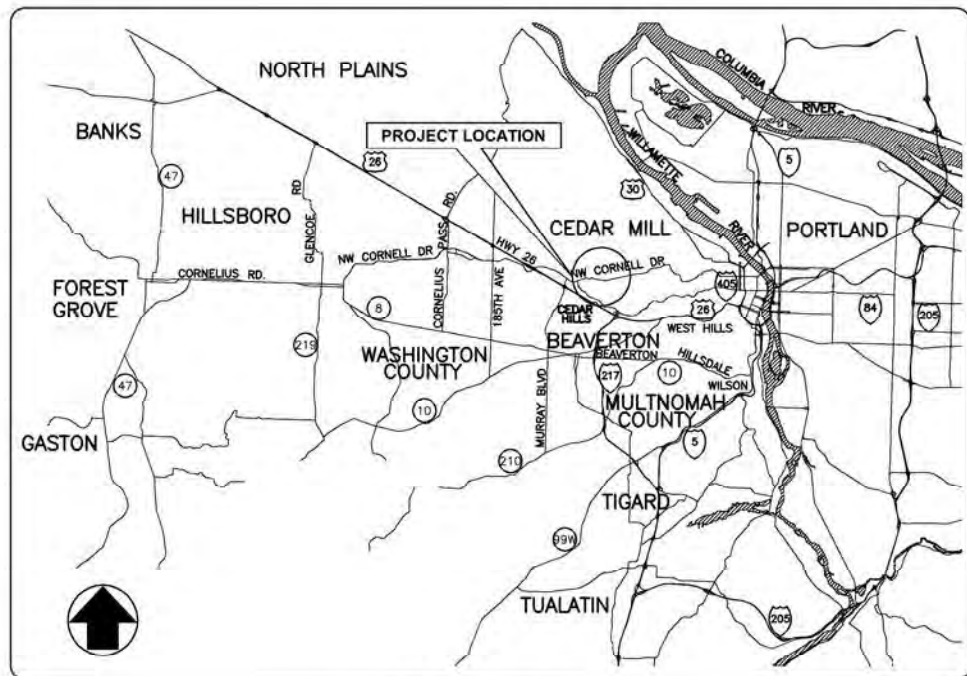


NW CORNELL RD & 107TH RD LID

PRIVATE SANITARY SEWER IMPROVEMENTS

CLEAN WATER SERVICES PROJECT NO. 6974



VICINITY MAP
NTS



UTILITY LOCATES (503) 232-1987
48 BUSINESS HOUR NOTICE PRIOR TO EXCAVATION

OREGON LAW REQUIRES CONTRACTOR TO COMPLY WITH RULES ADOPTED BY OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. COPIES OF RULES MAY BE OBTAINED BY CONTACTING THE UTILITY LOCATE CENTER AT (503) 232-1987.

ELECTRIC:	PORTLAND GENERAL ELECTRIC	(800) 544-1793
GAS:	NORTHWEST NATURAL GAS	(503) 226-4211
TELEPHONE:	QWEST	(800) 833-0825
	FRONTIER	(800) 483-4000
TELEVISION:	COMCAST	(866) 873-9735
	LEVEL 3 COMMUNICATIONS	(877) 366-8344
STREETS:	WASHINGTON COUNTY	(503) 846-7037
WATER:	TUALATIN VALLEY WATER DIST.	(503) 642-1511
SANITARY SEWER:	CLEAN WATER SERVICES	(503) 547-8100
STORM SEWER:	CLEAN WATER SERVICES	(503) 547-8100

CLEAN WATER SERVICES

CONTACT INFORMATION

CAPITAL PROGRAM. MGR.:	ANDREW J. BRAUN P.E.	(503) 681-3615
PROJECT ENGR.:	TAMMIE WILSON	(503) 681-3636
FIELD OPERATION SPVR.:	GABE SOHLER	(503) 547-8104

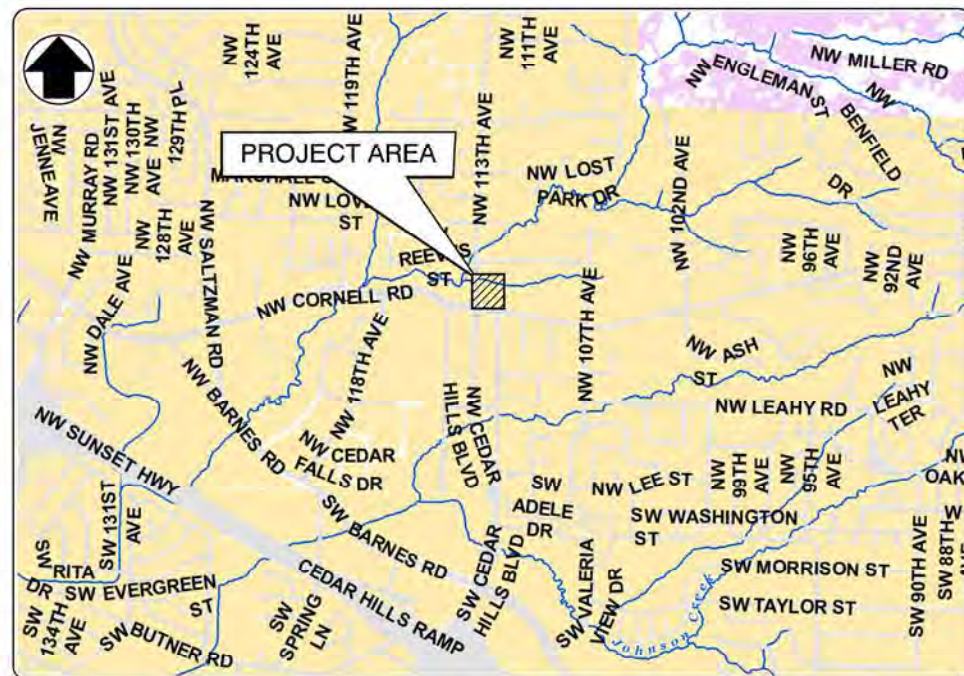


ELEVATION DATUM: WASHINGTON COUNTY NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) BASED ON CONTROL AS SHOWN ON SN33377, AS PROVIDED BY OTHERS.

BASIS OF BEARING: BEARINGS ARE BASED ON RECORD INFORMATION AS SHOWN ON WASHINGTON COUNTY SURVEY NUMBER 33377.

SHEET INDEX

1. COVER SHEET
2. EXISTING CONDITIONS
3. PROPOSED DEVELOPMENT-PLAN AND PROFILE STA 11+50 TO 15+15
4. STREAM CROSSING DETAILS
5. EROSION & SEDIMENT CONTROL PLAN
6. STANDARD DETAILS
7. STANDARD DETAILS
8. RESTORATION PLAN



SITE MAP
NTS

GENERAL NOTES

1. CONTRACTOR SHALL NOTIFY CLEAN WATER SERVICES PROJECT MANAGER (503-681-4426) AND INSPECTOR (503-681-5117) 48 BUSINESS HOURS PRIOR TO START OF CONSTRUCTION AND COMPLY WITH ALL OTHER REQUIREMENTS OF ORS 757.541 TO 757.571.
2. CONTRACTOR SHALL PROVIDE 24 HOUR NOTICE OF WORK RESUMPTION AFTER ANY SHUTDOWN EXCEEDING ONE DAY DURATION EXCEPT FOLLOWING WEEKENDS OR HOLIDAYS
3. ALL CONSTRUCTION AND TESTING OF COMPLETED SANITARY SYSTEMS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CLEAN WATER SERVICES GENERAL CONDITIONS AND STANDARD SPECIFICATIONS AS SET FORTH BY RESOLUTION & ORDER (R&O 07-20). NO FLOW SHALL BE EXPOSED TO NEW SEWERS UNTIL THE SUCCESSFUL COMPLETION OF ALL TESTING HAS OCCURRED.
4. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CLEAN WATER SERVICES EROSION PREVENTION & SEDIMENT CONTROL TECHNICAL GUIDANCE HANDBOOK.
5. ALL RESTORATIVE PAVING WITHIN STREET RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF WASHINGTON COUNTY UNIFORM STREET DESIGN STANDARDS.
6. ALL TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS MODIFIED BY THE OREGON SUPPLEMENTS. COST ASSOCIATED WITH IMPLEMENTATION OF TRAFFIC CONTROL, SIGNAGE, OR DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. CLEAN WATER SERVICES SHALL PROVIDE CONTRACTOR WITH NECESSARY PERMITS. CONTRACTOR SHALL HAVE A COPY OF PERMIT ONSITE AT ALL TIMES AND COMPLY WITH ALL CONDITIONS STIPULATED IN PERMIT.
8. CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL OF TRAFFIC CONTROL PLAN FROM WASHINGTON COUNTY PRIOR TO START OF CONSTRUCTION. FEES ASSOCIATED WITH ANY ROAD CLOSURE REQUEST SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
9. CONTRACTOR SHALL CONFINE CONSTRUCTION OPERATIONS WITHIN PERMANENT EASEMENTS, TEMPORARY CONSTRUCTION EASEMENTS, OR PUBLIC RIGHT-OF-WAY ONLY. IF AREAS OR FEATURES OUTSIDE DESIGNATED CONSTRUCTION ZONES SUSTAIN IMPACT FROM CONTRACTORS ACTIVITIES, CONTRACTOR SHALL RESTORE TO PRE-CONSTRUCTION CONDITION AT NO COST TO CLEAN WATER SERVICES.

10. CONTRACTOR TO INSTALL PERIMETER FENCE AROUND THE WORK ZONE AND LIMIT ALL CONSTRUCTION ACTIVITY INSIDE THE WORK ZONE. NO EQUIPMENT OR SOIL DISTURBANCE ALLOWED OUTSIDE THE WORK ZONE.

11. ALL EXISTING UTILITY LOCATIONS AND DESCRIPTIONS SHOWN ON PLANS HAVE BEEN COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEY. CLEAN WATER SERVICES CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THIS INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF LOCATION AND DEPTH (POTHOLE) OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION ZONE PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL PROMPTLY NOTIFY CLEAN WATER SERVICES OF POTENTIAL CONFLICTS. UNDER THESE TERMS CLEAN WATER SERVICES SHALL BE RESPONSIBLE FOR COST OF REQUIRED RELOCATIONS. IF CONTRACTOR FAILS TO LOCATE ANY KNOWN UTILITY WITHIN CONSTRUCTION ZONE THAT CONFLICTS WITH WORK, CONTRACTOR SHALL CORRECT CONFLICT AT OWN COST. ANY COSTS TO THE CONTRACTOR ARISING FROM COORDINATION WITH UTILITY COMPANY TO RELOCATE UTILITIES SHALL BE CONSIDERED INCIDENTAL TO COST OF PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE DUE CONTRACTOR.

12. CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS AND CONSTRUCTION STAKING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST AND COORDINATION TO REPLACE ANY DISTURBED MONUMENTS. CONTRACTOR SHALL NOTIFY CLEAN WATER SERVICES PRIOR TO DISTURBANCE OR REMOVAL OF ANY PERMANENT MONUMENTS TO ALLOW REFERENCING FOR FUTURE REPLACEMENT.

13. CONTRACTOR SHALL RESTORE ALL STREET FEATURES IMPACTED BY CONSTRUCTION. FEATURES SHALL INCLUDE, BUT NOT BE LIMITED TO, PAVEMENT, CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, STREET STRIPING, SIGNAGE, MAILBOXES, AND UTILITIES. THIS ALSO APPLIES TO ANY PATHWAYS WITHIN THE WORK ZONE.

14. CONTRACTOR SHALL RESTORE ALL PROJECT-RELATED EASEMENT AREAS AS STIPULATED IN EASEMENT AND CONTRACT DOCUMENTS. CLEAN WATER SERVICES SHALL PROVIDE CONTRACTOR WITH REFERENCE COPY OF ALL EASEMENT AGREEMENT CONDITIONS.

15. CONTRACTOR TO PROTECT AND MAINTAIN ALL STORM WATER FACILITIES AND STRUCTURES INCLUDING OUTFALLS, PIPES, RIPRAP, AND INLETS. ANY DAMAGE TO STORM WATER FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.

16. CONTRACTOR TO COORDINATE WITH PGE FOR ANY CONSTRUCTION ACTIVITY WITHIN 20 FEET OF THE TRANSMISSION LINES. PGE SAFETY MONITOR MAY BE REQUIRED, CHECK PERMIT REQUIREMENTS.



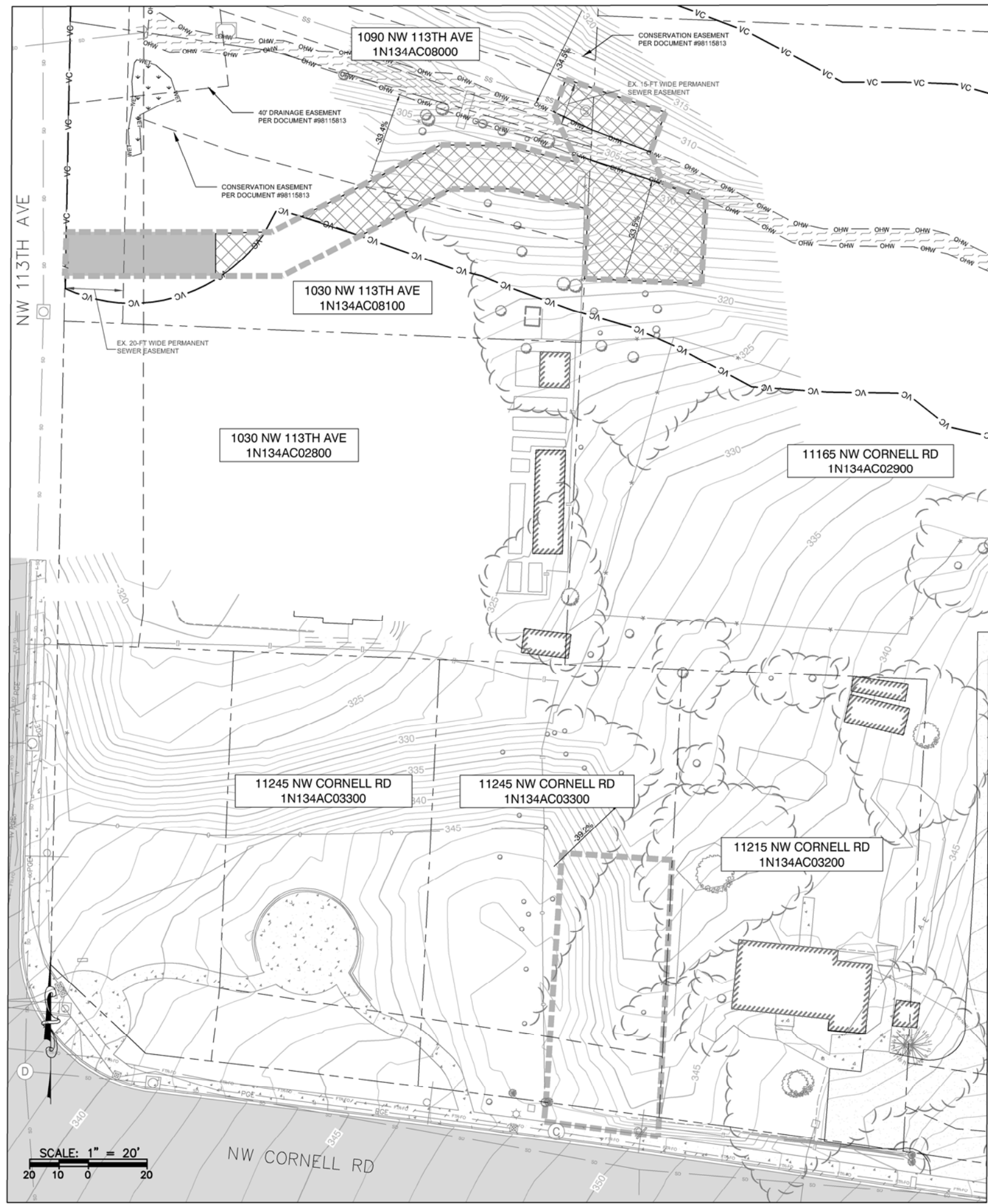
Clean Water Services
Our commitment is clear.
2550 SW Hillsboro Hwy
Hillsboro, OR 97123
(503) 681-3600
www.cleanwaterservices.org

COVER SHEET

NW CORNELL RD &
107TH RD LID
PRIVATE SANITARY SEWER
IMPROVEMENTS

1/4 SECTION	3018
DRAFTER: MC	DESIGNER: KKS
CHECKED: TW	APPROVED: AJB

PROJECT	6974
SHEET	1 OF 8



LEGEND

EXISTING

320

MAJOR CONTOURS

MINOR CONTOURS

SS

EX. SANITARY SEWER

S

EX. SANITARY SEWER MH

PROPERTY LINE

ASPHALT

OHW

ORDINARY HIGH WATER LINE

CREEK CHANNEL

EX. CONIFEROUS TREE

EX. DECIDUOUS TREE

WET

VC

PROPOSED

LIMITS OF DISTURBANCE

SS

S

PROPOSED SANITARY SEWER MH

TEMPORARY IMPACTS W/IN VC
(3,626 SQ.FT =0.08 ACRES)

NOTES:

1. THE LOCATION OF EXISTING UNDERGROUND UTILITY FACILITIES SHOWN HEREON ARE BASED ON LOCATE MARKS PROVIDED BY A PRIVATE UTILITY LOCATER. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES BY THE RESPECTIVE UTILITY OWNERS, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH ARE NOT SHOWN ON THE PLAN. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

Type	Removal					Fill					Duration
	Material	Length	Width	Depth	Volme (cu.yds)	Material	Length	Width	Depth	Volme (cu.yds)	
Sewer Trench	Soil/gravel	12'	3'	8'	10.67	Soil/gravel	12'	3'	7"	9.33	1 week
Streambed Reconstruction	Soil/gravel	15'	9'	1'	5	Soil/gravel	15'	12'	1'	6.67	1 week
In-water work isolation	Sandbags/ visqueen	27'	1'	6'	6	Sandbags/ visqueen	27'	1'	6'	6	1 week
					Total=						Total=
					21.67						22



CleanWater Services

Our commitment is clear.

2550 SW Hillsboro Hwy
Hillsboro, OR 97123
(503) 881-3600
www.cleanwaterservices.org

EXISTING CONDITIONS

NW CORNELL RD & 107TH RD LID
PRIVATE SANITARY SEWER IMPROVEMENTS

PROJECT 6974

SHEET 2 OF 8

1/4 SECTION 3018

DRAFTER: MC

DESIGNER: KKS

CHECKED: TW

APPROVED: AJB

ISSUED FOR CONSTRUCTION

REVISION

DATE

1

10/26/20

BY

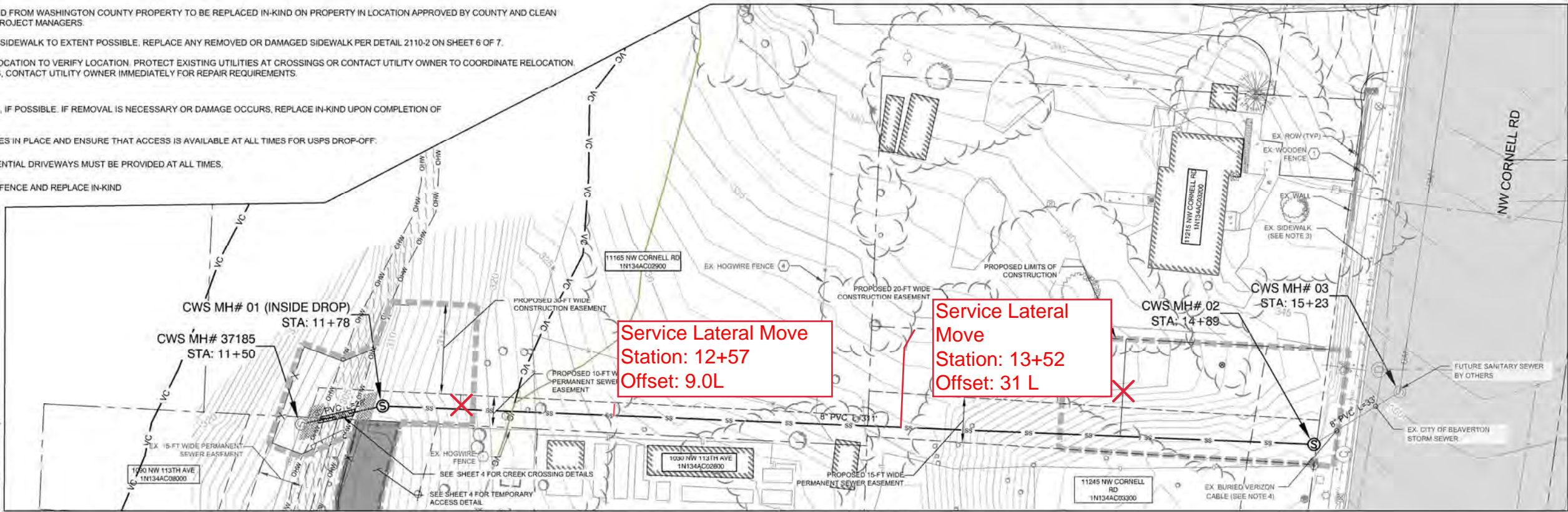
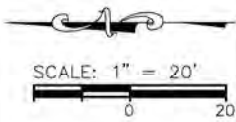
TW

NOTES

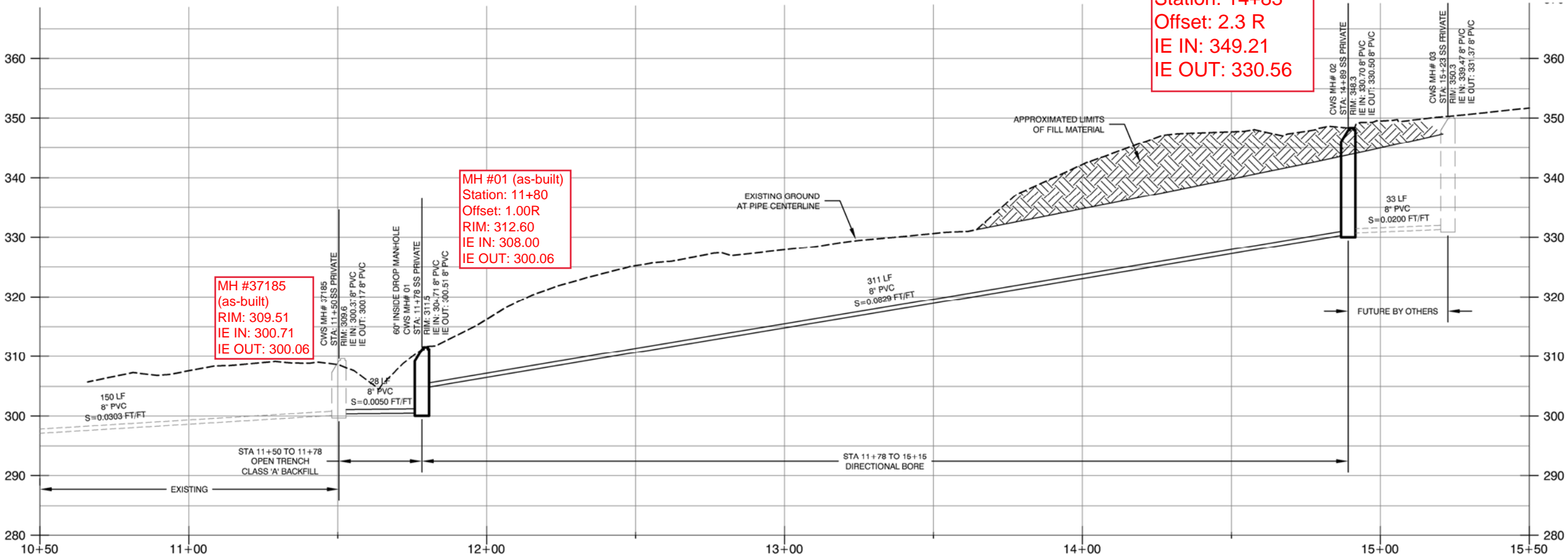
1. ALL TREES REMOVED FROM WASHINGTON COUNTY PROPERTY TO BE REPLACED IN-KIND ON PROPERTY IN LOCATION APPROVED BY COUNTY AND CLEAN WATER SERVICES PROJECT MANAGERS.
2. PROTECT EXISTING SIDEWALK TO EXTENT POSSIBLE. REPLACE ANY REMOVED OR DAMAGED SIDEWALK PER DETAIL 2110-2 ON SHEET 6 OF 7.
3. POTHOLE UTILITY LOCATION TO VERIFY LOCATION. PROTECT EXISTING UTILITIES AT CROSSINGS OR CONTACT UTILITY OWNER TO COORDINATE RELOCATION. IF DAMAGE OCCURS, CONTACT UTILITY OWNER IMMEDIATELY FOR REPAIR REQUIREMENTS.

KEYED NOTES

1. PROTECT IN PLACE, IF POSSIBLE. IF REMOVAL IS NECESSARY OR DAMAGE OCCURS, REPLACE IN-KIND UPON COMPLETION OF CONSTRUCTION.
2. PROTECT MAILBOXES IN PLACE AND ENSURE THAT ACCESS IS AVAILABLE AT ALL TIMES FOR USPS DROP-OFF.
3. ACCESS TO RESIDENTIAL DRIVEWAYS MUST BE PROVIDED AT ALL TIMES.
4. REMOVE EXISTING FENCE AND REPLACE IN-KIND



NW CORNELL RD. SANITARY SEWER PLAN
STATION 11+50 TO 15+15



NW CORNELL RD. SANITARY SEWER PROFILE
STATION 11+50 TO 15+15

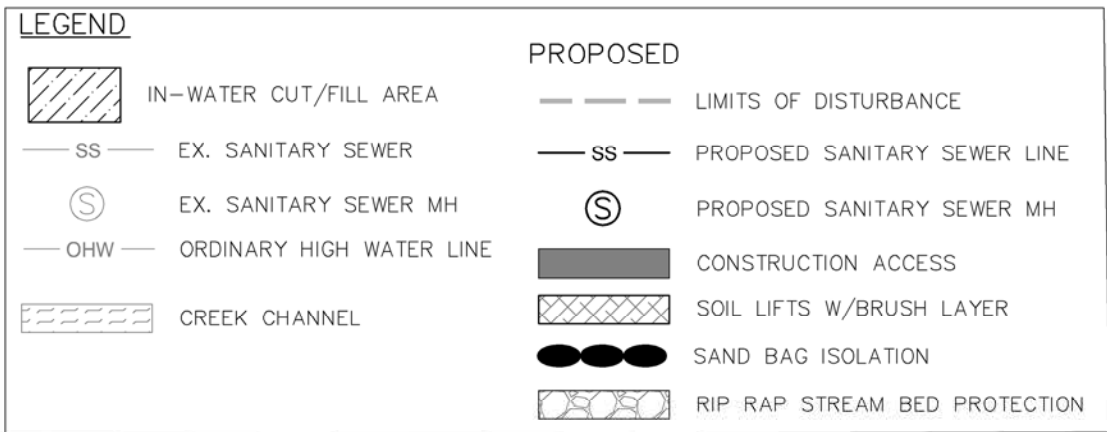
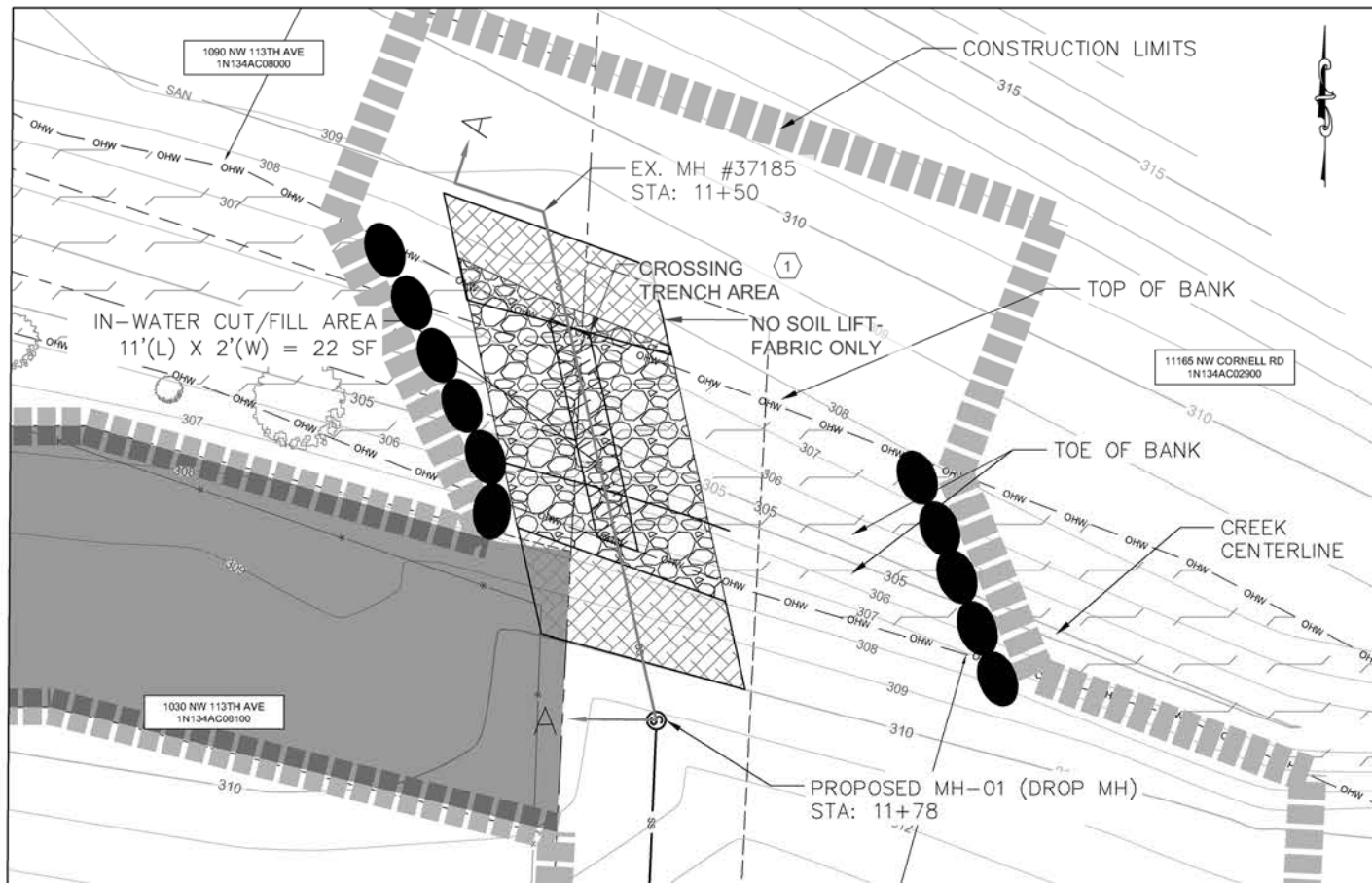
HORIZONTAL AND VERTICAL SCALE: 1" = 20'



CleanWater Services
Our commitment is clear.
2550 SW Hillsboro Hwy
Hillsboro, OR 97123
(503) 851-3500
www.cleanwaterservices.org

PLAN & PROFILE
NW CORNELL RD LID
107TH RD LID
PRIVATE SANITARY
SEWER IMPROVEMENTS
STA 11+50 TO 15+15

1/4 SECTION 3018
DRAFTER: KKS
DESIGNER: KKS
CHECKED: TW
APPROVED: AJB
PROJECT 6974
SHEET 3 OF 8



NOTES

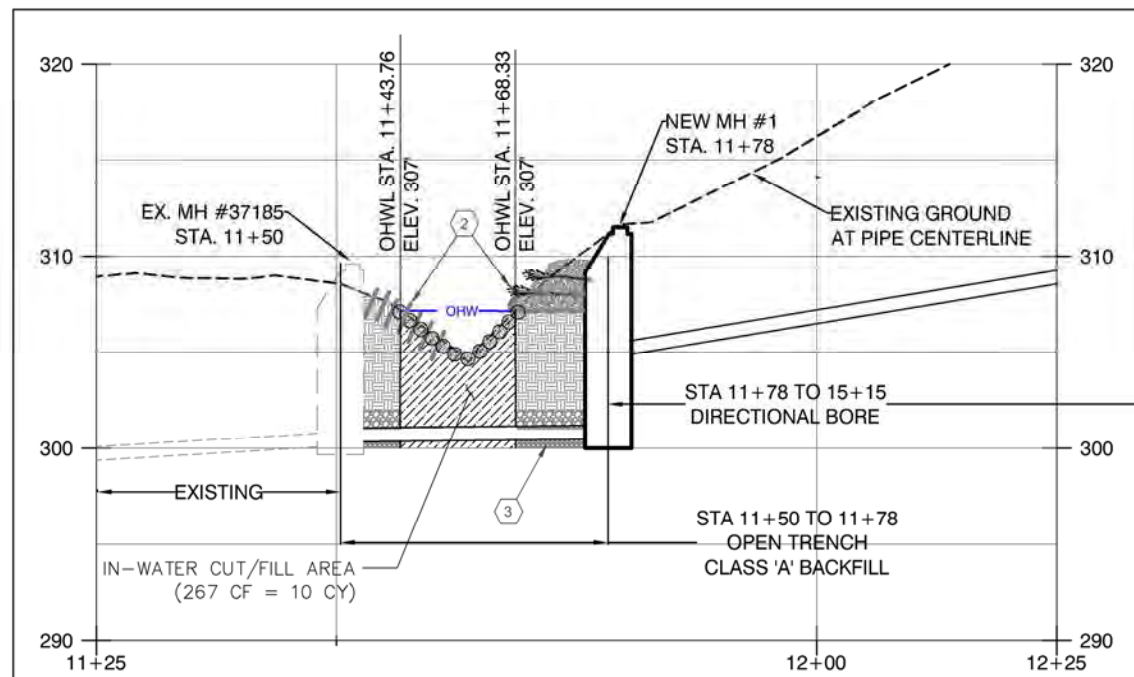
- EXISTING 4' HOGWIRE FENCE TO BE REMOVED FOR CONSTRUCTION AND REPLACED IN-KIND AFTER CONSTRUCTION. NEED TO VERIFY WHETHER THIS FENCE IS THERE TO CONTAIN ANIMALS. IF SO, TEMPORARY FENCE WILL BE REQUIRED DURING CONSTRUCTION. ALSO VERIFY WHETHER FENCE IS ALLOWED WITHIN EASEMENT OR WOULD NEED TO BE REINSTALLED ALONG EASEMENT BOUNDARY.
- SEE DETAIL NS-17 "WORK ISOLATION-DEWATERING" FOR TYPICAL METHODS OF CHANNEL ISOLATION AND DEWATERING.
- WHEN ISOLATING A WORK AREA WITH A COFFERDAM, CHECK DAM OR TEMPORARY DRAINAGE FACILITIES, REMOVE FISH WITH THE APPROVAL OF THE DISTRICT AND UNDER THE SUPERVISION OF APPROPRIATE REGULATORY AGENCIES' REPRESENTATIVE. A QUALIFIED BIOLOGIST SHALL PERFORM FISH REMOVAL AND ALL NECESSARY PERMITS SHALL BE OBTAINED BY CONTRACTOR.

KEYED NOTES

- CREEK CROSSING TO BE RESTORED PER CROSS SECTION DETAIL 'A-A' AND DETAILS NS24 & 620 THIS SHEET.
- LIVE STAKES TO BE SUPPLIED BY OTHERS AND INSTALLED WITHIN NORTH BANK PROTECTION AND BETWEEN SOIL LIFTS. EXTEND RIP RAP TOE MINIMUM 1' ABOVE OHWL.
- BACKFILL TRENCH AS SPECIFIED IN STANDARD DETAIL #620, SEE SHEET 6 OF 8.

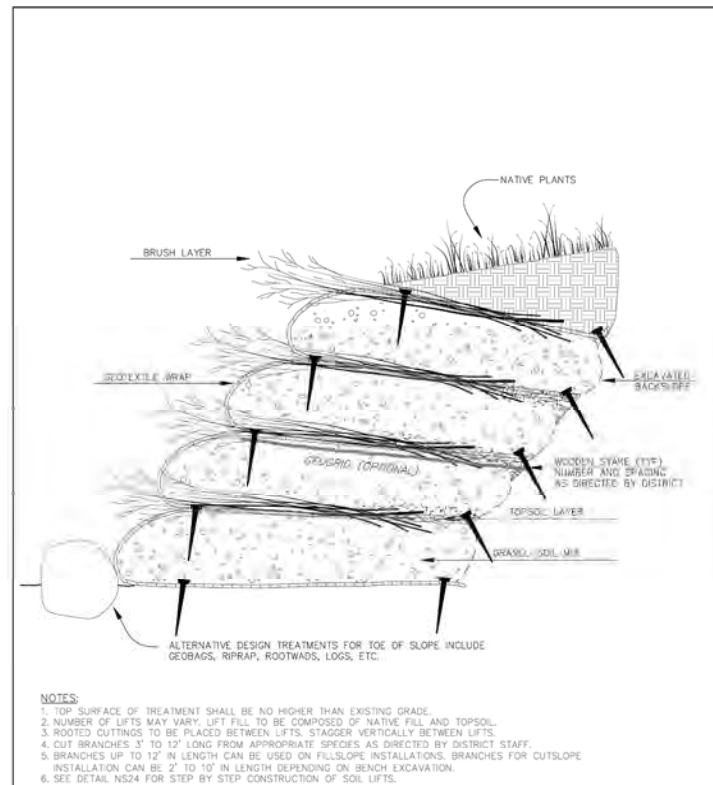
1 PROPOSED SANITARY SEWER CREEK CROSSING
PLAN VIEW DETAIL

SCALE: 1" = 5'



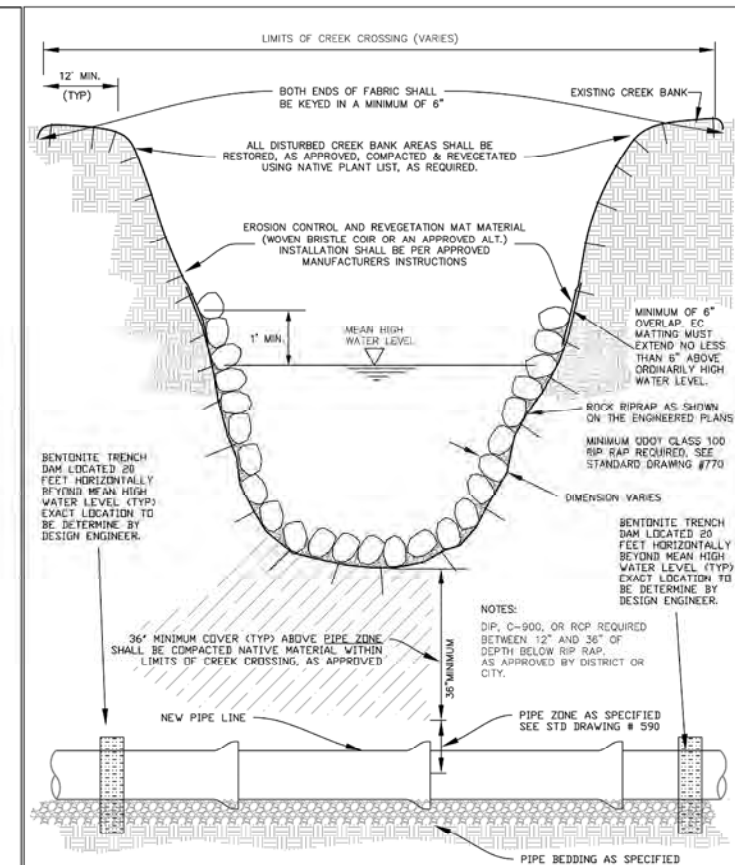
A PROPOSED SANITARY SEWER CREEK CROSSING
PROFILE VIEW DETAIL

HORIZONTAL AND VERTICAL SCALE:



BRUSH LAYERING WITH
GEOTEXTILE SOIL WRAP

DRAWING NO. NS24 03/2020



CREEK CROSSING
RESTORATION

DRAWING NO. 620 REVISED 10-31-19

CleanWater Services



CleanWater Services

Our commitment is clear.

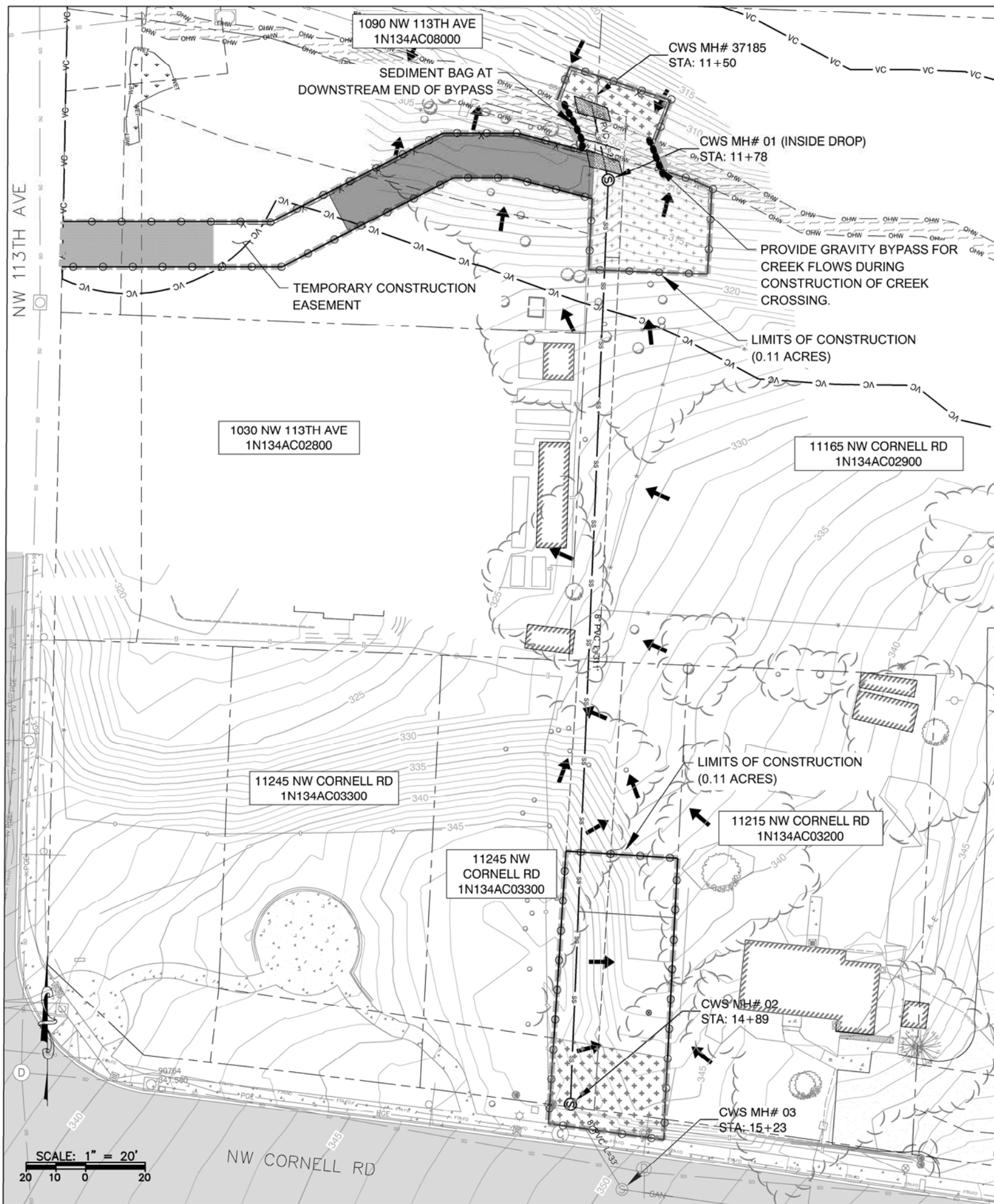
2550 SW Hillside Hwy
Hillsboro, OR 97123
(503) 881-3600
www.cleanwaterservices.org

**STREAM
CROSSING
DETAILS**

**NW CORNELL RD &
107TH RD LID
PRIVATE SANITARY
SEWER IMPROVEMENTS**

1/4 SECTION
3018
DRAFTER: KKS
DESIGNER: KKS
CHECKED: TW
APPROVED: AJB

PROJECT
6974
SHEET
4 OF 8



LEGEND

320

MAJOR CONTOURS

SS

EX. SANITARY SEWER

S

EX. SANITARY SEWER MH

EX. CONIFEROUS TREE

EX. DECIDUOUS TREE

FLOW ARROW

PROPOSED

LIMITS OF DISTURBANCE

SS

PROPOSED SANITARY SEWER LINE

S

PROPOSED SANITARY SEWER MH

PERMANENT EASEMENT

TEMPORARY EASEMENT

PERIMETER ESC CONTROL

X

WATTLES

SAND BAG ISOLATION

CONSTRUCTION ENTRANCE

LONG TERM STABILIZATION

SEED / MULCH

- NOTES:
- WHEN RAINFALL AND RUNOFF OCCURS, A KNOWLEDGEABLE AND EXPERIENCED PERSON IN THE PRINCIPLES, PRACTICES, INSTALLATION, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS WHO WORKS FOR THE PERMITTEE MUST PROVIDE DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS AND DISCHARGE OUTFALLS.
 - CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31ST EACH YEAR.
 - DURING WET WEATHER PERIOD, TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY.
 - SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. THEY MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
 - ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
 - SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIME FRAME.
 - SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
 - SEDIMENT MUST BE REMOVED FROM BEHIND ALL SEDIMENT CONTROL MEASURES WHEN IT HAS REACHED A HEIGHT OF 1/3-RD THE BARRIER HEIGHT AND PRIOR TO THE CONTROL MEASURES REMOVAL.
 - CLEANING OF ALL STRUCTURES WITH SUMPS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT.
 - ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
 - THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION.
 - THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE MADE IN APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE.
 - OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH CURRENT CLEAN WATER SERVICES STANDARDS AND STATE, AND FEDERAL REGULATIONS.
 - PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. UNLESS OTHERWISE APPROVED, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITTEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
 - PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPs THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPs MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
 - IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1ST; THE TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS SPECIFIED BY THE DESIGN ENGINEER.
 - WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
 - ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG).
 - THE ESC PLAN MUST BE KEPT ONSITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
 - THE ESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
 - WRITTEN ESC LOGS ARE SUGGESTED TO BE MAINTAINED ONSITE AND AVAILABLE TO DISTRICT INSPECTORS UPON REQUEST.
 - IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMPs MUST BE USED, WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.
 - ALL EXPOSED SOILS MUST BE COVERED, AT END OF BUSINESS DAY, DURING WET WEATHER PERIOD, FROM OCTOBER 1 - MAY 31.

STANDARD EROSION CONTROL
NOTES FOR SITES LESS THAN 1 ACRE

DRAWING NO. 945

REVISED 10-31-19

CleanWater Services

REGISTERED PROFESSIONAL
ENGINEER
#75462PE
OREGON
APR. 14, 2004
ANDREW J. BRAUN

EXPIRES: 12/31/2021

CleanWater Services

Our commitment is clear.

2550 SW Hillsboro Hwy
Hillsboro, OR 97123
(503) 681-3600
www.cleanwaterservices.org

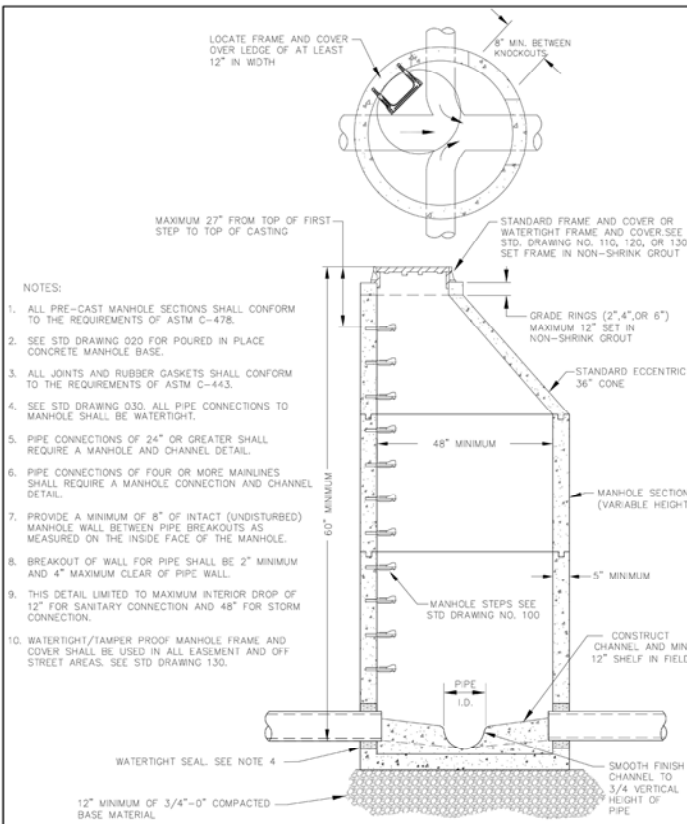
EROSION AND
SEDIMENT
CONTROL PLAN

NW CORNELL RD
SANITARY SEWER
IMPROVEMENTS

1/4 SECTION
3018
PROJECT
6974

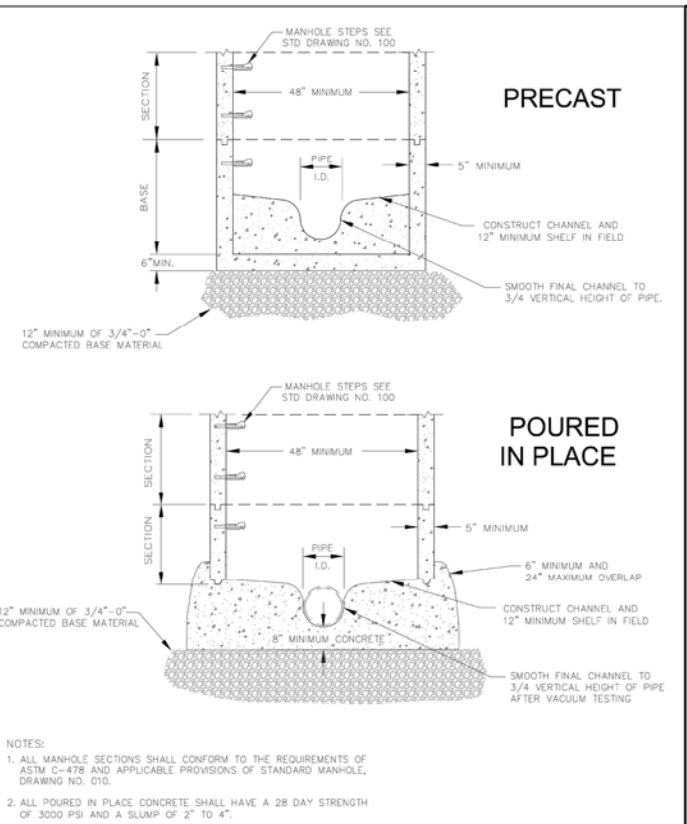
DRAFTER: MC
DESIGNER: KKS
CHECKED: TW
APPROVED: AJB

SHEET
5
OF
8



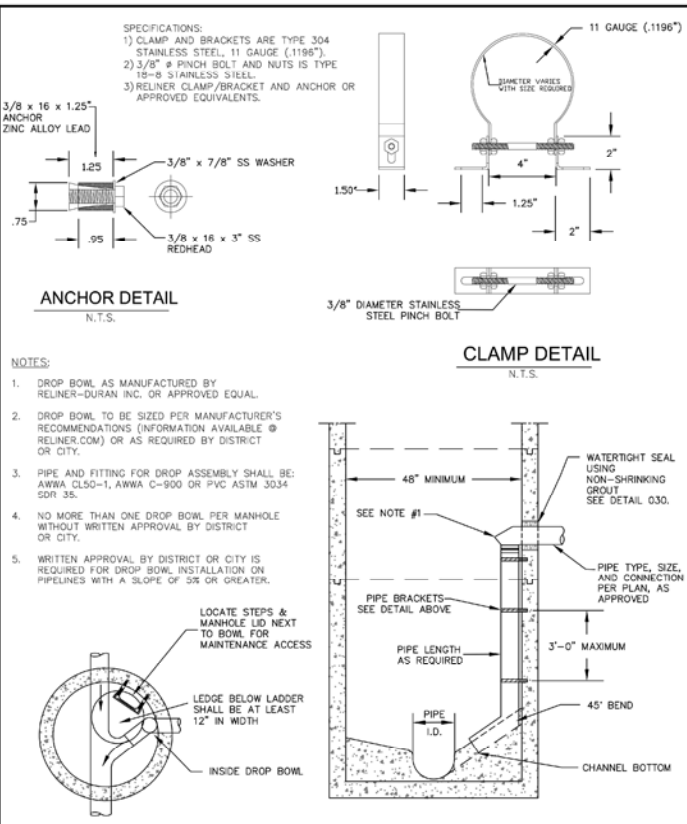
STANDARD MANHOLE

DRAWING NO. 010 REVISED 10-31-19



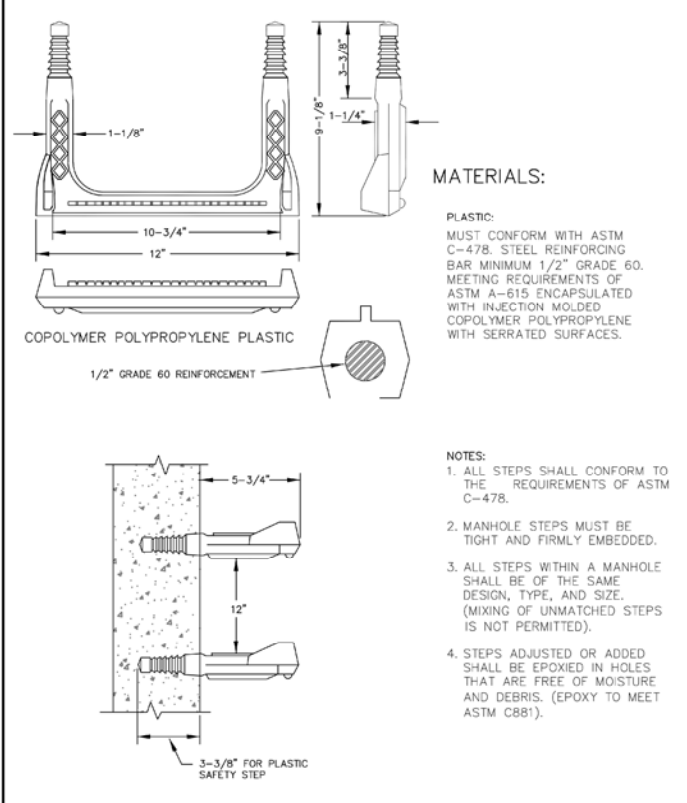
PRE-CAST/POURED IN PLACE MANHOLE BASE

DRAWING NO. 020 REVISED 10-31-19



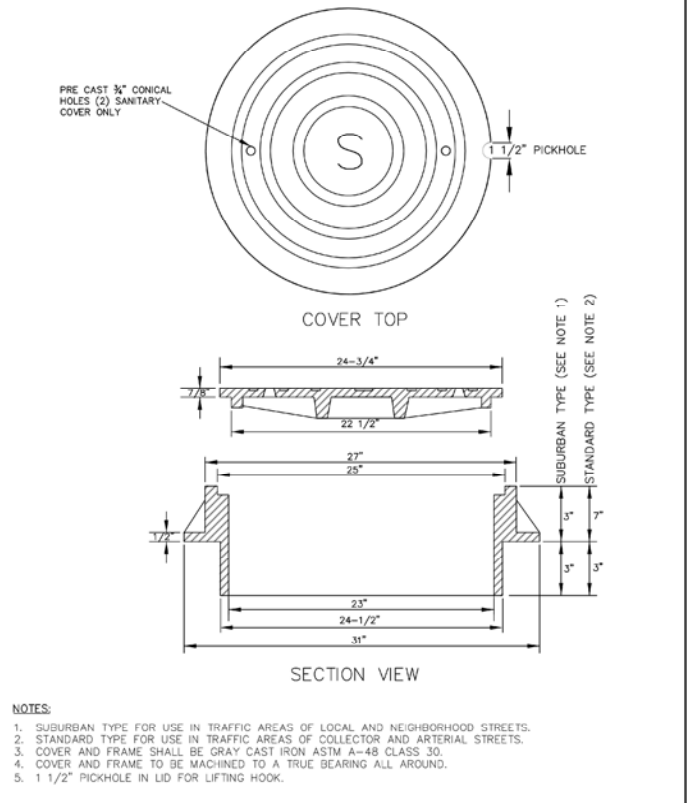
INSIDE DROP MANHOLE W/BOWL

DRAWING NO. 090 REVISED 10-31-19



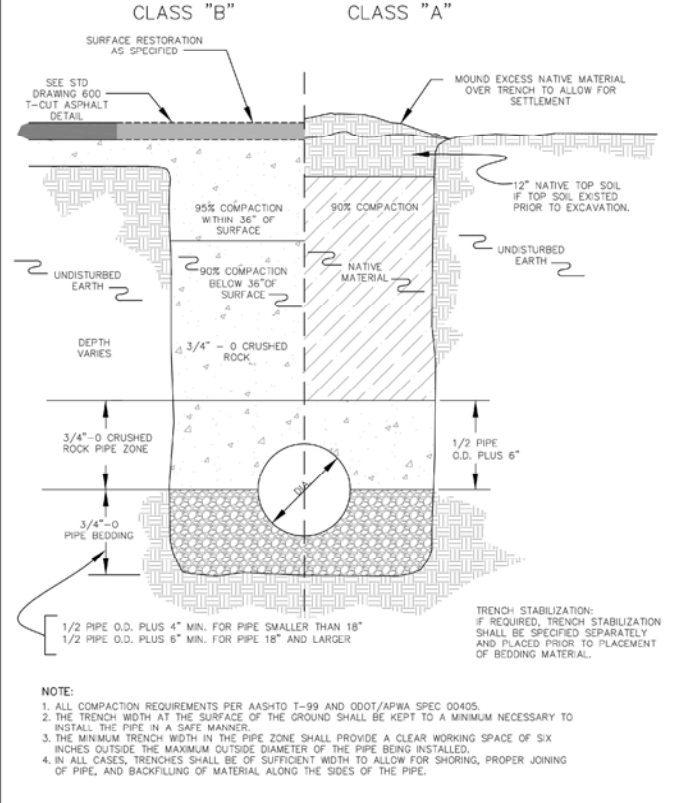
MANHOLE STEP

DRAWING NO. 100 REVISED 10-31-19



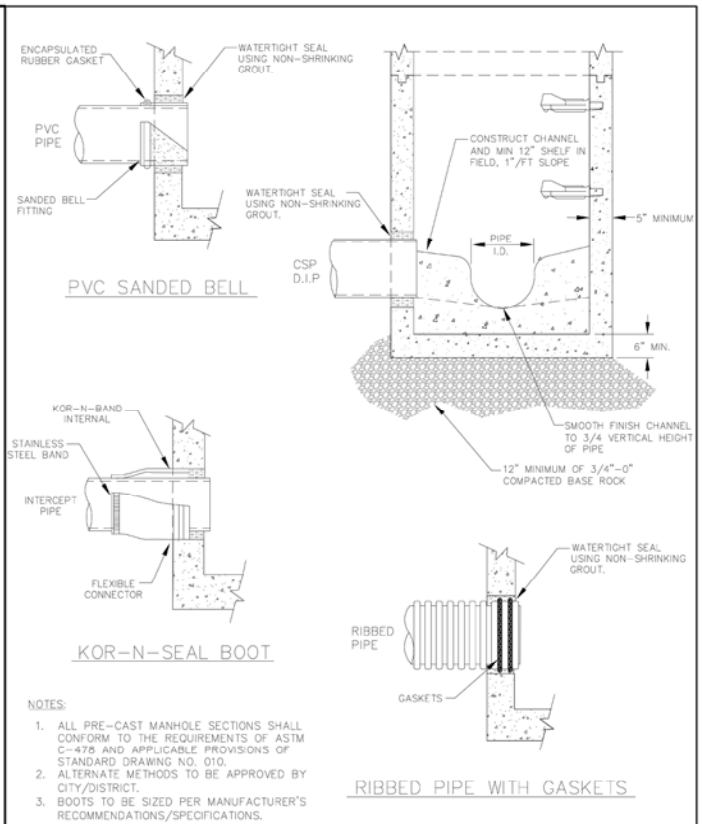
SUBURBAN AND STANDARD MANHOLE FRAME AND COVER SANITARY

DRAWING NO. 110 REVISED 10-31-19



TRENCH BACKFILL DETAILS

DRAWING NO. 590 REVISED 10-31-19



MANHOLE CONNECTIONS

DRAWING NO. 030 REVISED 10-31-19



NO.	REVISION	DATE
1	ISSUED FOR CONSTRUCTION	TW 10/26/20

CleanWater Services

Our commitment is clear.

2550 SW Hillsboro Hwy
Hillsboro, OR 97123
(503) 881-3600
www.cleanwaterservices.org

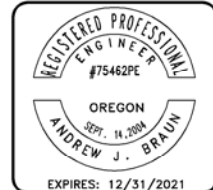
STANDARD DETAILS

**NW CORNELL RD &
107TH RD LID
PRIVATE SANITARY
SEWER IMPROVEMENTS**

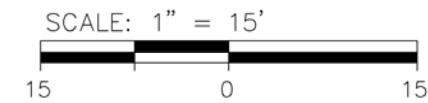
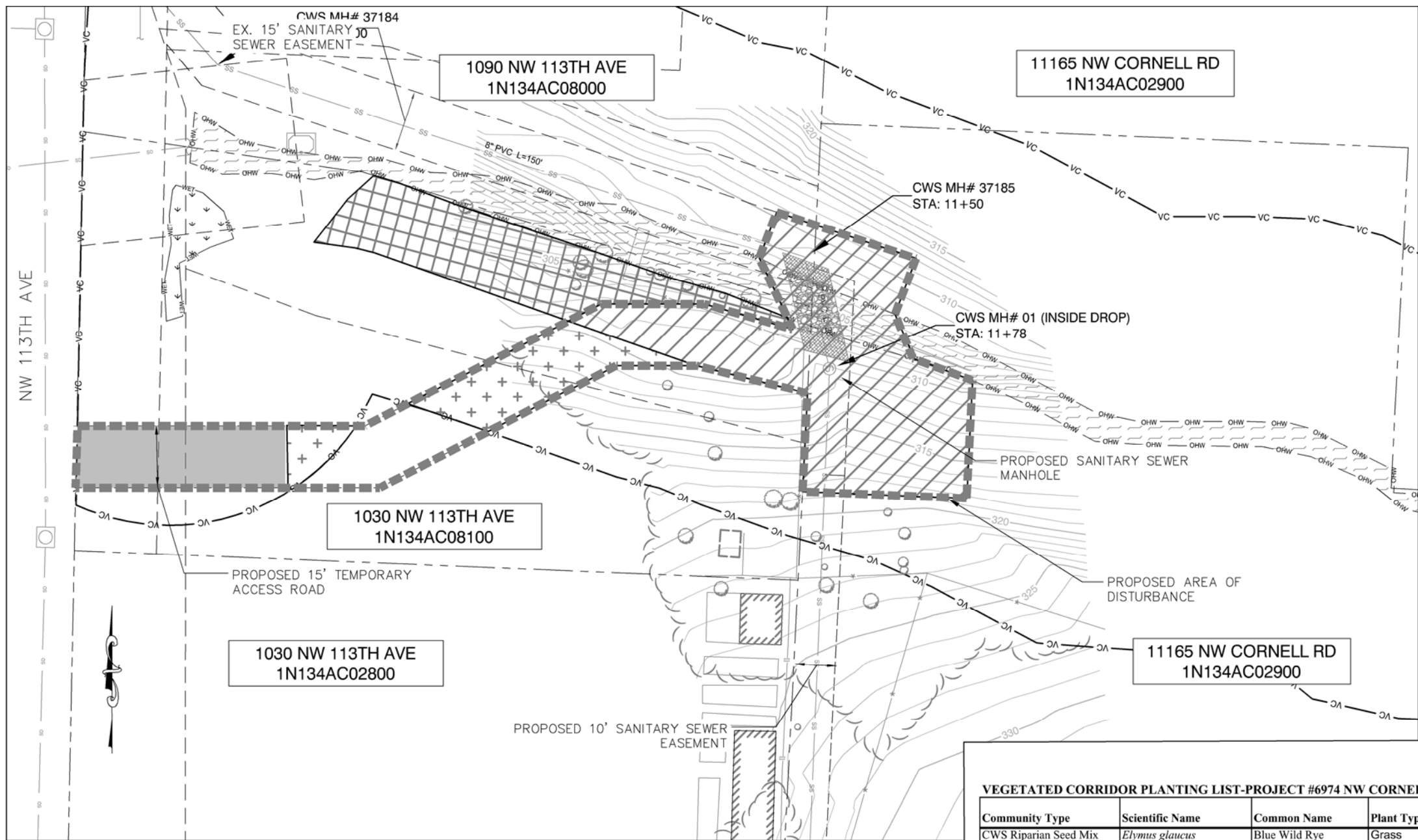
1/4 SECTION	3018
DRAFTER: MC	DESIGNER: MC
CHECKED: TW	APPROVED: AJB

PROJECT 6974

SHEET 6 OF 8







- SEEDING ONLY (TEMPORARY IMPACTS)
(1,066 SQFT= 0.02 ACRES)
- RIPARIAN BUFFER (TEMPORARY IMPACTS)
(2,913 SQFT= 0.07 ACRES)
- RIPARIAN BUFFER (MITIGATION)
(1,434 SQFT= 0.03 ACRES)

VEGETATED CORRIDOR PLANTING LIST-PROJECT #6974 NW CORNELL RD SANITARY EXTENSION

Community Type	Scientific Name	Common Name	Plant Type	Indicator Status	Spacing (ft. o.c.) or Seed (lb/acre)	Seed Total	Plant or Plug Total
CWS Riparian Seed Mix	<i>Elymus glaucus</i>	Blue Wild Rye	Grass	FACU	4	2	
CWS Riparian Seed Mix	<i>Deschampsia elongata</i>	Slender Hairgrass	Grass	FACW	4	2	
CWS Riparian Seed Mix	<i>Agrostis exarata</i>	Spike Bentgrass	Grass	FACW	4	1	
CWS Riparian Seed Mix	<i>Lupinus rivularis</i>	Riverbank Lupine	Herb	FAC	4	1	
CWS Riparian Seed Mix	<i>Sidalcea campestris</i>	checkermallow	Herb	FACW	4	0.1	
CWS Riparian Seed Mix	<i>Achillea millefolium</i>	Yarrow	Herb	FACU	4	0.2	
Seed Total						5	
Riparian Forest (RF)	<i>Lonicera involucrata</i>	black twinberry	Shrub	FAC	4		100
Riparian Forest (RF)	<i>Sambucus racemosa</i>	red elderberry	Shrub	FACU	4		75
Riparian Forest (RF)	<i>Mahonia aquifolium</i>	Oregon grape	Shrub	FACU	4		100
Riparian Forest (RF)	<i>Symphoricarpos albus</i>	snowberry	Shrub	FACU	4		100
Shrub Total							375
Riparian Forest (RF)	<i>Alnus rubra</i>	red alder	Tree	FAC	6		50
Riparian Forest (RF)	<i>Fraxinus latifolia</i>	Oregon ash	Tree	FACW	6		50
Tree Total							100

Seeding rate: pure live seed (pls) pounds per acre
Tree spacing = sq footage x 0.01 (~436/acre); Shrub spacing = sq footage x 0.05 (~2178/acre); Groundcover = 100% areal cover.
Square footage is based on the total site or facility size.

NOTES:

- RESTORATION TO BE DONE BY OTHERS.