



PROJECT NAME: **POR STINGER**
PROJECT LOCATION: **29421 E WOODARD RD
TROUTDALE, OR 97060**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF MORRISON HERSHFIELD CORPORATION. NEITHER MORRISON HERSHFIELD NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.



EXP 12/31/19

ZONING		
5	11/15/19	ADD MONOPINE & LANDSCAPE
4	05/24/19	ADD L-810 LIGHTING
3	02/27/19	ISSUED FOR REVIEW
2	05/29/18	ISSUED FOR REVIEW
1	10/12/17	ISSUED FOR REVIEW
0	02/17/17	ISSUED FOR PERMIT
A	12/19/16	ISSUED FOR REVIEW

No.	Date	Revision
Client:		



Implementation Team:

BLACK ROCK

A&E Team:

MORRISON HERSHFIELD
600 STEWART ST, SUITE 200
SEATTLE, WA 98101
Tel: 206.268.7370
www.morrisonhershfield.com

Project Info:

POR STINGER
29421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:

COVER SHEET

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No: 5	Sheet No: T-1

VICINITY MAP



DRIVING DIRECTIONS

- (FROM PORTLAND, OR)
- FOLLOW SIGNS TO I-84 E/US 30 E TOWARD THE DALLES
 - MERGE ONTO I-84 E/US 30 E
 - TAKE EXIT 18 TOWARD OXBOW REGIONAL PARK/LEWIS AND CLARK STATE PARK
 - TURN LEFT ONTO JORDAN RD
 - CONTINUE ONTO HISTORIC COLUMBIA RIVER HWY
 - TURN LEFT ONTO SE WOODARD RD
 - TURN LEFT ONTO DRIVEWAY AT 29241 E WOODARD RD
 - FOLLOW DRIVEWAY, PAST HOUSE, THRU GATED FENCE TO SITE

PROJECT INFORMATION

JURISDICTION:	MULTNOMAH COUNTY
ZONING CLASS:	MUA - MIXED USE AGRICULTURE
OCCUPANCY GROUP:	UTILITY
CONSTRUCTION TYPE:	RAW LAND MONOPOLE
TAX PARCEL ID:	R322458/1N4E31DB 600
PARCEL SIZE:	358,007 SQ FT (8.22 ACRES)
LATITUDE:	45°31'31.51" N 45.525419°
LONGITUDE:	122°21'33.95" W -122.359431°
GROUND ELEVATION:	470.8' AMSL
STRUCTURE HEIGHT:	150'-0" (TOP OF PROPOSED MONOPOLE)
LEASE AREA:	2500 S.F.

LEGAL DESCRIPTION

SEE SITE SURVEY.

CONTACTS

APPLICANT/CLIENT AND IMPLEMENTATION CONTACT: JASON FALLAU VERIZON WIRELESS (VAW) LLC (d/b/a VERIZON WIRELESS) 5430 NE 122ND AVE PORTLAND, OR 97230 PHONE: (541) 981-3542 jason.fallau@verizonwireless.com	APPLICANT/CLIENT CONTACT: KONRAD HYLE BLACKROCK CONSULTING, LLC PHONE: (503) 522-0634 konrad@blk-rock.com	A&E CONTACT: RYLAN BROWNING MORRISON HERSHFIELD CORP 5100 SW MACADAM AVE, SUITE 500 PORTLAND, OR 97239 PHONE: (503) 595-9128 rbrowning@morrisonhershfield.com
PROPERTY OWNER CONTACT: CLIFF HEGSTAD PHONE: (503) 481-8927	ZONING PERMIT CONTACT: KONRAD HYLE BLACKROCK CONSULTING, LLC PHONE: (503) 522-0634 konrad@blk-rock.com	ENGINEER OF RECORD: G. LANCE COOKE MORRISON HERSHFIELD CORP PHONE: (503) 924-2515 lcooke@morrisonhershfield.com
SURVEYOR: DUNCANSON COMPANY, INC. 145 SW 155TH ST, SUITE 102 SEATTLE, WA 98166 PHONE: (206) 244-4141		

SCOPE OF WORK

VERIZON WIRELESS PROPOSES TO INSTALL AN UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF THE INSTALLATION OF (3) 10' V-BOOM MOUNTS, (6) NEW PANEL ANTENNAS WITH A 150'-0" TIP HEIGHT, (8) RRU'S, (1) HYBRID CABLE AND (1) RFS SPLITTER/SURGE SUPPRESSORS ON A NEW 150' MONOPINE. ALSO PROPOSED IS THE INSTALLATION OF (2) EQUIPMENT CABINETS, (1) RFS SURGE SUPPRESSORS MOUNTED WITHIN A CABINET AND A 30kW DIESEL GENERATOR WITHIN A 33'-0"x35'-0" FENCED AREA IN A 50'-0"x50'-0" LEASE AREA.

LIST OF DRAWINGS

SHEET	DESCRIPTION
T-1	COVER SHEET
T-2	GENERAL NOTES AND SYMBOLS
SV1	SITE SURVEY
SV2	SITE SURVEY
C1	EROSION, SEDIMENT AND POLLUTION CONTROL PLAN
C2	ROAD AND GRADING PLAN
C3	GRADING DETAILS
A-1	SITE PLAN
A-1.1	PROPOSED COMPOUND AND EQUIPMENT PLANS
A-2	PROPOSED ELEVATION
A-3	CONSTRUCTION DETAILS
A-4	GENERATOR DETAILS
A-4.1	GENERATOR DETAILS
RF-1	PROPOSED ANTENNA CONFIGURATION
RF-2	PLUMBING DIAGRAM
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE PLAN

CODE COMPLIANCE


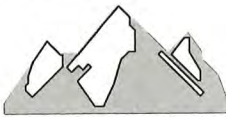

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT CONDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

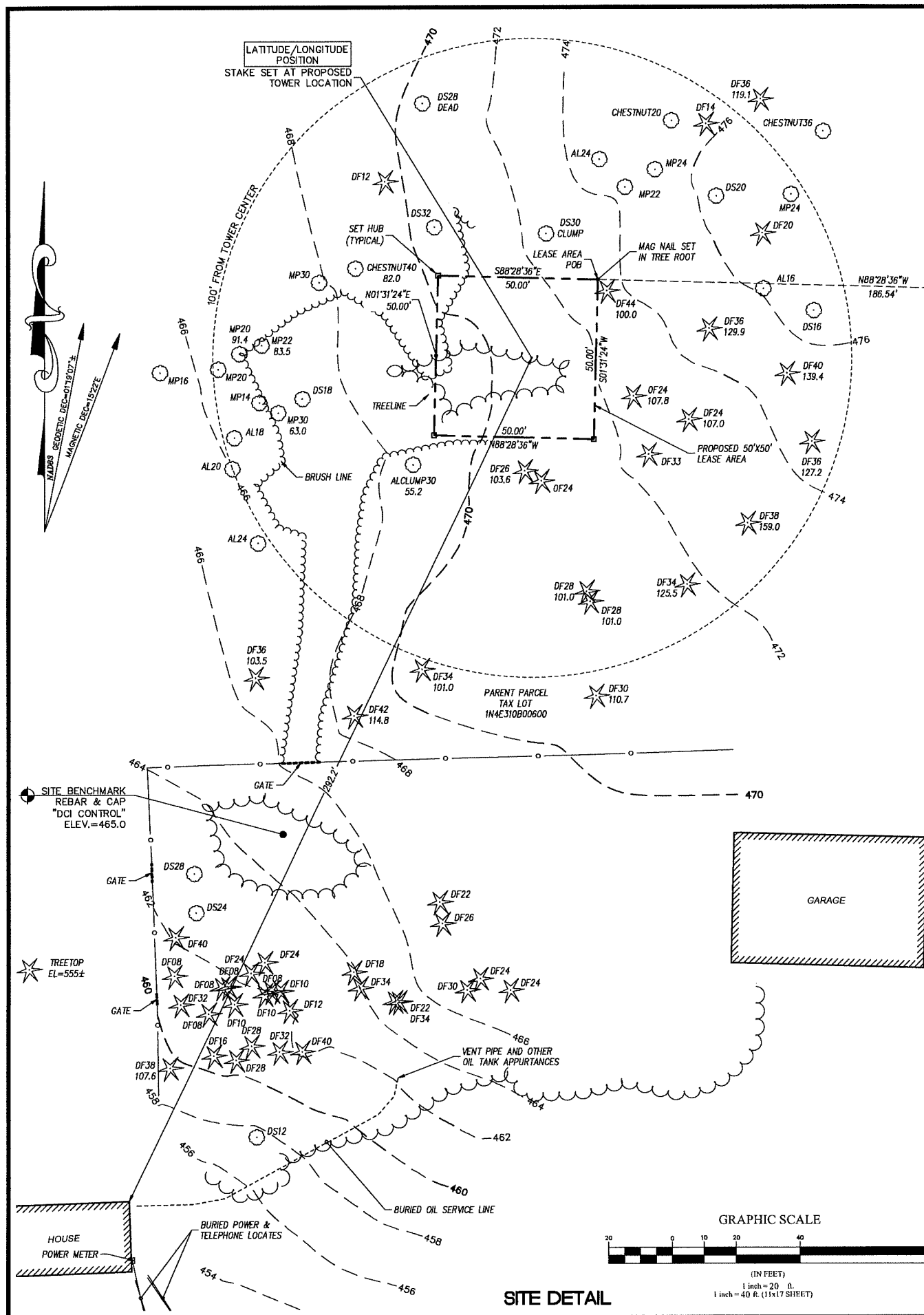
OREGON STATE AND LOCAL BUILDING CODES WITH THE FOLLOWING REFERENCE CODE:

2014 OREGON STRUCTURAL SPECIALTY CODE
2017 OREGON ELECTRICAL SPECIALTY CODE
2014 OREGON MECHANICAL SPECIALTY CODE
2012 NFPA 101 LIFE SAFETY CODE

APPROVALS

	SIGNATURE	DATE
REPRESENTATIVE		
SITE OWNER		
RF ENGINEER		

GENERAL NOTES		LINE/ANTENNA NOTES		ABBREVIATIONS		<div>DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF MORRISON HERSHFIELD CORPORATION. NEITHER MORRISON HERSHFIELD NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.</div> <div></div>	
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No.		Date		Revision			
Client:							
<div>verizon</div>							
Implementation Team:							
<div></div> <div>BLACK ROCK</div>							
A&E Team:							
<div></div> <div>MORRISON HERSHFIELD</div> <div>600 STEWART ST, SUITE 200 SEATTLE, WA 98101 Tel: 206.268.7370 www.morrisonhershfield.com</div>							
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GENERAL NOTES AND SYMBOLS							
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Revision No:		Sheet No:		Revision No: 5			
				T-2			



EASEMENTS

THE FOLLOWING EASEMENTS FROM THE REFERENCED TITLE REPORT CONTAIN SUFFICIENT INFORMATION TO BE DEPICTED ON THE PLAN. OTHER EASEMENTS OR ENCUMBRANCES, IF ANY, MAY AFFECT THE PROPERTY, BUT LACK SUFFICIENT INFORMATION TO BE SHOWN.

BLANKET EASEMENT FOR RIGHT OF WAY, CANALS OR DITCHES FOR MINING OR IRRIGATION, RECORDED IN BOOK 2139, PAGE 531 - DOCUMENT CONTAINS INSUFFICIENT INFORMATION TO LOCATE HEREON, NOT SHOWN.

PARENT PARCEL LEGAL DESCRIPTION

TRACT IN SECTION 31, TOWNSHIP 1 NORTH, RANGE 4 EAST OF THE WILLAMETTE MERIDIAN, IN THE COUNTY OF MULTNOMAH AND STATE OF OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE WEST 15 ACRES OF THE NORTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SECTION 31, SAID TOWNSHIP AND RANGE, SAID POINT BEING SOUTH 89°20'00" WEST 2132.13 FEET AND SOUTH 0°20'55" WEST 1316.67 FEET FROM THE EAST ONE-QUARTER CORNER OF SAID SECTION 31 AND RUNNING THENCE NORTH 0°20'55" EAST ALONG THE EAST LINE OF THE SAID 15 ACRE TRACT, 1316.67 FEET TO THE NORTHEAST CORNER OF SAID TRACT; THENCE NORTH 89°20'00" EAST 490.03 FEET TO THE NORTHWEST CORNER OF THE PROPERTY DESCRIBED IN THE DEED RECORDED IN BOOK 315, PAGE 113, MULTNOMAH COUNTY RECORDS OF DEEDS; THENCE SOUTH 0°15'40" WEST ALONG THE WEST LINE OF THE LAST MENTIONED PROPERTY, 700 FEET; THENCE SOUTH 89°20'00" WEST 291.11 FEET; THENCE SOUTH 0°20'55" WEST 616.23 FEET TO THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SAID SECTION 31; THENCE SOUTH 89°12'00" WEST ALONG SAID SOUTH LINE 200 FEET TO THE POINT OF BEGINNING.**

NOTE: PROVIDED LEGAL DESCRIPTION DESCRIBES BOTH TAX LOT NUMBERS 1N4E31DB00600 & 1N4E31DB00500 AND THE PUBLIC RIGHT OF WAY OF WOODARD ROAD.

** EXCEPTING THAT PORTION LYING WITHIN THE RIGHT OF WAY OF WOODARD ROAD (PER VESTING DEED REC. #2016098955)

LATITUDE/LONGITUDE POSITION

COORDINATE DATA AT CENTER OF PROPOSED MONOPOLE:
NAD 83
LAT - 45°31'31.51" N NAVD 88
LONG - 122°21'33.95" W ELEV.= 470.8 FEET



BENCHMARK IS "JIME"
NGS GPS CORS STATION.
ELEV = 250.1

ELEVATION DERIVED USING GPS. ACCURACY MEETS OR EXCEEDS 1A STANDARDS AS DEFINED ON THE FAA ASAC INFORMATION SHEET 91:003.

NOTES

- TITLE ISSUED BY FIDELITY NATIONAL TITLE COMPANY OF OREGON, ORDER NO. 4514635883, EFFECTIVE DATE NOVEMBER 21, 2016.
- FIELD WORK CONDUCTED IN DECEMBER, 2016.
- BASIS OF BEARING: OREGON COORDINATE SYSTEM, NORTH ZONE (NAD83).
- UNDERGROUND UTILITIES SHOWN HEREON, IF ANY, WERE DELINEATED FROM SURFACE EVIDENCE AND/OR UTILITY COMPANY RECORDS. CRITICAL LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN AND CONSTRUCTION.
- FEMA DESIGNATION: ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PANEL 238 OF 550, FIRM MAP NUMBER 41051C0238H, EFFECTIVE DATE DECEMBER 18, 2009.

LEGEND

- SUBJECT BOUNDARY LINE
- RIGHT-OF-WAY CENTERLINE
- RIGHT-OF-WAY LINE
- ADJACENT BOUNDARY LINE
- SECTIONAL BREAKDOWN LINE
- OVERHEAD POWER LINE
- BURIED POWER LINE
- BURIED GAS LINE
- OVERHEAD TELEPHONE LINE
- BURIED TELEPHONE LINE
- BURIED WATER LINE
- BURIED SANITARY SEWER
- BURIED STORM DRAIN
- DITCH LINE/FLOW LINE
- ROCK RETAINING WALL
- VEGETATION LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE/WIRE FENCE
- TRANSFORMER
- LIGHT STANDARD
- POWER VAULT
- UTILITY BOX
- UTILITY POLE
- POLE GUY WIRE
- GAS VALVE
- GAS METER
- TELEPHONE VAULT
- TEL. MANHOLE
- TELEPHONE RISER
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- FIRE STAND PIPE
- IRRIGATION CONTROL
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- SIGN
- BOLLARD
- MAIL BOX
- SPOT ELEVATION

NOTE:
1) ALL ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL (AMSL) AND ARE REFERENCED TO THE NAVD88 DATUM.
2) ALL TOWER, TREE AND APPURTENANCE HEIGHTS ARE ABOVE GROUND LEVEL (AGL) AND ARE ACCURATE TO ± 0.5 FEET OR ± 1% OF TOTAL HEIGHT, WHICHEVER IS GREATER.

TREE LEGEND

- DECIDUOUS TREE
AL=ALDER
MP=MAPLE
DS=DECIDUOUS
MA=MADRONA
OK=OAK
CH=CHERRY
- EVERGREEN TREE
CE=CEDAR
DF=DOUGLAS FIR
HE=HEMLOCK
PI=PINE
EVG=EVERGREEN

NOTE:
TREE DRIP LINES ARE NOT TO SCALE. TREE SYMBOLS REFERENCE TRUNK LOCATION ONLY. TRUNK DIAMETERS WERE APPROXIMATED AT 3.5' TO 4' ABOVE GROUND LEVEL. TREES SHOWN ARE FOR REFERENCE ONLY AND OTHER TREES AND VEGETATION MAY EXIST.

SITE INFORMATION

TAX LOT NUMBER 1N4E31DB00600
SITE ADDRESS 29421 E WOODARD ROAD TROUTDALE, OR 97060
SITE CONTACT CLIFF HEGSTAD
PHONE NUMBER 503-484-8927
ZONING MUA (MULTNOMAH COUNTY)
TOTAL LOT AREA 358,007± S.F. (8.22 AC.)-TL 600
PROJECT AREA 102,610± S.F. (2.36 AC.)-TL 500 2,500 S.F.

SURVEY REFERENCE

- SURVEY, RECORDING NO. 9950, RECORDS OF MULTNOMAH COUNTY.
- SURVEY, RECORDING NO. 40822, RECORDS OF MULTNOMAH COUNTY.

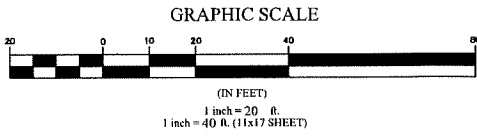
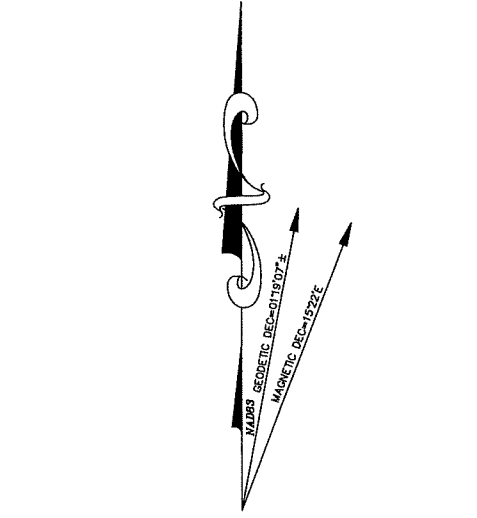
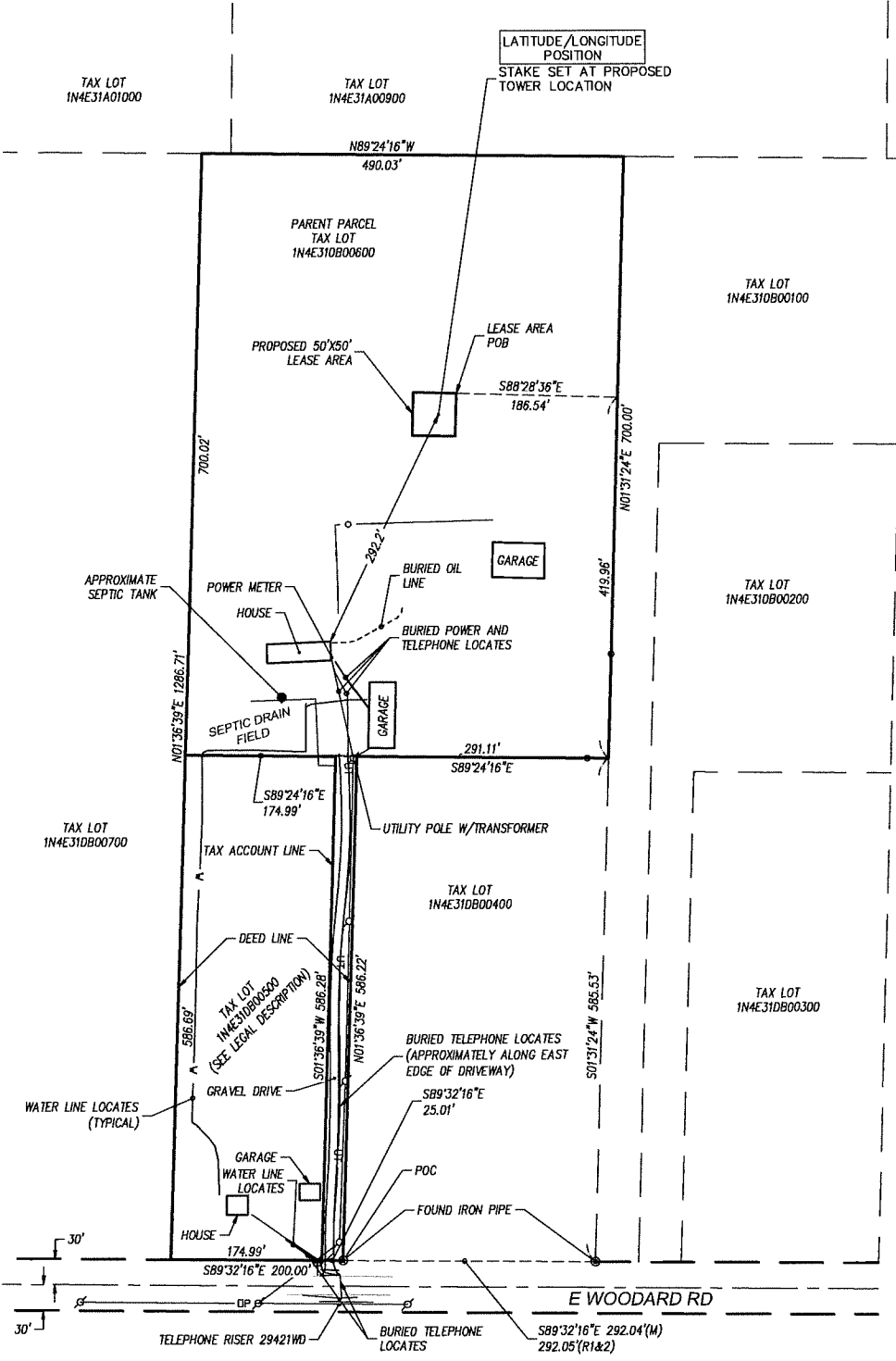
BOUNDARY DISCLAIMER

THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY. SUBJECT AND ADJACENT PROPERTY LINES ARE DEPICTED USING FIELD-FOUND EVIDENCE AND RECORD INFORMATION.

CAUTION!

UNDERGROUND UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY BE INCOMPLETE. STATE LAW REQUIRES THAT CONTRACTOR CONTACT THE ONE-CALL UTILITY LOCATE SERVICE AT LEAST 48 HOURS BEFORE STARTING ANY CONSTRUCTION.

1-800-424-5555



SITE DETAIL

verizon

MORRISON HERSHFELD
600 Stewart Street, Suite 200
Seattle, WA 98101
Tel: 206.288.7370
www.morrisonhersfeld.com

DUNCANSON
Company, Inc.
145 SW 155th Street, Suite 102
Seattle, Washington 98166
Phone 206.244.4141
Fax 206.244.4455

SITE
POR STINGER
29421 E WOODARD ROAD
TROUTDALE, OR 97060
MULTNOMAH COUNTY

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FLD. CREW:	CR/NR
FLD. BOOK:	428/89
DRAWN BY:	RLP
JOB #:	99544.1430
DATE:	12/13/16

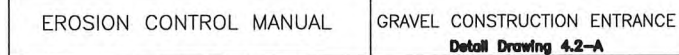
REVISIONS

DATE	DESCRIPTION	BY
10/07/19	UPDATE TREE COUNT	RLP
5/21/18	ADD UTILITY LOCATES AND SEPTIC AREAS	LAC

REGISTERED PROFESSIONAL LAND SURVEYOR
CLIFF HEGSTAD
MAY 10, 2011
JONATHAN MARLO BECKER
84870
RENEWS: 12/31/2019

SHEET TITLE
EXISTING SITE SURVEY
SEC 31, TWP 1 N, RNG 4 E, WM

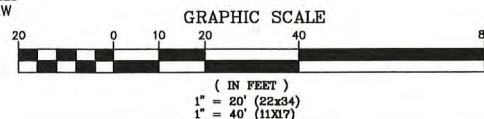
SHEET NUMBER
SV2



NTS

1. COVER ALL STOCKPILED SOIL WITH PLASTIC SHEETING WHEN NOT IN USE.
2. RE-SEED, OR INSTALL LANDSCAPING IN ALL DISTURBED AREAS AS SOON AS POSSIBLE.
3. COVER ALL DISTURBED AREAS AS SOON AS POSSIBLE WITH ORGANIC MULCHING SUCH AS STRAW OR HAY.

- A. APPROVAL OF TS EROSION, SEDIMENT AND POLLUTION CONTROL PLAN (ESPCP) MUST NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- B. THE IMPLEMENTATION OF THIS ESPCP AND THE CONSTRUCTION, MAINTENANCE REPLACEMENT AND UPGRADING OF THESE ESPCP FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- C. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- D. THE ESPCP FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- E. THE ESPCP FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESPCP FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- F. THE ESPCP FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- G. THE ESPCP FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
- H. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAR FOR THE DURATION OF THE PROJECT.



APPLICATION RATES

1. APPLY SEED MIX AT A RATE OF 120 LBS PER ACRE. HYDROSEED W/2,000 LB/AC WOOD FIBER MULCH & TACKIFIER (ALTERNATIVE: STRAW MULCH AT 4,000 LB/AC OR STRAW MAT)
2. APPLY SLOW-RELEASE LOW-PHOSPHORUS FERTILIZER (3-1-2-N-P-K) AT A RATE OF 90 LBS PER ACRE.

1. ANY SEEDED AREAS THAT FAIL TO ESTABLISH AT LEAST 80 PERCENT COVER WITHIN ONE MONTH SHALL BE RESEED. IF RESEEDING IS INEFFECTIVE, AN ALTERNATE METHOD, SUCH AS SODDING OR NET/BLANKETS, SHALL BE USED. IF WINTER WEATHER PREVENTS ADEQUATE GRASS GROWTH, THIS TIME LIMIT MAY BE RELAXED AT THE DISCRETION OF THE COUNTY WHEN CRITICAL AREAS WOULD OTHERWISE BE PROTECTED.

2. AFTER ADEQUATE COVER IS ACHIEVED, ANY AREAS THAT EXPERIENCE EROSION SHALL BE RE-SEEDED AND PROTECTED BY MULCH. IF THE EROSION PROBLEM IS DRAINAGE RELATED, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA RE-SEEDED AND PROTECTED BY MULCH.
3. SEEDED AREAS SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, BUT NOT WATERED TO THE EXTENT THAT IT CAUSES RUNOFF.

2

NTS

1. PROVIDE PLASTIC COVERING OR OTHER SUITABLE MEANS FOR KEEPING RAINFALL AND RUNOFF OFF OF POTENTIALLY POLLUTING MATERIALS AND WASTES.
2. LIGHTING IS REQUIRED IF FUELING (PROVIDED BY SERVICE TRUCKS) OCCURS AT NIGHT.
3. DRIP PANS OR PLASTIC SHEETING IS REQUIRED WHEN EQUIPMENT MAINTENANCE IS PERFORMED ON-SITE.
4. CONTRACTOR SHALL DEVELOP A SPILL PREVENTION PLAN AND MAINTAIN APPROPRIATE SPILL RESPONSE SUPPLIES FOR ANY TOXIC OR HAZARDOUS LIQUIDS STORED OR USED ON SITE.

SEE SHEET T-1 FOR COMPLETE SITE, CONTACT & APPLICANT INFO

SITE ADDRESS:	29421 E WOODWARD RD TROUTDALE, OR 97060
SITE AREA:	358,007 SF (8.22 AC)
NEW IMPERVIOUS AREA:	4,800± SF
LIMITS OF DISTURBANCE:	10,200± SF
SOILS PER NRCS:	MERSHON SILT LOAM

ALL SITE WORK SHALL CONFORM TO THE
RECOMMENDATIONS IN THE GEOTECHNICAL
ENGINEERING EVALUATION BY ADAPT ENGINEERING,
JOB OR17-20807-GEO, MAY 4, 2017



Know what's below.
Call 48 hours before you dig.



10900 NE 8TH ST., SUITE 810
BELLEVUE, WA 98004
Tel: 425.451.1301 Fax: 425.451.1369
www.morrisonhershfield.com



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Seattle, Washington 98166
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Fax 206.244.4455

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DRAWN BY:	HMD
JOB #:	99544.1430
DATE:	12/13/18

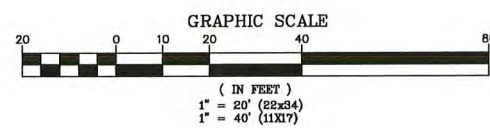
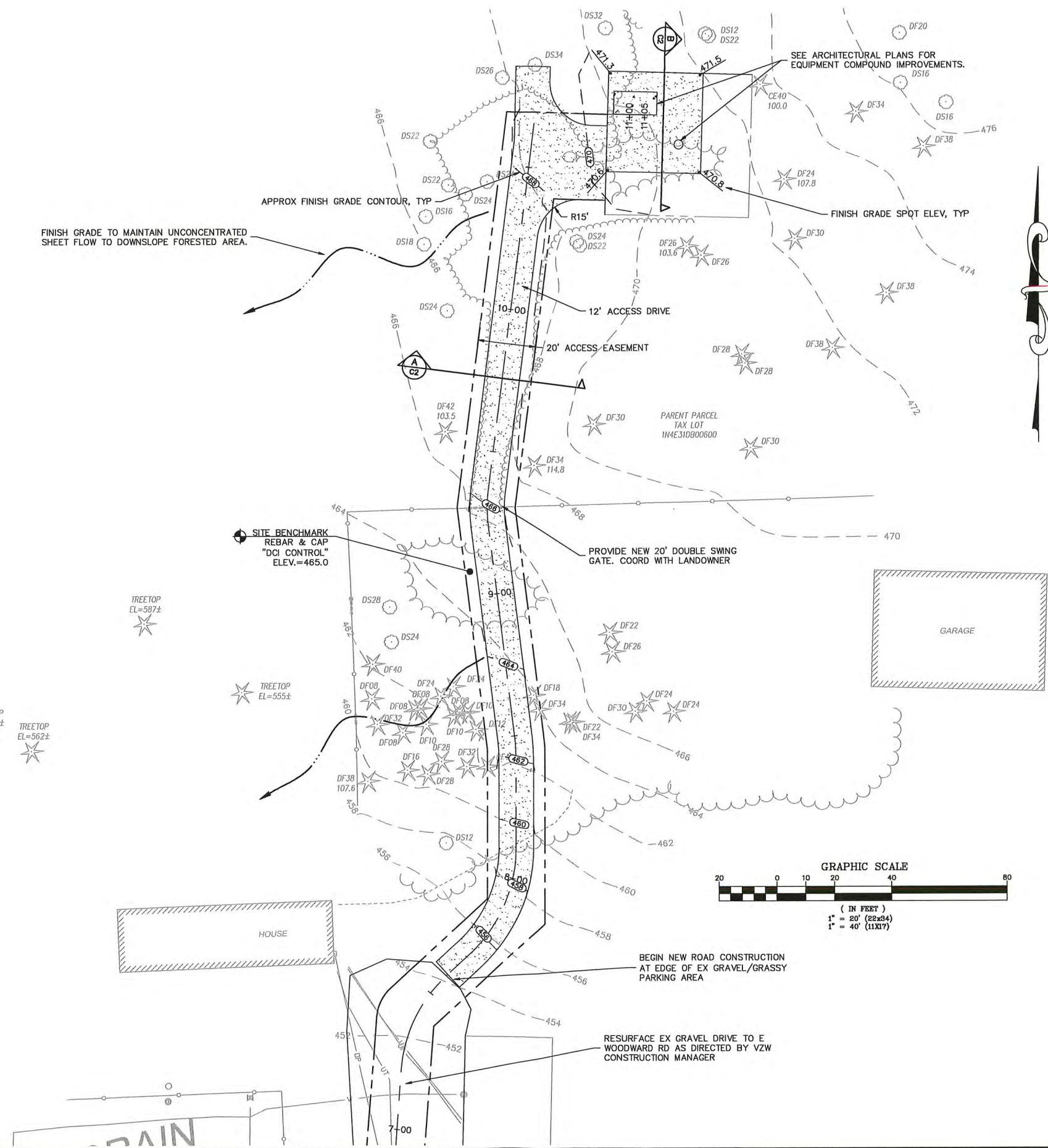
DATE	DESCRIPTION	BY
2/28/19	ADD PARKING SPACE	HMC



SHEET TITLE
EROSION, SEDIMENT AND
POLLUTION CONTROL PLAN

SHEET NUMBER

C1



verizon

MORRISON HERSHFIELD
10900 NE 8TH ST., SUITE 810
BELLEVUE, WA 98004
Tel: 425.451.1301 Fax: 425.451.1369
www.morrisonhershfield.com



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Company, Inc.
145 SW 155th Street, Suite 102
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Phone 206.244.4141
Fax 206.244.4455

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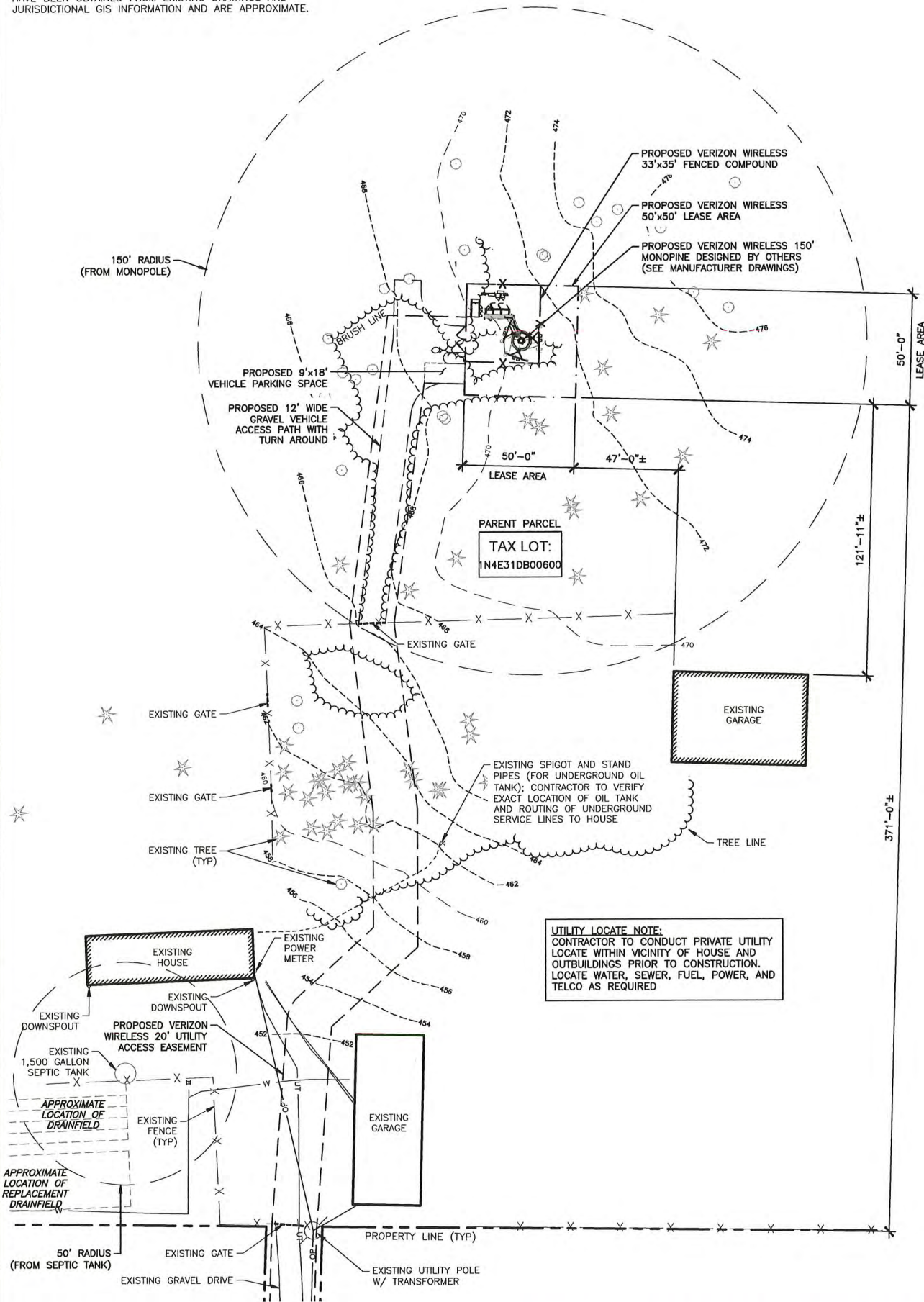
REVISIONS		
DATE	DESCRIPTION	BY
2/26/19	ADD PARKING SPACE	HMD



SHEET TITLE
ROAD AND GRADING PLAN

SHEET NUMBER
C2

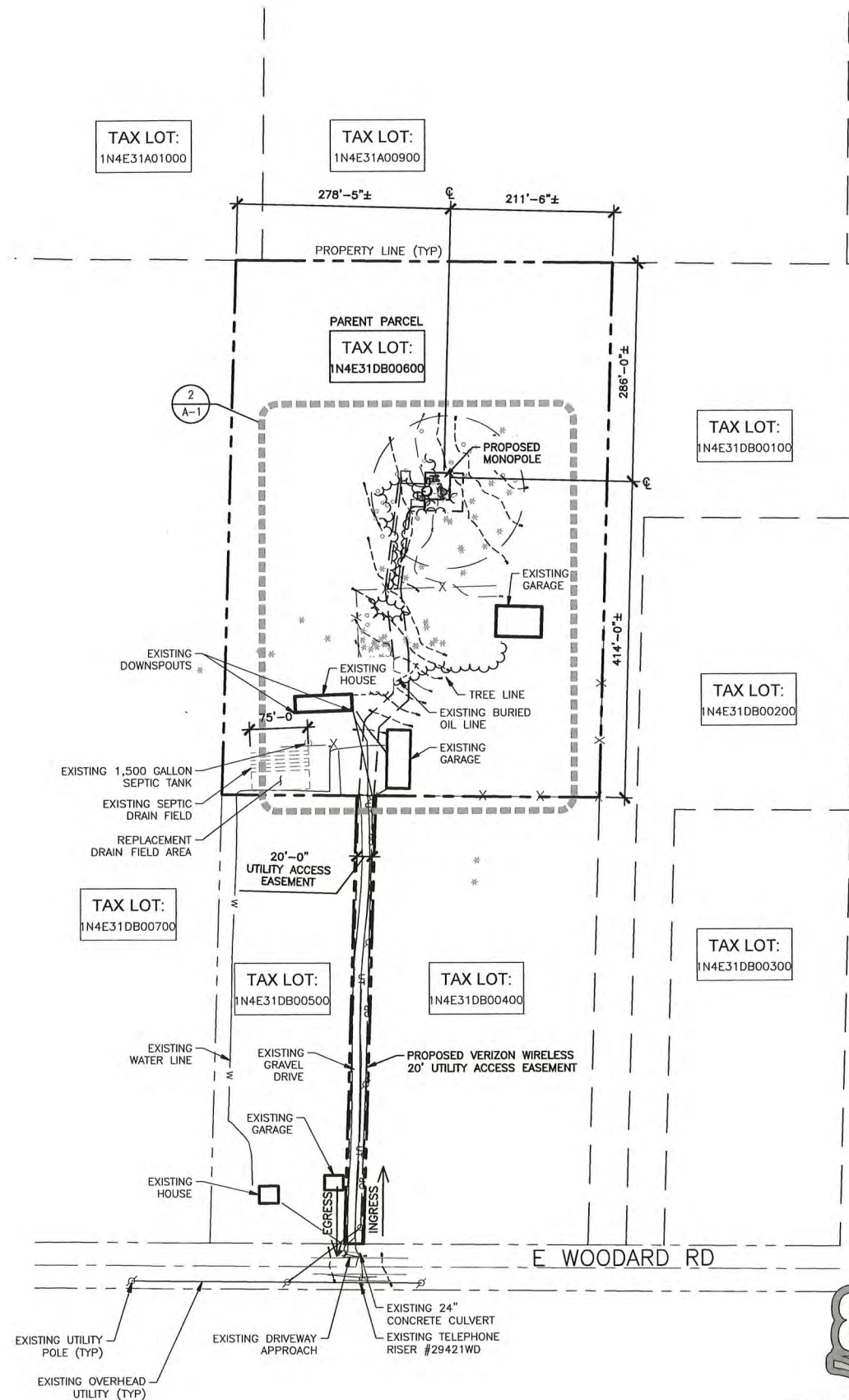
NOTE:
THIS IS NOT A SURVEY. ALL INFORMATION AND TRUE NORTH
HAVE BEEN OBTAINED FROM EXISTING DRAWINGS AND
JURISDICTIONAL GIS INFORMATION AND ARE APPROXIMATE.



24"x36" SCALE: 1" = 30'-0"
11"x17" SCALE: 1" = 60'-0"

ENLARGED SITE PLAN 2

24"x36" SCALE: 1" = 100'-0"
11"x17" SCALE: 1" = 200'-0"



Know what's below.
Call before you dig.

SITE PLAN 1

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS OR OMISSIONS. NO VARIATIONS OR MODIFICATIONS TO WORK SHOWN SHALL BE IMPLEMENTED WITHOUT PRIOR WRITTEN APPROVAL. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. ALL DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF MORRISON HERSHFIELD CORPORATION. NEITHER MORRISON HERSHFIELD NOR THE ARCHITECT WILL BE PROVIDING CONSTRUCTION REVIEW OF THIS PROJECT.



EXP 12/31/19

ZONING		
5	11/15/19	ADD MONOPINE & LANDSCAPE
4	05/24/19	ADD L-810 LIGHTING
3	02/27/19	ISSUED FOR REVIEW
2	05/29/18	ISSUED FOR REVIEW
1	10/12/17	ISSUED FOR REVIEW
0	02/17/17	ISSUED FOR PERMIT
A	12/19/16	ISSUED FOR REVIEW

No. Date Revision

Client:



Implementation Team:

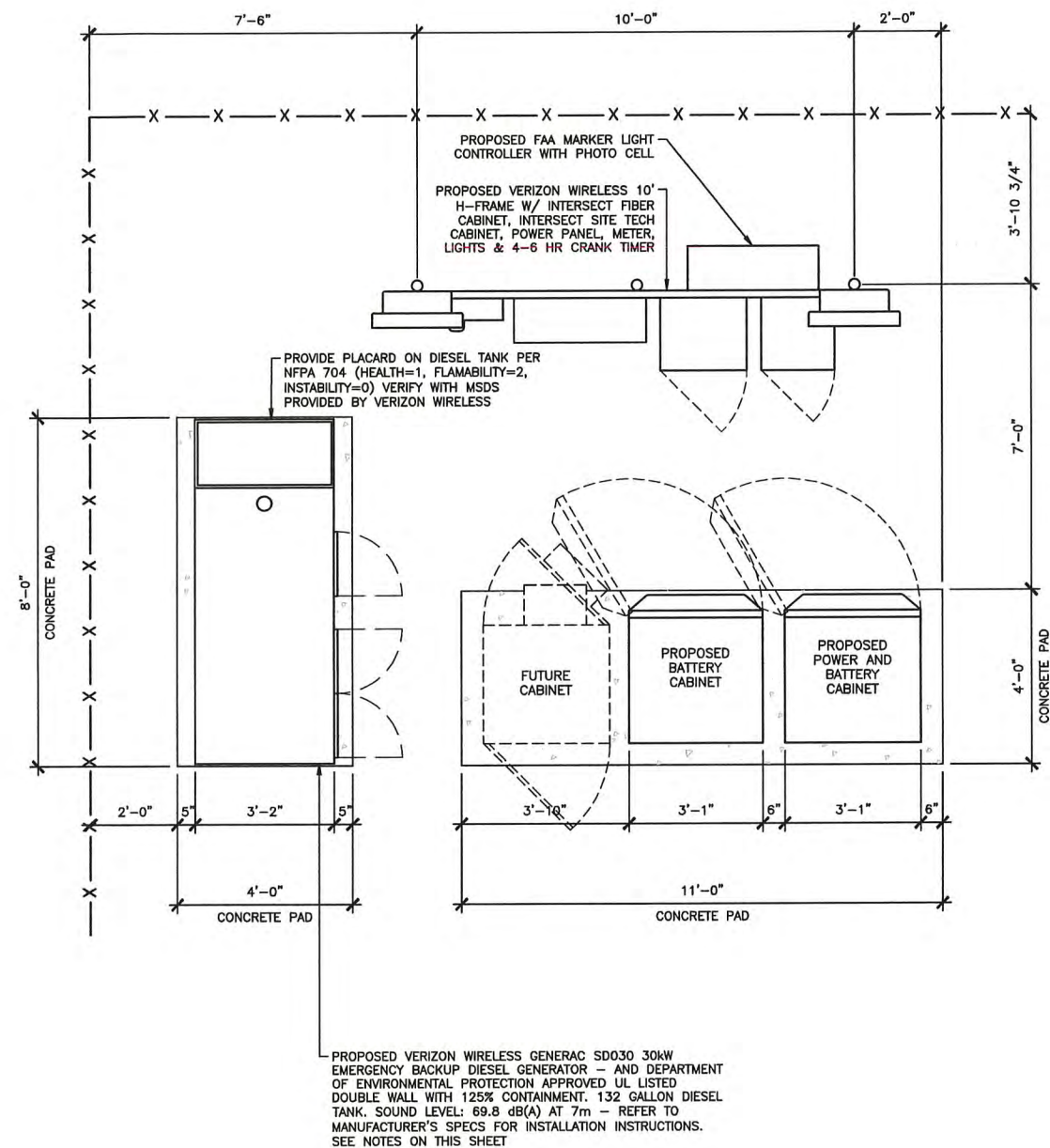
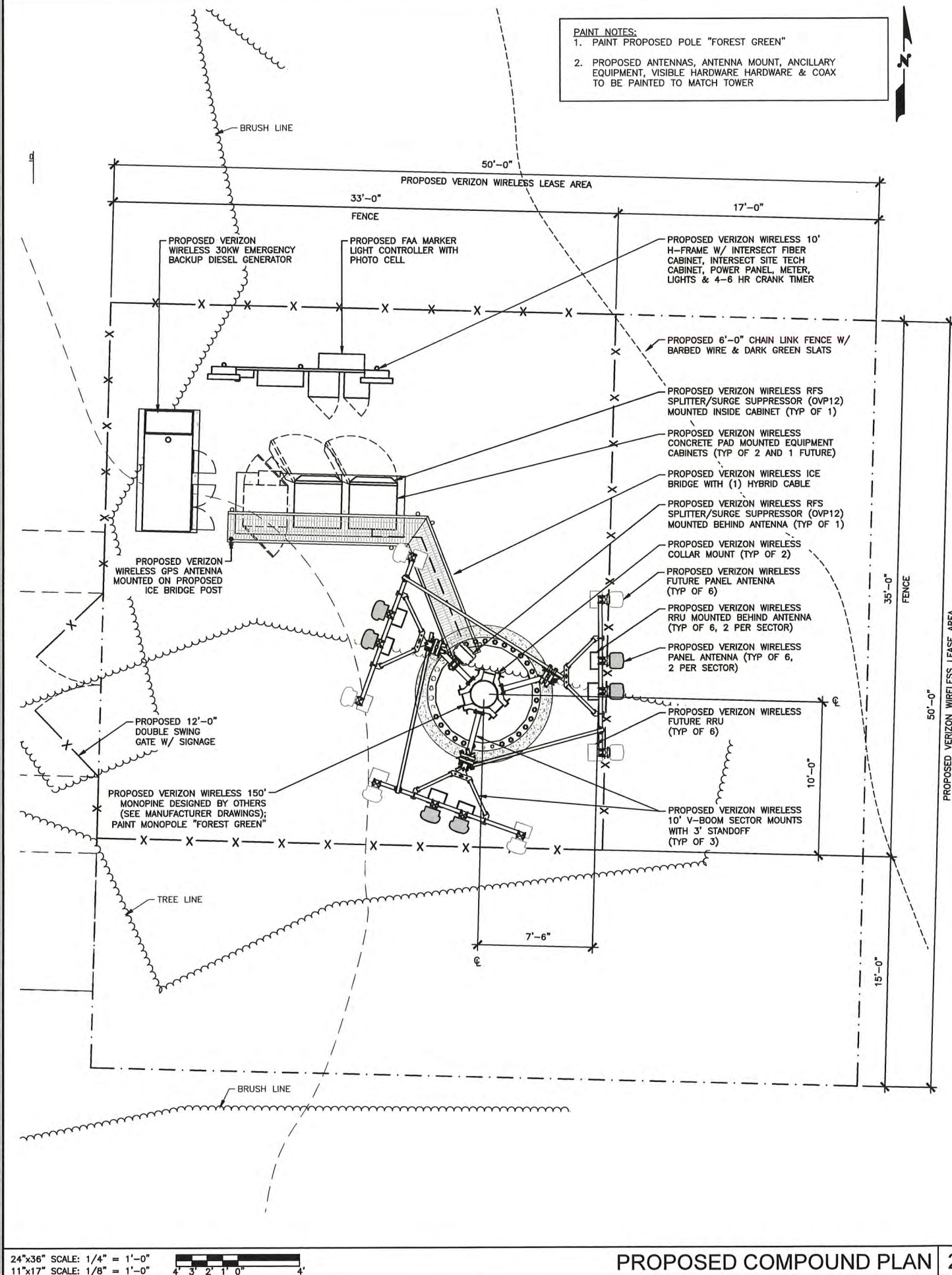


A&E Team:
MORRISON HERSHFIELD
600 STEWART ST, SUITE 200
SEATTLE, WA 98101
Tel: 206.268.7370
www.morrisonhershfield.com

Project Info:
POR STINGER
29421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:
SITE PLAN

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No: 5	Sheet No: A-1



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EXP 12/31/19

ZONING

5	11/15/19	ADD MONOPINE & LANDSCAPE
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No.	Date	Revision
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Client:



Implementation Team:



A&E Team:



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Tel: 206.268.7370
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TROUTDALE, OR 97060

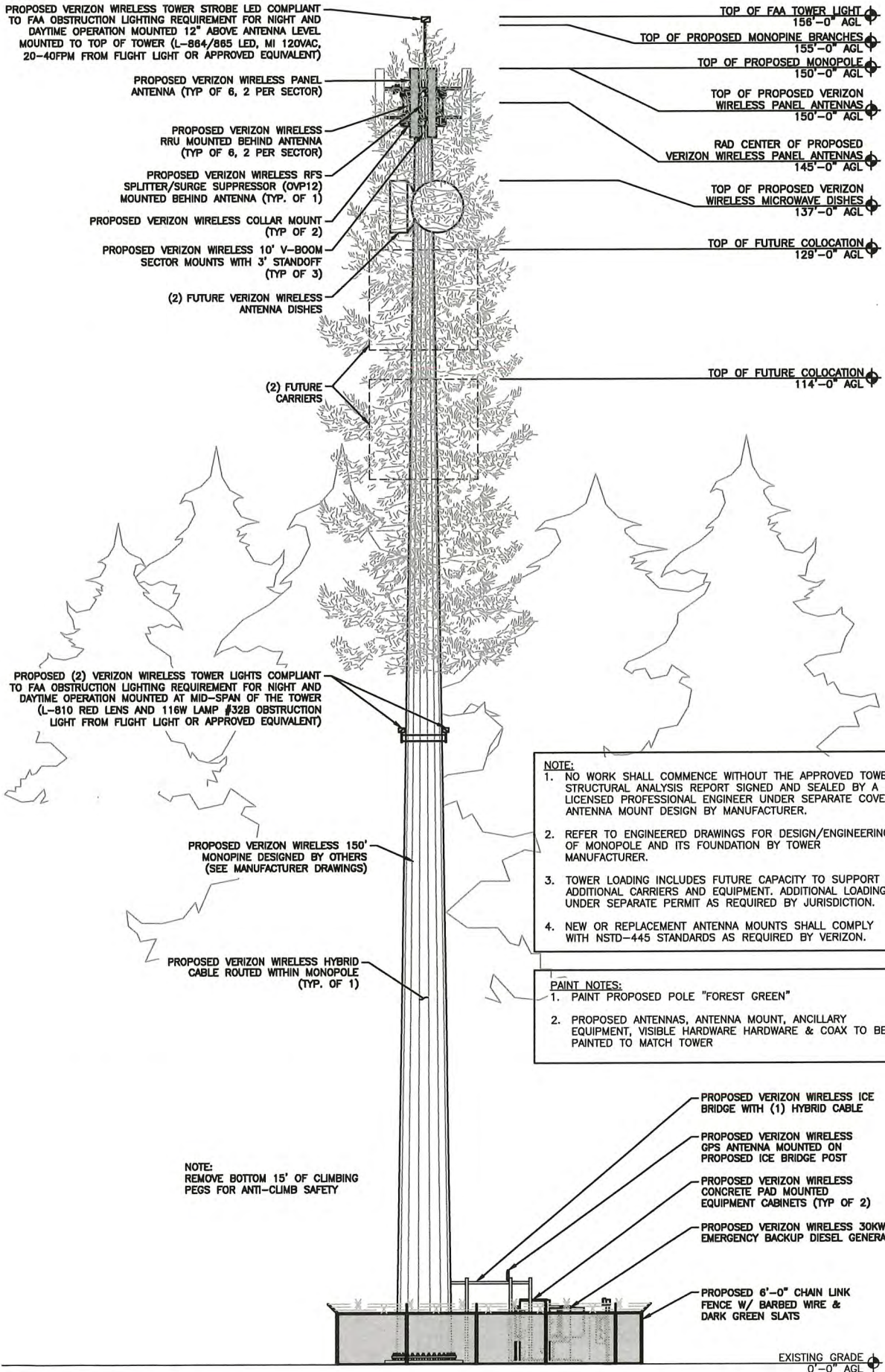
Drawing Title:

PROPOSED COMPOUND AND EQUIPMENT PLANS

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No:	Sheet No:

5

A-1.1



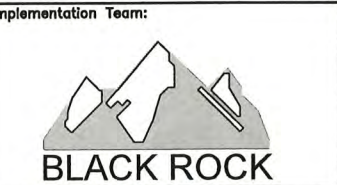
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EXP 12/31/19

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No.	Date	Revision
Client:		



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28421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:
PROPOSED ELEVATION

Project Number:	Start Date:
190001800	12/13/16
Drafter:	Designer:
JA	RB
Project Manager:	Professional of Record:
LC	LC
Revision No:	Sheet No:

5

A-2

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0	02/17/17	ISSUED FOR PERMIT
A	12/19/16	ISSUED FOR REVIEW

No. Date Revision

Client:

verizon

Implementation Team:



A&E Team:

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Project Info:

POR
STINGER
29421 E WOODARD RD
TROUTDALE, OR 97080

Drawing Title:

CONSTRUCTION
DETAILS

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No: 5	Sheet No: A-3

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

NOT USED 4

NOT USED 3

TIE WIRE TO FENCE

SIGN TO BE RED IN COLOR W/ TEXT & BORDER IN WHITE

IN CASE OF EMERGENCY CALL:
1-800-264-6620

SITE NAME _____

SITE# _____ TBD _____

STATE: _____ TBD _____

SWITCH: _____ TBD _____

FCC CALL SIGN # _____ TBD _____

TBD TO BE DETERMINED PRIOR TO SIGNS BEING MADE

GENERAL SIGN DETAIL

TIE WIRE TO FENCE

SIGN TO BE WHITE IN COLOR W/ RED TEXT

FCC Registration #: _____ TBD _____

TBD TO BE DETERMINED PRIOR TO SIGNS BEING MADE

FCC SIGN DETAIL



CORROSIVE LIQUIDS



CORROSIVE MATERIAL



CAUTION BATTERY SIGN



AUTHORIZED PERSONNEL



TRESPASSING SIGN DETAIL



RF SIGN DETAIL

1. SIGNS & PLACEMENT
- A. LOW LEVEL (BLUE) WARNING SIGNS – PLACE AT SITE ENTRY/ACCESS POINTS ONLY:
1. ROOF TOPS: PLACE SIGNS ON THE INSIDE OF ROOF HATCH; PLACE ON ACCESS DOOR UNLESS DOOR IS USED BY GENERAL PUBLIC OR BUILDING TENANTS REGULARLY FOR ACCESS – IN THESE CASES CONSULT CONSTRUCTION MANAGER (CM) OR QUALITY CONTROL (QC) SUPERVISOR.
 2. WATER TANKS: PLACE SIGNS ON COMPOUND GATE.
 3. VERIZON-OWNED SITES: PLACE ONE SIGN ON SITE GATE.
- B. HIGH LEVEL (RED) WARNING SIGNS – PLACE AT ALL ANTENNA SECTORS WHERE ACCESS BY THE GENERAL PUBLIC TO THE ANTENNAS IS POSSIBLE:
1. ALL SIGNS WILL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS TECH SCREWS.
2. CONSTRUCTION COORDINATOR (CC) PARTICIPATION IN SIGN LOCATION.
- A. CM WILL MEET WITH ALL CC'S TO OUTLINE CRITERIA FOR SIGN PLACEMENT; EMPHASIS WILL BE ON 'GRAY AREA' SITES, WHERE SIGN PLACEMENT IS PARTICULARLY CHALLENGING – WE WILL GIVE CC'S AS MUCH GUIDANCE ON SPECIFIC SITUATIONS AS WE CAN FORESEE, BUT CC'S WILL BE ENCOURAGED TO PARTNER CM OR CC IN DECIDING PLACEMENT OF DIFFICULT SITES. A JOINT SITE VISIT MAY BE REQUIRED TO FULFILL REQUIREMENTS.
- B. CC WILL CALL OUT SIGN LOCATION(S) AT THE A&E WALK FOR EACH SITE AS THOSE OCCUR.
- C. ON SITES WITH EXISTING A&E BUT NOT YET CONSTRUCTED, CC WILL BE ASKED TO PROVIDE (WITHIN A REASONABLE TIME FRAME TBD) A DETAIL FOR SIGN PLACEMENT THAT WILL BE SLIP-SHEETED INTO EXISTING SETS.
3. SIGNAGE SHALL NOT EXCEED 3 SF IN AREA.

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

NOT USED 2

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

STANDARD SIGNAGE DETAILS

1

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC[®] INDUSTRIAL
POWER

Standby Power Rating
30 kW, 38 kVA, 60 Hz

Prime Power Rating*
27 kW, 34 kVA, 60 Hz



*EPA Certified Prime ratings are not available in the US or its Territories

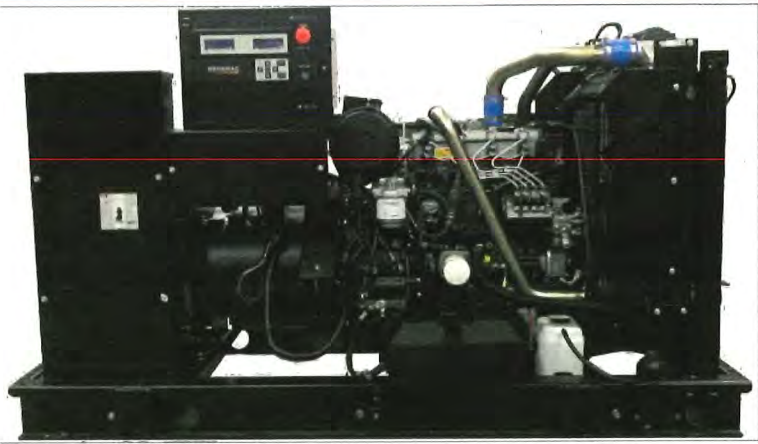


Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

- UL2200, UL508, UL489, UL142
- CSA C22.2
- BS5514 and DIN 6271
- SAE J1349
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

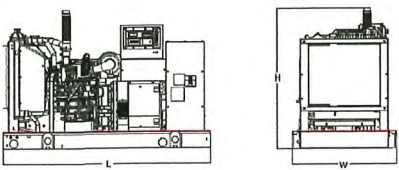
Generac is committed to ensuring our customers' service support continues after their generator purchase.

SPEC SHEET

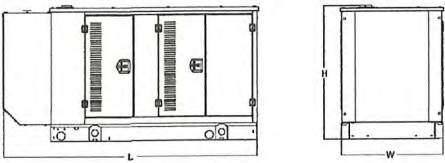
SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC[®] INDUSTRIAL
POWER

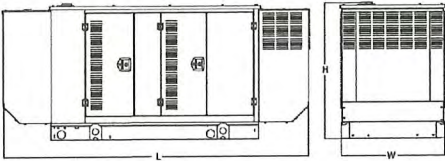
DIMENSIONS AND WEIGHTS*



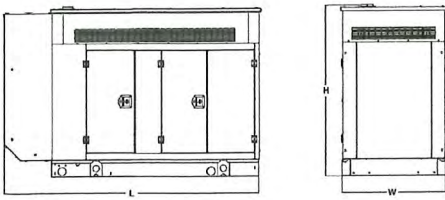
OPEN SET (Includes Exhaust Flex)				Weight - lbs (kg)	
Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)		Steel	Aluminum
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)		1,641 (745)	
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)		2,121 (963)	
47	132 (501)	76.0 (1,930) x 37.4 (950) x 89.8 (1,773)		2,351 (1,067)	
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)		2,560 (1,162)	
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)		2,623 (1,190)	



WEATHER PROTECTED ENCLOSURE				Weight - lbs (kg)	
Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)		Enclosure Only	
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		Steel	Aluminum
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		372 (170)	241 (110)
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)			
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)			
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)			



LEVEL 1 ACOUSTIC ENCLOSURE				Weight - lbs (kg)	
Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)		Enclosure Only	
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		Steel	Aluminum
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)		505 (230)	338 (154)
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)			
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)			
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)			



LEVEL 2 ACOUSTIC ENCLOSURE				Weight - lbs (kg)	
Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)		Enclosure Only	
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		Steel	Aluminum
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		510 (232)	341 (155)
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)			
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)			
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)			

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

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Part No. 10000024842
Rev. B 08/27/18

SPEC SHEET

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EXP 12/31/19

ZONING		
5	11/15/19	ADD MONOPINE & LANDSCAPE
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3	02/27/19	ISSUED FOR REVIEW
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No. Date Revision
Client:



Implementation Team:



A&E Team:
MORRISON HERSHFIELD
600 STEWART ST, SUITE 200
SEATTLE, WA 98101
Tel: 206.268.7370
www.morrisonhershfield.com

Project Info:
POR STINGER
29421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:
GENERATOR DETAILS

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No:	Sheet No:

5 A-4

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No. Date Revision

Client:

verizon

Implementation Team:



A&E Team:



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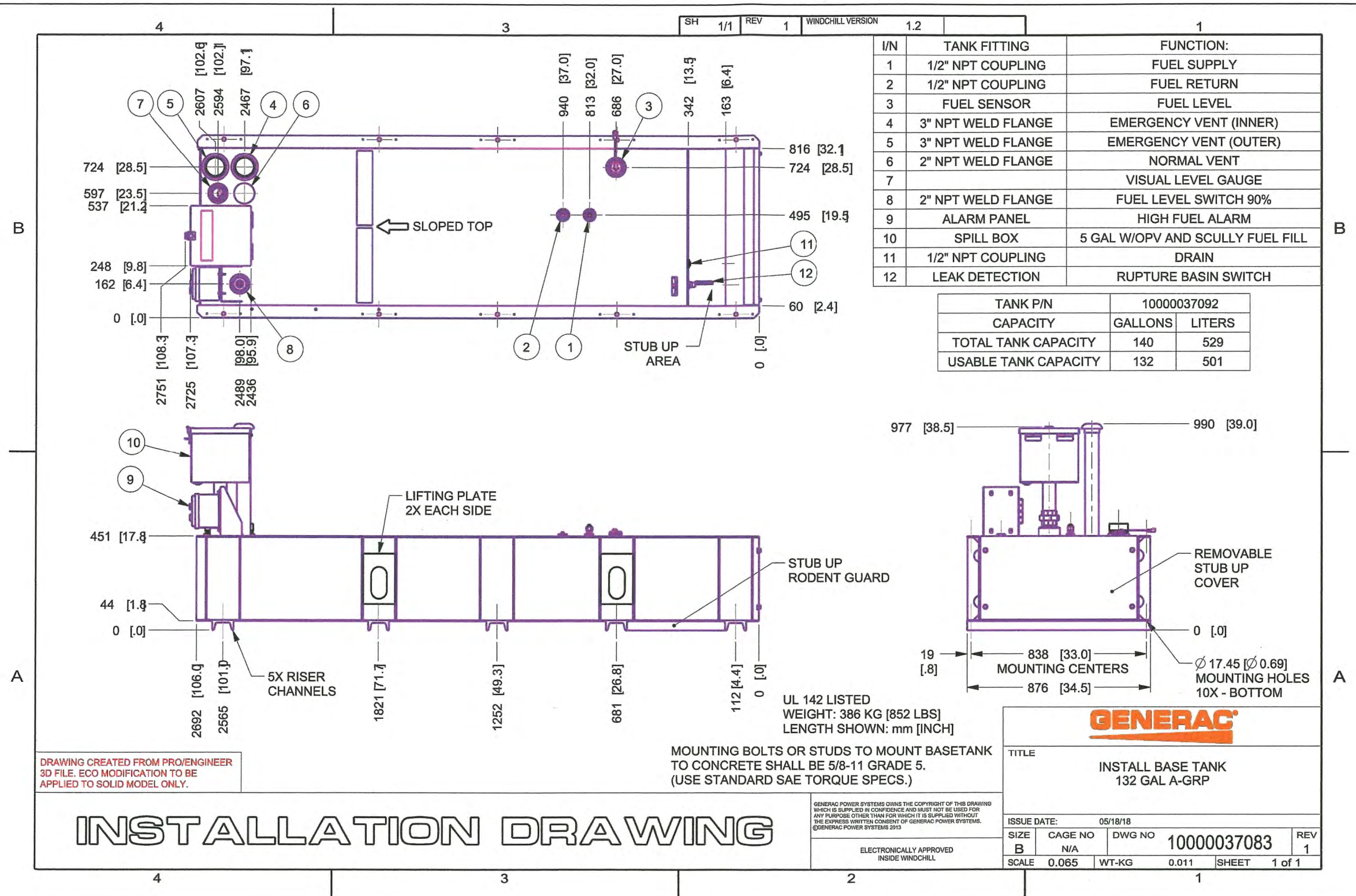
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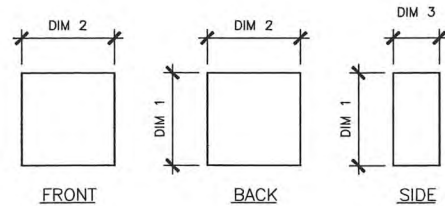
**GENERATOR
DETAILS**

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No:	Sheet No:

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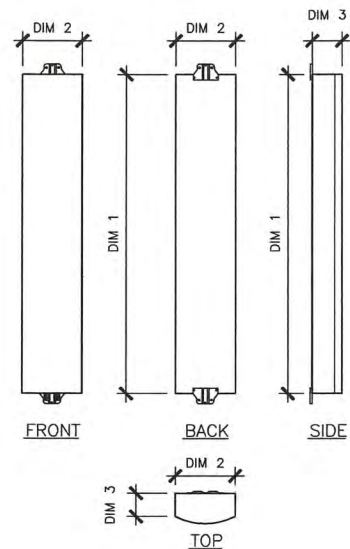


	QTY	DIM 1	DIM 2	DIM 3	WEIGHT
RRU 4449 B13/B5	3	18.0"	13.2"	9.4"	70.0 LBS
RRU 8843 B66A	3	18.0"	13.2"	11.3	75.0 LBS

NOTES:
1. INSTALL UNITS PER MANUFACTURER SPECIFICATIONS

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

PROPOSED RRU DIMENSIONS 4

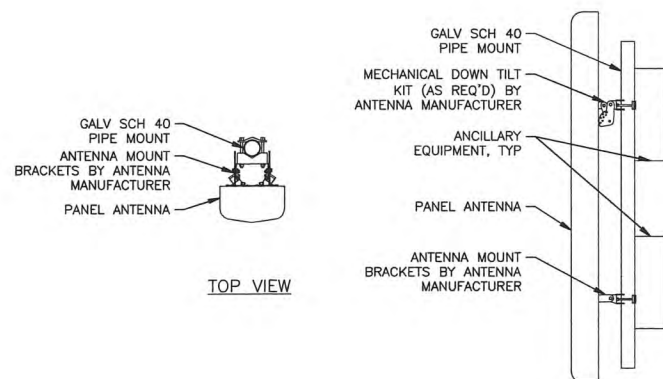


	QTY	DIM 1	DIM 2	DIM 3	WEIGHT
SECTOR ALPHA					
MX06FIT865-02	2	95.9"	12.2"	10.7"	50 LBS
SECTOR BETA					
MX06FIT845-02	2	95.9"	15.4"	10.7"	51 LBS
SECTOR GAMMA					
MX06FIT845-02	2	95.9"	15.4"	10.7"	51 LBS

NOTES:
1. INSTALL ANTENNAS PER MANUFACTURER SPECIFICATIONS
2. CONTRACTOR TO TORQUE ALL MOUNTING HARDWARE PER MANUFACTURER SPECIFICATIONS

24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

PROPOSED ANTENNA DIMENSIONS 3

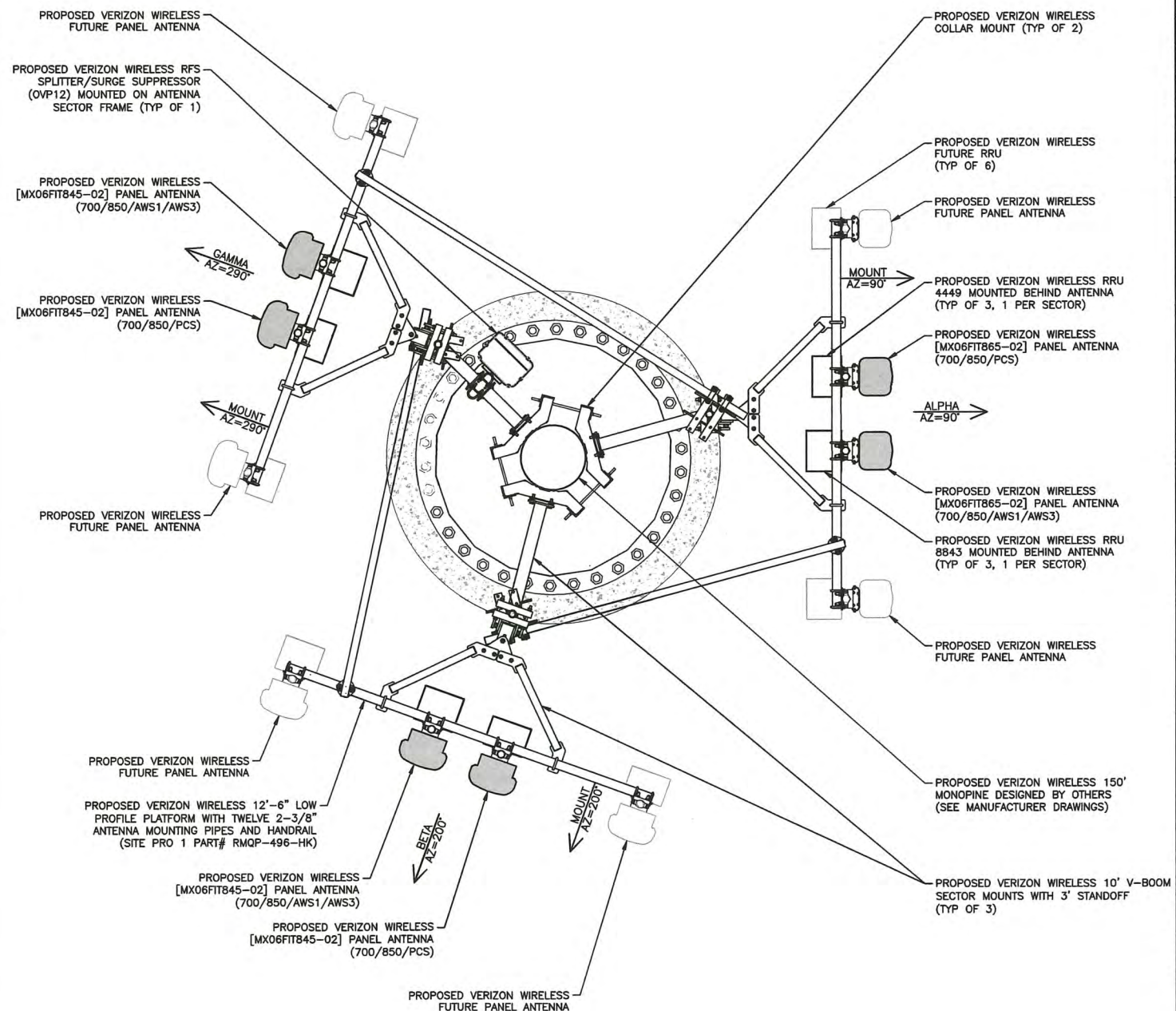


24"x36" SCALE: NOT TO SCALE
11"x17" SCALE: NOT TO SCALE

TYPICAL ANTENNA ATTACHMENT 2

PROPOSED ANTENNA AND COAX SCHEDULE											
SECTOR ALPHA	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC TILT	MECH DOWNTILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	ADDITIONAL EQUIPMENT
700/850/AWS LTE	90°	145'-0"	1	JMA	MX06FIT865-02	0°	0°	-	-	-	(1) RRU 4449 B5/B13 (1) RRU 8843 B2/B66A
700/850/PCS LTE	90°	145'-0"	1	JMA	MX06FIT865-02	0°	0°	-	-	-	
SECTOR BETA	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC TILT	MECH DOWNTILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	ADDITIONAL EQUIPMENT
700/850/AWS LTE	200°	145'-0"	1	JMA	MX06FIT845-02	4°	0°	1	HYBRID	200'-0"	(1) RRU 4449 B5/B13 (1) RRU 8843 B2/B66A (1) OVP12
700/850/PCS LTE	200°	145'-0"	1	JMA	MX06FIT845-02	4°	0°	-	-	-	
SECTOR GAMMA	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC TILT	MECH DOWNTILT	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	ADDITIONAL EQUIPMENT
700/850/AWS LTE	290°	145'-0"	1	JMA	MX06FIT845-02	6°	0°	-	-	-	(1) RRU 4449 B5/B13 (1) RRU 8843 B2/B66A
700/850/PCS LTE	290°	145'-0"	1	JMA	MX06FIT845-02	6°	0°	-	-	-	

NOTES:
1. ADJUST PIPE MOUNTS AS REQUIRED TO ACCOMMODATE REQUIRED ANTENNA SPACING.
2. PROVIDED 24" CENTER TO CENTER SPACE FOR ALPHA SECTOR ANTENNAS AND 36" CENTER TO CENTER SPACE FOR BETA AND GAMMA SECTOR ANTENNAS.



24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"

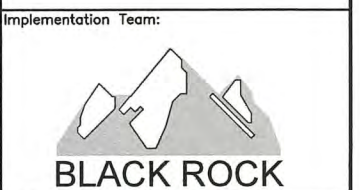
PROPOSED ANTENNA CONFIGURATION 1

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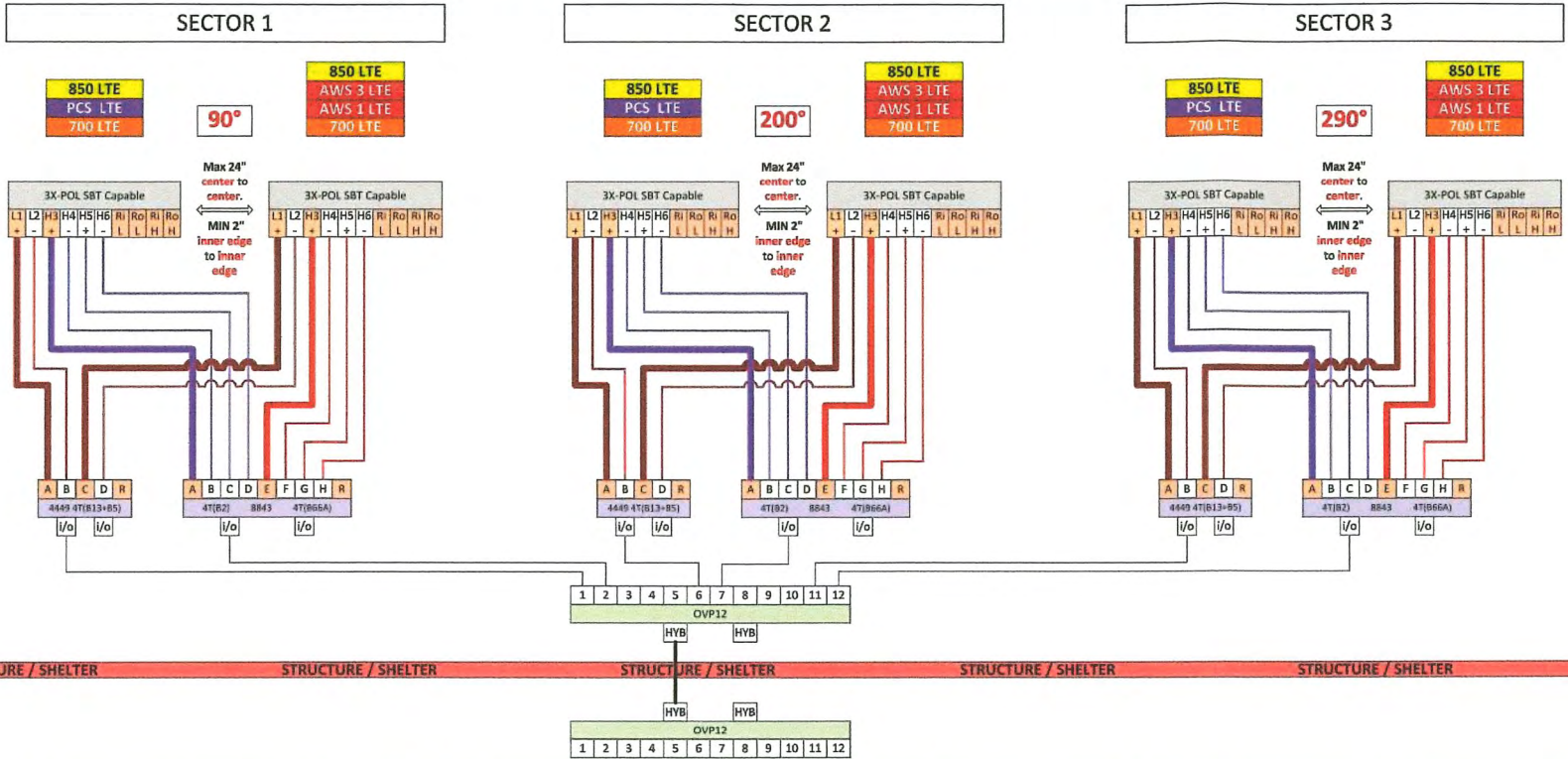
Drawing Title:
PROPOSED ANTENNA CONFIGURATION

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No:	Sheet No:

5 RF-1

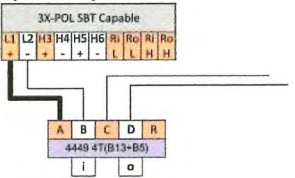
POR - STINGER_NSB [3 Sector - 4x4 RET RRH (700, 800, PCS, AWS1, AWS3)]

November 6, 2018



RET Control Path Note:
All Smart BiasT's (SBT)/Internal BiasT's, or External AISG RET Controllers are driven by the **BOLD** coax/jumper pathways.

Example:
Antenna port '1'
driven by
RRH port 'A'



6630DB-5-3-1; max cells is 24 (18 if ERAN) in 17.Q3 (B4 split is shown below); other variations possible

from 6630 tab (6630-5-3-1)
or from 6630 tab (6630-5-3-7)

6630DB-5-3-1	B13	B4	B66	B2	B5
		up to 25	up to 10	up to 20	up to 10
Bandwidth (MHz)	10	25	10	20	10
Tx or Rx	4	4	4	4	4

	BB1	ABW	Branches		Cells	
			cont	split	cont	split
port A	700/850 alpha	80	8	8	2	2
port B	AWS/PCS alpha	220	12	16	3	4
port C						
port D						
port E						
port F	700/850 beta	80	8	8	2	2
port G	AWS/PCS beta	220	12	16	3	4
port H						
port J						
port K						
port L	700/850 gamma	80	8	8	2	2
port M	AWS/PCS gamma	220	12	16	3	4
port N						
port P						
port Q						
Total ABW		900	60	72	15	18

RRU Bands:
700 ----- Band 13
AWS ----- Band 4
PCS ----- Band 2
850 ----- Band 5
AWS-1/3 ----- Band 66A
CBRS ----- Band 48
LAA ----- Band 46

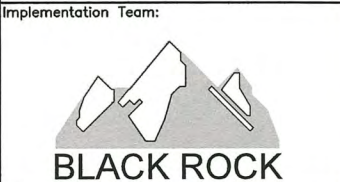
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EXP 12/31/19

ZONING		
5	11/15/19	ADD MONOPINE & LANDSCAPE
4	05/24/19	ADD L-810 LIGHTING
3	02/27/19	ISSUED FOR REVIEW
2	05/29/18	ISSUED FOR REVIEW
1	10/12/17	ISSUED FOR REVIEW
0	02/17/17	ISSUED FOR PERMIT
A	12/19/16	ISSUED FOR REVIEW

No. Date Revision
Client:



A&E Team:
MORRISON HERSHFIELD
600 STEWART ST, SUITE 200
SEATTLE, WA 98101
Tel: 206.268.7370
www.morrisonhershfield.com

Project Info:
POR STINGER
29421 E WOODARD RD
TROUTDALE, OR 97060

Drawing Title:
PLUMBING DIAGRAM

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No:	Sheet No:

TREE NOTES:

TREES OUTSIDE OF THE 100' RADIUS LANDSCAPE PLAN/CONSERVATION EASEMENT AREA ARE TO BE RETAINED TO THE GREATEST EXTENT POSSIBLE. THOSE TREES THAT ARE REQUIRED TO BE REMOVED FOR IMPROVEMENTS OF THE ACCESS ROAD OR UTILITIES ARE SHOWN TO BE REMOVED.

TREE DRIP LINES ARE NOT TO SCALE. TREE SYMBOLS REFERENCE TRUNK LOCATION ONLY. TRUNK DIAMETERS WERE APPROXIMATED AT 3.5' TO 4' ABOVE GROUND LEVEL. TREES SHOWN ARE FOR REFERENCE ONLY AND OTHER TREES AND VEGETATION MAY EXIST.

DECIDUOUS TREE
AL12 ← TRUNK DIAMETER (IN)
TYPE

EVERGREEN TREE
DF18
195.2
HEIGHT AGL IF MEASURED

TREES TO BE RETAINED

TREES TO BE REMOVED

AL=ALDER
MP=MAPLE
DS=DECIDUOUS
MA=MADRONA
OK=OAK
CH=CHERRY

CE=CEDAR
DF=DOUGLAS FIR
HE=HEMLOCK
PI=PINE
EVG=EVERGREEN



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No. Date Revision

Client:

verizon

Implementation Team:



A&E Team:

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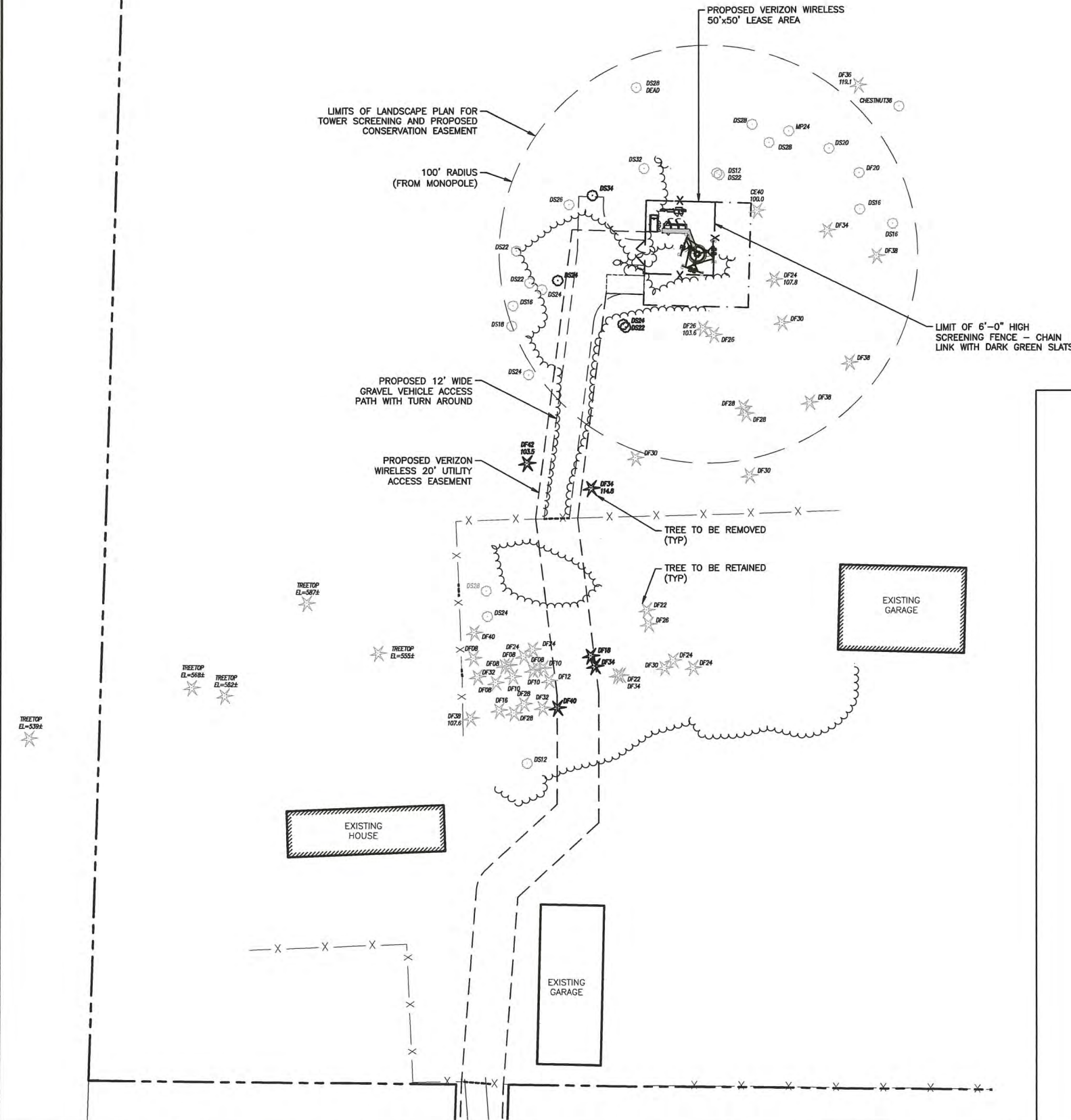
Project Info:

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STINGER
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Drawing Title:

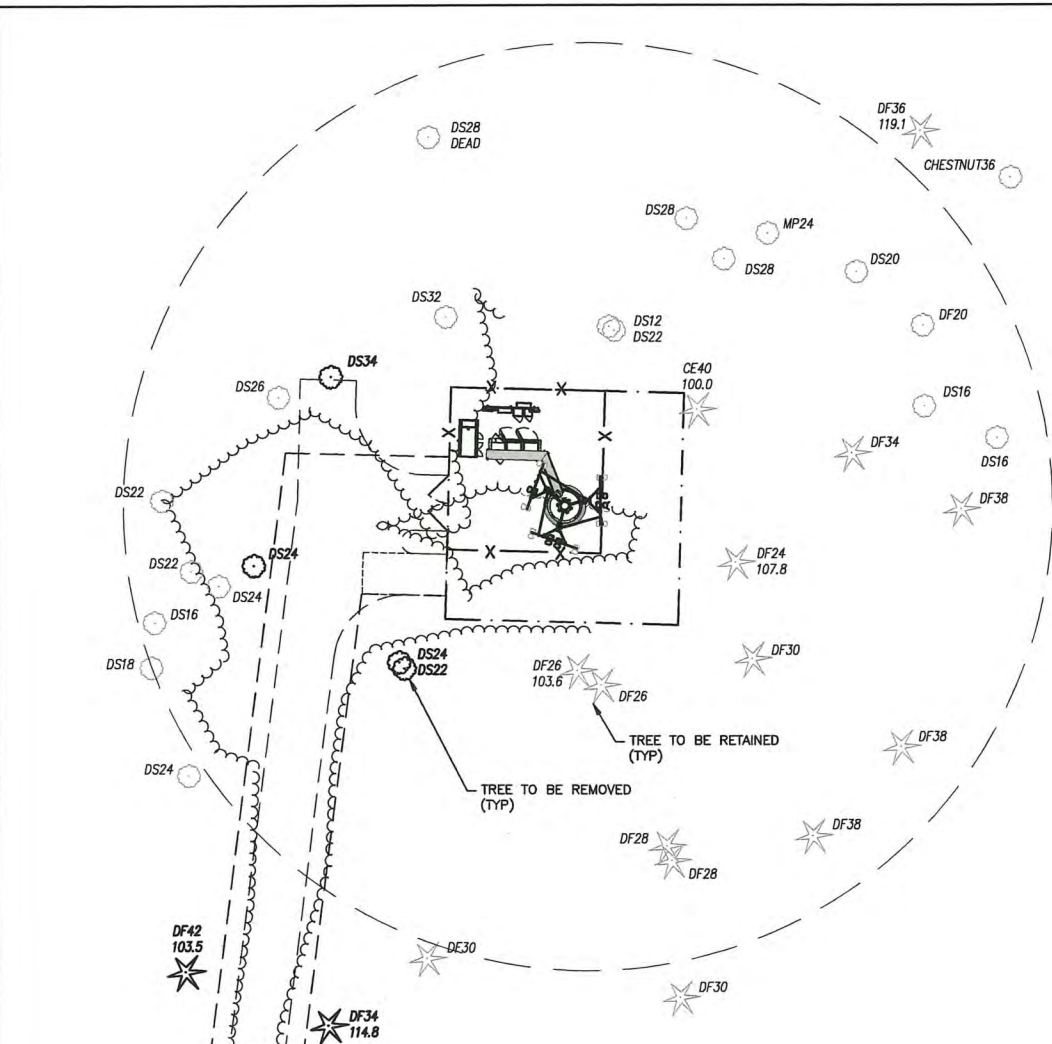
LANDSCAPE
PLAN

Project Number: 190001800	Start Date: 12/13/16
Drafter: JA	Designer: RB
Project Manager: LC	Professional of Record: LC
Revision No: 5	Sheet No: L-1



24"x36" SCALE: 1" = 30'-0"
11"x17" SCALE: 1" = 60'-0"

TREE REMOVAL PLAN 2



24"x36" SCALE: 1" = 30'-0"
11"x17" SCALE: 1" = 60'-0"

TREE REMOVAL PLAN ENLARGED 1

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AL12

TRUNK DIAMETER (IN)

TYPE
- EVERGREEN TREE

DF18

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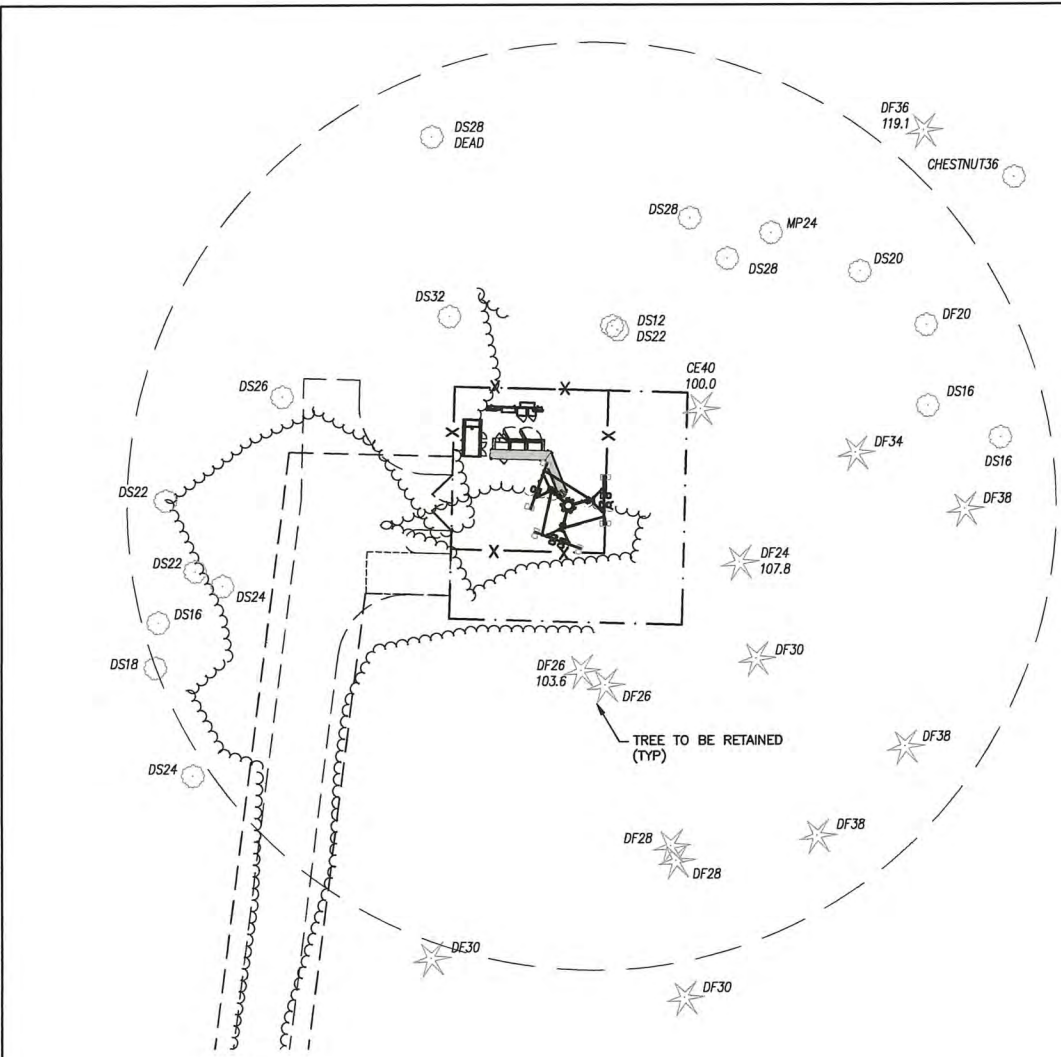
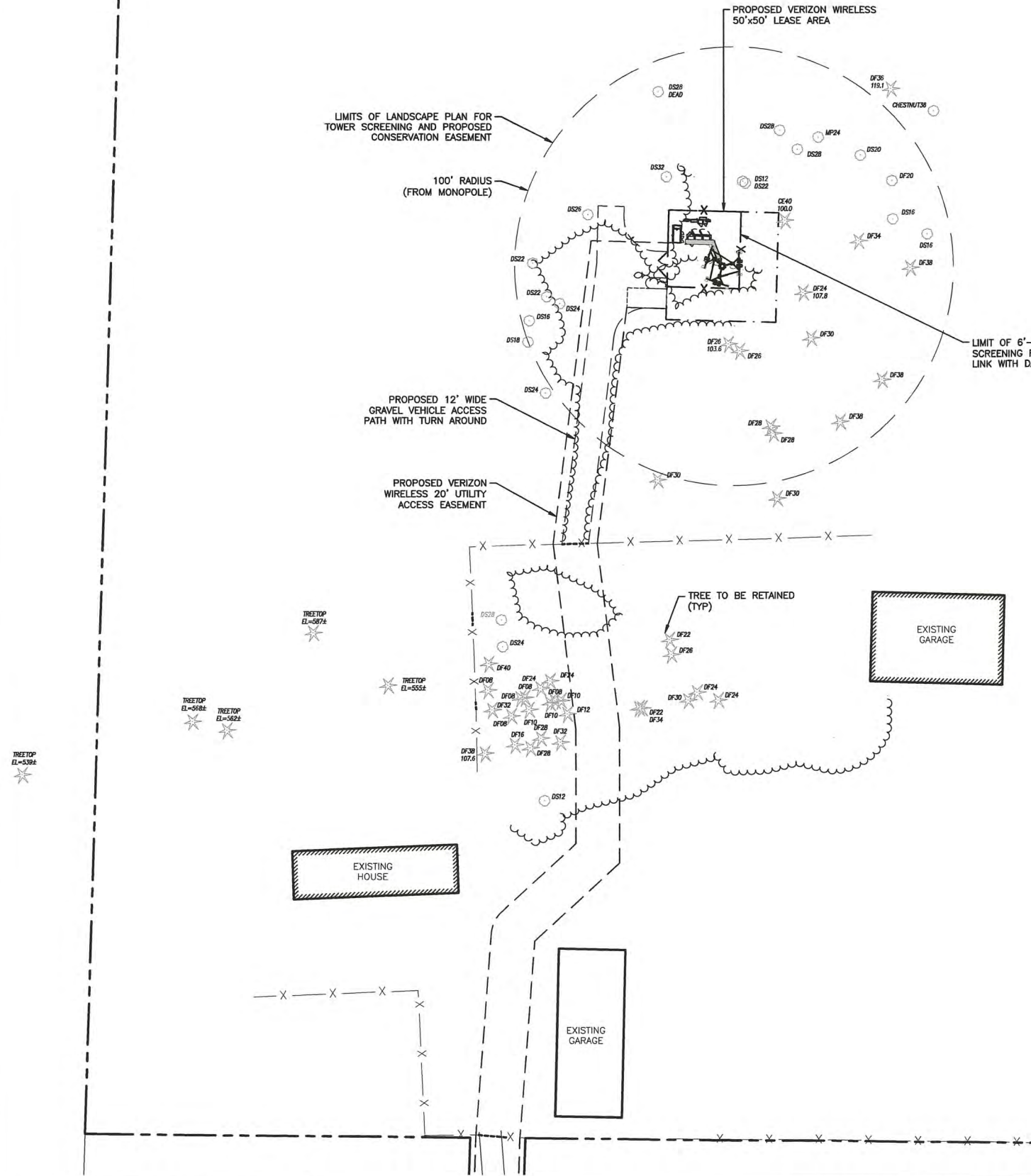
Drawing Title:

LANDSCAPE
PLAN

Project Number:	Start Date:
190001800	12/13/16
Drafter:	Designer:
JA	RB
Project Manager:	Professional of Record:
LC	LC
Revision No:	Sheet No:

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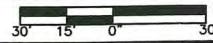


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11"x17" SCALE: 1" = 60'-0"



TREE RETENTION PLAN 2

24"x36" SCALE: 1" = 30'-0"
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TREE RETENTION PLAN ENLARGED 1