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CITY OF MANZANITA
Manzanita Classic Street Connection Project
Addendum Number 2

DATE: May 7, 2025

TO: Potential Bidders & Plan Holders

All proposers are hereby notified of the following modifications to the Competitive Requests for Contractor Proposals and the Contract Documents and Technical Specifications. This modification is to become a part of the contract documents for the "Manzanita Classic Street Connection Project."

ADDENDUM 2 – THIS ADDENDUM PACKAGE CONSISTS OF 29 PAGES TOTAL

Each proposal shall include a specific acknowledgement of receipt of this Addendum in the space provided within the "Bid Form Document" – Item 4.

This Addendum shall supersede all previously issued Request for Proposals, specifications, and drawings wherein it contradicts the same. All other conditions remain unchanged. The following changes, modifications, corrections, clarifications, and/or additions set forth herein shall apply to the above documents and shall be made part thereof and shall be subject to all of the requirements as though originally specified and/or shown.

There will be no time extension to the current Proposal and Bidding dates and times. Bid and proposal submittals are due on May 20, 2025.

For questions, please contact Marcus Lee at mlee@windsorengineers.com.

The following sections provide clarifications or revisions for Addendum #2. Revisions or responses shall be shown **underlined and in Bold**

CLARIFICATIONS

The following clarifications are provided for all bidders on the Manzanita Classic Street Connection Project.

- All bids shall be submitted through QuestCDN (www.questcde.com) using the vBid "Bid Worksheet" (Schedule of Prices) as described in the Invitation To Bid (ITB).
- The Request For Proposal submittal shall be a separate submittal transmitted directly to the city by either email or in person as described in the Request for Proposal (RFP) document.
- The Project name has been revised from "Manzanita Classic Street Project" to "**Manzanita Classic Street Connection**" project. This shall apply to all project documents.
- Add to the "Invitation To Bid" – Page CD 1 following the last sentence (***The Project is funded by Business Oregon and the City of Manzanita. State prevailing wages (BOLI) will be required.***) **The City has limited funding for the project. The City reserves the right to negotiate the Contract amount and work items with the selected bidder and remove bid items from the Contract should pricing be in excess of available funds for the work.**

GOOD FAITH EFFORTS

Good Faith Efforts – The Contractor shall comply with Section ORS 200.090 for providing opportunities for disadvantaged business enterprises, minority-owned businesses, women-owned businesses, businesses that service-disabled veterans own and emerging small businesses following good faith efforts described in ORS 200.045.

CONTRACTOR QUESTIONS

Questions, Answers, Clarifications, and Revisions: The following are based on questions received after the Invitation to Bid was published on April 17, 2025.

1. *Question:* RFP Process – Question - *In the pre-bid agenda handout it states this RFP procedure is on QuestCDN and the City website. I'm not finding it anywhere. Please provide direct access to this process. I am very skeptical of RFP unless I see the criteria. I'm also skeptical of the people reviewing and their qualifications. If there is a prequalification process for bidding then at least contractors know before they waste a bunch of time preparing a bid for a project that they have no chance of getting.*

    a. **The City's Website (Home screen tab) and the Quest CDN site have the RFP in the "View Bid Documents" section.**

    b. **RFP criteria and selection rating criteria are provided in the RFP document.**

    c. **The City will be the primary reviewer of the Proposal. The engineering team will perform technical review of the proposal details and contact references provided for use by the city rating team. All 'ratings' will be performed by the city selected review panel.**

2. *Question: Why is the design and engineering on the contractor? Why isn't Windsor or North Coast providing a design and engineering? This doesn't make any sense to me. If*

contractor does the design and engineering then that means that Windsor and North Coast have no say on inspection or installation of the wall. Having multiple engineers on a project is redundant, wasteful, and destine for conflict.

a. **The retaining wall design is the contractor's responsibility as to not limit the type of wall the contractor may choose or has experience in constructing. This will allow the contractor to bid on the retaining wall type that they are most comfortable and most experienced with and to be able to provide the best possible price. Windsor, with input from Pali (Geotech engineer), developed a preliminary design for a type of wall (gravity block wall). The geotech also reviewed the use of an MSE wall as a potential design. The Geotech report provides recommendations that will be implemented in the submittal review, and the Contractor should review this information for obtaining input from their wall supplier in designing the wall and providing prices.**

b. **Stamped & signed wall design and construction plans are not required for the bid/RFP submittal. Stamped & signed retaining wall plans will only be required as a submittal by the selected contractor.**

c. **The City Team will still have jurisdiction regarding submittal review and inspection of the wall installation.**

3. *Question: What coordination with developer is expected? Isn't all of the work as part of this project in the public right-of-way? I don't see where this project crosses into a TCE or onto the developers property. Am I missing something?*

    a. **There is a 15' temporary easement west of Classic south of Dorcas (Sheet C600). This property may be developed/constructed during the same time as the city project. If wall construction is coordinated with the adjacent development, it will benefit the Classic Street project; this is informational only, and the contractor should take whatever steps he feels are prudent in preparing his bid.**

4. *Question: Storm drain mainline right adjacent to the wall. This seems like such a bad idea. Any maintenance ever on this storm line will compromise the wall. If the wall is designed with any tie-back fabric then this pipe system will be in conflict. Why can't the storm main be installed in the middle of the road away from the wall? Run laterals to the catch basins.*

    a. **Storm system was designed along the edge of pavement to reduce cost and maintenance by reducing pipe (leader lines) and structures needed for the storm sewer.**

    b. **Storm sewer along the roadway center line may or may not reduce the cost of the wall construction but would increase the cost of the storm sewer. If the contractor feels that this is a benefit, they can propose a value-engineered alternative.**

5. *Question: Is it really necessary to do trenchless HPDE for watermain? This will be expensive for this short run. The road will have to be core drilled anyway to locate existing utilities.*

    a. **Yes, this was a direct city requirement to not open cut trench the watermain through Necarney City County Road.**

6. *Question: The list of bid items includes Bid item 19 "Retaining Walls" and gives an average height of 22' in the bid item. When I review the wall profile, it appears the walls will be far less than 22' tall on average. See plan sheet C-600. Would the City please confirm veracity of "Avg Height = 22'?*

    a. **The 22' average height was based on the initial engineered design, measured from the bottom of a footing to the top of the wall. The wall profiles will be (Sheet C600) the controlling design parameter. Additional plan information is provided with this addendum. AutoCAD developed elevation and contour information will be available on the QuestCDN site attached to Addendum 2 information.**

    NOTE: The final wall height should be determined by the contractors' deferred design based on the recommendations in the geotechnical report.

    b. **The wall profiles in the plan sheets are estimated based on Pali's Geotech report. They show existing grade and proposed wall heights based on theinital wall selection and recommendations of the geotech.**

7. *Question: The proposal quantity for item #14 General Excavation is 560 cy. The notes on the civil plans state that there is 1,286 cy of cut and 1635 cy of fill. Please clarify.*

    a. **The volumes estimated for the Bid Item 14 - 560 CY have been revised to approximately 1320 CY of total excavation and 3160 CY of embankment fill required (neat line calculations) for the entire project, resulting in approximately 1840 CY net fill. This estimate does not include volumes based on the wall design chosen. For bidding purposes, the contractor should use their individual design to determine the final quantities. Updates for the notes on the civil plan sheets have been provided.**

8. *Question: The proposal item #16 Borrow Excavation for 760 tons is apparently to come from off-site to make the necessary fills in the roadway section. Since there is expected to be surplus excavation from the retaining wall scope, is there any reason that the surplus structure excavation from the retaining wall couldn't be used to build the fills? If so, would the city be open to paying the item #16 work by an agreed conversion from cubic yards to tons?*

    a. **In most cases, the excavated material from the retaining wall may be suitable for project fill. This may be paid by cubic yards (or by ton) with an appropriate conversion factor of ~1.4 ton per cubic yard (truck measure) to be negotiated with the city. The contractor should bid or prepare to provide a credit back to the City.**

9. *Question: The proposal quantity for item #17 Base Course Aggregate is 1,693 cy. A take off yields approximately 20% more volume. Can you confirm the quantity?*

    a. **The base course aggregate total volume has been revised to 2,000 CY.**

CONTRACT DOCUMENTS

- Bid Bond Form – Contractor to provide a bond with the revised project name - "**Manzanita Classic Street Connection**".
- Revised Bid Form splitting Schedule A into two sections (A1 and A2) separating the retaining wall bid prices from the Roadway bid prices to better evaluate the project bids. Replace with the following **Schedule of Prices**.

SCHEDULE OF PRICES

SCHEDULE A1 – CLASSIC STREET WORK					
Item	**DESCRIPTION**	**UNIT**	**ESTIMATED QUANTITY**	**UNIT PRICE**	**TOTAL PRICE**
1	MOBILIZATION	LS	1	$	$
2	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	1	$	$
3	EROSION AND SEDIMENT CONTROL	LS	11	$	$
4	CLEARING AND GRUBBING	AC	0.15	$	$
5	ASPHALT PAVEMENT SAWCUTTING	LF	650	$	$
6	SALVAGE AND REINSTALL HYDRANT	EA	1	$	$
7	REMOVAL OF PAVEMENT, AC/PCC (INCLUDING HAUL)	SY	2300	$	$
8	REMOVAL OF WALK	SY	31	$	$
9	REMOVAL OF CURBS	LF	220	$	$
10	REMOVE OR PLUG-FILL AND ABANDON EXISTING PIPE (WATER)	LF	300	$	$
11	REMOVAL OF PIPE (STORM SEWER)	LF	350	$	$
12	REMOVAL OF STRUCTURES (STORM SEWER, CB ONLY)	EA	8	$	$
13	SALVAGE EXISTING SIGNS	LS	1	$	$
14	GENERAL EXCAVATION	CY	750	$	$
15	TOPSOIL (SEEDED AREA)	CY	130	$	$
16	BORROW EXCAVATION	TN	750	$	$
17	BASE COURSE AGGREGATE	CY	1000	$	$
18	LEVELING COURSE AGGREGATE	CY	100	$	$
19	LEVEL 2 - 3/8 INCH ACP MIXTURE WEARING COURSE (ROADWAY)	TON	377	$	$
20	LEVEL 2 - 1/2 INCH ACP MIXTURE BASE COURSE (ROADWAY)	TON	307	$	$
21	LEVEL 2 - 3/8 INCH ACP MIXTURE (PATH)	TON	102	$	$
22	2" COLD PLANE PAVEMENT REMOVAL	SY	610	$	$
23	EXTRA FOR PEDESTRIAN LANDINGS-ADA RAMPS	EA	9	$	$
24	4" CONCRETE CURBS, MOUNTABLE-ROLLED CURB & GUTTER	LF	410	$	$
25	VALLEY GUTTER CONCRETE SURFACING	LF	650	$	$
26	MINOR ADJUSTMENT OF MANHOLES	EA	3	$	$
27	CONNECTIONS TO EXISTING WATER MAIN	EA	7	$	$
28	6" PVC IPS, WATERMAIN	LF	55	$	$
29	6" DI PIPE	LF	7	$	$
30	8" DI PIPE	LF	8	$	$
31	10" HDPE SDR 14, WATERMAIN	LF	2152	$	$
32	8" DI MJ BENDS (VARIOUS ANGLES)	EA	1	$	$

SCHEDULE A1 – CLASSIC STREET WORK					
Item	**DESCRIPTION**	**UNIT**	**ESTIMATED QUANTITY**	**UNIT PRICE**	**TOTAL PRICE**
33	10" DI MJ BENDS (VARIOUS ANGLES)	EA	10	$	$
34	10"X10"X6" DI FLG TEE	EA	3	$	$
35	10"X10"X6" DI MJ TEE	EA	1	$	$
36	10" DI FLG TEE	EA	1	$	$
37	10" DI MJ TEE	EA	1	$	$
38	10" FLG X MJ TEE	EA	2	$	$
39	6" MJ GATE VALVE	EA	2	$	$
40	6" FLGXMJ GATE VALVE	EA	2	$	$
41	10" FLGXMJ GATE VALVE	EA	12	$	$
42	10" MJ GATE VALVE	EA	2	$	$
43	6" MJ LONG PATTERN SLEEVE	EA	2	$	$
44	8" MJ LONG PATTERN SLEEVE	EA	4	$	$
45	10" MJ LONG PATTERN SLEEVE	EA	1	$	$
46	10" TO 8" MJ REDUCER	EA	6	$	$
47	6" DI FLG CAP	EA	1	$	$
48	2" AIR RELEASE VALVE AND VAULT	EA	1	$	$
49	HYDRANT ASSEMBLY	EA	2	$	$
50	CDF BACKFILL MATERIAL	CY	5	$	$
51	CONNECTIONS TO EXISTING STORM SEWER	EA	4	$	$
52	8 INCH HDPE PIPE, 5 FT DEPTH	LF	179	$	$
53	12 INCH HDPE PIPE, 5 FT DEPTH	LF	1718	$	$
54	18 INCH HDPE PIPE, 5 FT DEPTH	LF	48	$	$
55	TYPE 1 CATCH BASIN	EA	27	$	$
56	NYLOPLAST CATCH BASIN	EA	5	$	$
57	48" STORM SEWER MANHOLE (ALL DEPTHS)	EA	5	$	$
58	INFILTRATION BASIN STRUCTURE	EA	1	$	$
59	CENTER LINE (YELLOW DOUBLE LINE)	LF	1503	$	$
60	STOP BARS (THERMOPLASTIC)	LF	90	$	$
61	CROSSWALK STRIPES (6 X 2 THERMOPLASTIC)	EA	50	$	$
62	SPEED BUMPS	EA	4	$	$
63	TEMPORARY SEED	SY	2459	$	$
64	PERMANENT SEED	SY	2459	$	$
65	COMPOST EROSION BLANKET	SY	2459	$	$
66	LANDSCAPING	LS	1	$	$
SUBTOTAL SCHEDULE A1 - CLASSIC STREET SECTION					**$**

SCHEDULE A2 – RETAINING WALL WORK					
ITEM	**DESCRIPTION**	**UNIT**	**ESTIMATED QUANTITY**	**UNIT PRICE**	**TOTAL PRICE**
67	MOBILIZATION	LS	1	$	$
68	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	1	$	$
69	EROSION AND SEDIMENT CONTROL	LS	1	$	$
70	CLEARING AND GRUBBING	AC	1.25	$	$
71	ASPHALT PAVEMENT SAWCUTTING	LF	55	$	$
72	REMOVAL OF PAVEMENT, AC/PCC (INCLUDING HAUL)	SY	2800	$	$
73	REMOVAL OF CURBS	LF	20	$	$
74	REMOVAL OF PIPE (STORM SEWER)	LF	8	$	$
75	REMOVAL OF STRUCTURES (STORM SEWER, CB ONLY)	EA	1	$	$
76	SALVAGE EXISTING SIGNS	LS	1	$	$
77	GENERAL EXCAVATION	CY	1000	$	$
78	TOPSOIL (SEEDED AREA)	CY	330	$	$
79	BORROW EXCAVATION	TN	2520	$	$
80	BASE COURSE AGGREGATE	CY	1000	$	$
81	LEVELING COURSE AGGREGATE	CY	110	$	$
82	RETAINING WALL	LF	835	$	$
83	4 FOOT CHAIN LINK FENCE	LF	860	$	$
84	W-BEAM GUARDRAIL, TYPE 2A	LF	880	$	$
85	W-BEAM END TREATMENT-TYPE 5	EA	2	$	$
86	LEVEL 2 - 3/8 INCH ACP MIXTURE WEARING COURSE (ROADWAY)	TON	270	$	$
87	LEVEL 2 - 1/2 INCH ACP MIXTURE BASE COURSE (ROADWAY)	TON	270	$	$
88	LEVEL 2 - 3/8 INCH ACP MIXTURE (PATH)	TON	84	$	$
89	CONSTRUCTION FABRIC	SY	2333	$	$
90	EXTRA FOR PEDESTRIAN LANDINGS-ADA RAMPS	EA	2	$	$
91	6" CONCRETE CURBS, CURB & GUTTER	LF	1050	$	$
92	VALLEY GUTTER CONCRETE SURFACING	LF	25	$	$
93	CENTER LINE (YELLOW DOUBLE LINE)	LF	1050	$	$
94	FOG LINE (WHITE SINGLE LINE)	LF	500	$	$
95	STOP BARS (THERMOPLASTIC)	LF	15	$	$
96	CROSSWALK STRIPES (6 X 2 THERMOPLASTIC)	EA	4	$	$
97	SPEED BUMPS	EA	4	$	$
98	TRAFFIC DELINEATORS	EA	51	$	$
99	TEMPORARY SEED	SY	2810	$	$
100	PERMANENT SEED	SY	2810	$	$
101	COMPOST EROSION BLANKET	SY	2810	$	$
102	LANDSCAPING	LS	1	$	$
SUBTOTAL SCHEDULE A2 – TOTAL OF RETAINING WALL SECTION					**$**

SCHEDULE B – NECARNEY COUNTY CITY ROAD SECTION					
ITEM	**ITEM DESCRIPTION**	**UNIT**	**ESTIMATED QUANTITY**	**UNIT PRICE**	**TOTAL PRICE**
103	8" HDPE SDR 14, WATERMAIN	LF	1483	$	$
104	8" HDPE SDR 14, WATERMAIN (TRENCHLESS)	LF	116	$	$
105	8" DI BENDS (VARIOUS ANGLES)	EA	1	$	$
106	8"X8"X6" DI FLG TEE	EA	2	$	$
107	8" DI FLG TEE	EA	2	$	$
108	6" MJ GATE VALVE	EA	1	$	$
109	6" FLGXMJ GATE VALVE	EA	1	$	$
110	8" FLGXMJ GATE VALVE	EA	9	$	$
111	8" DI MJ LONG PATTERN SLEEVE	EA	2	$	$
112	8" DI MJ CAP	EA	1	$	$
113	2" AIR RELEASE VALVE AND VAULT	EA	1	$	$
114	HYDRANT ASSEMBLY	EA	1	$	$
115	CONNECTIONS TO EXISTING WATER MAINS	EA	3	$	$
SUBTOTAL SCHEDULE B – NECARNEY CITY COUNTY ROAD SECTION					$

Schedule A1 Total	**$**
Schedule A2 Total	**$**
Schedule B Total	**$**
Sum of Totals (A1+A2+ B) = Grand Total	**$**

TECHNICAL SPECIFICATIONS

Technical Specifications – the following specification sections will replace the existing contract sections in their entirety. Removed sections or not applicable sections are shown with ~~a strikethrough,~~ and new sections are shown with **bold and underlining**.

- Revised Section 304 – Fencing Technical Specifications
- Revised Section 305 Guardrail Technical Specifications

SECTION 304 - FENCES DESCRIPTION

The following information shall supplement the existing Oregon Department of Transportation Standard Specifications for Construction. These provisions shall take precedence over any conflicting specifications.

304.1 Scope - This Work consists of constructing:

- ~~Fences, gates, and gateways of barbed wire, woven wire fabric, chain link fabric, or combinations, to the lines and grades shown or directed.~~
- Protective fences, on and off Structure as shown or directed; **adjacent to the retaining wall structure.**

304.1.1 All dimensions shown on the Plans are horizontal and vertical measurement. Actual quantities required for the installation may be greater depending on the slope of the terrain.

304.2 Definitions:

304.2.A Fences - Fence, gates, gateways, and appurtenances, regardless of kinds and types.

~~304.2.B Gates - Swinging units to provide an opening in the fence line.~~

~~304.2.B.1 Single Gate - A unit of 16 feet or less.~~

~~304.2.B.2 Double Gate - Two single gate units used together.~~

~~304.2.C Gateway - Supported fence wire or fabric stretched between gate posts and fastened by bars, wire hinges and locking devices.~~

304.2.D Panel - That portion of fence between adjacent posts.

304.2.E Run - As used in this specification, run is defined as follows:

- Fences, gates, and gateways - The length of fence between end posts, intermediate end posts, corner posts, and gate posts.
- Bridge protective fence - A section of fence 150 feet or less in length.

304.3 Materials

304.3.1 Materials - Furnish Materials meeting the following requirements:

Chain Link Fabric 03010.30

Commercial Grade Concrete.....00440

Fence Gates.....03010.60

Fence Grounding ..... 03010.50(e) and (f)

Fence Posts, Braces, and Appurtenances 02110.30, 03010.50

Guardrail Elements.....02820.10

~~Pickets.....03010.31~~

Protective Fence Materials, On and Off Structures 03010.75

304.4 Construction

304.4.1 General - Construct the ~~several kinds and types of~~ fences including the assembly and erection of all component parts and materials complete in place at the locations shown or directed. Confine activities and operations to the area immediately adjacent to the Right-of-Way line and within the highway Right-of-Way. Arrange for permits required from adjacent property owners to perform the Work.

~~304.4.1.A Schedule the installation of fencing or provide temporary fencing or other adequate means to prevent livestock from entering the Project Right-of-Way, easements and/or adjoining properties according to 00170.92.~~

304.4.1.B Lines, Grades, and Preparation Work - Unless otherwise directed, set fences so the fence fabric and wires **are visually straight, plumb and consistent**. ~~on Right-of-Way lines or Agency property lines, with posts set on Agency property. If directed, center concrete footings and fence posts 1 foot from the Right-of-Way or property line on Agency property.~~

~~304.4.1.C Clear, grub and prepare the fence line area. Remove all shrubs, brush, snags, downed timber, float Rock, and other obstacles, including trees up to 6 inches in diameter which interfere with fence construction. If directed, preserve trees and geographic features on fence lines by varying the fence alignment to miss them.~~

~~304.4.1.D Fill or excavate ground surface irregularities which interfere with maintaining specified clearance above ground surface of the bottom wire of the fence. Limit the width as necessary to provide a clear way for the fence.~~

304.4.1.E ~~Excavate for concrete footings to reasonably Neat Lines, but not less than the specified dimensions in Soil, or not less than 18 inches deep in Rock. Prevent disturbance of original ground at the sides and bottom of the excavation.~~ **Installation shall be on the top of the retaining wall. Fence post bases shall be constructed as shown in the Contract Plans – C502 Chain Link Fence Detail, using a plate and anchor bolt installation. Leveling nuts shall be added below the plates in order to level and plumb the installation. Following final leveling the Contractor shall grout the space between the wall and the base plate.**

~~304.4.1.F Clear and grade gate openings to permit the gate to swing in a horizontal plane according to 01050.48.~~

304.4.1.G Dispose of materials removed under these provisions, including excess excavation, in a satisfactory manner.

~~304.4.2 Optional Posts - Use steel or wood posts in barbed, or barbed and woven wire fence construction according to one of the following options, and once an option has been selected, use that option throughout the Project:~~

Steel posts **shall be installed** entirely in all types of fence.

304.4.3 Installing Posts and Braces:

304.4.3.A General - Set all metal end posts, intermediate end posts, corner posts, gate posts, and chain link fence posts in concrete footings **or as described in Section 3.04.4.1E above**. Set all other posts firmly in the ground or in concrete footings as the Contractor elects.

304.4.3.A.1 Set posts to the depths shown. ~~Reasonable variation in depths will be allowed and posts may be appropriately shortened or left slightly high, as approved by the Engineer, to:~~

- ~~Avoid unnecessary penetration or excavation in Rock or other unusually firm material.~~
- ~~Obtain desired grades along the fence~~.

304.4.3.A.2 Set all posts vertical, except on curved alignment set posts slightly off vertical, as directed, to offset the pull of the fence fabric and wires.

304.4.3.A.3 For bridge protective fence **and wall mounted** only, set all metal end posts, intermediate end posts, and chain link fence posts as shown.

(1) Driven Posts - Posts that are set by driving shall be free of damage when set. Remove and replace any driven posts that are split, twisted, or bent, or have badly misshapen tops.

Dug Holes - Where Rock is encountered, set the posts to depths of not less than 18 inches and backfill with fine Granular Material. Do not exceed the post height shown by more than 3 inches. When posts are set in dug holes, backfill in 6-inch layers with each layer separately and thoroughly tamped and compacted.

(3) Concrete Footings - Dimensions of footings shall not be less than shown and shall fill the excavated areas. Place the concrete with contact against firm Soil at the sides and bottom and tamp around the posts and brace ends after the posts and braces have been brought to and firmly held in proper position. Strike off, slope or crown and smooth the surface of the concrete at the ground level to shed water. Allow to cure for at least 5 Calendar Days before subjecting the posts and braces to strain.

304.4.3.B End Posts - Set end posts:

- At the beginning and end of new fence construction that is not terminating at gate posts.
- At the end of the intersecting line of existing fences just outside the line of the new fence.

~~304.4.3.C Intermediate End Posts - Set intermediate end posts in the line of the new fence:~~

- ~~At each summit and at each valley in the grade of the fence where the algebraic difference in the grades of adjoining panels of fence exceeds 30 percent.~~
- ~~At other points located along the new fence line to break the fence construction into approximately equal runs not exceeding the applicable lengths of runs shown.~~

~~304.4.3.D Corner Posts - Set corner posts as follows:~~

~~Chain Link Fences - At angle points in fence alignment where the alignment of adjoining panels of fence changes direction by 20 degrees or more.~~

~~304.4.3.E Line Posts - Set line posts along the line of fence, between end, intermediate end, corner, and gate posts, and at the spacings shown. Line posts may be set at spacings not exceeding 25 percent greater than specified or at closer spacings if approved. Set a line post in the new fence line at a point in alignment with each intersecting fence line approximately 1 foot from the end post of the intersecting fence line. It is intended that the actual number of line posts will average to the number required for normal spacing.~~

~~304.4.3.F Braces - Construct braces before placing of fence fabric and wires on the posts.~~

304.4.3.F.1 Metal Braces - Provide corner posts and intermediate end posts with two braces, one each direction from the post in the main fence lines. Provide end posts and gate posts with one brace in the line of the fence as shown. Attach metal braces to the metal end, intermediate end, corner and gate posts and set in concrete footings.

304.4.4 Chain Link Fence:

(a) Concrete Footings - Construct concrete footings according to 304.4.3

(b) Chain Link Fence Rails and Tension Wires - Place longitudinal rails and longitudinal tension wires along the line of chain link fence, except at gates.

(1) Tension Wire - Attach tension wire to end, gate and corner posts by bands and clamps. Either thread the top tension wire through line post loop caps or hold in open slots in a manner to limit vertical movement. Tie or attach the bottom tension wire to the bottom of line posts by ties or clamps in a manner that prevents vertical movement. Provide tension wires with one turnbuckle or one ratchet take-up in each run of fence.

(c) Chain Link Fence Fabric and Wire - Assemble and install chain link fence fabric and wire according to the following:

(1) Splicing Fabric - Use spiral pickets of specified chain link fabric material for fabric splices. Use wrap or telephone type splices for tension wire and barbed wire with each end wrapped around the other wire for not less than six complete turns.

(2) Fastening Fabric - Fasten fabric to end, gate and corner posts and to gate frames as shown. Attach fabric to line posts with wire ties at top and bottom and at intermediate spacings not exceeding 18 inches. Fasten fabric to top and bottom rails and to longitudinal tension wires with metal bands or tie wires spaced as shown, but in no case greater than 24 inches apart.

For wall mounted fence only, assemble and install chain link fence fabric and wire according to paragraphs (1), (2), and (3) of this Subsection. Provide anchorage, plate and calculations for review by the Engineer.

304.5 Measurement

304.5.1 Measurement - The quantities of fences, protective fences, gates, and associated items performed under this Section will be measured according to the following:

304.5.1.A Chain Link Fence - Chain link fence will be measured on a length basis. Measurement will be from center to center of posts, measured along the line and grade of each separate continuous run of fence as constructed, exclusive of gates.

304.6 Payment

304.6.1 Payment - The accepted quantities of fences and associated items performed under this Section will be paid for according to the following:

304.6.2 Chain Link Fence - Chain link fence will be paid for at the Contract unit price, per lineal foot, for the following items: “4 Foot Chain Link Fence”. Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified. ~~Payment for Materials, Equipment, and labor involved in constructing panels of fence additional to normal fence construction at waterways and at ground surface depressions.~~ **Payment shall include end posts, braces, tension wire, concrete, connection to the retaining wall, engineering, and installation as required to provide a complete installation.**

END OF SECTION 304

SECTION 305 – METAL GUARDRAIL

The following information shall supplement existing Oregon Department of Transportation Standard Specifications for Construction. These provisions shall take precedence over any conflicting specifications.

305.00 Scope - This Work consists of constructing metal guardrail to the lines and grades shown or established and includes the assembly and erection of all components, parts and Materials complete at the locations shown or directed. Metal guardrail and metal Median barrier will be referred to in this Section as "guardrail". The types of guardrail will be shown. Work shall be performed in accordance with these special provisions and Section 00810 of the current release of the Oregon Department of Transportation Standard Specifications.

305.11 Posts - Posts, except as specified for use on Bridges or otherwise shown or directed, may be of steel or wood, as the Contractor elects. Once a type has been selected, use it throughout the continuous run of guardrail except in the transitions and terminals.

305.13 Guardrail Anchors - Furnish steel guardrail anchors according to Section 02820 and as called out in the plans. No guardrail anchor cable assembly per Project for testing according to AASHTO M 30 will be required.

Construction

305.40 Timing and Coordination of Work - Time and coordinate construction of guardrail to hold disturbance of Bases, Surfacings and Pavements to a minimum. Place all metal Median barrier Materials in continuous runs. Do not leave posts installed for guardrail exposed to traffic for more than 24 hours before installing the rail members, rail end pieces and anchors and tightening all bolts, except replacement rail shall be installed according to 00310.40(a).

305.42 Installation of Posts and Anchors - Place posts and anchors as shown. If directed, install 8 foot guardrail posts. Drive posts in place. If posts are driven through the Bases, Surfacings, Pavement or other utilities repair all damage as directed. Remove and replace posts, anchors or other components damaged during installation with sound components. Firmly set all posts at proper line, grade and spacing within a tolerance of 1/2 inch. Rigidly attach anchors, terminals and connections to other Structures as shown.

Guardrail posts shall be 7'-6" in length.

Anchor posts shall be Type 5 installations **as shown in the plans (C500).**

300.43 Erection of Rails and Other Components - Normally, all fabrication of metal beam rail members and other components shall be done in the shop or by the manufacturer. Limit field cutting, drilling and other field fabrication to the minimum and perform in a manner that will not impair the appearance or structural quality of the material. Burning new holes in metal beam rail members is not allowed.

Restore to specified condition, surface finishes and protections that are damaged before or during erection. Repair the cut ends of galvanized bolts, rail elements and back-up plates, and any holes drilled or punched after galvanizing according to ASTM A780. Minimum zinc content for Method A2 is 94 percent on the dry film.

Toe nail blocks to post with two 16d, galvanized, flat head nails to prevent rotation.

Draw tight all bolts. Bolts shall be of sufficient length to extend slightly beyond the nuts

Measurement

305.80 Measurement - The quantities of guardrail items constructed under this Section will be determined as follows:

- Length - Measurement will be on the length basis, measured as follows:
- Length Method - Measurement will be from center to center of end posts, or as otherwise shown, along the line and grade of each run of each type.

Payment

305.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	**Unit of Measurement**
(a) Guardrail, Type 2A	Foot
(b) Guardrail End Pieces,	Each

END OF SECTION 305

ENGINEERING PLAN REVISIONS

- AutoCAD Existing and Proposed Surfaces (provided for downloading from Quest CDN)
- New and revised plan sheets are included in Addendum 2, which are available on QuestCDN:
    - **G001** – Cover: Updated project name and sheet index.
    - **C120, C120** – Grading Plan: Proposed contours updated to include development proposed contours to show how grading tie-ins work along the retaining wall, approximately from Sta 11+00 to 22+00.
    - **C201, C202** – Road and Utility Plan: Proposed contours updated to include development proposed contours to show how grading tie-ins work along the retaining wall, approximately from Sta 11+00 to 22+00. Call outs for "Temporary Construction Easement" and Permanent Easement."
    - **C270, C271** – Signage and Striping: Call outs for "Temporary Construction Easement" and "Permanent Easement."
    - **C502** – Details: Detail 4 Chain Link Fence Updated to refer to gravity block retaining wall connection.
    - **C600** – Retaining Wall Plan: Proposed contours updated to include development proposed contours to show how grading tie-ins work along the retaining wall, approximately from Sta 11+00 to 22+00. Call outs for "Temporary Construction Easement" and "Permanent Easement" have been added. Added a cross-section to help explain the ground elevations shown in the profile better.
    - **C601 – C603** (**New**) – Retaining Wall Cross Sections: Added Cross section plan sheets along the retaining wall to help illustrate cut and fill needs along the wall.