



City of Helena

Helena Wastewater Collection System Master Plan

APPENDIX A

Currently Planned Collection System Rehabilitation Projects

**Capital Improvements identified from Hansen Database (based on TV inspections)
Pipe Lining Projects**

Maintenance Projects	Type of work required	Size of pipe/type	Length of project (ft)	Other Improvem
Cutler between Rodney 1W and Ewing	Relining due to age	8" cement	375	
Warren between Cutler and State	Relining due to age	8" cement	237	
10th Ave between Ewing and Warren	Relining due to age	8" cement	367	
East of Benton and Adams in Edwards St easement to Broadway	Relining due to age	8" cement	273	
5th Ave between Hoback and K street (part 1)	Relining due to age	8" cement	338	
Lewis St between Oakes and Harris	Relining due to age	8" clay	470	
Harris St between Livingston and Boulder	Relining due to age	8" clay	360	
Livingston St between Oakes 1W and Harris	Relining due to age	8" clay	398	
Highland between Blake 1w and Davis	Relining due to age	8" clay	399	
Logan between 14th and 15th	Relining due to age	8" clay	441	
15th street between Main and 1W	Relining due to age	8" clay	260	
Easement between Beattie/state 1W and Beattie/Highland1W	Relining due to age	8" clay	172	
Roberts between Boulder 1S and Boulder	Relining due to age	8" clay	191	
Highland between Montana 2W and Dakota	Relining due to age	8" clay	280	
Oakes between 8th and 1N	Relining due to age	8" clay	152	
Broadway between Montana and Dakota	Relining due to age	8" clay	400	
11th between Washington Dr and Montana	Relining due to age	8" clay	480	
Dakota between State and Highland	Relining due to age	8" cement	271	
Popular between Roberts and Sanders	Relining due to age	8" cement	435	
Walnut between Cooke and Roberts (segment 1)	Relining due to age	8" cement	476	
Walnut between Roberts and Harris (segment 2)	Relining due to age	8" cement	938	
Walnut between Oakes and 1W (segment 3)	Relining due to age	8" cement	389	
Walnut between Montana and Cooke (segment 4)	Relining due to age	8" cement	476	
9th ave between Montana and Dakota	Relining due to age	8" cement	419	
Prospect between Hoback and Idaho	Relining due to age	8" cement	403	
Cook st between Butte 1S and Butte	Relining due to age	8" cement	258	
Livingston St between Idaho and Montana	Relining due to age	8" cement	940	
Bedford between Rodney 1E and Lyndale	Relining due to age	8" cement	370	
Cherry between National and Dodge	Relining due to age	8" cement	293	
Maple between Roberts and Sanders	Relining due to age	8" cement	450	
Elm between Villard 1W and Villard	Relining due to age	8" cement	370	
Columbia between Aspen and Cedar	Relining due to age	8" cement	360	
Breckenridge between Montana and Alta	Relining due to age	8" cement	660	
University between Lincoln 1E and Lincoln	Relining due to age	8" cement	141	replace 1 lamphole
University between Lincoln 1W and Lincoln	Relining due to age	8" cement	325	replace 1 lamphole
Knight between Garfield 1W and Garfield	Relining due to age	8" cement	405	replace 1 lamphole
Hayes between Floweree and Stuart	Relining due to age	8" cement	370	
Hayes between Power 1N and Gilbert	Relining due to age	8" cement	326	
Garfield between 1100 Alley and 1000 Alley	Relining due to age	8" cement	332	
Ralph between Park 1E and Park	Relining due to age	8" cement	360	
Hauser between Henderson and Cleveland	Relining due to age	8" cement	920	
Stuart between Grant and Cleveland	Relining due to age	8" cement	346	
Floweree between MT View 1W and Garrison	Relining due to age	8" cement	318	
Knight between Henderson and MT View	Relining due to age	8" cement	454	
Choteau between Allison 1E and Allison	Relining due to age	8" cement	170	
Alley between Lincoln/Euclid 1S and Grant/Euclid 1S	Relining due to age	8" cement	460	
Alley between 1800 Cleveland 1W and Cleveland	Relining due to age	8" cement	392	replace 1 lamphole
Alley between Hudson/Allison 1N and Hudson Cleveland	Relining due to age	8" cement	460	
Leslie between Allison 1W and Allison	Relining due to age	8" cement	251	
Prospect between Lamborn 1W and Lamborn	Relining due to age	8" cement	235	
Lamborn between Prospect and Butte	Relining due to age	8" cement	376	
Highland between Lamborn and Hannaford	Relining due to age	8" cement	472	
Jerome between Lamborn and Fee (segment 1)	Relining due to age	8" cement	508	
Lamborn between Winne and Jerome	Relining due to age	8" cement	323	
Jerome between Harris 1E and Harris	Relining due to age	8" cement	252	
Highland between Harris and Oakes (segment 1)	Relining due to age	8" cement	260	
Highland between Oakes 1W and Oakes (segment 2)	Relining due to age	8" cement	210	
Wallace between Winne 1S and Winne	Relining due to age	8" cement	285	
Roberts between Sibelius and Winne	Relining due to age	8" cement	310	
Golden between Carson 2E and Lamborn	Relining due to age	8" cement	407	
9th ave between Washington 1E and Oregon	Relining due to age	8" cement	135	
Oakes between 6th and 8th	Relining due to age	8" cement	425	
Oregon between 6th and 8th	Relining due to age	8" cement	465	
5th between Fee 1W and Hannaford	Relining due to age	8" cement	400	
Lockey between fee 1W and Hannaford	Relining due to age	8" cement	400	
100 block of Lamborn between 2W and 5th and Lamborn 1W	Relining due to age	8" cement	151	
TOTAL FEET			24,745	
Ewing between 11th ave and 12th ave	Relining due to age	9" cement	360	
5th Ave between Hoback and K street (part 2)	Relining due to age	9" cement	212	
Breckenridge between Hoback and Alta	Relining due to age	9" cement	376	
Last Chance Gulch between 6th and 7th	Relining due to age	9" clay	447	
Jefferson St between Adams and Ming	Relining due to age	9" clay	374	
Jerome between Lamborn and Fee (segment 2)	Relining due to age	9" cement	472	
TOTAL FEET			2,241	
Helena Ave between Ewing and Rodney	Relining due to age	10" cement	648	
Lyndale between Oakes 1W and Harris	Relining due to age	10" clay	470	
Lamborn between Townsend and Livingston (Segment 1)	Relining due to age	10" clay	369	
Sanders between Missoula and 1N	Relining due to age	10"clay	380	
11th Ave between Lamborn and Hannaford	Relining due to age	10" clay	471	
Oakes between Popular and Aspen	Relining due to age	10" cement	365	
Popular between Lamborn and Oakes	Relining due to age	10" cement	463	
Hannaford between 700 A and Butte	Relining due to age	10" cement	190	
Lamborn between Butte and Missoula	Relining due to age	10" cement	372	
Hannaford between 11th and 600 block alley	Relining due to age	10" cement	304	
Cleveland between Wilder and Peosta	Relining due to age	10" cement	1,004	
TOTAL FEET			5,036	
Lamborn between Townsend and Livingston (Segment 2)	Relining due to age	12" clay	376	

Capital Improvements identified from Hansen Database (based on TV inspections)

Pipe Replacement Projects

Maintenance Projects	Type of work required	Size of pipe/type	new pipe size/type	Length of project
West main from grizzly/unionville Y to Redders Village	replace old undersize pipe	6" steel	8" PVC	2100
400 block Broadway between 1S thru block	replace old undersize pipe	6" clay	8" PVC	500
Floweree & Laurel easement (segment 1)	relocate, replace, undersize pipe	6" clay	8" PVC	567
Floweree between Laurel and Linden (segment 2)	replace old undersize pipe	6" clay	8" PVC	500
TOTAL FEET				3667
Hillsdale between Raliegh 1W and Beatie	replace old broken pipe	8" clay	8" PVC	401
Missoula between Sanders and Harris	replace old broken pipe	8" clay	8" PVC	471
Townsend between Hannaford 1E and Hannaford	replace old broken pipe	8" clay	8" PVC	268
Missoula between Fee and Washington	replace old broken pipe	8" concrete	8" PVC	475
Oranage between Columbia 1W and Columbia 1E	replace old broken pipe	8" clay	8" PVC	304
TOTAL FEET				1919
Cole street between Harris and Oakes	replace odd undersize pipe	18 x 13 cement	24" PVC	730
TOTAL FEET				730

Curent Capital Improvements Associated with Capacity/Growth

Maintenance Projects	<u>Type of work required</u>	<u>Size of pipe/type</u>	<u>new pipe size/type</u>	<u>Length of project (ft)</u>
Colonial Dr between MH03-26-33 and MHSI300-23	pipe bottleneck increase size	8" PVC	12" PVC	1,419
Airport Gravity Main	new gravity main to replace aging lift station (Airport)	dna	24" PVC	9,500
Country Club Main upsize	increase grade or pipe size for flow/capacity	10"	15 to 18"	undetermined
Second Interceptor to parrallel Brady line	Increases in flow will require additional capacity	tbd	tbd	tbd
12" main along east side of I-15 at capacity	Line requires upsize to handle flow w/o surcharge	12"	24"	undetermined
upsized main between airport road and RR	Gravity Mains are under sized for expected flows	10"	24"	undetermined