

# THE HEIGHTS

A TRACT OF LAND BEING PART OF U.S. SURVEY 1790 AND FRACTIONAL SECTION 15,  
TOWNSHIP 47 NORTH, RANGE 3 EAST, ST. CHARLES COUNTY, MISSOURI

## INDEX

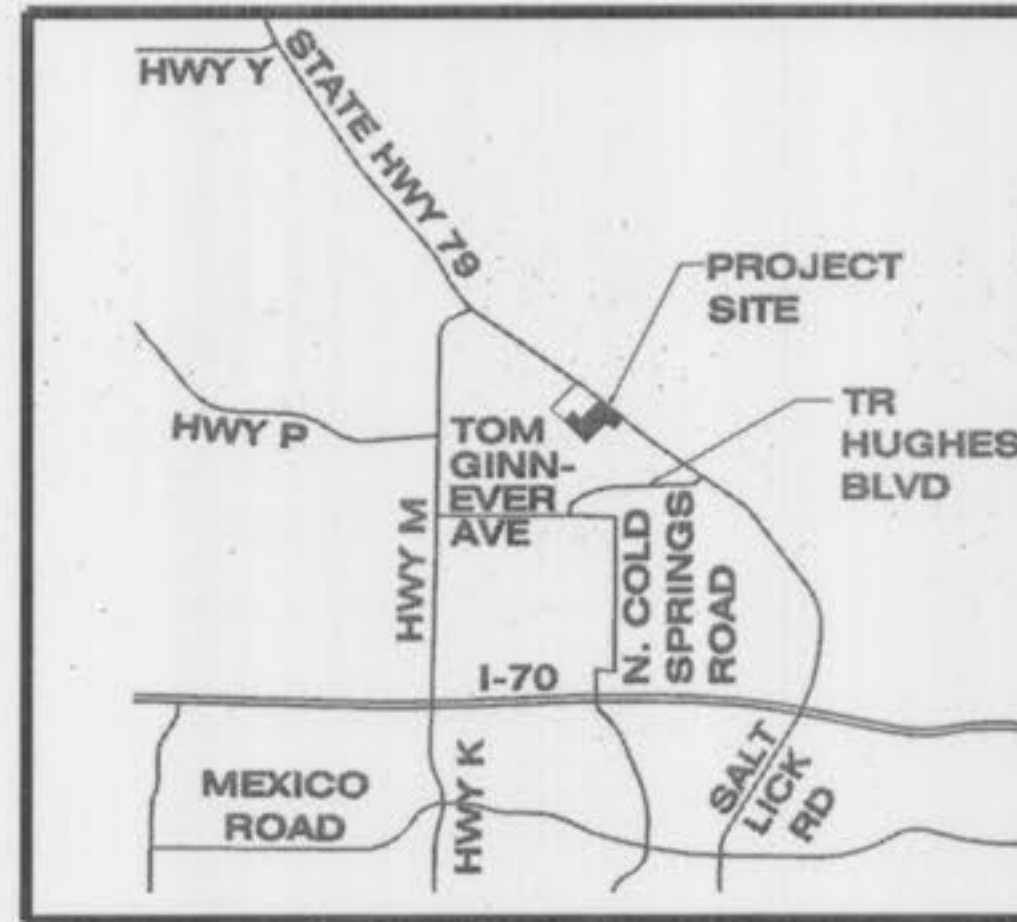
### REVISIONS

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C2.0 SPECIFICATION SHEET	●	●	●	●	●	●
C3.0 EXISTING CONDITIONS	●					
C4.0 SITE PLAN	●	●	●	●	●	●
C5.0 GRADING & UTILITY PLAN	●	●	●	●	●	●
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C9.0 EXISTING DRAINAGE AREAS	●	●	●	●	●	●
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C10.3 STORM SEWER DETAILS	●	●	●	●	●	●
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C10.6 WATER DETAILS	●	●	●	●	●	●
C10.7 WATER DETAILS	●	●	●	●	●	●
L1.0 LANDSCAPING PLAN	●					

## LEGEND

EXISTING TREE LINE	
EXISTING CONTOURS	120
PROPOSED CONTOURS	120
EXISTING SANITARY SEWERS	--- ---
EXISTING STORM SEWERS	12" CMP
PROPOSED SANITARY SEWERS	SS --- SS
PROPOSED STORM SEWERS	
PROPOSED RIGHT-OF-WAY CENTERLINE	--- ---
EASEMENT	---
CONCRETE PAVEMENT	
ASPHALT PAVEMENT	
EXISTING SPOT ELEVATION	+ 120.15
PROPOSED SPOT ELEVATION	+ 120.10
SWALE	
TO BE REMOVED	(T.B.R.)
TO BE REMOVED & REPLACED	(T.B.R.&R.)
TO BE ABANDONED & FILLED	(T.B.A.&F.)
TO BE USED IN PLACE	(U.I.P.)
BACK OF CURB	B.C.
FACE OF CURB	F.C.
PROPOSED INFORMATION	PR.
GAS MAIN	
WATER MAIN	
UNDERGROUND TELEPHONE	
FIRE HYDRANT	
POWER POLE	
PROPOSED FENCE	
SILTATION CONTROL	
CURB INLET	
FLARED END SECTION	
AREA INLET	
STREET SIGN LOCATION	
RETAINING WALL	
CLEANOUT	
LATERAL STATION	LAT. STA.
PROPOSED TREE LINE	
FLOW LINE OF DITCH	F.L.D.
CLEANOUT	
GUARDRAIL	

## SITE IMPROVEMENT PLANS



SITE LOCATION MAP  
N.T.S.

### PERTINENT DATA

1. SITE ACREAGE: 6.012 ACRES
2. EXISTING ZONING: "UN20"
3. PROPOSED ZONING: "R-1"
4. EXISTING USE: SINGLE FAMILY RESIDENCES AND OUTBUILDING LINES.
5. PROPOSED USE: 12 SINGLE FAMILY RESIDENCES
6. ALL RESIDENCES SHALL HAVE 2 OFF-STREET PARKING SPACES.

### UTILITIES

GAS:	LACLEDE GAS COMPANY 3950 FOREST PARK AVE. ST. LOUIS, MO 63108 (314) 658-5449	TELEPHONE:	CENTURY TEL 1151 CENTURY TEL DRIVE, P.O. BOX 751 WENTZVILLE, MO 63385 (636) 332-3710
SEWER:	CITY OF O'FALLON 100 N. MAIN ST. O'FALLON, MO 63366 (636) 281-2858	FIRE DIST:	CITY OF O'FALLON 119 E. ELM ST. O'FALLON, MO 63366 (636) 272-3493
ELECTRIC:	AMEREN UE 200 N. CALLAHAN RD, WZ-858 WENTZVILLE, MO 63385 (636) 639-8315	SCHOOL DIST:	FORT ZUMWALT SCHOOL DISTRICT 110 VIRGIL STREET O'FALLON, MO 63366 (636) 272-6620
WATER:	CITY OF O'FALLON 100 N. MAIN ST. O'FALLON, MO 63366 (636) 281-2858	NEAREST MAJOR INTERSECTION:	HIGHWAY 79 & OLD HWY. 79

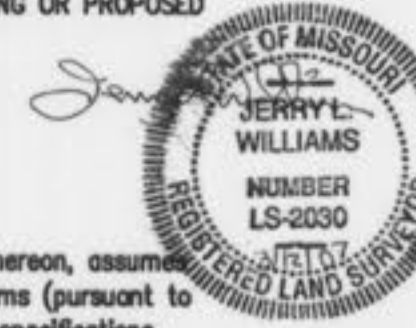
THE EXISTING SEWER LENGTH, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE ON THIS SET OF FINAL MEASUREMENT PLANS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

COLE & ASSOCIATES INC. L.S. 266-0

PROJECT NO. 05-143 (SEWER AS-BUILTS ONLY)

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UTILITY INFORMATION:  
UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

CALL 1-800-368-3683 (MISSOURI ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION).

### BENCHMARK

BENCHMARK INFORMATION: NGS STATION F149 BENCHMARK DISK STAMPED "F149 1935" SET IN TOP OF CONCRETE MONUMENT 78.4 FEET SOUTH OF BRICK CITY OF O'FALLON MUNICIPAL BUILDING ENTRANCE SIGN AND 45 FEET NORTH OF NORTH RAIL OF WABASH RAILROAD. NAVD 88 ELEV.=542.80

### SITE BENCHMARK

SITE BENCHMARK: MO DNR GPS DISK "SC-47 2000" LOCATED 51 FEET NORTHEAST OF THE CENTER OF MO HIGHWAY 79, 28.8 FEET SOUTHEAST OF A NAIL AND SHINER IN UTILITY POLE (#304), 9.3 FEET SOUTHWEST OF A NAIL AND SHINER IN FENCE POST WITH CARBONITE WINESS POST, AND 15.5 FEET WEST-NORTHWEST OF A METAL UNDERGROUND UTILITIES WARNING SIGN. ELEV BASED ON F-149 = 445.81

### FLOOD MAP REFERENCE

AS DETERMINED THROUGH GRAPHIC PLOTTING ONLY, SUBJECT TRACT FALLS IN ZONE X, AREA DETERMINED TO BE OUTSIDE OF THE 500-YEAR FLOOD PLAIN, AND IN ZONE AE, SPECIAL FLOOD HAZARD AREA INUNDATED BY 100-YEAR FLOOD, PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR ST. CHARLES COUNTY, MISSOURI AND INCORPORATED AREAS, PANEL 235 OF 525, MAP NUMBER 2918302235, EFFECTIVE DATE OF AUGUST 2, 1989.

"AS-BUILT" 01-10-07

### REVISIONS

12-28-06	1	CITY OF O'FALLON COMMENTS
02-01-07	2	CITY OF O'FALLON COMMENTS
04-01-07	3	CITY OF O'FALLON COMMENTS
05-01-07	4	MOIST COMMENTS
08-12-07	5	CITY COMMENTS

DEVELOPER/OWNER:  
R3 DEVELOPMENT, LLC  
7800 HIGHWAY N  
O'FALLON, MO 63366  
(636) 561-3948

THE HEIGHTS  
1609 HIGHWAY 79  
O'FALLON, MO 63366

COVER SHEET

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**COLE**  
and ASSOCIATES  
INCORPORATED

DESIGNED BY

JCB

DRAWN BY

JCB

CHECKED BY

MB

DATE

10/03/05

Job Number

05-143

Sheet Number

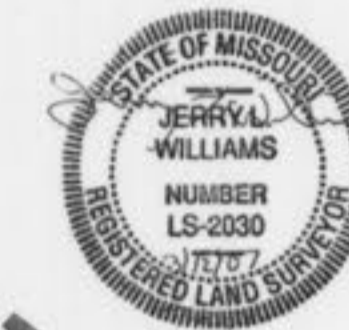
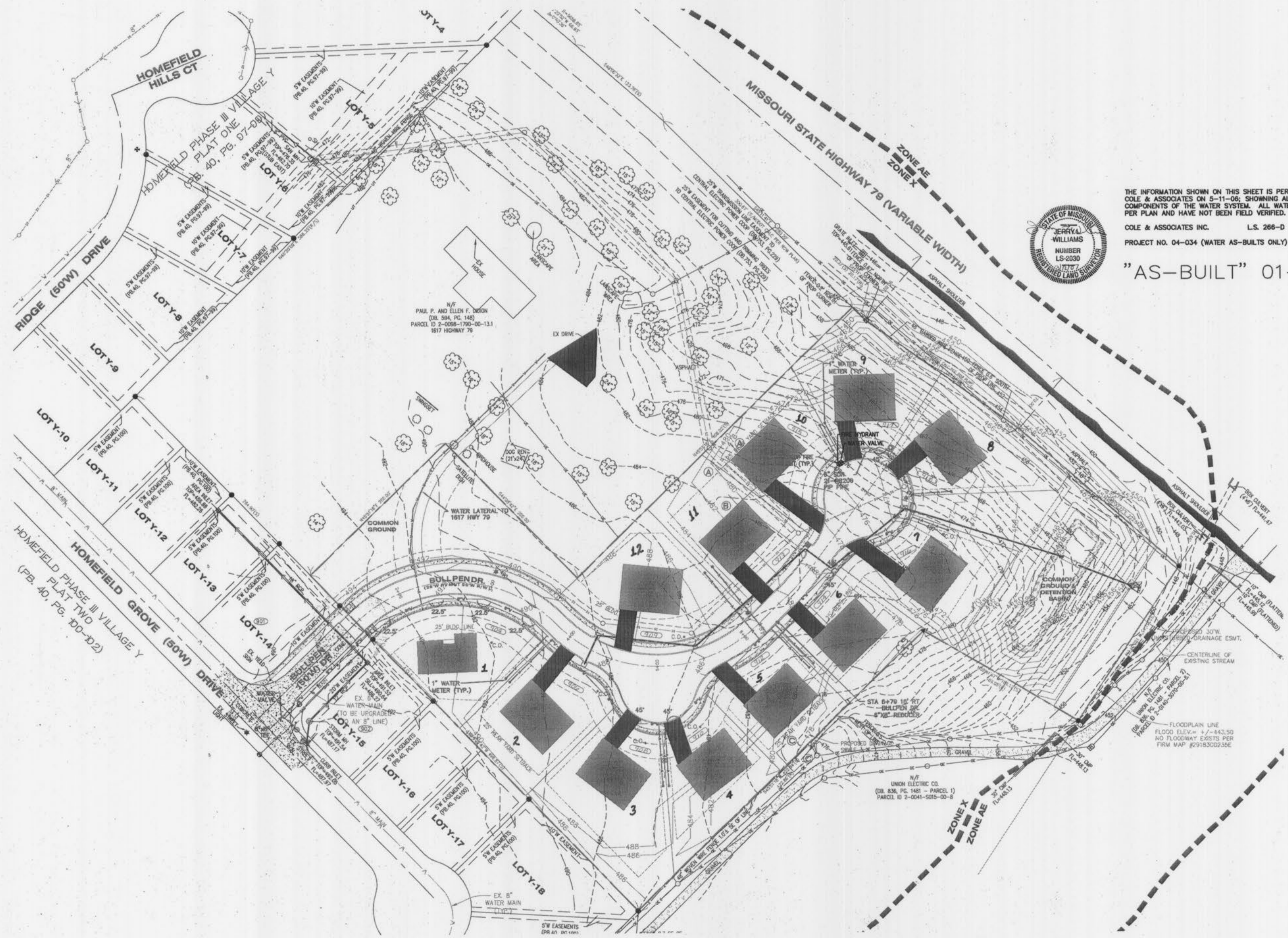
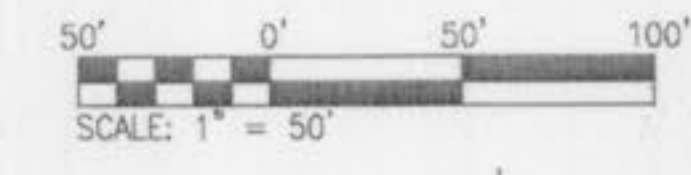
C1.0

P&Z #2705 & 2705.01









THE INFORMATION SHOWN ON THIS SHEET IS PER A SURVEY DONE BY COLE & ASSOCIATES ON 5-11-06; SHOWING ALL VISIBLE COMPONENTS OF THE WATER SYSTEM. ALL WATER LINES SHOWN ARE PER PLAN AND HAVE NOT BEEN FIELD VERIFIED.

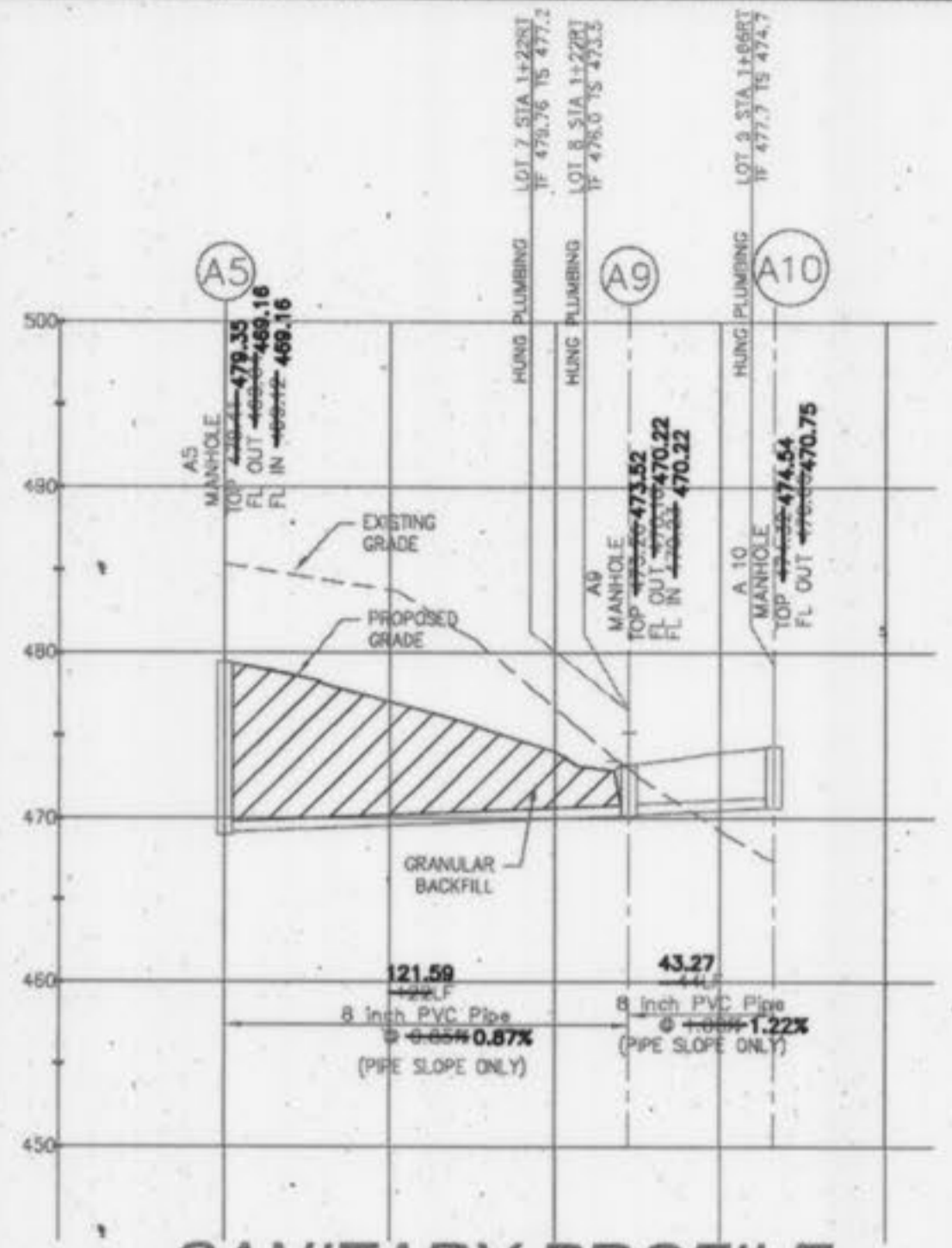
COLE & ASSOCIATES INC. L.S. 266-D  
PROJECT NO. 04-034 (WATER AS-BUILTS ONLY)

**"AS-BUILT" 01-10-07**

LAYOUT/DATE: 10/03/05  
DATE: 10/03/05  
DRAWING: S:\0805\08050005\05-143\AS-BUILT\05-143-WATER\_PLAN\_05-143.dwg

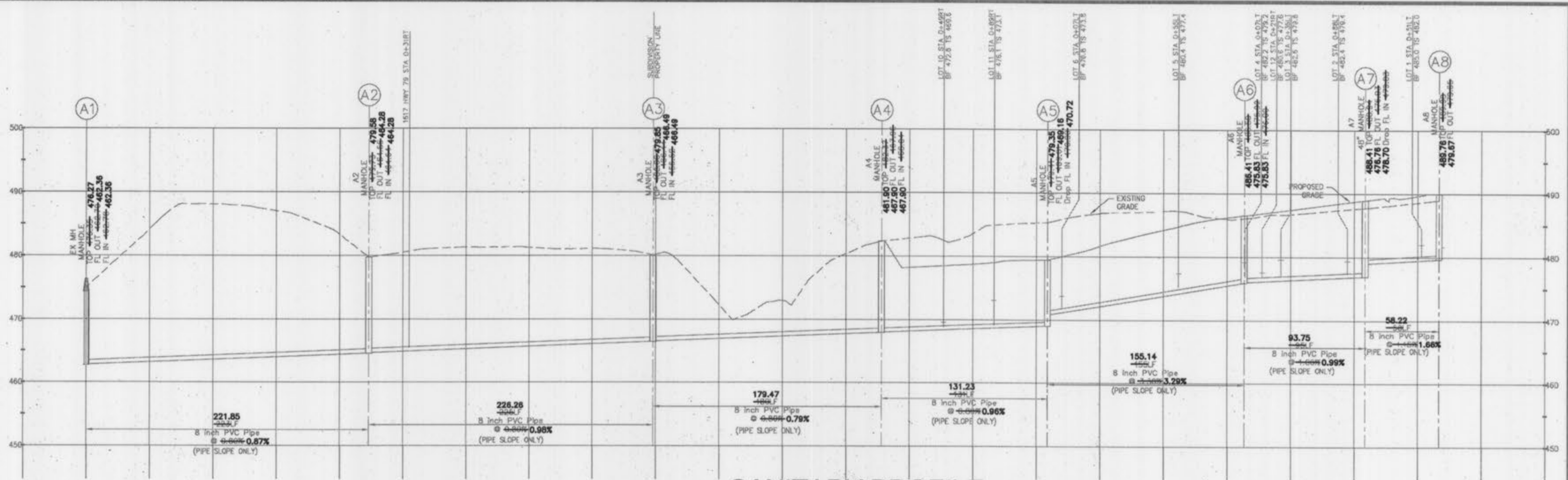
<b>REVISIONS</b> 1. 10-03-05 2. 10-03-05 3. 10-03-05 4. 10-03-05 5. 10-03-05	
DEVELOPER/OWNER: <b>R3 DEVELOPMENT, LLC</b> 7800 HIGHWAY N OFALLON, MO 63366 (636) 561-3948	
THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR THIS PLAN. THE ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL OTHER PLANS. THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL OTHER PLANS. THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL OTHER PLANS.	
DESIGNER: <b>THE HEIGHTS</b> 1609 HIGHWAY 79 OFALLON, MO 63366	
PLANNING • engineering • surveying • landscape architecture <b>Cole and ASSOCIATES INCORPORATED</b> 10777 summit office dr. suite 10 saint louis, missouri 63127 p. 314.964.8687 f. 314.964.0587	
DESIGNED BY: JCB DRAWN BY: JCB CHECKED BY: MB DATE: 10/03/05	
Job Number: <b>05-143</b> Sheet Number: <b>C5.1</b>	





**SANITARY PROFILE**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



**SANITARY PROFILE**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'

**NOTE: ALL STRUCTURES ARE TO REQUIRE A 1" DROP CAST BOTTOM**

"AS-BUILT" 01-10-07

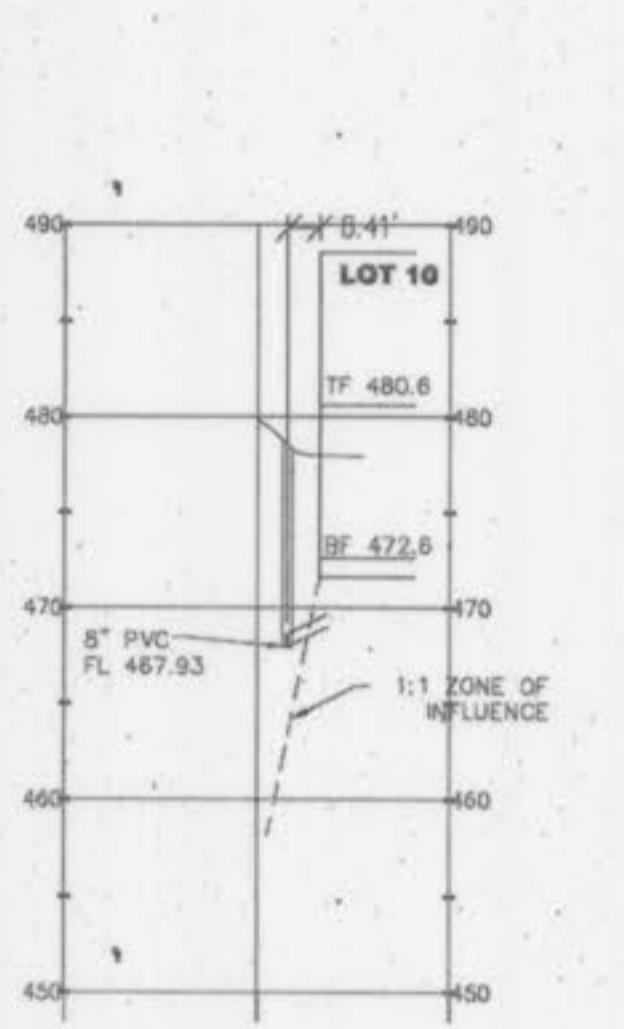
**NOTE: ALL STRUCTURES ARE TO REQUIRE A 1" DROP CAST BOTTOM**

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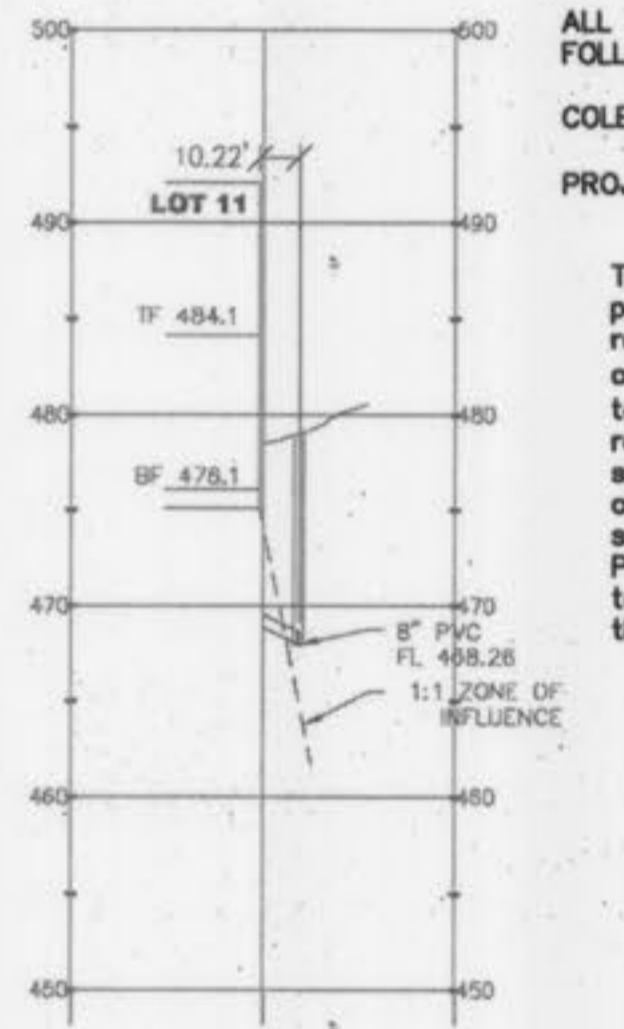
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PROJECT NO. 05-143 (SEWER AS-BUILTS ONLY)

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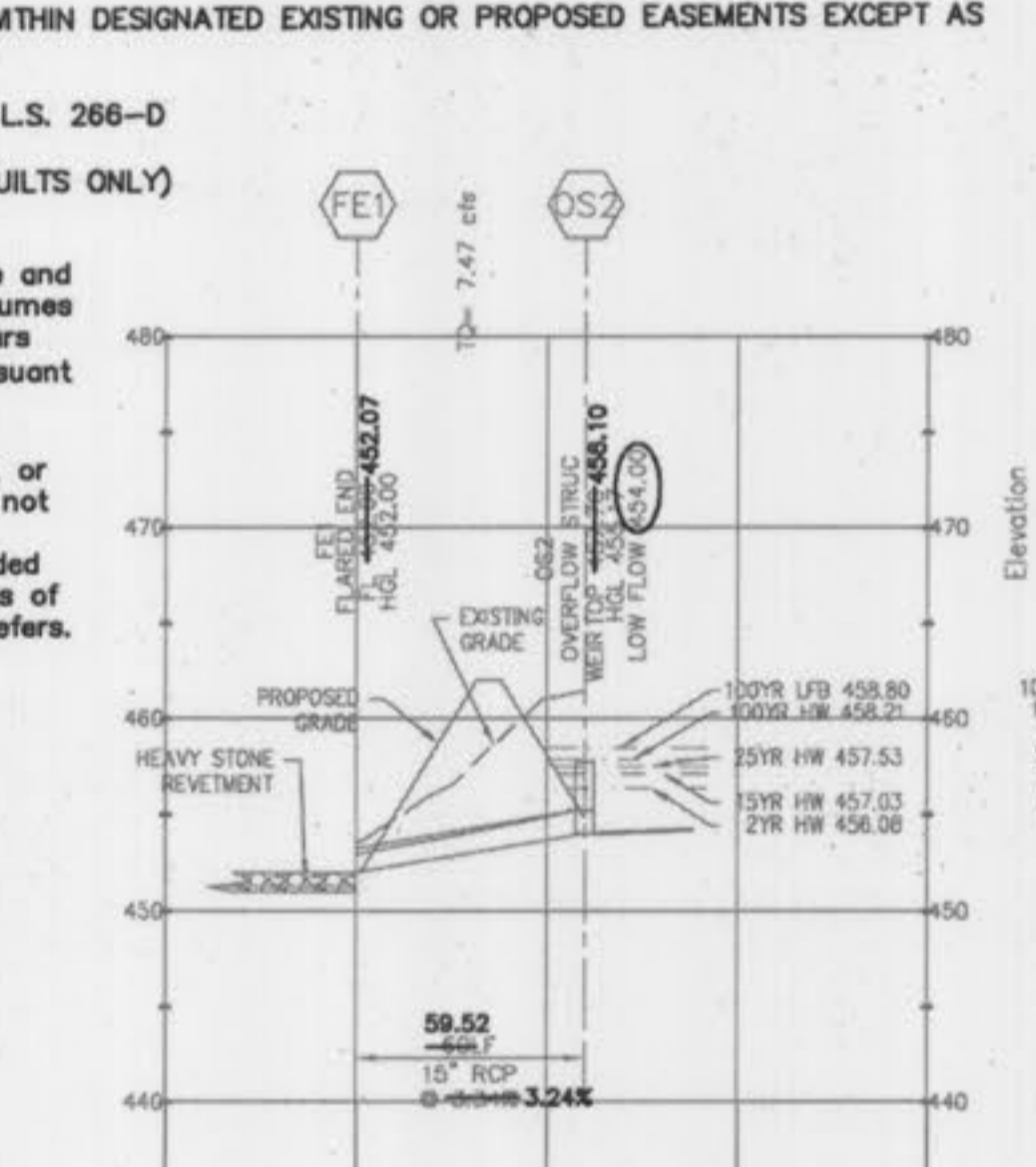
**SECTION A-A**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



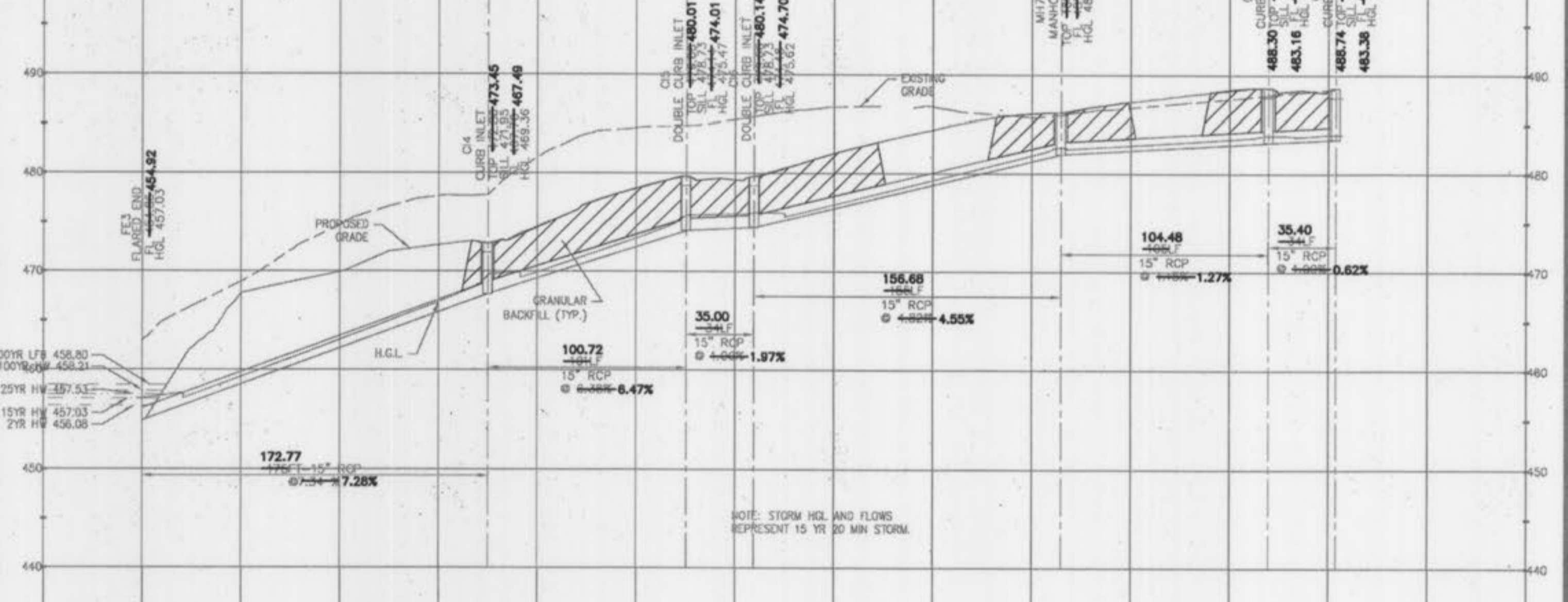
**SECTION B-B**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



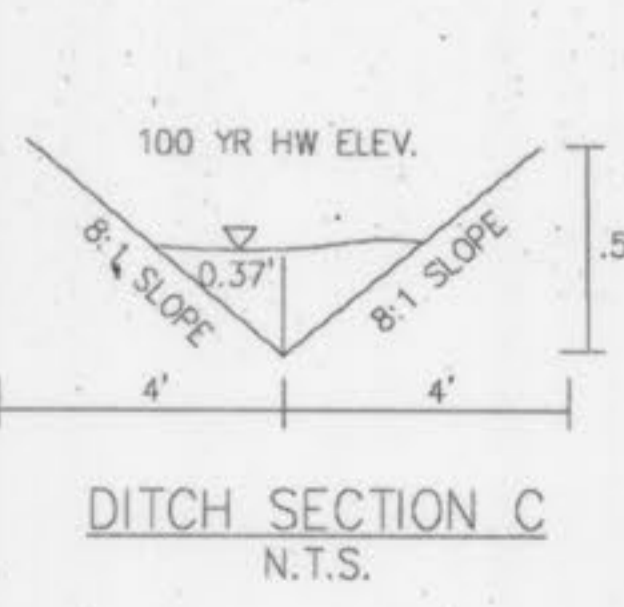
**STORM SEWER PROFILE**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



**STORM SEWER PROFILE**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



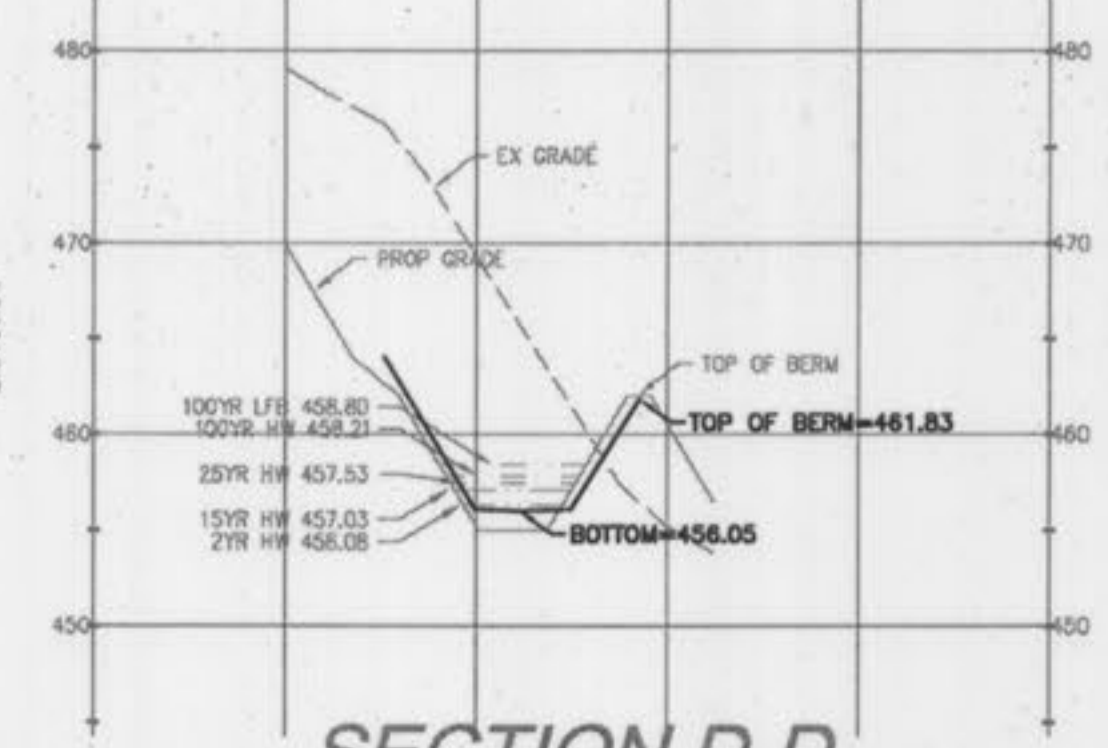
**SECTION C-C**

NOT TO SCALE

TEMPERATURE CORRECTED ANALYSIS  
NORMAL DEPTH COMPUTATION  
OCT 19, 2006

DESCRIPTION	VALUE
<b>FORECAST INPUT DATA</b>	
Flow Rate (cfs)	4.38
Channel Bottom Slope (S <sub>b</sub> )	0.00
Manning's Roughness Coefficient (n)	0.027
Channel Left Side Slope (Horizontal/Vertical)	0.5:1
Channel Right Side Slope (Horizontal/Vertical)	0.5:1
Channel Bottom Width (ft)	4.1
<b>COMPUTATION RESULTS</b>	
Normal Depth (ft)	0.37
Flow Velocity (ft/s)	4.63
Froude Number	1.64
Velocity Head (ft)	0.35
Energy Head (ft)	0.62
Gross Sectional Area of Flow (sq ft)	1.13
Top Width of Flow (ft)	0.62

HYDROLOGIC HydroStation for Windows, Version 1.2a Copyright (c) 1998 Hydrologic & Associates, Inc., 3020 FM 1380 West, Suite 214, Houston, TX 77068 Phone: (281) 460-2197, Fax: (281) 460-4164, Email: hst@hydro.com All Rights Reserved.



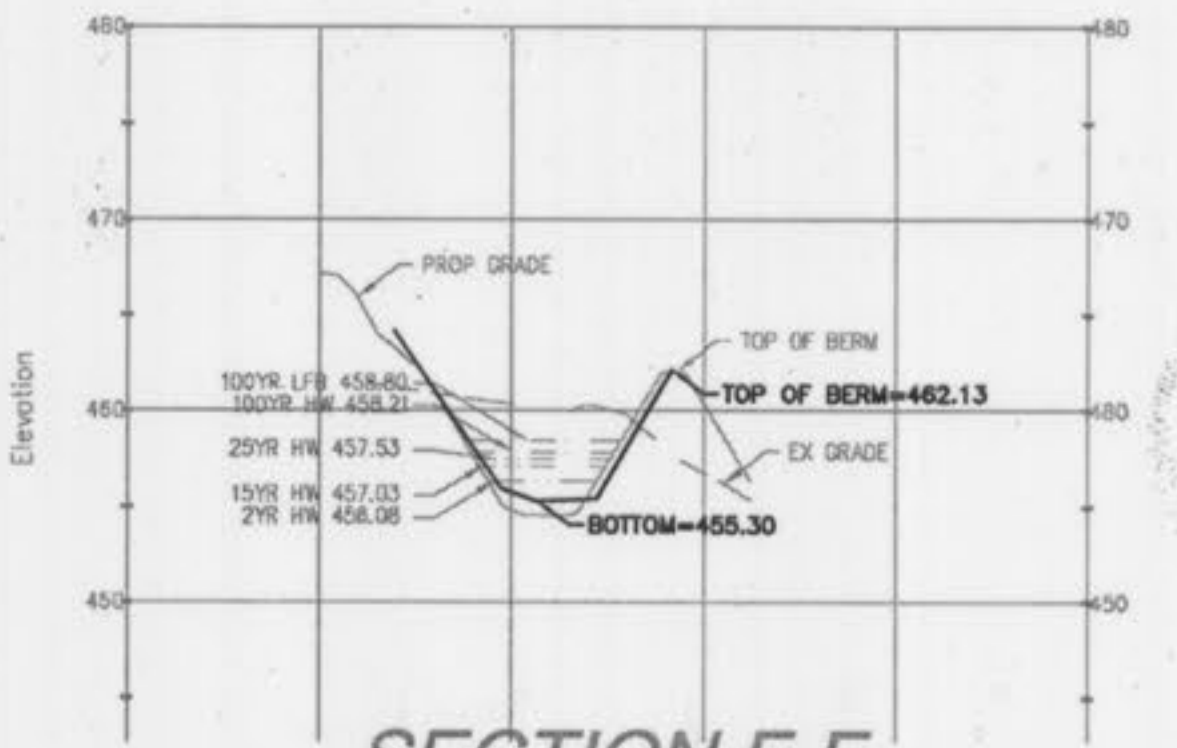
**SECTION D-D**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



**SECTION E-E**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'



**SECTION F-F**

SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=10'

**REVISIONS**

12-28-05	1	CITY OF FALLON COMMENTS
02-08-06	2	CITY OF FALLON COMMENTS
04-02-06	3	CITY OF FALLON COMMENTS
05-25-06	4	BASE COMMENTS
3/1/07	5	CITY COMMENTS

DEVELOPER/OWNER:  
**R3 DEVELOPMENT, LLC**  
7800 HIGHWAY N  
OF FALLON, MO 63366  
(636) 561-3948

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SEAL:

**THE HEIGHTS**  
1609 HIGHWAY 79  
OF FALLON, MO 63366

**Storm & Sanitary Sewer Profiles**

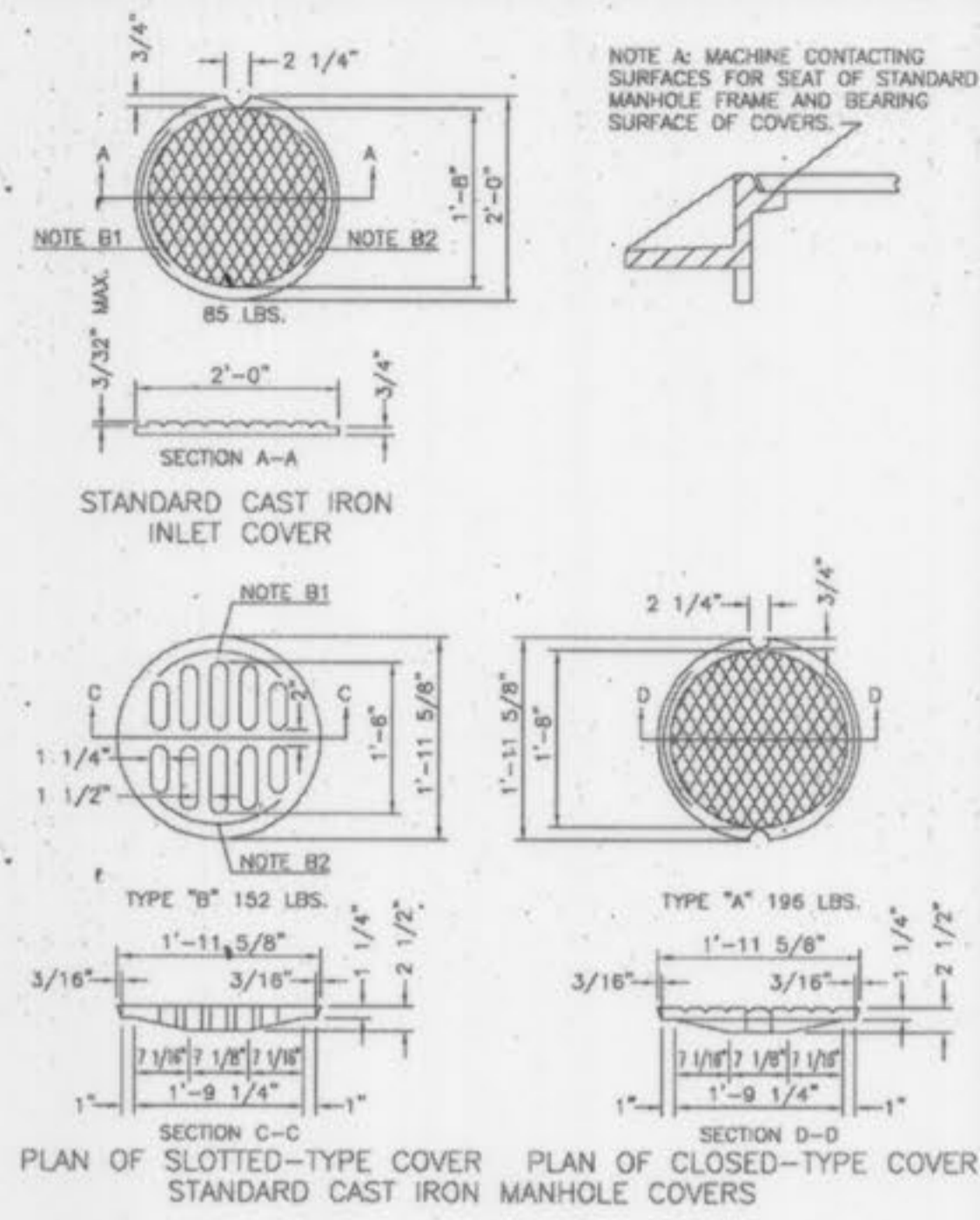
planning • engineering • surveying • landscape architecture  
**Cole and Associates Incorporated**  
10777 sunset office dr. suite 10  
st. louis, missouri 63122  
p: 314 984 9887 f: 314 984 0587

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DRAWN BY: JCB  
CHECKED BY: MB  
DATE: 10/03/05  
Job Number: 05-143  
Sheet Number: C7.0

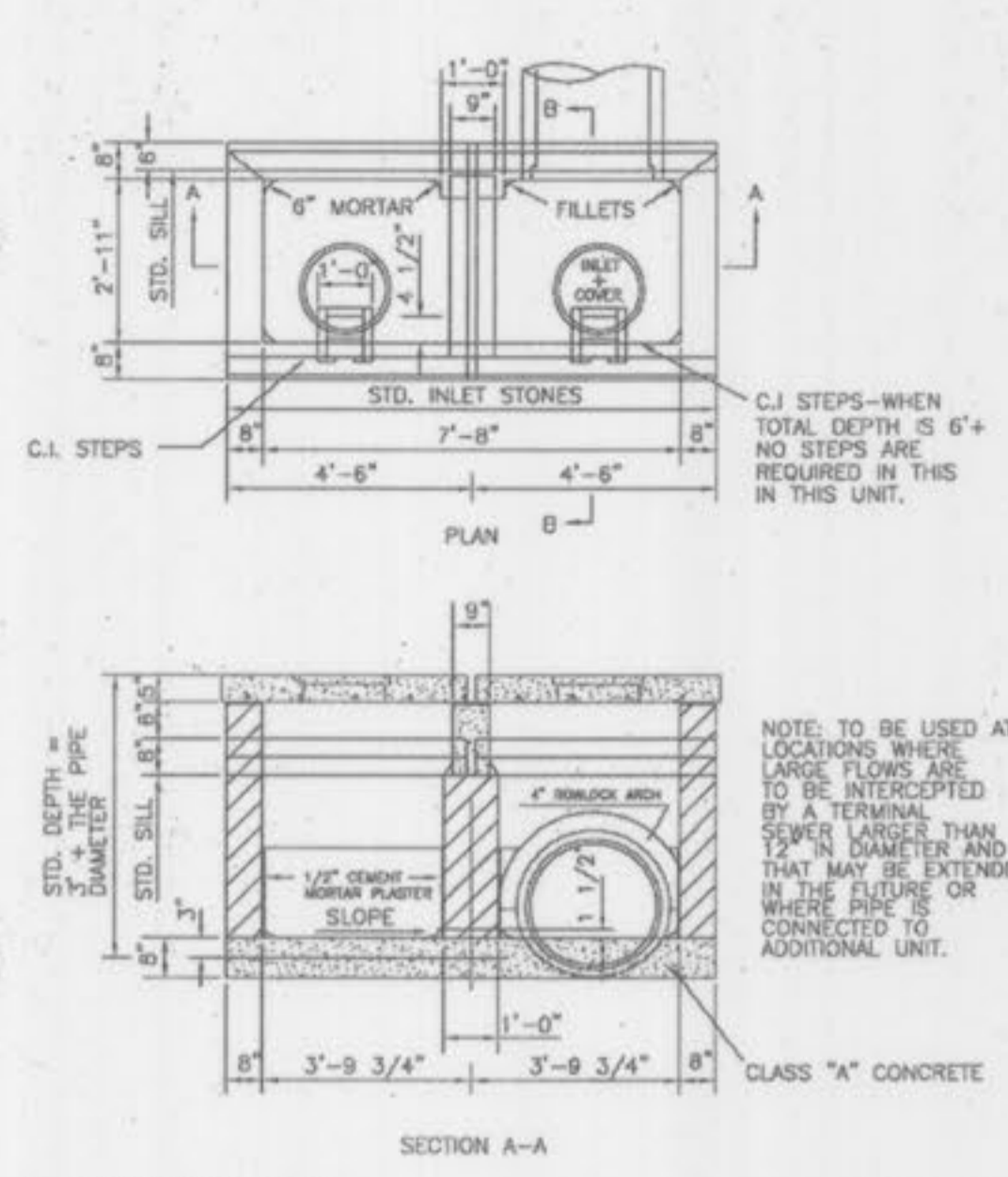
P&Z #2705 & 2705.01

LAYOUT/Layout: 2007 - 8-11am  
DATE: Mar 12, 2007  
DRAWING: C:\Users\jacob\Documents\05-143\ASBUILTS\05-143 ASBUILTS.dwg

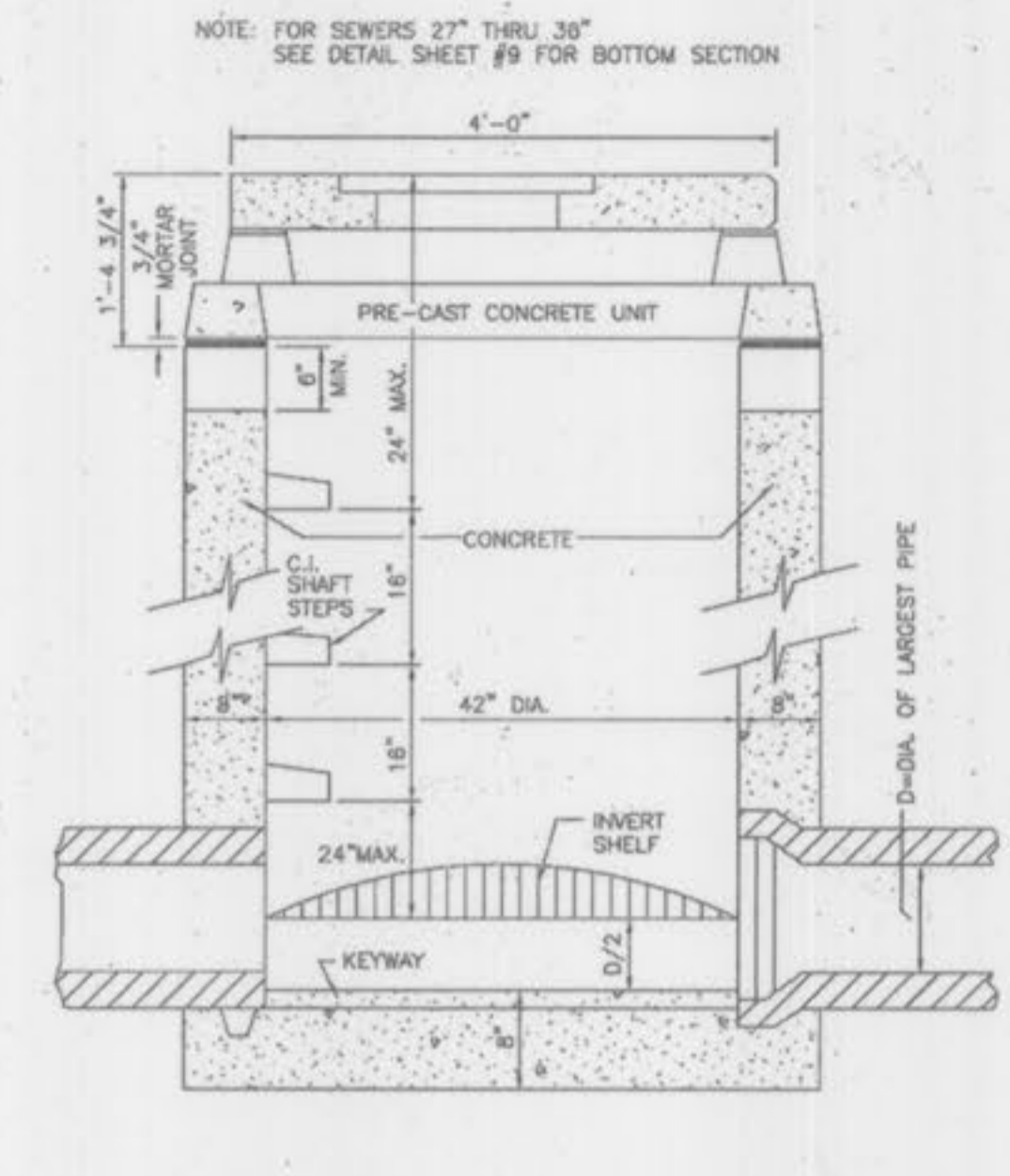




**7 MANHOLE COVER DETAIL**  
SCALE: N.T.S. REF. DWG. C6

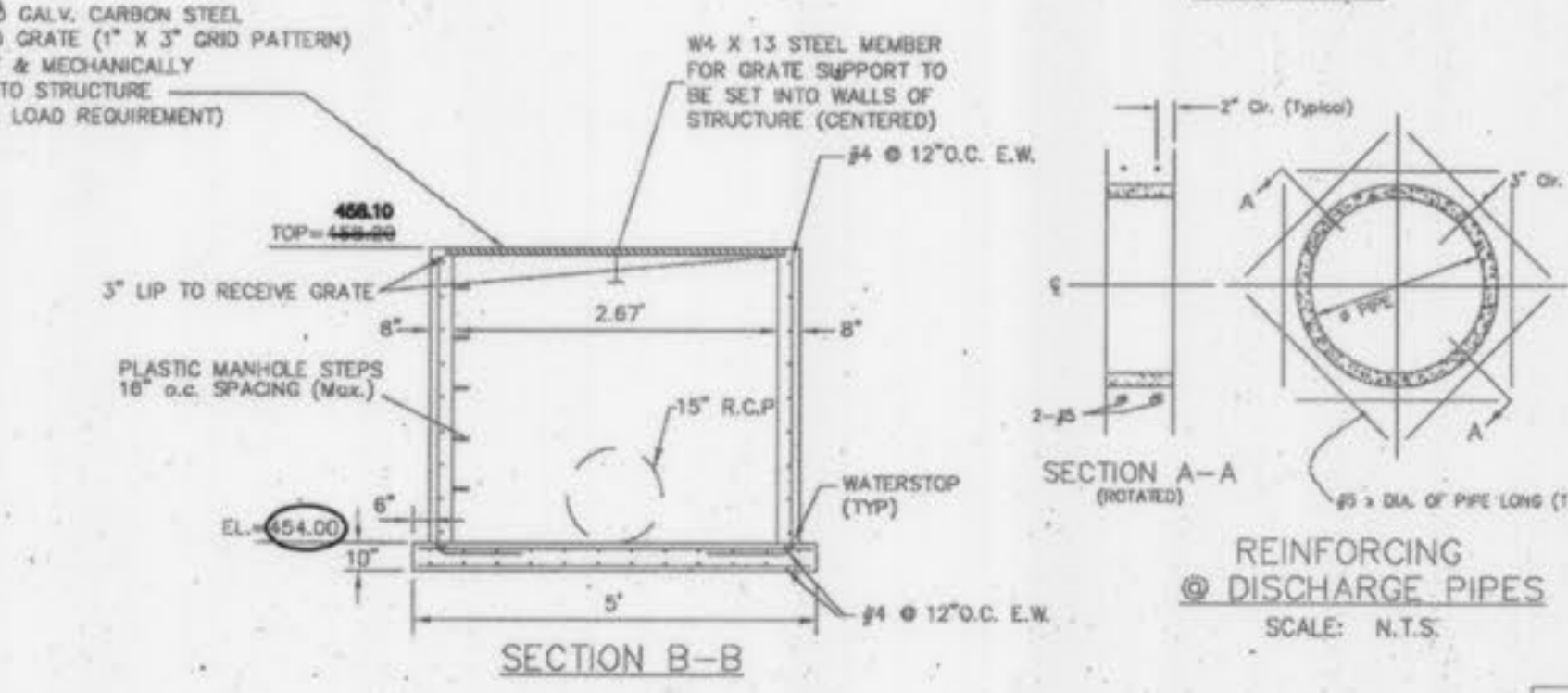
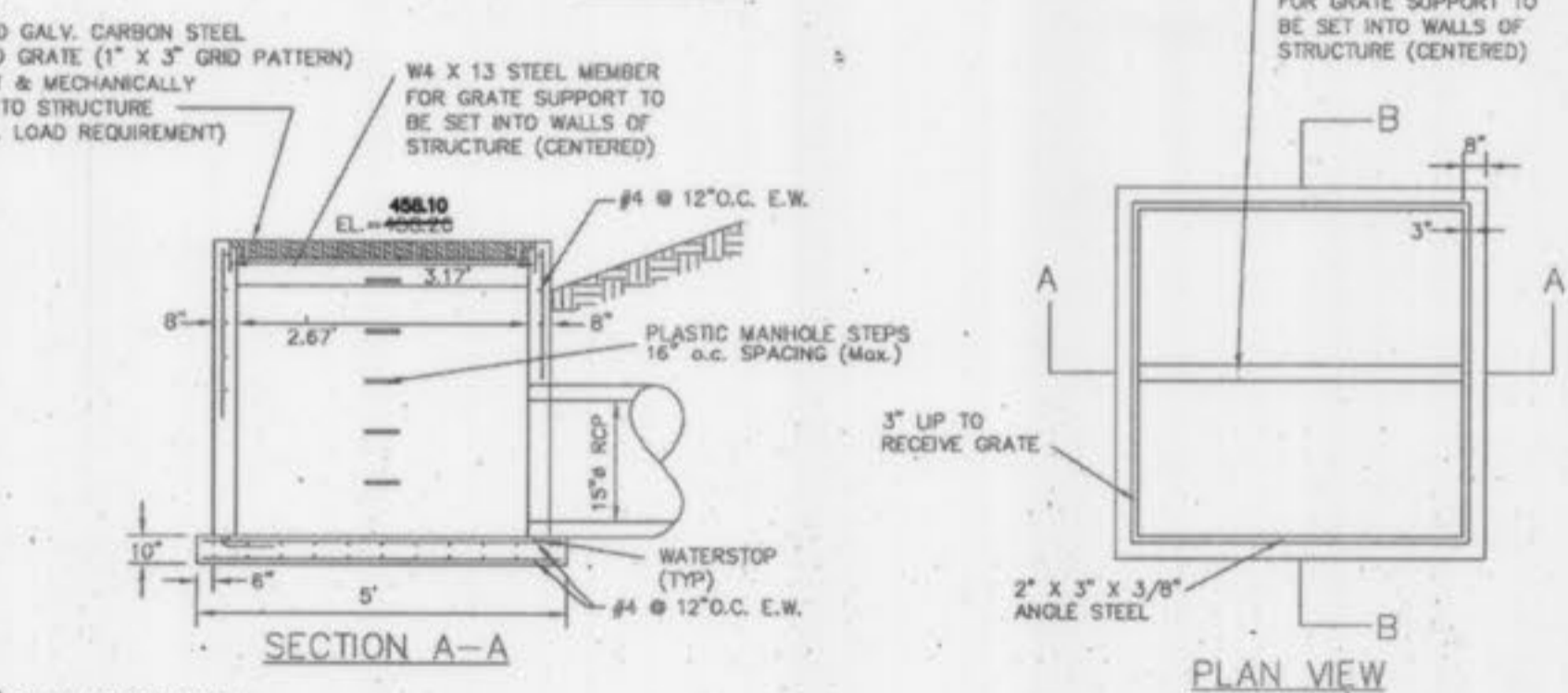
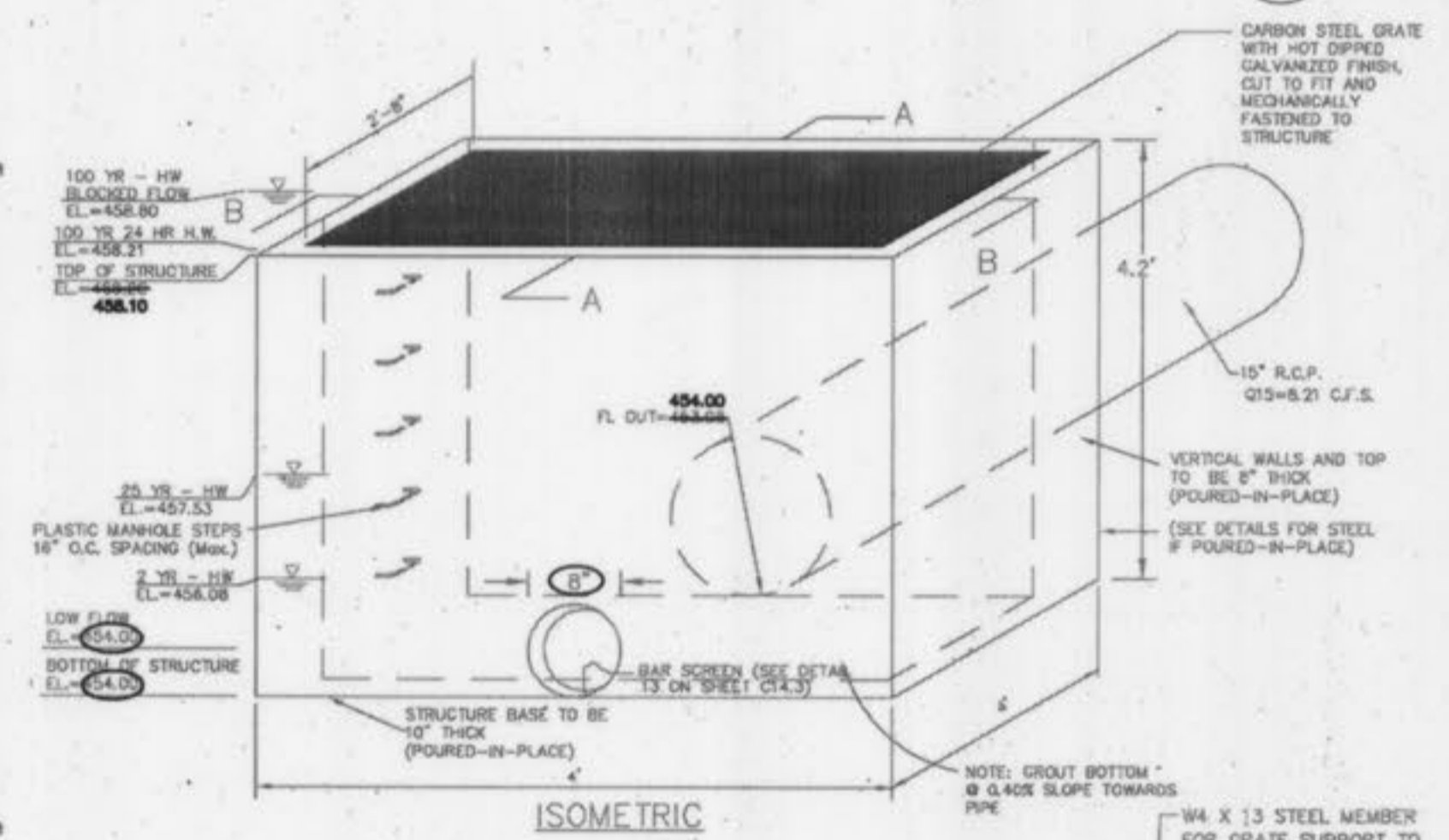


**8 DOUBLE CURB INLET DETAIL**  
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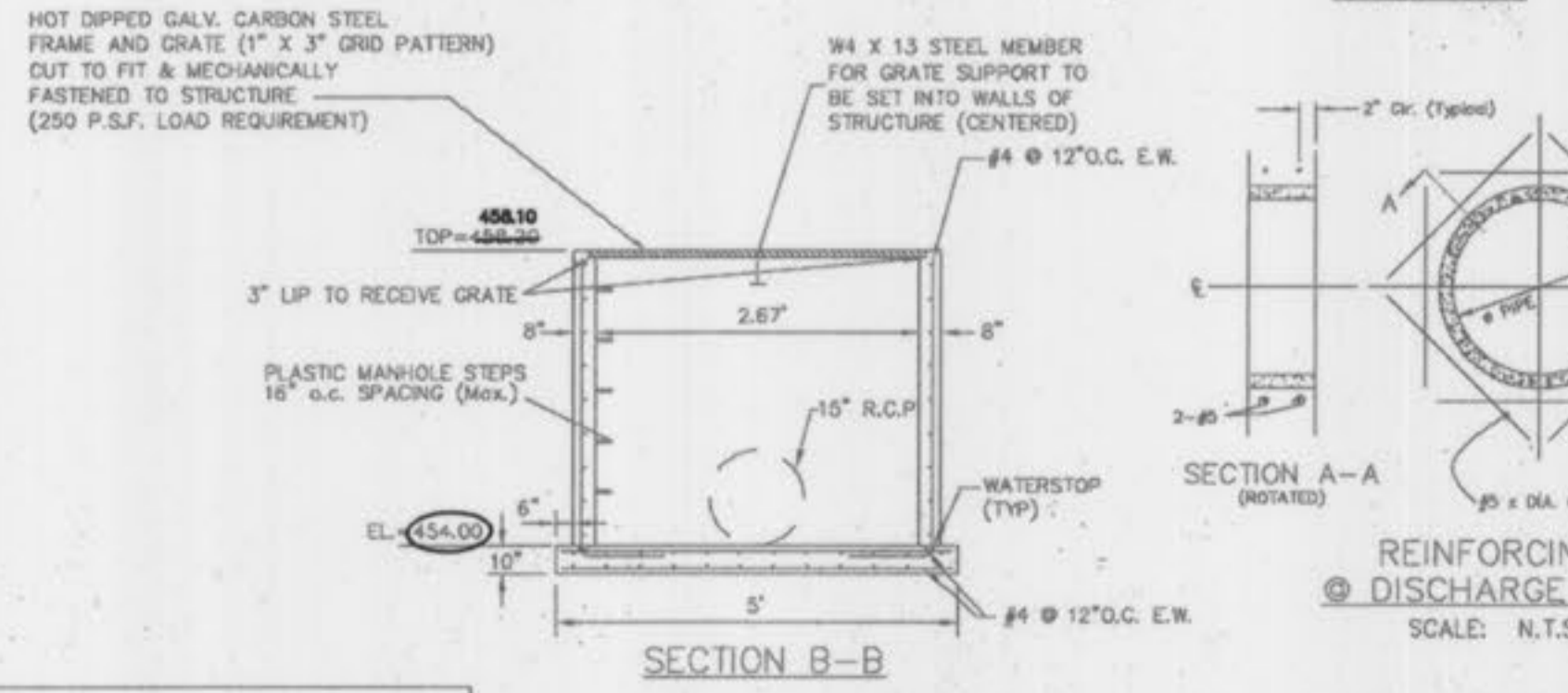
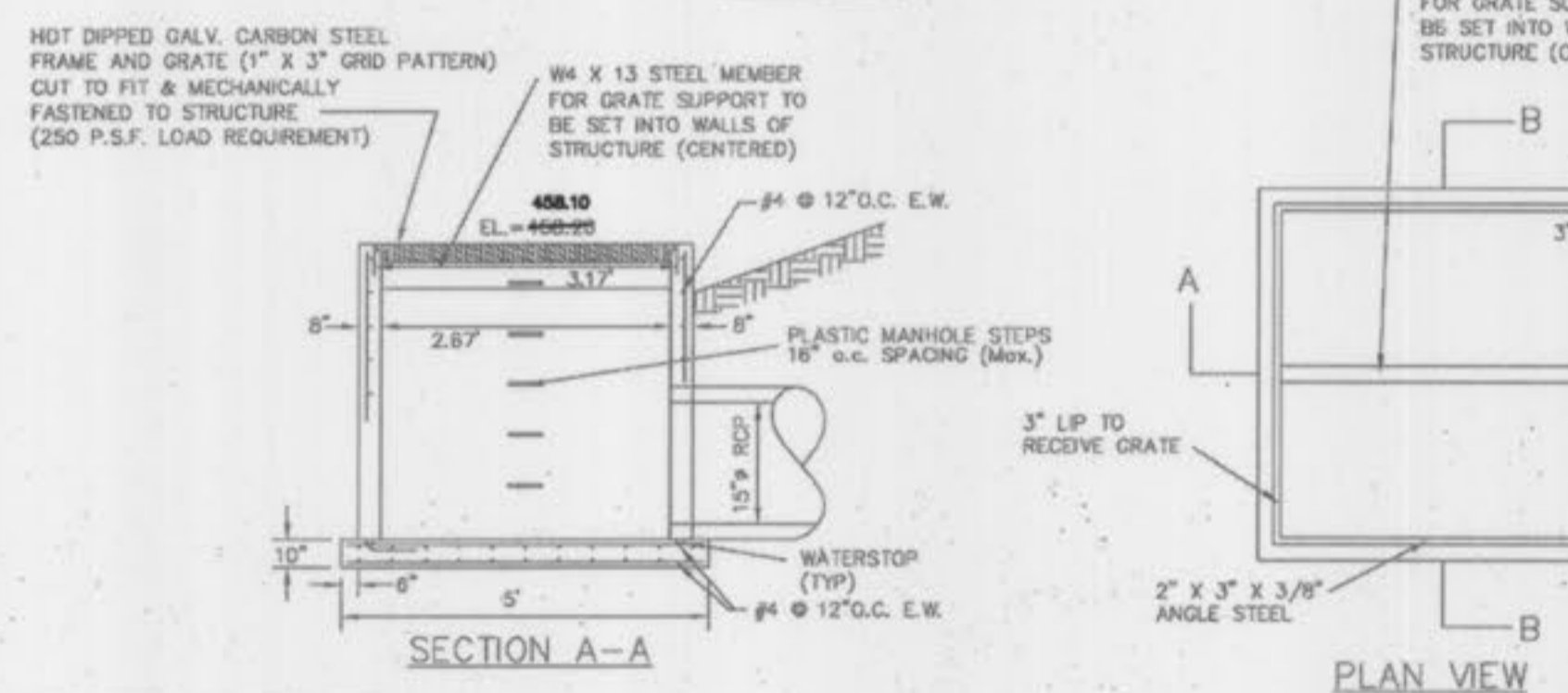
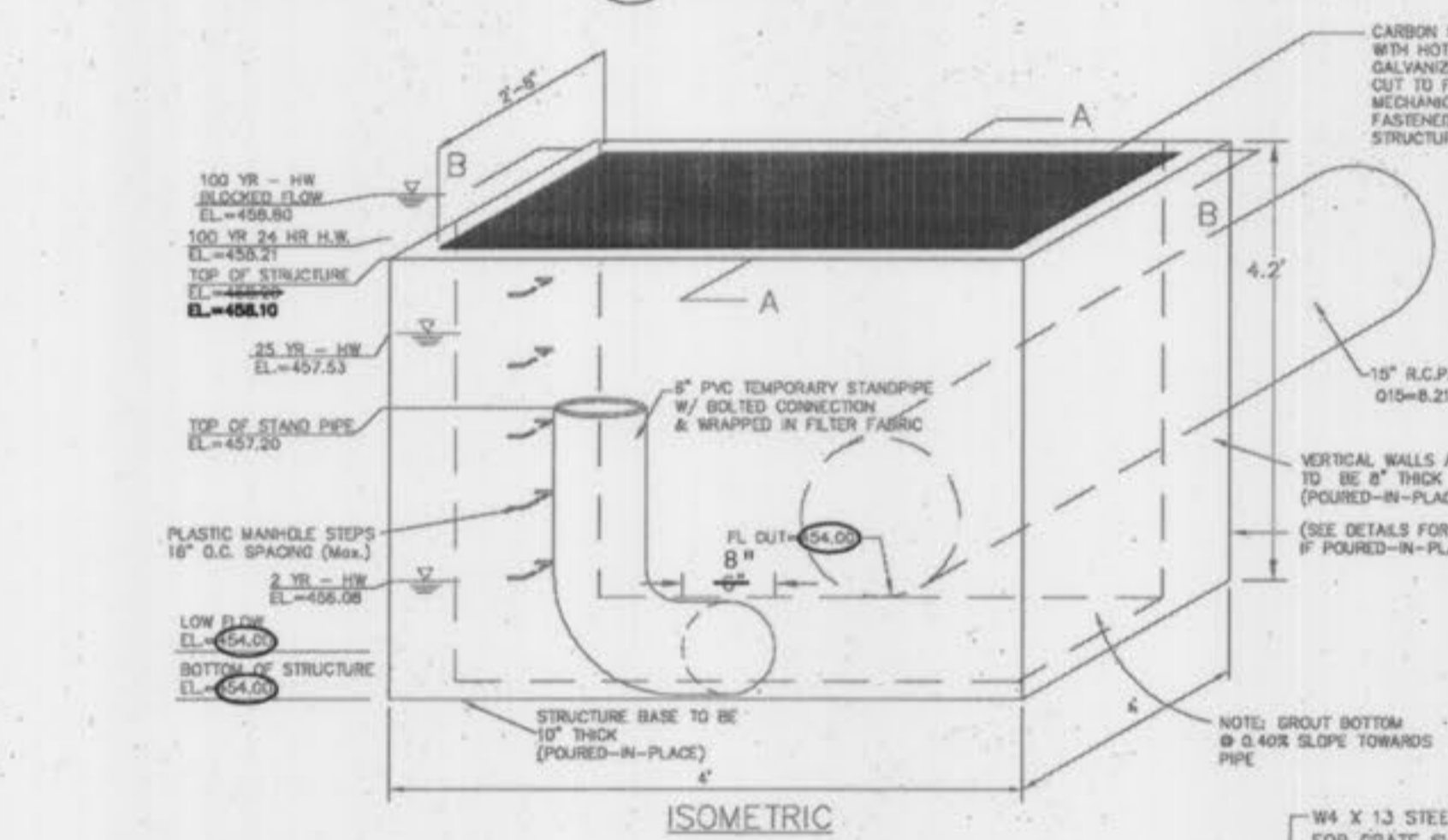


**9 AREA INLET DETAIL**  
SCALE: N.T.S. REF. DWG.

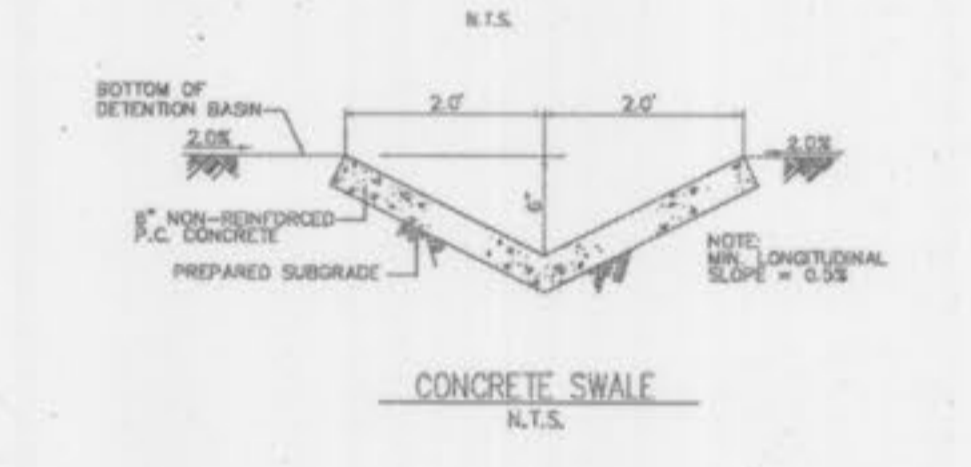
**NOTE:**  
\*ALL STRUCTURES ARE TO REQUIRE A  $\frac{2}{10}$  DROP CAST BOTTOM  
\*ALL STRUCTURAL REBAR TO REQUIRE 31 MIL EPOXY COATING



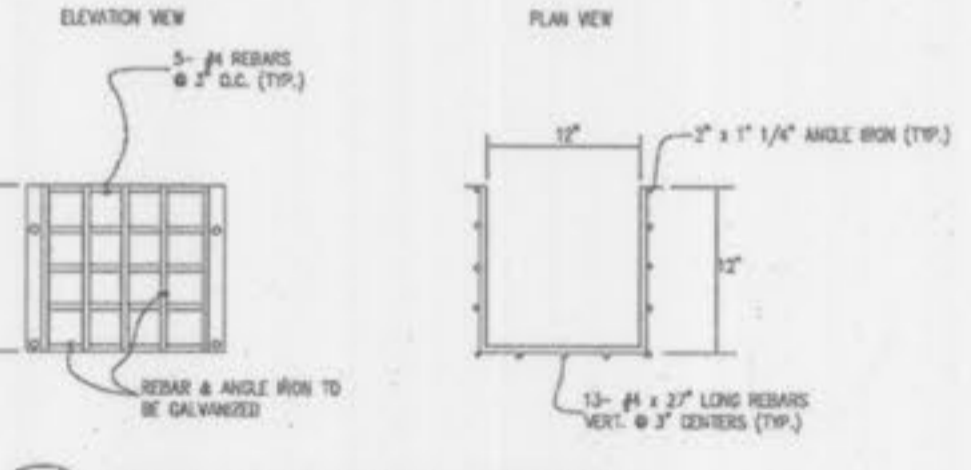
**11 O.S. DETENTION DETAILS**  
SCALE: N.T.S. REF. DWG.



**11 O.S. SEDIMENT BASIN DETAILS**  
SCALE: N.T.S. REF. DWG.



**13 DETENTION BASIN - CONCRETE SWALE DETAIL**  
SCALE: N.T.S. REF. DWG.

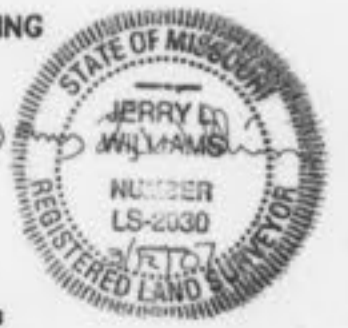


**14 TRASH RACK DETAIL**  
SCALE: N.T.S. REF. DWG.

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REVISIONS	
1	CITY OF FALLON COMMENTS
2	CITY OF FALLON COMMENTS
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4	CITY OF FALLON COMMENTS
5	CITY OF FALLON COMMENTS

DEVELOPER/OWNER:  
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O'FALLON, MO 63366  
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THE HEIGHTS  
1609 HIGHWAY 79  
O'FALLON, MO 63366

planning • engineering • surveying • landscape architecture  
**Cole and Associates Incorporated**  
10777 sunset office dr. suite 10  
saint louis, missouri 63127  
p: 314 984 9887 f: 314 984 0587

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DRAWN BY: JCB  
CHECKED BY: MB  
DATE: 10/03/05  
Job Number: 05-143  
Sheet Number: C10.3

"AS-BUILT" 01-10-07

The Heights @ O'Fallon As-Built P9 5 of 5