

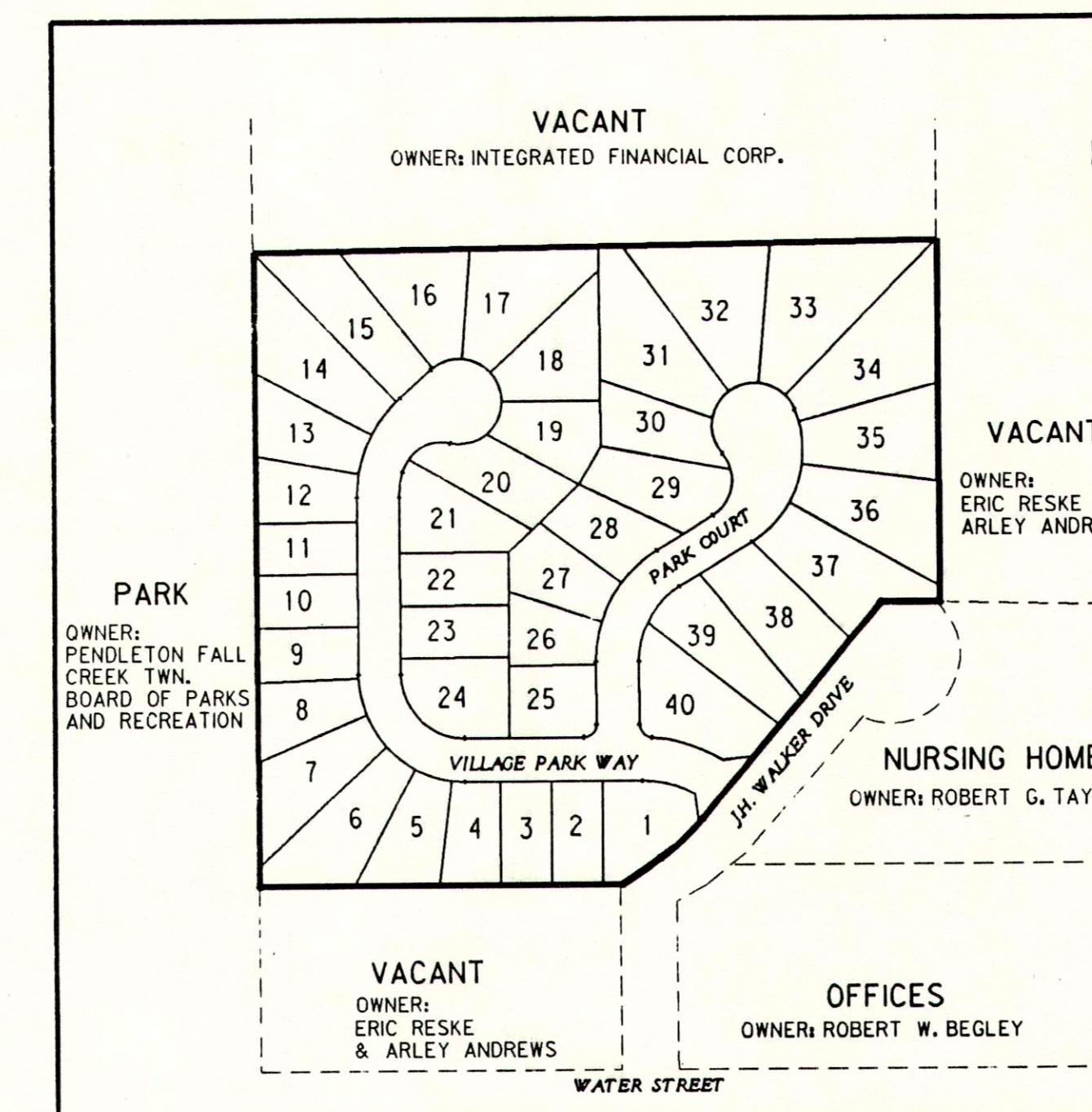
SITE CONSTRUCTION PLANS FOR
FALLS PARK VILLAGE
SUBDIVISION

| INDEX | |
|-------|----------------------------------|
| SHEET | DESCRIPTION |
| 1 | TITLE SHEET |
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| 10 | DETAILS |

LAST REVISION DATE 7/31/89

9-14-89
10-3-89
11-1-89

| UTILITIES | |
|-----------------|---|
| WATER: | PENDLETON MUNICIPAL UTILITIES P.O. BOX 230 PENDLETON, INDIANA |
| ELECTRIC: | PENDLETON MUNICIPAL UTILITIES P.O. BOX 230 PENDLETON, INDIANA |
| GAS: | INDIANA GAS COMPANY 915 JACKSON ST. ANDERSON, INDIANA |
| SANITARY SEWER: | FALL CREEK REGIONAL WASTE DISTRICT BOX 59, COUNTY ROAD 650 WEST PENDLETON, INDIANA |
| TELEPHONE: | GTE 54 MONUMENT CIRCLE INDIANAPOLIS, INDIANA |
| CABLE: | UA CABLE SYSTEMS 633 JACKSON STREET ANDERSON, INDIANA |

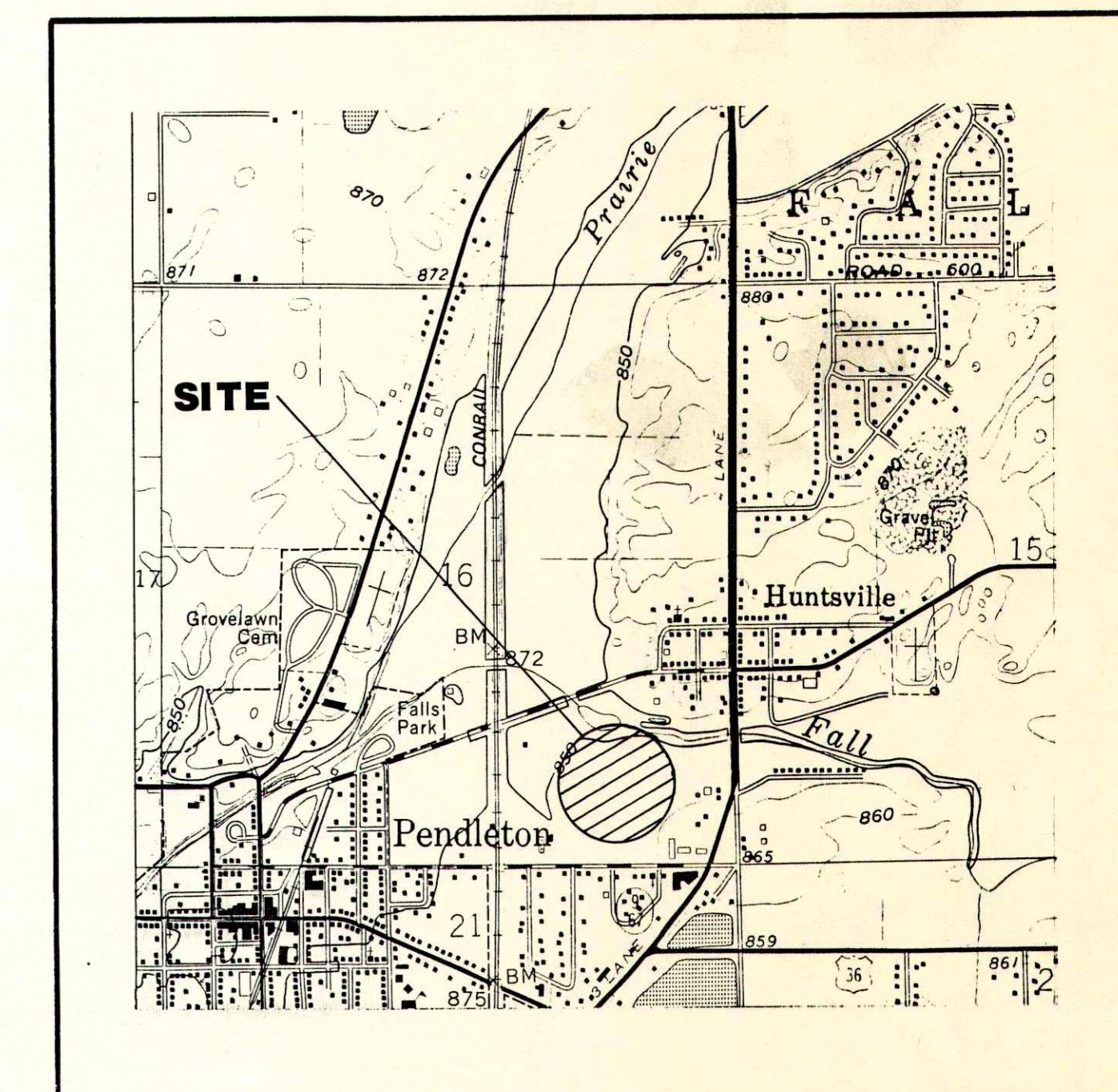


PLANS PREPARED FOR
INTEGRATED FINANCIAL CORP.
P. O. BOX 363
ANDERSON, INDIANA 46015

PREPARED BY

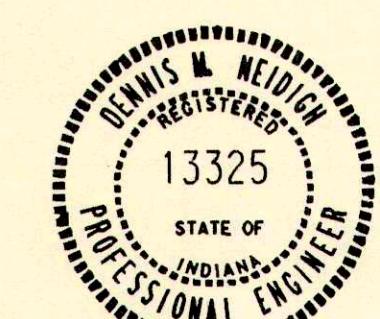
MSE Engineering

MSE Corporation
941 North Meridian Street
Indianapolis, IN 46204-1061
317 634-1000
317 634-3576 FAX



SITE LOCATION

CERTIFIED THIS 6th DAY OF July, 1989
Dennis M. Neidigh
 DENNIS M. NEIDIGH
 Registered Professional Engineer No. 13325 - Indiana



SHEET 1 OF 10
JOB No. III-0295

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 I.D.O.H. shall refer to the Indiana Department of Highways Standard Specifications dated 1988 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 scoured areas shall be removed in accordance with accepted horticultural practice and the scars coated thoroughly with an asphaltum base free 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; materials shall not be disposed of by burning.

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 in accordance with specifications of the Town of Pendleton.
- B. Trees shall be removed from the project site as directed by the Owner, and so designated.
- C. Trees shall be removed from the project site where they interfere with the placement of storm or sanitary sewers.
- 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.
- F. See Note II-B.

IV. STRIPPING OF TOPSOIL

- A. The Contractor shall verify that all topsoil has been removed in the areas to be occupied by road, walks and designated building areas. Topsoil shall be removed to a depth of 6 inches or deeper, if necessary, to remove vegetative matter where required.
- 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 subsoil debris and stones.

V. GRADING

- A. The Contractor shall perform all grading operations to bring subgrades, after final compaction, to the required grades and sections for site improvement.
- B. Subgrade shall be proofoiled with suitable equipment and all spongy and otherwise unsuitable material shall be removed and replaced with suitable material.
- C. Subgrade for streets shall be prepared in compliance with Town of Pendleton Specification, for all areas of street construction. Subgrade shall be compacted to 100% of standard proctor in the upper 6" of depth. Depths of embankment below the upper 6" shall be compacted to 95% of standard proctor.
- D. See PAVEMENT CONSTRUCTION
- E. 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.
- F. 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 Soil's Engineer's report (minimum of 95% standard proctor). These areas shall be determined by the developer's representative.

VI. SANITARY SEWER CONSTRUCTION

- A. Current Fall Creek Regional Waste District, County and State specifications shall prevail as to materials and methods of construction.
- B. The Contractor shall be responsible for obtaining or verifying all permits for all or portions of this project prior to starting construction. Contractor shall notify the Fall Creek Regional Waste 48 hours prior to commencement of sanitary construction.
- C. Sanitary sewers shall be installed in accordance with the Indiana Department of Environmental Management requirements.
- D. Sanitary sewers shown on the construction plans shall be A.S.T.M. Truss Pipe, where applicable, in accordance with A.S.T.M. D-2680 (8"-16" pipe and fittings), D-2751 (6" pipe and fittings), or PVC-ASTM D-3034 (S.D.R. 35) pipe.
- E. All fittings and joints shall be pre molded type and manufactured and installed in accordance with the pipe manufacturer's specifications.
- F. Sanitary manholes shall be precast concrete in accordance with A.S.T.M. C-478, including concrete adjusting rings.
- G. Castings shall be of type and kind as shown on the Structure Data Table.
- H. Solvent welded tapping saddles shall be used for lateral connections.
- I. Water and sewer line crossings and separations shall be in accordance with Ten States Standards and local codes.

- 1. Where water lines and sewer lines cross and the water line cannot be placed above the sewer line a minimum of 18" with a minimum cover of 48", the sewer line shall be constructed of waterworks grade cast iron pipe with mechanical joints.
- 2. Where water lines and sanitary sewer lines run parallel with one another, a minimum of 10' horizontal separation shall be maintained.

- J. All future sewer installation, either connected to or extended from this system, shall be constructed in accordance with these specifications.

- K. No roof drains, footing drains, and/or surface water drains may be connected to the sanitary sewer system, including a temporary connection during construction.

- L. Buildings shall be serviced by a 6" minimum sanitary sewer lateral. The sewer lateral's termination shall be indicated on the surface with a metal fence post set immediately above said termination point. The ends shall be plugged and sealed with a water tight clay or plastic disc. Wyes are to be tilted up to 45 degrees from the horizontal, with suitable fittings for all changes in direction.

- M. The Contractor shall provide the Engineer with "as-built" locations and information for all sanitary sewer laterals within ten days after completion.

- N. Concrete riser sections shall have either "O" rings or rubber type gaskets which meet A.S.T.M. C-433.

- O. Manhole watertops shall be installed at all connections to manholes, where flexible-type manhole connections are not used.

- P. All precast manholes shall be bedded on a granular foundation as shown in the Details. The granular foundation shall be compacted with vibratory tamps.

- Q. The Contractor shall remove by pumping or other suitable methods any water which may accumulate in trenches.

- R. The Contractor shall be responsible for all tests for leakage, infiltration and deflection as established by Fall Creek Regional Waste and the Indiana Department of Environmental Management. Any portions not passing said tests for acceptance shall be repaired or replaced at the Contractor's expense, including re-excavation and backfill. All testing shall be observed by a Professional Engineer for certification within forty days after completion.

- S. Pipe shall be laid in open trenches, except when conditions require and the appropriate approving agencies give written permission for tunneling or jacking of pipe.

- T. Trench shall be opened sufficiently ahead of pipe laying to reveal obstructions, and shall be properly protected and/or barricaded when left unattended.

- U. Contractor shall be responsible for sheeting and bracing of trenches as necessary to protect workmen and adjacent structures. All trenching shall be done in accordance with O.S.H.A. standards to protect workmen.

- V. Manhole invert shall be shaped for flow channels with concrete and smoothly finished by a semi-circular section conforming to the inside diameter of the connecting sewers. Changes in size and grade shall be made by smooth true curves for all connecting sewers at each manhole.

- W. Granular backfill shall be required under all pavement areas and within 3 feet of the edge of pavement, plus a distance of one-half the depth.

VII. EROSION PROTECTION DURING CONSTRUCTION

- A. The Contractor shall provide adequate erosion protection measures during construction.
- 1. Construction operations conducted on private or town-owned property shall be neatly finish graded and sodded with Owner approved material.

VIII. STORM SEWER CONNECTION

- A. Storm sewer structures shall comply with current specifications of the Town, County and all agencies in respect to design and quality of construction.
- B. All storm sewer construction inside public right-of-way, either existing or to be dedicated, shall be in accordance with Town of Pendleton Specifications. Contractor shall notify the aforesaid Building Commissioner forty-eight hours prior to commencement of storm sewer construction.
- 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 Wall "B", unless otherwise specified on the plans.
- D. Where corrugated metal pipe is shown on the construction plans, it shall be 16 gauge unless otherwise specified and shall have the connecting bands and seals as specified by the manufacturer. C.M.P. may be either aluminum pipe or zinc coated steel sheets in accordance with A.S.T.M. A-444.

- E. Manholes, catchbasins, and inlets may be precast concrete, brick or block.

- F. Precast concrete and steel for manholes and inlets shall be in accordance with A.S.T.M. C-478.

- G. Castings shall be as shown on the Structure Data Table for manufacturer, type, and model number.

- H. Granular backfill shall be required for all crossings under pavement areas.

IX. UTILITIES

A. Water line

- 1. See Sanitary Sewers for vertical and horizontal separations (Note VI-1-1 and 2).
- 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 Indiana Department of Management 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 3 feet beyond the edge of pavement.

- 5. All water lines within the existing or proposed right-of-way or special easements requested by the Utility company shall be ductile iron or copper and shall be installed in accordance with the Pendleton Municipal Utilities 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. Pipe sizes between 3" and 12" for potable water mains shall be cement lined ductile iron pipe C.L.50 conforming to A.N.S.I. Specification A21.50.

- 8. Thrust blocks shall be installed in accordance with the details contained within the plans, or the Pendleton Municipal Utilities standard specifications, as applicable.

- 9. Felt material not to exceed 3/8 inch thick shall be placed between pipes and concrete thrust blocks.

- 10. All valves and appurtenances for domestic and fire protection water mains shall be approved by the Underwriters Laboratories and Factory Mutual for critical use.

B. Electric and Telephone

- 1. 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 Grading Plans for the respective locations.

X. GRANULAR BACKFILL

- Shall be in accordance with I.D.O.H. Standard Specifications.

XI. PAVEMENT CONSTRUCTION

- A. All street construction shall be in accordance with the plans and specifications and conform to the minimum standards of the Town of Pendleton Specifications.

- B. Subgrade shall be prepared in compliance with Section 207.02 of the I.D.O.H. standard specifications. No traffic shall be permitted on the prepared subgrade prior to paving.

- C. Backfilling of utility trenches with granular material under pavement areas is required and shall conform to Town of Pendleton Specifications.

- D. Contractor shall notify the Town of Pendleton Building Commissioner forty-eight hours prior to commencement of street construction within any existing or proposed right-of-way.

XII. CONCRETE CURB AND WALKS

- A. See Detail Sheet for type and details. Curbs and walks within existing or proposed right-of-way shall be constructed in accordance with Town of Pendleton specifications.

- 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 I.D.O.H. Specifications, 1988 edition, shall apply.

- 3. Except as otherwise specified, cure all concrete by one of the methods described in Section 501.17 of the I.D.O.H. Specifications, 1988 edition.

XIII. FINISH GRADING AND SODDING (Owner shall designate location if required.)

- A. Over the approved rough grade (see Section V), 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. Fertilizer and Agricultural Limestone. Fertilizer and agricultural limestone shall be spread uniformly over the area to be seeded. They shall be mixed into the top two inches of soil with a disk harrow, rotary tiller, or other approved equipment. Fertilizer shall be spread at the rate of 800 pounds per acre and agricultural limestone at the rate of one-half ton per acre, unless otherwise specified.

- C. A seeding mixture in the areas where stripping, cuts, or fills have been graded shall be seeded for silt and erosion protection at a rate of 50 pounds per acre with a mixture as follows: 18 lbs. Kentucky Bluegrass, 18 lbs. Park Kentucky Bluegrass, 18 lbs. Delta Kentucky Bluegrass, 10 lbs. Pennlawn Fescue, and 26 lbs. Annual Ryegrass. Wood cellulose fibre, straw or mulch, as approved by the Engineer, shall be applied at a rate of 3/4 tons per acre.

XIV. LIME MODIFIED SOIL (Developer shall designate location if required.)

- A. The use of Lime Modification shall be used to improve the upper 12" of subgrade that does not conform to Section 207 of the 1988 Indiana Department of Highways Specifications. The lime used shall be "Polyhydrated Lime, Code 'L', as manufactured by Mississippi Lime, or equal. The following construction procedures shall be utilized.

- 1. The subgrade shall be placed to the proper grade and cross section.

- 2. Lime shall be dry placed on the subgrade at an application rate of 24 through 36 pounds per square yard as directed by the Engineer. The lime and soil shall then be mixed by tractor-drawn disc harrows, scarifiers, rotary mixers, or front end loaders equipped with bucket teeth. Several passes shall be made to a depth of 12" as directed by the Engineer.

- 3. Initial compaction shall be performed with a sheepfoot roller. The soil and lime shall be compacted in 6" lifts until the proper grade and cross section of the subgrade is obtained. This will be done by blading the excess to one lane and compacting the mixed lime and soil in the 6" lifts. The final passes shall be made with a steel wheel or pneumatic-tired roller approved by the Engineer.

- 4. The density of the soil-lime mixture will be determined by the Town of Pendleton near the end of the finishing operations. Any portion of the soil-lime mixture not passing the density requirements shall be corrected, or removed and replaced. The in place dry density shall be determined by the Town of Pendleton in accordance with AASHTO T-191.

- 5. When compaction of the lime-soil mixture is nearing completion, the surface shall be sloped to the required lines, grades, and cross section, and compaction continued using a steel wheeled roller until the minimum specified density is obtained.

- 6. The surface shall be maintained in a moist condition by means of a fine spray of water during all finishing operations. The treated material shall be maintained in a moist condition by sprinkling with water for a period of seven days. Traffic of all types shall be kept off of the lime-modified soil for seven days, or thereafter until, in the opinion of the Engineer the lime-modified soil will support traffic without being damaged. When allowed on the subgrade, traffic shall exercise further care in driving over it so as not to tear up the subgrade.

- 7. Caution: Lime and lime mixtures are caustic in nature. The manufacturer of the lime shall be consulted to determine what special precautions are required to protect the skin, and particularly the eyes.

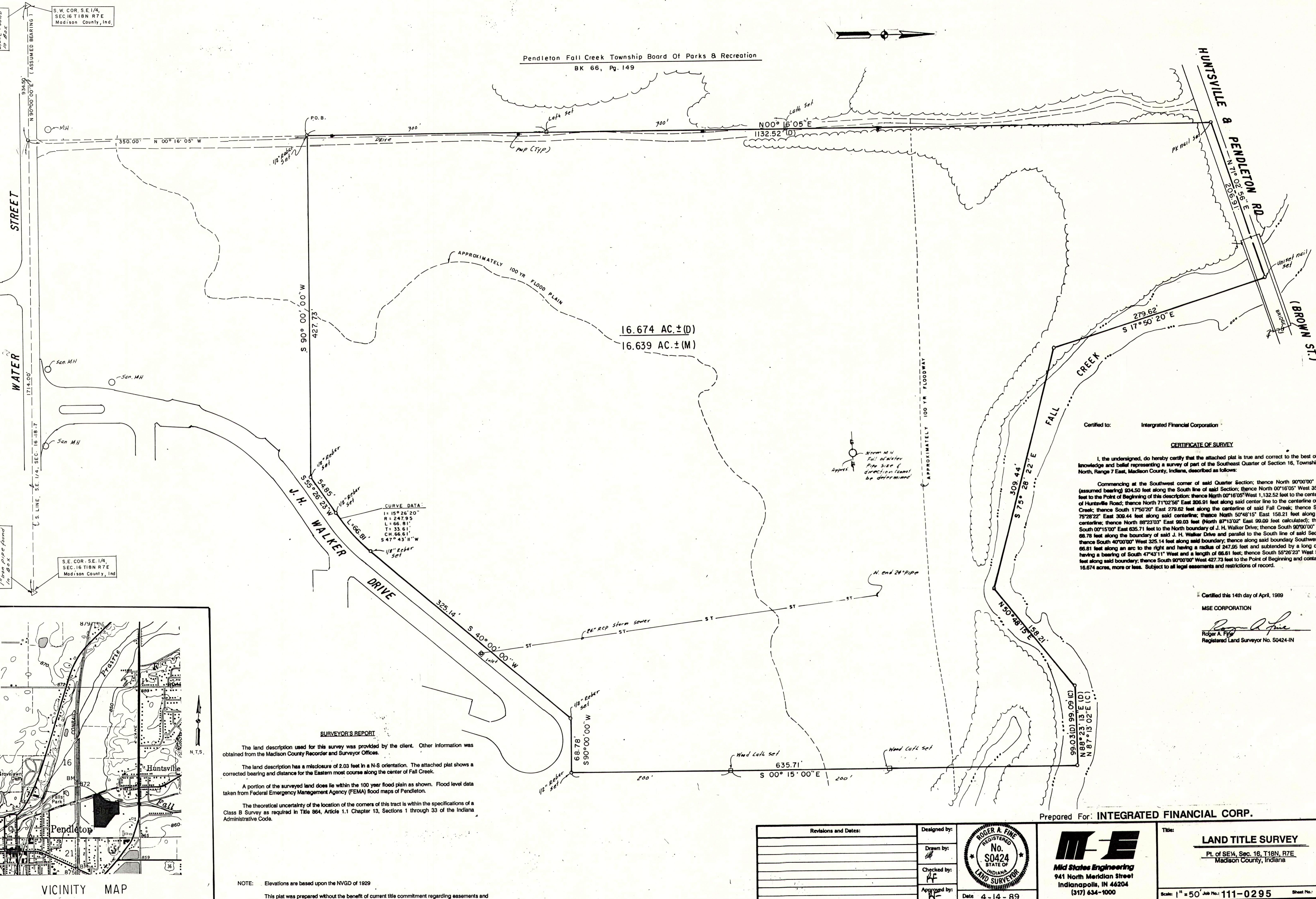
Note: the Contractor shall receive approval from the Engineer for any changes to the plans or specifications.

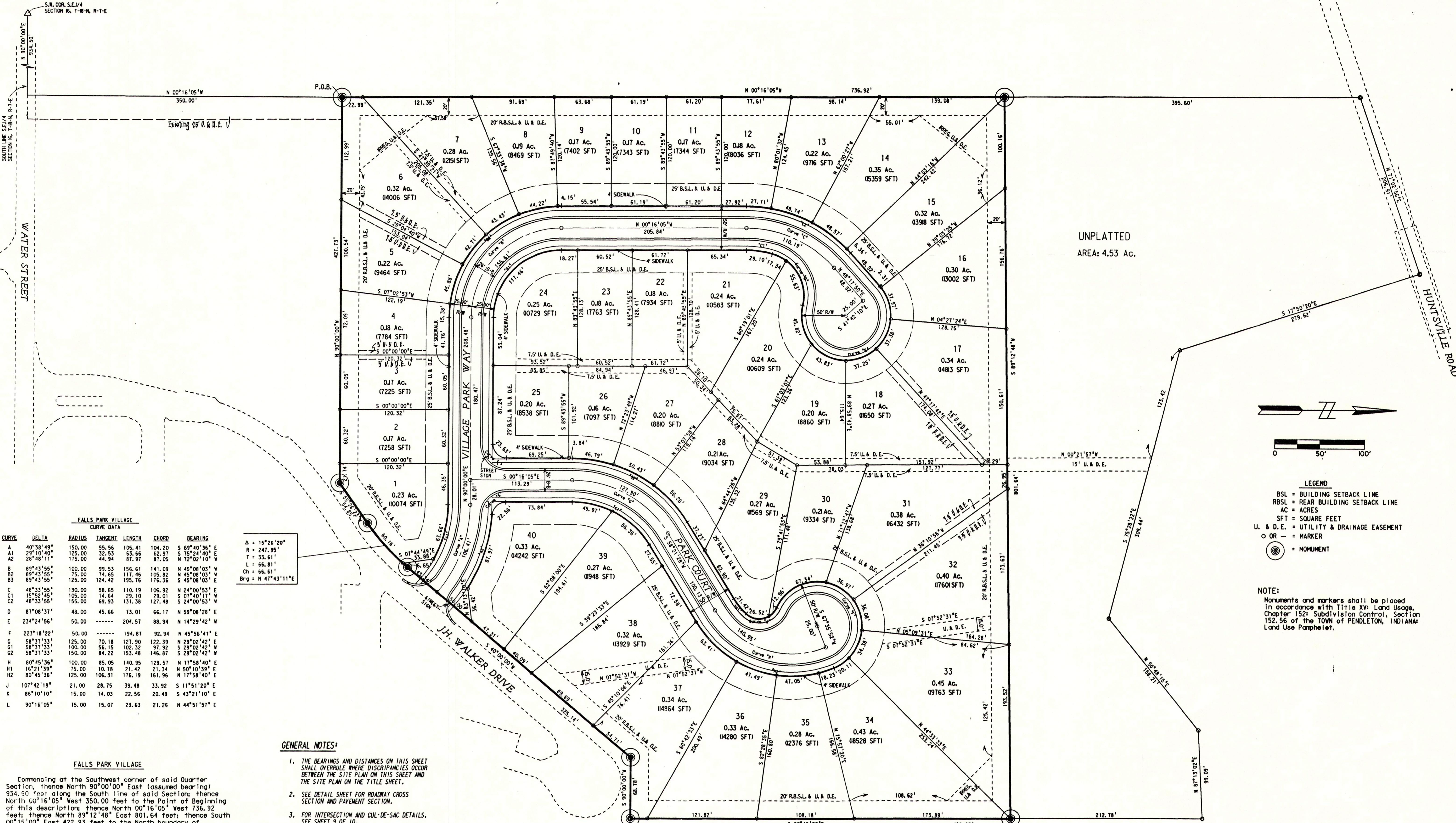
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| Revisions and Dates | Designed by DBH |
| | Drawn |

S.W. COR. S.E. 1/4,
SEC. 16 T18N R7E
Madison County, Ind.

Pendleton Fall Creek Township Board Of Parks & Recreation

BK 66, Pg. 149





FALLS PARK VILLAGE

Commencing at the Southwest corner of said Quarter Section, thence North 90°00'00" East (assumed bearing) 934.50' feet along the South line of said Section; thence North W 0°16'05" West 350.00 feet to the Point of Beginning of this description; thence North 0°16'05" West 736.92 feet; thence North 89°12'48" East 801.64 feet; thence South 00°15'00" East 422.93 feet to the North boundary of J. H. Walker Drive; thence South 90°00'00" West 68.78 feet along the boundary of said J. H. Walker and parallel to the South line of said Section; thence South 40°00'00" West 325.14 feet along said boundary; thence along said boundary Southwesterly 66.81 feet along an arc to the right and having a radius of 247.95 feet and subtended by a long chord having a bearing of South 47°43'11" West and a length of 66.61 feet; thence South 55°26'23" West 54.85 feet along said boundary; thence South 90°00'00" West 427.73 feet to the Point of Beginning and containing 12.14 acres, more or less; subject to all legal highways, rights-of-way and easements of record.

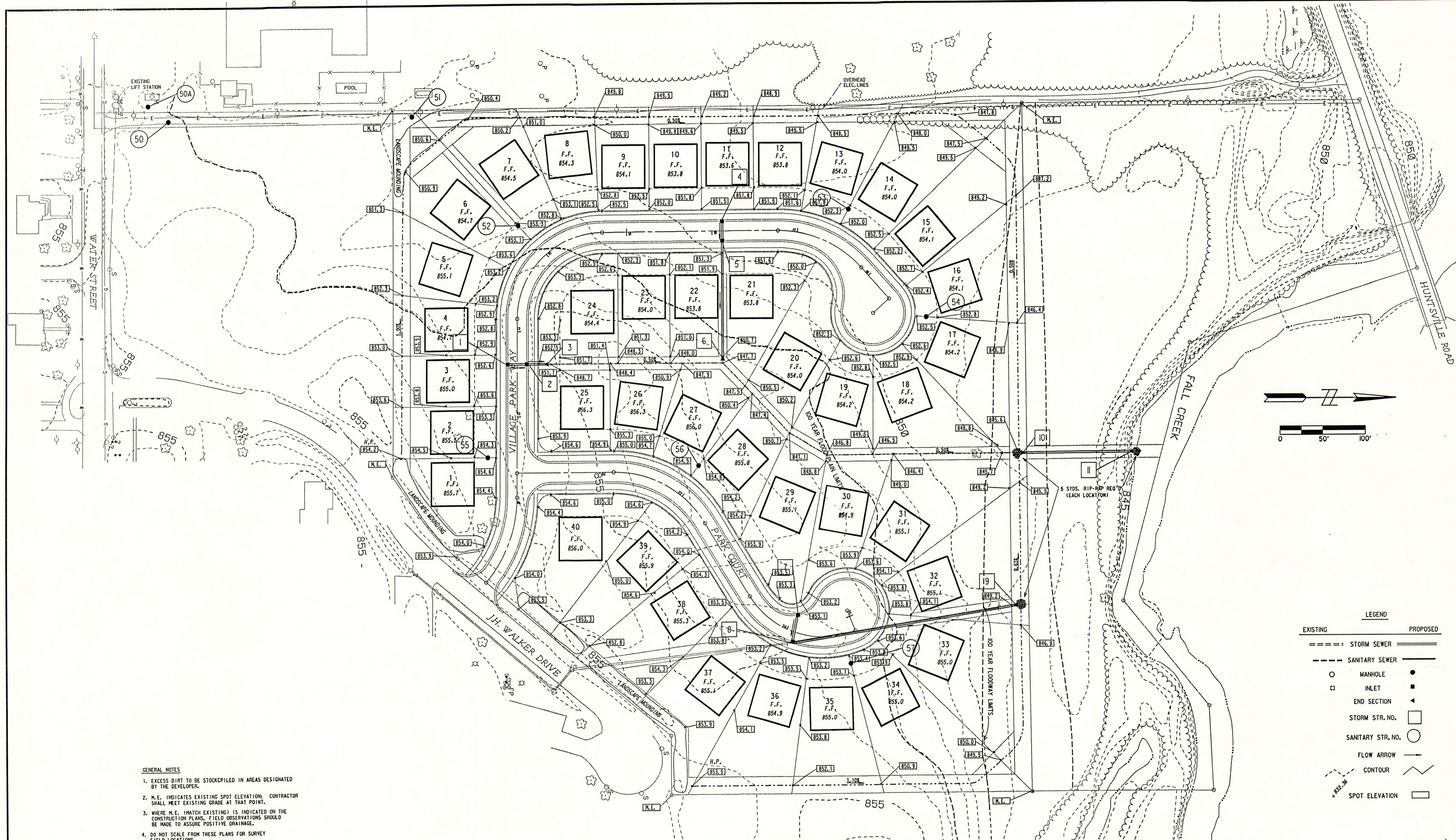
GENERAL NOTES:

- THE BEARINGS AND DISTANCES ON THIS SHEET SHALL OVERRULE WHERE DISCREPANCIES OCCUR BETWEEN THE SITE PLAN ON THIS SHEET AND THE SITE PLAN ON THE TITLE SHEET.
- SEE DETAIL SHEET FOR ROADWAY CROSS SECTION AND PAVEMENT SECTION.
- FOR INTERSECTION AND CUL-DE-SAC DETAILS, SEE SHEET 9 OF 10.
- SEE UTILITY PLAN FOR ROADWAY STATIONING.
- FOR GRADING PLAN SEE SHEET 5 OF 10.
- FOR UTILITY PLAN SEE SHEET 6 OF 10.
- ALL DIMENSIONS ARE TO BACK OF CURB, UNLESS OTHERWISE NOTED.
- DO NOT SCALE FROM THESE PLANS FOR SURVEY FIELD LOCATIONS.
- SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION DETAILS.
- CURB RETURNS AT ALL ROADWAY INTERSECTIONS TO HAVE A RADIUS OF 25' MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

FALLS PARK VILLAGE

SITE PLAN

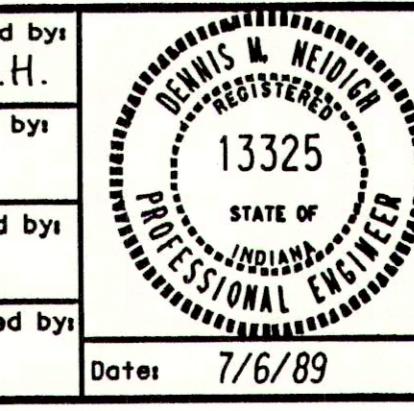
| Revisions and Dates | | Designed by | Drawn by | Checked by | Approved by | Title |
|--|--|-------------------|----------|--------------------|-------------|-----------------------------|
| 7-31-89 ADDED MONUMENT AND MARKER LOCATION | | DBH | CNC | RF | RF | MSE Engineering |
| A-14-89 ADDED U.D.E. FOR Water Main | | | | | | MSE Corporation |
| | | | | | | 941 North Meridian Street |
| | | | | | | Indianapolis, IN 46204-1061 |
| | | | | | | 317 634-1000 |
| | | | | | | 317 634-3576 FAX |
| | | | | | | Date: 7/6/89 |
| Scale: 1" = 50' | | Job No.: 111-0295 | | Sheet No.: 4 of 10 | | |



BENCHMARK DESCRIPTION

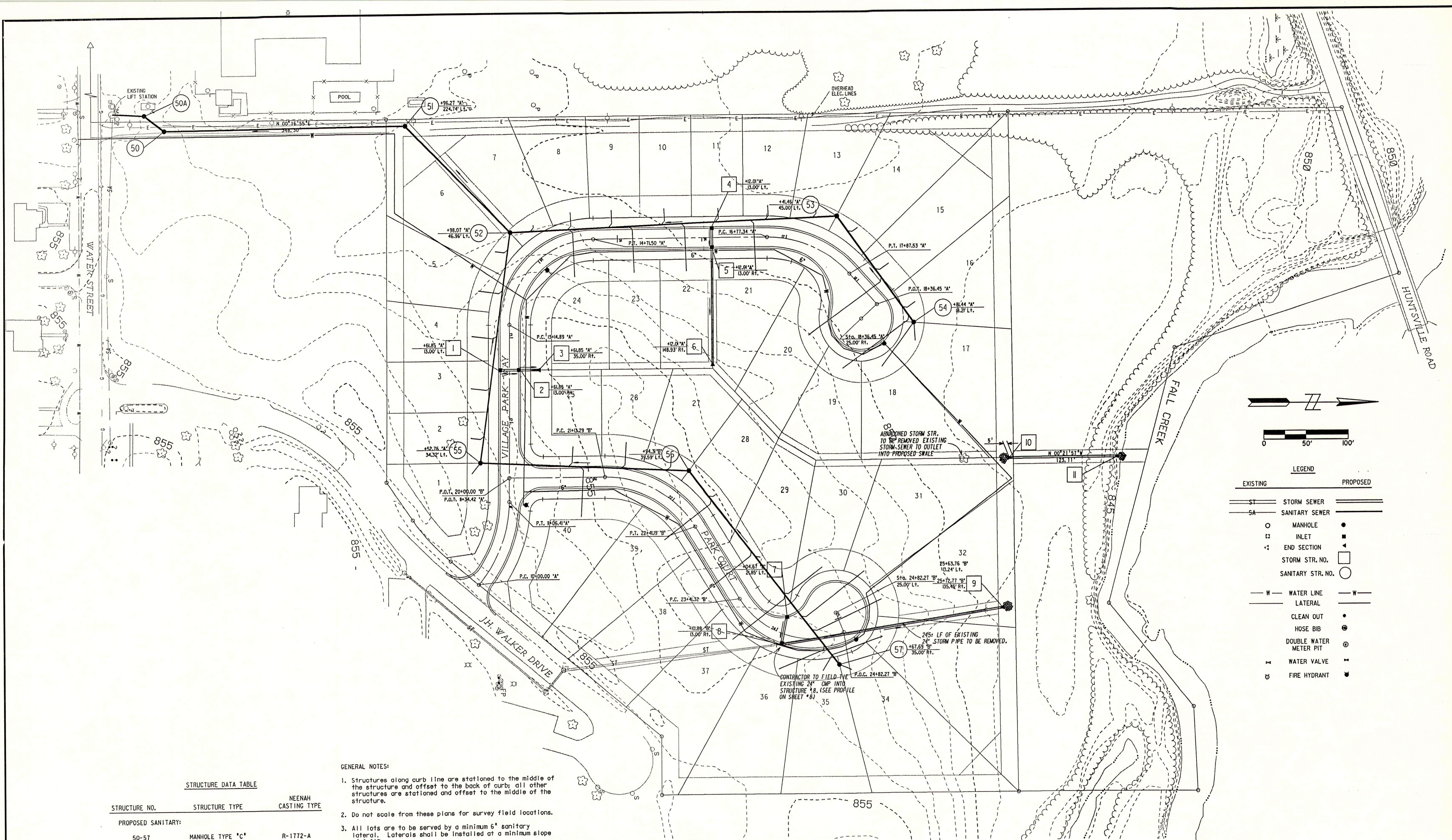
T.B.M. PK SET EAST FACE PWP #C245
3RD POLE NORTH OF WATER ST.
NEAR WEST R ELEV. 852.42

| Revisions and Dates | Designed by |
|--|-------------|
| 9-14-89 REVISED 100YR. FLOODWAY LOCATION | D.B.H. |
| 11-1-89 REVISED GRADES ON PARK COURT | Drawn by |
| | Checked by |
| | Approved by |
| | Date 7/6/89 |



MSE Engineering
MSE Corporation
941 North Meridian Street,
Indianapolis, IN 46204-1061
317 634-1000
317 634-3576 FAX

GRADING PLAN



GENERAL NOTES:

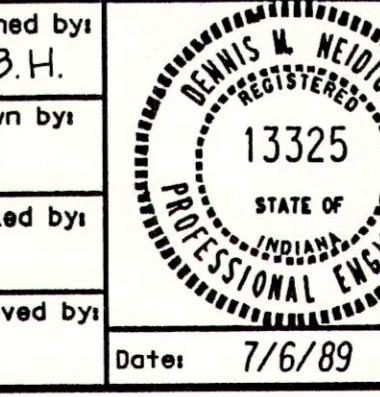
- Structures along curb line are stationed to the middle of the structure and offset to the back of curb; all other structures are stationed and offset to the middle of the structure.
- Do not scale from these plans for survey field locations.
- All lots are to be served by a minimum 6" sanitary lateral. Laterals shall be installed at a minimum slope of 0.6%.
- All points of connection of proposed sanitary and storm sewers to existing systems must be verified from a known benchmark vertically 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.
- See Sheet 10 for construction details.
- See Sheet 7 and 8 for sanitary and storm sewer profiles.

| STRUCTURE NO. | STRUCTURE TYPE | NEENAH CASTING TYPE |
|--------------------|-------------------------|---------------------|
| PROPOSED SANITARY: | | |
| 50-57 | MANHOLE TYPE "C" | R-1772-A |
| PROPOSED STORM: | | |
| 1 | INLET TYPE "A" | R-3501 N |
| 2 | INLET TYPE "A" | R-3501 N |
| 3 | END SECTION | |
| 4 | INLET TYPE "A" | R-3501 N |
| 5 | INLET TYPE "A" | R-3501 N |
| 6 | END SECTION | |
| 7 | INLET TYPE "A" | R-3501 N |
| 8 | MANHOLE TYPE "B" | R-3501 N |
| 9 | END SECTION | |
| 10 | END SECTION | |
| 11 | AUTOMATIC DRAINAGE GATE | R-5050 |

BENCHMARK DESCRIPTION

T.B.M. PK SET EAST FACE PWP #C245
3RD POLE NORTH OF WATER ST.
NEAR WEST R ELEV. 852.42

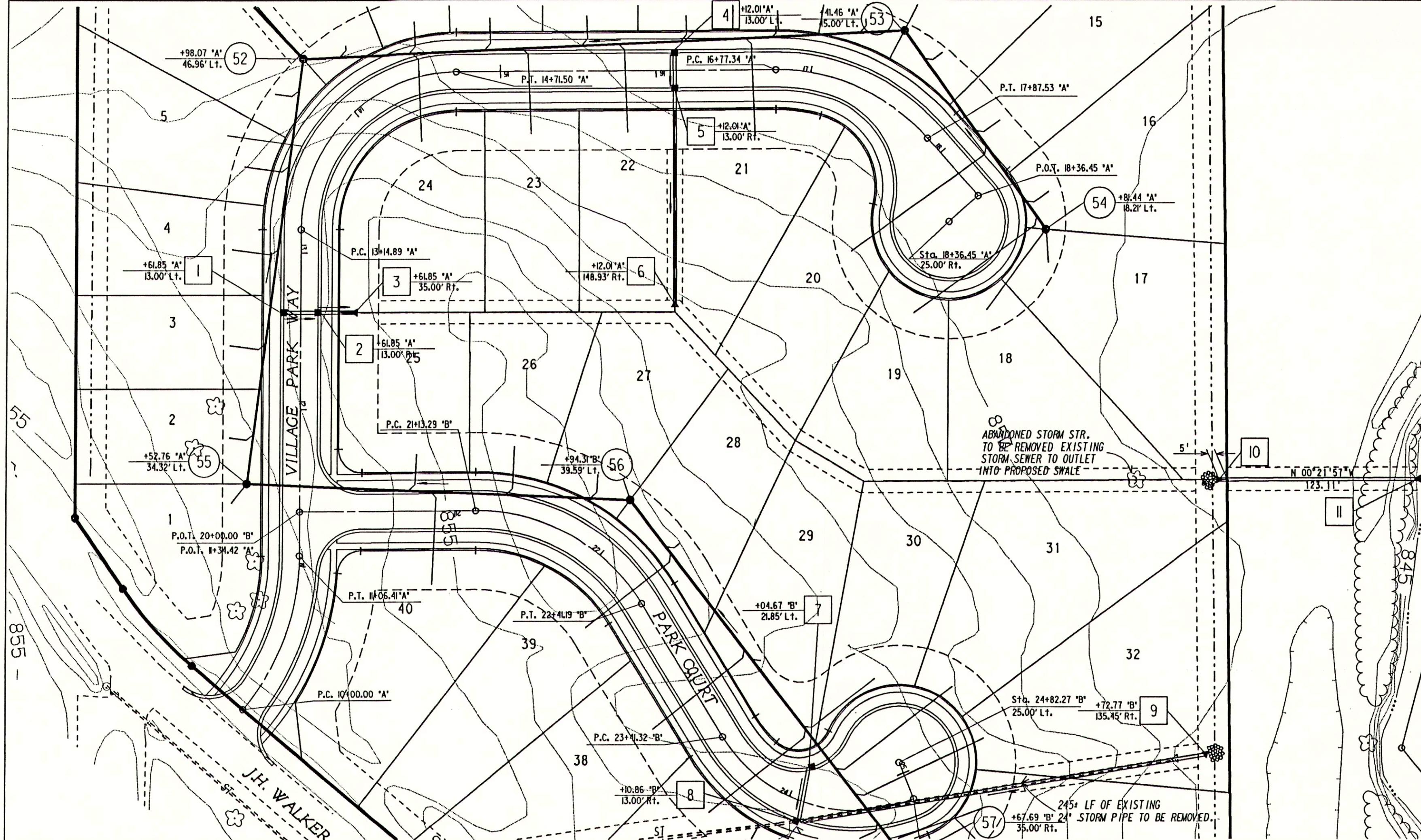
| Revisions and Dates | |
|--|------------------------|
| 7/31/89 REVISED STR. 11 TO AUTO. DRAINAGE GATE | Designed by: D.B.H. |
| 9/14/89 REVISED WATER LINE | Drawn by: |
| 11/1/89 REVISED SAN. AND STORM SEWERS | Checked by: |
| | Approved by: |
| | Date: 7/6/89 |



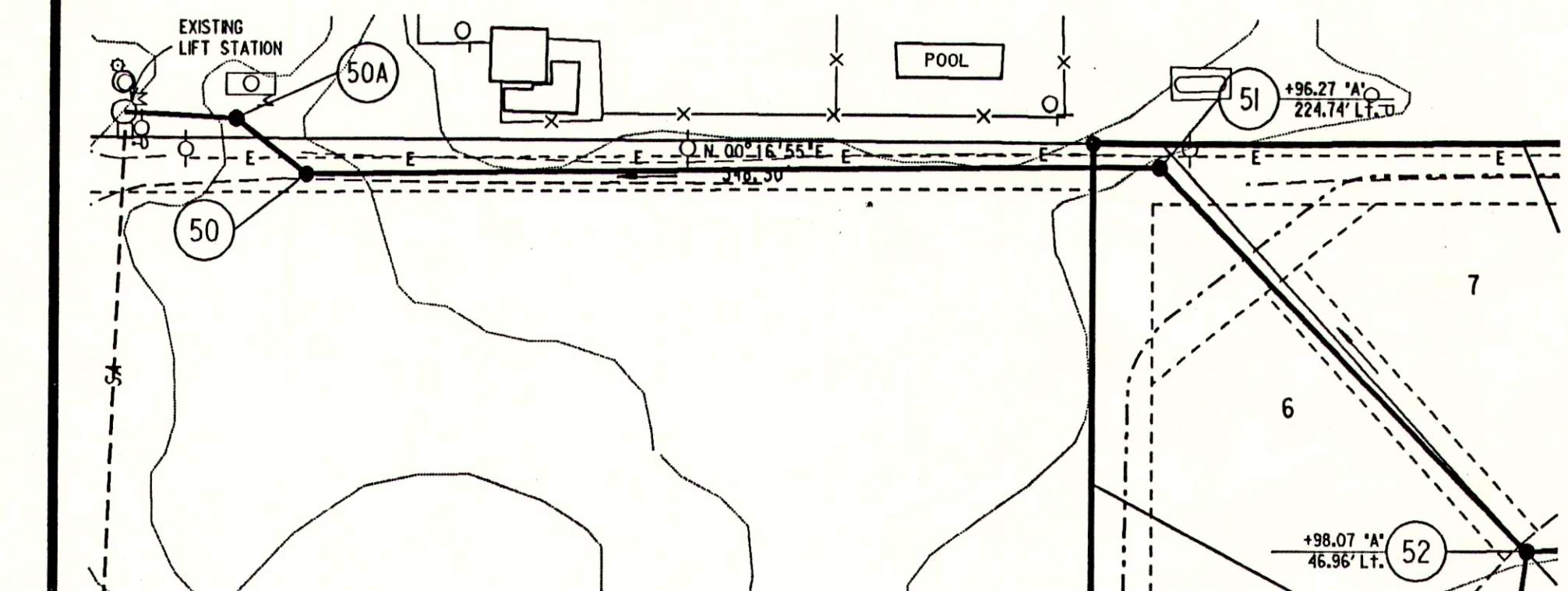
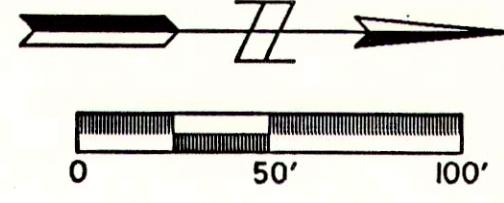
MSE Engineering
MSE Corporation
941 North Meridian Street
Indianapolis, IN 46204-1061
317 634-1000
317 634-3576 FAX

TITLE:
UTILITY PLAN

PLANE SURVEYED
NOTE BOOK
ROUTE CHECKED
BY DATE



OFF-SITE SANITARY PLAN



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

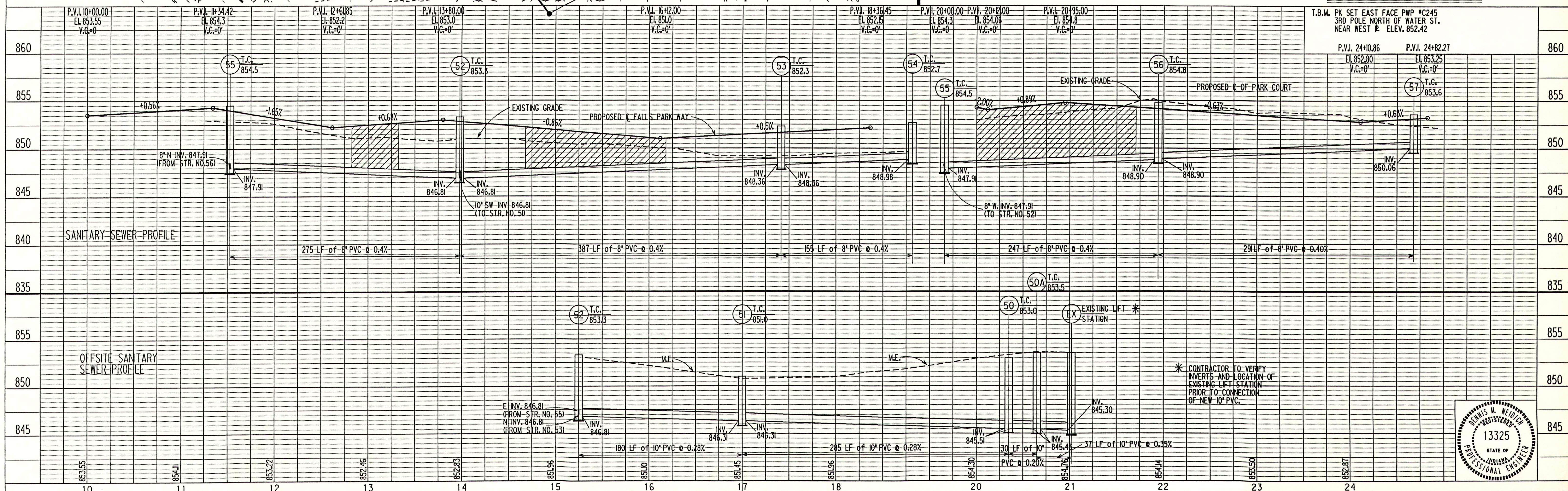
NOTES:
CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES
WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION

20 MPH DESIGN SPEED

SCALE:
PLAN: I' = 50'
PROFILE: VERTICAL I' = 5'
HORIZONTAL I' = 50'

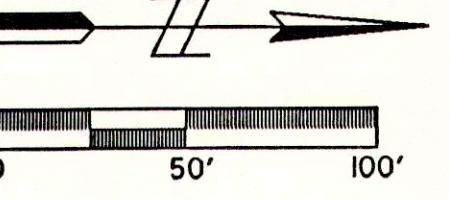
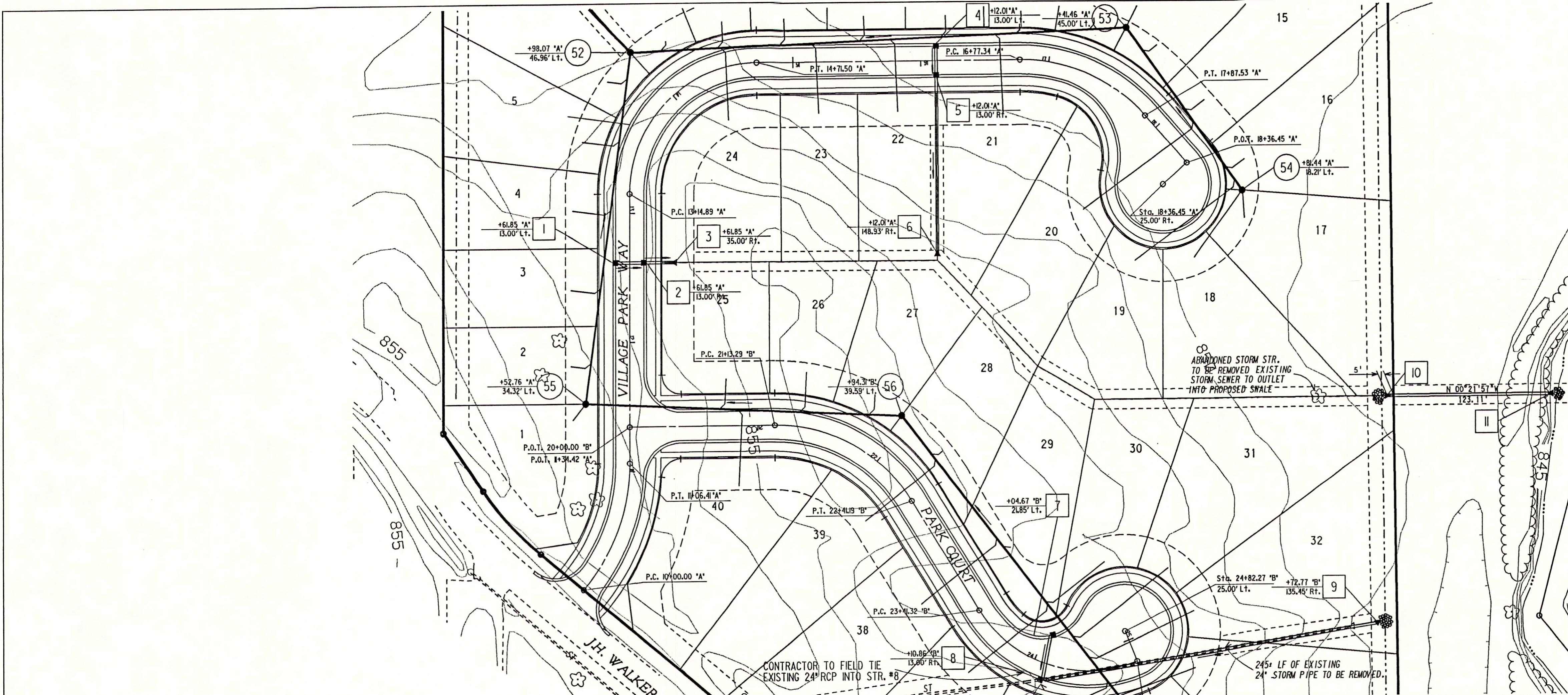
BENCH MARK DESCRIPTION

PROFILE SURVEYED
ROUTE CHECKED
NOTE BOOK
B.M.'S NOTED
STRUCTURE NOTATIONS
CHECKED
BY DATE



PLAN
SIGNED
DRAFTED
NOTE BOOK
NO.
DATE
BY

PROFILE
SURVEYED
NOTES
NOTE BOOK
NO.
STRUCTURE NOTATIONS CHECKED
DATE
BY



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

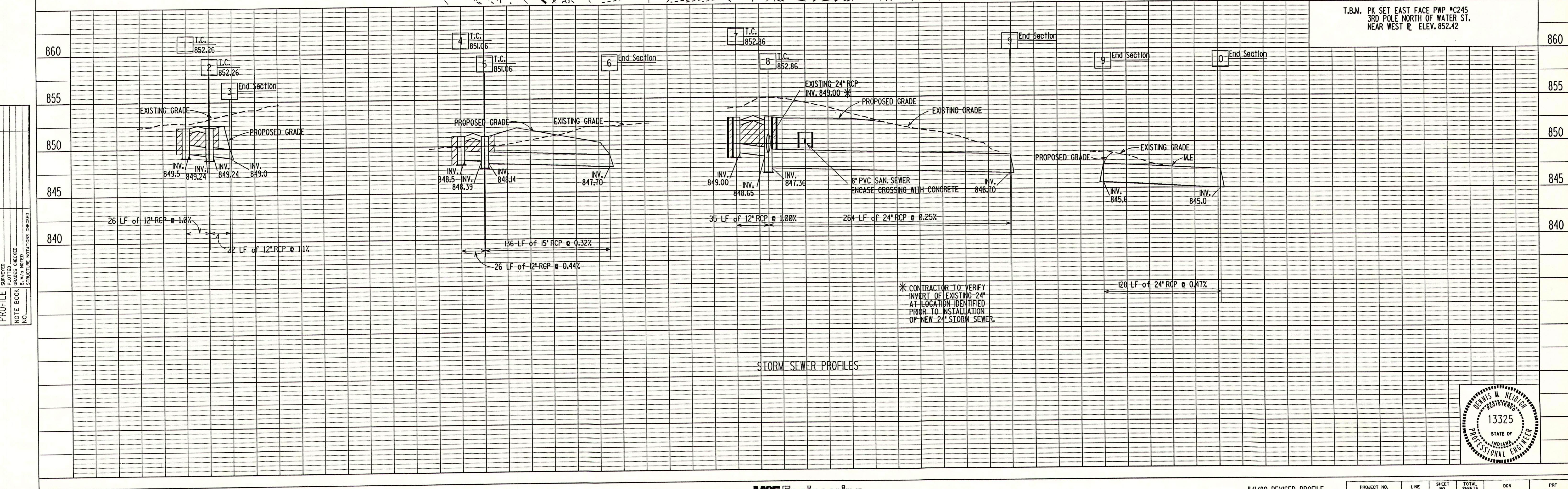
NOTES:
CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION

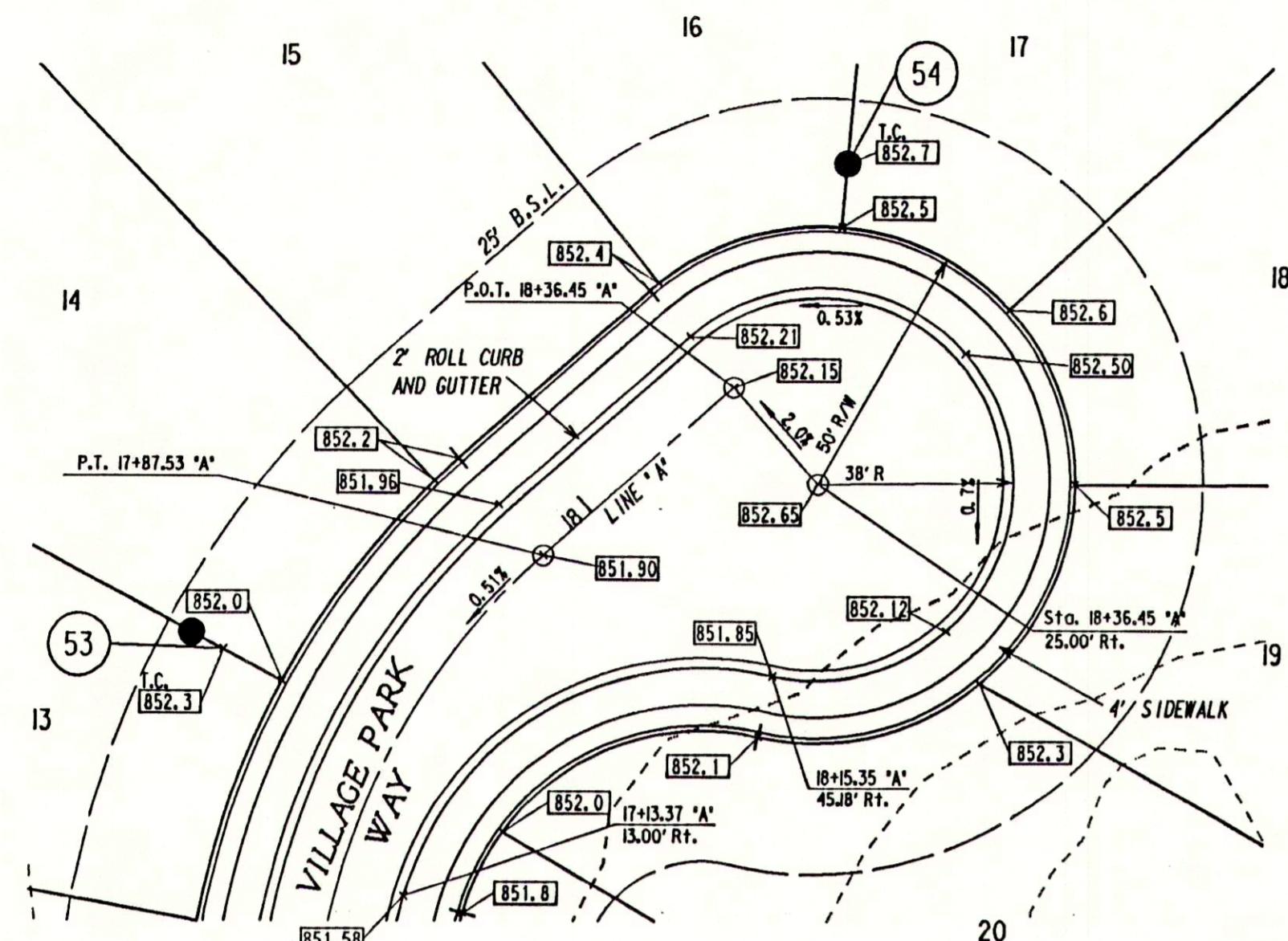
20 MPH DESIGN SPEED

SCALE:
PLAN: I' = 50'
PROFILE: I' = 5'
VERTICAL: I' = 50'
HORIZONTAL: I' = 50'

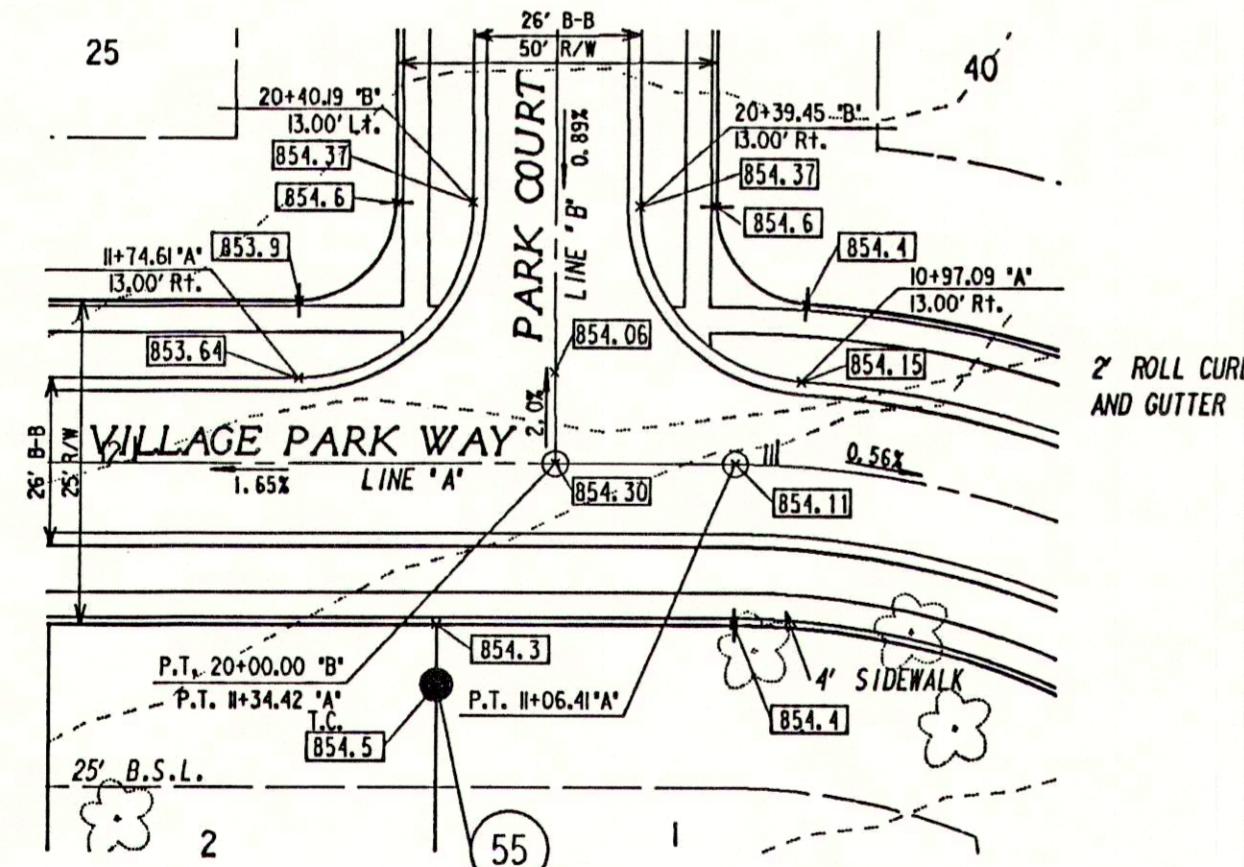
BENCH MARK DESCRIPTION

T.B.M. PK SET EAST FACE PWP #C245
3RD POLE NORTH OF WATER ST.
NEAR WEST R. ELEV. 852.42

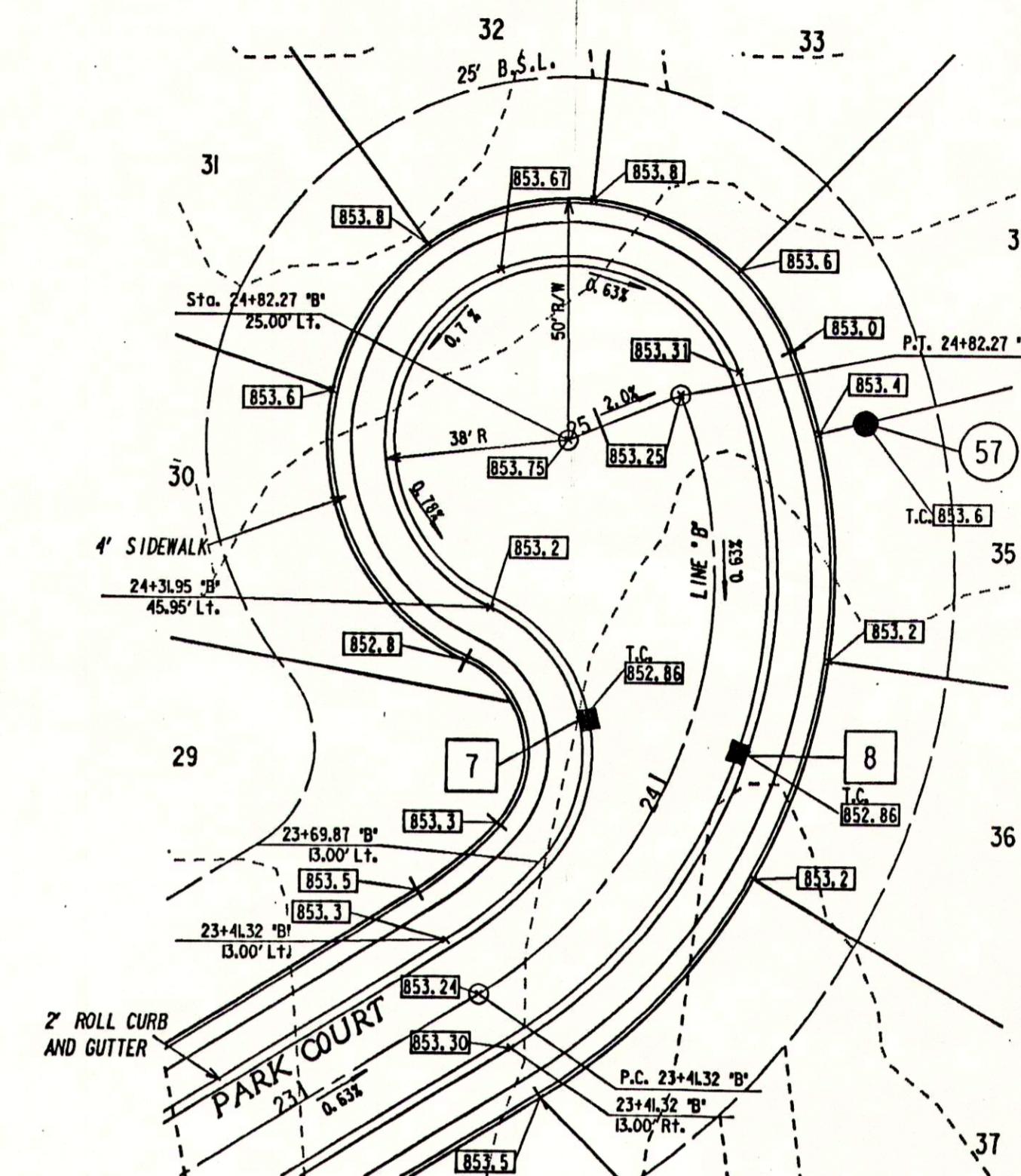




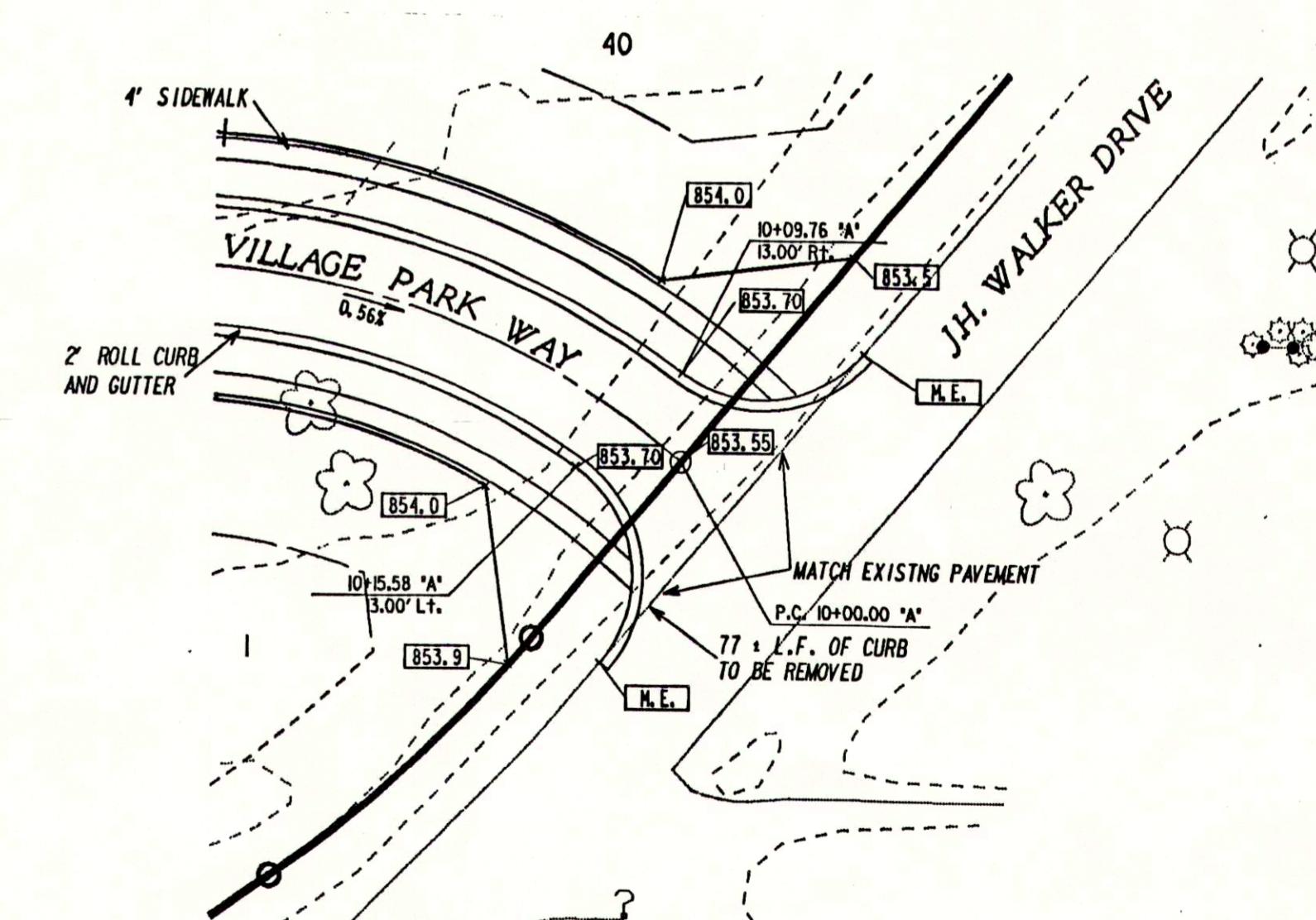
CUL-DE-SAC DETAIL @ VILLAGE PARK WAY



INTERSECTION @ VILLAGE PARK WAY AND PARK COURT



CUL-DE-SAC DETAIL @ PARK COURT



INTERSECTION @ VILLAGE PARK WAY AND EXISTING J.H. WALKER DRIVE

NOTES:

1. ELEVATIONS SHOWN AT STREET LINE
ARE PROPOSED TOP OF CURB ELEVATIONS
FOR EDGE OF PAVEMENT ELEVATIONS
DEDUCT 0.29.
2. CONTRACTOR SHALL GRADE AND MULCH
SEED ALL DISTURBED AREAS WITHIN
THE EXISTING RIGHT OF WAY.

BENCHMARK DESCRIPTION

| | |
|---|------------------------|
| Revisions and Dates | |
| 11/1/89 REVISED CUL-DE-SAC @ PARK COURT | |
| | Designed by: D.B.H. |
| | Drawn by: |
| | Checked by: |
| | Approved by: |
| Date: 7/6/89 | |

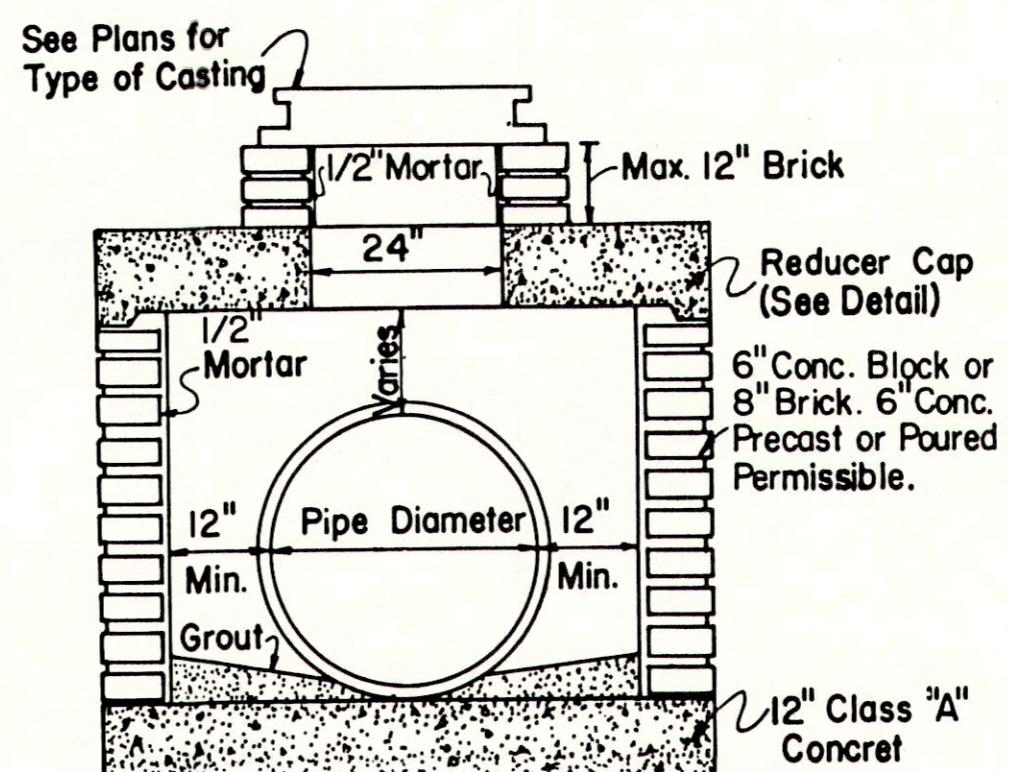
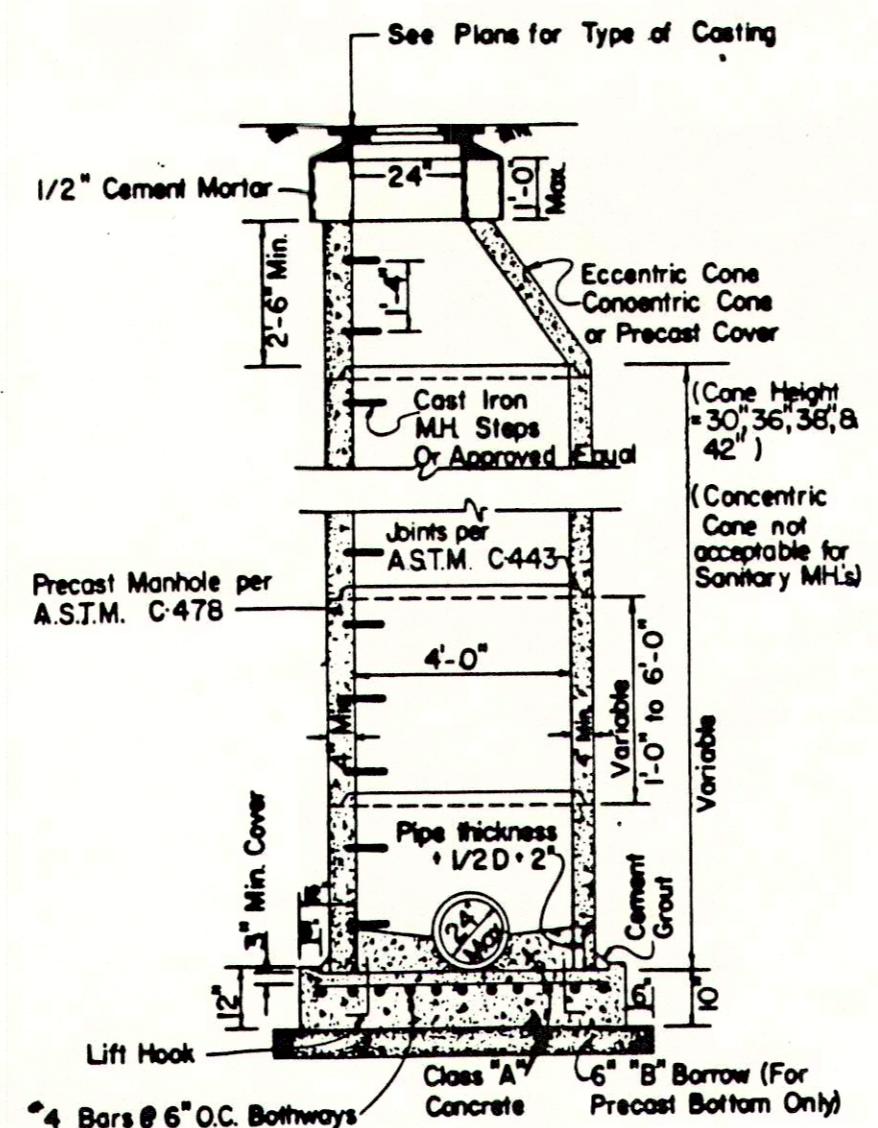
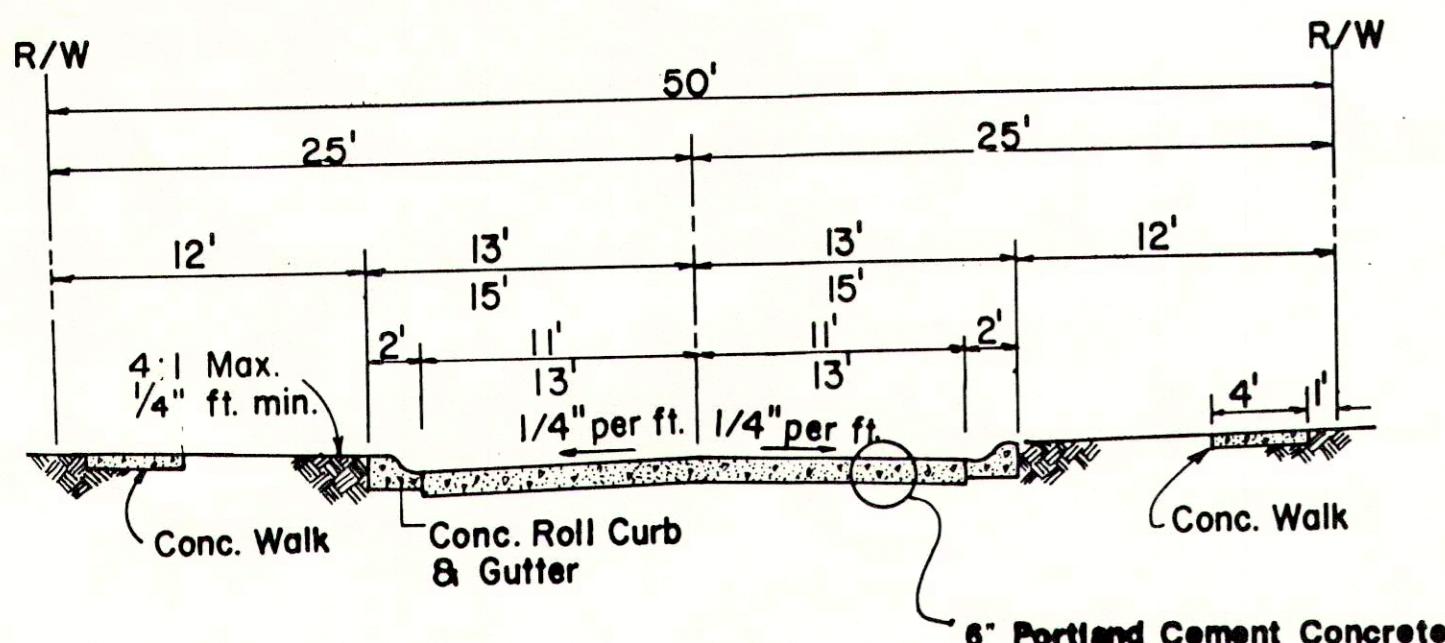




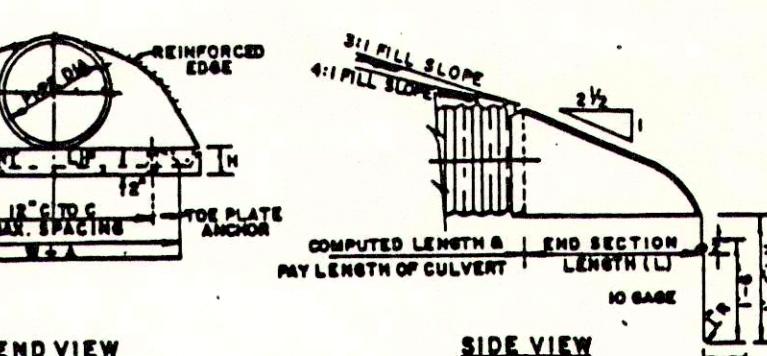
FALLS PARK VILLAGE

Title:

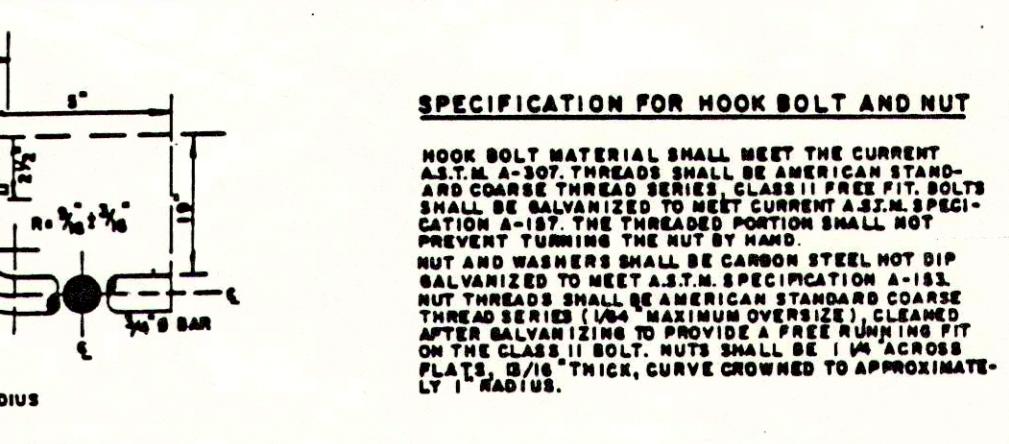
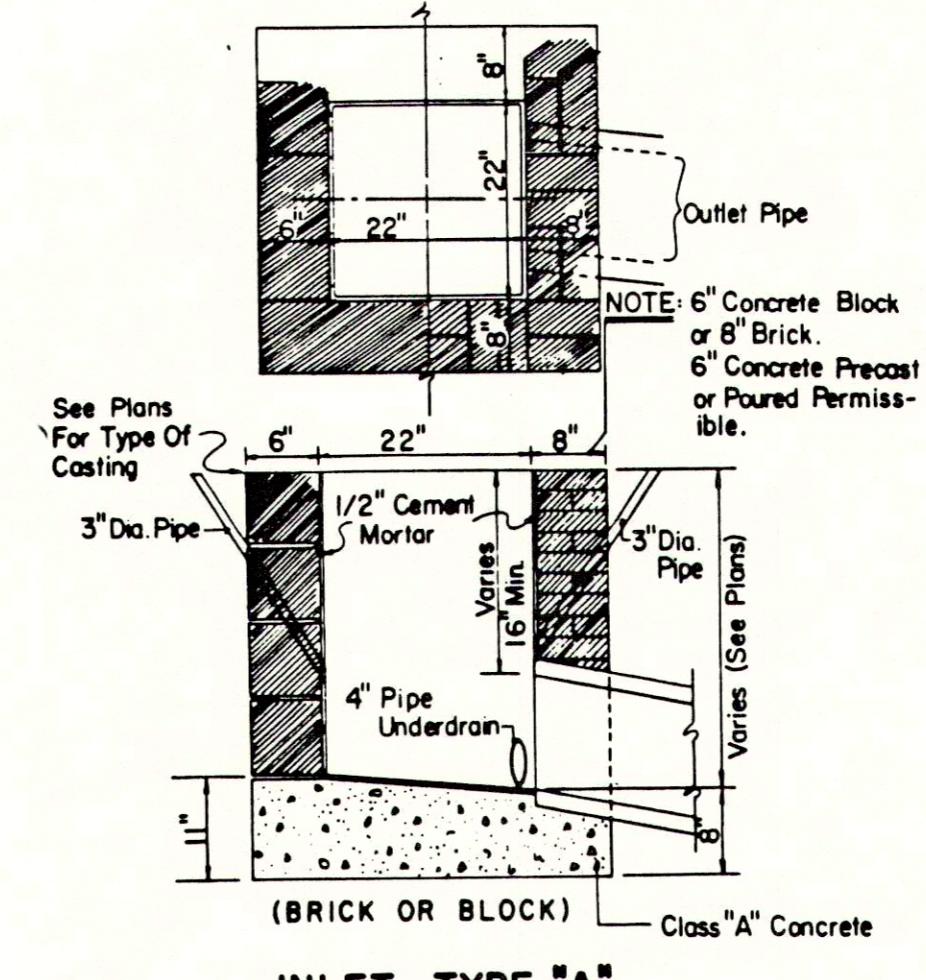
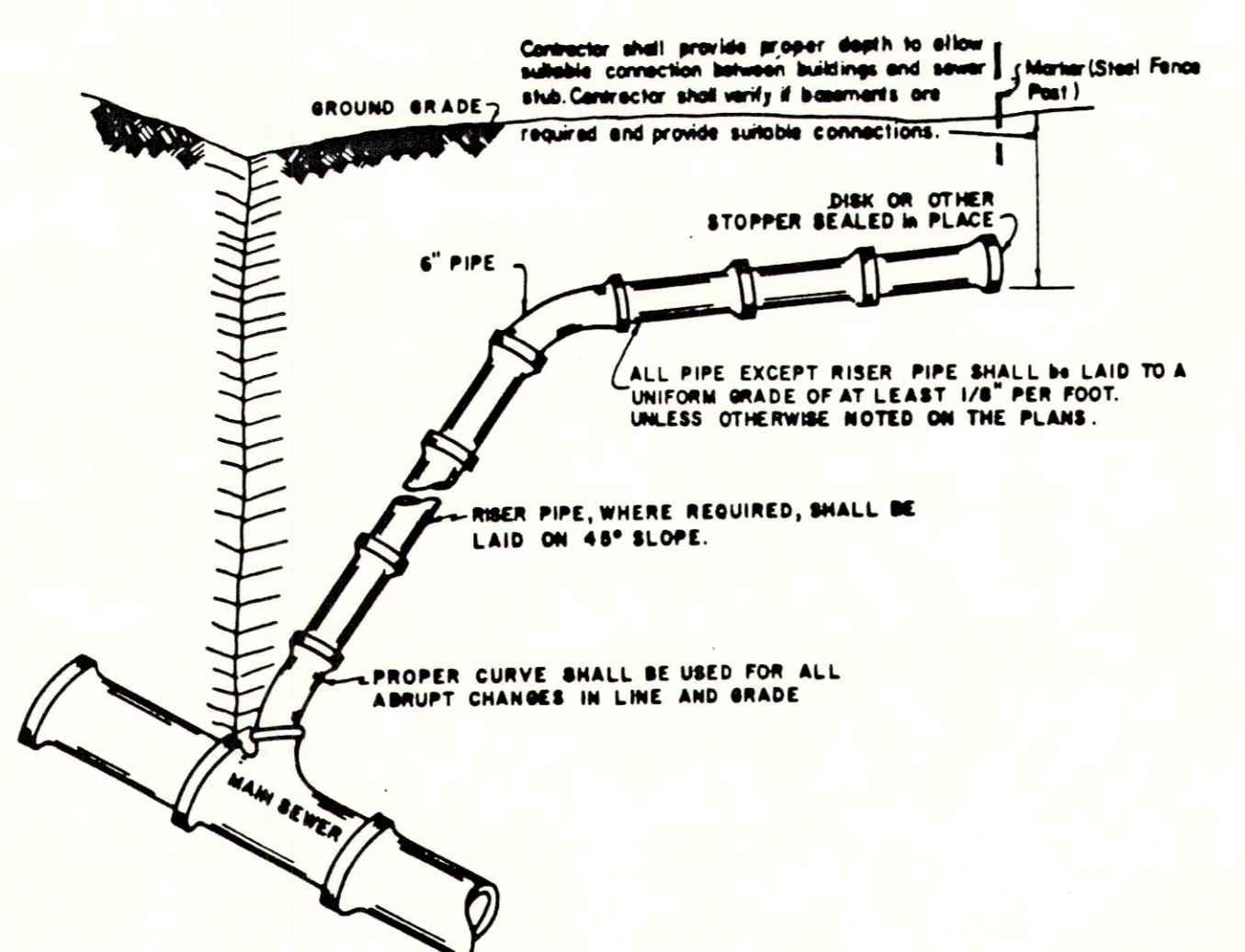
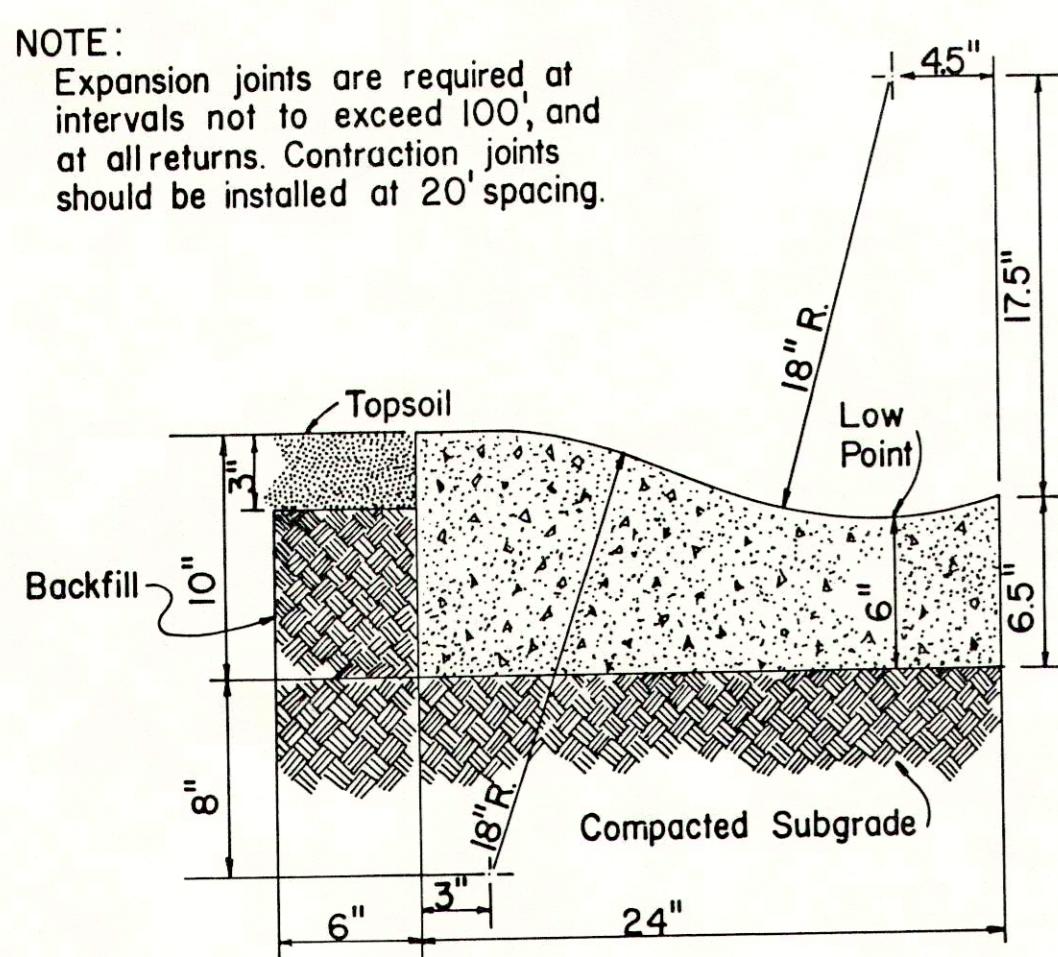
CUL-DE-SAC & INTERSECTION DETAILS



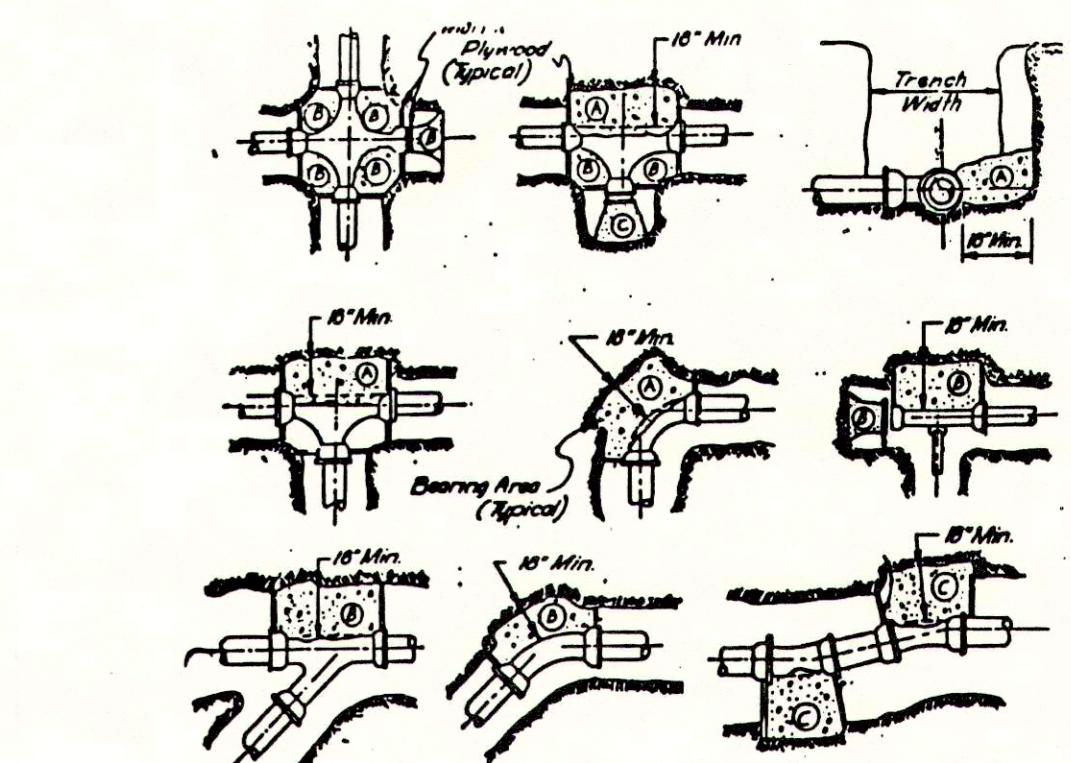
| DIA. (in.) | Dimensions (in.) | Blow Out |
|------------|------------------|----------|
| 12 | 12 1/2 x 12 1/2 | 12 1/2 |
| 14 | 14 1/2 x 14 1/2 | 14 1/2 |
| 16 | 16 1/2 x 16 1/2 | 16 1/2 |
| 18 | 18 1/2 x 18 1/2 | 18 1/2 |
| 20 | 20 1/2 x 20 1/2 | 20 1/2 |
| 22 | 22 1/2 x 22 1/2 | 22 1/2 |
| 24 | 24 1/2 x 24 1/2 | 24 1/2 |
| 26 | 26 1/2 x 26 1/2 | 26 1/2 |
| 28 | 28 1/2 x 28 1/2 | 28 1/2 |
| 30 | 30 1/2 x 30 1/2 | 30 1/2 |
| 32 | 32 1/2 x 32 1/2 | 32 1/2 |
| 34 | 34 1/2 x 34 1/2 | 34 1/2 |
| 36 | 36 1/2 x 36 1/2 | 36 1/2 |
| 38 | 38 1/2 x 38 1/2 | 38 1/2 |
| 40 | 40 1/2 x 40 1/2 | 40 1/2 |
| 42 | 42 1/2 x 42 1/2 | 42 1/2 |
| 44 | 44 1/2 x 44 1/2 | 44 1/2 |
| 46 | 46 1/2 x 46 1/2 | 46 1/2 |
| 48 | 48 1/2 x 48 1/2 | 48 1/2 |
| 50 | 50 1/2 x 50 1/2 | 50 1/2 |



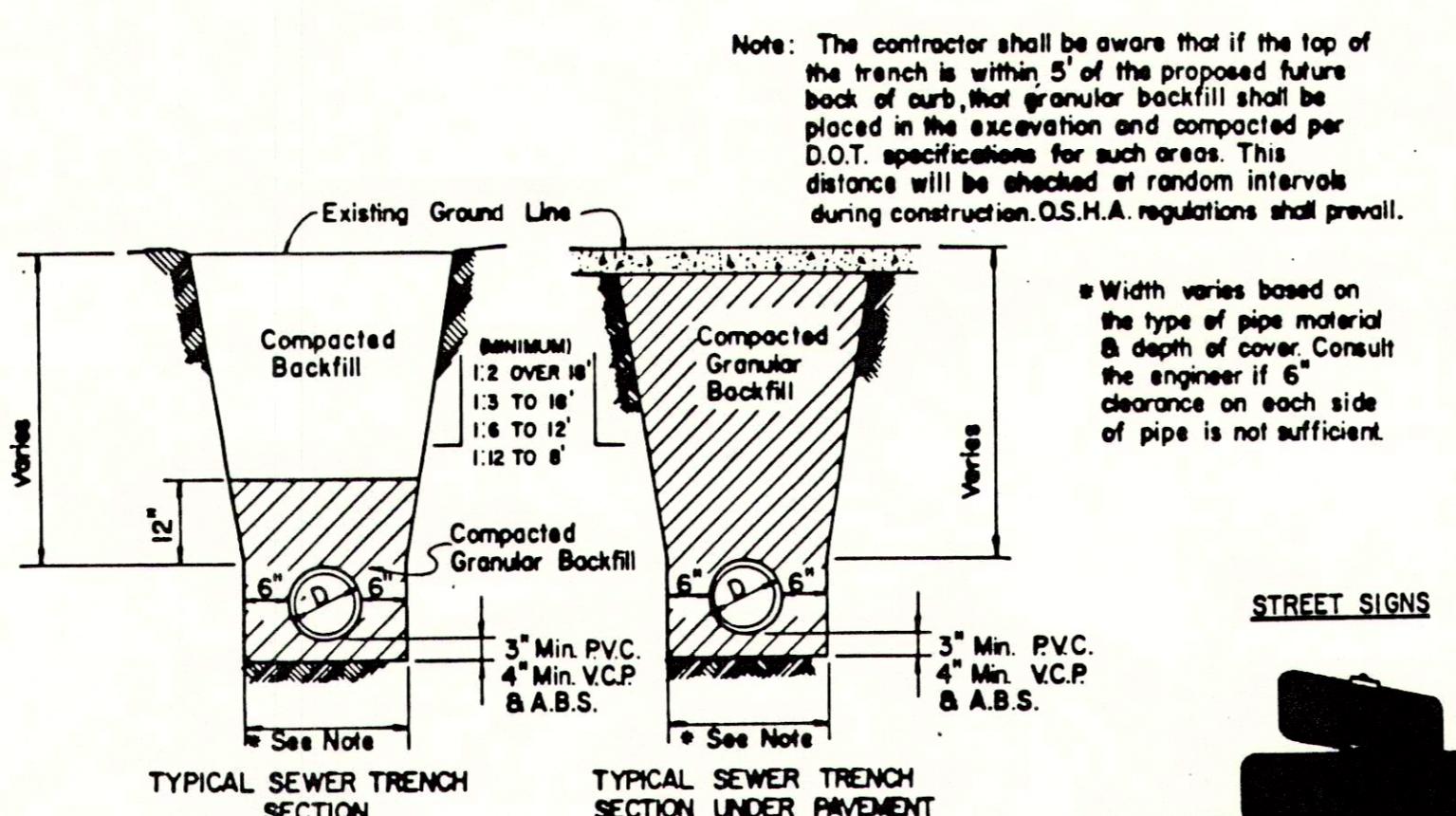
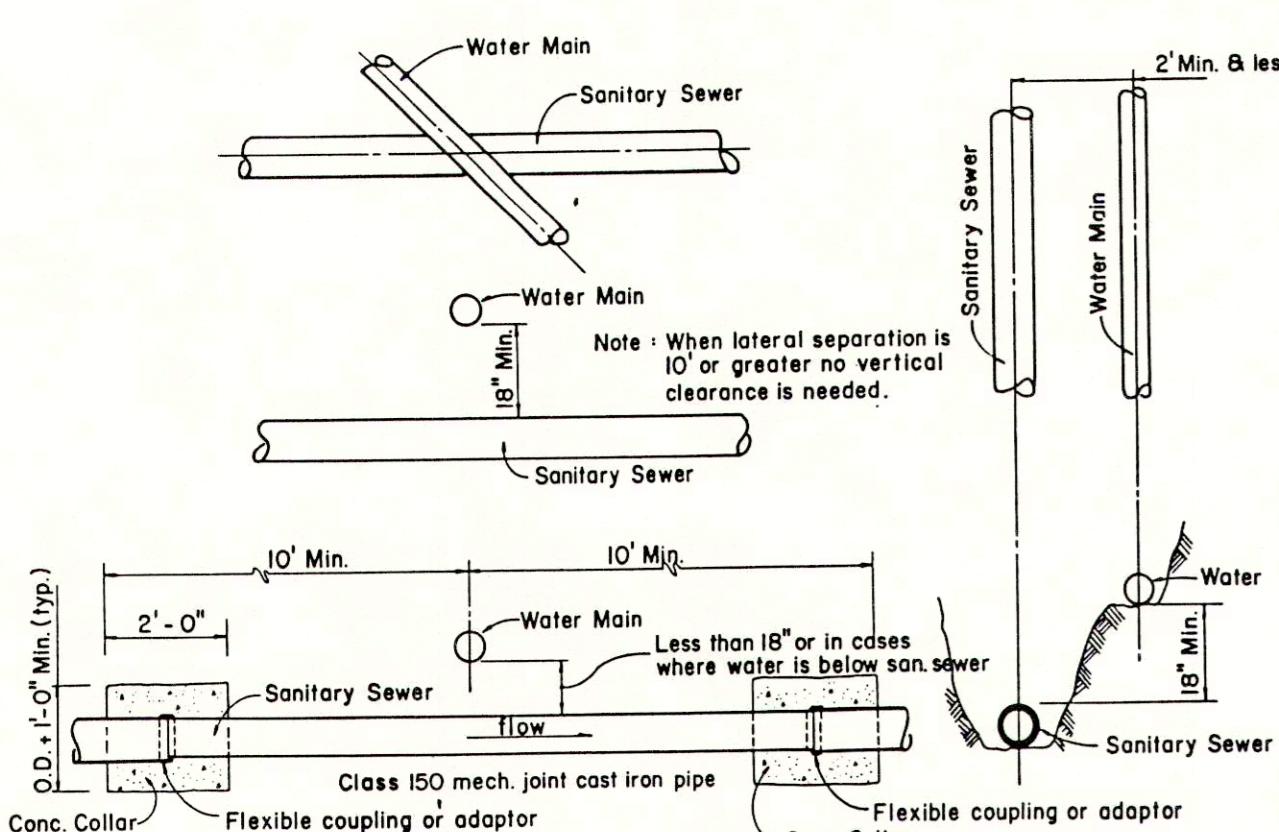
NOTE:
Expansion joints are required at intervals not to exceed 100', and at all returns. Contraction joints should be installed at 20' spacing.



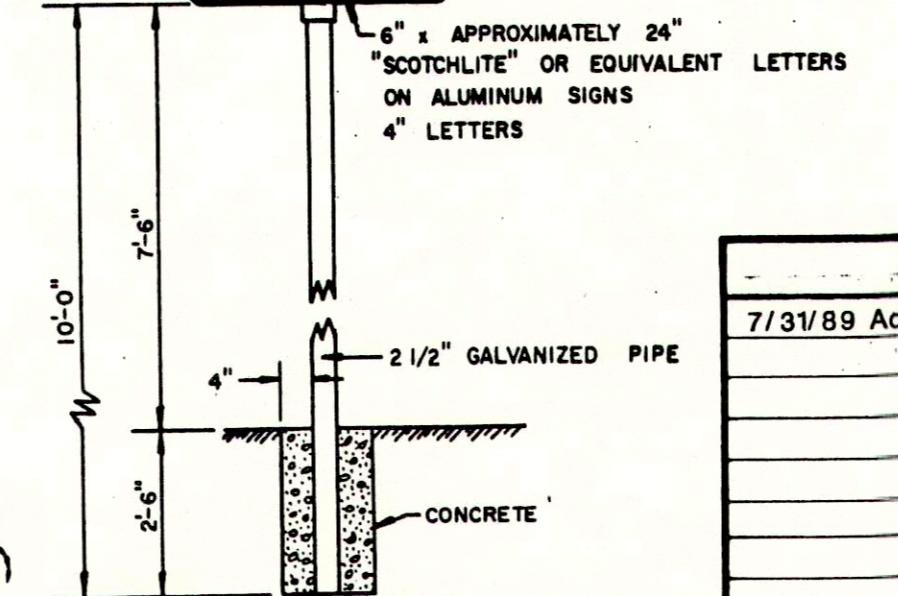
METAL END SECTION



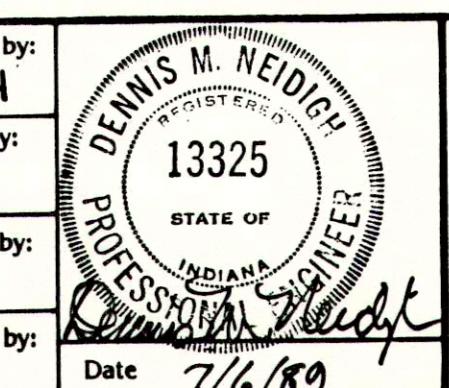
1. Above table indicates cu ft of concrete required with a soil pressure of 2000 PSF.
2. Place paper or plastic between fitting & concrete.



SANITARY SEWER TRENCH DETAILS



| | |
|-----------------------------------|--------|
| Revisions and Dates: | |
| 7/31/89 Added Street Signs Detail | |
| Designed by: | DBH |
| Drawn by: | |
| Checked by: | RF |
| Approved by: | RF |
| Date: | 7/6/89 |



MSE Engineering
MSE Corporation
941 North Meridian Street
Indianapolis, IN 46204-1061
317 634-1000
317 634-3576 FAX

Title:

DETAIL SHEET

Scale: Job No.: 111-0195 Tube No.: 10 Of: 10