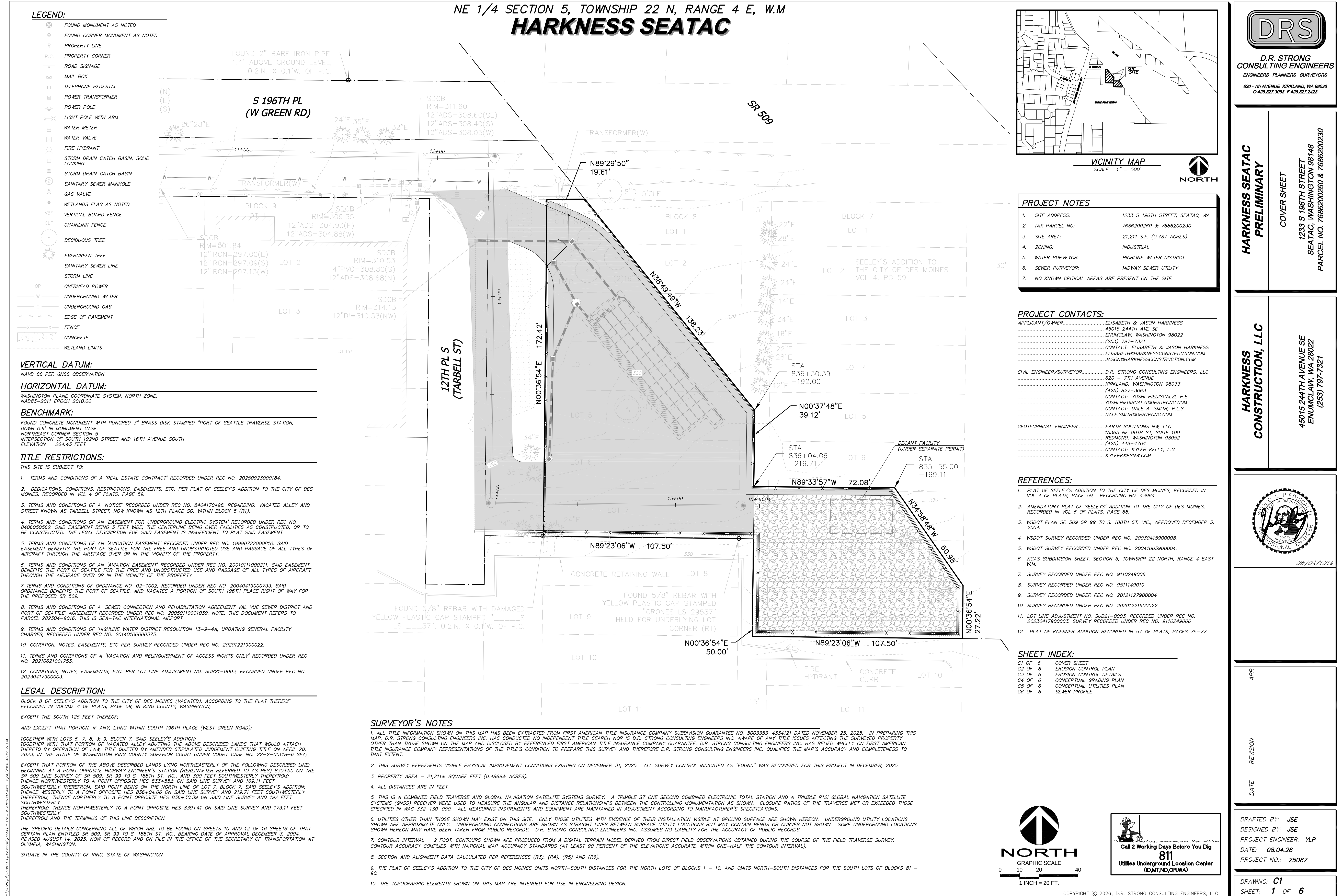
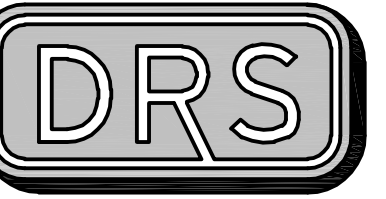




HARKNESS SEATAC

EROSION AND SEDIMENT CONTROL NOTES

- APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOW ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF ORANGE PROTECTION FENCING PRIOR TO CONSTRUCTION. DURING CONSTRUCTION, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS PREVENTED.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE COURSE OF CONSTRUCTION, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30).
- ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A STORM EVENT.
- AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE FINAL GRADE OF THE PERMANENT FACILITY.
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
- PRIOR TO SEPTEMBER 15, ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED PRIOR TO OCTOBER 1. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE CITY INSPECTOR. THE CITY INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.
- CLEARING AND GRADING BETWEEN OCTOBER 1 AND APRIL 30 WILL REQUIRE A WET SEASON PERMIT.



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS

620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3065 F 425.827.2423

HARKNESS SEATAC
PRELIMINARY

EROSION CONTROL PLAN

1233 S 196TH STREET
SEATAC, WASHINGTON 98148
PARCEL NO. 76862002080 & 76862002030

HARKNESS
CONSTRUCTION, LLC

45015 244TH AVENUE SE
ENUMCLAW, WA 98022
(253) 797-7321



08/04/2016

APR

REVISION

DATE

DRAFTED BY: JSE
DESIGNED BY: JSE
PROJECT ENGINEER: YLP
DATE: 08.04.26
PROJECT NO.: 25087

DRAWING: C2
SHEET: 2 OF 6

DES MOINES MEMORIAL DR S

FOUND 2" BARE IRON PIPE,
1.4' ABOVE GROUND LEVEL,
0.2'N. X 0.1'W. OF P.C.

S 196TH PL
(W GREEN RD)

SR 509

SSMH
RIM=299.64
8"PVC=289.51(N)
8"PVC=289.69(S)
8"PVC=289.71(E)
8"PVC=289.62(W)

SDCB
RIM=300.03
UN-ABLE
TO OPEN

SDCB
RIM=301.04
12"IRON=297.12(E)
12"IRON=297.19(W)

AREA DRAIN
RIM=301.49
8"=300.55(E)

SDCB
RIM=301.84
12"IRON=297.00(E)
12"IRON=297.09(S)
12"IRON=297.13(W)

SDCB
RIM=309.35
12"ADS=304.93(E)
12"ADS=304.88(W)

SDCB
RIM=310.53
4"PVC=308.
12"ADS=308.

SDCB
RIM=314.13
12"DI=310.53(NW)

BLDG
#19600

12TH PL S
(TARBELL ST)

FOUND 1/2" REBAR WITH ORANGE
PLASTIC CAP STAMPED "GEO-D
15025", 1.0'S. OF LOT LINE

FOUND 5/8" REBAR WITH DAMAGED
YELLOW PLASTIC CAP STAMPED "____S
LS ____37", 0.2'N. X 0.1'W. OF P.C.

FOUND 5/8" REBAR WITH
YELLOW PLASTIC CAP STAMPED
"CRONES LS 29537"
HELD FOR UNDERLYING LOT
CORNER (R1)

TESC LEGEND

- | | |
|-----|--|
| CL | CONSTRUCTION LIMITS, TO BE FLAGGED OR
FENCED WHEN NO SILT FENCE IS PROPOSED |
| SF | SILT FENCE |
| | STABILIZED CONSTRUCTION ENTRANCE |
| DC | DUST CONTROL |
| O | INLET PROTECTION. SEE SHEET C6 FOR DETAILS |
| SSV | STREET SWEEPING & VACUUMING |
| | TREE TO BE REMOVED |

SEDIMENT TRAP SIZING SUMMARY:

THE TRAP WAS SIZED USING THE REQUIREMENTS STATED IN APPENDIX D OF THE
2021 KING COUNTY SURFACE WATER DESIGN MANUAL WHICH REQUIRES 2,080 S.F.
OF SURFACE AREA PER CFS OF INFLOW; DEVELOPED 2-YEAR STORM, 15-MIN. TIME
STEPS.

CATCHMENT AREA: 0.487 AC.	
2-YEAR PEAK FLOW RATE.....	0.1857 CFS
REQUIRED SURFACE AREA.....	387 S.F.
PROVIDED SURFACE AREA.....	400 S.F.

VERTICAL DATUM:

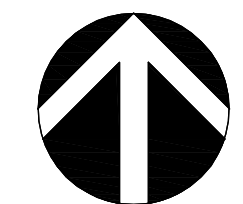
NAVD 88 PER GNSS OBSERVATION

HORIZONTAL DATUM:

WASHINGTON PLANE COORDINATE SYSTEM, NORTH ZONE.
NAD83-2011 EPOCH 2010.00

BENCHMARK:

FOUND CONCRETE MONUMENT WITH PUNCHED 3" BRASS DISK STAMPED "PORT OF SEATTLE TRAVERSE STATION,
DOWN 0.9' IN MONUMENT CASE.
NORTHEAST CORNER SECTION 5
INTERSECTION OF SOUTH 192ND STREET AND 16TH AVENUE SOUTH
ELEVATION = 264.43 FEET.



NORTH

GRAPHIC SCALE
10 20 40

1 INCH = 20 FT.



Call 2 Working Days Before You Dig

811

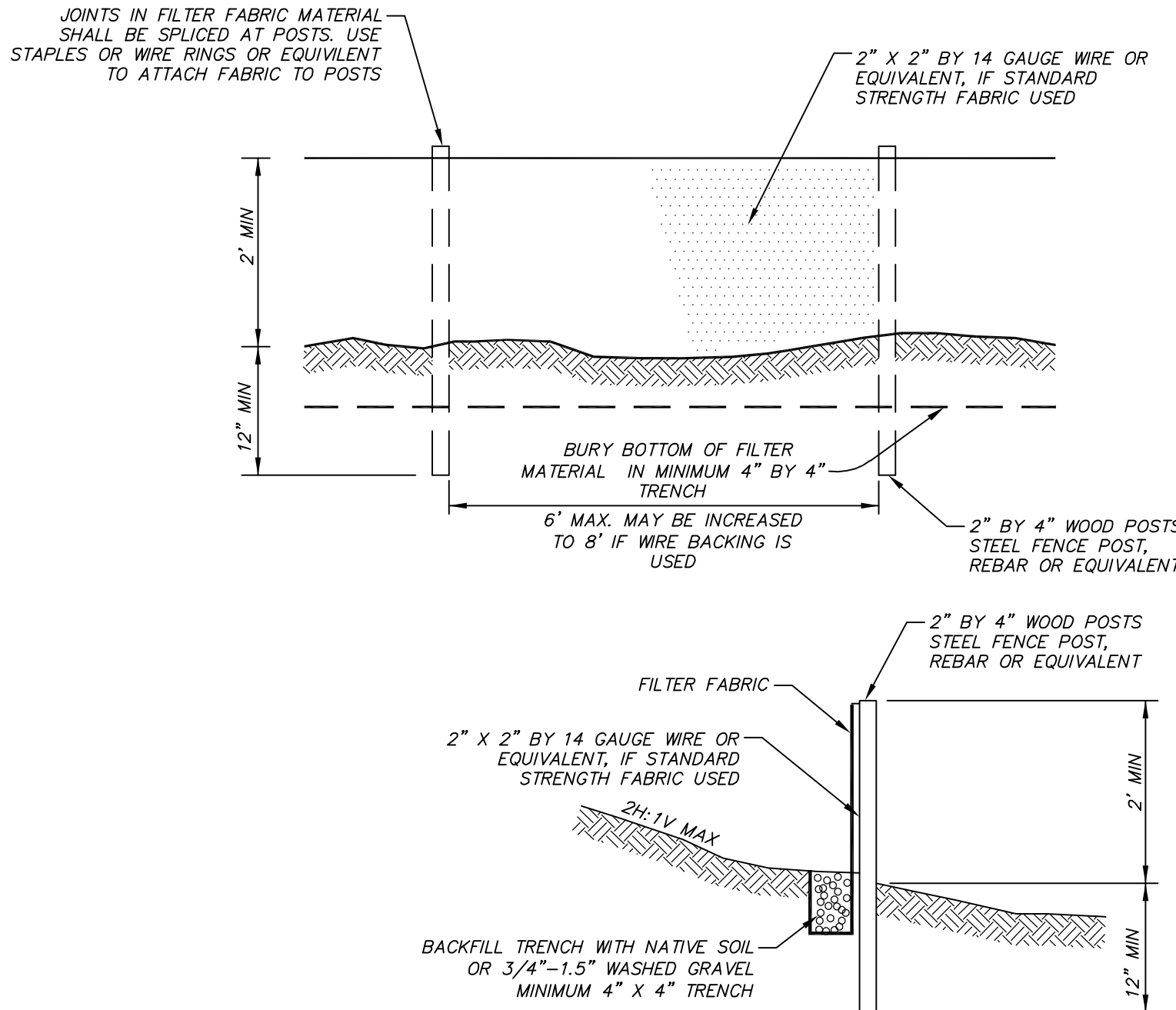
Utilities Underground Location Center
(ID.MTND.OR.WA)

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R: 10/23/21 (J) 250871.1 Drawings Project (JSE) (JSE) - HARKNESS SEATAC.dwg 8/1/2026 8:27:43 PM

NE 1/4 SECTION 5, TOWNSHIP 22 N, RANGE 4 E, W.M

HARKNESS SEATAC



SILT FENCE NOTES:

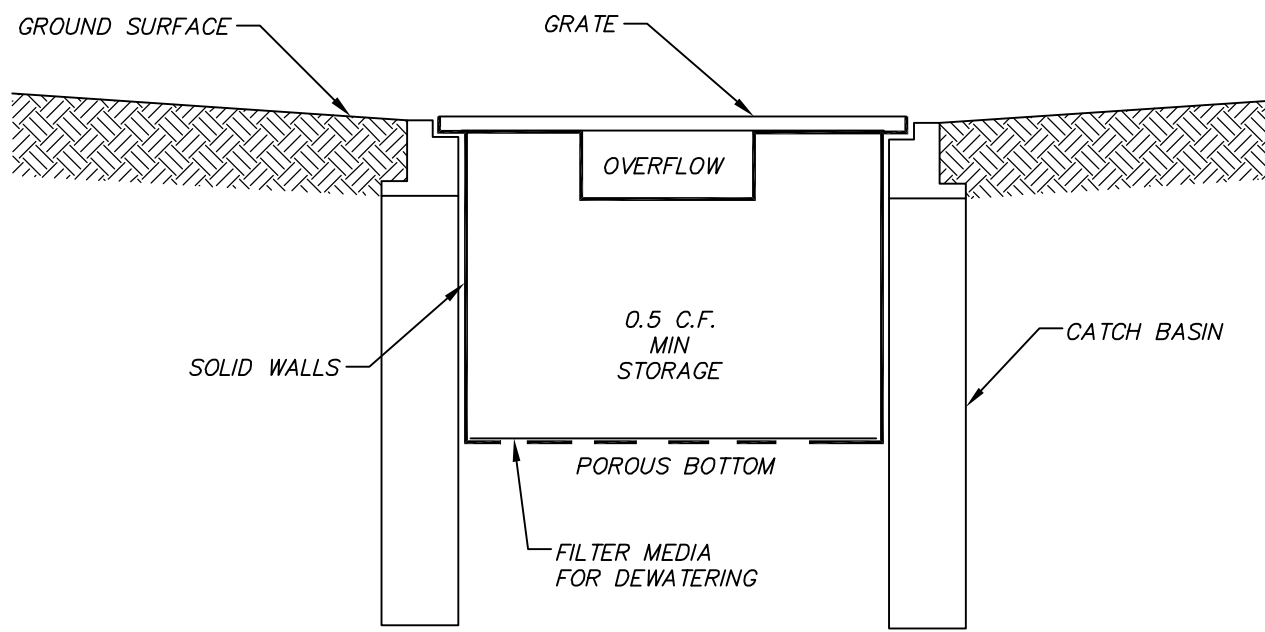
- SEE ADJACENT DETAIL.
- THE GEOTEXTILE USED MUST MEET THE FOLLOWING SPECIFICATIONS:
AOS (ASTM D-4751)
WATER PERMITTIVITY (ASTM D-4491)
GRAB TENSILE STRENGTH (ASTM D-4632)
GRAB TENSILE ELONGATION (ASTM D-4632)
ULTRAVIOLET RESISTANCE (ASTM D-4355)
30-100 SIEVE SIZE FOR SILT FILM
50-100 SIEVE SIZE FOR OTHER FABRICS
0.02 SEC-1 MIN
180 LBS MIN. FOR EXTRA STRENGTH FABRIC
100 LBS PER MINUTE STANDARD STRENGTH FABRIC
30% MAX.
70% MIN.
A COPY OF THE MANUFACTURERS' FABRIC SPECIFICATIONS MUST BE AVAILABLE ONSITE
- STANDARD STRENGTH FABRIC REQUIRES WIRE BACKING TO INCREASE THE STRENGTH OF THE FENCE. WIRE BACKING OR CLOSER POST SPACING MAY BE REQUIRED FOR EXTRA STRENGTH FABRIC IF FIELD PERFORMANCE WARRANTS A STRONGER FENCE. 4. WHERE THE FENCE IS INSTALLED, THE SLOPE SHALL BE NO STEEPER THAN 2H:1V.

SILT FENCE DETAIL

NTS

MAINTENANCE STANDARDS

- ANY SEDIMENT DEPOSITION OF MORE THAN 0.5 FEET SHALL BE REMOVED SO THAT THE CHANNEL IS RESTORED TO ITS DESIGN CAPACITY.
- IF THE CHANNEL CAPACITY IS INSUFFICIENT FOR THE DESIGN FLOW, IT MUST BE DETERMINED WHETHER THE PROBLEM IS LOCAL (E.G., A CONSTRUCTION OR BEND) OR THE CHANNEL IS UNDER-DESIGNED. IF THE PROBLEM IS LOCAL, THE CHANNEL CAPACITY MUST BE INCREASED THROUGH CONSTRUCTION OF A BERM(S) OR BY EXCAVATION. IF THE PROBLEM IS UNDER-DESIGN, THE DESIGN ENGINEER SHALL BE NOTIFIED AND THE CHANNEL REDESIGNED TO A MORE CONSERVATIVE STANDARD TO BE APPROVED BY KING COUNTY.
- THE CHANNEL SHALL BE EXAMINED FOR SIGNS OF SCOURING AND EROSION OF THE BED AND BANKS. IF SCOURING OR EROSION HAS OCCURRED, AFFECTED AREAS SHALL BE PROTECTED BY RIPRAP OR AN EROSION CONTROL BLANKET OR NET.

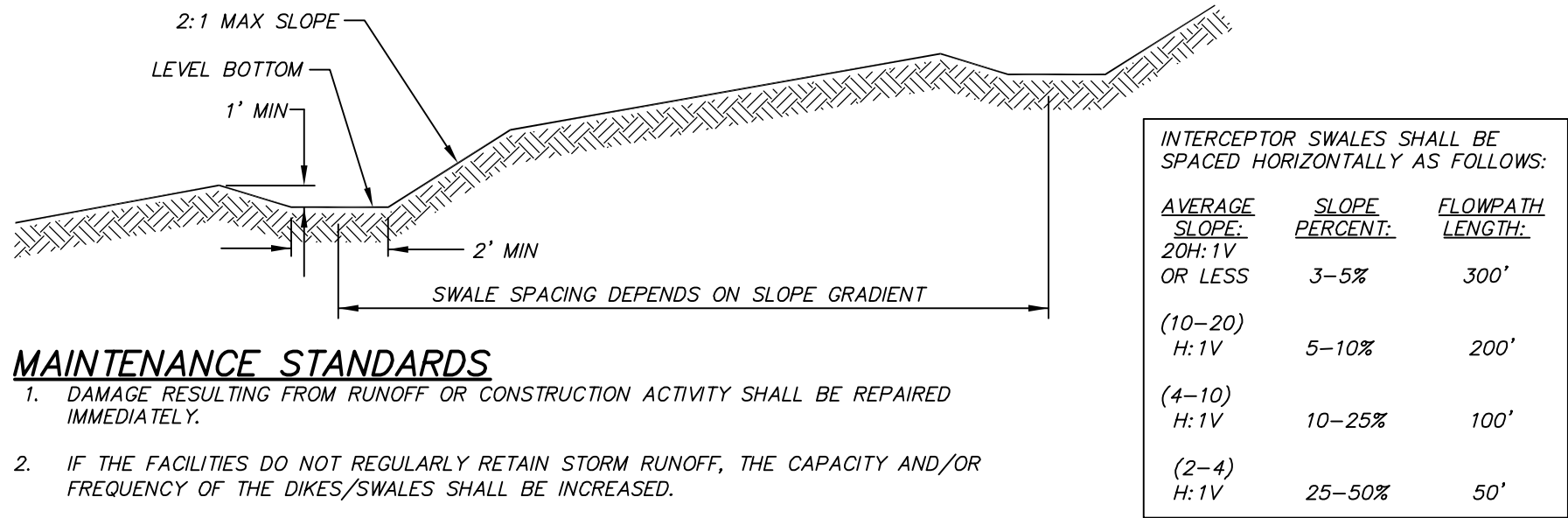


INSERT NOTES:

- ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC PROTECTION SHALL BE REMOVED IMMEDIATELY. SEDIMENT SHALL NOT BE REMOVED WITH WATER, AND ALL SEDIMENT MUST BE DISPOSED OF AS FILL ON SITE OR HAULED OFF SITE.
- ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN THE SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE.
- THE FILTER MEDIA FOR THE INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.

CATCH BASIN INSERT CROSS-SECTION

NTS

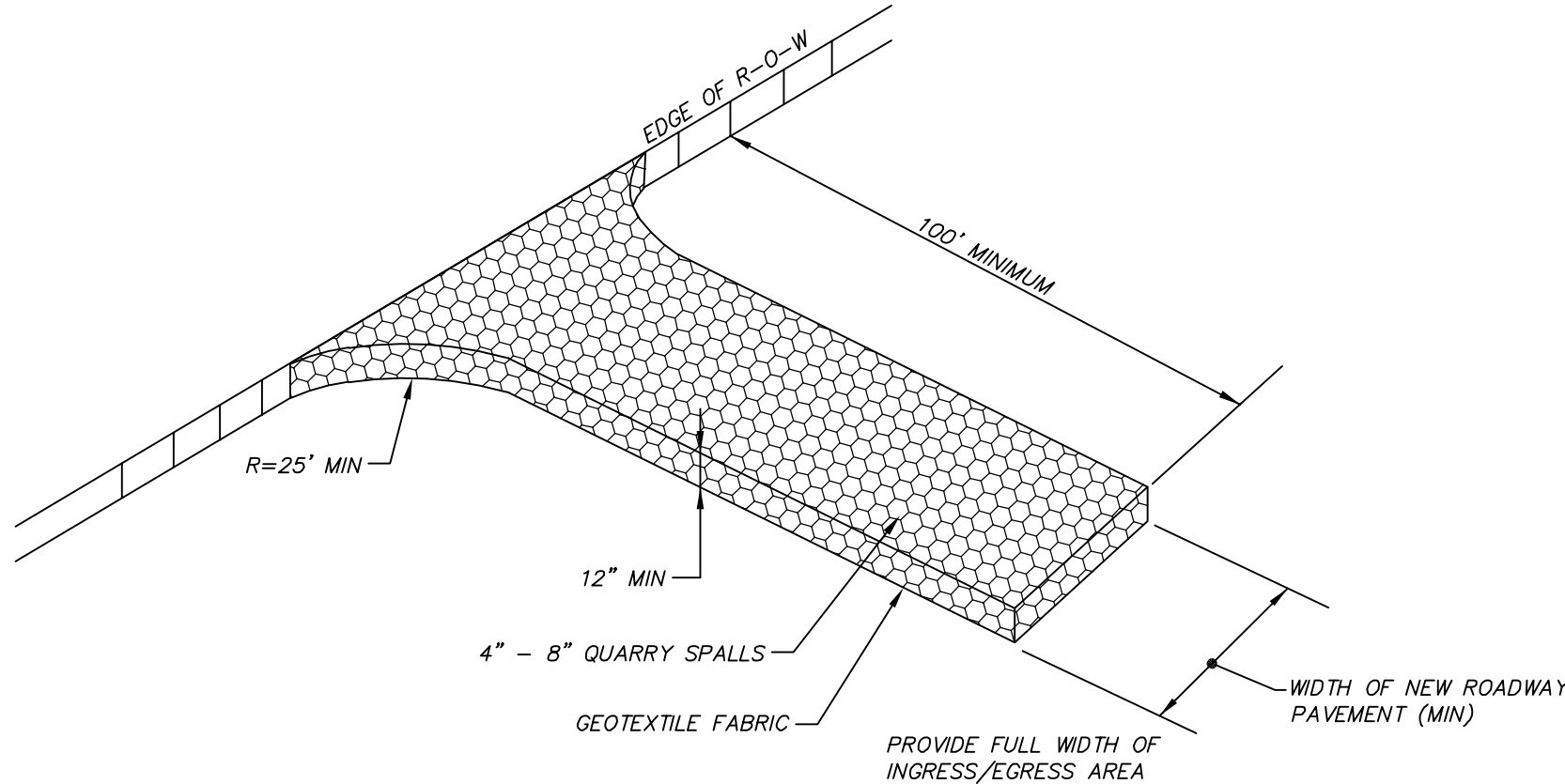


MAINTENANCE STANDARDS

- DAMAGE RESULTING FROM RUNOFF OR CONSTRUCTION ACTIVITY SHALL BE REPAIRED IMMEDIATELY.
- IF THE FACILITIES DO NOT REGULARLY RETAIN STORM RUNOFF, THE CAPACITY AND/OR FREQUENCY OF THE DIKES/SWALES SHALL BE INCREASED.

INTERCEPTOR SWALE

NTS

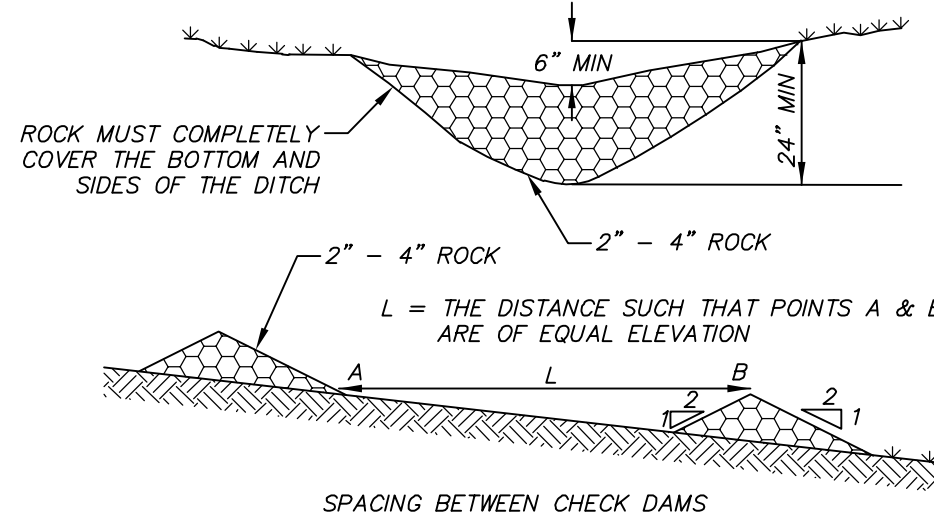


NOTES:

- SEE ADJACENT DETAIL.
- A SEPARATION GEOTEXTILE SHALL BE PLACED UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM PUMPING UP INTO THE ROCK PAD. THE GEOTEXTILE SHALL MEET THE FOLLOWING STANDARDS:
GRAB TENSILE STRENGTH (ASTM D-4751).....200 PSI
GRAB TENSILE ELONGATION (ASTM D-4632).....30% MAX.
MULLEN BURST STRENGTH (ASTM D-3786-80A).....400 PSI MIN.
AOS (ASTM D-4751).....20-45 (U.S. STANDARD SIEVE SIZE)
- HOG FUEL MAY BE SUBSTITUTED FOR OR COMBINED WITH QUARRY SPALLS IN AREAS THAT WILL NOT BE USED FOR PERMANENT ROADS. THE EFFECTIVENESS OF HOG FUEL IS HIGHLY VARIABLE, BUT IT HAS BEEN USED SUCCESSFULLY ON MANY SITES. IT GENERALLY REQUIRES MORE MAINTENANCE THAN QUARRY SPALLS. THE INSPECTOR MAY AT ANY TIME REQUIRE THE USE OF QUARRY SPALLS IF THE HOG FUEL IS NOT PREVENTING SEDIMENT BEING TRACKED ONTO PAVEMENT OR IF THE HOG FUEL IS BEING CARRIED ONTO PAVEMENT. HOG FUEL IS PROHIBITED FROM PERMANENT ROADBEDS BECAUSE ORGANICS IN THE SUB-GRADE SOILS CAUSE DIFFICULTIES WITH COMPACTION.
- FENCING SHALL BE INSTALLED AS NECESSARY TO RESTRICT TRAFFIC TO THE CONSTRUCTION ENTRANCE.
- WHENEVER POSSIBLE, THE ENTRANCE SHALL BE CONSTRUCTED ON A FIRM, COMPACTED SUBGRADE. THIS CAN SUBSTANTIALLY INCREASE THE EFFECTIVENESS OF THE PAD AND REDUCE THE NEED FOR MAINTENANCE.

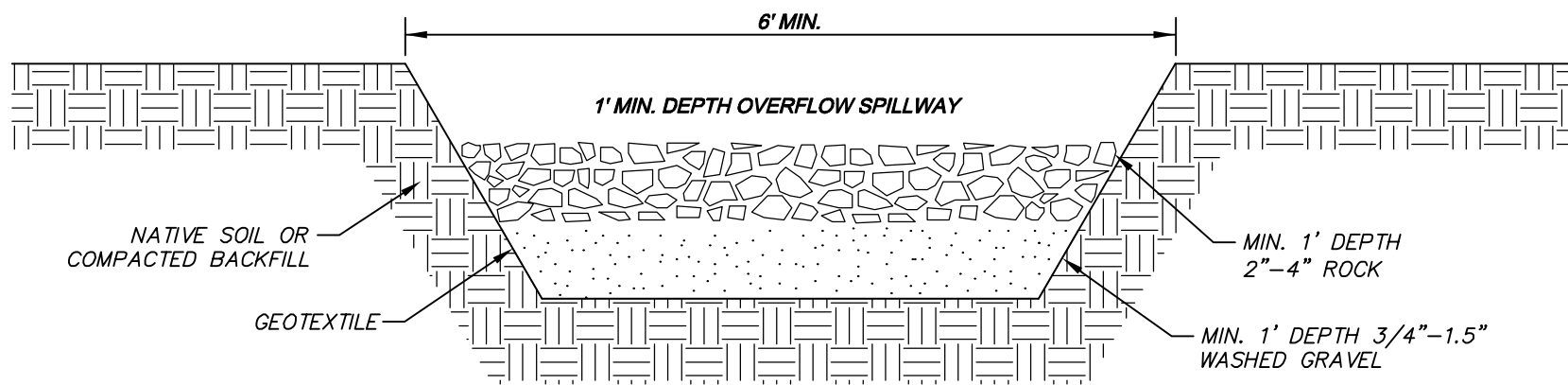
STABILIZED CONSTRUCTION ENTRANCE

NTS



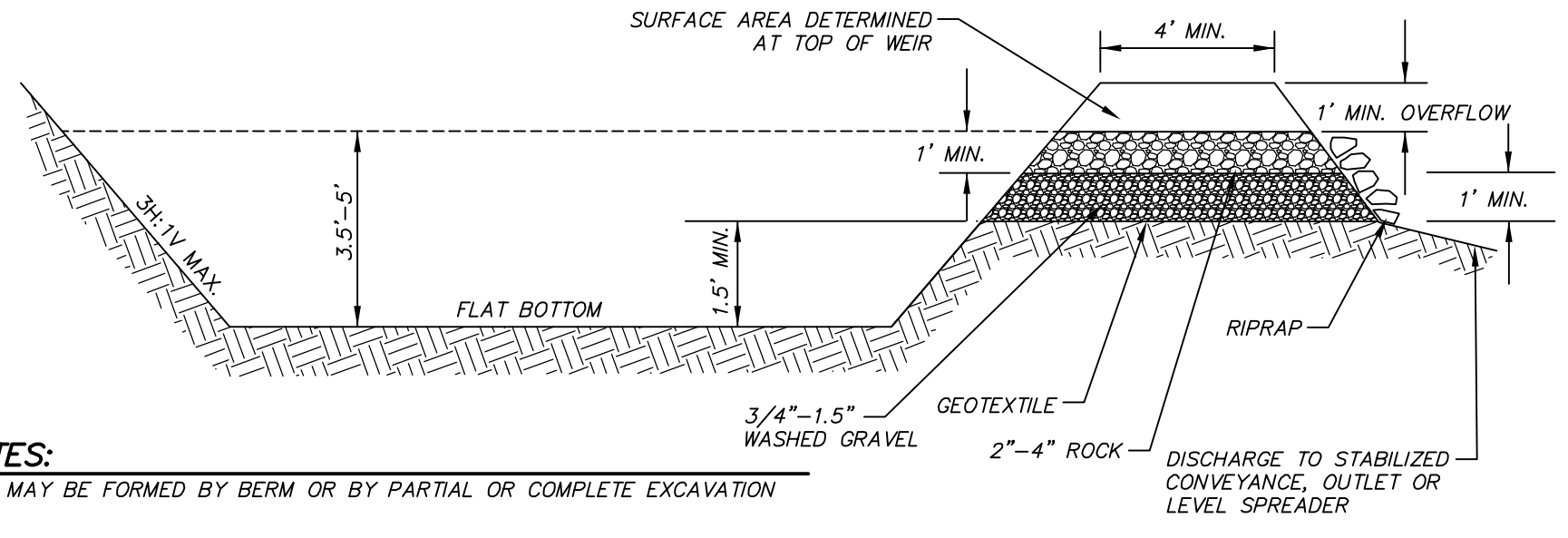
ROCK CHECK DAM

NTS



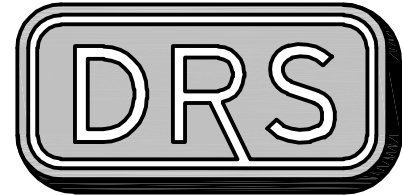
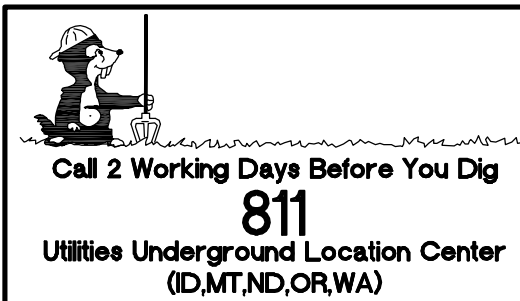
TEMPORARY SEDIMENT TRAP DETAIL

NTS



NOTES:

TRAP MAY BE FORMED BY BERM OR BY PARTIAL OR COMPLETE EXCAVATION



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

HARKNESS SEATAC
PRELIMINARY

EROSION CONTROL DETAILS

1233 S 196TH STREET
SEATAC, WASHINGTON 98148
PARCEL NO. 7686200260 & 7686200230

HARKNESS
CONSTRUCTION, LLC

45015 244TH AVENUE SE
ENUMCLAW, WA 98022
(253) 797-7321



08/01/2016

APR

REVISION

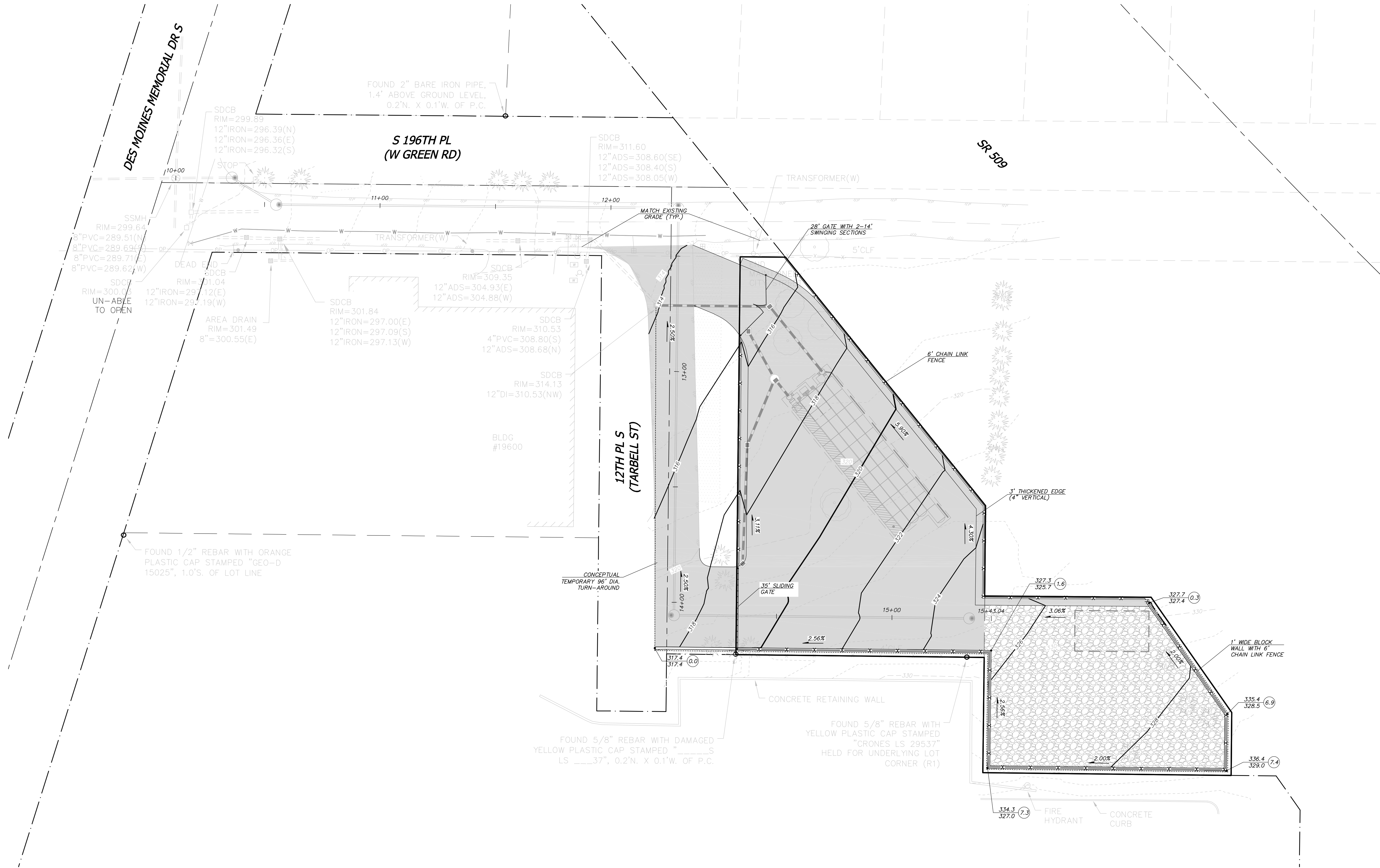
DATE

DRAFTED BY: JSE
DESIGNED BY: JSE
PROJECT ENGINEER: YLP
DATE: 08.04.26
PROJECT NO.: 25087

DRAWING: C3
SHEET: 3 OF 6

NE 1/4 SECTION 5, TOWNSHIP 22 N, RANGE 4 E, W.M

HARKNESS SEATAC



SITE VOLUME CALCULATIONS

CUT VOLUME (CU. YDS.)	FILL VOLUME (CU. YDS.)	NET VOLUME (CU. YDS.)
1,779	35	1,744 CUT

ALL VOLUMES ARE APPROXIMATE AND ARE PROVIDED FOR PERMITTING PURPOSES. CONTRACTOR SHALL RELY ON HIS/HER OWN ESTIMATES FOR DETERMINING ACTUAL EARTHWORK QUANTITIES. THESE VOLUMES ARE AFTER THE SITE HAS BEEN STRIPPED AND ASSUME A ROAD SECTION OF 1- FOOT. THEY DO NOT INCLUDE STRUCTURAL EXCAVATION, UTILITY TRENCH EXCAVATION, EXPANSION/COMPACTION FACTORS OR ANY SOIL TYPE RESTRICTIONS.

VERTICAL DATUM:

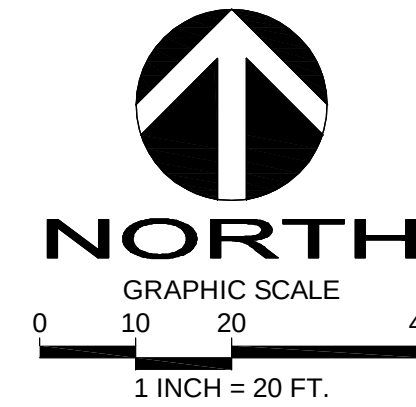
NAVD 88 PER GNSS OBSERVATION

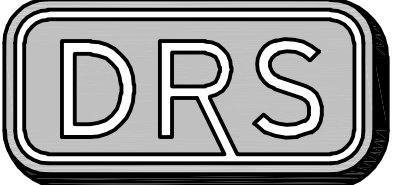
HORIZONTAL DATUM:

WASHINGTON PLANE COORDINATE SYSTEM, NORTH ZONE.
NAD83-2011 EPOCH 2010.00

BENCHMARK:

FOUND CONCRETE MONUMENT WITH PUNCHED 3" BRASS DISK STAMPED "PORT OF SEATTLE TRAVERSE STATION, DOWN 0.9" IN MONUMENT CASE.
NORTHEAST CORNER SECTION 5
INTERSECTION OF SOUTH 192ND STREET AND 16TH AVENUE SOUTH
ELEVATION = 264.43 FEET.





D.R. STRONG
CONSULTING ENGINEERS
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620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

HARKNESS SEATAC
PRELIMINARY

CONCEPTUAL GRADING PLAN
1233 S 196TH STREET
SEATAC, WASHINGTON 98148
PARCEL NO. 7686200260 & 7686200230

HARKNESS
CONSTRUCTION, LLC

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ENUMCLAW, WA 28022
(253) 797-7321



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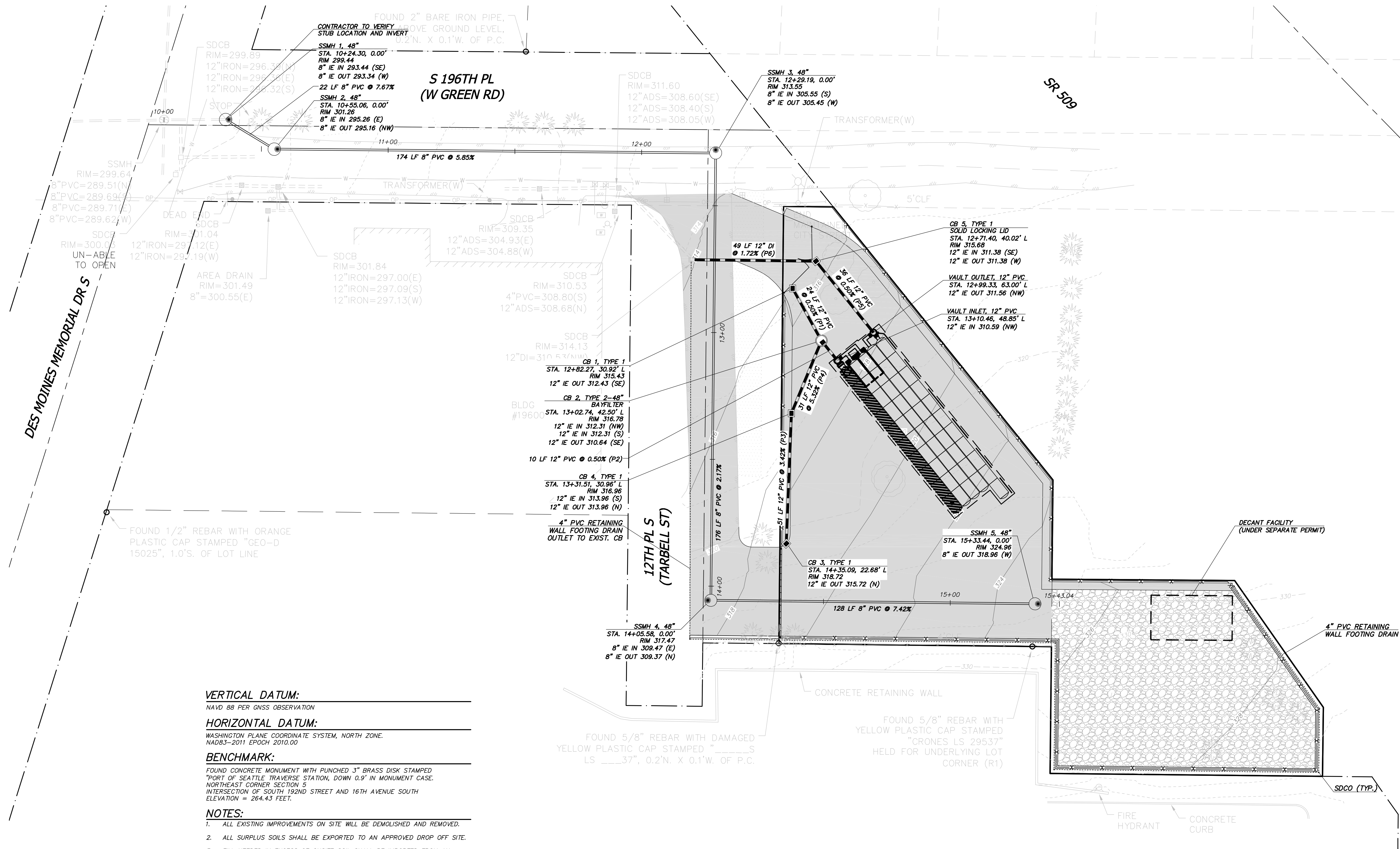
REVISION

DATE

DRAFTED BY: JSE
DESIGNED BY: JSE
PROJECT ENGINEER: YLP
DATE: 08.04.26
PROJECT NO.: 25087

DRAWING: C4
SHEET: 4 OF 6

HARKNESS SEATAC



VERTICAL DATUM:

NAVD 88 PER GNSS OBSERVATION

HORIZONTAL DATUM:

WASHINGTON PLANE COORDINATE SYSTEM, NORTH ZONE.
NAD83-2011 EPOCH 2010.00

BENCHMARK:

FOUND CONCRETE MONUMENT WITH PUNCHED 3\"/>

NOTES:

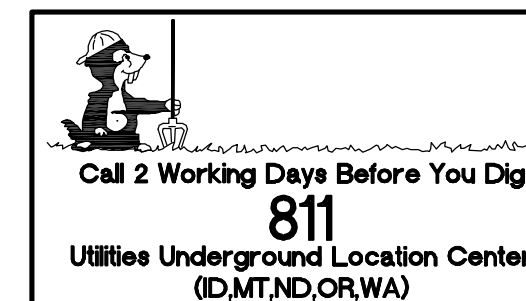
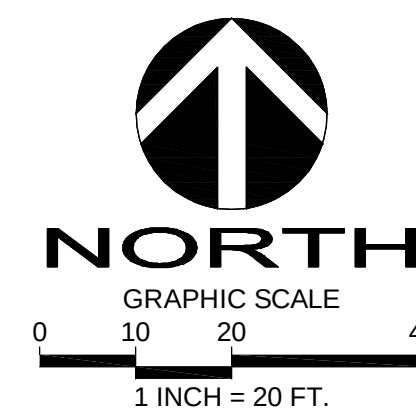
- ALL EXISTING IMPROVEMENTS ON SITE WILL BE DEMOLISHED AND REMOVED.
- ALL SURPLUS SOILS SHALL BE EXPORTED TO AN APPROVED DROP OFF SITE.
- FILL NEEDED IN EXCESS OF ONSITE SOIL SHALL BE IMPORTED FROM AN APPROVED SOURCE AND SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.

GENERAL DRAINAGE NOTES:

- DRAINAGE ELEMENTS SHOWN ON THIS PLAN ARE CONCEPTUAL IN NATURE. DETAILED DESIGN WILL BE DONE AT THE CONSTRUCTION DOCUMENT PHASE.
- SEE THE TARGETED DRAINAGE REPORT FOR INFORMATION RELATED TO HYDROLOGIC DESIGN AND EVALUATION OF UPSTREAM AND DOWNSTREAM AREAS.
- INFILTRATION VAULT WILL BE USED FOR DRIVEWAY RUNOFF TO THE MAXIMUM EXTENT FEASIBLE.

SEWER NOTE:

- SEWER TO BE DESIGNED AND CONSTRUCTED UNDER A SEPARATE PERMIT. SHOWN FOR CONCEPTUAL PURPOSES ONLY.

D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423HARKNESS SEATAC
PRELIMINARY

CONCEPTUAL UTILITIES PLAN

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SEATAC, WASHINGTON 98148
PARCEL NO. 7686200260 & 7686200230HARKNESS
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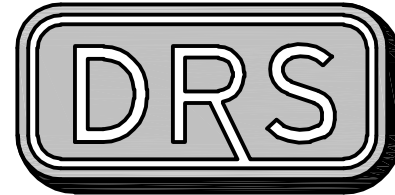
APR

REVISION

DATE

DRAFTED BY: JSE
DESIGNED BY: JSE
PROJECT ENGINEER: YLP
DATE: 08.04.26
PROJECT NO.: 25087DRAWING: C5
SHEET: 5 OF 6

NE 1/4 SECTION 5, TOWNSHIP 22 N, RANGE 4 E, W.M
HARKNESS SEATAC



D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

**HARKNESS SEATAC
PRELIMINARY**

SEWER PROFILE
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SEATAC, WASHINGTON 98148
PARCEL NO. 7686200260 & 7686200230

**HARKNESS
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08/04/2026

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REVISION

DATE

DRAFTED BY: JSE
DESIGNED BY: JSE
PROJECT ENGINEER: YLP
DATE: 08.04.26
PROJECT NO.: 25087

DRAWING: **C6**
SHEET: **6** OF **6**

