PROPOSED
GRADING AND ACCESS ROAD IMPROVEMENTS
LOWER HANEL MILL

TAX LOT 1017, NW 1/4
SECTION 25, TOWNSHIP 2 NORTH, RANGE 10 EAST, W.M.,
HOOD RIVER COUNTY, OREGON

FOR

Port of HOOD RIVER

1000 E PORT MARINA DRIVE
HOOD RIVER, OREGON 97031

BY

HRK ENGINEERING & FIELD SERVICES

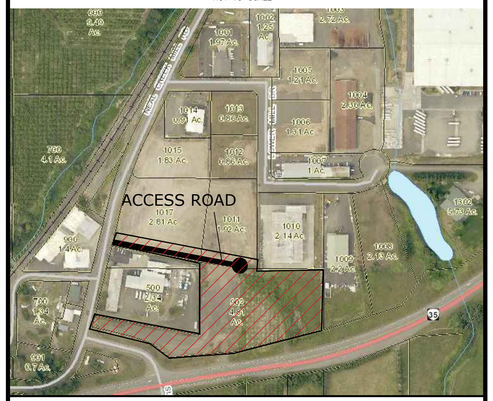
489 N 8TH STREET - SUITE 201
HOOD RIVER, OREGON 97031

Oregon 811

AUGUST 2019

REVISIONS:

VICINITY MAP
NOT TO SCALE



SITE MAP
NOT TO SCALE

DRAWING NUMBER	TITLE AND DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	EROSION AND SEDIMENT CONTROL
4	GRADING AND DRAINAGE PLAN
5	GRADING AND DRAINAGE - WETLAND
6	ROADWAY PLAN AND PROFILE
7	STANDARD DETAILS

APPROVED:

LINDSEY GROVE - PROJECT MANAGER 8/2/2019
DATE

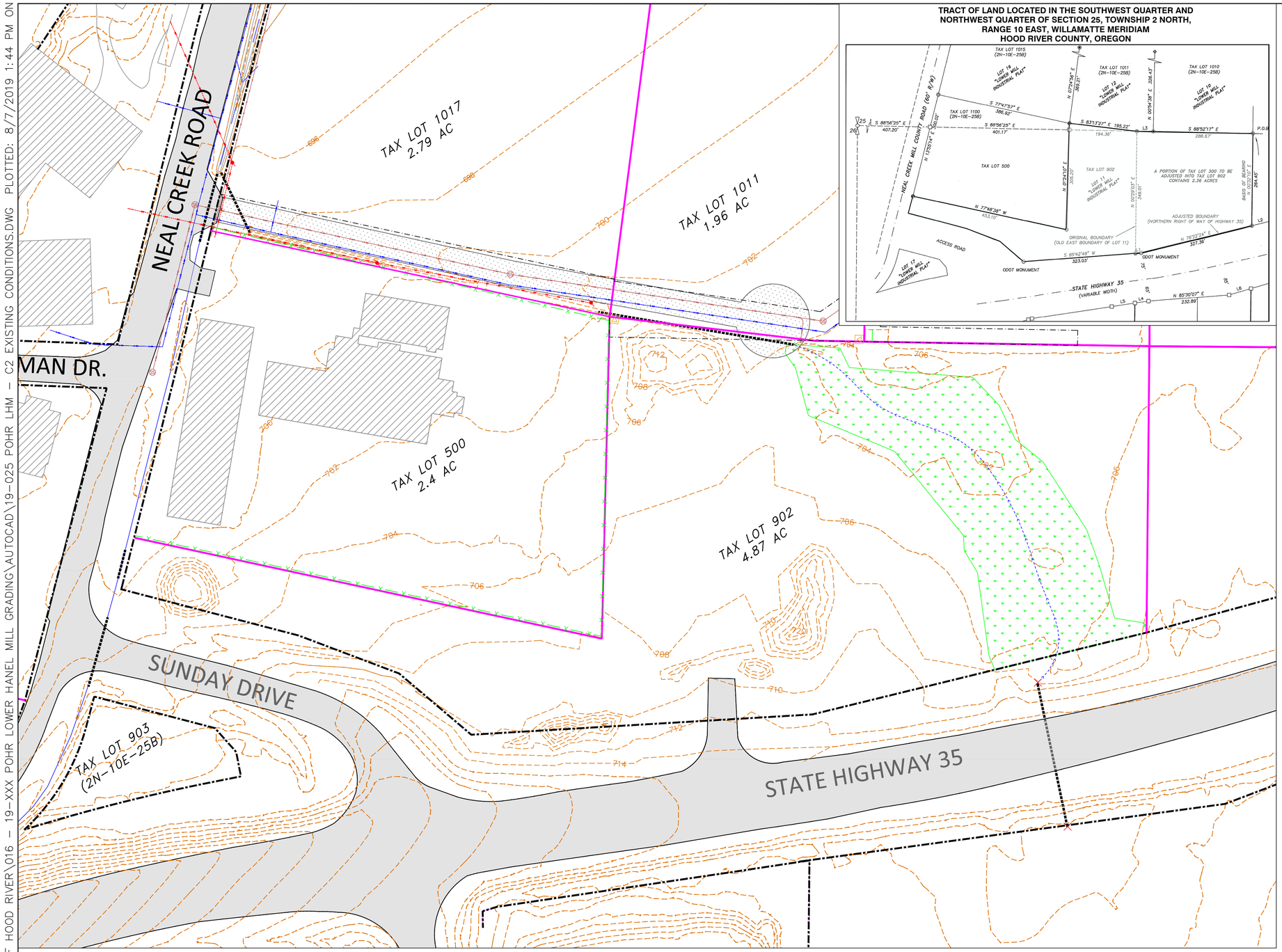
JAMES JONES, P.E. - ENGINEER OF RECORD 8/2/2019
DATE

REGISTERED PROFESSIONAL ENGINEER
90691PE
OREGON
NOVEMBER 15, 2015
JAMES THOMAS JONES

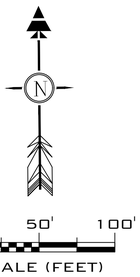
EXPIRES 06/30/2021

ISSUED FOR BID

I:\ENGINEERING\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C2 EXISTING CONDITIONS.DWG PLOTTED: 8/7/2019 1:44 PM ON ANSI B



TRACT OF LAND LOCATED IN THE SOUTHWEST QUARTER AND NORTHWEST QUARTER OF SECTION 25, TOWNSHIP 2 NORTH, RANGE 10 EAST, WILLAMATTE MERIDIAM HOOD RIVER COUNTY, OREGON



LEGEND:

- EXISTING STORM SEWER (E-SAN)
- EXISTING SANITARY MANHOLE (SS)
- PROPOSED DITCH INLET
- EXISTING CONTOUR LINE (550)
- PROPOSED INDEX CONTOUR LINE (550)
- PROPOSED CONTOUR LINE (550)
- EXISTING FENCE LINE
- RIGHT OF WAY
- PROPERTY LINE
- EXISTING WATER LINE (E-WTR)
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING SANITARY SEWER (E-SAN)
- EXISTING ELECTRIC VAULT
- EXISTING CULVERT
- EXISTING OVERHEAD POWER (OHP)
- EXISTING FLOW PATH
- PROPOSED FLOW PATH
- EASEMENT

HATCH LEGEND:

- EXISTING ASPHALT
- PROPOSED ASPHALT
- EXISTING GRAVEL ROAD
- EXISTING BUILDING
- EXISTING WETLAND AREA

NOTES:

1. TOPOGRAPHIC SURVEY PERFORMED BY HRK ENGINEERING, JULY 2019 AND COMBINED WITH LIDAR DATA OBTAINED FROM THE HOOD RIVER COUNTY WEBSITE.
2. HORIZONTAL DATUM: OREGON STATE PLANE, NORTH ZONE NAD 83/91
3. VERTICAL DATUM: NAVD 1988

HRK ENGINEERING & FIELD SERVICES
489 N 8TH STREET - SUITE 201
HOOD RIVER, OREGON 97031
(541) 386-6480

PROJECT NO. 19-025

REV	DATE	REVISION DESCRIPTION	DES	DRN	APP
-	-	-	-	-	-

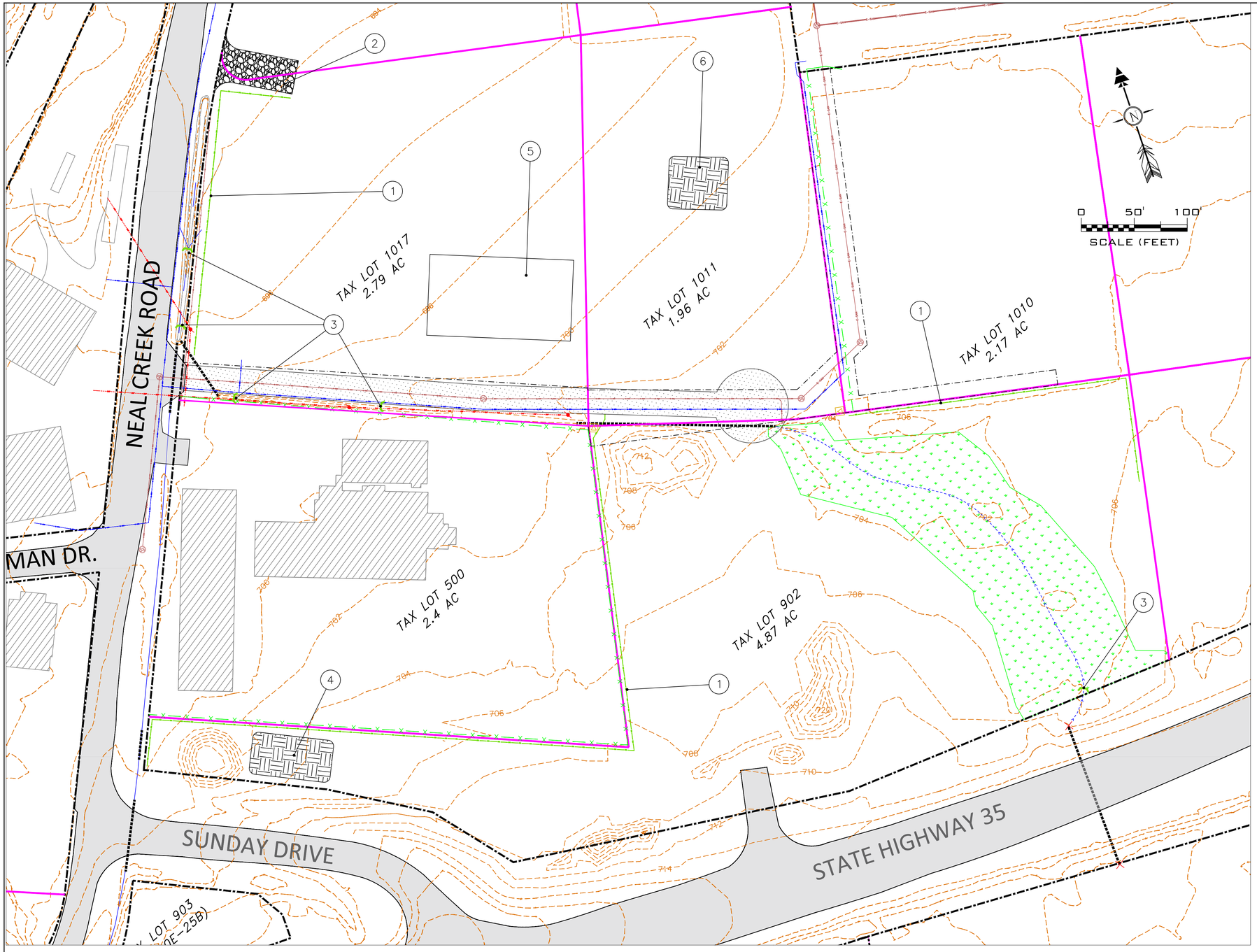
DATE: 08/02/2019

PORT OF HOOD RIVER
LOWER HANEL MILL
3335 NEAL CREEK ROAD
ODEL, OREGON 97031

EXISTING CONDITIONS

DRAWING NO.
C2
OF 7

ISSUED FOR BID



CONSTRUCTION NOTES:

1. INSTALL 1,562 LF OF SILT FENCE (SEE DETAIL D ON SHEET C7).
2. INSTALL GRAVEL CONSTRUCTION ENTRANCE (SEE DETAIL C ON SHEET C7).
3. INSTALL STRAWBALE BARRIER (SEE DETAIL E ON SHEET C7).
4. PROPOSED UNSUITABLE/TOP SOIL STOCKPILE AREA
5. PROPOSED CONTRACTOR STAGING AREA
6. PROPOSED BRUSH DEBRIS STOCKPILE AREA

GENERAL EROSION CONTROL NOTES:

1. CONTRACTORS AND BUILDERS SHALL KEEP CUTTING AND CLEARING TO A MINIMUM AND WITHIN THE PHASE UNDER CONSTRUCTION. EVERY EFFORT SHOULD BE MADE TO DISTURB AS LITTLE EXISTING VEGETATION AS POSSIBLE, AND TO REESTABLISH GOOD GROUND COVER AS SOON AS POSSIBLE AFTER GRADING.
2. SEEDING OF DISTURBED AREAS, SUCH AS CUTS, FILLS, AND STORAGE AREAS SHALL BE DONE AS SOON AS POSSIBLE AFTER USE OF THE AREA IS CONCLUDED, OR CONSTRUCTION IS FAR ENOUGH ALONG THAT THE AREA WILL NOT BE DISTURBED
3. IF AN AREA IS NOT, OR CANNOT BE SEEDED ADEQUATELY TO PROTECT IT FROM EROSION, THEN IT SHALL BE PROTECTED BY COVERING WITH SOME PROTECTIVE MATERIAL, SUCH AS MULCH, STRAW, TARPS, PLASTIC AND CHIPPED BRUSH.
4. SILT FABRIC SHALL BE PLACED OVER THE CATCH BASIN INLETS SO THAT NO SEDIMENT WILL ACCUMULATE IN THE CATCH BASINS. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM.
5. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (E.G. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE). SEEDING OF CLEARED AREAS SHALL BE ACCOMPLISHED WITHIN SEVEN DAYS UNLESS OTHERWISE STABILIZED. TEMPORARY IRRIGATION MAY BE REQUIRED TO ESTABLISH AND MAINTAIN VEGETATION. ALL DISTURBED AREAS SHALL BE SEEDED.
6. THE CONTRACTOR SHALL INSPECT ROADS DAILY AND CLEAN AS NEEDED SO THAT NO SEDIMENT IS WASHED OR CARRIED OFF-SITE.
7. APPROVAL OF THIS EROSION/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.)
8. THE IMPLEMENTATION OF THESE ESC PLANS AND CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION/LANDSCAPING IS ESTABLISHED.
9. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
10. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
11. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
12. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
13. 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 ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
14. WATER WILL BE USED AS NEEDED FOR DUST CONTROL DURING CONSTRUCTION ACTIVITIES.

NOTES FOR SEDIMENT FENCES:

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2"x 2" POSTS AND ATTACHED AS SHOWN ON DETAIL.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS WHERE FEASIBLE. THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
3. THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6 INCHES. ALL EXCAVATED MATERIAL FROM FILTER FABRIC FENCE INSTALLATION SHALL BE BACKFILLED AND COMPACTED ALONG THE ENTIRE DISTURBED AREA.
4. STANDARD OR HEAVY DUTY FILTER FABRIC FENCE SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2"x 2" POST INSTALLATION. STITCHED LOOPS SHALL BE INSTALLED ON THE UPHILL SIDE OF THE SLOPED AREA.
5. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
6. FILTER FABRIC FENCES SHALL BE INSPECTED BY APPLICANT/CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

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REV	DATE	REVISION DESCRIPTION	DES	DRN	APP
-	-	-	-	-	-

DATE: 8/02/19

LOWER HANEL MILL - ACCESS ROAD IMPROVEMENT
PORT OF HOOD RIVER
3335 NEAL CREEK ROAD
ODELL, OREGON 97031

EROSION AND SEDIMENT CONTROL

DRAWING NO.
C3
OF 7

ISSUED FOR BID

I:\EIL HOOD RIVER\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C3 EROSION AND SEDIMENT CONTROL.DWG PLOTTED: 8/7/2019 1:46 PM ON ANSI FULL BLEED D (34.00 X 22.00 INCHES)

I:\EIL HOOD RIVER\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C4 GENERAL GRADING - WETLAND NEW.DWG PLOTTED: 8/7/2019 1

NEAL CREEK

ADELMAN DR.

SUNDAY DRIVE

STATE HIGHWAY 35

19001
716873.5220
7940615.0780
695.86
IR CTRP

19002
716726.7020
7941152.0540
704.76
IR CTRP

19003
716375.0450
7941034.2240
709.59
MAG CTRP

TAX LOT 1011
1.96 AC

TAX LOT 1010
2.17 AC

TAX LOT 500
2.4 AC

TAX LOT 902
4.87 AC

TAX LOT 903
(2N-10E-25B)

AREA 1

AREA 2

AREA 3

2.5% SLOPE

2.0% SLOPE

2.1% SLOPE

6' TO CL DITCH

6' TO CL DITCH

705.12
CUL IE

705.51
CUL IE

N

0' 40' 80'
SCALE (FEET)

CONSTRUCTION NOTES:

1. COMPLETE CLEARING AND GRUBBING PRIOR TO BEGINNING EARTHWORK ACTIVITIES.
2. GRADE SITE TO PROPOSED CONTOUR ELEVATIONS.
3. INTERCEPT EXISTING FLOW LINE AND REDIRECT IT INTO PROPOSED NEW DRAINAGE DITCH.
4. CONSTRUCT DRAINAGE DITCH @ 0.6% SLOPE (SEE DETAIL B ON SHEET C7).
5. INSTALL 600 SF OF RIP-RAP MATERIAL - CLASS 50 AT BOTTOM OF DRAINAGE DITCH.
6. AFTER FINAL GRADING IS COMPLETE, ENTIRE AREA MUST BE SEEDED PER SECTION 01030 OF THE ACCOMPANYING SPECIAL PROVISIONS DOCUMENT.

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PORT OF HOOD RIVER
LOWER HANEL MILL
3335 NEAL CREEK ROAD
ODELL, OREGON 97031

GRADING & DRAINAGE PLAN

DRAWING NO.
C4
OF 7

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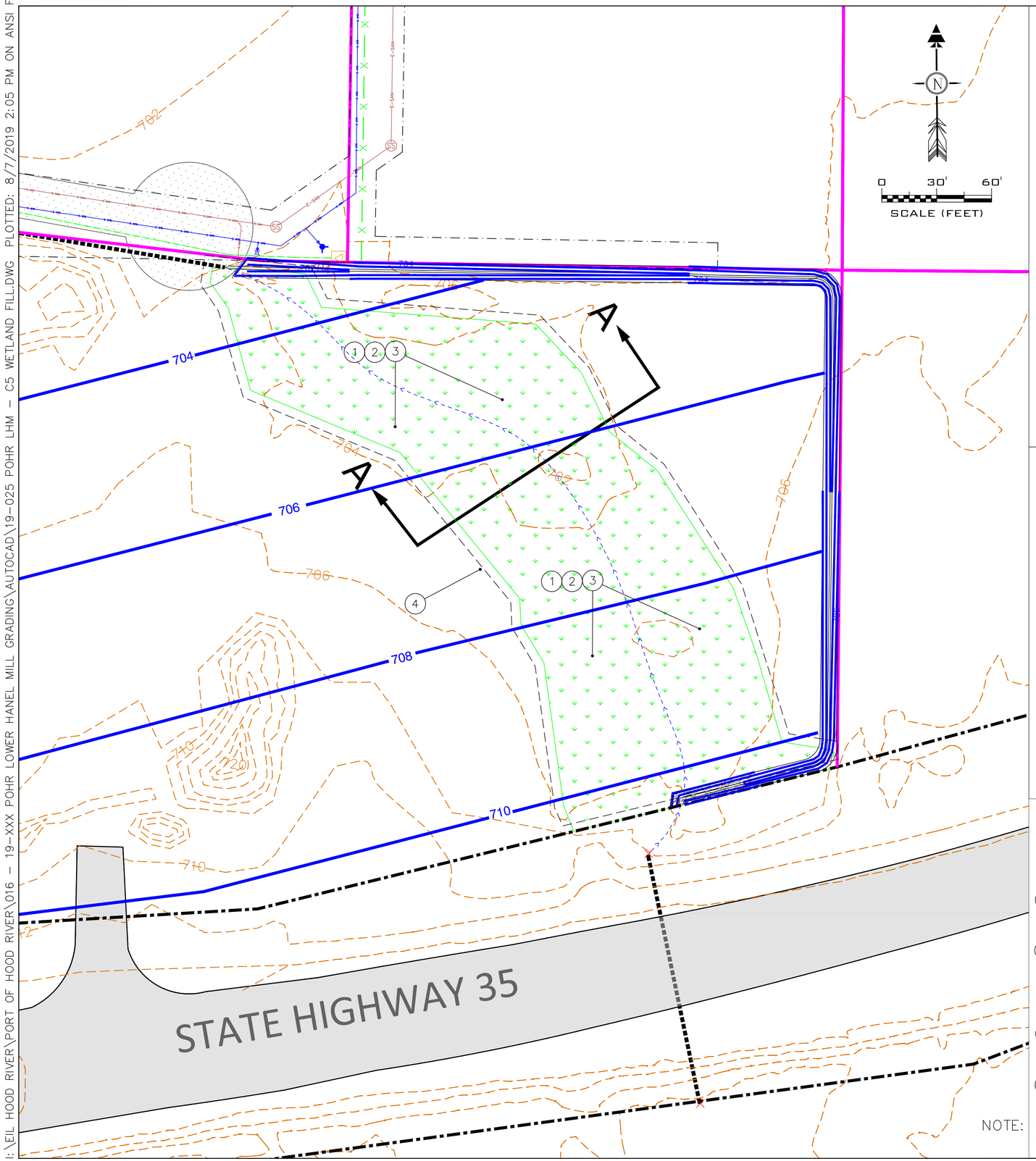
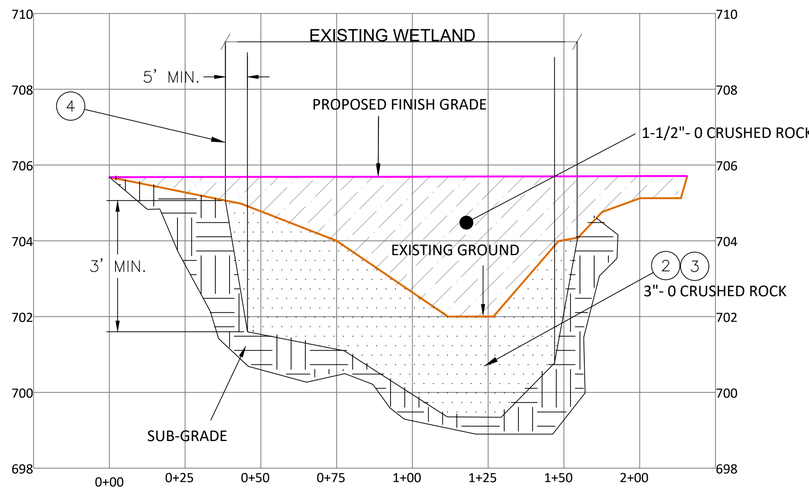
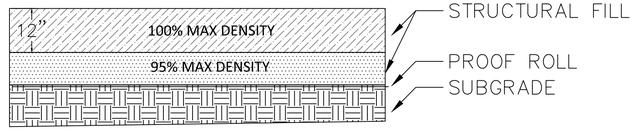




SECTION A-A



DETAIL A - ENGINEERED FILL

NTS

NOTES:
1) SUBGRADE SHOULD BE APPROVED BY ENGINEER PRIOR TO PLACEMENT OF STRUCTURAL FILL MATERIAL.
2) DENSITY REFERS TO ASTM D698.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL DEWATER AREA AS REQUIRED FOR SAFE EXCAVATION AND FOR PLACEMENT OF GEOTEXTILE AND FILL MATERIAL
2. EXCAVATE UNSUITABLE MATERIAL FROM WETLAND AREA TO 3-FT BELOW EXISTING GRADE (OR AS APPROVED BY ENGINEER). ENGINEER SHALL APPROVE SUBGRADE PRIOR TO PLACEMENT OF SUBGRADE GEOTEXTILE AND PLACEMENT OF WETLAND STABILIZATION MATERIAL.
3. PLACE STRUCTURAL FILL TO PROPOSED GRADES. (SEE DETAIL A ON THIS SHEET FOR FILL, BACKFILL, AND COMPACTION REQUIREMENTS).
4. 5-FT GRADING TRANSITION FROM EXCAVATION OF UNSUITABLE MATERIAL IN WETLAND AREA.

NOTE: WETLAND STABILIZATION DESIGN COMPLETED BY VISTA GEOENVIRONMENTAL SERVICES ON OCTOBER 2018.

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LOWER HANEL MILL
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ODELL, OREGON 97031

WETLAND DETAIL AND SECTION

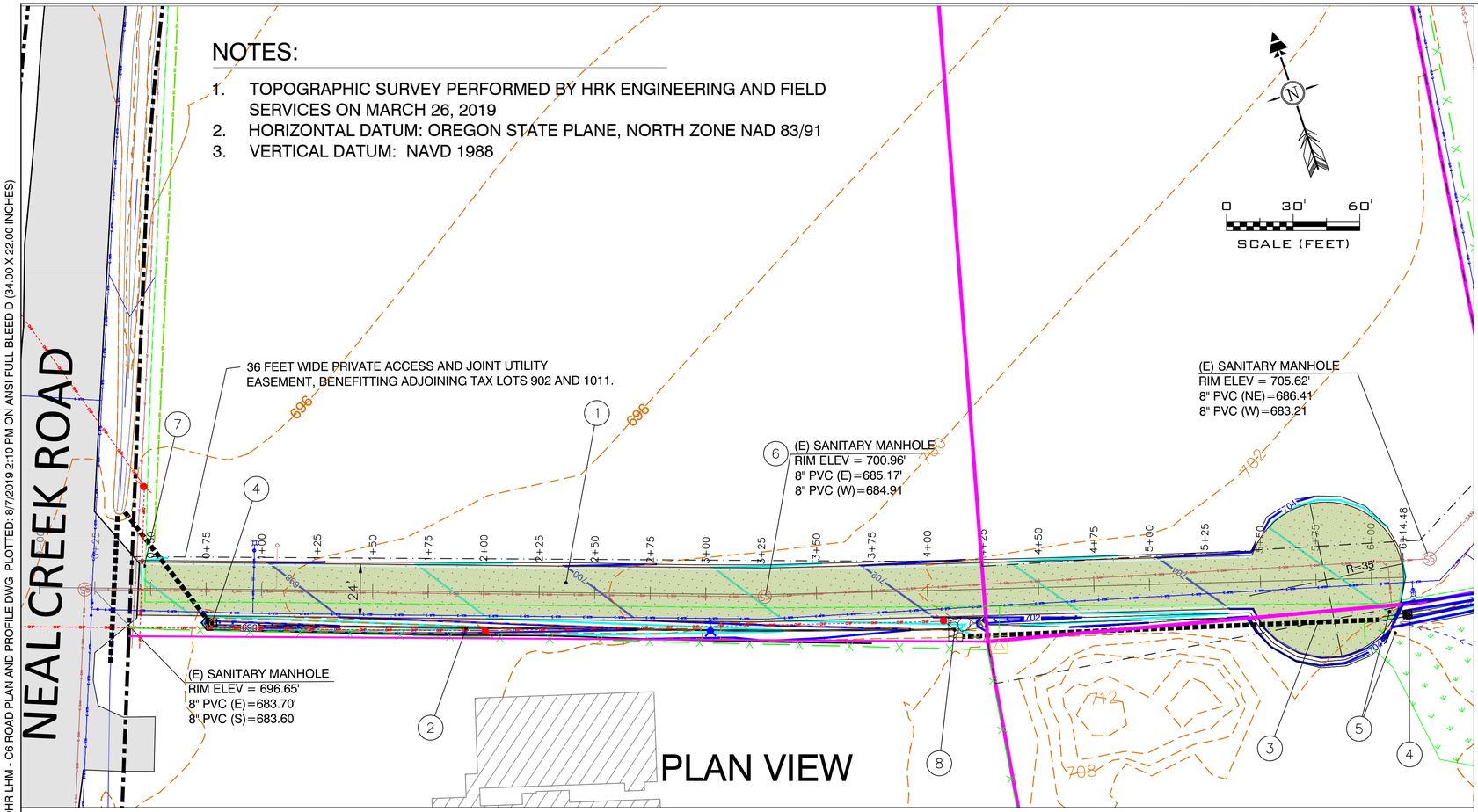
DRAWING NO.
C5
OF 7

ISSUED FOR BID

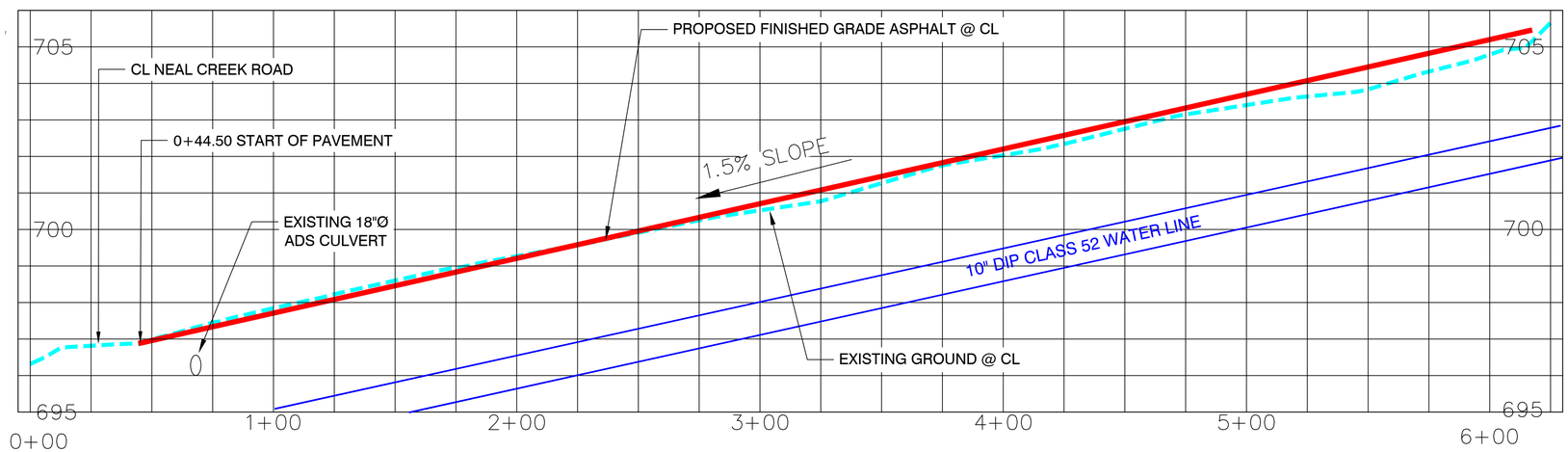
I:\ENGINEERING\PROJECTS\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C5 WETLAND FILL.DWG PLOTTED: 8/7/2019 2:05 PM ON ANSI FULL

NOTES:

1. TOPOGRAPHIC SURVEY PERFORMED BY HRK ENGINEERING AND FIELD SERVICES ON MARCH 26, 2019
2. HORIZONTAL DATUM: OREGON STATE PLANE, NORTH ZONE NAD 83/91
3. VERTICAL DATUM: NAVD 1988



PLAN VIEW



PROFILE

ROADWAY CONSTRUCTION NOTES:

1. PROPOSED ACCESS ROAD. (SEE ROAD SECTIONS ON SHEET C5)
   (16,900 SF OF HOT MIX ASPHALT CONCRETE, LEVEL 2, ½" DENSE WEARING COURSE (PG 64-22).

GEO6108 WOVEN GEO-TEXTILE	= 16,900 SF
4"- 1 ½" MINUS BASE ROCK	= 200 CY
2"- ¾" MINUS LEVELING COARSE	= 100 CY
3" HOT MIX ASPHALT CONSTRUCTION	= 305 TONS

   SUBGRADE EARTHWORK:

CUT	= 350 CY
FILL	= 0.0 CY

2. CONTRACTOR TO RE-SHAPE EXISTING ROAD DITCH ACCORDING TO ROAD SECTION SHOWN IN DETAIL A ON SHEET C7.
3. CONTRACTOR TO VERIFY LENGTH AND REMOVE (APPROX.) 120 LF OF EXISTING 18" Ø CMP CULVERT PIPE; AND REPLACE WITH ADS N-12 HDPE CULVERT PIPE. SET CULVERT PIPE @ 1% MINIMUM SLOPE AND 2 FEET OF MINIMUM COVER (SEE DETAIL G ON SHEET C7).
4. INSTALL DITCH INLET. SET INVERT TO MATCH EXISTING CULVERT ELEVATION. (SEE DETAIL F ON SHEET C7).
5. EXTEND EXISTING SANITARY CLEAN OUT - 7 FEET TO THE SOUTH OUTSIDE OF CUL DE SAC (SEE DETAIL H ON SHEET C7).
6. ADJUST ASPHALT GRADE TO MEET RIM ELEVATION OF EXISTING SANITARY MANHOLE.
7. INSTALL STOP BAR AND STOP SIGN PER ODOT STANDARDS.
8. INSTALL 120 SF OF RIP-RAP MATERIAL - CLASS 50 AT BOTTOM OF DRAINAGE DITCH.

ROADWAY GENERAL NOTES:

I. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. FIELD VERIFY LOCATIONS AND DEPTH OF ALL EXISTING UTILITIES.

II. CONTRACTOR SHALL COORDINATE EXCAVATION ACTIVITIES WITH UTILITY COMPANIES WHEN EXCAVATING WITHIN PROXIMITIES.

III. CONTRACTOR SHALL PROVIDE POWER UTILITY COMPANY SUFFICIENT NOTICE TO PROVIDE TEMPORARY POLE ANCHORING IF NECESSARY AS TO NOT DELAY CONTRACTOR'S EXCAVATION ACTIVITIES.

IV. EXISTING 8"Ø - PVC SANITARY LINE NOT SHOWN ON PROFILE DUE TO THE DEPTH OF THE LINE EXCEEDING PROFILE SETTINGS.

V. 350 CY OF EXCAVATION FROM THE EXISTING ROAD WILL BE STOCKPILED IN A DESIGNATED AREA TO BE USED IN THE PROPOSED ENGINEERED FILL FOR THE EXISTING WETLAND LOCATED 150 FEET TO THE SOUTHEAST OF THE CUL DE SAC.

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LOWER HANEL MILL - ACCESS ROAD IMPROVEMENT
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ODELL, OREGON 97031

PLAN AND PROFILE

DRAWING NO.
C6
OF 7

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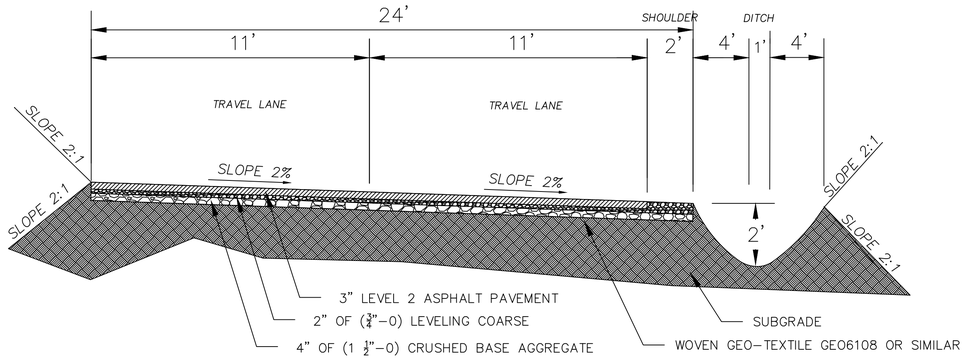
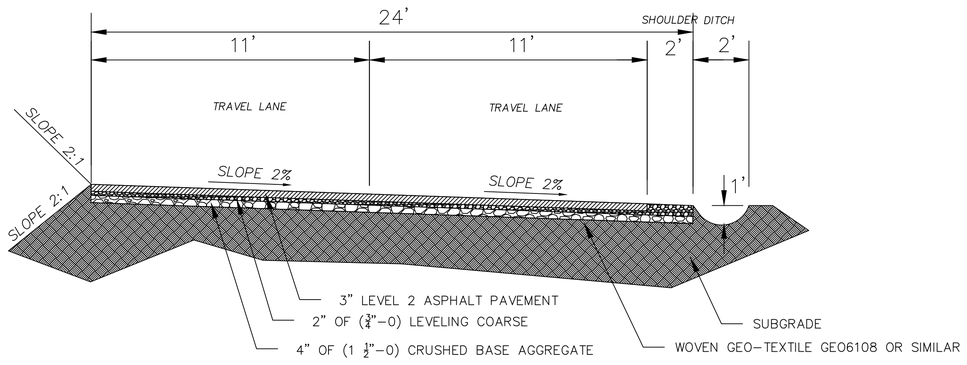
I:\EIL HOOD RIVER\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C6 ROAD PLAN AND PROFILE.DWG PLOTTED: 8/7/2019 2:10 PM ON ANSI FULL BLEED D (34.00 X 22.00 INCHES)



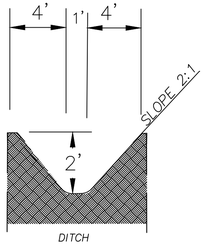
LOWER HANEL MILL ACCESS ROAD
0+00 TO 4+25
NTS

DETAIL A



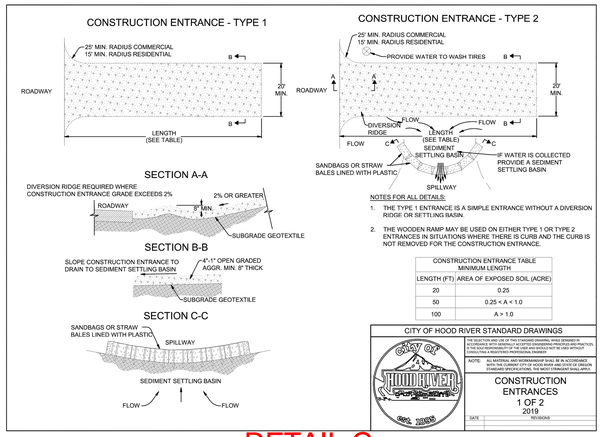
LOWER HANEL MILL ACCESS ROAD
4+25 TO 5+50
NTS

DETAIL A

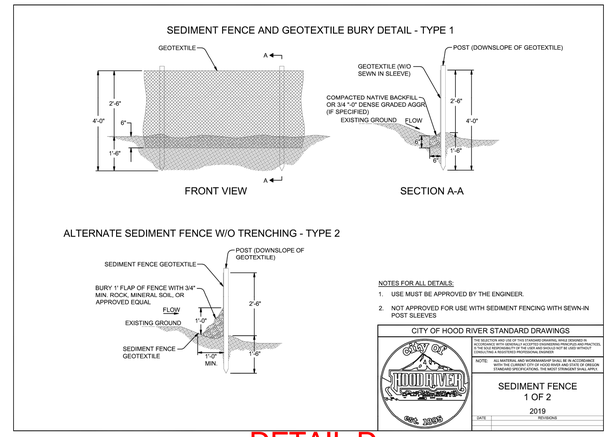


DRAINAGE DITCH DETAIL
N.T.S.

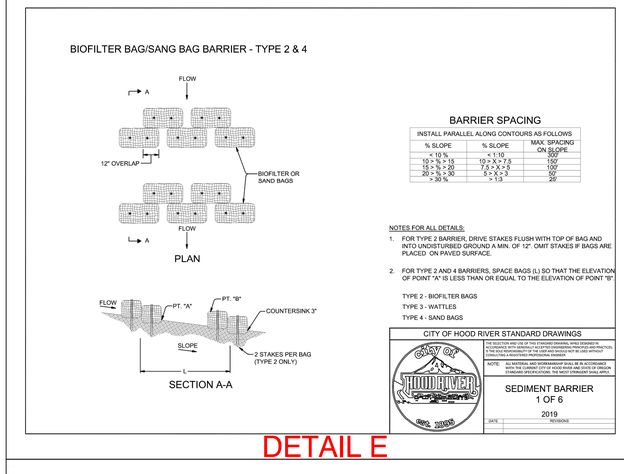
DETAIL B



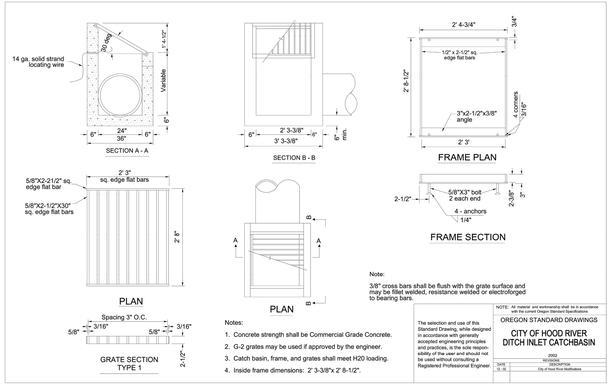
DETAIL C



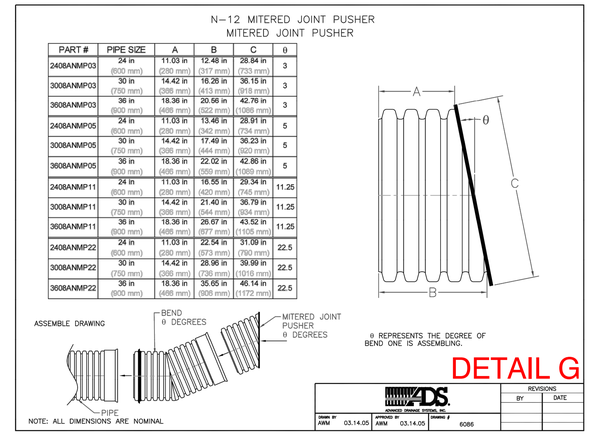
DETAIL D



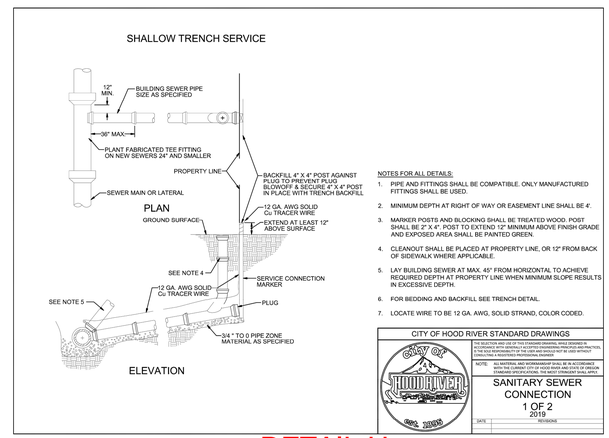
DETAIL E



DETAIL F



DETAIL G



DETAIL H

HRK ENGINEERING & FIELD SERVICES
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PROJECT NO. 19-025

REV	DATE	REVISION DESCRIPTION	DES	DRN	APP

DATE: 8/02/19

LOWER HANEL MILL - ACCESS ROAD IMPROVEMENT
PORT OF HOOD RIVER
3335 NEAL CREEK ROAD
ODELL, OREGON 97031

STANDARD DETAILS

DRAWING NO.
C7
OF 7

ISSUED FOR BID

I:\EIL HOOD RIVER\PORT OF HOOD RIVER\016 - 19-XXX POHR LOWER HANEL MILL GRADING\AUTOCAD\19-025 POHR LHM - C7 STANDARD DETAILS.DWG PLOTTED: 8/7/2019 2:13 PM ON ANSI FULL BLEED D (34.00 X 22.00 INCHES)