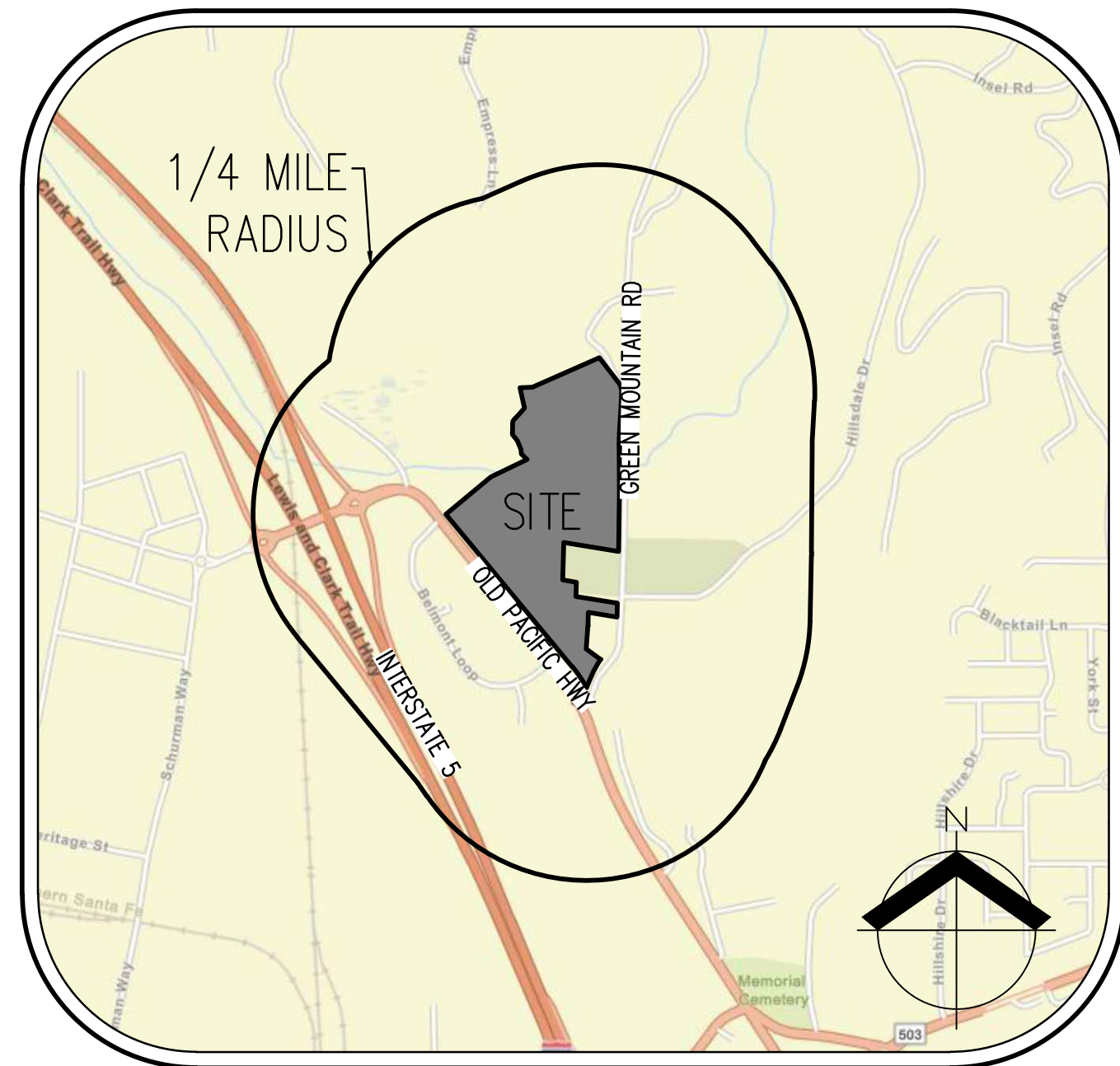
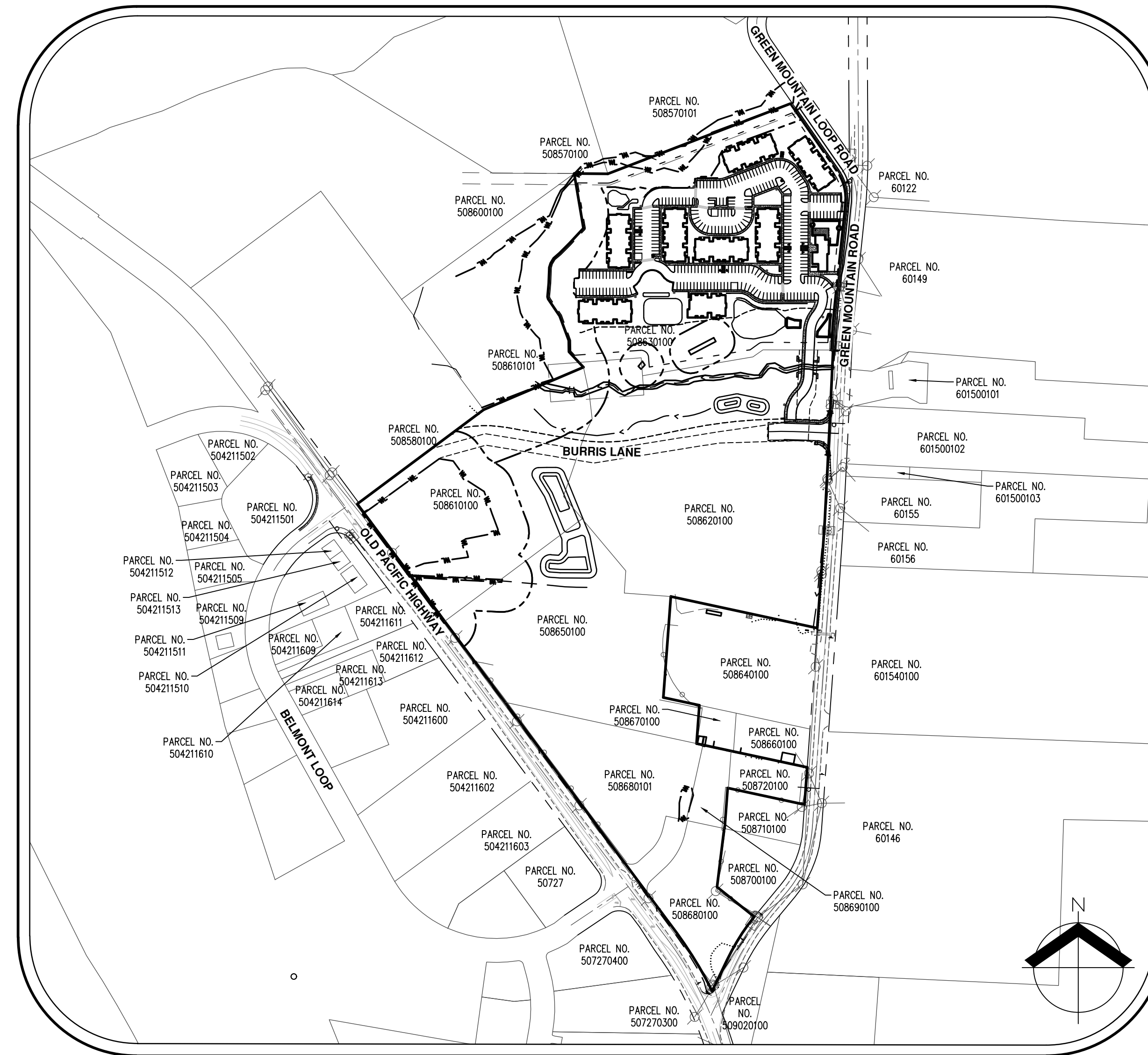


# OAK VILLAGE APARTMENTS

## EARLY GRADING PLANS



**VICINITY MAP**  
 N.T.S.



**SITE MAP**  
 N.T.S.

### APPLICANT/OWNER

41ST AVENUE LLC  
 CONTACT: PAT JEFFRIES  
 18518 NW 41ST AVENUE  
 RIDGEFIELD, WA 98645  
 PH: (360) 518-5363  
 E-MAIL: PJEFFRIES3@OUTLOOK.COM

### CONTACT

AKS ENGINEERING & FORESTRY, LLC.  
 CONTACT: BRYCE HANSON, PE  
 9600 NE 126TH AVENUE, SUITE 2520  
 VANCOUVER, WA 98682  
 PH: 360-487-6687  
 FAX: 360-882-0426  
 E-MAIL: BRYCEH@AKS-ENG.COM

### PROPERTY DESCRIPTION

LOCATED IN SECTION 12, TOWNSHIP 5 NORTH RANGE 1 WEST, WILLAMETTE MERIDIAN, COWLITZ COUNTY, WASHINGTON. PROPERTY SERIAL NO.'S 508630100, 508610100, 508620100, 508650100, 508680101, 508680100, 508690100, 508720100

### EXISTING LAND USE

VACANT; ZONED MDR AND C-2

### PROJECT PURPOSE

CONSTRUCT 8-BUILDING, 186-UNIT APARTMENT COMPLEX WITH ASSOCIATED SITE IMPROVEMENTS. CONSTRUCT NEW PUBLIC ROAD BURRIS LANE AND FRONTAGE IMPROVEMENTS ALONG GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD.

### SITE AREA

OVERALL SITE AREA: 34.68 AC (1,510,870 SF)  
 RESIDENTIAL SITE AREA: 9.75 AC (424,842 SF)

### VERTICAL DATUM

ELEVATIONS ARE BASED ON NGS (WSDOT) BENCHMARK NO. X-533, LOCATED JUST SOUTH OF THE DRIVEWAY AT 1500 ATLANTIC AVENUE. ELEVATION = 30.07 FEET (NAVD 88).

### LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
DECIDUOUS TREE			STORM DRAIN CLEAN OUT		
CONIFEROUS TREE			STORM DRAIN CATCH BASIN		
FIRE HYDRANT			STORM DRAIN AREA DRAIN		
WATER BLOWOFF			STORM DRAIN MANHOLE		
WATER METER			GAS METER		
WATER VALVE			GAS VALVE		
DOUBLE CHECK VALVE			GUY WIRE ANCHOR		
AIR RELEASE VALVE			UTILITY POLE		
SANITARY SEWER CLEAN OUT			POWER VAULT		
SANITARY SEWER MANHOLE			SANITARY JUNCTION BOX		
SIGN			POWER PEDESTAL		
STREET LIGHT			COMMUNICATIONS VAULT		
MAILBOX			COMMUNICATIONS JUNCTION BOX		
			COMMUNICATIONS RISER		
RIGHT-OF-WAY LINE					
BOUNDARY LINE					
PROPERTY LINE					
CENTERLINE					
DITCH					
CURB					
EDGE OF PAVEMENT					
EASEMENT					
FENCE LINE					
GRAVEL EDGE					
POWER LINE					
OVERHEAD WIRE					
COMMUNICATIONS LINE					
FIBER OPTIC LINE					
GAS LINE					
STORM DRAIN LINE					
SANITARY SEWER LINE					
WATER LINE					

## SHEET INDEX

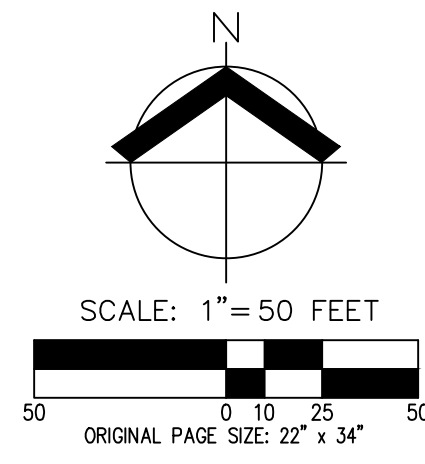
G1.0	COVER SHEET	G5.0	PROPOSED DEVELOPMENT PLAN
G2.0	EXISTING CONDITIONS	G5.1	PROPOSED DEVELOPMENT PLAN
G2.1	EXISTING CONDITIONS	G5.2	PROPOSED DEVELOPMENT PLAN
G2.2	EXISTING CONDITIONS	G5.3	PROPOSED DEVELOPMENT PLAN
G3.0	DEMOLITION, GRADING, & ESC PLAN	G5.4	PROPOSED DEVELOPMENT PLAN
G3.1	DEMOLITION, GRADING, & ESC PLAN	G6.0	STORMWATER PLAN
G3.2	DEMOLITION, GRADING, & ESC PLAN	G6.1	STORMWATER PLAN
G3.3	DEMOLITION, GRADING, & ESC PLAN	G6.2	STORMWATER PLAN
G3.4	GRADING & ESC NOTES & DETAILS	G6.3	STORMWATER PLAN
G3.5	ESC DETAILS	G7.0	SANITARY SEWER & WATER PLAN
G3.6	ESC DETAILS	G7.1	SANITARY SEWER & WATER PLAN
G4.0	TREE PRESERVATION & REMOVAL PLAN	G7.2	SANITARY SEWER & WATER PLAN
G4.1	TREE PROTECTION NOTES AND DETAILS		

\*SHEETS G5.0-G7.2 ARE INCLUDED FOR INFORMATION ONLY FROM THE LAND USE PLANS.

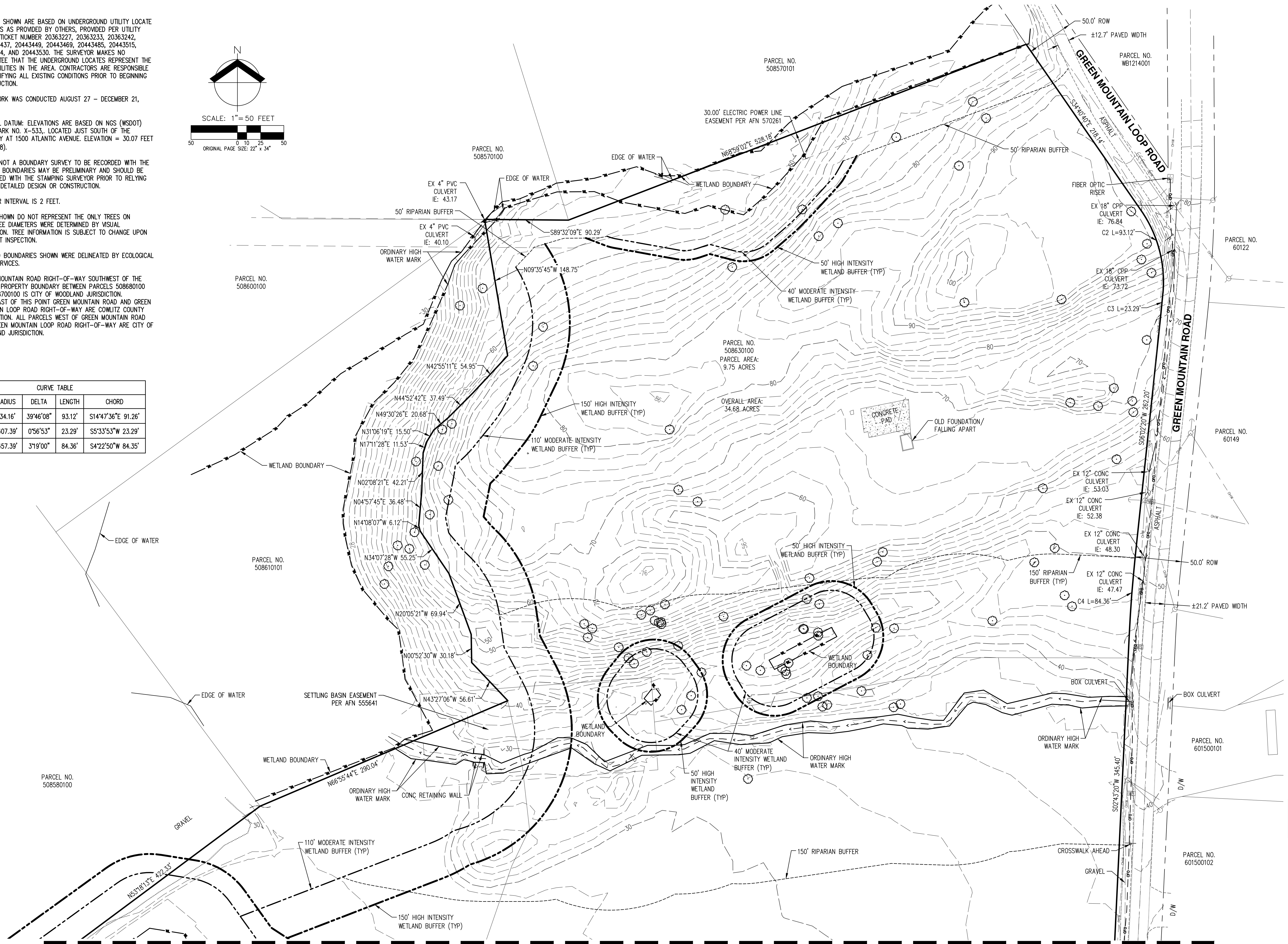
IF ANY CULTURAL RESOURCES AND/OR HUMAN REMAINS ARE DISCOVERED IN THE COURSE OF UNDERTAKING THE DEVELOPMENT ACTIVITY, THE OFFICE OF ARCHAEOLOGY AND HISTORIC PRESERVATION IN OLYMPIA AND CITY OF WOODLAND COMMUNITY DEVELOPMENT SHALL BE NOTIFIED. FAILURE TO COMPLY WITH THESE STATE REQUIREMENTS MAY CONSTITUTE A CLASS C FELONY, SUBJECT TO IMPRISONMENT AND/OR FINES.

**NOTES:**

- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 20363227, 20363233, 20363242, 2020443437, 20443449, 20443469, 20443485, 20443515, 20443524, AND 20443530. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
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- CONTOUR INTERVAL IS 2 FEET.
- TREES SHOWN DO NOT REPRESENT THE ONLY TREES ON SITE. TREE DIAMETERS WERE DETERMINED BY VISUAL INSPECTION. TREE INFORMATION IS SUBJECT TO CHANGE UPON ARBORIST INSPECTION.
- WETLAND BOUNDARIES SHOWN WERE DELINEATED BY ECOLOGICAL LAND SERVICES.
- GREEN MOUNTAIN ROAD RIGHT-OF-WAY SOUTHWEST OF THE SHARED PROPERTY BOUNDARY BETWEEN PARCELS 508680100 AND 508700100 IS CITY OF WOODLAND JURISDICTION. NORTHEAST OF THIS POINT GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE COMLITZ COUNTY JURISDICTION. ALL PARCELS WEST OF GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE CITY OF WOODLAND JURISDICTION.



CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C2	134.16'	39°46'08"	93.12'	S14°47'36"E 91.26'
C3	1407.39'	0°56'53"	23.29'	S5°33'53"W 23.29'
C4	1457.39'	3°19'00"	84.36'	S4°22'50"W 84.35'



AKS DRAWING FILE: 8344 G2 EXCOND.DWG | LAYOUT: G2.0

**SEE SHEET G2.1**

**AKS**  
 AKS ENGINEERING & FORESTRY, LLC  
 9600 NE 126TH AVE, STE 2520  
 VANCOUVER, WA 98682  
 360.882.0419  
 WWW.AKS-ENG.COM  
 ENGINEERING · SURVEYING · NATURAL RESOURCES  
 FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

**OAK VILLAGE APARTMENTS  
 EARLY GRADING  
 WOODLAND WASHINGTON**

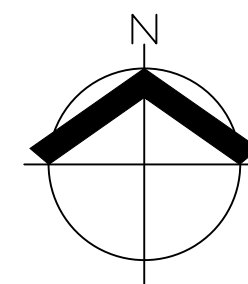
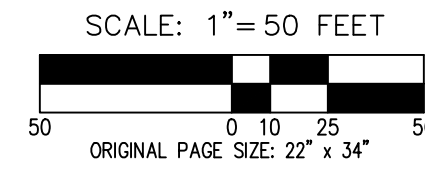
**EXISTING CONDITIONS**

DESIGNED BY: CJC  
 DRAWN BY: CJC  
 MANAGED BY: BDH  
 CHECKED BY: JOH  
 DATE: 2/9/2022

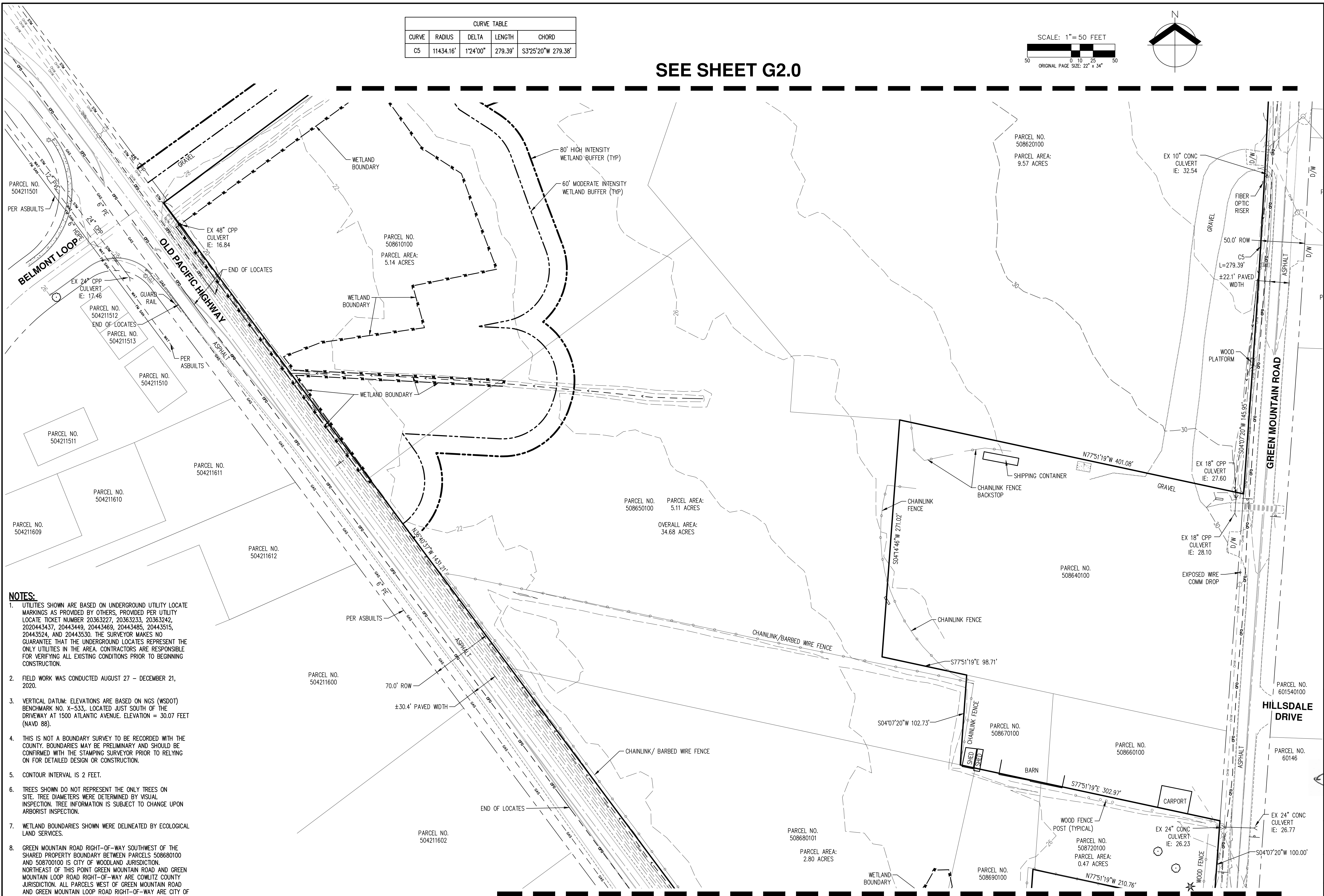
REVISIONS

JOB N  
**8344**  
 SHEET  
**G2.0**

CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C5	11434.16'	1°24'00"	279.39'	S3°25'20"W 279.38'



SEE SHEET G2.0



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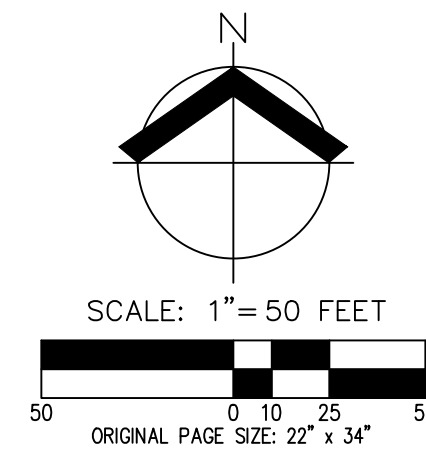
AKS DRAWING FILE: 8344 G2 EXCOND.DWG | LAYOUT: G2.1

DESIGNED BY: CJC  
 DRAWN BY: CJC  
 MANAGED BY: BDH  
 CHECKED BY: JOH  
 DATE: 2/9/2022

REVISIONS

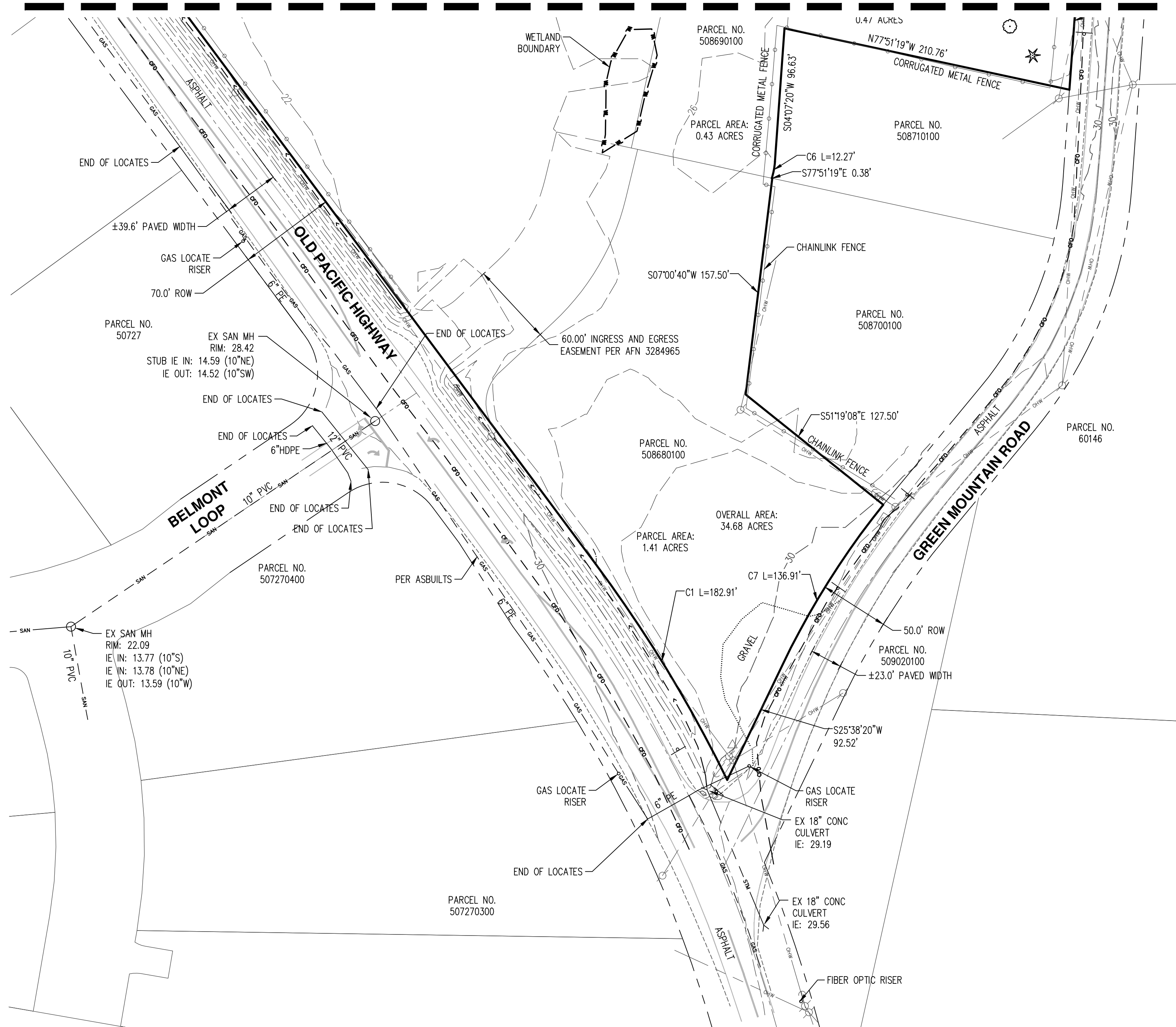
JOB N  
**8344**  
 SHEET  
**G2.1**

SEE SHEET G2.2



CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	984.93'	10°38'25"	182.91'	N31°21'24"W 182.65'
C6	52.78'	13°19'20"	12.27'	S10°47'00"W 12.24'
C7	597.96'	13°07'06"	136.91'	S32°11'53"W 136.61'

SEE SHEET G2.1



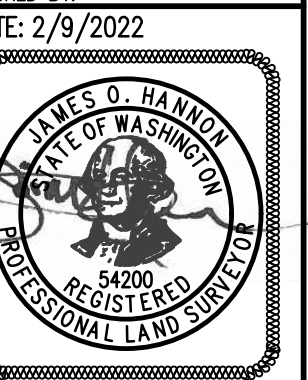
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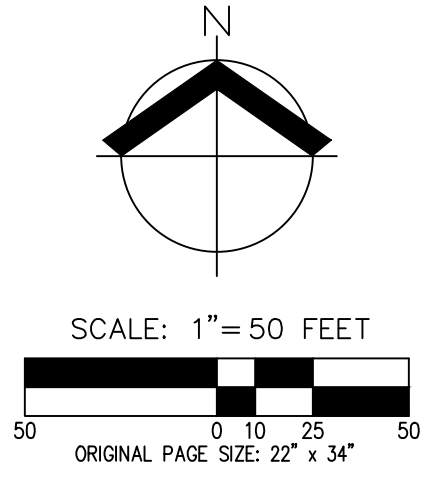
AKS DRAWING FILE: 8344 G2 EXCOND.DWG | LAYOUT: G2.2

**EXISTING CONDITIONS**

DESIGNED BY:  
 DRAWN BY: CJC  
 MANAGED BY: BDH  
 CHECKED BY: JOH



REVISIONS  
 JOB N  
**8344**  
 SHEET  
**G2.2**



**NOTE: PERMIT APPROVAL IS FOR GRADING ONLY.  
 NO PERMANENT UTILITY INSTALLATION IS ALLOWED.**

**DEMOLITION KEYED NOTES**

1. REMOVE EXISTING CONCRETE PAD AND FOUNDATION.
2. REMOVE EXISTING CONCRETE RETAINING WALLS. COORDINATE WITH MITIGATION PLAN PREPARED BY ELS (JUNE 2021).

**GRADING QUANTITIES**

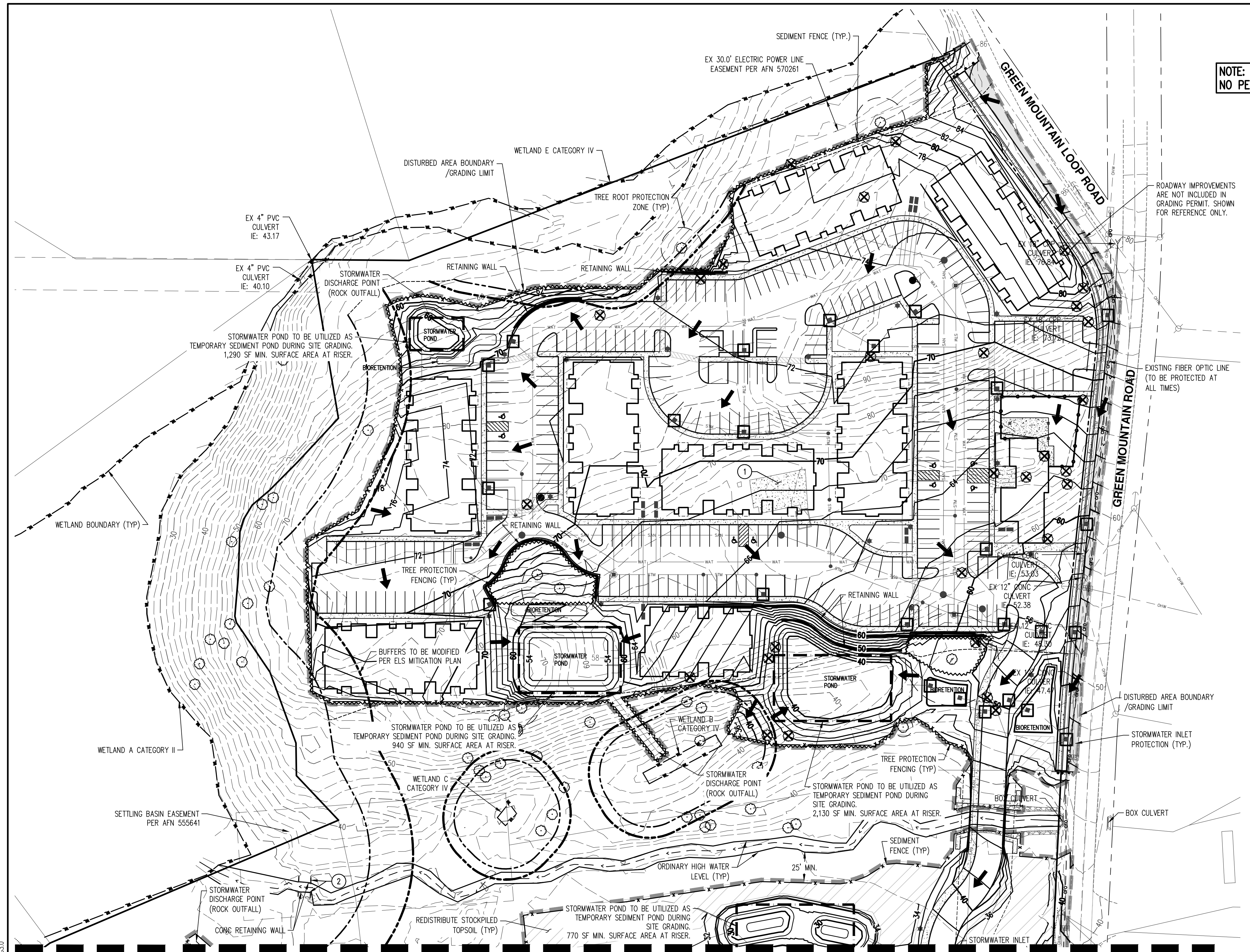
CUT: 71,800 C.Y.  
 FILL: 110,200 C.Y.  
 STRIPPINGS (CUT): 38,200 C.Y.

NOTE: CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES FOR BID PURPOSES.

DISTURBED AREA: ±18.0 AC

**LEGEND**

EXISTING GROUND CONTOUR (2 FT)	- - - - -102
EXISTING GROUND CONTOUR (10 FT)	- - - - -110
FINISHED GRADE CONTOUR (2 FT)	— — — — —102
FINISHED GRADE CONTOUR (10 FT)	— — — — —110
EXISTING OREGON WHITE OAK TO REMAIN	○
EXISTING OREGON WHITE OAK TO BE REMOVED	⊗
TREE ROOT PROTECTION ZONE (1 FOOT RADIUS PER INCH DBH)	○ (with dashed circle)
TREE PROTECTION/CONSTRUCTION FENCE	~ ~ ~ ~ ~
SEDIMENT FENCE (DETAIL E-20, G3.5)	- x - x -
GRAVEL CONSTRUCTION ENTRANCE (DETAIL E-05, G3.5)	▨
CATCH BASIN / INLET PROTECTION (DETAILS E-16, E-17, G3.5) (FOR FUTURE STRUCTURES; SHOWN FOR REFERENCE ONLY)	□
CONCRETE WASHOUT (FOR FUTURE CONCRETE WORK; SHOWN FOR REFERENCE ONLY)	⊠
GRADING/DISTURBED LIMIT	- - - - -
TEMPORARY STOCKPILE AREA (COVER PER DETAIL E-08, G3.5)	▬ ▬ ▬ ▬ ▬
STAGING/FUELING AREA	▬ ▬ ▬ ▬ ▬
TEMPORARY SEDIMENT TRAP/POND (DETAILS E-22, E-23, G3.6)	▬ ▬ ▬ ▬ ▬
FLOW ARROW	➔



SEE SHEET G3.2

SEE SHEET G3.1

**GENERAL NOTES:**

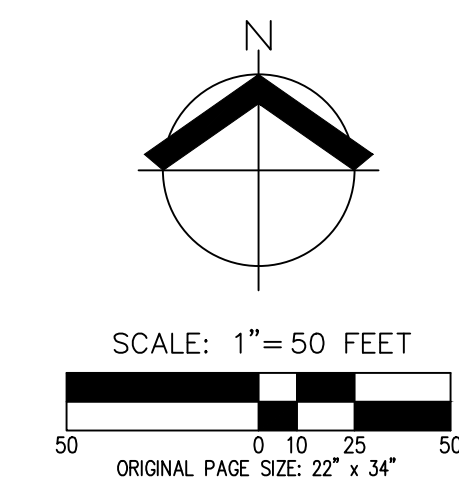
1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO AND DURING GRADING PER CITY OF WOODLAND MUNICIPAL CODE CHAPTER 15.10. TEMPORARY SEDIMENT TRAPS, SEDIMENT PONDS, AND DIVERSION DITCHES SHALL ALSO REMAIN IN PLACE AND BE MAINTAINED UNTIL PERMANENT STORMWATER CONTROLS ARE INSTALLED.
2. PROPOSED STORMWATER PONDS TO BE UTILIZED AS TEMPORARY SEDIMENT PONDS DURING SITE GRADING. ALL SEDIMENT TO BE REMOVED PRIOR TO FINAL STABILIZATION AND PLANTING.
3. REFERENCE THE MITIGATION PLAN (JUNE 2021), SUPPLEMENTAL MEMO (DEC. 10, 2021), AND CRITICAL AREAS REPORT (FEB. 8, 2022) BY ELS FOR ALL DISTURBANCES IN AND ADJACENT TO THE WETLANDS, STREAMS, AND OREGON WHITE OAKS.
4. A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PLAN ON SHEET G4.0.
5. TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON SHEET G4.1.
6. TREE PROTECTION FENCING SHALL BE FLUSH WITH THE INITIAL UNDISTURBED GRADE.
7. NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL, WASTE ITEMS OR PARKED VEHICLES OR EQUIPMENT.
8. NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITIES SHALL OCCUR WITHIN THE TREE PROTECTION ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON-SITE AND APPROVED BY THE CITY.
9. NOT ALL ON-SITE TREES WERE SURVEYED. ONLY TREES ADJACENT TO THE PROPOSED DEVELOPMENT ACTIVITIES WERE INSPECTED AND INCLUDED WITHIN THE TREE SURVEY.
10. FOLLOWING CLEARING AND GRADING ACTIVITIES, A CERTIFIED ARBORIST SHALL INSPECT RETAINED TREES FOR POTENTIALLY HAZARDOUS TREE CONDITIONS. COORDINATION WITH THE CITY SHALL OCCUR PRIOR TO ANY ADDITIONAL TREE REMOVALS FOR HAZARD ABATEMENT.
11. EXISTING ITEMS AND ELEVATIONS INCLUDING CONTOUR INFORMATION HAVE BEEN SURVEYED BY OR UNDER THE SUPERVISION OF A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF WASHINGTON AND ACCURATELY REFLECT THE SITE CONDITIONS.

CUT AND FILL QUANTITIES SHOWN ARE BASED OFF OF GENERAL SITE GRADING ESTABLISHED FROM THE FINISHED STRIPPING GRADE TO THE FINISHED PROPOSED SUBGRADE. THESE VOLUMES ALSO INCLUDE APPROXIMATE OVER EXCAVATION FOR ROADWAY SUBGRADE. THESE VOLUMES DO NOT TAKE INTO ACCOUNT ANY UNKNOWN UNSUITABLE SOIL DEPOSITS OR OVER EXCAVATION OF NON-ORGANIC MATERIALS FOUND ONSITE, NOR WET WEATHER CONDITIONS AND MEASURES SHOULD THIS APPLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PRODUCE THEIR OWN INDEPENDENT GRADING VOLUMES AS WELL AS ACCOUNT FOR ANY OBSERVATIONS OR MEASURES DIRECTED WITHIN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER ONSITE THROUGHOUT CONSTRUCTION.



Know what's below.  
 Call before you dig.

SEE SHEET G3.0



DESIGNED BY: T.J.W.  
DRAWN BY: T.J.W.  
MANAGED BY: B.D.H.  
CHECKED BY: B.D.H.  
DATE: 2/9/2022



REVISIONS  
JOB NUMBER  
8344  
SHEET  
G3.1

GENERAL NOTES:

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO AND DURING GRADING PER CITY OF WOODLAND MUNICIPAL CODE CHAPTER 15.10. TEMPORARY SEDIMENT TRAPS, SEDIMENT PONDS, AND DIVERSION DITCHES SHALL ALSO REMAIN IN PLACE AND BE MAINTAINED UNTIL PERMANENT STORMWATER CONTROLS ARE INSTALLED.
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DEMOLITION KEYED NOTES

1. REMOVE EXISTING GRAVEL AREA WITHIN DISTURBED LIMITS (TYP).
2. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT WITHIN DISTURBED LIMITS.
3. REMOVE EXISTING FENCE WITHIN DISTURBED LIMITS.

GRADING QUANTITIES

CUT: 71,800 C.Y.  
FILL: 110,200 C.Y.

STRIPPINGS (CUT): 38,200 C.Y.

NOTE: CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES FOR BID PURPOSES.

DISTURBED AREA: ±18.0 AC

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HILLSDALE DRIVE

GREEN MOUNTAIN ROAD

BURRIS LANE ALIGNMENT REMOVED PER CONDITION #5 OF THE LAND USE DECISION (NOV. 3, 2021). ALTERNATIVE ALIGNMENT TO BE DETERMINED WITH FINAL ENGINEERING OF COMMERCIAL SITE.

SEE SHEET G3.2

SEE SHEET G3.3

AKS DRAWING FILE: 8344\_G3\_DEMO-GRAD-ESCDWG | LAYOUT: G3.1



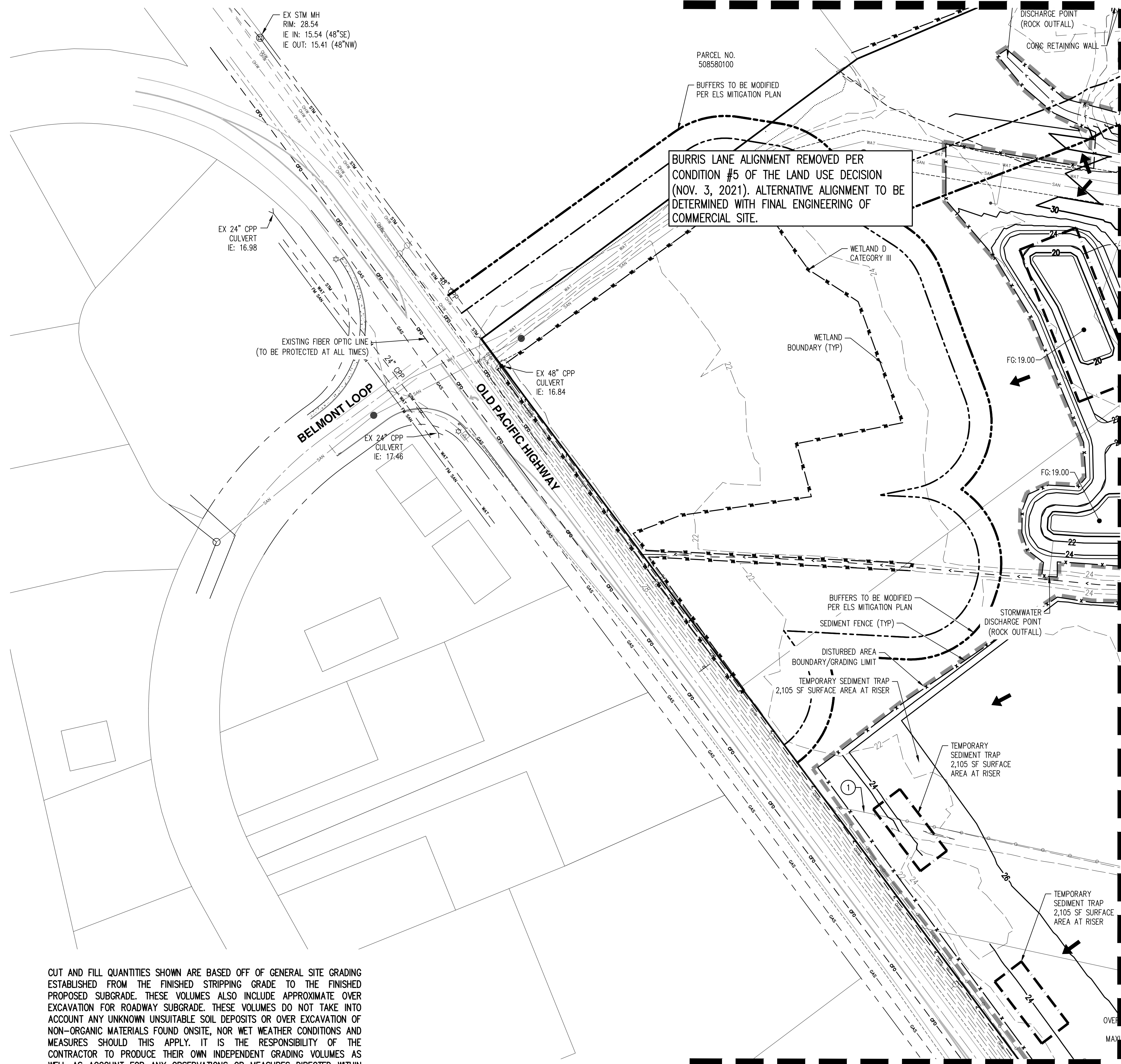
Know what's below.  
Call before you dig.

LEGEND

EXISTING GROUND CONTOUR (2 FT)	- - - - -102-
EXISTING GROUND CONTOUR (10 FT)	- - - - -110-
FINISHED GRADE CONTOUR (2 FT)	- - - - -102-
FINISHED GRADE CONTOUR (10 FT)	- - - - -110-
OREGON WHITE OAK	○
EXISTING OREGON WHITE OAK TO REMAIN	○
EXISTING OREGON WHITE OAK TO BE REMOVED	⊗
TREE ROOT PROTECTION ZONE (1 FOOT RADIUS PER INCH DBH)	○
TREE PROTECTION/CONSTRUCTION FENCE	~ ~ ~ ~ ~
SEDIMENT FENCE (DETAIL E-20, G3.5)	- x - x -
GRAVEL CONSTRUCTION ENTRANCE (DETAIL E-05, G3.5)	▨
CATCH BASIN / INLET PROTECTION (DETAILS E-16, E-17, G3.5) (FOR FUTURE STRUCTURES; SHOWN FOR REFERENCE ONLY)	□
CONCRETE WASHOUT (FOR FUTURE CONCRETE WORK; SHOWN FOR REFERENCE ONLY)	⊗
GRADING/DISTURBED LIMIT	- - - - -
TEMPORARY STOCKPILE AREA (COVER PER DETAIL E-08, G3.5)	▬ ▬ ▬
STAGING/FUELING AREA	▬ ▬ ▬
TEMPORARY SEDIMENT TRAP/POND (DETAILS E-22, E-23, G3.6)	▬ ▬ ▬
FLOW ARROW	➔

NOTE: PERMIT APPROVAL IS FOR GRADING ONLY. NO PERMANENT UTILITY INSTALLATION IS ALLOWED.

SEE SHEET G3.0



BURRIS LANE ALIGNMENT REMOVED PER CONDITION #5 OF THE LAND USE DECISION (NOV. 3, 2021). ALTERNATIVE ALIGNMENT TO BE DETERMINED WITH FINAL ENGINEERING OF COMMERCIAL SITE.

SEE SHEET G3.1

SEE SHEET G3.3

**GENERAL NOTES:**

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO AND DURING GRADING PER CITY OF WOODLAND MUNICIPAL CODE CHAPTER 15.10. TEMPORARY SEDIMENT TRAPS, SEDIMENT PONDS, AND DIVERSION DITCHES SHALL ALSO REMAIN IN PLACE AND BE MAINTAINED UNTIL PERMANENT STORMWATER CONTROLS ARE INSTALLED.
2. PROPOSED STORMWATER PONDS TO BE UTILIZED AS TEMPORARY SEDIMENT PONDS DURING SITE GRADING. ALL SEDIMENT TO BE REMOVED PRIOR TO FINAL STABILIZATION AND PLANTING.
3. REFERENCE THE MITIGATION PLAN (JUNE 2021), SUPPLEMENTAL MEMO (DEC. 10, 2021), AND CRITICAL AREAS REPORT (FEB. 8, 2022) BY ELS FOR ALL DISTURBANCES IN AND ADJACENT TO THE WETLANDS, STREAMS, AND OREGON WHITE OAKS.
4. A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PLAN ON SHEET G4.0.
5. TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON SHEET G4.1.
6. TREE PROTECTION FENCING SHALL BE FLUSH WITH THE INITIAL UNDISTURBED GRADE.
7. NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL, WASTE ITEMS OR PARKED VEHICLES OR EQUIPMENT.
8. NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITIES SHALL OCCUR WITHIN THE TREE PROTECTION ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON-SITE AND APPROVED BY THE CITY.
9. NOT ALL ON-SITE TREES WERE SURVEYED. ONLY TREES ADJACENT TO THE PROPOSED DEVELOPMENT ACTIVITIES WERE INSPECTED AND INCLUDED WITHIN THE TREE SURVEY.
10. FOLLOWING CLEARING AND GRADING ACTIVITIES, A CERTIFIED ARBORIST SHALL INSPECT RETAINED TREES FOR POTENTIALLY HAZARDOUS TREE CONDITIONS. COORDINATION WITH THE CITY SHALL OCCUR PRIOR TO ANY ADDITIONAL TREE REMOVALS FOR HAZARD ABATEMENT.
11. EXISTING ITEMS AND ELEVATIONS INCLUDING CONTOUR INFORMATION HAVE BEEN SURVEYED BY OR UNDER THE SUPERVISION OF A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF WASHINGTON AND ACCURATELY REFLECT THE SITE CONDITIONS.

**DEMOLITION KEYED NOTES**

1. REMOVE EXISTING FENCE WITHIN DISTURBED LIMITS.

**GRADING QUANTITIES**

CUT: 71,800 C.Y.  
 FILL: 110,200 C.Y.

STRIPPINGS (CUT): 38,200 C.Y.

NOTE: CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES FOR BID PURPOSES.

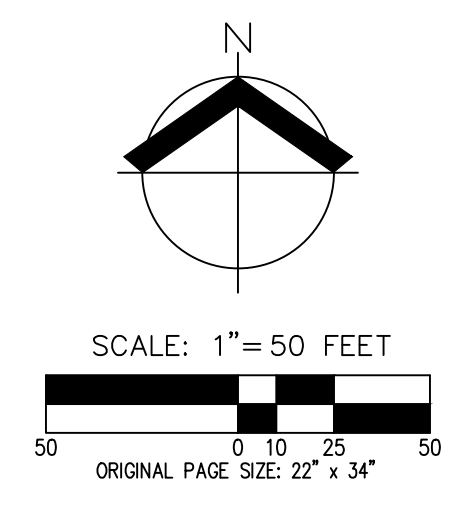
DISTURBED AREA: ±18.0 AC

**LEGEND**

EXISTING GROUND CONTOUR (2 FT)	-102-
EXISTING GROUND CONTOUR (10 FT)	-110-
FINISHED GRADE CONTOUR (2 FT)	-102
FINISHED GRADE CONTOUR (10 FT)	-110
OREGON WHITE OAK	(Symbol)
EXISTING OREGON WHITE OAK TO REMAIN	(Symbol)
EXISTING OREGON WHITE OAK TO BE REMOVED	(Symbol)
TREE ROOT PROTECTION ZONE (1 FOOT RADIUS PER INCH DBH)	(Symbol)
TREE PROTECTION/CONSTRUCTION FENCE	(Symbol)
SEDIMENT FENCE (DETAIL E-20, G3.5)	(Symbol)
GRAVEL CONSTRUCTION ENTRANCE (DETAIL E-05, G3.5)	(Symbol)
CATCH BASIN / INLET PROTECTION (DETAILS E-16, E-17, G3.5) (FOR FUTURE STRUCTURES; SHOWN FOR REFERENCE ONLY)	(Symbol)
CONCRETE WASHOUT (FOR FUTURE CONCRETE WORK; SHOWN FOR REFERENCE ONLY)	(Symbol)
GRADING/DISTURBED LIMIT	(Symbol)
TEMPORARY STOCKPILE AREA (COVER PER DETAIL E-08, G3.5)	(Symbol)
STAGING/FUELING AREA	(Symbol)
TEMPORARY SEDIMENT TRAP/POND (DETAILS E-22, E-23, G3.6)	(Symbol)
FLOW ARROW	(Symbol)

CUT AND FILL QUANTITIES SHOWN ARE BASED OFF OF GENERAL SITE GRADING ESTABLISHED FROM THE FINISHED STRIPPING GRADE TO THE FINISHED PROPOSED SUBGRADE. THESE VOLUMES ALSO INCLUDE APPROXIMATE OVER EXCAVATION FOR ROADWAY SUBGRADE. THESE VOLUMES DO NOT TAKE INTO ACCOUNT ANY UNKNOWN UNSUITABLE SOIL DEPOSITS OR OVER EXCAVATION OF NON-ORGANIC MATERIALS FOUND ONSITE, NOR WET WEATHER CONDITIONS AND MEASURES SHOULD THIS APPLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PRODUCE THEIR OWN INDEPENDENT GRADING VOLUMES AS WELL AS ACCOUNT FOR ANY OBSERVATIONS OR MEASURES DIRECTED WITHIN THE GEOTECHNICAL REPORT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER ONSITE THROUGHOUT CONSTRUCTION.

NOTE: PERMIT APPROVAL IS FOR GRADING ONLY. NO PERMANENT UTILITY INSTALLATION IS ALLOWED.



AKS DRAWING FILE: 8344\_G3\_DEMO-GRAD-ESC.DWG | LAYOUT: G3.2

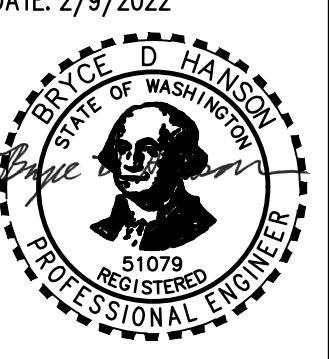
**AKS**  
 AKS ENGINEERING & FORESTRY, LLC  
 9600 NE 126TH AVE, STE 2520  
 VANCOUVER, WA 98682  
 360.882.0419  
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ENGINEERING - SURVEYING - NATURAL RESOURCES  
 FORESTRY - PLANNING - LANDSCAPE ARCHITECTURE

OAK VILLAGE APARTMENTS  
 EARLY GRADING  
 WOODLAND WASHINGTON  
 ST2, T5N, R1W, W.M.

DEMOLITION, GRADING, &  
 ESC PLAN

DESIGNED BY: TJW  
 DRAWN BY: TJW  
 MANAGED BY: BDH  
 CHECKED BY: BDH

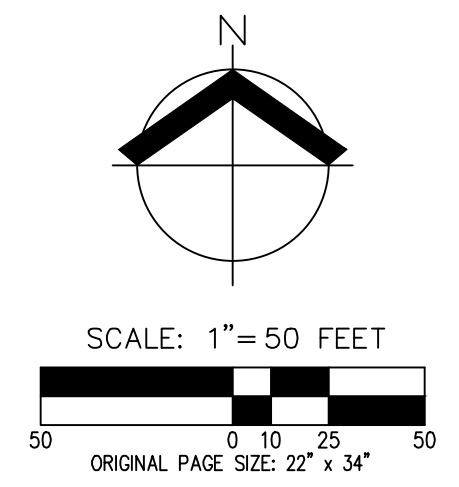


REVISIONS

JOB NUMBER  
 8344

SHEET  
 G3.2

SEE SHEET G3.1



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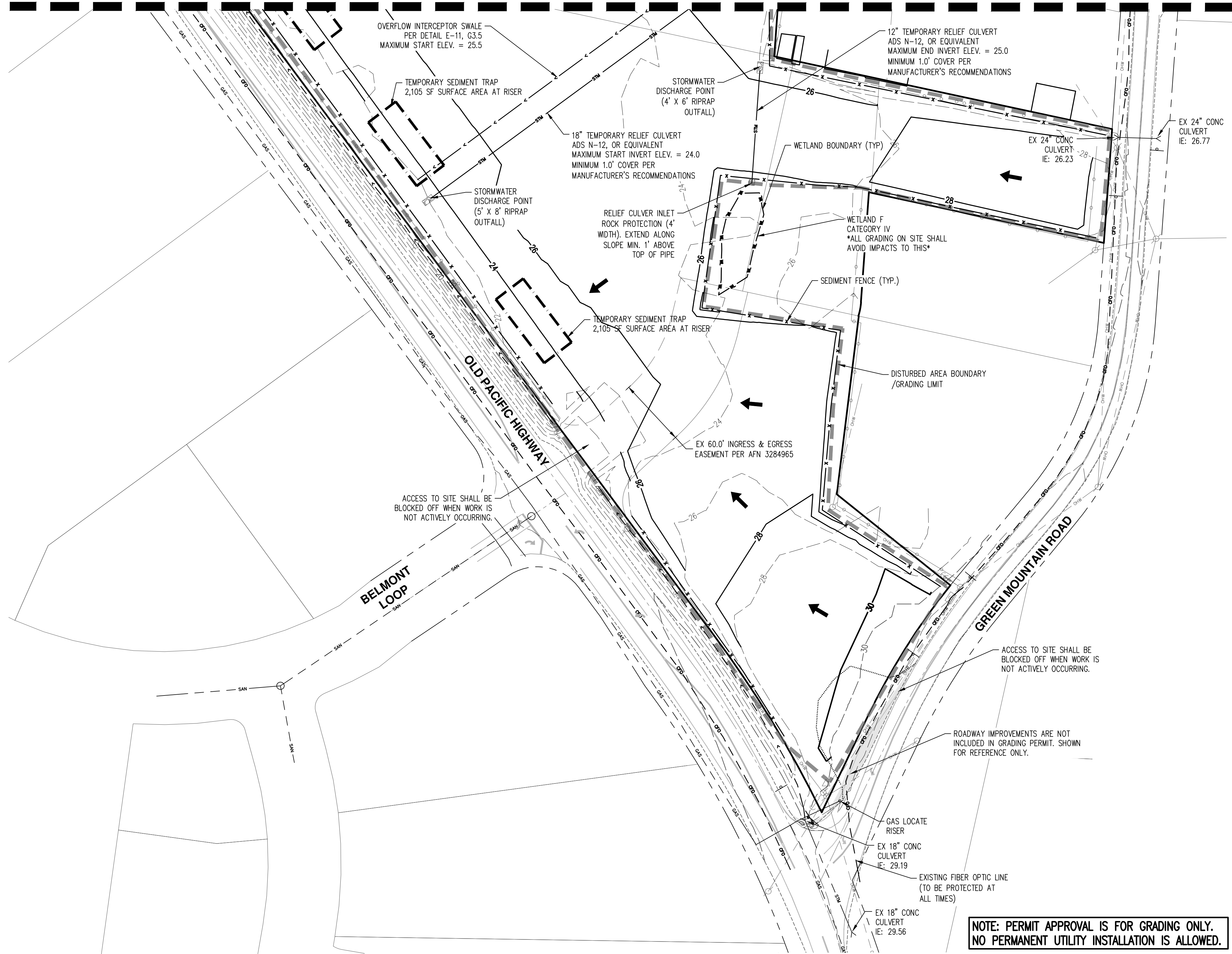
**OAK VILLAGE APARTMENTS  
 EARLY GRADING  
 WOODLAND WASHINGTON**  
 512, 15N, R1W, W.M.

**DEMOLITION, GRADING, &  
 ESC PLAN**

DESIGNED BY: T.J.W.  
 DRAWN BY: T.J.W.  
 MANAGED BY: BDH  
 CHECKED BY: BDH  
 DATE: 2/9/2022



REVISIONS  
 JOB NUMBER  
**8344**  
 SHEET  
**G3.3**



**GRADING QUANTITIES**

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 FILL: 110,200 C.Y.  
 STRIPPINGS (CUT): 38,200 C.Y.  
 NOTE: CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES FOR BID PURPOSES.  
 DISTURBED AREA: ±18.0 AC



**LEGEND**

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FINISHED GRADE CONTOUR (2 FT)	—102—
FINISHED GRADE CONTOUR (10 FT)	—110—
	<b>OREGON WHITE OAK</b>
EXISTING OREGON WHITE OAK TO REMAIN	⊙
EXISTING OREGON WHITE OAK TO BE REMOVED	⊗
TREE ROOT PROTECTION ZONE (1 FOOT RADIUS PER INCH DBH)	⊙
TREE PROTECTION/CONSTRUCTION FENCE	⋈
SEDIMENT FENCE (DETAIL E-20, G3.5)	—x—x—
GRAVEL CONSTRUCTION ENTRANCE (DETAIL E-05, G3.5)	⊠
CATCH BASIN / INLET PROTECTION (DETAILS E-16, E-17, G3.5) (FOR FUTURE STRUCTURES; SHOWN FOR REFERENCE ONLY)	□
CONCRETE WASHOUT (FOR FUTURE CONCRETE WORK; SHOWN FOR REFERENCE ONLY)	⊠
GRADING/DISTURBED LIMIT	— · — · — · — · —
TEMPORARY STOCKPILE AREA (COVER PER DETAIL E-08, G3.5)	— — — — —
STAGING/FUELING AREA	— — — — —
TEMPORARY SEDIMENT TRAP/POND (DETAILS E-22, E-23, G3.6)	— · — · — · — · —
FLOW ARROW	➔

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AKS DRAWING FILE: 8344\_G3\_DEMO-GRAD-ESCDWG | LAYOUT: G3.3



### STANDARD GRADING NOTES

- IF EARLY GRADING ACTIVITY IS APPROVED, IT IS TO BE PERFORMED AT APPLICANT'S RISK.
- FILL/GRADING SHALL BE PERFORMED IN COMPLIANCE WITH APPENDIX J CHAPTER 33 OF THE UNIFORM BUILDING CODE (UBC).
- ALL SUBGRADE UNDER PAVED SURFACES, CURBS, BUILDINGS, FOOTINGS, SLABS AND CONCRETE WALKS SHALL BE COMPACTED TO 95% OF MAXIMUM RELATIVE DENSITY (T-99) OR AS SPECIFIED BY THE PROJECT GEOTECHNICAL ENGINEER. WHERE FILLING IS REQUIRED, THE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS WITH EACH LIFT BEING COMPACTED TO 95% OF MAXIMUM RELATIVE DENSITY OF THE FILL MATERIAL BEFORE THE NEXT LIFT OR FINISHED SURFACE IS PLACED. WHERE FILLING IS REQUIRED OUTSIDE THE ABOVE-MENTIONED STRUCTURAL AREAS, COMPACTION REQUIREMENTS SHALL BE 90% OF MAXIMUM RELATIVE DENSITY. PROJECT GEOTECHNICAL ENGINEER SHALL SUBMIT COMPACTION TEST RESULTS TO CITY INSPECTOR FOR PROPER CERTIFICATION OF FILL PLACEMENT.
- UNDER WET WEATHER CONDITIONS (OCT - APR) SUBGRADE THAT CAN NOT MEET COMPACTION MAY REQUIRE ADDITIONAL TESTING TO DETERMINE THE DEPTH OF OVER EXCAVATION, ADDITIONAL AGGREGATE AND GEOTEXTILE TO BE INSTALLED. UPON INSPECTION OF THE SUBGRADE, THE CITY INSPECTOR MAY REQUEST A GEOTECHNICAL ENGINEER TO SUBMIT AN ALTERNATE WET WEATHER STREET SECTION FOR REVIEW AND APPROVAL BY ENGINEERING SERVICES.
- SITE PREPARATION MUST INCLUDE THE REMOVAL OF VEGETATION, NON-COMPLYING FILL, TOPSOIL, OR OTHER UNSUITABLE MATERIAL PRIOR TO PLACEMENT OF THE FILL. FILL SLOPES SHALL NOT EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL.
- NO CUT OR FILL SHALL EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS APPROVED BEFOREHAND BY THE GEOTECHNICAL ENGINEER, PROJECT ENGINEER, AND CITY OF WOODLAND.
- APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. BENCHING MUST BE DONE AS PER THE APPROVED PLANS.
- CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.
- THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER AND THE PROJECT'S GEOTECHNICAL ENGINEER FOR REQUIRED INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION (ADDITIONAL INSPECTIONS MAY BE REQUIRED):
  - INSPECTION OF SITE STRIPPING, BUT PRIOR TO FILL PLACEMENT. EROSION CONTROL MEASURES SHALL BE IN PLACE AT THIS TIME.
  - IN PREPARATION OF BENCH CONSTRUCTION PRIOR TO FILL PLACEMENT.
  - AFTER PLACEMENT OF EACH 500 YARDS OF FILL.
  - AFTER THE MAJORITY OF FILL HAS BEEN PLACED AND IS IN "ROUGH" GRADE BUT PRIOR TO FINAL GRADING.
  - WHEN FINAL GRADING IS COMPLETED.
  - DURING FINAL GRADING, BUT PRIOR TO BASE ROCK AND PAVEMENT CONSTRUCTION.
- PROJECT GRADING LIMITS SHALL BE WITHIN THE PROJECT'S PROPERTY BOUNDARY AND/OR STREET RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON PLANS. NO GRADING SHALL BE CONDUCTED IN WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS UNLESS SPECIFICALLY SHOWN ON THE APPROVED PLANS. THE GRADING LIMITS SHALL BE FENCED WITH STANDARD SILT FENCING.
- IDENTIFICATION OR REMOVAL OF UNSUITABLE MATERIAL (BELOW SPECIFIED STRIPPING DEPTH) SHALL BE DONE IN CONSULTATION WITH PROJECT ENGINEER AND PROJECT'S GEOTECHNICAL ENGINEER.
- REMOVE AND DISPOSE OF ALL ORGANIC AND/OR UNSUITABLE MATERIALS, INCLUDING TREES, STUMPS, ROOTS, BRUSH, AND GRASS IN SUCH A MANNER TO MEET ALL APPLICABLE REGULATIONS. ON-SITE DISPOSAL SHALL BE AS DETERMINED BY THE PROJECT ENGINEER OR PROJECT'S GEOTECHNICAL ENGINEER.
- THE CONTRACTOR SHALL PROTECT ALL TREES THAT ARE NOT SPECIFICALLY SHOWN TO BE REMOVED ON APPROVED PLANS. ALL TREES TO BE PRESERVED SHALL BE FENCED WITH STANDARD 4' ORANGE CONSTRUCTION FENCING.
- GRADE THE SITE TO THE ELEVATIONS SHOWN ON THE DRAWING WITH THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE FINISHED GRADES AS SPECIFIED. SHAPE FUTURE PAVED AREAS PER THE PLANS TO A SUBGRADE ELEVATION THAT WILL ACCOMMODATE FUTURE BASE ROCK AND PAVING.
- STRAIGHT GRADES SHALL BE RUN BETWEEN FINISH GRADE AND/OR FINISH CONTOUR LINES SHOWN, UNLESS OTHERWISE NOTED. FINISH GRADES ARE TO DRAIN AS INDICATED ON THE PLANS. ROUGH GRADING SHALL BE FINISHED BY BLADING AND RAKING TO REASONABLE SMOOTH CONTOURS WITH GENTLE TRANSITIONS.
- AREAS TO RECEIVE FILL MATERIALS SHALL BE PREPARED BY REMOVING ALL ORGANIC AND UNSUITABLE MATERIALS AND PROOF ROLLING. BENCHING IS REQUIRED ON FILLS WHERE THE EXISTING GROUND SLOPE EXCEEDS 5H:1V. BENCHING TO BE IN ACCORDANCE WITH PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. MATERIAL IN SOFT SPOTS WITHIN PROPOSED BUILDING, PAVED, OR SIDEWALK AREAS SHALL BE REMOVED TO THE DEPTH REQUIRED (AS DIRECTED BY THE PROJECT ENGINEER OR THE PROJECT'S GEOTECHNICAL ENGINEER) TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH SUITABLE BACKFILL. FILLS TO BE CONSTRUCTED IN HORIZONTAL LIFTS NOT TO EXCEED 8 INCHES LOOSE MEASURE.
- FINISHED GRADE CONTOURS SHOWN REPRESENT FINAL FINISHED GRADE ELEVATIONS.
- ALL CUT AND FILL AREAS SHALL BE STRIPPED OF SOD AND OTHER NON-STRUCTURAL MATERIAL (DEPTH TO BE DETERMINED BY PROJECT'S GEOTECHNICAL ENGINEER).
- STRIPPING MATERIAL SHALL BE DISPOSED OF OFF-SITE OR STOCKPILED IN A SINGLE LOCATION AND COVERED PER CITY OF WOODLAND DETAIL E-08. STOCKPILED STRIPPINGS SHALL BE FREE OF VEGETATION AND TREE ROOTS.
- STRIPPINGS SHALL BE STOCKPILED AND LATER SPREAD EVENLY OVER SURFACES NOT RECEIVING A HARD, DURABLE SURFACE (PAVEMENT, ETC.) UPON COMPLETION OF FINAL GRADING. THE STRIPPING REDISTRIBUTION SHALL NOT EXCEED 12" IN DEPTH. STRIPPINGS SHALL BE FREE OF VEGETATION AND TREE ROOTS. EXCESS STRIPPINGS SHALL BE DISPOSED OF OFF-SITE. STRIPPINGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 25%.
- UPON COMPLETION OF SITE GRADING, STRIPPINGS SHALL BE DISPOSED OF OFF-SITE OR IN NON-STRUCTURAL AREAS WITH PROJECT ENGINEER'S PERMISSION.
- THESE PLANS AND SPECIFICATIONS ASSUME "DRY WEATHER" CONSTRUCTION. ADDITIONAL MEASURES MAY BE REQUIRED FOR "WET WEATHER" CONSTRUCTION.
- ALL TRENCH SPOILS SHALL BE UTILIZED ON-SITE AS STRUCTURAL FILL, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER AND OWNER.
- PER INTERNATIONAL BUILDING CODE (IBC) APPENDIX J, THERE SHALL BE NO CUT OR FILL SLOPES WITHIN 2' OF ADJACENT PARCELS UNLESS A CONSTRUCTION EASEMENT IS OBTAINED.

### RECOMMENDED CONSTRUCTION SEQUENCE FOR EROSION CONTROL

- PRE-CONSTRUCTION MEETING.
- FLAG OR FENCE CLEARING LIMITS.
- POST NOTICE OF CONSTRUCTION ACTIVITY SIGN WITH NAME AND PHONE NUMBER OF EROSION SEDIMENT CONTROL SUPERVISOR.
- INSTALL CATCH BASIN PROTECTION, IF REQUIRED.
- GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
- INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
- CONSTRUCT SEDIMENT PONDS AND TRAPS.
- GRADE AND STABILIZE CONSTRUCTION ROADS.
- CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE CITY OF WOODLAND 2015 ENGINEERING STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE SURFACE WATER CONTROLS AND EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE CITY OF WOODLAND 2015 ENGINEERING STANDARDS.
- COVER OR STABILIZE ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
- SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BEST MANAGEMENT PRACTICES REMOVED IF APPROPRIATE.

### DEPARTMENT OF ECOLOGY STANDARD NOTES FOR EROSION CONTROL PLAN

- 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.).
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE 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.
- 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.
- 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 INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- 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.
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A MAJOR STORM EVENT.
- AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED 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.
- ONE STABILIZED CONSTRUCTION ENTRANCE 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 CLEAN FOR THE DURATION OF THE PROJECT.

**GENERAL EROSION PREVENTION & SEDIMENT CONTROL NOTES**

- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND IN WORKING CONDITION PRIOR TO ANY LAND DISTURBING ACTIVITY CAUSED BY CLEARING OR GRADING. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE APPROVED BY THE CITY OF WOODLAND SPECIALIST PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL CALL FOR AN ON-SITE INSPECTION WHEN EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND PRIOR TO COMMENCEMENT OF WORK.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SITED, DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS IN THE CITY OF WOODLAND'S LATEST STANDARD DETAILS AND THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANUAL FOR WESTERN WASHINGTON, WHERE THE CITY OF WOODLAND GENERAL REQUIREMENTS SHALL TAKE PRECEDENCE.
- THE DEVELOPER IS RESPONSIBLE FOR MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES DURING AND AFTER INSTALLATION OF ALL UTILITY WORK ASSOCIATED WITH UTILITY TRENCHES.
- PRIOR TO ANY SITE EXCAVATION, ALL STORM DRAINAGE INLETS SHALL BE PROTECTED DOWN SLOPE FROM ANY DISTURBED OR CONSTRUCTION AREA PER THE STANDARD DETAILS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREAS. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.
- THE CONTRACTOR SHALL NOT ALLOW SEDIMENT OR DEBRIS TO ENTER NEW OR EXISTING PIPES, CATCH BASINS OR INFILTRATION SYSTEMS.
- NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION.
- TEMPORARY SEEDING AND MULCHING OF FILL SLOPES AND DIVERSION DIKES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING.
- ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) DURING THE PERIOD FROM OCTOBER 1 TO APRIL 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1 TO SEPTEMBER 30 NO SOIL SHALL BE EXPOSED FOR MORE THAN SEVEN (7) DAYS.
- MATERIAL STOCKPILES ARE TO BE PROTECTED BY THE FOLLOWING MEANS:  
 TEMPORARY: COVER PILES WITH TARPS OR PLASTIC SHEETING NESTLED WITH CONCRETE BLOCKS, LUMBER OR TIRES.  
 PERMANENT: COVER PILES WITH TARPS OR PLASTIC, PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOIL SURFACE IS STABILIZED WITH RESEEDING.
- THE CONTRACTOR SHALL MAINTAIN ON SITE A WRITTEN DAILY LOG OF EROSION CONTROL BMP MAINTENANCE.
- IF THE CITY INSPECTOR OR ENGINEER(S) HAS EVIDENCE OF POOR CONSTRUCTION PRACTICES OR IMPROPER EROSION PREVENTION BMPs, CITATIONS AND/OR A STOP WORK ORDER SHALL BE ISSUED UNTIL PROPER MEASURES HAVE BEEN TAKEN AND APPROVED BY THE CITY OF WOODLAND. IF THE BMPs APPLIED TO A SITE ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHT-OF-WAY, THEN THE PUBLIC WORKS DIRECTOR SHALL REQUIRE ADDITIONAL BMPs.

**PROTECTION OF ADJACENT PROPERTIES, ROADS AND STREETS**

- PROVIDE A 12-INCH DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE FOR ALL ACCESS POINTS UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS. WIDTH OF THE PAD SHALL BE A MINIMUM OF 20 FEET. ALL TRUCKS LEAVING THE SITE SHALL EXCESS ACROSS THE PAD. ACCUMULATED SOIL SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE CLEAN 4 INCH TO 8 INCH QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- PAVEMENT SWEEPING AND SHOVELING IS REQUIRED. WASHING THE PAVEMENT INTO THE STORM SYSTEM IS NOT PERMITTED.
- AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET. SINGLE FAMILY LOT ENTRANCES MAY HAVE THE PAD LENGTH REDUCED TO 20 FEET. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS WITH THE SAME OWNER DURING CONSTRUCTION, ONE LOT ENTRANCE MAY BE USED FOR THE ADJACENT LOTS.
- INSTALL SEDIMENT FENCE IN ACCORDANCE WITH THIS DETAIL SHEET PRIOR TO BUILDING CONSTRUCTION AND/OR EXCAVATION TO PREVENT SILT INTRUSION UPON ADJACENT LOTS. IF CONSTRUCTION OCCURS SIMULTANEOUSLY ON ADJACENT LOTS AND THE LOTS HAVE THE SAME OWNER DURING CONSTRUCTION, THE SILT FENCE ALONG THE COMMON LOT LINE MAY BE ELIMINATED.
- CONSTRUCTION ROADS AND PARKING AREAS SHALL BE STABILIZED WHEREVER THEY ARE CONSTRUCTED, WHETHER PERMANENT OR TEMPORARY, FOR THE USE OF CONSTRUCTION TRAFFIC.

**MAINTENANCE OF SEDIMENT CONTROL BMPs**

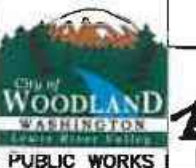
- MAINTAIN AND REMOVE ALL SEDIMENT CONTROLS AS SPECIFIED IN THE STANDARD DETAILS. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, UTILITY TRENCHES AND STORM PIPES PRIOR TO ACCEPTANCE BY THE CITY.
- SEDIMENT CONTROL BMPs SHALL BE INSPECTED WEEKLY AND AFTER ANY STORM EVENT PRODUCING RUNOFF. THE INSPECTION FREQUENCY FOR STABILIZED, INACTIVE SITES SHALL BE ONCE EVERY TWO WEEKS OR MORE, FREQUENTLY AS DETERMINED BY THE LOCAL PERMITTING AUTHORITY BASED ON THE LEVELS OF SOIL STABILITY AND POTENTIAL FOR ADVERSE ENVIRONMENTAL IMPACTS.
- ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

**DUST CONTROL**

- IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST ONE OR MORE OF THE FOLLOWING PREVENTATIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:  
 A. MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.  
 B. SPRINKLE THE SITE WITH WATER UNTIL THE SURFACE IS WET.  
 C. SPRAY EXPOSED SOIL AREAS WITH A DUST PALLIATIVE. NOTE: USE OF PETROLEUM PRODUCTS OR POTENTIALLY HAZARDOUS MATERIALS ARE PROHIBITED.

**TEMPORARY SEEDING**

- EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADE OR GIVEN A PERMANENT COVER TREATMENT WITHIN 30 DAYS OF THE EXPOSURE SHALL HAVE SEED MIX AND MULCH PLACED TO STABILIZE THE SOIL AND REDUCE EROSION/SEDIMENTATION. SEEDING AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STAND OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT EROSION WILL BE RESEEDDED AS SOON AS SUCH AREAS ARE IDENTIFIED.
- APPLY AN APPROVED TEMPORARY SEEDING MIXTURE TO THE PREPARED SEED BED AT A RATE OF 120 LBS./ACRE. NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.

EROSION PREVENTION AND SEDIMENT CONTROL					
APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	
 <b>Paul Hogg</b> PUBLIC WORKS DIRECTOR		9/13/13			E-03

FILL TYPE	FILL LOCATION	COMPACTION REQUIREMENT (%)	AASHTO TEST METHODOLOGY
TRENCH BACKFILL	PIPE ZONE	90	T-99
	ABOVE PIPE ZONE (STRUCTURAL AREAS)	95	T-99
	ABOVE PIPE ZONE (NON-STRUCTURAL AREAS)	90	T-99
EMBANKMENT FILLS	STRUCTURAL AREAS	95	T-99 (FINE-GRAINED SOILS) T-180 (COARSE-GRAINED SOILS)
	NON-STRUCTURAL AREAS	90	T-99 (FINE-GRAINED SOILS) T-180 (COARSE-GRAINED SOILS)
SUBGRADE	ROADWAY	95	T-99
BASE ROCK	ROADWAY AND BUILDINGS	95	T-180
ASPHALT	ROADWAYS	91	T-209



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NO PERMANENT UTILITY INSTALLATION IS ALLOWED.

NOTE: DEMOLITION AND REMOVAL OF ALL STRUCTURES TOGETHER WITH DECOMMISSIONING OF ALL WELLS, SEPTIC TANKS, AND UNDERGROUND STORAGE TANKS (IF ANY EXIST) SHALL BE COMPLETED PRIOR TO SITE GRADING.

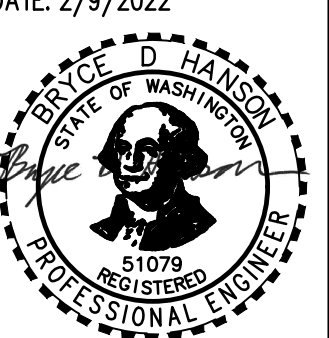
AKS DRAWING FILE: 8344\_G3\_DEMO-GRAD-ESC.DWG | LAYOUT: G3.4



OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON  
1512 75th, Rivn, WA

GRADING & ESC NOTES & DETAILS

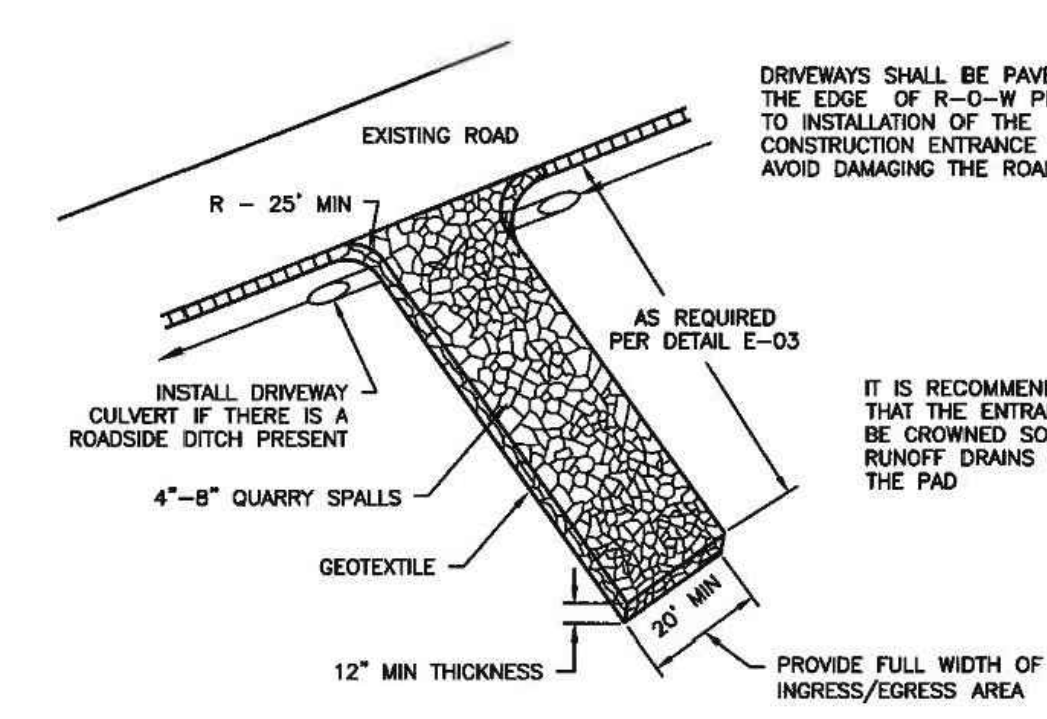
DESIGNED BY: T.J.W.  
DRAWN BY: T.J.W.  
MANAGED BY: BDH  
CHECKED BY: BDH



REVISIONS

JOB NUMBER  
8344

SHEET  
G3.4



DRIVEWAYS SHALL BE PAVED TO THE EDGE OF R-O-W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING THE ROADWAY

AS REQUIRED PER DETAIL E-03

IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD

EXISTING ROAD  
 R - 25' MIN  
 4"-8" QUARRY SPALLS  
 GEOTEXTILE  
 12" MIN THICKNESS  
 20' MIN  
 PROVIDE FULL WIDTH OF INGRESS/EGRESS AREA

INSTALL DRIVEWAY CULVERT IF THERE IS A ROADSIDE DITCH PRESENT

NOTES:

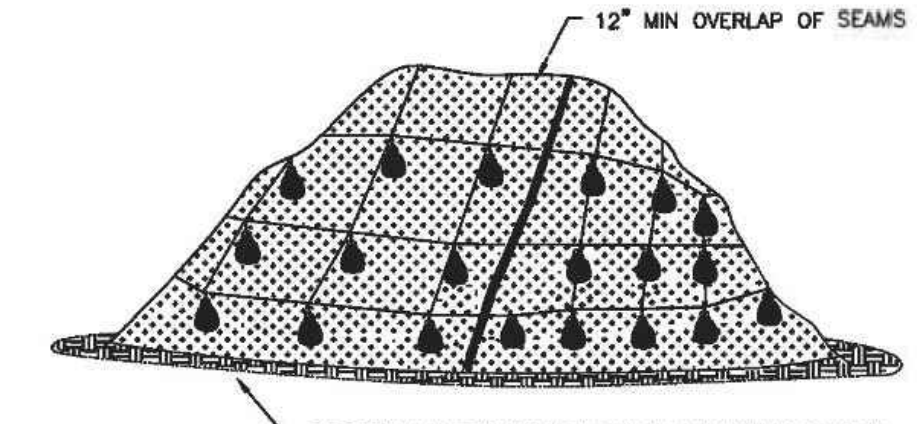
- IF THE ENTRANCE SITS ON A SLOPE, PLACE A FILTER FABRIC FENCE DOWN GRADIENT.
- TOP DRESS THE PAD WITH CLEAN 3" MINUS ROCK WHEN THE CONSTRUCTION ENTRANCE BECOMES CLOGGED WITH SEDIMENTS.
- ANY SEDIMENT CARRIED FROM THE SITE ONTO THE STREET SHALL BE CLEANED UP IMMEDIATELY.
- IF EQUIPMENT TRAVELS EXTENSIVELY ON UNSTABILIZED ROADS ON THE SITE, A TIRE AND VEHICLE UNDERCARRIAGE WASH NEAR THE ENTRANCE WILL BE NEEDED. PERFORM WASHING ON CRUSHED ROCK. WASH WATER WILL REQUIRE TREATMENT IN A SEDIMENT POND OR TRAP.

**STABILIZED CONSTRUCTION ENTRANCE**

APPROVED	REVISIONS	DATE	DRAWN	DESIGNED
<i>Bart Stipp</i> 1/6/14				

WOODLAND PUBLIC WORKS DIRECTOR DATE

E-05



12" MIN OVERLAP OF SEAMS

PROVIDE ENERGY DISSIPATION AT TOE WHEN NEEDED

PLASTIC SHEETING

NOTES:

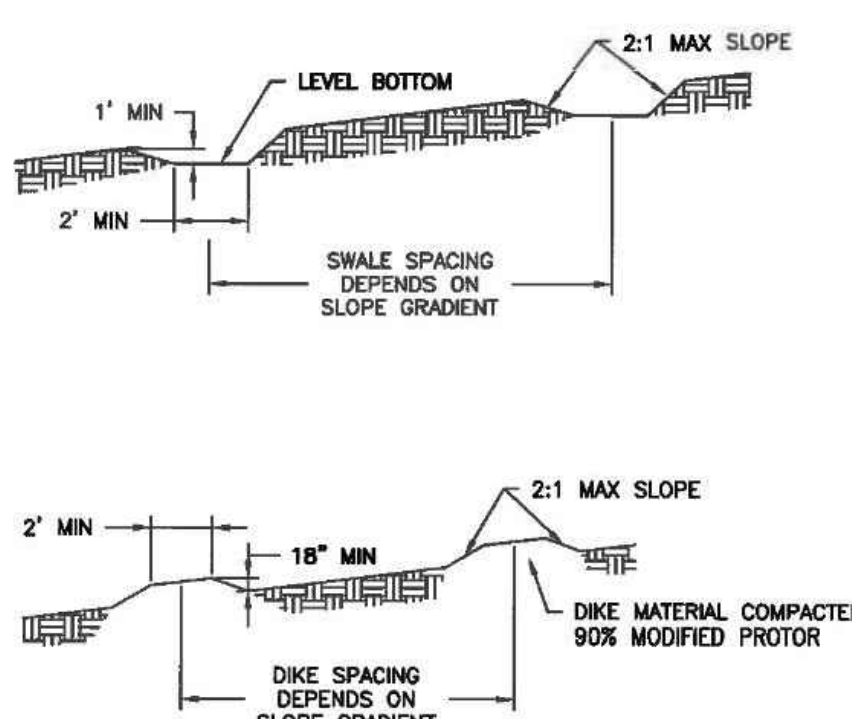
- PLASTIC SHEETING IS USED TO PROVIDE IMMEDIATE PROTECTION TO SLOPES AND STOCKPILES.
- DO NOT USE PLASTIC COVERING UPSLOPE OF AREAS SUCH AS STEEP AND/OR UNSTABLE SLOPES THAT MIGHT BE ADVERSELY AFFECTED BY CONCENTRATED RUNOFF.
- WHEN POSSIBLE, INSTALL AN INTERCEPTOR DIKE AT THE TOP OF THE PLASTIC TO DIVERT FLOWS AWAY FROM THE PLASTIC.
- TOE-IN THE TOP OF THE SHEETING IN A 6"x6" TRENCH BACKFILLED WITH COMPACTED NATIVE MATERIAL.
- INSTALL A GRAVEL BERM, RIPRAP, OR OTHER SUITABLE PROTECTION AT THE TOP OF THE SLOPE IN ORDER TO DISSIPATE RUNOFF VELOCITY.
- ANCHOR THE PLASTIC USING SANDBAGS OR OTHER SUITABLE TETHERED ANCHOR SYSTEM SPACED ON A 10' GRID SPACING IN ALL DIRECTIONS.
- OVERLAP SEAMS 1'-2', TAPE, ROLL AND STAKE THE SEAMS AND THEN WEIGH DOWN THE ENTIRE LENGTH.
- PROVIDE ENERGY DISSIPATION AT TOE WHEN NEEDED.
- REPLACE TORN SHEETS AND REPAIR OPEN SEAMS; COMPLETELY REMOVE AND REPLACE PLASTIC WHEN IT BEGINS TO DETERIORATE.

**PLASTIC COVERING**

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<i>Bart Stipp</i> 1/6/14				

WOODLAND PUBLIC WORKS DIRECTOR DATE

E-08



LEVEL BOTTOM  
 2:1 MAX SLOPE  
 1' MIN  
 2' MIN  
 SWALE SPACING DEPENDS ON SLOPE GRADIENT

2:1 MAX SLOPE  
 18" MIN  
 DIKE SPACING DEPENDS ON SLOPE GRADIENT  
 DIKE MATERIAL COMPACTED 90% MODIFIED PROTOR

NOTES:

- MAXIMUM SLOPE OF FLOW PATH SHALL BE EQUAL TO OR LESS THAN 5%.
- SIDE SLOPE OF INTERCEPTOR SWALES SHALL BE NO GREATER THAN 2:1.
- MAXIMUM LENGTH BETWEEN SWALES:

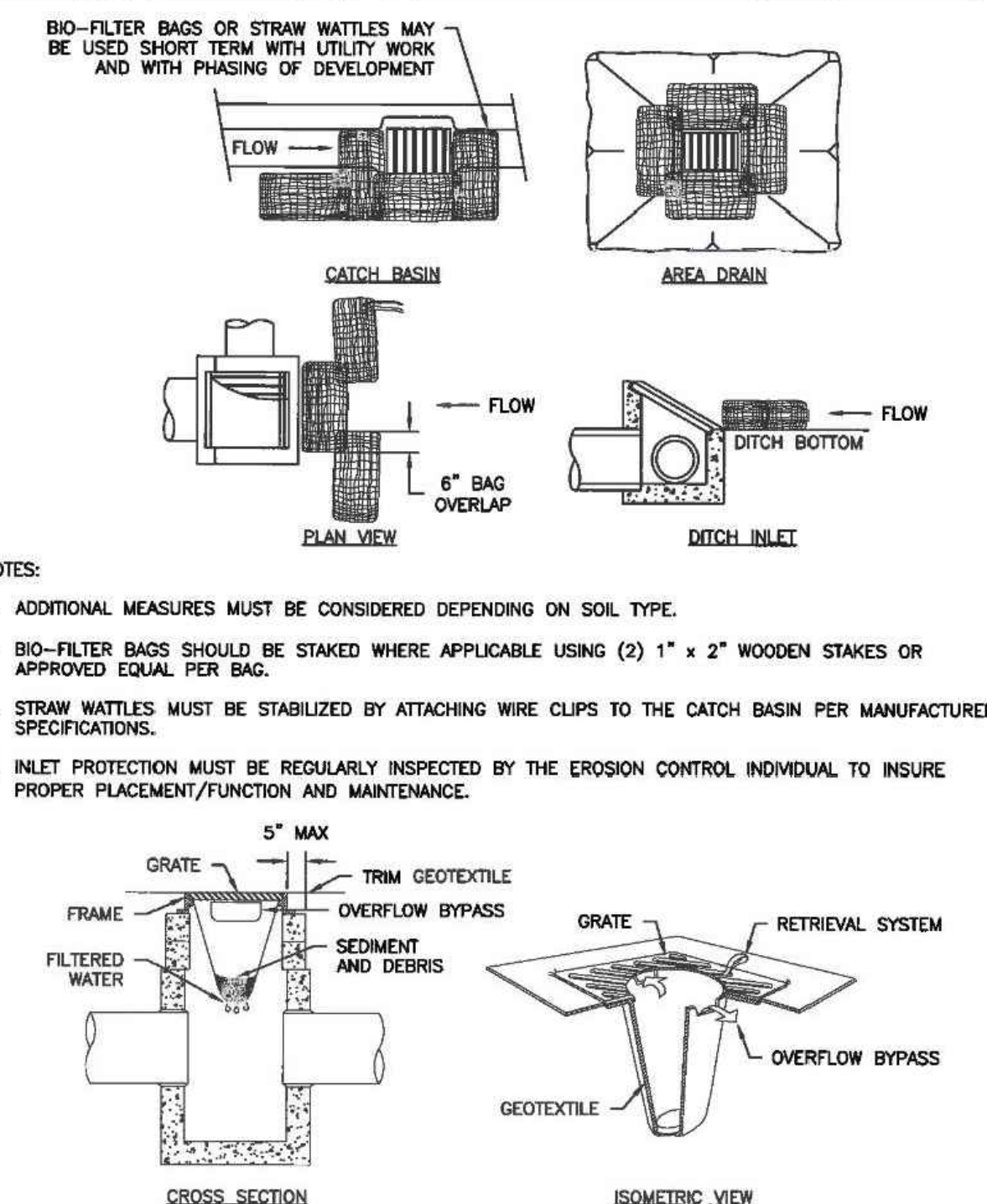
SLOPE	<5%	5-10%	10-40%
DISTANCE	300 FT	200 FT	100 FT

**INTERCEPTOR DIKE AND SWALE**

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WOODLAND PUBLIC WORKS DIRECTOR DATE

E-11



BIO-FILTER BAGS OR STRAW WATTLES MAY BE USED SHORT TERM WITH UTILITY WORK AND WITH PHASING OF DEVELOPMENT

CATCH BASIN  
 AREA DRAIN  
 DITCH INLET  
 PLAN VIEW  
 DITCH BOTTOM  
 6" BAG OVERLAP

NOTES:

- ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPE.
- BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1" x 2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
- STRAW WATTLES MUST BE STABILIZED BY ATTACHING WIRE CLIPS TO THE CATCH BASIN PER MANUFACTURER SPECIFICATIONS.
- INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.

5" MAX  
 GRATE  
 TRIM GEOTEXTILE  
 OVERFLOW BYPASS  
 FRAME  
 FILTERED WATER  
 SEDIMENT AND DEBRIS  
 CROSS SECTION

GRATE  
 RETRIEVAL SYSTEM  
 OVERFLOW BYPASS  
 GEOTEXTILE  
 ISOMETRIC VIEW

NOTES:

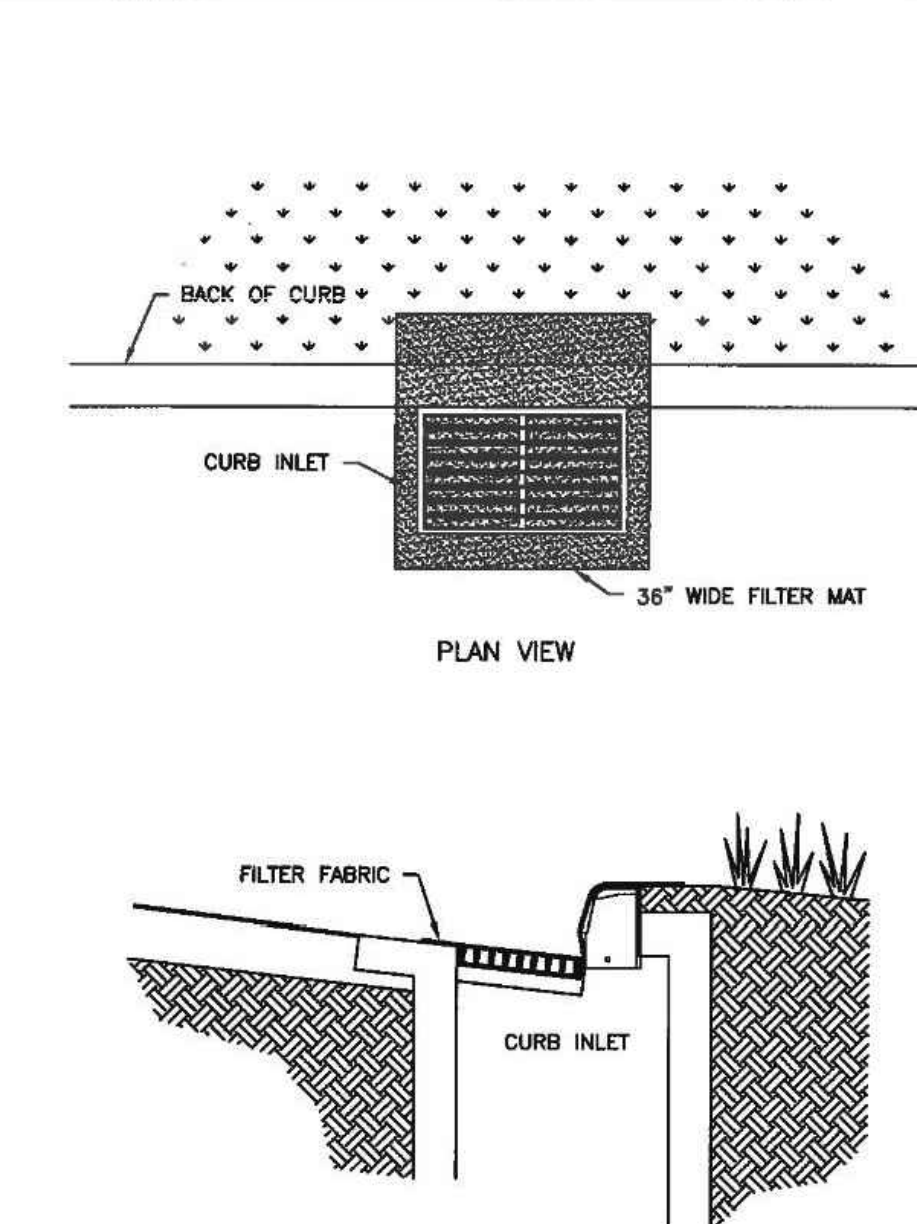
- SIZE THE BELOW GRATE INLET DEVICE (BGID) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
- THE REMOVAL SYSTEM MUST ALLOW REMOVAL OF THE BGID WITHOUT SPILLING THE COLLECTED MATERIAL.
- THE BGID SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
- THE CONTRACTOR SHALL INSPECT THE BAG AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.
- THE FILTER BAG SHALL BE CLEANED OR REPLACED WHEN THE BAG BECOMES HALF FULL.

**INLET PROTECTION (1 OF 2)**

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WOODLAND PUBLIC WORKS DIRECTOR DATE

E-16



BACK OF CURB  
 CURB INLET  
 36" WIDE FILTER MAT  
 PLAN VIEW

FILTER FABRIC  
 CURB INLET

NOTES:

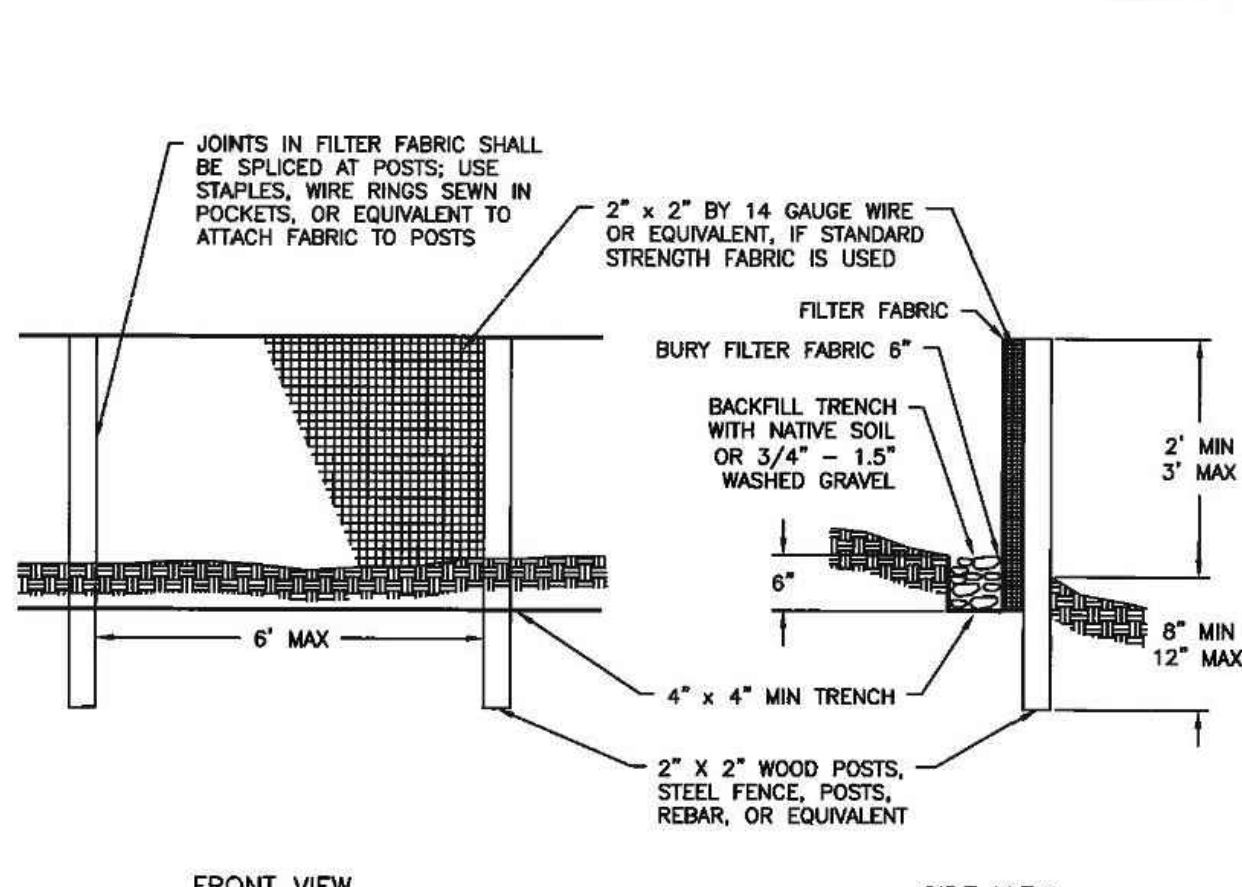
- USE FILTER MAT SEDIMENT BARRIER WHEN CURB INLET IS LOCATED IN GENTLY SLOPING STREET, WITH MINIMAL NEED, WHERE WATER CAN FILTER AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
- BARRIER SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
- INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

**INLET PROTECTION (2 OF 2)**

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WOODLAND PUBLIC WORKS DIRECTOR DATE

E-17



JOINTS IN FILTER FABRIC SHALL BE SPICED AT POSTS; USE STAPLES, WIRE RINGS SEWN IN POCKETS, OR EQUIVALENT TO ATTACH FABRIC TO POSTS

2" x 2" BY 14 GAUGE WIRE OR EQUIVALENT, IF STANDARD STRENGTH FABRIC IS USED

FRONT VIEW  
 SIDE VIEW

6" MAX  
 4" x 4" MIN TRENCH  
 2" x 2" WOOD POSTS, STEEL FENCE, POSTS, REBAR, OR EQUIVALENT

2' MIN  
 3' MAX  
 6"  
 8" MIN  
 12" MAX

NOTES:

- FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
- POST SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED.

MAINTENANCE STANDARDS:

- SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT POND.
- IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
- SEDIMENT DEPOSITS SHALL EITHER BE REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-THIRD THE HEIGHT OF THE SILT FENCE, OR A SECOND SILT FENCE SHALL BE INSTALLED.
- IF THE FILTER FABRIC (GEOTEXTILE) HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

**SILT FENCE**

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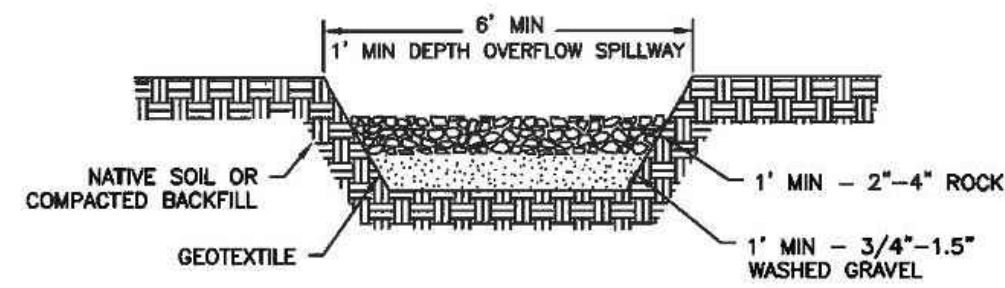
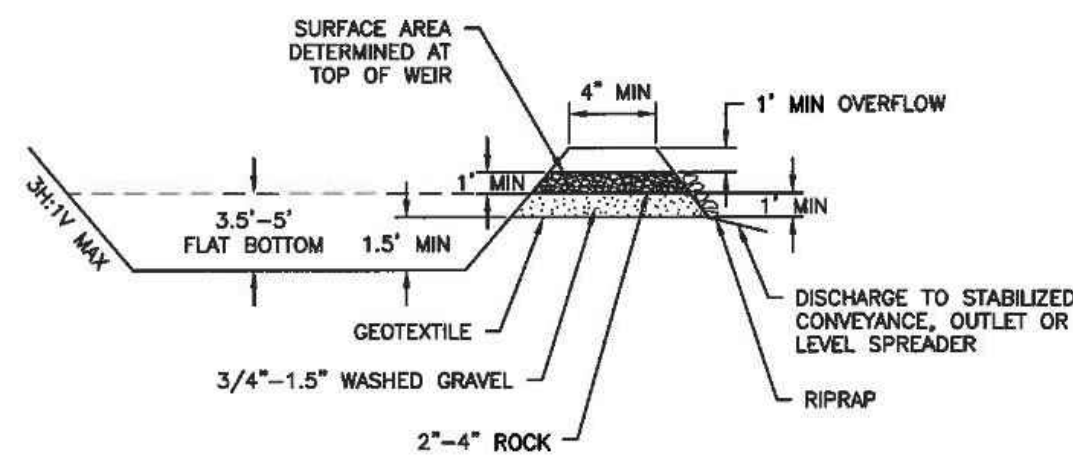
WOODLAND PUBLIC WORKS DIRECTOR DATE

E-20



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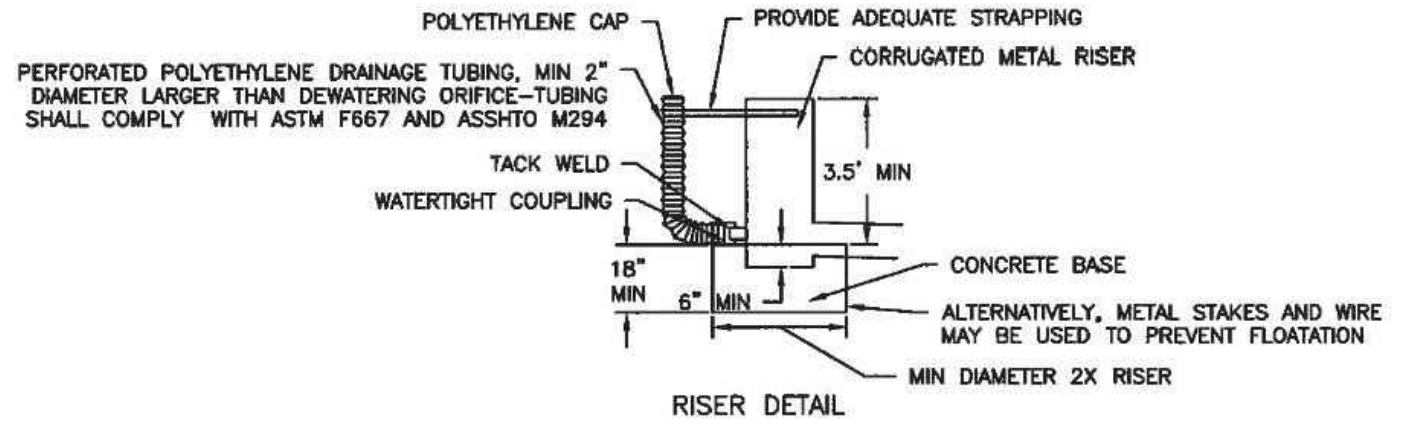
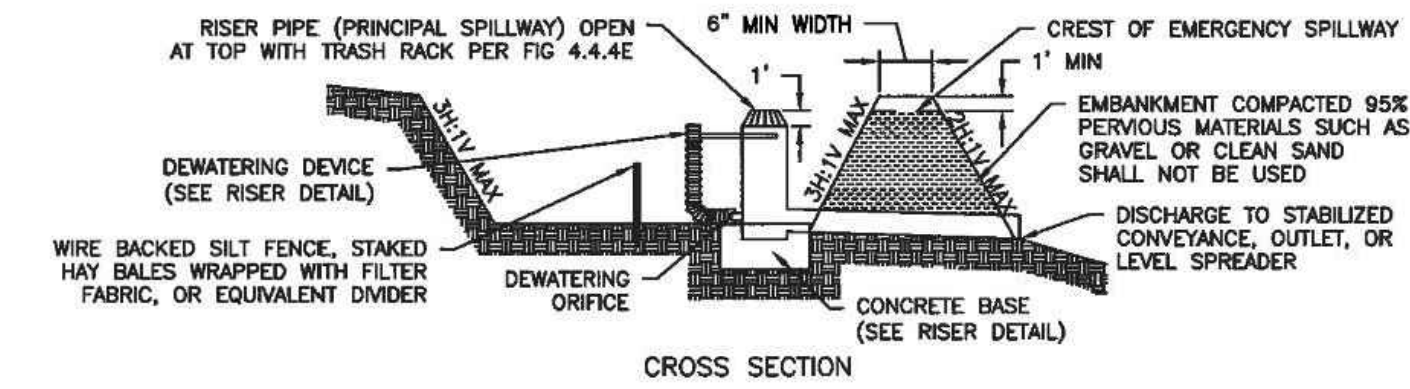
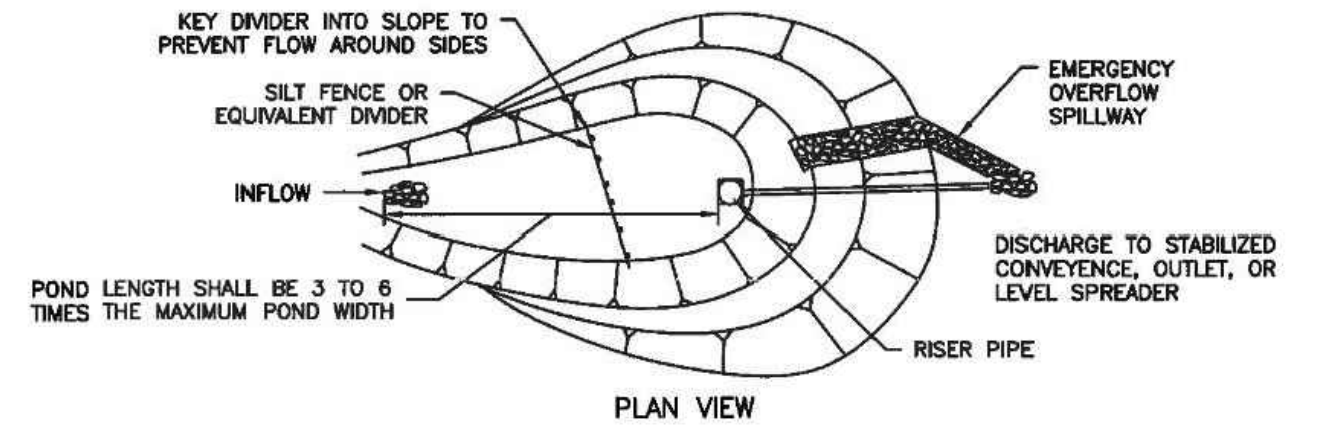


NOTES:

1. SEDIMENT TRAP MAY BE CONSTRUCTED BY EXCAVATION OR BY BUILDING A BERM.
2. OUTFLOW CHANNEL SHALL BE CONSTRUCTED BY EXCAVATION.
3. SEDIMENT TRAPS SHALL BE LIMITED TO SITES OF LESS THAN 1-ACRE. FOR ANY SITE GREATER THAN 1-ACRE, SEE SEDIMENT BASIN.
4. SEDIMENT SHALL BE REMOVED BEFORE 1' ACCUMULATES.

SEDIMENT TRAP

	APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	E-22
	<i>Burt Strap</i> PUBLIC WORKS DIRECTOR DATE: 11/14					



NOTES:

1. STRUCTURES HAVING A MAXIMUM STORAGE CAPACITY AT THE TOP OF THE DAM OF 10 ACRE-FT (435,600 FT<sup>3</sup>) OR MORE ARE SUBJECT TO THE WASHINGTON DAM SAFETY REGULATIONS (CHAPTER 173-175 WAC).
2. GRADE BOTTOM OF BASIN AS LEVEL AS POSSIBLE.
3. SPILLWAY SHALL BE LINED WITH 2"-4" ROCKS.
4. ALL INLETS AND OUTLETS SHALL BE PROTECTED WITH RIPRAP.
5. POND MAY BE FORMED BY BERM OR BY PARTIAL OR COMPLETE EXCAVATION.
6. IF THE POND POSES A SAFETY HAZARD, IT SHALL BE FENCED.
7. REMOVE SEDIMENT BEFORE 1-FOOT ACCUMULATES.

SEDIMENT POND

	APPROVED	REVISIONS	DATE	DRAWN	DESIGNED	E-23
	<i>Burt Strap</i> PUBLIC WORKS DIRECTOR DATE: 11/14					

DESIGNED BY:	TJW
DRAWN BY:	TJW
MANAGED BY:	BDH
CHECKED BY:	BDH



REVISIONS	

JOB NUMBER	8344
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SHEET	G3.6
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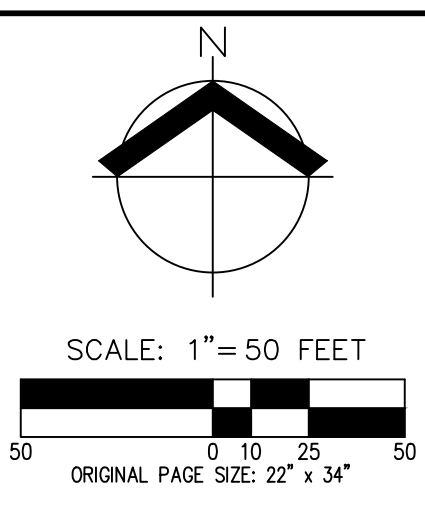
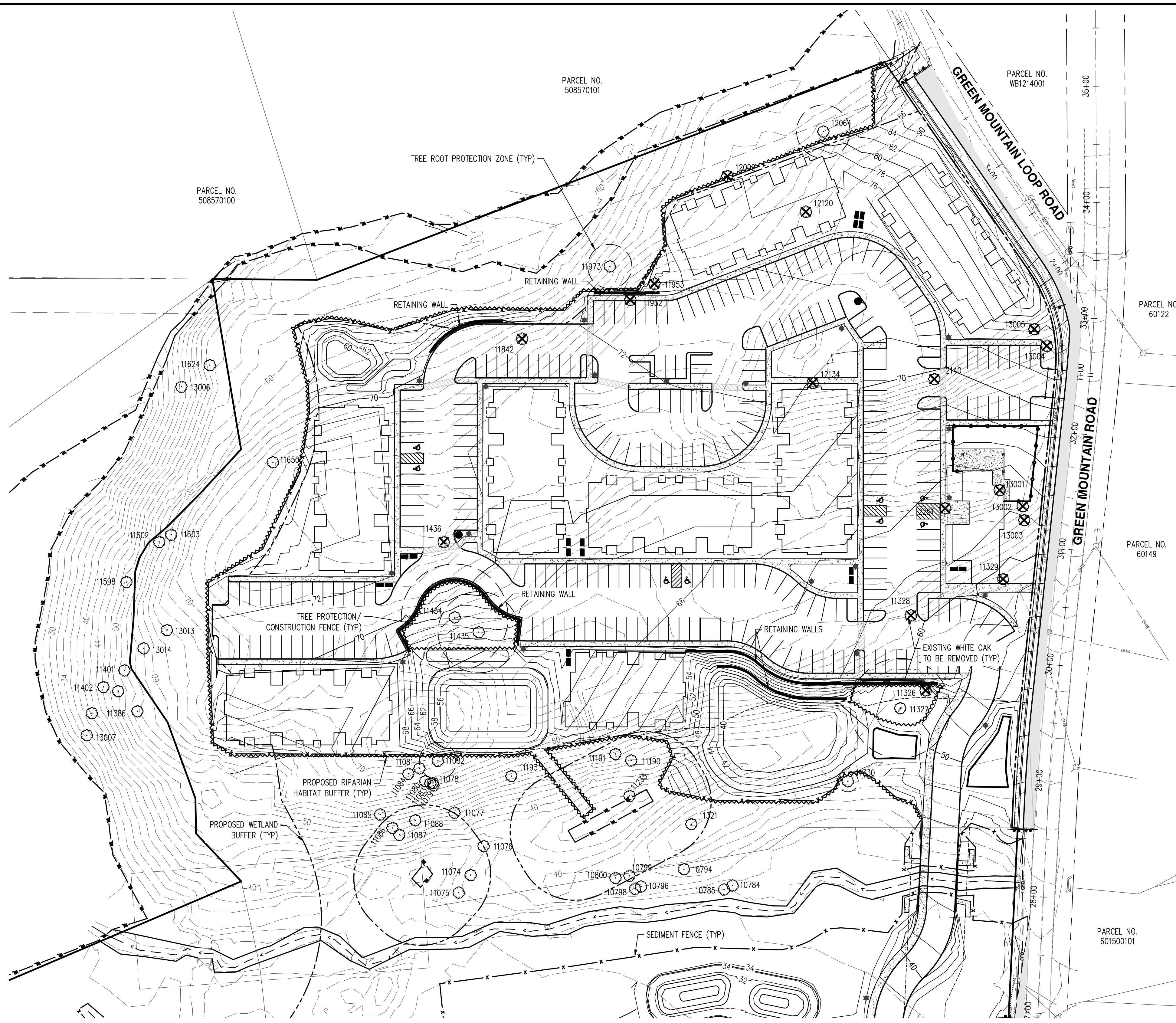


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**GENERAL NOTES:**

- A CERTIFIED ARBORIST SHALL BE PRESENT DURING EXCAVATION ACTIVITIES WITHIN TREE PROTECTION ZONE OF PRESERVED TREES. SEE TREE PROTECTION NOTES ON SHEET G4.1.
- TREE PROTECTION MEASURES SHALL BE INSTITUTED PRIOR TO ANY DEVELOPMENT ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CLEARING, GRADING, EXCAVATION OR DEMOLITION WORK, AND SHALL BE REMOVED ONLY AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITY, INCLUDING LANDSCAPING AND IRRIGATION INSTALLATION. SEE TREE PROTECTION DETAIL ON SHEET G4.1.
- TREE PROTECTION FENCING SHALL BE FLUSH WITH THE INITIAL UNDISTURBED GRADE.
- NO CONSTRUCTION ACTIVITY SHALL OCCUR WITHIN THE TREE PROTECTION ZONE, INCLUDING, BUT NOT LIMITED TO, DUMPING OR STORAGE OF MATERIALS SUCH AS BUILDING SUPPLIES, SOIL, WASTE ITEMS OR PARKED VEHICLES OR EQUIPMENT.

- NO EXCAVATION, TRENCHING, GRADING, ROOT PRUNING OR OTHER ACTIVITIES SHALL OCCUR WITHIN THE TREE PROTECTION ZONE UNLESS DIRECTED BY AN ARBORIST PRESENT ON-SITE AND APPROVED BY THE CITY.
- NOT ALL ON-SITE TREES WERE SURVEYED. ONLY TREES ADJACENT TO THE PROPOSED DEVELOPMENT ACTIVITIES WERE INSPECTED AND INCLUDED WITHIN THE TREE SURVEY.
- FOLLOWING CLEARING AND GRADING ACTIVITIES, A CERTIFIED ARBORIST SHALL INSPECT RETAINED TREES FOR POTENTIALLY HAZARDOUS TREE CONDITIONS. COORDINATION WITH THE CITY SHALL OCCUR PRIOR TO ANY ADDITIONAL TREE REMOVALS FOR HAZARD ABATEMENT.
- EXISTING ITEMS AND ELEVATIONS INCLUDING CONTOUR INFORMATION HAVE BEEN SURVEYED BY OR UNDER THE SUPERVISION OF A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF WASHINGTON AND ACCURATELY REFLECT THE SITE CONDITIONS.



TREE TABLE			
TREE NUMBER	TYPE	DBH (IN.)	PRESERVE/REMOVE
10784	W.OAK	11	PRESERVE
10785	W.OAK	6	PRESERVE
10794	W.OAK	31	PRESERVE
10796	W.OAK	21,19	PRESERVE
10798	W.OAK	22,7	PRESERVE
10799	W.OAK	24,22	PRESERVE
10800	W.OAK	24,16	PRESERVE
11074	W.OAK	32	PRESERVE
11075	W.OAK	8	PRESERVE
11076	W.OAK	42	PRESERVE
11077	W.OAK	30	PRESERVE
11078	W.OAK	34	PRESERVE
11079	W.OAK	23	PRESERVE
11080	W.OAK	12,11	PRESERVE
11081	W.OAK	30	PRESERVE
11082	W.OAK	16	PRESERVE
11083	W.OAK	14	PRESERVE
11084	W.OAK	32	PRESERVE
11085	W.OAK	33	PRESERVE
11086	W.OAK	25	PRESERVE
11087	W.OAK	19	PRESERVE

TREE TABLE			
TREE NUMBER	TYPE	DBH (IN.)	PRESERVE/REMOVE
11088	W.OAK	25	PRESERVE
11190	W.OAK	35	PRESERVE
11191	W.OAK	27	PRESERVE
11193	W.OAK	34	PRESERVE
11235	W.OAK	12	PRESERVE
11321	W.OAK	32,29	PRESERVE
11326	W.OAK	30	REMOVE
11327	W.OAK	43	PRESERVE
11328	W.OAK	15	REMOVE
11329	W.OAK	17	REMOVE
11330	W.OAK	9	PRESERVE
11386	W.OAK	35	PRESERVE
11401	W.OAK	21	PRESERVE
11402	W.OAK	34	PRESERVE
11434	W.OAK	46	PRESERVE
11435	W.OAK	35	PRESERVE
11436	W.OAK	56	REMOVE
11598	W.OAK	24	PRESERVE
11602	W.OAK	24	PRESERVE
11603	W.OAK	31	PRESERVE
11624	W.OAK	36	PRESERVE

TREE TABLE			
TREE NUMBER	TYPE	DBH (IN.)	PRESERVE/REMOVE
11650	W.OAK	7	PRESERVE
11842	W.OAK	41	REMOVE
11952	W.OAK	9	REMOVE
11953	W.OAK	13	REMOVE
11973	W.OAK	19	PRESERVE
12002	W.OAK	33	REMOVE
12064	W.OAK	23	PRESERVE
12120	W.OAK	13	REMOVE
12134	W.OAK	19	REMOVE
12140	W.OAK	16	REMOVE
12291	W.OAK	12	REMOVE
13001	W.OAK	8	REMOVE
13002	W.OAK	10	REMOVE
13003	W.OAK	12	REMOVE
13004	W.OAK	11	REMOVE
13005	W.OAK	6	REMOVE
13006	W.OAK	31	PRESERVE
13007	W.OAK	35	PRESERVE
13013	W.OAK	5	PRESERVE
13014	W.OAK	8	PRESERVE

\*2 ADDITIONAL OFF-SITE OREGON WHITE OAKS LOCATED BY ELS NOT INCLUDED IN TABLE.

**LEGEND**

- EXISTING GROUND CONTOUR (2 FT) ———
- EXISTING GROUND CONTOUR (10 FT) - - - - -
- FINISHED GRADE CONTOUR (2 FT) ———
- FINISHED GRADE CONTOUR (10 FT) - - - - -
- OREGON WHITE OAK
- EXISTING OREGON WHITE OAK TO REMAIN ○
- EXISTING OREGON WHITE OAK TO BE REMOVED ⊗
- TREE ROOT PROTECTION ZONE (1 FOOT RADIUS PER INCH DBH) ○
- TREE PROTECTION/CONSTRUCTION FENCE ~~~~~
- SEDIMENT FENCE — x — x —



**BRYCE D. HANSON**  
CERTIFICATE NUMBER: PH 7554  
EXPIRATION DATE: 06/30/22

**AKS**  
AKS ENGINEERING & FORESTRY, LLC  
9800 NE 126TH AVE, STE 2520  
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**OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON**

**TREE PRESERVATION &  
REMOVAL PLAN**

DESIGNED BY: TJW  
DRAWN BY: TJW  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022

REVISIONS

JOB NUMBER  
**8344**

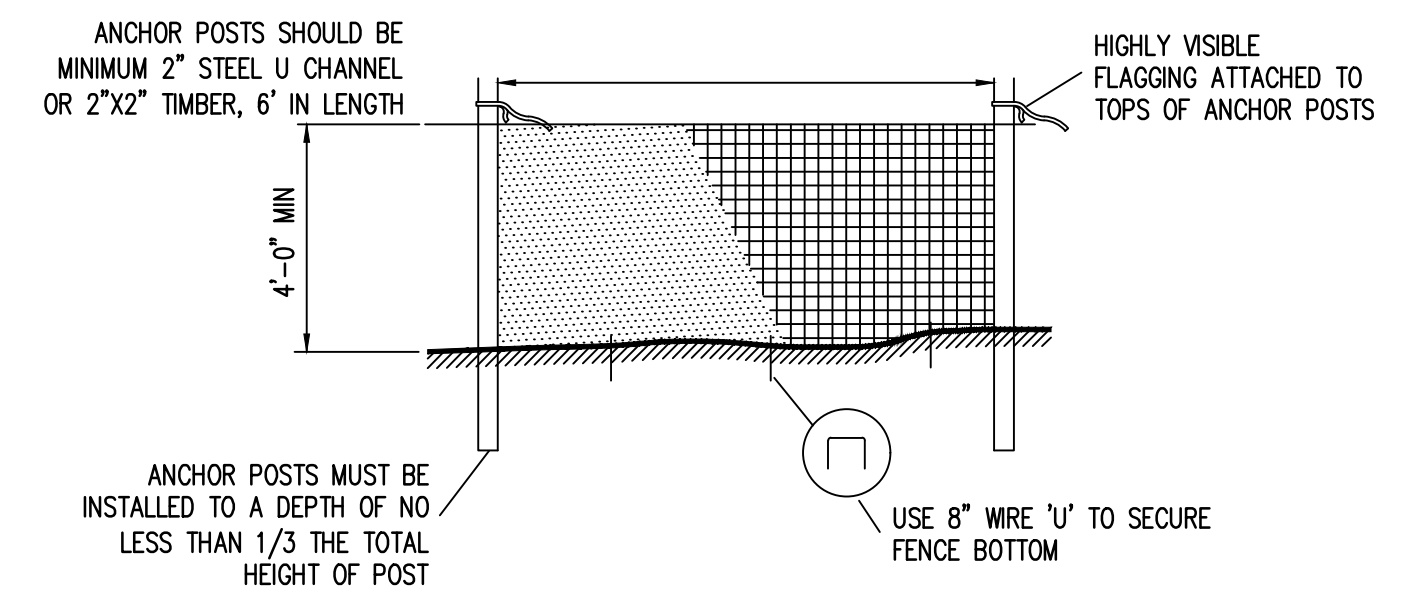
SHEET  
**G4.0**

**TREE PROTECTION NOTES**

- A. PLACING MATERIALS NEAR TREES – NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE PROTECTED AREA OF ANY TREE DESIGNATED TO REMAIN, INCLUDING, BUT NOT LIMITED TO, PARKING EQUIPMENT, PLACING SOLVENTS, STORING BUILDING MATERIALS AND SOIL DEPOSITS, DUMPING CONCRETE WASHOUT, ETC.
- B. ATTACHMENTS TO TREES – DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY OBJECT TO ANY TREE DESIGNATED FOR PROTECTION.
- C. PROTECTIVE BARRIER – BEFORE DEVELOPMENT, LAND CLEARING, FILLING OR ANY LAND ALTERATION FOR WHICH A TREE REMOVAL PERMIT IS REQUIRED, THE CONTRACTOR:
  - C.A. SHALL ERECT AND MAINTAIN READILY VISIBLE PROTECTIVE TREE FENCING ALONG THE OUTER EDGE AND COMPLETELY SURROUNDING THE PROTECTED AREA OF ALL PROTECTED TREES OR GROUP OF TREES. FENCES SHALL BE CONSTRUCTED PER THE DETAIL ON THIS SHEET.
  - C.B. MAY BE REQUIRED TO COVER WITH MULCH TO A DEPTH OF AT LEAST SIX (6) INCHES OR WITH PLYWOOD OR SIMILAR MATERIAL IN THE AREAS ADJOINING THE CRITICAL ROOT ZONE OF A TREE IN ORDER TO PROTECT ROOTS FROM DAMAGE CAUSED BY HEAVY EQUIPMENT.
  - C.C. SHALL PROHIBIT EXCAVATION OR COMPACTING OF EARTH OR OTHER POTENTIALLY DAMAGING ACTIVITIES WITHIN THE BARRIERS.
  - C.D. MAY BE REQUIRED TO MINIMIZE ROOT DAMAGE BY EXCAVATING A TWO (2) FOOT DEEP TRENCH, AT EDGE OF CRITICAL ROOT ZONE, TO CLEANLY SEVER THE ROOTS OF TREES TO BE RETAINED. ROOTS ONE (1) INCH DIAMETER OR GREATER SHALL BE CLEANLY CUT WITH A SAW OR PRUNERS.
  - C.E. MAY BE REQUIRED TO HAVE CORRECTIVE PRUNING PERFORMED ON PROTECTED TREES IN ORDER TO AVOID DAMAGE FROM MACHINERY OR BUILDING ACTIVITY. MAY BE REQUIRED TO MAINTAIN TREES THROUGHOUT THE CONSTRUCTION PERIOD BY WATERING AND FERTILIZING.
  - C.F. SHALL MAINTAIN THE PROTECTIVE BARRIERS IN PLACE UNTIL THE PROJECT ARBORIST AUTHORIZES THEIR REMOVAL OR A FINAL CERTIFICATE OF OCCUPANCY IS ISSUED, WHICHEVER OCCURS FIRST.
  - C.G. SHALL ENSURE THAT ANY LANDSCAPING DONE IN THE PROTECTED ZONE SUBSEQUENT TO THE REMOVAL OF THE BARRIERS SHALL BE ACCOMPLISHED WITH LIGHT MACHINERY OR HAND LABOR.
- D. GRADE
  - D.A. THE GRADE SHALL NOT BE ELEVATED OR REDUCED WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE PRESERVED WITHOUT THE PROJECT ARBORIST'S AUTHORIZATION. THE PROJECT ARBORIST MAY ALLOW COVERAGE OF UP TO ONE HALF OF THE AREA OF THE TREE'S CRITICAL ROOT ZONE WITH LIGHT SOILS (NO CLAY) TO THE MINIMUM DEPTH NECESSARY TO CARRY OUT GRADING OR LANDSCAPING PLANS, IF IT WILL NOT IMPERIL THE SURVIVAL OF THE TREE. AERATION DEVICES MAY BE REQUIRED TO ENSURE THE TREE'S SURVIVAL.
  - D.B. IF THE GRADE ADJACENT TO A PRESERVED TREE IS RAISED SUCH THAT IT COULD SLOUGH OR ERODE INTO THE TREES CRITICAL ROOT ZONE, IT SHALL BE PERMANENTLY STABILIZED TO PREVENT SUFFOCATION OF THE ROOTS.
  - D.C. THE APPLICANT SHALL NOT INSTALL AN IMPERVIOUS SURFACE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE TO BE RETAINED WITHOUT THE AUTHORIZATION OF THE PROJECT ARBORIST. THE PROJECT ARBORIST MAY REQUIRE SPECIFIC CONSTRUCTION METHODS AND/OR USE OF AERATION DEVICES TO ENSURE THE TREE'S SURVIVAL AND TO MINIMIZE THE POTENTIAL FOR ROOT INDUCED DAMAGE TO THE IMPERVIOUS SURFACE.
  - D.D. TO THE GREATEST EXTENT PRACTICAL, UTILITY TRENCHES SHALL BE LOCATED OUTSIDE OF THE CRITICAL ROOT ZONE OF TREES TO BE RETAINED. THE PROJECT ARBORIST MAY REQUIRE THAT UTILITIES BE TUNNELED UNDER THE ROOTS OF TREES TO BE RETAINED IF THE PROJECT ARBORIST DETERMINES THAT TRENCHING WOULD SIGNIFICANTLY REDUCE THE CHANCES OF THE TREE'S SURVIVAL.

- D.E. TREE AND OTHER VEGETATION TO BE RETAINED SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. CLEARING OPERATIONS SHALL BE CONDUCTED SO AS TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL TO EROSION FOR THE LEAST POSSIBLE TIME. TO CONTROL EROSION, SHRUBS, GROUND COVER, AND STUMPS SHALL BE MAINTAINED ON THE INDIVIDUAL LOTS, WHERE FEASIBLE. WHERE NOT FEASIBLE, APPROPRIATE EROSION CONTROL PRACTICES SHALL BE IMPLEMENTED PURSUANT TO 2014 WA ECY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (SMMWW).
- E. DIRECTIONAL FELLING OF TREES SHALL BE USED TO AVOID DAMAGE TO TREES DESIGNATED FOR RETENTION.
- F. ADDITIONAL REQUIREMENTS – THE PROJECT ARBORIST MAY REQUIRE ADDITIONAL TREE PROTECTION MEASURES WHICH ARE CONSISTENT WITH ACCEPTED URBAN FORESTRY PRACTICES.
- G. ENCROACHMENT INTO THE ROOT PROTECTION ZONE IS ALLOWED WITH PROJECT ARBORIST APPROVAL AS DESCRIBED IN THE FOLLOWING NOTES:
  - G.A. EXCAVATION IN THE TOP 24 INCHES OF THE SOIL IN THE CRITICAL ROOT ZONE AREA SHOULD BEGIN AT THE EXCAVATION LINE THAT IS CLOSEST TO THE TREE.
  - G.B. THE EXCAVATION SHOULD BE DONE BY HAND/SHOVEL OR WITH A BACKHOE AND A MAN WITH A SHOVEL, PRUNING SHEARS, AND A PRUNING SAW.
  - G.C. IF DONE BY HAND, ALL ROOTS 1 INCH OR LARGER SHOULD BE PRUNED AT THE EXCAVATION LINE.
  - G.D. IF DONE WITH BACKHOE (MOST LIKELY SCENARIO), THEN THE OPERATOR SHALL START THE CUT AT THE EXCAVATION LINE AND CAREFULLY "FEEL" FOR ROOT/RESISTANCE. WHEN THERE IS RESISTANCE, THE MAN WITH THE SHOVEL/HAND DIGS AROUND THE ROOTS AND PRUNES THE ROOTS LARGER THAN 1 INCH DIAMETER.
  - G.E. THE BACKHOE IS TO REMAIN OFF OF THE TREE ROOTS TO BE PRESERVED AT ALL TIMES.
  - G.F. ALL ROOTS SHALL BE CUT CLEANLY WITH PRUNING SHEARS OR A PRUNING SAW.
  - G.G. PROJECT ARBORIST MUST BE ONSITE DURING ANY WORK WITHIN THE TREE ROOT PROTECTION ZONE.
- H. TREE PROTECTION ZONE IS DEFINED AS ALL AREAS BOUND AND PROTECTING THE OPTIMAL TREE PROTECTION ZONE.
- I. TIMELINE FOR CLEARING, GRADING, AND INSTALLATION OF TREE PROTECTION MEASURES: WORK WILL BEGIN IMMEDIATELY FOLLOWING FINAL APPROVAL BY THE CITY. TREE PROTECTION MEASURES WILL BE DONE DURING CLEARING AND ANY GRADING WILL FOLLOW.
- J. PRUNING/TREE REMOVAL NOTES: THE WORK TO BE COMPLETED UNDER THIS PROJECT SHALL CONSIST OF TREE REMOVAL AND TREE TRIMMING AS LISTED.
  - J.A. THE CONTRACTOR SHALL PROVIDE ADEQUATE CREW OF MEN, EQUIPMENT AND MATERIALS TO SAFELY AND EFFICIENTLY COMPLETE THE ASSIGNED WORK. EACH SUCH CREW SHALL INCLUDE AN INDIVIDUAL WHO SHALL BE DESIGNATED AS THE CREW SUPERVISOR AND WHO SHALL BE RESPONSIBLE FOR THE CREW'S ACTIVITIES AND WHO SHALL RECEIVE INSTRUCTION FROM THE OWNER OR THE OWNER'S REPRESENTATIVE AND DIRECT THE CREW TO ACCOMPLISH SUCH WORK.
  - J.B. WHENEVER A TREE, WHICH IS NOT SCHEDULED TO BE REMOVED, MUST BE TRIMMED OR PRUNED, THE CONTRACTOR SHALL INSURE THAT SUCH TRIMMING AND PRUNING IS CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED ARBORIST. ALL PRUNING AND TRIMMING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF ANSI A 300 "STANDARD PRACTICES FOR TREE, SHRUB AND OTHER WOODY PLANT MAINTENANCE".
  - J.C. THE CONTRACTOR SHALL BE REQUIRED TO CUT TREES TO A HEIGHT OF APPROXIMATELY 12". THE STUMPS AND ROOTS SHALL BE GROUND DOWN A MINIMUM OF TWELVE (12) INCHES BELOW NORMAL GROUND LEVEL.

- J.D. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST GOVERNMENTAL SAFETY REGULATIONS. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ANSI Z133.1 "PRUNING, TRIMMING, REPAIRING, MAINTAINING AND REMOVING TREES AND CUTTING BRUSH-SAFETY REQUIREMENTS" WITH SPECIAL EMPHASIS GIVEN TO THE REQUIREMENT THAT ONLY QUALIFIED LINE-CLEARANCE TREE TRIMMERS BE ASSIGNED TO WORK WHERE A POTENTIAL ELECTRICAL HAZARD EXISTS.
- J.E. THE CONTRACTOR SHALL MAKE ALL THE NECESSARY ARRANGEMENTS WITH ANY UTILITY THAT MUST BE PROTECTED OR RELOCATED IN ORDER TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF THE OPERATING CONDITION OF ALL ACTIVE UTILITIES WITHIN THE AREA OF CONSTRUCTION AND THEY SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES.
- J.F. ANY MATERIAL RESULTING FROM THE TRIMMING OR REMOVAL OF ANY TREES SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
- J.G. HAZARDOUS TREES-REPORTING – ANY PERSON ENGAGED IN TRIMMING OR PRUNING WHO BECOMES AWARE OF A TREE OF DOUBTFUL STRENGTH, THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY, SHALL REPORT SUCH TREE(S) TO THE OWNER OR THE OWNERS REPRESENTATIVE. SUCH TREES SHALL INCLUDE THOSE THAT ARE OVER MATURE, DISEASED, OR SHOWING SIGNS OF DECAY OR OTHER STRUCTURAL WEAKNESS.
- J.H. DAMAGES-ANY DAMAGE CAUSED BY THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO, BROKEN SIDEWALK, CURB, RUTTED LAWN, BROKEN WATER SHUT-OFFS, WIRE DAMAGE, BUILDING DAMAGE, STREET DAMAGE, ETC., WILL BE REPAIRED OR REPLACED IN A TIMELY MANNER, TO THE OWNER'S SATISFACTION, AND ALL COSTS PAID BY THE CONTRACTOR.
- J.I. ANY BRUSH CLEARING REQUIRED WITHIN THE TREE PROTECTION ZONE SHALL BE ACCOMPLISHED WITH HAND OPERATED EQUIPMENT.
- J.J. TREES TO BE REMOVED SHALL BE FELLED SO AS TO FALL AWAY FROM TREE ROOT PROTECTION ZONES AND TO AVOID PULLING AND BREAKING OF ROOTS TO REMAIN.
- J.K. ALL DOWNED BRUSH AND TREES SHALL BE REMOVED FROM THE TREE PROTECTION ZONE EITHER BY HAND OR WITH EQUIPMENT SITTING OUTSIDE THE TREE ROOT PROTECTION ZONE. EXTRACTION SHALL OCCUR BY LIFTING THE MATERIAL OUT, NOT BY SKIDDING IT ACROSS THE GROUND.
- J.L. IF TEMPORARY HAUL OR ACCESS ROADS MUST PASS OVER THE ROOT AREA OF TREES TO BE RETAINED A ROADBED OF 6 INCHES OF MULCH OR GRAVEL SHALL BE CREATED TO PROTECT THE SOIL. THE ROADBED MATERIAL SHALL BE REPLENISHED AS NECESSARY TO MAINTAIN A 6-INCH DEPTH.
- J.M. PRUNING. TREES SHALL BE PRUNED PRIOR TO THE START OF CONSTRUCTION. TREES SHALL BE CROWN CLEANED TO REMOVE THE DEADWOOD 2 INCHES IN DIAMETER AND OVER. TREES SHALL BE CROWN THINNED BY 10-20%. CROWNS MAY BE RAISED BY REMOVING BOTTOM BRANCHES AS NECESSARY UP TO 14 FEET HIGH TO GIVE CLEARANCE FOR ANY CONSTRUCTION TRAFFIC, ACTIVITIES, ETC. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI A300 PRUNING STANDARDS. REMOVE ANY LIMBS OF DOUBTFUL STRENGTH THAT COULD BE DANGEROUS TO PERSONS AND PROPERTY.



**TREE PROTECTION FENCE NOTES**

1. BLAZE ORANGE OR BLUE PLASTIC MESH FENCE FOR TREE PROTECTION DEVICE, ONLY.
2. BOUNDARIES OF PROTECTION AREA WILL BE ESTABLISHED IN THE FIELD BY THE ARBORIST PRIOR TO CONSTRUCTION
3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED AND FLAGGED BY THE ARBORIST, OR UNDER THE SUPERVISION OF THE ARBORIST, PRIOR TO INSTALLING DEVICES.
4. AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING POSTS.
5. TREE PROTECTION TO BE INSTALLED PRIOR TO CONSTRUCTION AND REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED.

**PLASTIC MESH TREE PROTECTION FENCE**  
NOT TO SCALE

**ARBORIST DISCLOSURE STATEMENT**

ARBORISTS ARE TREE SPECIALISTS WHO USE THEIR EDUCATION, KNOWLEDGE, TRAINING, AND EXPERIENCE TO EXAMINE TREES, RECOMMEND MEASURES TO ENHANCE THE HEALTH OF TREES, AND ATTEMPT TO REDUCE THE RISK OF LIVING NEAR TREES. THE CLIENT AND JURISDICTION MAY CHOOSE TO ACCEPT OR DISREGARD THE RECOMMENDATIONS OF THE ARBORIST, OR SEEK ADDITIONAL ADVICE.

ARBORISTS CANNOT DETECT EVERY CONDITION THAT COULD POSSIBLY LEAD TO THE STRUCTURAL FAILURE OF A TREE. TREES ARE LIVING ORGANISMS THAT FAIL IN WAYS WE DO NOT FULLY UNDERSTAND. CONDITIONS ARE OFTEN HIDDEN WITHIN TREES AND BELOW GROUND. ARBORISTS CANNOT GUARANTEE THAT A TREE WILL BE HEALTHY OR SAFE UNDER ALL CIRCUMSTANCES, OR FOR A SPECIFIED PERIOD OF TIME. LIKEWISE, REMEDIAL TREATMENTS, LIKE MEDICINE, CANNOT BE GUARANTEED.

TREES CAN BE MANAGED, BUT THEY CANNOT BE CONTROLLED. TO LIVE NEAR TREES IS TO ACCEPT SOME DEGREE OF RISK. THE ONLY WAY TO ELIMINATE ALL RISK ASSOCIATED WITH TREES IS TO ELIMINATE ALL TREES.

AT THE COMPLETION OF CONSTRUCTION, ALL TREES MUST ONCE AGAIN BE REVIEWED TO EVALUATE THEIR HAZARD RATING. LAND CLEARING AND REMOVAL OF ADJACENT TREES CAN EXPOSE PREVIOUSLY UNSEEN DEFECTS AND OTHERWISE HEALTHY TREES CAN BE DAMAGED DURING CONSTRUCTION.

TREES SHOWN TO BE SAVED WILL BE EVALUATED BY THE PROJECT ARBORIST PRIOR TO, DURING, AND AFTER CONSTRUCTION. TREES ADVERSELY AFFECTED BY CONSTRUCTION AND/OR DETERMINED TO BE A SAFETY HAZARD WILL BE REMOVED.



Know what's below.  
Call before you dig.



**BRUCE D. HANSON**  
CERTIFICATE NUMBER: PH 7554  
EXPIRATION DATE: 06/30/22

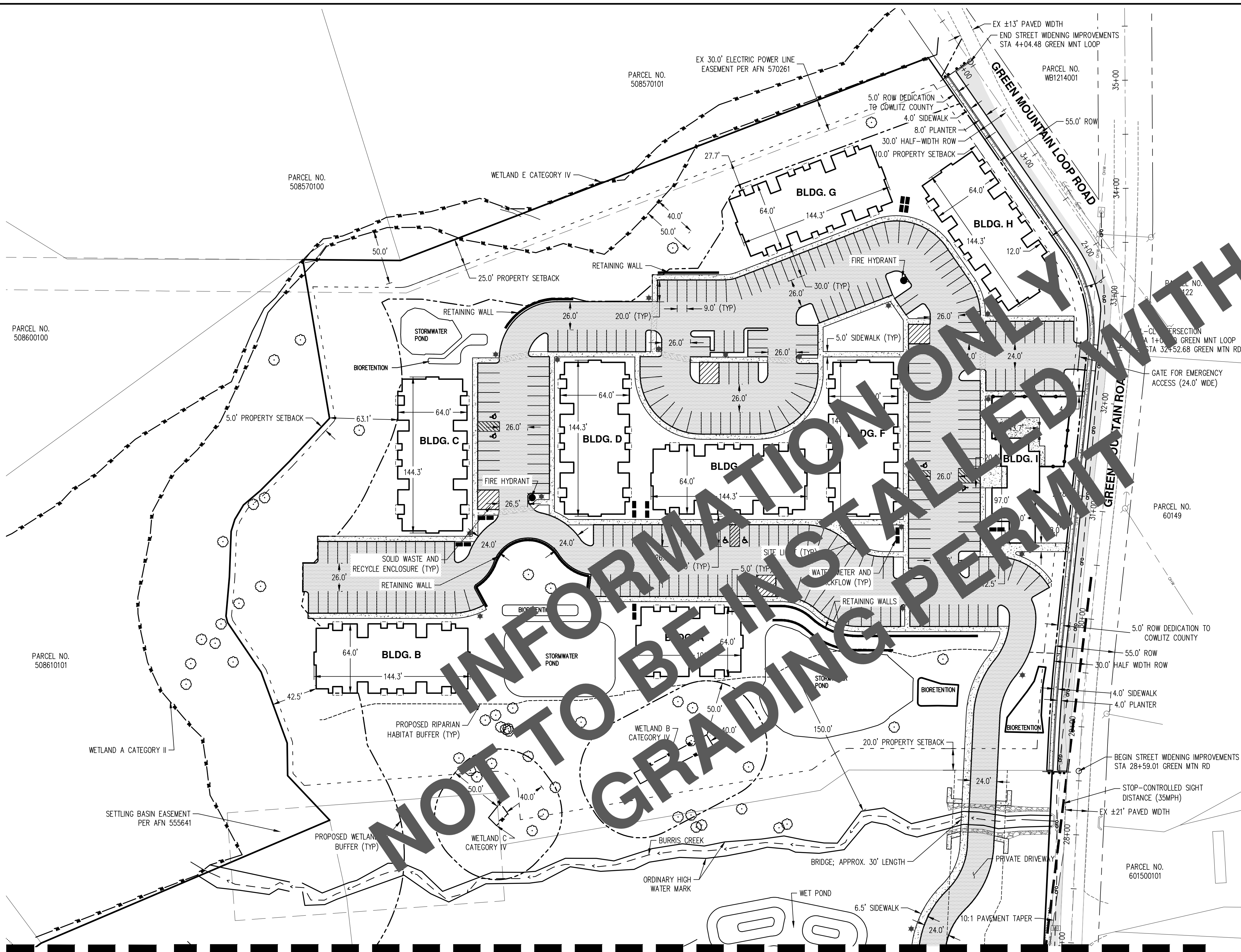
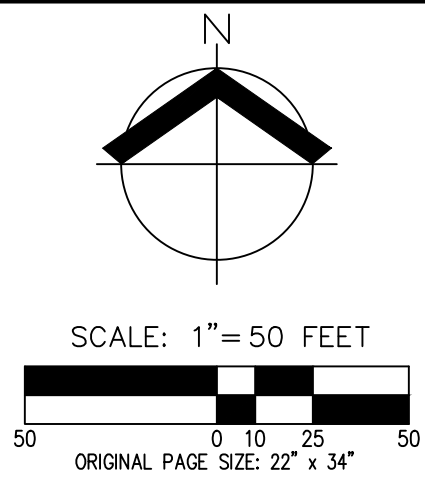
*Bryce D. Hanson*

DESIGNED BY:	TJW
DRAWN BY:	TJW
MANAGED BY:	BDH
CHECKED BY:	BDH
DATE:	2/9/2022

REVISIONS
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JOB NUMBER	8344
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SHEET	G4.1
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**GENERAL NOTES**

- ROADWAY WIDENING AND FRONTAGE IMPROVEMENTS ARE PROPOSED FOR GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD.
- STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF BIORETENTION, WET PONDS, AND DETENTION PONDS.
- THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF 8 APARTMENT BUILDINGS AND 1 AMENITIES BUILDING.
- THE PROPOSED BUILDINGS WILL BE CONNECTED TO PUBLIC WATER AND SANITARY SEWER PROVIDED BY THE CITY OF WOODLAND.
- PARKING REQUIREMENTS WERE DETERMINED PER WOODLAND MUNICIPAL CODE SECTION 17.56.050, ASSUMING ALL UNITS WILL BE ONE OR TWO BEDROOM.
- THERE ARE NO OUTDOOR STORAGE AREAS PROPOSED ON SITE.
- TWO FIRE HYDRANT LOCATIONS ARE PROPOSED AS SHOWN ON THE RESIDENTIAL SITE.
- SEE TYPICAL ROADWAY SECTIONS ON SHEET G5.4.
- GREEN MOUNTAIN ROAD RIGHT-OF-WAY SOUTHWEST OF THE SHARED PROPERTY BOUNDARY BETWEEN PARCELS 508680100 AND 508700100 IS CITY OF WOODLAND JURISDICTION. NORTHEAST OF THIS POINT GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE COWLITZ COUNTY JURISDICTION. ALL PARCELS WEST OF GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE CITY OF WOODLAND JURISDICTION.
- THE PROPERTY IS NOT KNOWN TO BE LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.
- STORMWATER FACILITIES ON PRIVATE SITE SHALL BE PRIVATELY OWNED AND MAINTAINED. AN ACCESS AND INSPECTION EASEMENT WITH DEFINED EXTENTS OR IN THE FORM OF A COVENANT RUNNING WITH THE LAND SHALL BE GRANTED TO THE CITY OF WOODLAND.
- PROPOSED WATER MAINS, STRUCTURES, AND HYDRANTS OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND ON PARCEL 508630100. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
- PROPOSED SANITARY SEWER MAINS AND STRUCTURES OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND ON PARCEL 508630100. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
- A PRIVATE TEMPORARY CONSTRUCTION EASEMENT IS PROPOSED ALONG THE SHARED PROPERTY LINE WITH PARCEL 508580100 FOR THE INSTALLATION OF THE PROPOSED WATER MAIN (17.5' MAX. WIDTH).

**BUILDING INFORMATION**

BUILDING	FOOTPRINT (SF)	STORIES	UNITS
A	5,967	3	18
B	8,137	3	24
C	8,137	3	24
D	8,137	3	24
E	8,137	3	24
F	8,137	3	24
G	8,137	3	24
H	8,137	3	24
I	3,443	1	NA (AMENITIES BUILDING)

**SURFACING LEGEND**

NEW PRIVATE AC PAVEMENT	
NEW PUBLIC AC PAVEMENT	
NEW CEMENT CONCRETE SIDEWALK	

NOT TO BE INSTALLED WITHOUT PERMIT

SEE SHEET G5.2

SEE SHEET G5.1

**OVERALL SITE STATISTICS**

GROSS AREA:	1,510,870	SF	(34.68 AC)
ROW AREA:	504,433	SF	(11.58 AC)
NET AREA:	1,006,437	SF	(23.10 AC)
IMPERVIOUS AREA:	280,090	SF	(6.43 AC) (27.8%)
LANDSCAPING AREA:	443,507	SF	(10.22 AC) (44.3%)
CRITICAL AREA:	280,840	SF	(6.45 AC) (27.9%)

**RESIDENTIAL SITE STATISTICS (PARCEL 508630-100)**

GROSS AREA:	424,842	SF	(9.75 AC)
ROW AREA:	3,528	SF	(0.08 AC)
NET AREA:	421,314	SF	(9.67 AC)
IMPERVIOUS AREA:	192,970	SF	(4.43 AC) (45.8%)
LANDSCAPING AREA:	93,633	SF	(2.15 AC) (22.2%)
CRITICAL AREA:	134,711	SF	(3.09 AC) (32.0%)
*PARKING AREA:	105,789	SF	(2.43 AC) (25.1%)
*LOT COVERAGE AREA (BUILDING AREA)	66,369	SF	(1.52 AC) (15.8%)

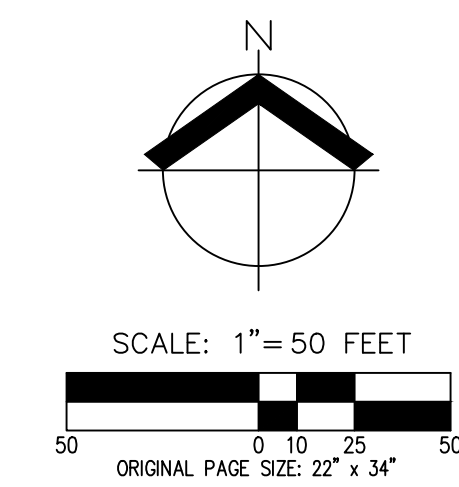
\*INCLUDED IN IMPERVIOUS AREA

**RESIDENTIAL SITE PARKING STATISTICS (PARCEL 508630-100)**

REQUIRED: SEE NOTE 6	
REQUIRED MULTIFAMILY PARKING STALLS (1.5/UNIT*186 UNITS):	279
PROPOSED STANDARD PARKING STALLS (9' X 20'):	271
*PROPOSED ADA PARKING STALLS (9' X 20'):	8
TOTAL PROPOSED PARKING STALLS:	279

\*INCLUDES 2 ADA VAN PARKING STALLS

SEE SHEET G5.0



SEE SHEET G5.2

**NOT TO BE INSTALLED WITH  
INFORMATION ONLY  
GRADING PERMIT**

**GENERAL NOTES**

- ROADWAY WIDENING AND FRONTAGE IMPROVEMENTS ARE PROPOSED FOR GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD.
- STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF BIORETENTION, WET POND, AND DETENTION PONDS.
- THE PROPOSED DEVELOPMENT PROVIDES THE CONSTRUCTION OF 8 APARTMENT BUILDINGS AND 1 AMENITY BUILDING.
- THE PROPOSED BUILDINGS WILL BE CONNECTED TO PUBLIC WATER AND SANITARY SEWER PROVIDED BY THE CITY OF WOODLAND.
- PARKING REQUIREMENTS WERE DETERMINED PER WOODLAND MUNICIPAL CODE SECTION 17.050, ASSUMING ALL UNITS WILL BE ONE OR TWO BEDROOM.
- THERE ARE NO OUTDOOR STORAGE AREAS PROPOSED ON SITE.
- TWO FIRE HYDRANT LOCATIONS ARE PROPOSED AS SHOWN ON THE RESIDENTIAL SITE.
- SEE TYPICAL ROADWAY SECTIONS ON SHEET G5.4.
- GREEN MOUNTAIN ROAD RIGHT-OF-WAY SOUTHWEST OF THE SHARED PROPERTY BOUNDARY BETWEEN PARCELS 508680100 AND 508700100 IS CITY OF WOODLAND JURISDICTION. NORTHEAST OF THIS POINT GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE COWLITZ COUNTY JURISDICTION. ALL PARCELS WEST OF GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE CITY OF WOODLAND JURISDICTION.
- THE PROPERTY IS NOT KNOWN TO BE LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.
- STORMWATER FACILITIES ON PRIVATE SITE SHALL BE PRIVATELY OWNED AND MAINTAINED. AN ACCESS AND INSPECTION EASEMENT WITH DEFINED EXTENTS OR IN THE FORM OF A COVENANT RUNNING WITH THE LAND SHALL BE GRANTED TO THE CITY OF WOODLAND.
- PROPOSED WATER MAINS, STRUCTURES, AND HYDRANTS OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND ON PARCEL 508630100. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
- PROPOSED SANITARY SEWER MAINS AND STRUCTURES OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND ON PARCEL 508630100. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
- A PRIVATE TEMPORARY CONSTRUCTION EASEMENT IS PROPOSED ALONG THE SHARED PROPERTY LINE WITH PARCEL 508580100 FOR THE INSTALLATION OF THE PROPOSED WATER MAIN (17.5'

SURFACING LEGEND	
NEW PRIVATE AC PAVEMENT	
NEW PUBLIC AC PAVEMENT	
NEW CEMENT CONCRETE SIDEWALK	

OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON

PROPOSED DEVELOPMENT  
PLAN

DESIGNED BY: TJW  
DRAWN BY: TJW  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022

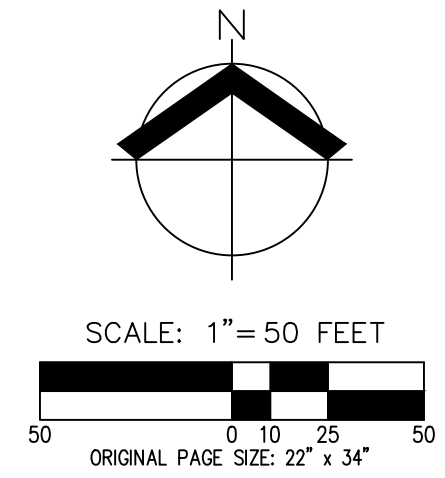


REVISIONS

JOB NUMBER  
8344

SHEET  
G5.1

SEE SHEET G5.0



DESIGNED BY: TJW  
DRAWN BY: TJW  
MANAGED BY: BDH  
CHECKED BY: BDH

DATE: 2/9/2022



REVISIONS

JOB NUMBER  
8344

SHEET  
G5.2

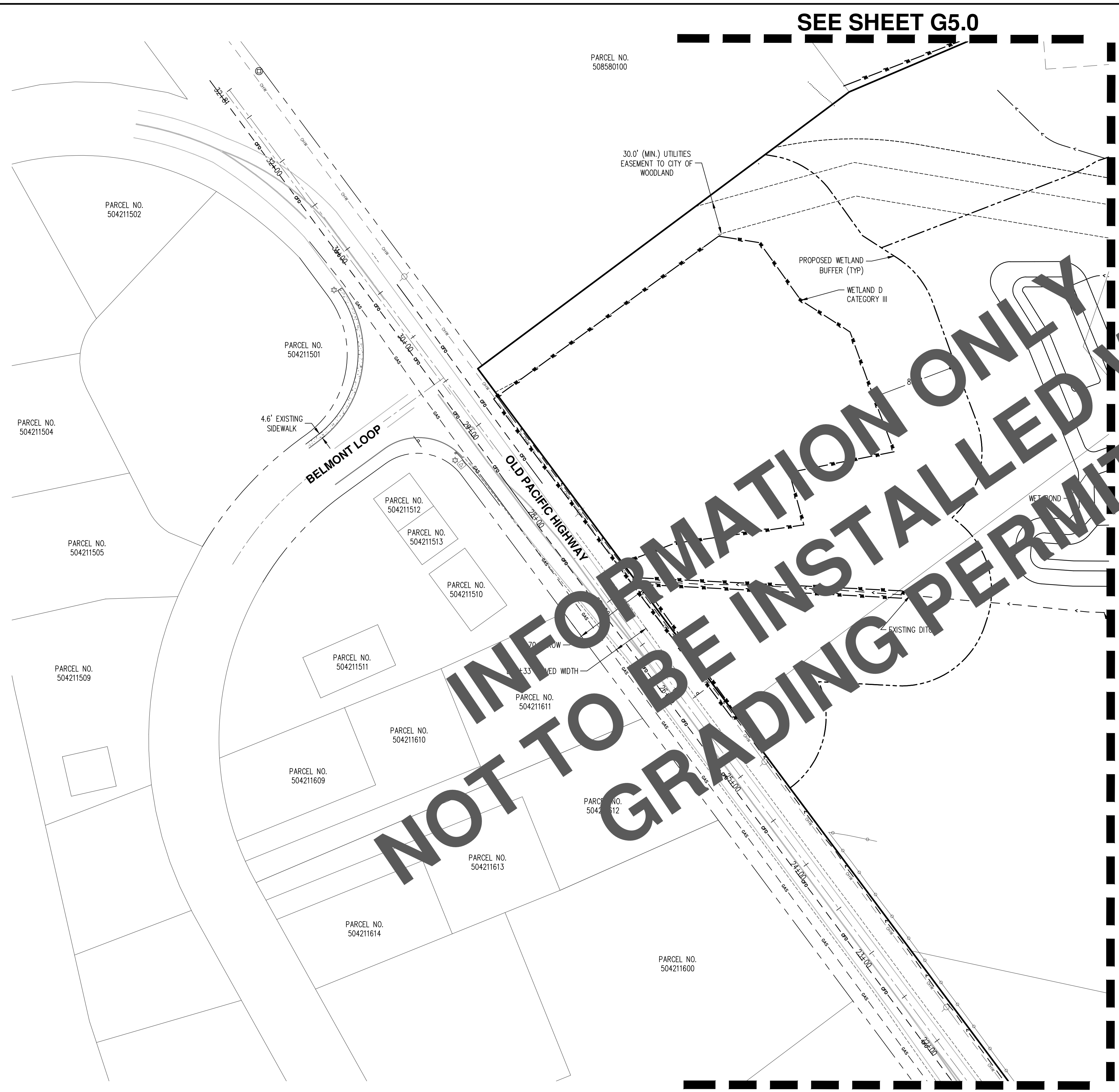
GENERAL NOTES

- ROADWAY WIDENING AND FRONTAGE IMPROVEMENTS ARE PROPOSED FOR GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD.
- STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF RETENTION, WET PONDS, AND DETENTION PONDS.
- THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF 8 APARTMENT BUILDINGS AND 1 GYMNASIUM BUILDING.
- THE PROPOSED BUILDINGS WILL BE CONNECTED TO PUBLIC WATER AND SANITARY SEWER PROVIDED BY THE CITY OF WOODLAND.
- PARKING REQUIREMENTS WERE DETERMINED PER WOODLAND MUNICIPAL CODE SECTION 17.56.050, ASSUMING ALL UNITS WILL BE ONE OR TWO BEDROOM.
- THERE ARE NO OUTDOOR STORAGE AREAS PROPOSED ON SITE.
- TWO FIRE HYDRANT LOCATIONS ARE PROPOSED AS SHOWN ON THE RESIDENTIAL SITE.
- SEE TYPICAL ROADWAY SECTIONS ON SHEET G5.4.
- GREEN MOUNTAIN ROAD RIGHT-OF-WAY SOUTHWEST OF THE SHARED PROPERTY BOUNDARY BETWEEN PARCELS 508680100 AND 508700100 IS CITY OF WOODLAND JURISDICTION. NORTHEAST OF THIS POINT GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE COWLITZ COUNTY JURISDICTION. ALL PARCELS WEST OF GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD RIGHT-OF-WAY ARE CITY OF WOODLAND JURISDICTION.
- THE PROPERTY IS NOT KNOWN TO BE LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.
- STORMWATER FACILITIES ON PRIVATE SITE SHALL BE PRIVATELY OWNED AND MAINTAINED. AN ACCESS AND INSPECTION EASEMENT WITH DEFINED EXTENTS OR IN THE FORM OF A COVENANT RUNNING WITH THE LAND SHALL BE GRANTED TO THE CITY OF WOODLAND.
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- A PRIVATE TEMPORARY CONSTRUCTION EASEMENT IS PROPOSED ALONG THE SHARED PROPERTY LINE WITH PARCEL 508580100 FOR THE INSTALLATION OF THE PROPOSED WATER MAIN (17.5' WIDE).

NOT TO BE INSTALLED WITH INFORMATION ONLY GRADING PERMIT

SEE SHEET G5.3

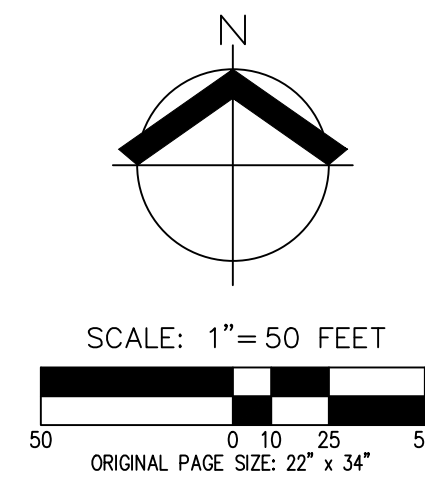
AKS DRAWING FILE: 8344\_G5\_PROP\_DEV.DWG | LAYOUT: G5.2



SEE SHEET G5.1



SEE SHEET G5.1



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**OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON**  
S12, T5N, R1W, W.M.

**PROPOSED DEVELOPMENT  
PLAN**

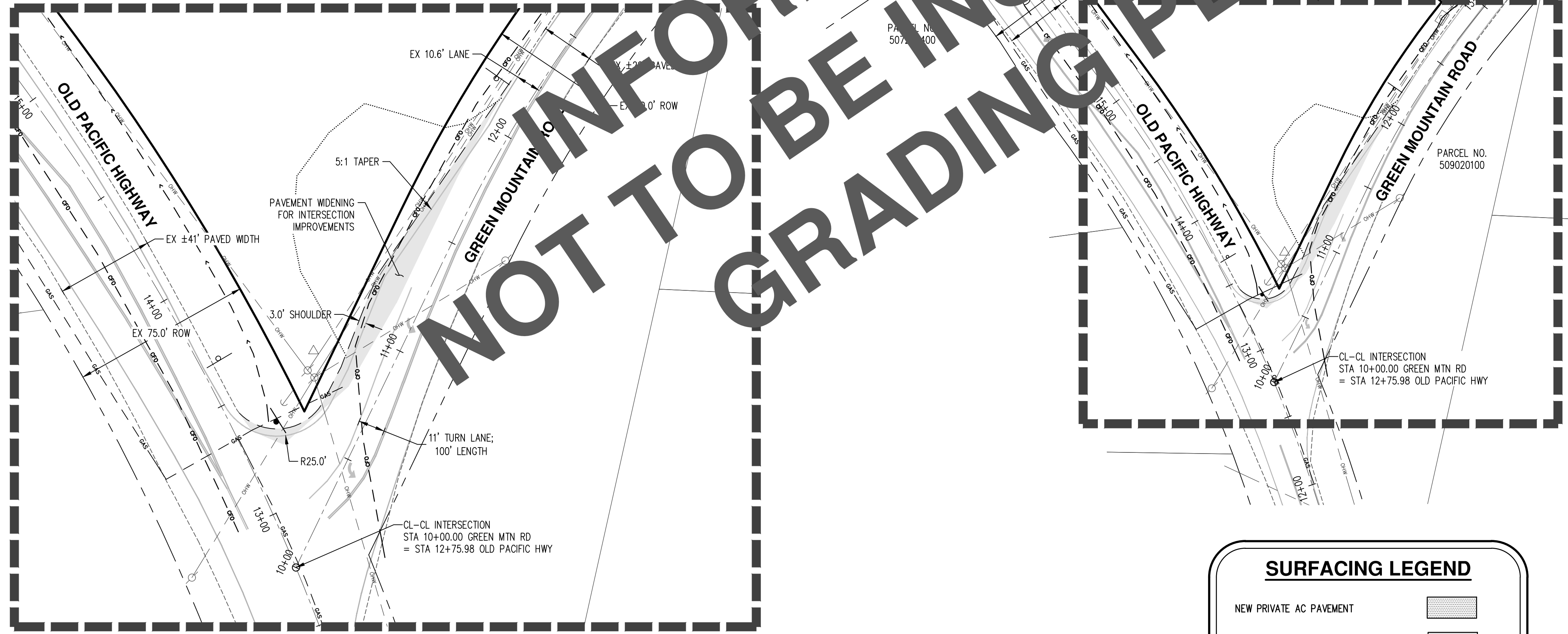
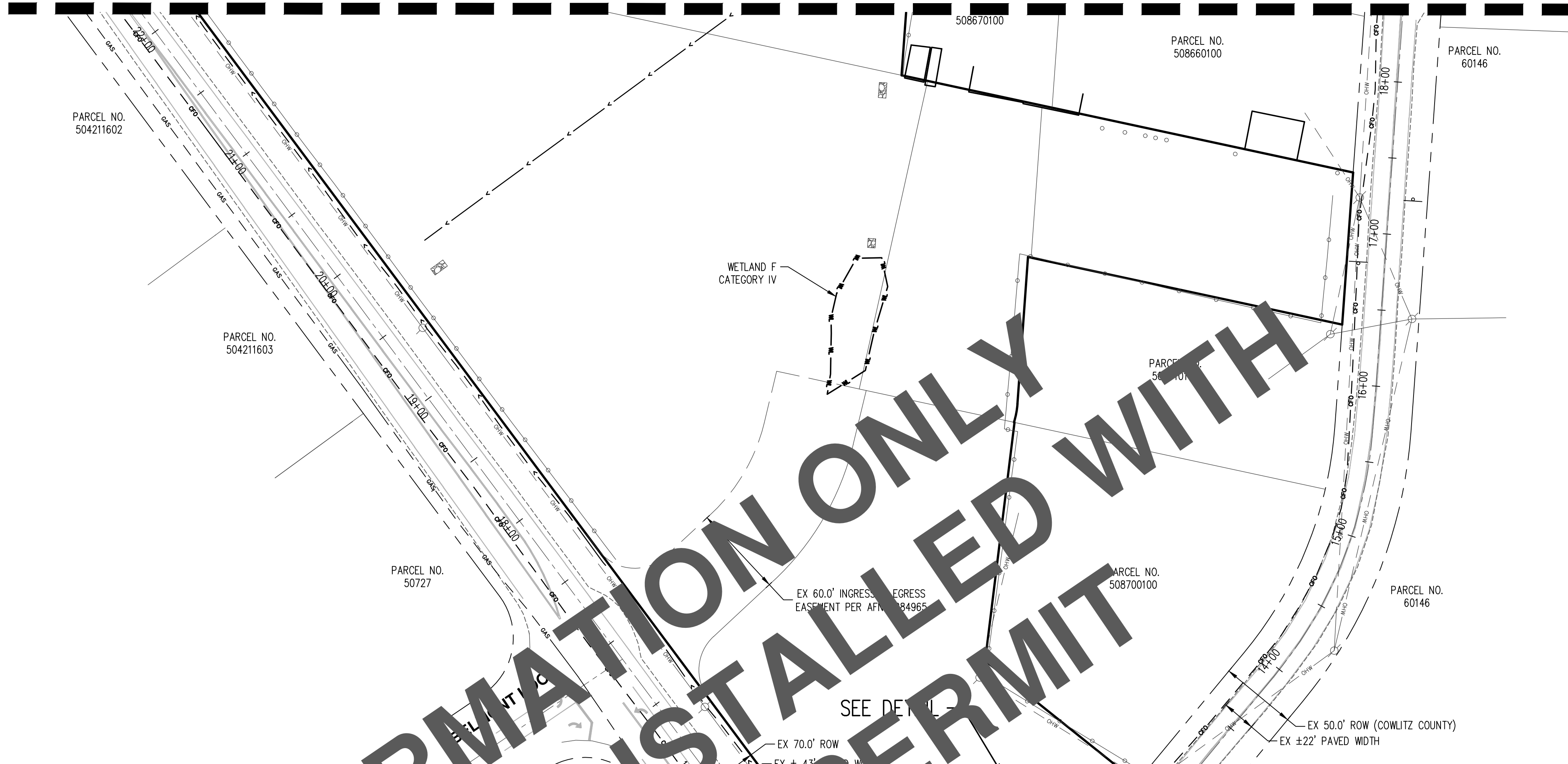
DESIGNED BY: T.J.W.  
DRAWN BY: T.J.W.  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022



REVISIONS

JOB NUMBER  
**8344**

SHEET  
**G5.3**



**DETAIL**  
SCALE: 1" = 30'

**GENERAL NOTES**

- ROADWAY WIDENING AND FRONTAGE IMPROVEMENTS ARE PROPOSED FOR GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD.
- STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF BIORETENTION, WET PONDS, AND DETENTION PONDS.
- THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF 8 APARTMENT BUILDINGS AND 1 AMENITIES BUILDING.
- THE PROPOSED BUILDINGS WILL BE CONNECTED TO PUBLIC WATER AND SANITARY SEWER PROVIDED BY THE CITY OF WOODLAND.
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- A PRIVATE TEMPORARY CONSTRUCTION EASEMENT IS PROPOSED ALONG THE SHARED PROPERTY LINE WITH PARCEL 508580100 FOR THE INSTALLATION OF THE PROPOSED WATER MAIN (17.5' MAX. WIDTH).

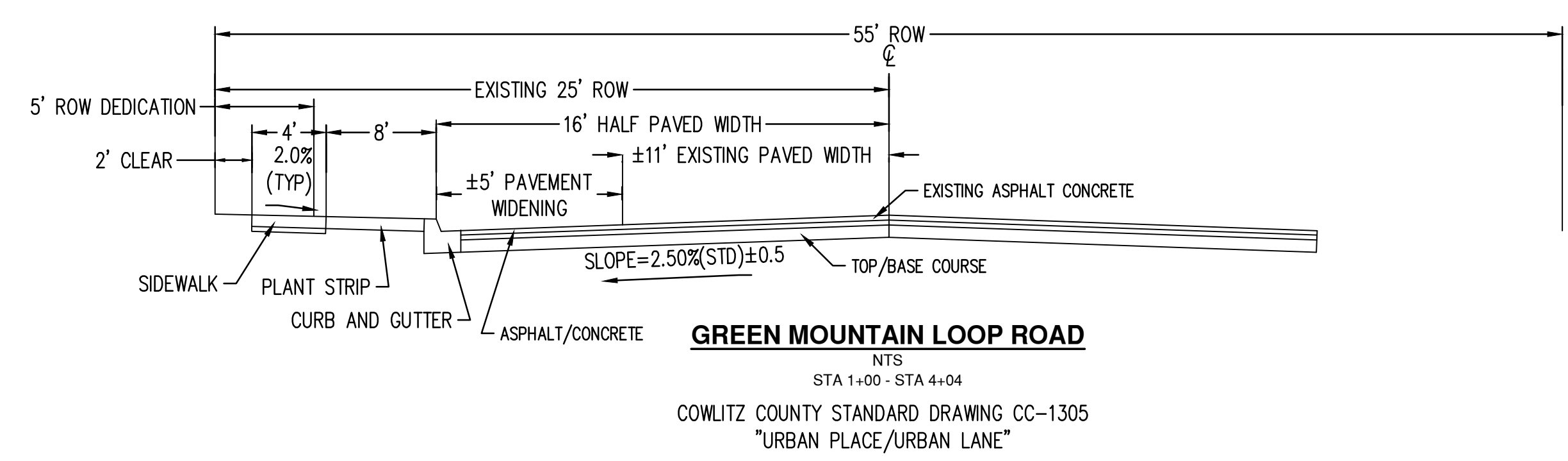
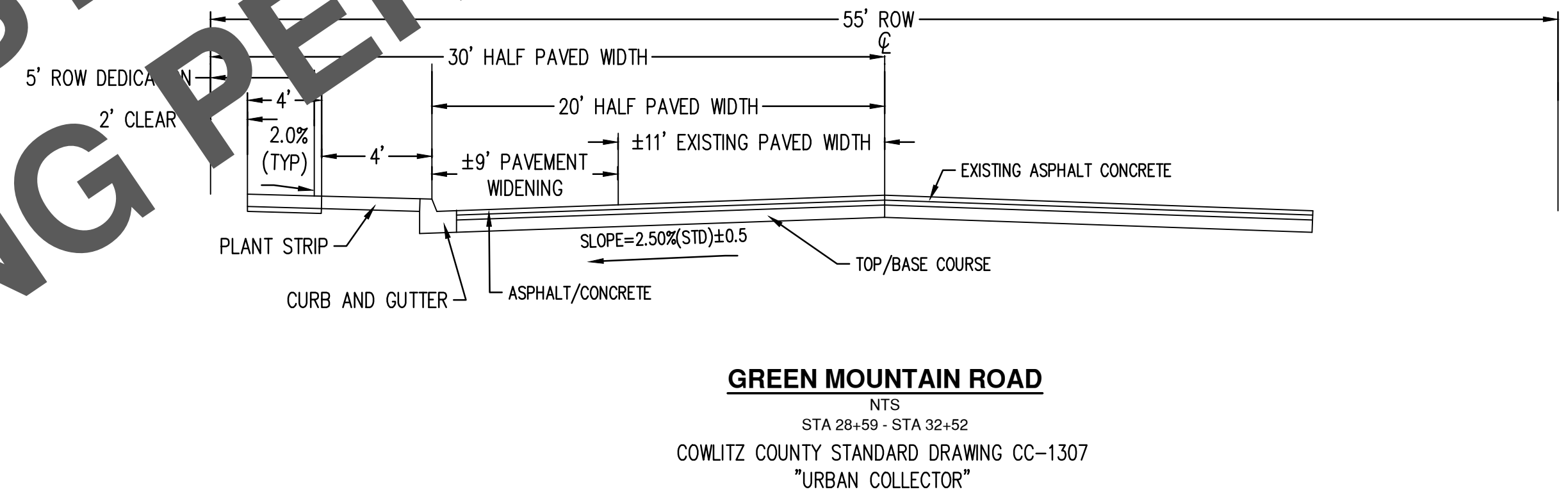
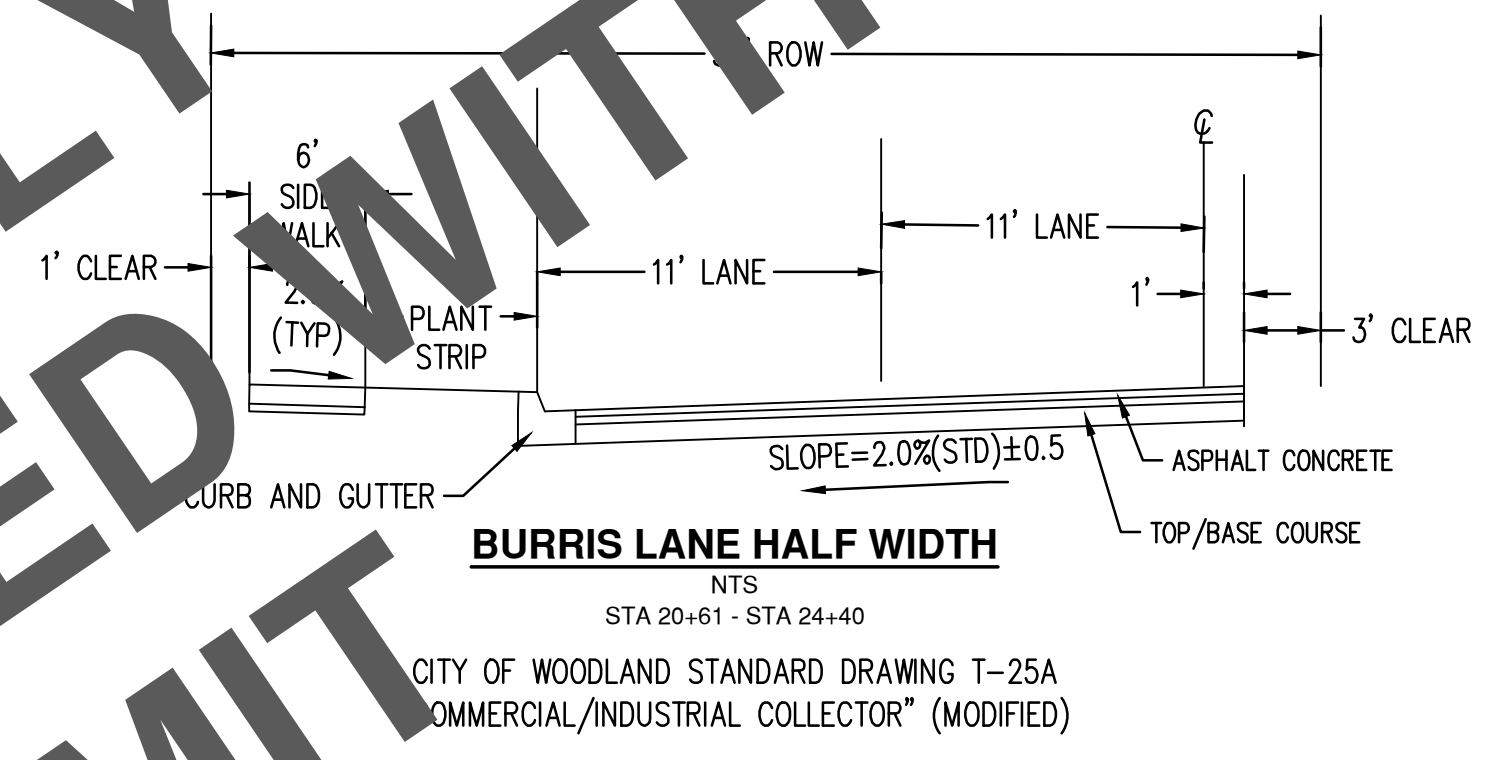
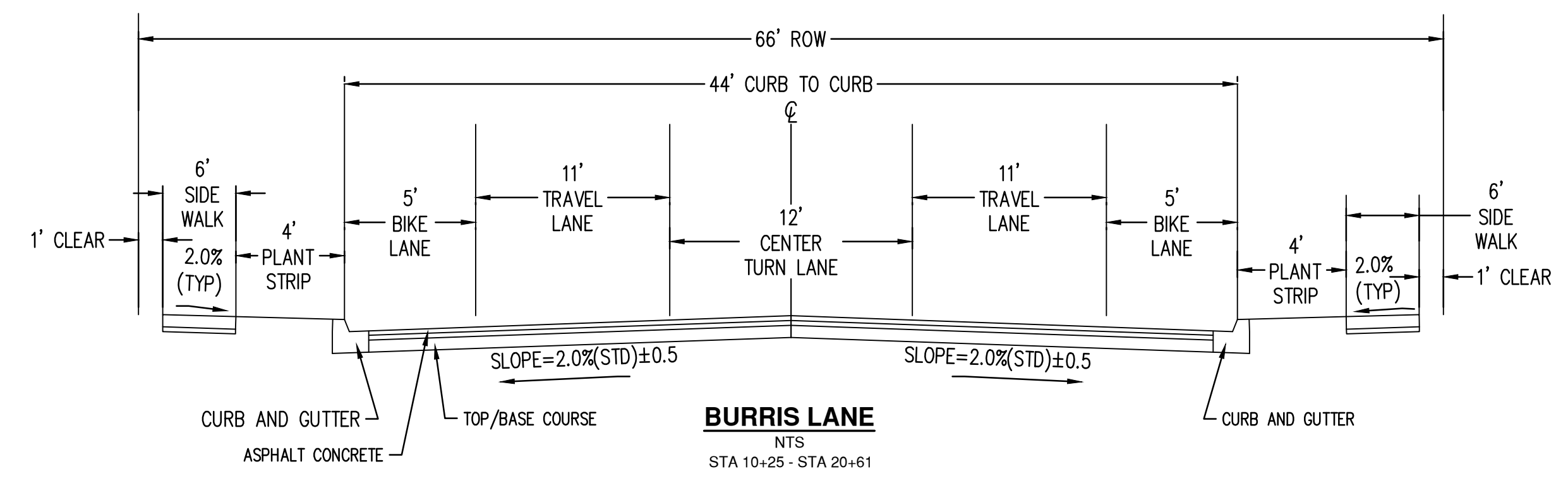
**SURFACING LEGEND**

NEW PRIVATE AC PAVEMENT	
NEW PUBLIC AC PAVEMENT	
NEW CEMENT CONCRETE SIDEWALK	

AKS DRAWING FILE: 8344\_G5\_PROP\_DEVELOPMENT\_LAYOUT\_G5.3

AKS DRAWING FILE: 8344\_G5\_PROP\_DEVELOPMENT\_LAYOUT\_G5.4

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**OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON**

**PROPOSED DEVELOPMENT  
PLAN**

DESIGNED BY: TJW  
DRAWN BY: TJW  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022

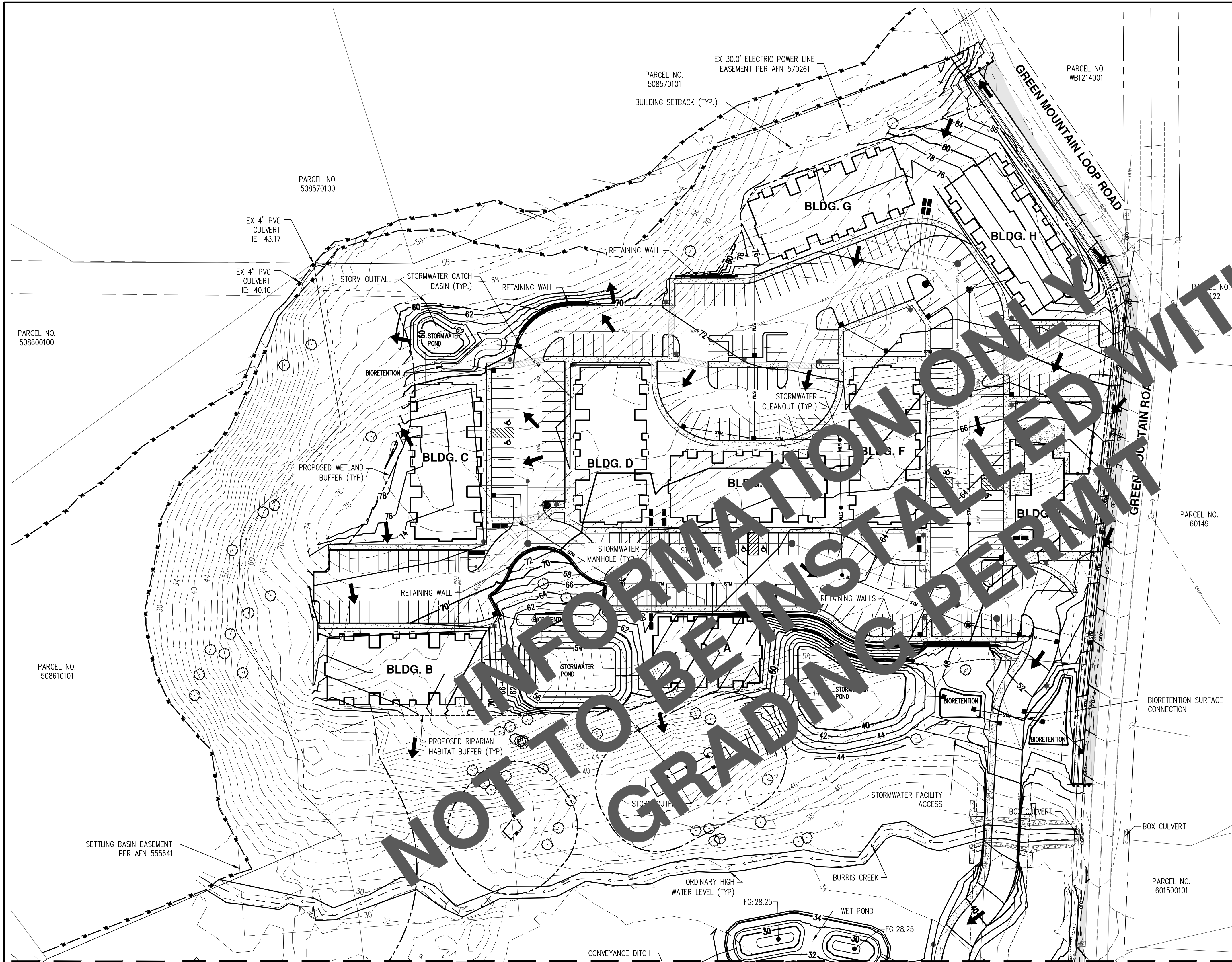


REVISIONS

JOB NUMBER  
**8344**

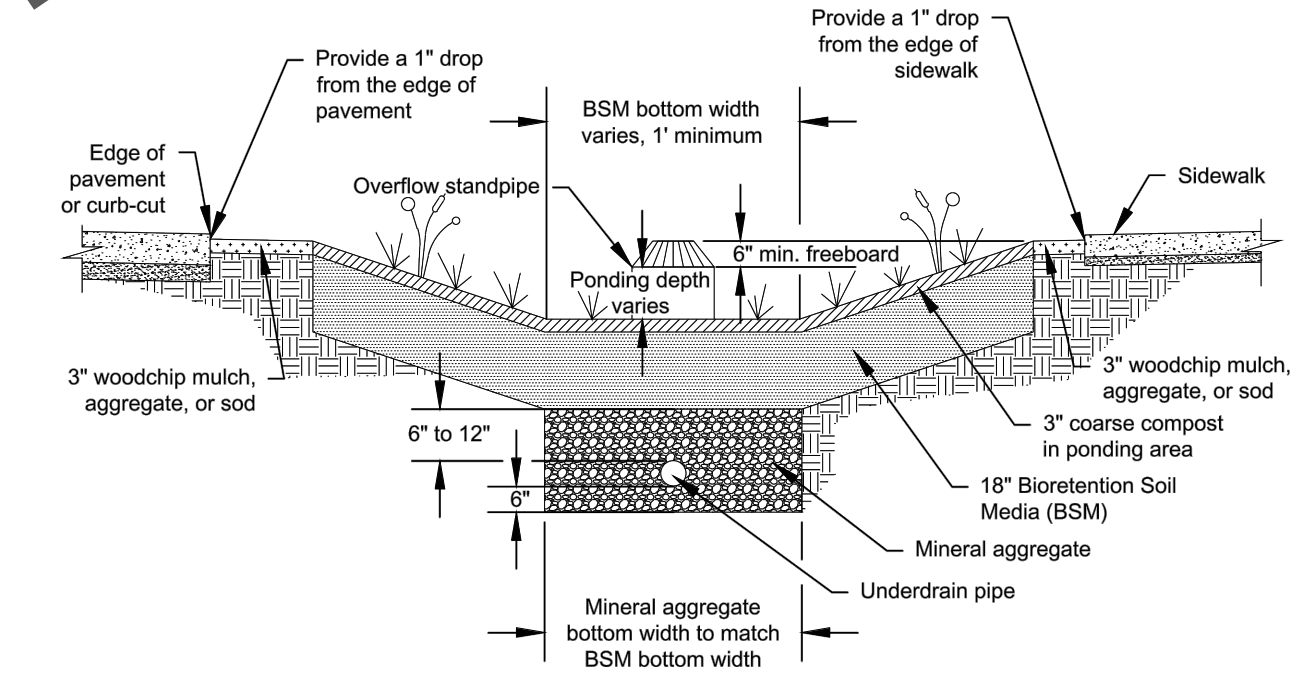
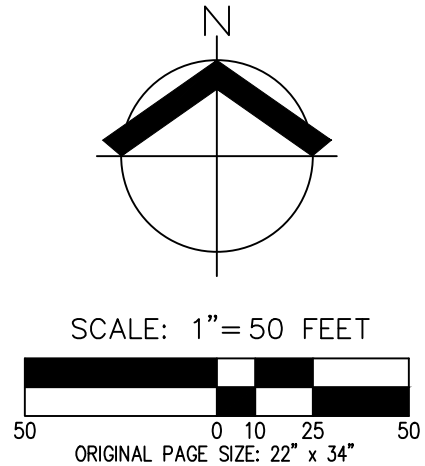
SHEET

**G5.4**

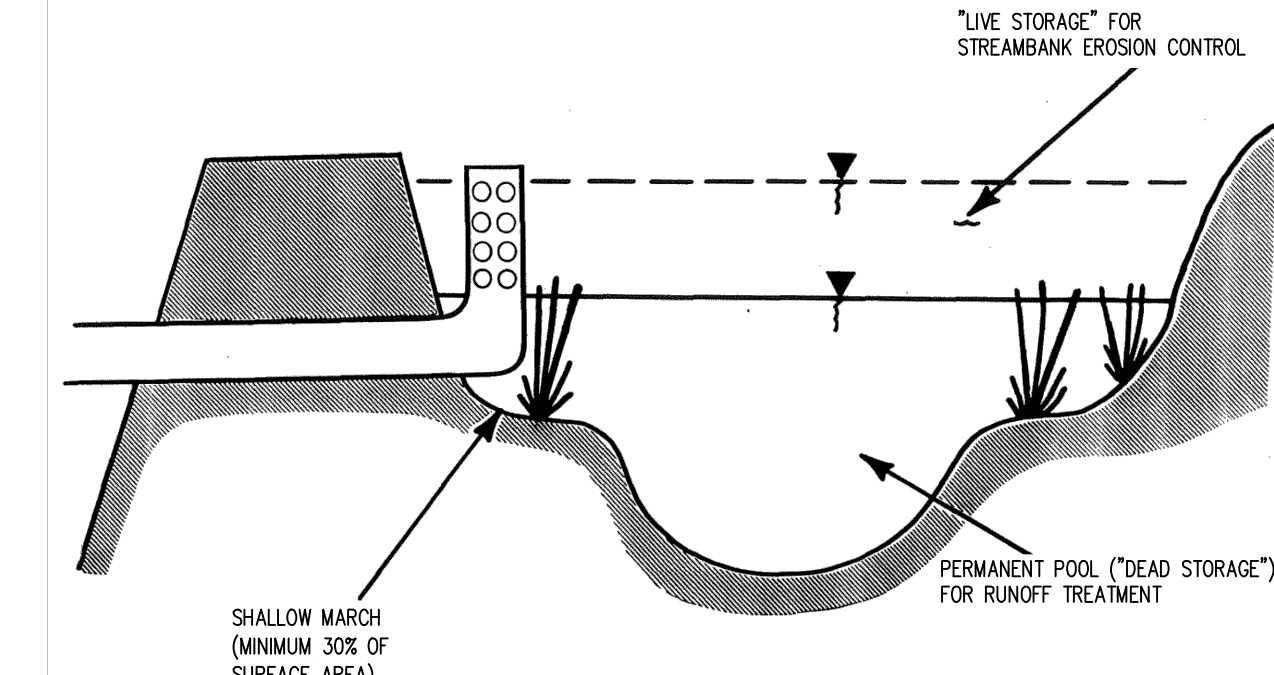


**GENERAL NOTES**

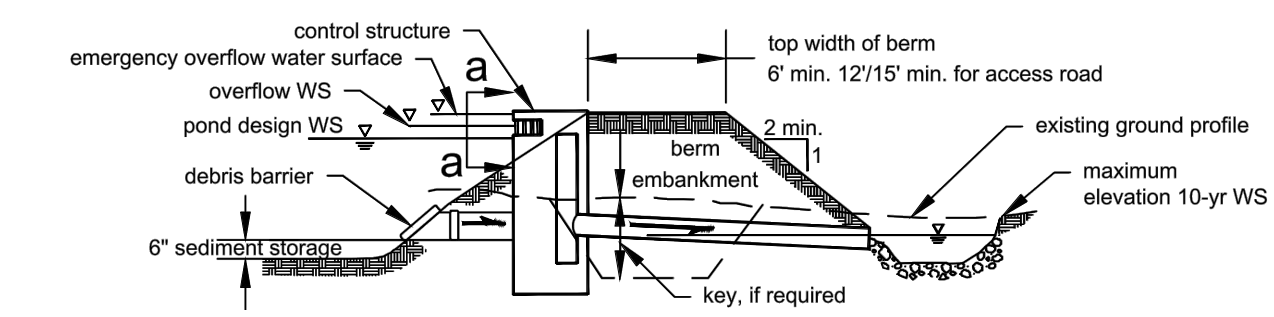
1. STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF BIORETENTION, DETENTION PONDS, AND WET PONDS IN ACCORDANCE WITH WMC 15.12.
2. STORMWATER WILL BE TREATED, DETAINED, AND HAVE A METERED DISCHARGE TO NATURAL DOWNSTREAM FLOW PATHS.
3. STORMWATER LINES THROUGHOUT RESIDENTIAL PARCEL SHALL BE MINIMUM 5' FROM SANITARY SEWER AND WATER LINE.
4. STORMWATER FACILITIES ON PRIVATE SITE SHALL BE PRIVATELY OWNED AND MAINTAINED. AN ACCESS AND INSPECTION EASEMENT WITH DEFINED EXTENTS OR IN THE FORM OF A COVENANT RUNNING WITH THE LAND SHALL BE GRANTED TO THE CITY OF WOODLAND.
5. GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD FRONTAGE RUNOFF TO BE COLLECTED AND ROUTED TO ON-SITE STORMWATER FACILITIES FOR TREATMENT AND FLOW CONTROL.
6. SEE TECHNICAL INFORMATION REPORT (DECEMBER 2021) FOR MORE INFORMATION.
7. STORMWATER RUNOFF FROM BURRIS LANE TO BE CONVEYED TO PRIVATE TEMPORARY WET POND FOR TREATMENT AND FLOW CONTROL. TEMPORARY WET POND TO BE RELOCATED WITH FUTURE DEVELOPMENT OF COMMERCIAL PROPERTIES UNDER A SEPARATION PERMIT.



**BIORETENTION**  
NTS



**WET POND**  
NTS



**DETENTION POND**  
NTS

LEGEND	
EXISTING GROUND CONTOUR (2 FT)	---102---
EXISTING GROUND CONTOUR (10 FT)	---110---
FINISHED GRADE CONTOUR (2 FT)	---102---
FINISHED GRADE CONTOUR (10 FT)	---110---
DRAINAGE FLOW DIRECTION	➔

SEE SHEET G6.2

SEE SHEET G6.1

DESIGNED BY: T.J.W.  
DRAWN BY: T.J.W.  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022



REVISIONS


JOB NUMBER  
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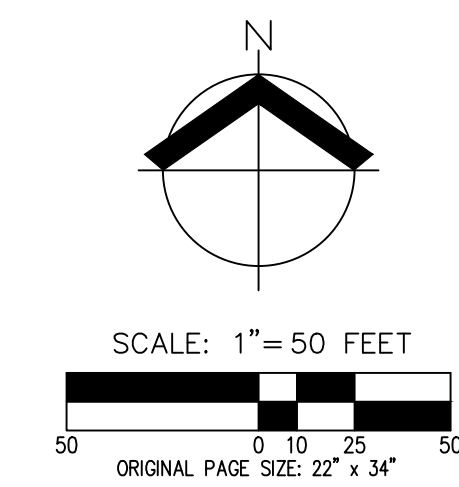
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AKS DRAWING FILE: 8344\_G6\_STM.DWG | LAYOUT: G6.0

SEE SHEET G6.0

**GENERAL NOTES**

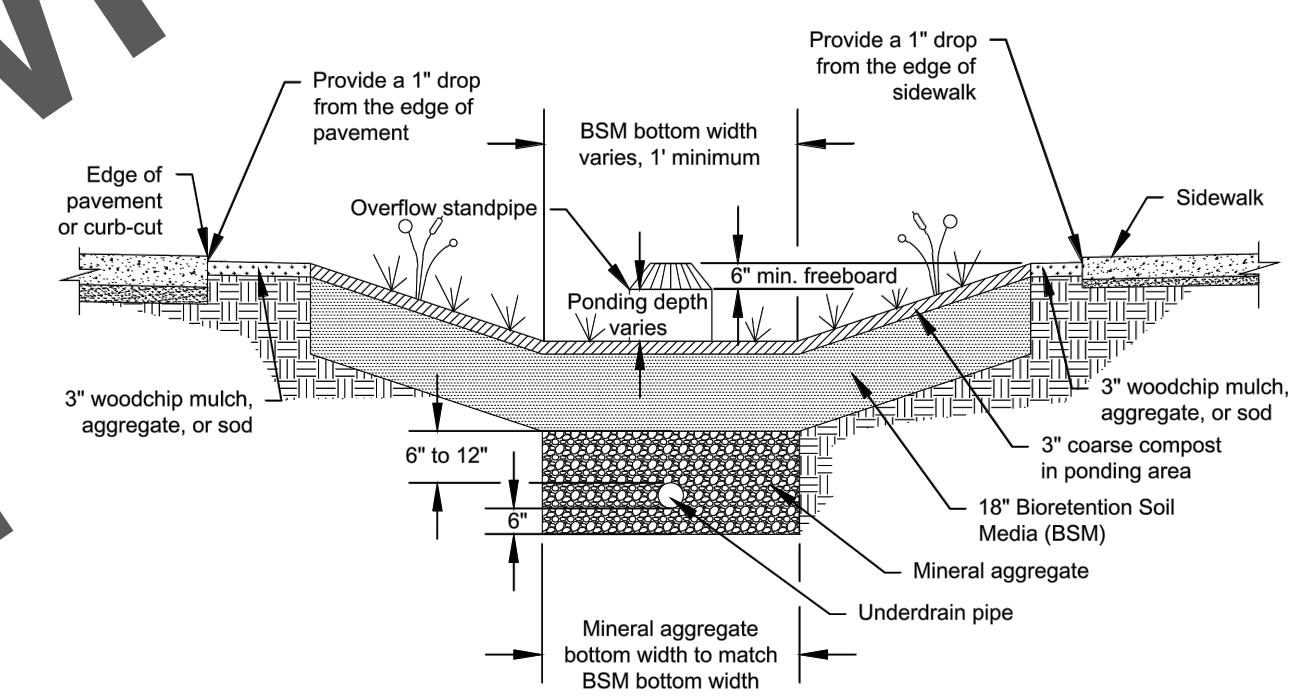
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5. GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD FRONTAGE RUNOFF TO BE COLLECTED AND ROUTED TO ONSITE STORMWATER FACILITIES FOR TREATMENT AND FLOW CONTROL.
6. SEE TECHNICAL INFORMATION REPORT (DECEMBER 2021) FOR MORE INFORMATION.
7. STORMWATER RUNOFF FROM BURRIS LANE TO BE CONVEYED TO PRIVATE TEMPORARY WET POND FOR TREATMENT AND FLOW CONTROL. TEMPORARY WET POND TO BE RELOCATED WITH FUTURE DEVELOPMENT OF COMMERCIAL PROPERTIES UNDER A SEPARATE PERMIT.
8. THE MAJORITY OF STORMWATER RUNOFF FROM PROPOSED GREEN MOUNTAIN ROAD INTERSECTION IMPROVEMENTS WILL BE COLLECTED WITHIN BURRIS LANE AND CONVEYED TO PRIVATE TEMPORARY WET POND FOR TREATMENT AND FLOW CONTROL. A NEGLIGIBLE AMOUNT OF RUNOFF FROM PAVEMENT TAPERS, UNABLE TO BE CAPTURED, WILL ENTER THE EXISTING ROADSIDE DITCH. TEMPORARY WET POND TO BE RELOCATED WITH FUTURE DEVELOPMENT.



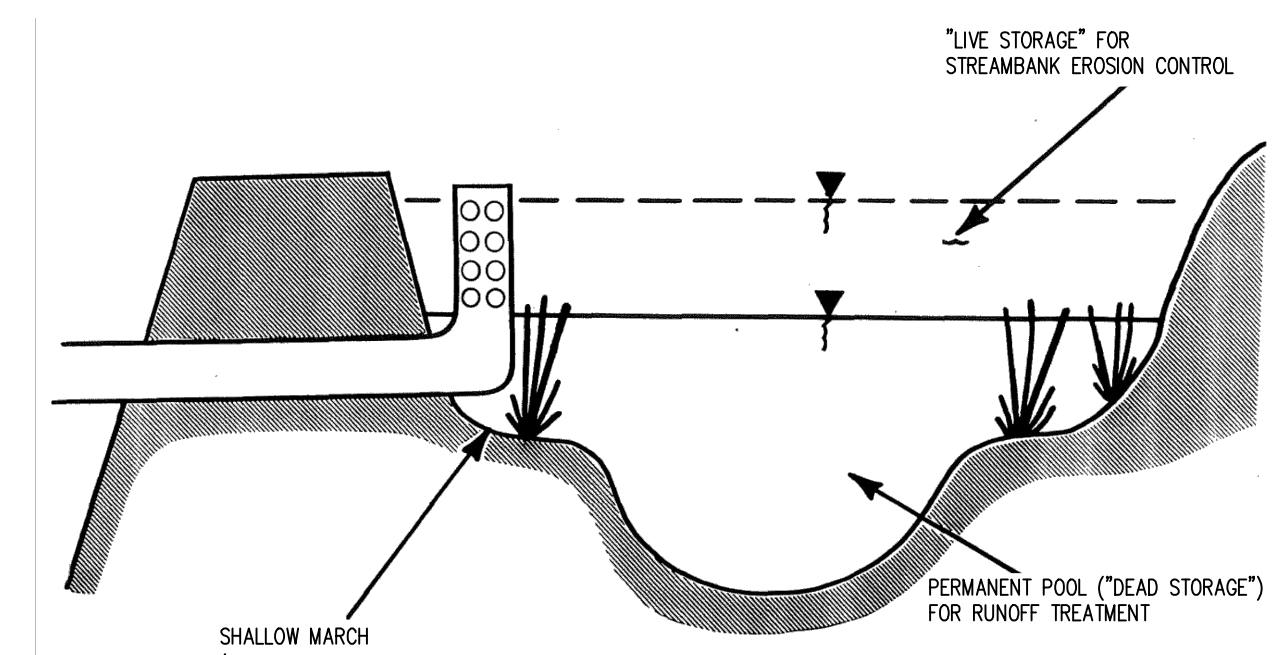
SEE SHEET G6.2

NOT TO BE INSTALLED WITH GRADING PERMIT

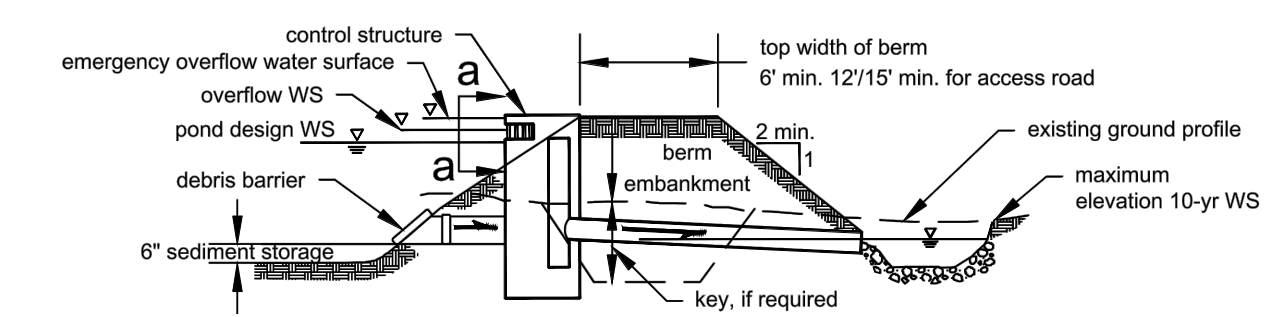
SEE SHEET G6.3



**BIORETENTION**  
NTS



**WET POND**  
NTS



**DETENTION POND**  
NTS

LEGEND	
EXISTING GROUND CONTOUR (2 FT)	---102---
EXISTING GROUND CONTOUR (10 FT)	---110---
FINISHED GRADE CONTOUR (2 FT)	---102---
FINISHED GRADE CONTOUR (10 FT)	---110---
DRAINAGE FLOW DIRECTION	→

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**OAK VILLAGE APARTMENTS**  
**EARLY GRADING**  
**WOODLAND WASHINGTON**  
S12, T5N, R1W, W.M.

**STORMWATER PLAN**

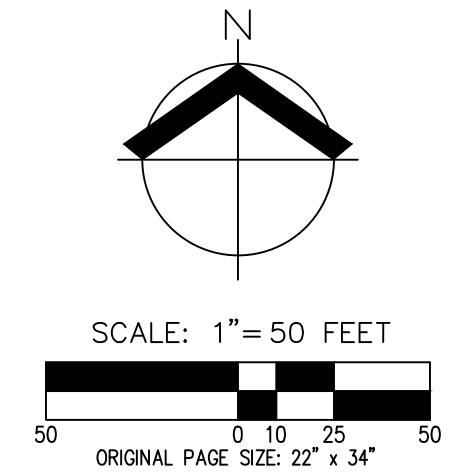
DESIGNED BY: T.J.W.  
DRAWN BY: T.J.W.  
MANAGED BY: BDH  
CHECKED BY: BDH  
DATE: 2/9/2022

REVISIONS


JOB NUMBER  
**8344**

SHEET  
**G6.1**

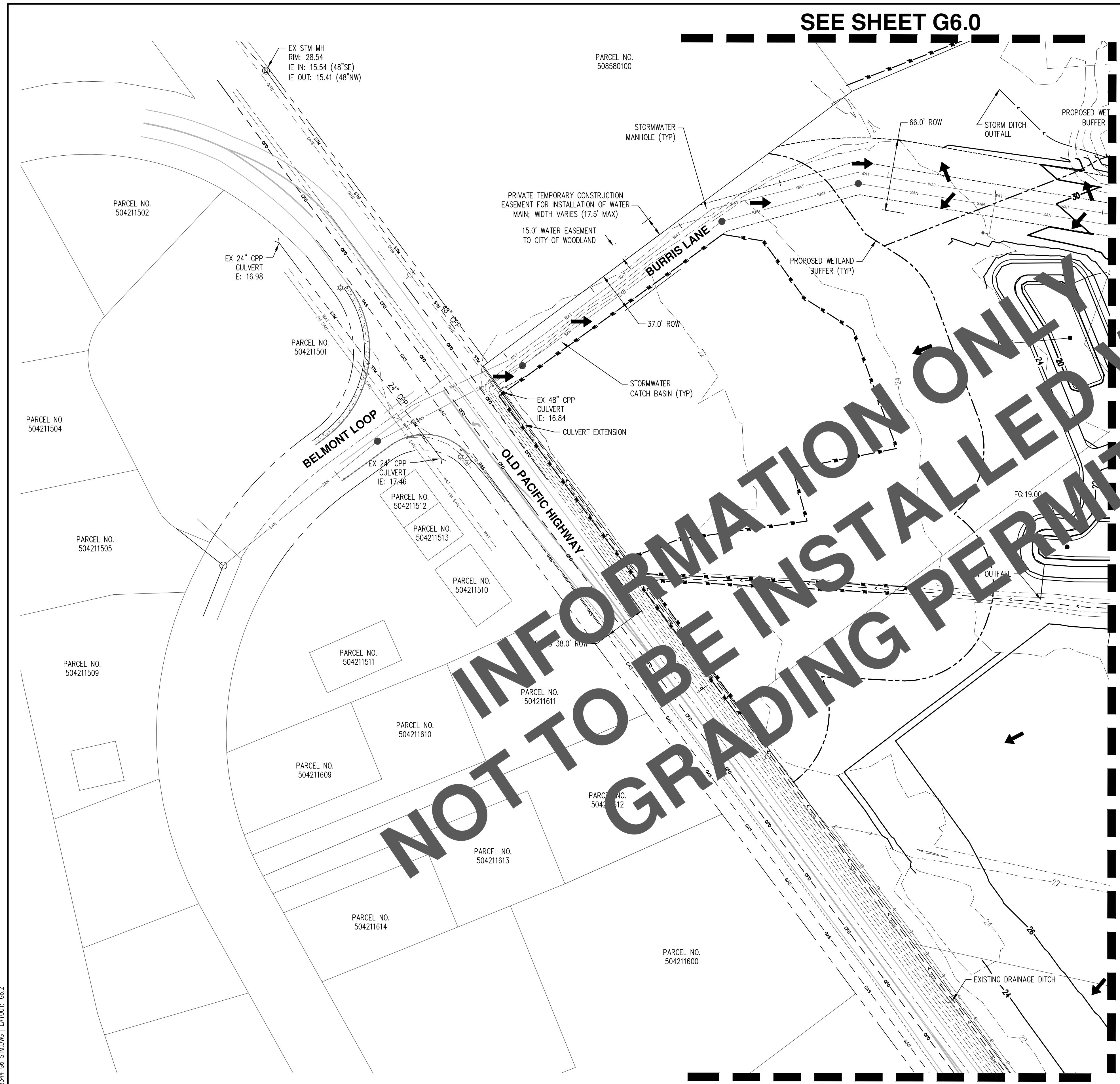
SEE SHEET G6.0



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CHECKED BY: BDH  
DATE: 2/9/2022



REVISIONS  
JOB NUMBER  
8344  
SHEET  
G6.2



**GENERAL NOTES**

1. STORMWATER QUALITY AND QUANTITY REQUIREMENTS WILL BE MET THROUGH THE USE OF BIORETENTION, DETENTION PONDS, AND WETLANDS IN ACCORDANCE WITH WMC 15.12.
2. STORMWATER WILL BE TREATED, DETAINED, AND HAVE A METERED DISCHARGE TO NATURAL DOWNSTREAM FLOW PATHS.
3. STORMWATER FACILITIES THROUGHOUT RESIDENTIAL PARCEL SHALL BE MINIMUM 5' FROM SANITARY SEWER AND WATER LINE. STORMWATER FACILITIES ON PRIVATE SITE SHALL BE PRIVATELY OWNED AND MAINTAINED. AN ACCESS AND INSPECTION EASEMENT WITH DEFINED EXTENTS OR IN THE FORM OF A COVENANT RUNNING WITH THE LAND SHALL BE GRANTED TO THE CITY OF WOODLAND.
4. GREEN MOUNTAIN ROAD AND GREEN MOUNTAIN LOOP ROAD FRONTAGE RUNOFF TO BE COLLECTED AND ROUTED TO ONSITE STORMWATER FACILITIES FOR TREATMENT AND FLOW CONTROL.
5. SEE TECHNICAL INFORMATION REPORT (DECEMBER 2021) FOR MORE INFORMATION.
6. STORMWATER RUNOFF FROM BURRIS LANE TO BE CONVEYED TO PRIVATE TEMPORARY WET POND FOR TREATMENT AND FLOW CONTROL. TEMPORARY WET POND TO BE RELOCATED WITH FUTURE DEVELOPMENT OF COMMERCIAL PROPERTIES UNDER A SEPARATE PERMIT.
7. THE MAJORITY OF STORMWATER RUNOFF FROM PROPOSED OLD PACIFIC HIGHWAY INTERSECTION IMPROVEMENTS WILL BE COLLECTED WITHIN BURRIS LANE AND CONVEYED TO PRIVATE TEMPORARY WET POND FOR TREATMENT AND FLOW CONTROL. A NEGLIGIBLE AMOUNT OF RUNOFF FROM PAVEMENT TAPERS, UNABLE TO BE CAPTURED, WILL ENTER THE EXISTING ROADSIDE DITCH. TEMPORARY WET POND TO BE RELOCATED WITH FUTURE DEVELOPMENT OF COMMERCIAL PROPERTIES UNDER SEPARATE PERMIT.

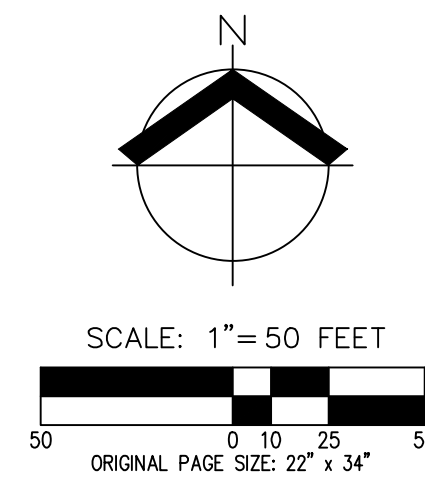
NOT TO BE INSTALLED WITHOUT GRADING PERMIT

SEE SHEET G6.1

SEE SHEET G6.3

LEGEND	
EXISTING GROUND CONTOUR (2 FT)	---102---
EXISTING GROUND CONTOUR (10 FT)	---110---
FINISHED GRADE CONTOUR (2 FT)	---102---
FINISHED GRADE CONTOUR (10 FT)	---110---
DRAINAGE FLOW DIRECTION	→

SEE SHEET G6.1

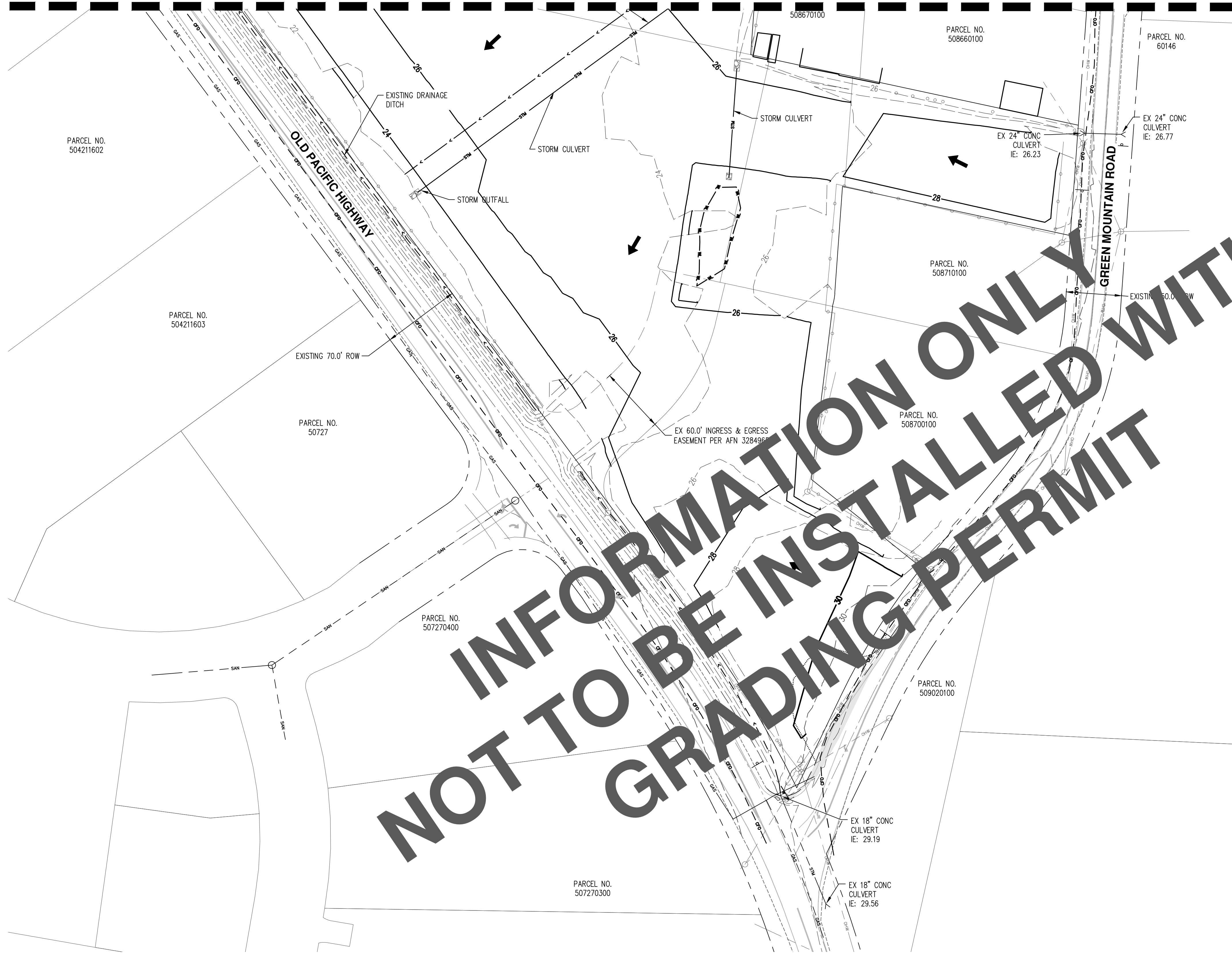


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**NOT TO BE INSTALLED WITH INFORMATION ONLY GRADING PERMIT**



LEGEND	
EXISTING GROUND CONTOUR (2 FT)	--- -102 ---
EXISTING GROUND CONTOUR (10 FT)	--- -110 ---
FINISHED GRADE CONTOUR (2 FT)	— 102 —
FINISHED GRADE CONTOUR (10 FT)	— 110 —
DRAINAGE FLOW DIRECTION	➔

**OAK VILLAGE APARTMENTS  
EARLY GRADING  
WOODLAND WASHINGTON**

**STORMWATER PLAN**

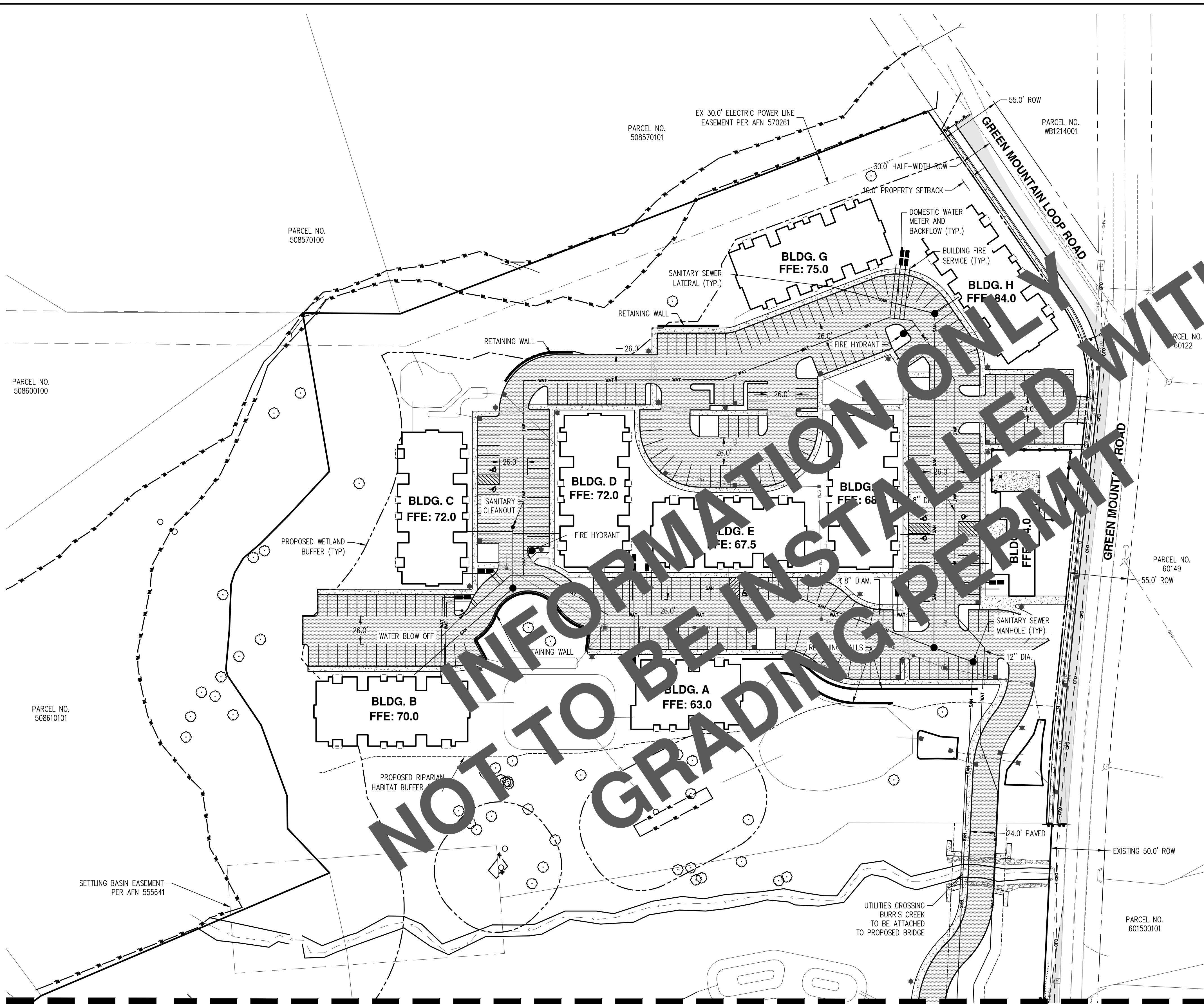
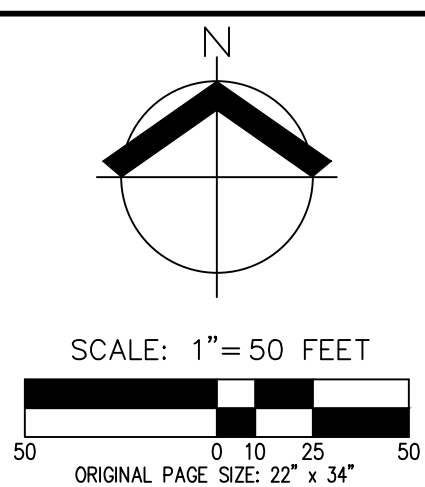
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 DRAWN BY: TJW  
 MANAGED BY: BDH  
 CHECKED BY: BDH  
 DATE: 2/9/2022



REVISIONS

JOB NUMBER  
**8344**

SHEET  
**G6.3**



**GENERAL NOTES**

- TWO FIRE HYDRANT LOCATIONS ARE PROPOSED AS SHOWN.
- DOMESTIC WATER AND FIRE SERVICES PROPOSED FOR EACH BUILDING AS SHOWN. FIRE SERVICE BACKFLOWS AND FIRE DEPARTMENT CONNECTIONS WILL BE DETAILED IN FINAL ENGINEERING.
- A WATER CONNECTION IS PROPOSED TO THE CITY OF WOODLAND WATER SYSTEM AT THE EXISTING 12" PVC MAIN WITHIN THE INTERSECTION OF OLD PACIFIC HIGHWAY AND BELMONT LOOP.
- A SANITARY SEWER CONNECTION IS PROPOSED TO THE CITY OF WOODLAND SEWER SYSTEM AT EXISTING MANHOLE INSTALLED UNDER PACIFIC PARK CENTER 2 DEVELOPMENT (LIFT STATION #12). CONNECTION TO EXISTING LIFT STATION PROPOSED PENDING CAPACITY ANALYSIS. IF EXISTING FACILITY LACKS CAPACITY, EXISTING LIFT STATION WILL BE UPGRADED OR NEW LIFT STATION WILL BE DESIGNED AND PROPOSED WITH FINAL ENGINEERING. IT IS ASSUMED THAT ONE BUILDING (MINIMUM) CAN BE SERVED BY LIFT STATION #12.
- PROPOSED WATER MAIN IN BURRIS LANE TO BE 12" PVC.
- PROPOSED WATER MAIN ON PARCEL 508630100 TO BE 8" PVC. IF WATER PRESSURE FOR FIRE FLOW ON PARCEL 508630100 IS DETERMINED TO BE INSUFFICIENT, A PRIVATE BOOSTER PUMP WILL BE DESIGNED AND PROPOSED WITH FINAL ENGINEERING. PRELIMINARY BUILDING FINISH FLOOR ELEVATIONS (FFE) SHOWN TO DEMONSTRATE STATIC WATER PRESSURE AVAILABILITY BASED ON CITY RESERVOIR ELEVATION OF 179 MSL.
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- PROPOSED WATER MAINS, STRUCTURES, AND HYDRANTS OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
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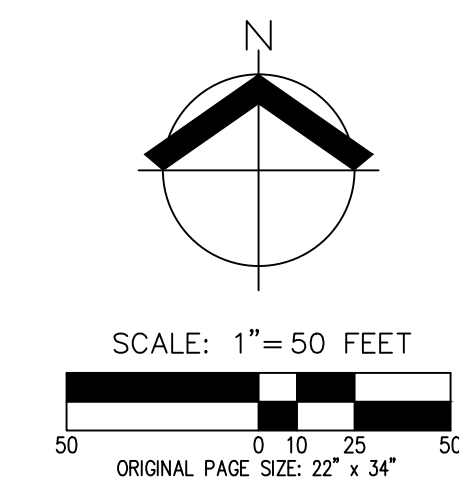
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SEE SHEET G7.2

SEE SHEET G7.1

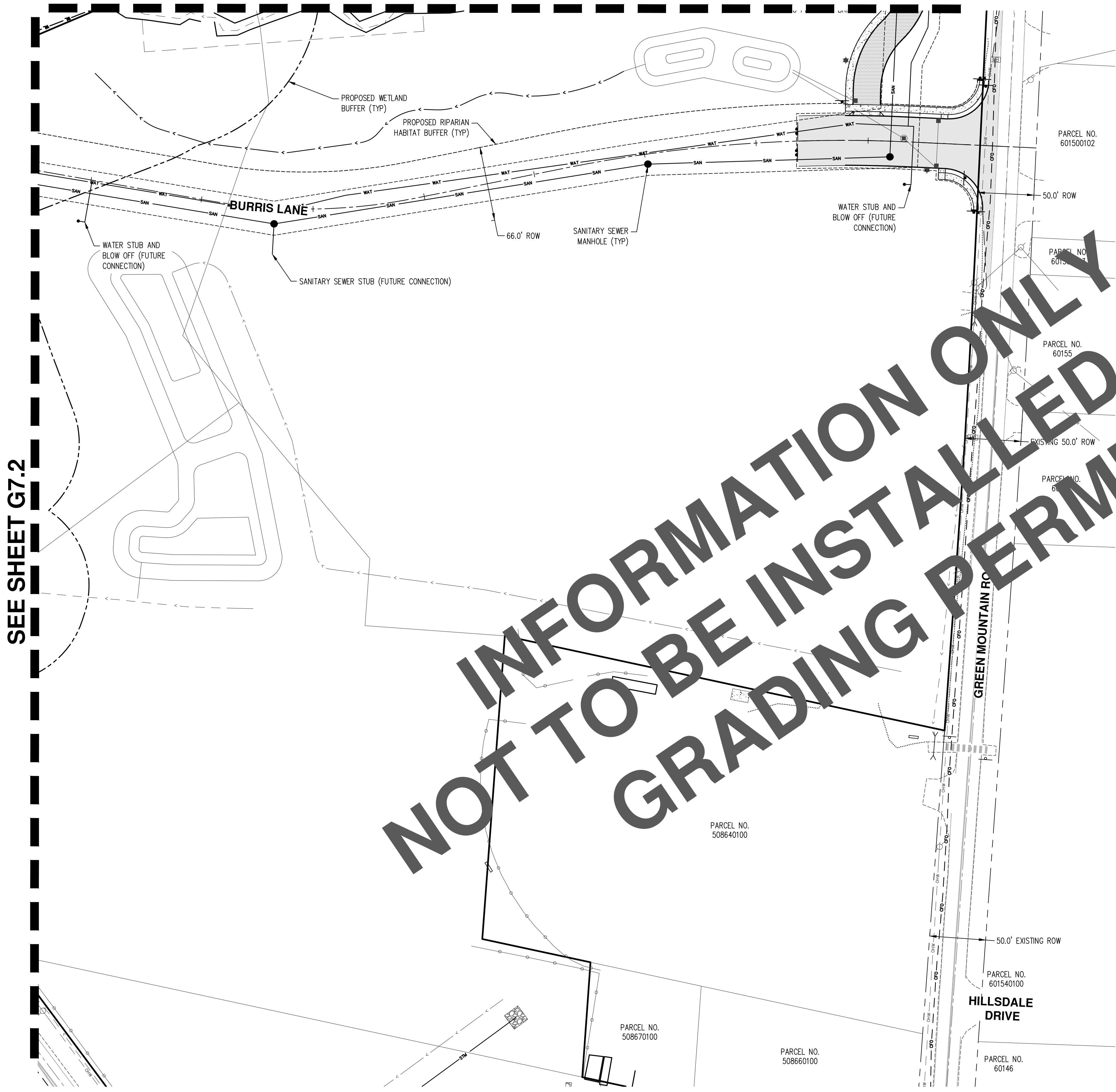
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SEE SHEET G7.1



SEE SHEET G7.2

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GENERAL NOTES

- 1. TWO FIRE HYDRANT LOCATIONS ARE PROPOSED AS SHOWN.
2. FIRE SERVICE AND FIRE SERVICES PROPOSED FOR EACH BUILDING AS SHOWN. FIRE SERVICE BACKFLOW AND FIRE DEPARTMENT CONNECTIONS WILL BE DETAILED IN FINAL ENGINEERING.
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10. PROPOSED WATER MAINS, STRUCTURES, AND HYDRANTS OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE LOCATED WITHIN MINIMUM 15' WIDE EASEMENTS TO THE CITY OF WOODLAND. THESE ARE NOT DISPLAYED ON THIS PLAN FOR CLARITY.
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S12, T5N, R1W, W.M.

SANITARY SEWER & WATER PLAN

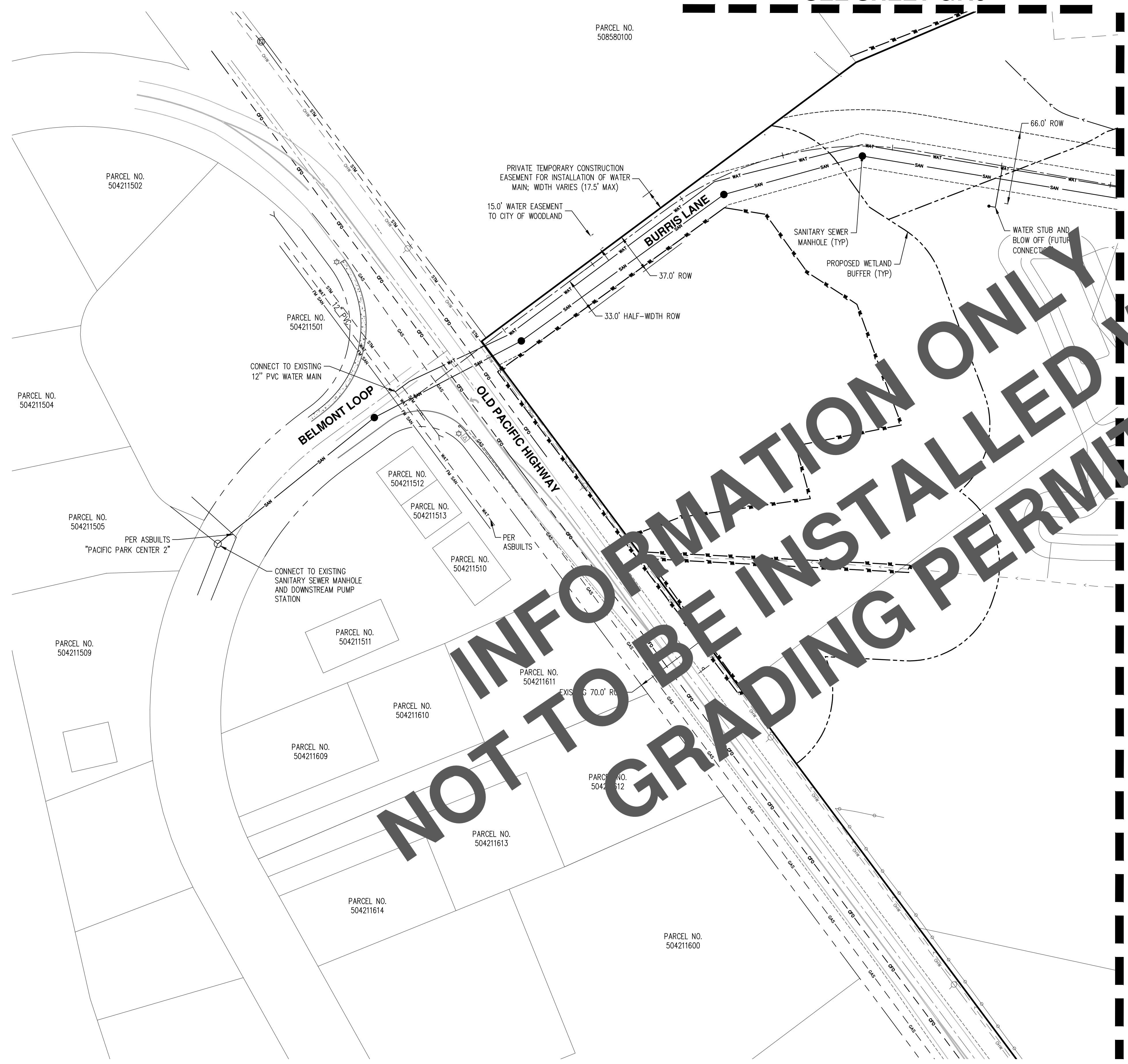
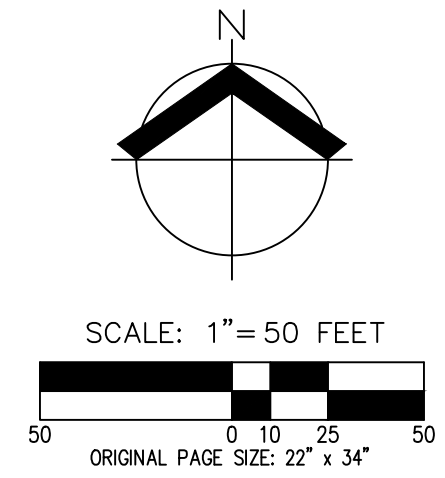
DESIGNED BY: TJW
DRAWN BY: TJW
MANAGED BY: BDH
CHECKED BY: BDH
DATE: 2/9/2022



REVISIONS
JOB NUMBER 8344
SHEET G7.1



SEE SHEET G7.0



**NOT TO BE INSTALLED WITH INFORMATION ONLY GRADING PERMIT**

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**GENERAL NOTES**

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 WATER PLAN**

DESIGNED BY: T.J.W.  
 DRAWN BY: T.J.W.  
 MANAGED BY: BDH  
 CHECKED BY: BDH  
 DATE: 2/9/2022



REVISIONS

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