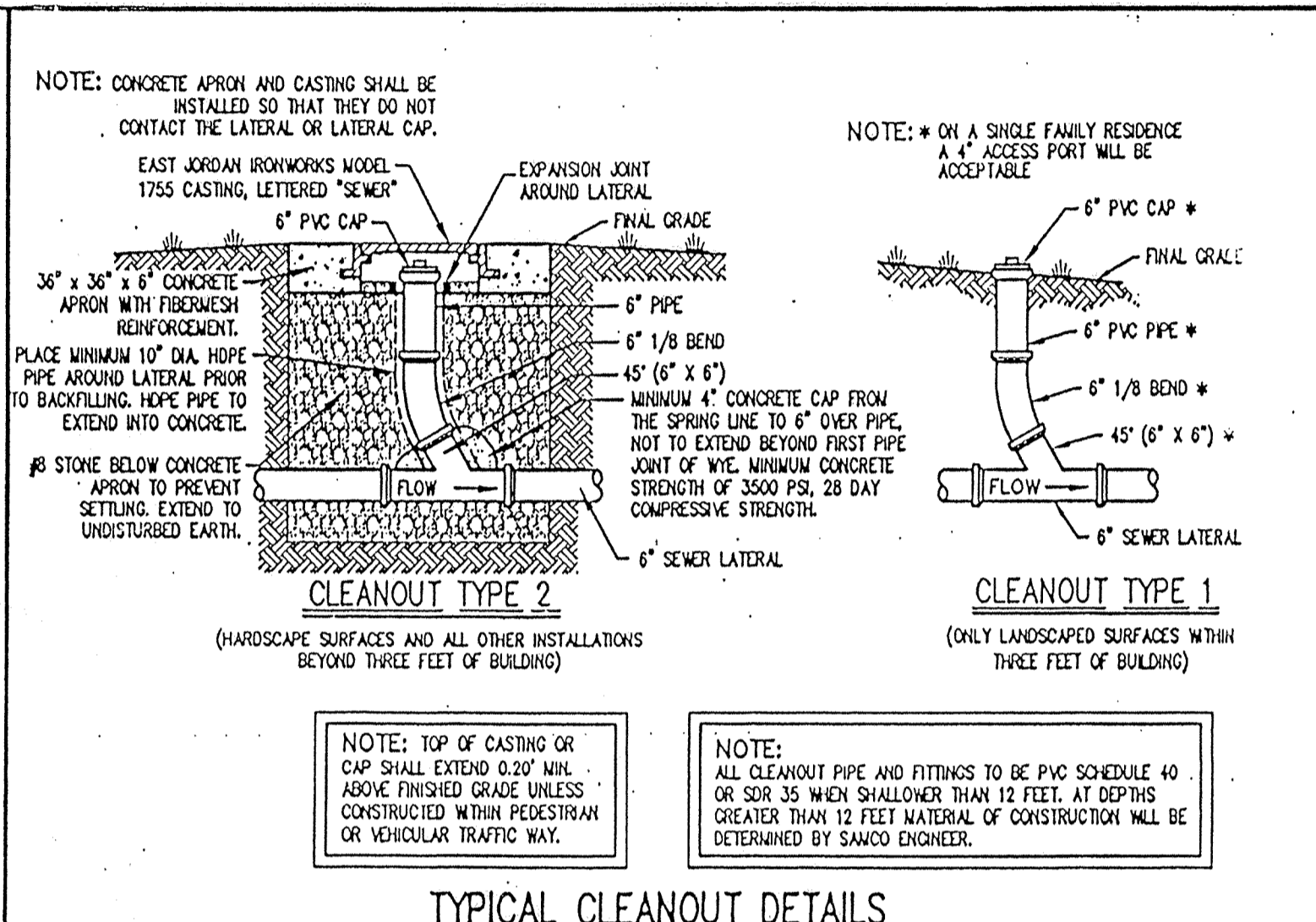
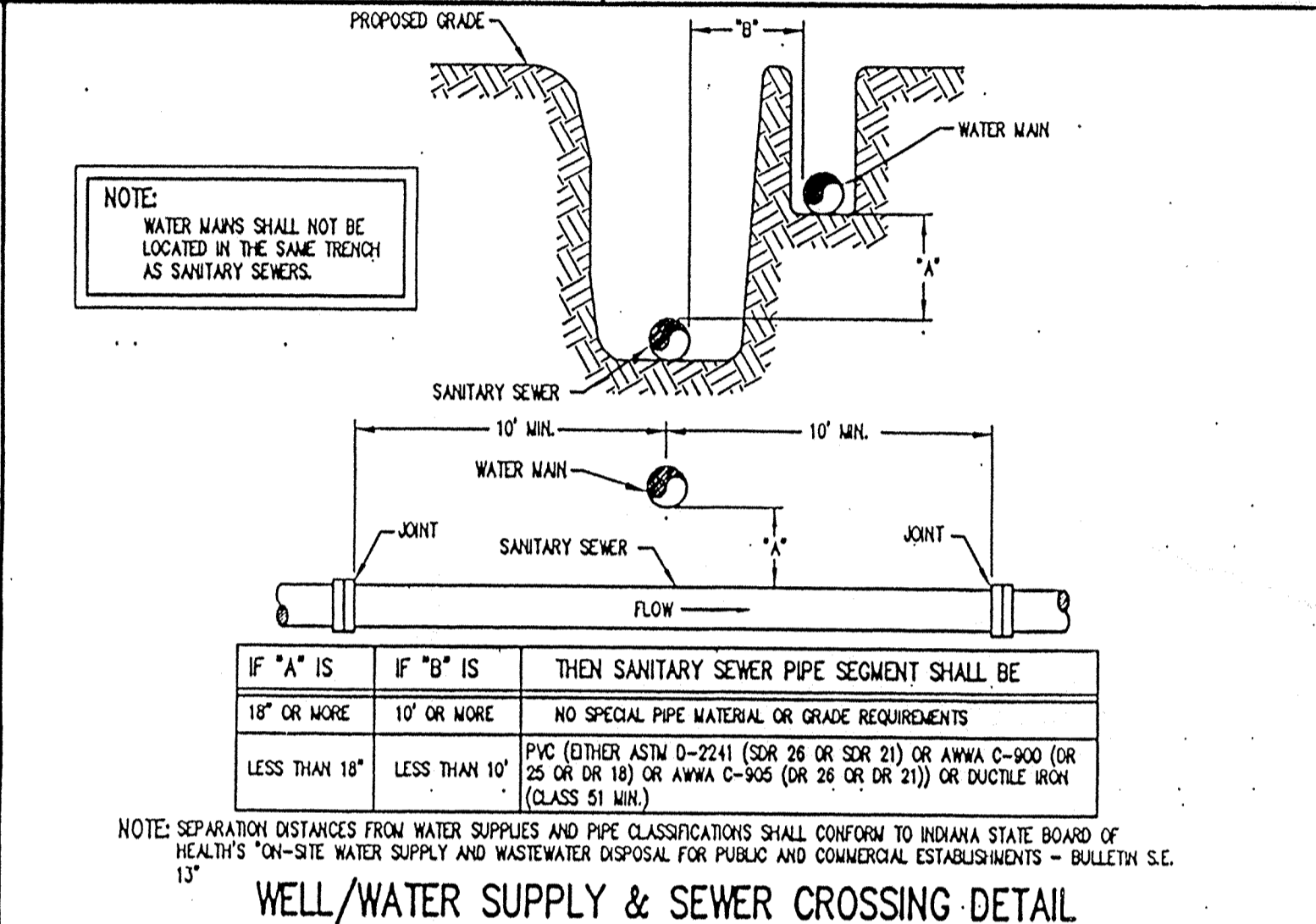
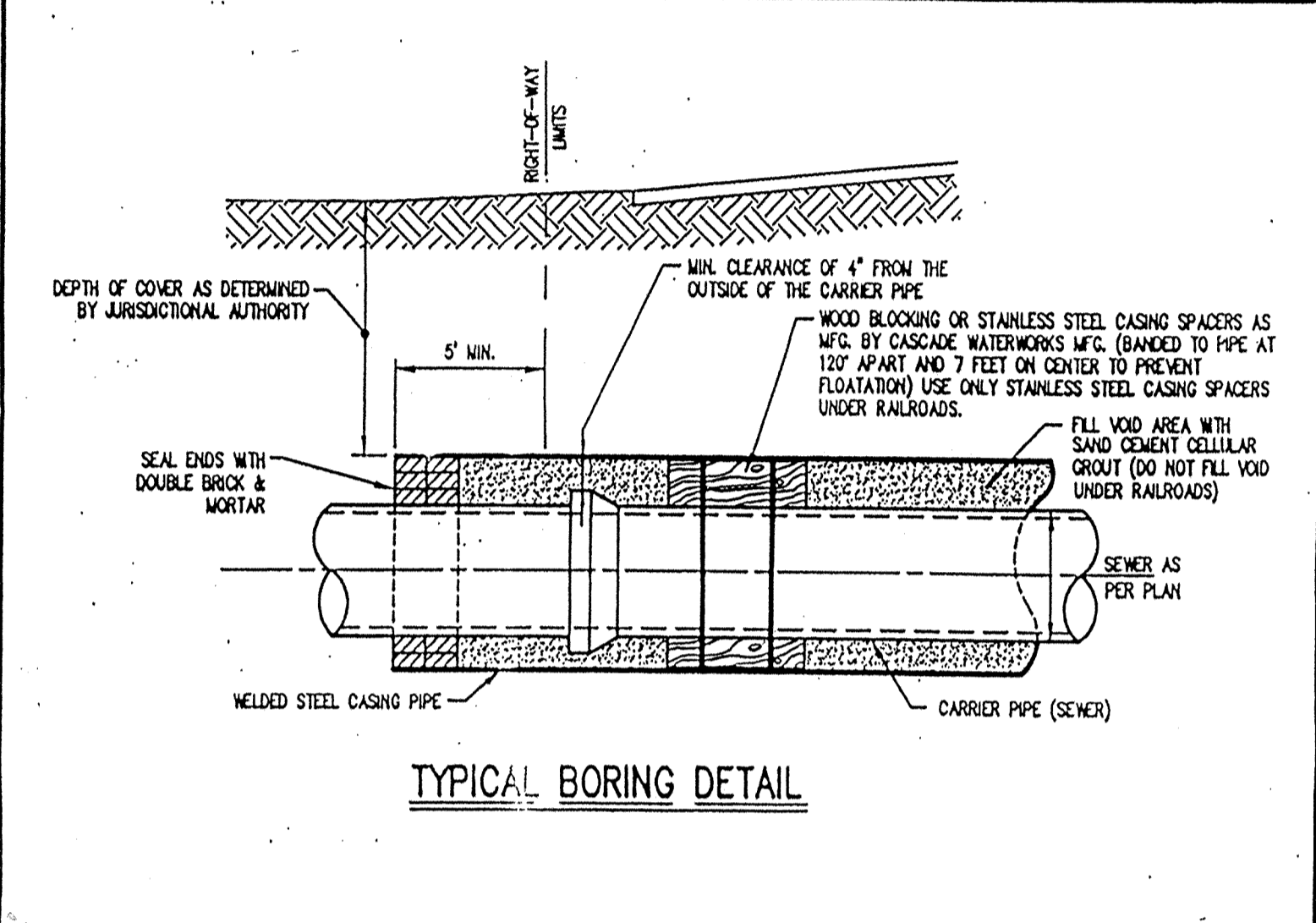
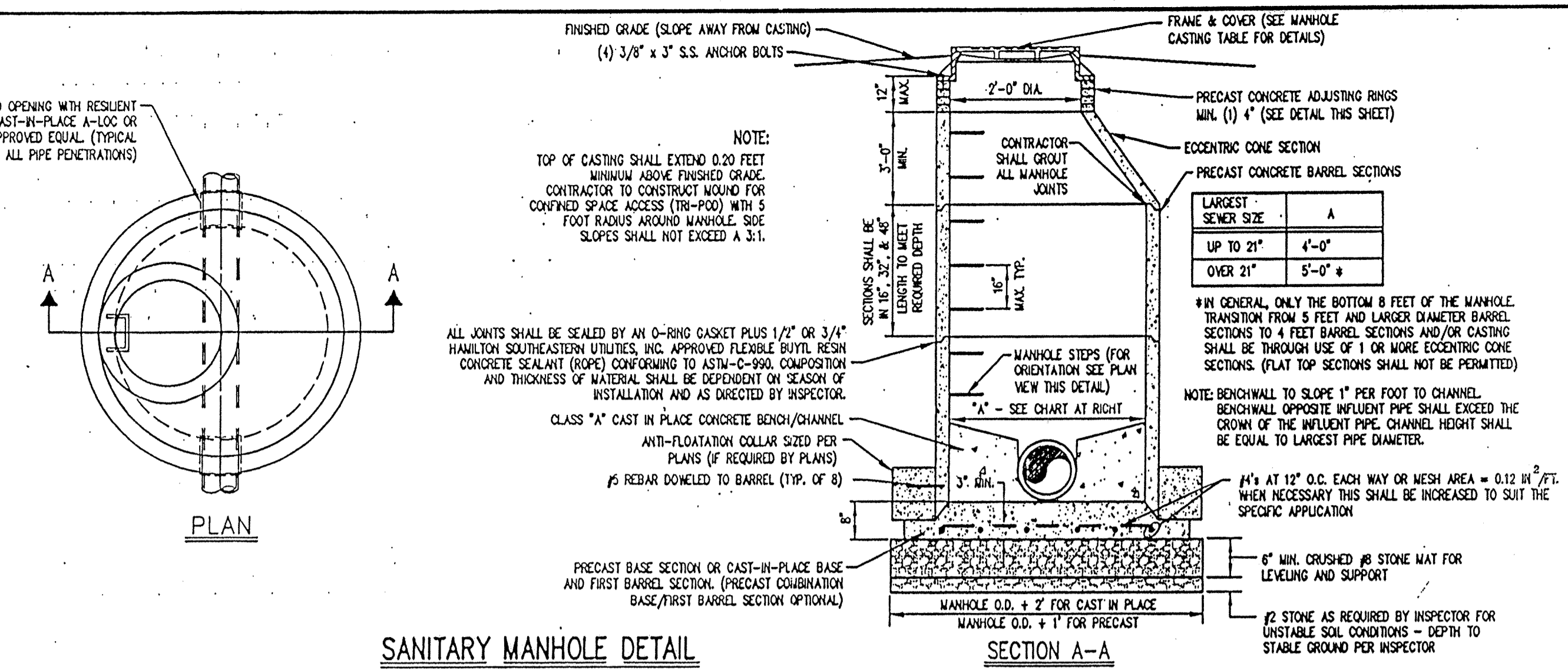
DUCTILE IRON PIPE SIZE	DEPTH OF COVER (INVERT TO FINAL GRADE)	THICKNESS CLASS
8" - 12"	UP TO 20 FEET OVER 20 FEET CONTACT ENGINEER	CLASS 50
10" - 12"	UP TO 20 FEET OVER 20 FEET CONTACT ENGINEER	CLASS 51
14" - 16"	UP TO 20 FEET OVER 20 FEET CONTACT ENGINEER	CLASS 52
18" - 20"	UP TO 20 FEET OVER 20 FEET CONTACT ENGINEER	CLASS 53
24"	UP TO 20 FEET OVER 20 FEET CONTACT ENGINEER	CLASS 55
GREATER THAN 24" DIA.	GREATER THAN 20 FEET DEEP	CONTACT SANCO ENGINEER (OTHER CASE)

NOTE: NO PRESSURE RATED PIPE WILL BE PERMITTED.

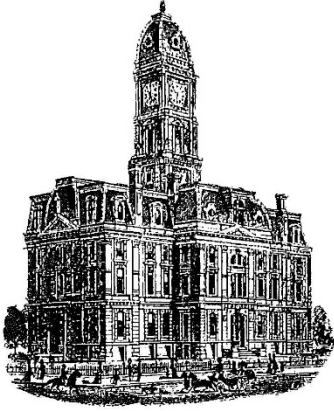
LOCATION	MODEL	COVER
18" INCHES OR MORE ABOVE 100 YEAR FLOOD ELEVATION OF ALL WATERWAYS	EAST JORDAN 1050-21 OR NEENAH R-1712-B	HEAVY DUTY SOLID
LESS THAN 18" ABOVE 100 YEAR FLOOD ELEVATION OF ALL WATERWAYS	EAST JORDAN 1050-21WT OR NEENAH R-1916-E	HEAVY DUTY SOLID

OWNERSHIP	LETTERING
HAMILTON SOUTHEASTERN UTILITIES, INC.	"SANITARY SEWER" - HSE
PRIVATE	"SANITARY SEWER"

ALL CASTINGS TO BE SUPPLIED WITH FOUR (4) ANCHOR BOLT HOLES.



FALL CREEK HARBOUR
 GRAVITY SANITARY SEWER DETAILS
 SCALE: N/A
 JOB NO: 111-0860
 PROJECT: PARAMOUNT REALTY GROUP
 PREPARED FOR: N/A
 SHEET 14 OF 14
 1998 BY SANITARY MANAGEMENT & ENGINEERING COMPANY, INC.



Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

Map Correction-Field Verification

Drain: #298 Sail Place

Drain Length: 202

Arm: Fall Creek Harbour Sec. 1

Change + / - : -40

Date: 02-14-2024

New Length: 162

Verified By: Steve Fesmire

Notes & Sketch: See attached As-built Information.

The City of Fishers installed a roundabout at the intersection of Fall Creek Road and Brooks School Rd. This modified the existing drain by replacing 41 feet of 24" RCP with 41 feet of 36" RCP. The new pipe was installed between two new structures (419,418). The existing drain between existing structures 1 to 3 was abandoned in place. This consisted of 40 feet of 12" RCP.

Suzanne L. Mills
GIS Specialist

DATA SHOT BY
HCSO 02-14-2024

DATA
PROVIDED
BY FISHERS

STR 419
TC = 815.811
(N) 15" = 812.769
(S) 36" = 803.66

814.26 North
805.35 South

419
X 817.29
mh

13+00

13+50

50+00

41' OF 36"
RCP @ 0.07%

40' @ -0.65%

10005
X 816.27
str11

STR 418
TC = 814.797
(N) 36" = 803.631
(S) 36" 803.482

418
X 816.32
mh

805.09 North
804.96 South

10006
X 815.39
str13

32.2' OF 36"
RCP

32.5' @ -1.01%

10007
813.93
str14

STR 417
TC=812.30
(N) 36" = 803.04
(SE) 12" = 803.932
(SW) 15" = 802.88

417
X 813.81
mh

804.63
North and South

10008
X 813.00
str16

50+50

25	1707009	249277.1	815.811	nrim_mh 419	
26	1707009	249276.1	812.769	rcp_15in_North	
27	1707007	249276.7	803.666	rcp_36in_South	
28	1707036	249275.1	817.273	nrim_ North of project	
29	1707033	249275.6	812.775	rcp_15in_South	
30	1707034	249274.6	813.125	rcp_15in_North	
31	1707035	249276.4	812.862	rcp_12in_NE abandone	
32	1707034	249275.7	812.852	str_test for 12in	
33	1707040	249254.2	817.201	nrim_North of project	
34	1707039	249254.8	813.327	rcp_15in_South	SE
35	1707040	249254	813.375	rcp_15in_North	
36	1707083	249236.5	821.593	nrim_North of project	
37	1707082	249236.7	815.698	rcp_15in_South	
38	1706967	249277.5	814.797	nrim_mh 418	
39	1706966	249277.1	803.631	rcp_36in_North	
40	1706964	249277.7	803.482	rcp_36in_South	
41	1706939	249297.7	803.04	rcp_36in_North	
42	1706938	249297.2	802.88	rcp_15in_SW	
43	1706937	249299	803.932	rcp_12in_South	
44	1706939	249298.5	812.3	nrim_mh 417	

41 ft of 36 in rcp @ 0.07% slope between mh 419 & mh 418
32.2 ft of 36 in rcp @ 1.37% slope between mh 418 & mh 417