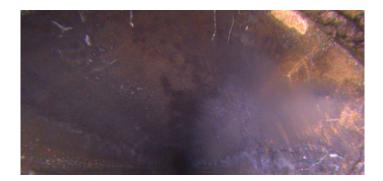
Profile/Pho	oto Observation	Report			RedZone
Date:	04/23/2018	Weather:		Coding:	PACP 6.0
Pipe Length (ft)	: 291.3	Owner:	NA	Pre Clean:	No Pre-Cleaning
P.O.#:		Surveyor:	Jen Costello	PSR:	P-405-023-022
Customer:		Clean Date:	01/01/1900	Shape:	с
Street:	ALLEY BETWEEN D	RIFTWOOD DR &	Flow Control:	Not Controlled	
City:	Hobart, IN		Year Renewed:		
Location:	Yard		Tape/Media #:		
Purpose:	Routine Assessme	nt	Dia/Height:	12"	
Use:	Sanitary		Material:	VCP	
Drain Area:	NA		Lining:		
Category:	NA				
Comment:					
Location Details	5:		Direction of Surve	ey: Downstream	
US MH:	M-405-023	DS MH:	M-405-022	Total Length Surveyed (ft)	280.0
O&M Index:	1.84	O&M Quick:	3628	O&M Rating:	101.00
Structural Index:	3.41	Structural Qui	ck: 473A	U	58.00
Overall Index:	2.21	Overall Quick:	473B	Overall Rating:	159.00

	Position	Code	Observation	Video (sec)	Grade
M(405	023				
	0.	AMH	Manhole	11	NA
- 10	.0	MWL	Water Level	22	NA
	¬\\.0	RFJ(SO1)	Roots Fine Joint	33	M 1
	_ <mark>\ \</mark> 11.0	СМ	Crack Multiple	69	S 3
	-	RFB	Roots Fine Barrel	98	M 2
	17.7	FL	Fracture Longitudinal	110	S 3
	19.7	DAE(S03)	Deposits Attached Encrustation	130	M 2
	22.9	FM(S02)	Fracture Multiple	152	S 4
	31.3	FM(F02)	Fracture Multiple	185	S 4
5	31.3	RFJ(F01)	Roots Fine Joint	196	M 1
Camera Direction		IW(S04)	Infil Weeper	207	M 2
	- 55.6	FM	Fracture Multiple	272	S 4
uer.	58.5	IW(F04)	Infil Weeper	293	M 2
Č	58.5	DAE(F03)	Deposits Attached Encrustation	304	M 2
	- 58.5	MMC	Material Change	316	NA
	59.9	ТВА	Tap Break-in Active	334	NA
↓⊨	66.8	TFA	Tap Factory Active	364	NA
	69.4	MMC	Material Change	385	NA
	70.8	FL(S05)	Fracture Longitudinal	404	S 3

75.0	RFB(S06)	Roots Fine Barrel	428	M
84.3	RMJ	Roots Medium Joint	463	M
87.2	FM(S07)	Fracture Multiple	485	S 4
87.2	FL(F05)	Fracture Longitudinal	496	S 3
87.2	RMJ(S08)	Roots Medium Joint	507	M
107.1	RMJ(F08)	Roots Medium Joint	563	M
107.1	FM(F07)	Fracture Multiple	574	S 4
107.1	RFB(F06)	Roots Fine Barrel	585	M
113.9	RFJ	Roots Fine Joint	614	M
113.9	FL	Fracture Longitudinal	625	S 3
120.1	RFJ	Roots Fine Joint	653	M
123.1	DAE(S09)	Deposits Attached Encrustation	675	M
123.1	RFJ	Roots Fine Joint	686	M
129.2	RFJ(S10)	Roots Fine Joint	715	M
148.3	TBD	Tap Break-in Defective	769	M
148.3	RFC	Roots Fine Connection	780	М
152.9	RFJ(F10)	Roots Fine Joint	805	М
152.9	DAE(F09)	Deposits Attached Encrustation	816	М
152.9	MMC	Material Change	827	NA
155.8	TF	Tap Factory	849	NA
159.9	MMC	Material Change	873	NA
167.7	DAE(S11)	Deposits Attached Encrustation	905	M
186.2	TFC	Tap Factory Capped	957	NA
189.4	TFC	Tap Factory Capped	979	NA
201.1	DAE(F11)	Deposits Attached Encrustation	1018	M
233.5	FS	Fracture Spiral	1099	S 3
248.8	FS	Fracture Spiral	1146	S 3
258.0	ТВІ	Tap Break-in Intruding	1180	M
/ 264.2	TFC	Tap Factory Capped	1208	NA
//267.4	TF	Tap Factory	1230	NA
// 269.9	MMC	Material Change	1251	NA
269.9	SAP(S12)	Surface Aggregate Projecting	1262	S 3
280.0	SAP(F12)	Surface Aggregate Projecting	1296	S 3
280.0	AMH	Manhole	1307	NA



Code:	AMH
Description:	Manhole
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-405-023



Distance (ft):	.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	30.000
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	

MWL

Water Level

Code:

Description:

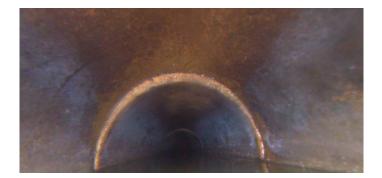


Code: Description:	RFJ Roots Fine Joint
Distance (ft):	.0
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S01
Within 8" of Joint:	YES

Remarks:

Code:

Description:



Distance (ft):	11.0
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	

СМ

Crack Multiple



Code: Description:	RFB Roots Fine Barrel
Distance (ft): Structural Grade: O&M Grade: Clock Start/From: Clock To: 1st Value:	17.7 0 2 12
2nd Value:	

Value Percent: Continuous Index: Within 8" of Joint:

Within 8" of Joint:

Remarks:

Remarks:



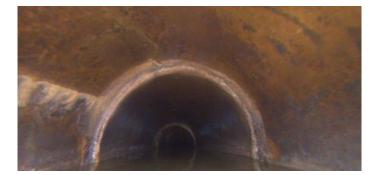
Code: Description:	FL Fracture Longitudinal
Distance (ft):	17.7
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	

NO



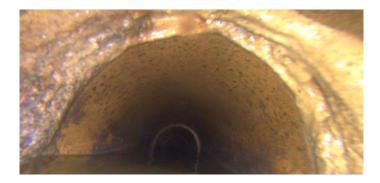
Code:DAEDescription:Deposits Attached Encrustation

Distance (ft):	19.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S03
Within 8" of Joint:	YES
Remarks:	

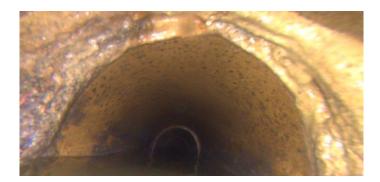


Code:	FM
Description:	Fracture Multiple

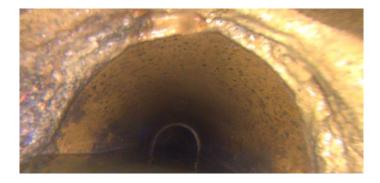
Distance (ft):	22.9	
Structural Grade:	4	
O&M Grade:	0	
Clock Start/From:	8	
Clock To:	4	
1st Value:		
2nd Value:		
Value Percent:		
Continuous Index:	S02	
Within 8" of Joint:	YES	
Remarks:		



Code: Description:	FM Fracture Multiple
Distance (ft):	31.3
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F02
Within 8" of Joint:	YES
Remarks:	



Description: Roots Fine Joint	
Distance (ft): 31.3	
Structural Grade: 0	
O&M Grade: 1	
Clock Start/From: 8	
Clock To: 4	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index: F01	
Within 8" of Joint: YES	
Remarks:	



Code:	IW
Description:	Infil Weeper
Distance (ft):	31.3
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S04
Within 8" of Joint:	YES
Remarks:	



Code:	FM
Description:	Fracture Multiple
Distance (ft):	
Distance (ft):	55.6
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	

YES

Continuous Index: Within 8" of Joint:



Code:	IW
Description:	Infil Weeper
Distance (ft):	58.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	

Continuous Index:

Within 8" of Joint:

Continuous Index:

Within 8" of Joint:

Remarks:

Remarks:

Code:

3 and	State 1	Mary Co.
		1.4.
-		1 P.

Description:	Deposits Attached Encrustation
Distance (ft):	58.5
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000

F03

YES

F04

YES

DAE

n			
	÷.		



Code: Description:	MMC Material Change
Distance (ft):	58.5
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	PVC



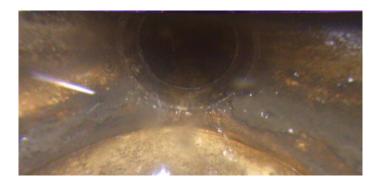
Distance (ft):	59.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

ТВА

Tap Break-in Active

Code:

Description:



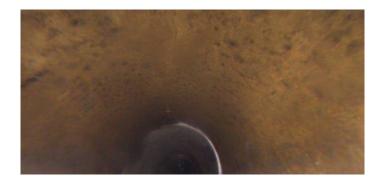
Code:TFADescription:Tap Factory Active

Distance (ft):	66.8
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	ММС
Description:	Material Change
Distance (ft):	69.4
Structural Grados	0

09.4	
0	
0	
NO	
vcp	
	0 0 NO



Code:FLDescription:Fracture Longitudinal

Distance (ft):	70.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S05
Within 8" of Joint:	YES
Remarks:	



Code:	RFB
Description:	Roots Fine Barrel
Distance (ft):	75.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	

1st Value: 2nd Value: Value Percent: Continuous Index: **S06** Within 8" of Joint: **NO** Remarks:

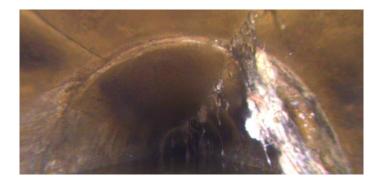


Code:RMJDescription:Roots Medium Joint

Distance (ft):	84.3
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	FM
Description:	Fracture Multiple
Distance (ft):	87.2
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S07
Within 8" of Joint:	YES
Remarks:	



Code:FLDescription:Fracture Longitudinal

Distance (ft):	87.2
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F05
Within 8" of Joint:	YES
Remarks:	

Code:

Description:



Distance (ft):	87.2
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	S08
Within 8" of Joint:	YES
Remarks:	

RMJ

Roots Medium Joint



Code:RMJDescription:Roots Medium Joint

Distance (ft):	107.1
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	10.000
Continuous Index:	F08
Within 8" of Joint:	YES
Remarks:	



Code:	FM
Description:	Fracture Multiple
Distance (ft):	107.1
Structural Grade:	4

=	
Structural Grade:	4
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F07
Within 8" of Joint:	YES
Remarks:	

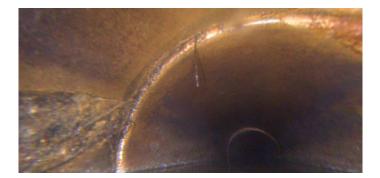


Code:RFBDescription:Roots Fine Barrel

Distance (ft):	107.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F06
Within 8" of Joint:	NO
Remarks:	

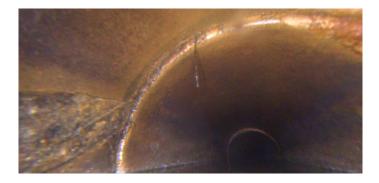
Code:

Remarks:



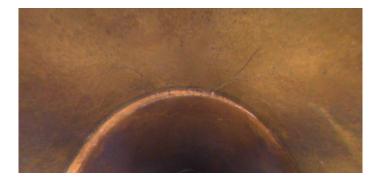
Description:	Roots Fine Joint
Distance (ft):	113.9
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	1
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES

RFJ



Code:FLDescription:Fracture Longitudinal

Distance (ft):	113.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	3
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	RFJ
Description:	Roots Fine Joint
Distance (ft):	120.1
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	

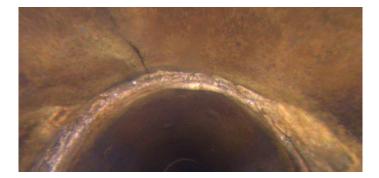
YES

Within 8" of Joint:



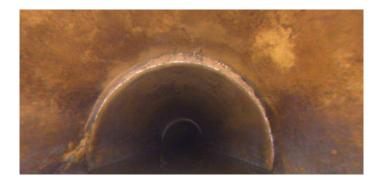
Code:DAEDescription:Deposits Attached Encrustation

Distance (ft):	123.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S09
Within 8" of Joint:	YES
Remarks:	



Code:	RFJ
Description:	Roots Fine Joint

Distance (ft):	123.1
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	12
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:RFJDescription:Roots Fine Joint

Distance (ft):	129.2
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S10
Within 8" of Joint:	YES
Remarks:	

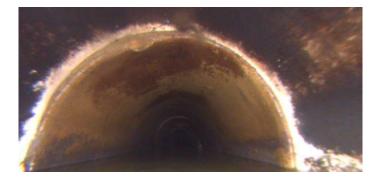


Code:	TBD
Description:	Tap Break-in Defective
Distance (ft):	148.3
Structural Grade:	0
O&M Grade:	3
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	roots

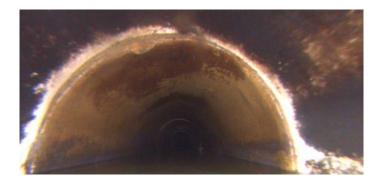


Code:RFCDescription:Roots Fine Connection

Distance (ft):	148.3
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	11
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	



Code: Description:	RFJ Roots Fine Joint
Distance (ft):	152.9
Structural Grade:	0
O&M Grade:	1
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F10
Within 8" of Joint:	YES



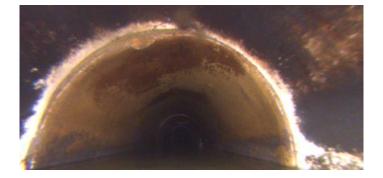
Code:DAEDescription:Deposits Attached Encrustation

ММС

PVC

Distance (ft):	152.9
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F09
Within 8" of Joint:	YES
Remarks:	

Code:



Description:	Material Change
Distance (ft):	152.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO



Code:	TF
Description:	Tap Factory

Distance (ft):	155.8
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	12
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

Continuous Index: Within 8" of Joint:

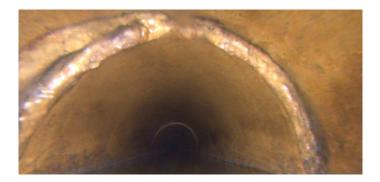
Remarks:



Code: Description:	MMC Material Change
Distance (ft):	159.9
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	

NO

vcp



Code:DAEDescription:Deposits Attached Encrustation

Distance (ft):	167.7
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	S11
Within 8" of Joint:	YES
Remarks:	

Code:



Description:	Tap Factory Capped
Distance (ft):	186.2
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	3
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

TFC



Code: Description:

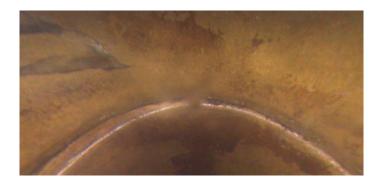
TFC Tap Factory Capped

Distance (ft):	189.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	9
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

10/00	19-22		
	1	 1	
	1		

Code:	DAE
Description:	Deposits Attached Encrustation

Distance (ft):	201.1
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	5.000
Continuous Index:	F11
Within 8" of Joint:	YES
Remarks:	

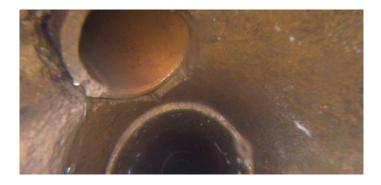


Code:FSDescription:Fracture Spiral

Distance (ft):	233.5
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	12
Clock To:	1
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code:	FS
Description:	Fracture Spiral
Distance (ft)	240.0
Distance (ft):	248.8
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	1
Clock To:	2
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	YES
Remarks:	



Code: **TBI** Description: **Tap Brea**

Tap Break-in Intruding

Distance (ft):	258.0
Structural Grade:	0
O&M Grade:	2
Clock Start/From:	1
Clock To:	
1st Value:	4.000
2nd Value:	1.000
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	



Code:	TFC
Description:	Tap Factory Capped
Distance (ft):	264.2
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	3
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	



Code:	TF
Description:	Tap Factory

Distance (ft):	267.4
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	9
Clock To:	
1st Value:	4.000
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	
Remarks:	

Continuous Index: Within 8" of Joint:

Remarks:



Code:	ММС
Description:	Material Change
Distance (ft):	269.9
()	
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	

NO CP



Code:SAPDescription:Surface Aggregate Projecting

Distance (ft):	269.9
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	S12
Within 8" of Joint:	
Remarks:	

Code:	SAP
Description:	Surface Aggregate Projecting

Distance (ft):	280.0
Structural Grade:	3
O&M Grade:	0
Clock Start/From:	8
Clock To:	4
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	F12
Within 8" of Joint:	
Remarks:	



Code:	AMH
Description:	Manhole

Distance (ft):	280.0
Structural Grade:	0
O&M Grade:	0
Clock Start/From:	
Clock To:	
1st Value:	
2nd Value:	
Value Percent:	
Continuous Index:	
Within 8" of Joint:	NO
Remarks:	M-405-022