1 REVISED

1 ADDED

NOTE:
ALL NEW PIPES SHALL BE REINFORCED CONCRETE DUE TO EX.PLASTIC AND CMP'S FAILING IN AREA

STA 214+56, OFF -141.84'
72"PRECAST MANHOLE
TYPE 4 FRAME & COVER (ALT MANHOLE TOP)
3-OPENINGS (1-15",1-21",1-24")
D= 6.32'
PAY D = 7'
CL.3 EXC.= 18.7 CY

1-1 MH

650
640 CLAYTON RD
630
620

FL-638.07

REMOVE AND REPLACE EX.MANHOLE & 16'L X5'W SIDEWALK

EX.GROUND

*Q = 23.8cfs (INFO ONLY)

FL-631.89 15"
FL-631.75 21"
FL-631.75

7.04%

*Q = 23.8cfs (INFO ONLY)

1-1 MH TO 1-2 MH
112' OF 24"GRP A @ 7.00%
CL.3 EXC.=142.5 CY

MANHOLE WAS A 72" CHANGED TO A 60" 1 REVISED

STA 213+67.5, OFF -54.8'
72"PRECAST MANHOLE
TYPE 4 FRAME & COVER (ALT MANHOLE TOP)
3-OPENINGS (1-24",1-18",1-30")
D= 7.70'
PAY D = 8'
CL.3 EXC.= 21.0 CY

STA 213+49.0, OFF -44.3'
60"PRECAST MANHOLE
W/TYPE T INLET TOP
TO CATCH EX.FLUME PROFILE
USE TYPE 3 FRAME & COVER
2-OPENINGS (1-30",1-36")
D= 7.68'
PAY D = 8'
CL.3 EXC.= 18.8 CY

1-2 MH

1-3 MH

1-4 MH

TS 631.63

TS 631.27
FL 630.27

TS 631.63

*Q = 30.2cfs (INFO ONLY)

*Q = 40cfs (INFO ONLY)

2.38%

2.38%

FL 623.93

FL 623.93 18"

FL 623.93

FL 623.59

FL 623.59

FL 623.27

1-2 MH TO 1-3 MH
14.3' OF 30"GRP A @ 2.38%
CL.3 EXC.=17.8 CY

1-3 MH TO 1-4 MH
13.5' OF 36"GRP A @ 2.38%
CL.3 EXC.=20.4 CY

STA 213+32.6, OFF -55.6'
72"PRECAST MANHOLE
TYPE 4 FRAME & COVER (ALT MANHOLE TOP)
2-OPENINGS (1-36",1-36)
D= 8.36'
PAY D = 9'
CL.3 EXC.= 25.9 CY

POSSIBLE 6"EX PIPE THAT WOULD NEED TO BE CONNECTED (NO SURVEY INFO)

1-4 MH TO 1-5 PC
29' OF 36"GRP A @ 2.29%
CL.3 EXC.=56.2 CY

STA 213+07, OFF -34.9'
TYPE C PIPE COLLAR
EX BOX SIZE = 3'X2'
1.16 CY OF CONC & 151 LBS OF STEEL
SEE STD PLAN 604.40G

1-5 PC

*Q = IS APPROXIMATE AND WAS CREATED FROM BACK DESIGNING EXISTING PIPES ENTERING 1-1 MH.

EX.3'X2'BC HISTORICAL AS-BUILTS SHOW 14AC SO
FIGURE 14Ac X .6Coef. X 6.3in/hr = 52.9cfs
CURRENT CONDITION HAS HAD DEVELOPMENT SO NOW IT IS
FIGURE 14Ac X .75coef X 6.3in/hr = 66.2cfs

WOODS MILL RD

640
630
620

EX.36"CMP (R)

FL 623.27

FL 622.57

EX.3'X2'CBC @ 2.29% (UIP)

EX DROP INLET (UIP)

STA 212+27, OFF 48.04'
EX.MANHOLE W/SLOTTED
COVER FOR DRAINAGE (UIP)
3-OPENINGS (2-36",1-UNKNOWN)

EX10 MH

FL 629.27

WOODS MILL RD

640
630
620

EX.3'X2'CBC @ 2.29% (UIP)

FL 619.97

SEE STDS.PLANS 731.00U & 731.10T FOR ADD.DETAILS

1-3 MH

SEE 1-3 MH ABOVE FOR ADD. DETAIL

TOP VIEW

EX.CONC.FLUME (UIP)

MOD. TYPE T INLET TOP ON 60" MANHOLE

T=631.27
FL=630.27

SIDE VIEW

42"
60"
30"
36"

630
620

FL=623.59

5'

1 ADDED

ADDED DETAIL OF 1-3MH FOR ADDITION OF TYPE T INLET TOP

ADD TYPE A PIPE COLLAR TO NEW RUN OF PIPE AT BETWEEN EX5-DI AND 1-1MH

STA 214+56, OFF -141.84'
72"PRECAST MANHOLE
TYPE 4 FRAME & COVER

1-1A PC

1-1 MH

PIPE COLLAR

EX DROP INLET
W/3'x2'CURVED VANE GRATE
(UIP)

EX5 DI

650
640 CLAYTON RD
630
620

FL-638.07

TS 631.67

FL 633.64

FL-631.89 15"
FL-631.75 21"
FL-631.75

EX5-DI TO 1-1 MH
8'APPROX.OF 21"RCP
TIE INTO EX.PIPE JOINT
@ -10.2% EXC.=8.6 CY

EX5-DI TO 1-1-MH
21"RCP (UIP)
@ -10.2%

* ACTUAL PIPE LENGTH WILL BE BASED ON FIELD OBSERVATION AT THE DIRECTION OF THE ENGINEER

EX DROP INLET
W/2.4'X7.7'GRATE TOP
(UIP)

EX7 DI

1-2 MH

640
630
620

EX.18"CMP & EX.36"CMP GROUT FILL & ABANDON

TS 631.22

TS 631.63

*Q = 6.1cfs (INFO ONLY)

FL 624.78

FL 623.93

FL 623.93

FL 623.93

EX 6 DI TO TO 1-2 MH
14' OF 18"GRP A @ 6.10%
CL.3 EXC.=14.2 CY

10'

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STATE OF MISSOURI
BARRY M. BERGMAN
NUMBER PE-17867
PROFESSIONAL ENGINEER
04/01/2025 9:56:38 AM
BARRY M. BERGMAN - CIVIL
MO-PE-17867

DATE PREPARED
4/1/2025

ROUTE	STATE
CLAYTON	MO
DISTRICT	SHEET NO.
SL	13

COUNTY
ST.LOUIS

JOB NO.
JSLM0051

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

CULVERT SECTION