

## Appendix J: Capital Projects

---

THIS PAGE INTENTIONALLY LEFT BLANK

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
<b>Project S1 Totals:</b>		<b>Replace</b>		<b>7,902 lf</b>	<b>in 33 reaches</b>		
S1	B1S-208_B1S-206	B1S-208	B1S-206	297	6	8	Open Cut
S1	C1S-409_C1S-506	C1S-409	C1S-506	216	6	8	Open Cut
S1	D1S-611_D1S-610	D1S-611	D1S-610	117	6	8	Open Cut
S1	E1S-607_E1S-606	E1S-607	E1S-606	199	6	8	Open Cut
S1	E2S-211_E2S-201	E2S-211	E2S-201	331	12	12	Open Cut
S1	E2S-511_E2S-509	E2S-511	E2S-509	262	6	8	Open Cut
S1	E3S-206_D3S-504	E3S-206	D3S-504	330	6	8	Open Cut
S1	E3S-505_E3S-512	E3S-505	E3S-512	329	6	8	Open Cut
S1	E3S-509_E3S-612	E3S-509	E3S-612	299	6	8	Open Cut
S1	E4S-110_E4S-111	E4S-110	E4S-111	148	6	8	Open Cut
S1	F2S-101_E2S-413	F2S-101	E2S-413	136	6	8	Open Cut
S1	F3S-216_F3S-217	F3S-216	F3S-217	267	6	8	Open Cut
S1	H2S-105_G2S-406	H2S-105	G2S-406	215	6	8	Open Cut
S1	H3S-501_H3S-603	H3S-501	H3S-603	450	6	8	Open Cut
S1	I2S-201_I2S-205	I2S-201	I2S-205	177	6	8	Open Cut
S1	I2S-502_I2S-501	I2S-502	I2S-501	381	6	8	Open Cut
S1	I3S-303_H3S-610	I3S-303	H3S-610	304	6	8	Open Cut
S1	I3S-504_I3S-503	I3S-504	I3S-503	106	6	8	Open Cut
S1	I3S-602_I3S-603	I3S-602	I3S-603	172	6	8	Open Cut
S1	J3S-302_I3S-605	J3S-302	I3S-605	323	6	8	Open Cut
S1	K3S-313_K3S-208	K3S-313	K3S-208	239	6	8	Open Cut
S1	K3S-604_K3S-601	K3S-604	K3S-601	232	6	8	Open Cut
S1	K4S-404_K4S-403	K4S-404	K4S-403	139	6	8	Open Cut
S1	K4S-406_K4S-405	K4S-406	K4S-405	77	6	8	Open Cut
S1	K5S-508_K5S-509	K5S-508	K5S-509	253	8	8	Open Cut
S1	L4S-608_L4S-607	L4S-608	L4S-607	284	6	8	Open Cut
S1	L5S-608_L5S-602	L5S-608	L5S-602	393	8	8	Open Cut
S1	L6S-108_L6S-223	L6S-108	L6S-223	305	6	8	Open Cut
S1	M5S-503_M5S-505	M5S-503	M5S-505	206	6	8	Open Cut
S1	M6S-105_M6S-107	M6S-105	M6S-107	59	6	8	Open Cut
S1	M6S-212_M6S-305	M6S-212	M6S-305	343	6	8	Open Cut
S1	N6S-104_N6S-102	N6S-104	N6S-102	214	6	8	Open Cut
S1	N6S-112_N6S-111	N6S-112	N6S-111	99	4	8	Open Cut

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
<b>Project S2 Totals:</b>		<b>Replace</b>		<b>20,383 lf</b>	<b>in 84 reaches</b>		
S2	A1S-612_A1S-611	A1S-612	A1S-611	107	6	8	Spot Repair/Replace
S2	A2S-402_A1S-601	A2S-402	A1S-601	294	6	8	Spot Repair/Replace
S2	B2S-119_B2S-110	B2S-119	B2S-110	182	6	8	Spot Repair/Replace
S2	B2S-609_B2S-610	B2S-609	B2S-610	112	6	8	Spot Repair/Replace
S2	C1S-206_C1S-208	C1S-206	C1S-208	103	6	8	Spot Repair/Replace
S2	C1S-207_C1S-208	C1S-207	C1S-208	226	6	8	Spot Repair/Replace
S2	C1S-501_C1S-502	C1S-501	C1S-502	196	6	8	Spot Repair/Replace
S2	C2S-108_C2S-111	C2S-108	C2S-111	83	12	12	Spot Repair/Replace
S2	C3S-406_C3S-113	C3S-406	C3S-113	306	6	8	Spot Repair/Replace
S2	D1S-609_D1S-608	D1S-609	D1S-608	254	6	8	Spot Repair/Replace
S2	D2S-313_D2S-312	D2S-313	D2S-312	121	6	8	Spot Repair/Replace
S2	D2S-414_D2S-415	D2S-414	D2S-415	243	6	8	Spot Repair/Replace
S2	D2S-506_D2S-502	D2S-506	D2S-502	253	6	8	Spot Repair/Replace
S2	D2S-512_D2S-511	D2S-512	D2S-511	262	6	8	Spot Repair/Replace
S2	D2S-604_D2S-610	D2S-604	D2S-610	147	6	8	Spot Repair/Replace
S2	D3S-109_D3S-101	D3S-109	D3S-101	342	8	8	Spot Repair/Replace
S2	D3S-208_D3S-209	D3S-208	D3S-209	278	10	10	Spot Repair/Replace
S2	D4S-408_D4S-406	D4S-408	D4S-406	346	6	8	Spot Repair/Replace
S2	E1S-310_E1S-204	E1S-310	E1S-204	256	6	8	Spot Repair/Replace
S2	E1S-314_E1S-312	E1S-314	E1S-312	288	6	8	Spot Repair/Replace
S2	E1S-611_E1S-608	E1S-611	E1S-608	150	8	8	Spot Repair/Replace
S2	E1S-617_E1S-601	E1S-617	E1S-601	145	6	8	Spot Repair/Replace
S2	E2S-312_E2S-313	E2S-312	E2S-313	331	6	8	Spot Repair/Replace
S2	E2S-406_E2S-407	E2S-406	E2S-407	366	6	8	Spot Repair/Replace
S2	E2S-413_E2S-403	E2S-413	E2S-403	343	6	8	Spot Repair/Replace
S2	E2S-504_E2S-414	E2S-504	E2S-414	384	6	8	Spot Repair/Replace
S2	E2S-608_E2S-609	E2S-608	E2S-609	347	6	8	Spot Repair/Replace
S2	E3S-210_D3S-505	E3S-210	D3S-505	322	6	8	Spot Repair/Replace
S2	E3S-403_E3S-404	E3S-403	E3S-404	301	6	8	Spot Repair/Replace
S2	E3S-405_E3S-109	E3S-405	E3S-109	303	8	8	Spot Repair/Replace
S2	E3S-409_E3S-403	E3S-409	E3S-403	321	6	8	Spot Repair/Replace
S2	E3S-610_E3S-604	E3S-610	E3S-604	274	6	8	Spot Repair/Replace
S2	E4S-202_E4S-300	E4S-202	E4S-300	359	6	8	Spot Repair/Replace
S2	F3S-212_F3S-213	F3S-212	F3S-213	281	6	8	Spot Repair/Replace
S2	F3S-215_F3S-514	F3S-215	F3S-514	326	6	8	Spot Repair/Replace
S2	G2S-103_G2S-104	G2S-103	G2S-104	265	6	8	Spot Repair/Replace
S2	G2S-108_G2S-109	G2S-108	G2S-109	126	6	8	Spot Repair/Replace
S2	G3S-103_G3S-108	G3S-103	G3S-108	149	6	8	Spot Repair/Replace
S2	G3S-105_G3S-108	G3S-105	G3S-108	168	6	8	Spot Repair/Replace
S2	H2S-204_H2S-205	H2S-204	H2S-205	355	6	8	Spot Repair/Replace
S2	H2S-316_G2S-618	H2S-316	G2S-618	193	6	8	Spot Repair/Replace
S2	H3S-118_H3S-116	H3S-118	H3S-116	397	6	8	Spot Repair/Replace
S2	H3S-510_H3S-509	H3S-510	H3S-509	62	6	8	Spot Repair/Replace
S2	I3S-207_I3S-208	I3S-207	I3S-208	193	6	8	Spot Repair/Replace
S2	I3S-308_I3S-309	I3S-308	I3S-309	232	6	8	Spot Repair/Replace
S2	I3S-405_I3S-406	I3S-405	I3S-406	241	6	8	Spot Repair/Replace
S2	I3S-503_I3S-502	I3S-503	I3S-502	272	6	8	Spot Repair/Replace
S2	J3S-201_J3S-202	J3S-201	J3S-202	386	8	8	Spot Repair/Replace
S2	J3S-513_J3S-512	J3S-513	J3S-512	179	6	8	Spot Repair/Replace

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
S2	J3S-604_J3S-605	J3S-604	J3S-605	233	8	8	Spot Repair/Replace
S2	J4S-205_J4S-203	J4S-205	J4S-203	346	8	8	Spot Repair/Replace
S2	J4S-414_J4S-407	J4S-414	J4S-407	239	6	8	Spot Repair/Replace
S2	J4S-603_J4S-307	J4S-603	J4S-307	239	6	8	Spot Repair/Replace
S2	K3S-309_K3S-307	K3S-309	K3S-307	189	6	8	Spot Repair/Replace
S2	K4S-202_K4S-207	K4S-202	K4S-207	200	6	8	Spot Repair/Replace
S2	K4S-503_K4S-502	K4S-503	K4S-502	316	6	8	Spot Repair/Replace
S2	K4S-602_K4S-603	K4S-602	K4S-603	64	6	8	Spot Repair/Replace
S2	K5S-302_K5S-303	K5S-302	K5S-303	404	6	8	Spot Repair/Replace
S2	K5S-305_K5S-304	K5S-305	K5S-304	255	6	8	Spot Repair/Replace
S2	K5S-502_K5S-504	K5S-502	K5S-504	245	8	8	Spot Repair/Replace
S2	K6S-109_K6S-120	K6S-109	K6S-120	497	15	15	Spot Repair/Replace
S2	K6S-302_K6S-303	K6S-302	K6S-303	206	6	8	Spot Repair/Replace
S2	K6S-514_K6S-515	K6S-514	K6S-515	167	6	8	Spot Repair/Replace
S2	K6S-617_K6S-618	K6S-617	K6S-618	256	12	12	Spot Repair/Replace
S2	L4S-107_K4S-411	L4S-107	K4S-411	155	6	8	Spot Repair/Replace
S2	L4S-308_L4S-304	L4S-308	L4S-304	231	6	8	Spot Repair/Replace
S2	L4S-613_L4S-612	L4S-613	L4S-612	150	6	8	Spot Repair/Replace
S2	L4S-614_L4S-609	L4S-614	L4S-609	407	6	8	Spot Repair/Replace
S2	L5P-501_L5S-508	L5P-501	L5S-508	109	6	8	Spot Repair/Replace
S2	L5S-212_L5S-501	L5S-212	L5S-501	168	6	8	Spot Repair/Replace
S2	L5S-313_L6S-417	L5S-313	L6S-417	233	6	8	Spot Repair/Replace
S2	L5S-404_L5S-503	L5S-404	L5S-503	264	6	8	Spot Repair/Replace
S2	L5S-501_L5S-502	L5S-501	L5S-502	164	6	8	Spot Repair/Replace
S2	L5S-502_L5S-505	L5S-502	L5S-505	292	8	8	Spot Repair/Replace
S2	L6S-217_L6S-221	L6S-217	L6S-221	387	6	8	Spot Repair/Replace
S2	L6S-316_L6S-312	L6S-316	L6S-312	151	6	8	Spot Repair/Replace
S2	L6S-414_L6P-402	L6S-414	L6P-402	16	6	8	Spot Repair/Replace
S2	L6S-513_L6S-508	L6S-513	L6S-508	383	6	8	Spot Repair/Replace
S2	M5S-204_M5S-203	M5S-204	M5S-203	275	6	8	Spot Repair/Replace
S2	M6S-115_M6S-114	M6S-115	M6S-114	154	6	8	Spot Repair/Replace
S2	M6S-518_M6S-515	M6S-518	M6S-515	240	6	8	Spot Repair/Replace
S2	M6S-519_M6S-518	M6S-519	M6S-518	131	6	8	Spot Repair/Replace
S2	N6S-204_N6S-201	N6S-204	N6S-201	229	6	8	Spot Repair/Replace
S2	N6S-505_N6S-215	N6S-505	N6S-215	218	6	8	Spot Repair/Replace

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
<b>Project M1 Totals:</b>		<b>Replace</b>		<b>6,620 lf</b>	<b>in 20 reaches</b>		
M1	E2S-506_E2S-507	E2S-506	E2S-507	368	10	10	Open Cut
M1	E2S-605_E2S-607	E2S-605	E2S-607	302	6	8	Open Cut
M1	E2S-610_E2S-605	E2S-610	E2S-605	318	6	8	Open Cut
M1	F2S-110_F2S-205	F2S-110	F2S-205	352	6	8	Open Cut
M1	F2S-205_F2S-206	F2S-205	F2S-206	351	6	8	Open Cut
M1	F2S-206_E2S-512	F2S-206	E2S-512	366	6	8	Open Cut
M1	F2S-208_F2S-206	F2S-208	F2S-206	338	6	8	Open Cut
M1	F2S-501_F2S-502	F2S-501	F2S-502	320	6	8	Open Cut
M1	F2S-502_F2S-111	F2S-502	F2S-111	301	6	8	Open Cut
M1	I4S-408_I4S-413	I4S-408	I4S-413	283	6	8	Open Cut
M1	I4S-502_I4S-407	I4S-502	I4S-407	292	8	8	Open Cut
M1	J4S-203_I4S-502	J4S-203	I4S-502	290	8	8	Open Cut
M1	J4S-213_J4S-205	J4S-213	J4S-205	346	8	8	Open Cut
M1	J4S-312_J4S-213	J4S-312	J4S-213	350	8	8	Open Cut
M1	J4S-315_J4S-313	J4S-315	J4S-313	336	6	8	Open Cut
M1	J4S-316_J4S-312	J4S-316	J4S-312	328	8	8	Open Cut
M1	J4S-602_J4S-613	J4S-602	J4S-613	373	8	8	Open Cut
M1	J5S-403_J4S-602	J5S-403	J4S-602	356	8	8	Open Cut
M1	K5S-417_K5S-416	K5S-417	K5S-416	201	8	8	Open Cut
M1	L6S-601_L6S-316	L6S-601	L6S-316	449	6	8	Open Cut
<b>Project M2 Totals:</b>		<b>Replace</b>		<b>5,815 lf</b>	<b>in 24 reaches</b>		
M2	A2S-101_A2S-106	A2S-101	A2S-106	353	6	8	Open Cut
M2	A2S-106_A2S-107	A2S-106	A2S-107	280	6	8	Open Cut
M2	A2S-107_A2P-402	A2S-107	A2P-402	68	6	8	Open Cut
M2	B2S-215_B2S-210	B2S-215	B2S-210	222	6	8	Open Cut
M2	B2S-217_B2S-216	B2S-217	B2S-216	190	6	8	Open Cut
M2	B2S-307_B2S-212	B2S-307	B2S-212	139	8	8	Open Cut
M2	B2S-308_B2S-307	B2S-308	B2S-307	104	8	8	Open Cut
M2	B3S-511_B3S-506	B3S-511	B3S-506	293	6	8	Open Cut
M2	D1S-309_D2S-111	D1S-309	D2S-111	326	6	8	Open Cut
M2	D1S-310_D1S-309	D1S-310	D1S-309	243	6	8	Open Cut
M2	D1S-311_D1S-310	D1S-311	D1S-310	77	6	8	Open Cut
M2	D1S-604_D1S-311	D1S-604	D1S-311	297	6	8	Open Cut
M2	E2S-409_E2S-411	E2S-409	E2S-411	231	6	8	Open Cut
M2	E2S-502_E2S-515	E2S-502	E2S-515	281	6	8	Open Cut
M2	F2S-201_F2S-208	F2S-201	F2S-208	284	8	8	Open Cut
M2	F2S-207_E2S-512	F2S-207	E2S-512	338	8	8	Open Cut
M2	F2S-504_F2S-201	F2S-504	F2S-201	383	8	8	Open Cut
M2	F2S-505_F2S-504	F2S-505	F2S-504	240	8	8	Open Cut
M2	F2S-513_F2S-516	F2S-513	F2S-516	269	6	8	Open Cut
M2	F2S-618_F2S-516	F2S-618	F2S-516	350	8	8	Open Cut
M2	I7S-503_I7S-508	I7S-503	I7S-508	320	6	8	Open Cut
M2	I7S-504_I7S-503	I7S-504	I7S-503	317	6	8	Open Cut
M2	I7S-505_I7S-504	I7S-505	I7S-504	34	6	8	Open Cut
M2	J5S-405_J5S-406	J5S-405	J5S-406	177	6	8	Open Cut

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
<b>Project M3 Totals:</b>		<b>Replace</b>		<b>9,674 lf</b>	<b>lf in 36 reaches</b>		
M3	A1S-301_A1S-302	A1S-301	A1S-302	112	6	8	Open Cut
M3	A1S-607_A1S-608	A1S-607	A1S-608	123	6	8	Open Cut
M3	A1S-608_A1S-611	A1S-608	A1S-611	245	6	8	Open Cut
M3	A1S-611_A1S-301	A1S-611	A1S-301	214	6	8	Open Cut
M3	E4S-502_E4S-503	E4S-502	E4S-503	301	6	8	Open Cut
M3	F3S-303_E3S-611	F3S-303	E3S-611	291	8	8	Open Cut
M3	F3S-305_F3S-307	F3S-305	F3S-307	232	8	8	Open Cut
M3	F3S-307_F3S-311	F3S-307	F3S-311	266	8	8	Open Cut
M3	F3S-311_F3S-303	F3S-311	F3S-303	270	8	8	Open Cut
M3	F3S-601_F3S-605	F3S-601	F3S-605	326	6	8	Open Cut
M3	F3S-605_F3S-608	F3S-605	F3S-608	336	8	8	Open Cut
M3	F3S-608_F3S-305	F3S-608	F3S-305	248	8	8	Open Cut
M3	F4S-201_F4S-103	F4S-201	F4S-103	199	6	8	Open Cut
M3	F4S-202_F4S-203	F4S-202	F4S-203	174	6	8	Open Cut
M3	F4S-203_F4S-201	F4S-203	F4S-201	344	6	8	Open Cut
M3	G2S-405_G2S-512	G2S-405	G2S-512	370	6	8	Open Cut
M3	G2S-512_G2S-501	G2S-512	G2S-501	127	6	8	Open Cut
M3	G3S-302_F3S-601	G3S-302	F3S-601	312	6	8	Open Cut
M3	H2S-106_H2S-104	H2S-106	H2S-104	256	6	8	Open Cut
M3	H2S-213_H2S-103	H2S-213	H2S-103	356	6	8	Open Cut
M3	H5S-607_H5S-605	H5S-607	H5S-605	260	6	8	Open Cut
M3	I5S-111_I5S-112	I5S-111	I5S-112	142	6	8	Open Cut
M3	I5S-201_I5S-111	I5S-201	I5S-111	484	6	8	Open Cut
M3	J6S-203_J6S-214	J6S-203	J6S-214	270	8	8	Open Cut
M3	J6S-204_J6S-203	J6S-204	J6S-203	190	8	8	Open Cut
M3	J6S-214_J6S-215	J6S-214	J6S-215	293	8	8	Open Cut
M3	J6S-215_J6S-209	J6S-215	J6S-209	276	8	8	Open Cut
M3	J6S-412_J6S-413	J6S-412	J6S-413	328	6	8	Open Cut
M3	J6S-504_J6S-510	J6S-504	J6S-510	293	6	8	Open Cut
M3	J6S-509_J6S-204	J6S-509	J6S-204	400	6	8	Open Cut
M3	J6S-510_J6S-509	J6S-510	J6S-509	154	6	8	Open Cut
M3	K6S-105_J6S-412	K6S-105	J6S-412	349	6	8	Open Cut
M3	K6S-106_K6S-107	K6S-106	K6S-107	343	6	8	Open Cut
M3	K6S-107_K6S-108	K6S-107	K6S-108	308	6	8	Open Cut
M3	K6S-108_K6S-105	K6S-108	K6S-105	189	6	8	Open Cut
M3	K6S-201_J6S-504	K6S-201	J6S-504	294	6	8	Open Cut

2011 CIP Project Details							
Project	Pipe ID	From MH	To MH	Length	Existing Diameter	Proposed Diameter	Construction Method
<b>Project C2 Totals:</b>		<b>CIPP Line</b>		<b>1,349 lf</b>	<b>in 5 reaches</b>		<b>V&amp;A Ranking</b>
C2	Z1S-128_Z1S-129	Z1S-128	Z1S-129	92	33	8	CIPP
C2	Z1S-129_Z1S-127	Z1S-129	Z1S-127	299	33	8	CIPP
C2	A2P-501_A2S-506	A2P-501	A2S-506	193	27	9	CIPP
C2	B3S-404_B3S-401	B3S-404	B3S-401	281	27	12	CIPP
C2	A2S-203_A2S-201	A2S-203	A2S-201	484	30	13	CIPP
<b>Project C3 Totals:</b>		<b>CIPP Line</b>		<b>9,076 lf</b>	<b>in 25 reaches</b>		<b>V&amp;A Ranking</b>
C3	Z1S-119_Z1S-118	Z1S-119	Z1S-118	502	30	15	CIPP
C3	D4S-201_C4S-501	D4S-201	C4S-501	476	30	16	CIPP
C3	C3S-602_C3S-601	C3S-602	C3S-601	494	30	17	CIPP
C3	D4S-202_D4S-201	D4S-202	D4S-201	423	30	18	CIPP
C3	C4S-402_C4S-401	C4S-402	C4S-401	383	30	19	CIPP
C3	C4S-401_C3S-602	C4S-401	C3S-602	543	30	20	CIPP
C3	D4S-401_D4S-202	D4S-401	D4S-202	334	30	21	CIPP
C3	Z1S-108_Z1S-111	Z1S-108	Z1S-111	515	39	22	CIPP
C3	F4S-103_E4S-412	F4S-103	E4S-412	338	30	23	CIPP
C3	H4S-105_G4S-409	H4S-105	G4S-409	488	30	24	CIPP
C3	C4S-403_C4S-402	C4S-403	C4S-402	282	30	25	CIPP
C3	E4S-409_E4S-402	E4S-409	E4S-402	274	30	26	CIPP
C3	Z1S-124_Z1S-128	Z1S-124	Z1S-128	276	30	27	CIPP
C3	Z1S-111_Z1S-107	Z1S-111	Z1S-107	312	36	28	CIPP
C3	D4S-407_D4S-409	D4S-407	D4S-409	256	30	29	CIPP
C3	Z1S-110_Z1S-108	Z1S-110	Z1S-108	296	39	30	CIPP
C3	C3S-601_C3S-213	C3S-601	C3S-213	414	30	31	CIPP
C3	F4S-106_F4S-103	F4S-106	F4S-103	331	30	32	CIPP
C3	Z1S-118_Z1S-109	Z1S-118	Z1S-109	498	39	33	CIPP
C3	E4S-402_E4S-105	E4S-402	E4S-105	254	30	34	CIPP
C3	E4S-105_E4S-106	E4S-105	E4S-106	318	30	35	CIPP
C3	H4S-103_H4S-105	H4S-103	H4S-105	491	30	36	CIPP
C3	Z1S-112_Z1S-110	Z1S-112	Z1S-110	252	39	37	CIPP
C3	H4S-503_H4S-501	H4S-503	H4S-501	268	24	38	CIPP
C3	F4S-107_F4S-108	F4S-107	F4S-108	60	30	39	CIPP
<b>Project C4 Totals:</b>		<b>CIPP Line</b>		<b>1,666 lf</b>	<b>in 6 reaches</b>		<b>V&amp;A Ranking</b>
C4	Z1S-107_Z1S-132	Z1S-107	Z1S-132	163	42	40	CIPP
C4	Z1S-132_Z1S-106	Z1S-132	Z1S-106	385	42	40	CIPP
C4	A2S-503_A2P-501	A2S-503	A2P-501	163	27	41	CIPP
C4	A2S-504_A2S-503	A2S-504	A2S-503	143	27	41	CIPP
C4	G4S-118_G4S-105	G4S-118	G4S-105	336	30	42	CIPP
C4	F4S-409_F4S-410	F4S-409	F4S-410	476	30	43	CIPP