

**PROJECT LIMITS**

EXISTING	W	Water
EXISTING	GAS	Gas
EXISTING	CTV	Cable TV
PROPOSED	PRV	Pressure Reducing Valve (PRV) Station
PROPOSED	○	Remove (Fire Hydrant or Water Meter Setting) or Water Meter Setting
PROPOSED	⊗	Remove (Fire Hydrant or Water Meter Setting)
PROPOSED	⊕	Water Meter Setting
PROPOSED	⊙	Water Meter
PROPOSED	⊗	Gas Meter
PROPOSED	⊕	Utility Pole Anchor
PROPOSED	⊙	Utility Pole
PROPOSED	⊕	Telephone Riser
PROPOSED	⊙	Traffic Sign
PROPOSED	⊕	Shrub
PROPOSED	⊙	Deciduous Tree

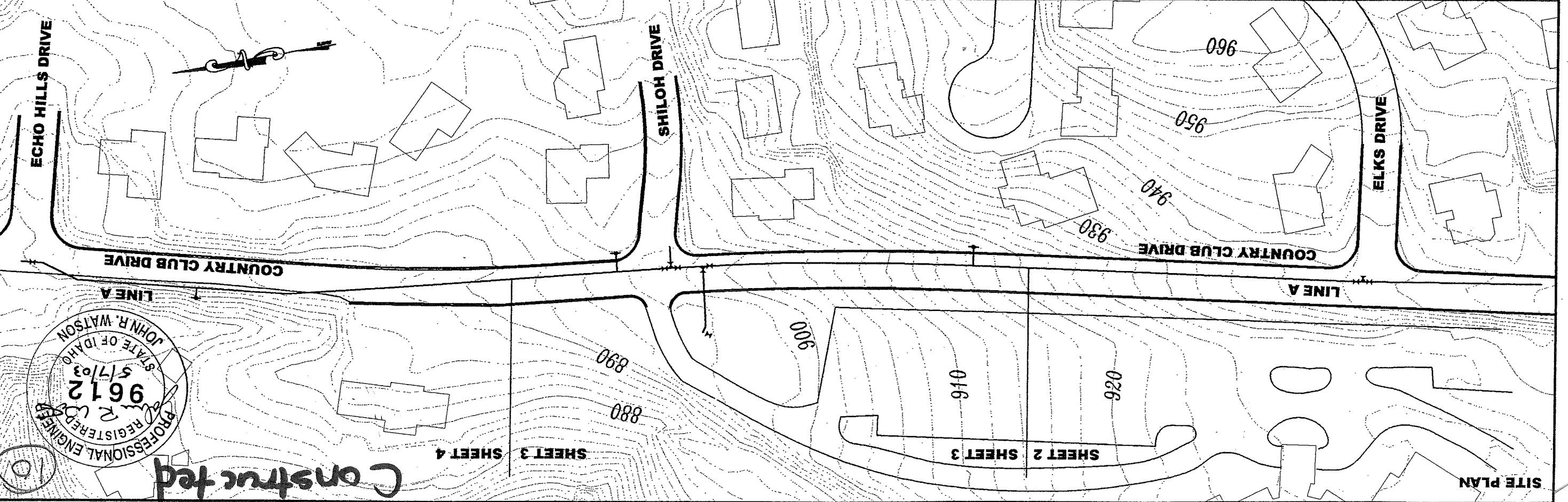
EXISTING	—	1.25" Elbow
EXISTING	—	22.5" Elbow
EXISTING	—	45" Elbow
EXISTING	—	90" Elbow
EXISTING	—	Tee
EXISTING	—	Fire Hydrant
EXISTING	—	Water Valve
EXISTING	—	Water Meter Setting
EXISTING	—	Sanitary Sewer Manhole
EXISTING	—	Storm Drain Manhole
EXISTING	—	Catch Basin
EXISTING	—	Utility Pole
EXISTING	—	Telephone Riser
EXISTING	—	Traffic Sign
EXISTING	—	Shrub
EXISTING	—	Deciduous Tree

EXISTING	—	Power
EXISTING	—	Telephone
EXISTING	—	Storm Drain
EXISTING	—	Sanitary Sewer
EXISTING	—	Survey Control Point
EXISTING	—	Monument
EXISTING	—	Wire Fence
EXISTING	—	Right-of-Way Line
EXISTING	—	Property Line
EXISTING	—	Edge of Pavement
EXISTING	—	Curb & Gutter
EXISTING	—	Building
EXISTING	—	P.C.C. Pavement
EXISTING	—	A.C. Pavement
EXISTING	—	Gravel
PROPOSED	⊕	Detail or Section Designation
PROPOSED	⊕	Sheet Number on Which Detail Appears

**LEGEND**

**CONSTRUCTION NOTES**

- UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY EXACT LOCATIONS IN FIELD PRIOR TO EXCAVATION. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR OR UTILITY COMPANY, AT THE CONTRACTOR'S EXPENSE. TO THE SATISFACTION OF THE UTILITY COMPANY.
- UTILITY FORCES MAY ENGAGE IN MOVING, RECONSTRUCTING OR INSTALLING, OR MAINTAINING UTILITY FACILITIES, AND THE CONTRACTOR SHALL COOPERATE WITH THESE FORCES AND CONDUCT OPERATIONS IN SUCH A MANNER AS TO AVOID ANY DELAY TO WORK BEING PERFORMED BY OTHER FORCES. THE CONTRACTOR SHALL JOIN HIS WORK WITH THE WORK OF THE OTHERS AND PERFORM THE WORK IN PROPER-SEQUENCE AND WITH JUDICIOUS HANDLING OF FORCES AND EQUIPMENT.
- SURVEYING AND CONSTRUCTION STAKING FOR SEWER AND WATER MAIN CONSTRUCTION WILL BE PERFORMED BY THE CITY OF LEWISTON. CONTRACTOR SHALL RETAIN AND PROTECT CONSTRUCTION STAKING, AND SHALL NOTIFY THE ENGINEER OF ANY ERRORS.
- SHOULD ADD ALTERNATE D BE AWARDED, ALL INSTALLATION WORK WITHIN THE ROADWAY LIMITS SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF THE MAINTENANCE OVERLAY.
- THE NEW WATER MAIN SHALL BE CONSTRUCTED IN THE SEQUENCE INDICATED BY THE PLANS UNLESS OTHERWISE DIRECTED.
- ALL TRENCHES AND EXCAVATED AREAS SHALL BE BACKFILLED TO FINISH GRADE WITH GUSHED AGGREGATE BACKFILL IN ACCORDANCE WITH SECTION 202 OF THE SPECIFICATIONS. EXCESS AGGREGATE SHALL BE REMOVED PRIOR TO PAVEMENT REPLACEMENT.
- ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL SEPARATION OF 10' BETWEEN THE WATER MAIN AND SANITARY OR STORM SEWER MAIN AND IN COMPLIANCE WITH CITY OF LEWISTON STANDARD DRAWING W-9.
- AT ALL WATER/SEWER MAIN CROSSINGS, WATER MAINS SHALL BE CONSTRUCTED TO PROVIDE A MINIMUM 18" VERTICAL SEPARATION BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SANITARY OR STORM SEWER MAIN. THE WATER MAIN SHALL BE INSTALLED WITH A MINIMUM 20' LENGTH WATER CLASS PIPE ENCASEMENT AT THE SEWER LINE CROSSING.
- THRUST BLOCKS SHALL BE INSTALLED AT ALL FITTING LOCATIONS AS SPECIFIED ON CITY STANDARD DRAWING W-2. THRUST BLOCKS SHALL BE CONSTRUCTED TO SIZES BASED ON ALLOWABLE SOIL STRESS OF 1000 PSI.
- REMOVAL OF CURB FOR HYDRANT INSTALLATION IS INCIDENTAL TO THAT ITEM. PAY LENGTH FOR REPLACEMENT OF CURB AND GUTTER EXISTING CURBS. THE CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING CURBS.
- THE CONTRACTOR SHALL PRESSURE TEST THE NEW WATER MAIN IN ACCORDANCE WITH THE SPECIFICATIONS AND AMWA C600.
- EXCEPT AS REQUIRED IN THE SPECIFICATIONS, THE CONTRACTOR WILL NOT BE REQUIRED TO DISINFECT NEW WATER MAINS. THE WATER DEPARTMENT WILL THEN PERFORM SYSTEM DISINFECTION.
- CONNECTION OF EXISTING WATER SERVICE LINES SHALL BE PERFORMED IN ACCORDANCE WITH DETAIL 7.
- THE EXISTING WATER LINE SHALL BE KEPT IN SERVICE UNTIL ALL WATER SERVICE CONNECTIONS ARE INSTALLED ON THE NEW WATER MAIN.
- ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, RESTORATION OF PAVEMENT, SIDEWALK, CURB, AND OTHER SURFACES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.



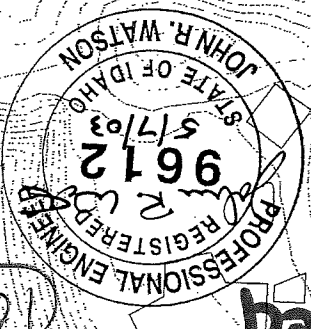
**CITY OF LEWISTON**  
**PUBLIC WORKS DEPARTMENT**  
**ENGINEERING SERVICES**  
 134 1/2 STREET LEWISTON, ID 83801  
 (208) 746-3871 FAX (208) 746-9867



**SITE PLAN**  
**ADD ALTERNATE D**  
**Country Club Drive**  
**Water Main Replacement**

NO.	DATE	FILENAME	DESCRIPTION

DESIGNED BY:	S.M.	SCALE:	1"=100'
DRAWN BY:	S.M.	DATE:	May 2003
CHECKED BY:	J.M.	DRAWING NO.:	Sib Plan
JOB NO.:		SHEET	1 OF 7

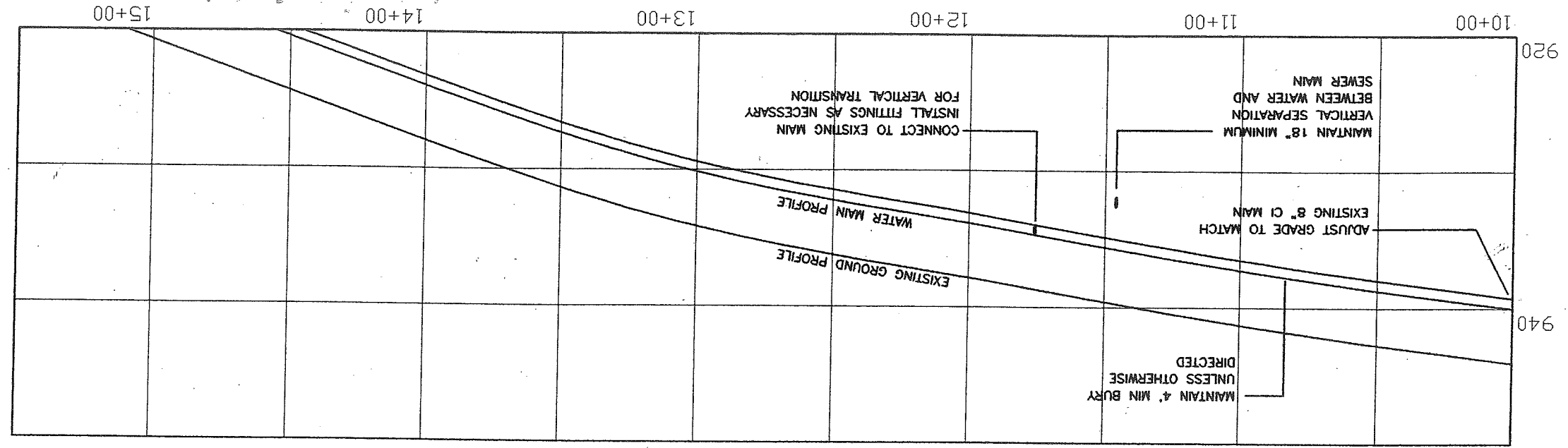
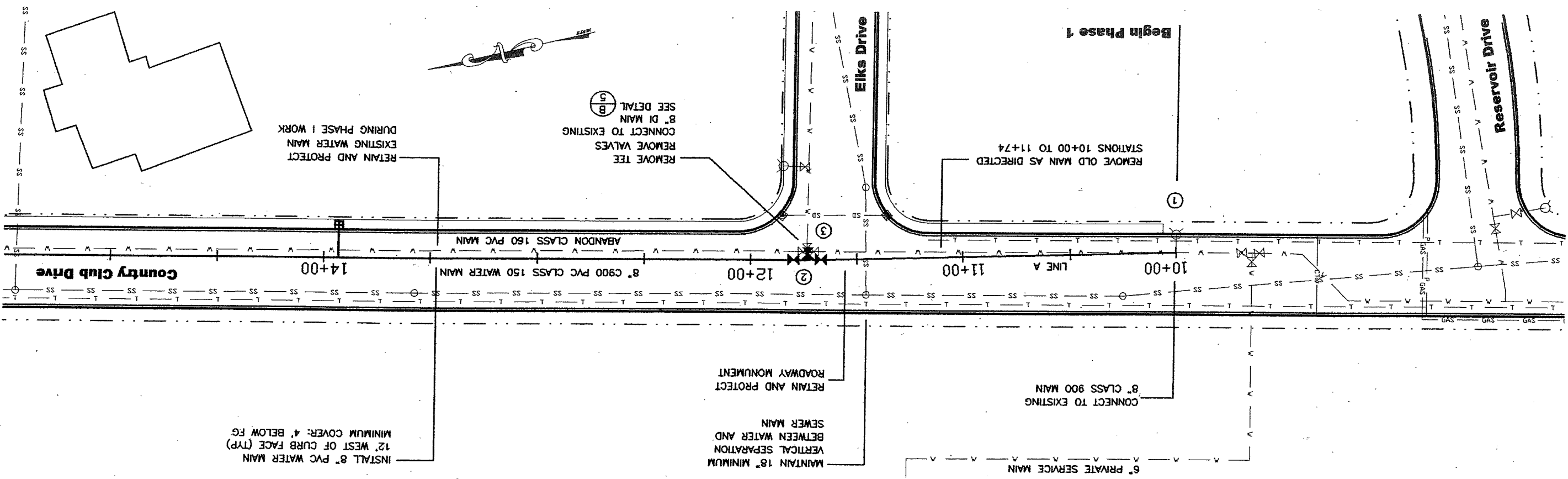


*Constructed*

*Constructed*

**WATER MAIN SCHEDULE**

NO. LINE	STATION	OFFSET	NOTES	NO. LINE	STATION	OFFSET	NOTES
(1)	10+00		CONNECT TO EXISTING MAIN	(3)	13+74		REMOVE EXISTING TEE
'A'	11+74		8" x 8" FL TEE				REMOVE EXISTING VALVES (3)
			8" FL x MJ GV (S)				CONNECT TO EXISTING MAIN (E)
			8" FL x MJ GV (N)				CAP ABANDONED MAIN (N)
			8" FL x MJ GV (E)				CAP ABANDONED MAIN (S)
			10 LF 8" PIPE (E)				



PLAN AND PROFILE  
 ADD ALTERNATE D  
 Country Club Drive  
 Water Main Replacement

NO.	DATE	FILENAME	DESCRIPTION	BY

DESIGNED BY	SCALE	DATE	DRAWING NO.
S.M.	1" = 50'	May 2003	plans.dwg



CITY OF LEWISTON  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING SERVICES  
 134 1<sup>st</sup> STREET LEMINGTON, ID 83501  
 (208) 748-3671 FAX (208) 748-9887



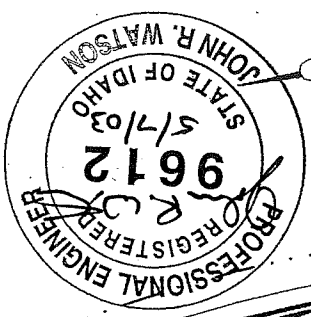




PLAN AND PROFILE  
 ADD ALTERNATE D  
 Country Club Drive

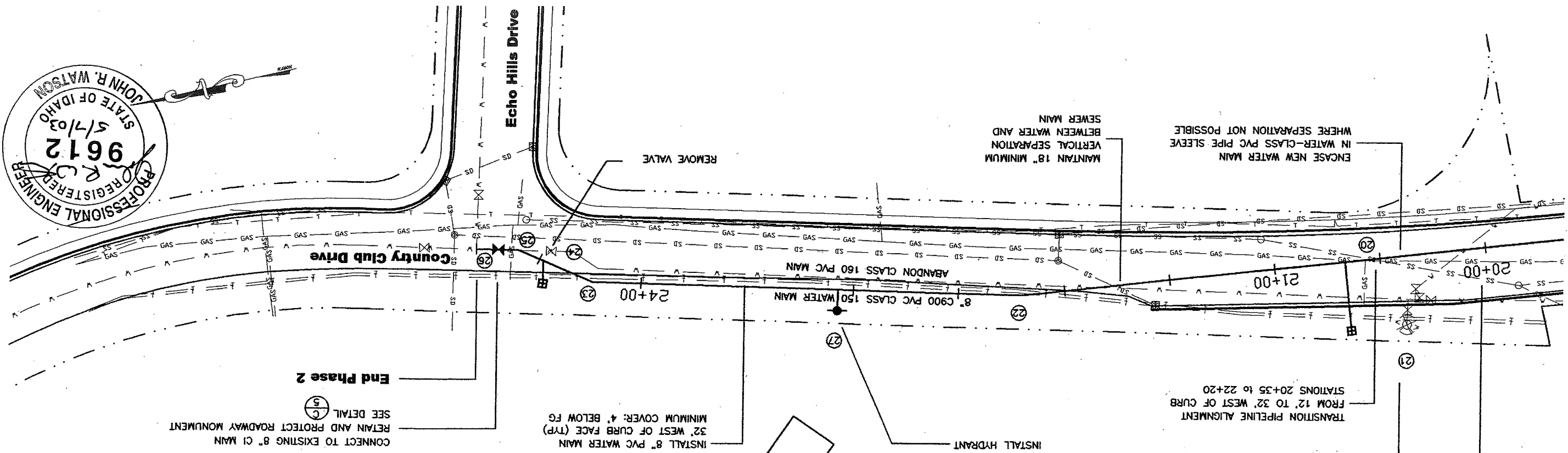
REVISIONS

DESIGNED BY	S.M.	SCALE	1" = 50'
DRAWN BY	S.M.	DATE	May 2009
CHECKED BY	L.W.	DRAWING NO.	Plans-019



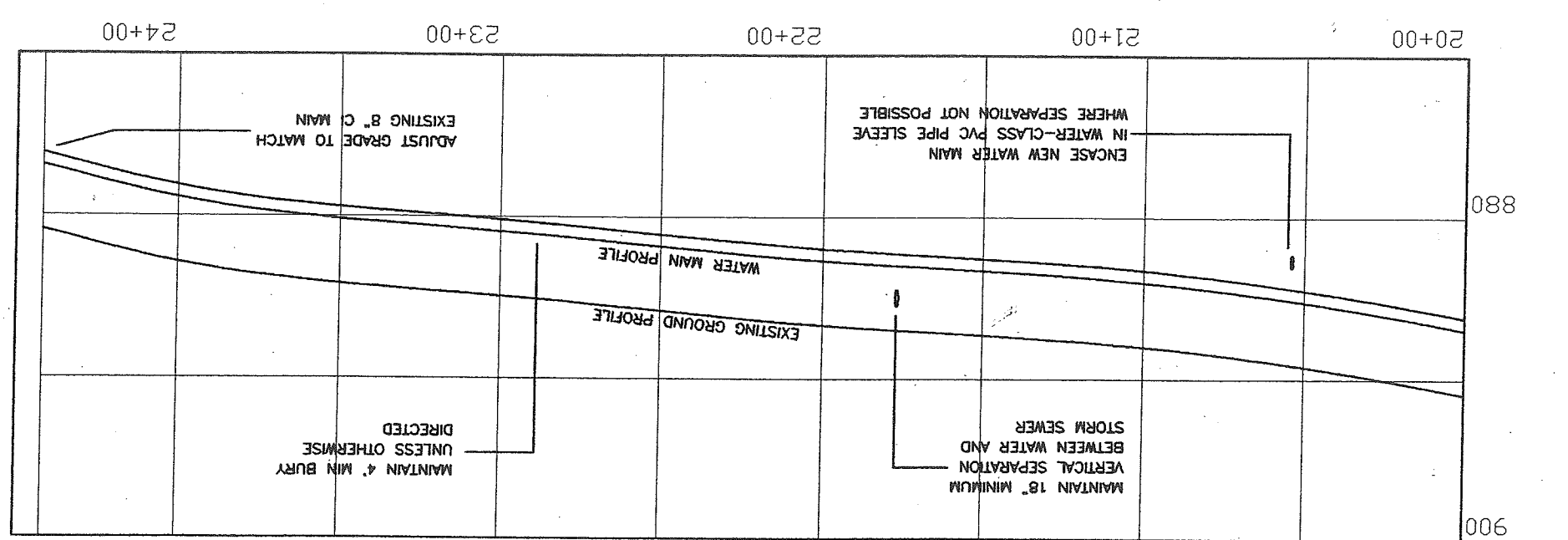
NO.	LINE	STATION	OFFSET	NOTES
20	A	20+05		ENCASE PIPELINE - 100 LF
21	A	20+39	LT	REMOVE HYDRANT AND VALVE
22	A	22+20		8" 11 DEG MJ ELL
23	A	24+23		8" 22 DEG MJ ELL
24	A	24+42	RT	REMOVE EXISTING VALVE
25	A	24+60		8" 22 DEG MJ ELL
26	A	24+77		8" FL x MJ GV (S)
27	A	23+07	10' LT	HYDRANT ASSEMBLY

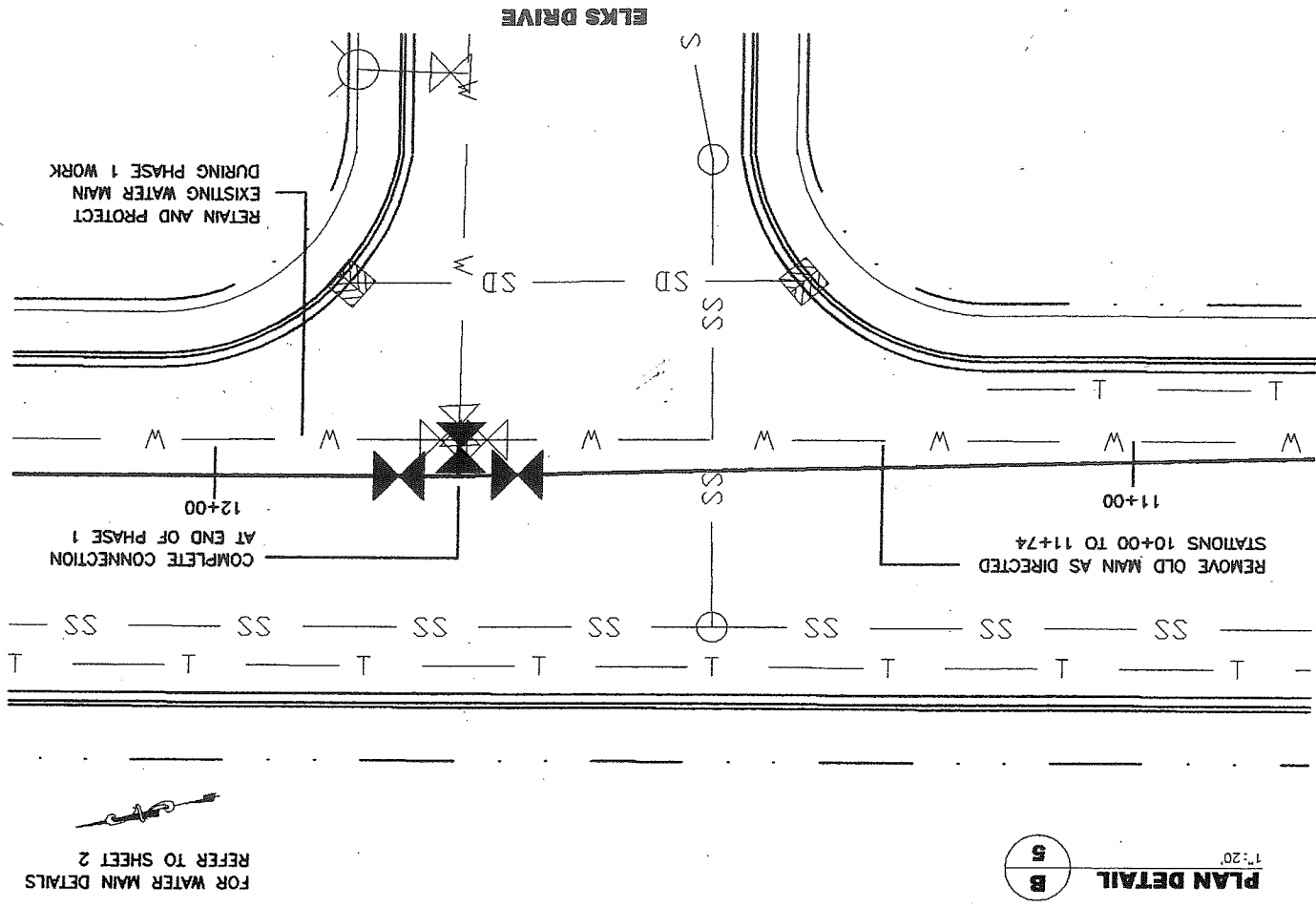
WATER MAIN SCHEDULE



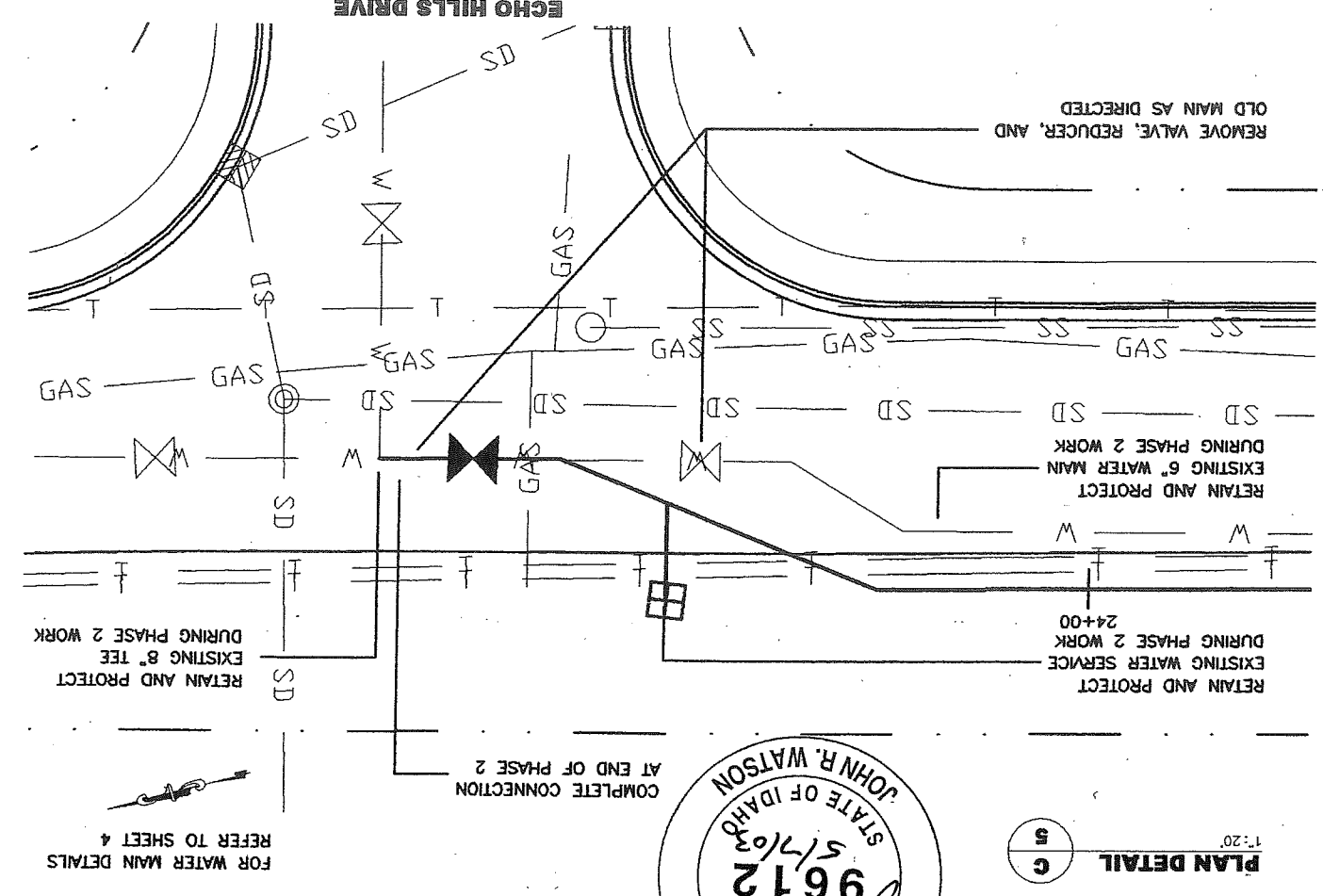
LINE	LOCATION	SIDE	ADDRESS	ID #	APPROX LENGTH	NOTES
A	13+93	RT	3473 Eiks Dr	NONE	15 LF	1" SERVICE
A	20+65	LT	3406 CC	5286	33 LF	1" SERVICE
A	24+50	LT	3434 CC	5288	12 LF	1" SERVICE

WATER SERVICE NOTES

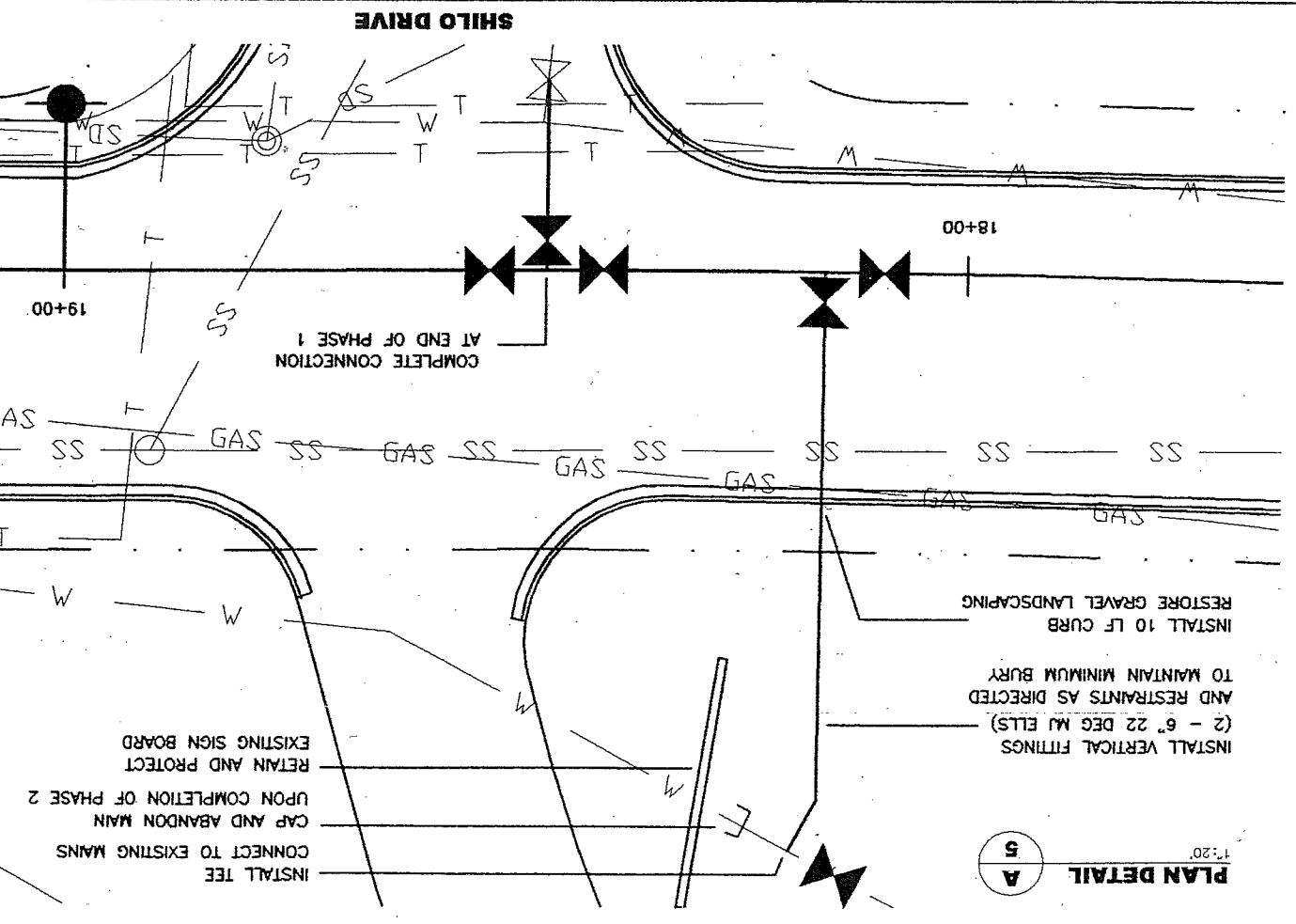




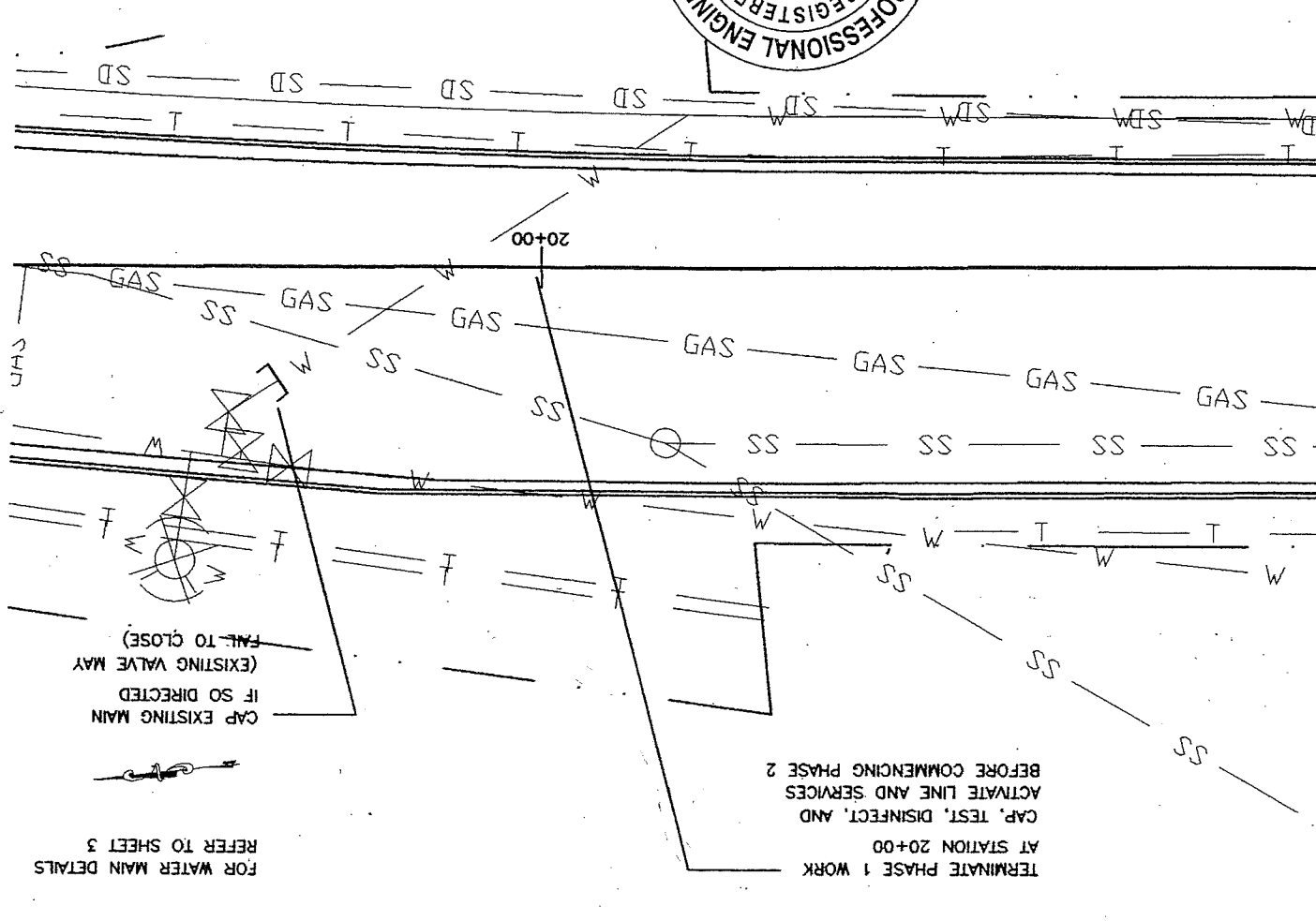
FOR WATER MAIN DETAILS REFER TO SHEET 2



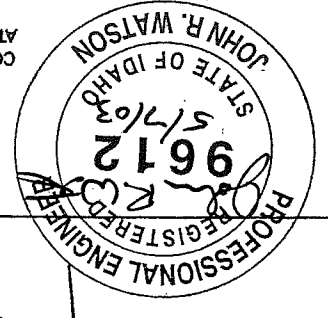
FOR WATER MAIN DETAILS REFER TO SHEET 4



FOR WATER MAIN DETAILS REFER TO SHEET 3



FOR WATER MAIN DETAILS REFER TO SHEET 3

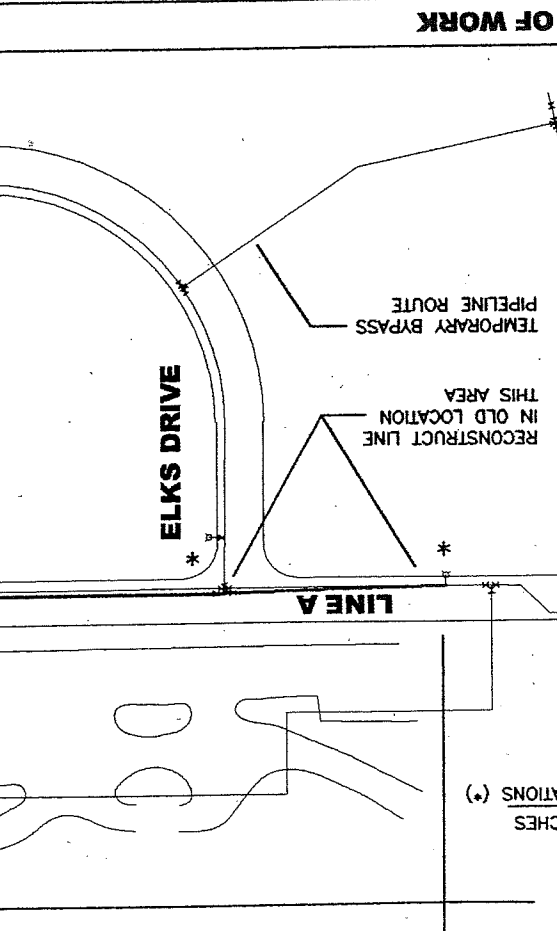
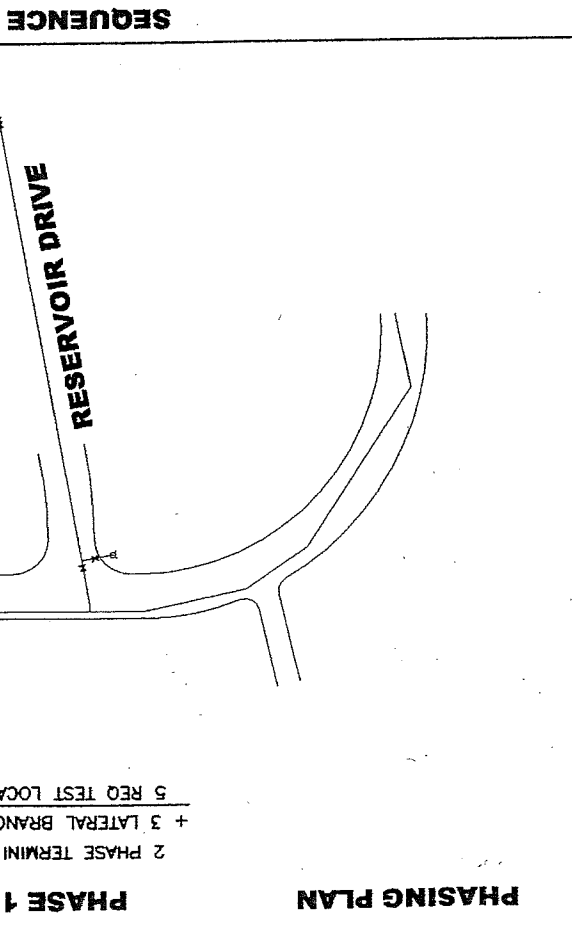


CITY OF LEWISTON  
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
104 P STREET LEWISTON, ID 83501  
(208) 746-9871 FAX (208) 746-9887



PLAN DETAILS  
ADD ALTERNATE D  
Country Club Drive  
Water Main Replacement

NO.	REVISIONS	DESIGNED BY	SCALE	DATE	DRAWING NO.
1		S.M.	1" = 20'	May 2003	CHRS.DWG
2		S.M.			
3		J.W.			



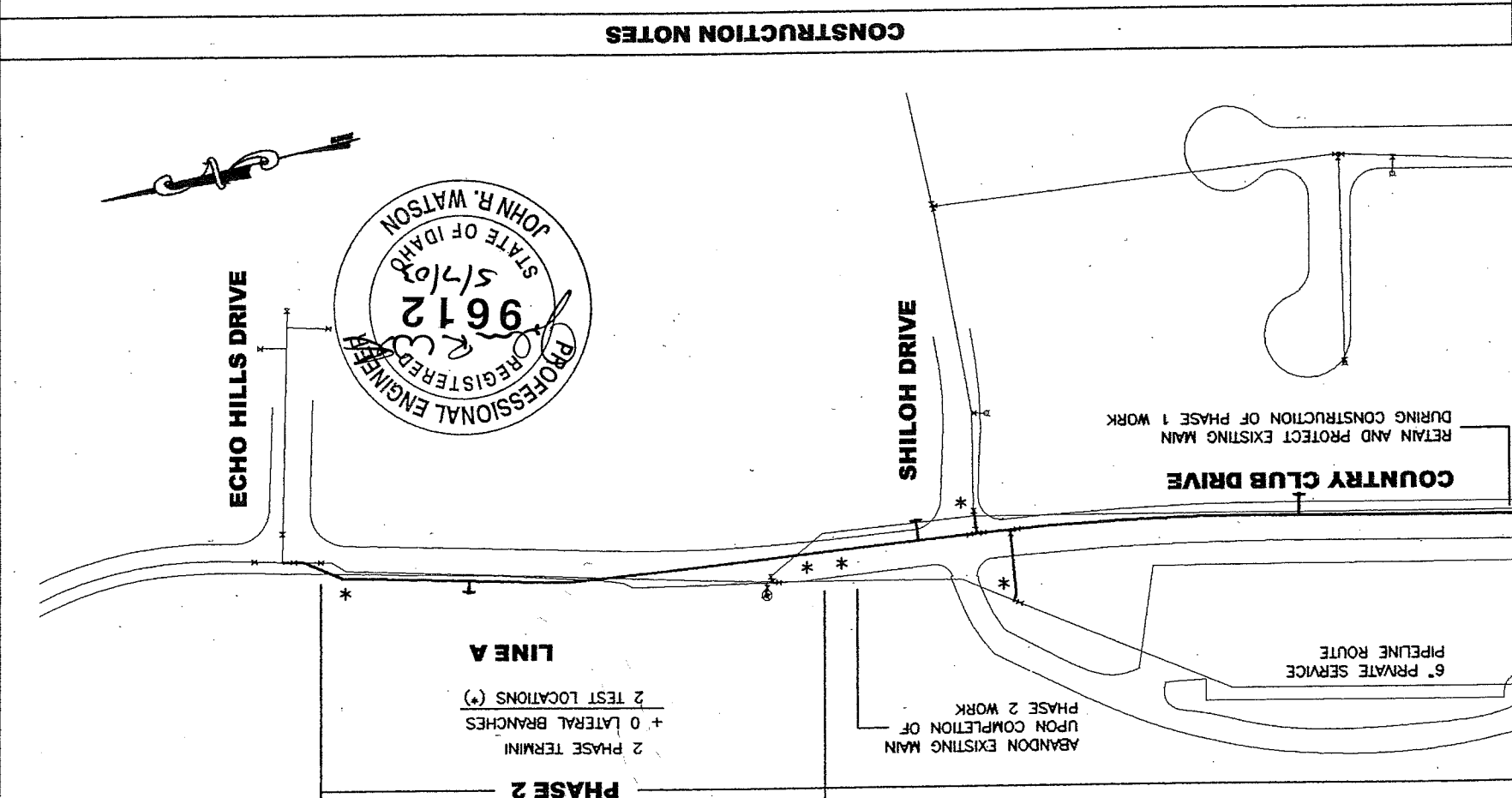
**SEQUENCE OF WORK**

PHASE 1

- CONSTRUCT LINE A 10+10 TO 20+00
- CONSTRUCT LATERAL BRANCHES
- PRESSURE TEST AND DISINFECT LINES
- BACTERIOLOGICAL TEST (2 DAY MIN)
- CONNECT LINE A @ 18+16 AND 10+00
- TRANSFER SERVICE @ 13+93
- CONNECT LINE A @ 18+47 AND 11+74

PHASE 2

- CONSTRUCT LINE A 20+00 TO 24+77
- PRESSURE TEST AND DISINFECT LINES
- BACTERIOLOGICAL TEST (2 DAY MIN)
- CONNECT LINE A @ 20+00
- TRANSFER SERVICES @ 20+65 AND 24+50
- CONNECT LINE A @ 24+77



**SEQUENCE OF CONSTRUCTION**

The sequence of construction appearing in the contract plans shows the anticipated method of constructing the planned project with the fewest service interruptions and public inconvenience. The Contractor shall conduct the project in the manner presented unless otherwise authorized. If the Contractor's proposed methods differ from the planned sequence of construction, the Contractor must submit the proposed modification of the project sequence to the Engineer at least ten calendar days in advance of the requested change. The Contractor shall also present the required changes in the project's traffic control plans by showing the necessary construction signs, flaggers, and other traffic control devices required for the change.

**Hydrostatic Test**

Make pressure and leakage tests on all newly laid pipe and valved sections of it. Furnish all necessary equipment and material, make all taps, and furnish all closure pieces in the pipe as required. The City will monitor and approve a satisfactory test. Pressure test procedures shall conform to AWWA C600 as hereinafter modified or expanded, and the requirements of any governing agency having jurisdiction. Conduct tests after the trench has been partially back-filled with the joints left exposed for inspection, or when completely back-filled, as permitted by the City. Where any section of pipe is provided with concrete thrust blocking, do not conduct pressure test until at least 2 days have elapsed after the concrete thrust blocking was installed. If high-early cement is used for the concrete thrust blocking, the time may be reduced to 1 day. After the pipe has been back-filled or partially back-filled, as herein specified, fill the pipe with water, expelling air during filling, and permit it to stand for a 24-hour period to allow natural absorption to take place. The pressure to be used in the test shall be the greater of 1.5 times the working pressure or 150 psi. Before disinfecting, flush all foreign matter from the pipeline. Provide hoses, pumps, temporary pipes, ditches, etc., as required to dispose of flushing water without damage to adjacent properties. Flushing velocities shall be at least 2.5 FPS. For large diameter pipe where it is impractical or impossible to flush the pipe at 2.5 FPS velocity, clean the pipeline in place from the inside by brushing and sweeping, then flush the line at a lower velocity.

**Disinfection**

Pipelines intended to carry potable water shall be disinfected and tested by the City before placing in service. Disinfection procedures shall conform to AWWA C651 as hereinafter modified or expanded, and the requirements of any governing agency having jurisdiction. Treated water shall be retained in the pipeline long enough to destroy all nonspore-forming bacteria, or as directed by the Engineer. The Contractor shall be responsible to operate all new valves, hydrants and other appurtenances during disinfection to assure that the disinfecting mixture is dispersed into all parts of the line, including dead ends, new services and similar areas that otherwise may not receive the treated water. After the applicable retention period, heavily chlorinated water will be flushed from the new water main. After final flushing and before the new main is connected to the distribution system, two consecutive sets of acceptable samples, taken at least 24 hours apart, shall be collected from the new main.

The Contractor shall provide testing locations as required by the plans or as directed by the Engineer. A combination blowoff and sampling tap is recommended, but samples may be taken at tapped saddle locations provided that the saddle is used for a service connection at the completion of the project. No hose or fire hydrant may be used in the collection of samples. All samples shall be tested for bacteriological quality in accordance with Standard Methods for the Examination of Water and Wastewater, and shall show the absence of coliform organisms. Each test requires a minimum 24 hour period for results.

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 104 1/2 STREET LEWISTON, ID 83501  
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**PHASING PLAN AND WORK SEQUENCE**  
 ADD ALTERNATE D  
 Country Club Drive  
 Water Main Relinishment

**PHASING PLAN**  
 2 PHASE TERMINI  
 + 3 LATERAL BRANCHES  
 5 REQ TEST LOCATIONS (\*)

**PHASE 1**

**PHASE 2**  
 2 PHASE TERMINI  
 + 0 LATERAL BRANCHES  
 2 TEST LOCATIONS (\*)