

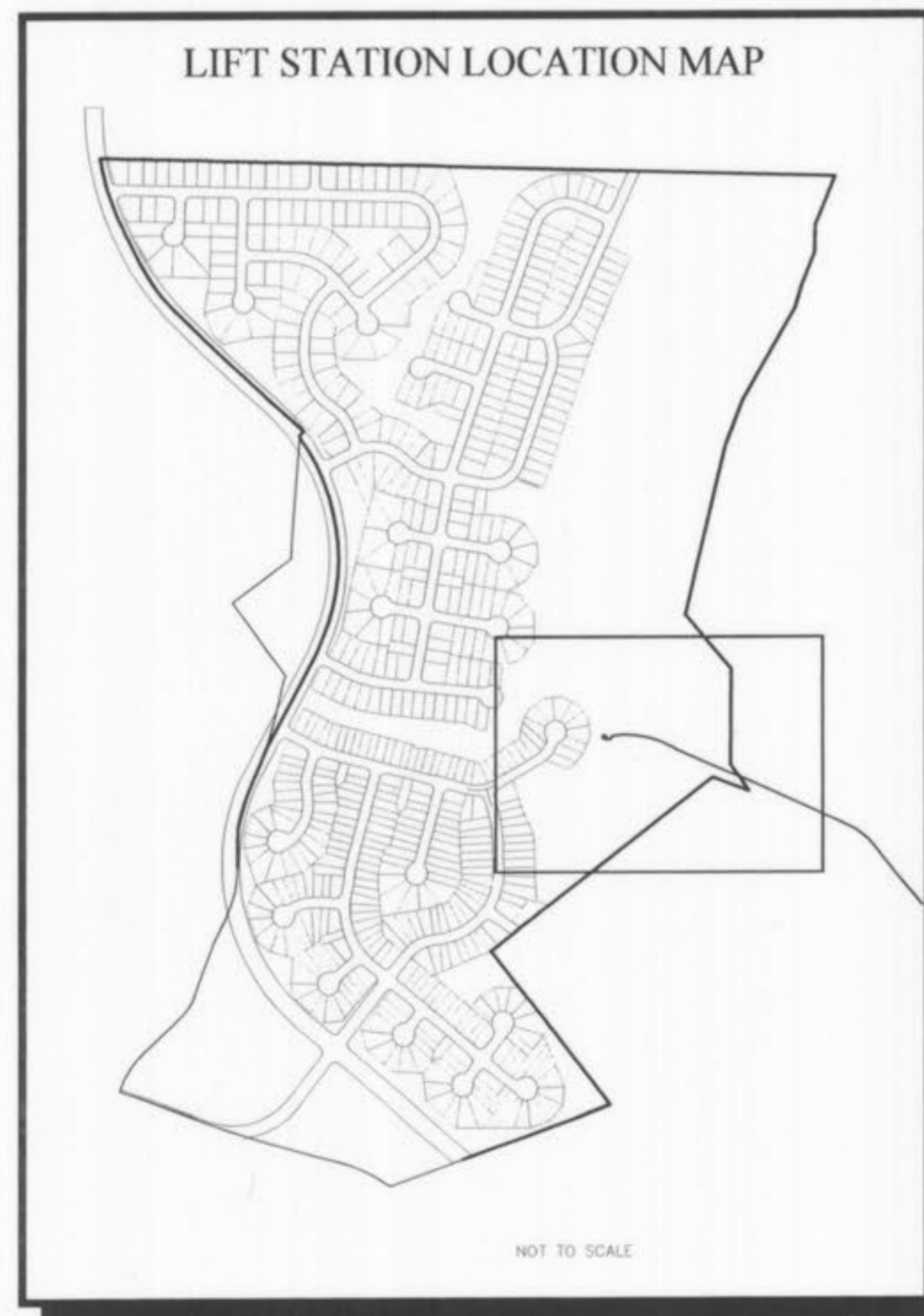
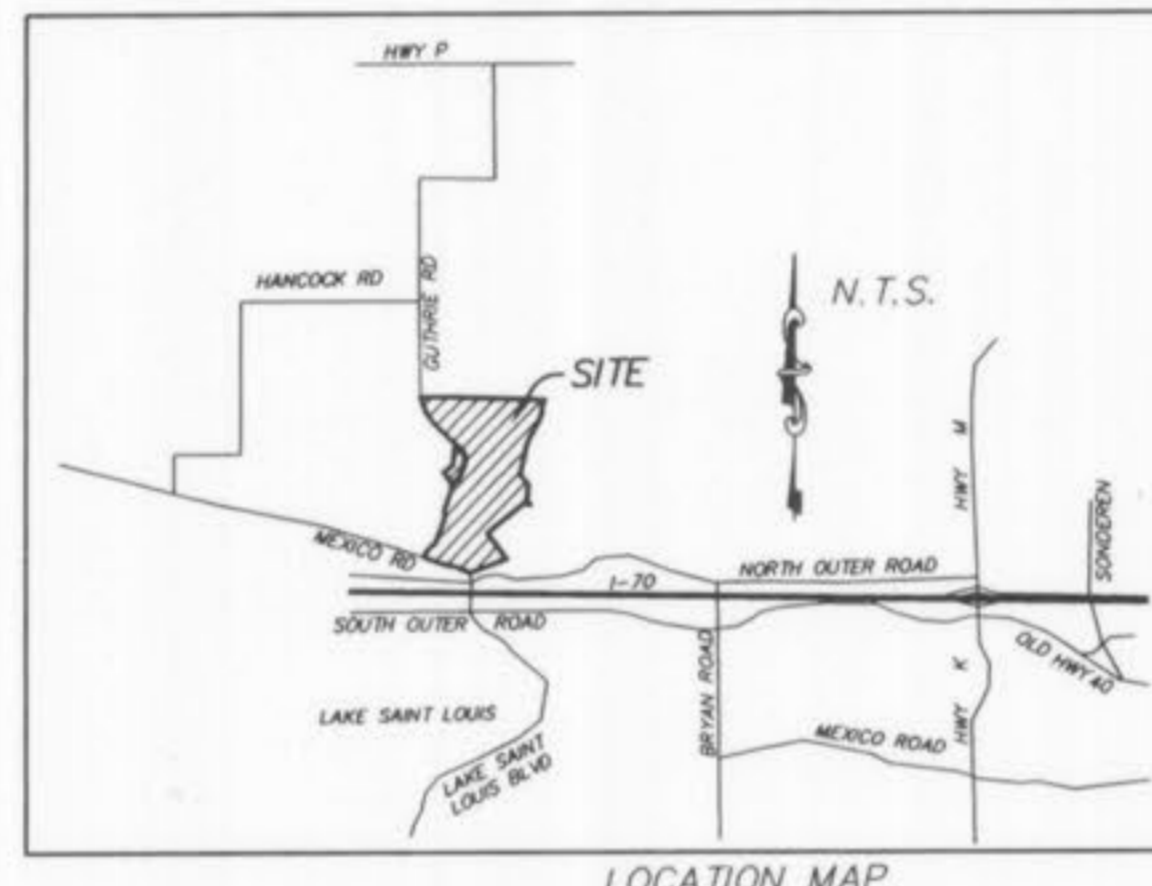
BROOKSIDE

A TRACT OF LAND BEING PART OF
SECTIONS 22, 23, 26, & 27, AND PART OF
U.S. SURVEY 54, TOWNSHIP 47 NORTH, RANGE 2 EAST,
ST. CHARLES COUNTY, MISSOURI

LIFT STATION & OFF-SITE FORCE MAIN

GENERAL NOTES

- 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.
- 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.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to at least 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557), unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.
- All filled places in paved State, County or City roads (highways) shall be compacted to at least 90% of the maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557), unless otherwise specified by the local governing authority specifications. All tests will be verified by a Soils Engineer.
- Earth subgrade for paved areas must be compacted to 90% of maximum dry density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557), and must be inspected and approved by a representative of the City, before paving can commence.
- All grading on City of O'Fallon right-of-way shall be seeded and mulched and all disturbed right-of-way markers shall be reset at the completion of grading.
- No area shall be cleared without permission of the developer.
- All grades shall be within 0.2 feet more or less of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- The developer shall contract with a soil consultant firm registered in the State of Missouri during the grading operation to monitor cut and fill and to verify proper compaction has been achieved. A report shall be prepared by the soil consultant and provided to the City for verification of the grading operation.
- Owner/Developer assumes full responsibility as to the performance of the grading operation and assurance that all properties and roads will be adequately protected.
- The total yardage for this project is based on a 15.0% shrinkage factor.
- The shrinkage factor is subject to change, due to soil conditions, (types and moisture content), weather conditions, and the percent compaction actually achieved at the time grading is performed. As a result, adjustments need to be made, the contractor shall contact the project engineer, prior to completion of the grading.
- If straw bales or siltation fence are destroyed by heavy rains, vandalism, etc., they are to be replaced promptly by Contractor.
- All fills under and within 15 feet of the building areas that are deeper than 8 feet shall be compacted to at least 92 percent of the maximum dry density as determined by a modified proctor test. Fills less than 8 feet in building areas should be compacted to at least 90 percent of the maximum dry density as determined by a modified proctor test.
- Where natural vegetation is removed during grading, vegetation shall be re-established in such a density as to prevent erosion. Permanent type grasses shall be established as soon as possible or during the next seeding period after grading has been completed.
- When grading operations are completed or suspended for more than 14 days, vegetation must be established at sufficient density to provide erosion control from the site. Between permanent grass seeding periods, temporary cover shall be provided according to the designated officials recommendation.
- All finished grades (areas not to be disturbed by future improvement) in excess of 20% slopes (5:1) shall be mulched and tacked at the rate of 100 pounds per 1,000 square feet when seeded.
- Trees, organic debris, rubble, foundations and other deleterious material shall be removed from the site and disposed in compliance with all applicable laws and regulations. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district.
- The developer and his contractor shall be responsible for installing the siltation control as approved by the City of O'Fallon prior to the commencement of grading operations.
- Development is located within the 100 Year Flood Plain Limits as shown on F.E.M.A. Maps No. 29183C0210E, 29183C0220E, 29183C0405E and 29183C0410E dated MARCH 17, 2003.
- Erosion control shall NOT be limited to what is shown on the plan. Whichever means necessary shall be taken to prevent siltation and erosion from entering natural streams and adjacent roadways, properties, and ditches.
- This tract is served by:
CITY OF O'FALLON SEWER
CITY OF O'FALLON WATER
AMEREN UE
CENTURY TEL
ST. CHARLES GAS CO.
WENTZVILLE FIRE PROTECTION DISTRICT
FORT ZUMWALT SCHOOL DISTRICT
O'FALLON POST OFFICE
- Each contractor, subcontractor, and/or utility company shall be responsible for the maintenance and preservation of any siltation control placed on the development by the developer and shall not disturb the siltation control except as absolutely necessary. In the event of any such disturbance of siltation control, then the contractor, subcontractor, or utility company, as applicable, disturbing such siltation control shall immediately replace the same at such contractor's, subcontractor's, and utility company's, as applicable, expense. In the event of any fines or penalties being levied as a result of the disturbance of any such siltation control, the party disturbing such siltation control shall be liable for payment of same and shall indemnify and hold Summit Pointe L.C., harmless from any and all liabilities, damages, demands, penalties, fines, fees, claims, causes of action, judgments, costs and expenses, including, without limitation, attorneys' fees, arising from or in connection with any such disturbance.
- It is the responsibility of the developer and the developer's grading contractor to read and be familiar with the Geotechnical Report prepared by the Soils Engineer.
- Developer must supply City inspectors with soils reports prior to or during site soil testing.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the owner and/or the City of O'Fallon and/or MoDOT. The Contractor's responsibilities depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may at their option direct the contractor in his methods as deemed fit to protect property and improvements. Any depositing of silts or mud on new or existing pavement or in new or existing storm sewers or seales shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.
- All erosion control systems shall be inspected and necessary corrections made within 24 hours of any rainstorm resulting in one-half inch of rain or more.
- No graded area is to remain bare for over 6 months without being seeded and mulched.
- All low places whether on site or off site should be graded to allow positive drainage.
- The developer is required to keep all public roadways used to access this site, clear of dirt, rock, sediment, and/or other debris during all grading.
- Graded areas to remain bare for over 2 weeks are to be seeded and mulched.
- All fill placed under proposed storm and sanitary sewer, proposed roads, and/or paved areas shall be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. All fill placed in proposed roads shall be compacted from the bottom of the fill up. All test 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 to the City of O'Fallon.
- A separate permit must be obtained for demolition of existing buildings and structures.
- A Special-Use Permit must be obtained from St. Charles County Highway Department before any work can be performed in Mexico Road or Guthrie Road right-of-way. Please contact Donna Ray at St. Charles County Highway Department at 636-949-7305.
- St. Charles County Highway Department shall be notified 24 hours prior to the start of construction. Contact Vance Gribble at 636-949-7305.
- Contractor will be responsible for any damage done to the newly paved Mexico Road. Any damage done to the road should be replaced as followed:
a. Pavement - Damaged area should be milled 1/2 width of existing road surface. SSH tack oil be applied to milled area. 2" thick overlay (BP-1).
Guthrie Road and Mexico Road must be kept clean of mud and debris. Clean up of both roads must be done throughout the workday.



DRAWING INDEX

Sheet	Description
1	COVER SHEET
31A	VILLAGE "A" LIFT STATION SITE PLAN
32A-33A	VILLAGE "A" OFFSITE FORCE MAIN PLAN & PROFILE
34A-38A	VILLAGE "A" LIFT STATION DETAILS

These "As-Built" SANITARY SEWER plans are based on actual field measurements and the results are shown hereon.

By: *J.R. Chervek* 8-25-06
JAMES R. CHERVEK, P.L.S., #2211
STATE OF MISSOURI
PICKETT, RAY & SILVER'S CORPORATE
REGISTRATION NO. LS-54-D

LEGEND

—●— Sanitary Sewer (Proposed)	MA 20 Sanitary Structure	R.C.P. Reinforced Concrete Pipe
—○— Sanitary Sewer (Existing)	CS 30 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
6" Water Line & Size	⊙ Light Standard	V.C.P. Vitrified Clay Pipe
Ex W Existing water line	⊙ Double Water Meter Setting	
— Tee & Valve	⊙ Single Water Meter Setting	C.O. Clean Out
Hydrant	C.I. Curb Inlet	V.T. Vent Trap
Cap	S.C.I. Skewed Curb Inlet	T.B.R. To Be Removed
18 Lot or Building Number	D.C.I. Double Curb Inlet	T.B.R.&R To Be Removed & Relocated
x Existing Fence Line	G.I. Gate Inlet	T.B.P. To Be Protected
Existing Tree Line	A.I. Area Inlet	T.B.A. To Be Abandoned
Street Sign	D.A.I. Double Area Inlet	B.C. Base Of Curb
Existing Contour	C.C. Concrete Collar	T.C. Top Of Curb
Proposed Contour	F.E. Flared End Section	T.W. Top Of Wall
Rip-Rap	E.P. End Pipe	B.W. Base Of Wall
End of Lateral	E.D. Energy Dissipater	(TYP) Typical
Asphalt Pavement	M.H. Manhole	U.N.O. Unless Noted Otherwise
Concrete Pavement	C.P. Concrete Pipe	U.I.P. Use in Place
Strawbales		

PROJECT BENCH MARK

NGVD (same as USGS)
RM 45: Chiseled square on the southeast wingwall of the Lake Saint Louis Boulevard bridge over the spillway of Lake Saint Louis.
Elev. 526.16

SITE BENCH MARK

RM 45: Chiseled square on the southeast wingwall of the Lake Saint Louis Boulevard bridge over the spillway of Lake Saint Louis.
Elev. 526.16

AS-BUILTS

PICKETT RAY & SILVER
CIVIL ENGINEERS
PLANNERS
LAND SURVEYORS
333 Mid Rivers Mall Drive
St. Peters, MO 63376
Phone (636) 397-1211
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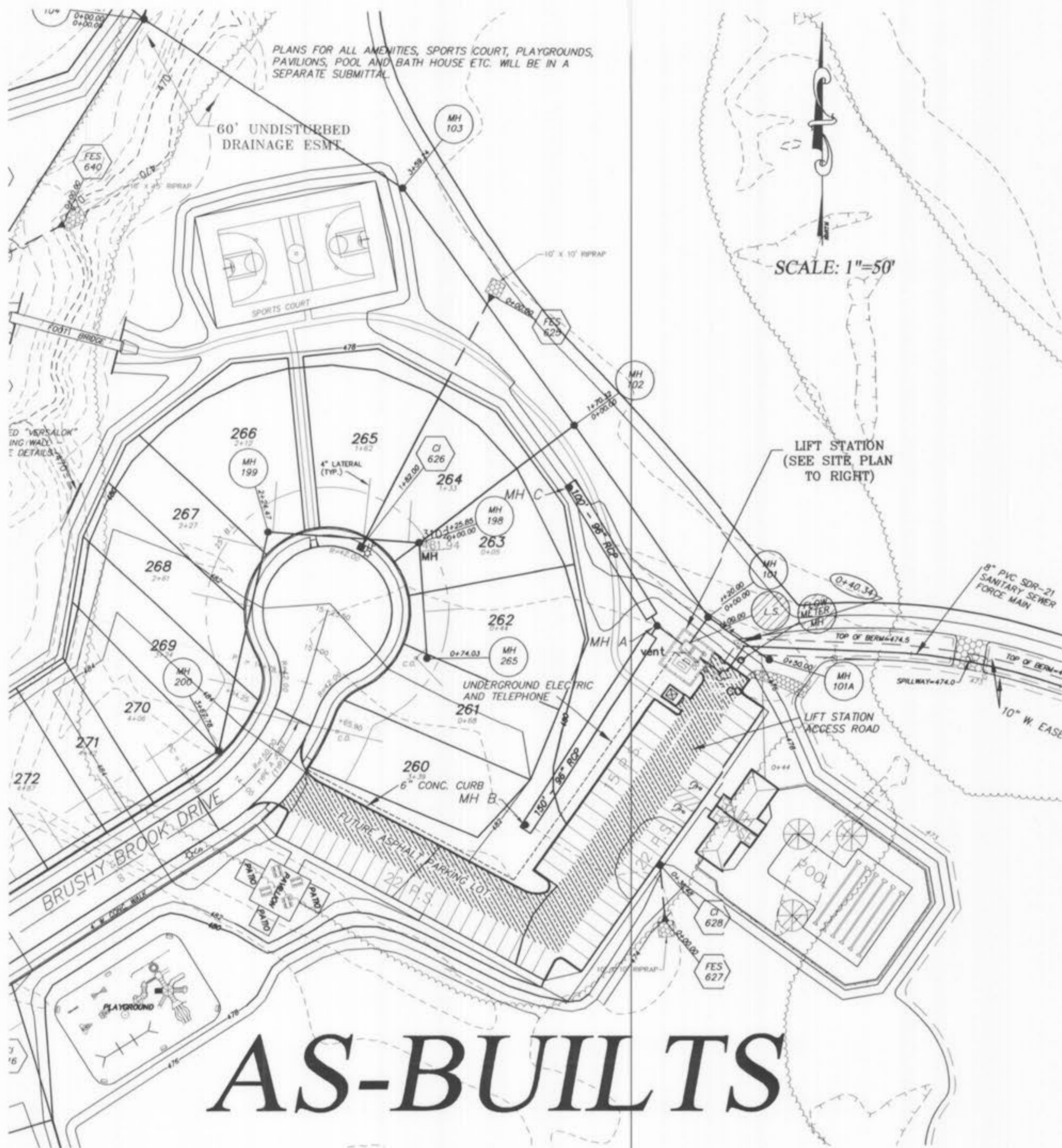
BROOKSIDE
LIFT STATION & OFF-SITE FORCE MAIN
COVER SHEET
Prepared For:
SUMMIT POINTE L.C.
130 FOX HILL ROAD,
ST. CHARLES, MO. 63301
(636) 940-9360

NO.	DATE	REV.	PER CITY COMMENTS	REV.	PER CITY COMMENTS
1	8/06/05	REV.	PER CITY COMMENTS 1/27/05		
2	8/14/05	REVISED PER CLIENT			
3	8/11/05	REV.	PER CITY COMMENTS 7/26/05		
4	1/17/07	REV.	PER CITY COMMENTS 1/10/07		

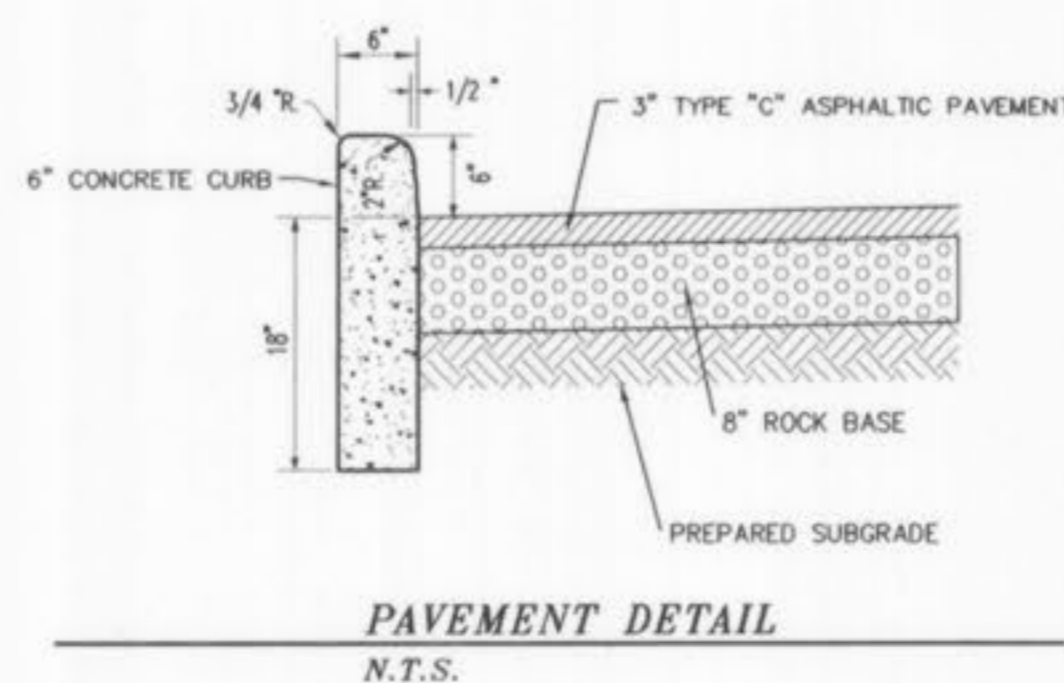
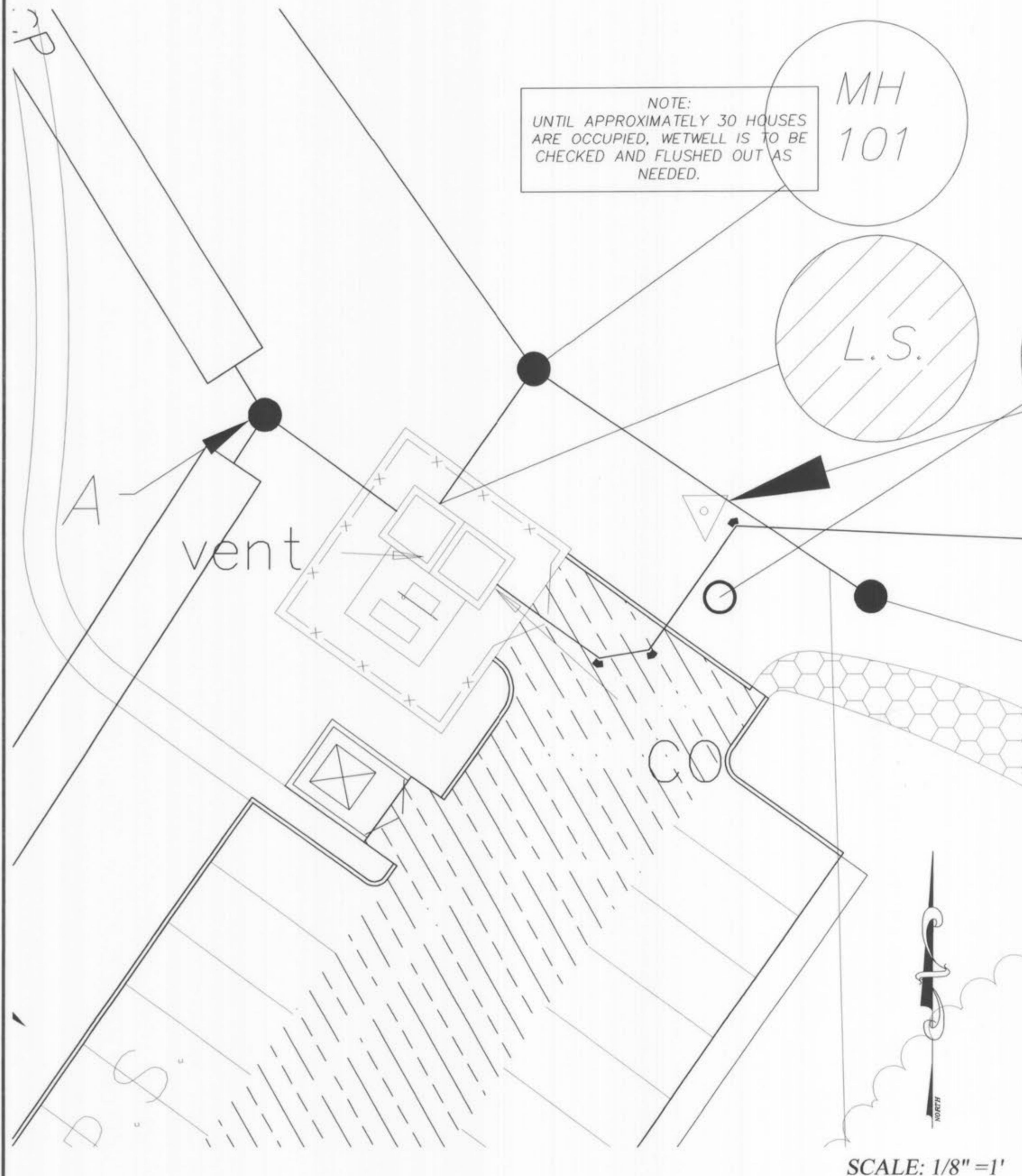
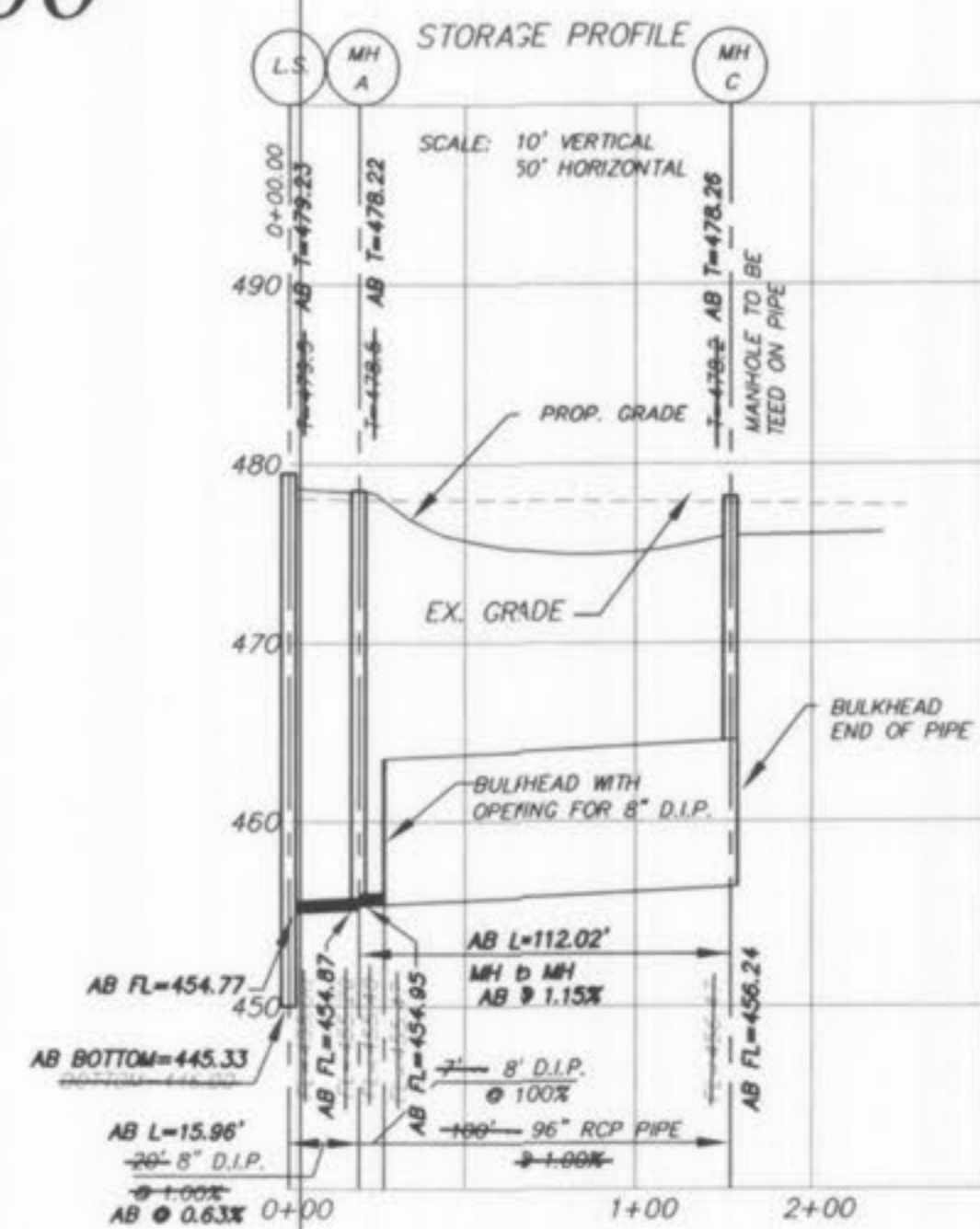
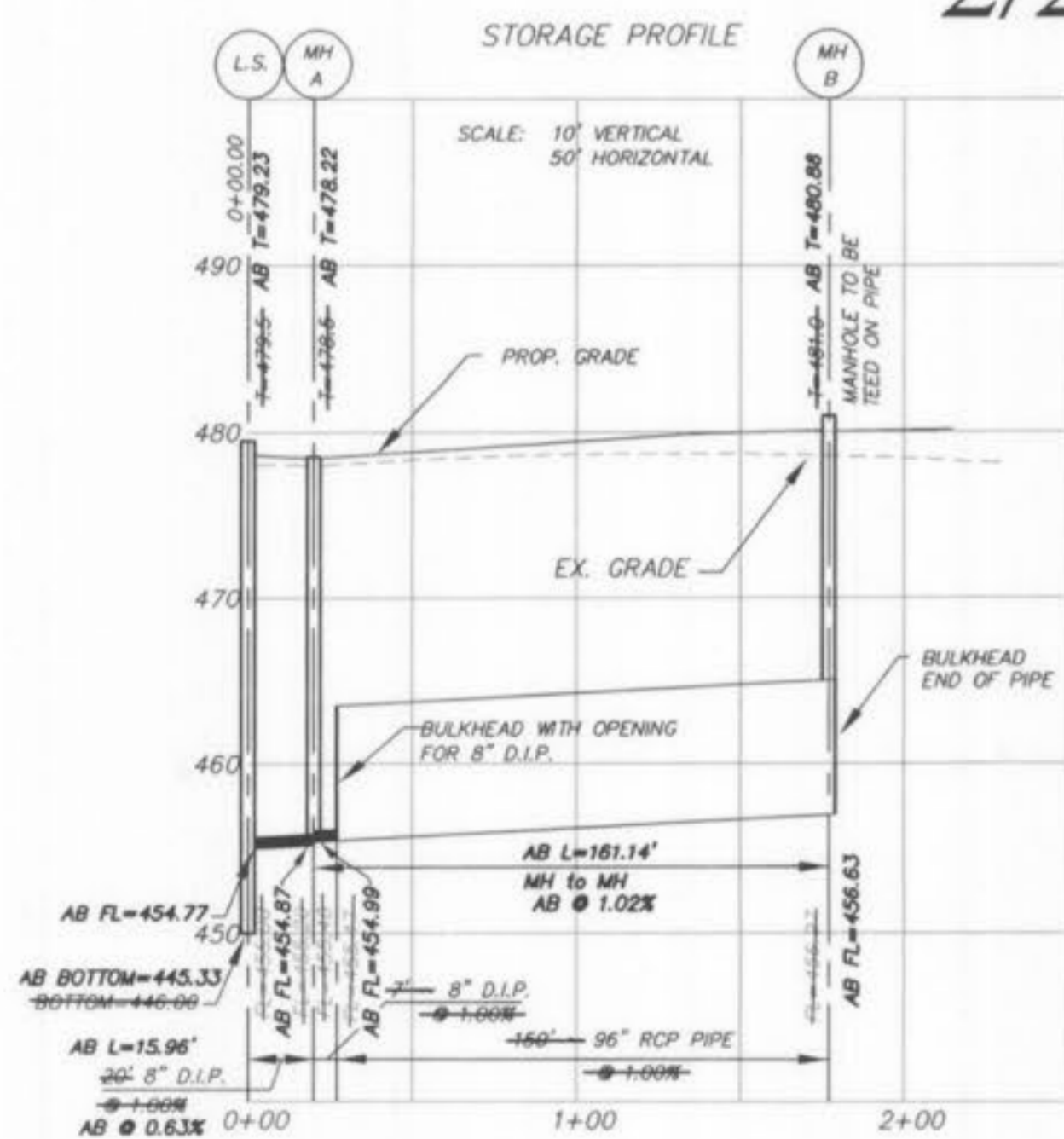
ENGINEERS AUTHENTICATION
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PICKETT, RAY & SILVER, INC.

DRAWN	DATE
JEE	8-26-04
CHECKED	DATE
DWD	8-26-04
PROJECT # 03029.SUPO.01R	
TASK # 4	FIELD BOOK 847

BROOKSIDE - LIFT STATION & OFF-SITE FORCE MAIN
COVER SHEET
SHEET 1 OF 149
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2/27/06



PICKETT RAY & SILVER

CIVIL ENGINEERS
PLANNERS
LAND SURVEYORS

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BROOKSIDE VILLAGE A
LIFT STATION SITE PLAN

Prepared For:
SUMMIT POINTE L.C.

230 FOX HILL ROAD
ST. CHARLES, MO. 63301
(636) 940-9300

NO.	DATE	REVISIONS
1	8/27/04	ADDED FLOW FROM KUPAN PROPERTY
2	8/11/05	REV. PER CITY COMMENTS 7/26/05
3	9/19/05	REV. PER CITY COMMENTS 9/12/05
4	10/19/05	REV. PER CITY COMMENTS 10/12/05
5	1/17/07	REV. PER CITY COMMENTS 1/10/07

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PICKETT, RAY & SILVER, INC

DRAWN	CAD	DATE	FEB., 2005
CHECKED	DWD	DATE	FEB., 2005

PROJECT # 03029.SUPO.01R
TASK # 002 FIELD BOOK 847

VILLAGE A
LIFT STATION SITE PLAN
SHEET 31A OF 149

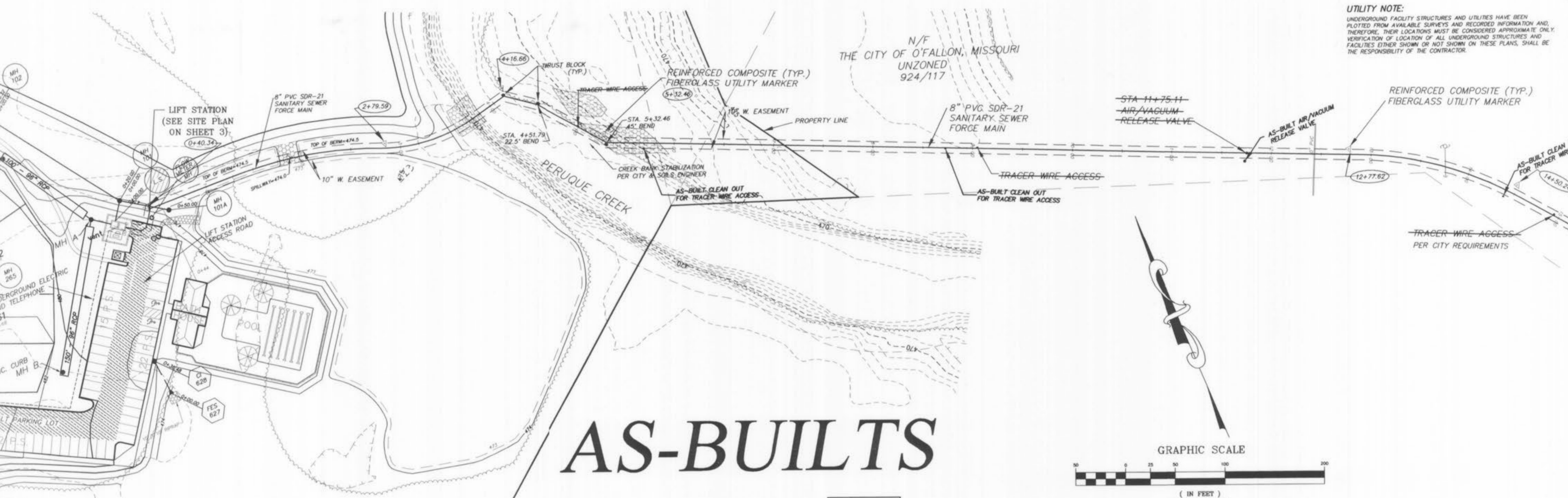
P & Z NO. 2603.01

Brookside Lift Station + Offsite Force Main

UTILITY NOTE:
 UNDERGROUND FACILITY STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDED INFORMATION AND, THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. VERIFICATION OF LOCATION OF ALL UNDERGROUND STRUCTURES AND FACILITIES EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

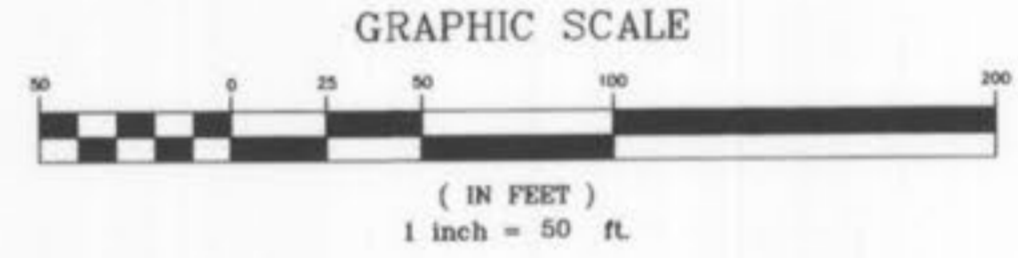
PICKETT RAY & SILVER
 CIVIL ENGINEERS
 PLANNERS
 LAND SURVEYORS
 333 Mid Rivers Mall Drive
 St. Peters, MO 63376
 Phone (636) 397-1211
 Fax (636) 397-1104

BROOKSIDE VILLAGE A
 FORCE MAIN PLAN & PROFILE
 Prepared For:
SUMMIT POINTE L.C.
 239 FOX HILL ROAD
 SUMMIT POINT, MO. 63081
 (636) 940-2300



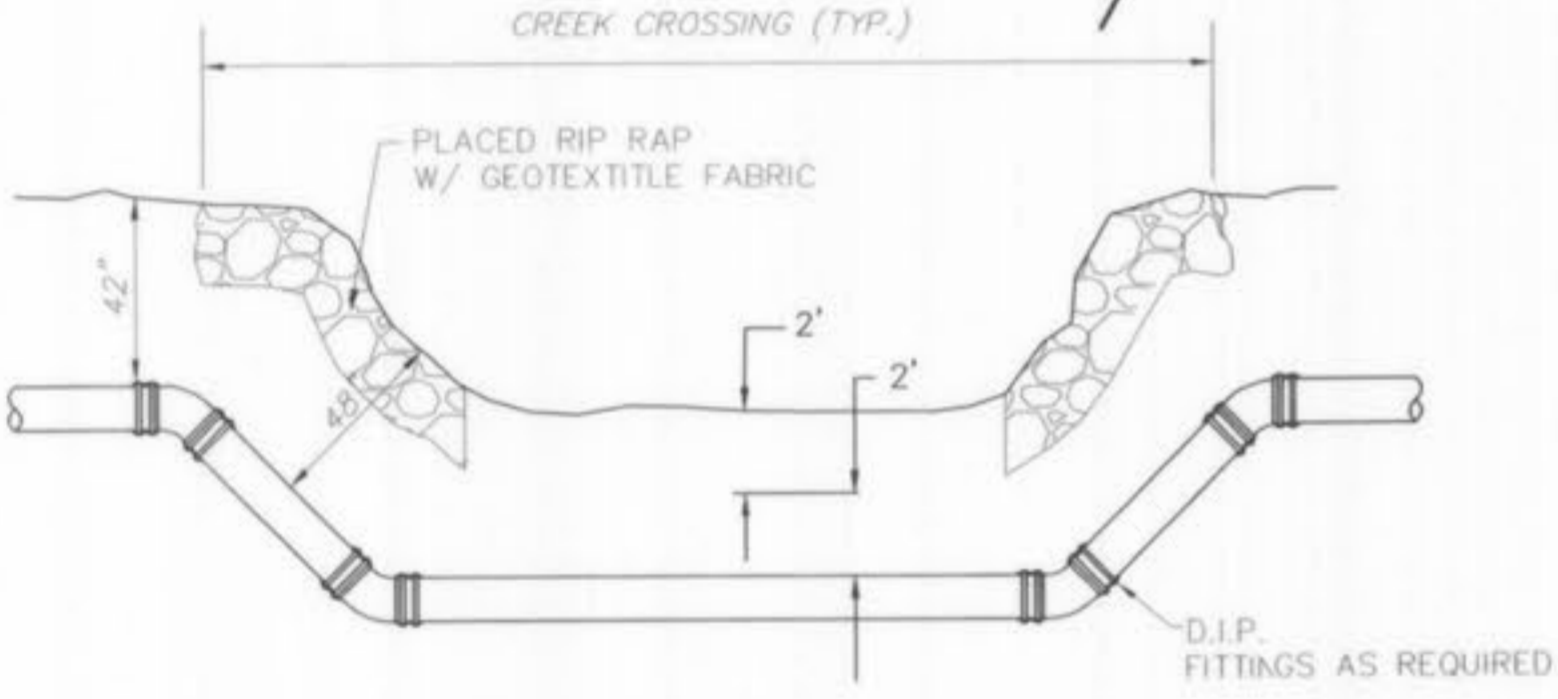
AS-BUILTS

8/25/06

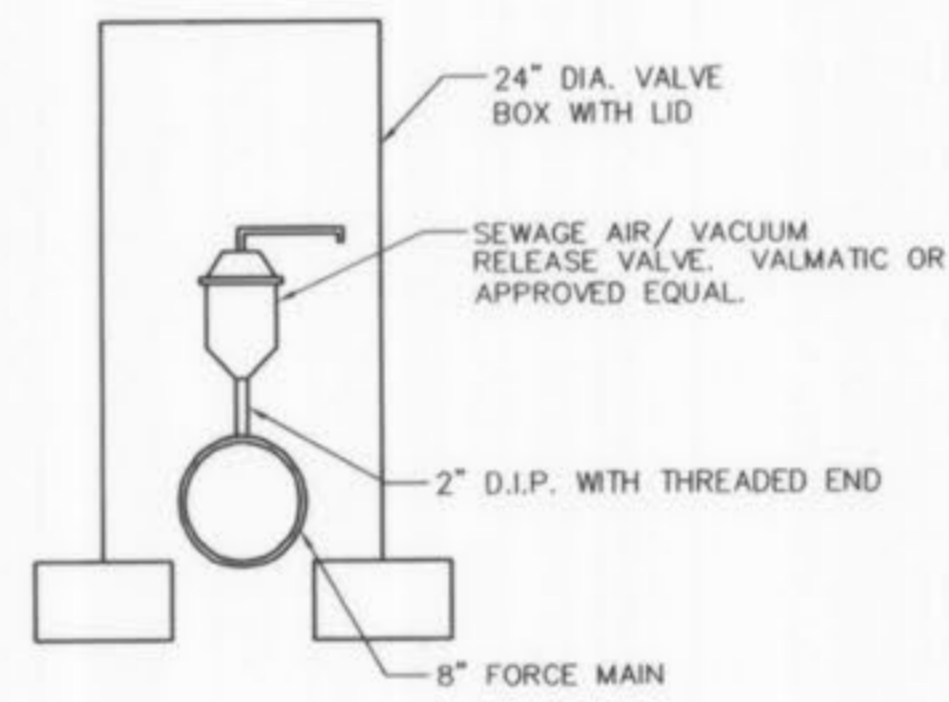


NOTE: SANITARY SEWER FORCE MAIN AS CONSTRUCTED TO BE CENTERED IN 10' W. EASEMENT

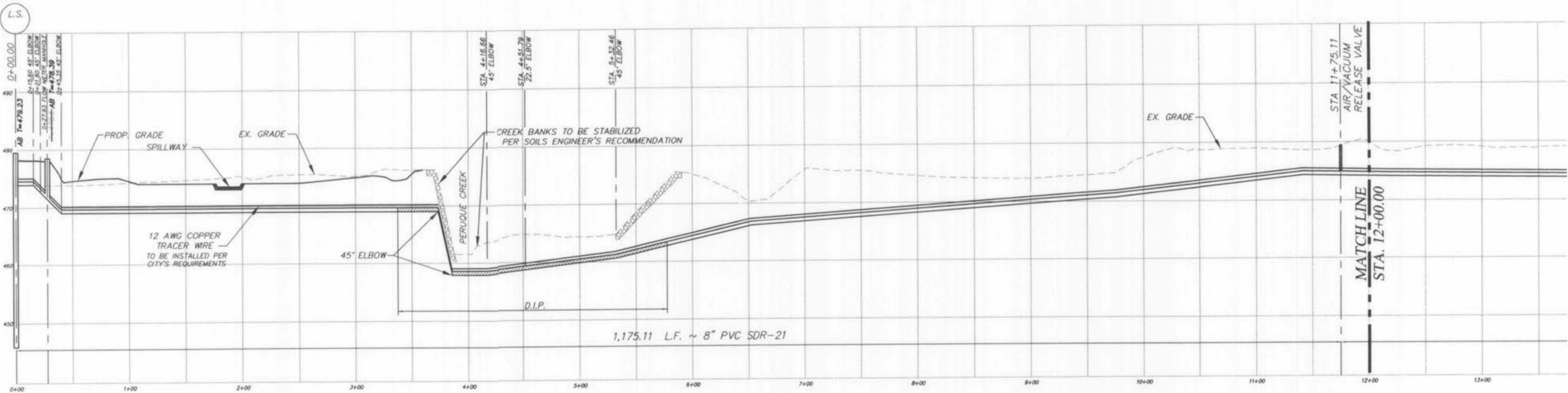
NOTE: SANITARY SEWER FORCE MAIN MARKERS TO CONSIST OF REINFORCED COMPOSITE FIBER-GLASS - 60" TO 72" ABOVE GRADE.



FORCE MAIN CREEK CROSSING DETAIL
 48" COVER AVERAGE



AIR/VACUUM RELEASE VALVE



SCALES
 HOR: 1"=50'
 VER: 1"=10'

REVISIONS	NO.	DATE	DESCRIPTION
	1	9/21/04	ADDED PLAN FROM KAPLAN PROPERTY
	2	8/11/05	REV. PER CITY COMMENTS 7/29/05
	3	11/22/05	REV. OFF-SITE FORCE MAIN PER CLIENT
	4	12/22/05	REV. PER CITY COMMENTS
	5	12/22/05	REV. PER CITY COMMENTS
	6	01/10/06	REV. PER CITY COMMENTS
	7	01/10/06	REV. PER CITY COMMENTS
	8	01/10/06	REV. PER CITY COMMENTS
	9	01/10/06	REV. PER CITY COMMENTS
	10	01/10/06	REV. PER CITY COMMENTS
	11	01/10/06	REV. PER CITY COMMENTS
	12	01/10/06	REV. PER CITY COMMENTS
	13	01/10/06	REV. PER CITY COMMENTS
	14	01/10/06	REV. PER CITY COMMENTS
	15	01/10/06	REV. PER CITY COMMENTS
	16	01/10/06	REV. PER CITY COMMENTS
	17	01/10/06	REV. PER CITY COMMENTS
	18	01/10/06	REV. PER CITY COMMENTS
	19	01/10/06	REV. PER CITY COMMENTS
	20	01/10/06	REV. PER CITY COMMENTS

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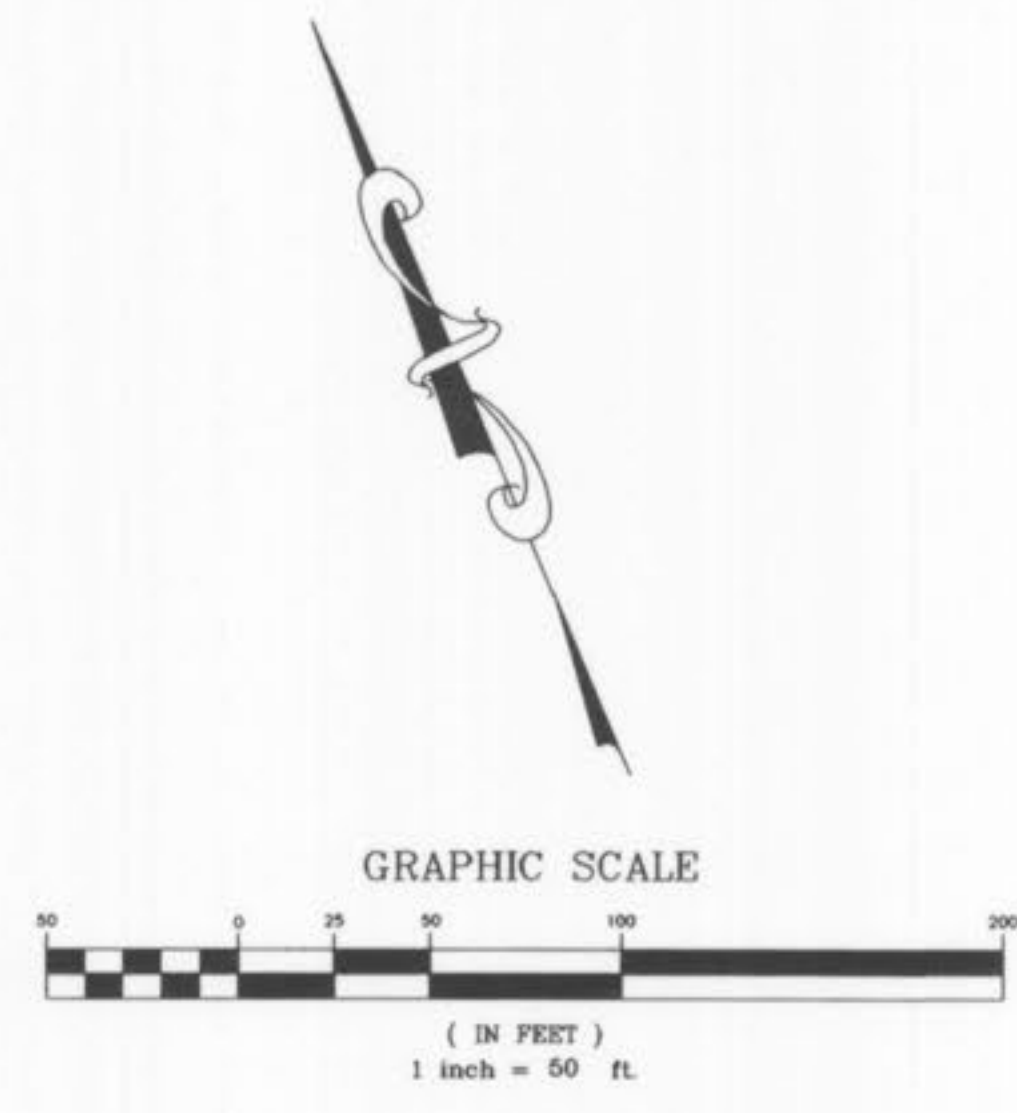
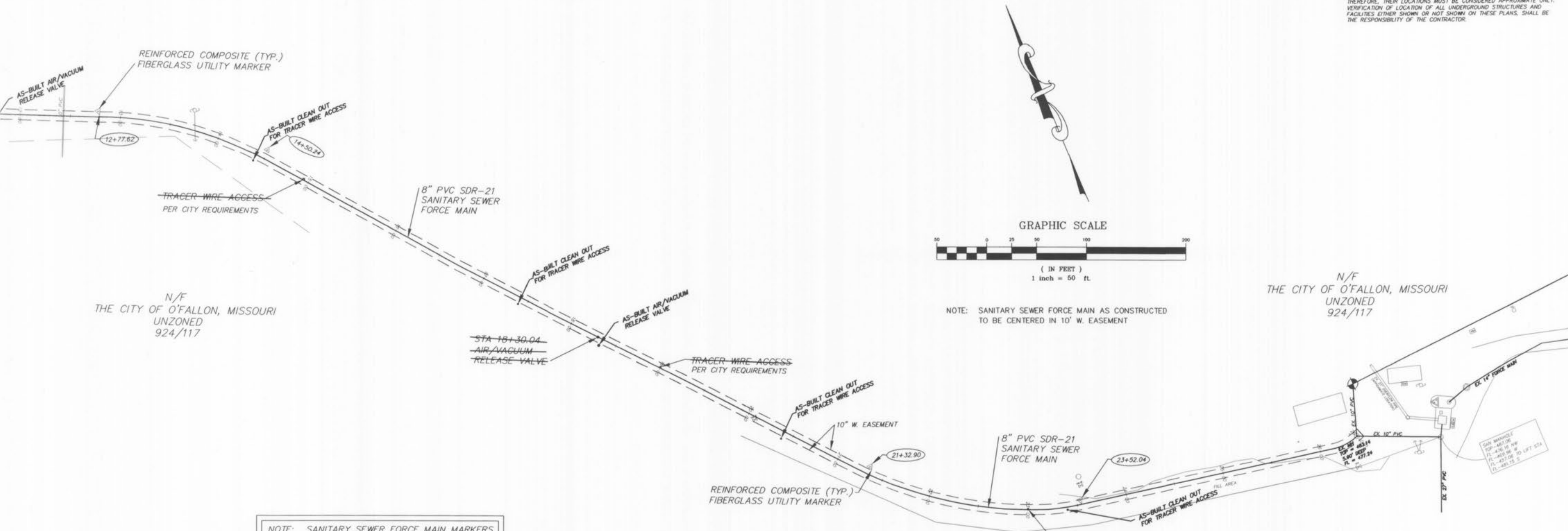
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CHECKED	DWD	DATE	FEB, 2005
PROJECT #	03029.SUPO.01R		
TASK #	002	FIELD BOOK	847

VILLAGE A
 OFF-SITE FORCE MAIN
 FORCE MAIN PLAN & PROFILE
 SHEET 32A OF 149

UTILITY NOTE:
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 LAND SURVEYORS
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BROOKSIDE VILLAGE A
 FORCE MAIN PLAN & PROFILE
 SUMMIT POINTE L.C.
 Prepared For:
 238 FOX HILL ROAD
 ST. CHARLES, MO. 63301
 (636) 948-9300



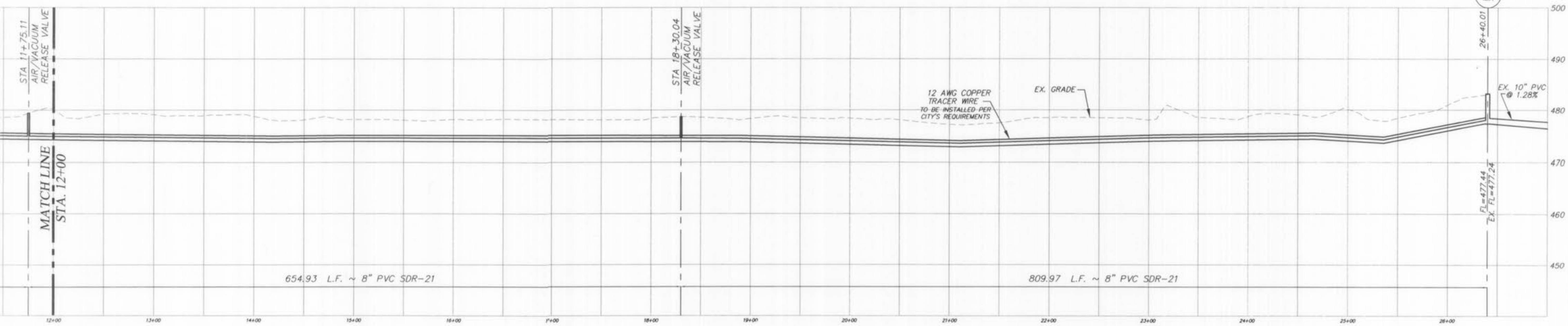
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 THE CITY OF O'FALLON, MISSOURI
 UNZONED
 924/117

N/F
 THE CITY OF O'FALLON, MISSOURI
 UNZONED
 924/117

NOTE: SANITARY SEWER FORCE MAIN MARKERS TO CONSIST OF REINFORCED COMPOSITE FIBERGLASS - 60" TO 72" ABOVE GRADE.

AS-BUILTS

8/25/06



SCALES
 HOR: 1"=50'
 VER: 1"=10'

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	4	12/22/05	REV. PER CITY COMMENTS
	5	01/17/06	REV. MARKERS PER CLIENT
	6	1/17/07	REV. PER CITY COMMENTS 1/30/07

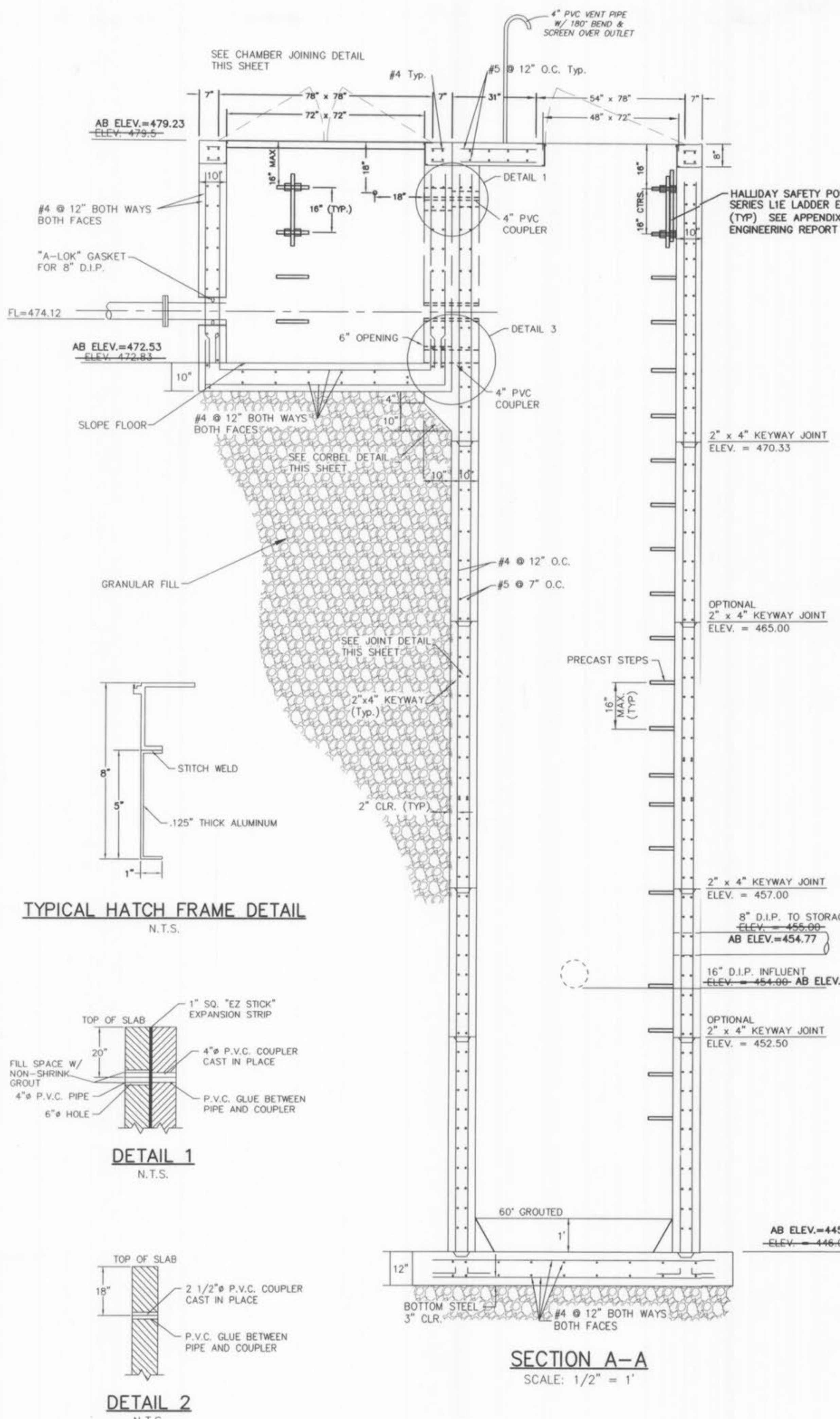
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TASK #	002	FIELD BOOK	847

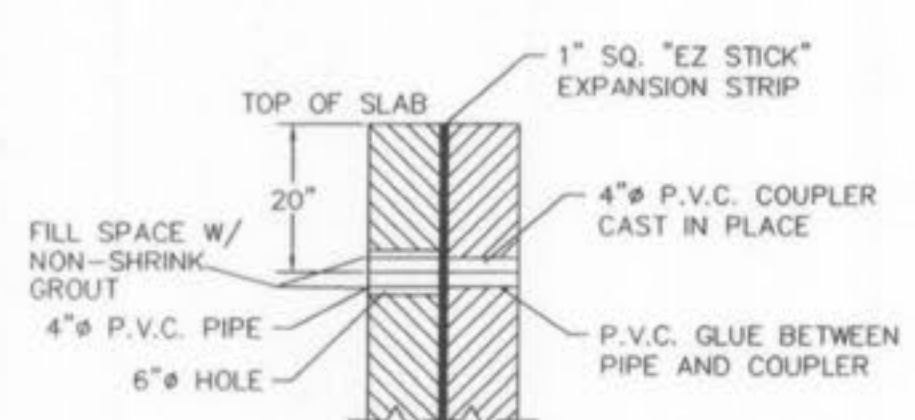
VILLAGE A
 OFF-SITE FORCE MAIN
 FORCE MAIN PLAN & PROFILE
 SHEET 33A OF 149
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P & Z NO. 2603.01

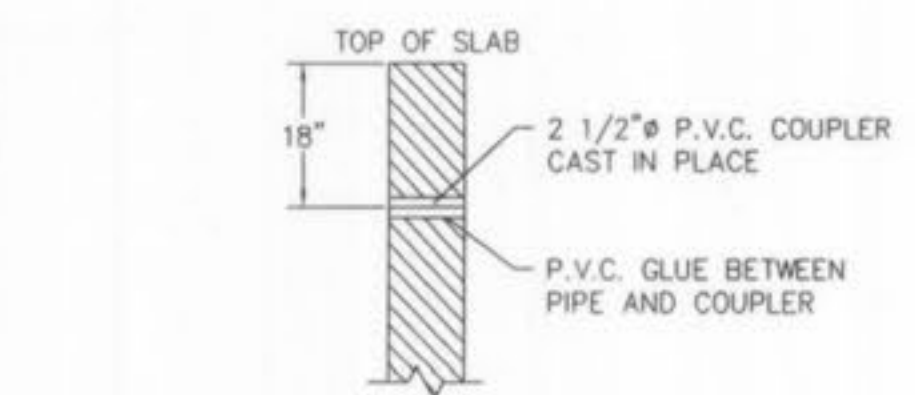
Brookside Lift Station + Offsite Force Main



TYPICAL HATCH FRAME DETAIL
N.T.S.



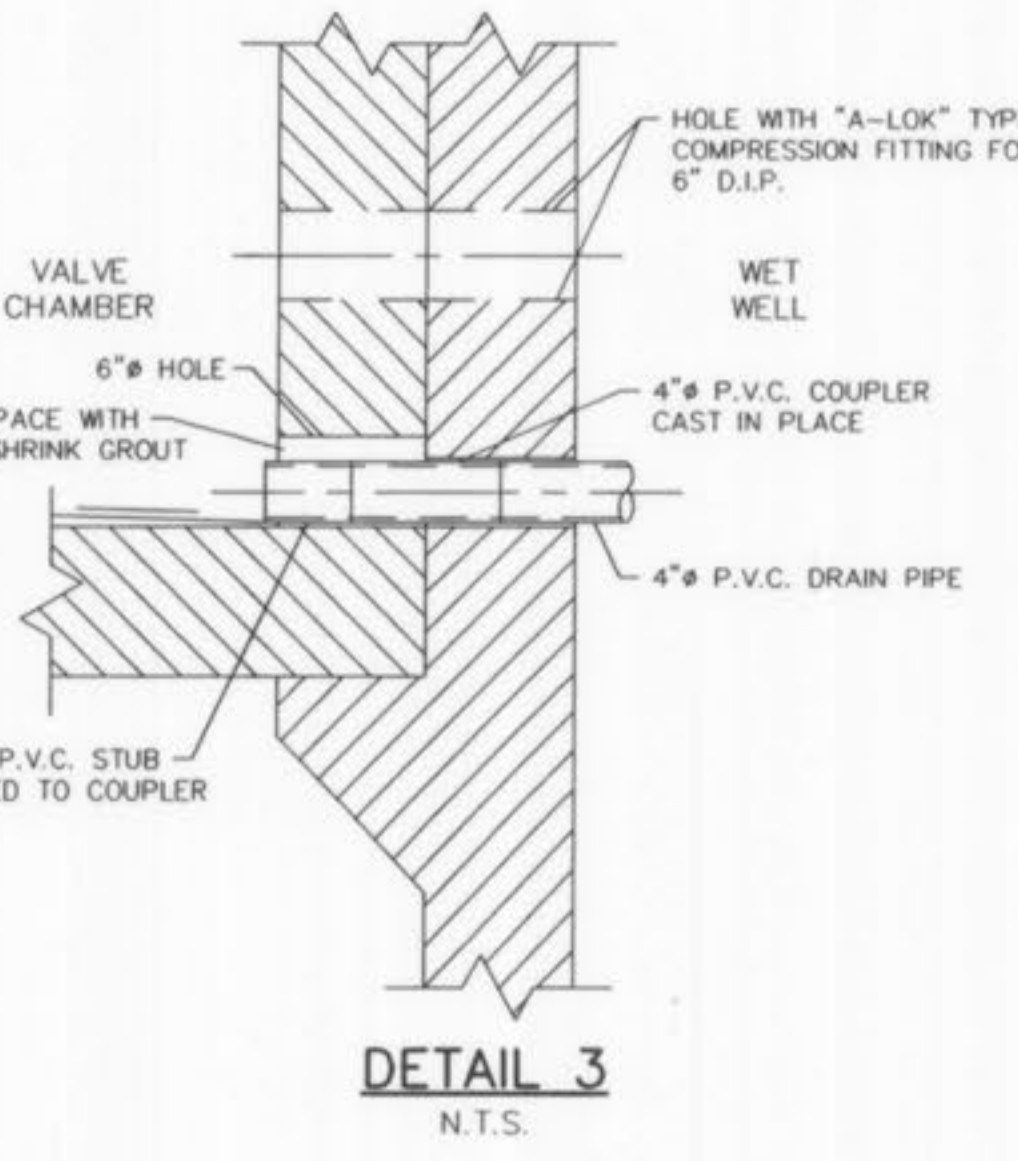
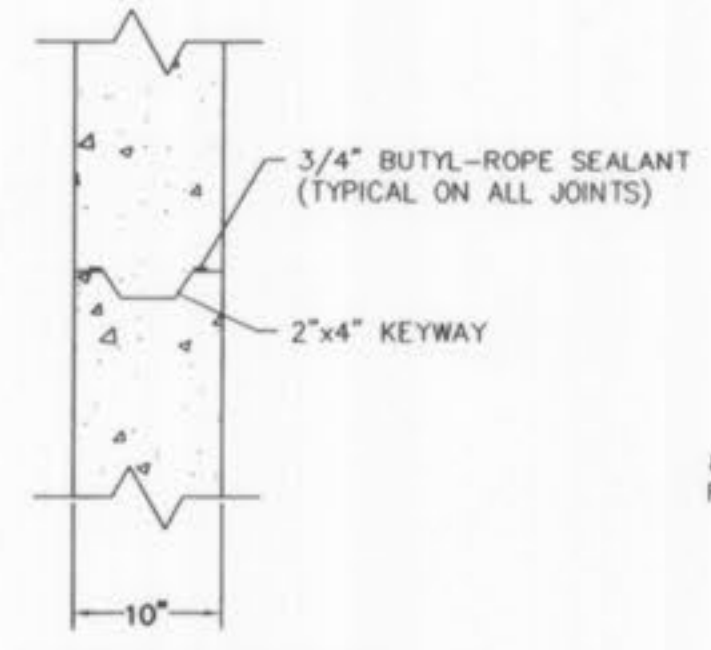
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N.T.S.



DETAIL 2
N.T.S.

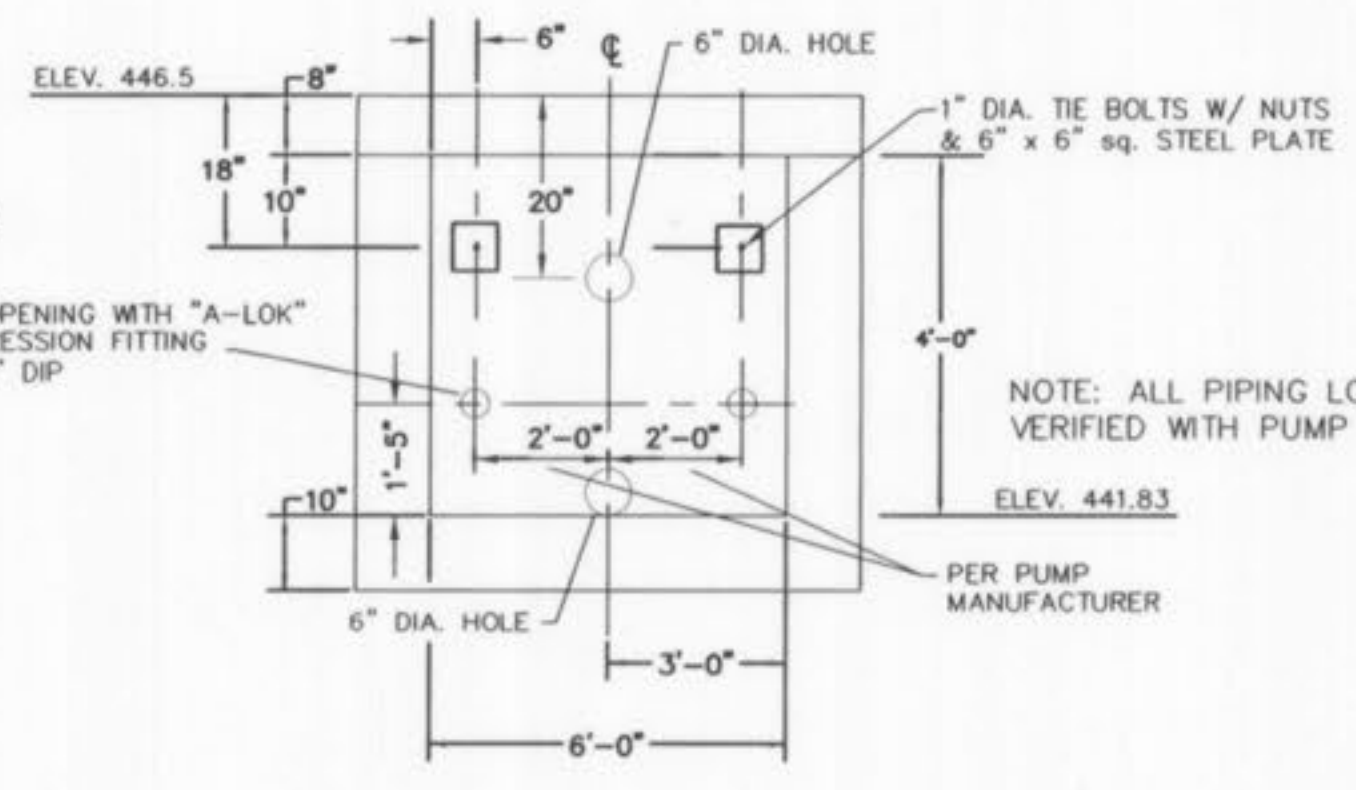
SECTION A-A
SCALE: 1/2" = 1'

PRECAST WALL TYPICAL JOINT DETAIL
N.T.S.



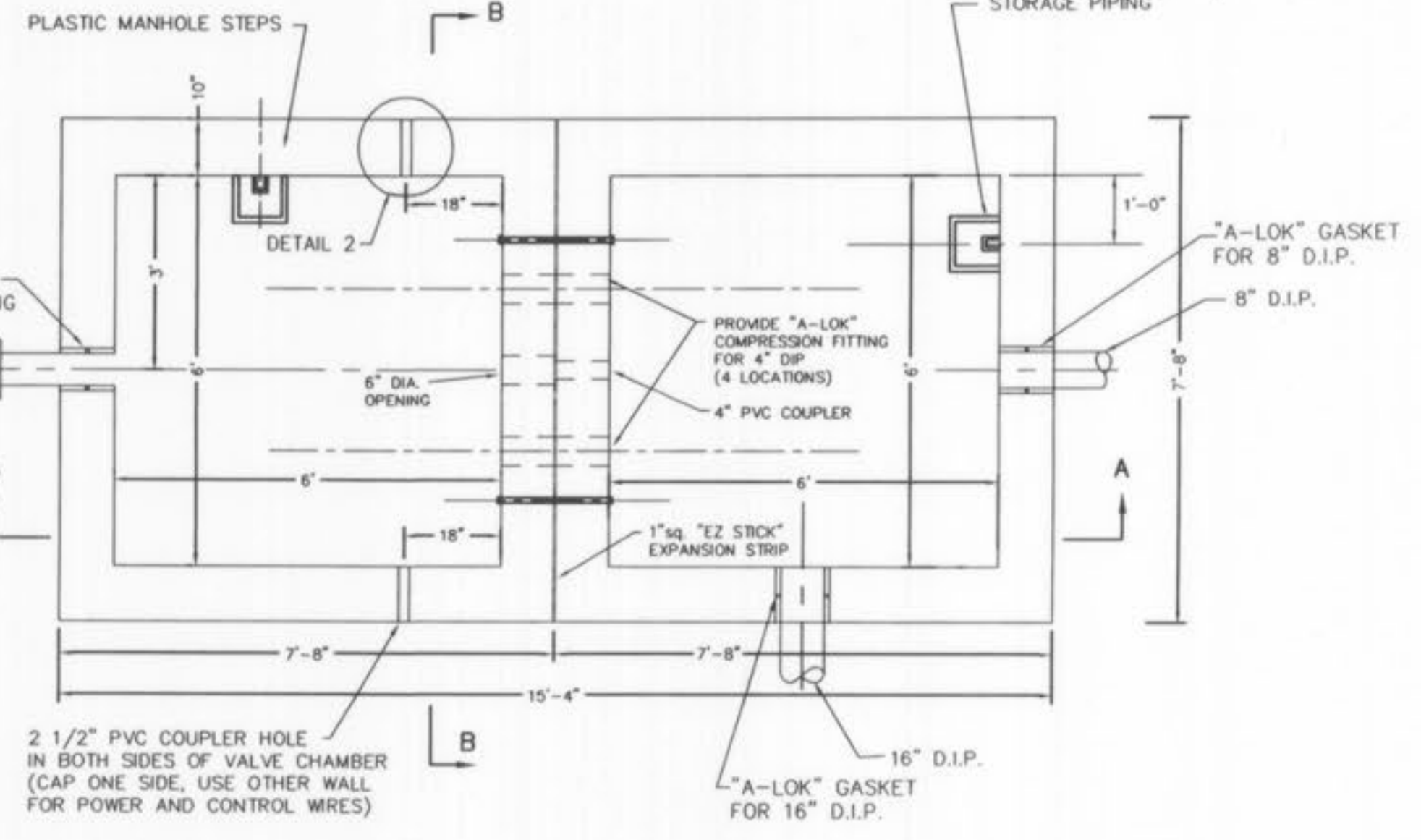
DETAIL 3
N.T.S.

NOTE: 4" DIA. OPENINGS TO BE PLACED IN SAME LOCATION ON COMMON WALL OF WET WELL

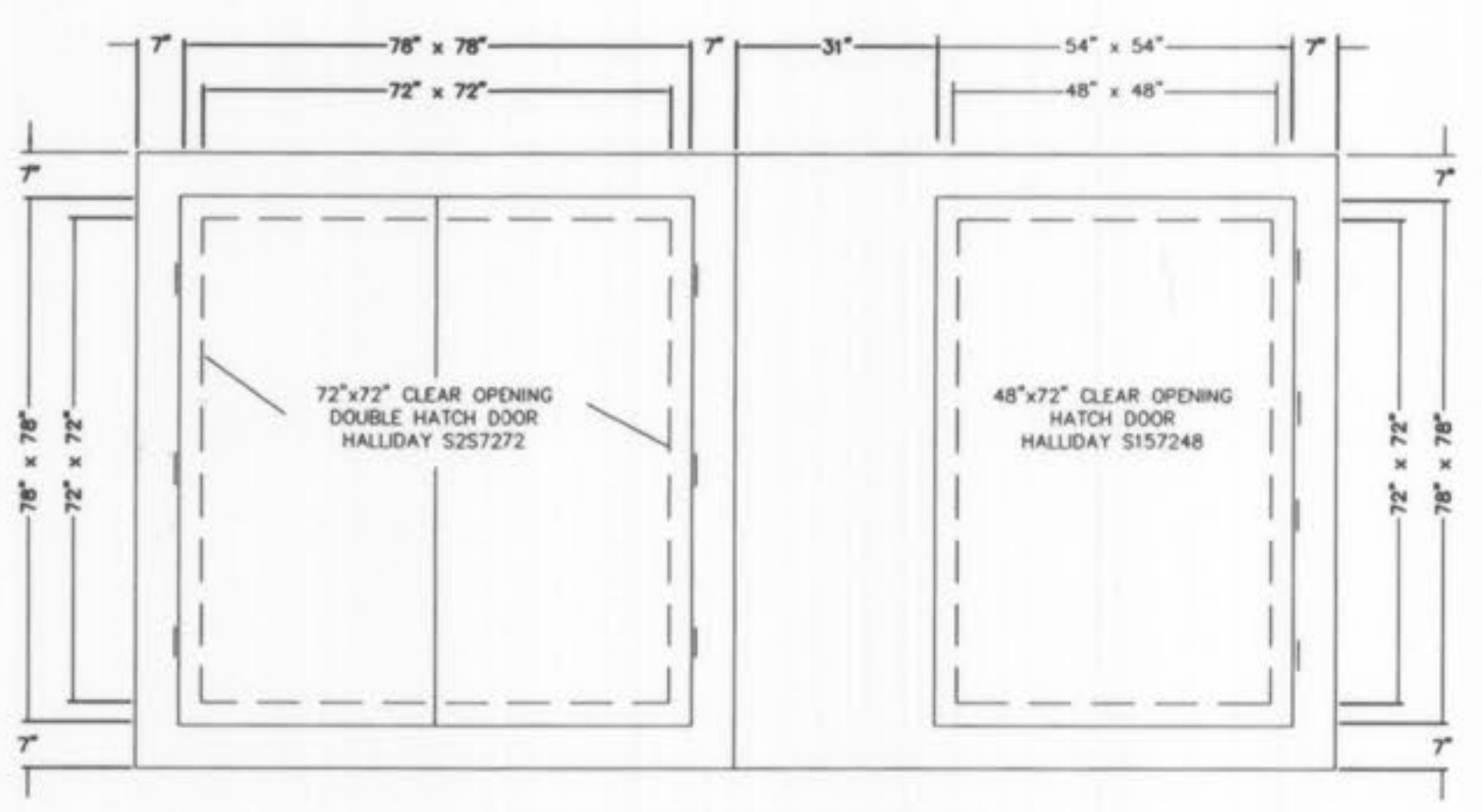


SECTION "B-B" VALVE CHAMBER WALL OPENING DETAIL
N.T.S.

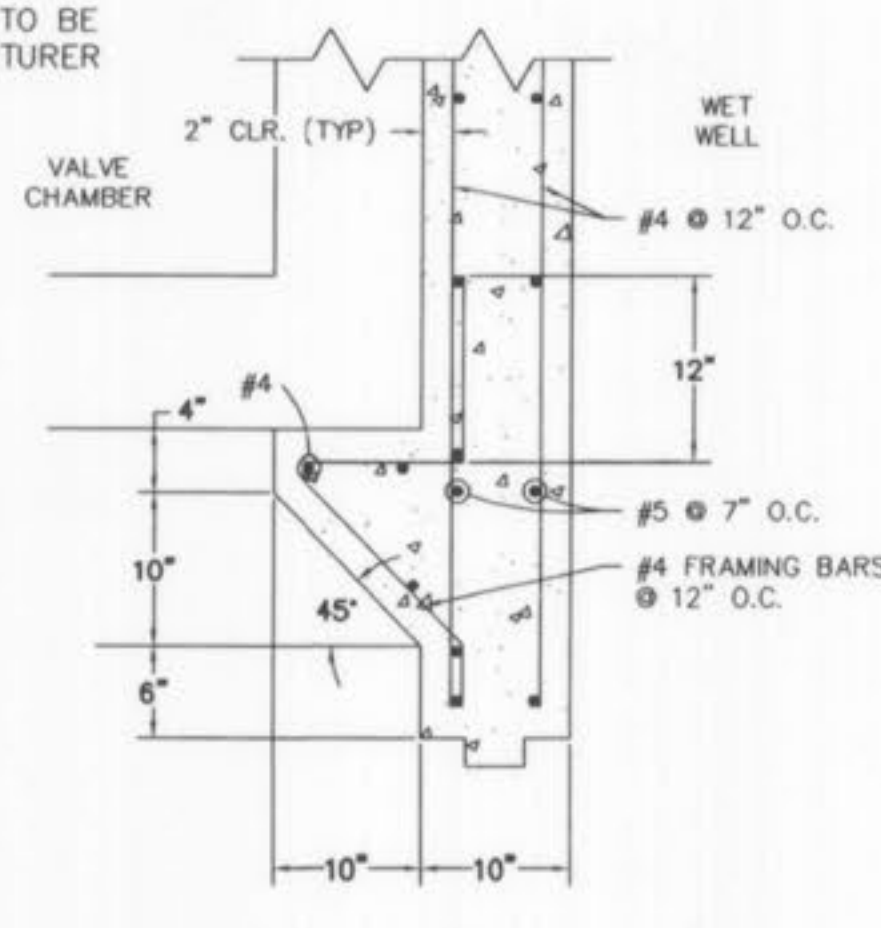
NOTE: THESE PLANS HAVE BEEN PREPARED WITH SUPPLEMENTAL INFORMATION PROVIDED BY THE SUPPLIER OF THE MECHANICAL AND ELECTRICAL EQUIPMENT. THE CONTRACTOR AND THE SUPPLIER SHOULD VERIFY THAT THE DIMENSIONS SPECIFIED ON THESE STRUCTURAL AND MECHANICAL PLANS ARE ACCURATE AND CONFORM WITH THE EQUIPMENT TO BE INSTALLED PRIOR TO CONSTRUCTION.



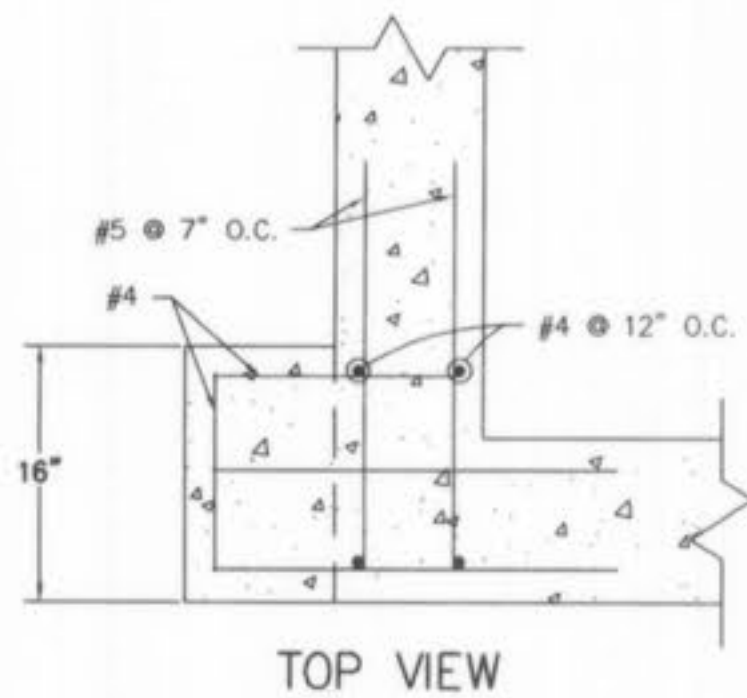
WET WELL & VALVE CHAMBER
N.T.S.



HATCH LOCATION PLAN
N.T.S.



SECTION VIEW



CORBEL DETAIL
N.T.S.



PICKETT RAY & SILVER
CIVIL ENGINEERS
PLANNERS
LAND SURVEYORS
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BROOKSIDE VILLAGE A
LIFT STATION STRUCTURAL DETAILS SHEET
Prepared For:
SUMMIT POINTE L.C.
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NO.	DATE	REVISIONS
1	9/21/04	ADDED FLOW FROM KAPLAN PROPERTY
2	9/11/05	REV. PER CITY COMMENTS 7/26/05
3	9/19/05	REV. PER CITY COMMENTS 9/12/05
4		
5		
6		

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authorized by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
PICKETT, RAY & SILVER, INC

DRAWN DKL	DATE 08-10-04
CHECKED EAK	DATE 08-10-04
PROJECT # 03029.SUP0.01R	TASK # 4
FIELD BOOK	

VILLAGE A
OFF-SITE FORCE MAIN
LIFT STATION STRUCTURAL DETAILS
SHEET **34A** OF **149**
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EXCAVATION SHOULD BE VERIFIED BY GEOTECHNICAL ENGINEER TO CONFIRM THAT SOILS ARE SUITABLE FOR PLACEMENT OF PUMP STATION.
P & Z NO. 2603.01
Brookside Lift Station + Off Site Force Main