THE STROM PROPERTY

FOR BURNSTEAD CONSTRUCTION, L.L.C.

LEGAL DESCRIPTION

LOT 3, KING COUNTY SHORT PLAT NO. 181077, RECORDED UNDER RECORDING NO. 8109300611, SAID SHORT PLAT
BEING A SUBDIVISION
OF A PORTION OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 26 NORTH, RANGE 5
EAST, W.M., IN KING
COUNTY, WASHINGTON.

EXCEPT THAT PORTION OF LOT 3 OF SAID KING COUNTY SHORT PLAT NO. 181077, LYING WEST OF THE FOLLOWING
DESCRIBED LINE:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 1 OF SAID SHORT PLAT; THENCE S01°42'49"W TO THE SOUTH LINE
OF LOT 3 OF SAID
SHORT PLAT AND THE TERMINUS OF SAID LINE;

(ALSO KNOWN AS LOT B OF KING COUNTY LOT LINE ADJUSTMENT NO. 484088, RECORDED UNDER RECORDING
NO. 8405210441.)

TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS RESERVED BY INSTRUMENT RECORDED
UNDER RECORDING NO. 7211090377.

LOT AREA TABLE

A LOT NUMBER	B AVG LOT SIZE (SF)	C LOT AREA (SF)	D OPEN SPACE (10%)	E LOT AREA REDUCTION *
1	7,000	6,500	1,300	500
2	7,000	5,000	1,000	2,000
3	7,000	4,619	924	2,381
4	7,000	5,949	1,190	1,051
5	7,000	5,246	1,049	1,754
6	7,000	5,000	1,000	2,000
7	7,000	5,000	1,000	2,000
8	7,000	5,000	1,000	2,000
9	7,000	4,900	980	2,100
10	7,000	4,900	980	2,100
11	7,000	4,946	989	2,054
12	7,000	4,836	967	2,164
13	7,000	5,255	1,051	1,745
TOTAL	91,000	67,151	13,430	23,849

* COLUMN B LESS COLUMN C = LOT AREA REDUCTION

AVERAGE LOT SIZE REDUCTION TABLE

CODE SECTION USED	TECHNIQUE USED	POINTS
RZC 21.67.040 (4)	50% NATIVE VEGETATION RETENTION	3
RZC 21.67.040 (3)	DROUGHT TOLERANT LANDSCAPING	1
TOTAL POINTS		4

INCENTIVE USED 20C.30.37 -080 (5) LOT REDUCTION SIZE	
R-4 AVG. LOT SIZE	7,000 SF
30% ALLOWED REDUCTION	2,100 SF
NEW ALLOWED AVG. LOT SIZE	4,900 SF+

LOTS HAVE BEEN REDUCED UTILIZING TECHNIQUES AND INCENTIVES PROVIDED IN REDMOND ZONING CODE 21.67.040. A REDUCTION OF THE AVERAGE LOT SIZE BY 30% HAS BEEN ACCOMPLISHED BY THE ACHIEVEMENT OF FOUR POINTS. THE REDUCED AVERAGE LOT SIZE IS NOW 4,900 SF.

AFFORDABLE HOUSING

1 UNIT (13 X .10 = 1.3)

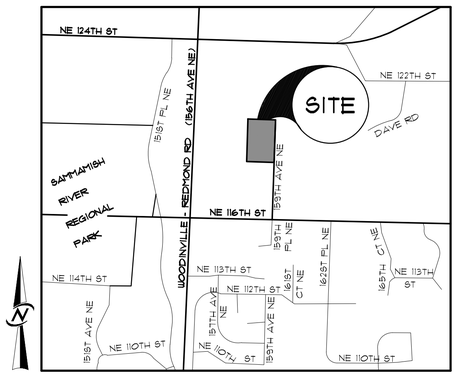
DATUM

N.A.V.D. 88 (CITY OF REDMOND DATUM).

BENCHMARKS

C.O.R. BENCHMARK #3191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.47 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R. ELEVATION = 253.49

C.O.R. BENCHMARK #3192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.10



VICINITY MAP
1" = 2400'

SITE STATISTICS

PRESENT USE	VACANT LAND
PROPOSED USE	SINGLE FAMILY RESIDENTIAL
EXISTING ZONING	R-4
COMPREHENSIVE PLAN DESIGNATION	SINGLE FAMILY URBAN
WATER SOURCE	CITY OF REDMOND
METHOD OF SEWAGE DISPOSAL	CITY OF REDMOND
TOTAL SITE AREA	250,241 S.F. OR 5.74 ACRES
OPEN SPACE (TRACT A - STORM VAULT TRACT)	7,561 S.F. OR 0.17 ACRES
ACCESS/UTILITY TRACTS (TRACT B)	2,754 S.F. OR 0.06 ACRES
NGPA (TRACT C)	160,956 S.F. OR 3.70 ACRES
ROW DEDICATION	10,970 S.F. OR 0.25 ACRES
NET DEVELOPMENT AREA	68,000 S.F. OR 1.56 ACRES
NUMBER OF PROPOSED LOTS	13
AVERAGE LOT SIZE (4,900 SF+)	5,165 S.F. (67,151 S.F. / 13 = 5,165 S.F.)
SMALLEST LOT SIZE	4,619 S.F.
TAX PARCEL NUMBERS -	2626059014
IBC CONSTRUCTION TYPE	IRC TYPE 1B R

SITE AREA - 5.74 AC. (250,241± S.F.)
MAX ALLOWED IMPERVIOUS AREA = 60% OF SITE
PROPOSED IMPERVIOUS AREA = 1.07 AC. (46,609± S.F.) OR 18% OF SITE
DISTURBED AREA = 2.27 AC. (99,019± S.F.)

WATER PRESSURE ZONES - 390
METRO MANHOLE - TO BE DETERMINED

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

HORIZONTAL CONTROL

NAD 83 (91) (CITY OF REDMOND HORIZONTAL CONTROL)

GLO 3CS

SOUTH QUARTER CORNER SECTION 26, TOWNSHIP 26 NORTH, RANGE 5 EAST, FOUND COPPER NAIL WITH PUNCH MARK IN CONCRETE MONUMENT IN CASE IN CENTERLINE 166TH AVENUE NE AND NE 116TH STREET INTERSECTION. MONUMENT IS 0.9' BELOW GRADE.

N.259497.06
E.1320690.97

GLO 4CSW

SOUTHWEST CORNER SECTION 25, TOWNSHIP 26 NORTH, RANGE 5 EAST. FOUND CONCRETE PLUG IN CONCRETE MONUMENT IN CASE IN CENTER OF EASTBOUND DRIVING LANE OF NE 116TH STREET APPROXIMATELY 240 FEET EAST OF INTERSECTION WITH 162ND AVENUE NE. PLUG IS ETCHED +. MONUMENT IS 1.4 FEET BELOW GRADE.

N.259409.30
E.1323240.28

PROJECT NO. LAND2013-01788

APPLICANT/DEVELOPER

BURNSTEAD CONSTRUCTION, LLC
11980 NE 24TH ST., SUITE 200
BELLEVUE, WASHINGTON 98005
(425) 454-1900 EXT. 234
CONTACT: TIFFINY BROWN
TIFFINY@BURNSTEAD.COM

SURVEYOR/ENGINEER/PLANNER

CORE DESIGN, INC.
14711 N.E. 29th PLACE, SUITE 101
BELLEVUE, WASHINGTON 98007
(425) 885-7877
CONTACT: KENNETH W. SHIPLEY, P.L.S. (SURVEYOR)
JIM OLSEN, P.E. (ENGINEER)
LAFE HERMANSEN (PLANNER)
JOSH BEARD, RLA (LANDSCAPE ARCHITECT)

OPEN SPACE

THIS PROJECT WILL SATISFY THE OPEN SPACE REQUIREMENTS OF THE CITY OF REDMOND CODE BY PROVIDING A MINIMUM OF 20% (250,241 S.F. X 20 = 50,048 S.F. OR 1.15 ACRES) OF TOTAL SITE AREA AS OPEN SPACE. PLEASE REFER TO THE LOT AREA TABLE FOR THE AMOUNT OF OPEN SPACE REQUIRED ON EACH LOT.

TOTAL OPEN SPACE PROVIDED:
TRACT A, C, AND LOTS = 4.17 AC. (181,947 S.F.).

PARKING REQUIREMENTS

R-4 ZONE PARKING REQUIRED:	26 SPACES (2 X 13 HOMES)
PARKING PROVIDED:	26 SPACES

2 GARAGE SPACES (MIN.) PER HOUSE

MAXIMUM DENSITY (OVERALL SITE)

TOTAL SITE AREA:	250,241 S.F. OR 5.74 AC.
AREA ZONED R-4:	250,241 S.F. OR 5.74 AC.
BASE DENSITY R-4:	23 UNITS (5.74 AC. X 4 DU)
TOTAL UNITS PROPOSED:	13 UNITS

MINIMUM DENSITY (OVERALL SITE)

MIN. HOMES ALLOWED	7 UNITS 6.8 UNITS=(2.14 AC. X 4 X 0.8)

NOTES

1. THE PROPOSED TYPE OF INTERNATIONAL RESIDENTIAL CODE CONSTRUCTION IS R.
2. ALL NEW RESIDENTIAL STRUCTURES SHALL HAVE SPRINKLER SYSTEMS.

SHEET INDEX

DATE	DESCRIPTION
8/21/12	1. REVISED PER CITY COMMENTS
1/30/13	2. REVISED PER CITY COMMENTS
10/3/13	3. REVISED PER CITY COMMENTS
2/11/15	4. REVISED PER CITY COMMENTS

10-3-13

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

COVER SHEET
THE STROM PROPERTY

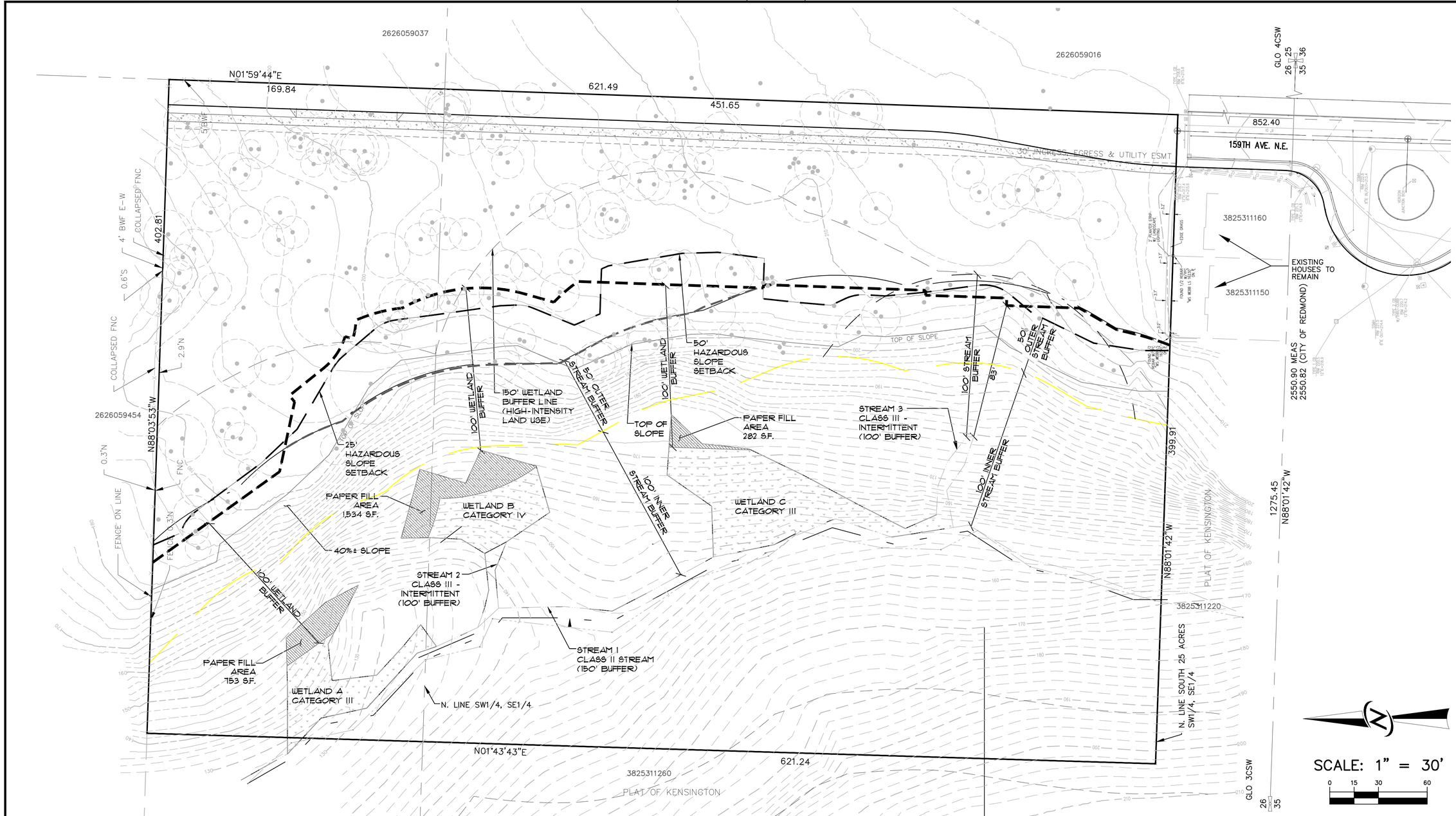
BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013
DESIGNED	JAMES A. OLSEN, P.E.
DRAWN	HOLLI H. HOPKINS
APPROVED	JAMES A. OLSEN, P.E. PROJECT MANAGER

SHEET	OF
P1	9

PROJECT NUMBER
10079

SEC. 26, TWP. 26 N., RGE. 5 E., W.M.



SCALE: 1" = 30'

0 15 30 60

NOTES

1. ALL TITLE INFORMATION SHOWN ON THIS MAP HAS BEEN EXTRACTED FROM CHICAGO TITLE INSUARANCE COMPANY CERTIFICATE ORDER NO. 512702, DATED JUNE 29, 1998. IN PREPARING THIS MAP, CORE DESIGN, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS CORE DESIGN, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY THE REFERENCED CHICAGO TITLE CERTIFICATE. CORE DESIGN, INC. HAS RELIED WHOLLY ON CHICAGO TITLE'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE CORE DESIGN, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.

2. THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON OCTOBER 26, 2010. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN DECEMBER, 1999.

3. PROPERTY AREA = 249,391± SQUARE FEET (5.7252± ACRES).

4. ALL DISTANCES ARE IN FEET.

5. THIS IS A FIELD TRAVERSE SURVEY. A SOKKIA FIVE SECOND COMBINED ELECTRONIC TOTAL STATION WAS USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE TRAVERSE MET OR EXCEEDED THOSE SPECIFIED IN WAC 332-130-090. ALL MEASURING INSTRUMENTS AND EQUIPMENT ARE MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

6. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE ARE SHOWN HEREON. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE UTILITY LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. CORE DESIGN ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS.

LEGAL DESCRIPTION

LOT 3, KING COUNTY SHORT PLAT NO. 181077, RECORDED UNDER RECORDING NO. 8109300611, SAID SHORT PLAT BEING A SUBDIVISION OF A PORTION OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 26 NORTH, RANGE 5
EAST, W.M., IN KING
COUNTY, WASHINGTON.

EXCEPT THAT PORTION OF LOT 3 OF SAID KING COUNTY SHORT PLAT NO. 181077, LYING WEST OF THE FOLLOWING DESCRIBED LINE:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 1 OF SAID SHORT PLAT; THENCE S01°42'49"W TO THE SOUTH LINE OF LOT 3 OF SAID
SHORT PLAT AND THE TERMINUS OF SAID LINE;

(ALSO KNOWN AS LOT B OF KING COUNTY LOT LINE ADJUSTMENT NO. 484088, RECORDED UNDER RECORDING NO. 8405210441.)

TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND UTILITIES AS RESERVED BY INSTRUMENT RECORDED UNDER RECORDING NO. 7211090377.

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 – CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R. BENCHMARK #9191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE.
MONUMENT IS 0.47 FEET BELOW TOP OF CASE.
STAMPED – BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #9192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED – BM 29 C.O.R.
ELEVATION = 321.70

HORIZONTAL CONTROL

NAD 83 (91) (CITY OF REDMOND HORIZONTAL CONTROL)

GLO 3CS

SOUTH QUARTER CORNER SECTION 26, TOWNSHIP 26 NORTH, RANGE 5 EAST, FOUND COPPER NAIL WITH PUNCH MARK IN CONCRETE MONUMENT IN CASE IN CENTERLINE 166TH AVENUE NE AND NE 116TH STREET INTERSECTION. MONUMENT IS 0.9' BELOW GRADE.

N.259497.060
E.1320690.970

GLO 4CSW

SOUTHWEST CORNER SECTION 25, TOWNSHIP 26 NORTH, RANGE 5 EAST. FOUND CONCRETE PLUG IN CONCRETE MONUMENT IN CASE IN CENTER OF EASTBOUND DRIVING LANE OF NE 116TH STREET APPROXIMATELY 240 FEET EAST OF INTERSECTION WITH 162ND AVENUE NE. PLUG IS ETCHED +. MONUMENT IS 1.4 FEET BELOW GRADE.

N.259409.300
E.1323240.280

LEGEND

- POWER POLE
- TYPE 1 CB
- FIRE HYDRANT
- TELEPHONE RISER
- TELEPHONE MANHOLE
- STORM DRAIN MANHOLE
- GAS VALVE
- STREET LIGHT
- FOUND SURVEY MONUMENT (AS NOTED)
- TELEVISION RISER
- JUNCTION BOX
- WATER VALVE
- HOSE BIB
- GUY ANCHOR
- POWER TRANSFORMER
- SEWER MARKER
- SANITARY SEWER MANHOLE
- SEWER CLEANOUT
- POWER METER
- WATER METER

NO.	DATE	REVISION
1	8/21/12	REVISED PER CITY COMMENTS
2	1/30/13	REVISED PER CITY COMMENTS
3	10/3/13	REVISED PER CITY COMMENTS
4	2/11/15	REVISED PER CITY COMMENTS

10-2-15

CORE DESIGN
ENGINEERING · PLANNING · SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

BOUNDARY/TOPOGRAPHIC SURVEY THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013
DESIGNED	JAMES A. OLSEN, P.E.
DRAWN	HOLLI H. HOPKINS
APPROVED	JAMES A. OLSEN, P.E.
	PROJECT MANAGER

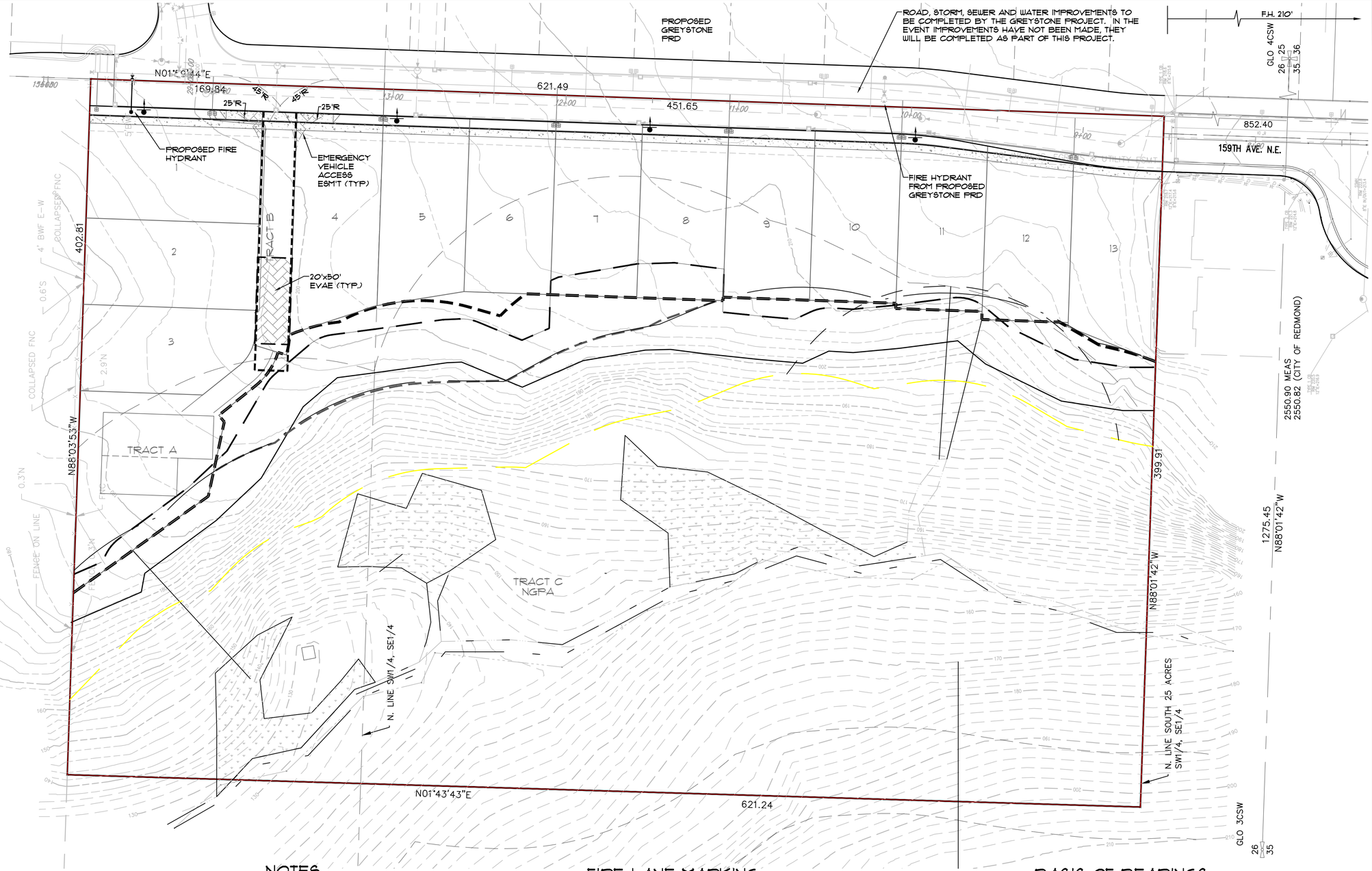
SHEET	OF
P2	9

PROJECT NUMBER
10079

SEC. 26, TWP. 26 N., RGE. 5 E., W.M.

SCALE: 1" = 30'

0 15 30 60



NOTES

1. ALL NEW RESIDENTIAL STRUCTURES SHALL HAVE INSTALLED AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM.

2. ALL REQUIRED ACCESS NOT IN A PUBLIC RIGHT OF WAY SHALL BE MAINTAINED IN AN APPROVED AND RECORDED EMERGENY VEHICLE ACCESS EASEMENT.

FIRE LANE MARKING

TYPE 1 - PAINTED CURB/PAVEMENT

VERTICAL CURBS SHALL BE PAINTED ON THE TOP AND SIDE, EXTENDING THE LENGTH OF THE DESIGNATED FIRE LANE. ROLLED CURB SHALL BE PAINTED WITH A MINIMUM 6 INCH PAINTED STRIPE ON THE TOP MOST PART OF CURB. PAVEMENT SHALL BE PAINTED WITH A MINIMUM 6 INCH PAINTED STRIPE ALONG THE PAVEMENT EDGE.

TYPE 3 - METAL SIGNS

APPROVED METAL SIGNS STATING "NO PARKING-FIRE LANE" OR "NO PARKING-THIS SIDE OF STREET" SHALL BE REQUIRED AT INTERVALS OF 150 FEET ON CENTER ALONG PRIVATE ROADS AND 100 FEET ON CENTER ALONG PUBLIC ROADS. ADDITIONAL LOCATIONS MAY BE DESIGNATED BY THE FIRE MARSHAL. SUCH SIGNS SHALL BE APPROXIMATELY 12" WIDE AND 18" HIGH AND HAVE RED LETTERS ON A WHITE BACKGROUND. METAL SIGNS SHALL BE INSTALLED ON 2" BY 2", 14 GAUGE, QUIK-PUNCH A.S.T.M. A570 POSTS PER CITY OF REDMOND DESIGN AND CONSTRUCTION DRAWING NO.'S 426B, 426C, 426D AND M.U.T.C.D. GUIDELINES. WHERE FIRE LANES ARE ADJACENT TO BUILDINGS OR STRUCTURES THE SIGNS MAY BE PLACED ON THE BUILDING OR STRUCTURE FACE WHEN APPROVED OR DIRECTED BY THE FIRE MARSHAL. TYPE 3 (METAL SIGNS) MAY BE USED IN LIEU OF TYPE 2 (PAVEMENT LETTERING) WHEN SPECIFICALLY APPROVED BY THE FIRE MARSHAL.

EMERGENCY VEHICLE ACCESS EASEMENT AND EMERGENCY VEHICLE OPERATION AREA. (AS NOTED ON PLAN)

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 - CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R BENCHMARK #3191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.47 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #3192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.10

NO.	REVISED PER CITY COMMENTS	8/21/12
1	REVISED PER CITY COMMENTS	1/31/13
2	REVISED PER CITY COMMENTS	10/3/13
3	REVISED PER CITY COMMENTS	2/11/15
4		

10-3-13

CORE DESIGN
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963
ENGINEERING · PLANNING · SURVEYING

FIRE PLAN
THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	
	JAMES A. OLSEN, P.E.	PROJECT MANAGER

SHEET	OF
P7	9

PROJECT NUMBER
10079

PROPOSED GREYSTONE PRD

1" COMBINED DOMESTIC WATER & FIRE SPRINKLER METER WITH 2" SERVICE LINE (TYP.)

ROAD, STORM, SEWER AND WATER IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT.

ROAD IMPROVEMENTS PROPOSED AND TO BE CONSTRUCTED BY THE GREYSTONE PROJECT.

EXISTING LUMINARIES PER GREYSTONE PRD (TYP.)

CONCRETE DRIVEWAY APRON

FIRE HYDRANT

10' PRIVATE STORM DRAINAGE ESM'T

SEE SECTION B-B SHEET P6

14' SIDEWALK AND UTIL. ESM'T (TYP.)

CLEANOUT (TYP.)

SEE SECTION A-A SHEET P6

SEWER SERVICE (TYP.)

10' PRIVATE STORM DRAIN ESM'T

BUFFER AVERAGING REDUCTION: 1,122 SF

FOOTING DRAIN SPLASH BLOCK (TYP.)

50' HAZARDOUS SLOPE SETBACK

TOP: 212
TOE: 208

12" PVC STORM (TYP.)

6" SIDE SEWER (TYP.)

BUFFER AVERAGING REDUCTION: 1,237 SF

4' HIGH (MAX.) RETAINING WALL

TOP: 191
TOE: 190

TOP: 191
TOE: 187

TOP: 191
TOE: 190

20' STORM WATER SETBACK

TOP: 210
TOE: 207

50' HAZARDOUS SLOPE SETBACK

TOP OF SLOPE

50' OUTER STREAM BUFFER

100' STREAM BUFFER

25' BUFFER

STORMWATER DETENTION/WATER QUALITY FACILITY SEE DETAIL SHEET P6

RIM 201.5
IE 197.5

150' WETLAND BUFFER LINE (HIGH-INTENSITY LAND USE)

100' WETLAND BUFFER

BUFFER RESTORATION 10,800 SF

PAPER FILL AREA 282 S.F.

STREAM 3 CLASS III - INTERMITTENT (100' BUFFER)

BUFFER RESTORATION 850 SF

25' HAZARDOUS SLOPE SETBACK

TOP: 190
TOE: 188

TOP: 189
TOE: 187

SEE SECTION D-D SHEET P6

PAPER FILL AREA 1,534 S.F.

WETLAND B CATEGORY IV

WETLAND C CATEGORY III

100' INNER STREAM BUFFER

HDPE STORM PIPE ABOVE GROUND INSTALLATION

40%± SLOPE

ENERGY DISSIPATER PAD EL. 130±

STREAM 2 CLASS III - INTERMITTENT (100' BUFFER)

TRACT C NGPA

PAPER FILL AREA 753 S.F.

WETLAND A CATEGORY III

N. LINE SW1/4, SE1/4

STREAM 1 CLASS II STREAM (150' BUFFER)

N. LINE SOUTH 25 ACRES SW1/4, SE1/4

PLAT OF KENSINGTON

159TH AVE. N.E.

GLO 4CSW 26 25 35 36

GLO 3CSW 26 35

N01°C'44"E 169.84

621.49

451.65

852.40

N88°01'42"W 1275.45

N88°01'42"W 399.91

N01°43'43"E 621.24

2550.90 MEAS
2550.82 (CITY OF REDMOND)

402.81

N88°03'35"W 144

TRACT A 62' 24' 20' 42' 20'

LEGEND

- W — 8" DUCTILE IRON WATER PIPE
- SS — 8" PVC SANITARY SEWER PIPE
- SD — 12" STORM DRAIN
- P — POWER/GAS/PHONE/ CABLE LINE
- 320 — PROPOSED CONTOUR
- 320 — EXISTING CONTOUR
- STREET LIGHT

SCALE: 1" = 30'

0 15 30 60

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 - CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R. BENCHMARK #3191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.41 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #3192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.70

NO.	REVISED PER CITY COMMENTS	6/21/12
1	REVISED PER CITY COMMENTS	7/31/13
2	REVISED PER CITY COMMENTS	10/31/13
3	REVISED PER CITY COMMENTS	2/11/15
4		

10-9-15

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

GRADING, TRANSPORTATION AND UTILITY PLAN
THE STROM PROPERTY

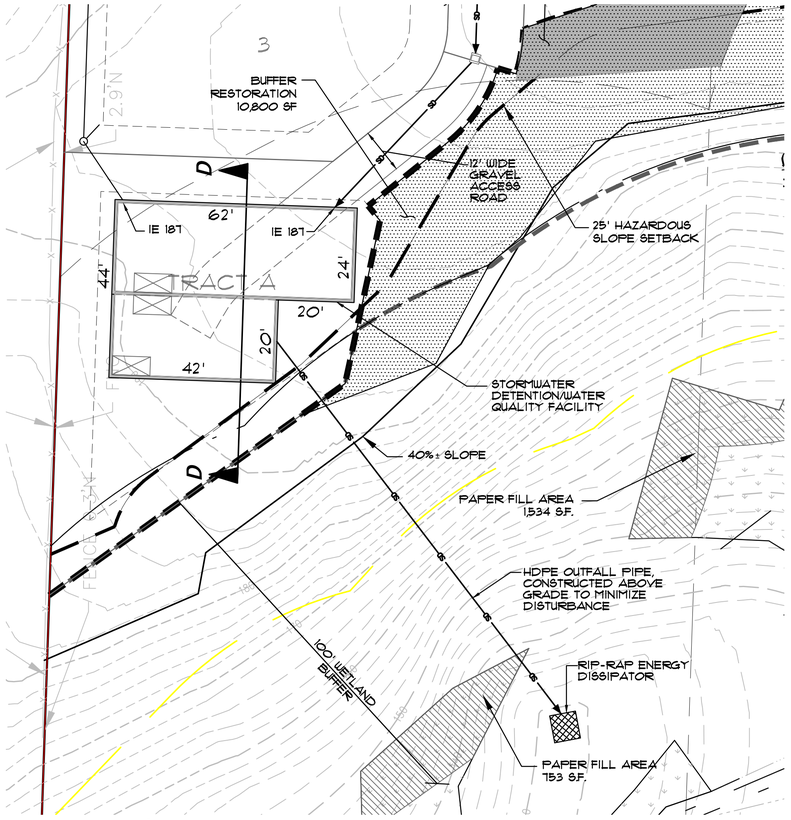
BURNSTEAD CONSTRUCTION, LLC.

11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	JAMES A. OLSEN, P.E. PROJECT MANAGER

SHEET	OF
P5	9

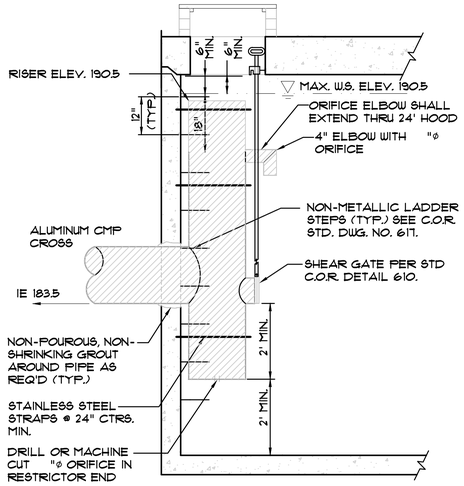
PROJECT NUMBER
10079



DETENTION VAULT

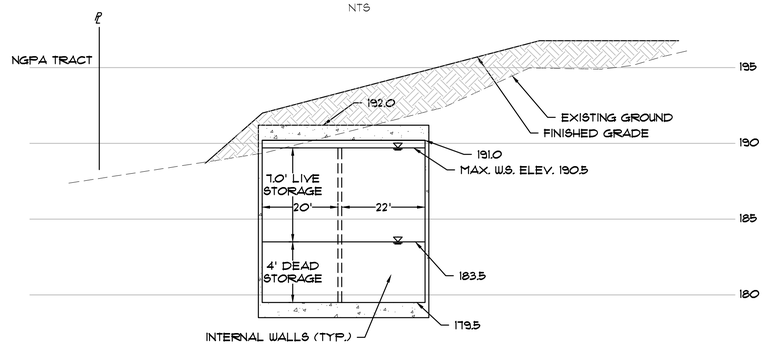
SCALE: 1"=20'

DEAD VOLUME REQUIRED=	5940 CF
DEAD VOLUME PROVIDED=	5950 CF
LIVE VOLUME REQUIRED=	15,457 CF
LIVE VOLUME PROVIDED=	15,500 CF
MAX W.S. ELEV.	190.5
NORMAL W.S. ELEV.	183.5
AVG. BOT. ELEV.	179.5 (DETENTION ONLY CELL)
AVG. BOT. ELEV.	179.5 (WATER QUALITY CELLS)



RESTRICTOR DETAIL

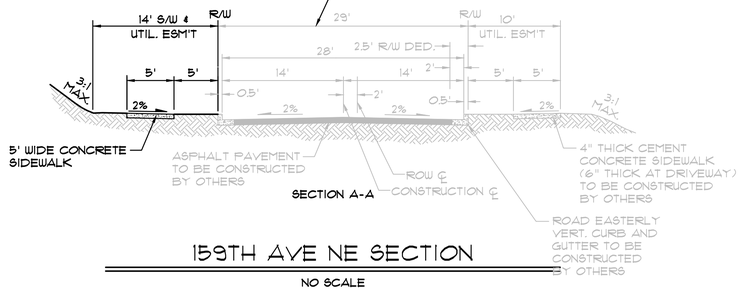
NTS



SECTION D-D

SCALE: 1"=20' HORIZ.
1"=5' VERT.

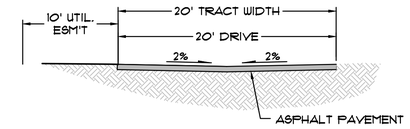
ROAD IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT. PER DIMENSIIONS SHOWN BELOW, SHADED.



SECTION A-A

159TH AVE NE SECTION

NO SCALE



SECTION B-B
PRIVATE ROAD

TRACT B

NO SCALE

NO.	DATE	BY	REVISIONS
1	8/21/12		REVISED PER CITY COMMENTS
2	1/31/13		REVISED PER CITY COMMENTS
3	10/3/13		REVISED PER CITY COMMENTS
4	2/11/15		REVISED PER CITY COMMENTS

10-3-13

CORE DESIGN
ENGINEERING · PLANNING · SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

ROAD AND STORM DETAILS THE STROM PROPERTY

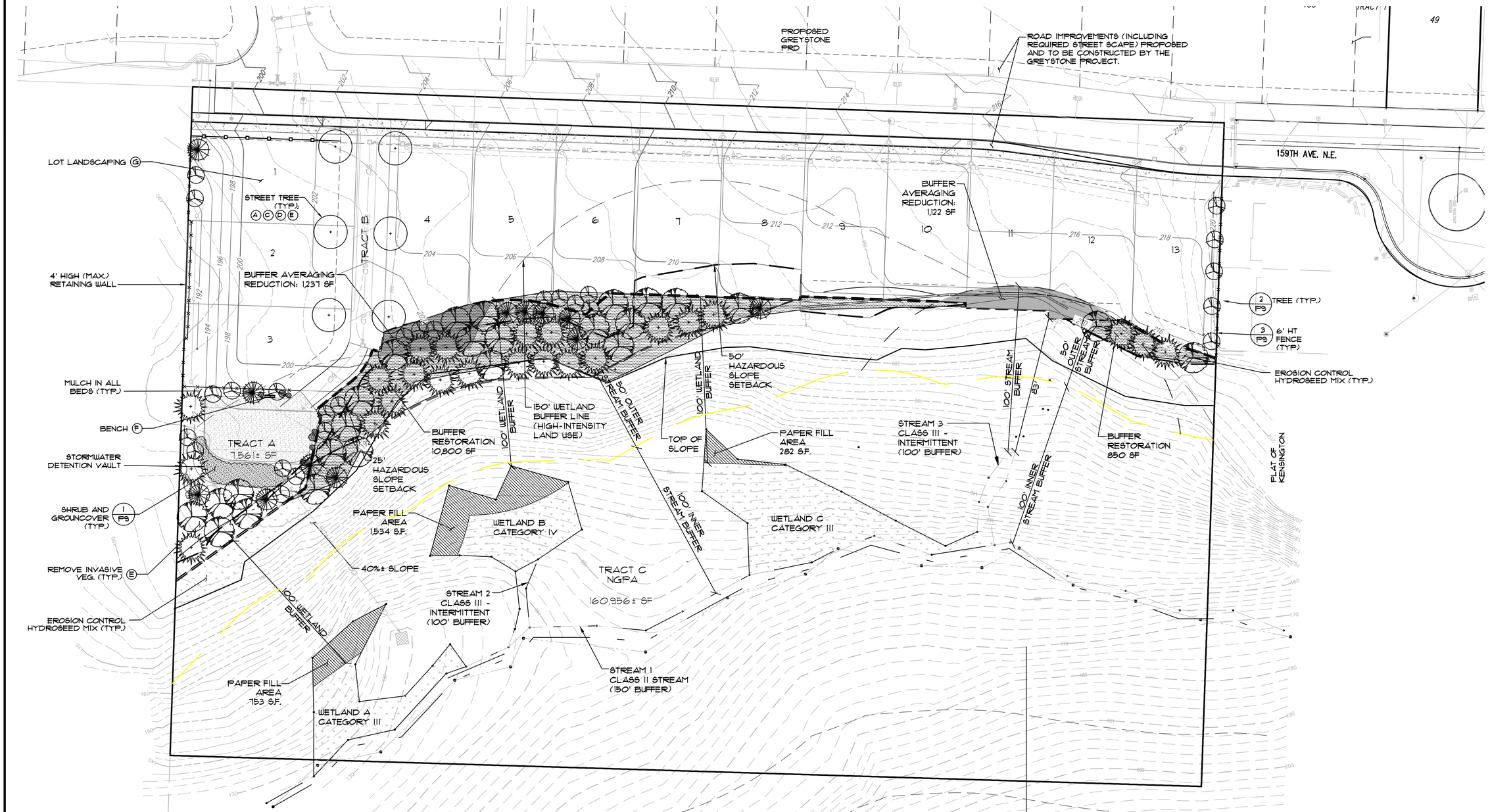
BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	
	JAMES A. OLSEN, P.E.	PROJECT MANAGER

SHEET	OF
P6	9

PROJECT NUMBER
10079

SEC. 26, TWP. 26 N., RGE. 5 E., W.M.



OPEN SPACE CALCULATIONS

TOTAL SITE AREA:	250,241± S.F. (5.74 ACRES)
OPEN SPACE REQUIRED (20% OF TOTAL SITE AREA):	50,048 SF (1.15 AC)
OPEN SPACE PROVIDED:	
TRACT A (OPEN SPACE):	7,561 SF (0.17 AC)
TRACT C (NGPA):	160,956 SF (3.70 AC)
TOTAL/%:	168,517 SF (3.86 AC)/67.4%

ECOLOGICAL SCORE

TECHNIQUE	POINTS AWARDED
#1. 25% OF PLANTS INSTALLED TO BE NORTHWEST ADAPTIVE AND 25% INSTALLED TO BE NATIVE (SEE SCHEDULE ON SHEET P9)	5
#2. 40 PERCENT OF EXISTING SIGNIFICANT TREES (INCLUDES LANDMARK) ARE RETAINED (SEE TREE PRESERVATION PLAN ON SHEET P04)	7
#3. MIN. OF 25% OF PROPOSED TREES ARE EVERGREEN (SEE SCHEDULE ON SHEET P9)	5
#12. MIN. OF 50% OF REQUIRED PLANTING AREAS IN DISTURBED SOILS WILL BE AMENDED (SEE GENERAL NOTES ON P9)	3
TOTAL POINTS:	20

REPLACEMENT TREE CALCULATIONS*

REPLACEMENT TREES REQUIRED FOR SIGNIFICANT TREES LOST:	229
STREET TREES AS REPLACEMENT TREES:	6
OPEN SPACE TREES AS REPLACEMENT TREES:	86
TOTAL REPLACEMENT TREES PROVIDED:	92
REMAINDER TREES TO BE FEE IN LIEU OF TREE REPLACEMENT:	137

* SEE PRELIMINARY TREE RETENTION PLAN ON SHEET P4 FOR COMPLETE RETENTION/REPLACEMENT CALCULATIONS

NOTES

1. FOR PROJECT NOTES SEE SHEET P9.

LEGEND

—x—x—x— 6' HT. FENCE

BENCH

LANDSCAPE BOULDER

SCALE: 1" = 30'

0 15 30 60

NO.	DATE	REVISIONS
1	8/21/12	REVISED PER CITY COMMENTS
2	1/30/13	REVISED PER CITY COMMENTS
3	10/3/13	REVISED PER CITY COMMENTS
4	2/11/15	REVISED PER CITY COMMENTS

STATE OF WASHINGTON
REGISTERED LANDSCAPE ARCHITECT
JOSHUA PENNINGTON BEARD
CERTIFICATE NO. 938

14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963
CORE DESIGN
ENGINEERING • PLANNING • SURVEYING

LANDSCAPE PLAN
THE STROM PROPERTY
BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE AUGUST 2013
DESIGNED J.P.B.
DRAWN J.P.B.
APPROVED J.P.B.
JAMES A. OLSEN, P.E.
PROJECT MANAGER

SHEET P8 OF 9
PROJECT NUMBER 10079

COMMON SPACE PRELIMINARY PLANT SCHEDULE

QTY	LATIN NAME	COMMON NAME	SIZE	SPACING	COMMENTS	REPLACEMENT TREE
TREES						
26	SMALL NATIVE TREE – SUGGESTED SPECIES: –ACER CIRONATUM* –CORNUS MAS	–VINE MAPLE –CORNELIAN CHERRY	8' HT. MIN.	AS SHOWN	WELL BRANCHED	REPLACEMENT TREE
12	SMALL CONIFEROUS ACCENT TREE – SUGGESTED SPECIES: –PINUS CONTORTA VAR. CONTORTA –TAXUS BACCATA 'FASTIGIATA'	–SHORE PINE –IRISH YEW	5–6' HT. MIN.	AS SHOWN	WELL BRANCHED	REPLACEMENT TREE
23	LARGE NATIVE CONIFER – SUGGESTED SPECIES: –PICEA OMORIKA –TSUGA MERTENSIANA*	–SERBIAN SPRUCE –MOUNTAIN HEMLOCK	5–6 HT. MIN.	AS SHOWN	WELL BRANCHED;	REPLACEMENT TREE
6	STREET TREE – SUGGESTED SPECIES: –KOELREUTERIA PANICULATA –ACER BUERGERIANUM	–GOLDENRAIN TREE –TRIDENT MAPLE	2.5" CAL. MIN.	AS SHOWN	WELL BRANCHED; STREET TREE QUALITY	REPLACEMENT TREE
25	LARGE DEC. NATIVE – SUGGESTED SPECIES: –BETULA UTILIS VAR. JACQUEMONTII	–JACQUEMONTII BIRCH	2.5" CAL. MIN.	AS SHOWN	WELL BRANCHED; STREET TREE QUALITY;	REPLACEMENT TREE
SHRUBS & GRASSES						
320 (1,740 SF)	NATIVE SHRUB MIX FOR OPEN SPACE AREAS: –MAHONIA NERVOSA* –GAULTHERIA SHALLON* –RIBES SANGUINEUM* –CORNUS STOLONIFERA*	–TALL OREGON GRAPE –SALAL –REDFLOWERING CURRANT –REDTWIG DOGWOOD	1–5 GAL.	3' O.C.	FULL & WELL BRANCHED	
TURF						
2,490 SF	LAWN					
EROSION CONTROL HYDROSEED MIX						
14,130 SF	EROSION CONTROL HYDROSEED: 10% CHEWING FESCUE, K-2 30% CREEPING FESCUE, NAVIGATOR 30% SHEEP FESCUE, COVAR 30% UPLAND BLUEGRASS, DRAYLAR WILDFLOWER HYDROSEED: NW NATIVE WILDFLOWER MIX ENVIRONMENTAL SEEDS LOMPOC, CA PHONE (805) 735–8888			100 LBS/ACRE 5 LBS/ACRE		

* DENOTES PLANT NATIVE TO PACIFIC NORTHWEST PER PLANTS OF THE PACIFIC NORTHWEST COAST: WASHINGTON, OREGON, BRITISH COLUMBIA & ALASKA, WHICH IS REFERENCED IN RZC 21.32.050

NOTE: DROUGHT TOLERANT SPECIES SELECTED FROM THE PLANT LIST PUBLISHED BY THE SAVING WATER PARTERSHIP, PER RZC 21.67.050 (C).

PROJECT NOTES:

(A) LIMB ALL STREET TREES UP TO 8'.

(B) SIGHT DISTANCE TRIANGLES: MUST MAINTAIN VERTICAL CLEARANCE ZONE BETWEEN 2' AND 8' HEIGHT.

(C) STREET TREE LOCATION IS APPROXIMATE. ADJUST AS NEEDED DUE TO CONFLICTS WITH UTILITIES AND/OR OTHER OBSTRUCTIONS ENCOUNTERED (CONTACT LANDSCAPE ARCHITECT IF GREATER THAN 3'-0" ADJUSTMENT IS REQUIRED).

(D) TREES TO BE PLANTED A MINIMUM OF 8' FROM SEWER & WATER LINES. ROOT BARRIER TO BE INSTALLED WITH ALL TREES WITHIN PLANTER STRIPS.

(E) REMOVE ALL INVASIVE SPECIES WITHIN EXISTING NATIVE UNDERSTORY AREAS TO REMAIN.

(F) BENCH: DOUBLE PEDESTAL - FULL CONTOUR BENCH WITH FULL BACK; EXACT MODEL T.B.D.

(G) LOT LANDSCAPING: TO BE INCLUDED IN FUTURE, SEPARATE PACKAGE.

GENERAL NOTES

1) ALL LANDSCAPING SHALL BE INSTALLED PEER ALL APPLICABLE REDMOND ZONING CODE (RZC) REQUIREMENTS.

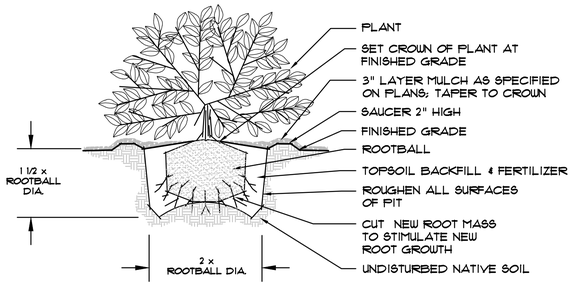
2) STREET TREE MAINTENANCE IS THE RESPONSIBILITY OF THE ADJACENT LANDOWNER UPON OCCUPANCY.

3) THIS IS A PRELIMINARY LANDSCAPE PLAN AND PLANT SYMBOLS, SPECIES, LOCATIONS, & QUANTITIES SHOWN ARE GENERAL IN NATURE. FINAL LAYOUT AND SPECIES SELECTION WILL BE DETERMINED IN THE FINAL LANDSCAPE PLAN.

4) IRRIGATION: STREET TREES AND PLANTING AREAS OVER 500 SF SHALL BE IRRIGATED PER RZC 21.32.100. IN ADDITION, ALL PLANTING AREAS OVER THE STORMWATER VAULT SHALL BE IRRIGATED. ALL IRRIGATION SHALL BE BIDDER DESIGNED AND SHALL BE COMPLIANT WITH ALL APPLICABLE RZC 21.32.100 REQUIREMENTS.

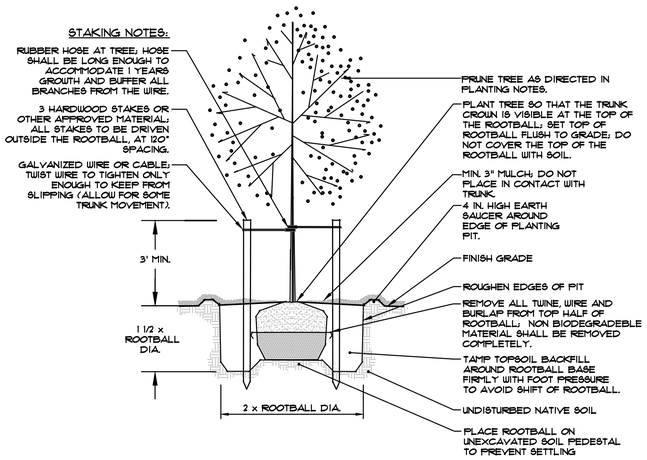
5) A MINIMUM OF SIX INCHES OF COMPOST SHALL BE PROVIDED IN ALL PLANTING AREAS. COMPOST-AMENDED SOILS SHALL BE ADDED TO LANDSCAPED AREAS TO ACHIEVE THE MINIMUM SOIL DEPTH REQUIRED BY THESE REGULATIONS. LANDSCAPING PLANS SHALL REQUIRE A COPY OF RECEIPT FOR PURCHASE(S) OF COMPOST-AMENDED SOILS.

DETAILS



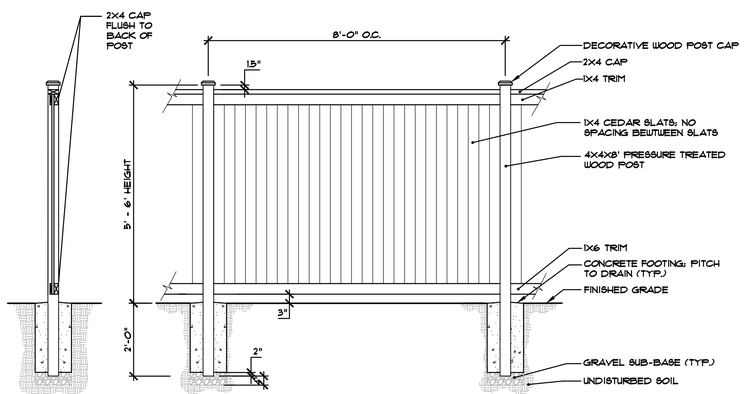
1 SHRUB / GROUNDCOVER PLANTING DETAIL

NTS



2 TREE PLANTING DETAIL

NTS



3 6' HT PANEL FENCE DETAIL

NTS

NO.	DATE	REVISIONS
1	8/21/12	REVISED PER CITY COMMENTS
2	1/31/13	REVISED PER CITY COMMENTS
3	10/3/13	REVISED PER CITY COMMENTS
4	2/11/15	REVISED PER CITY COMMENTS

STATE OF WASHINGTON
REGISTERED
LANDSCAPE ARCHITECT
JOSHUA PENNINGTON BEARD
CERTIFICATE NO. 938

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place, Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

PLANT SCHEDULE & DETAILS
THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE AUGUST 2013
DESIGNED J.P.B.
DRAWN J.P.B.
APPROVED J.P.B.
JAMES A. OLSEN, P.E.
PROJECT MANAGER

SHEET P9 OF 9

PROJECT NUMBER 10079

WETLAND A
CATEGORY III
(150' standard buffer)

PAPER FILL
AREA
753 SF

100' WETLAND
BUFFER

TOP OF SLOPE

S3

TRACT A
7,560± SF

P1

3
4619± SF

2
5000± SF

1
6500± SF

25' HAZARDOUS
SLOPE SETBACK

S4

TRACT B
2754± SF

ENERGY PAD
DISSIPATER
50 SF

S6

PAPER FILL
AREA
1,534 SF

P2

BUFFER
RESTORATION
10,800 SF

BUFFER AVERAGING
REDUCTION: 1,237 SF

4
5948± SF

WETLAND B
CATEGORY IV
(50' standard buffer)

S5

100' WETLAND
BUFFER

P3

5
5246± SF

150' WETLAND
BUFFER LINE
(HIGH-INTENSITY
LAND USE)

OHWM OF
STREAM 1
CLASS II STREAM
(150' BUFFER)

OHWM OF
STREAM 2
CLASS III -
INTERMITTENT
(100' BUFFER)

6
5000± SF

TRACT C
NGPA
135,308± SF

50' OUTER
STREAM BUFFER

100' INNER
STREAM BUFFER

7
5000± SF

100' WETLAND
BUFFER

PAPER FILL
AREA
282 S.F.

50' HAZARDOUS
SLOPE SETBACK

8
5000± SF

TOP OF SLOPE

P4

S1

WETLAND C
CATEGORY III
(150' standard buffer)

9
4901± SF

10
4899± SF

S2

CLASS II
STREAM

100' STREAM
BUFFER

83'

BUFFER AVERAGING
REDUCTION: 1,122 SF

11
4955± SF

OHWM OF
STREAM 3
CLASS III -
INTERMITTENT
(100' BUFFER)

12
4844± SF

BUFFER
RESTORATION
850 SF

P5

13
5261± SF

P6

SCALE 1" = 20'
0 10 20 30 40

LEGEND

- 150' WETLAND BUFFER
- 100' CLASS III BUFFER
- 50' OUTER CLASS II STREAM BUFFER
- 100' INNER CLASS II STREAM BUFFER
- PROPOSED BUFFER LINE WITH FENCE
- TOP OF SLOPE
- 50' HAZARDOUS SLOPE BUFFER
- 100' WETLAND BUFFER CORRIDOR
- BUFFER AVERAGING REDUCTION
- BUFFER AVERAGING ADDITION
- BUFFER RESTORATION
- SENSITIVE AREA SIGNS
- S1 – S6 DATA SITES 1-6
- P3 DIRECTION/PHOTO SITES 1-6

ON-SITE BUFFER MITIGATION PLAN
BURNSTEAD CONSTRUCTION - STROM PROPERTY
REDMOND, WASHINGTON

Burnstead Construction Co.
Attn: Tiffiny Brown
11980 NE 24th St., #200
Bellevue, WA 98005

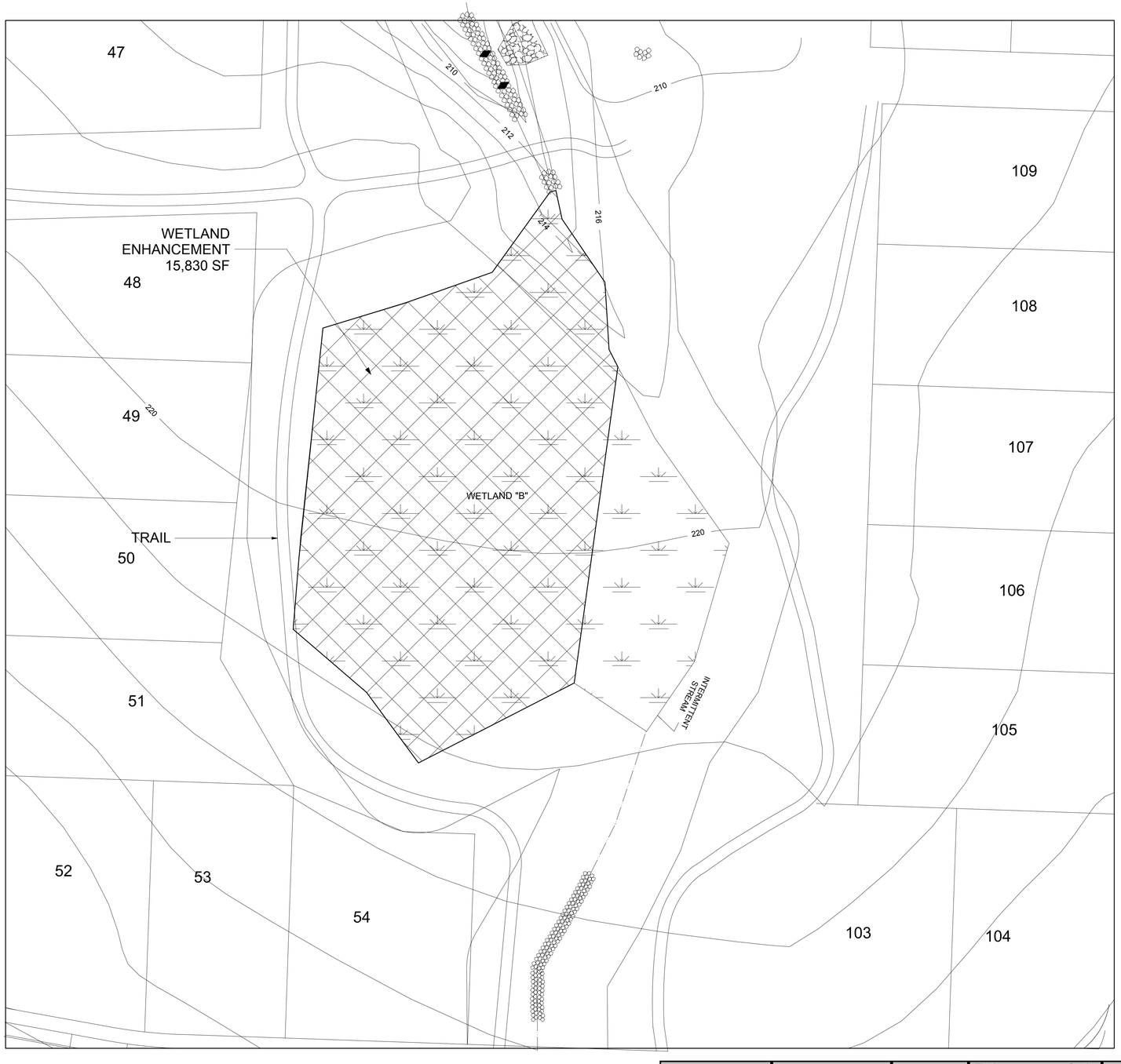
Sheet 1/4
Job #11045
Drawn by: A. Bachman
Date: February 6, 2015

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
9505 19th Avenue S.E. Suite 106 Everett,Washington 98208
Phone: (425) 337-3174
Fax: (425) 337-3045
Email: mailbox@wetlandresources .com

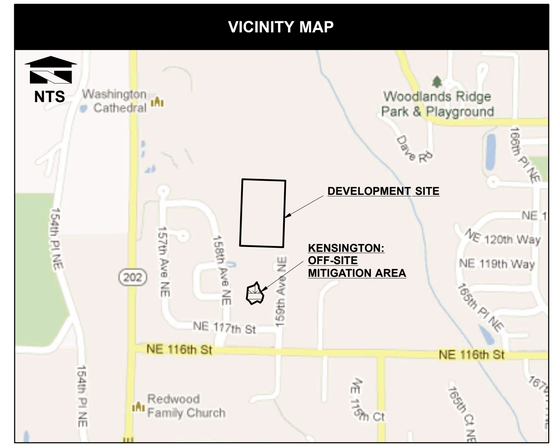
OFF-SITE MITIGATION PLAN

BURNSTEAD CONSTRUCTION

REDMOND, WASHINGTON



VICINITY MAP



SCALE 1" = 20'

0 10 20 30 40

LEGEND

- WETLAND
- WETLAND ENHANCEMENT

Name of Critical Area	Category/Type	Impact Area (SF)	Enhancement Only Ratio (Per RZC 21.64.030B)	Enhancement Only
Wetland A	Category III	753	8:1	6,056 SF
Wetland B	Category IV	2,130	6:1	12,780 SF
Wetland C	Category III	282	8:1	2,256 SF
				Total = 15,830 SF

OFF-SITE MITIGATION PLAN
BURNSTEAD CONSTRUCTION
REDMOND, WASHINGTON

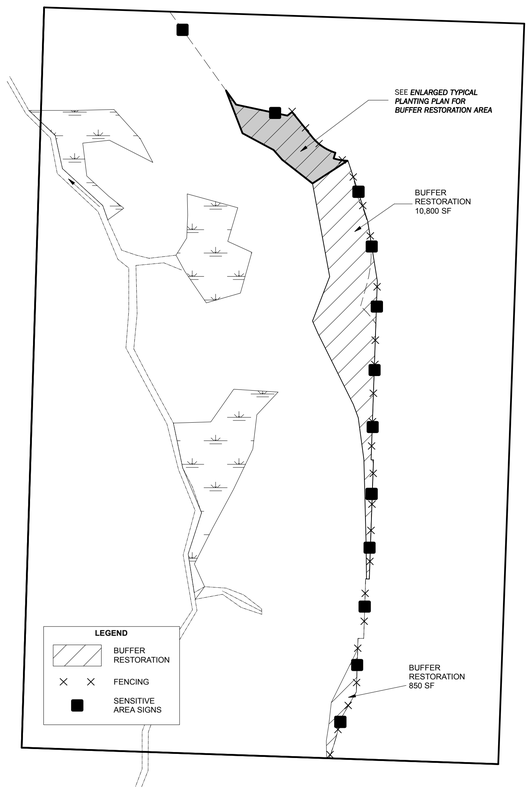
Burnstead Construction Co.
Attn: Tiffiny Brown
11980 NE 24th St., #200
Bellevue, WA 98005

Sheet 2/4
Job #11045
Drawn by: A. Bachman
Date: February 6, 2015

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
9505 19th Avenue S.E. Suite 106 Everett,Washington 98208
Phone: (425) 337-3174
Fax: (425) 337-3045
Email: mailbox@wetlandresources.com

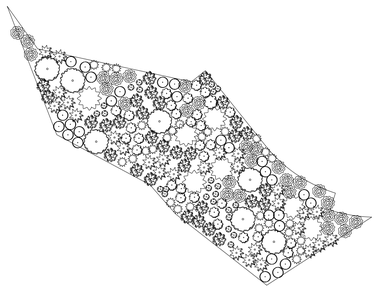
ON-SITE BUFFER RESTORATION PLAN

Scale 1" = 60'



ENLARGED TYPICAL PLANTING PLAN FOR BUFFER RESTORATION AREA

1" = 20'



A total of 11,650 (10,800 + 850) square feet of buffer will be temporarily disturbed during site preparation and grading. Following the installation of the pipe, the disturbed soils will be restored to original horizonal structure, and bare ground areas will be restored with native vegetation. Spacing is based on the triangular spacing formula for 4-foot spacings. Plant quantities may be adjusted upon installation, if it is determined that the disturbance area is smaller or larger than anticipated. The following plant species are proposed:

Buffer Restoration/Enhancement (11,650 square feet)

Common Name	Latin Name	Size	Spacing	Quantity
Big-leaf maple	*Acer macrophylum*	5 gal	15’	30
Western red cedar	*Thuja plicata*	5 gal	15’	30
Osoberry	*Oemleria cerasiformis*	2 gal	4’	165
Snowberry	*Symphoricarpos albus*	2 gal	4’	160
Vine maple	*Acer circinatum*	2 gal	4’	160
Salmonberry	*Rubus spectabilis*	2 gal	4’	120
Salal	*Gaultheria shallon*	2 gal	4’	120
Dwarf Oregon grape	*Mahonia nervosa*	2 gal	4’	100
Sword fern	*Polystichum munitum*	1 gal	4’	140

Signs and Fencing

Sensitive area signs shall be installed along the proposed buffer boundary on the subject site. Sign design specifications shall follow those recommended by the City. In addition, fencing shall be installed along the buffer to minimize disturbance from residents and domestic animals to the greatest extent possible. The fence will not be a standard split-rail fence, but a minimum 6 feet tall wood privacy fence.

MITIGATION PLANTING PLAN
BURNSTEAD CONSTRUCTION - STROM PROPERTY
REDMOND, WASHINGTON

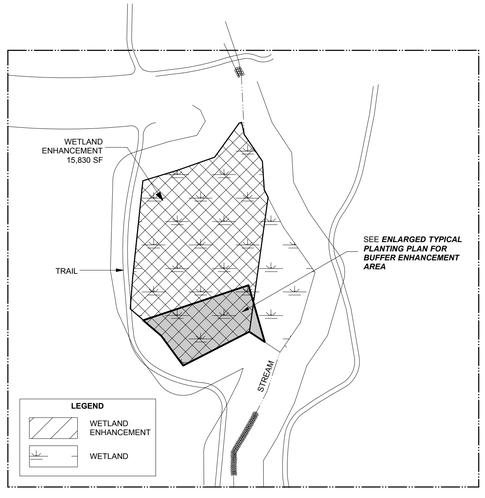
Sheet 3/4
Job #11045
Drawn by: A. Bachman
February 6, 2015

Burnstead Construction Co.
Attn: Tiffiny Brown
11980 NE 24th St., #200
Bellevue, WA 98005

Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
9505 19th Avenue S.E. Suite 106 Everett, Washington 98208
Phone: (425) 337-3174
Fax: (425) 337-3045
Email: mailbox@wetlandresources.com

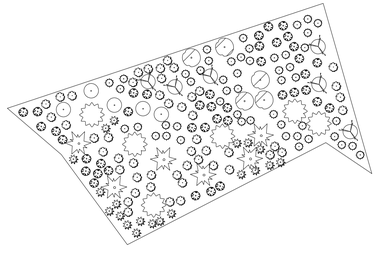
OFF-SITE WETLAND ENANCEMENT PLAN

Scale 1" = 60'



ENLARGED TYPICAL PLANTING PLAN FOR WETLAND ENHANCEMENT AREA

1" = 20'



Wetland Enhancement

A total of approximately 15,830 square feet wetland within the off-site native growth protection easement will be enhanced, including areas along the stream channel. Enhancement will begin with carful removal of invasive species, such as Himalayan blackberry (*Rubus armeniacus*). All invasive plant cuttings will be removed from the designated enhancement areas and exported off-site. The areas will then be planted with a diversity of native trees and shrubs. Five-gallon trees will be planted on 12-foot centers and two-gallon shrubs will be planted on 5-foot centers. The combination of new plantings and existing native vegetation should be adequate to achieve the plant density standards outlined in the definitions of success later in this report. Plantings will be in groups of 2-3 like species, however, the actual placement of individual plants shall mimic natural, asymmetric vegetation patterns. The following species shall be planted within the designated off-site enhancement areas:

Wetland Enhancement (15,830 square feet)

Common Name	Latin Name	Size	Spacing	Quantity
Western red cedar	*Thuja plicata*	5 gal	12’	32
Sitka spruce	*Picea sitchesis*	5 gal	12’	32
Oregon ash	*Fraxinus latifolia*	5 gal	12’	27
Sitka willow	*Salix sitchensis*	5 gal	12’	20
Pacific willow	*Salix lucida*	5 gal	12’	20
Red-twig dogwood	*Cornus sericea*	2 gal	5’	234
Pacific ninebark	*Physocarpus capitatus*	2 gal	5’	184
Black twinberry	*Lonicera involucrata*	2 gal	5’	184
Salmonberry	*Rubus spectabilis*	2 gal	5’	134

INTRODUCTION

The subject 5.74-acre site is located northeast of 158th Ave NE and NE 118th Way in the city of Redmond, WA (within a portion of Section 26, Township 26N, Range 5E, W.M.).

The site contains three wetlands (Wetlands A, B, and C) and three streams (Streams 1, 2 and 3) within the steeply sloped ravine area in the western half of the site. Wetland A, B, and C and Streams 2 and 3 all drain into Stream 1. Stream 1 flows north through the site and continues off-site to the north.

Wetlands A and C are classified as Category III wetlands with 150-foot wide protective buffers and Wetland B is classified as a Category IV wetland with a 50-foot protective buffer.

Stream 1 is a Class II stream because it meets the criteria for fish habitat. Class II streams are dedicated 150-foot protective buffers (100-foot inner buffer + 50-foot outer buffer). Streams 2 and 3 are intermittent Class III streams because they drain to a Class II stream. They will be dedicated 100-foot protective buffers.

PROJECT DESCRIPTION

The applicant is proposing a 13-lot single-family residential subdivision with associated access road and stormwater detention facility in the eastern half of the subject site.

Proposed mitigation measures include: 11,650SF of Buffer Restoration/Enhancement and 15,830 SF of wetland enhancement to compensate for temporary buffer disturbance and paper filling portions of on-site critical areas.

BUFFER RESTORATION PLAN

A total of 11,650 (10,800 + 850) square feet of buffer will be temporarily disturbed during site preparation and grading. Following the installation of the pipe, the disturbed soils will be restored to original horizonal structure, and bare ground areas will be restored with native vegetation. Spacing is based on the triangular spacing formula for 4-foot spacings. Plant quantities may be adjusted upon installation, if it is determined that the disturbance area is smaller or larger than anticipated. The following plant species are proposed:

Buffer Restoration/Enhancement (11,650 square feet)

Common Name	Latin Name	Size	Spacing	Quantity
Big-leaf maple	*Acer macrophylum*	5 gal	15'	30
Western red cedar	*Thuja plicata*	5 gal	15'	30
Osoberry	*Oemleria cerasiformis*	2 gal	4'	165
Snowberry	*Symphoricarpos albus*	2 gal	4'	160
Vine maple	*Acer circinatum*	2 gal	4'	160
Salmonberry	*Rubus spectabilis*	2 gal	4'	120
Salal	*Gaultheria shallon*	2 gal	4'	120
Dwarf Oregon grape	*Mahonia nervosa*	2 gal	4'	100
Sword fern	*Polystichum munitum*	1 gal	4'	140

WETLAND ENHANCEMENT PLAN

A total of approximately 15,830 square feet wetland within the off-site native growth protection easement will be enhanced, including areas along the stream channel. Enhancement will begin with carful removal of invasive species, such as Himalayan blackberry (*Rubus armeniacus*). All invasive plant cuttings will be removed from the designated enhancement areas and exported off-site. The areas will then be planted with a diversity of native trees and shrubs. Trees will be planted on 12-foot centers and shrubs will be planted on 5-foot centers. The combination of new plantings and existing native vegetation should be adequate to achieve the plant density standards outlined in the definitions of success later in this report. Plantings will be in groups of 2-3 like species, however, the actual placement of individual plants shall mimic natural, asymmetric vegetation patterns. The following species shall be planted within the designated off-site enhancement areas:

Wetland Enhancement (15,830 square feet)

Common Name	Latin Name	Size	Spacing	Quantity
Western red cedar	Thuja plicata	5 gal	12'	32
Sitka spruce	Picea sitchesis	5 gal	12'	32
Oregon ash	Fraxinus latifolia	5 gal	12'	27
Sitka willow	Salix sitchensis	5 gal	12'	20
Pacific willow	Salix lucida	5 gal	12'	20
Red-twig dogwood	Cornus sericea	2 gal	5'	234
Pacific ninebark	Physocarpus capitatus	2 gal	5'	184
Black twinberry	Lonicera involucrata	2 gal	5'	184
Salmonberry	Rubus spectabilis	2 gal	5'	134

TEMPORARY IRRIGATION SYSTEM

An above ground irrigation system capable of full head to head coverage of all planted areas will be provided. The temporary irrigation system shall either utilize control and point of connection (POC) from the site irrigation system, or shall include a separate POC and controller with a backflow prevention device per water jurisdiction inspection and approval. The system shall be zoned to provide optimal pressure and uniformity of coverage, as well as separation of areas of full sun or shade and slopes in excess of 5%.

The system shall be operational by June 15 (or at time of planting) and winterized by October 15. Irrigation shall be provided for the first two years of the monitoring period, and as needed during subsequent years of maintenance. The irrigation system shall be programmed to provide 1" inch of water per week (one cycle with two start times per week or every three days). A chart describing the location of all installed or open zones and corresponding controller numbers shall be placed inside the controller and given to the owner's representative.

SIGNS AND FENCING

Sensitive area signs shall be installed along the proposed buffer boundary on the subject site. Sign design specifications shall follow those recommended by the City. In addition, fencing shall be installed along the buffer to minimize disturbance from residents and domestic animals to the greatest extent possible. The fence will not be a standard split-rail fence, but a minimum 6 feet tall wood privacy fence.

PLANTING NOTES

Plant in the early spring or late fall and obtain all plants from a reputable nursery. Care and handling of all plant materials is extremely important to the overall success of the project. The origin of all plant materials specified in this plan shall be native plants, nursery grown in the Puget Sound region of Washington. Some limited species substitution may be allowed, only with the agreement of the landscape designer, wetland biologist, and/or City staff.

Handling: Plants shall be handled to avoid all damage, including breaking, bruising, root damage, sunburn, drying, freezing or other injury. Plants must be covered during transport. Plants shall not be bound with wire or rope in a manner that could damage branches. Protect plant roots with shade and wet soil in the time period between delivery and installation. Do not lift container stock by trunks, stems, or tops. Do not remove from containers until ready to plant. Water all plants as necessary to keep moisture levels appropriate to the species' horticultural requirements. Plants shall not be allowed to dry out. All plants shall be watered thoroughly immediately upon installation. Soak all containerized plants thoroughly prior to installation. Bare root plants are subject to the following special requirements, and shall not be used unless planted between November 1 and March 1, and only with the permission of the landscape designer, wetland biologist, and City of Redmond staff. Bare root plants must have enough fibrous root to insure plant survival. Roots must be covered at all times with mud and/or wet straw, moss, or other suitable packing material until time of installation. Plants whose roots have dried out from exposure will not be accepted at installation inspection.

Storage: Plants stored by the Permittee for longer than one month prior to planting shall be planted in nursery rows, and treated in a manner suitable to that species' horticultural requirements. Plants must be reinspected by the wetland biologist and/or landscape designer prior to installation.

Damaged plants: Damaged, dried out, or otherwise mishandled plants will be rejected at installation inspection. All rejected plants shall be immediately removed from the site.

Plant Names: Plant names shall comply with those generally accepted in the native plant nursery trade. Any question regarding plant species or variety shall be referred to the landscape designer, wetland biologist, or City of Redmond staff. All plant materials shall be true to species and variety and legibly tagged.

Quality and condition: Plants shall be normal in pattern of growth, healthy, well-branched, vigorous, with well-developed root systems, and free of pests and diseases. Damaged, diseased, pest-infested, scraped, bruised, dried out, burned, broken, or defective plants will be rejected. Plants with pruning wounds over 1" in diameter will be rejected.

Roots: All plants shall be balled and burlapped or containerized, unless explicitly authorized by the landscape designer and/or wetland biologist. Rootbound plants or B&B plants with damaged, cracked, or loose rootballs (major damage) will be rejected. Immediately before installation, plants with minor root damage (some broken and / or twisted roots) must be root-pruned. Matted or circling roots of containerized plantings must be pruned or straightened and the sides of the root ball must be roughened from top to bottom to a depth of approximately half an inch in two to four places. Bare root plantings of woody material are allowed only with permission from the landscape designer, wetland biologist and/or City of Redmond staff.

Sizes: Plant sizes shall be the size indicated in the plant schedule in approved plans. Larger stock may be acceptable provided that it has not been cut back to the size specified, and that the root ball is proportionate to the size of the plant. Smaller stock may be acceptable, and preferable under some circumstances, based on site-specific conditions. Measurements, caliper, branching, and balling and burlapping shall conform to the American Standard of Nursery Stock by the American Association of Nurserymen (latest edition).

Form: Evergreen trees shall have single trunks and symmetrical, well-developed form. Deciduous trees shall be single-trunked unless specified as multi-stem in the plant schedule. Shrubs shall have multiple stems and be well-branched.

Timing of Planting: Unless otherwise approved by City of Redmond staff, all planting shall occur between November 1 and March 1. Overall, the earlier plants go into the ground during the dormant period, the more time they have to adapt to the site and extend their root systems before the water demands of spring and summer.

PLANTING NOTES CONTINUED

Weeding: Existing and exotic vegetation in the planting areas will be hand-weeded from around all newly installed plants at the time of installation and on a routine basis throughout the monitoring period. No chemical control of vegetation on any portion of the site is allowed without the written permission of the City of Redmond staff.

Soil Amendments: Unless otherwise specified and approved by the City of Redmond, organic matter (compost or approved equal) will be incorporated into the entire planting area, not including areas inside the dripline of existing trees and shrubs. One unit of loose, well-composted organic material should be incorporated with two units of silt loam topsoil to a depth of eight to ten inches (only three to four inches within three feet of existing drip lines) and mixed thoroughly.

Site conditions: The contractor shall immediately notify the landscape designer and/or wetland biologist of drainage or soil conditions likely to be detrimental to the growth or survival of plants. Planting operations shall not be conducted under the following conditions: freezing weather, when the ground is frozen, excessively wet weather, excessively windy weather, or in excessive heat.

Planting Pits: Planting pits shall be circular or square with vertical sides, and shall be 6" deeper and 12" larger in diameter than the root ball of the plant. Break up the sides of the pit in compacted soils. Set plants upright in pits. Burlap shall be removed from the planting pit. Backfill shall be worked back into holes such that air pockets are removed without adversely compacting down soils.

Fertilizer: Slow release fertilizer may be used if pre-approved by the City of Redmond. Fertilizers shall be applied only at the base of plantings underneath the required covering of mulch (that does not make contact with stems of the plants). No soil amendment or fertilizers will be placed in planting holes.

Water: Plants shall be watered midway through backfilling, and again upon completion of backfilling. For spring plantings (if approved), a rim of earth shall be mounded around the base of the tree or shrub no closer than the drip line, or no less than 30 inches in diameter, except on steep slopes or in hollows. Plants shall be watered a second time within 24-48 hours after installation. The earthen rim / dam should be leveled prior to the second growing season.

Staking: Most shrubs and many trees DO NOT require any staking. If the plant can stand alone without staking in a moderate wind, do not use a stake. If the plant needs support, then strapping or webbing should be used as low as possible on the trunk to loosely brace the tree with two stakes. Do not brace the tree tightly or too high on the trunk. If the tree is unable to sway, it will further lose the ability to support itself. Do not use wire in a rubber hose for strapping as it exerts too much pressure on the bark. As soon as supporting the plant becomes unnecessary, remove the stakes. All stakes must be removed within two (2) years of installation.

Plant Location: Three-foot by two-inch by one quarter-inch (3' x 2" x 1/4") lath stakes or suitable flagging material shall be placed next to or on each planting to assist in locating the plants while removing the competing non-native vegetation and to assist in locating the plants during the monitoring period.

Arrangement and Spacing: The plants shall be arranged in a pattern with the appropriate numbers, sizes, species, and distribution that are required in accordance with the approved plans. The actual placement of individual plants shall mimic natural, asymmetric vegetation patterns found on similar undisturbed sites in the area. Spacing of the plantings may be adjusted to maintain existing vegetation with the agreement of the landscape designer, wetland biologist, and/or City of Redmond staff.

Inspection(s): A wetland biologist shall be present on site to inspect the plants prior to planting. Minor adjustments to the original design may be required prior to and during construction.

Mulch: All landscaped areas denuded of vegetation and soil surface surrounding all planting pit areas shall receive no less than two to four inches of organic compost or certified weed free straw after planting. Compost or certified weed free straw shall be kept well away (at least two inches) from the trunks and stems of woody plants.

Temporary Erosion and Sedimentation Control

Prior to beginning any development or mitigation activities, erosion control fencing shall be installed as described in the grading plan construction drawings. A pre-construction meeting between the City of Redmond, the consulting wetland professional, contractor and equipment operator(s) will be held prior to any construction activities to inspect the location of siltation fencing.

All sedimentation control facilities shall be kept in place and functioning until vegetation is firmly established. Refer to site engineer's TESC plan for all erosion and sedimentation control details.

PROJECT GOALS

The goal of this mitigation plan is to replace and improve ecological functions and values through vegetation restoration and enhancement. This will be achieved if the mitigation areas designated in this plan support a minimum 80 percent per year survival of planted trees and 80 percent cover of shrubs, groundcover and emergent species and less than 20 percent cover of invasive species by the end of five years.

PROJECT MONITORING PROGRAM

Requirements for monitoring project:

1. At the time of construction; 30 days after planting; early in the growing season of the second year; end of the growing season of the second year; and annually thereafter Initial compliance/as-built report repared within 30 days following planting.
2. Two inspections (early and end of growing season) during years 1 and 2, and one annual inspection for years 3, 4, and 5.
3. Annual reports including final report (one report submitted in the fall of each monitored year).

Purpose for Monitoring

The purpose for monitoring this planting plan shall be to evaluate its success. Success will be determined if monitoring shows at the end of five years that the definitions of success stated below are being met. The property owner shall grant access to the planting area for inspection and maintenance to the contracted landscape and/or wetland specialist and the City of Redmond during the period of the bond or until the project is evaluated as successful.

Performance Standards

Vegetative success equals 80 percent per year survival of planted trees and 80 percent cover of shrubs, groundcover and emergent species and less than 20 percent cover of invasive species.

Vegetation Monitoring

Sampling points or transects will be established for vegetation monitoring and photo points will be established from which photos will be taken throughout the monitoring period. Permanent sampling points must be identified on the planting site plans in the first monitoring report (they may be drawn on approved enhancement plans by hand). Each sampling point shall detail herbaceous, shrub, and tree coverage in accordance with the King County Sensitive Areas Restoration Guidelines (2002).
Monitoring of vegetation sampling points shall occur annually between May 15 and September 1 (prior to leaf drop), unless otherwise specified.

Vegetative success equals 80 percent per year survival of planted trees and 80 percent cover of shrubs, groundcover and emergent species and less than 20 percent cover of invasive species.

Water Quality Monitoring

Water quantity monitoring will be required as part of the mitigation monitoring program. At least two sampling points for collecting water samples will be selected within Stream 1 (Class II), ideally one sample site downstream of the proposed development (northwest corner of the site) and one sample site upstream within the off-site mitigation area. Visual observations will be made within the on-site wetlands and in the off-site wetland mitigation area.

Visual observations shall include water level, peak flows, soil saturation depth, soil moisture within root zone, inundation and overall water coverage. Water sampling methods shall include temperature, pH, dissolved oxygen, total suspended solids, total metals, herbicides and pesticides.

Photo points

Permanent photo points will be established within the enhancement areas. Photographs will be taken from these points to visually record condition of the enhancement area. Photos shall be taken annually between May 15 and September 30 (prior to leaf drop), unless otherwise specified.

Monitoring Reports

Monitoring reports shall be submitted by October 31 of each year during the monitoring period. As applicable, monitoring reports must include descriptions / data for:

1) Site plan and vicinity map;
2) Historic description of project, including date of installation, current year of monitoring, restatement of planting / restoration goals, and performance standards;
3) General appearance, health, mortality, colonization rates, percent cover, percent survival, volunteer plant species, invasive weeds, and/or other components deemed appropriate by the Department and a qualified consultant;
4) Slope condition, site stability, any structures or special features;
5) Wetland and buffer conditions, e.g., surrounding land use, use by humans, and/or wild and domestic creatures;
6) Wildlife Monitoring Methods shall include visual sightings, aural observations, nests, scat, tracks, and/or other means deemed appropriate by the Department and a qualified consultant. Wildlife monitoring components shall include species counts, species diversity, breeding activity, habitat type, nesting activity, location, usage, and/or other components deemed appropriate by the Department and a qualified consultant;
7) Assessment of nuisance / exotic biota and recommendations for management;
8) Color photographs (4" x 6" in size) taken from permanent photo-points that shall be depicted on the monitoring report map; and
9) Water quality monitoring data, including sample data and visual observations.

MAINTENANCE

The planting areas will require periodic maintenance to remove undesirable species and replace vegetation mortality. Maintenance shall occur in accordance with King County Sensitive Areas Restoration Guidelines (2002) and approved plans. Maintenance may include, but will not be limited to, removal of competing grasses (by hand if necessary), irrigation, fertilization (if necessary), replacement of plant mortality, and the replacement of mulch for each maintenance period. Chemical control, only if approved by City of Redmond staff, shall be applied by a licensed applicator following all label instructions. Mulch should be replenished during the maintenance visits, every second year, or as needed.

Silt Fencing: Following plant installation, or at the end of year 1, any silt fencing should be removed.

Duration and Extent: In order to achieve performance standards, the Permittee shall have the planting area maintained for the duration of the five-year monitoring period. Maintenance will include watering, weeding around the base of installed plants, pruning, replacement, restaking, removal of all classes of noxious weeds (see Washington State Noxious Weeds List, WAC 16-750-005) as well as Himalayan blackberry, and any other measures needed to insure plant survival. The landscape designer and/or wetland biologist shall direct all maintenance.

Survival: The Permittee shall be responsible for the health of 100 percent of all newly installed plants for *one growing season* after installation has been accepted by the City of Redmond. A growing season for these purposes is defined as occurring from spring to spring (March 15 to March 15 of the following year). For fall installation (often required), the growing season will begin the following spring. The Permittee shall replace any plants that are failing, weak, defective in manner of growth, or dead during this growing season, as directed by the landscape designer, wetland biologist, and/or City of Redmond staff.

Installation Timing for Replacement Plants: Replacement plants shall be installed between September 15 and January 15, unless otherwise determined by the landscape designer, wetland biologist, and/or City of Redmond staff.

Standards for Replacement Plants: Replacement plants shall meet the same standards for size and type as those specified for the original installation unless otherwise directed by the landscape designer, wetland biologist, and/or City of Redmond staff.

Replanting: Plants that have settled in their planting pits too deep, too shallow, loose, or crooked shall be replanted as directed by the landscape designer, wetland biologist, and/or City of Redmond staff.

Herbicides / Pesticides: Chemical controls shall not be used in the planting area, sensitive areas, or their buffers. However, limited use of herbicides may be approved depending on site-specific conditions, only if approved by City of Redmond staff.

General: The Permittee shall include in general maintenance activities the replacement of any vandalized or damaged signs, habitat features, fences, or other structural components of this planting area.

CONTINGENCY PLAN

If 20 percent of the plants are severely stressed during any of the inspections, or it appears 20 percent may not survive, additional plantings of the same species may be added to the planting area. Elements of a contingency plan may include, but will not be limited to: more aggressive weed control, pest control, mulching, replanting with larger plant material, species substitution, fertilization, soil amendments, and/or irrigation.

PERFORMANCE BOND

Upon approval of this mitigation proposal, a performance bond amount shall be determined by completing the City of Redmond's mitigation security worksheet. The performance bond shall be provided to the City for a period of five years from the time of successful installation of the project. The bond shall be released if the project is deemed successful after five years.

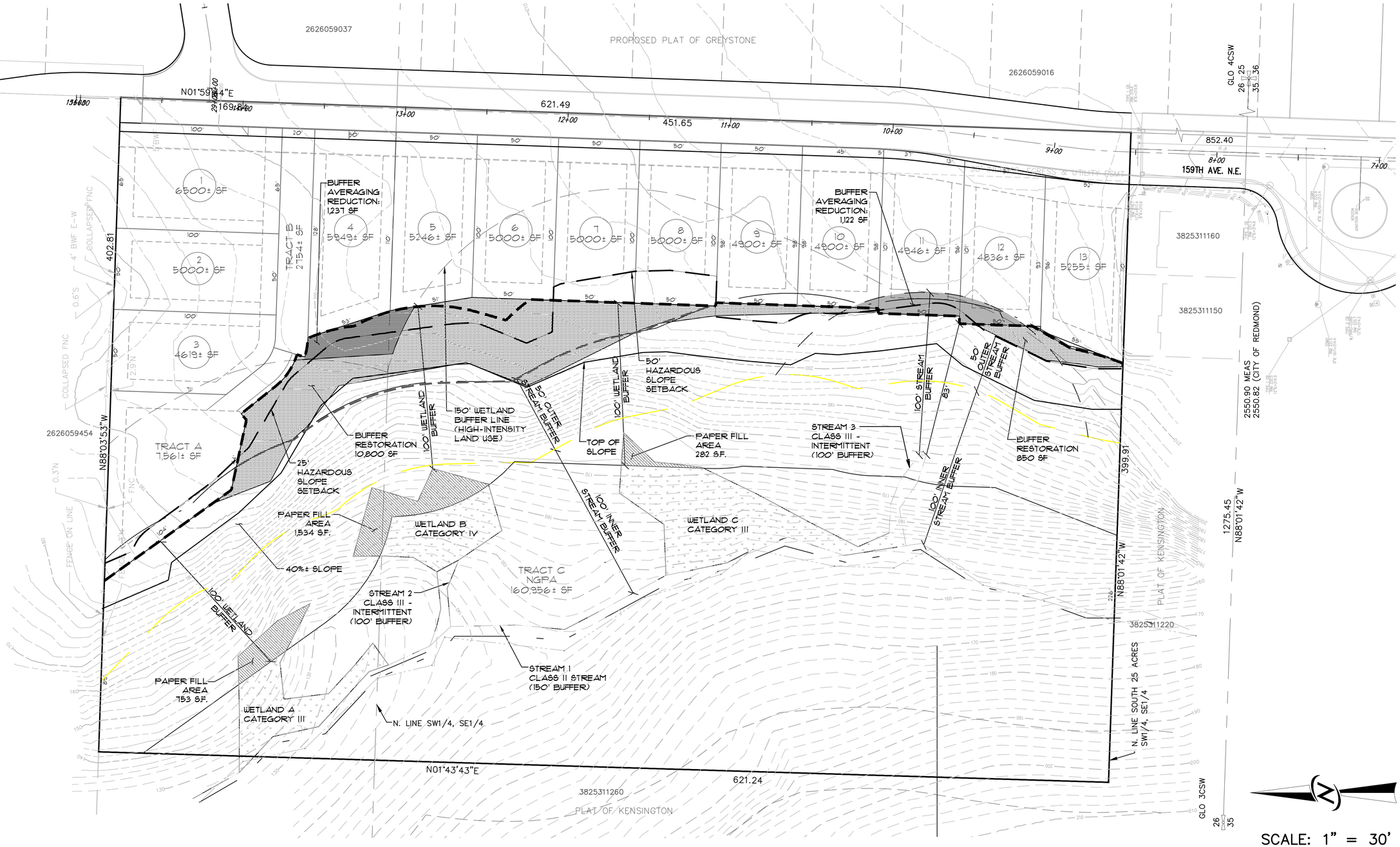
Wetland Resources, Inc.
Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
9505 19th Avenue S.E. Suite 106 Everett,Washington 98208
Phone: (425) 337-3174
Fax: (425) 337-3045
Email: mailbox@wetlandresources.com

WETLAND MITIGATION PLAN NOTES
BURNSTEAD CONSTRUCTION
REDMOND, WASHINGTON

Burnstead Construction Co.
Attn: Tiffiny Brown
11980 NE 24th St., #200
Bellevue, WA 98005

Sheet 4/4
Job #11045
Drawn by: A. Bachman
Date: February 6, 2015

SEC. 26, TWP. 26 N., RGE. 5 E., W.M.



SCALE: 1" = 30'

0 15 30 60

NOTE

LOTS 4-6, 9-13 HAVE A 25' SLOPE BUFFER.
LOTS 7, 8 HAVE A 50' SLOPE BUFFER.
SEE GEOTECHNICAL REPORT PREPARED BY ABPB CONSULTANTS, DATED 2-7-2011

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 - CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R. BENCHMARK #3191
025 FOOT DIA. BRASS DISK IN 050 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.47 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #3192
025' FOOT DIA. BRASS DISK IN 050' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.10

NO.	REVISED PER CITY COMMENTS	8/21/12
1	REVISED PER CITY COMMENTS	1/30/13
2	REVISED PER CITY COMMENTS	10/3/13
3	REVISED PER CITY COMMENTS	2/11/15
4		

WILLIAM SHELBY JOHNSON — REGISTERED PROFESSIONAL LAND SURVEYOR — STATE OF WASHINGTON — 10-3-15

CORE DESIGN
ENGINEERING · PLANNING · SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

SITE PLAN
THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	
	JAMES A. OLSEN, P.E.	PROJECT MANAGER

SHEET	OF
P3	9

PROJECT NUMBER 10079

PROPOSED GREYSTONE PRD

1" COMBINED DOMESTIC WATER & FIRE SPRINKLER METER WITH 2" SERVICE LINE (TYP.)

ROAD, STORM, SEWER AND WATER IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT.

ROAD IMPROVEMENTS PROPOSED AND TO BE CONSTRUCTED BY THE GREYSTONE PROJECT.

EXISTING LUMINARIES PER GREYSTONE PRD (TYP.)

CONCRETE DRIVEWAY APRON

FIRE HYDRANT

10' PRIVATE STORM DRAINAGE ESM'T

SEE SECTION B-B SHEET P6

14' SIDEWALK AND UTIL. ESM'T (TYP.)

CLEANOUT (TYP.)

SEE SECTION A-A SHEET P6

SEWER SERVICE (TYP.)

10' PRIVATE STORM DRAIN ESM'T

BUFFER AVERAGING REDUCTION: 1,122 SF

FOOTING DRAIN SPLASH BLOCK (TYP.)

50' HAZARDOUS SLOPE SETBACK

TOP: 212
TOE: 208

12" PVC STORM (TYP.)

6" SIDE SEWER (TYP.)

BUFFER AVERAGING REDUCTION: 1,237 SF

4' HIGH (MAX.) RETAINING WALL

TOP: 191
TOE: 190

TOP: 191
TOE: 187

TOP: 191
TOE: 190

20' STORM WATER SETBACK

TOP: 210
TOE: 207

50' HAZARDOUS SLOPE SETBACK

TOP OF SLOPE

50' OUTER STREAM BUFFER

100' STREAM BUFFER

25' BUFFER

STORMWATER DETENTION/WATER QUALITY FACILITY SEE DETAIL SHEET P6

RIM 201.5
IE 197.5

150' WETLAND BUFFER LINE (HIGH-INTENSITY LAND USE)

100' WETLAND BUFFER

BUFFER RESTORATION 10,800 SF

PAPER FILL AREA 282 S.F.

STREAM 3 CLASS III - INTERMITTENT (100' BUFFER)

BUFFER RESTORATION 850 SF

25' HAZARDOUS SLOPE SETBACK

TOP: 190
TOE: 188

TOP: 189
TOE: 187

SEE SECTION D-D SHEET P6

PAPER FILL AREA 1,534 S.F.

WETLAND B CATEGORY IV

WETLAND C CATEGORY III

100' INNER STREAM BUFFER

HDPE STORM PIPE ABOVE GROUND INSTALLATION

40%± SLOPE

ENERGY DISSIPATER PAD EL. 130±

STREAM 2 CLASS III - INTERMITTENT (100' BUFFER)

TRACT C NGPA

PAPER FILL AREA 753 S.F.

WETLAND A CATEGORY III

N. LINE SW1/4, SE1/4

STREAM 1 CLASS II STREAM (150' BUFFER)

N. LINE SOUTH 25 ACRES SW1/4, SE1/4

PLAT OF KENSINGTON

159TH AVE. N.E.

GLO 4CSW 26 25 35 36

GLO 3CSW 26 35

N01°C'44"E 169.84

621.49

451.65

852.40

N88°01'42"W 1275.45

N88°01'42"W 399.91

N01°43'43"E 621.24

2550.90 MEAS
2550.82 (CITY OF REDMOND)

402.81

N88°03'35"W 144

TRACT A 62' 24' 20' 42' 20'

LEGEND

- W — 8" DUCTILE IRON WATER PIPE
- SS — 8" PVC SANITARY SEWER PIPE
- SD — 12" STORM DRAIN
- P — POWER/GAS/PHONE/ CABLE LINE
- 320 — PROPOSED CONTOUR
- 320 — EXISTING CONTOUR
- STREET LIGHT

SCALE: 1" = 30'

0 15 30 60

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 - CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R. BENCHMARK #3191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.41 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #3192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.70

NO.	REVISED PER CITY COMMENTS	6/21/12
1	REVISED PER CITY COMMENTS	7/31/13
2	REVISED PER CITY COMMENTS	10/31/13
3	REVISED PER CITY COMMENTS	2/11/15
4		

10-9-15

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

GRADING, TRANSPORTATION AND UTILITY PLAN
THE STROM PROPERTY

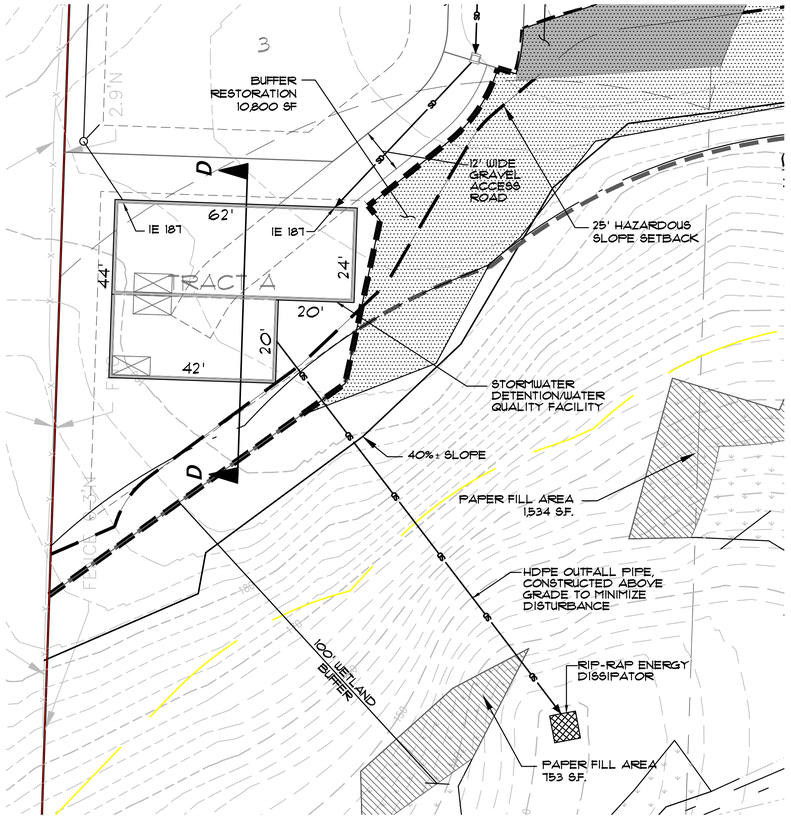
BURNSTEAD CONSTRUCTION, LLC.

11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	JAMES A. OLSEN, P.E. PROJECT MANAGER

SHEET	OF
P5	9

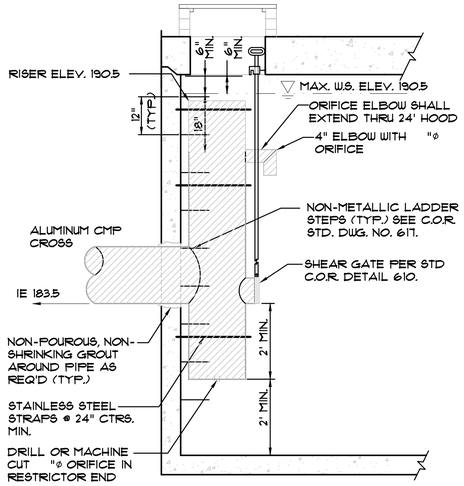
PROJECT NUMBER
10079



DETENTION VAULT

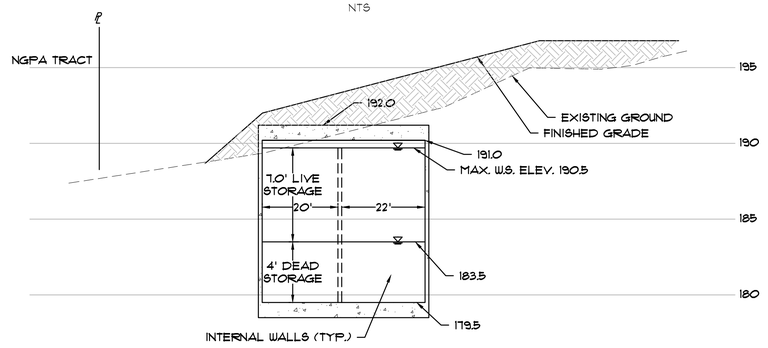
SCALE: 1"=20'

DEAD VOLUME REQUIRED=	5940 CF
DEAD VOLUME PROVIDED=	5950 CF
LIVE VOLUME REQUIRED=	15,457 CF
LIVE VOLUME PROVIDED=	15,500 CF
MAX W.S. ELEV.	190.5
NORMAL W.S. ELEV.	183.5
AVG. BOT. ELEV.	179.5 (DETENTION ONLY CELL)
AVG. BOT. ELEV.	179.5 (WATER QUALITY CELLS)



RESTRICTOR DETAIL

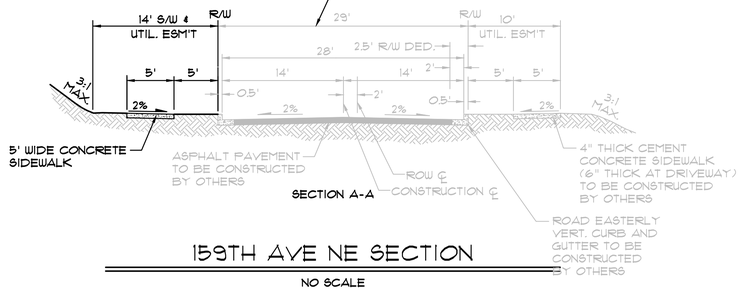
NTS



SECTION D-D

SCALE: 1"=20' HORIZ.
1"=5' VERT.

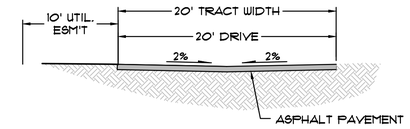
ROAD IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT. PER DIMENSIIONS SHOWN BELOW, SHADED.



SECTION A-A

159TH AVE NE SECTION

NO SCALE



SECTION B-B
PRIVATE ROAD

TRACT B

NO SCALE

NO.	DATE	BY	REVISIONS
1	8/21/12		REVISED PER CITY COMMENTS
2	1/31/13		REVISED PER CITY COMMENTS
3	10/3/13		REVISED PER CITY COMMENTS
4	2/11/15		REVISED PER CITY COMMENTS

10-3-13

CORE DESIGN
ENGINEERING · PLANNING · SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

ROAD AND STORM DETAILS THE STROM PROPERTY

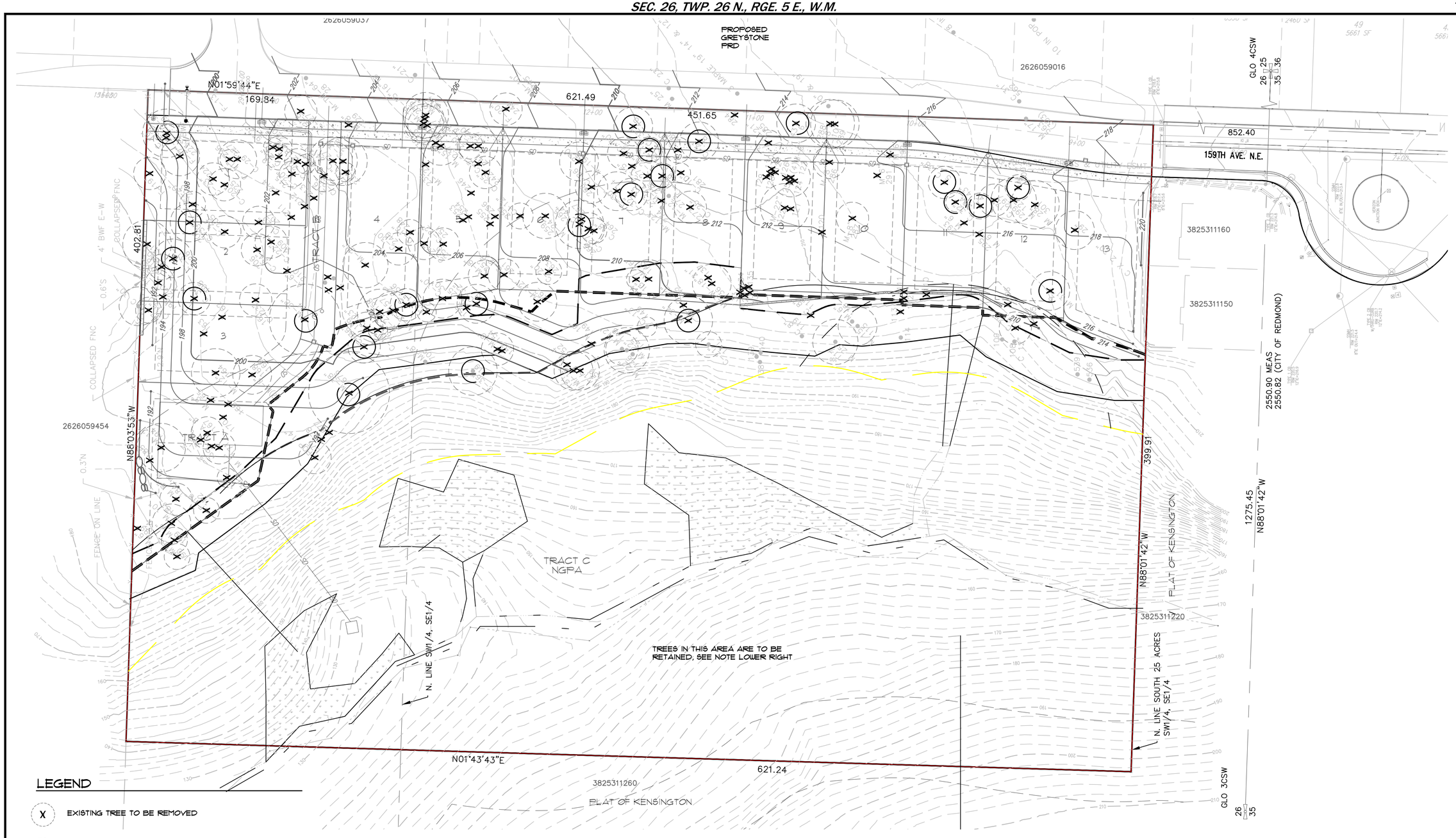
BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	
	JAMES A. OLSEN, P.E.	PROJECT MANAGER

SHEET	OF
P6	9

PROJECT NUMBER
10079

SEC. 26, TWP. 26 N., RGE. 5 E., W.M.



LEGEND

- X — EXISTING TREE TO BE REMOVED
- SIGNIFICANT TREE TO BE RETAINED
- X — LANDMARK TREE TO BE REMOVED
- LANDMARK TREE TO BE RETAINED
- 5' BSBL FROM TREE DRIPLINE (SEE NOTES 4 & 5 FOR EXCEPTIONS)
- OFF-SITE TREES WITH DRIPLINES ADJACENT TO PROPERTY

NOTES

1. FOR TREE RETENTION CALCULATIONS AND DATA SHEETS, REFER TO "TREE PRESERVATION AND HEALTH EVALUATION REPORT".
2. FOR TREE REPLACEMENT LOCATION SEE PRELIMINARY LANDSCAPE PLAN.
3. "UNHEALTHY TREES TO BE REMOVED" HAVE BEEN EXEMPT FROM COUNTS.
4. SIDEWALKS & UTILITIES MAY BE LOCATED WITHIN DRIPLINE OF A PROTECTED TREE PER (RCDG 20D.80.20-070).
5. THE ADMINISTATOR MAY ALLOW CONSTRUCTION LIMITS OR ALTERATION OF GRADES WITHIN 5' OF DRIPLINE OF A PROTECTED TREE PER (RCDG 20D.80.20-070).

SUMMARY OF ON-SITE TREE RETENTION

TREE TYPE	REMOVAL	RETAINED	TOTAL
LANDMARK (OVER 30" DBH)	23 48%	25 51%	48 100%
SIGNIFICANT (6" - 30" DBH)	160 42%	218 58%	378 100%
TOTAL	183 43%	243 57%	426 100%
REPLACEMENT TREES			229

SCALE: 1" = 30'

0 15 30 60

NOTE:
THERE ARE 243 TREES TO BE RETAINED IN THE OPEN SPACE AREA (TRACT C) THAT ARE NOT SHOWN BUT ARE CERTIFIED IN THE ARBORISTS REPORT DATED NOV. 8, 2010.

NO.		
1	REVISED PER CITY COMMENTS	8/21/12
2	REVISED PER CITY COMMENTS	1/31/13
3	REVISED PER CITY COMMENTS	10/3/13
4	REVISED PER CITY COMMENTS	2/11/15

10-3-13

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

TREE PRESERVATION PLAN
THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013
DESIGNED	JAMES A. OLSEN, P.E.
DRAWN	HOLLI H. HOPKINS
APPROVED	JAMES A. OLSEN, P.E.
PROJECT MANAGER	JAMES A. OLSEN, P.E.

SHEET	OF
P4	9

PROJECT NUMBER
10079

PROPOSED GREYSTONE PRD

1" COMBINED DOMESTIC WATER & FIRE SPRINKLER METER WITH 2" SERVICE LINE (TYP.)

ROAD, STORM, SEWER AND WATER IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT.

ROAD IMPROVEMENTS PROPOSED AND TO BE CONSTRUCTED BY THE GREYSTONE PROJECT.

EXISTING LUMINARIES PER GREYSTONE PRD (TYP.)

CONCRETE DRIVEWAY APRON

FIRE HYDRANT

10' PRIVATE STORM DRAINAGE ESM'T

SEE SECTION B-B SHEET P6

14' SIDEWALK AND UTIL. ESM'T (TYP.)

CLEANOUT (TYP.)

SEE SECTION A-A SHEET P6

SEWER SERVICE (TYP.)

10' PRIVATE STORM DRAIN ESM'T

BUFFER AVERAGING REDUCTION: 1,122 SF

FOOTING DRAIN SPLASH BLOCK (TYP.)

50' HAZARDOUS SLOPE SETBACK

TOP: 212
TOE: 208

12" PVC STORM (TYP.)

6" SIDE SEWER (TYP.)

BUFFER AVERAGING REDUCTION: 1,237 SF

4' HIGH (MAX.) RETAINING WALL

TOP: 191
TOE: 190

TOP: 191
TOE: 187

TOP: 191
TOE: 190

20' STORM WATER SETBACK

TOP: 210
TOE: 207

50' HAZARDOUS SLOPE SETBACK

TOP OF SLOPE

50' OUTER STREAM BUFFER

100' STREAM BUFFER

25' BUFFER

STORMWATER DETENTION/WATER QUALITY FACILITY SEE DETAIL SHEET P6

RIM 201.5
IE 197.5

150' WETLAND BUFFER LINE (HIGH-INTENSITY LAND USE)

100' WETLAND BUFFER

BUFFER RESTORATION 10,800 SF

PAPER FILL AREA 282 S.F.

STREAM 3 CLASS III - INTERMITTENT (100' BUFFER)

BUFFER RESTORATION 850 SF

25' HAZARDOUS SLOPE SETBACK

TOP: 190
TOE: 188

TOP: 189
TOE: 187

SEE SECTION D-D SHEET P6

PAPER FILL AREA 1,534 S.F.

WETLAND B CATEGORY IV

WETLAND C CATEGORY III

100' INNER STREAM BUFFER

HDPE STORM PIPE ABOVE GROUND INSTALLATION

40%± SLOPE

ENERGY DISSIPATER PAD EL. 130±

STREAM 2 CLASS III - INTERMITTENT (100' BUFFER)

TRACT C NGPA

PAPER FILL AREA 753 S.F.

WETLAND A CATEGORY III

N. LINE SW1/4, SE1/4

STREAM 1 CLASS II STREAM (150' BUFFER)

N. LINE SOUTH 25 ACRES SW1/4, SE1/4

PLAT OF KENSINGTON

159TH AVE. N.E.

GLO 4CSW 26 25 35 36

GLO 3CSW 26 35

N01°C'44"E 169.84

621.49

451.65

852.40

N88°01'42"W 1275.45

N88°01'42"W 399.91

N01°43'43"E 621.24

2550.90 MEAS
2550.82 (CITY OF REDMOND)

402.81

N88°03'35"W 144

TRACT A 62' 24' 20' 42' 20'

LEGEND

- W — 8" DUCTILE IRON WATER PIPE
- SS — 8" PVC SANITARY SEWER PIPE
- SD — 12" STORM DRAIN
- P — POWER/GAS/PHONE/ CABLE LINE
- 320 — PROPOSED CONTOUR
- 320 — EXISTING CONTOUR
- STREET LIGHT

SCALE: 1" = 30'

0 15 30 60

BASIS OF BEARINGS

N88°01'42"W ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 26-26-05 PER THE CITY OF REDMOND HORIZONTAL CONTROL NETWORK

DATUM

NAVD 88 - CITY OF REDMOND VERTICAL CONTROL DATABASE

BENCHMARK

C.O.R. BENCHMARK #3191
0.25 FOOT DIA. BRASS DISK IN 0.50 FOOT DIA. CONCRETE MONUMENT IN S.E. CORNER OF INTERSECTION OF NE 116TH STREET AND 162ND AVENUE NE. MONUMENT IS 0.41 FEET BELOW TOP OF CASE. STAMPED - BM 30 C.O.R.
ELEVATION = 253.49

C.O.R BENCHMARK #3192
0.25' FOOT DIA. BRASS DISK IN 0.50' DIA. CONCRETE MONUMENT AT S.E. CORNER OF INTERSECTION OF N.E. 116TH STREET AND 169TH COURT N.E. STAMPED - BM 29 C.O.R.
ELEVATION = 321.70

NO.	REVISED PER CITY COMMENTS	6/21/12
1	REVISED PER CITY COMMENTS	7/31/13
2	REVISED PER CITY COMMENTS	10/31/13
3	REVISED PER CITY COMMENTS	2/11/15
4		

10-9-15

CORE DESIGN
ENGINEERING • PLANNING • SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

GRADING, TRANSPORTATION AND UTILITY PLAN
THE STROM PROPERTY

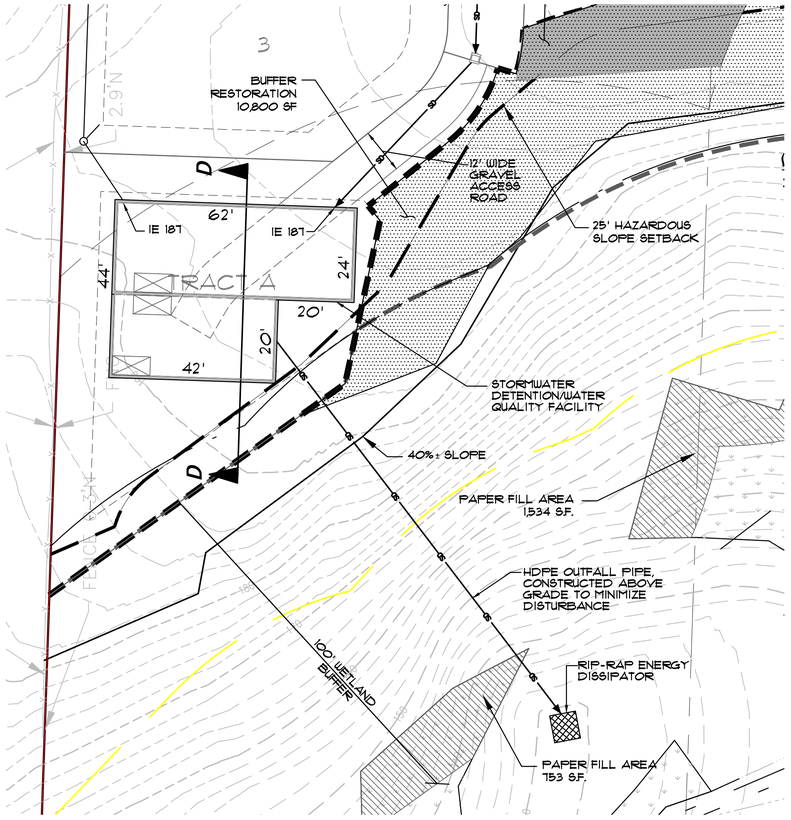
BURNSTEAD CONSTRUCTION, LLC.

11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	JAMES A. OLSEN, P.E. PROJECT MANAGER

SHEET	OF
P5	9

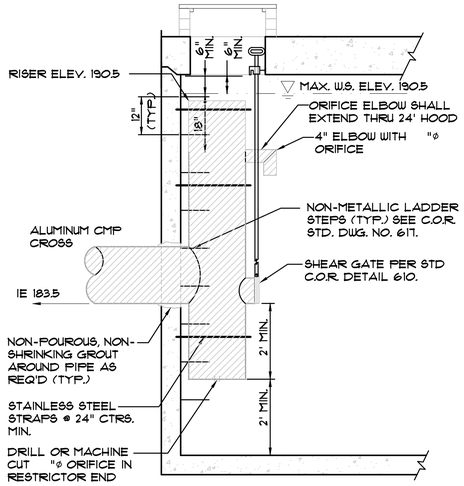
PROJECT NUMBER
10079



DETENTION VAULT

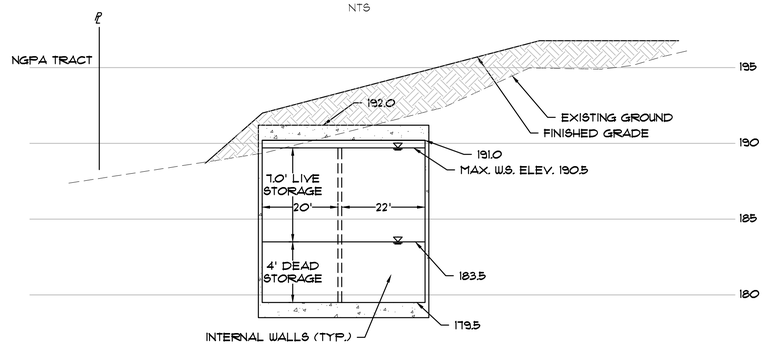
SCALE: 1"=20'

DEAD VOLUME REQUIRED=	5940 CF
DEAD VOLUME PROVIDED=	5950 CF
LIVE VOLUME REQUIRED=	15,457 CF
LIVE VOLUME PROVIDED=	15,500 CF
MAX W.S. ELEV.	190.5
NORMAL W.S. ELEV.	183.5
AVG. BOT. ELEV.	179.5 (DETENTION ONLY CELL)
AVG. BOT. ELEV.	179.5 (WATER QUALITY CELLS)



RESTRICTOR DETAIL

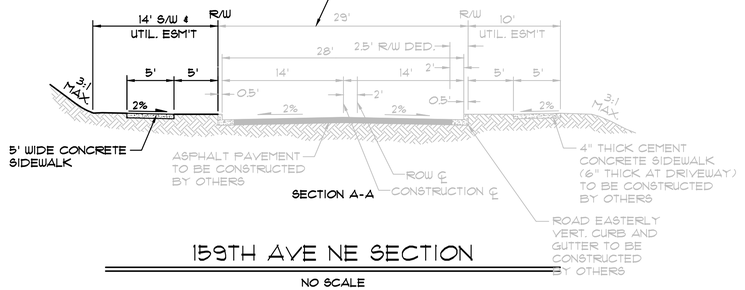
NTS



SECTION D-D

SCALE: 1"=20' HORIZ.
1"=5' VERT.

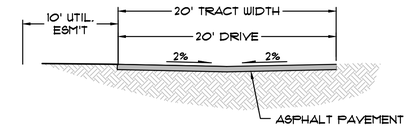
ROAD IMPROVEMENTS TO BE COMPLETED BY THE GREYSTONE PROJECT. IN THE EVENT IMPROVEMENTS HAVE NOT BEEN MADE, THEY WILL BE COMPLETED AS PART OF THIS PROJECT. PER DIMENSIIONS SHOWN BELOW, SHADED.



SECTION A-A

159TH AVE NE SECTION

NO SCALE



SECTION B-B
PRIVATE ROAD

TRACT B

NO SCALE

NO.	DATE	BY	REVISIONS
1	8/21/12		REVISED PER CITY COMMENTS
2	1/31/13		REVISED PER CITY COMMENTS
3	10/3/13		REVISED PER CITY COMMENTS
4	2/11/15		REVISED PER CITY COMMENTS

10-3-13

CORE DESIGN
ENGINEERING · PLANNING · SURVEYING
14711 NE 29th Place Suite 101
Bellevue, Washington 98007
425.885.7877 Fax 425.885.7963

ROAD AND STORM DETAILS THE STROM PROPERTY

BURNSTEAD CONSTRUCTION, LLC.
11980 NE 24TH ST., SUITE 200
BELLEVUE, WA 98005

DATE	AUGUST 2013	
DESIGNED	JAMES A. OLSEN, P.E.	
DRAWN	HOLLI H. HOPKINS	
APPROVED	JAMES A. OLSEN, P.E.	
	JAMES A. OLSEN, P.E.	PROJECT MANAGER

SHEET	OF
P6	9

PROJECT NUMBER
10079