### **GENERAL**

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR REQUIREMENTS OF BOISE CITY PUBLIC WORKS DEPARTMENT, THE ADA COUNTY HIGHWAY DISTRICT, AND/OR THE ISPWC (CURRENT EDITION)

2. A PRE CONSTRUCTION CONFERENCE WILL BE HELD A MINIMUM OF 48 HOURS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR UTILITY CONTRACTORS SHOULD BE PRESENT.

3. ALL LOT, BLOCK, STREET RIGHT-OF-WAY, AND EASEMENT DIMENSIONS SHALL BE TAKEN FROM THE FINAL PLAT OF UNION SQUARE SUBDIVISION

4. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS, BOTH ABOVE AND BELOW GROUND, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS SHALL INCLUDE CLEARING AND GRUBBING WHICH CONSISTS OF CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND SUCH MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE FOR THE FOUNDATION OF PAVEMENTS. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON SITE SHALL BE DISPOSED OF OFF SITE.

5. SURVEY CONTROL POINTS WHICH ARE CRITICAL TO THE CONSTRUCTION OF THE PROJECT ARE LOCATED WITHIN THE LIMITS OF WORK. THE CONTRACTOR SHALL TAKE PRECAUTION TO PROTECT THE POINTS IN PLACE.

6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING. 7. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF

ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN AND AROUND THE CONSTRUCTION AREA. 8. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE

EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING. 9. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET

FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE. 10. CONTRACTORS MUST FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE REQUIREMENTS OF ITEM #9 AT THE

REQUEST OF THE AGENCY AND/OR THE ENGINEER. 11. ALL CONTRACTORS WORKING WITHIN THE PUBLIC ROAD RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT-OF-WAY PERMIT FROM ACHD AT

LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION. 12. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER.

13. ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORRECT SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.

14. THE CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS AND SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS. 15. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY CONFLICTS NOT

TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL DIG-LINE 1-800-342-1585. 16. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY NECESSARY NPDES PERMITS, FILING ANY NOI'S, AND PREPARING A POLLUTION

SHOWN ON PLANS. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY FAILURE

PREVENTION PLAN (PPP) IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY. CONTACT THE EPA AT (208)378-5746 FOR THE REQUIRED INFORMATION. 17. ALL UTILITIES INCLUDING SERVICE LINES WITHIN THE STREET TRAVEL WAYS SHALL BE IN PLACE PRIOR TO CURB, GUTTER, SIDEWALKS AND

STREET CONSTRUCTION. 18. THE PIPE CONTRACTOR SHALL REPLACE ALL PAVEMENT AND CONCRETE REMOVED FOR THE INSTALLATION OF WATER, SEWER, OR IRRIGATION PIPE. ALL PAVEMENT SHALL BE REPLACED WITHIN SEVEN CALENDAR DAYS FROM THE TIME THE PAVEMENT AND/OR CONCRETE IS REMOVED.

CONCRETE AND PAVEMENT SHALL BE REPLACED PER ISPWC STANDARDS. 19. NO PAVING SHALL OCCUR UNTIL THE CONTRACTOR OBTAINS WRITTEN APPROVAL OF ALL INSTALLED WATER AND SEWER FACILITIES FROM THE

CITY OF BOISE. 20. ABANDONED BUILDINGS, TEST PITS, TEMPORARY EXCAVATIONS OR WATERWAYS LOCATED WITHIN CURRENT OR FUTURE RIGHT-OF-WAY SHALL BE RE-EXCAVATED TO NATIVE SOIL AND BACKFILLED WITH STRUCTURAL FILL PER ISPWC SPECIFICATIONS. CONTRACTOR SHALL PROVIDE ACHD WITH SOILS TESTING LABORATORY CERTIFICATION OF SUITABILITY OF NATIVE BACKFILL MATERIALS WHICH MEET THE REQUIREMENTS FOR ENGINEERED FILL PER ISPWC SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS TO ACHD FOR ALL SUCH RE-EXCAVATED AND BACKFILLED AREAS.

### ROADWAY

1. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPWC AND THE ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS, AND THE ISPWC WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.

2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.

3. INSPECTION OF WORK WITHIN THE RIGHT-OF-WAYS SHALL BE BY THE ADA COUNTY HIGHWAY DISTRICT AND THE OWNER'S ENGINEER.

4. ALL TOPS OF VALVE BOXES AND SEWER MANHOLES SHALL BE SET FLUSH WITH THE SLOPE OF THE FINISHED STREET GRADES. THE ROADWAY CONTRACTOR SHALL INSTALL AND ADJUST ALL SPACERS, GRADE RINGS, MANHOLE RINGS AND LIDS.

5. EXISTING A.C. PAVEMENT SHALL BE CUT TO A NEAT STRAIGHT LINE (2' MINIMUM CUT BACK) PARALLEL OR PERPENDICULAR TO THE STREET CENTERLINE AND THE EXPOSED EDGE SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.

6. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS SHALL BE BACKCHARGED TO THE CONTRACTOR BY THE OWNER.

ALL COSTS TO THE CONTRACTOR INCURRED IN CORRECTING DEFICIENT WORK SHALL BE TO THE CONTRACTORS ACCOUNT. FAILURE TO CORREC SUCH WORK WILL BE CAUSE FOR A STOP WORK ORDER AND POSSIBLE TERMINATION.

8. ALL STORM DRAINAGE APPURTENANCES SHALL BE INSPECTED AND CERTIFIED BY ADA COUNTY HIGHWAY DISTRICT.

9. ALL WATER VALVES WILL BE PLACED SO AS NOT TO CONFLICT WITH ANY CONCRETE CURB, GUTTER, VALLEY GUTTER, AND SIDEWALK IMPROVEMENTS.

10. ALL WATER METERS ARE TO BE LOCATED OUTSIDE THE ROAD RIGHT-OF-WAY. ALL FIRE HYDRANTS ARE TO BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY. THERE MUST BE AT LEAST A ONE (1) FOOT SEPARATION BETWEEN BACK OF SIDEWALK (OR CURB IF NO SIDEWALK) AND THE LEADING EDGE OF ANY FIRE HYDRANT

11. OVER EXCAVATION AND ADDITIONAL GRANULAR BACKFILL MAY BE REQUIRED IN HIGH GROUNDWATER AREAS WHICH ARE TO BE DETERMINED BY THE FIELD INSPECTOR.

13. ALL MATERIAL PLACED AS FILL OR BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 306 OF THE CURRENT EDITION OF ADA COUNTY HIGHWAY DISTRICT STANDARD SPECIFICATIONS.

14. ROADWAY CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR PUBLIC WORKS

CONSTRUCTION STANDARD DRAWINGS: (CURRENT EDITION)

1. STREET SECTION, DRAWING NO. SD-801, AND SECTIONS AS SHOWN ON ROADWAY DETAIL SHEET.

2. ASPHALT REPAIR FOR STREET CUTS. ISPWC DRAWINGS SD-301, SD-303, SD-806 3. 4.0' CONCRETE VALLEY GUTTER, DRAWING NO. SD-708.

4. ROLLED CURB AND GUTTER, DRAWING NO. SD-702.

5. PEDESTRIAN RAMP FOR HANDICAPPED. DRAWING NO. SD-712C.

6. DETECTABLE WARNING TRUNCATED DOMES TO BE CAST INTO THE CONCRETE (ADHESIVE MATS NOT ALLOWED) AND

PAINTED TRAFFIC YELLOW, DRAWING NO. SD-712. 7. SIDEWALKS, DRAWING NO. SD-709.

8. STANDARD DROP INLET TYPE I W/ 12" SUMP, ACHD SUPPLEMENTAL DRAWNG NO. SD-601.

9. STANDARD DROP INLET TYPE VI W/ 12" SUMP. ACHD SUPPLEMENTAL DRAWING NO. SD-604A

### IRRIGATION

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2010 EDITION OF IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (I.S.P.W.C.) AND NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL STANDARD SPECIFICATIONS FOR IRRIGATION WATER DISTRIBUTION SYSTEMS. 2. TEN (10) FEET OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND NON-POTABLE WATER LINES. WHERE IT IS NECESSARY FOR THE NON POTABLE WATER LINE AND WATER LINE TO CROSS EACH OTHER AND THE NON POTABLE LINE IS LESS THAN 18" BELOW OR ABOVE THE WATER MAIN, THE NON POTABLE WATER LINE CROSSING SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C-900 (CLASS 160) OR ASTM D2241 (CLASS 250) STANDARDS WITH WATERTIGHT JOINTS, OR EQUAL CONSTRUCTION, FOR A DISTANCE OF 10' ON BOTH SIDES OF THE WATER LINE IN ACCORDANCE WITH IDAPA 58.01.08, RULES FOR PUBLIC DRINKING WATER SYSTEMS. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER OR NON POTABLE WATER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. IN LIEU OF CONSTRUCTING OR RECONSTRUCTING THE SEWER OR NON POTABLE WATER LINE TO CONFORM TO WATER MAIN STANDARDS, THE NON POTABLE WATER LINE MAY BE SLEEVED PER IDAPA 58.01.08, SECTION 550.06.h.v. CONSTRUCTION SHALL BE IN CONFORMANCE WITH ISPWC SD-407, NON-POTABLE WATER LINE SEPARATION.

3. MINIMUM BURIAL DEPTH FOR ALL IRRIGATION MAINS SHALL BE 2.5 FEET FROM FINISHED GRADE TO TOP OF PIPE. ALL CROSSING OF PUBLIC RIGHT-OF-WAY WITH PRESSURE IRRIGATION SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3.5 FEET. PIPE SHALL BE CONSTRUCTED TO SLOPE TO

DRAINS AND/OR PUMP-OUT STATIONS AS SHOWN ON THE PLANS 4. ALL VAULTS AND VALVE BOX COVERS FOR THE PRESSURIZED IRRIGATION SYSTEM SHOULD BE IDENTIFIED AS "IRRIGATION" OR "NONPOTABLE

WATER." 5. PRESSURE IRRIGATION MAINS WITHIN THE RIGHT OF WAY SHALL BE BEDDED WITH REJECT SAND MEETING GRADATION SPECIFICATIONS OF TABLE 801 OF I.S.P.W.C.

6. FINAL APPROVAL AND ACCEPTANCE OF ALL PRESSURE IRRIGATION CONSTRUCTION WILL BE BY THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL. 7, FINAL APPROVAL OF GRAVITY IRRIGATION CONSTRUCTION WILL BE BY THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL.

8. PRESSURE IRRIGATION INSPECTIONS WILL BE BY THE OWNERS ENGINEER AND THEIR DECISIONS SHOULD BE CONSIDERED AS FINAL. SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK IN AN ACCEPTABLE MANNER. CONTRACTOR TO NOTIFY ENGINEER OF TESTING 24 HOURS PRIOR.

9. ALL TEES, PLUGS, CAPS, AND BENDS OF 11-1/4° AND GREATER AT LOCATIONS WHERE UNBALANCED FORCES EXIST SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN IN THE ISPWC STANDARDS.

10. ALL PLASTIC PIPE SHALL BE INSTALLED WITH LOCATING WIRE AND IDENTIFICATION TAPE AS SPECIFIED IN ISPWC SECTION 901. 11. PRESSURE MAIN LINE PIPING SHALL BE PVC, 200 PSI, SDR 32.5 CONFORMING TO ASTM D-2241.

12. GRAVITY FLOW IRRIGATION PIPE SHALL BE 18"RCP.

13. THE CONTRACTOR SHALL CONTACT THE NEW YORK IRRIGATION DISTRICT/BOISE PROJECT BOARD OF CONTROL AND BAILEY ENGINEERING, TO WITNESS THE PRESSURE TEST.

### SEWER

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST SEWER SPECIFICATIONS AND STANDARD DRAWINGS OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC), BOISE CITY PUBLIC WORKS DEPARTMENT AND/OR THE ADA COUNTY HIGHWAY 2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. 3. SEWER PIPE WITH COVER OF GREATER THAN 3 FEET, SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034 FOR 4-INCH THROUGH 15-INCH AND ASTM F679 FOR 18-INCH THROUGH 27-INCH AS SET FORTH BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. SEWER PIPE WITH LESS THAN 3 FEET OF COVER SHALL BE DUCTILE IRON CONFORMING TO ANSI A-21.51 OR AWWA C-151 MINIMUM CLASS 50. A RUBBER RING IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH THE MANHOLE BASE AND/OR ITS CHANNEL IN ORDER TO ENSURE A WATER-TIGHT SEAL. 4. SEWER INSPECTIONS WILL BE BY THE BOISE CITY PUBLIC WORKS DEPARTMENT AND THEIR DECISIONS SHOULD BE CONSIDERED AS FINAL. THE CONTRACTOR WILL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO CONSTRUCTION. BOISE CITY WILL PROVIDE PERIODIC INSPECTIONS FOR AN EIGHT-HOUR DAY, FROM 8:00 A.M. TO 5:00 P.M., FOR A FORTY HOUR WEEK. THE CONTRACTOR SHALL REIMBURSE THE CITY AT RATES ESTABLISHED BY THE CITY FOR INSPECTION IN EXCESS OF THE NORMAL WORK WEEK, INCLUDING LEGAL HOLIDAYS, OVERTIME INSPECTION RATES AND A LIST OF LEGAL HOLIDAYS CAN BE OBTAINED FROM THE BOISE CITY PUBLIC WORKS DEPARTMENT 5. SERVICE LINES SHALL BE MARKED IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWING SD 512. SERVICE LINE MARKERS SHALL REMAIN IN PLACE DURING CONSTRUCTION AND BE PRESENT FOR FINAL INSPECTION. 6. PRIOR TO FINAL ACCEPTANCE, AFTER ALL UTILITIES ARE IN AND PRIOR TO PAVING, AN AIR TEST SHALL BE CONDUCTED. THE CONTRACTOR SHALL CONTACT THE CITY OF BOISE A MINIMUM OF 24 HOURS PRIOR TO TESTING. ALL MANHOLES SHALL BE TESTED IN

ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS. 7. THE SEWER CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE SEWER CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE MANHOLE CONE TO ASSURE THAT RING ELEVATIONS MATCH FINAL STREET GRADES. THE MAXIMUM HEIGHT OF THE GRADE RINGS SHALL BE SUCH THAT THE FINISH GRADE ELEVATION OF THE MANHOLE FRAME AND COVER SHALL NOT BE MORE THAN TWENTY-ONE (21") INCHES ABOVE THE TOP OF THE MANHOLE CONE. 8. THE PAVING CONTRACTOR SHALL SET THE GRADE RINGS AND POUR THE CONCRETE COLLARS PER STANDARD DRAWING NO. SD 508. THE PAVING CONTRACTOR SHALL CONTACT ACHD 24 HOURS PRIOR TO POURING CONCRETE COLLARS. 9. THE HORIZONTAL SEPARATION OF THE WATER AND SEWER MAINS SHALL BE A MINIMUM OF TEN (10) FEET. WHERE IT IS NECESSARY FOR SEWER AND WATER TO CROSS EACH OTHER AND THE SEWER LINE IS LESS THAN 18 INCHES BELOW OR ABOVE THE WATER MAIN, THE SEWER LINE CROSSING SHALL BE P.V.C. PRESSURE PIPE CONFORMING TO AWWA C-900 OR ASTM D2241, FOR A DISTANCE OF 10' ON BOTH SIDES OF WATER LINE. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. 10. GROUNDWATER LEVELS SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING OPERATIONS. ALL MANHOLES LOCATED WITHIN MLIMITS OF SEASONAL GROUNDWATER SHALL HAVE THE EXTERIOR OF ALL CONCRETE

SURFACES COATED WITH TWO COATS OF COAL TAR EPOXY. 11. THE TRENCH BACKFILL ABOVE THE PIPE ZONE WILL BE INSPECTED BY THE ACHD OR BY THE DEVELOPER'S ENGINEER IN ACCORDANCE WITH THE LATEST EDITION OF THE "CONSTRUCTION QUALITY ASSURANCE MANUAL". COMPACTION TESTS ARE REQUIRED IN THE BACKFILL ABOVE THE PIPE ZONE. WITHIN PUBLIC RIGHT-OF-WAY. ACCORDING TO ACHD REQUIREMENTS AND THE RESULTS SHALL BE SUBMITTED TO BOISE CITY PUBLIC WORKS

DEPARTMENT AND ACHD PRIOR TO FINAL ACCEPTANCE. 12. ALL STATIONING RELATES TO THE GRAVITY SEWER CENTERLINE. 13. THE SEWER MAIN SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS, ALL SEWER LINES SHALL BE TELEVISED WITH A CLOSED CIRCUIT TELEVISION CAMERA IN ACCORDANCE WITH THE ISPWC AND BOISE CITY'S MODIFICATIONS. NO STANDING WATER SHALL BE PRESENT. 14. THE BOISE PUBLIC WORKS DEPARTMENT MAY TEST THE COMPACTION OF THE SEWER PIPELINE BEDDING. TESTING WILL BE DONE BY AN INDEPENDENT TESTING LABORATORY. THE COST OF THE FIRST TEST WILL BE PAID BY THE BOISE PUBLIC WORKS DEPARTMENT. IF THE FIRST TEST FAILS TO MEET REQUIRED COMPACTION, ALL RE-TESTING SHALL BE PAID BY THE SEWER CONTRACTOR. THE CONTRACTOR SHALL CONTACT THE BOISE PUBLIC WORKS DEPARTMENT AND/OR TESTING LABORATORY TO SCHEDULE THE TESTS PRIOR TO ANY PIPE LAYING AND BACKFILLING. 15. SEWER CONSTRUCTION WILL MEET SPECIFIC DETAILS AND REQUIREMENTS OF THE FOLLOWING IDAHO STANDARDS FOR

PUBLIC WORKS CONSTRUCTION: STANDARD MANHOLE - TYPE A. DRAWING NO. SD-501. 2. STANDARD SHALLOW MANHOLE, DRAWING NO. SD-505. MANHOLE COLLAR DETAIL, DRAWING NO. SD-508.

. MANHOLE COVER & FRAME, DRAWING NO. SD-507 . STANDARD SEWER SERVICE LINE, DRAWING NO. SD-511-A

SEWER SERVICE MARKER, DRAWING NO. SD-512. 16. THE CONTRACTOR SHALL LEAVE THE EXCAVATION FOR THE UPSTREAM END OF ALL SERVICE LINES OPEN FOR FIELD VERIFICATION OF THE INVERT ELEVATION BY THE CITY'S INSPECTOR. THE CONTRACTOR SHALL NOT BACKFILL THE ENDS OF SERVICE LINES UNTIL HE HAS OBTAINED APPROVAL FROM BOISE CITY'S INSPECTOR OR MADE OTHER ARRANGEMENTS FOR THE VERIFICATION OF SERVICE LINE INVERT ELEVATIONS.

17. THE CONTRACTOR SHALL PROVIDE BOISE CITY'S INSPECTOR WITH "CUT SHEETS" FOR THE STAKING PROVIDED FOR CONSTRUCTION OF THE SANITARY SEWER. "CUT SHEETS" SHALL BE PROVIDED TO THE CITY PRIOR TO CONSTRUCTION. ADDITIONALLY, TEMPORARY BENCH MARKS MUST BE PROVIDED TO THE BOISE CITY DEPARTMENT OF PUBLIC WORKS, INSPECTION SECTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 18. THE CONTRACTOR SHALL INSTALL REMOVABLE PLUGS UPSTREAM OF SSMH SW4724 BETWEEN SSMH

SW4724 AND CAP. THIS PLUG SHALL REMAIN IN PLACE DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THIS SEWER PROJECT. 19. THE CONTRACTOR SHALL CONSTRUCT THE SANITARY SEWER IN ACCORDANCE WITH THE STAMPED PLANS APPROVED BY THE BOISE CITY PUBLIC WORKS DEPARTMENT. THESE PLANS WILL BE PROVIDED TO THE CONTRACTOR BY THE PROJECT INSPECTOR PRIOR TO CONSTRUCTION. WORK SHALL NOT BE DONE WITHOUT THE CURRENT SET OF APPROVED

20. PRIOR TO CONSTRUCTION, TEMPORARY BENCHMARKS (TBM'S) SHALL BE SET IN THE FIELD BY A LICENSED SURVEYOR OR ENGINEER AND SHALL BE FLAGGED AND CLEARLY VISIBLE FROM ALL DIRECTIONS. A TBM SHALL BE LOCATED WITHIN 100—FEET OF TIE—IN TO EXISTING SEWER AND SPACED NO GREATER THAN 500—FEET ALONG THE SEWER ALIGNMENT THERE AFTER. TBM'S SHALL HAVE ELEVATIONS TIED TO THE NAVD 1988 DATUM.

# GENERAL LEGEND

EXISTING SEWER LINE

EXISTING WATER LINE

NEW PRESSURE IRRIGATION LINE

EXISTING EDGE OF PAVEMENT

NEW EDGE OF PAVEMENT

ROADWAY CENTER LINE

EASEMENT BOUNDARY

EXISTING CONTOUR

FINAL GRADE CONTOUR

POINT (TOP BACK OF ROLLED

CURB UNLESS OTHERWISE NOTED)

EXISTING SANITARY SEWER MANHOLE

ELEVATION @ STATION

ROADWAY RIGHT-OF-WAY

**NEW STORM DRAIN** 

NEW WATER LINE

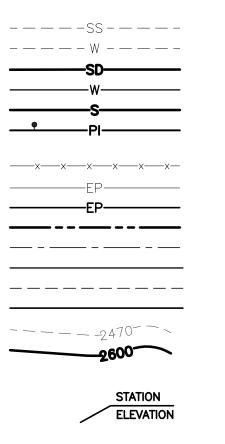
NEW SEWER LINE

EXISTING FENCE

BOUNDARY LINE

LOT LINE

W/SERVICE



TVC = TOP BAC VERTICAL CURB TRLC = TOP REVERSE LIP CURB PC = POINT OF CURVATURE PT = POINT OF TANGENCY FL = GUTTER FLOW LINE SANITARY SEWER MANHOLE

> 4" SEWER SERVICE LINE PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT

NEW SEWER LINE CLEAN OUT

LOT NUMBER

CATCH BASIN - ACHD SD-604A TYPE IV STORM DRAIN MANHOLE ISPWC SD-611 W/2' SUMP

DIRECTION OF DRAINAGE FLOW STREET LIGHT

EXISTING DECIDUOUS TREE (CALIPER)

EXISTING POWER LINE & POLE

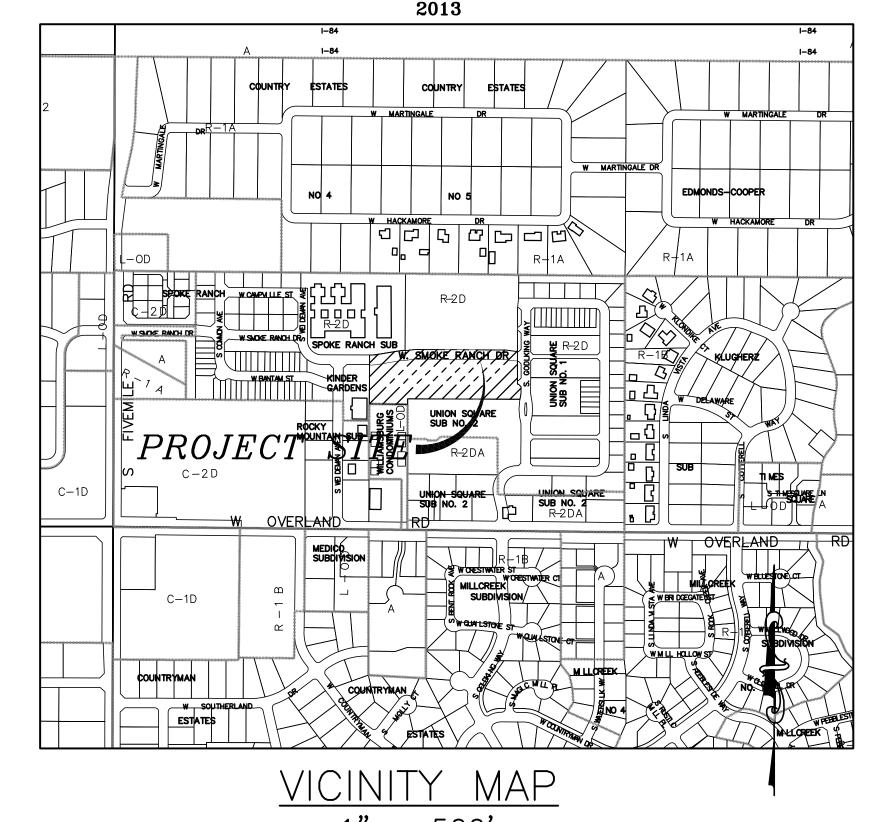


PEDESTRIAN RAMP PER. I.S.P.W.C. SD-712A (OR AS NOTED ON STREET SHEETS) ALL PEDESTRIAN RAMPS SHALL HAVE TRUNCATED DOMES. DOMES SHALL BE CAST INTO CONCRETE (ADHESIVE MATS NOT ALLOWED) AND SHALL BE PAINTED TRAFFIC YELLOW.

STORM DRAIN OBSERVATION WELL

# DEVELOPMENT PLANS FOR UNION SQUARE SUBDIVISION NO. 3

A PORTION OF THE SW 1/4 OF SECTION 14 TOWNSHIP 3 NORTH, RANGE 1 EAST, BOISE MERIDIAN BOISE, ADA COUNTY, IDAHO



# PLAN SHEET INDEX

DESCRIPTION

- COVER SHEET, INDEX, VICINITY MAP, & NOTES

FINAL PLAT

STREET PLAN AND PROFILE

STREET AND DRAINAGE DETAILS

UNITED WATER IDAHO PLAN

THE ENGINEER OF RECORD CERTIFIES THAT THE PLANS ARE PREPARED IN SUBSTANTIAL CONFORMANCE WITH THE ACHD POLICY MANUAL AND STANDARDS IN EFFECT AT THE TIME OF PREPARATION. THE ENGINEER ACKNOWLEDGES THAT ACHD ASSUMES NO LIABILITY FOR ERROR OR DEFICIENCIES IN THE DESIGN. ALL VARIANCES FROM ACHD POLICY SHALL BE APPROVED IN WRITING. THE FOLLOWING VARIANCES, LISTED BY DATE AND SHORT DESCRIPTION, WERE APPROVED FOR THE PROJECT: NONE.

#### Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifically and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

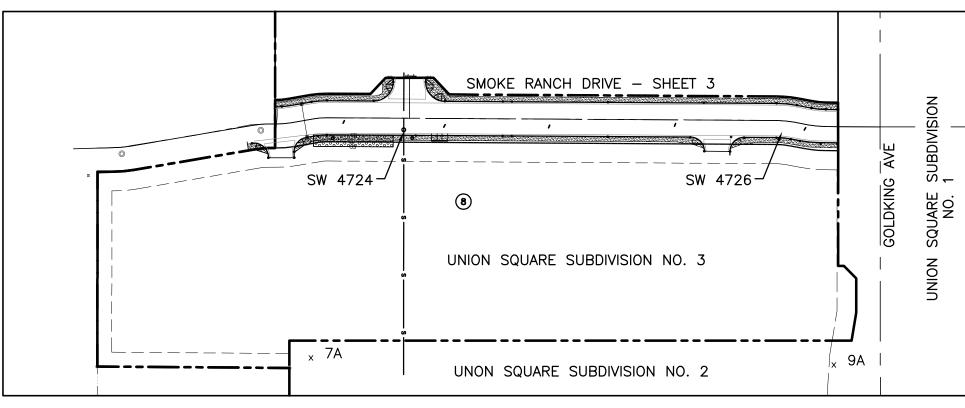
ADA COUNTY HIGHWAY DISTRICT



NAVD 88 DATUM

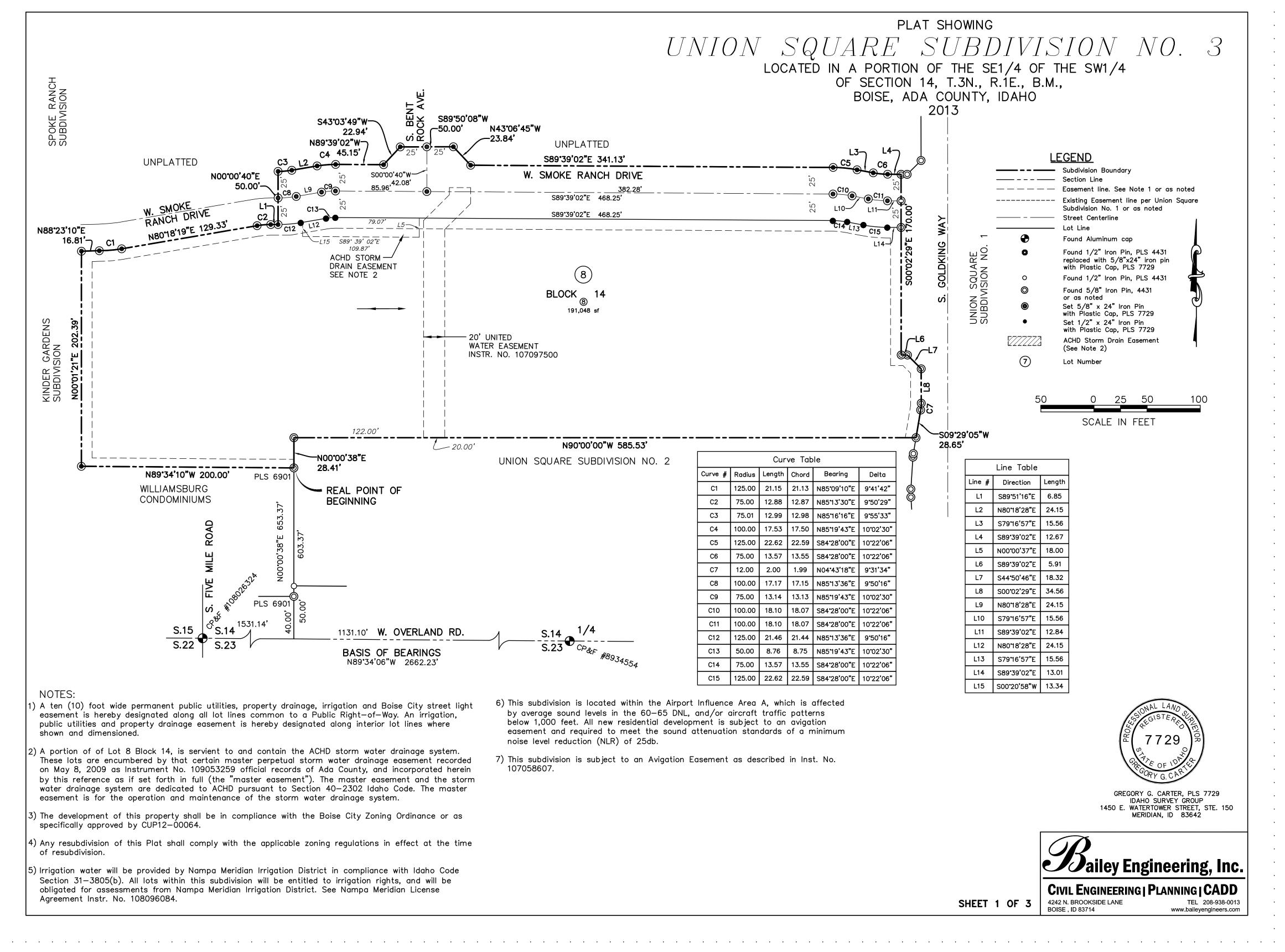


1. SEE UNITED WATER PLAN FOR ALL WATER SYSTEM CONSTRUCTION.



STREET & SEWER INDEX

<u>DEVELOPER</u> HEARTLAND HOMES LLC. 2358 S. TITANIUM MERIDIAN, ID 83642 TEL: 208-895-8858 FAX: 208-985-0714



Plans Are Accepted For Public Street Construction

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BY\_\_\_\_\_DATE:\_\_\_\_ ADA COUNTY HIGHWAY DISTRICT TOTAL # LOTS: 1

REVISED

NO. DATE DESCRIPTION

CIVIL ENGINEERING PLANNING CADD

4242 N. BROOKSIDE LANE
BOISE, ID 83714

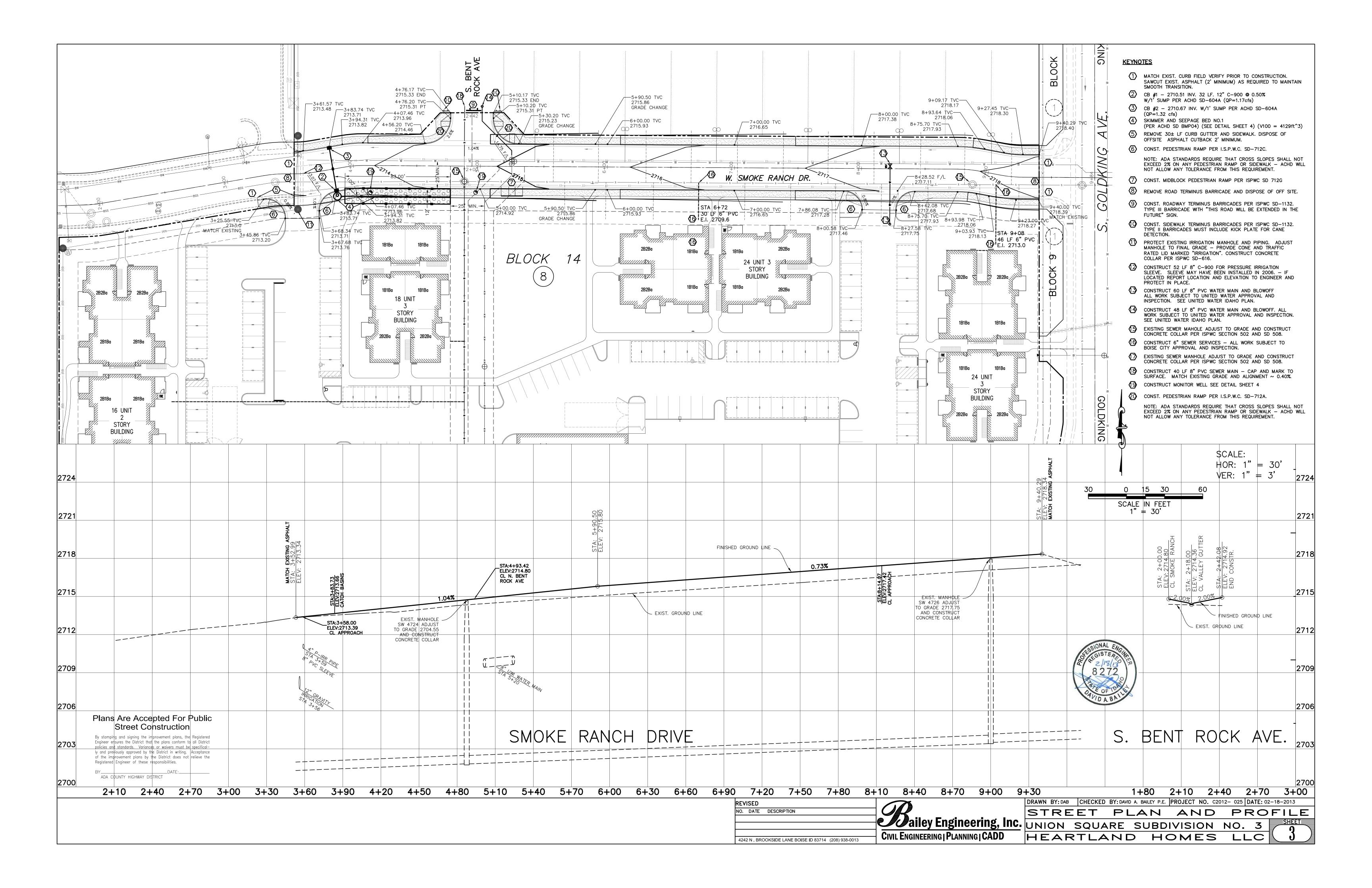
DRAWN BY: DAB CHECKED BY: DAVID A. BAILEY P.E. PROJECT: C2013-025

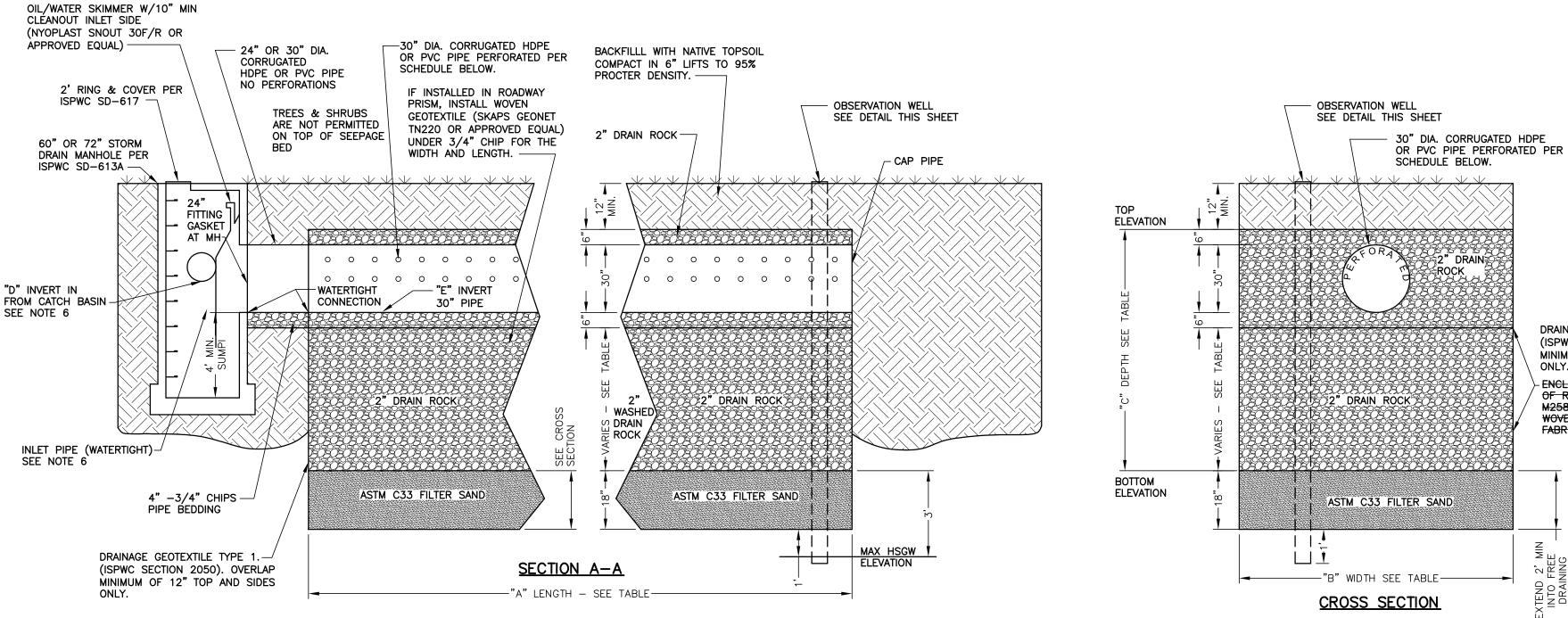
DATE: 02-18-2013

UNION SQUARE SUBDIVISION NO. 3

SHEET

HEARTLAND HOMES LLC





- . CONTACT DESIGN ENGINEER IF GROUNDWATER IS ENCOUNTERED FOR SEEPAGE BED RESIZING. ALL VAULTS, MANHOLES & SAND AND GREASE TRAPS MUST BE HS25 OR GREATER LOAD RATED.
- CONTRACTOR SHALL INSTALL CHAMBERS PER MANUFACTURERS INSTRUCTIONS. 4. ALL GEOTEXTILE SEAMS SHALL OVERLAP 1 FOOT MIINIMUM, UNLESS OTHERWISE DIRECTED PER
- 2" DRAIN ROCK MAY BE OMITTED WHERE HIGH GROUND WATER EXISTS.
   INVERT ELEVATION OF INLET PIPE TO SKIMMER MH >= ELEVATION OF LOWEST PERFORATIONS IN THE 30" ISOLATOR.

# UNDERGROUND STORMWATER CHAMBER

### TABLE OF DIMENSIONS

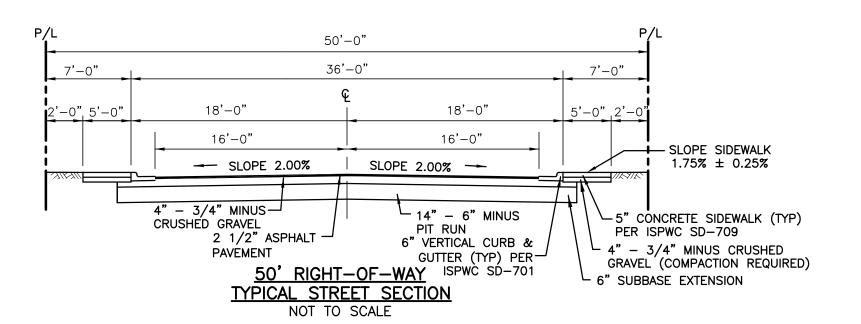
DESCRIPTION	"A" LENGTH	"B" WIDTH	"C" DEPTH	INVERT IN FROM CB	"D" INVERT IN FROM CB	"E" 30" PIPE INVERT	"TOP ELEV" SEEPAGE BED	"BOTTOM ELEV" SEEPAGE BED	GROUNDWATER ENCOUNTERED AT DEPTH
SEEPAGE TRENCH #1	83'	12'	10'	CB#1 12"	2710.51	2708.50	2711.50	2701.50	2693.50
							BOTTOM OF ROAD SECTION		

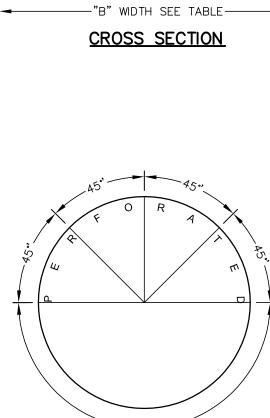
~ 2712.0

1. DRAINAGE CONTRACTOR SHALL INSTALL 2" SCH 80 WATER CLASS PIPE CONDUITS THROUGH THE SEEPAGE TRENCHES FOR WATER LINES, UNDERGROUND POWER LINES, GAS LINES AND TELEPHONE LINES. SEWER SERVICES SHALL BE PLACED IN 6" DIA. SCH 80 WATER CLASS PIPE THROUGH SEEPAGE TRENCHES. THE PRECISE LOCATION, DEPTH AND SIZE SHALL BE DETERMINED BY THE ENGINEER.

2. GROUNDWATER WAS ENCOUNTERED IN TEST EXCAVATIONS ON THIS SITE. IF GROUNDWATER IS ENCOUNTERED HIGHER THAN INDICATED ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR REDESIGN OF SEEPAGE TRENCHES TO PROVIDE 3' MINIMUM CLEARANCE BETWEEN GROUNDWATER AND THE BOTTOM OF THE TRENCH. UNTIMELY NOTIFICATION OF THE ENGINEER MAY RESULT IN ADDITIONAL COSTS TO THE CONTRACTOR. REFER TO GEOTECHNICAL REPORT PREPARED BY M.T.I. DATED

3. ALL MONITOR WELLS SHALL HAVE A CONCRETE APRON POURED AROUND THE CAP.





DRAINAGE GEOTEXTILE TYPE 1. (ISPWC SECTION 2050). OVERLAP MINIMUM OF 12" TOP AND SIDES

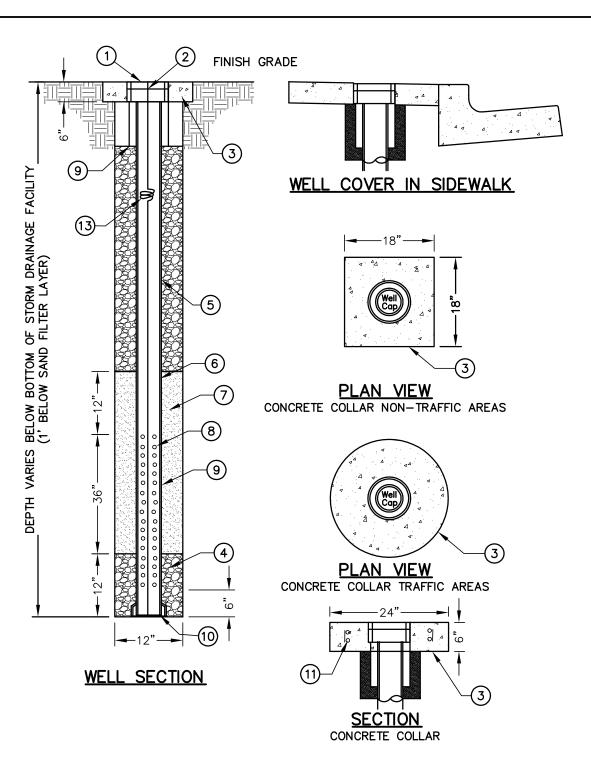
- ENCLOSE TOP & SIDES OF ROCK WITH AASHTO

M258 CLASS 2 NON WOVEN GEOTEXTILE

CORRUGATED PIPE.

5 EA. 3/8" DIA. PERFORATIONS IN EACH

30" PIPE PERFORATIONS



- 1. WELL COVER, 8" DIAM. WATERTIGHT GALVANIZED STEEL COVER AND CANISTER.
- 2. PVC CAP, GASKETED (WATERTIGHT).
- 3. CONCRETE (COLLAR), CLASS 3000 (ISPWC SECTION 703). 4. 3/4" MINUS CRUSHED AGGREGATE FOR BASE (ISPWC SECTION 802) OR MATERIAL
- REQUIRED FOR STORM DRAINAGE FACILITY (I.E. 1.5" TO 2" DRAIN ROCK, FILTER SAND. 5. PVC PIPE, 4" DIAMETER ASTM D-3034 SDR 35 FOR DRILLED WELLS. PVC PIPE, 6" DIAMETER ASTM D-3034 SDR 35 FOR WELLS DUG & BACKFILLED (INSIDE SEEPAGE
- 6. 2 STAINLESS STEEL HOSE CLAMPS AT 3" SPACING. SECURE GEOTEXTILE IN PLACE.
- 7. FILTER SAND (ISPWC SECTION 801). 8. PERFORATED PCV PIPE, ASTM D-3035 SDR 35 WITH 6 - 3/8" DIA. HOLES AT 3" ON
- 9. DRAINAGE GEOTEXTILE, TYPE I (ISPWC SECTION 2060).
- 10. PVC CAP, SOLVENT WELDED OR GASKETED (WATERTIGHT).
- 11. (2) #4 REBAR HOOPS WITH #4 VERTICALS. 12. NO. 12 AWG. GALVANIZED FINDER WIRE.

A. WELLS ARE FOR OBSERVATION OF GROUNDWATER LEVEL NEAR STORM DRAINAGE B. LOCATION OF GROUNDWATER OBSERVATION WELLS SHALL BE APPROVED BY ENGINEER.

### MONITOR WELL LOCATIONS

TRENCH #1

_	**			
	WELL #	NORTH	EAST	DIST. ALONG TRENCH
	#1	N 7532.21	E 7180.56	20' INTO TRENCH
	#2	N 7263.34	E 7532.30	20' PAST TRENCH

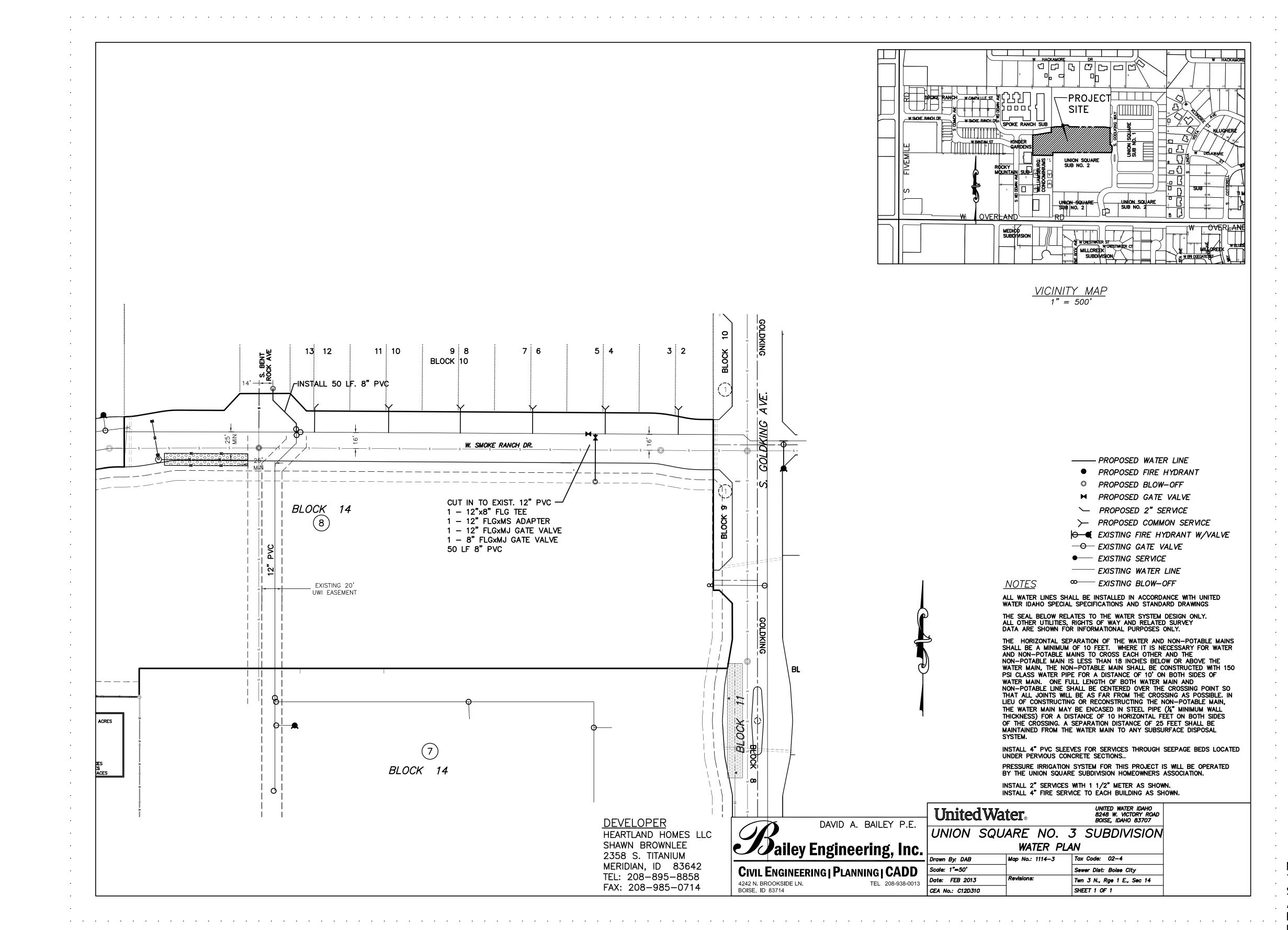


### Plans Are Accepted For Public Street Construction

By stamping and signing the improvement plans, the Registered Engineer ensures the District that the plans conform to all District policies and standards. Variances or waivers must be specifical ly and previously approved by the District in writing. Acceptance of the improvement plans by the District does not relieve the Registered Engineer of these responsibilities.

BY\_\_\_\_\_ADA COUNTY HIGHWAY DISTRICT

**Sailey Engineering, Inc.** REVISED NO. DATE DESCRIPTION CIVIL ENGINEERING | PLANNING | CADD 4242 N. BROOKSIDE LANE dbailey@baileyengineers.com DRAWN BY: DAB | CHECKED BY: DAVID A. BAILEY P.E. | PROJECT: C2012-025 | DATE: 02-18-2013 STREET AND DRAINAGE DETAILS UNION SQUARE SUBDIVISION NO. 3 HEARTLAND HOMES LLC



NOTE:
THIS SHEET IS INCLUDED IN THE PLAN
SET FOR CONVENIENCE ONLY — ALL
APPROVALS AND CONSTRUCTION SHALL
REFER TO THE OFFICIAL UNITED WATER



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BY\_\_\_\_\_DATE
ADA COUNTY HIGHWAY DISTRICT

REVISED	
NO. DATE DESCRIPTION	
	<b>ailey Engineering, Inc.</b>
	Civil Engineering   Planning   CADD
	4242 N. BROOKSIDE LANE TEL 208-938-0013 BOISE, ID 83714 dbailey@baileyengineers.com
DRAWN BY: DAB   CHECKED BY: DAVID A. BAILEY P.E	PROJECT: C2012-025 DATE2-18-13
UNITED WATE	R IDAHO PLAN
JNION SQUARE SUBE	IVISION NO. 3
HEARTLAND H	OMES LICE 5

IDAHO APPROVED PLAN