

City of O'Fallon
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.
- 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.
- Storm sewers 18" in diameter or smaller shall be ASTM C-14.
- Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise on the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.O. See plans for gauge.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.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 earthen filled places within State, County, or City made Highways shall be compacted to 94% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a Soils Engineer.
- All storm and sanitary trench backfills shall be water settled. Granular fill will be used under paved areas.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.
- No area shall be cleared without the permission of the developer.
- All grade 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.
- Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices", end of roadway markers mounted on two (2) pound "J" channel stem post. Each marker 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.
- 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.
- All standard street curb inlets to have front of inlet 2 feet behind curb.
- 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 of not less than 2-1/2 feet.
- Water lines, valves, sleeves, meters and etc. shall meet all specifications and installation requirements of the local governing authority.
- 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 pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All PVC water pipe shall have a minimum pressure rating of PP-200 or SDR-21.
- All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding and/or bedding between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way markers shall be reset at the completion of grading.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- All sanitary manhole tops shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
- All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for Single-family developments.
- Manhole frame and cover shall be Clay and Bailey No. 2008 for Neenah R-1736 or Dober 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.
- Sewer contractor shall maintain 24' vertical separation between all storm sewers and the sludge force main. Contractor shall be responsible for verifying separation prior to storm sewer installation.
- This tract is served by:

- CUVRE RIVER ELECTRIC
- ST. CHARLES GAS COMPANY
- CONTINENTAL TELEPHONE
- ST. CHARLES CO. WATER DIST. #2
- DUCKETT CREEK SEWER DIST.
- OFALLON FIRE PROT. DIST.
- FORT ZUMWALT R-2 SCHOOL DIST.

ea. All sanitary sewer manholes shall be waterproofed on the exterior, in accordance w/ Mo Dept. of Natural Resources Specifications. 10 C.S.R. 8.120 (7)(E).

"AS-BUILTS"

MALLARD POINTE

MALLARD POINTE
PROPERTY DESCRIPTION
21.860 ACRE TRACT

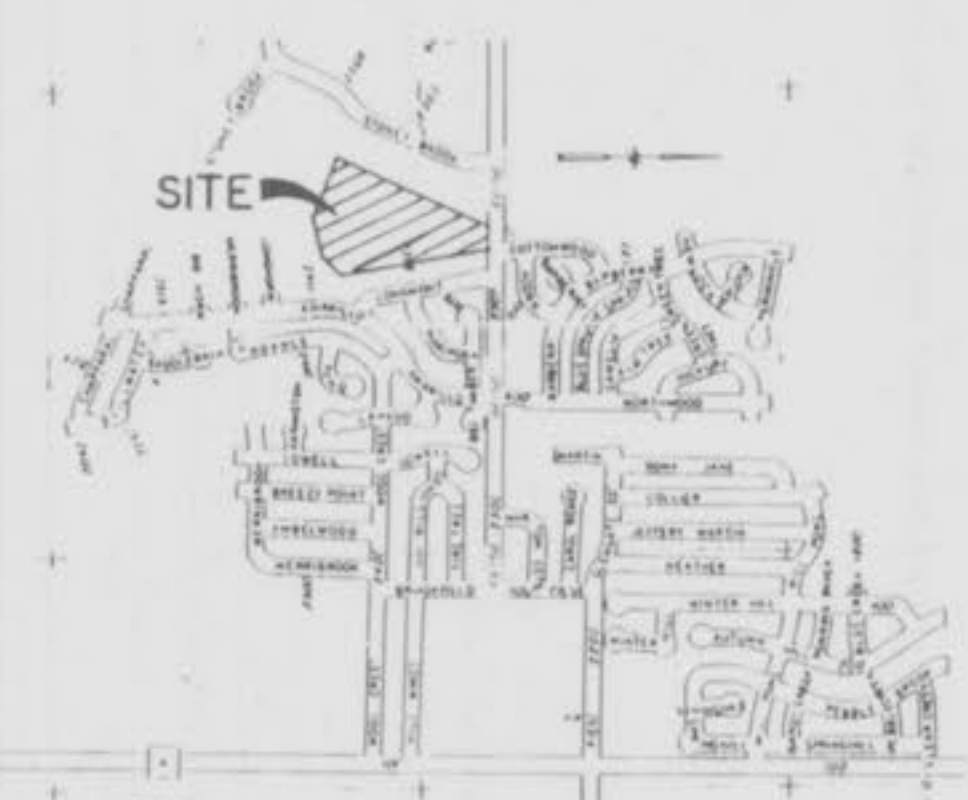
A tract of land being part of U.S. Survey 1771, and Fractional Section 5, Township 46 North, Range 3 East, St. Charles County, Missouri and being more particularly described as follows:

BEGINNING at a point marking the intersection of the North line of U.S. Survey 1771 at an angle point in the East line of Stoney Brook Subdivision as recorded in Plat Book 20 Page 181 of the St. Charles County, Missouri records; thence leaving the North line of said U.S. Survey 1771 along the East line of said Stoney Brook, North 24°22'26" East, a distance of 1307.56 feet to a point in the center line of Feise Road (30' wide); thence along said centerline South 89°37'24" East, a distance of 49.44 feet to an angle point in said centerline; thence continuing along said centerline South 89°07'24" East, a distance of 150.56 feet to a point; thence leaving said centerline along the West line of Bayfield Plat Two (Subdivision) as recorded in Plat Book 21 Page 91 of the said St. Charles County, Missouri records and its extension, South 99°18'45" East, a distance of 1531.59 feet to a point; thence along the northern line of the Bayfield/Amarillo Village Future Development the following courses: South 50°06'39" West, a distance of 126.88 feet to a point; thence North 50°18'42" West, a distance of 207.68 feet to a point; thence North 57°10'59" West, a distance of 781.77 feet to a point on the East line of the aforementioned Stoney Brook (Subdivision); thence along said East line North 23°59'18" East, a distance of 92.21 feet back to the POINT OF BEGINNING and containing 952,243 square feet or 21.860 acres more or less according to a boundary survey by Pickett, Ray & Silver, Inc., during the month of April 1990.

REVISIONS PER PLAT 2 IMPROVEMENTS JUNE, 1991

REVISIONS PER PLAT 3 IMPROVEMENTS FEBRUARY, 1992

Location Map



GENERAL NOTES

- A Geotechnical Engineer shall be employed by the owner and be on site during grading operations.
- The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied therefrom, all in accordance with the plans and notes as interpreted by the geotechnical engineer.
- The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
- All areas will be allowed to drain. All low points should be provided with temporary ditches.
- A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage systems.
- Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site, or buried on site.
- Any existing trash and debris currently on this property must be removed and disposed of off-site, or buried on site.
- Soft soils in the bottom and banks of any existing or former pond site should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed public right-of-way locations or on storm sewer locations.
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grading and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The unsuitable material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
- Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill layers.
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing full quality will be made to the Owner at regular intervals.
- The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
- All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted to at least 85 percent of the maximum density as determined by the Modified AASHTO T-1800 Compaction Test (ASTM-D-1557). Natural slopes steeper than 1 vertical to 3 horizontal to receive fill shall have horizontal benches, with minimum widths of 10 feet and maximum height of 4 feet, cut into the slope before the placement of any fill. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense.
- The sequence of operation in the fill areas will be fill, compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture control.
- The surface of the fill shall be finished so that it will not pond water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.
- Fill and backfill should be compacted to the criteria specified in the following table:

CATEGORY	MINIMUM PERCENT COMPACTION
Fill in building areas below footings	90%
Fill under slabs, walks and pavements	90%
Fill other than building areas	88%
Natural subgrade	88%
Pavement subgrade	90%
Pavement and base course	90%

Measured as a percent of the maximum dry density as determined by modified Proctor test (ASTM D 1557).
Moisture content must be within 2 percent below or 4 percent above optimum moisture content if fill is deeper than 10 feet.

NOTE: Trash & Debris shall be disposed of in the detention basin area, & other designated areas, as shown on E.P. Also, all debris shall be buried a minimum of 3' below finished grade.

Index

Sheet	Description
1	Cover Sheet
2	Flat Plan
3	Water Plan
4	Grading Plan
5	Street Profiles
6	Sanitary Sewer Profiles
3-7	Storm Sewer Profiles
4-8	Drainage Area Map
9	Construction Details
10-11-12	Water Details
13	Misc Details

Benchmark

DCM, "A" CUT AT WEST END, TOP OF CONCRETE CURB AT ENTRANCE TO BAYFIELD SUBD., ON FEISE ROAD. ELEVATION: 615.05

Legend

1	Sanitary Sewer (Proposed)	C.I.	Curb Inlet
2	Sanitary Sewer (Proposed)	D.C.I.	Double Curb Inlet
3	Storm Sewer (Proposed)	G.I.	Grate Inlet
4	Storm Sewer (Proposed)	A.I.	Area Inlet
5	Water Line & Pipe	D.A.I.	Double Area Inlet
6	Concrete Collar	C.C.	Concrete Collar
7	Flared End Section	F.E.	Flared End Section
8	End Pipe	E.P.	End Pipe
9	Energy Dissipator	E.D.	Energy Dissipator
10	Manhole	M.H.	Manhole
11	Concrete Pipe	C.P.	Concrete Pipe
12	Reinforced Concrete Pipe	R.C.P.	Reinforced Concrete Pipe
13	Corrugated Metal Pipe	C.M.P.	Corrugated Metal Pipe
14	Cast Iron Pipe	C.I.P.	Cast Iron Pipe
15	Polyvinyl Chloride	P.V.C.	Polyvinyl Chloride
16	Vitrified Clay Pipe	V.C.P.	Vitrified Clay Pipe
17	Clean Out	C.O.	Clean Out
18	Went Trap	W.T.	Went Trap

3-31-92 As-Builts
Rev. 7-2-91 Tds. DC&D. comments.
Rev. 6-27-91 Tds. Red?
Rev. 9-5-90 JC
Rev. 8-30-90 Tds
Rev. 8-26-90 Tds (of O'Fallon Comm.
Rev. 8-17-90 Tds. Dist #2
Rev. 8-15-90 Tds. DC&D
Rev. 8-10-90 Tds. DC&D
Rev. 7-27-90 Tds. City of O'Fallon Comments.

PICKETT RAY & SILVER

Professional Engineers
Planners
Land Surveyors

PREPARED FOR:
OWEN B SONS DEVELOPMENT
235 JUNGERMANN ROAD
SUITE 207
ST. PETERS, MO. 63376 (314)928-6936

DRAWN	J.P.T.D.	DATE	June, 1990
CHECKED		DATE	
FIELD BOOK	477	PROJECT	90-040
		JOB ORDER	8362

FLAT PLAN
MALLARD POINT

JUNE, 1990 90-040

Rev. 7-27-90 DCSO T&S
 Rev. 2-10-92 Plat 3 T&S

Rev. 7-27-90 T&S, City of O'Fallon Comments
 Rev. 8-16-90 Rev. T&S, Duckett Creek Comm
 Rev. 8-30-90 T&S
 Rev. 9-5-90 J.C.
 Rev. 6-27-91 T&S - update field chg. - Plat 2 info

General Notes

1. Plat 1 (Phase 1) - 31 lots
2. Display Houses on lots 2,3,4,5
3. Lot setbacks
 25' Front
 6' Side
 25' Rear
4. Present Zoning (R1E)
5. Minimum lot width - 70'
6. Minimum lot area - 7,000 sq ft
7. Minimum dwelling size - 775 sq ft
8. All streets in development shall be dedicated to the public
9. All utilities shall be located underground
10. Due to rock elevations laterals 24 & 30 are shallower than normal. Field verify lateral elevations prior to constructing houses

NOTE: SHADED "BALLOONS" INDICATE "AS-BUILT" STRUCTURES.

NOTE: See sheet #4 for "Sight Distance".

Note: The connection at Feise Rd shall be concrete pavement to existing asphalt, saw cut 1" of asphalt, providing an uniform edge for connection.

Note: Sediment in Basin shall be removed every 2 years per the City of O'Fallon. 8/30/90 T&S

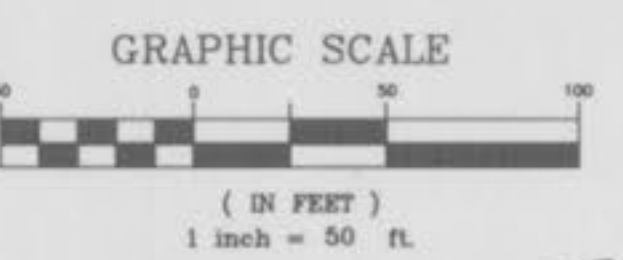
NOTE: ALL EXISTING BUILDINGS, PAVEMENT AND OTHER IMPROVEMENTS SHALL BE DEMOLISHED AND/OR BURIED (IN DESIGNATED AREAS) OR REMOVED FROM THE SITE, AS DIRECTED BY THE SOIL ENGINEER OR PICKETT, RAY AND SILVER.

Note: All curb inlets & area inlets, shall have a 6" metal rod, bolted on or cast-in place on the openings (across to center).

NOTE: Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

2/4
14

"AS-BUILTS"



APPROXIMATE LOCATION OF STORM INLET, PER PLANS BY BAX ENGINEERING, DATED 3-28-90, JOB NUMBER 83-1200K, BAYFIELD, PHASE SIX.

BAYFIELD/AMARILLO VILLAGE FUTURE DEVELOPMENT (Phase 6)

BAYFIELD PLAT TWO PB.23 PG.91

STONEY BROOK PB.20 PG.181

PLAT 2

PLAT 3

BAYFIELD PLAT TWO PB.23 PG.91

STONEY BROOK PB.20 PG.181

PLAT 2

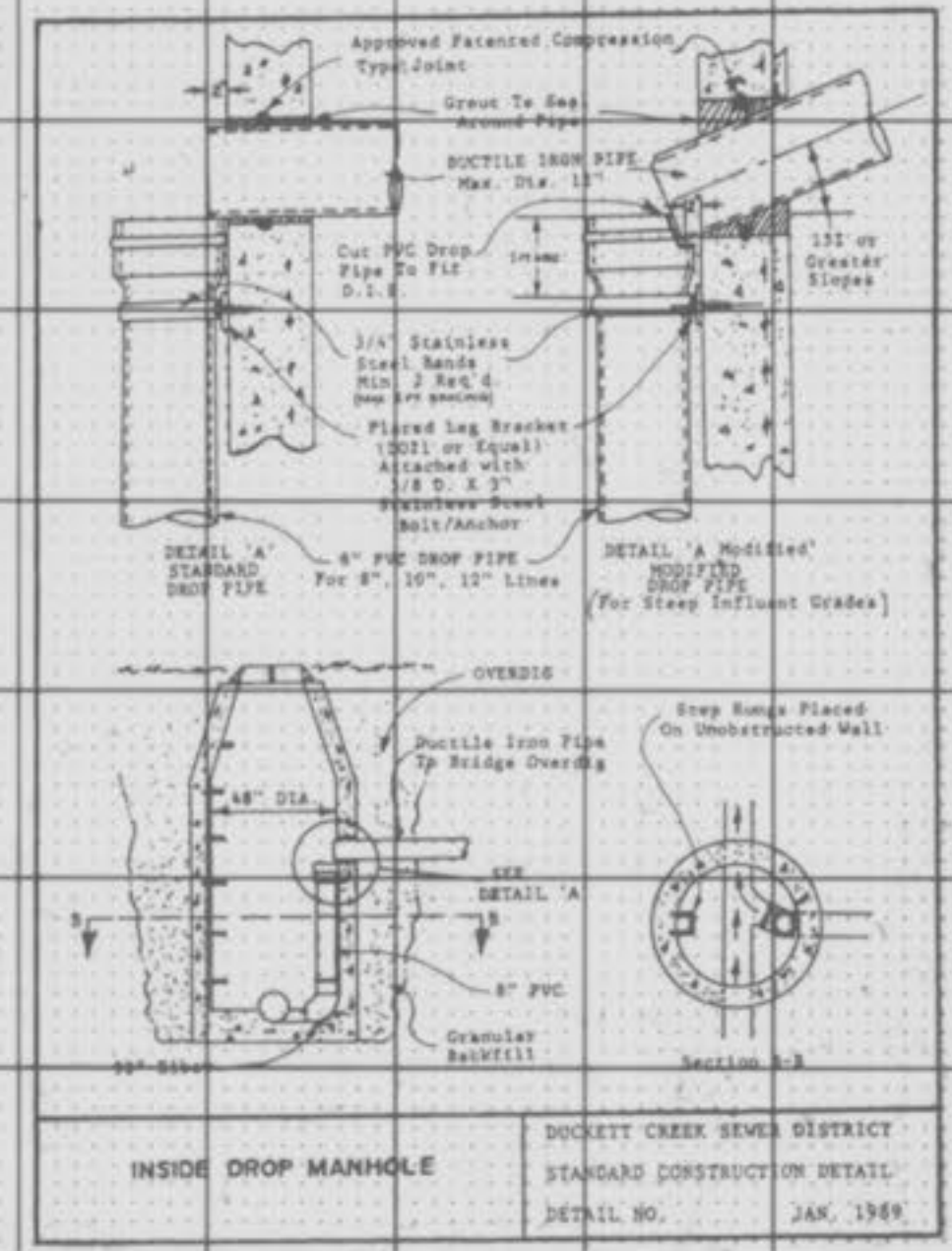
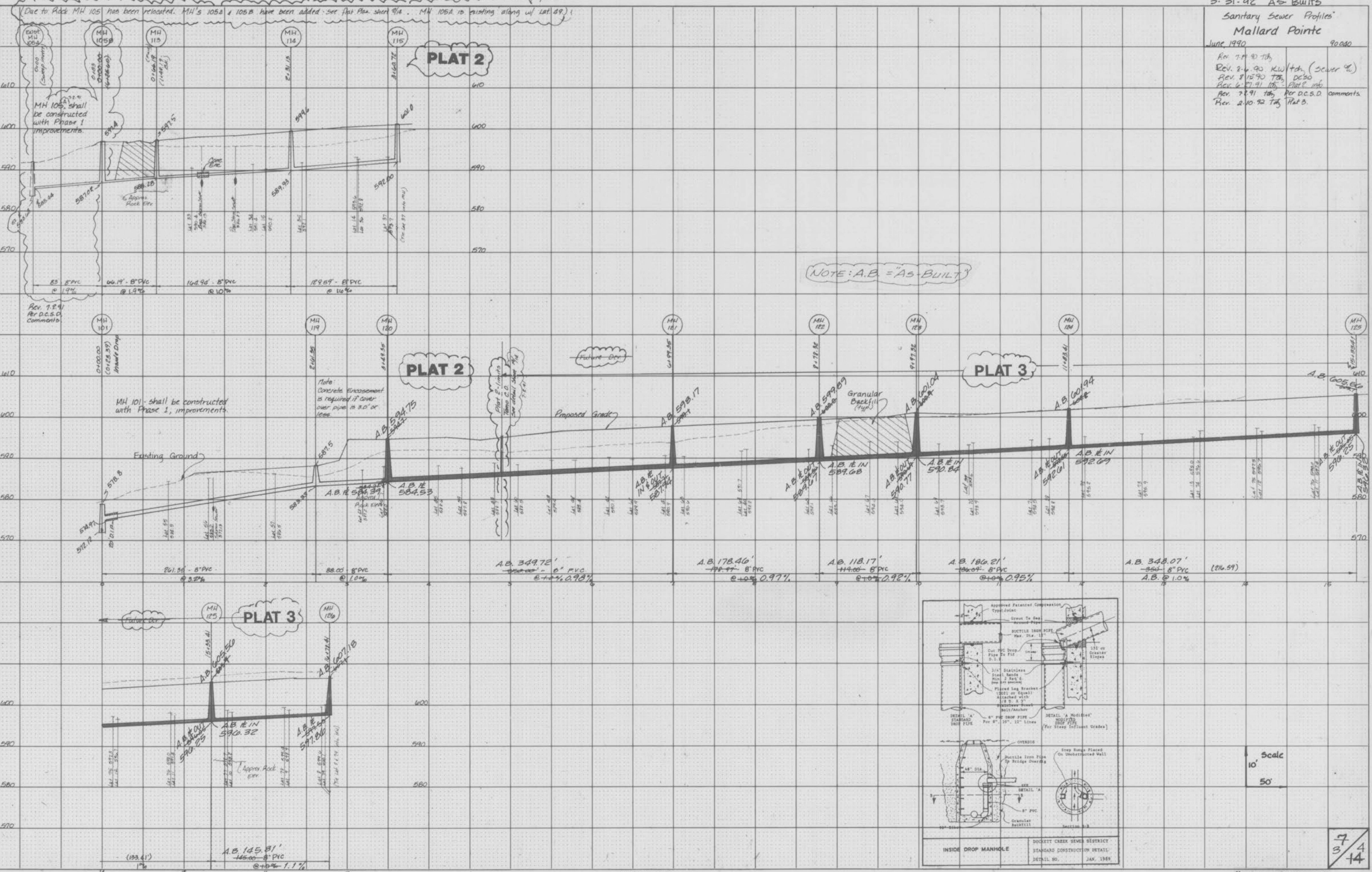
PLAT 3

June 1990 90000
Rev. 7.19.90 TB
Rev. 2.15.90 KWT/dh (Sewer %)
Rev. 8.15.90 TB DCSD
Rev. 6.27.91 TB Per D.C.S.D. comments
Rev. 7.29.91 TB Per D.C.S.D. comments
Rev. 2.10.92 TB Hat 3.

Due to Rock MH 105 has been relocated. MH's 105A & 105B have been added - see Plat Plan sheet 9/16. MH 105A is existing along w/ lat. 49.

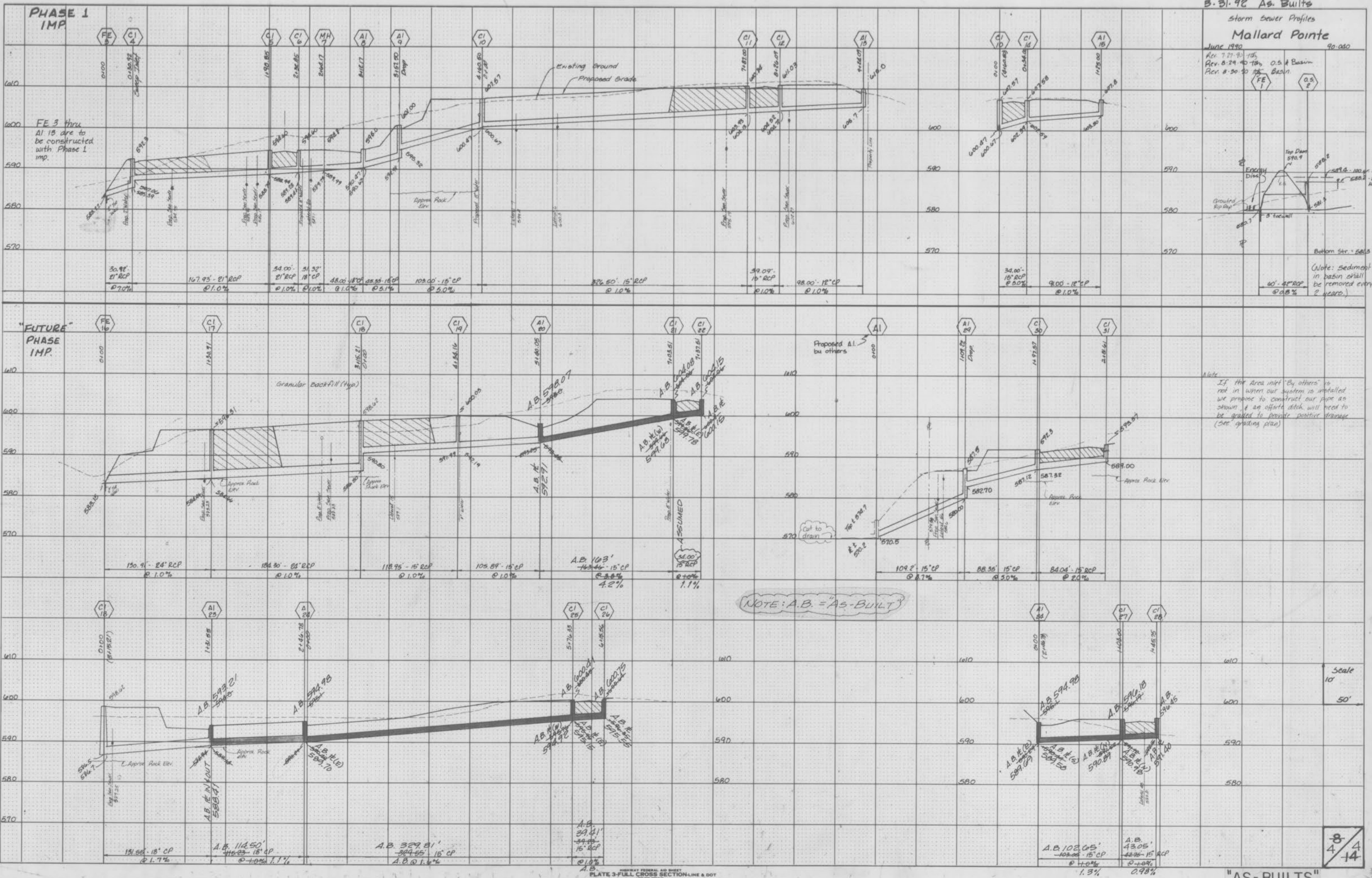
DATE
BY
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Scale
10'
50'

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14



DATE: _____ BY: _____

REVISIONS:

NO.	DATE	DESCRIPTION

FINAL SURVEY: _____
 PLANNED: _____
 NOTE BOOK: _____
 NO. _____
 AREAS CHECKED: _____

DATE: _____ BY: _____

REVISIONS:

NO.	DATE	DESCRIPTION

ORIGINAL SURVEY: _____
 PLANNED: _____
 NOTE BOOK: _____
 NO. _____
 AREAS CHECKED: _____