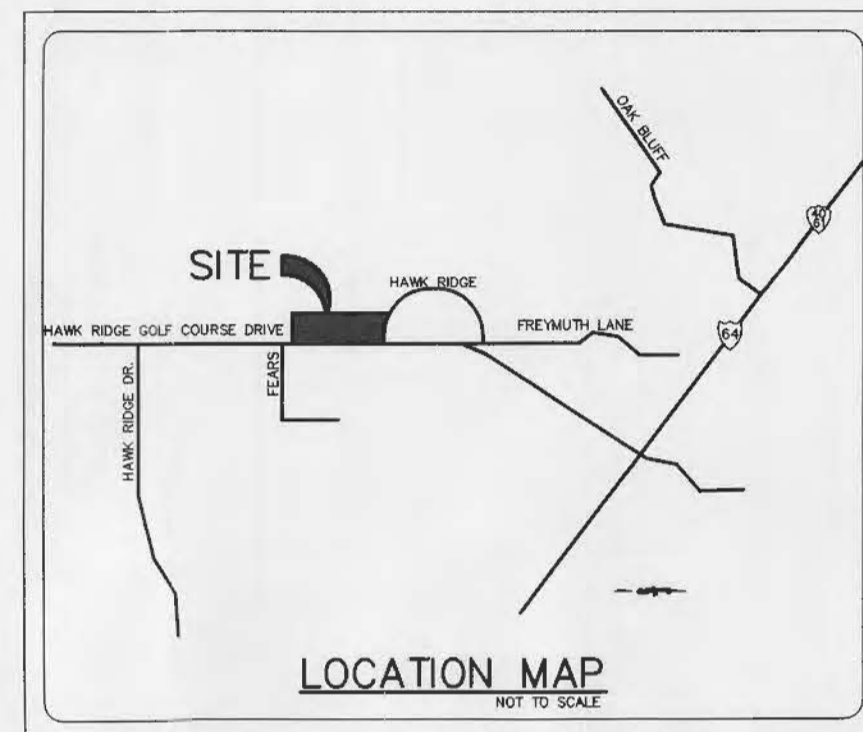


A SET OF CONSTRUCTION PLANS FOR  
**MTM OFFICE BUILDING**  
 A TRACT OF LAND BEING LOT 2 OF  
 "HAWK RIDGE BUSINESS PARK AND GOLF  
 COURSE" WITHIN U.S. SURVEY 825,  
 TOWNSHIP 46 NORTH, RANGE 2 EAST  
 OF THE FIFTH PRINCIPAL MERIDIAN,  
 ST. CHARLES COUNTY, MISSOURI



**GENERAL NOTES**

- 1) UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.
- 2) ALL FILLED PLACES, INCLUDING TRENCH BACK FILLS, UNDER BUILDINGS, PROPOSED STORM AND SANITARY SEWER LINES AND/OR PAVED AREAS, SHALL BE COMPACTED TO 90% MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-99" COMPACTION TEST (A.S.T.M.-D-1557). ALL FILLED PLACES WITHIN PUBLIC ROADWAYS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE "STANDARD PROCTOR TEST AASHTO T-99, METHOD C" (A.S.T.M. D-998).
- 3) ALL TRENCH BACK FILLS UNDER PAVED AREAS SHALL BE GRANULAR BACK FILL AND SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY THE "MODIFIED AASHTO T-99" COMPACTION TEST (A.S.T.M.-D-1557). ALL OTHER TRENCH BACK FILLS MAY BE EARTH MATERIAL (FREE OF LARGE GLOBS OR STONES). ALL TRENCH BACK FILLS SHALL BE WATER SETTED.
- 4) NO AREA SHALL BE CLEARED WITHOUT THE PERMISSION OF THE PROJECT ENGINEER.
- 5) ALL GRADES SHALL BE WITHIN 0.2 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- 6) NO SLOPE SHALL BE STEEPER THAN 3:1. ALL SLOPES SHALL BE SODDED OR SEEDED AND MULCHED.
- 7) ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF LAKE ST. LOUIS STANDARDS.
- 8) ALL MECHANICAL EQUIPMENT TO BE SCREENED FROM PUBLIC VIEW.
- 9) PROPOSED BUILDING WILL COMPLY WITH CURRENT AMERICAN DISABILITY ACT REQUIREMENTS.
- 10) SEE ARCHITECTURAL DRAWING FOR ALL BUILDING DIMENSIONS, SERVICE CONNECTIONS, DETAILS, ETC.
- 11) ALL UTILITIES SHOWN ARE EXISTING UNLESS OTHERWISE NOTED. ALL NEW UTILITIES SHALL BE LOCATED UNDERGROUND.
- 12) ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- 13) ALL CONSTRUCTION METHODS AND PRACTICES SHALL CONFORM WITH CURRENT D.S.H.A. STANDARDS.
- 14) ALL SIGNS ON THE SITE OR ANY STRUCTURE MUST HAVE SIGN PERMITS APPROVED BY THE ST. CHARLES COUNTY PLANNING AND BUILDING DEPARTMENTS. A SIGN ON A STRUCTURE CANNOT EXCEED 60 SQUARE FEET AND MUST FACE ONTO A STREET. A GROUND SIGN CANNOT EXCEED 150 SQUARE FEET. ANY GROUND SIGN MUST BE 10 FEET FROM ANY PROPERTY LINE AND A MINIMUM OF 50 FEET FROM THE PAVEMENT OF ANY INTERSECTION.

**DEVELOPMENT NOTES**

1. Area of Tract: 2.728 Acres
2. Present Zoning: BP-Business Park District
3. Proposed Use: General Office Building
4. Site is served by:
  - Sewer - Public Water Supply District #2
  - Water - Public Water Supply District #2
  - Fire - Lake St. Louis Fire Protection District
  - Electric - Quiver River Electric
  - Telephone - Verizon
  - Gas - St. Charles Gas Company
5. Building Setbacks are as follows:
  - Front Yard: 50 feet
  - Side Yard: 15 feet
6. According to the Flood Insurance Rate Map of the City of Lake St. Louis, Missouri (Community Panel Number 290855-0220-E Dated August 2, 1996), this property lies with Zone X. Zone X is defined as an area outside of the 500 year floodway.
7. Parking Calculations:
  - 1 Space for every 250 sq. ft. of floor area = 41,085/250 = 164.34 ~ 165 Spaces Required
  - 182 Spaces Provided (Including 6 HC Spaces)
  - Building - 13,695 SQ. FT.
  - Green Space - 36,919 SQ. FT.
  - Pavement - 68,218 SQ. FT.
8. Site Coverage:
  - Street Frontage: 1 Space per every 40 linear feet = 685.36/40 = 17.13 ~ 18 Trees Required
  - Interior Parking: 1 Tree per every 7 parking spaces = 182/7 = 26 Interior Trees Required
  - Landscape Buffer: Continuous Visual Screen
  - Landscape Provided: See Landscape Legend
9. Additional erosion control requirements may be imposed on site and/or at the time of construction.
10. Electrical service to building to be located underground.
11. LANDSCAPE REQUIREMENTS

**SHEET INDEX**

- SHEET 1.....COVER SHEET
- SHEET 2.....SITE PLAN
- SHEET 3.....GRADING PLAN
- SHEET 4.....DRAINAGE AREA MAP
- SHEET 5.....PROFILE SHEET
- SHEET 6.....CONSTRUCTION DETAILS

**BENCHMARK**

BASIS OF BEARING FOR THIS SURVEY ADOPTED FROM THE RECORD PLAT OF "HAWK RIDGE BUSINESS PARK AND GOLF COURSE" AS RECORDED IN PLAT BOOK 32 PAGE 381 OF THE ST. CHARLES COUNTY RECORDS.

**GRADING QUANTITIES:**  
 7,195 C.Y. CUT  
 2,274 C.Y. FILL (INCLUDES 15% SHRINKAGE)  
 4,921 C.Y. EXCESS

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

**VEGETATION ESTABLISHMENT**  
 For Urban Development Sites  
**APPENDIX A**

**SEEDING RATES:**

**PERMANENT:**  
 Tall Fescue - 30 lbs./ac.  
 Smooth Brome - 20 lbs./ac.  
 Combined - Fescue @ 15 lbs./ac. AND Brome @ 10 lbs./ac.

**TEMPORARY:**  
 Wheat or Rye - 150 lbs./ac. (3.5 lbs. per sq. ft.)  
 Oats - 120 lbs./ac. (2.75 lbs. per sq. ft.)

**SEEDING PERIODS:**  
 Fescue or Brome - March 1 to June 1  
 August 1 to October 1  
 Wheat or Rye - March 15 to November 1  
 Oats - March 15 to September 15

**MULCH RATES:**  
 100 lbs. per 1000 sq. ft. (4,356 lbs. per ac.)

**FERTILIZER RATES:**  
 Nitrogen 30 lbs./ac.  
 Phosphate 30 lbs./ac.  
 Potassium 30 lbs./ac.  
 Lime 600 lbs./ac. ENM\*

\* ENM = effective neutralizing material as per State evaluation of quarried rock.

**LANDSCAPE LEGEND**

- QTY. (54) ~ INDICATES PROPOSED ORNAMENTAL SHRUBS (spireas, forsythia, barberries, privets, lilacs)
- QTY. (47) ~ INDICATES PROPOSED HARDWOOD TREE (Min. 2 1/2" Caliper) (ashes, oaks, maples, birches, sweet gum)
- QTY. (64) ~ INDICATES PROPOSED CONIFEROUS TREE (Min. 2 1/2" Caliper)
- QTY. (5) ~ INDICATES EXISTING TREES TO BE REMOVED AND REPLACED

\*\* LANDSCAPING AS DEPICTED IS SUBJECT TO FINAL DESIGN BY A QUALIFIED LANDSCAPE DESIGNER



**CALL BEFORE YOU DIG!**  
 1-800-DIG-RITE

PREPARED FOR: **LPG CONTRACTING, INC.**  
 791 CYPRESS KNOLL DRIVE  
 O'FALLON, MISSOURI 63366  
 314-378-7853

DISCLAIMER OF RESPONSIBILITY  
 I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

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**REVISIONS**

DATE	REVISIONS
01-10-03	REVISIONS
03-24-03	CITY COMMENTS

**ENGINEERING PLANNING SURVEYING**

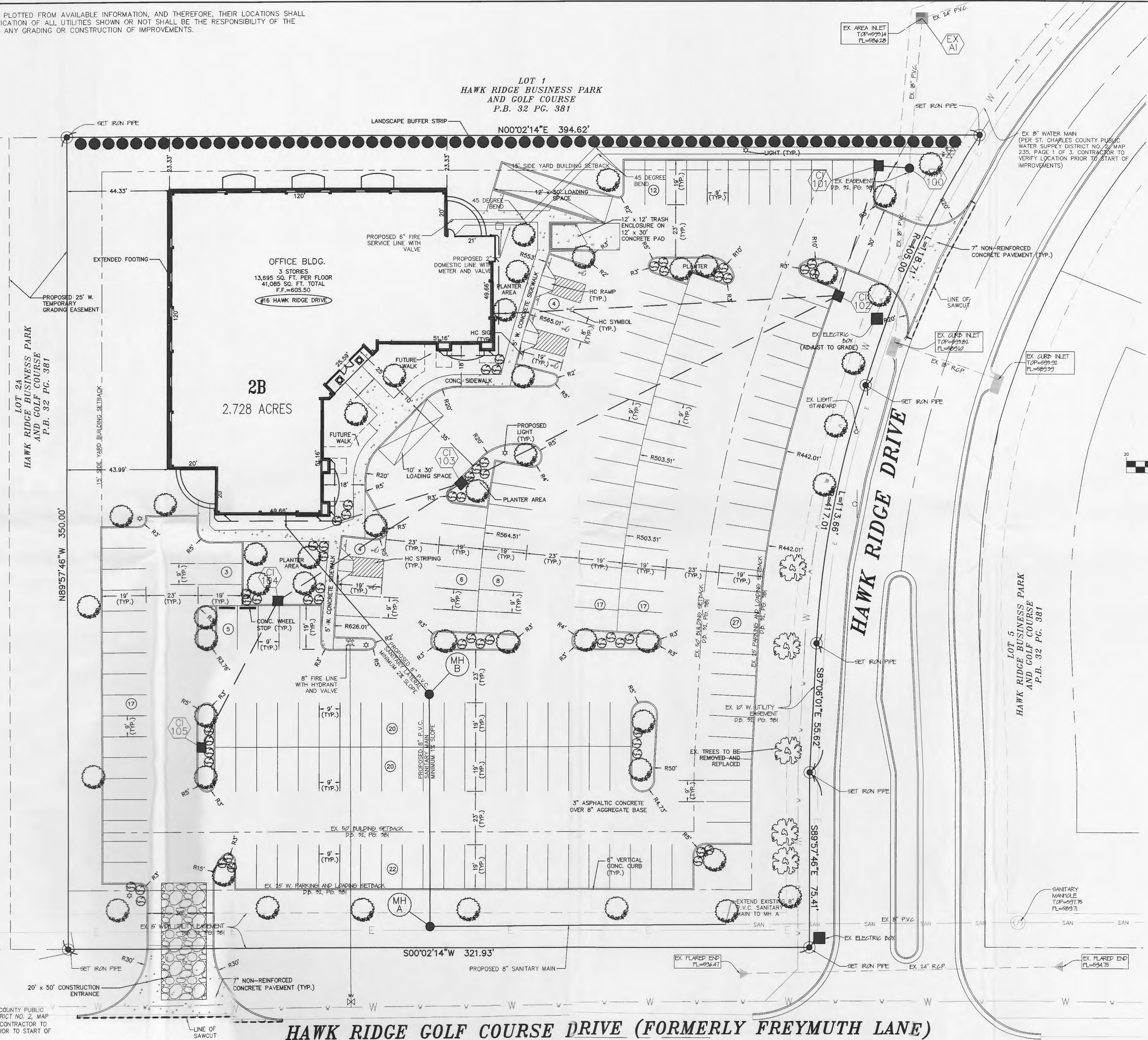
1052 South Cloverleaf Drive  
 St. Peters, MO. 63376-6445  
 636-928-5552  
 FAX 928-1718

11-10-02  
 DATE  
 99-10641A  
 PROJECT NUMBER  
 1 OF 6  
 SHEET OF  
 10641ACON.DWG  
 FILE NAME  
 R.J.H.  
 DRAWN  
 R.J.H. CLH  
 DESIGNED CHECKED



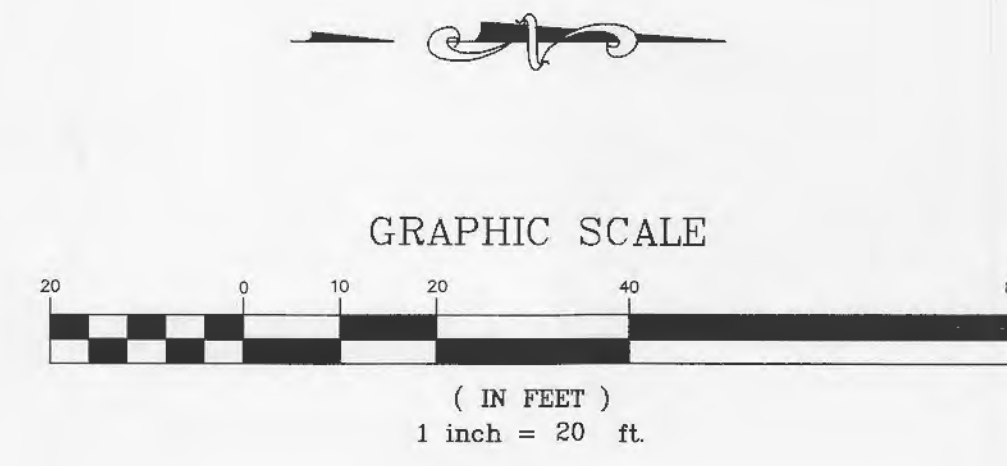
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LOT 1  
**HAWK RIDGE BUSINESS PARK  
 AND GOLF COURSE**  
 P.B. 32 PG. 381



LOT 2A  
**HAWK RIDGE BUSINESS PARK  
 AND GOLF COURSE**  
 P.B. 32 PG. 381

LOT 5  
**HAWK RIDGE BUSINESS PARK  
 AND GOLF COURSE**  
 P.B. 32 PG. 381



EX 8" WATER MAIN  
 (PER ST. CHARLES COUNTY PUBLIC  
 WATER SUPPLY DISTRICT NO. 2, MAP  
 235, PAGE 1 OF 3. CONTRACTOR TO  
 VERIFY LOCATION PRIOR TO START OF  
 IMPROVEMENTS)

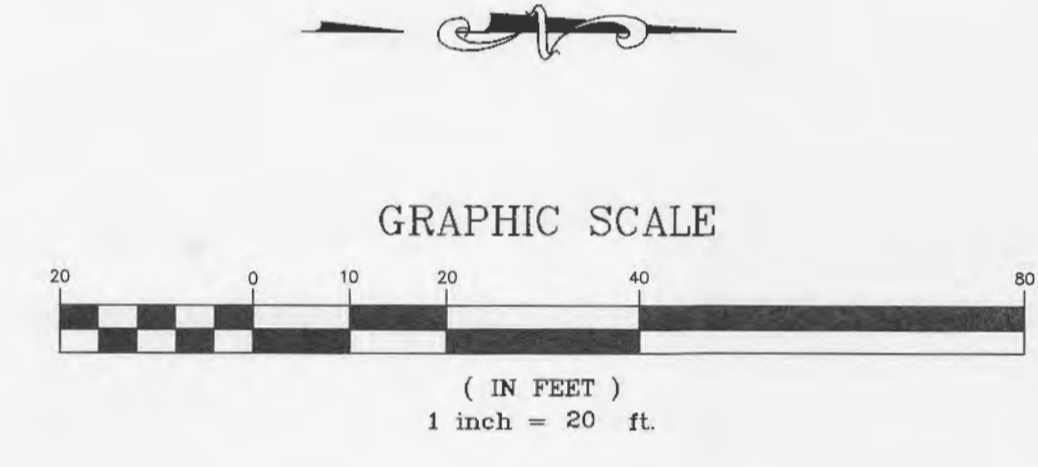
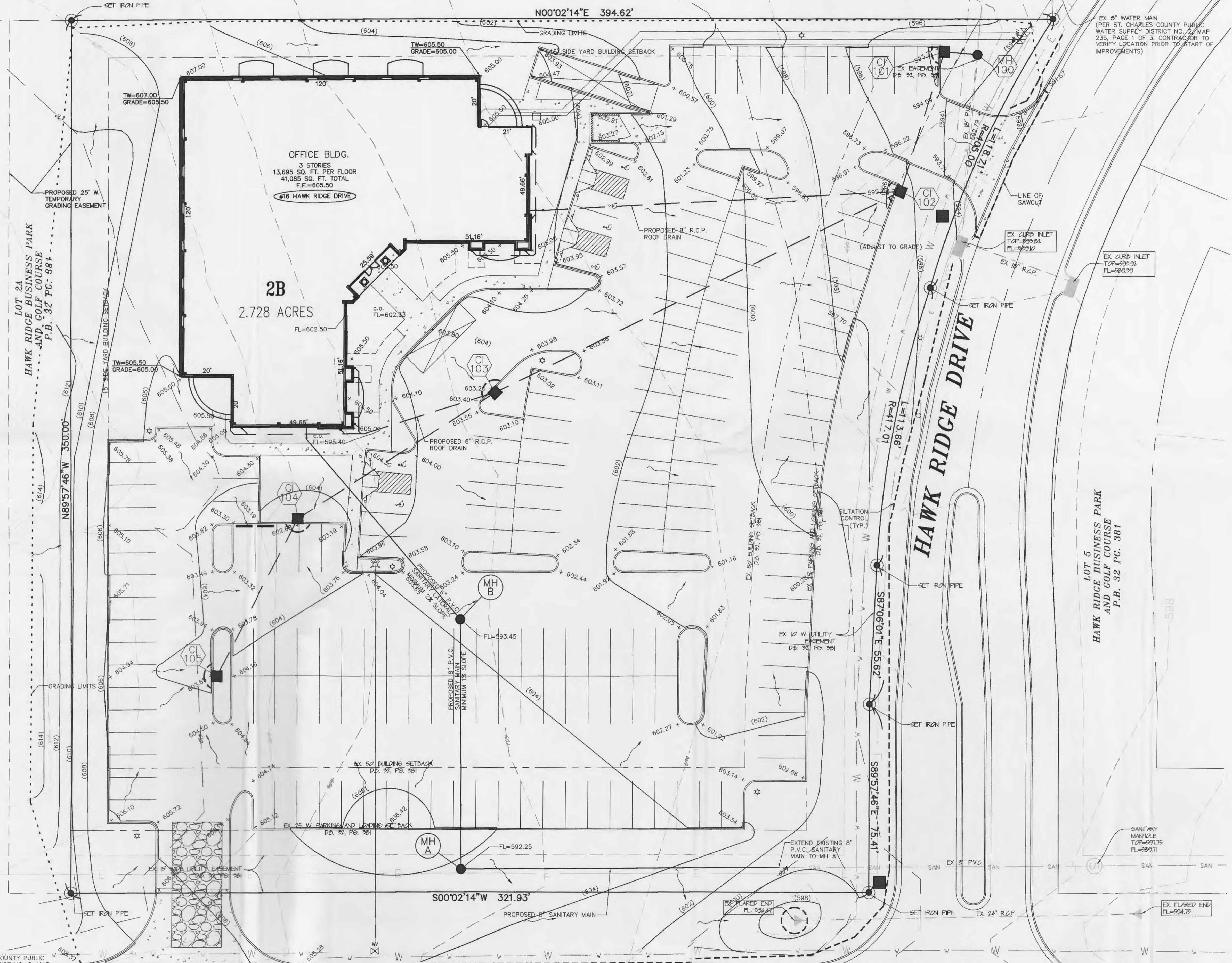
**HAWK RIDGE GOLF COURSE DRIVE (FORMERLY FREYMUTH LANE)**



ALL UNDERGROUND UTILITIES SHOWN HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION, AND THEREFORE, THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF ALL UTILITIES SHOWN OR NOT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF IMPROVEMENTS.

REVISIONS  
01-10-03 REVISIONS  
03-24-03 CITY COMMENTS

**LOT 1  
HAWK RIDGE BUSINESS PARK  
AND GOLF COURSE  
P.B. 32 PG. 381**



**HAWK RIDGE GOLF COURSE DRIVE (FORMERLY FREYMUTH LANE)**

EX 8" W. WATER MAIN  
(PER ST. CHARLES COUNTY PUBLIC  
WATER SUPPLY DISTRICT NO. 2, MAP  
235, PAGE 1 OF 3. CONTRACTOR TO  
VERIFY LOCATIONS PRIOR TO START OF  
IMPROVEMENTS)

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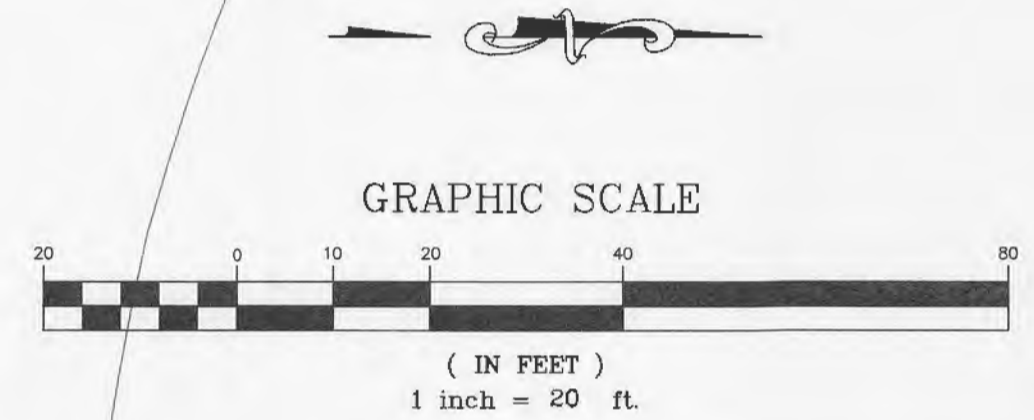


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**LOT 1  
 HAWK RIDGE BUSINESS PARK  
 AND GOLF COURSE  
 P.B. 32 PC. 381**



EX 8" WATER MAIN  
 (PER ST. CHARLES COUNTY PUBLIC  
 WATER SUPPLY DISTRICT NO. 2, MAP  
 235, PAGE 1 OF 3, CONTRACTOR TO  
 VERIFY LOCATION PRIOR TO START OF  
 IMPROVEMENTS)



FROM OFF-SITE  
 0.27 ACRES @  
 1.70 CFS/ACRE  
 Q=0.45 CFS

FROM OFF-SITE  
 0.13 ACRES @  
 1.70 CFS/ACRE  
 Q=0.22 CFS

0.13 ACRES @  
 1.70 CFS/ACRE  
 Q=0.22 CFS

0.14 ACRES @  
 1.70 CFS/ACRE  
 Q=0.24 CFS

0.46 ACRES @  
 3.54 CFS/ACRE  
 Q=1.62 CFS

0.44 ACRES @  
 3.54 CFS/ACRE  
 Q=1.56 CFS

0.24 ACRES @  
 3.54 CFS/ACRE  
 Q=0.84 CFS

0.98 ACRES @  
 3.54 CFS/ACRE  
 Q=3.46 CFS

TO OFF-SITE  
 0.42 ACRES @  
 1.70 CFS/ACRE  
 Q=0.71 CFS

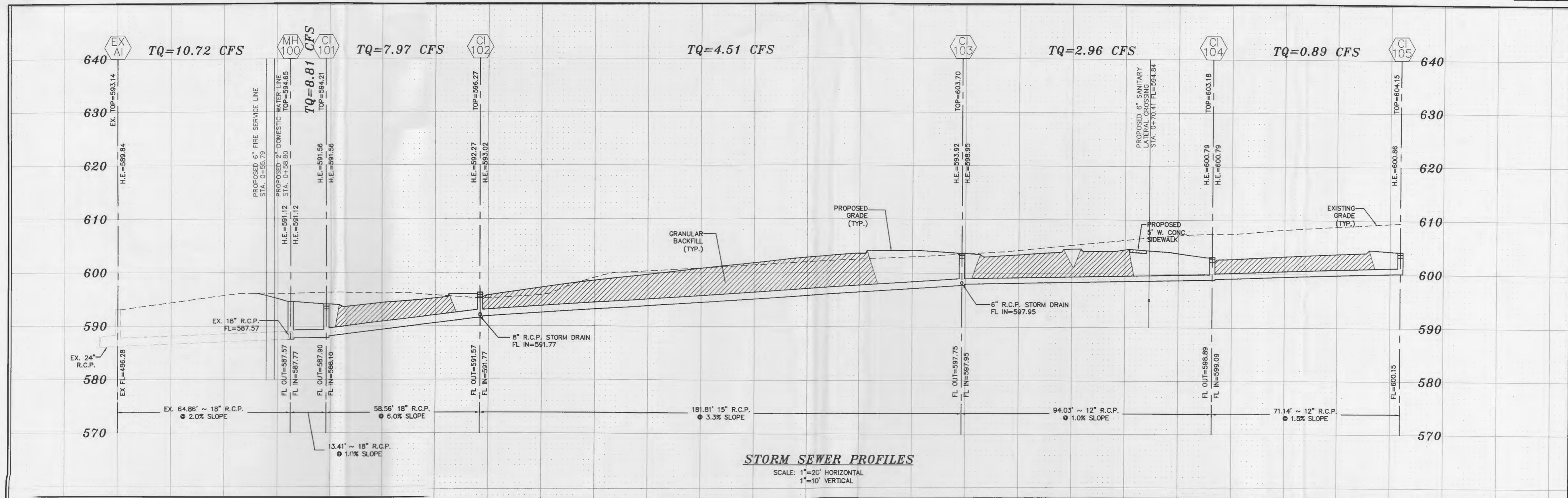
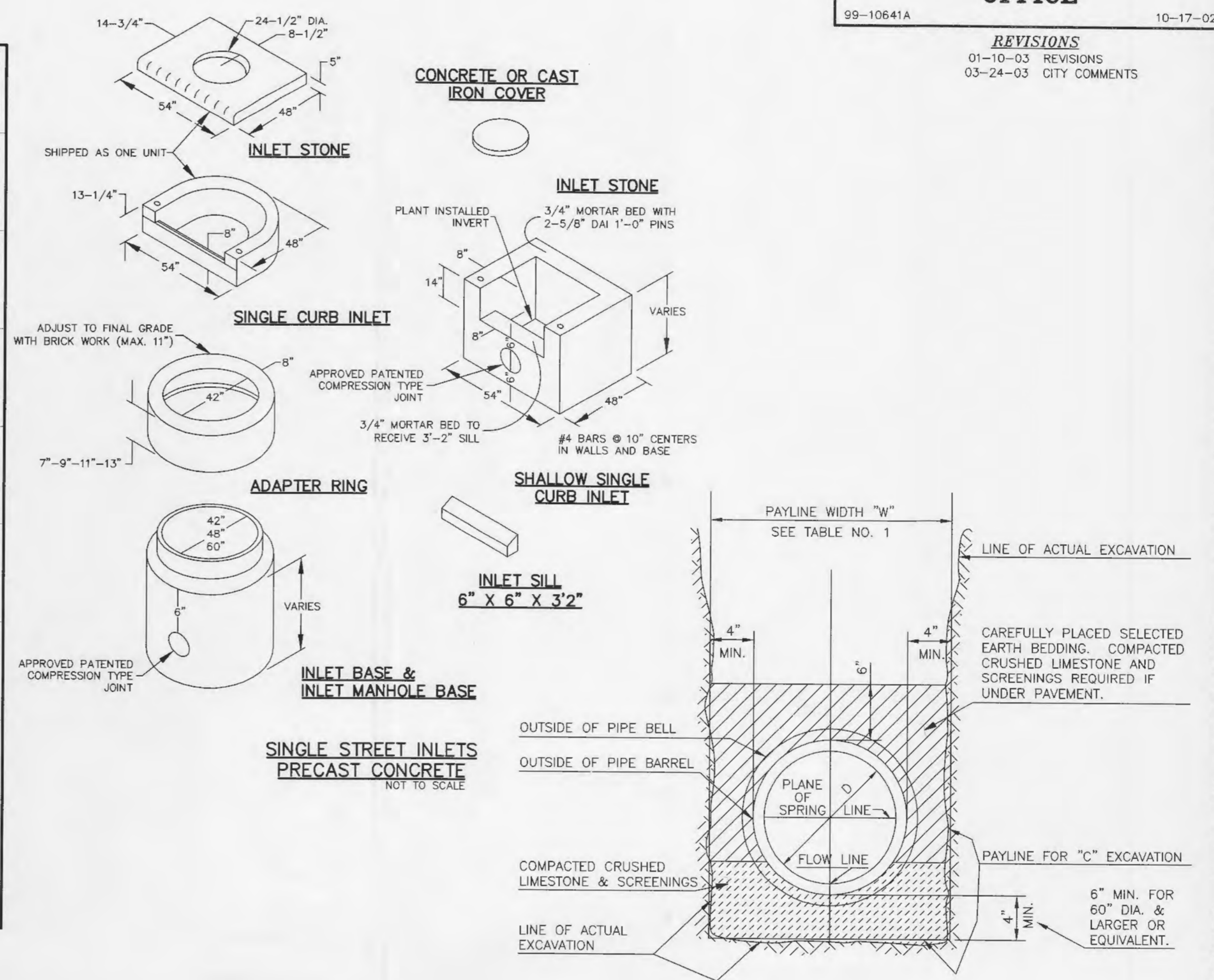
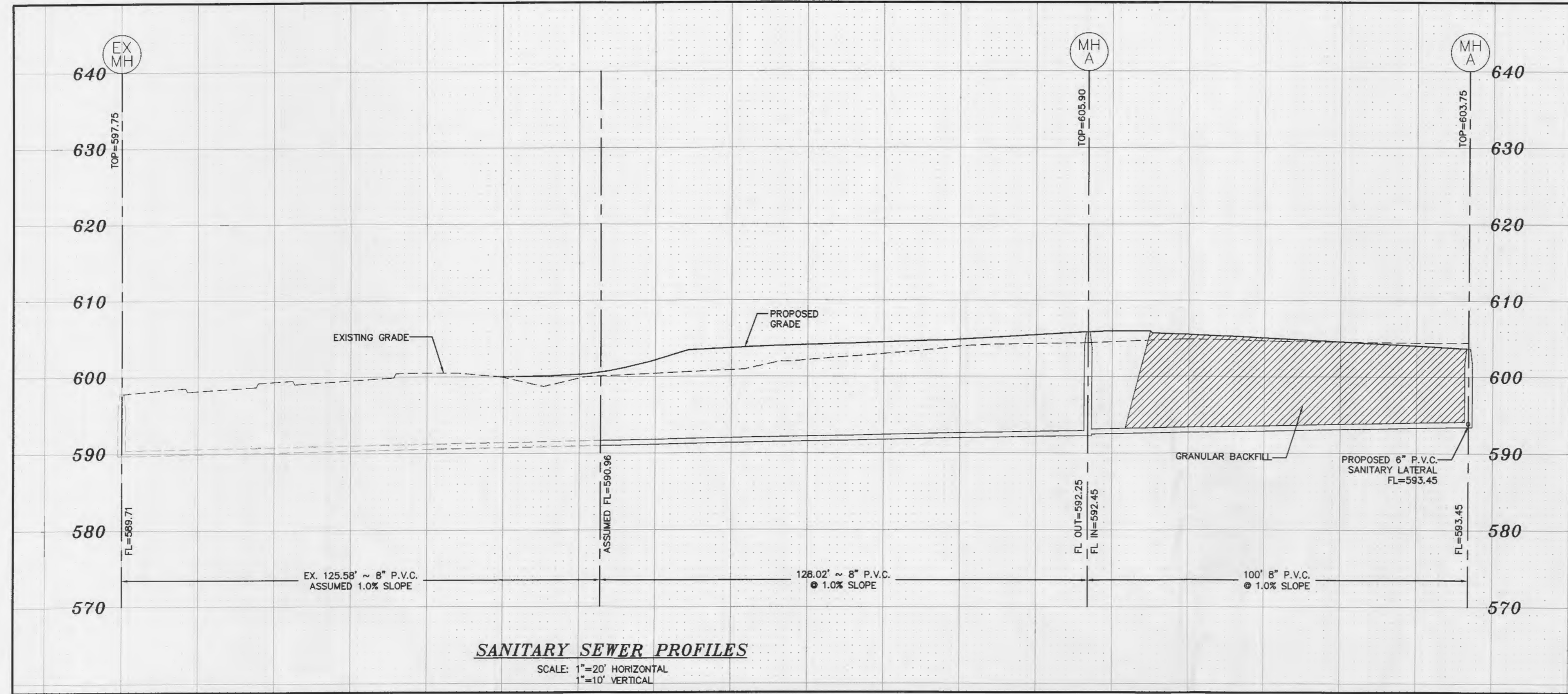
**HAWK RIDGE GOLF COURSE DRIVE (FORMERLY FREYMUTH LANE)**

**THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY  
 AND IS NOT TO BE USED FOR CONSTRUCTION.**

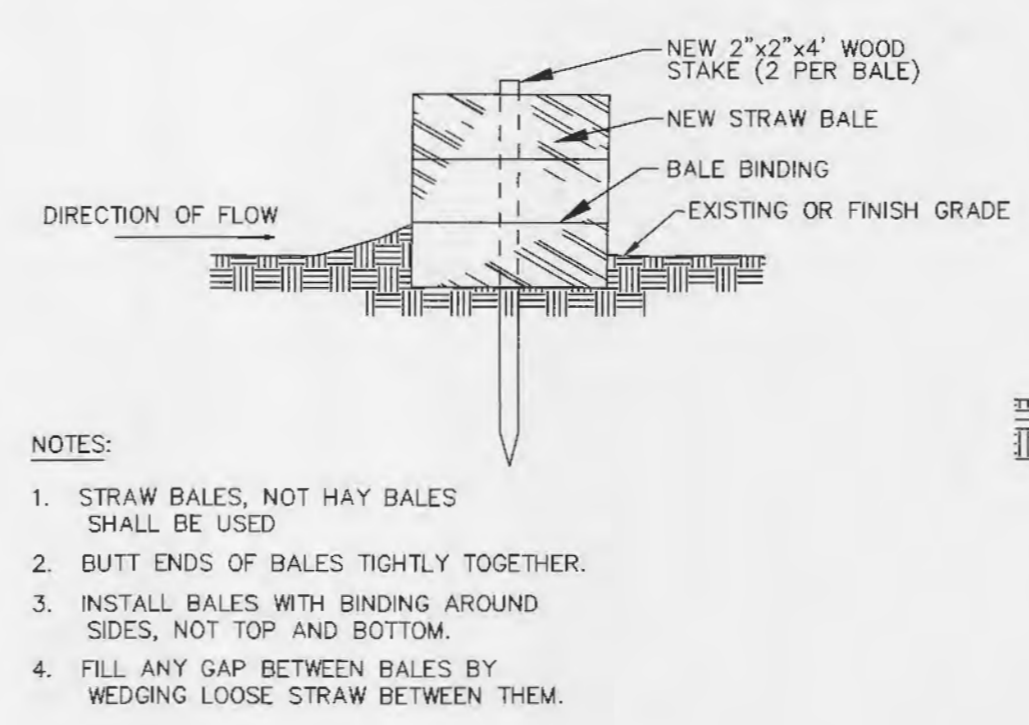
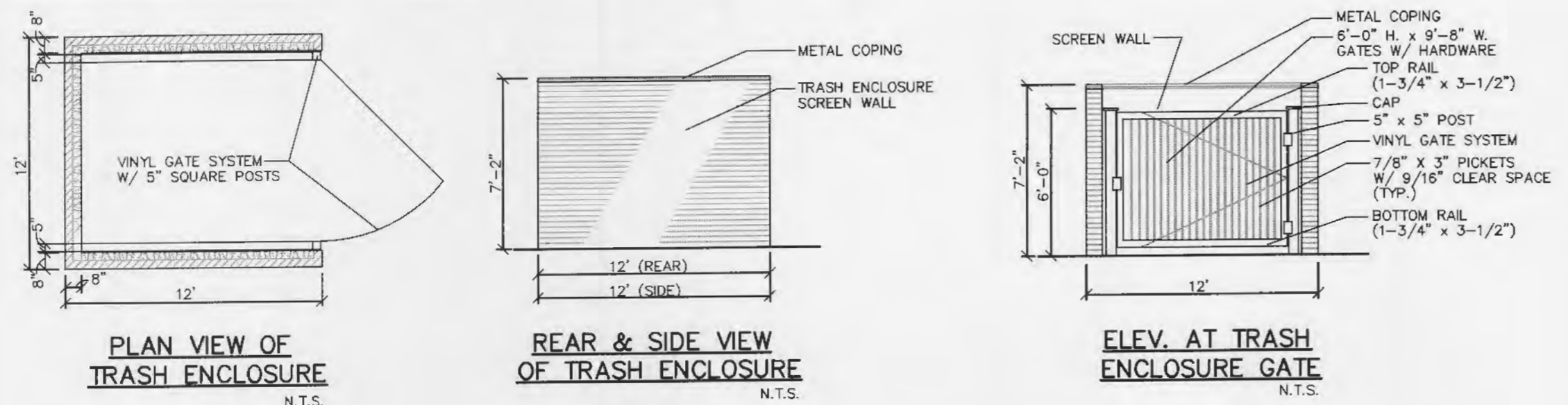
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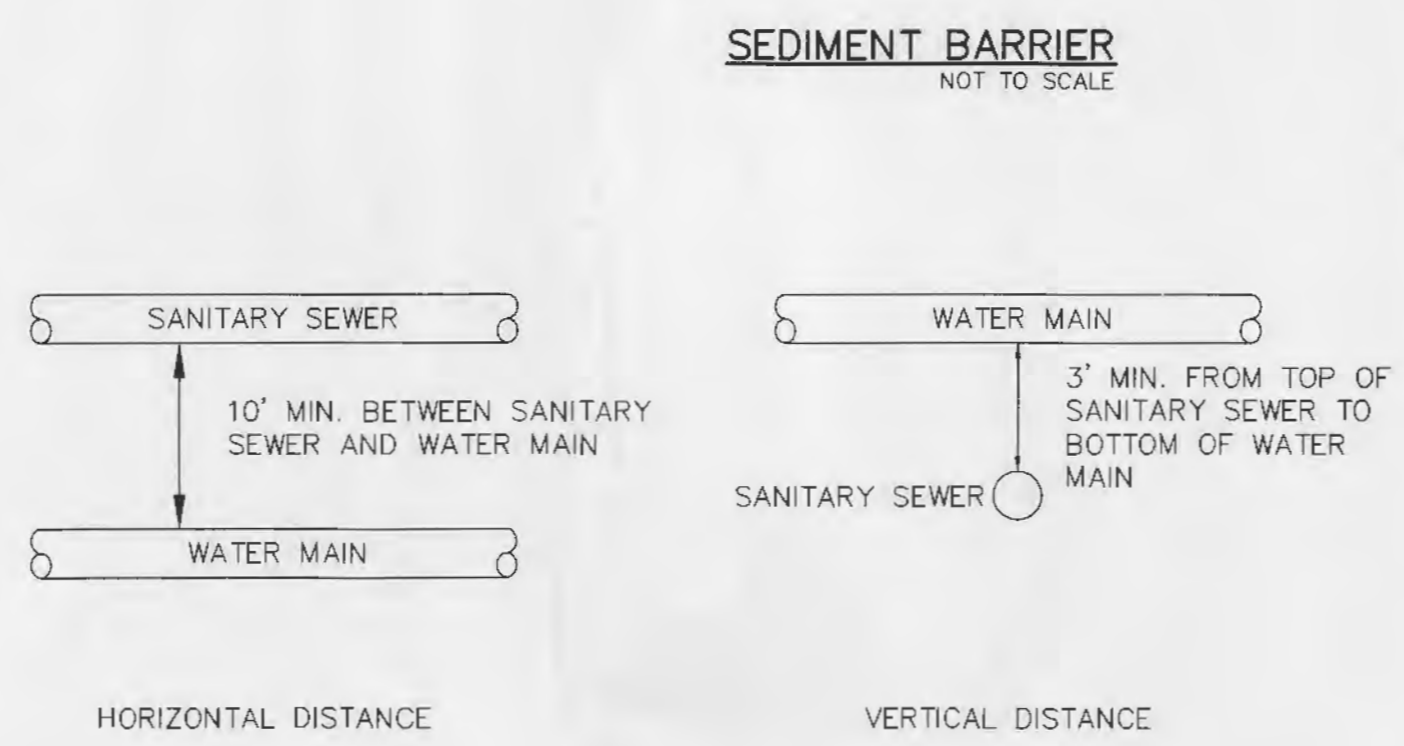
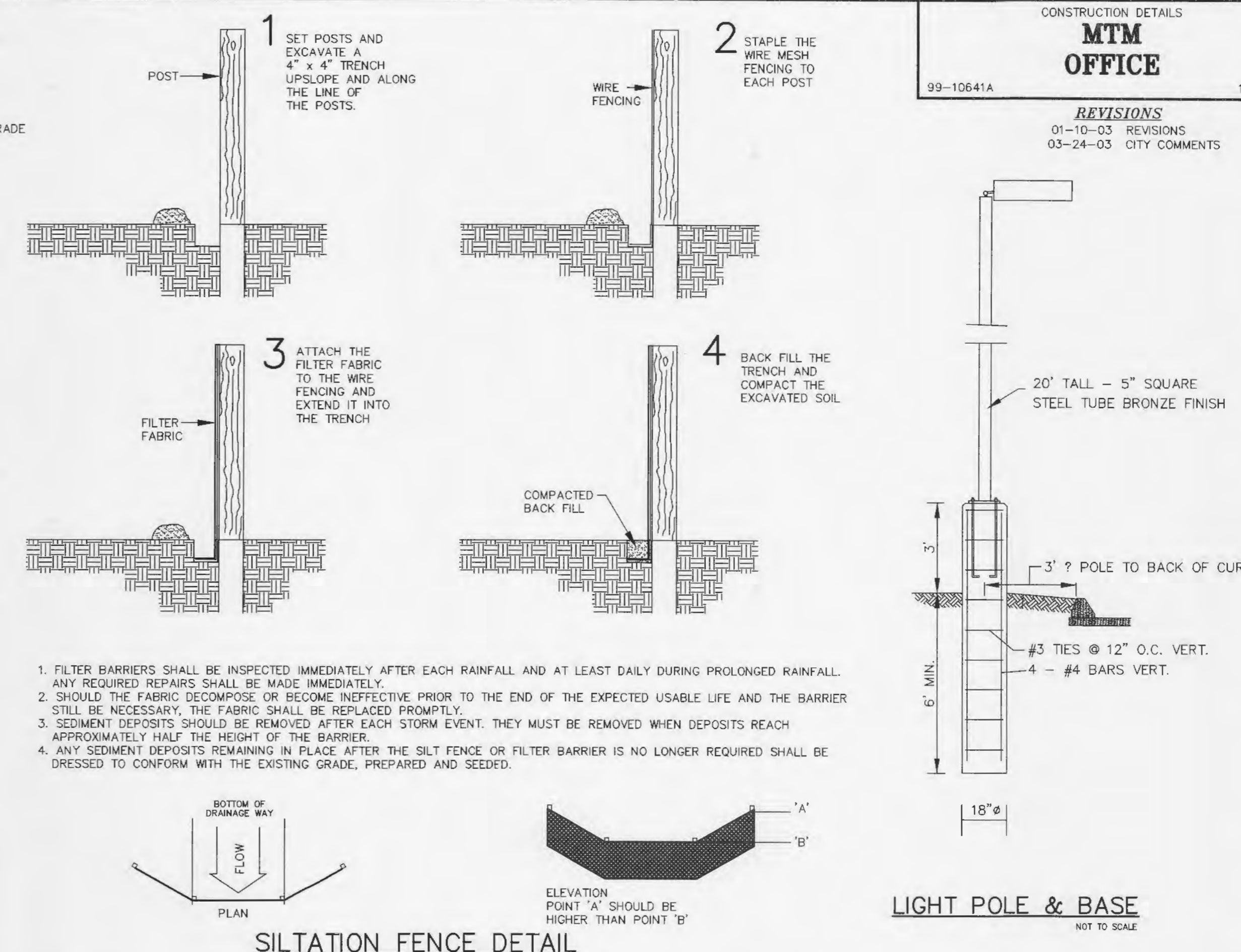
**REVISIONS**  
 01-10-03 REVISIONS  
 03-24-03 CITY COMMENTS







- NOTES:
1. STRAW BALES, NOT HAY BALES SHALL BE USED.
  2. BUTT ENDS OF BALES TIGHTLY TOGETHER.
  3. INSTALL BALES WITH BINDING AROUND SIDES, NOT TOP AND BOTTOM.
  4. FILL ANY GAP BETWEEN BALES BY WEDGING LOOSE STRAW BETWEEN THEM.

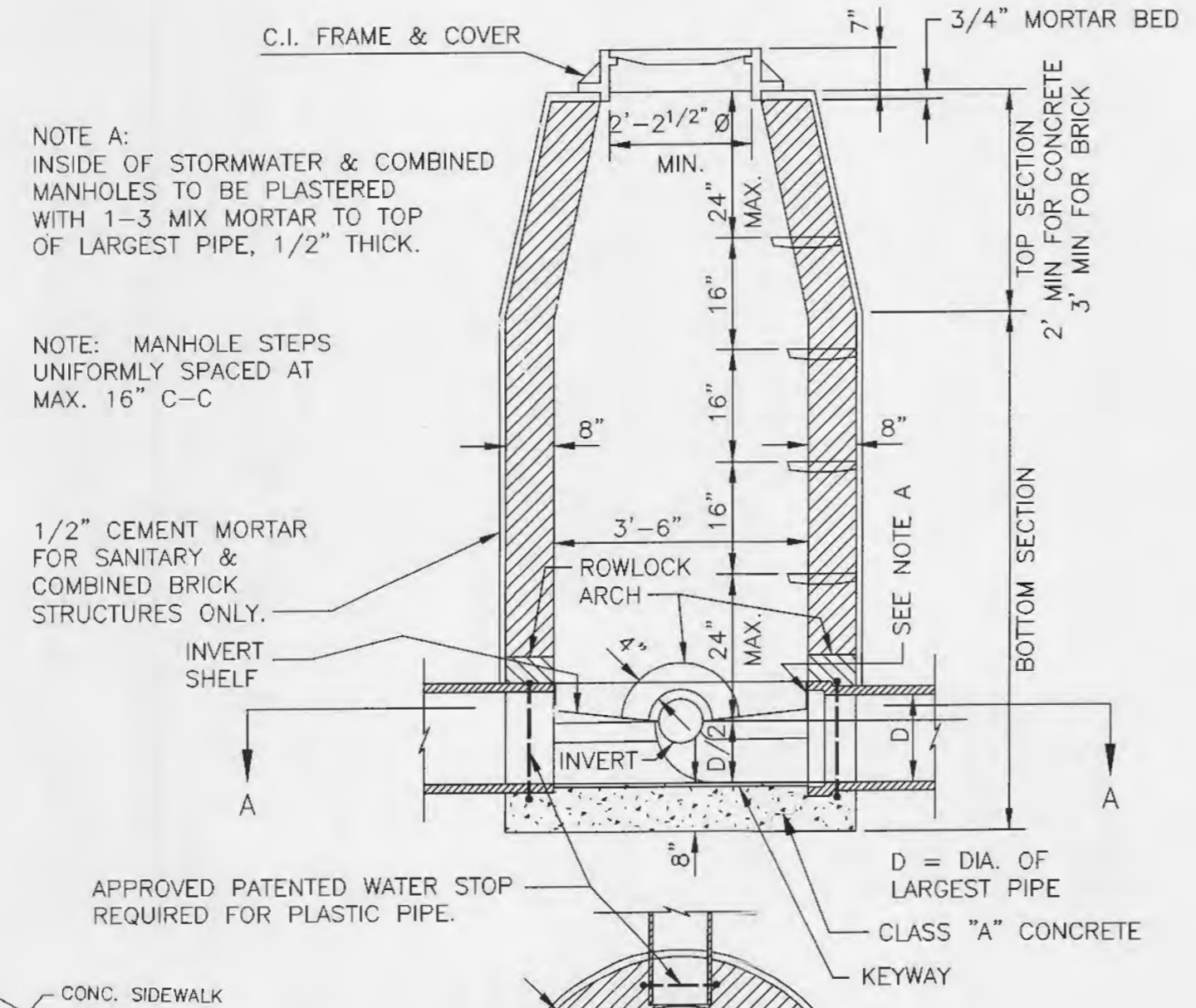


TYPICAL WATER AND SEWER SEPARATION  
NOT TO SCALE



STANDARD SIGN FACE, STANDARD HIGHWAY DEPARTMENT, OR CITY STREET DEPARTMENT GAUGE, BLACK OR BLUE LETTERING, GALVANIZED STEEL POST 9'-8\"/>

HANDICAP PARKING SIGN  
NOT TO SCALE



NOTE A: INSIDE OF STORMWATER & COMBINED MANHOLES TO BE PLASTERED WITH 1-3 MIX MORTAR TO TOP OF LARGEST PIPE, 1/2\"/>

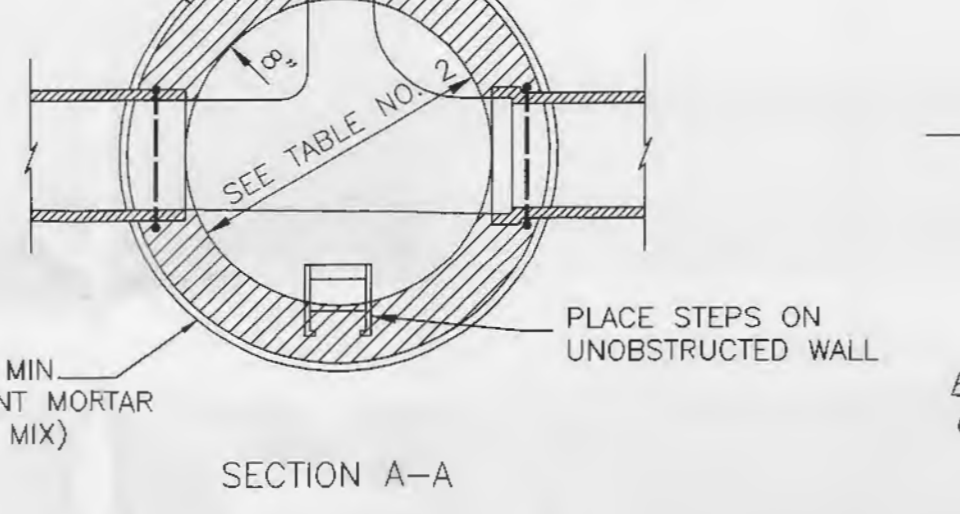
NOTE: MANHOLE STEPS UNIFORMLY SPACED AT MAX. 16\"/>

1/2\"/>

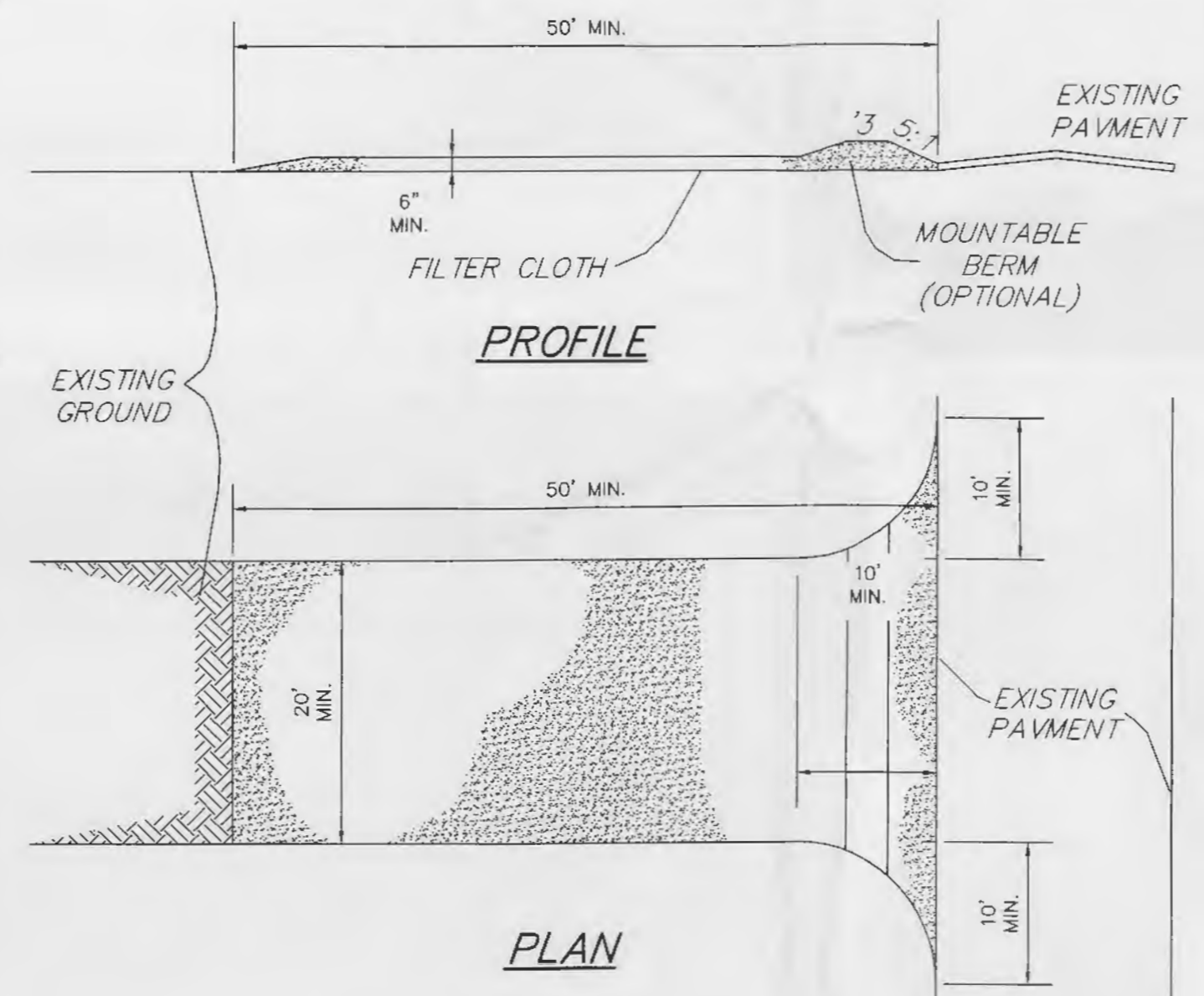
APPROVED PATENTED WATER STOP REQUIRED FOR PLASTIC PIPE.

D = DIA. OF LARGEST PIPE  
CLASS "A" CONCRETE

KEYWAY



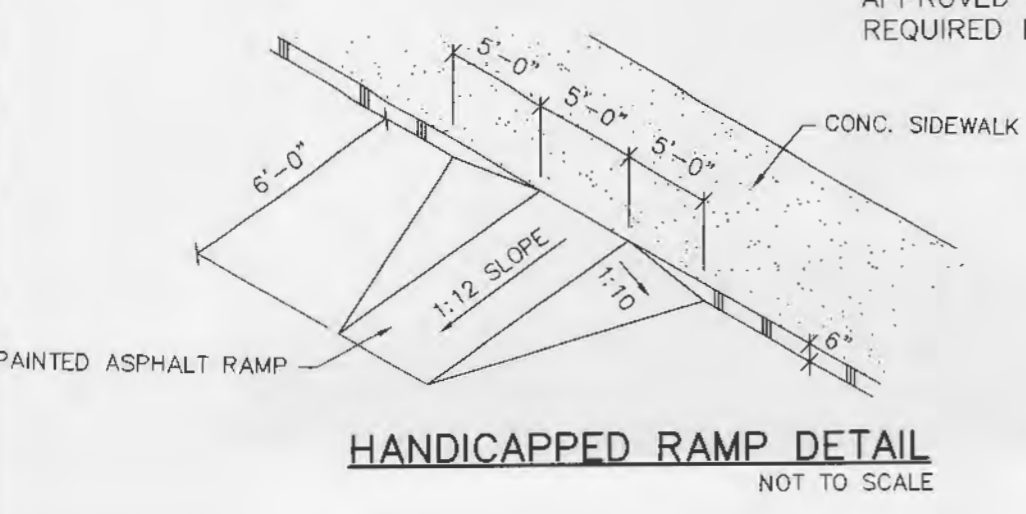
LINE MANHOLE  
PIPE SEWERS 8"-24" DIA.



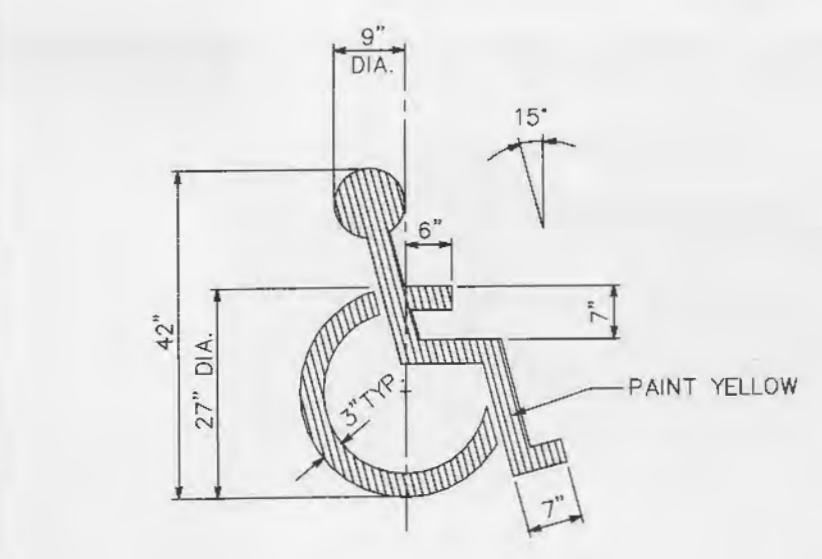
CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Twenty (20) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

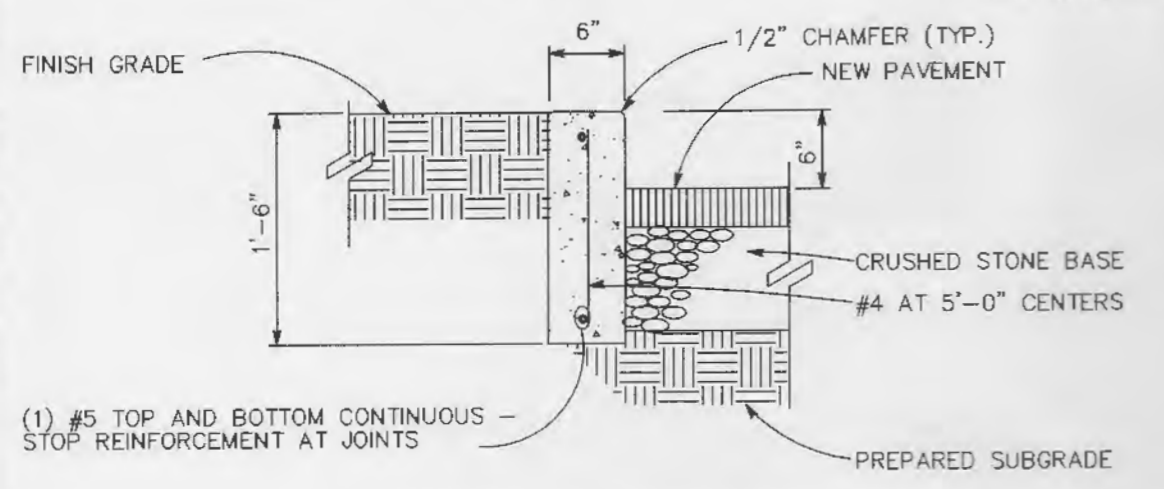
STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA  
NOT TO SCALE



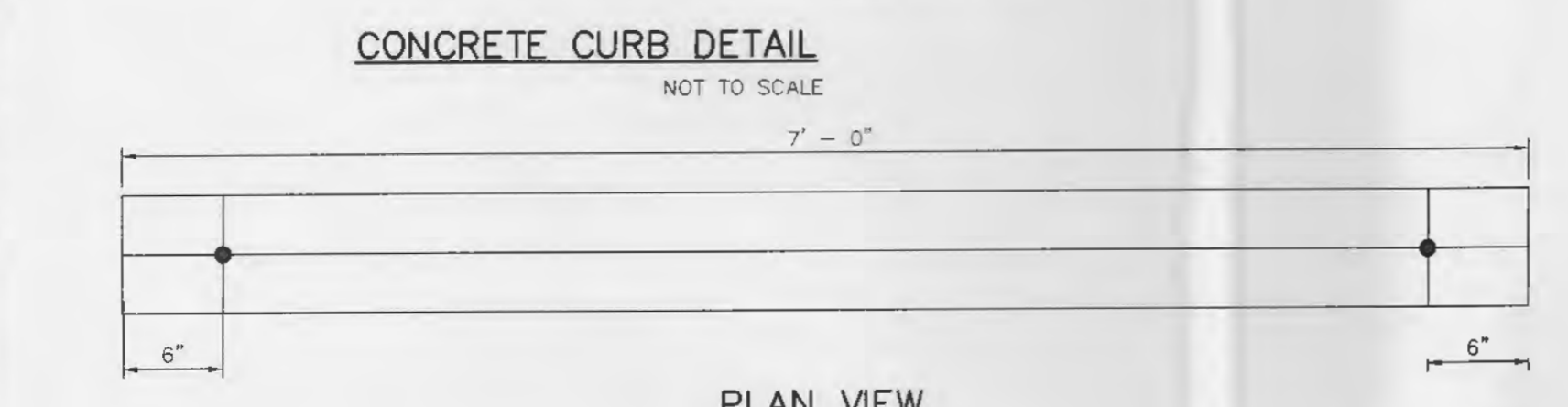
HANDICAPPED RAMP DETAIL  
NOT TO SCALE



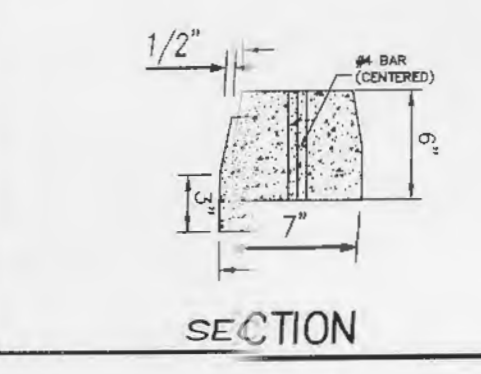
PAINTED HANDICAPPED PARKING SYMBOL  
NOT TO SCALE



ASPHALT PAVEMENT DETAIL  
NOT TO SCALE

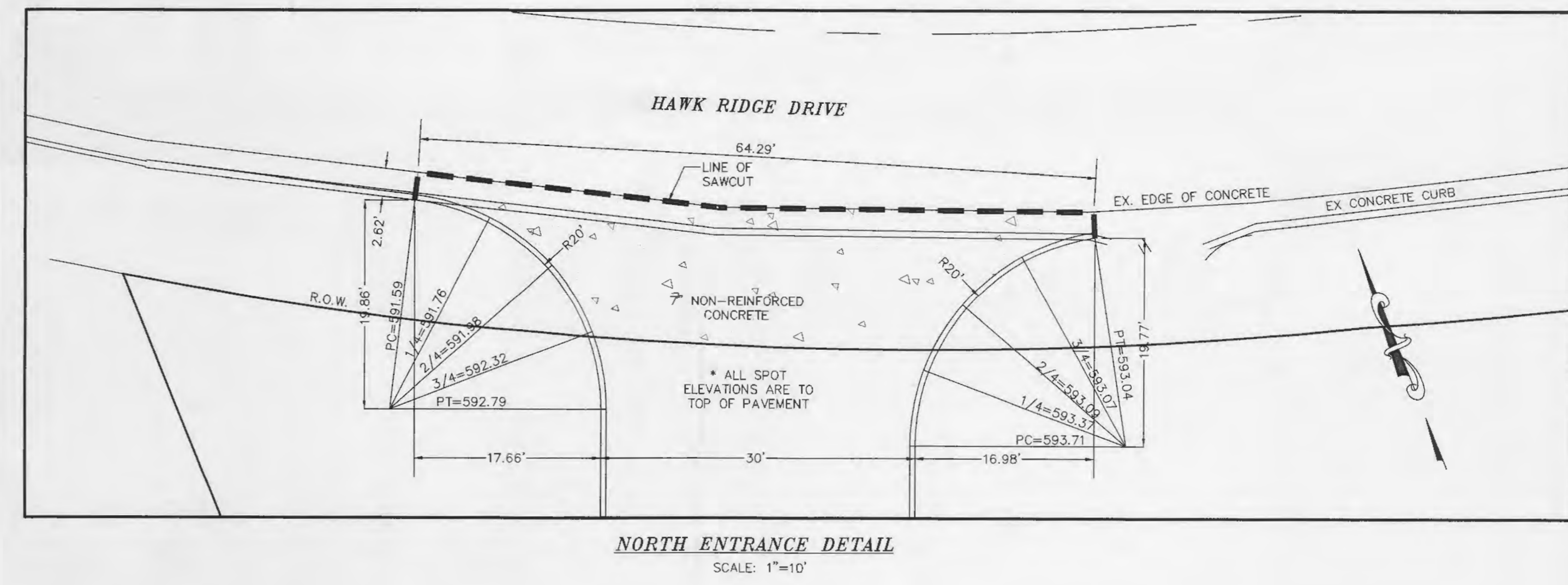


CONCRETE CURB DETAIL  
NOT TO SCALE

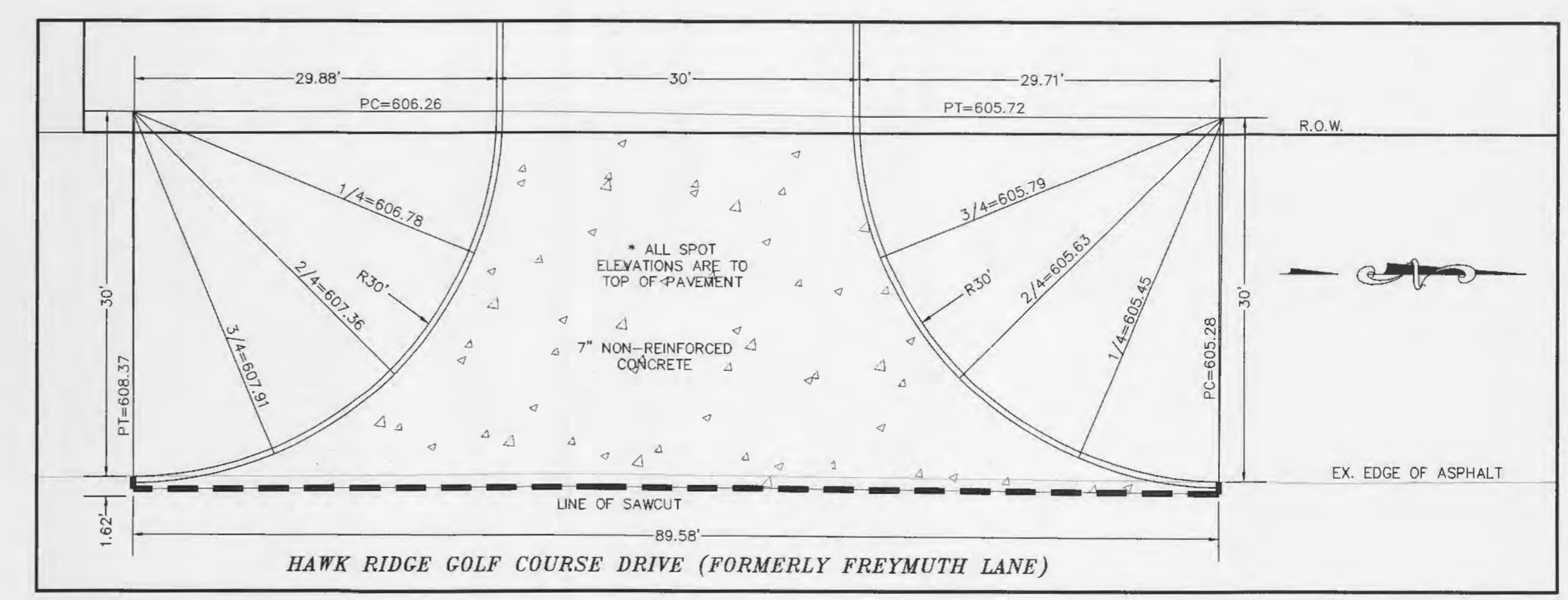


PLAN VIEW

NOTES: To anchor wheel stop, use 2 - #4 bars 24\"/>



NORTH ENTRANCE DETAIL  
SCALE: 1"=10'



EAST ENTRANCE DETAIL  
SCALE: 1"=10'