

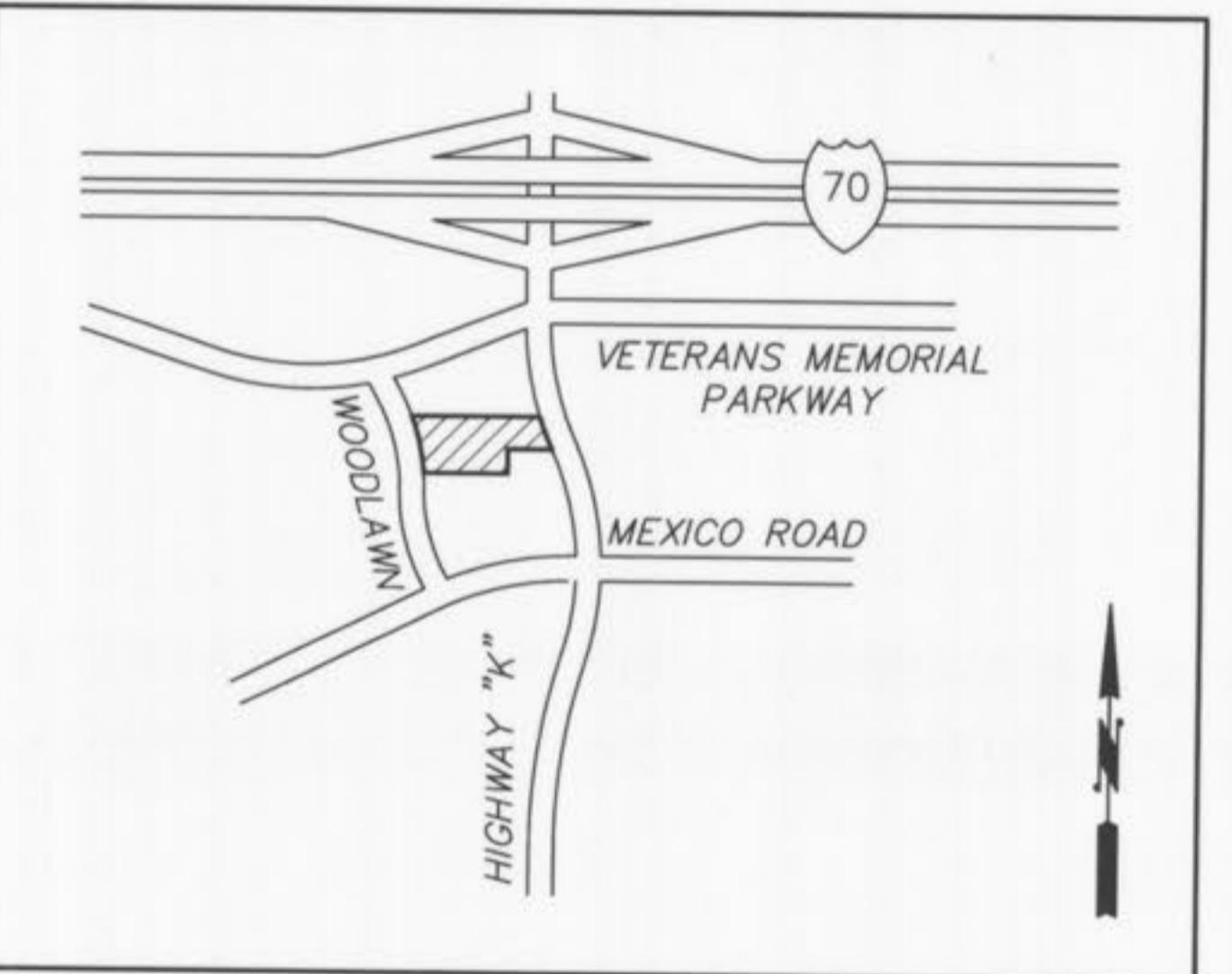
# SSM HEALTHCARE

## IMPROVEMENT PLANS

### CITY OF O'FALLON GENERAL NOTES

1. Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
  2. Underground utilities have been plotted from available information and, therefore, their locations must 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 grading or construction of improvements.
  3. Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings SDR-35.
  4. Storm sewers 18" in diameter or smaller shall be ASTM C-14.
  5. Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
  6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise in the plans.
  7. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.S.H.T.O. See plans for gauge.
  8. All filled places under proposed roads, proposed sanitary and storm sewer lines, and/or paved areas including trench bottoms shall be compacted to 90% of maximum density as determined by the "Modified AASHTO T-157 Compaction Test" or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All filled places in proposed roads shall be compacted from the bottom of the fill up. All tests shall be verified by a soils engineer concurrent with grading and backfilling operations. Ensure the moisture content of the soil in fill areas is to correspond to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill. Proof rolling may be required to verify soil stability at the discretion of the City of O'Fallon.
  9. All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.
  10. All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
  11. Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plot for location and size of easements. This does not apply to house laterals.
  12. No area shall be cleared without the permission of the developer.
  13. All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
  14. No slope shall be steeper than 3° (horizontal) to 1° (vertical) sodded or seeded and mulched.
  15. Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," and roadway markers mounted on two (2) pound "U" channel sign post. The markers shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
  16. All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
  17. All standard street curb inlets to have front of inlet 2 feet behind curb.
  18. The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2").
  19. Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority. Water mains shall have a minimum of 42" of cover.
  20. All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipes and fittings shall conform to A.W.W.A. specification C-111.
  21. All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
  22. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
  23. All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21. All new utilities under City streets shall be bored.
- OLD UTILITY NOTE**  
Underground facility structures and utilities have been plotted from available surveys and record information and, therefore, their locations must be considered approximate only. Verification of all existing underground structures and facilities either shown or not shown on these plans shall be the responsibility of the contractor.

AS RECORDED IN PLAT BOOK 42, PAGE 45 AND ALSO BEING PART OF U.S. SURVEY 55, TOWNSHIP 47 NORTH, RANGE 3 EAST ST. CHARLES COUNTY, MISSOURI



LOCATION MAP

These "AS-BUILT" storm and sanitary sewer plans are based on actual field observations conducted during June and November, 2007 and the results are shown hereon.

By: ROGER G. ALLEN, P.L.S. #2185  
STATE OF MISSOURI

PICKETT, RAY & SILVER'S CORPORATE  
REGISTRATION NO. LS-54-D



### BENCH MARKS

Project Benchmark RM66: A cross cut on the western bolt of a fire hydrant located at the northeastern corner of Mill Pond Drive and Spring Hill Drive. Elevation = 581.74 feet (NGVD1929).

TBM: "M" in Mueller on Fire Hydrant  
52' west of the edge of asphalt to Highway K  
and 21' North of the center of entrance to  
1101 Highway "K"

ELEVATION = 565.73

### DRAWING INDEX

Sheet	Description
1	COVER SHEET
2	DEMOLITION PLAN
3	SITE PLAN
4	GRADING PLAN
5	PREDEVELOPED DRAINAGE AREA MAP
6	POSTDEVELOPED DRAINAGE AREA MAP
7	EROSION AND SEDIMENT CONTROL PLAN
8	PROFILES SHEET
9	CONSTRUCTION DETAILS
10	EROSION AND SEDIMENT CONTROL DETAILS
11	MoDOT DETAILS
PHOTO-1	PHOTOMETRIC LIGHTING PLAN

### LEGEND

— Sanitary Sewer (Proposed)	Sanitary Structure	R.C.P.	Reinforced Concrete Pipe
—○— Sanitary Sewer (Existing)	Storm Structure	C.M.P.	Corrugated Metal Pipe
- - - Storm Sewer (Proposed)	Test Hole	C.I.P.	Cast Iron Pipe
- - -○- Storm Sewer (Existing)	Power Pole	P.V.C.	Polyvinyl Chloride
—○— Water Line & Size	Light Standard	V.C.P.	Vitrified Clay Pipe
—EX W— Existing Water line	Double Water Meter Setting	A.T.G.	Adjust To Grade
—T— Tee & Valve	Single Water Meter Setting	C.O.	Clean Out
—Hydrant	Curb Inlet	V.T.	Vent Trap
—Cap	Skewed Curb Inlet	T.B.R.	To Be Removed
18 Lot or Building Number	Double Curb Inlet	T.B.R.&R	
—x— Existing Fence Line	Grate Inlet	G.I.	To Be Protected
Existing Tree Line	Area Inlet	A.I.	To Be Abandoned
Street Sign	Double Area Inlet	B.C.	Base Of Curb
Existing Contour	Concrete Collar	T.C.	Top Of Curb
Proposed Contour	Flared End Section	T.W.	Top Of Wall
Grouted Rip-Rap	End Pipe	B.W.	Base Of Wall
— End of Lateral	Energy Dissipator	(TYP)	Typical
Asphalt Pavement	Manhole	U.N.O.	Unless Noted Otherwise
Concrete Pavement	Concrete Pipe	U.I.P.	Use In Place

"AS-BUILTS" 12.17.07

SSM HEALTHCARE  
IMPROVEMENT PLANS  
O'FALLON, MO

LILLIBRIDGE  
Prepared For:  
LILLIBRIDGE

REVISIONS NO.	DATE	REVISED PER CITY COMMENTS	REVISED PER MoDOT COMMENTS
1	10.19.06	REVISED	REVISED PER MoDOT COMMENTS
2	11.09.06	REVISED	REVISED PER MoDOT COMMENTS
3	12.12.07	"AS-BUILTS"	"AS-BUILTS"
4	7.31.07	REVISE SHEETS 3,4, AND 11	
5	12.17.07	"AS-BUILTS"	

ENGINEERS AUTHENTICATION  
The responsible professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility for any other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.

PICKETT, RAY & SILVER, INC.



Little Mo's says  
CALL  
BEFORE  
YOU DIG!

1-800-DIG-RITE

OWNER/DEVELOPER:  
LILLIBRIDGE HEALTHCARE  
REAL ESTATE TRUST  
CONTACT: NOE MARTINEZ  
5308 WEST PLANO PARKWAY  
PLANO, TEXAS, 75093-4821  
972-248-9100 EXT 4360  
P&Z APPROVAL 10.05.06  
FILE #2606.01

DRAWN	DATE
J.M. WINTERS	10.11.06
CHECKED	DATE
S.D. MARION	10.11.06
PROJECT # 91090.LILB.02C	
TASK # 2	FIELD
	BOOK 450E
SSM HEALTHCARE IMPROVEMENT PLANS COVER SHEET	
SHEET 1	OF 1

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**PICKETT RAY & SILVER**

CIVIL ENGINEERS  
PLANNERS  
LAND SURVEYORS

333 Mid Rivers Mall Drive  
St. Peters, MO 63376  
Phone (636) 397-1104

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"AS-BUILT" 12.17.07

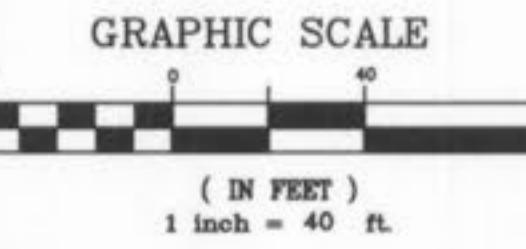
SSM HEALTHCARE  
IMPROVEMENT PLANS  
O'FALLON, MO

Prepared For:

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CHECKED  
S.D. MARION  
PROJECT # 91090.LILB.02C  
TASK # 2 FIELD  
BOOK 450ESSM HEALTHCARE  
IMPROVEMENT PLANS  
SITE PLAN

SHEET 3 OF 11

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GRAPHIC SCALE

## PROJECT DATA

BUILDING	PAVED AREA	LANDSCAPED AREA	TOTAL SQ. FT.
26,516 (19.7%)	63,472 (46.9%)	45,120(33.4%)	135,108

GREGORY P. & DOBORAH L.  
SPRINGFIELD,  
2524/764

## LANDSCAPE CALCULATIONS

Street Trees = 1 tree per every 40.00' of public or private street frontage.  
Placed at 40.00' intervals inside the landscape setback

Site Trees = 1 tree per every 4,000 S.F. of landscape open space.

328.95 LIN. FT. STREET FRONTAGE / 40 = 8 TREES REQUIRED / 7 EXISTING / 4 PROVIDED

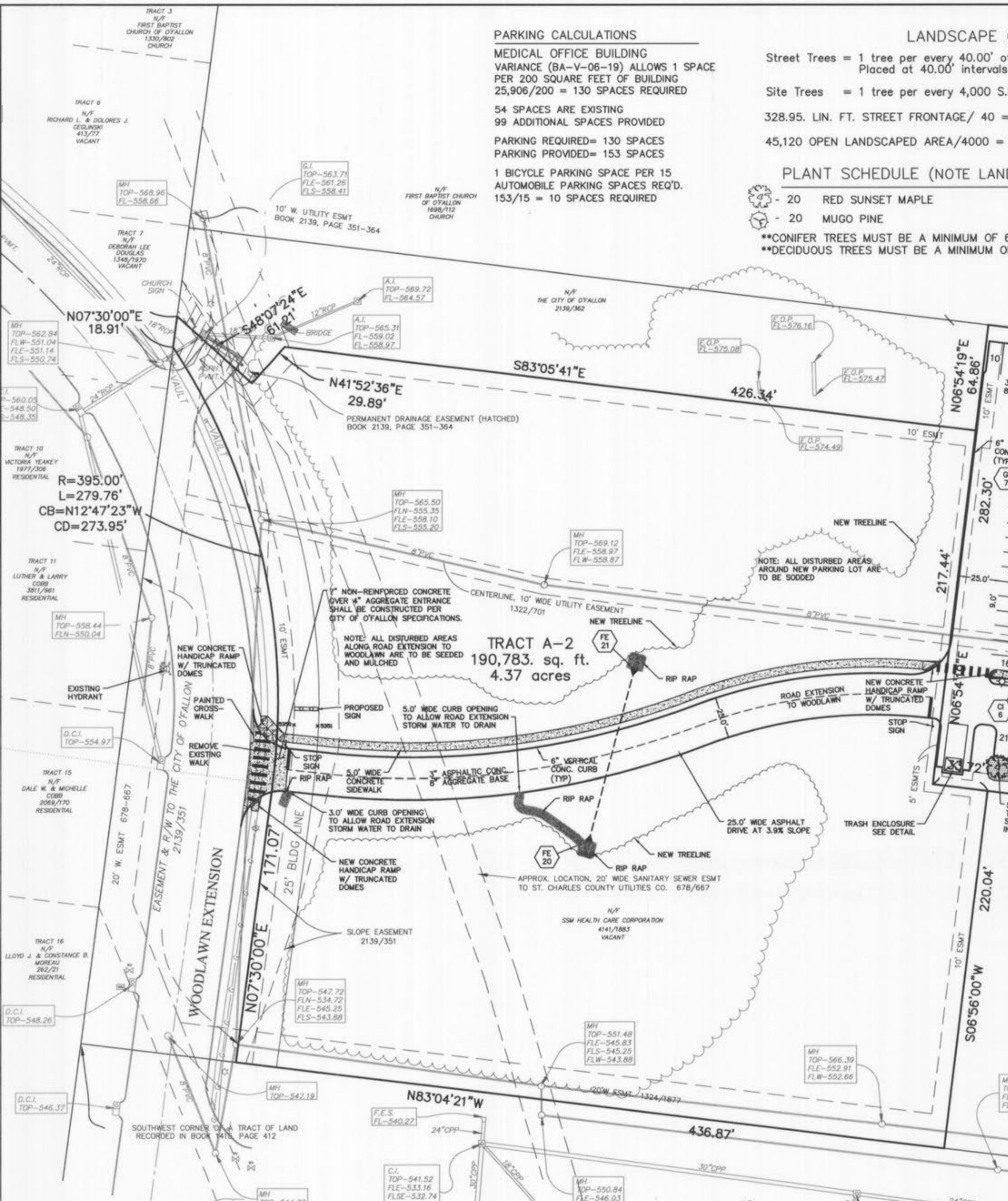
45,120 OPEN LANDSCAPED AREA/4000 = 11 SITE TREES REQUIRED / 11 EXISTING / 20 PROVIDED

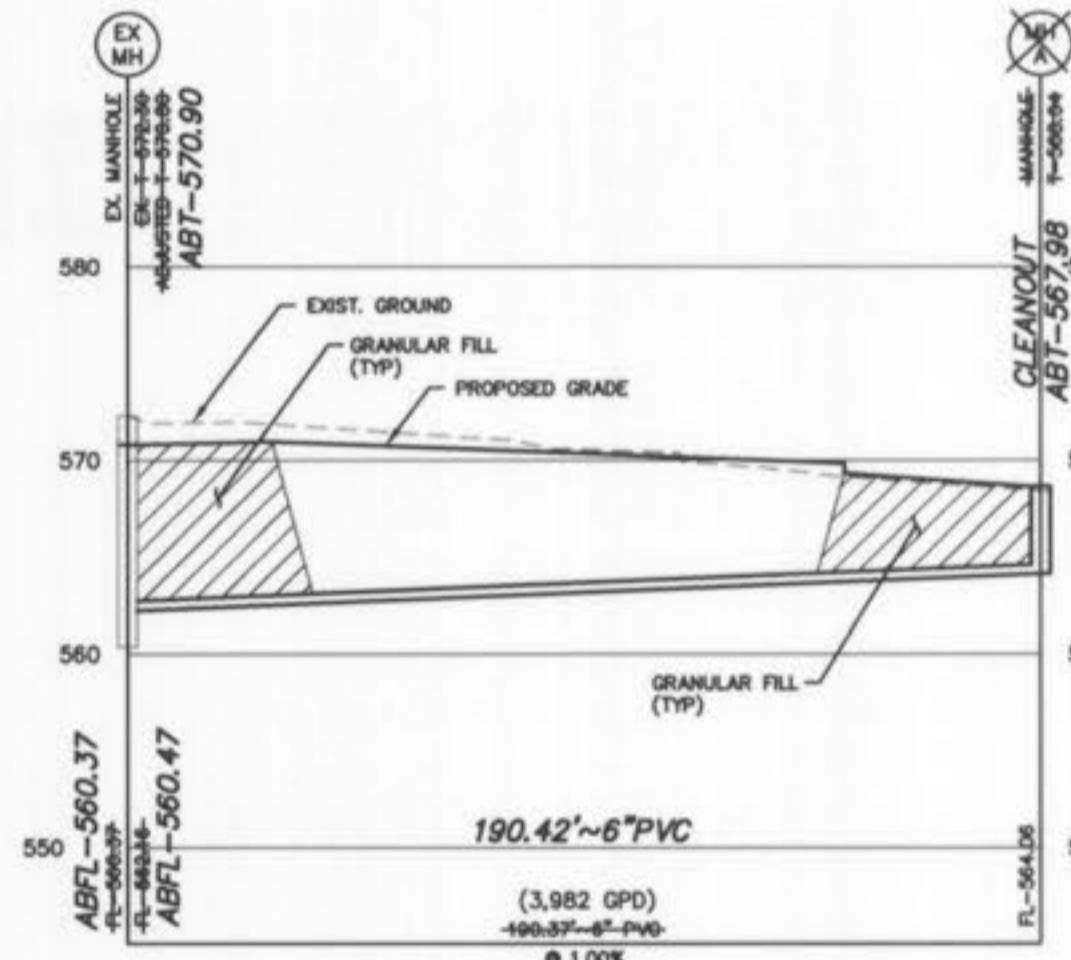
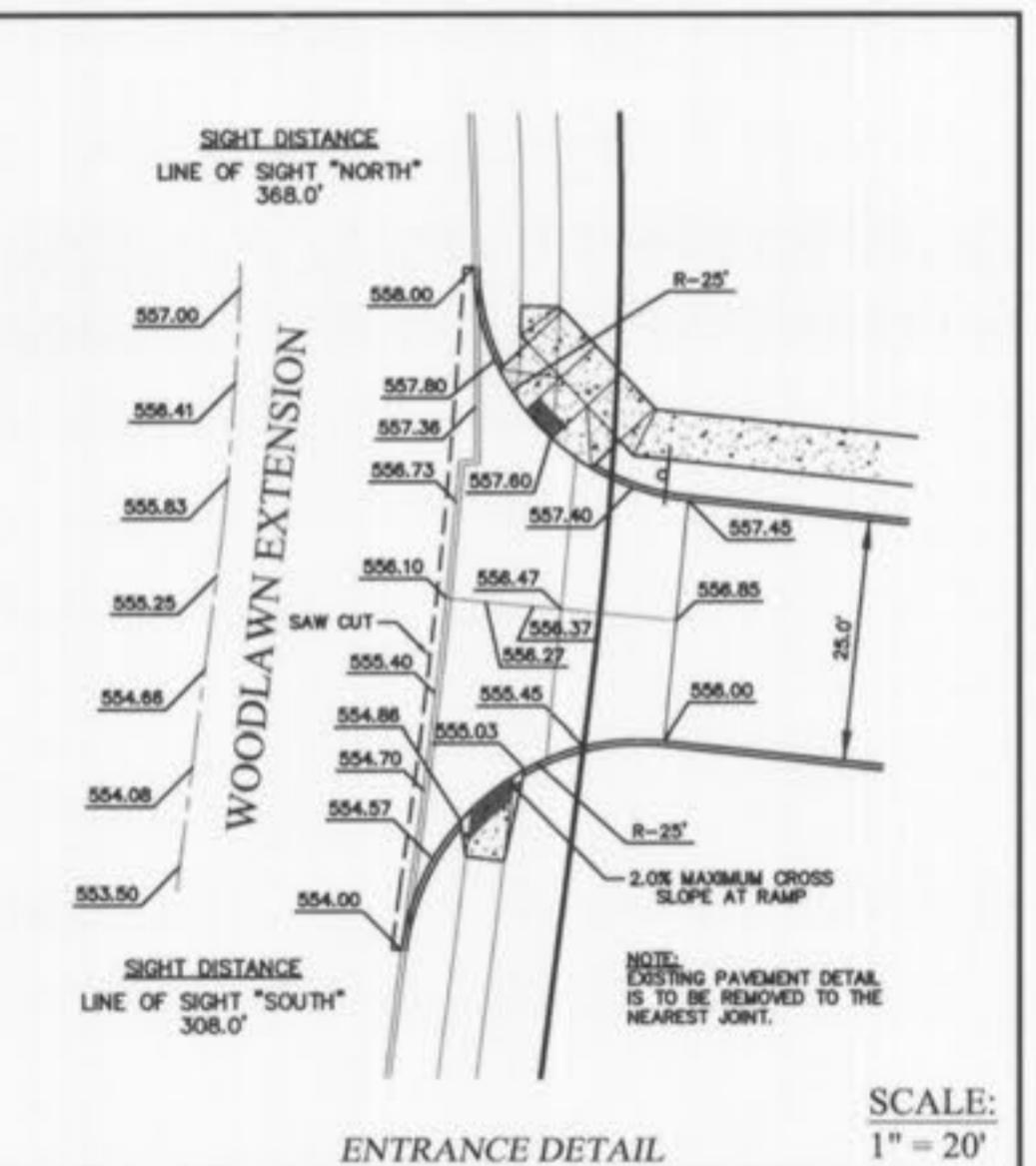
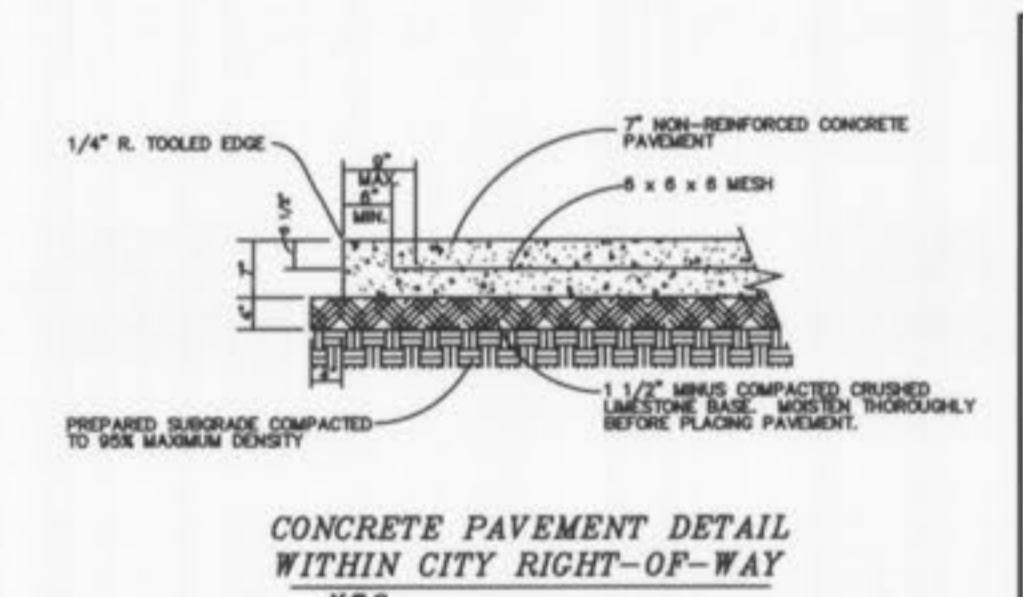
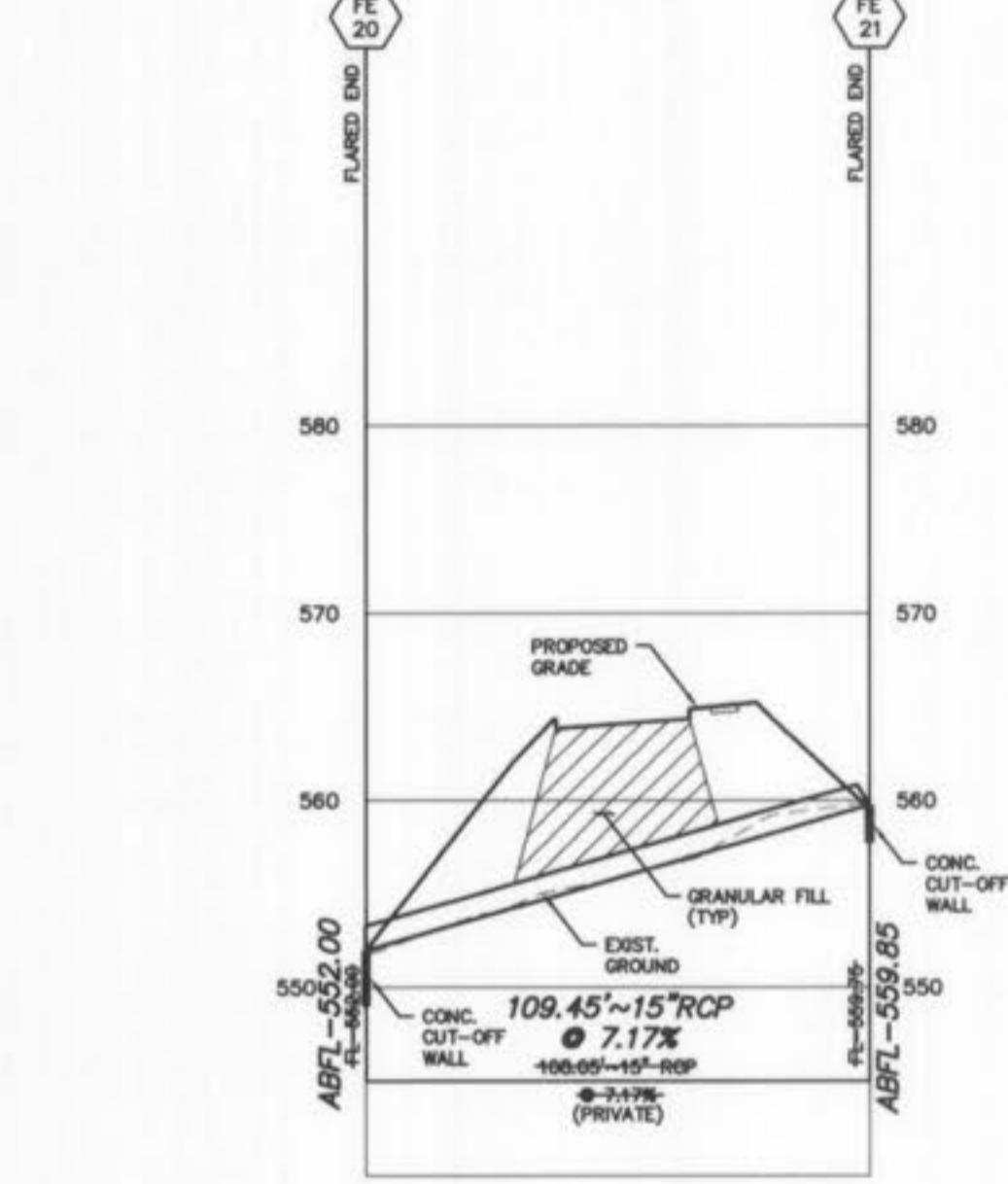
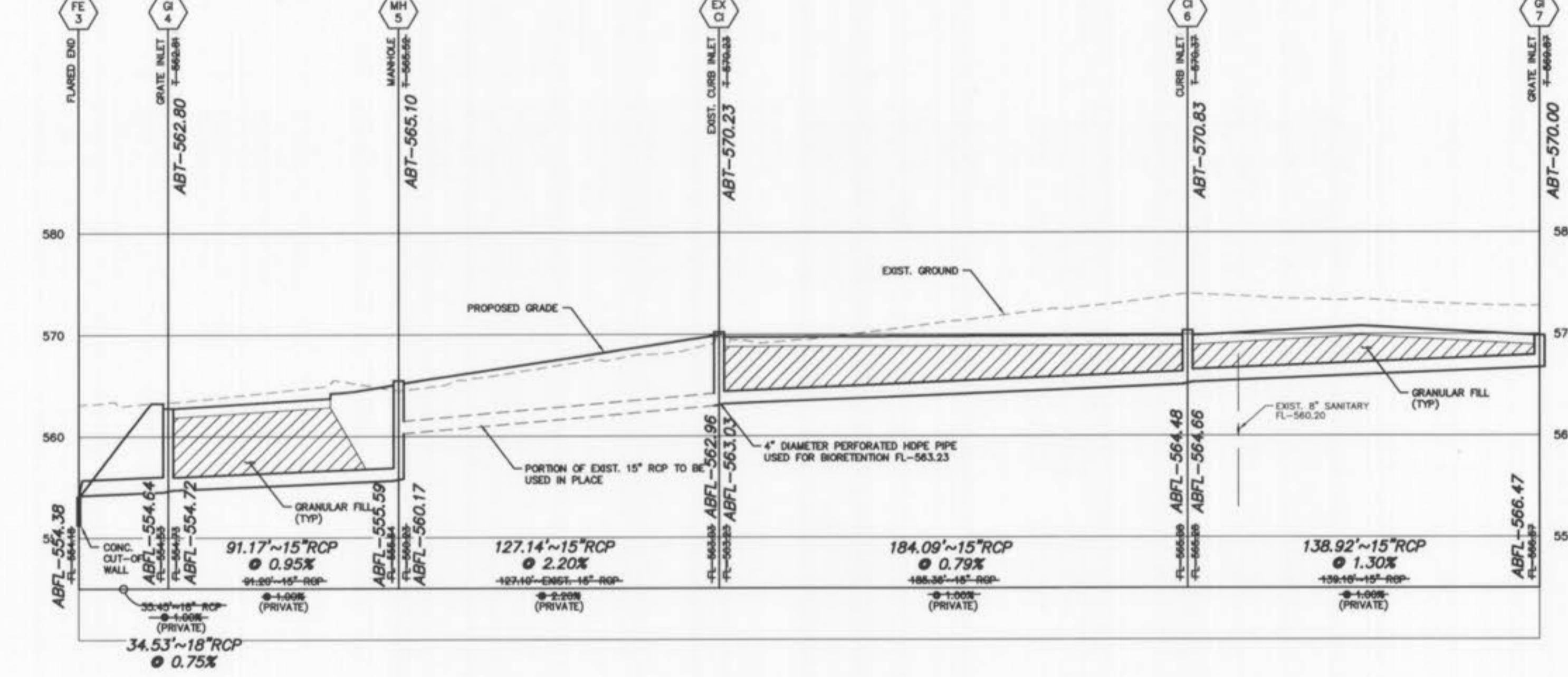
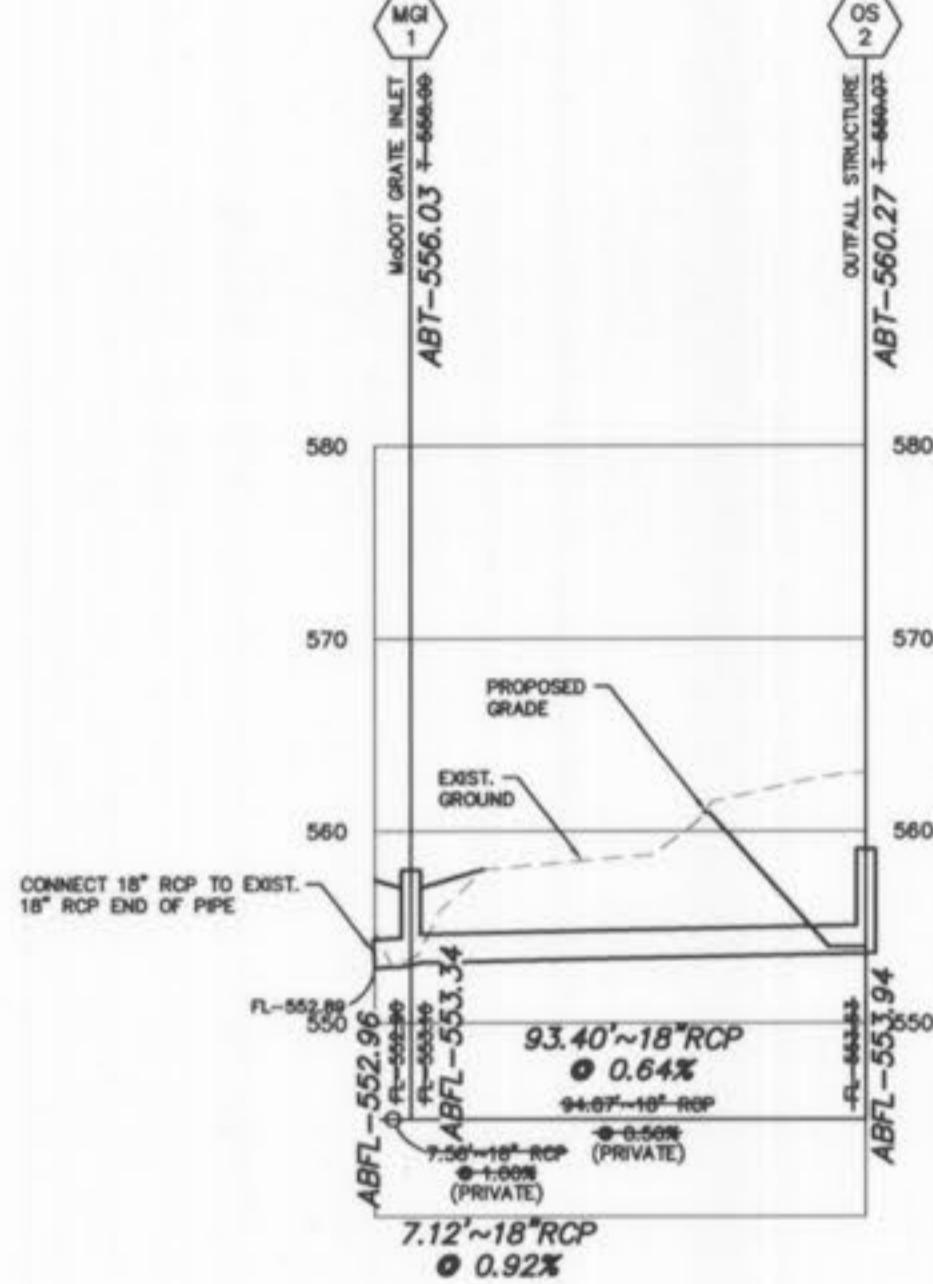
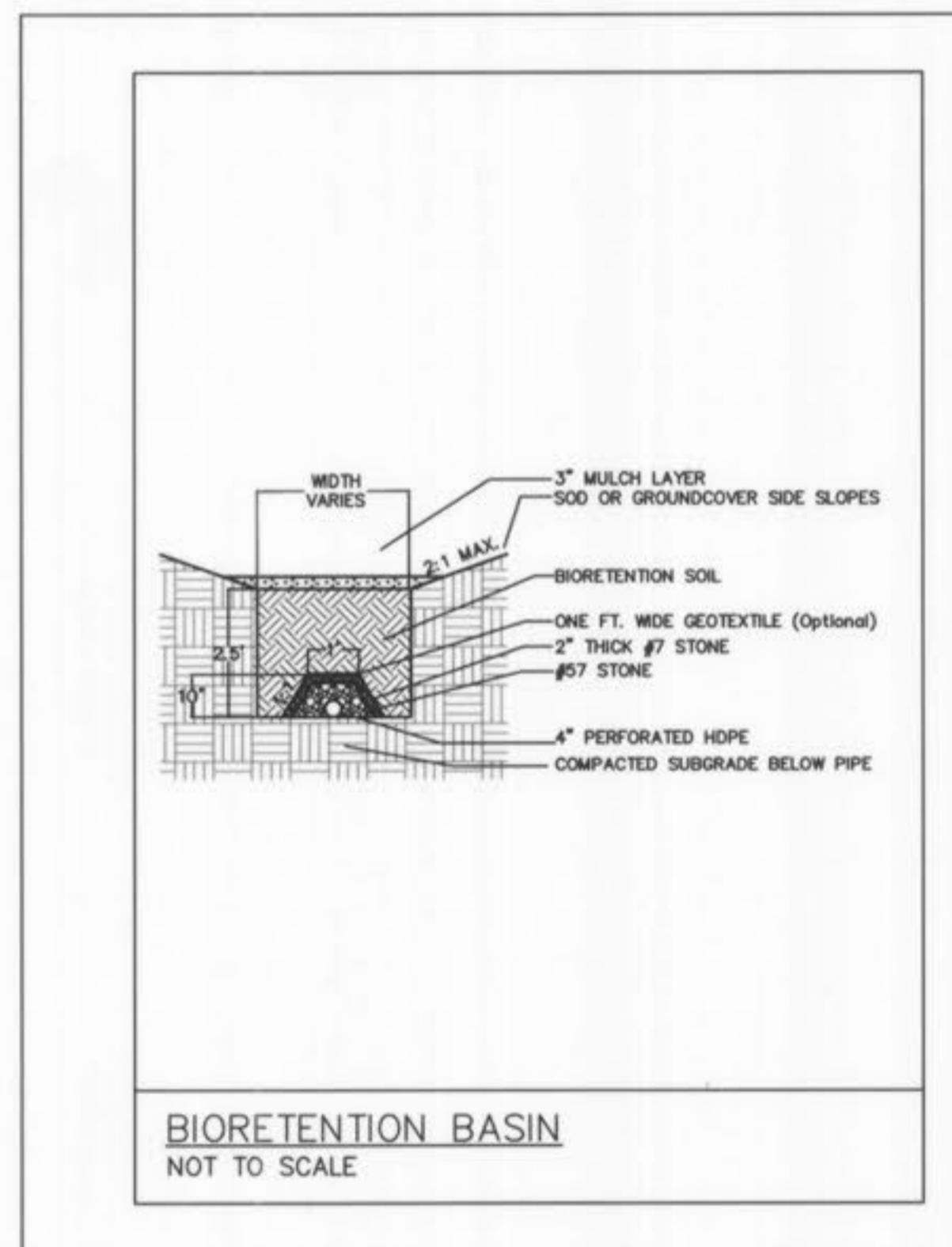
## PLANT SCHEDULE (NOTE LANDSCAPING NOT SHOWN TO SCALE)

- 20 RED SUNSET MAPLE	Acer rubrum 'Red Sunset'	2" CAL.
- 20 MUGO PINE	Pinus mugo mughus	2 GAL.

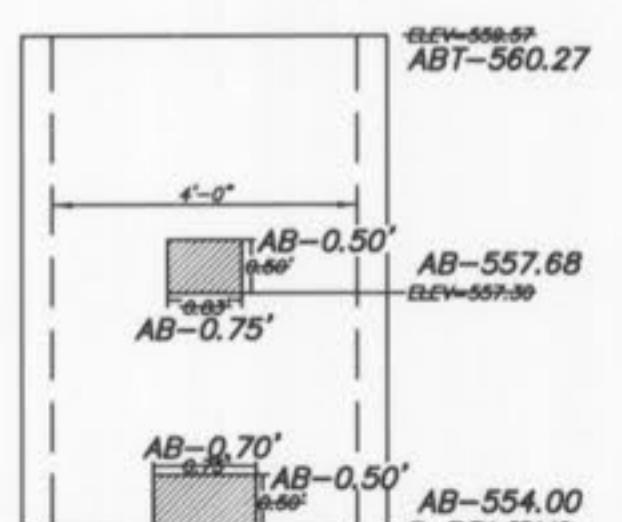
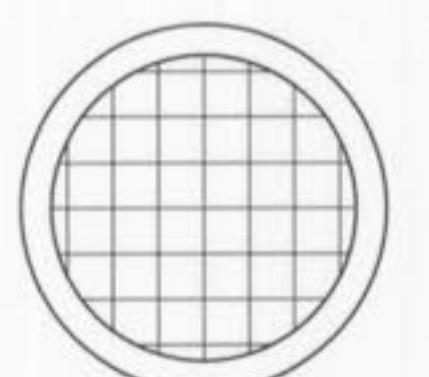
\*\*CONIFER TREES MUST BE A MINIMUM OF 6' IN HEIGHT.

\*\*DECIDUOUS TREES MUST BE A MINIMUM OF 2" IN CALIPER

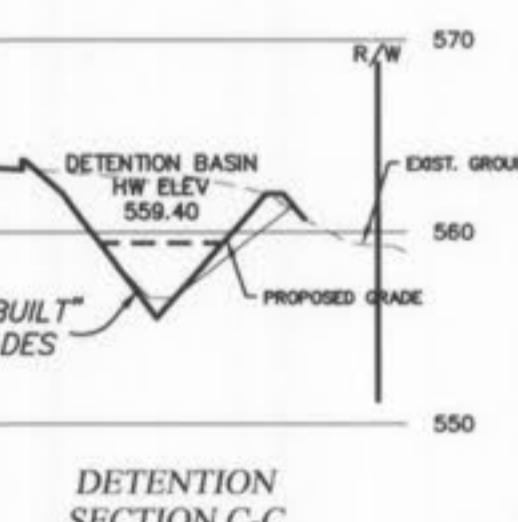
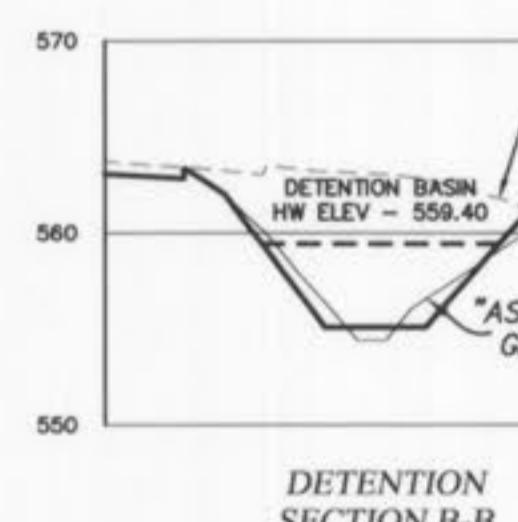
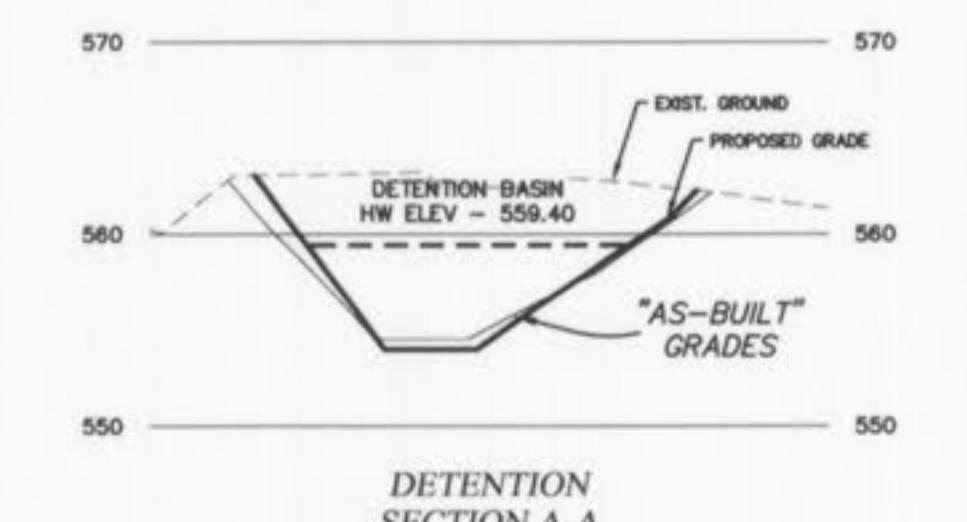




SANITARY PROFILE



OUTFALL STRUCTURE  
N.T.S.



Manufacturer	Size	Adhesive	Style	Message (Part #)	Website
ACP International	3 7/8"	Epoxy	Crystal Cap	No Dumping Drains To Waterways (SD-WCC)	<a href="http://www.acpinternational.com">www.acpinternational.com</a>
DAS Manufacturing, Inc.	4"	Epoxy	Standard Style	No Dumping Drains To Stream (SDS)	<a href="http://www.dasmanufacturing.com">www.dasmanufacturing.com</a>

NOTE:  
RIP RAP SHOWN AT FLARED ENDS WILL BE EVALUATED IN THE FIELD AFTER INSTALLATION. IF REQUIRED, RIP RAP AND FILTER MODIFIED IF NECESSARY TO REDUCE EROSION ON AND OFF SITE. RIP RAP IS NOT TO BE GROUTED.

NOTE:  
CUT OFF WALLS ON FE'S ARE 2' DEEP UPSTREAM, 3' DEEP DOWNSTREAM. (FE'S SHALL BE CONC.)

SCALE:  
HOR. - 1"=40'  
VERT. - 1"-10'  
P&Z APPROVAL 10.05.06  
FILE #2606.01

DRAWN  
J.M. WINTERS  
CHECKED  
S.D. MARION  
PROJECT # 91090.LLB.02C  
TASK # 2 FIELD BOOK 450E

SSM HEALTHCARE IMPROVEMENT PLANS PROFILES SHEET  
SHEET 8 OF 11

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CONTACT: NATE MARTINZ  
PLANO, TEXAS 75093-4821  
972-248-9100 EXT. 4360

"AS-BUILTS" 12-17-07

SSM HEALTHCARE IMPROVEMENT PLANS OFALLON, MO

Prepared For:  
**LILLIBRIDGE**

REVISIONS  
NO. DATE  
1 10.19.06 REVISED PER CITY COMMENTS  
2 11.09.06 REVISED PER MDOT COMMENTS  
3 12.15.06 REVISED PER MDOT COMMENTS  
4 12.17.07 AS-BUILTS

ENGINEERS AUTHENTICATION  
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PICKETT, RAY & SILVER, INC.

*Roy D. Allen*  
PICKETT, RAY & SILVER, INC.  
ALLEN, TX  
10-25-08

SSM HEALTHCARE IMPROVEMENT PLANS PROFILES SHEET  
SHEET 8 OF 11

