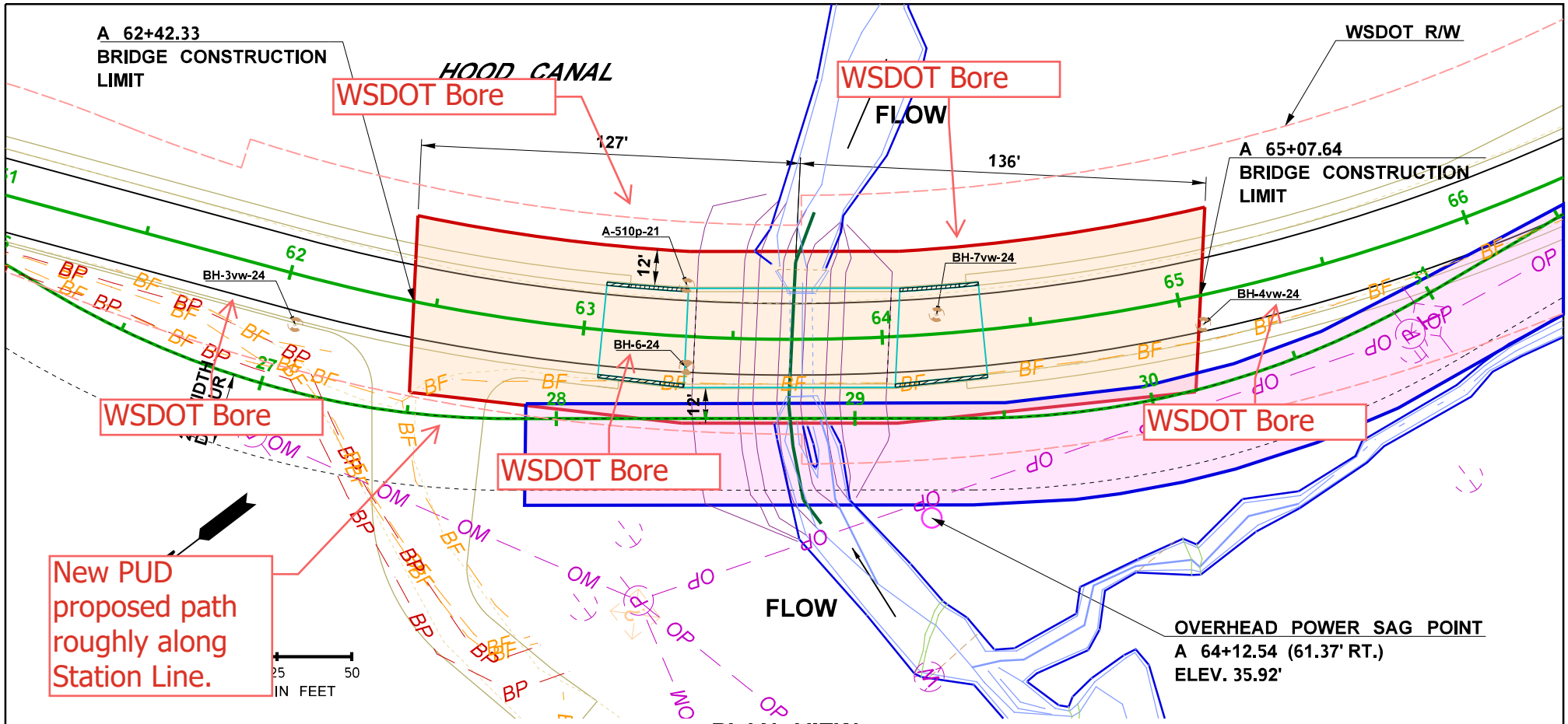
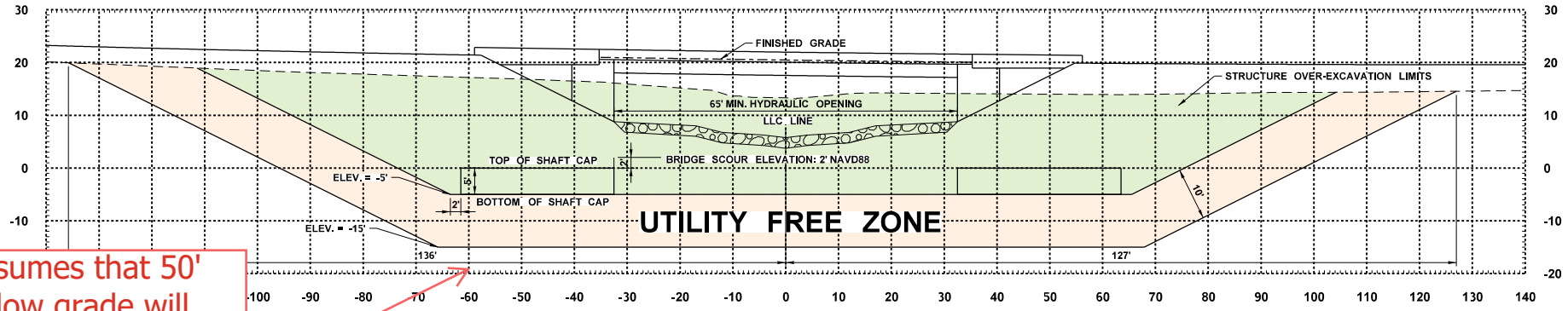


PLAN VIEW



ELEVATION VIEW
(LOOKING UPSTREAM)

Assumes that 50' below grade will give sufficient depth to avoid pile support structures

Washington State Department of Transportation

US 101 LILLIWAUP UTILITY FREE ZONE EXHIBIT

BASED ON PRELIMINARY BRIDGE LAYOUT FROM 8/2025

PROJECT LEAD: BRIAN REGISTER | DESIGNER: MARCO SANTONIL

PLOTTED BY: SantonM
DATE: 1/8/2026 TIME: 10:59:36 AM

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQFish Passage\ORproj\000\101_119_LilliwaupVicInityV8i\Design_InRoads\WorkingDGNs\MTSUS 101\101_MP327.76
c:\users\santonm\d0697048\US 101 Lilliwaup Utility Free Zone.dgn

pw:\\projectstore.wsdot.wa.gov:WSDOT\Documents_HQ\Fish Passage\ORproj\000\101_119_LilliwaupVicinityV8iDesign_InRoads\WorkingDGNs\MTS\US 101\101_MP327.76
c:\users\santonm\d0697048\US 101 Lilliwaup Utility Free Zone.dgn

HOOD CANAL

A 62+42.33
BRIDGE CONSTRUCTION
LIMIT

A 69+23.12
END CONSTRUCTION

A 65+07.64
BRIDGE CONSTRUCTION
LIMIT

FLOW

BH-1vw-24
BH-2-24
BH-3vw-24
BH-4vw-24
BH-5vw-24
BH-6-24
BH-7vw-24
A-510p-21

WSDOT Bore Locations

New PUD Path recommended 50'+below grade

WSDOT R/W

OVERHEAD POWER SAG POINT
A 64+12.54 (61.37' RT.)
ELEV. 35.92'

A 55+00.00
START CONSTRUCTION

0 75 150
SCALE IN FEET

PLAN VIEW

Washington State Department of Transportation

US 101 LILLIWAUP UTILITY FREE ZONE EXHIBIT

PLOTTED BY: SantonM
DATE: 1/8/2026 TIME: 11:05:26 AM

BASED ON PRELIMINARY BRIDGE LAYOUT FROM 8/2025

PROJECT LEAD: BRIAN REGISTER | DESIGNER: MARCO SANTONIL

WSDOT

LOG OF BORING A-510P-22

Project: Advanced Geotechnical Scoping For Fish Passage: US 101 Little Lilliwap Creek to Hood Canal (996138)

Job Number: XL5950 *Route & MP Range:* SR 101 MP 327.76 - 327.76

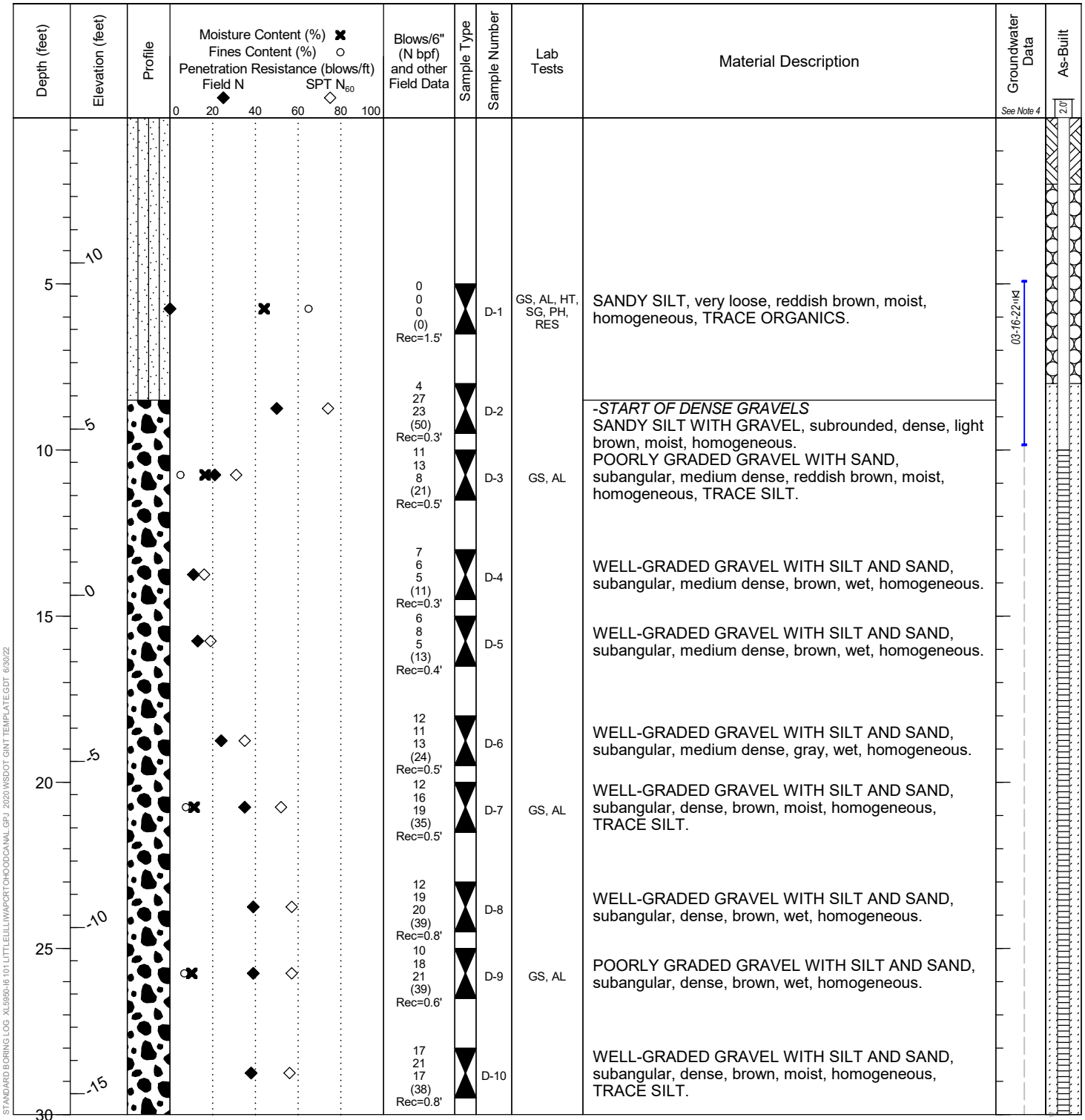
Northing: 785,397.8 feet *Latitude:* 47.457606 deg. *Driller/Inspector:* Peterson, Trevor (#3008) / Walker, Robert (#2864)

Easting: 994,135.0 feet *Longitude:* -123.112815 deg. *Start Card:* RE-21740 *Well Tag:* BNQ-981 *Instrument:* 1" PVC

Elevation: 14.4 feet *Collector:* Region Survey *Drilling Method:* Casing Advancer *Hole Diam.:* 4 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88 *Equipment:* CME 45 (ID:9C4-2) *Rod Type:* HQ

Started: March 15, 2022 *Completed:* March 16, 2022 *Hammer Type:* Autohammer *Historic Efficiency:* 88.3%

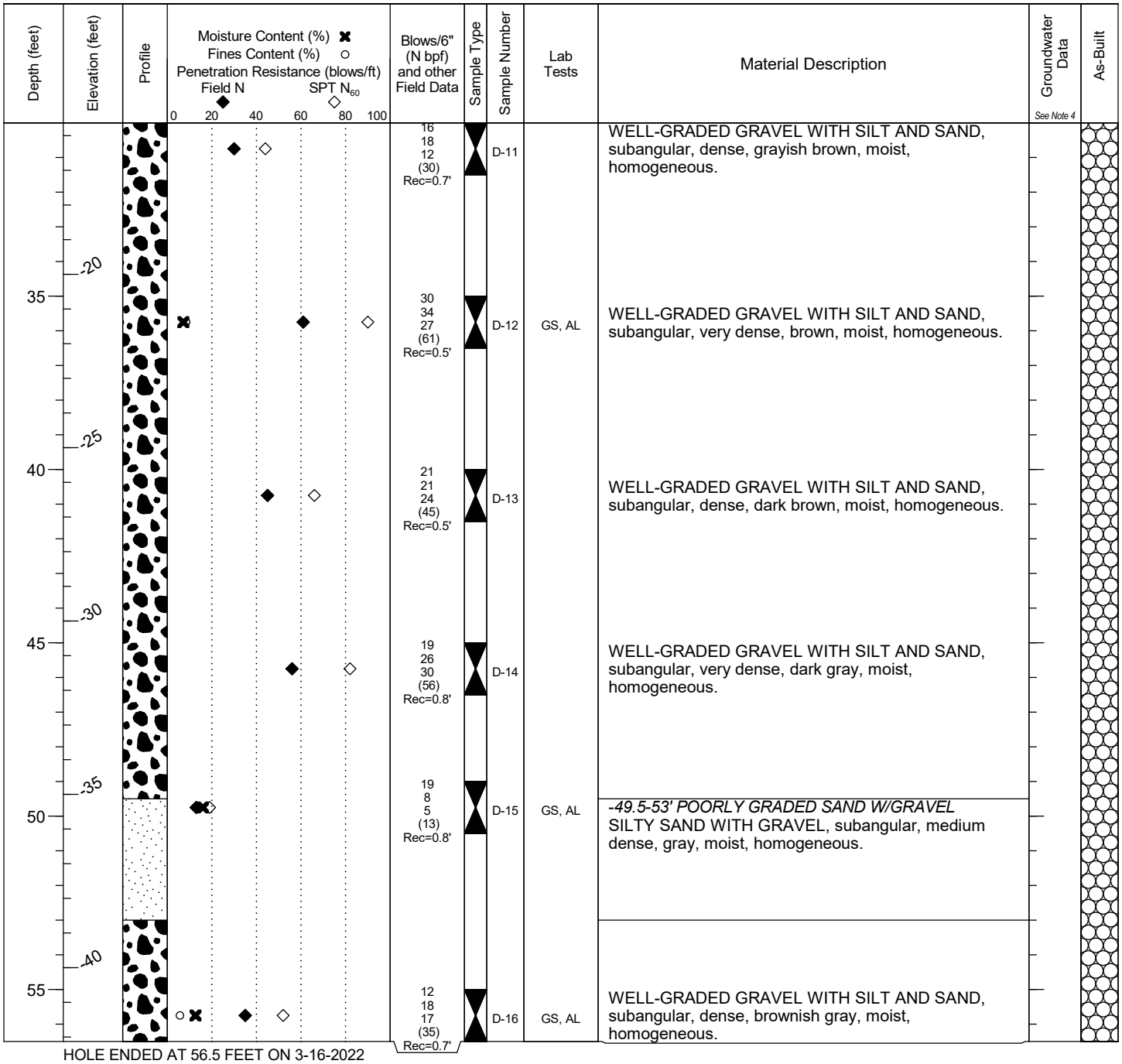


CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

STANDARD BORING LOG XL5950-I6 101 LITTLELILLIWAPORTOHOODCANAL.GPJ 2020 WSDOT GINT TEMPLATE.GDT 6/30/22

Project: Advanced Geotechnical Scoping For Fish Passage: US 101 Little Lilliwap Creek to Hood Canal (996138) *Job Number:* XL5950 *Route & MP Range:* SR 101 MP 327.76 - 327.76



HOLE ENDED AT 56.5 FEET ON 3-16-2022

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 3/28/2022 and 5/24/2022. The blue line extends between the minimum and maximum readings collected during the monitoring period.

WSDOT

LOG OF BORING BH-1vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

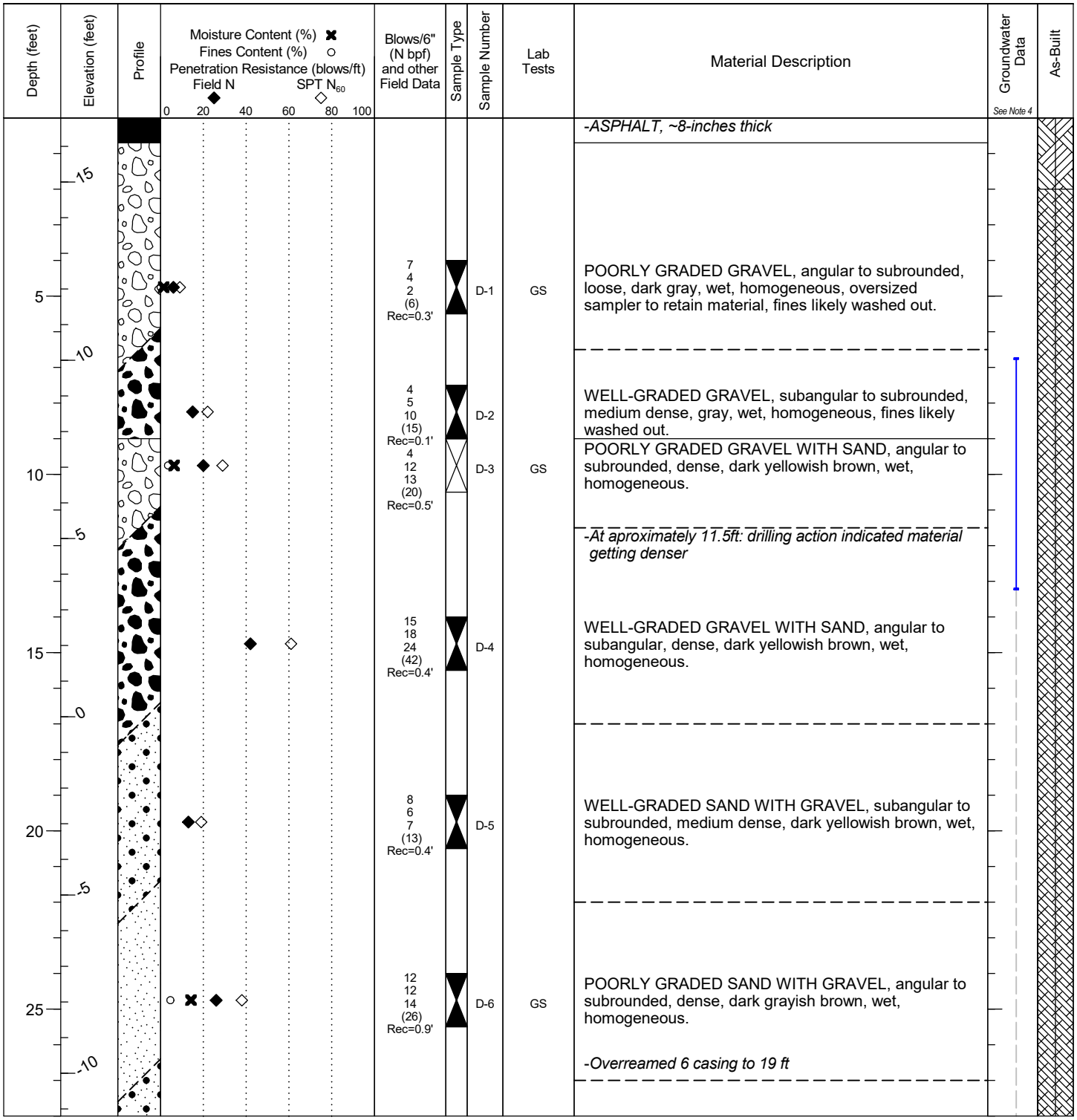
Northing: 786,105.6 feet *Latitude:* 47.459571 deg.
Driller/Inspector: Weatherford, Michael (#3331) / Hanson, Abagail

Easting: 994,413.4 feet *Longitude:* -123.111785 deg.
Start Card: RE26435 *Well Tag:* BPE-671 *Instrument:* VWP

Elevation: 16.8 feet *Collector:* Region Survey
Drilling Method: Casing Advancer/Over Ream *Hole Diam.:* 6 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME 55 (ID:9C7-1) *Rod Type:* AWJ

Started: September 17, 2024 *Completed:* September 17, 2024
Hammer Type: Autohammer *Historic Efficiency:* 87.5%



STANDARD BORING LOG XL6779 101 119\LILLIWAUP\VICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

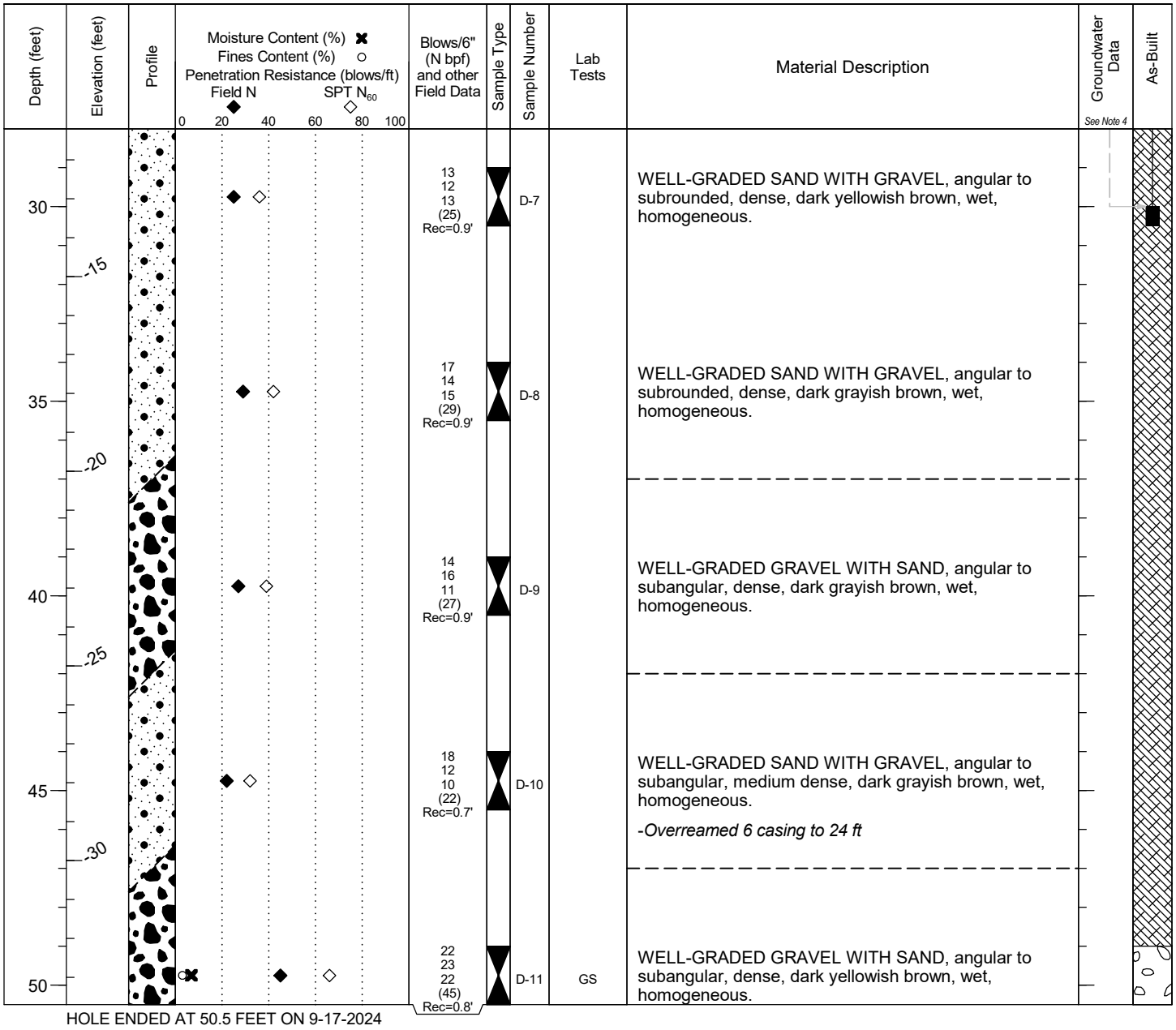
CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

WSDOT

LOG OF BORING BH-1vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81



HOLE ENDED AT 50.5 FEET ON 9-17-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 9/30/2024 and 1/29/2025. The blue line extends between the minimum and maximum readings collected during the monitoring period.
5. Mud return ~60% until crew overreamed larger casing to 19 ft then 80-100% until BOH
6. vwp readings: 2965.4 Hz 19.3C, 2929.4 Hz 19.7C

STANDARD BORING LOG XL6779 101119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

WSDOT

LOG OF BORING BH-2-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779
Route & MP Range: SR 101 MP 327.71 - 327.81

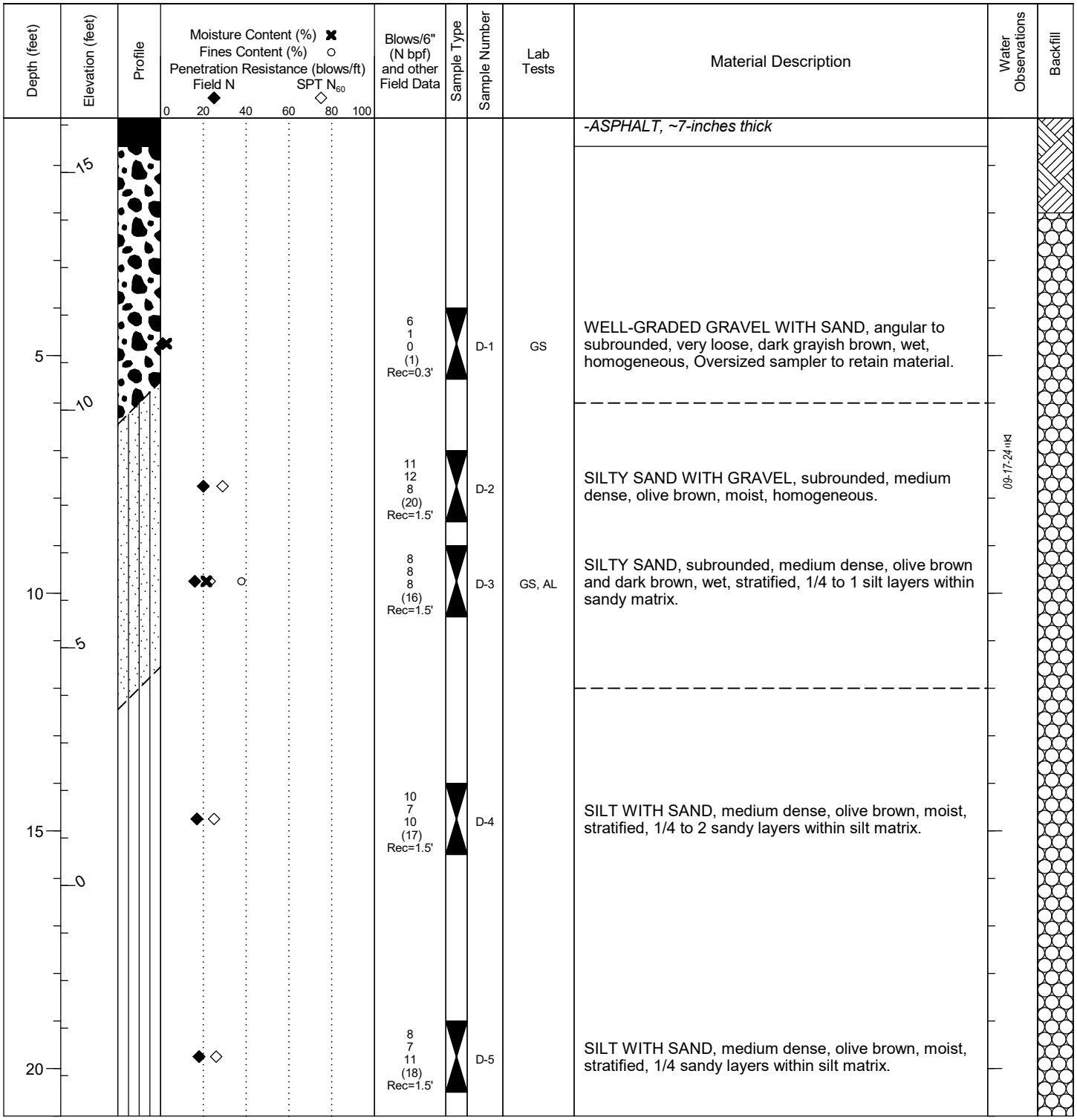
Northing: 785,717.1 feet
Latitude: 47.458509 deg.
Driller/Inspector: Weatherford, Michael (#3331) / Hanson, Abagail

Easting: 994,437.6 feet
Longitude: -123.111635 deg.
Start Card: SE89272 AE83404

Elevation: 16.2 feet
Collector: Region Survey
Drilling Method: Casing Advancer
Hole Diam.: 4 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME 55 (ID:9C7-1)
Rod Type: AWJ

Started: September 16, 2024
Completed: September 17, 2024
Hammer Type: Autohammer
Historic Efficiency: 87.5%



-ASPHALT, ~7-inches thick

STANDARD BORING LOG XL6779 101 119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ Fines Content (%) ○ Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ 0 20 40 60 80 100	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Water Observations	Backfill
	-5									
25	-10		◆ ◇ ○	11 13 13 (26) Rec=1.5'		D-6	GS, AL	SANDY SILT, dense, olive brown and grayish brown, moist, stratified, 1/2 to 2 silt layers within sandy matrix.		
30	-15		◆ ◇	8 8 10 (18) Rec=1.5'		D-7		SILT WITH SAND, medium dense, olive brown and dark brown, moist, stratified, 1/4 to 1 sandy layers within silt matrix.		
35	-20		◆ ◇	8 9 10 (19) Rec=1.5'		D-8		SILT WITH SAND, medium dense, olive brown and dark brown, wet, stratified, 1/4 to 1 sandy layers within silt matrix.		
40			◆ ✖ ◇ ○	9 11 12 (23) Rec=1.5'		D-9	GS, AL, HT, SG	SILT, medium dense, olive brown and dark brown, wet, stratified, 1/4 to 1 sandy layers within silt matrix.		

HOLE ENDED AT 40.5 FEET ON 9-17-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level(s), if shown, represents observations made during drilling. The groundwater level should be considered approximate and will vary based on seasonal and other effects.
5. Normal mud return for entirety of hole

STANDARD BORING LOG XL6779 101119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

WSDOT

LOG OF BORING BH-3vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779
Route & MP Range: SR 101 MP 327.71 - 327.81

Northing: 785,509.9 feet
Latitude: 47.457920 deg.
Driller/Inspector: Weatherford, Michael (#3331) / Hanson, Abagail

Easting: 994,204.2 feet
Longitude: -123.112550 deg.
Start Card: RE26435
Well Tag: BPE-672
Instrument: VWP

Elevation: 15.5 feet
Collector: Region Survey
Drilling Method: Casing Advancer
Hole Diam.: 4 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME 55 (ID:9C7-1)
Rod Type: AWJ

Started: September 16, 2024
Completed: September 16, 2024
Hammer Type: Autohammer
Historic Efficiency: 87.5%

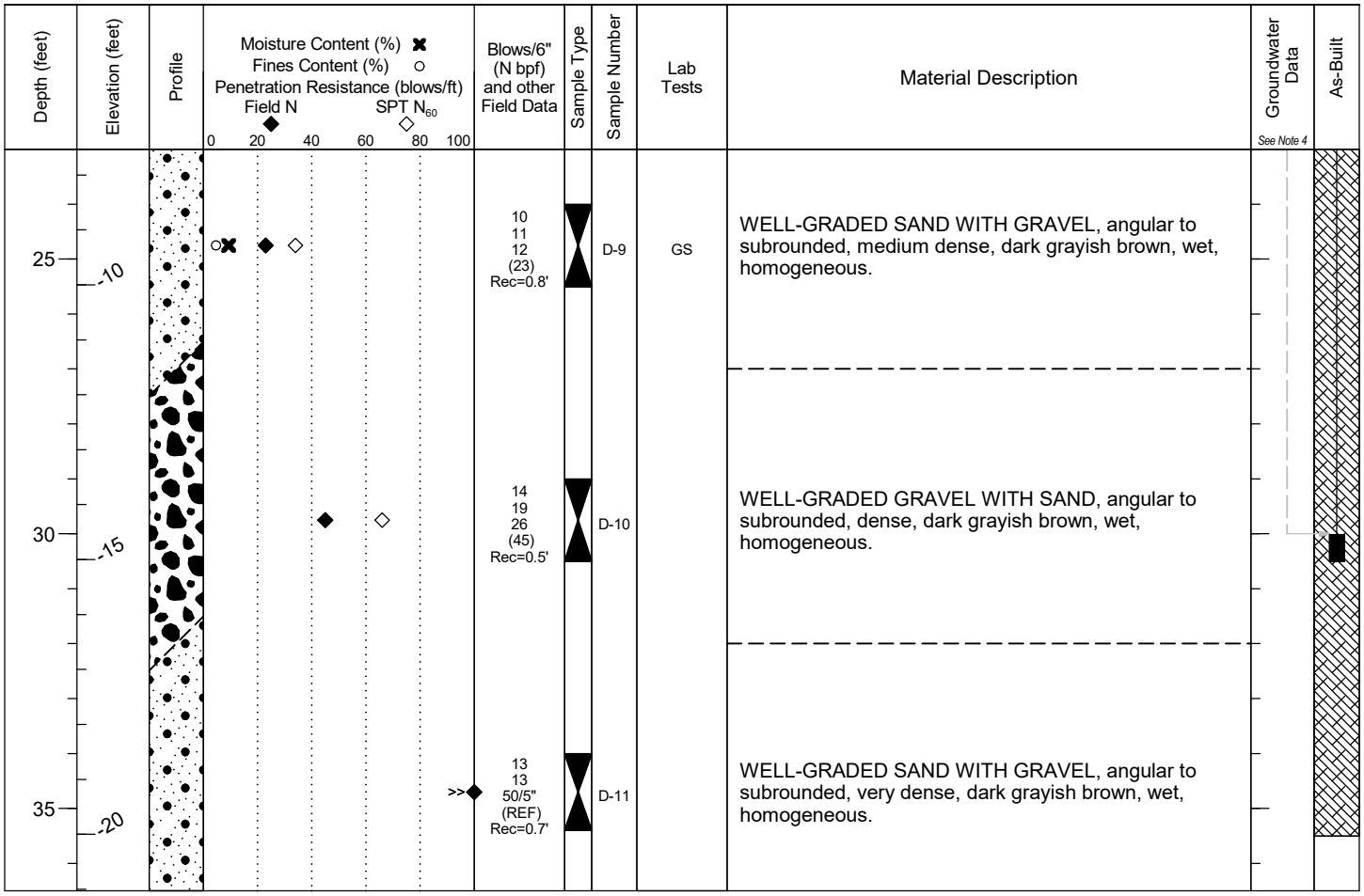
Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ / Fines Content (%) ○ / Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Groundwater Data (See Note 4)	As-Built
	15							*-ASPHALT, ~1-foot thick*		
			◆◇ ✖ ○	11 4 3 (7) Rec=0.9'		D-1	GS	SILTY SAND WITH GRAVEL, subangular to subrounded, loose, brown, moist, homogeneous.		
			✖ ○	0 7 13 (20) Rec=1.0'		D-2	GS, AL, HT, SG	[D-2A] 4 to 4.4: LEAN CLAY WITH SAND, medium dense, brown, moist, homogeneous, trace gravel, trace organics. [D-2B] 4.4 to 5.5: WELL-GRADED SAND WITH GRAVEL, subangular to subrounded, medium dense, dark grayish brown, moist, homogeneous.		
5	10		◆◇	7 6 15 (21) Rec=0.5'		D-3		WELL-GRADED GRAVEL WITH SAND, angular to subrounded, medium dense, dark gray, wet, homogeneous.		
			✖ ◆ ◇	16 18 15 (33) Rec=0.8'		D-4	GS	POORLY GRADED GRAVEL WITH SAND, angular to subrounded, dense, dark grayish brown, wet, homogeneous.		
10	5		◆ ◇	16 18 22 (40) Rec=0.7'		D-5		WELL-GRADED SAND WITH GRAVEL, angular to subrounded, dense, dark grayish brown, wet, homogeneous.		
			◆ ◇	18 17 15 (32) Rec=0.9'		D-6		WELL-GRADED GRAVEL WITH SAND, angular to subrounded, dense, dark grayish brown, wet, homogeneous.		
15	0		◆ ◇	15 26 31 (57) Rec=0.5'		D-7		WELL-GRADED GRAVEL WITH SAND, angular to subrounded, very dense, dark grayish brown, wet, homogeneous.		
			◆ ◇	25 22 17 (39) Rec=1.0'		D-8		WELL-GRADED GRAVEL WITH SAND, angular to subrounded, dense, dark grayish brown, wet, homogeneous.		
20	-5									

CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

STANDARD BORING LOG XL6779 101119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81



HOLE ENDED AT 36.5 FEET ON 9-16-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 10/2/2024 and 1/29/2025. The blue line extends between the minimum and maximum readings collected during the monitoring period.
5. vwp readings: 2946.5 Hz 18.9C, 2938.3 Hz 29.3C

STANDARD BORING LOG XL6779 101 119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

WSDOT

LOG OF BORING BH-4vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779
Route & MP Range: SR 101 MP 327.71 - 327.81

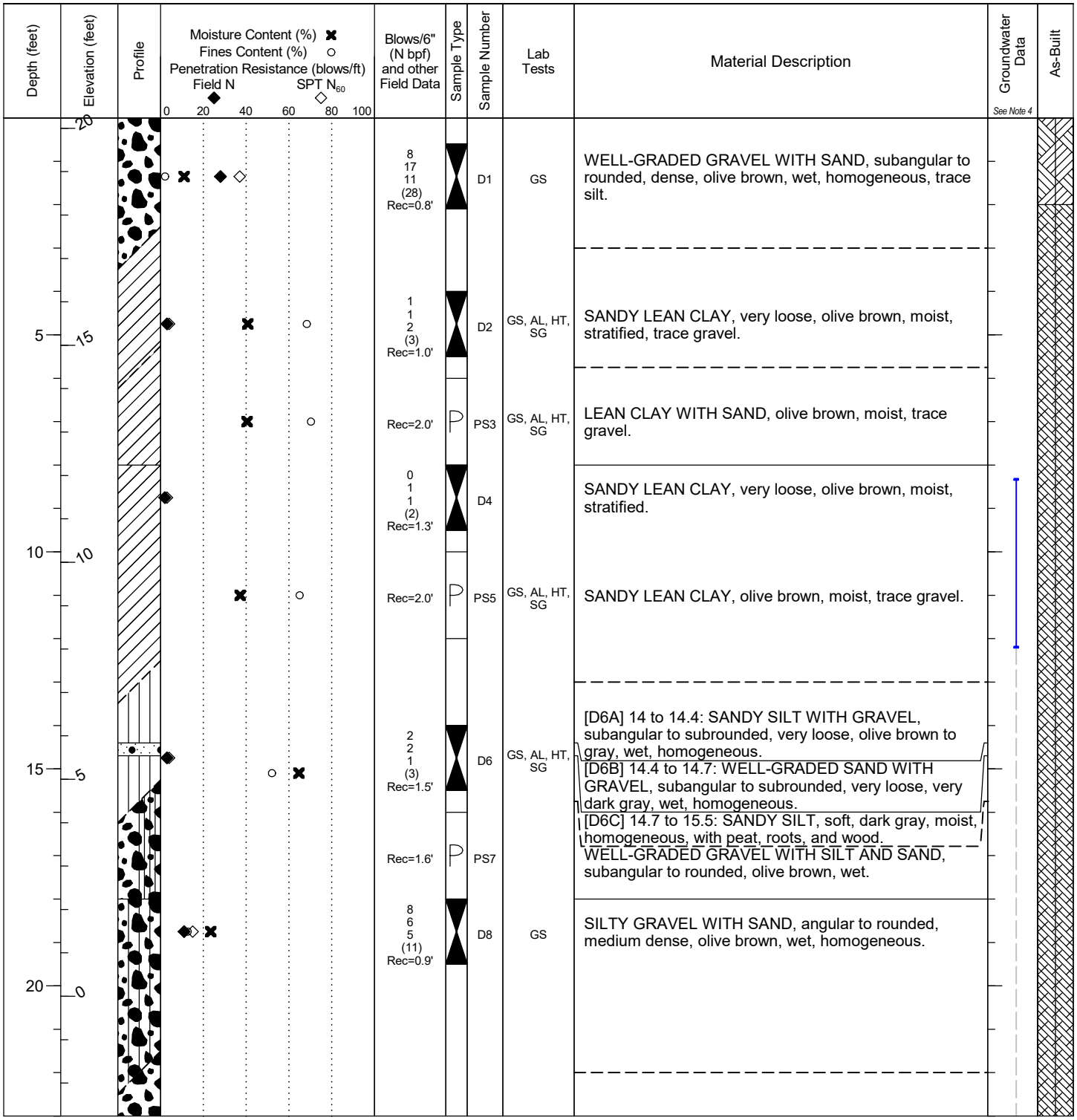
Northing: 785,268.4 feet
Latitude: 47.457241 deg.
Driller/Inspector: Anderson, Corey (#3312) / Bielinski, Anthony (#3379)

Easting: 994,019.7 feet
Longitude: -123.113263 deg.
Start Card: RE26435
Well Tag: BPE-673
Instrument: VWP

Elevation: 20.2 feet
Collector: Region Survey
Drilling Method: Casing Advancer/Over Ream
Hole Diam.: 6 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME LC55 (ID:9C7-2)
Rod Type: AWJ

Started: September 4, 2024
Completed: September 4, 2024
Hammer Type: Autohammer
Historic Efficiency: 80%

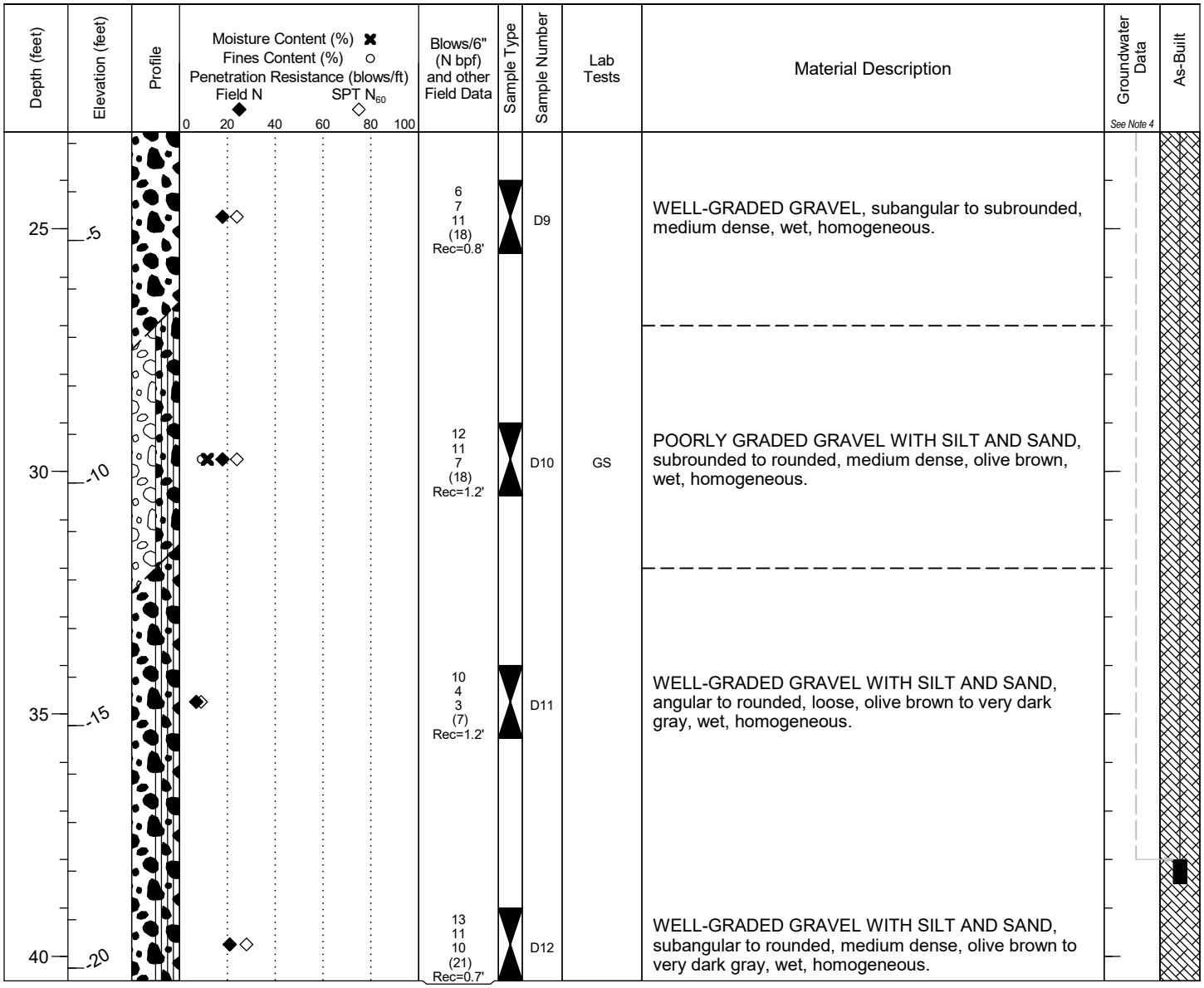


CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

STANDARD BORING LOG XL6779 101119LILLIWAUP/VICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81



HOLE ENDED AT 40.5 FEET ON 9-4-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 9/30/2024 and 1/29/2025. The blue line extends between the minimum and maximum readings collected during the monitoring period.

BAIL-RECHARGE TEST RESULTS:

Test Date: September 4, 2024
Hole Depth / Casing Depth: 40.5 feet / 39.0 feet
Water Depth Before Bailing: 13.3 feet
Note: Removed 5 bails

ELAPSED TIME (minutes)	WATER DEPTH (feet)
0	17.4
1	15.9
2	15.6
3	15.6
4	15.5
5	15.5
10	15.5

STANDARD BORING LOG XL6779 101119ULLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

WSDOT

LOG OF BORING BH-5vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81
Northing: 785,077.9 feet *Latitude:* 47.456716 deg. *Driller/Inspector:* Anderson, Corey (#3312) / Bielinski, Anthony (#3379)
Easting: 993,981.2 feet *Longitude:* -123.113393 deg. *Start Card:* RE26435 *Well Tag:* BPE674 *Instrument:* VWP
Elevation: 27.2 feet *Collector:* Region Survey *Drilling Method:* Casing Advancer/Over Ream *Hole Diam.:* 6 in
Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88 *Equipment:* CME LC55 (ID:9C7-2) *Rod Type:* AWJ
Started: September 3, 2024 *Completed:* September 4, 2024 *Hammer Type:* Autohammer *Historic Efficiency:* 80%

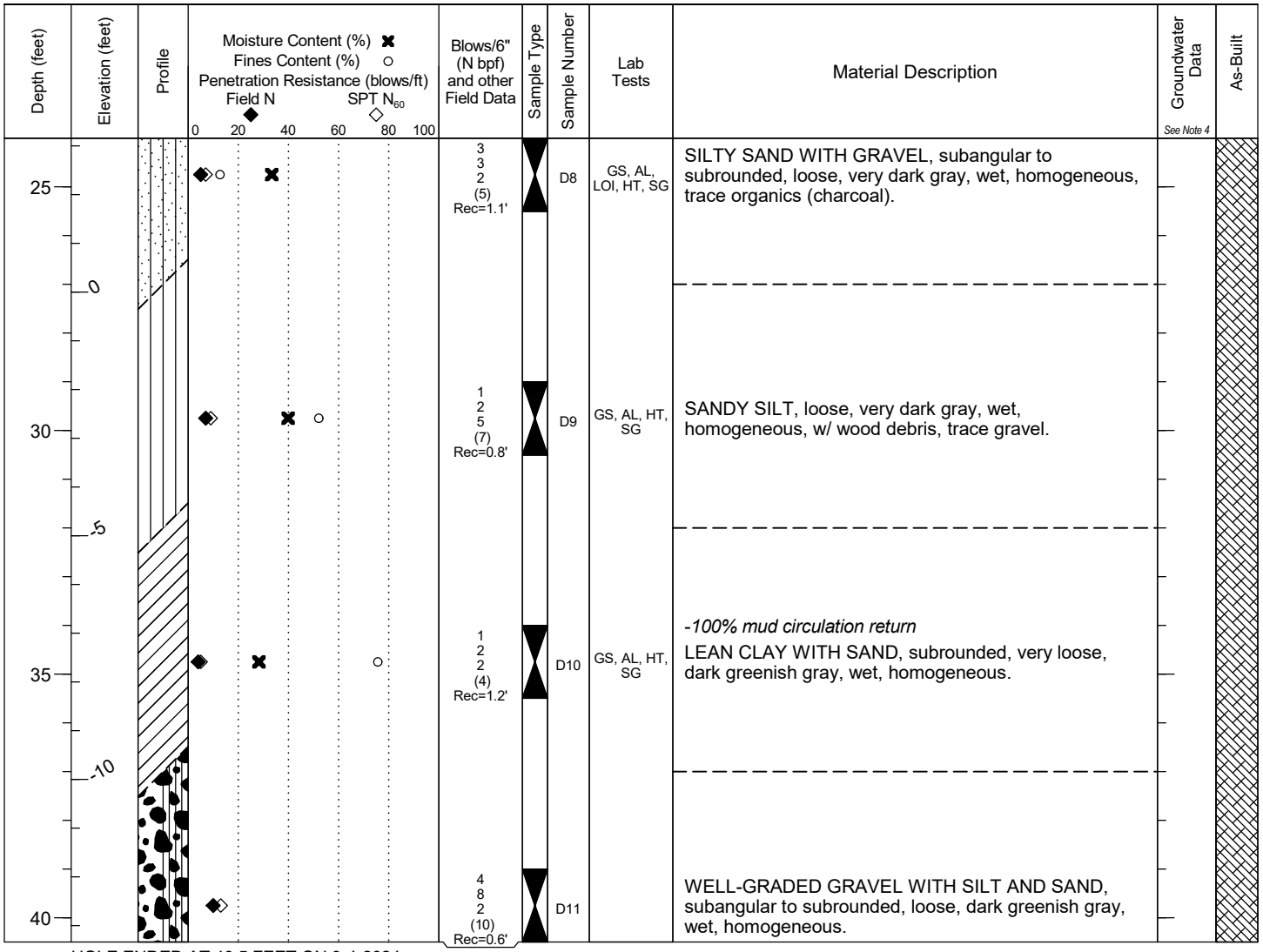
Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ / Fines Content (%) ○ / Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Groundwater Data (See Note 4)	As-Built
								-CONCRETE ~1.3-feet thick		
	25		✖ ◆◇	6 4 4 (8) Rec=1.1'		D1	GS	[D1A] 1.3 to 1.7: WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, loose, very dark gray, wet, homogeneous. [D1B] 1.7 to 2.4: SILTY SAND, loose, olive brown, wet, stratified, trace gravel.		
5			◆	2 2 2 (4) Rec=0.7'		D2		SILTY SAND, very loose, olive brown, wet, stratified, trace gravel.		
	20		✖ ○	Rec=2.0'		PS3	GS, AL, HT, SG	SILT WITH SAND, olive brown, wet, trace gravel.		
			◆ ✖ ○	1 1 1 (2) Rec=1.1'		D4	GS, AL, HT, SG	SANDY LEAN CLAY, very loose, olive brown, wet, stratified, trace gravel.		
10			✖ ○	Rec=1.8'		PS5	GS, AL, HT, SG	LEAN CLAY WITH SAND, olive brown, wet, trace gravel.		
	15									
15			◆	0 1 1 (2) Rec=0.9'		D6		*-100% mud circulation loss* SILTY SAND WITH GRAVEL, subangular to subrounded, very loose, very dark brown, wet, homogeneous, and wood debris.	DRY	
	10									
20			◆◇	7 8 8 (16) Rec=1.2'		D7		WELL-GRADED GRAVEL WITH SAND, subangular to rounded, medium dense, very dark gray, wet, homogeneous, trace silt.		
	5									

STANDARD BORING LOG XL6779 101119LILLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

CONTINUED NEXT PAGE *(see last page for notes)*

VERSION 1
FINAL

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81



HOLE ENDED AT 40.5 FEET ON 9-4-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 9/30/2024 and 1/29/2025. The blue line extends between the minimum and maximum readings collected during the monitoring period. DRY" represents the condition where the groundwater level is at an unknown distance below the bottom of the transducer.

BAIL-RECHARGE TEST RESULTS:

Test Date: September 3, 2024
Hole Depth / Casing Depth: 40.5 feet / 39.0 feet
Water Depth Before Bailing: 6.9 feet
Note: Removed 5 bails

ELAPSED TIME (minutes)	WATER DEPTH (feet)
0	25.6
1	25.4
2	25.1
3	25.0
4	24.9
5	24.7
10	24.1
15	23.5
20	22.8
25	22.6
30	22.3
35	22.1
40	21.8
45	21.2
50	21.1
55	21.0

STANDARD BORING LOG XL6779 101119ULLIWAUPVICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

WSDOT

LOG OF BORING BH-6-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779
Route & MP Range: SR 101 MP 327.71 - 327.81

Northing: 785,414.6 feet
Latitude: 47.457650 deg.
Driller/Inspector: Weatherford, Michael (#3331) / Peterson, Trevor (#3008)

Easting: 994,113.2 feet
Longitude: -123.112905 deg.
Start Card: SE 89778 AE 84201

Elevation: 16.6 feet
Collector: Region Survey
Drilling Method: Casing Advancer
Hole Diam.: 4 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME 55 (ID:9C7-1)
Rod Type: AWJ

Started: September 10, 2024
Completed: September 12, 2024
Hammer Type: Autohammer
Historic Efficiency: 87.5%

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ / Fines Content (%) ○ / Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Water Observations	Backfill
0	15			3 2 1 (3) Rec=1.3'		D1	GS, AL, HT, SG	SANDY SILT, very loose, light brown, moist, homogeneous, trace gravel, trace organics, FeO staining.		
5	10			Rec=1.6'		P.S.2	GS, AL, HT, SG	LEAN CLAY WITH SAND.		
				0 0 1 (1) Rec=1.2'		D3		LEAN CLAY WITH SAND, very soft, light brown, moist, stratified, trace organics, trace gravel.		
10	5			1 0 10 (10) Rec=1.3'		D4		SANDY SILT, loose, light brown mottled, moist, stratified, trace organics, change to gravel at bottom.	09/12/24	
15	0			18 8 11 (19) Rec=0.2'		D5	GS	POORLY GRADED GRAVEL WITH SILT AND SAND, subrounded, medium dense, gray, wet, homogeneous.		
20	-5			14 8 9 (17) Rec=0.5'		D6		WELL-GRADED GRAVEL WITH SILT AND SAND, subrounded, medium dense, olive brown, wet, homogeneous.		

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STANDARD BORING LOG XL6779 101 119 LILLIWAUP VICINITY.GPJ 2020 WSDOT GINT TEMPLATE.GDT 3/14/25

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ / Fines Content (%) ○ / Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Water Observations	Backfill
25	-10		◆ ◇	18 22 20 (42) Rec=1.0'		D7		WELL-GRADED GRAVEL WITH SILT AND SAND, subangular to subrounded, dense, olive gray, wet, homogeneous.		
30	-15		○ ✖ ◆ ◇	21 24 20 (44) Rec=1.0'		D8	GS	WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, dense, grayish brown, wet, homogeneous, trace silt.		
35	-20									
40	-25		◆ ◇	16 21 23 (44) Rec=1.3'		D9		WELL-GRADED GRAVEL WITH SILT AND SAND, subrounded, dense, reddish brown, wet, homogeneous, heavy FeO staining.		
45	-30									
50			>> ◆	50/6" (REF) Rec=0.2'		D10		WELL-GRADED GRAVEL WITH COBBLES, subangular, very dense, gray, wet, homogeneous, trace sand, trace silt, sample ended on cobble;.		

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Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ Fines Content (%) ○ Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ 0 20 40 60 80 100	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Water Observations	Backfill
55	-35									
	-40									
60			○ ✖ ◆ ◇	15 21 45 (66) Rec=0.9'		D11	GS	WELL-GRADED SAND WITH SILT AND GRAVEL, subangular to subrounded, very dense, olive brown, wet, homogeneous, trace silt.		
	-45									
65										
	-50									
70			>> ◆	50/3" (REF) Rec=0.2'		D12		WELL-GRADED GRAVEL WITH COBBLES, angular, very dense, gray, wet, homogeneous, cobble at 61.		
	-55									
75	-60									

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Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ Fines Content (%) ○ Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Water Observations	Backfill
80	-65		✖ ◆ ◇ ○	13 20 25 (45) Rec=1.5'		D13	GS, AL, HT, SG	LEAN CLAY, hard, gray, dry, homogeneous.		
85	-70									
90	-75		◆ ◇	16 25 32 (57) Rec=1.5'		D14		LEAN CLAY, hard, gray, dry, homogeneous.		
95	-80									
100			◆ ◇	13 24 27 (51) Rec=1.5'		D15		LEAN CLAY, hard, gray, dry, homogeneous.		

HOLE ENDED AT 100.5 FEET ON 9-12-2024

NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level(s), if shown, represents observations made during drilling. The groundwater level should be considered approximate and will vary based on seasonal and other effects.

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WSDOT

LOG OF BORING BH-7vw-24

Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers
Job Number: XL6779
Route & MP Range: SR 101 MP 327.71 - 327.81

Northing: 785,337.3 feet
Latitude: 47.457435 deg.
Driller/Inspector: Anderson, Corey (#3312) / Peterson, Trevor (#3008)

Easting: 994,076.5 feet
Longitude: -123.113043 deg.
Start Card: RE26637
Well Tag: BPE-679
Instrument: VWP

Elevation: 17.1 feet
Collector: Region Survey
Drilling Method: Casing Advancer
Hole Diam.: 4 in

Horizontal/Vertical Datum: NAD 83 HARN, SPS / NAVD88
Equipment: CME 55 (ID:9C7-1)
Rod Type: AWJ

Started: September 9, 2024
Completed: September 10, 2024
Hammer Type: Autohammer
Historic Efficiency: 87.5%

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ / Fines Content (%) ○ / Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ (0 20 40 60 80 100)	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Groundwater Data (See Note 4)	As-Built
	15			2 1 1 (2) Rec=1.2'		D1		SILTY SAND, very loose, brown orangish brown, stratified, trace organics, trace gravel, FeO stains.		
5	10			1 1 1 (2) Rec=1.3'		D2	GS, AL, HT, SG	LEAN CLAY WITH SAND, soft, light brown, stratified, trace organics, trace gravel, FeO stains.		
			WOH	0 0 0 (0) Rec=1.4'		D3		LEAN CLAY WITH SAND, very soft, light brown, stratified, trace organics, trace gravel, FeO stains.		
10	5			Rec=1.7'		P.S.4	GS, AL, HT, SG	LEAN CLAY WITH SAND.		
				15 13 13 (26) Rec=0.7'		D5		WELL-GRADED SAND WITH SILT AND GRAVEL, subrounded, dense, light brownish gray, homogeneous, change at 10.7.		
15	0			21 14 15 (29) Rec=1.3'		D6	GS	WELL-GRADED SAND WITH SILT AND GRAVEL, subangular to subrounded, dense, brownish gray, homogeneous, trace silt.	09-10-24 ⊓	
				13 12 11 (23) Rec=0.8'		D7		WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, medium dense, brownish gray, homogeneous, trace silt.		
20	-5			11 11 11 (22) Rec=0.7'		D8		WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, medium dense, gray, homogeneous.		
				20 17 16 (33) Rec=1.2'		D9		WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, dense, brownish gray, homogeneous, trace silt.		
25	-10									

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Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81

Depth (feet)	Elevation (feet)	Profile	Moisture Content (%) ✖ Fines Content (%) ○ Penetration Resistance (blows/ft) Field N ◆ SPT N_{60} ◇ 0 20 40 60 80 100	Blows/6" (N bpf) and other Field Data	Sample Type	Sample Number	Lab Tests	Material Description	Groundwater Data (See Note 4)	As-Built
30	-15		✖ ◆ ◇	22 14 15 (29) Rec=1.3'		D10	GS	WELL-GRADED GRAVEL WITH SILT AND SAND, subangular to subrounded, dense, brownish gray, homogeneous, FeO stains.		
35	-20		◆ ◇	11 14 17 (31) Rec=0.8'		D11		WELL-GRADED GRAVEL WITH SAND, subrounded, dense, brownish gray, homogeneous, trace silt.		
40	-25		✖ ◆ ◇	18 19 28 (47) Rec=1.3'		D12	GS	WELL-GRADED GRAVEL WITH SILT AND SAND, subrounded, dense, brownish gray, homogeneous, trace silt.		
45	-30		◆ ◇	25 23 30 (53) Rec=0.8'		D13		WELL-GRADED GRAVEL, subangular to subrounded, very dense, brownish gray, homogeneous, trace sand.		
50	-35		◆ ◇	15 24 40 (64) Rec=0.4'		D14		WELL-GRADED GRAVEL, subangular to subrounded, very dense, brownish gray, homogeneous, trace silt.		
55	-40		◆ ◇	17 27 24 (51) Rec=1.1'		D15		WELL-GRADED GRAVEL WITH SAND, subangular to subrounded, very dense, brownish gray, homogeneous.		
60			>> ◆	50/5" (REF) Rec=0.1'		D16		WELL-GRADED GRAVEL, subangular to subrounded, very dense, gray, homogeneous.		

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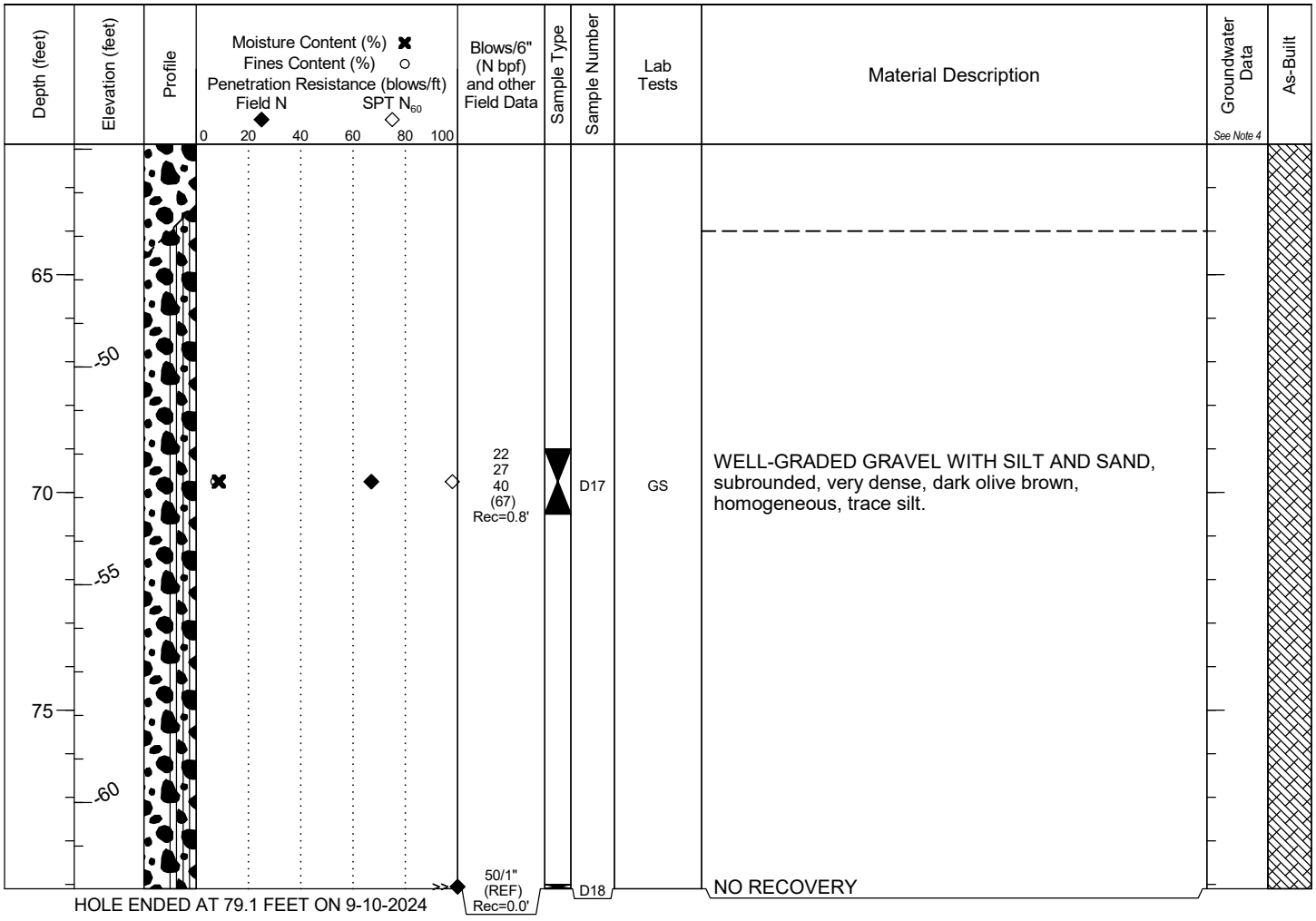
Project: US101/SR119 Lilliwaup Vicinity - Remove Fish Barriers *Job Number:* XL6779 *Route & MP Range:* SR 101 MP 327.71 - 327.81



NOTES:

1. This is a summary log of the boring. Soil/rock descriptions are derived from visual field identifications and laboratory test data (where tested). See exploration log legend for explanation of graphics and abbreviations.
2. The implied accuracy of the location information displayed on this log is typically sub-meter(X,Y) when collected using GPS methods by the Geotechnical Office and sub-centimeter (X,Y,Z) when collected by the Region survey crew.
3. Where oversized samplers were used, a correction was made to the N-value per the AASHTO Manual on Subsurface Investigations, 1988. Blow counts per 6-inch increment have not been corrected.
4. The groundwater level range shown on this log represents data collected between 9/30/2024 and 1/29/2025. The blue line extends between the minimum and maximum readings collected during the monitoring period.

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