

2018 Capital Plan

Baker City Public Works Department

Current Year Update

**BAKER CITY PUBLIC WORKS
3 YEAR WATER CAPITAL PLAN
ESTIMATE OF COST
2017-2018 FISCAL YEAR - 2nd Half
JANUARY 1, 2018 - JUNE 30, 2018**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Mountain Line Replacement Sta. 983+20 to Sta. 1022+00	3880	Lineal Feet	\$140.00	\$ 543,200.00	20" DI	Purchase and install 20" dia. Pipe (Class 53 DI), fittings and transport to site (April - June).
2	Replace Hydrants	2	Each	\$6,000.00	\$ 12,000.00	Varies	Replace hydrants as needed.
3	Water Line Extensions	Varies	Lineal Feet	Varies	\$ 10,000.00	Varies	Misc. water line extensions.
4	Reservoir Maintenance	1	Lump Sum	\$60,000.00	\$ 60,000.00	N/A	Sand blast and recoat exterior of 3MG reservoir.
5	Estes St. (Powder River - Elm St.)	900	Lineal Feet	\$120.00	\$ 108,000.00	8" DI	Install 8" DI pipe to replace substandard lines and improve fire flows (March).
6	Watershed Fuels Reduction Project	1	Lump Sum	\$15,000.00	\$ 15,000.00	N/A	Preliminary Project Development
7	Groundwater Source Development	1	Lump Sum	\$200,000.00	\$ 200,000.00	N/A	Planning for new municipal well (ongoing).
SUBTOTAL					\$ 948,200.00		
ENGINEERING					\$ 94,820.00		
ADMINISTRATIVE CHARGE					\$ 89,699.72		
TOTAL ESTIMATED COST					\$ 1,132,719.72		

Items noted in blue lettering are projects required by state or federal regulatory agencies.

Current Year
ITEM NO. 1

MOUNTAIN LINE REPLACEMENT

16

Replace line w/ 20" DI, 15'

14

1

Sta 983+20 thru 1022+00

122

21

22

23

1811

GULCH

28

27

26

1811

N.T.S.

ELK CREEK
SETTLING TANK



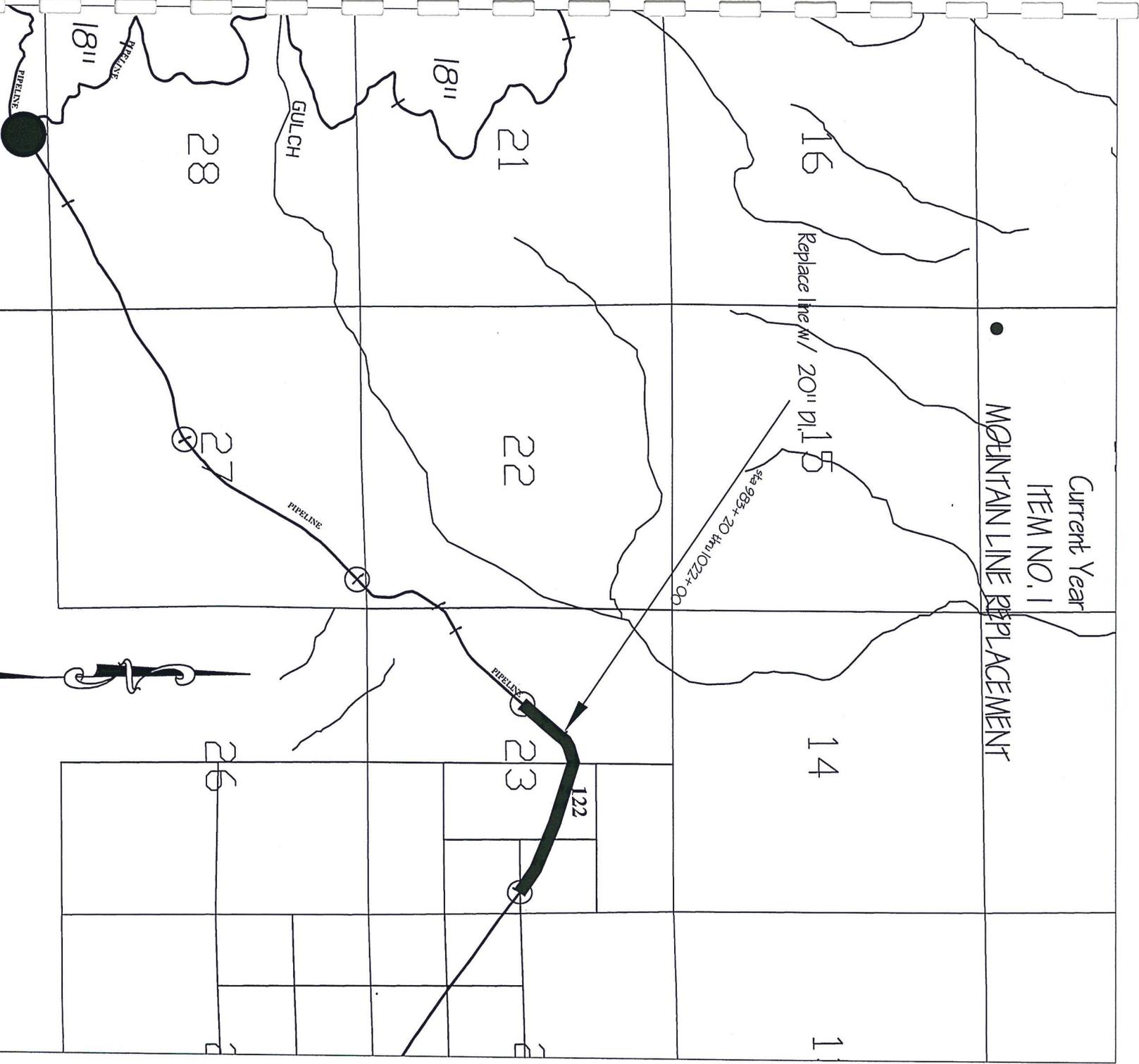
points of diversion

33

historic

pipeline route

mountain waterline



Year 1

**BAKER CITY PUBLIC WORKS
3 YEAR WATER CAPITAL PLAN
ESTIMATE OF COST
2018-2019 FISCAL YEAR
JULY 1, 2018 - JUNE 30, 2019**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Mountain Line Replacement Sta. 944+40 to Sta. 983+20	3880	Lineal Feet	\$140.00	\$ 543,200.00	20" DI	Purchase and install 20" dia. Pipe (Class 53 DI), fittings and transport to site.
2	Replace Hydrants	5	Each	\$6,000.00	\$ 30,000.00	Varies	Replace hydrants as needed.
3	Water Line Extensions	Varies	Lineal Feet	Varies	\$ 10,000.00	Varies	Misc. water line extensions.
4	Groundwater Source Development	1	Lump Sum	\$200,000.00	\$ 200,000.00	N/A	Design new municipal well and consultant services during construction.
5	East St. (Campbell St. - D St.)	735	Lineal Feet	\$100.00	\$ 73,500.00	8" DI	Install 8" DI pipe to improve distribution grid and fire flows.
6	Watershed Fuels Reduction Project	1	Lump Sum	\$25,000.00	\$ 25,000.00	N/A	Work with USFS for fuel reduction.
7	Place St. (Oak St. - West 180')	180	Lineal Feet	\$90.00	\$ 16,200.00	4" DI	Install 4" DI pipe to replace undersized, failing galvanized line
8	Court St. - (4th St. - 7th St.)	1075	Lineal Feet	\$110.00	\$ 118,250.00	8" DI	Install 8" DI pipe to improve distribution grid and fire flows.
SUBTOTAL					\$ 1,016,150.00		
ENGINEERING					\$ 101,615.00		
ADMINISTRATIVE CHARGE					\$ 96,127.79		
TOTAL ESTIMATED COST					\$ 1,213,892.79		

Items noted in blue lettering are projects required by state or federal regulatory agencies.

Year 1
ITEM NO. 1

MOUNTAIN LINE REPLACEMENT

16

15

14

1

Replace line w/ 2011 Pl.

§ 944 + 40 thru 983 + 20

122

21

22

23

1811

GULCH

PIPELINE

28

27

26

1811

PIPELINE

PIPELINE

N.T.S.



ELK CREEK
SETTLING TANK

points of diversion

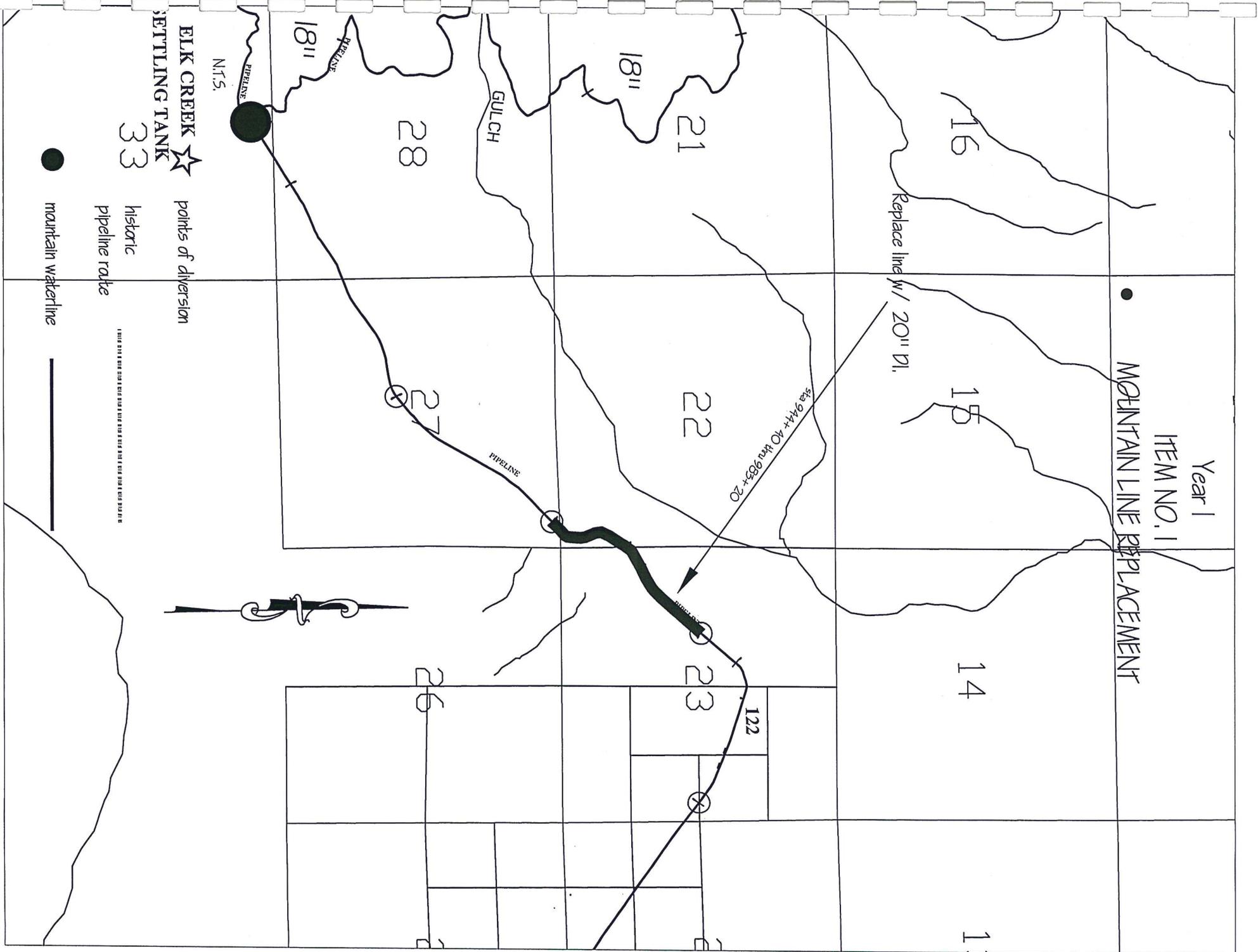
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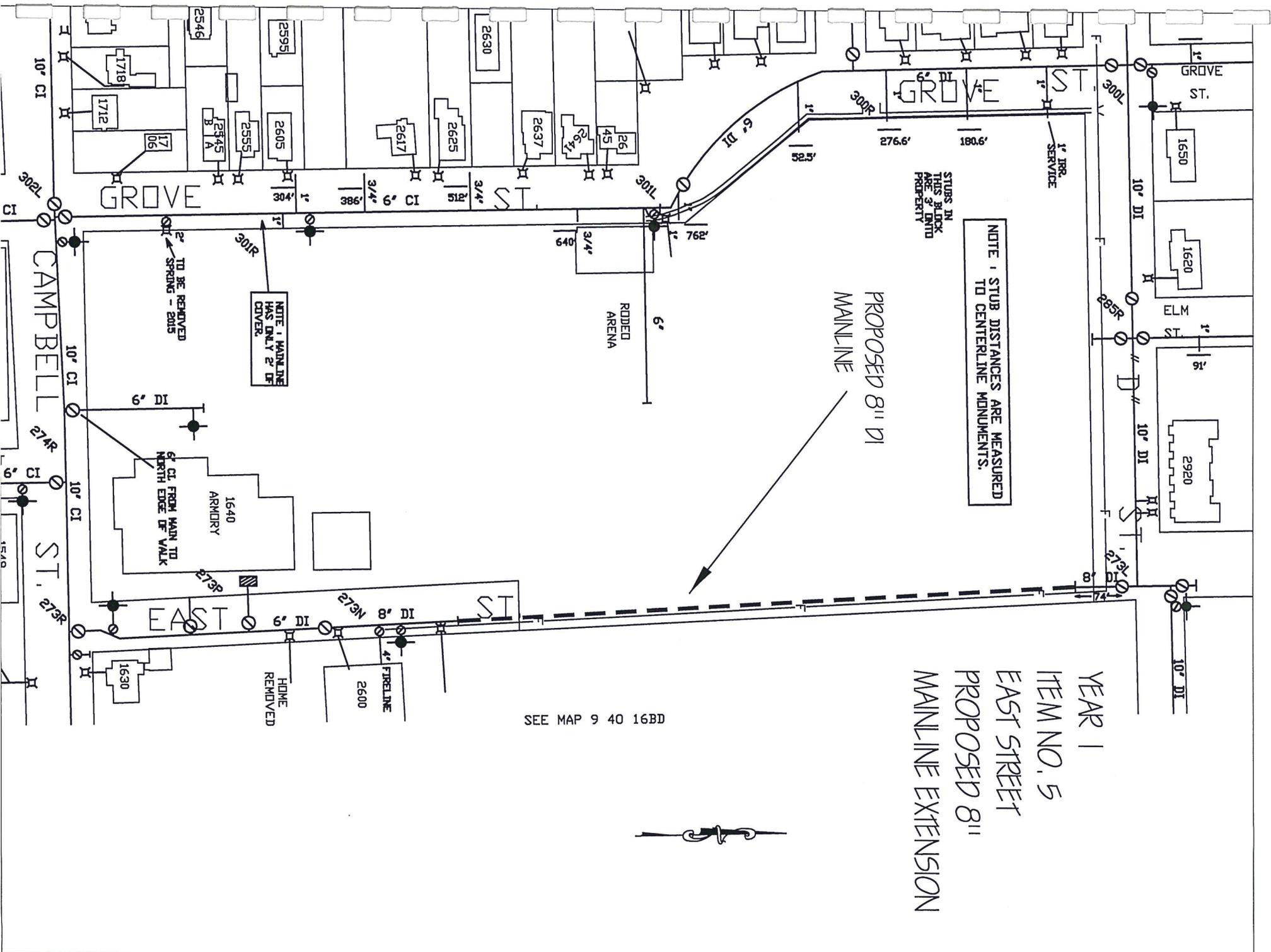
historic

pipeline route

1:10000

mountain waterline





NOTE: STUB DISTANCES ARE MEASURED TO CENTERLINE MONUMENTS.

STUBS IN THIS BLOCK ARE 3' INTO PROPERTY

NOTE: MAINLINE HAS ONLY 2' OF COVER.

TO BE REMOVED SPRING - 2015

6' CL FROM MAIN TO NORTH EDGE OF WALK

ARMORY

1640

HOME REMOVED

2600

FIRELINE

SEE MAP 9 40 16BD

YEAR 1
ITEM NO. 5
EAST STREET
PROPOSED 8" I
MANLINE EXTENSION

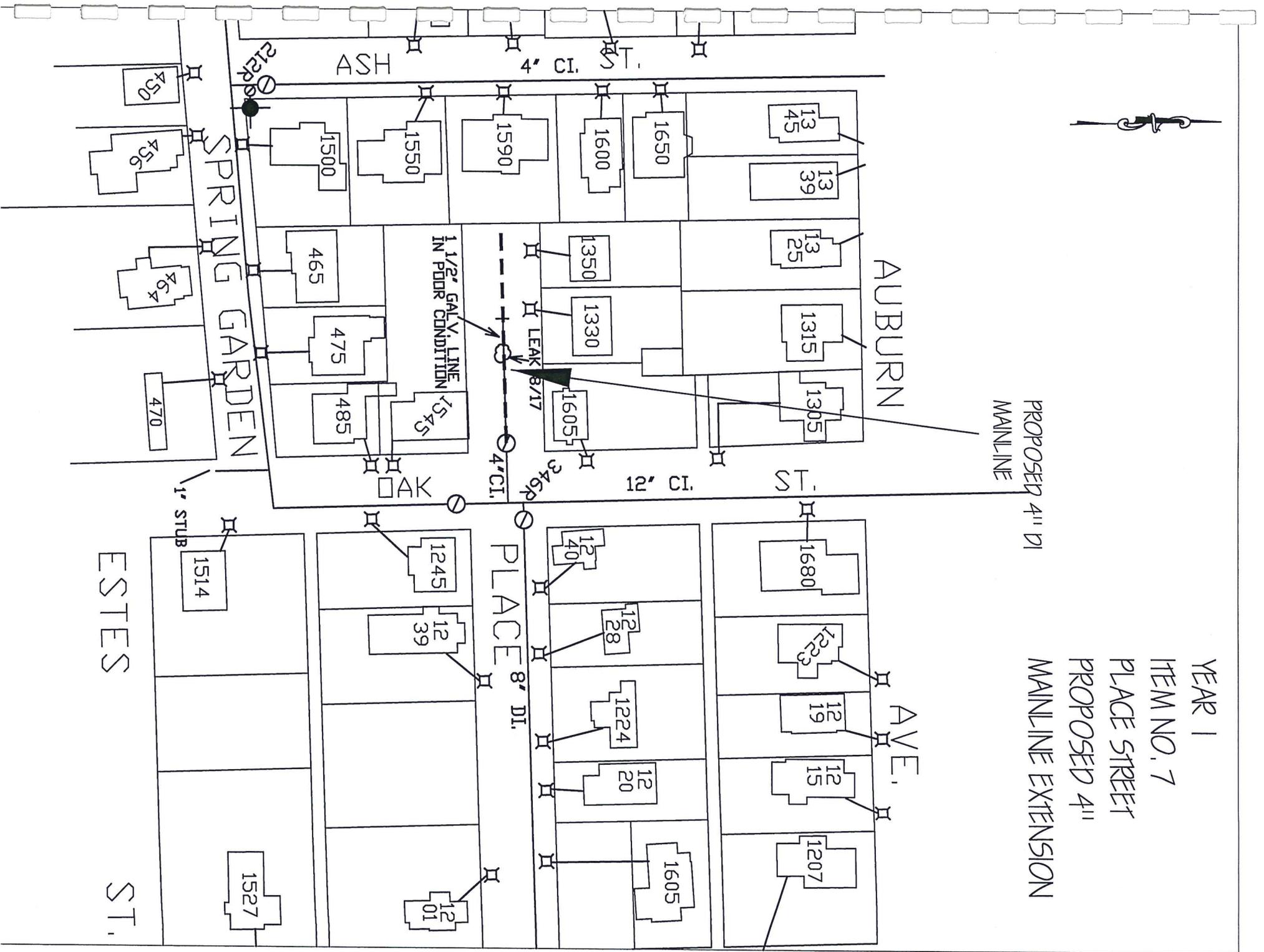




YEAR 1
ITEM NO. 7
PLACE STREET
PROPOSED 4"

MAINLINE EXTENSION

PROPOSED 4" DI
MAINLINE



Year 2

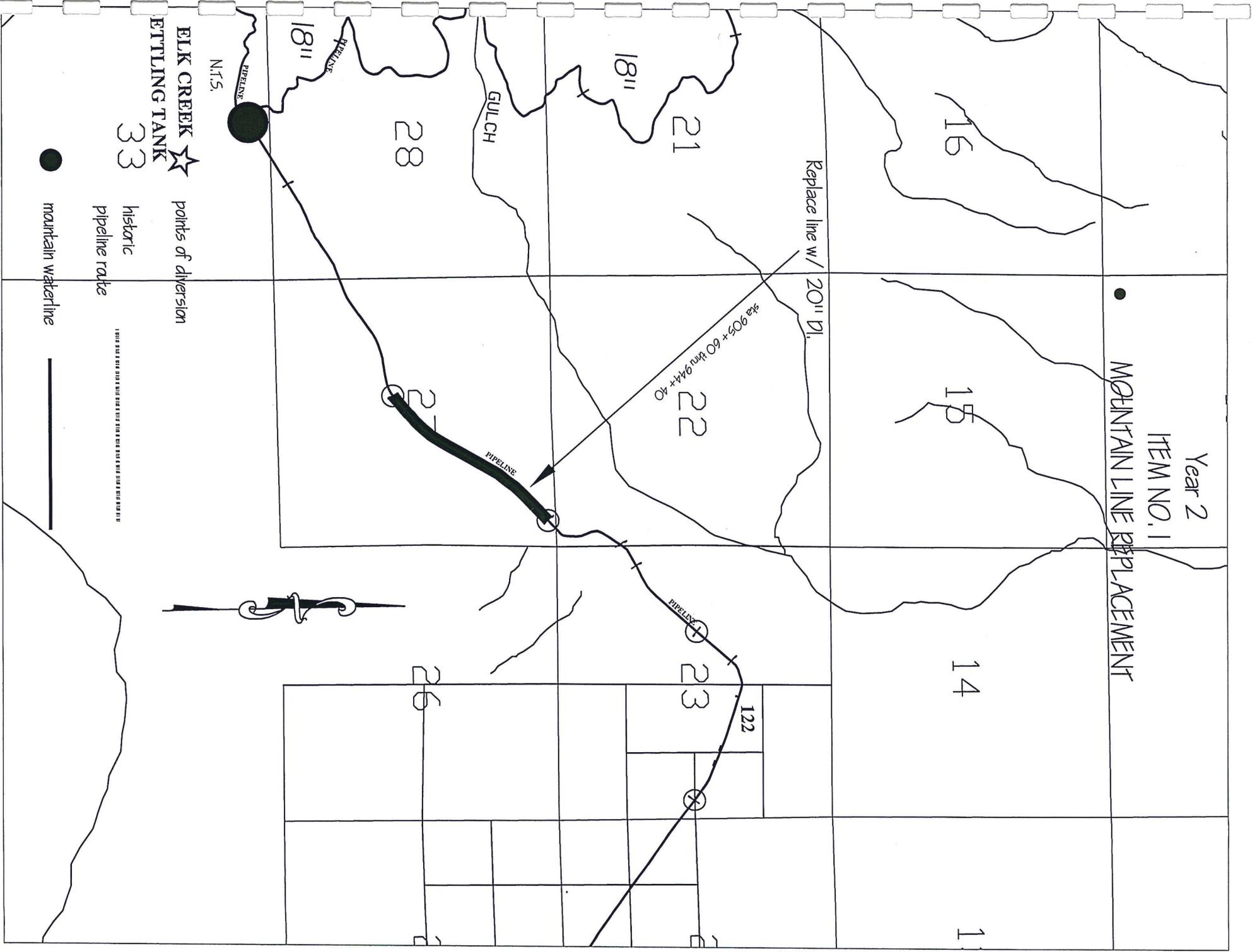
**BAKER CITY PUBLIC WORKS
3 YEAR WATER CAPITAL PLAN
ESTIMATE OF COST
2019-2020 FISCAL YEAR
JULY 1, 2019 - JUNE 30, 2020**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Mountain Line Replacement Sta. 905+60 to Sta. 944+40	3880	Lineal Feet	\$145.00	\$ 562,600.00	20" DI	Purchase and install 20" dia. Pipe (Class 51 and 53 DI), fittings and transport to site.
2	Replace Hydrants	5	Each	\$6,000.00	\$ 30,000.00	Varies	Replace hydrants as needed.
3	Water Line Extensions	Varies	Lineal Feet	Varies	\$ 10,000.00	Varies	Misc. water line extensions.
4	Groundwater Source Development	1	Lump Sum	\$400,000.00	\$ 400,000.00	N/A	Drill new municipal well and consultant services during construction.
5	Watershed Fuels Reduction Project	1	Lump Sum	\$25,000.00	\$ 25,000.00	N/A	Work with USFS for fuel reduction.
6	Chlorine System Upgrade	1	Lump	\$40,000.00	\$ 40,000.00	N/A	Design on-site Sodium Hypochlorite generation system to replace chlorine gas system.
7	Washington Ave. (River crossing) Clifford St. (Washington - South 400')	530	Lineal Feet	\$150.00	\$ 79,500.00	8" DI	Install 8" DI river crossing and replace Clifford St. water main to improve distribution and fire flows.
SUBTOTAL					\$ 1,147,100.00		
ENGINEERING					\$ 114,710.00		
ADMINISTRATIVE CHARGE					\$ 108,515.66		
TOTAL ESTIMATED COST					\$ 1,370,325.66		

Items noted in blue lettering are projects required by state or federal regulatory agencies.

Year 2
ITEM NO. 1

MOUNTAIN LINE REPLACEMENT



ELK CREEK
FTLING TANK
33

points of diversion

historic

pipeline rake

mountain waterline



1/4% 903+60 thru 944+40

Replace line w/
20" DI.

PIPELINE

PIPELINE

GULCH

N15

1811

1811

28

21

16

22

15

27

14

23

122

26

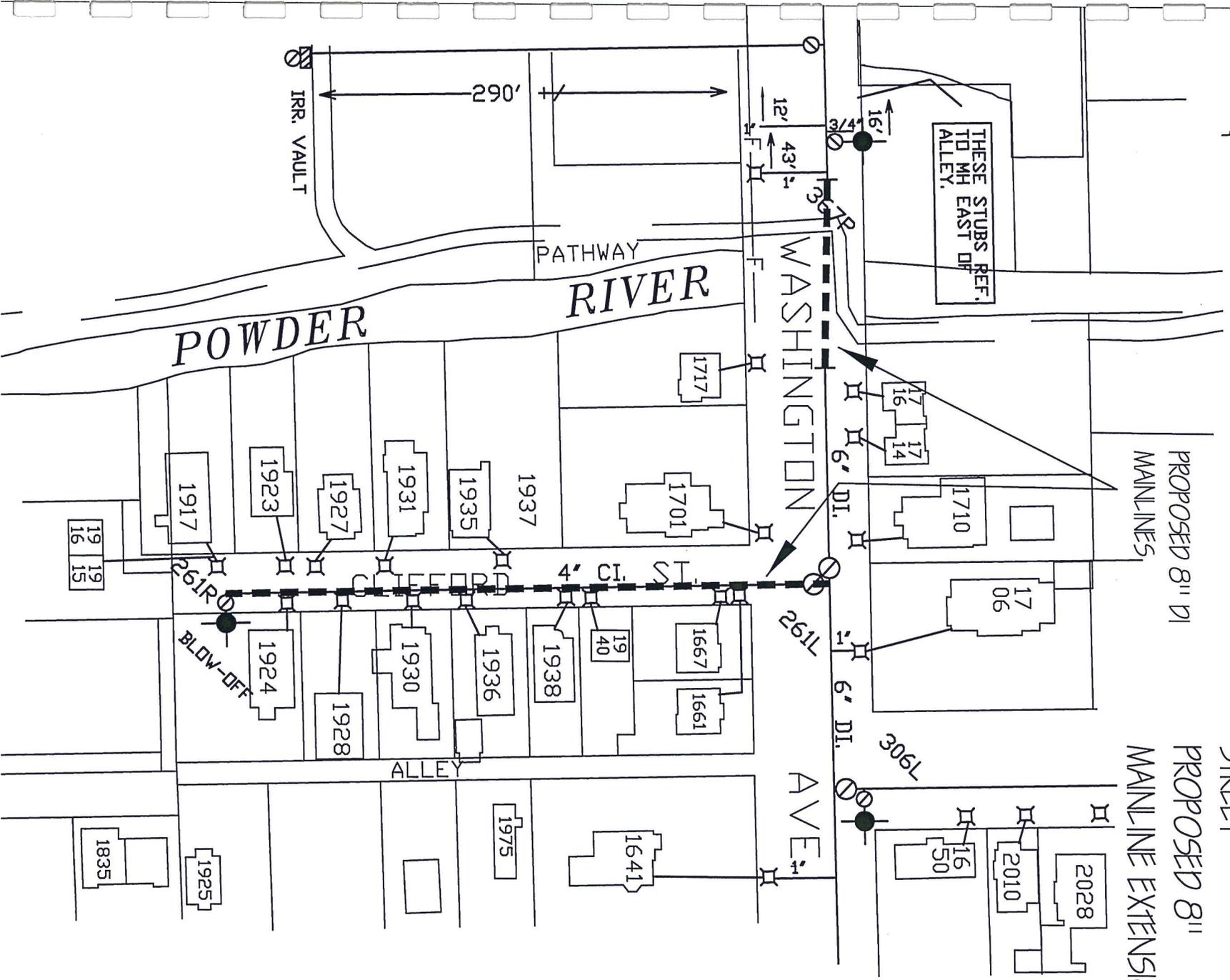
1



YEAR 2
ITEM NO. 7

CLIFFORD / WASHINGTON
STREET

PROPOSED 8" DI
MANLINE EXTENSION



POWDER RIVER

WASHINGTON

AVE.

IRR. VAULT

PATHWAY

THESE STUBS REF. TO MH EAST OF ALLEY.

PROPOSED 8" DI MAINLINES

PROPOSED 8" DI MANLINE EXTENSION

261R

261L

306L

261R0

BLDW-OFF

290'

12'

43'

6' DI.

6' DI.

1937

1935

1931

1927

1923

1917

1717

1701

1717
16
17
14

1710

1706

1940

1667

1661

1938

1936

1930

1928

1924

1919
16
19

1975

1641

150

2010

2028

1925

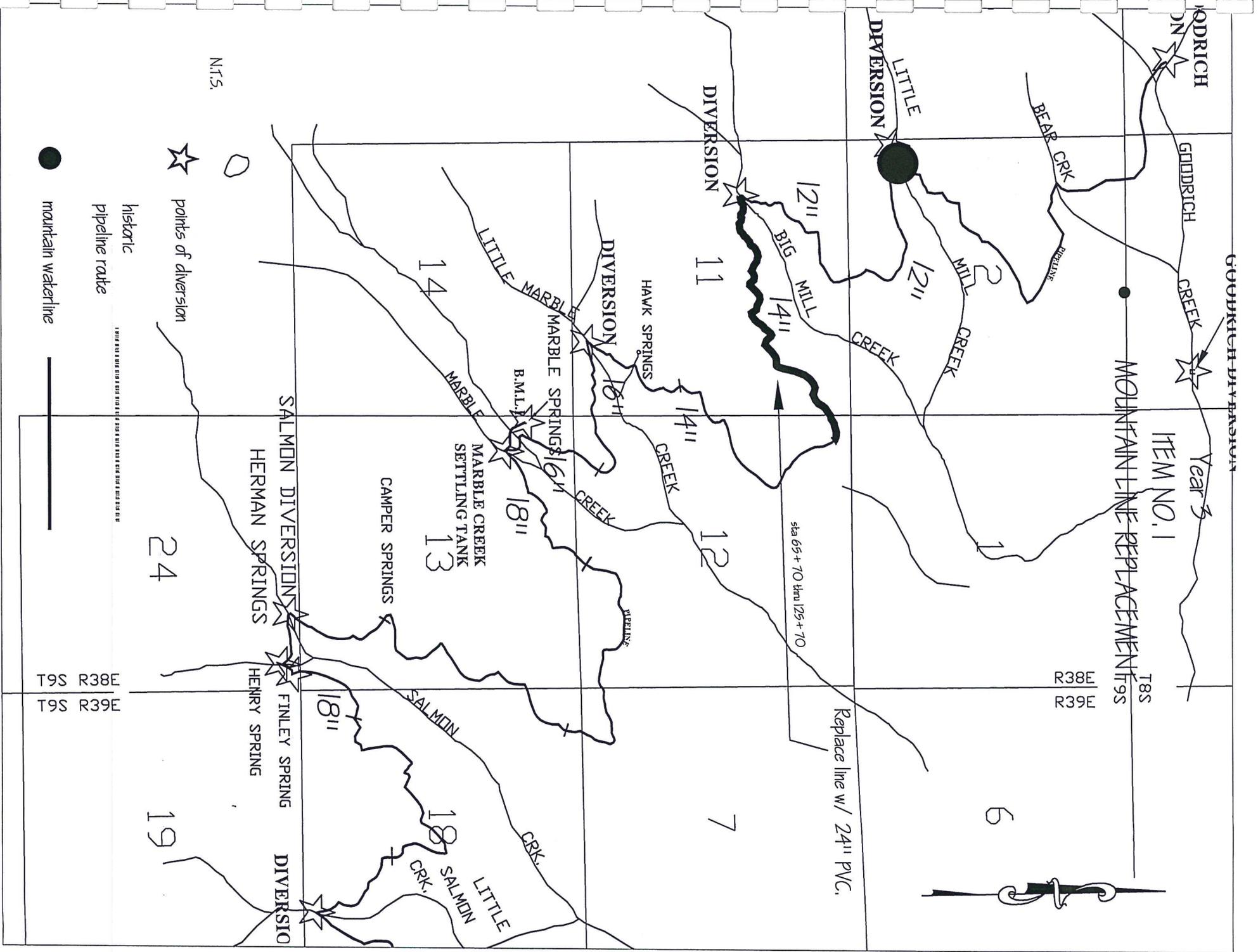
1835

Year 3

**BAKER CITY PUBLIC WORKS
3 YEAR WATER CAPITAL PLAN
ESTIMATE OF COST
2020-2021 FISCAL YEAR
JULY 1, 2020 - JUNE 30, 2021**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Mountain Line Replacement Sta. 65+70 to Sta. 125+70	6000	Lineal Feet	\$90.00	\$ 540,000.00	24" PVC	Purchase and install 24" dia. Pipe (C-900 PVC), fittings and transport to site.
2	Replace Hydrants	5	Each	\$6,000.00	\$ 30,000.00	Varies	Replace hydrants as needed.
3	Water Line Extensions	Varies	Lineal Feet	Varies	\$ 10,000.00	Varies	Misc. water line extensions.
4	Groundwater Source Development	1	Lump Sum	\$500,000.00	\$ 500,000.00	N/A	Construct well house, pump station, new piping, chlorination system, backup power, telemetry, start up and commissioning. Includes consulting services during construction and start up.
5	Chlorine System Upgrade	1	Lump	\$150,000.00	\$ 150,000.00	N/A	Install on-site Sodium Hypochlorite generation system to replace chlorine gas system.
SUBTOTAL					\$ 1,230,000.00		
ENGINEERING					\$ 123,000.00		
ADMINISTRATIVE CHARGE					\$ 116,358.00		
TOTAL ESTIMATED COST					\$ 1,469,358.00		

Items noted in blue lettering are projects required by state or federal regulatory agencies.



GOODRICH DIVERSION

GOODRICH DIVERSION

GOODRICH CREEK

Year 3
ITEM NO. 1
MOUNTAIN LINE REPLACEMENT

T8S
R38E
R39E

6



LITTLE DIVERSION

BEAR CRK

MILL CREEK

BIG MILL CREEK

sta 65 + 70 thru 125 + 70

Replace line w/ 24" PVC.

DIVERSION

11

HAWK SPRINGS

CREEK

12

DIVERSION

CREEK

MARBLE SPRINGS

15

B.M.L.

16

MARBLE CREEK
SETTLING TANK

13

14

CAMPER SPRINGS

SALMON DIVERSION

HERMAN SPRINGS

FINLEY SPRING

DIVERSIO

N.T.S.



points of diversion

historic

pipeline route

mountain waterline

24

T9S R38E
T9S R39E

19

18

LITTLE SALMON CRK.

7

18

HENRY SPRING

DIVERSIO

Current Year Update

**BAKER CITY PUBLIC WORKS
WASTE WATER CAPITAL PLAN
ESTIMATE OF COST
2017-2018 FISCAL YEAR - 2nd Half
JANUARY 1, 2018 - JUNE 30, 2018**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	*Wastewater Treatment Facility	N/A	Lump Sum	\$100,000.00	\$ 100,000.00	N/A	Engineering and design of effluent disposal option.
2	Various Locations	Varies	Lineal Feet	Varies	\$ 150,000.00	Varies	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating sewage lines.
SUBTOTAL					\$ 250,000.00		
ENGINEERING					\$ 25,000.00		
ADMINISTRATIVE CHARGE					\$ 23,650.00		
TOTAL ESTIMATED COST					\$ 298,650.00		

*Current funding / rate structure does not provide adequate funding for this project

Year 1

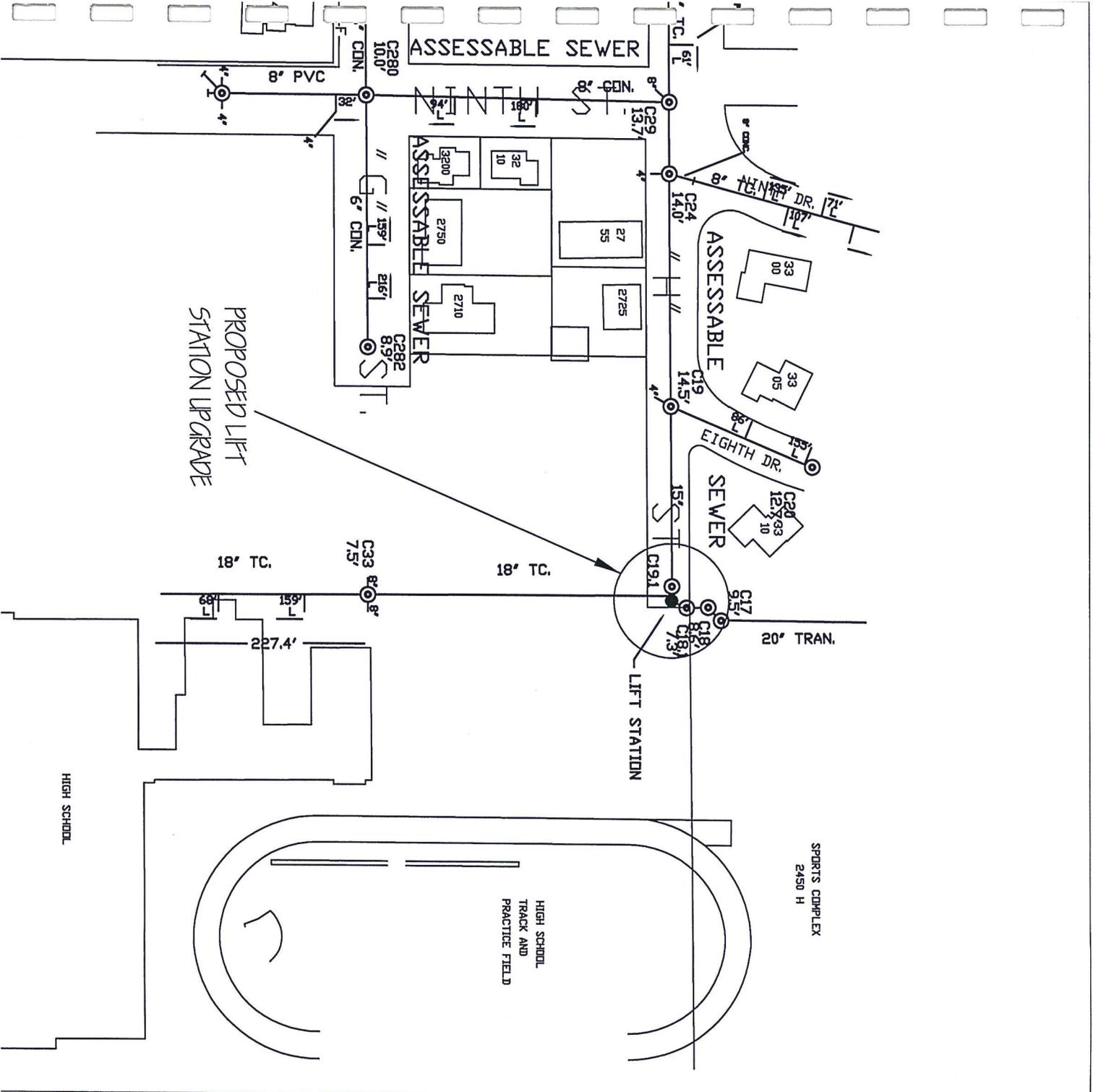
**BAKER CITY PUBLIC WORKS
WASTE WATER CAPITAL PLAN
ESTIMATE OF COST
2018-2019 FISCAL YEAR
JULY 1, 2018 - JUNE 30, 2019**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Various Locations	Varies	Lineal Feet	Varies	\$ 100,000.00	Varies	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating sewage lines.
2	H St. - 7th Street	1	Lump Sum	\$170,000.00	\$ 170,000.00	N/A	Upgrade the H St. lift station.
3	* Wastewater Treatment Facility	N/A	Lump Sum	\$500,000.00	\$ 500,000.00	N/A	Acquire property and easements for wastewater effluent disposal.
SUBTOTAL					\$ 770,000.00		
ENGINEERING					\$ 77,000.00		
ADMINISTRATIVE CHARGE					\$ 72,842.00		
TOTAL ESTIMATED COST					\$ 919,842.00		

*Current funding / rate structure does not provide adequate funding for this project



YEAR 1
ITEM NO. 2
H STREET LIFT STATION
PROPOSED UPGRADE



PROPOSED LIFT
STATION UPGRADE

HIGH SCHOOL

HIGH SCHOOL
TRACK AND
PRACTICE FIELD

SPORTS COMPLEX
2450 H

Year 2

**BAKER CITY PUBLIC WORKS
WASTE WATER CAPITAL PLAN
ESTIMATE OF COST
2019-2020 FISCAL YEAR
JULY 1, 2019 - JUNE 30, 2020**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Various Locations	Varies	Lineal Feet	Varies	\$ 150,000.00	Varies	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating sewage lines.
2	*Wastewater Treatment Facility	N/A	Lump Sum	\$8,500,000.00	\$ 8,500,000.00	N/A	Begin construction of effluent storage pond and piping project.
3	* Wastewater Treatment Facility	N/A	Lump Sum	\$1,200,000.00	\$ 1,200,000.00	N/A	Upgrade current system to include grit removal, screening, valve replacement, scada update, and discharge piping. Also includes biosolids harvesting of pond A.
SUBTOTAL					\$ 9,850,000.00		
ENGINEERING					\$ 985,000.00		
ADMINISTRATIVE CHARGE					\$ 931,810.00		
TOTAL ESTIMATED COST					\$11,766,810.00		

*Current funding / rate structure does not provide adequate funding for this project

Year 3

**BAKER CITY PUBLIC WORKS
WASTE WATER CAPITAL PLAN
ESTIMATE OF COST
2020-2021 FISCAL YEAR
JULY 1, 2020 - JUNE 30, 2021**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Various Locations	Varies	Lineal Feet	Varies	\$ 150,000.00	Varies	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating sewage lines.
2	*Wastewater Treatment Facility	N/A	Lump Sum	\$200,000.00	\$ 200,000.00	N/A	Biosolids removal from small cells B, C and D.
SUBTOTAL					\$ 350,000.00		
ENGINEERING					\$ 35,000.00		
ADMINISTRATIVE CHARGE					\$ 33,110.00		
TOTAL ESTIMATED COST					\$ 418,110.00		

*Current funding / rate structure does not provide adequate funding for this project

Current Year Update

**BAKER CITY PUBLIC WORKS
3 YEAR STORM WATER CAPITAL PLAN
ESTIMATE OF COST
2017-2018 FISCAL YEAR - 2nd Half
JANUARY 1, 2018 - JUNE 30, 2018**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	TV Inspection of Storm Mainlines	1	Lump Sum	\$ 5,000.00	\$ 5,000.00	Varies	Inspect condition of existing storm mainlines.
SUBTOTAL					\$ 5,000.00		
ENGINEERING					\$ 500.00		
ADMINISTRATIVE CHARGE					\$ 473.00		
TOTAL ESTIMATED COST					\$ 5,973.00		

Items noted in green lettering are projects required by state or federal regulatory agencies.

Year 1

**BAKER CITY PUBLIC WORKS
3 YEAR STORM WATER CAPITAL PLAN
ESTIMATE OF COST
2018-2019 FISCAL YEAR
JULY 1, 2018 - JUNE 30, 2019**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	1st Street (Church Street - Madison Street)	660	Lineal Feet	\$ 52.00	\$ 34,320.00	12"	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating storm lines.
2	D Street (Main Street - 1st Street)	290	Lineal Feet	\$ 130.00	\$ 37,700.00	Varies	Upsize existing 15" main line to 21" and 24" to improve flow and eliminate surcharging.
3	TV Inspection of Storm Mainlines	Lump	Lump Sum	\$ 5,000.00	\$ 5,000.00	Varies	Inspect condition of existing storm mainlines.
SUBTOTAL					\$ 77,020.00		
ENGINEERING					\$ 7,702.00		
ADMINISTRATIVE CHARGE					\$ 7,286.09		
TOTAL ESTIMATED COST					\$ 92,008.09		

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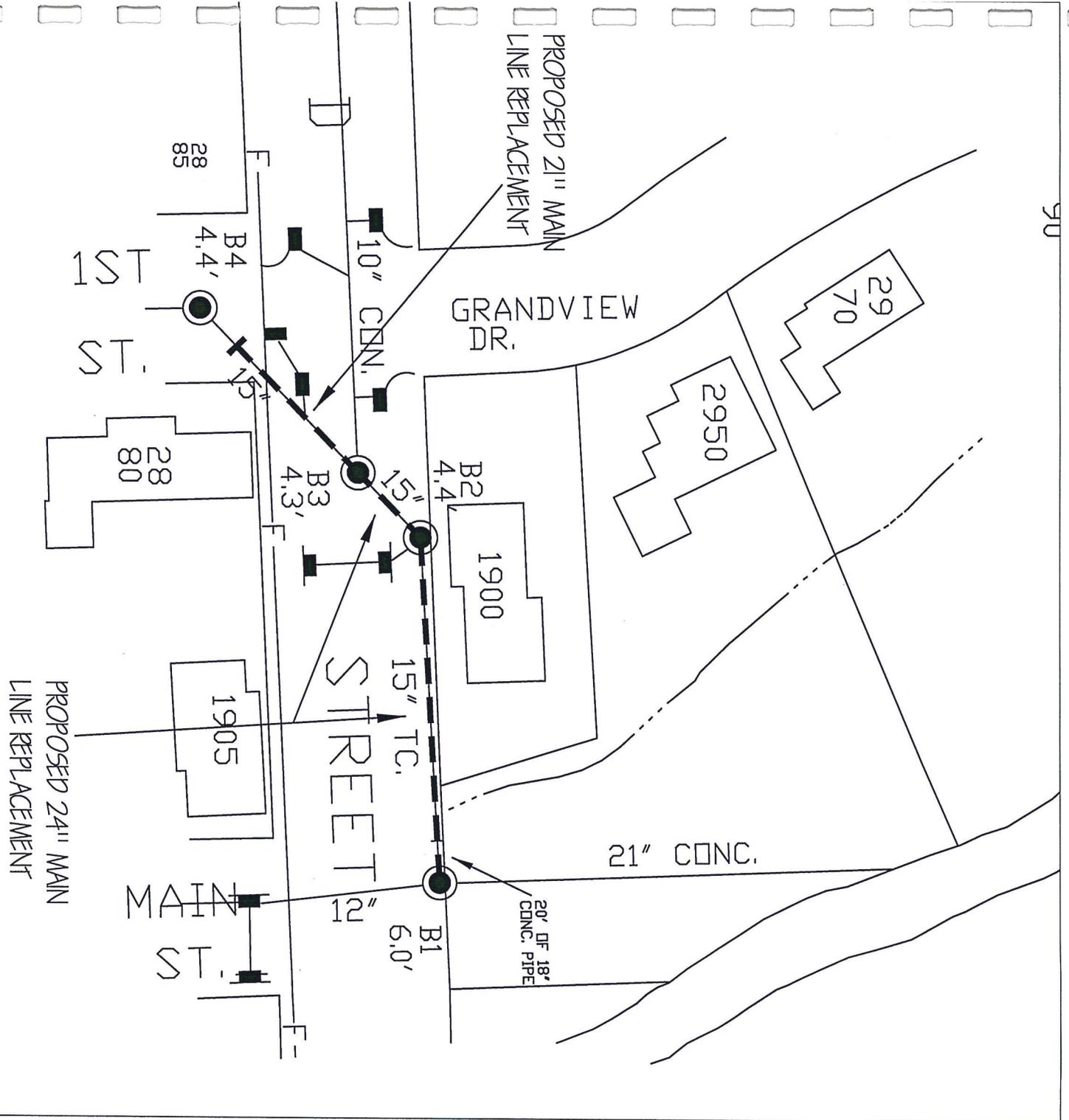


YEAR 1
ITEM NO. 1
1ST STREET
PROPOSED 12" CPP LINING





YEAR 1
ITEM NO. 2
D STREET
PROPOSED 21" AND 24" STORM MAINLINE



Year 2

**BAKER CITY PUBLIC WORKS
3 YEAR STORM WATER CAPITAL PLAN
ESTIMATE OF COST
2019-2020 FISCAL YEAR
JULY 1, 2019 - JUNE 30, 2020**

ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	1st Street (C Street to D Street)	295	Lineal Feet	\$ 120.00	\$ 35,400.00	Varies	Upsize existing 15" main line to 21" to improve flow and eliminate surcharging.
2	TV Inspection of Storm Mainlines	Lump	Lump Sum	\$ 5,000.00	\$ 5,000.00	Varies	Inspect condition of existing storm mainlines.
SUBTOTAL					\$ 40,400.00		
ENGINEERING					\$ 4,040.00		
ADMINISTRATIVE CHARGE					\$ 3,821.84		
TOTAL ESTIMATED COST					\$ 48,261.84		

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Year 3

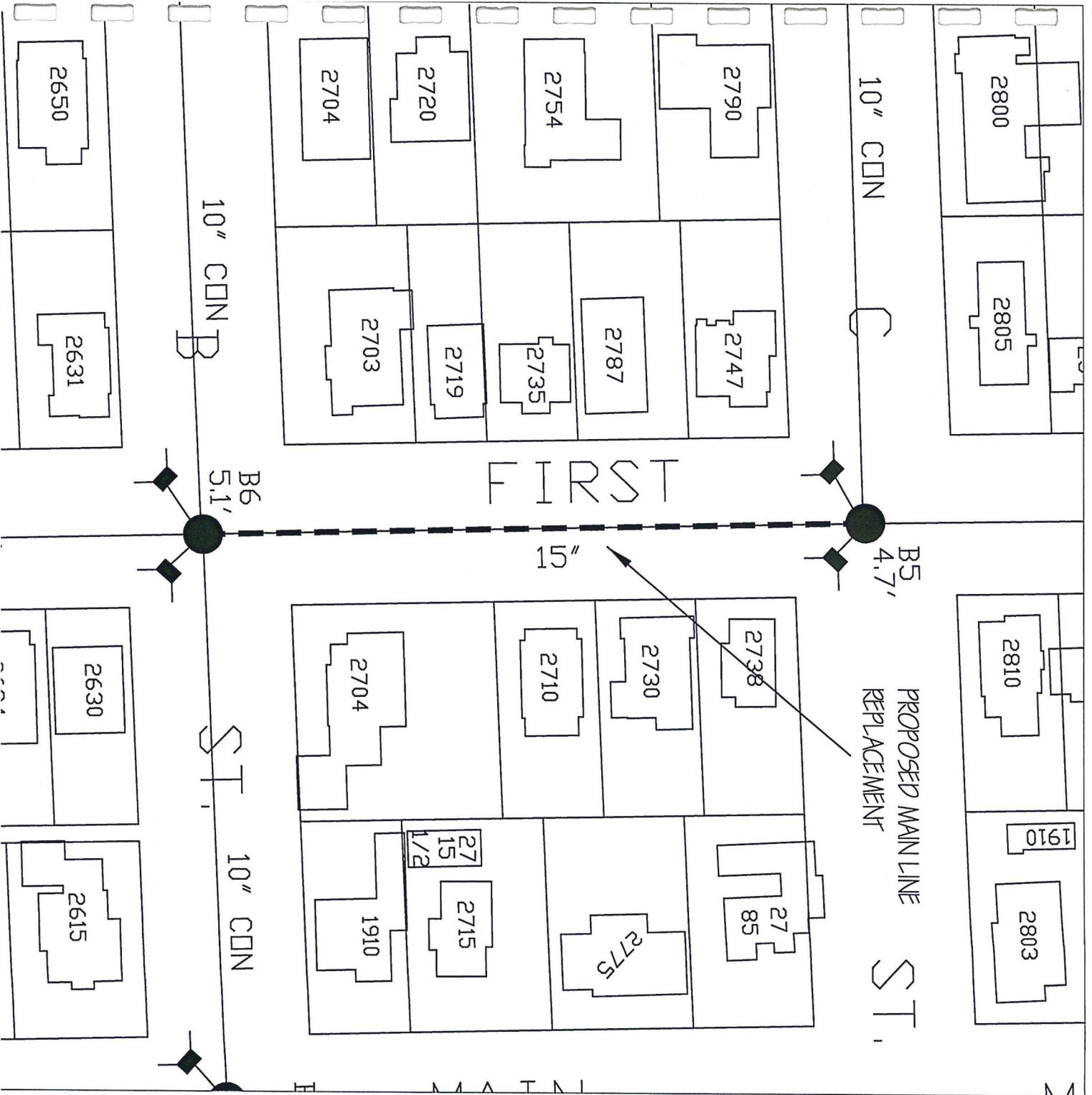
**BAKER CITY PUBLIC WORKS
3 YEAR STORM WATER CAPITAL PLAN
ESTIMATE OF COST
2020-2021 FISCAL YEAR
JULY 1, 2020 - JUNE 30, 2021**

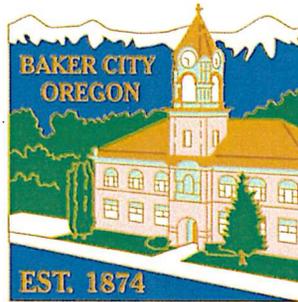
ITEM #	LOCATION	QUANTITY	UNIT	UNIT COST	ESTIMATED TOTAL COST	SIZE TYPE	OBJECTIVE
1	Locations to be Determined	500	Lineal Feet	\$ 52.00	\$ 26,000.00	Varies	Install CIPP (Cured In Place Pipe) lining to prevent leakage & improve structural & flow characteristics of deteriorating storm lines.
2	1st Street (B Street to C Street)	330	Lineal Feet	\$ 120.00	\$ 39,600.00	Varies	Upsize existing 15" main line to 21" to improve flow and eliminate surcharging.
2	TV Inspection of Storm Mainlines	Lump	Lump Sum	\$ 5,000.00	\$ 5,000.00	Varies	Inspect condition of existing storm mainlines.
SUBTOTAL					\$ 70,600.00		
ENGINEERING					\$ 7,060.00		
ADMINISTRATIVE CHARGE					\$ 6,678.76		
TOTAL ESTIMATED COST					\$ 84,338.76		

Items noted in green lettering are projects required by state or federal regulatory agencies.



YEAR 3
ITEM NO. 2
1ST STREET
PROPOSED 21" STORM MAINLINE





2018 Capital Plan

Baker City Public Works Department
1655 1st Street
P.O. Box 650
Baker City, OR 97814