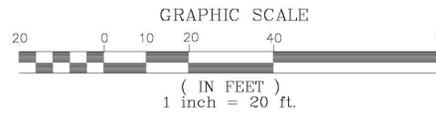


**PRE APPLICATION:**

• **PA16-24**

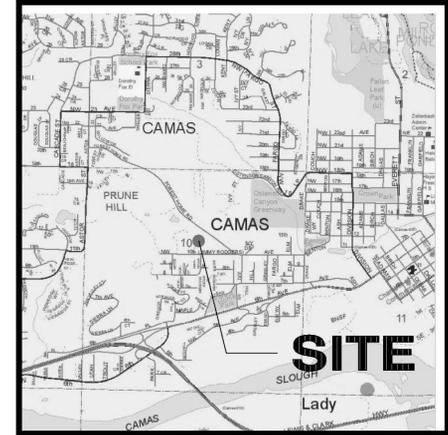
**PERMITS REQUESTED:**

- **CONDITIONAL USE PERMIT**
- **GENERAL APPLICATION**



**FRANKLIN DUPLEX**

A Preliminary Site within a portion of the SW 1/4 of Sec. 35, T2N., R3E., W.M. Clark County, Washington



VICINITY MAP (NTS)

PROPERTY OWNER:  
DEP 2 LLC  
PO BOX 805  
CAMAS WA, 98607

CONTACT:  
JOEL STIRLING  
STERLING DESIGN, INC.  
2208 E. EVERGREEN BLVD.  
VANCOUVER, WA 98661  
PH.: (360) 759-1794  
FAX: (360) 759-4983  
EMAIL: Joel@SterlingDesign.biz

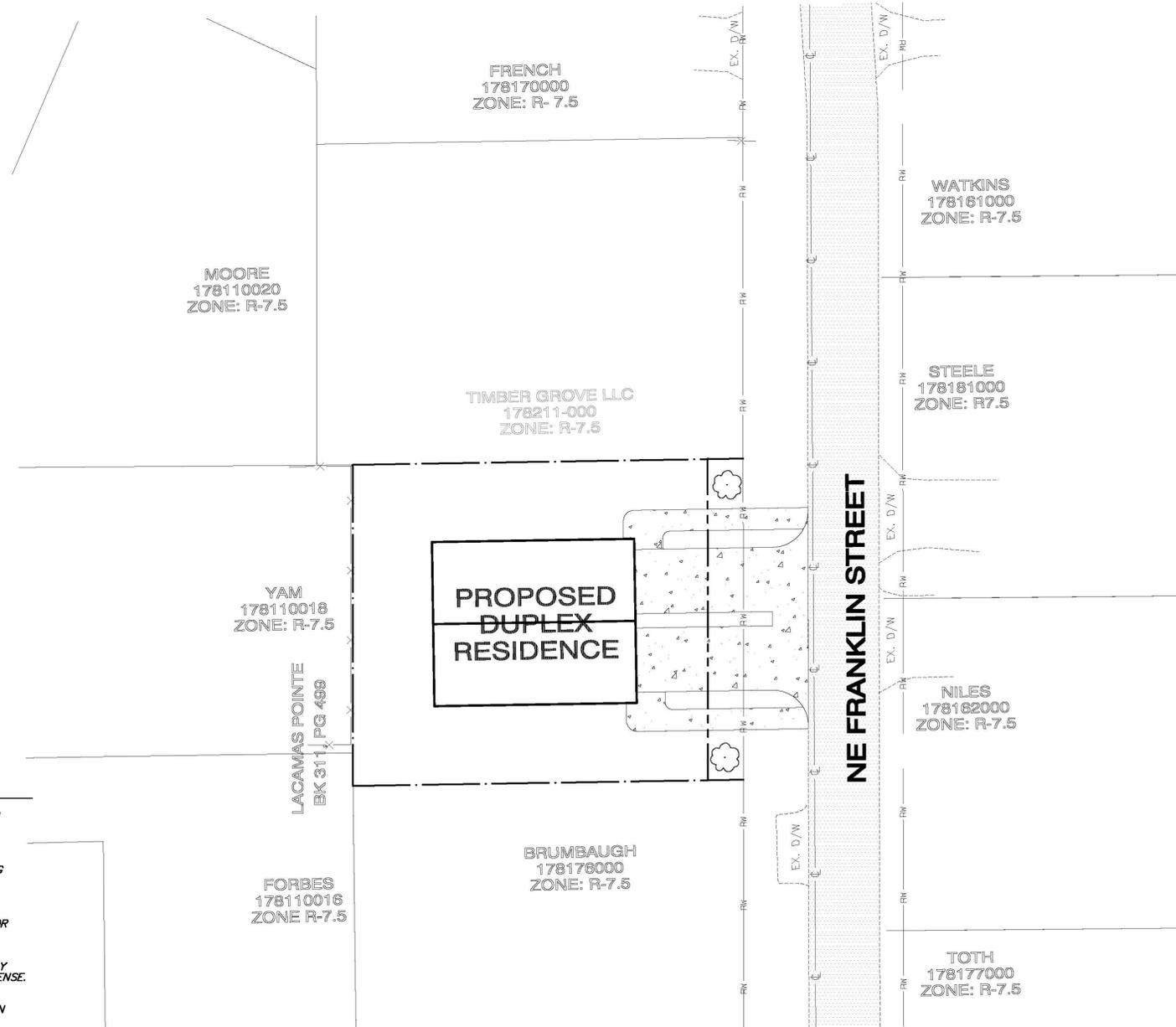
**SITE INFORMATION:**

- AREA: 0.23 ACRES
- TAX LOT: 115
- SERIAL NUMBER: 178207-000
- SITE ADDRESS: 4033 NE FRANKLIN ST, CAMAS, 98607
- ZONING: R-7.5
- COMPREHENSIVE PLAN: SFM

**SHEET INDEX**

COVER SHEET	1
EXISTING CONDITIONS PLAN	2
BOUNDARY SURVEY	3
SITE PLAN	4
GRADING & EROSION CONTROL PLAN	5
UTILITY CONNECTIONS PLAN	6
EXAMPLE RESIDENTIAL DUPLEX PLANS	7
DETAILS SHEET	8
DETAILS SHEET	9
DETAILS SHEET	10

**TYPE III CONDITIONAL USE PERMIT**



**GENERAL NOTES:**

- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2006 EDITION OF THE WSDOT/APWA STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AND STANDARD DETAIL SHEETS ATTACHED HERE IN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES, INCLUDING THE INVERT AND TOP ELEVATIONS AT CROSSING LOCATIONS, PRIOR TO THE START OF CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS.
- CONTRACTOR SHALL CALL CLARK COUNTY'S 24-HOUR UTILITY NOTIFICATION CENTER AT (360) 696-4848 OR (800) 553-4344 FOR UTILITIES LOCATE, A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING MONUMENTS, PROPERTY CORNERS AND SURVEY MARKERS SHALL BE PROTECTED. REPLACEMENT OF LOST, DESTROYED OR DAMAGED MARKERS SHALL BE DONE BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH R.C.W. 58.17 AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL NOT EXCAVATE OVER FOUR FEET IN DEPTH WITHOUT USING ADEQUATE SAFETY MEASURES. THE CONTRACTOR IS REFERRED TO TITLE 296 W.A.C., PART N FOR EXCAVATION, TRENCHING AND SHORING REQUIREMENTS.
- ALL UTILITIES SHALL HAVE A GRANULAR BACKFILL APPROVED BY THE CITY OF CAMAS. WATER SETTLEMENT OF UTILITY TRENCHES IS NOT ALLOWED.
- ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION/SEDIMENT CONTROL PLAN AND CITY OF CAMAS EROSION/SEDIMENT CONTROL DETAILS PRIOR TO ANY CLEARING OR THE START OF ANY CONSTRUCTION.
- IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY ENGINEERING STAFF.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF CAMAS PUBLIC WORKS DEPARTMENT. APPROVAL SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- THE DEVELOPER/CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE CITY OF CAMAS ENGINEERING DEPARTMENT PRIOR TO COMMENCING ANY WORK.
- ANY SIGNIFICANT DEVIATIONS FROM THE PLANS WILL REQUIRE A SUBMITTAL FROM THE APPLICANT'S ENGINEER AND APPROVAL FROM THE CITY OF CAMAS ENGINEERING DEPARTMENT.
- AN EROSION/SEDIMENT CONTROL BOND WILL BE REQUIRED BY THE CITY OF CAMAS PRIOR TO WORK COMMENCING.

**NOTE:**

Existing utilities shown are approximate only from utility records and as visible at the site. Contractor shall verify presence, location, depth & slope of any and all existing utilities prior to construction. Contact One Call Concepts at (800) 424-5555.

PREPARED BY:  
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2208 E. EVERGREEN BLVD  
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PH. (360) 759-1794  
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mailto:sterlingdesign.biz

**STERLING DESIGN, INC.**

**COVER SHEET**

**FRANKLIN DUPLEX SOUTH**

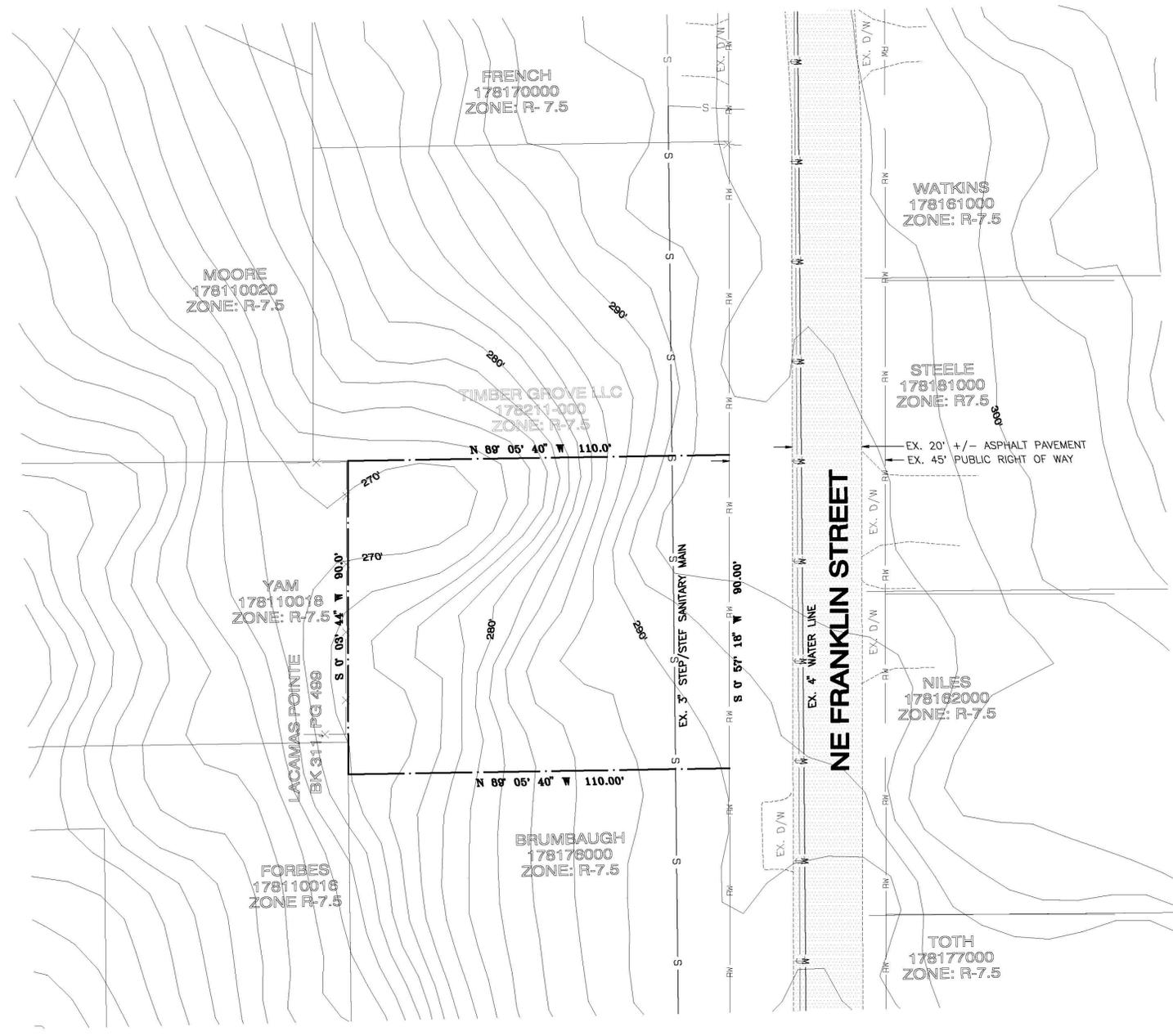
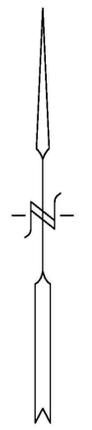
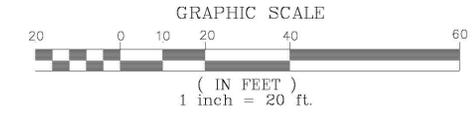
Project:



<b>CITY OF CAMAS</b>	
CITY ENGINEER	DATE
REVISION NO.	SHEETS AFFECTED
INITIAL APPROVAL	DATE

**SITE INFORMATION**

ALIGNMENT & FIELD DATA: <b>MINISTER &amp; GLAESER SURVEYING, INC. (360) 694-3313</b>	Scale: <b>AS SHOWN</b>
SOIL TYPE(s): <b>HcD &amp; HcB</b>	HYDROLOGIC GROUP: <b>C</b>
SOILS TESTING BY: <b>JGS/BC</b>	AASHTO CLASSIFICATION: <b>A-7</b>
SITE LOCATION: <b>CLARK COUNTY, WA</b>	Project Number: <b>708</b>
SITE AREA: <b>0.23 ACRES</b>	Design/Drawn: <b>JGS/BC</b>
APPROX. SURFACE ELEV.: <b>270'-294"</b>	DATE: <b>JAN. 2017</b>
FILENAME: <b>S\708-Prelim.pro</b>	Drawing Date: <b>JAN. 2017</b>
	Sheet 1 of 10 Sheet(s)



**DRY UTILITY NOTE:**  
 POWER, CA TV AND OTHER FRANCHISE UTILITIES ARE ON OVERHEAD LINES ALONG THE EAST SIDE OF FRANKLIN ST.

REFER TO SHEET 3 FOR SITE SURVEY INFORMATION

NOTE:  
 Existing utilities shown are approximate only from utility records and as visible at the site. Contractor shall verify presence, location, depth & slope of any and all existing utilities prior to construction. Contact One Call Concepts at (800) 424-5555.

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 PH. (360) 759-1794  
 FAX (360) 759-4983  
 mail@sterlingdesign.biz

**STERLING DESIGN, INC.**

Sheet Description:  
**EXISTING CONDITIONS PLAN**

Project:  
**FRANKLIN DUPLEX SOUTH**



**SITE INFORMATION**

ALIGNMENT & FIELD DATA:		Scale: AS SHOWN
MINISTER & GLAESER SURVEYING, INC. (360) 894-3313		Project Number: 708
SOIL TYPE(S):	HYDROLOGIC GROUP: AASHTO CLASSIFICATION:	DATE:
HoD & HoB	C	A-7
SOILS TESTING BY:	DATE:	Design/Drawn: JGS/BC
SITE LOCATION: CLARK COUNTY, WA	APPROX SURFACE ELEV: 270'-294"	Drawing Date: JAN. 2017
SITE AREA: 0.29 ACRES	FILENAME: S\; 708-Prelim.pro	Sheet 2 of 10 Sheet(s)

# SURVEY

IN A PORTION OF THE  
SE 1/4 OF THE SW 1/4  
OF SECTION 35  
T. 2 N., R. 3 E., W. M.  
CITY OF CAMAS  
CLARK COUNTY, WASHINGTON

**LEGEND:**

- INDICATES 1/2" x 24" IRON ROD WITH "BETHLE 37535" CAP FOUND PER SURVEY REFERENCE #1
- ⊙ INDICATES 1/2" x 24" IRON ROD WITH "DENNY 32451" CAP SET
- ( ) INDICATES RECORD DISTANCE
- X- INDICATES RIGHT-OF-WAY
- ASSR. NO. INDICATES ASSESSOR TAX IDENTIFICATION NUMBER

**SURVEY REFERENCES:**

- 1) LACAMAS POINTE BOOK 311, PAGE 499
- 2) TOWLE SURVEY BOOK 048, PAGE 068
- 3) TOWLE SURVEY BOOK 049, PAGE 168
- 4) LACAMAS SUMMIT PHASE 2 BOOK 310, PAGE 894

**DEED REFERENCES:**

- ADDRESS: 4055 NE FRANKLIN ST.  
GRANTOR: ROGER NEERLAND AND OLLIE NEERLAND  
GRANTEE: DONALD GRAFTON AND JOY GRAFTON  
AF NO.: G 738295  
DATE: 09-27-76
- ADDRESS: 4033 NE FRANKLIN ST.  
GRANTOR: RALPH LYHLEN JOHNSON  
GRANTEE: DONALD GRAFTON AND JOY GRAFTON  
AF NO.: G738294  
DATE: 09-27-76

**NARRATIVE:**

THE PURPOSE OF THIS SURVEY WAS TO MONUMENT THE PERIMETER BOUNDARIES OF PARCELS IDENTIFIED AS ASSR. NO.'S 178211000 & 178207000. I HELD SURVEY REFERENCE NO. 1 TO CONTROL THE BASIS OF BEARING AND THE WEST LINE OF SAID PARCELS. I HELD THE EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 35 TO CONTROL THE NORTHERLY DIRECTION OF THE DEED CALLS. THIS CORRESPONDS WITH AUDITOR'S FILE NO.'S 3386062, 8704300141 & 8810210662 RECORDS OF CLARK COUNTY, OF WHICH DEFINE THE LOCATION OF THE EAST LINE OF NE FRANKLIN STREET (FORMERLY KNOWN AS LAKEVIEW COUNTY ROAD) TO BE PARALLEL WITH SAID EAST LINE OF THE SOUTHWEST QUARTER OF SECTION 35. I HELD THE EASTERLY & WESTERLY DIRECTION OF THE DEED CALLS TO BE PARALLEL WITH THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF SECTION 35.

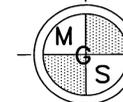
**AUDITOR'S CERTIFICATE**

FILED FOR RECORD THIS 27 DAY OF July, 2016  
AT 7:40 O'CLOCK PM, IN BOOK 65 OF SURVEYS,  
AT PAGE 165  
AT THE REQUEST OF MINISTER AND GLAESER SURVEYING INC.  
*John Bereman*  
DEPUTY/COUNTY AUDITOR

**SURVEYOR'S CERTIFICATE**

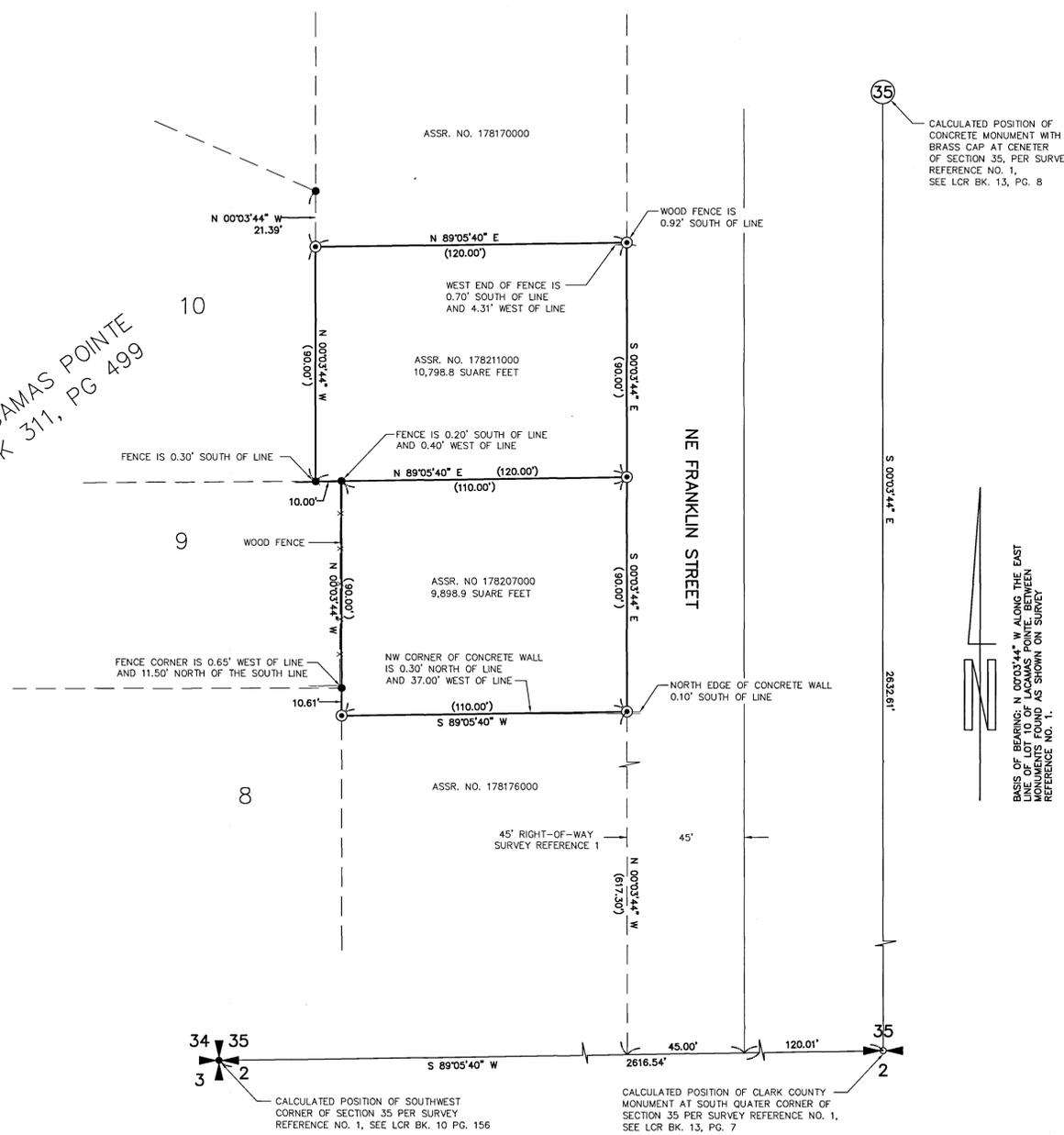
THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF DAVE GALANTER, IN JUNE 2016.

*Edmund Denny Jr.* 2-25-2016  
EDMUND DENNY, JR., PROFESSIONAL LAND SURVEYOR, LS# 32451

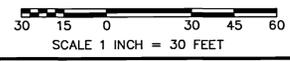
 <p><b>MINISTER-GLAESER SURVEYING INC.</b> 2200 E. EVERGREEN BLVD. VANCOUVER, WA 98661 (360) 694-3313</p>	<p>SCALE: 1"=30' JOB NO. 16-318 DATE: 07-25-16 CALC BY: ED DRAWN BY: ED CHECKED BY: ED SHEET 1 OF 1</p>
--	---

65-165

LACAMAS POINTE  
BK 311, PG 499



BASIS OF BEARING: N 89°05'40" W ALONG THE EAST LINE OF LOT 10 OF LACAMAS POINTE BETWEEN MONUMENTS FOUND AS SHOWN ON SURVEY REFERENCE NO. 1.



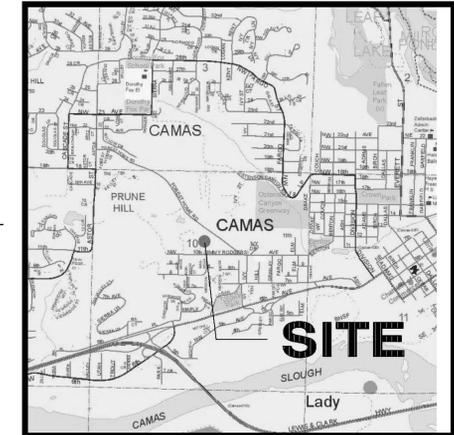
DWG FILE: 151955.DWG

MINISTER AND GLAESER SURVEYING, INC. MAKES NO WARRANTIES AS TO MATTERS OF UNWRITTEN TITLE SUCH AS ADVERSE POSSESSION, ACQUIESCENCE, ESTOPPLE, ETC.

A FIELD TRAVERSE WAS PERFORMED USING A ONE SECOND TOTAL STATION. THE FIELD TRAVERSE MET THE MINIMUM STANDARDS FOR SURVEYS AS DESIGNATED IN WAC 332-130-090. ALL CORNERS NOTED AS FOUND WERE VISITED ON 06-30-16.

# FRANKLIN DUPLEX

A Preliminary Site within a portion of the SW 1/4 of Sec. 35, T2N., R3E., W.M. Clark County, Washington



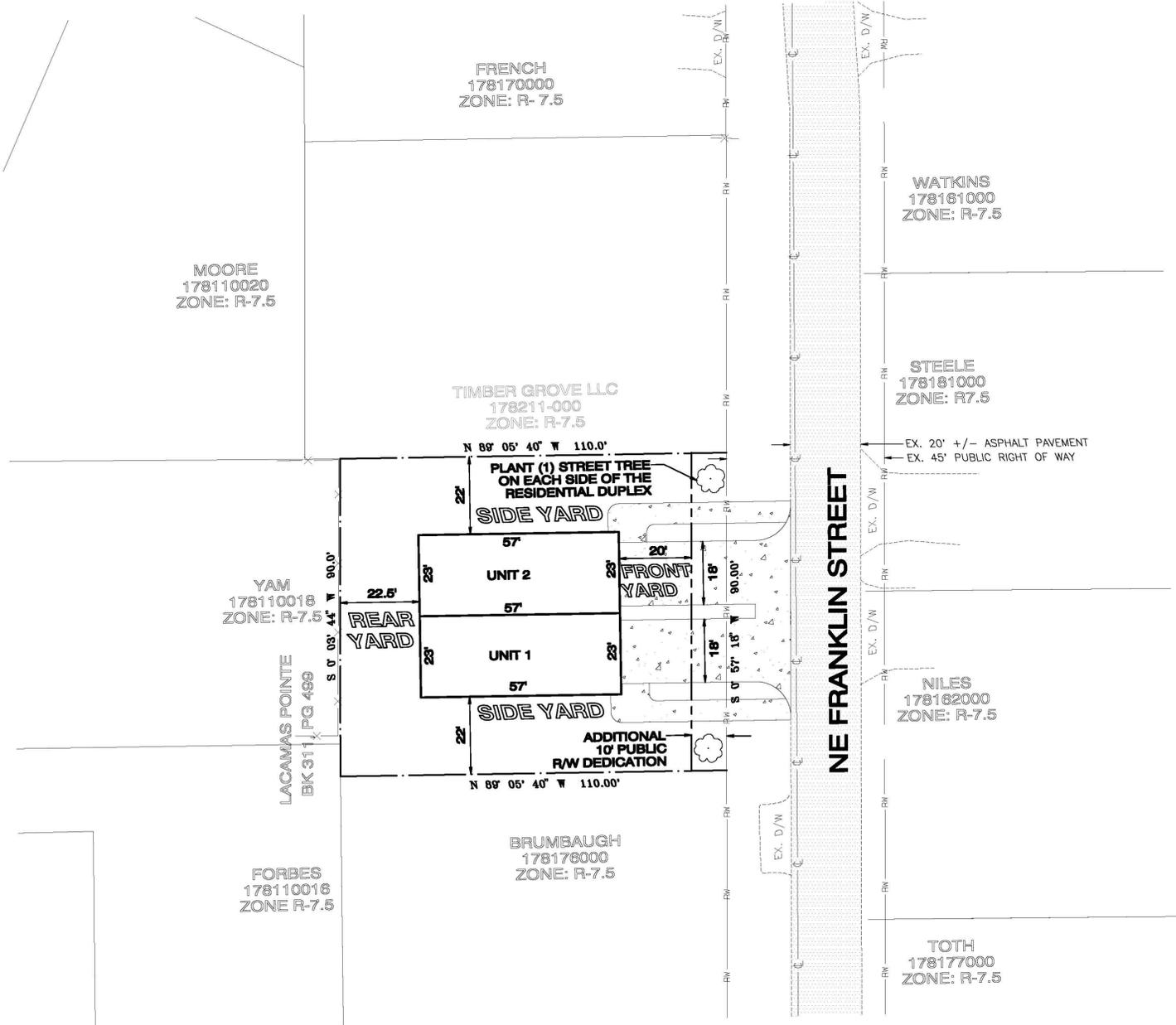
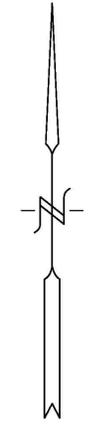
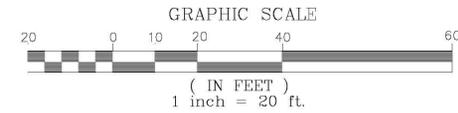
VICINITY MAP (NTS)

PREPARED BY:  
STERLING DESIGN, INC.  
2208 E. EVERGREEN BLVD  
VANCOUVER, WA 98661  
PH. (360) 759-1794  
FAX (360) 759-4983  
mail@sterlingdesign.biz

STERLING DESIGN, INC.

PRELIMINARY SITE PLAN

FRANKLIN DUPLEX SOUTH



### PRELIMINARY SITE INFORMATION

#### GENERAL INFORMATION

- APPLICANT/CONTACT: JOEL STIRLING, 2208 E. EVERGREEN BLVD, VANCOUVER, WA 98661, PH. (360) 759-1794, JOEL@STERLINGDESIGN.BIZ
- PROPERTY OWNER: DEP 2 LLC, PO BOX 805, CAMAS WA, 98607
- AREA: 0.23 ACRES
- TAX LOT: 115
- SERIAL NUMBER: 178207-000
- SITE ADDRESS: 4033 NE FRANKLIN STREET, CAMAS, 98607
- ZONING: R-7.5 (SEE REPORT BY CASCADIA ECOLOGICAL LAND SERVICES)
- COMPREHENSIVE PLAN: SFM

#### EXISTING CONDITIONS (REFER TO SHEETS 2 & 3)

- Environmental**
- TOPOGRAPHY IS SHOWN ON THE PROPOSED DEVELOPMENT PLAN.
  - THERE ARE NO SITE WATERCOURSES (STREAMS, RIVERS, ETC) OR AREAS PRONE TO FLOODING AS SHOWN.
  - THERE ARE NO FEMA DESIGNATED FLOODPLAINS, FLOOD FRINGE, OR FLOODWAYS ON THE SITE.
  - THERE ARE NO DESIGNATED SHORELINE AREAS ON THE SITE.
  - THERE ARE NO WATER BODIES OR WETLANDS ON THE SITE.
  - THERE ARE NO WETLAND DELINEATION AREAS ON THE SITE.
  - THERE ARE UNSTABLE SLOPES OR LANDSLIDE HAZARD AREAS ON THE SITE PER CLARK COUNTY MAPS ONLINE.
  - THERE ARE NO KNOWN RIPARIAN HABITAT AND OR VEGETATION BUFFERS ON THE SITE (SEE REPORT BY CASCADIA ECOLOGICAL LAND SERVICES)
  - THERE ARE NO KNOWN SIGNIFICANT HISTORIC, CULTURAL OR ARCHAEOLOGICAL RESOURCES ON THE SITE.
- Land Use and Transportation**
- THE PROPOSED SITE AREA IS APPROX. 0.23 ACRES. THE LAYOUT AND DIMENSIONS OF EXISTING PARCEL ARE SHOWN.
  - THERE ARE EXISTING STRUCTURES ON THE SITE.
  - EXISTING ACCESS, DRAINAGE & UTILITY EASEMENT LOCATIONS & WIDTHS ARE AS SHOWN.
  - NAME, LOCATION & WIDTH OF EXISTING RIGHT OF WAY IS SHOWN.
  - LOCATIONS & DIMENSIONS OF CENTERLINE & RIGHT-OF-WAY FOR NW 10th AVE. ARE SHOWN.
  - NAME, LOCATION, WIDTH & SURFACING MATERIAL OF ROADWAY & EASEMENTS AND WHETHER PUBLIC OR PRIVATE ARE SHOWN.
  - LOCATION OF EXISTING DRIVEWAYS ALONG NW 10th AVE ARE SHOWN.
  - LOCATION & WIDTH OF PEDESTRIAN & BICYCLE FACILITIES WITHIN 100' OF THE SITE ARE AS SHOWN.
  - THERE ARE NO TRANSIT ROUTES & STOPS WITHIN 600' OF THE DEVELOPMENT SITE. (PER THE GIS PACKET)

- Water and Sewer**
- THE NEAREST EXISTING FIRE HYDRANTS TO THE SITE ARE SHOWN.
  - THERE ARE NO KNOWN SEPTIC SYSTEM(S) OR WELL(S) ON THIS SITE.

#### PROPOSED IMPROVEMENTS

- Environmental**
- THERE ARE NO WETLANDS, STEEP SLOPE BUFFER AREAS/PROTECTED AREAS, OR PLANNED ENHANCEMENT AREAS LOCATED ON THE PORTION OF THE SITE WHERE NEW HOMES WILL BE CONSTRUCTED. PLANTING & BUFFER ENHANCEMENT WILL OCCUR WITHIN PRIVATE TRACTS.
- Land Use and Transportation**
- THE CONFIGURATION & DIMENSIONS OF BOUNDARIES, PROPOSED LOTS, DRAINAGE TRACTS & EASEMENTS ARE SHOWN ON THE PLAN. THERE ARE NO PARKS OR OPEN SPACES PROPOSED AS PART OF THE SHORT PLAT.
  - DIMENSIONS OF ALL PROPOSED EASEMENTS ARE SHOWN ON PLAN.
  - THERE ARE EXISTING STRUCTURES ON THE SITE THAT WILL REMAIN.
  - ALL LOCATIONS AND DIMENSIONS OF ROAD RIGHT-OF-WAYS OR ADJACENT TO THE SITE ARE SHOWN ON THE PLAN.
  - PEDESTRIAN FACILITIES ARE NOT PROPOSED WITH THIS PROJECT. THERE ARE NO TRANSIT ROUTES FRONTING THE SITE.

TABLE 18.09.040

BUILDING SETBACKS:	
FRONT:	20'
SIDE STREET:	20'
SIDE INTERIOR:	5'
REAR:	25'
MAX. LOT COVERAGE:	40%
MAX. BLDG. HEIGHT:	35'

**RESIDENTIAL DUPLEX WILL BE SUBJECT TO THE PAYMENT OF REQUIRED IMPACT FEES AT THE TIME OF BUILDING PERMIT ISSUANCE**

**BUILDING FOOTPRINT NOTE:**  
THE RESIDENTIAL DUPLEX BUILDING FOOT PRINT SHOWN IS FOR THE PURPOSES OF APPROVAL OF THE CONDITIONAL USE PERMIT. ACTUAL BUILDING PLANS MAY CHANGE DURING BUILDING PERMIT SUBMITTAL AND REVIEW TO BETTER FIT WITH CITY OF CAMAS COMPATIBILITY STANDARDS. THE PROPOSED RESIDENTIAL DUPLEX WILL MEET ALL APPLICABLE SETBACK AND LOT COVERAGE REQUIREMENTS OF THE CITY OF CAMAS CODE.

NOTE:  
Existing utilities shown are approximate only from utility records and as visible at the site. Contractor shall verify presence, location, depth & slope of any and all existing utilities prior to construction. Contact One Call Concepts at (800) 424-5555.

### SITE INFORMATION

ALIGNMENT & FIELD DATA:		MINISTER & GLAESER SURVEYING, INC. (360) 894-3313		Scale: AS SHOWN
SOIL TYPE(S):	HYDROLOGIC GROUP:	AASHTO CLASSIFICATION:	Project Number: 708	
HoD & HoB	C	A-7	Design/Drawn: JGS/BC	
SOILS TESTING BY:	DATE:		Drawing Date: JAN. 2017	
SITE LOCATION: CLARK COUNTY, WA	APPROX SURFACE ELEV: 270'-294"			
SITE AREA: 0.23 ACRES	FILENAME: S\708-Prelim.pro		Sheet 4 of 10 Sheet(s)	

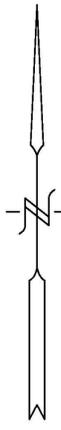
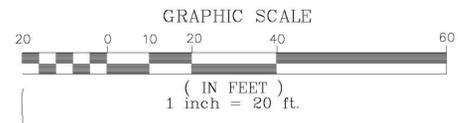
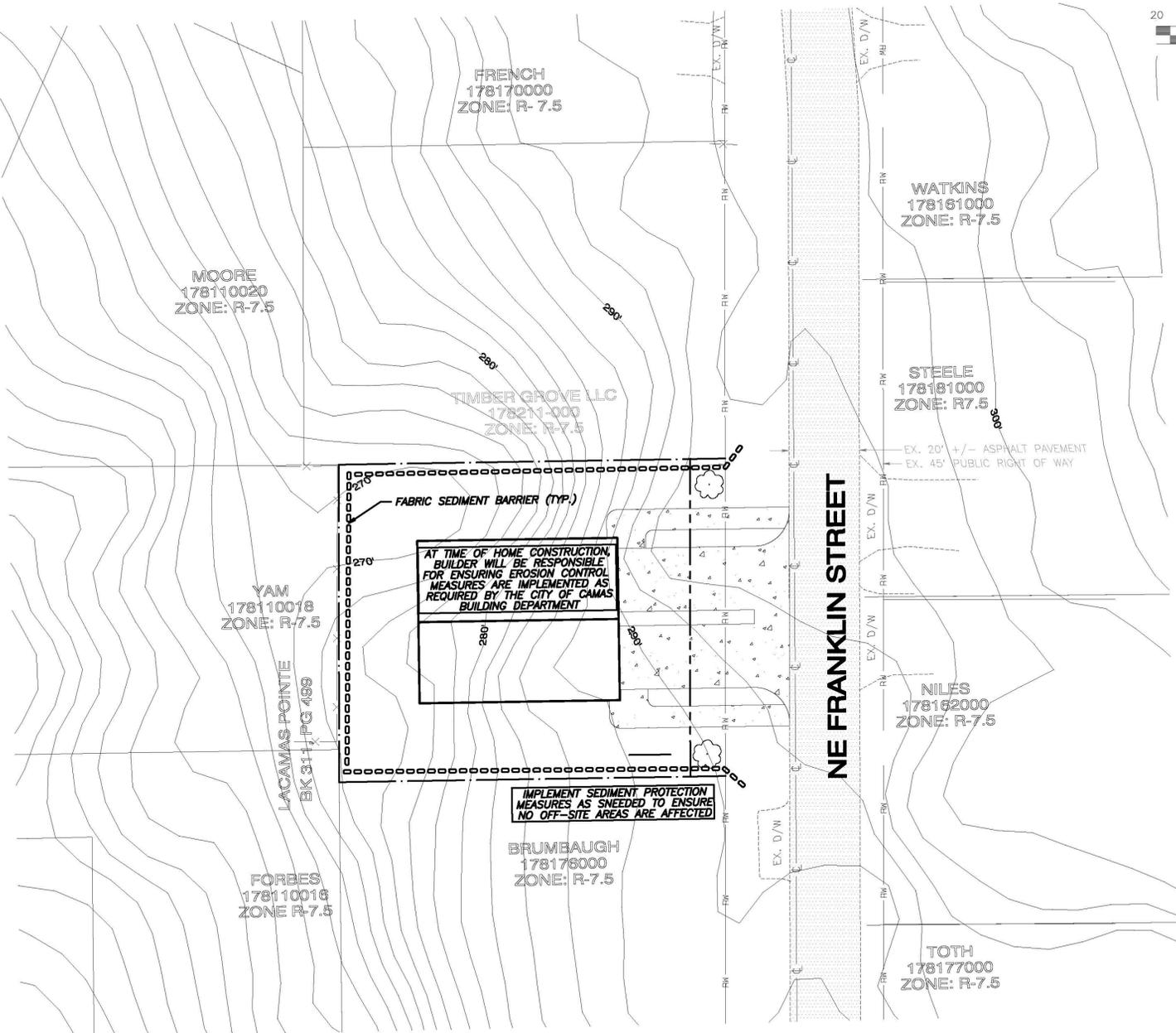
**EROSION/SEDIMENT CONTROL NOTES:**

1. THE EROSION/SEDIMENT CONTROL (ESC) PLAN IS TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORT OF LOOSE SOILS TO THE PROPERTY OUTSIDE OF THE CONSTRUCTION AREA AND AROUND THE CONSTRUCTION SITE. THE ESC MEASURES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
2. THE IMPLEMENTATION OF THE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADE OF THE ESC MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND PERMANENT VEGETATION/LANDSCAPING IS ESTABLISHED.
3. IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY ENGINEERING STAFF.
4. THE CONTRACTORS SHALL BE RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE CITY OF CAMAS EROSION/SEDIMENT CONTROL HANDBOOK AND THE STORMWATER MANUAL IN WASHINGTON STATE (LATEST EDITION), VOL. II.
5. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO DISTURBING AND EXPOSING ANY SOIL SURFACES (I.E. CONSTRUCTION ENTRANCES, FILTER FABRIC/STRAWBALE SEDIMENT BARRIERS, AND SEDIMENTATION TRAPS) AND MAINTAINED FOR THE DURATION OF THE PROJECT. TRAPPED SEDIMENT IN EXCESS OF 1 FOOT SHALL BE REMOVED OR STABILIZED ON-SITE. DISTURBED SOIL AREAS RESULTING FROM VEGETATION REMOVAL SHALL BE PERMANENTLY STABILIZED. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
6. TO MINIMIZE EROSION AND SEDIMENTATION TRANSPORTATION, EARTHWORK SHALL NOT BE PERFORMED WHILE SOILS ARE MORE THAN 5% ABOVE OPTIMUM MOISTURE CONTENT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE CLEARING LIMITS AND/OR ANY EASEMENTS, SENSITIVE OR CRITICAL AREAS, AND THEIR BUFFERS, TREES, AND DRAINAGE COURSES FLAGGED PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. FLAGGING LIMITS ARE TO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
8. REMOVE ONLY THOSE TREES AND SHRUBS THAT NEED TO BE REMOVED FOR THE CONSTRUCTION OF ROADS, SIDEWALKS, UTILITIES, GRADING LIMITS AND STORMWATER FACILITIES.
9. ALL ROAD EXISTING AND NEWLY CONSTRUCTED CATCH BASINS OR CURB INLETS AFFECTED BY CONSTRUCTION SHALL BE PROTECTED AGAINST SEDIMENT DEPOSITS. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
10. ALL POLLUTANTS THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER SYSTEM.
11. ALL DISTURBED SOIL SURFACES ARE TO BE STABILIZED BY A SUITABLE APPLICATION OF BEST MANAGEMENT PRACTICES. NO SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN TWO DAYS DURING THE PERIOD OF OCTOBER 1 THRU JULY 5. FROM JULY 5 THRU OCTOBER 1, NO SOIL SHALL REMAIN UNSTABILIZED FOR MORE THAN 7 DAYS. STABILIZATION OF DISTURBED SOIL AREAS CAN CONSIST OF HYDROSEEDING OR HAND-SEEDING, MULCHING, PLACEMENT OF EROSION CONTROL BLANKETS OR PLASTIC. ALL SEEDING AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENSURE THAT THE REGROWTH OF VEGETATION IS AS SOON AS POSSIBLE.
12. ALL TEMPORARY SEDIMENT AND EROSION CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR POLICING THE JOB SITE DAILY AND MAINTAINING THE EROSION/SEDIMENT CONTROL MEASURES THROUGHOUT ALL PHASES OF CONSTRUCTION. AN INSPECTION LOG SHALL BE KEPT AND MADE AVAILABLE TO THE CITY OF CAMAS. THE POLICING AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION DEVICE BEFORE DISCHARGE TO SURFACE.
  - REMOVAL OF TRAPPED SILT AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.
  - ADDITIONAL PROTECTIVE MEASURES DUE TO JOB SITE OR WEATHER CONDITIONS AS REQUIRED BY CITY OF CAMAS WATER QUALITY.
  - MONITORING OF VEHICLES LEAVING THE SITE TO MINIMIZE TRANSMISSION OF LOOSE SOILS TO THE PUBLIC ROADWAYS.
  - PLACING OF THE STRAWBALE SEDIMENTATION BARRIER AT THE ENTRANCE DURING PRECIPITATION OR AT THE END OF THE WORKDAY BEFORE LEAVING THE SITE.
  - VERIFY THAT ALL PROPERTIES ADJACENT TO THE PROJECT SITE ARE PROTECTED FROM SEDIMENTATION DEPOSITION. THIS MAY BE ACCOMPLISHED BY INSTALLING PERIMETER CONTROLS SUCH AS SEDIMENTATION BARRIERS, FILTERS OR DIKES, SEDIMENTATION BASINS/TRAPS, OR BY A COMBINATION OF SUCH MEASURES.
14. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES SHALL BE STABILIZED IN ACCORDANCE WITH EROSION/SEDIMENT CONTROL NOTE 11. SLOPES FOUND TO BE ERODING EXCESSIVELY WITHIN TWO YEARS OF CONSTRUCTION MUST BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES. THESE MEASURES MAY CONSIST OF ROUGHENED SOIL SURFACES, INTERCEPTORS, DIVERSIONS OR TERRACES, TEMPORARY OR PERMANENT CHANNELS, ADDITIONAL VEGETATION, OR PIPE SLOPE DRAINS AS REQUIRED BY CITY OF CAMAS WATER QUALITY UNTIL THE PROBLEM IS CORRECTED.
15. THE ESC MEASURES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING UNDERGROUND UTILITIES AS SPECIFIED BELOW:
  - WHERE FEASIBLE, NO MORE THAN 500 FEET OF TRENCH SHALL BE OPEN AT ONE TIME.
  - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
  - TRENCH DE-WATER DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND.
17. CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER, DURING ALL GRADING ACTIVITIES FOR FIELD VERIFICATION OF FILL PLACEMENT AND SITE SPECIFIC GRADING RECOMMENDATIONS. CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION FROM GEOTECHNICAL ENGINEER, FOR STRUCTURAL FILLS PRIOR TO ACCEPTANCE OF PROJECT BY CITY OF CAMAS.
18. SLOPES SHALL BE HYDRO-SEEDED AS SOON AS PROPOSED GRADES ARE ESTABLISHED. CONTRACTOR TO PREPARE SLOPES FOR SEED BY "TRACKING" SLOPES AS PER ATTACHED DETAIL.

**EROSION PROTECTION SHALL BE PLACED ON ALL OFFSITE STORM STRUCTURES DOWNSTREAM OF THE SITE OR AS WILL BE AFFECTED BY SITE CONSTRUCTION (TYP.)**

**MINIMAL GROUND DISTURBANCE WILL TAKE PLACE ON THE PROPERTY AS PART OF THE RESIDENTIAL DUPLEX CONSTRUCTION AND WILL BE LIMITED TO THE MINIMUM REQUIRED FOR FOUNDATION INSTALLATION, DRIVEWAY CONSTRUCTION AND YARD CONTOURING.**

**IN THE EVENT THAT ANY ITEM OF ARCHAEOLOGICAL INTEREST IS UNCOVERED DURING THE COURSE OF A PERMITTED GROUND DISTURBING ACTION OR ACTIVITY, ALL GROUND DISTURBING ACTIVITIES SHALL IMMEDIATELY CEASE AND THE APPLICANT SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AND DAHP**



**PREPARED BY:**  
 STERLING DESIGN, INC.  
 2208 E. EVERGREEN BLVD  
 VANCOUVER, WA 98661  
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 FAX: (360) 759-4983  
 mail@sterlingdesign.biz

**STERLING DESIGN, INC.**

**Sheet Description:**  
 GRADING & EROSION CONTROL PLAN

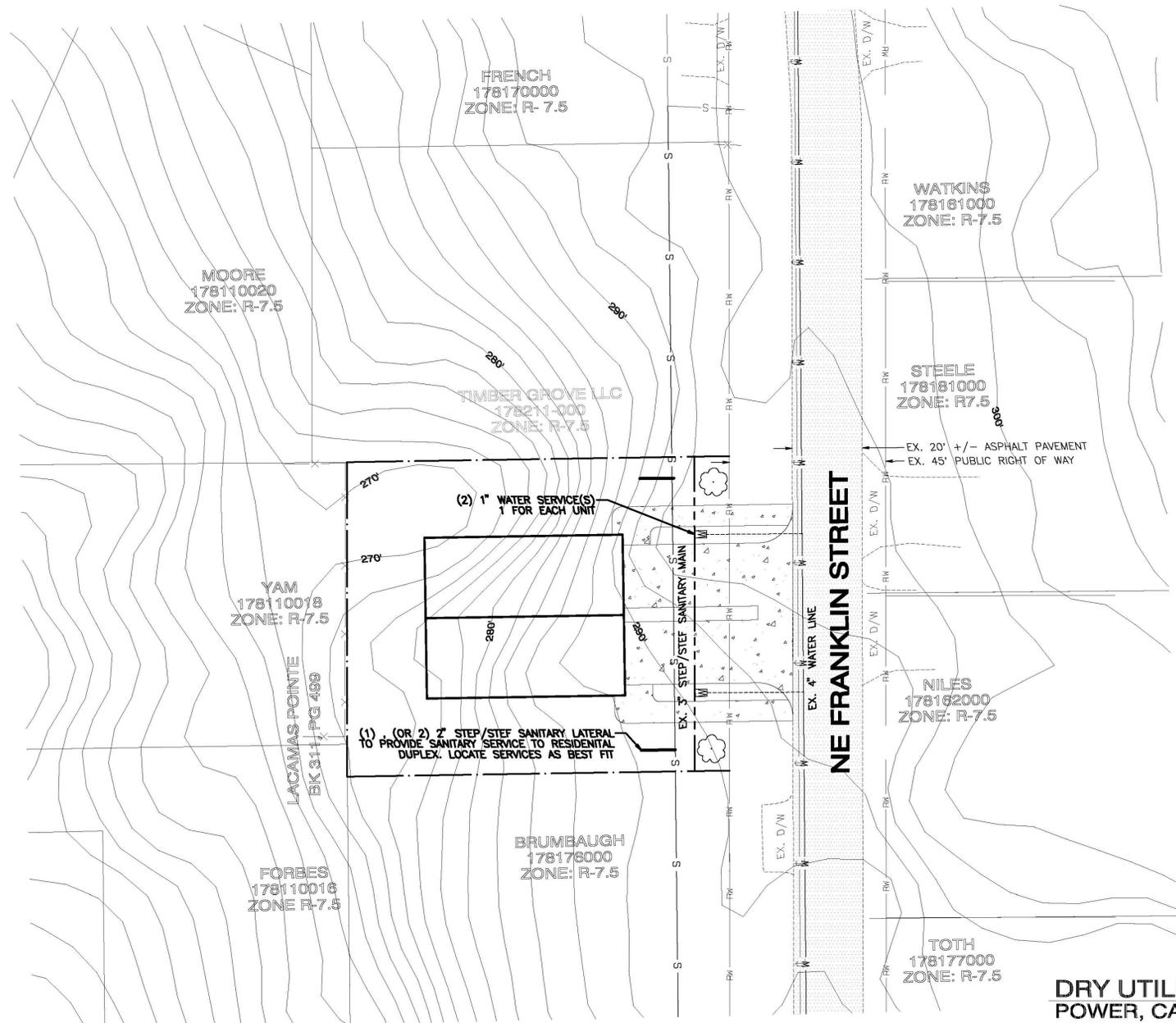
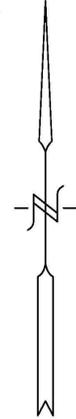
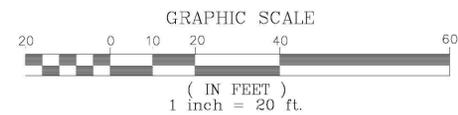
**Project:**  
 FRANKLIN DUPLEX SOUTH



**SITE INFORMATION**

ALIGNMENT & FIELD DATA:	MINISTER & GLAESER SURVEYING, INC. (360) 894-3313	Scale:	AS SHOWN
SOIL TYPE(S):	HYDROLOGIC GROUP: C	AASHTO CLASSIFICATION:	A-7
SOILS TESTING BY:	HoD & HoB	DATE:	Project Number: 708
SITE LOCATION:	CLARK COUNTY, WA	APPROX SURFACE ELEV:	270'-294"
SITE AREA:	0.29 ACRES	FILENAME:	S\; 708-Prelim.pro
		Design/Drawn:	JGS/BC
		Drawing Date:	JAN. 2017
		Sheet	5 of 10 Sheet(s)

**NOTE:**  
 Existing utilities shown are approximate only from utility records and as visible at the site. Contractor shall verify presence, location, depth & slope of any and all existing utilities prior to construction. Contact One Call Concepts at (800) 424-5555.



**UTILITY NOTE(S)  
RESIDENTIAL DUPLEX  
WILL BE PROVIDED WITH:  
1 (OR 2) - 6" SANITARY LATERAL  
2- 1" WATER SERVICES**

**UTILITIES WILL BE INSTALLED IN  
ACCORDANCE TO CITY OF CAMAS  
STANDARDS**

**RESIDENTIAL FIRE SPRINKLERS ARE REQUIRED  
PER NFPA 13D GUIDELINES AND CAMAS FMO**

**DRY UTILITY NOTE:  
POWER, CA TV AND OTHER FRANCHISE  
UTILITIES ARE ON OVERHEAD LINES  
ALONG THE EAST SIDE OF FRANKLIN ST.**

**NOTE:**  
Existing utilities shown are approximate only from utility records and as visible at the site. Contractor shall verify presence, location, depth & slope of any and all existing utilities prior to construction. Contact One Call Concepts at (800) 424-5555.

**SITE INFORMATION**

ALIGNMENT & FIELD DATA: <b>MINISTER &amp; GLAESER SURVEYING, INC. (360) 894-3313</b>		Scale: <b>AS SHOWN</b>
SOIL TYPE(S): <b>HoD &amp; HoB</b>	HYDROLOGIC GROUP: <b>C</b>	AASHTO CLASSIFICATION: <b>A-7</b>
SOILS TESTING BY: <b>-</b>	DATE: <b>-</b>	Project Number: <b>708</b>
SITE LOCATION: <b>CLARK COUNTY, WA</b>	APPROX SURFACE ELEV.: <b>270'-294"</b>	Design/ Drawn: <b>JGS/BC</b>
SITE AREA: <b>0.29 ACRES</b>	FILENAME: <b>S\; 708-Prelim.pro</b>	Drawing Date: <b>JAN. 2017</b>
		Sheet <b>6</b> of 10 Sheet(s)

**PREPARED BY:**  
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**STERLING  
DESIGN, INC.**

**UTILITY CONNECTIONS PLAN**

**FRANKLIN DUPLEX  
SOUTH**

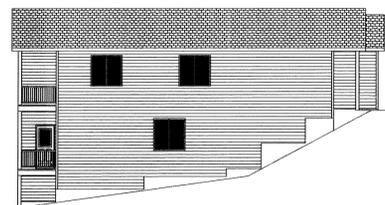




FRONT ELEVATION A  
SCALE 1/4"=1'-0"



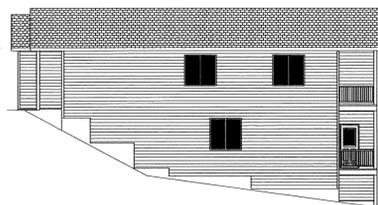
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SCALE 1/4"=1'-0"



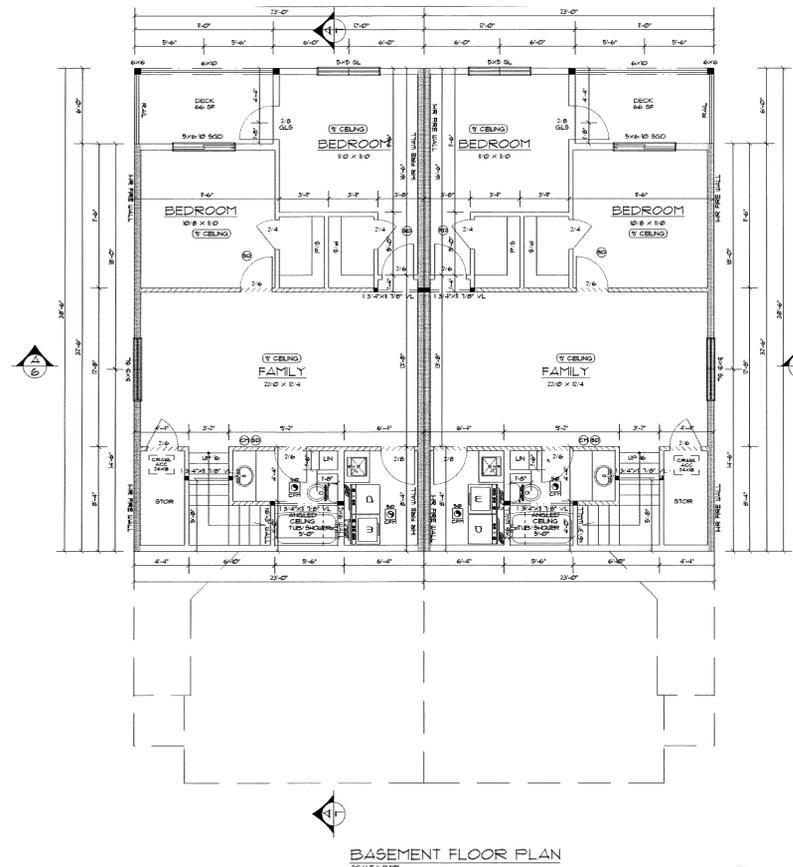
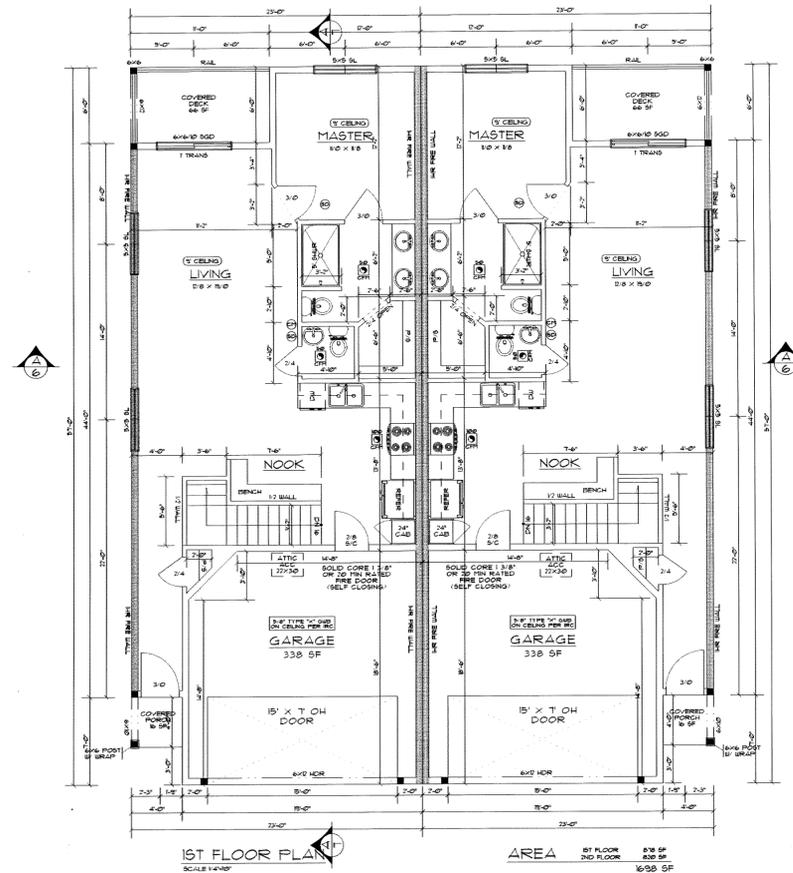
LEFT SIDE ELEVATION  
SCALE 1/4"=1'-0"



REAR ELEVATION  
SCALE 1/4"=1'-0"



RIGHT SIDE ELEVATION  
SCALE 1/4"=1'-0"



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STERLING  
DESIGN, INC.

Sheet Description:  
EXAMPLE RESIDENTIAL  
DUPLEX PLAN

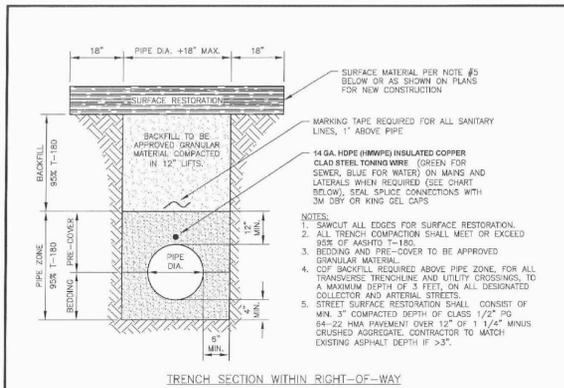
Project:  
FRANKLIN DUPLEX



SITE INFORMATION		Scale:	AS SHOWN
ALIGNMENT & FIELD DATA: MINISTER & GLAESER SURVEYING, INC. (360) 694-3313		Project Number:	708
SOIL TYPE(S): HcD & HcB	HYDROLOGIC GROUP: C	AASHTO CLASSIFICATION: A-7	Design/ Drawn JGS/BC
SOILS TESTING BY:	DATE:	Drawing Date:	JAN. 2017
SITE LOCATION: CLARK COUNTY, WA	APPROX. SURFACE ELEV.: 270'-294"	FILE NAME: S:\708-Prelim.pro	Sheet 7 of 10 Sheet(s)

**GENERAL CONSTRUCTION NOTES:**

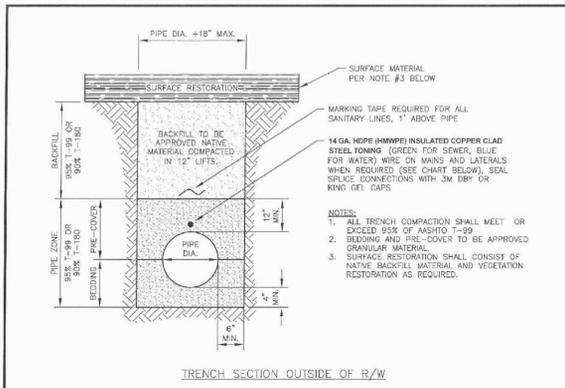
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE MOST RECENTLY ADOPTED EDITION OF THE W.S.D.O.T./APWA "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" AND STANDARD DETAIL SHEETS ATTACHED HERewith.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES, INCLUDING THE INVERT AND TOP ELEVATIONS AT CROSSING LOCATIONS, PRIOR TO THE START OF CONSTRUCTION AND TO NOTIFY THE CITY ENGINEER OF ANY POTENTIAL CONFLICTS.
- CONTRACTOR SHALL CALL CLARK COUNTY'S 24-HOUR UTILITY NOTIFICATION CENTER AT (360) 696-4848 OR (800) 553-4344 FOR UTILITIES LOCATE, A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING MONUMENTS, PROPERTY CORNERS AND SURVEY MARKERS SHALL BE PROTECTED. REPLACEMENT OF LOST, DESTROYED OR DAMAGED MARKERS SHALL BE DONE BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH R.C.W. 48.09 AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOT EXCAVATE OVER FOUR FEET IN DEPTH WITHOUT USING ADEQUATE SAFETY MEASURES. THE CONTRACTOR IS REFERRED TO TITLE 296 W.A.C., PART N FOR EXCAVATION, TRENCHING AND SHORING REQUIREMENTS.
- ALL UTILITIES SHALL HAVE A GRANULAR BACKFILL APPROVED BY THE CITY OF CAMAS. WATER SETTLEMENT OF UTILITY TRENCHES IS NOT ALLOWED. TRENCH LINES LOCATED WITHIN AN EXISTING ROADWAY SHALL BE FLATED OR TOPPED WITH COLD MIX. GRANULAR BACKFILL OVERNIGHT IS NOT ALLOWED. PLATES SHALL HAVE COLD MIX AROUND ALL EDGES.
- ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION/SEDIMENT CONTROL PLAN AND CITY OF CAMAS EROSION/SEDIMENT CONTROL DETAILS PRIOR TO ANY CLEARING OR THE START OF ANY CONSTRUCTION.
- IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A "STOP WORK" ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY ENGINEERING STAFF.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF CAMAS PUBLIC WORKS DEPARTMENT. APPROVAL SHALL BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
- THE DEVELOPER/CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE CITY OF CAMAS ENGINEERING DEPARTMENT PRIOR TO COMMENCING ANY WORK.
- ANY SIGNIFICANT DEVIATIONS FROM THE PLANS WILL REQUIRE A SUBMITTAL FROM THE APPLICANT'S ENGINEER AND APPROVAL FROM THE CITY OF CAMAS ENGINEERING DEPARTMENT.
- AN EROSION/SEDIMENT CONTROL BOND MAY BE REQUIRED BY THE CITY OF CAMAS PRIOR TO WORK COMMENCEMENT.



**MINIMUM PIPE COVER CHART**

UTILITY TYPE	MAIN TYPE	MIN. PIPE (MAIN) COVER	MIN. LATERAL OR SERVICE COVER
WATER	DISTRIBUTION	2.5'	2'
	TRANSMISSION*	3'	2' **
STORM	MAIN	5'	PER PLAN (MIN. 2')
	STEP***	5'	1.5'
SEWER	STEP***	6'	4.5'
	GRAVITY	6'	4.5'
	GRAVITY	6'	4.5'

\* TONING WIRE REQUIRED FOR MAINS 12" DIA. AND LARGER  
 \*\* SERVICES ONLY ALLOWED WHERE APPROVED  
 \*\*\* TONING WIRE REQUIRED



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\* TONING WIRE REQUIRED FOR MAINS 12" DIA. AND LARGER  
 \*\* SERVICES ONLY ALLOWED WHERE APPROVED  
 \*\*\* TONING WIRE REQUIRED

**GRADING NOTES:**

- ALL GRADING SHALL CONFORM TO THE MOST RECENTLY ADOPTED EDITION OF THE W.S.D.O.T. STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AND THE CITY OF CAMAS DESIGN STANDARDS MANUAL.
- THE LIMITS OF CLEARING SHALL BE FLAGGED PRIOR TO CLEARING AND GRUBBING OF THE SITE.
- ANY EXISTING TREES TO REMAIN WITHIN THE CLEARING LIMITS SHALL BE MARKED AND PROTECTED FROM DAMAGE.
- PRIOR TO ANY FILL PLACEMENT, ALL AREAS WHICH WILL RECEIVE STRUCTURAL FILL SHALL BE EXCAVATED TO FIRM, NON-ORGANIC, UNDISTURBED NATIVE GROUND. THE STRIPPED AREAS SHALL BE EXCAVATED AND ACCEPTED BY THE GEOTECHNICAL ENGINEER AND THE CITY OF CAMAS INSPECTOR.
- ALL LOT FILLS SHALL MEET 95% OF AASHTO T-99 COMPACTION.
- ALL RIGHT-OF-WAY FILLS SHALL MEET 95% OF AASHTO T-100 COMPACTION.
- FILLS SHALL BE INSTALLED IN VERTICAL LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND SHALL BE COMPACTED AS PREVIOUSLY NOTED.
- FILLS PLACED ON SLOPES EXCEEDING SH:IV SHALL BE KEVED AND BENCHED, GEOTECHNICAL APPROVAL REQUIRED PRIOR TO ANY FILL PLACEMENT.
- ALL SURFACES SHALL BE GRADED SMOOTH AND BE FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
- ALL CUT AND FILL SLOPES SHALL NOT EXCEED 2:1 SLOPES.
- ANY EXCESS MATERIAL NOT REQUIRED TO MEET THE GRADES SHOWN ON THE PLANS SHALL BE HAULED FROM THE SITE TO A CONTRACTOR PROVIDED WASTE SITE. IF WASTE SITE IS WITHIN CITY LIMITS, A GRADING PERMIT MAY BE REQUIRED.
- ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY SUITABLE APPLICATION OF EROSION CONTROL BMP'S.
- ALL SURFACES REQUIRING VEGETATION SHALL BE ROUGHENED PRIOR TO SEEDING (I.E. WHEEL TRACKED PERPENDICULAR TO SURFACE FLOW TO REDUCE EROSION AND HELP VEGETATION).
- FINAL GEOTECHNICAL SUMMARY REPORT, INCLUDING ALL COMPACTION TESTING RESULTS, SHALL BE SUBMITTED UPON COMPLETION OF SITE GRADING WORK.

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - GENERAL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	NOTES	G1
2	10/17/08	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 10-21-14	NOT TO SCALE
3	1/1/11	SD	JC	DATE	NOT TO SCALE
4	10/21/14	SD	JC	DATE	NOT TO SCALE

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - GENERAL DETAIL	DETAIL NO.
1	3/1/07	SD	JC	TRENCH DETAIL (IN R.O.W.)	G2
2	9/18/07	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 10-21-14	NOT TO SCALE
3	1/1/11	SD	JC	DATE	NOT TO SCALE
4	10/21/14	SD	JC	DATE	NOT TO SCALE

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - GENERAL DETAIL	DETAIL NO.
1	3/1/07	SD	JC	TRENCH DETAIL (OUTSIDE R.O.W.)	G3
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 10-21-14	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - EROSION CONTROL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	GRADING NOTES	EC1
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 1-4-11	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE

**EROSION/SEDIMENT CONTROL NOTES:**

- THE EROSION/SEDIMENT CONTROL (ESC) PLAN AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORT OF LOOSE SOILS TO THE PROPERTY OUTSIDE OF THE CONSTRUCTION AREA AND AROUND THE CONSTRUCTION SITE. ESC MEASURES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
- THE IMPLEMENTATION OF THE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THE ESC MEASURES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND PERMANENT VEGETATION/LANDSCAPING IS ESTABLISHED.
- IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR EROSION CONTROL TECHNIQUES, A "STOP WORK" ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY ENGINEERING STAFF.
- THE CONTRACTORS SHALL BE RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE MOST RECENTLY ADOPTED EDITION OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON, VOL. 1 AND THE CITY OF CAMAS MUNICIPAL CODE 14.06 (2011).
- ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO DISTURBING AND EXPOSING ANY SOIL SURFACES (I.E. CONSTRUCTION ENTRANCES, FILTER FABRIC SEDIMENT BARRIERS, AND SEDIMENTATION TRAPS) AND MAINTAINED FOR THE DURATION OF THE PROJECT. TRAPPED SEDIMENT IN EXCESS OF 1 FOOT SHALL BE REMOVED OR STABILIZED ON-SITE. DISTURBED SOIL AREAS RESULTING FROM VEGETATION REMOVAL SHALL BE PERMANENTLY STABILIZED. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- TO MINIMIZE EROSION AND SEDIMENTATION TRANSPORTATION, EARTHWORK SHALL NOT BE PERFORMED WHILE SOILS ARE IN AN UNSTABLE STATE DUE TO PRECIPITATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE CLEARING LIMITS AND/OR ANY CASSEMENTS, SENSITIVE OR CRITICAL AREAS, AND THEIR BUFFER TREES, AND DRAINAGE COURSES FLAGGED PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. FLAGGING LIMITS ARE TO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- REMOVE ONLY THOSE TREES AND SHRUBS THAT NEED TO BE REMOVED FOR THE CONSTRUCTION OF ROADS, SIDEWALKS, UTILITIES, AND STORMWATER FACILITIES.
- ALL EXISTING AND NEWLY CONSTRUCTED ROAD CATCH BASINS AND CURB INLETS AFFECTED BY CONSTRUCTION SHALL BE PROTECTED AGAINST SEDIMENT DEPOSITS. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- ALL POLLUTANTS THAT OCCUR ON-SITE DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER SYSTEM.
- ALL DISTURBED SOIL SURFACES ARE TO BE STABILIZED BY A SUITABLE APPLICATION OF "BEST MANAGEMENT PRACTICES" (BMP'S). DURING THE PERIOD OF OCTOBER 1 THROUGH JULY 5 DISTURBED SOILS MAY REMAIN UNSTABILIZED FOR UP TO TWO DAYS WHEN NOT BEING WORKED. FROM JULY 5 THROUGH OCTOBER 1, DISTURBED SOILS MAY REMAIN UNSTABILIZED FOR UP TO 7 DAYS WHEN NOT BEING WORKED. STABILIZATION OF DISTURBED SOIL AREAS MAY CONSIST OF HYDROSEEDING, HAND-SEEDING AND MULCHING, PLACEMENT OF EROSION CONTROL BLANKETS OR PLASTIC, ALL SEEDED AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENSURE THAT THE GROWTH OF VEGETATION OCCURS AS SOON AS POSSIBLE.
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED.

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - EROSION CONTROL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	EROSION/SEDIMENT CONTROL NOTES	EC2
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 1-4-11	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE

**EROSION/SEDIMENT CONTROL NOTES (CONTINUED):**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR POLICING THE JOB SITE DAILY AND MAINTAINING THE EROSION/SEDIMENT CONTROL MEASURES THROUGHOUT ALL PHASES OF CONSTRUCTION. AN INSPECTION LOG SHALL BE KEPT AND MADE AVAILABLE TO THE CITY OF CAMAS. THE POLICING AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:
  - VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION DEVICE BEFORE DISCHARGE.
  - REMOVAL OF TRAPPED SILT AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.
  - ADDITIONAL PROTECTIVE MEASURES DUE TO JOB SITE OR WEATHER CONDITIONS AS REQUIRED BY THE CITY OF CAMAS.
  - MONITORING OF VEHICLES LEAVING THE SITE TO MINIMIZE TRANSMISSION OF LOOSE SOILS TO THE PUBLIC ROADWAYS.
  - VERIFY THAT ALL PROPERTIES ADJACENT TO THE PROJECT SITE ARE PROTECTED FROM SEDIMENTATION DEPOSITION. THIS MAY BE ACCOMPLISHED BY INSTALLING PERIMETER CONTROLS SUCH AS SEDIMENTATION BARRIERS, FILTERS OR DIKES, SEDIMENTATION BASINS/TRAPS, OR BY A COMBINATION OF SUCH MEASURES.
- CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES SHALL BE STABILIZED IN ACCORDANCE WITH EROSION/SEDIMENT CONTROL NOTE 11. SLOPES FOUND TO BE ERODING EXCESSIVELY WITHIN TWO YEARS OF CONSTRUCTION MUST BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES. THESE MEASURES MAY CONSIST OF REINFORCED SOIL SURFACES, INTERCEPTORS, DIVERSIONS OR TERRACES, TEMPORARY OR PERMANENT CHANNELS, ADDITIONAL VEGETATION, OR PIPE SLOPE DRAINS AS REQUIRED BY THE CITY OF CAMAS UNTIL THE PROBLEM IS CORRECTED.
- THE ESC MEASURES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING ANY STORM EVENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING UNDERGROUND UTILITIES AS SPECIFIED BELOW:
  - WHERE FEASIBLE, NO MORE THAN 500 FEET OF TRENCH SHALL BE OPEN AT ONE TIME.
  - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
  - TRENCH DE-WATER DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND.
- PRIOR TO CONSTRUCTION, THE CITY OF CAMAS REQUIRES AN APPROVED FORM OF SECURITY IN THE AMOUNT OF 200% OF THE ENGINEER'S ESTIMATED COST OF THE ESC MEASURES, INCLUDING ASSOCIATED LABOR, AS SHOWN IN THE APPROVED ESC PLAN AND SWPPP.
- SUGGESTED STANDARD SEED MIXTURE FOR THOSE AREAS WHERE A TEMPORARY VEGETATIVE COVER IS REQUIRED:
 

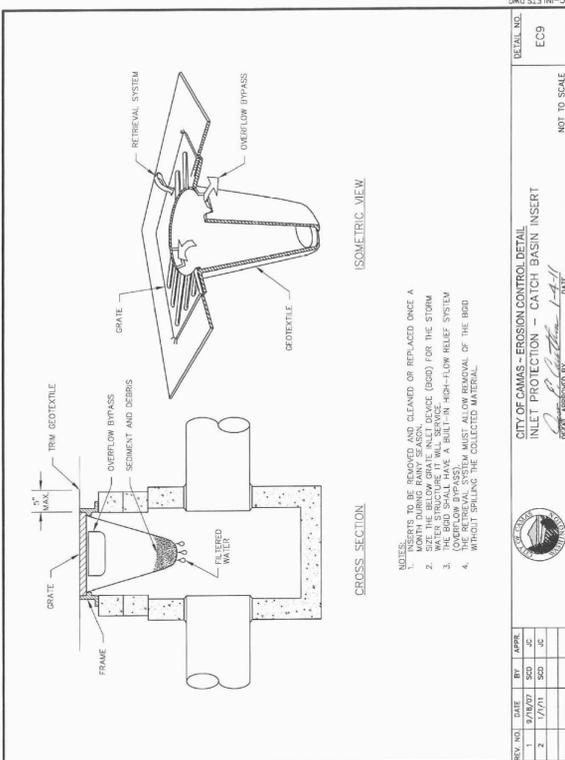
TEMPORARY EROSION CONTROL MIX*	% WEIGHT	% PURITY	% GERMINATION
CHEWINGS OR ANNUAL BLUE GRASS (FESTUCA RUBRA VAR. COMMUTATA OR PCA ANNV)	40	98	90
PERENNIAL RYE (LOLIUM PERENNE)	50	98	90
REDTOP OR COLONIAL BENTGRASS (AGROSTIS ALBA OR AGROSTIS TEMUIS)	5	92	85
WHITE DUTCH CLOVER (TRIFOLIUM REPENS)	5	98	90

 \*APPLICATION RATE OF 120 LBS/ACRE AND COVERED WITH STRAW OR MULCH
- SUGGESTED TURF SEED MIXTURE FOR DRY SITUATIONS WHERE THERE IS NO NEED FOR MUCH WATER:
 

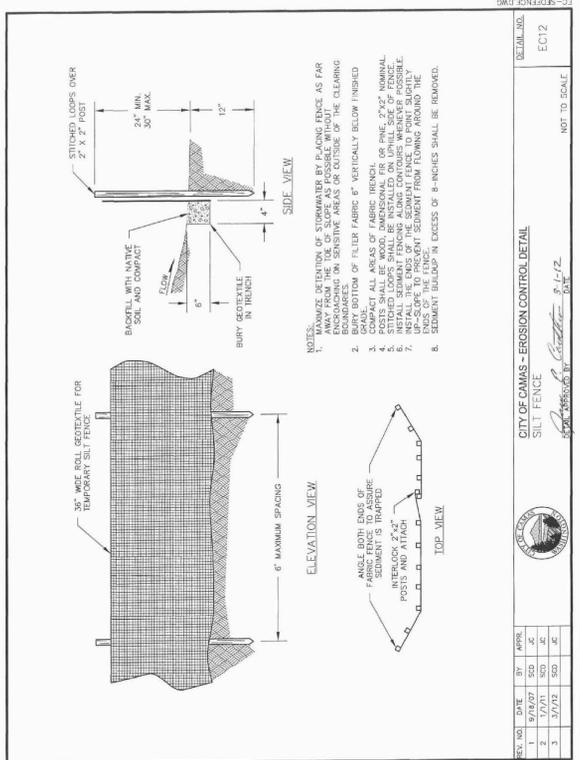
LOW-GROWING TURF SEED MIX*	% WEIGHT	% PURITY	% GERMINATION
DWARF FALLOUSE (SEVERAL VARIETIES) (FESTUCA ARUNDINACEA VAR.)	45	98	90
DWARF PERENNIAL RYE (LOLIUM PERENNE VAR. BARCLAY)	30	98	90
RED FESCUE (FESTUCA RUBRA)	20	98	90
COLONIAL BENTGRASS (AGROSTIS TEMUIS)	5	98	90

 \*APPLICATION RATE OF 120 LBS/ACRE AND COVERED WITH STRAW OR MULCH

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - EROSION CONTROL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	EROSION/SEDIMENT CONTROL NOTES	EC3
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 1-4-11	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE



REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - EROSION CONTROL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	INLET PROTECTION - CATCH BASIN INSERT	EC9
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 1-4-11	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE



REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - EROSION CONTROL DETAIL	DETAIL NO.
1	9/18/07	SD	JC	SILT FENCE	EC12
2	1/1/11	SD	JC	DATE APPROVED BY: <i>Janell G. Gauthier</i> 1-4-11	NOT TO SCALE
3	10/21/14	SD	JC	DATE	NOT TO SCALE

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**STERLING DESIGN INC.**

**Sheet Description:**  
**DETAILS SHEET**

**Project:**  
**FRANKLIN DUPLEX**



Scale: **AS SHOWN**  
 Project Number: **708**  
 Design/Drawn: **JGS/JC**  
 Drawing Date: **JAN. 2017**  
 Sheet **8** of 10 Sheet(s)



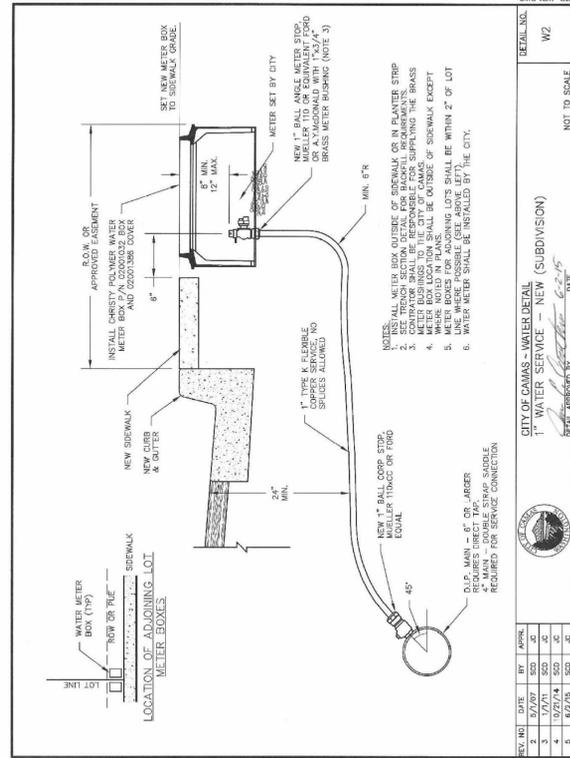
**WATER CONSTRUCTION NOTES:**

1. ALL TRENCH EXCAVATION AND PIPE INSTALLATION SHALL CONFORM TO THE MOST CURRENT A.W.W.A. STANDARDS, AND THE MOST RECENTLY ADOPTED EDITION OF THE W.S.D.O.T. STANDARD SPECIFICATIONS SECTION 7-08.3(1) AND SECTION 7-08.3(2). ALL EXCESS MATERIAL FROM THE TRENCH EXCAVATION SHALL BE LOADED DIRECTLY INTO A DUMP TRUCK AND DISPOSED OF AT AN APPROVED SITE.
2. PIPE BEDDING, PIPE ZONE MATERIAL AND TRENCH BACKFILL SHALL BE AN APPROVED GRANULAR MATERIAL OF EITHER WASHED SCREENINGS OR 3/8 INCH MINUS CRUSHED ROCK. SAND BACKFILL IS NOT ALLOWED.
3. TRENCH COMPACTION SHALL CONFORM TO THE MOST RECENTLY ADOPTED EDITION OF THE W.S.D.O.T. STANDARD SPECIFICATIONS SECTION 7-08.3(3). CONTRACTOR TO DETERMINE THE TYPE OF EQUIPMENT AND METHOD USED TO ACHIEVE THE REQUIRED COMPACTION AND BE APPROVED BY THE CITY OF CAMAS. EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE A.A.S.H.T.O. T-180 TEST METHOD.
4. SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.
5. ALL VALVES 10 INCHES OR LESS IN DIAMETER SHALL BE A.W.W.A. APPROVED RESILIENT WEDGE GATE VALVES, BUBBLE TIGHT AT 200PSI, HAVE NON RISING STEMS, AND OPEN BY TURNING TO THE LEFT. PROVIDE A 2 INCH SQUARE NUT TO CONFORM TO A.W.W.A. C-504. ALL VALVES 12 INCHES OR LARGER IN DIAMETER SHALL BE A.W.W.A. APPROVED BUTTERFLY VALVES.
6. ALL WATER PIPE 12 INCHES OR LESS IN DIAMETER SHALL BE DUCTILE IRON CLASS 52 PIPE. ALL WATER PIPE 14 INCHES IN DIAMETER AND LARGER SHALL BE DUCTILE IRON CLASS 51 PIPE. RUBBER GASKET TYPE SHALL BE U.S. PIPE, TYTON OR APPROVED EQUAL. ALL FITTINGS SHALL BE DUCTILE IRON AND SHALL CONFORM TO THE A.W.W.A. STANDARD C-110.
7. ALL TEES, FLANGES, CAPS, BENDS AND OFFSETS, AS WELL AS ALL OTHER APPURTENANCES WHICH ARE SUBJECT TO UNBALANCED THRUST, SHALL BE PROPERLY BRACED BY ONE OF THE FOLLOWING METHODS:
  - A. CONCRETE THRUST BLOCKING- AS DETAILED IN THE PLANS, SHALL BE PLACED AT BENDS, TEES, DEAD ENDS AND CROSSES. BLOCKING SHALL BE 3000 PSI CONCRETE POURED IN PLACE. CONCRETE BLOCKING SHALL BE AGAINST SOLID UNDISTURBED EARTH AT THE SIDES AND BOTTOM OF THE TRENCH EXCAVATION AND SHALL BE SHAPED SO AS NOT TO OBSTRUCT ACCESS TO THE JOINTS OF THE PIPE. 6 MIL PLASTIC SHALL BE USED TO INSULATE PIPE.
  - B. MECHANICAL JOINT RESTRAINT-USE "EGBA IRON SERIES 1100 MEGA LUC MECHANICAL JOINT THRUST RESTRAINT" OR APPROVED EQUAL. CONTRACTOR TO RESTRAIN THE MINIMUM REQUIRED PIPE LENGTH WITH "FIELD-LOCK" GASKETS OR APPROVED EQUAL.
8. ALL WATER MAINS SHALL BE TESTED AT 200PSI IN ACCORDANCE WITH SECTION 7-09.3(23) OF THE STANDARD SPECIFICATIONS. THE CITY SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ACCEPTANCE TESTING. MAXIMUM LENGTH OF PIPE TO BE TESTED AT ONE TIME IS 1000 FT.
9. CHLORINATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 7-09.3(24) OF THE STANDARD SPECIFICATIONS. CITY INSPECTOR WILL TAKE SAMPLES AND DELIVER TO LABORATORY FOR BACTERIA TESTING. NEGATIVE SAMPLE RESULTS SHALL BE CONFIRMED, PRIOR TO PRESSURE TESTING, DECHLORINATION OR DISPOSAL TO SANITARY MAIN MAY BE REQUIRED.
10. APPROPRIATE DISPOSAL AND OR DECHLORINATION OF FLUSHED WATER DURING BLOWOFF IS THE RESPONSIBILITY OF THE CONTRACTOR. METHOD USED SHALL BE APPROVED BY CITY AND OTHER REGULATING AUTHORITIES.
11. WATER MAIN TO HAVE A MINIMUM COVER OF 30 INCHES. WATER SERVICES TO HAVE A MINIMUM 24" OF COVER.
12. ALL EXISTING VALVES TO BE OPERATED BY CITY OF CAMAS WATER/SEWER DEPARTMENT PERSONNEL ONLY.
13. NO CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE PRIOR TO SATISFACTORY PRESSURE TESTING, DISINFECTION, AND THE CONFIRMATION OF A NEGATIVE BACTERIA TEST.

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - WATER DETAIL WATER CONSTRUCTION NOTES	DETAIL NO.
1	7/17/06	SD	MSH071		W1
2	5/7/07	SD	JC		
3	1/17/11	SD	JC		


 METAL APPROVED BY: *Gregory S. Smith* DATE: *1-4-11* NOT TO SCALE

W16-NOTECES02



CMG/ISA-BLM

REV. NO.	DATE	BY	APPR.	CITY OF CAMAS - WATER DETAIL 1" WATER SERVICE - NEW (SUBDIVISION)	DETAIL NO.
1	8/20/07	SD	JC		W2
2	7/2/07	SD	JC		
3	1/27/14	SD	JC		
4	1/27/14	SD	JC		
5	1/22/15	SD	JC		

NOT TO SCALE  
 PER: *Gregory S. Smith* DATE: *1-4-11*

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 DETAILS SHEET

**Project:**  
 FRANKLIN DUPLEX



Scale: AS SHOWN  
 Project Number: 708  
 Design/Drawn: JGS/BC  
 Drawing Date: JAN. 2017