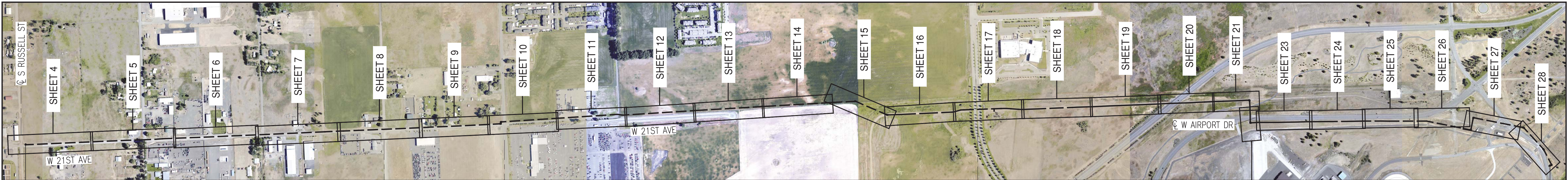


**DESIGN NOTES:**

1. HIGH PRESSURE STEEL PIPE DESIGN PARAMETERS:
  - A. MAOP – 500 PSIG
  - B. OPERATING PRESSURE – 350 PSIG
  - C. TEST PRESSURE – 750 PSIG MINIMUM (800 PSIG MAX)
  - D. TEST MEDIUM – WATER
  - E. TEST DURATION – 24 HOURS MINIMUM
  - F. % SMYS @ 500 PSIG:
    - 12" PIPE/FITTINGS, X52/Y52, WT = 0.375" => 16.3% SMYS
    - 8" PIPE/FITTINGS, GR B/WPB, WT = 0.322" => 19.1% SMYS
    - 12" PIPE, X52, WT = 0.312" => 19.6% SMYS
2. EXISTING UTILITY SURVEY INFORMATION:
  - A. SURVEYOR: H2 SURVEYING & ENGINEERING
  - B. BENCHMARK INFORMATION
    1. WDOT MONUMENTS: GP32002-103 AND GP32002-104
    2. DATUM, ELEVATION = NAV 88 DATUM
  - C. BASIS OF BEARING INFORMATION
    1. WASHINGTON STATE PLANE COORDINATE SYSTEM
    2. NAD 83/11 NORTH ZONE
  - D. CONTOUR INFORMATION
    1. INDEX CONTOURS AT 5' INTERVALS
    2. 1' CONTOURS ONLY SHOWN IN SELECT AREAS

MATERIAL LIST			
ITEM	STOCK NO.	QTY	DESCRIPTION
1	REQUISITION	15,000'	12" STEEL PIPE, 0.312" WT, X52 FBE
2	REQUISITION	3,000'	12" STEEL PIPE, 0.312" WT, X52, ARO
3	7702270	3	8" STOPPER FITTING, SPHERICAL LINE STOPPER FITTING WITH SIDE OR BOTTOM OUT, ANSI 300, H-17481
4	7705430	6	2" SAVE-A-VALVE NIPPLE, 1,440 PSIG (FOR TESTING-NOT ALL ARE SHOWN)
5	7706130	40'	8" STEEL PIPE, 0.322" WT, GR B, BLACK
6	7708735	3	8" GATE VALVE, ANSI 300, WELD ENDS, KEROTEST M-1
7	REQUISITION	1	12" x 8" REDUCER, STD WALL, Y52, CONCENTRIC
8	6680882	18,000'	GAS CAUTION TAPE, UNDERGROUND, 3" WIDE
9	REQUISITION	12	12" WELD ELBOW, 90 DEG, 3R LONG RADIUS, STD WALL, Y52
10	7700962	9	12" WELD CAP, STD WALL, Y52
11	REQUISITION	2	12" x 12" x 8" STEEL WELD TEE, REDUCING STD WALL, Y52
12	REQUISITION	2	12" GATE VALVE, ANSI 300, WELD ENDS, KEROTEST M-1
13	7706248	40'	12" STEEL PIPE, 0.375" WT, X52, BLACK
14	7700635	5	VALVE BOX, TOP SECTION AND LID
15	7700614	5	VALVE BOX, BOTTOM SECTION
16	7707890	5	3" TEST BOX, YELLOW, "BIG FINK"
17	5780265	5	3" CONDUIT, PVC, SCH 40
18	2831026	180'	WIRE, #10, SOLID COPPER, WHITE, INSULATED
19	7709002	16	"CADWELD" PLUS COLOR CODED CONTAINER
20	7706740	40	STOP-IT BORE SHIELD ARO, 4" x 25' ROLLS (FOR ARO PIPE JOINTS NOT SHOWN)
21	6620570	21	HP PIPELINE MARKER, 3.5" DIAMETER x 72" LONG
22	7700375	21	STEEL T-POST, GREEN, 5'L
23	2831027	80'	WIRE, #10, SOLID COPPER, BLACK, INSULATED
24	7707620	276 ROLLS	2" TAPE COAT, H35, 75' ROLL (NOT SHOWN)



**KEY MAP**  
SCALE: NONE

**DISTRIBUTION - GAS  
SPOKANE COUNTY - SPOKANE, WA  
AIRWAY HEIGHTS HP REINFORCEMENT  
KEY MAP, MATERIAL LIST, AND DESIGN NOTES**

AVISTA CORP  
SPOKANE, WASHINGTON

1" = 30'	8-18-20	APPROVED <i>[Signature]</i> DATE 4-5-21
SCALE	DATE	
DESIGN ANDERSON	CHECKED DRS	DATE E-38652
DRAWN DARNELL	NOTED RLB	
CHECKED RMB	NOTED RLB	SHT 1 OF 1

0	4-5-21	ISSUED FOR CONSTRUCTION PROJECT #95606185	CD	RMB	
NO	DATE	REVISION	BY	CKD	AS BUILT