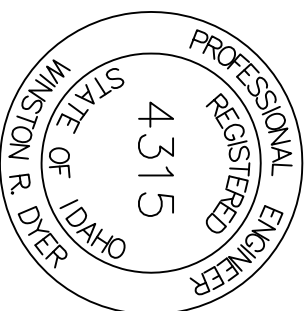
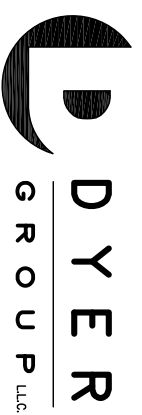


# WELLING ADDITION WATER/SEWER REPLACEMENT COMPLETION

BILLS ISLAND, IDAHO

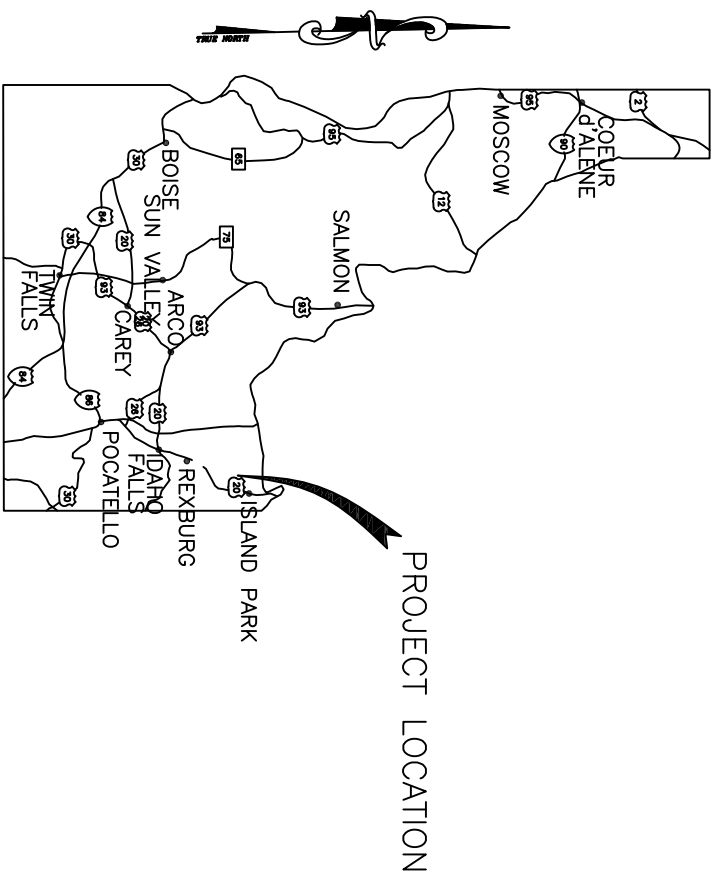


MAY 2015

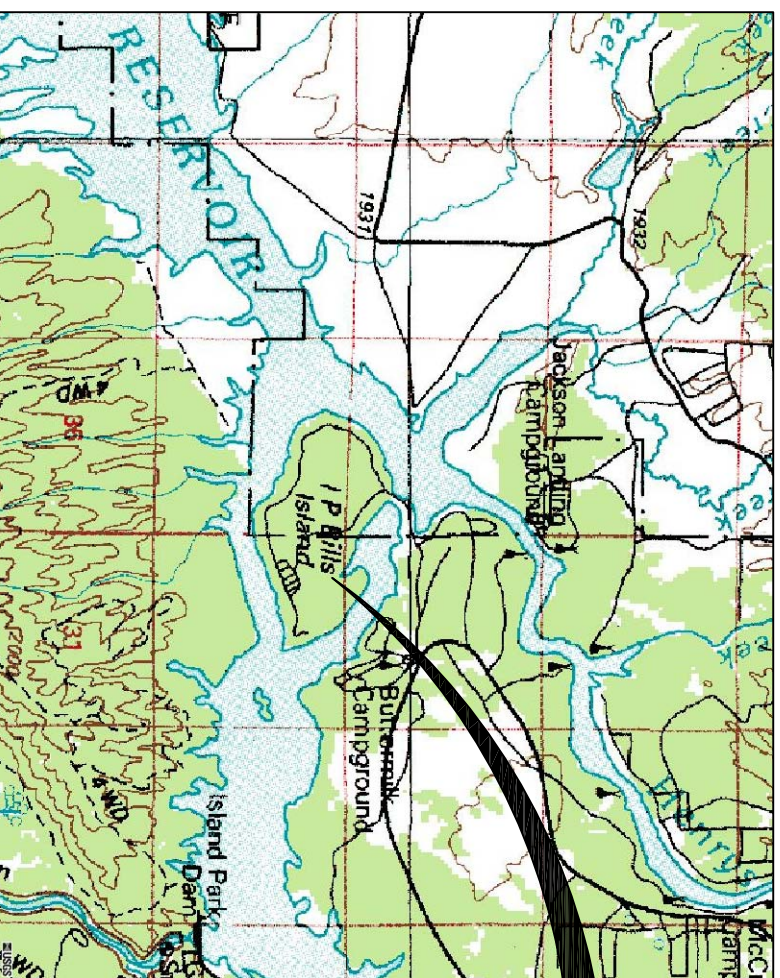


ENGINEERING • PLANNING • MANAGEMENT

208-656-8800



LOCATION MAP  
NTS



VICINITY MAP  
NTS

- INDEX
- 1 TITLE SHEET
  - 2 GENERAL NOTES, MAPS & INDEX
  - 3 PROJECT LAYOUT AND TOPOGRAPHY
  - 4 WATER SYSTEM REPLACEMENT
  - 5 WATER DETAILS
  - 6 SEWER REPLACEMENT & DETAILS
  - 7 MISCELLANEOUS DETAILS

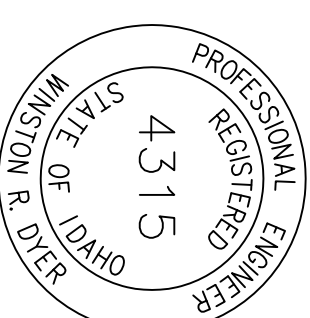
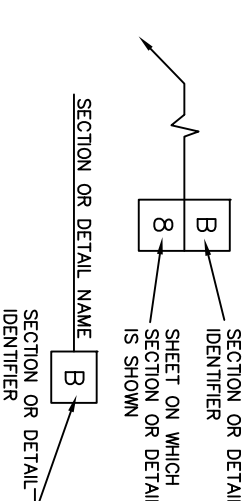
LEGEND

- |  |                         |
|--|-------------------------|
|  | TELEPHONE BOX           |
|  | WIRE FENCE              |
|  | POWER POLE AND GUY WIRE |
|  | SEWER LINE              |
|  | LAMPHOLE                |
|  | SEWER MANHOLE           |
|  | UNDERGROUND TELEPHONE   |
|  | WATER LINE              |
|  | FIRE HYDRANT            |
|  | CONTOUR LINE            |
|  | EDGE OF PAVEMENT        |
|  | EDGE OF GRAVEL          |
|  | BUILDING                |
|  | SIGN                    |
|  | APPLE TREE              |
|  | FOUND REBAR (AS NOTED)  |

GENERAL NOTES

1. UNLESS OTHERWISE SHOWN ON THESE PLANS CONDUCT ALL WORK IN ACCORDANCE WITH THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION, 2012 EDITION.
2. CHECK ALL DISTANCES AND DATA PRIOR TO THE START OF CONSTRUCTION. IN CASE OF CONFLICT, NOTIFY THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION MAY BE MADE PRIOR TO THE START OF WORK.
3. ELEVATIONS SHOWN ARE TO FINISHED SURFACE OR PIPE INVERT UNLESS OTHERWISE NOTED.
4. RETAIN AND PROTECT OR REMOVE AND REPLACE ALL LANDSCAPING, TREES, UTILITIES, DITCHES, CULVERTS, FENCES, MAILBOXES, SIGNS, LIGHTPOLES, HEADGATES, AND ALL OTHER MISCELLANEOUS ITEMS. CORRECT ANY DAMAGE AT OWN EXPENSE.
5. GENERAL LOCATIONS AND SIZES OF UTILITIES ARE SHOWN ON THE PLANS. THEY ARE TO BE USED FOR GENERAL INFORMATION ONLY. NOTIFY THE APPROPRIATE UTILITY COMPANIES WHEN CONSTRUCTION MIGHT INTERFERE WITH NORMAL OPERATION OF ANY UTILITIES AND HAVE THE APPROPRIATE UTILITY COMPANY FIELD-LOCATE ANY UTILITY INSTALLATIONS WHICH MIGHT BE AFFECTED BY CONSTRUCTION PRIOR TO BEGINNING WORK IN THAT AREA. MAINTAIN SERVICE OF EXISTING UTILITIES AND RESTORE ANY UTILITIES DAMAGED DUE TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. CALL IDAHO DIGLINE 800-342-1585 PRIOR TO ANY EXCAVATIONS.
6. PROVIDE A 10 FEET MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN ALL WATER LINES AND SEWER LINES EXCEPT WHERE WATER AND SEWER LINES CROSS AT APPROXIMATELY RIGHT ANGLES, WHERE A MINIMUM OF 1.5 FEET OF VERTICAL SEPARATION SHALL BE MAINTAINED.
7. SECURE SOURCES FOR GRANULAR MATERIAL, DISPOSAL SITES, AND ANY ADDITIONAL MATERIALS THAT MAY BE NECESSARY FOR PROPER CONSTRUCTION OF THIS PROJECT.
8. MAKE ARRANGEMENTS FOR WATER REQUIRED FOR TESTING, COMPACTION AND DUST CONTROL MEASURES.
9. PROVIDE TRAFFIC CONTROL SIGNING IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
10. USE FUSION WELDED AWWA C-901 OR C-906, PE4710, DR11, CLASS 200 HDPE PIPING FOR WATER AND SEWER SYSTEM PIPING. OWNER WILL SUPPLY MAINLINE PIPING MATERIALS.
11. USE CLASS B-2 BEDDING SYSTEM AND TYPE "A-1" TRENCH BACKFILL UNLESS OTHERWISE NOTED.

SECTION OR DETAIL LEGEND



|     |               |    |      |
|-----|---------------|----|------|
| NO. | REVISION NAME | IN | DATE |
|     |               |    |      |

|          |          |                  |      |
|----------|----------|------------------|------|
| DRAWN    | MDS-3/15 | CHECKED          | DATE |
| DESIGNED | WRD-3/15 | PROJECT ENGINEER |      |
| APPROVED | DATE     | PROJECT MANAGER  |      |

WELLING ADDITION  
BILLS ISLAND, IDAHO

|                             |   |
|-----------------------------|---|
| PROJECT NO.                 |   |
| WATER/SEWER REPLACEMENT     |   |
| GENERAL NOTES, MAPS & INDEX |   |
| SHEET NO.                   | 2 |



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# WELLING SUBDIVISION

CONSTRUCT WATER LOOP  
IN CUL-DE-SAC AREA

**B**  
5

FINISH SEWER  
SYSTEM REPLACEMENT

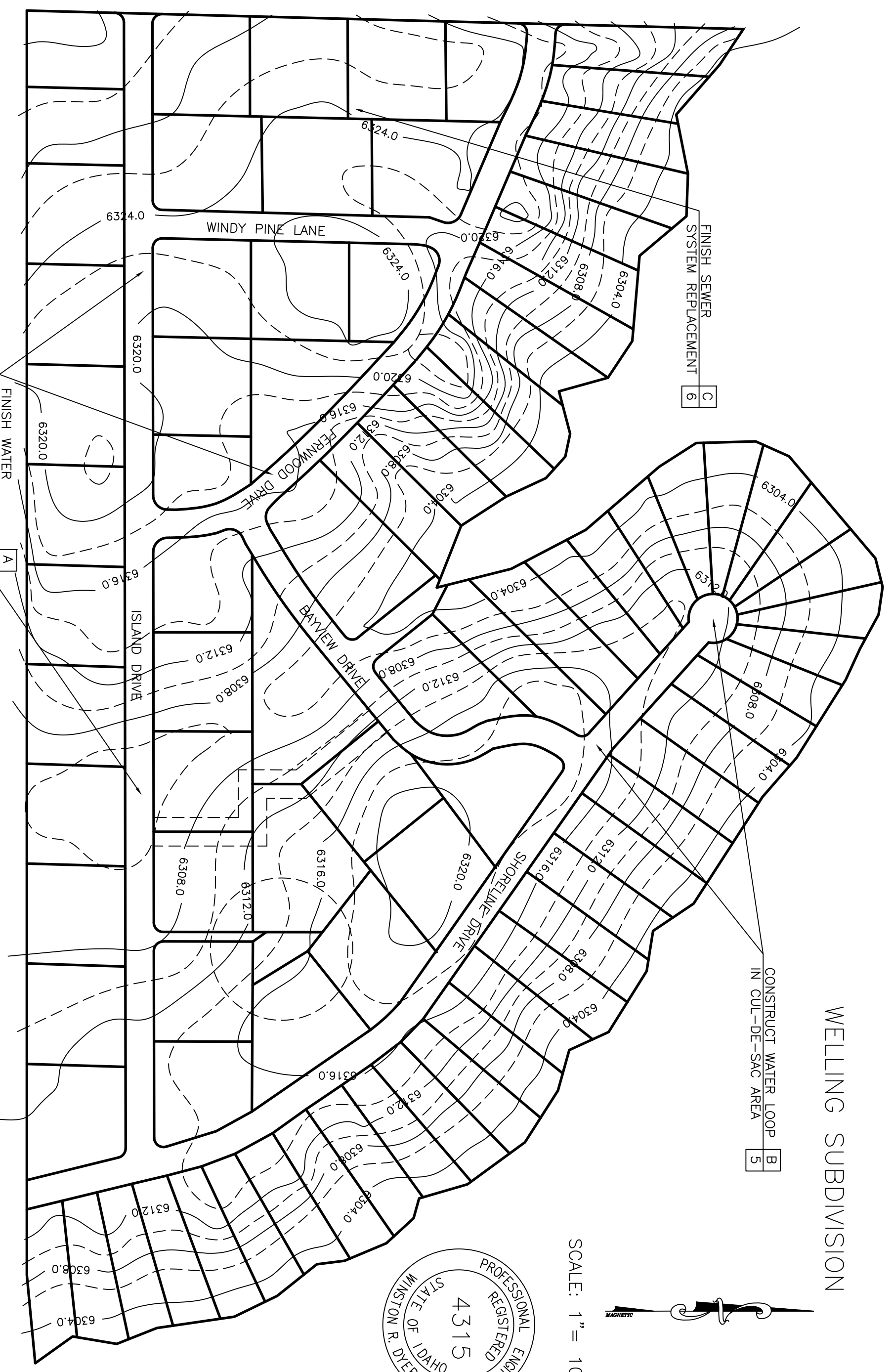
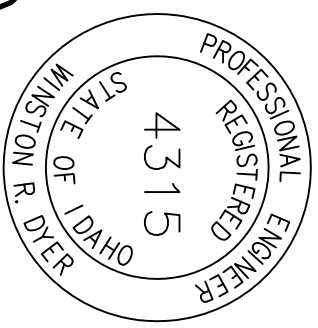
**C**  
6

FINISH WATER  
SYSTEM REPLACEMENT

**A**  
4



SCALE: 1" = 100'



|     |               |     |      |       |          |         |      |          |          |                  |          |      |                 |             |                               |           |
|-----|---------------|-----|------|-------|----------|---------|------|----------|----------|------------------|----------|------|-----------------|-------------|-------------------------------|-----------|
| NO. | REVISION NAME | INI | DATE | DRAWN | MDS-3/15 | CHECKED | DATE | DESIGNED | WRD-3/15 | PROJECT ENGINEER | APPROVED | DATE | PROJECT MANAGER | PROJECT NO. | WATER/SEWER REPLACEMENT       | SHEET NO. |
|     |               |     |      |       |          |         |      |          |          |                  |          |      |                 |             | PROJECT LAYOUT AND TOPOGRAPHY | 3         |

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# WELLING SUBDIVISION

CONSTRUCT 450LF OF 4" WATER LINE LOOP IN CUL-DE-SAC AREA

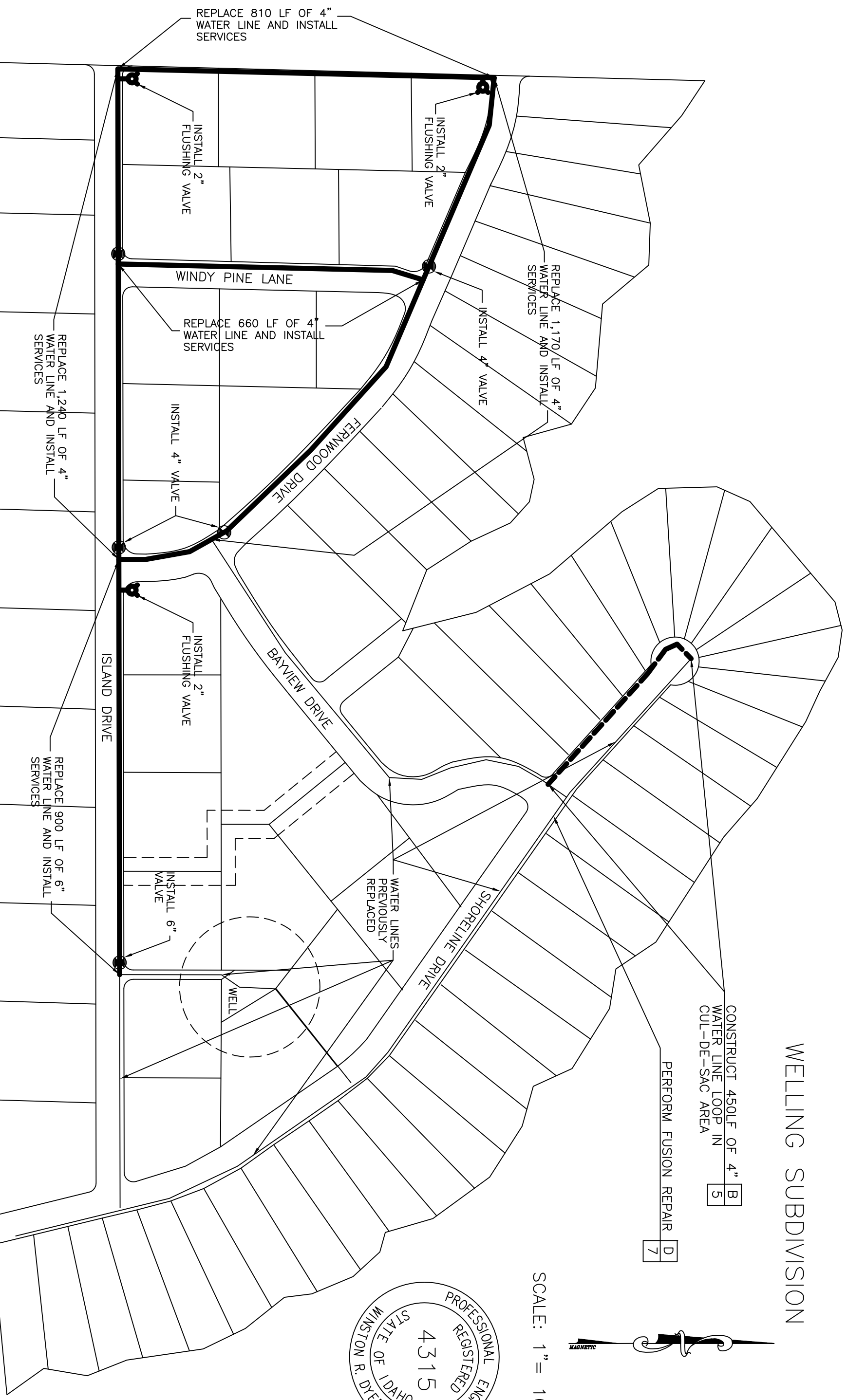
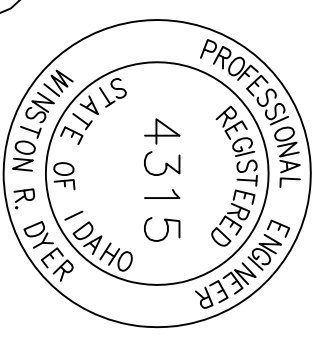
**B**  
5

PERFORM FUSION REPAIR

**D**  
7



SCALE: 1" = 100'

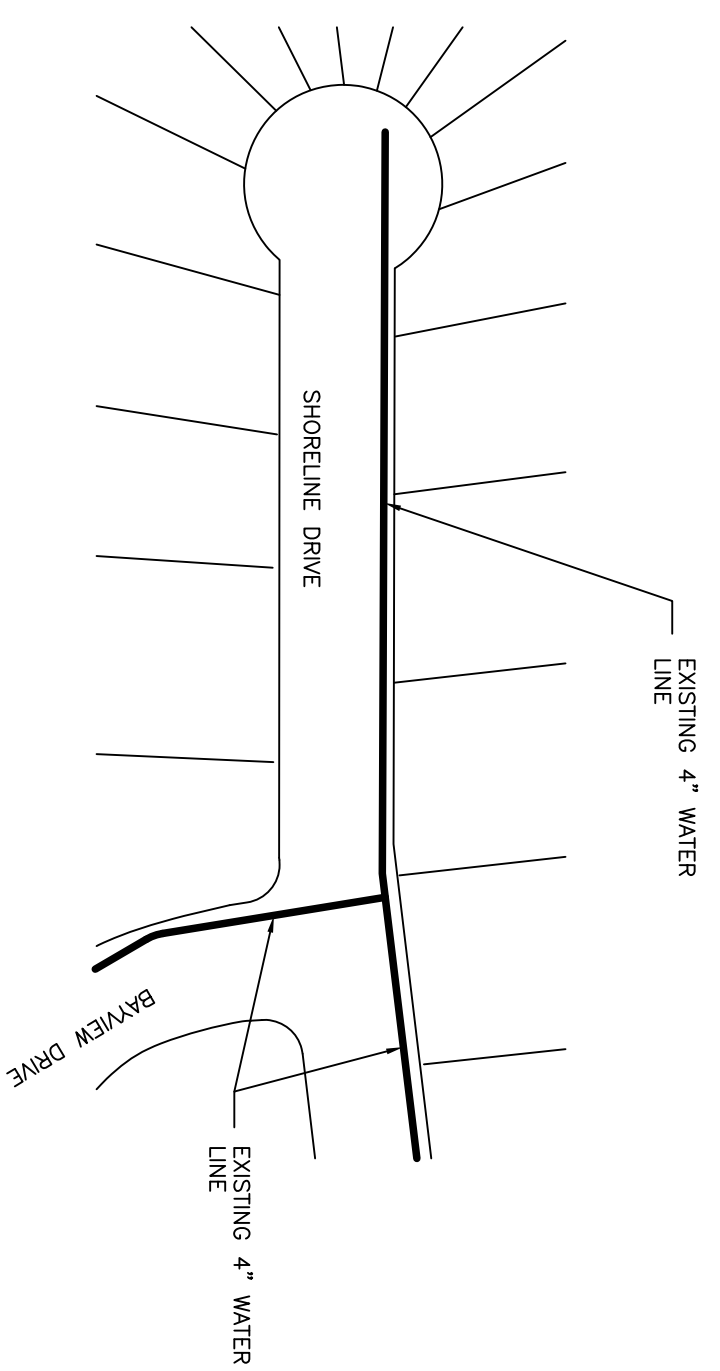


## WATER SYSTEM REPLACEMENT

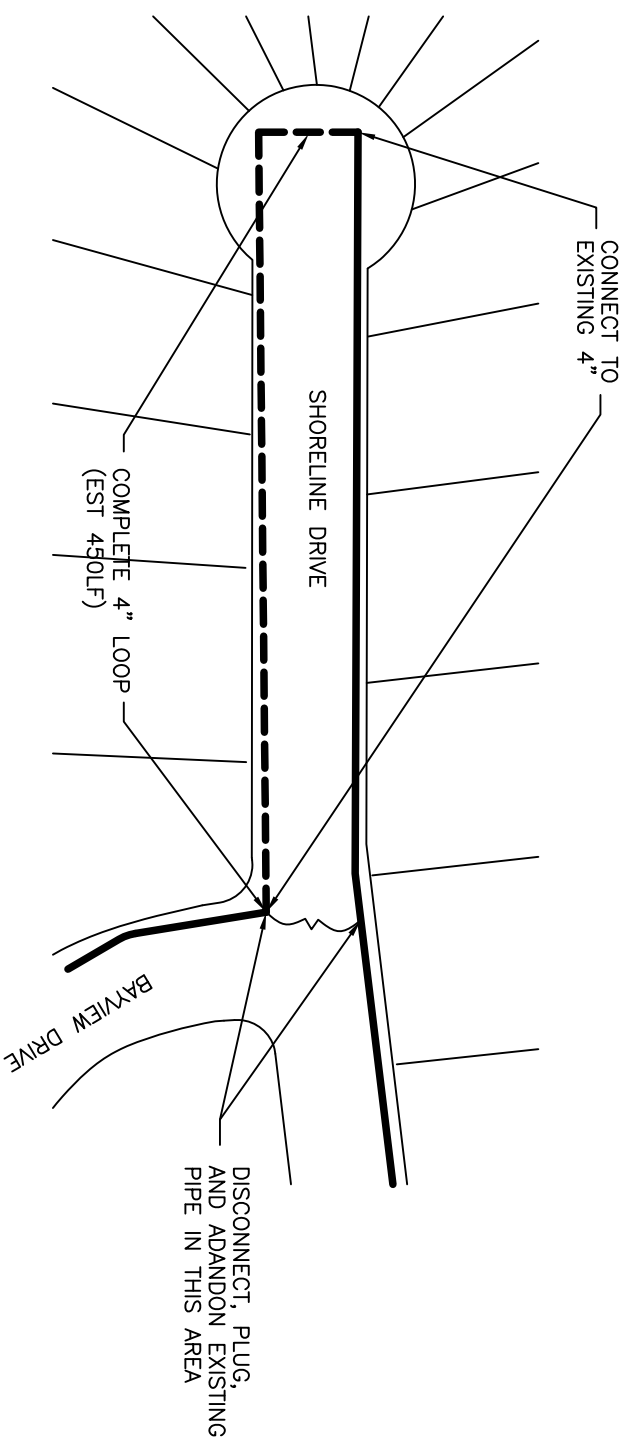
**A**

|   |               |   |                               |
|---|---------------|---|-------------------------------|
| NO.   | REVISION NAME | IN  | DATE                          |
|   |               |   |                               |
| DRAWN MDS-3/15  |               | CHECKED   | DATE                          |
| DESIGNED WRD-3/15                                     |               | PROJECT ENGINEER                                    |                               |
| APPROVED  |               | DATE  | PROJECT MANAGER               |
| WELLING ADDITION<br>BILLS ISLAND, IDAHO               |               |   |                               |
| DYER GROUP LLC<br>ENGINEERING • PLANNING • MANAGEMENT |               | WATER/SEWER REPLACEMENT<br>WATER SYSTEM REPLACEMENT | PROJECT NO.<br>SHEET NO.<br>4 |

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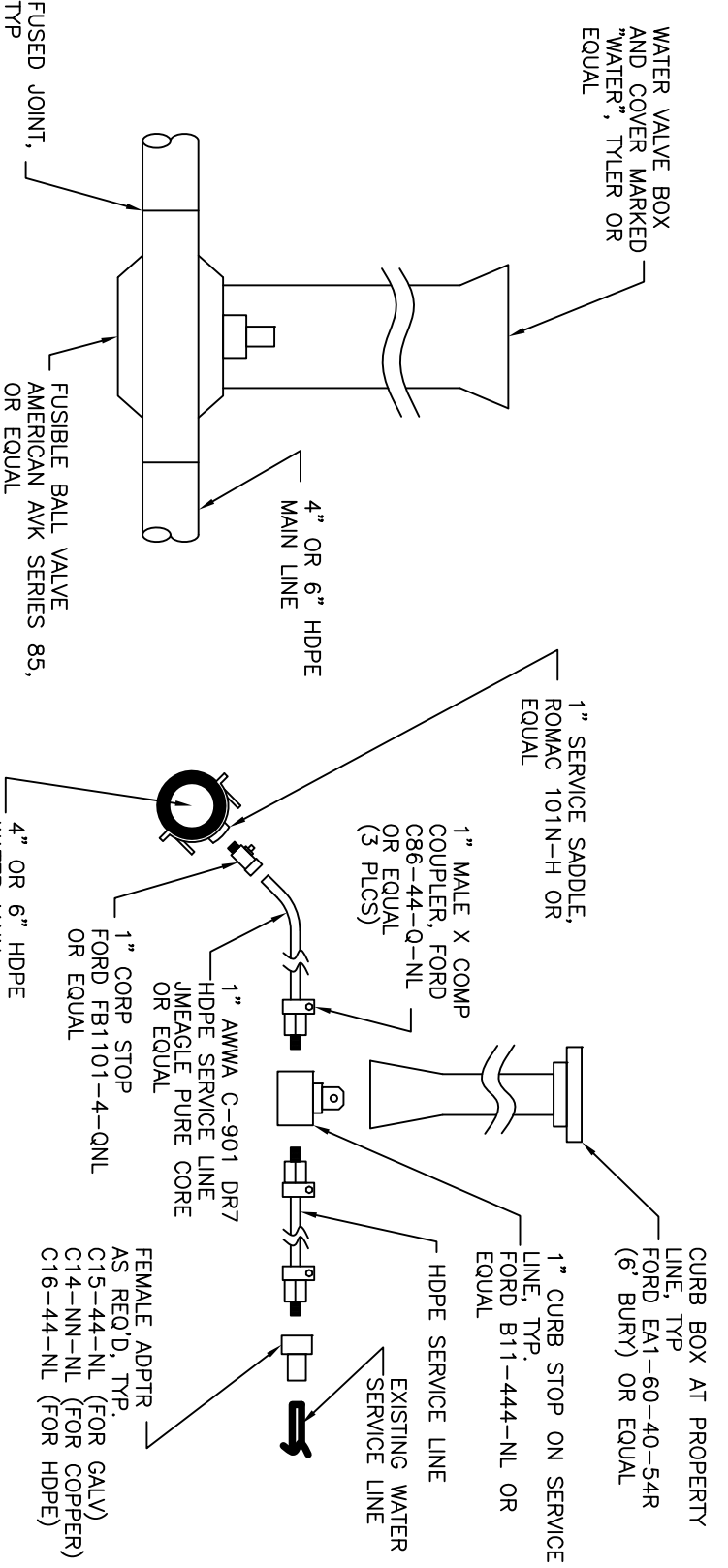


PRESENT



PROPOSED LOOP

CUL-DE-SAC LOOP  
NTS



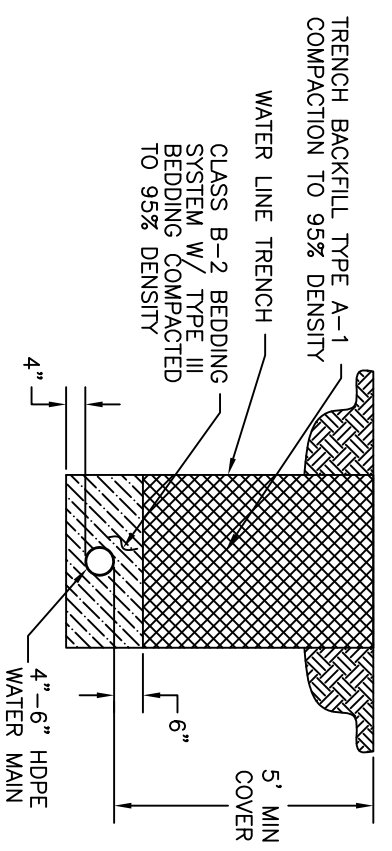
WATER VALVE INSTALLATION

NTS

TYPICAL WATER SERVICE

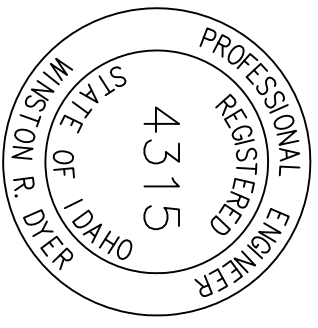
NTS

- NOTES:
- DO NOT ALLOW "HUMPS" IN INSTALLED PIPELINE
  - DISCONNECT AND ABANDON EXISTING PIPE IN PLACE AFTER NEW PIPE IS PLACED IN SERVICE.



WATER LINE INSTALLATION

NTS

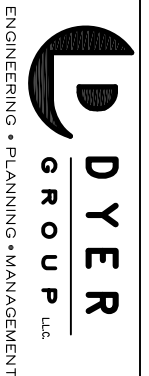


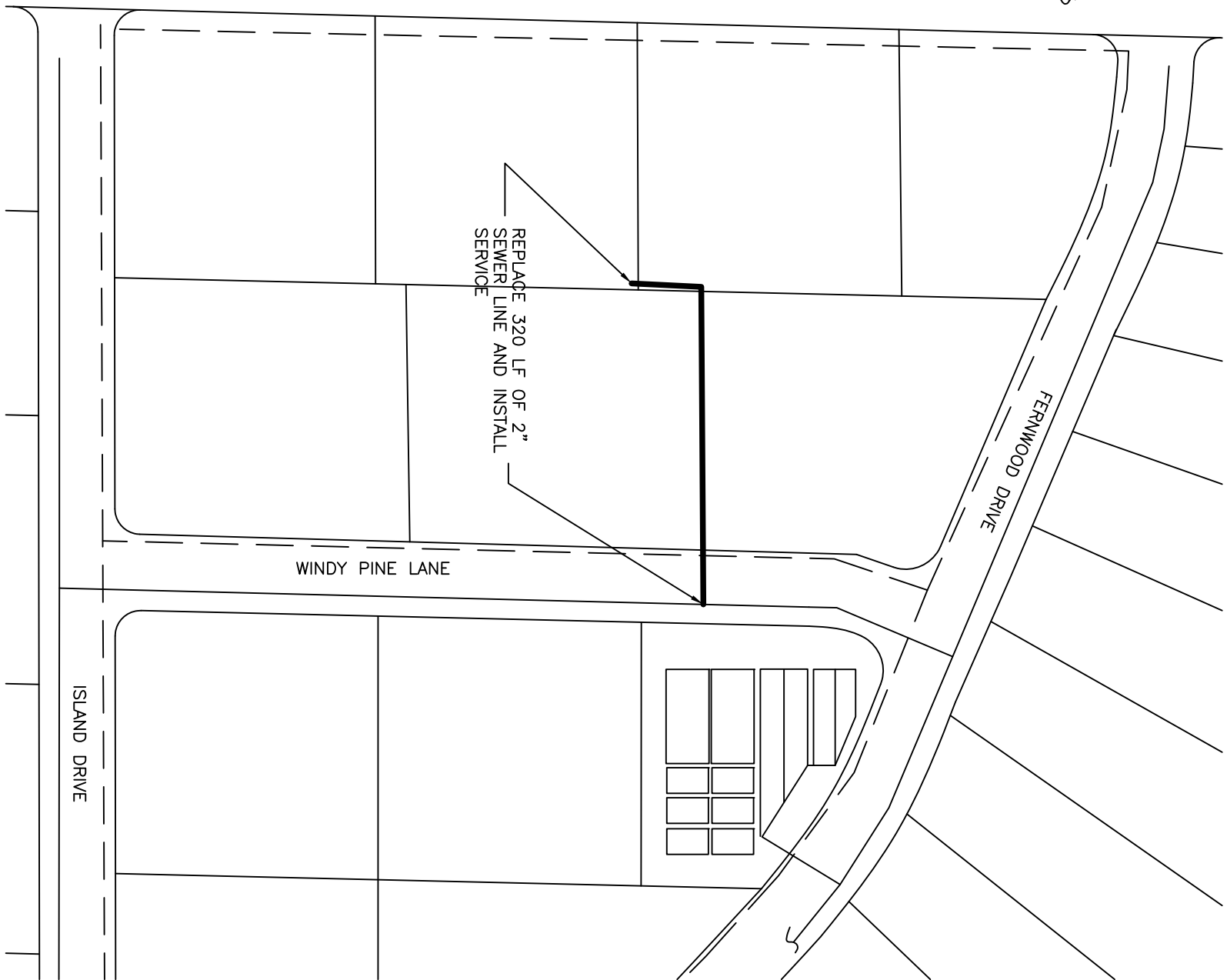
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|-----|---------------|-----|------|
|     |               |     |      |

DRAWN MDS-3/15  
DATE  
CHECKED DATE  
DESIGNED WRD-3/15  
DATE  
PROJECT ENGINEER  
APPROVED DATE  
PROJECT MANAGER

WELLING ADDITION  
BILLS ISLAND, IDAHO

WATER/SEWER REPLACEMENT  
WATER DETAILS  
PROJECT NO.  
SHEET NO. 5





SEWER SYSTEM REPLACEMENT  
NTS

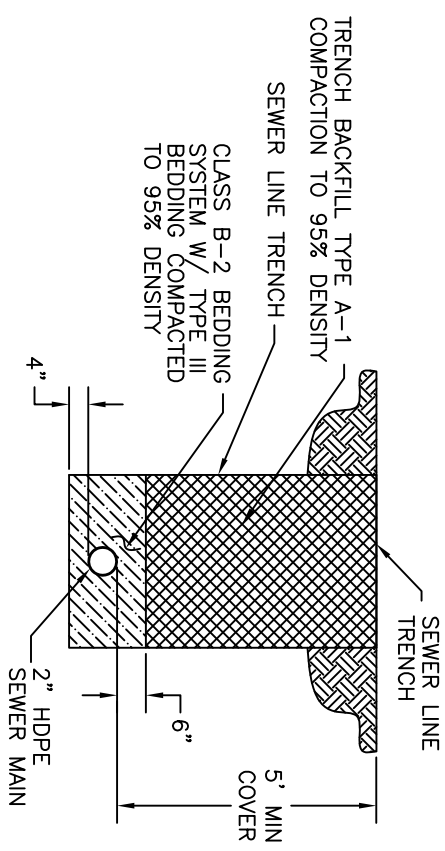
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| NO. | REVISION NAME | INI | DATE |
|     |               |     |      |
|     |               |     |      |
|     |               |     |      |

DRAWN MDS-3/15 CHECKED DATE  
DESIGNED WRD-3/15 PROJECT ENGINEER  
APPROVED DATE PROJECT MANAGER

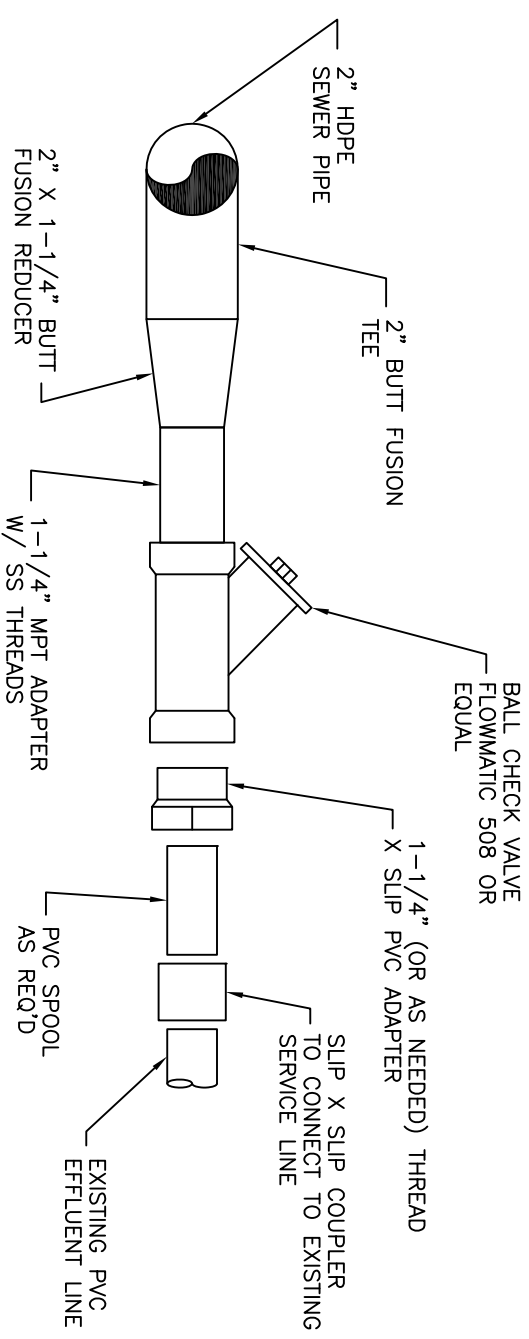
WELLING ADDITION  
BILLS ISLAND, IDAHO

PROJECT NO.  
SHEET NO. 6

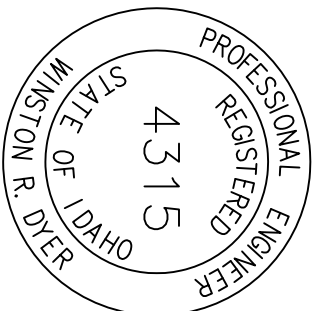
NOTES:  
DISCONNECT AND ABANDON EXISTING PIPE IN PLACE AFTER NEW PIPE IS PLACED IN SERVICE.



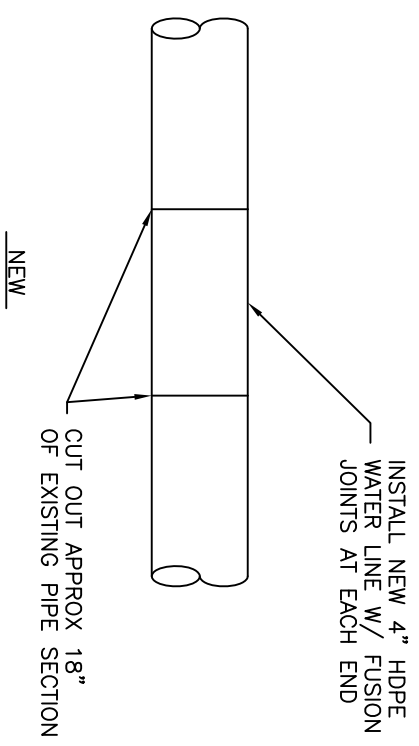
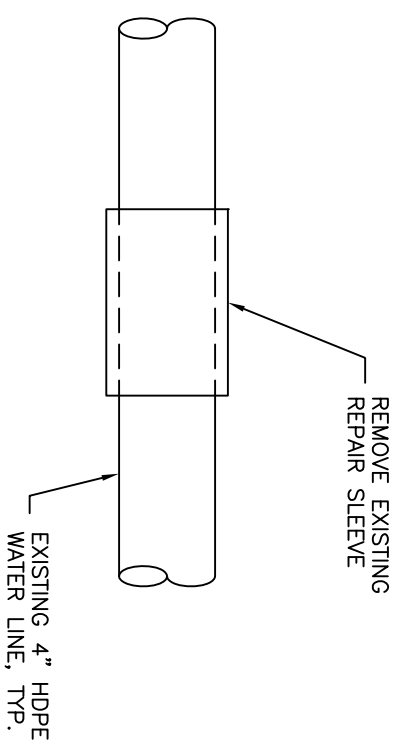
SEWER LINE INSTALLATION  
NTS



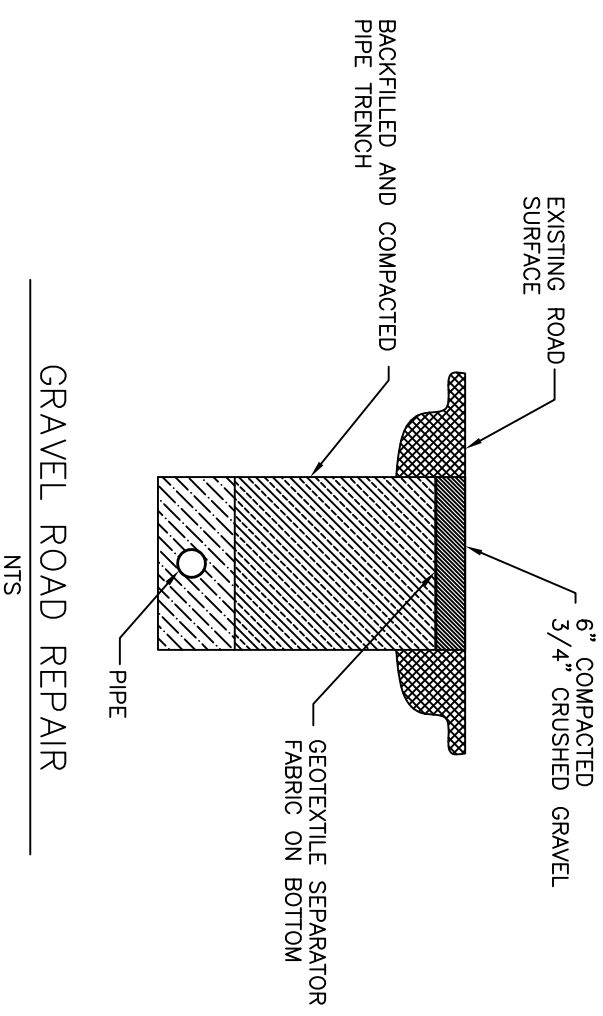
TYPICAL SEWER SERVICE  
NTS



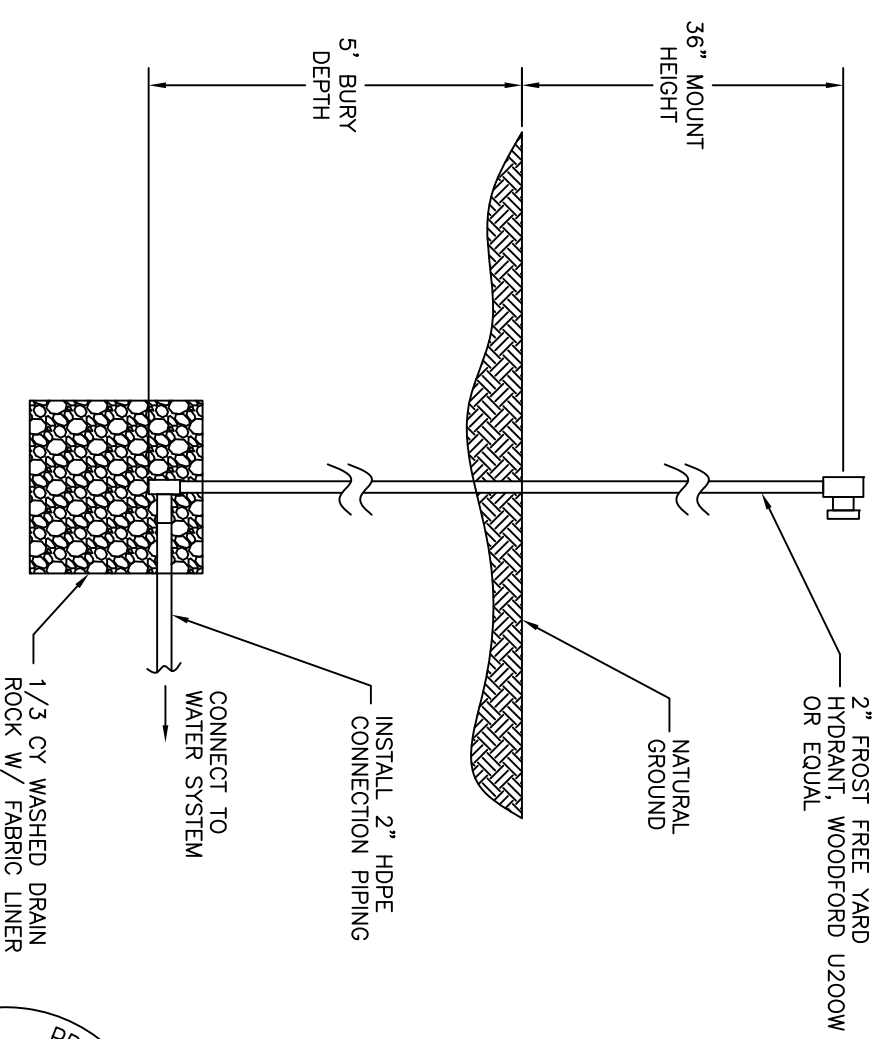
WATER/SEWER REPLACEMENT  
SEWER REPLACEMENT & DETAILS



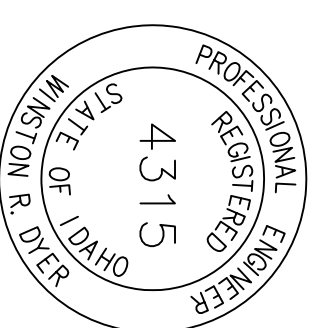
FUSION REPAIR  
NTS  
D



GRAVEL ROAD REPAIR  
NTS



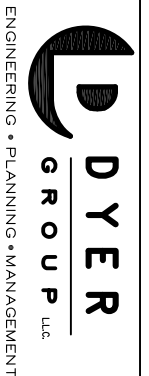
2" FLUSHING VALVE  
NTS



|     |               |     |      |          |          |                  |      |
|-----|---------------|-----|------|----------|----------|------------------|------|
| NO. | REVISION NAME | INI | DATE | DRAWN    | MDS-3/15 | CHECKED          | DATE |
|     |               |     |      | DESIGNED | WRD-3/15 | PROJECT ENGINEER |      |
|     |               |     |      | APPROVED |          | PROJECT MANAGER  |      |

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WELLING ADDITION  
BILLS ISLAND, IDAHO



WATER/SEWER REPLACEMENT  
MISCELLANEOUS DETAILS

PROJECT NO.  
SHEET NO.  
7