1 2	DIVISION2.GR2	Earthwor	rk
3 4 5	<u>2-01.GR2</u>	Clearing,	, Grubbing, and Roadside Cleanup
6 7	2-01.1.GR2	Des	scription
8 9 10 11 12 13 14 15	<u>2-01.1.INST1</u>	<u>.GR2</u>	(Section 2-01.1 is supplemented with the following) Must use once preceding any of the following:
	<u>2-01.1.OP</u>	<u>T1.FR2</u>	(Clearing and Grubbing) (March 13, 1995) Use when the payment for clearing and grubbing is either lump sum or included in other work. (1 fill-in) (Fill-in describes the longitudinal and lateral limits of clearing and grubbing)
17 18 19	2-01.3.GR2	Con	nstruction Requirements
20 21	2-01.3(1).GR	<u>2</u>	Clearing
22 23 24	<u>2-01.3(1).l</u>	NST1.GR2	(Item number 1 of Section 2-01.3(1) is revised to read) Must use once preceding any of the following:
25 26 27	<u>2-01.3</u>	(1).OPT1.G	(April 2, 2018) Use in projects applying Programmatic Biological Assessment Minimization Measure #88.
28 29	2-01.3(4).GR	<u>2</u>	Roadside Cleanup
30 31 32	<u>2-01.3(4).l</u>	NST1.GR2	(Section 2-01.3(4) is supplemented with the following) Must use once preceding any of the following:
33 34 35 36 37 38	<u>2-01.3</u>	(4).OPT1.F	(Roadside Cleanup) (January 5, 1998) Use if additional work is required under the item "Roadside Cleanup". (fill-ins)
39 40	2-01.5.GR2	Pay	rment
41 42 43 44	2-01.5.INST1	<u>.GR2</u>	(The first and second paragraphs of Section 2-01.5 are revised to read) Must use once preceding any of the following:
45 46 47 48 49 50	<u>2-01.5.OP</u>	T1.FR2	(Clearing and Grubbing) (August 7, 2017) Must be used with <b>2-01.1.OPT1.FR2</b> when the payment for clearing and grubbing is included in other work. (1 fill-in)
51 52 53	<u>2-02.GR2</u>	Removal	of Structures and Obstructions

1 2	2-02.1.GR2	Description
3 4 5	2-02.1.INST1.GR2	(Section 2-02.1 is supplemented with the following) Must use once preceding any of the following:
6 7 8 9 10 11 12 13 14	2-02.1.OPT1.GR2	(Removal of Misc. Traffic Items) (March 13, 1995) Must also use <b>2-02.3.OPT2.FR2</b> and <b>2-02.5.OPT8.GR2</b> Use in projects requiring the removal of minor quantities of miscellaneous traffic items such as traffic islands, traffic curb, lane markers, plastic traffic buttons, guide posts, etc. when there is no pay item for Removal of Structures and Obstructions and the cost of removing each type of item is under \$10,000.
16 17 18 19 20 21	2-02.1.OPT2.GR2	(Removal and Disposal of Asbestos Material) (October 4, 2021) Must also use 1-07.5(4)C.OPT1.FR1, 2-02.3.OPT4.GR2 and 2-02.5.OPT11.GR2. Use in projects when asbestos removal is required. (1 fill-in)
22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	2-02.1.OPT3.GR2	(Removing Portions of Existing Box Culvert) (March 13, 1995) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, 6-02.5.OPT5.GB6, and 2-02.5.OPT12.GR2.
	2-02.1.OPT5.GR2	(Decommissioning Wells) (February 25, 2021) Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with 2-02.2.OPT1.GR2, 2-02.3.OPT7.GR2, and 2-02.5.OPT2.GR2.
37 38 39	2-02.2.GR2	Materials
40 41 42	2-02.2.INST1.GR2	(Section 2-02.2 is supplemented with the following) Must use once preceding any of the following:
42 43 44 45 46 47 48 49	2-02.2.OPT1.GR2	(Decommissioning Wells) (February 25, 2021) Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with 2-02.1.OPT5.GR2, 2-02.3.OPT7.GR2, and 2-02.5.OPT2.GR2.
50 51	<u>2-02.3.GR2</u>	Construction Requirements
52 53	2-02.3.INST1.GR2	(Section 2-02.3 is supplemented with the following) Must use once preceding any of the following:

1		
2 3 4 5 6 7	2-02.3.OPT1.FR2	(Removal of Obstructions) (September 7, 2021) Use <i>except</i> when the combined cost of all obstruction removal is \$5,000 or less and payment is to be included in other payment items.
8 9 10 11		Removal of obstructions that are readily measurable and for which the cost of removal is \$5,000 or less per obstruction may be included in this pay item.
12 13 14 15		Removal of obstructions that are not readily measurable, such as foundations, may be included in this item regardless of the removal cost.
16 17 18		List all items and approximate quantities to be removed under "Removal of Structure and Obstruction". (1 fill-in)
19 20 21 22	2-02.3.OPT2.FR2	(Removing Miscellaneous Traffic Items) (March 13, 1995) Must include with <b>2-02.1.OPT1.GR2</b> .
23 24 25 26 27 28 29 30 31 32	2-02.3.OPT3.FR2	(Removal and Disposal of Hazardous Material) (June 6, 2022) Must also use 2-02.4.OPT1.GR2 and 2-02.5.OPT7.GR2. Use only for subsurface removal of known or suspected hazardous or contaminated material. Fill-in is for type of material, depth of contamination in soil, and depth of contamination in water. Fill-in information is to be provided by the Region Environmental Staff. (1 fill-in)
33 34 35 36 37	2-02.3.OPT4.GR2	(Removal and Disposal of Asbestos Material) (October 4, 2021) Must include with 1-07.5(4)C.OPT1.FR1, 2- 02.1.OPT2.GR2, and 2-02.5.OPT11.GR2.
38 39 40 41	2-02.3.OPT5.GR2	(Removal and Disposal of Asbestos Material) (October 4, 2021) Must include with <b>1-07.5(4)C.OPT2.FR1</b> .
42 43 44 45 46 47 48 49 50 51 52 53	2-02.3.OPT6.FB2	(Salvage of Removed Structure Items) (June 26, 2000) Use when removal items are to remain the property of the Contracting Agency. The first fill-in specifies the salvaged items. The second fill-in specifies the name and address (street address or highway milepost) of the material storage site. Include with either 2-02.3(2).OPT1.FB2, 2-02.3(2).OPT2.FB2, or 2-02.3(2).OPT3.FB2, and 2-02.3(2).OPT10(B).FB2. (2 fill-ins)

1 2 3 4 5 6 7		(Well Decommissioning) (February 25, 2021) Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with 2-02.1.OPT5.GR2, 2-02.2.OPT1.GR2, and 2-02.5.OPT2.GR2.
8 9 10		emoval of Bridges, Box Culverts, and other Drainage ructures
11 12 13		(Section 2-02.3(2) is supplemented with the following) Must use once preceding any of the following:
13 14 15 16 17 18 19 20 21 22 23 24	<u>2-02.3(2).OPT1.FB2</u>	(Removing Existing Bridge) (June 26, 2000) Use in projects requiring the removal of existing bridge(s) in one stage. The first fill-in specifies the bridge(s). The second fill-in specifies where traffic is directed (onto the detour route or bridge, onto the new bridge, etc.). Include with 2-02.3(2).OPT10(B).FB2. Include with 1-07.1(2).OPT3.FR1 if the bridge being removed has steel members with lead paint. (2 fill-ins)
25 26 27 28 29 30 31 32 33	2-02.3(2).OPT2.FB2	(Removing Existing Bridge) (June 26, 2000) Use in projects requiring the removal of existing bridge(s) in two or more stages. The fill-in specifies the bridge(s). Include with 1-07.1(2).0PT3.FR1 if the bridge being removed has steel members with lead paint. (1 fill-in)
33 34 35 36 37 38 39 40 41 42 43	<u>2-02.3(2).OPT3.FB2</u>	(Removing Portion of Existing Bridge) (June 26, 2000) Use in projects requiring the removal of portions of existing bridge(s). The first fill-in specifies the bridge(s). The second fill-in specifies the portions being removed. Include with 1-07.1(2).OPT3.FR1 if the bridge being partially removed has steel members with lead paint. (2 fill-ins)
43 44 45 46 47 48 49 50 51 52 53	<u>2-02.3(2).OPT7.FB2</u>	(Removal in Water) (June 26, 2000) Use in projects requiring the removal of existing bridge(s) when removal involves piers within the wetted perimeter of a stream, lake or bay. The first fill-in specifies the bridge(s). The second and fourth fill-ins specify the body of water. The third fill-in specifies the elevation of the removal level. Include with either 2-02.3(2).OPT1.FB2, 2-02.3(2).OPT2.FB2, or 2-02.3(2).OPT3.FB2, and 2-02.3(2).OPT10(B).FB2.

1 2 3	2-02.3(2).OPT10.GB2	(Use of Explosives) Must use once preceding any of the following:
4 5 6 7 8 9 10 11 12 13	2-02.3(2).OPT10(E	(Structure Removal By Explosives) (January 2, 2018) Use in projects requiring removal of existing bridges only if explosives may be used. The fill-in specifies the bridge where the use of explosives is permitted for removal operations. Include with 2-02.3(2).OPT1.FB2. Include with 1-07.1(2).OPT3.FR1 if the bridge involved has steel members with lead paint. (1 fill-in)
15 16 17 18 19 20 21 22 23 24 25	<u>2-02.3(2).OPT11.GB2</u>	(Requirements for Closing Bridge Prior to Removal) (January 2, 2018) Use in projects requiring removal of existing bridges when it is necessary to close the bridge to traffic in order to complete removal as soon as possible. Include with 2-02.3(2).OPT1.FB2, and 2-02.3(2).OPT10(B).FB2. Include with 1-07.1(2).OPT3.FR1 if the bridge involved has steel members with lead paint.
26 27 28 29 30 31 32 33	<u>2-02.3(2).OPT12.GR2</u>	(Removing Portions of Existing Box Culvert) (June 26, 2000) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and either 2-02.5.OPT12.GR2 or 2-02.5.OPT15.GR2.
34 35	2-02.3(3).GR2 Ren	noval of Pavement, Sidewalks, Curbs, and Gutters
36 37 38		Section 2-02.3(3) is supplemented with the following) flust use once preceding any of the following:
39 40 41 42 43 44 45 46 47	2-02.3(3).OPT1.FR2	(September 8, 1997) Include in projects when removal of pavement is outside the limits of roadway excavation, and the removal is to be paid by the square yard. Must also use 2-02.4.OPT2.GR2 and 2-02.5.OPT13.FR2. (2 fill-ins)
48 49	2-02.4.GR2 Measure	ement
50 51		ction 2-02.4 is supplemented with the following) it use once preceding any of the following:
52 53	<u>2-02.4.OPT1.GR2</u> (I	Removal and Disposal of Hazardous Material)

1 2 3 4		(December 4, 2006) Must include with 2-02.3.OPT3.FR2 and 2-02.5.OPT7.GR2.
5 6 7 8	2-02.4.OPT2.GR2	(Pavement Removal) (September 8, 1997) Must include with <b>2-02.3(3).OPT1.FR2.</b> .
9 10 11 12 13 14	<u>2-02.4.OPT3.GR2</u>	(Sidewalk Removal) (October 25, 1999) Include in projects when removal of sidewalk is outside the limits of roadway excavation, and the removal is to be paid by the square yard. Must include with 2-02.5.OPT16.FR2.
15 16 17 18 19 20 21	<u>2-02.4.OPT4.GR2</u>	(Curb Removal) (September 8, 1997) Include in projects when removal of curb is outside the limits of roadway excavation, and the removal is to be paid by the linear foot. Must include with 2-02.5.OPT17.FR2.
22 23	<u>2-02.5.GR2</u> Pay	yment
24 25 26	2-02.5.INST1.GR2	(Section 2-02.5 is revised by the following) Must use once preceding any of the following:
27 28 29 30 31	<u>2-02.5.OPT1.FR2</u>	(Removal of structures and obstructions included in other work) (August 1, 2017) (1 fill-in)
32 33	0.00 F INIOTO ODO	
34	<u>2-02.5.INST2.GR2</u>	(Section 2-02.5 is supplemented with the following) Must use once preceding any of the following:
35 36 37 38 39 40 41	2-02.5.INS12.GR2 2-02.5.OPT2.GR2	
35 36 37 38 39 40 41 42 43 44 45 46		Must use once preceding any of the following:  (Decommissioning Wells) (February 25, 2021) Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with 2-02.1.OPT5.GR2, 2-02.2.OPT1.GR2, and 2-
35 36 37 38 39 40 41 42 43 44 45	2-02.5.OPT2.GR2	Must use once preceding any of the following:  (Decommissioning Wells) (February 25, 2021) Include in projects when wells will not be removed prior to advertisement and will be removed as part of the Contract. Use with 2-02.1.OPT5.GR2, 2-02.2.OPT1.GR2, and 2-02.3.OPT7.GR2.  (Removal and Disposal of Hazardous Material) (December 4, 2006)  Must include with 2-02.3.OPT3.FR2 and

1 2		Must include with 1-07.5(4)C.OPT1.FR1, 2-02.1.OPT.GR2, and 2-02.3.OPT4.GR2.
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 32 33 33 33 33 33 33 33 33 33 33 33 33	<u>2-02.5.OPT12.GR2</u>	(Removing Portion of Conc. Box Culvert) (June 26, 2000) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6.
	2-02.5.OPT13.FR2	(Pavement Removal) (September 30, 1996) Must include with <b>2-02.3(3).OPT1.FR2</b> . (1 fill-in)
	<u>2-02.5.OPT15.GR2</u>	(Removal of portions of box culvert) (June 26, 2000) Use in projects requiring removal of portions of existing box culverts prior to extending or widening the structure. Include with 2-02.1.OPT3.GR2, 2-02.3(2).OPT12.GR2, 6-02.2.OPT2.GB6, 6-02.3(24)C.OPT1.GB6, 6-02.3(24)C.OPT2.GR6, and 6-02.5.OPT5.GB6.
	2-02.5.OPT16.FR2	(Sidewalk Removal) (November 3, 1999) Must include with <b>2-02.4.OPT3.GR2</b> (1 fill-in)
	2-02.5.OPT17.FR2	(Removal of portions of Curb) (September 8, 1997) Must include with <b>2-02.4.OPT4.GR2.</b> (1 fill-in)
34 35 36	2-03.GR2 Roadway	Excavation and Embankment
37 38	<u>2-03.3.GR2</u> Cons	struction Requirements
39 40	2-03.3(2).GR2	Rock Cuts
41 42 43 44 45 46 47 48	2-03.3(2).INST1.GR2	(Section 2-03.3(2) is supplemented with the following) Must use once preceding any of the following:
	<u>2-03.3(2).OPT1.GF</u>	(Rock Slope Scaling and Removal and Disposal of Rock Slope Scaling Debris) (September 7, 2021) Use in projects with rock slope scaling. Include with 2-03.4.OPT4.GR2 and 2-03.5.OPT3.GR2.
49 50	2-03.3(7).GR2	Disposal of Surplus Material
51 52 53	2-03.3(7).INST1.GR2	(Section 2-03.3(7) is supplemented with the following) Must use once preceding any of the following:

1		
2 3 4 5 6 7	<u>2-03.3(7).OPT1.FR2</u>	(Contracting Agency furnished waste site) (March 13, 1995) Use in projects with Contracting Agency provided waste sites. (1 fill-in)
8 9 10 11 12 13	2-03.3(7).OPT2.FR2	(Waste material by embankment widening) (March 13, 1995) Use in projects where the Contracting Agency specifies embankments to be widened. (2 fill-ins)
13 14 15 16 17 18	<u>2-03.3(7).OPT3.GR</u>	(Contracting Agency provided sites are not mandatory) (March 13, 1995) Use, when applicable, with <b>2-03.3(7).OPT1.FR2</b> or 2-03.3(7).OPT2.FR2.
19 20 21 22 23	<u>2-03.3(7).OPT4.GR</u>	(Contracting Agency provided sites are not of sufficient size) (March 13, 1995) Use, when applicable, with 2-03.3(7).OPT1.FR2 or 2-03.3(7).OPT2.FR2.
24 25	<u>2-03.3(14).GR2</u> E	mbankment Construction
26		
27 28	2-03.3(14)C.GR2	Compacting Earth Embankments
20 29	2-03.3(14)C.INST1.	GR2 (Section 2-03.3(14)C is supplemented
30		with the following)
31		Must use once preceding any of the following:
32 33	2-03.3(14)C.OP	Γ1.GR2 (March 13, 1995)
34	2 00.0(14)0.01	Use in projects when no payment for
35		embankment compaction (Method A) is included.
36	2.02.2/4.01.052	Fush and manta At Duides And Treatle Finds
37 38	<u>2-03.3(14)I.GB2</u>	Embankments At Bridge And Trestle Ends.
39	2-03.3(14)I.INST1.G	B2 (Section 2-03.3(14)I is supplemented
40		with the following)
41		Must use once preceding any of the following:
42 43	2-03.3(14)I.OPT	1.FB2 (March 13, 1995)
44	2 00.0(14)1.01 1	Use in projects when the bridge approach
45		embankments must be constructed before the
46 47		end piers.
47 48		(2 fill-ins)
49	2-03.4.GR2 Meas	urement
50	0.00 4 INOT4 OD0 (6	Section 0.00 4 is sumplemented with the following.
51 52		Section 2-03.4 is supplemented with the following) lust use once preceding any of the following:
53	IV	ast ase office preceding any of the following.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	2-03.4.OPT1.GR2	(Embankment In Place) (March 13, 1995) Must also include <b>2-03.5.OPT1.GR2</b> . Use in projects that require embankment widening for beam guardrail and no other grading pay items are included in the contract to construct the widening.	
	<u>2-03.4.OPT2.GR2</u>	(Measurement of roadway excavation and embankment) (March 13, 1995) Must include with <b>1-05.4.OPT2.GR1</b> , Contractor surveying - roadway. May be used without Contractor surveying.	
	<u>2-03.4.OPT3.GR2</u>	(Measurement of roadway excavation and embankment) (March 13, 1995) Use in minor grading projects when the original cross-sections are satisfactory for construction payment.	
	<u>2-03.4.OPT4.GR2</u>	(Rock Slope Scaling and Rock Slope Scaling Debris Removal Including Haul) (April 5, 2010) Use in projects with rock slope scaling. Include with 2-03.3(2).OPT1.GR2 and 2-03.5.OPT3.GR2.	
23 24	<u>2-03.5.GR2</u> Paym	nent	
25 26 27		Section 2-03.5 is supplemented with the following)  Must use once preceding any of the following:	
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	<u>2-03.5.OPT1.GR2</u>	(Embankment In Place) (September 30, 1996) Must include with <b>2-03.4.OPT1.GR2</b> .	
	<u>2-03.5.OPT2.FR2</u>	(Preparation of waste sites) (March 13, 1995) Use in projects when the preparation of waste sites is included in other work. (1 fill-in)	
	<u>2-03.5.OPT3.GR2</u>	(Rock Slope Scaling and Rock Slope Scaling Debris Removal Including Haul) (April 5, 2010) Use in projects with rock slope scaling. Include with 2-03.3(2).OPT1.GR2 and 2-03.4.OPT4.GR2.	
44 45	2-06.GR2 Subgrade	Preparation	
46 47 48	2-06.3.GR2 Construction Requirements		
46 49 50	2-06.3(1).GR2	Subgrade For Surfacing	
50 51 52 53	<u>2-06.3(1).INST1.GR2</u>	(Section 2-06.3(1) is supplemented with the following) Must use once preceding any of the following:	

1 2 3 4 5 6 7 8	2-06.3(1).OPT1.G	(Subgrade trimmer required) (March 13, 1995) Use in projects where a treated base or pavement will be placed directly on the subgrade. The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming.
9 10 11 12 13 14 15 16 17 18	<u>2-06.3(1).OPT2.GI</u>	(Subgrade trimmer not required) (March 13, 1995) Use in grading-only projects where a treated base is planned for construction on a future project. The project should include a bid item for "Gravel Borrow Including Haul" or "Borrow Excavation Including Haul" to ensure that sufficient fine material is available for trimming. The position of the future treated base is to shown on the plans.
20 21	2-09.GR2 Structure	Excavation
22 23	<u>2-09.3.GR2</u> Con	struction Requirements
24 25	2-09.3(1).GR2	General Requirements
26	2-09.3(1)C.GR2	Removal Of Unstable Base Material
27 28 29 30	2-09.3(1)C.INST1.	GR2 (Section 2-09.3(1)C is supplemented with the following)  Must use once preceding any of the following:
31 32 33 34 35 36 37 38 39 40	2-09.3(1)C.OP	(Soils Prone to Disturbance) (September 8, 2020) Use in bridge projects in where soil in the bottom of footing excavation is susceptible to disturbance and may become unsuitable. Use at the recommendation of the Geotechnical office. (1 fill-in) Fill-in #1 is the location of the soils prone to disturbance.
41 42 43		Construction Requirements, Structure Excavation, Class A
44 45 46 47	2-09.3(3)B.GR2	Excavation Using Open Pits – Extra Excavation
48 49 50	<u>2-09.3(3)B.INST1.</u>	GR2 (Section 2-09.3(3)B is supplemented with the following)  Must use once preceding any of the following:
51 52 53 54	2-09.3(3)B.OPT	1.FB2 (Extra Excavation and Open Pit Excavation Not Allowed) (September 7, 2021)

1 2 3 4 5 6 7			Use in projects where extra excavation and open pit excavation is not allowed at specific locations. The fill-in specifies the location(s) where extra excavation and open pit excavation is not allowed.  (1 fill-in)
9 10 11 12 13 14 15	<u>2-09.3(3)B.OPT2.</u>	FR2	(Extra Excavation and Open Pit Excavation) (April 1, 2019) Use in projects where temporary excavation slopes are located beneath structures, critical facilities, or where recommended by the Geotechnical Office. The fill-in specifies the location(s) where extra excavation and open pit excavation is allowed. (1 fill-in)
17 18	2-09.3(3)D.GR2	Shoring	And Cofferdams
19			
20 21	<u>2-09.3(3)D.INST1.GR</u>	•	ction 2-09.3(3)D is supplemented with the wing)
22			t use once preceding any of the following:
23			
24	<u>2-09.3(3)D.OPT1.</u>	GB2	(Protecting existing pavement)
25 26			(March 13, 1995) Use in projects when bridges are over or
27			adjacent to existing highways.
28			, 5 5 ,
29	2-09.3(3)D.OPT2.	GB2	(Protecting RR tracks)
30 31			(August 2, 2010) Use in projects when bridges are over or
32			adjacent to existing railroad tracks.
33			3 to 100
34	2-09.3(3)D.OPT3.	FB2	(March 13, 1995)
35 36			Use with 2-09.3(3)D.OPT2.GB2 when
37			construction is required near railroad tracks, or structures which require extensive shoring.
38			(3 fill-ins)
39			
40	<u>2-09.4.GR2</u> Measur	ement	
41 42	2-09.4.INST1.GR2 (Th	e subse	ection Lower Limits of Section 2-09.4 is
43			ited with the following)
44			nce preceding any of the following:
45 46	2.00.4 OBT4 OB2	/ lonuor	. 4. 2040)
46 47			y 4, 2010) nal structure excavation under girders
48		at end p	
49			projects where excavation is required outside of
50 51	1	normals	structure excavation limits for end pier footings.
51 52	2-12.GR2 Construction	ı Geosy	vnthetic
53			,

1 2	2-12.1.GR2	Description
3 4 5	<u>2-12.1.INST1.GR2</u>	(Section 2-12.1 is supplemented with the following) Must use once preceding any of the following:
6 7 8 9 10 11 12	<u>2-12.1.OPT1.GR</u>	Geosynthetic Reinforced Slope (November 17, 1997) Use in projects requiring geosynthetic reinforced slopes. Slope design should be performed by the Olympia Service Center Materials Laboratory or a geotechnical consultant. Use details from DETAILS.CEL Library; D225, D229, D230, and D230A or D230B.
14	2-12.2.GR2	Materials
15 16 17 18 19	2-12.2(9-03.14).0	(Borrow) (Section 9-03.14 is supplemented with the following) Must use once preceding any of the following:
20 21 22 23 24 25	<u>2-12.2(9-03.1</u>	4).OPT1.FR2 (Borrow for Geosynthetic Reinforced Slopes)  (November 17, 1997)  Use in projects requiring geosynthetic reinforced slopes.  (1 fill-in)
26 27 28 29	<u>2-12.2(9-07.7).G</u>	(Welded Wire Reinforcement) (Section 9-07.7 is supplemented with the following) Must use once preceding any of the following:
30 31 32 33	<u>2-12.2(9-07.7</u>	7).OPT1.GR2 (Welded Wire Reinforcement) (February 6, 2023) Use in projects where welded wire faced geosynthetic reinforced slopes are specified.
34 35 36 37 38 39	2-12.2(9-33.2(2))	(Geosynthetic Properties for Retaining Walls and Reinforced Slopes) (Section 9-33.2(2) is supplemented with the following) Must use once preceding any of the following:
40 41 42 43 44 45 46 47 48 49 50 51 52	<u>2-12.2(9-33.2</u>	Slopes) (January 2, 2012) Use in projects requiring geosynthetic reinforced slopes. The slope class must be identified in fill-in 6 based on the following: Class 1 is typically reinforced slopes which support bridge abutments, buildings, critical utilities, or other facilities which the consequences of poor performance or failure would be severe. In general, slopes greater than 30 feet in height. Class 2 is all reinforced slopes not categorized as Class 1. (6 fill-ins)

1	
2	2-12.2(9-33.2(2)).OPT2.GR2 (Geosynthetic Properties for Turf
3	Reinforcement Mat)
4	(April 5, 2004)
5	Use in projects where geosynthetic reinforced slopes
6	with a turf reinforcement mat facing are specified.
7	0.40.0(0.00.4(4)) 0.00. (0.4.4.1)
8	<u>2-12.2(9-33.4(1)).GR2</u> (Source Approval)
9	(Section 9-33.4(1) is supplemented with the following)
10	Must use once preceding any of the following:
11	2.42.2(0.22.4(4)) ODT4 CD2 (Case) with stip Deinforced Clane)
12	2-12.2(9-33.4(1)).OPT1.GR2 (Geosynthetic Reinforced Slope)
13	Primary Reinforcement
14	(April 5, 2004)
15	Use in projects requiring geosynthetic reinforced
16	slopes.
17	2.42.2(0.22.4(4)) ODT2 CD2 (Coopyrithetic Deinferend Clane)
18 19	2-12.2(9-33.4(1)).OPT2.GR2 (Geosynthetic Reinforced Slope) Secondary Reinforcement
20	
21	(April 5, 2004) Use in projects where geosynthetic reinforced slopes
22	with secondary reinforcement are specified.
23	with secondary reinforcement are specified.
23 24	2-12.2(9-33.4(1)).OPT3.GR2 (Geosynthetic Reinforced Slope)
25	Turf Reinforcement Mat
26	(November 17, 1997)
20 27	Use in projects where geosynthetic reinforced slopes
28	with turf reinforcement mat facing are specified.
29	with tall reilliorcement mat facing are specified.
30	2-12.2(9-33.4(3)).GR2 (Acceptance Samples)
31	(Section 9-33.4(3) is supplemented with the following)
32	Must use once preceding any of the following:
33	much use office proceding any of the fellowing.
34	2-12.2(9-33.4(3)).OPT1.GR2 (Geosynthetic Reinforced)
35	Slope Primary Reinforcement
36	(November 17, 1997)
37	Use in projects requiring geosynthetic reinforced
38	slopes.
39	'
40	2-12.2(9-33.4(3)).OPT2.GR2 (Geosynthetic Reinforced Slope)
41	Secondary Reinforcement
42	(April 5, 2004)
43	Use in projects where geosynthetic reinforced slopes
44	with secondary reinforcement are specified.
45	
46	
47	2-12.2(9-33.4(3)).OPT3.GR2 (Geosynthetic Reinforced Slope Turf)
48	Reinforcement Mat
49	(November 17, 1997)
50	Use in projects where geosynthetic reinforced slopes
51	with turf reinforcement mat facing are specified.
52	
53	2-12.2(9-33.4(4)).GR2 (Acceptance by Certificate of Compliance)

1 2		(Section 9-33.4(4) is supplemented with the following) Must use once preceding any of the following:
3 4 5 6 7	<u>2-12.2(9-33.4(4))</u>	.OPT1.GR2 (Reinforced Slope) (November 17, 1997) Use in projects requiring geosynthetic reinforced slopes.
8 9	<u>2-12.3.GR2</u> Co	nstruction Requirements
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	2-12.3.INST1.GR2	(Supplemental Instructions) (Section 2-12.3 is supplemented with the following) Must use once preceding any of the following:
	<u>2-12.3.OPT1.GR2</u>	(Geosynthetic Reinforced Slope Construction Requirements) (November 17, 1997) Use in projects requiring geosynthetic reinforced slopes. Slope facing options which include vegetative cover should only be used at sites where the average annual precipitation is 20 inches or more.
	<u>2-12.3.OPT2.FR2</u>	(Turf Reinforced Mat Facing Construction) (August 2, 2010) Use in projects requiring geosynthetic reinforced slopes with turf reinforcement mat facing. In general, use for slopes no steeper than 1.2H:1V. (2 fill-ins)
30 31 32 33 34 35 36	<u>2-12.3.OPT3.GR2</u>	(Geosynthetic Wrapped Slope Facing Construction) (November 17, 1997) Use in projects requiring geosynthetic reinforced slopes with geosynthetic wrapped facing. Because of planting requirements, do not use this option for sites where the elevation is over 1500 feet. In general, use for slopes no steeper than 1H:1V.
37 38 39 40 41 42	<u>2-12.3.OPT4.GR2</u>	(Welded Wire Facing Construction) (November 17, 1997) Use in projects requiring geosynthetic reinforced slopes with welded wire facing. In general, use for slopes no steeper than 1H:2V.
43 44 45 46 47 48	<u>2-12.3.OPT5.GR2</u>	(Installing Guardrail Posts in Geosynthetic) Reinforced Slopes (November 17, 1997) Use in projects requiring guardrail on geosynthetic reinforced slopes.
49 50	<u>2-12.4.GR2</u> Me	asurement
51 52 53	2-12.4.INST1.GR2	(Supplemental Instructions) (Section 2-12.4 is supplemented with the following)

1		Must use once preceding any of the following:
2		
3	2-12.4.OPT1.FR2	(Geosynthetic Reinforced Slope)
4		(January 5, 1998)
5		Use in projects requiring geosynthetic reinforced slopes.
6		(1 fill-in)
7		
8	2-12.5.GR2 Pa	yment
9		
10	2-12.5.INST1.GR2	(Supplemental Instructions)
11	<u> </u>	(Section 2-12.5 is supplemented with the following)
12		
		Must use once preceding any of the following:
13		
14	<u>2-12.5.OPT1.FR2</u>	(Geosynthetic Reinforced Slope)
15		(November 17, 1997)
16		Use in projects requiring geosynthetic reinforced slopes.
17		(1 fill-in)
		(1 1111-111)
18		