

ADDENDUM NO. 2

TO THE PLANS, SPECIFICATIONS, PROPOSAL AND CONTRACT FOR THE CITY OF LACEY

RAC PARKING LOT EXPANSION

LACEY CONTRACT NO. PW 2022-19

TO ALL PLAN HOLDERS:

You are hereby notified of the following changes, revisions, deletions, additions, corrections and/or clarifications to the plans, specifications, and contract documents for the *RAC PARKING LOT EXPANSION* project. This addendum is made part of these contract documents as though it was originally included in the Contract. The Contractor shall note the location of the Addenda Receipt Acknowledgement on Page B-4 of the Contract Proposal.

Issued this 29th day of September, 2023.

I. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE PLANS

ITEM NO. 1: Sheet SP-01

1) The revisions include the addition of construction note 9 and the associated Manhole on Sheet SP-01.

Delete Sheet SP-01 and replace it with the new page as attached.

ITEM NO. 2: Sheet HC-01

2) The revisions include the addition stationing for hardscape items and cement concrete traffic curb to the legend on Sheet HC-01.

Delete Sheet HC-01 and replace it with the new page as attached.

ITEM NO. 3: Sheet FR-02

3) The revisions include modifications to the road section shown on Sheet FR-02.

Delete Sheet FR-02 and replace it with the new page as attached.

ITEM NO. 4: Sheet LS-01

4) The revisions include additional limits to hydroseed area as noted on Sheet LS-01.

Delete Sheet LS-01 and replace it with the new page as attached.

ITEM NO. 5: Sheet LS-03

5) The revisions include the addition of hydroseed limits as noted on Sheet LS-03.

Delete Sheet LS-03 and replace it with the new page as attached.

II. ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE SPECIFICATIONS

ITEM NO. 1:

Section B

1) The revisions include changes to bid item B5; Per spec 2-03.5, this measured quantity also includes pond excavation. Revisions also include addition of bid item B13, and subsequent changes in numbering of bid items B13-B27.

DELETE Bid Proposal Pages B-1 to B-4 and **REPLACE** with new Bid Proposal as attached.

<u>ITEM NO. 2:</u> Section D, Section 1-010.5(2) Item Bids With Lump Sum For Incidentals

2) The revisions include modifications to Section D, Section 1-010.5(2) Lacey GSP

DELETE this section in its entirety

<u>ITEM NO. 3:</u> Section D, Section 7-05 Manholes, Inlets, Catch Basins, and Drywells

3) The revisions include modifications to Section D, Section 7-05

ADD these sections as shown below:

7-05.3(1)B Raise Manhole To Grade (January 7, 2019 Lacey GSP)

Add the following new section:

Where shown on the plans or where directed by the Engineer, existing manholes and Type 2 catch basins shall be raised to the grade as staked or as directed by the Engineer. The Contractor shall supply and install new manhole rings, frames, and covers as part of raising the manhole to grade. The finished installation shall conform to the detail shown in plans. No wood adjustment of any kind will be allowed. Maximum distance allowed from edge of iron ring or frame of appurtenance to outside edge of pavement restoration is 18 inches. Patches larger than this or clean misses (e.g. where the Contractor excavates in the new pavement mat and does not find the iron appurtenance to raise) shall result in a credit from the Contractor to the City of \$1000 for each occurrence. Further, the Contractor shall repair the pavement patch as directed by the Engineer.

7-05.5 Payment

(October 30, 2018 Lacey GSP)

Supplement this section with the following:

The unit contract price per each for manholes and catch basins shall be full pay for furnishing all labor, tools, equipment, and materials required to place the structure including excavation, haul, backfill, testing, and all accessories, such as rings, covers, grates, steps, grate inlets, trash racks, beehive grates and debris cages, removable silt trap tees, GU liners, inside drops, outside drops and all other items needed to install the manhole complete in place in accordance with the plans and these specifications in conformity with the lines and grades staked.

"Raise Manhole to Grade", per each.

<u>ITEM NO. 4:</u> Section D, Section 8-03.3(14) Irrigation Electrical Service

4) The revisions include modifications to Section D, Section 8-03.3(14) Lacey GSP

ADD this section as shown below:

8-03.3(14) Irrigation Electrical Service (******)

Supplement this section with the following:

All new and existing (as needed) irrigation zone control valves shall be connected to the existing controller using #14-AWG Direct Burial low voltage wire as specified in the plans and specifications.

<u>ITEM NO. 5:</u> Section D, Section 8-05 Lawn and Landscape Restoration

5) The revisions include modifications to Section D, Section 8-05.5 Payment Lacey GSP

DELETE this section and replace with the following as shown below:

8-05.5 Payment (******)

"Landscaping", lump sum

Payment for landscaping shall be full pay for all labor, materials, and equipment for all items as shown and/or referred to on the landscaping and irrigation plans. Payment for landscaping shall also include all incidental items. Incidental items include but are not limited to seat wall, colored concrete, concrete scoring, mow strips, inlaid clay pavers, mulch, tree ties, tree grates, valves, piping, wires, sprinkler heads, Netafim Techline CV and its components as referenced in the specifications or shown on the plans.

ITEM NO. 6: Section E, Section 32 9000 Landscape

6) The revisions include addition of Section E, Section 32 9000

ADD this section as attached:

3 Colta city Engineer

for Scott Egger, P.E.Ŏ Director of Public Works

CITY OF LACEY

RAC Parking Lot Expansion

EV Chargers

Addendum 2

Lacey Contract Number:

PW 2022-19

Federal Aid Project Number:

WSDOT Contract Number:

TIB Contract Number:

Contract Proposal

DATE:

The undersigned, as bidder, has examined the bid documents as prepared by the Public Works Department, City of Lacey.

The undersigned, as bidder, proposes to furnish all material and perform all labor in accordance with the bid documents at the following prices.

Bidder must fill in unit prices in figures for each item and total.

Bidder shall sign this proposal form and submit all required paperwork with the bid.

				A Roadway - Frontage Improvements		
No.	Quantity	Unit	Item ID	Item Description	Unit Price	Extended Price
A1	31000	MC	104-010	Minor Change	\$1.00	\$31,000.00
A2	1	LS	109-010	Mobilization	LUMP SUM	
A3	1	LS	110-010	Project Temporary Traffic Control	LUMP SUM	
A4	55	HR	110-040	Flaggers		
A5	40	HR	110-070	Portable Changeable Message Sign	. <u></u>	
A6	1	LS	201-010	Clearing and Grubbing	LUMP SUM	
A7	430	CY	203-010	Roadway Excavation Incl. Haul	. <u></u>	
A8	55	TN	404-010	Crushed Surfacing Base Course		
A9	55	TN	404-020	Crushed Surfacing Top Course		
A10	225	TN	504-011	HMA CI. 1/2" PG 58H-22		
A11	1	LS	504-610	Preparation of Existing Surfaces	LUMP SUM	
A12	39	LF	704-508	8 Inch Diameter Storm Sewer Pipe		
A13	160	LF	704-512	12 Inch Diameter Storm Sewer Pipe		
A14	2	EA	705-210	Catch Basin Type 1		
A15	1	LS	801-680	Erosion/Water Pollution Control	LUMP SUM	
A16	1	LS	802-980	Landscaping	LUMP SUM	
A17	660	LF	804-010	Cement Conc. Traffic Curb and Gutter		
A18	475	SY	814-510	Cement Conc. Sidewalk		
A19	3	EA	814-540	Cement Conc. Sidewalk Ramp		
A20	1	LS	820-505	Illumination System	LUMP SUM	
A21	1200	LF	822-020	Plastic Line		

A22	1	EA	822-190	Plastic Traffic Arrow		
A23	180	LF	822-670	Plastic Crosswalk Line		
A24	5	EA	822-770	Plastic Bicycle Legend		
				Sched	ule A Subtotal:	
				Tax Rate (%) : 0.00 Tax:		\$0.00
				Sched	ule A Total:	
				B General - Parking lot expansion		
No.	Quantity	Unit	Item ID	Item Description	Unit Price	Extended Price
B1	116000	MC	104-010	Minor Change	\$1.00	\$116,000.00
B2	1	LS	109-010	Mobilization	LUMP SUM	
B3	1	LS	201-010	Clearing and Grubbing	LUMP SUM	
B4	1	LS	202-510	Removal of Structures and Obstructions	LUMP SUM	
B5	8110	CY	203-010	Roadway Excavation Incl. Haul		
B6	1	LS	205-510	Trench Safety System	LUMP SUM	_
B7	2240	TN	404-010	Crushed Surfacing Base Course		
B8	1120	TN	404-020	Crushed Surfacing Top Course		
B9	2820	TN	504-011	HMA CI. 1/2" PG 58H-22		_
B10	1	LS	504-610	Preparation of Existing Surfaces	LUMP SUM	
B11	1130	LF	704-512	12 Inch Diameter Storm Sewer Pipe		
B12	8	EA	705-216	Catch Basin Type 1P		
B13	1	EA	705-920	Raise Manhole to Grade		
B14	1	LS	801-680	Erosion/Water Pollution Control	LUMP SUM	
B15	1	LS	802-980	Landscaping	LUMP SUM	
B16	2840	LF	804-020	Cement Conc. Traffic Curb		
B17	226	SY	806-510	6 Inch Cement Conc. Driveway Entrance		
B18	1250	SY	814-510	Cement Conc. Sidewalk		
B19	5	EA	814-540	Cement Conc. Sidewalk Ramp		
B20	4.9	TN	815-020	Light Loose Riprap		
B21	1	LS	820-505	Illumination System	LUMP SUM	
B22	8500	LF	822-010	Paint Line		
B23	8	EA	822-015	Painted Access Parking Space Symbol with Background		
B24	1	EA	850-530	Bollard Type I		
B25	8	EA	850-535	Bollard Type 2		
B26	1	LS	850-792	Project Closeout	\$500.00	\$500.00
B27	8	EA	853-510	Wheel Stop		
				Sched	ule B Subtotal:	
				Tax Rate (%) : 9.50 Tax:		
					ule B Total:	

	C General - EV chargers						
No.	Quantity	Unit	Item ID	Item Description		Unit Price	Extended Price
C1	28000	MC	104-010	Minor Change		\$1.00	\$28,000.00
C2	1	LS	104-020	Additive #1		LUMP SUM	
C3	1	LS	104-025	Additive #2		LUMP SUM	
C4	1	LS	109-010	Mobilization		LUMP SUM	
C5	1	LS	899-916	Type 3 Electric Vehicle Charger		LUMP SUM	
					Schedule (C Subtotal:	
				Tax Rate (%)): 9.50 Tax:		
					Schedule (C Total:	
					Contre	act Total:	
						chedules)	

The undersigned also agrees as follows:

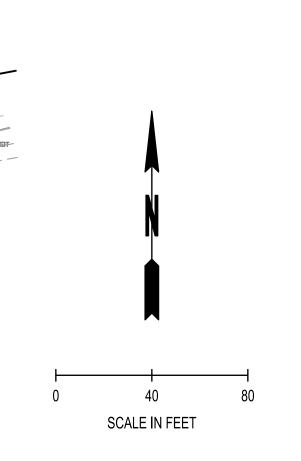
- Within 10 calendar days after the contract is awarded to sign and return the contract and provide insurance documents.
- That this proposal cannot be withdrawn within 45 days after receipt of bids.
- That it is the understanding that the City of Lacey may accept or reject any or all bids.
- The undersigned hereby agrees to pay for labor not less than the prevailing rates of wages per the bid documents.
- Enclosed with this proposal is a bid deposit in the sum of 5% of the bid total amount which it is agreed shall be collected and retained by the City of Lacey as liquidated damages in the event this proposal is accepted by the City of Lacey with 45 calendar days after the receipt of bids and the undersigned fails to execute the contract and the required bond with the City of Lacey, under the conditions thereof, within 10 calendar days after the undersigned is notified that said proposal has been accepted, otherwise said bid deposit shall be returned to the undersigned upon demand.
- A Performance/Payment Bond will be furnished to the City with the contract.
- Retention will be held on this contract per RCW 60.28.011.

Addenda Receipt Acknowledged

Signature of Bidde	er	Date		
(If an Individual, P	artnership, or Non-Incorporate	ed organization)		
Firm Name	Please Print	Phone		
Address of Bidder:	:			
Name and Addres	s of Firm Members:			
Signature of Bidde	er (if a Corporation)			
Title:				
Firm Name:			Phone:	
Business Address	:			
Incorporated unde	r the Laws of the State of _			
Officers		Address		
President:				
Secretary:				
Treasurer:				
			B - 4	



VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING କୁ ଜୁଁ THE UNDERGROUND LOCATE LINE AT 811 OR 1.800.424.5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



LEGEND

XX

STALL COUNT

CEMENT CONCRETE TRAFFIC CURB PER WSDOT STD. PLAN F.10.12.04 SEE SP-03

CEMENT CONCRETE CURB AND GUTTER PER CITY OF LACEY STD. DWG. 4–14 SEE SP–03

CONCRETE SIDEWALK PER CITY OF LACEY STD. DWG. 4-9: SEE SP-03

LIGHT DUTY ASPHALT PAVING: SEE SP-02

PRECAST CONCRETE WHEELSTOP: SEE SP-02

PARKING LOT LIGHT POLE FIXTURE(ARROW INDICATES DIRECTION OF AIMING FOR OPTICS) SEE ELECTRICAL PLANS

STREET LIGHT FIXTURE: SEE ELECTRICAL PLANS

FIXED POLE MOUNTED CAMERA - MOUNT AT +30' AFG. SEE ELECTRICAL PLANS

SITE HANDHOLE: SEE ELECTRICAL PLANS

FLOOD LIGHT – SEE ELECTRICAL PLANS

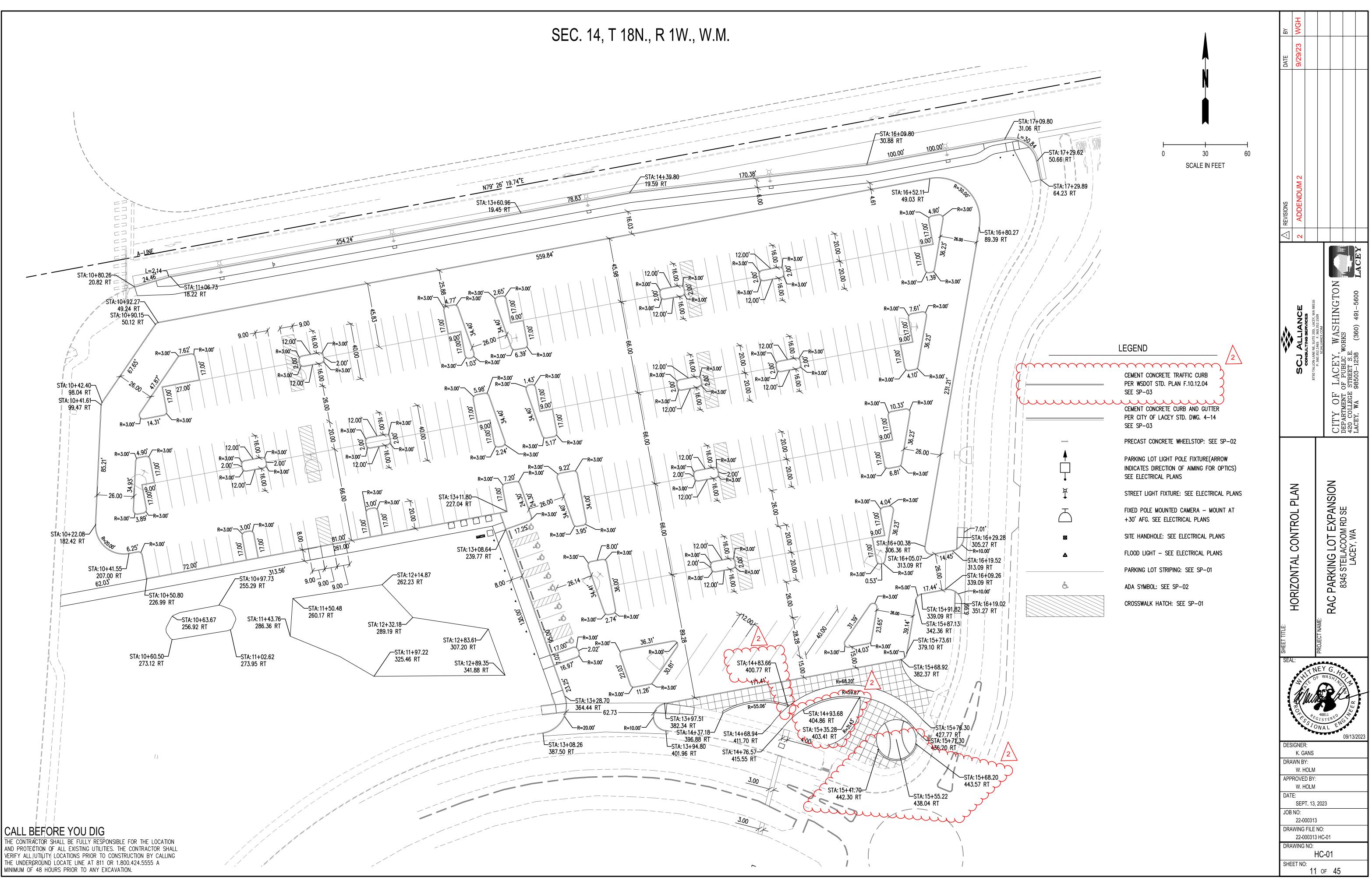
XX CONSTRUCTION NOTES:

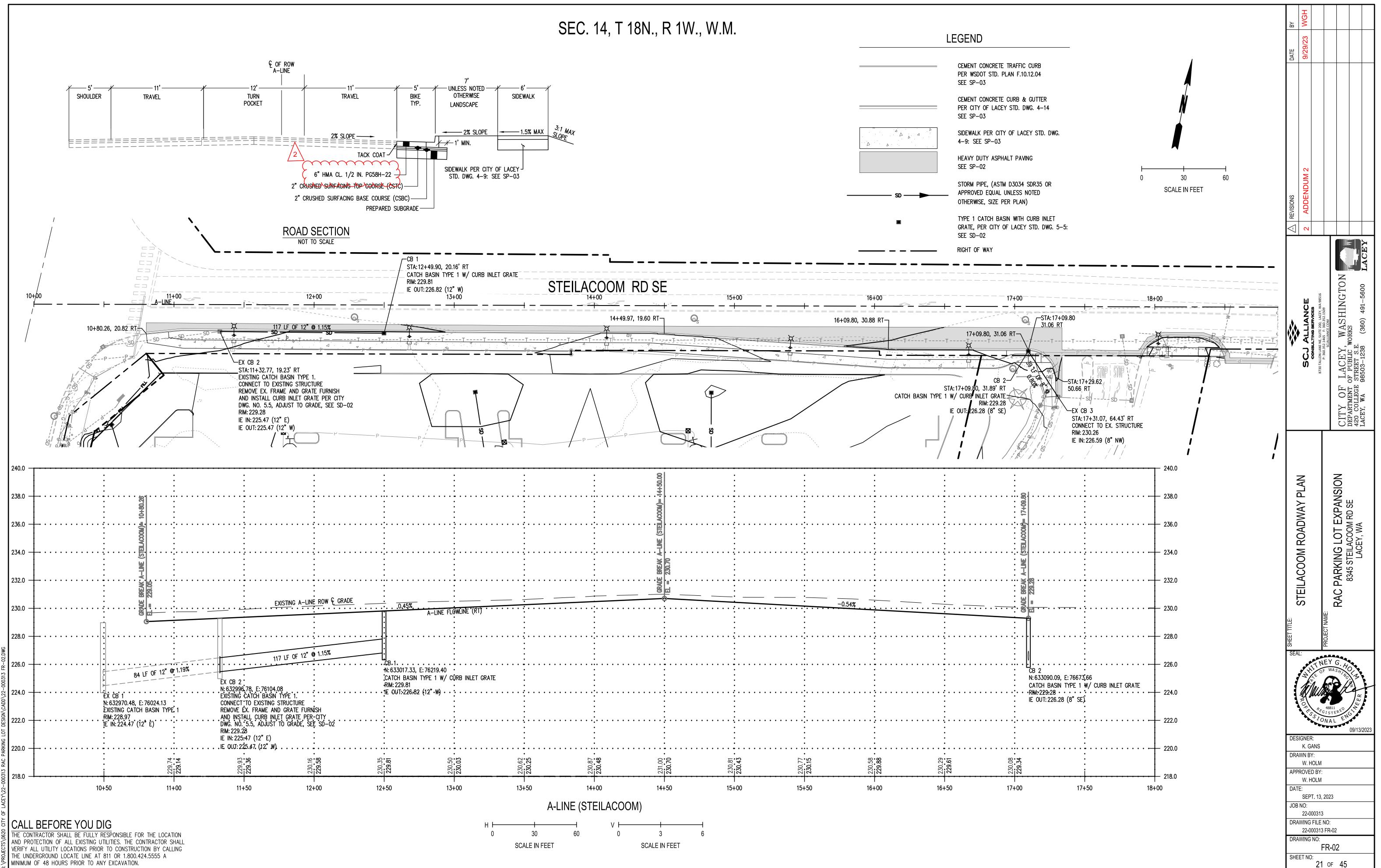
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- 1. AUTO PARKING STALL: 9'x20' (TYP): SEE SP-02
- 2. ADA ACCESSIBLE PARKING STALLS: SEE SP-02
- 3. ONE WAY BUS ONLY DRIVE AISLE
- 4. BUS PARKING STALL: 12'X40' (TYP): SEE SP-02
- 5. 4" WIDE WHITE PAINT LINES APPLY TWO (2) COATS OF TRAFFIC WHITE PAINT WITH 7 MIL DFT PER COAT (TYP)
- 6. 4" WIDE DIAGONAL STRIPING @ 18" O.C. (TYP) TWO (2) COATS OF TRAFFIC WHITE PAINT WITH 7 MIL DFT PER COAT
- 7. INSTALL BOLLARD PER WSDOT STANDARD DETAIL H-60.20-01. COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION PER THE EV CHARGER MANUFACTURER.

8. CEMENT CONCRETE DRIVEWAX: SEE SP-03

DRA APF DA1	JEA	SHEET TITLE:		A REV	REVISIONS	DATE	ВΥ
K. G K. G WN B W. H ROVE W. H E: SEP	ROFE	SITE AND PAVING PLAN	SCJ ALLIANCE	2	ADDENDUM 2	9/29/23 WGH	MGH
R: ANS Y: IOLM			CONSULTING SERVICES 8730 TALLON LANE NE, SUITE 200, LACEY, WA 98516				
202		PROJECT NAME:	P: 360.352.1465 F: 360.352.1509 SCJALLIANCE.COM				
	G VAS						
	Ď		CITY OF LACEY, WASHINGTON				
	SIN MALLO	8345 STEILACUOM RU SE I ACEV MA	DEPARTMENT OF PUBLIC WORKS 420 COLLEGE STREET S.E.				
3/2023			LACEY, WA 98503-1238 (360) 491-5600 LACEY				









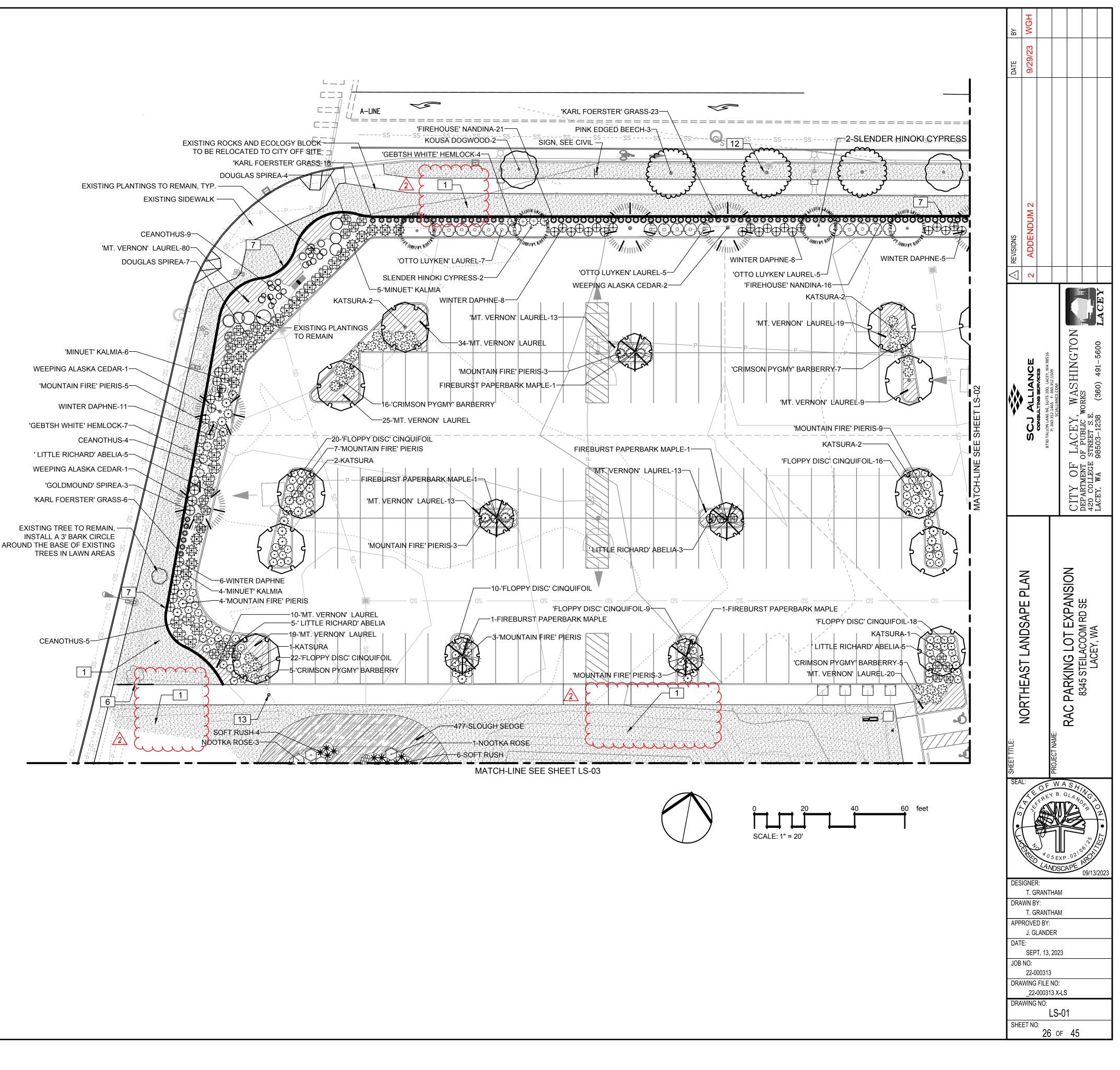
EES	QTY	DULE LS-01 BOTANICAL / COMMON NAME	SIZE	DESC.
	5	ACER GRISEUM 'JFS KW8AGRI' FIREBURST PAPERBARK MAPLE	2" CAL.	2" CAL., 8`-10` HT.
en e	10	CERCIDIPHYLLUM JAPONICUM KATSURA 5' BRANCHING HT.	2" CAL., B&B/ CONT.	12`-14` HT.
	4	CHAMAECYPARIS NOOTKATENSIS 'PENDULA' WEEPING ALASKA CEDAR	8` HT. MIN.	B&B/ CONT.
AND A CONTRACTOR OF A CONTRACT	4	CHAMAECYPARIS OBTUSA 'GRACILIS' SLENDER HINOKI CYPRESS	8` HT. MIN.	B&B/ CONT.
	2	CORNUS KOUSA KOUSA DOGWOOD	1 1/2" CAL	6`-8` HT., B&B
	3	FAGUS SYLVATICA 'ROSEOMARGINATA' PINK EDGED BEECH	2" CAL., B&B/ CONT.	12`-14` HT.
HRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING
	18	ABELIA X GRANDIFLORA 'LITTLE RICHARD' ' LITTLE RICHARD' ABELIA	5 GAL	4` O.C.
\$; ;;	33	BERBERIS THUNBERGII 'CRIMSON PYGMY' 'CRIMSON PYGMY' BARBERRY	2 GAL	3.5` O.C.
	47	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' 'KARL FOERSTER' GRASS	2 GAL	3` O.C.
	18	CEANOTHUS X 'JULIA PHELPS' CEANOTHUS	5 GAL	6` O.C.
\bigoplus	38	DAPHNE ODORA WINTER DAPHNE	2 GAL	3.5` O.C.
*	10	JUNCUS EFFUSUS SOFT RUSH	1 GAL	3` O.C.
(15	KALMIA LATIFOLIA `MINUET` 'MINUET' KALMIA	5 GAL	5` O.C.
JULICE STATE	33	NANDINA DOMESTICA 'FIREHOUSE' 'FIREHOUSE' NANDINA	2 GAL	2-1/2` O.C.
	37	PIERIS JAPONICA `MOUNTAIN FIRE` 'MOUNTAIN FIRE' PIERIS	5 GAL	4` O.C.
\bigcirc	95	POTENTILLA FRUTICOSA 'FLOPPY DISC' 'FLOPPY DISC' CINQUIFOIL	1 GAL	3` O.C.
\bigcirc	17	PRUNUS LAUROCERASUS 'OTTO LUYKEN' 'OTTO LUYKEN' LAUREL	21"-24" HT., B&B	5` O.C.
\bigcirc	4	ROSA NUTKANA NOOTKA ROSE	1 GAL	5` O.C.
	11	SPIRAEA DOUGLASII DOUGLAS SPIREA	5 GAL	4` O.C.
\oplus	3	SPIRAEA JAPONICA 'GOLDMOUND' 'GOLDMOUND' SPIREA	3 GAL	4` O.C.
<u>}</u>	11	TSUGA CANADENSIS `GENTSH WHITE` 'GEBTSH WHITE' HEMLOCK	5 GAL	4` O.C.
ROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	SPACING
	477	CAREX OBNUPTA SLOUGH SEDGE	4"POT	18" O.C.
	255	PRUNUS LAUROCERASUS 'MOUNT VERNON' 'MT. VERNON' LAUREL	1 GAL	2-1/2` O.C.

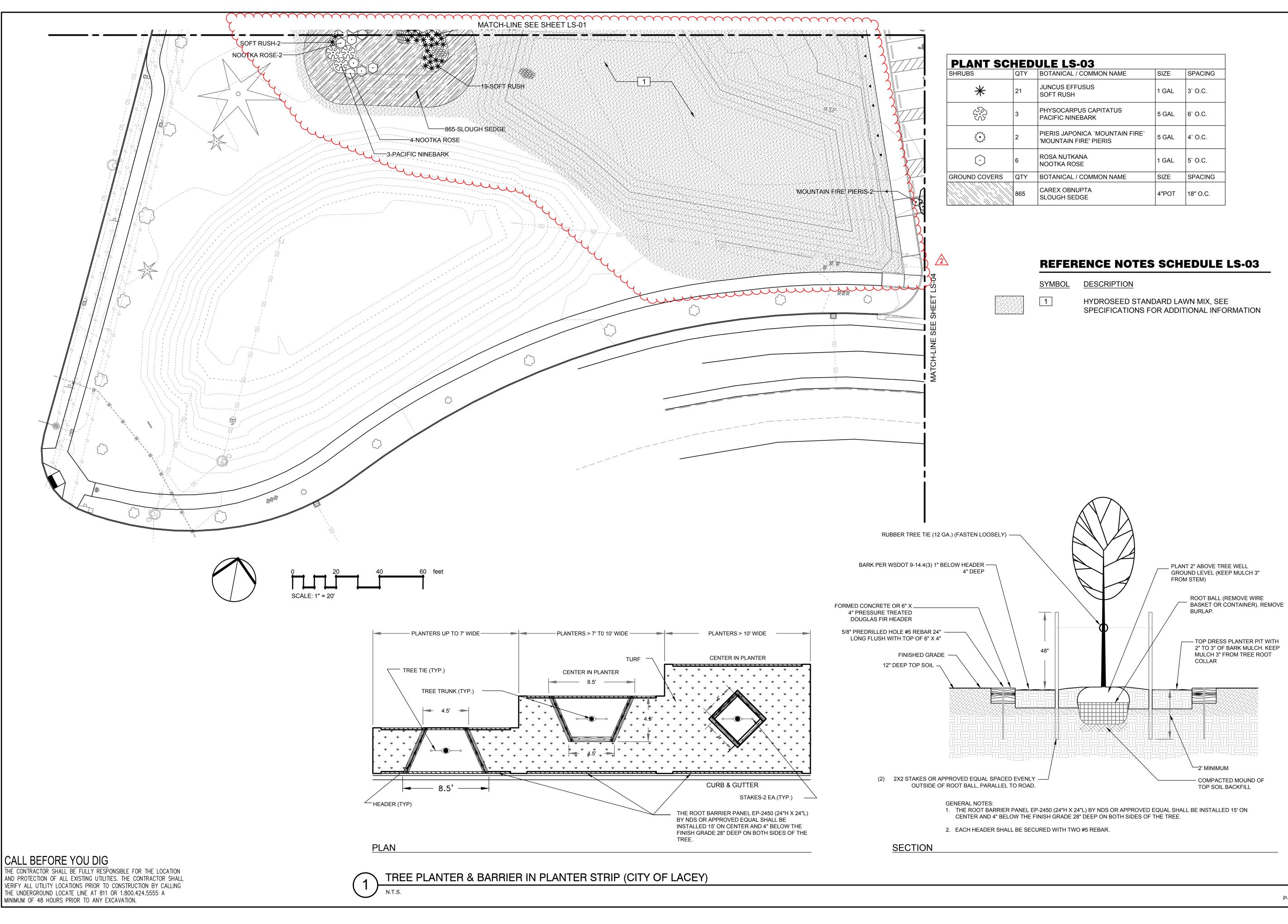
REFERENCE NOTES SCHEDULE LS-01

SYMBOL	DESCRIPTION	DETAIL
1	HYDROSEED STANDARD LAWN MIX, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION	
 6	INSTALL SPECIFIED ROOT BARRIER ALONG NEW CONCRETE SIDEWALK WITHIN 8' OF TREE TRUNK OF THIS EXISTING TREE TO REMAIN.	1/LS-03
 7	6" CONCRETE MOW STRIP	7/LS-05
12	STREET TREE WITH EDGING - TYP. ALL NEW STREET TREES	1/LS-03
13	REMOVABLE BOLLARD	9/LS-05

CALL BEFORE YOU DIG

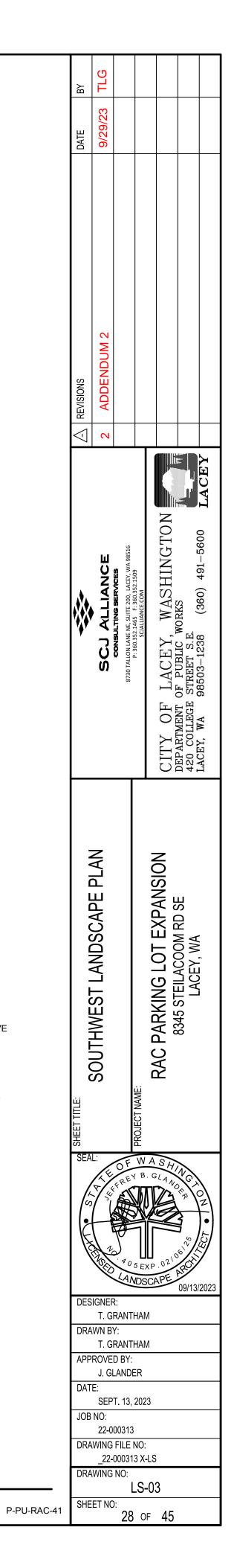
HE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 OR 1.800.424.5555 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.





78, 78,

SIZE	SPACING
1 GAL	3` O.C.
5 GAL	6` O.C.
5 GAL	4` O.C.
1 GAL	5` O.C.
SIZE	SPACING
4"POT	18" O.C.
	1 GAL 5 GAL 5 GAL 1 GAL SIZE



SECTION 32 90 00 LANDSCAPE INSTALLATION SPECIFICATIONS

PART I: GENERAL

1.01 GENERAL REQUIREMENTS

Conform to Section D Special Provision 8-05.

1.02 DESCRIPTION OF WORK

- A. Contractor shall coordinate activities necessary for the provision of labor, materials, tools, equipment, services, trees, shrubs, and ground covers necessary to complete the landscape operations in accordance with these specifications, as shown on the plans and details, or as directed by the Landscape Architect/Owner.
- B. These landscape operations shall be performed only by a licensed, bonded landscape contracting firm that specializes in landscape installation.
- C. Trees, shrubs, and ground covers will hereinafter be referred to collectively as plant material.

1.03 PRESERVATION OF PROPERTY

The planting operations shall be conducted in such manner that no damage shall result to existing site improvements and plantings. The Contractor shall be responsible for any damage resulting from their operation, and shall repair or replace such damage at their own expense by qualified trades and/or installers acceptable to the Owner.

1.04 JOB CONDITIONS

- A. Planting operations including soil preparation, shall proceed only during periods, which are normal for work as determined by season, weather conditions, and accepted practice. Do not perform work when there is prolonged freezing weather, or when the soil is in a wet or muddy condition.
- B. Determine location of underground utilities and perform work in a manner which will avoid possible damage. Hand excavate, as required. Any utilities, structures, or other facilities damaged due to work on this project shall be restored, equal to their original condition at the Contractor's expense.
- C. When conditions detrimental to plant growth are encountered, such as rubble, rubble fill, adverse drainage conditions, or obstructions, notify Landscape Architect/Owner before planting.

1.05 PRODUCT HANDLING & TEMPORARY STORAGE

- A. Handling and shipping of plant material shall be done in a manner that is not detrimental to the plants. Plant material shall be packed for shipment in accordance with prevailing practice for the type of plant being shipped. All plants shall be protected against drying, sun, wind, heat, freezing, and similar detrimental conditions at all times. When necessary, plant material shall be temporarily healed in.
- B. Protect work by placing stakes and twine barrier (visible day or night) around any planted area if required as a barrier for pedestrians, animals, vehicles, or any other cause until acceptance of work.
- C. Plant materials showing damage from shipping, or while in storage, or during planting shall be rejected by the Landscape Architect/owner and be replaced by the Contractor at their own expense.

1.06 SUBSTITUTION OF PLANTS

No substitution of plant material will be permitted unless evidence is submitted to the Landscape Architect that a specified plant or variety cannot be obtained. If substitution is permitted, it can be made only with the approval of the Landscape Architect/Owner.

PART II: MATERIALS

2.01 PLANT MATERIALS:

- A. All plant material furnished shall meet the grades established by the American Standard Nursery Stock (ANSI Z60.1). Each shall conform to the size and acceptable conditions as listed on the plans and shall be free of all foreign plant material. An exception to this standard shall concern tree caliper measurements. All tree calipers shall be sized at 'ANSI' (American National Standards Institute) height, which shall be considered to be 6" above the top of the root-ball.
- B. All plant material shall consist of live woody or herbaceous materials that are vigorous, well formed, with a well-developed fibrous root system. The material shall be free from dead branches, lichens, and from damage caused by an absence or an excess of heat or moisture, insects, disease, mechanical, or other causes detrimental to good plant development.
- C. Deciduous trees shall have solitary leaders (unless indicated otherwise on plan) and shall have only lateral branches thinned by pruning. All conifer trees shall have only one leader (growing apex) and one terminal bud. Trees having a damaged or missing leader, multiple leaders, or Y-crotches shall be rejected.
- D. Root-balls of the evergreen plants shall be solidly held together by the fibrous root system of the plant in its natural position and shall be composed only of the earth in which the plant has been actually growing.
- E. Container grown plants must be plants transplanted into a container and grown in that container sufficiently long for new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from container.
- F. Landscape Architect/Owner reserves the right to inspect all plant material at place of growth for compliance with requirements for size, variety, condition, including disease, and if rootbound. This preliminary approval does not constitute final approval of plants at completion of installation operations.

2.02 SOD:

- A. Sod, if used, shall be field grown one calendar year or longer, have a well-developed root structure, and be free of all weeds, disease, and insect damage.
- B. Prior to cutting, the sod shall be green, in an active and vigorous state of growth, and mowed to a height not exceeding one inch.
- C. The sod shall be cut with a minimum of one inch of soil adhering. Provide sod composed of the following:
 - 60% Perennial Turf Type Rye Grass
 - 20% Hard Fescue
 - 20% Bluegrass
- D. Sod shall be equal to that as grown by Country Green Turf Farms, 7725-B Yelm Highway S.E., Olympia, Washington 98516, (360)456-1006.
- E. If sod is used in athletic field areas, it shall contain no netting.

2.03 SEED:

- A. Grass seed of the type specified shall conform to the standards for "Certified" grade seed or better as outlined by the State of Washington Department of Agriculture "Rules for Seed Certification", latest edition. Seed shall be furnished in standard containers on which shall be shown the following information:
 - 1. Common name of seed
 - 2. Lot number
 - 3. Net weight
 - 4. Percentage of purity

- 5. Percentage of germination (in case of legumes, percentage of germination to include hard seed)
- 6. Percentage of weed seed content and inert material clearly marked for each kind of seed in accordance with applicable State and Federal Laws.
- B. Upon request, the Contractor shall furnish to the Landscape Architect duplicate copies of a statement signed by the vendor certifying that each lot of seed has been tested by a recognized seed testing laboratory within 6 months before date of delivery on the project. Seed which has become wet, moldy, or otherwise damaged in transit, or storage will not be accepted.

2.04 GROUND COVER:

Provide plants established and well-rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size shown or listed.

2.05 TOPSOIL:

Imported topsoil for berming and other required sub-grade work shall be a friable sandy loam typical of topsoils cultivated locally. Topsoil shall be free of objectionable subsoil materials, weeds, noxious weed seeds, refuse, sticks, brush, and rocks larger than 1" across the greatest dimension. Topsoil shall contain no more than 10% rocks or gravel by volume.

2.06 FERTILIZER:

- A. Fertilizer for backfill mix and soil preparation shall be standard commercial grade of organic or inorganic fertilizer of the kind and quality specified herein. It may be separate or in a mixture containing percentage of total nitrogen, available phosphoric acid, and soluble potash in the amounts specified. All fertilizers shall be furnished in standard unopened containers with weight, name of plant nutrients, and manufacturer's guaranteed statement of analysis clearly marked, all in accordance with State and Federal Laws.
- B. Commercial fertilizer shall have the following guaranteed chemical analysis:

	Perce	entage
Ingredient	Minimum	Maximum
Nitrogen	10	16
Phosphoric Acid	10	16
Water Soluble Potash	5	16

C. Top dress fertilizer shall be applied on the surface of all plant pits after installation and shall be Osmocote 18-6-12, 9 month slow release applied at the following rates;

Trees Over 10' Height	2 Cups
Trees Under 10' Height	1 Cup
All Shrubs Except 1 Gallons	1/2 Cup
All 1 Gallon Plants	¼ Cup
All Ground Covers	¼ Cup

- D. Fertilizer tablets for plant material shall be a nitrogen-phosphorus-potassium ratio similar to 20-10-5. The nitrogen shall be derived from ureaformaldehyde and shall be supplied in a two year controlled release 21 gram or 10 gram size table. Tablets shall be manufactured by "Agriform" or equal.
- E. Apply fertilizer tablets in the following quantities per plant:

2 ¼" pots and 4" pots	1-10 gram tablet
1 gallon container	1-21 gram tablet
All shrubs	3-21 gram tablets
All trees	1 tablet per ½" tree caliper. (min. 4-21 gram tablets)

F. Where more than 1 tablet is required, they shall be evenly spaced around the plant, directly next to the rootball.

2.07 BED MULCH TOP DRESSING:

Bed mulch top dressing for all shrub and ground cover areas shall be Ground Fir & Hemlock bark of uniform color, free from weeds, seeds, sawdust, splinters, resin, tannin, wood fiber, salts, or other compounds detrimental to plant like. Size range shall be $\frac{1}{4}$ " to 1" with a maximum of 50% passing a $\frac{1}{2}$ " screen. Submit sample to Landscape Architect for approval.

2.08 SOIL AMENDMENT

Soil amendment for soil preparation and use in soil mix shall be nitrified wood residual product, composted at 130° to 160° for four (4) and six (6) months and screened to 1/2" minus in size. Soil amendment shall be equal to the following compost brands as available from: (Submit sample for approval to landscape architect.)

- "Top Grade Compost" as available from Corliss Resources, Lake Tapps, WA, ph. 253.279.9102
- "Cedar Grove Compost" as available from Cedar Grove Compost, Maple Valley, WA, ph.
- 877.764.5748
- PREP/LRI Compost as available from Randle's Sand & Gravel, Puyallup, WA, ph. 253.537.6828

2.09 SOIL MIX

- A. Soil mix for raised planters and backfill mix shall consist of the following by volume:
 - 60% screened clean loamy sand
 - 40% specified soil amendment
- B. Submit sample of soil mix to Landscape Architect for approval prior to use on project. No rocks or gravel shall be allowed in soil mix.

2.10 PREPARED BACKFILL MIX:

- A. For all plant materials (except Rhododendrons & Azaleas) shall consist of the following per cubic yard (Submit sample for approval to landscape architect):
 - 1/3 c.y. clean site soil
 - 2/3 c.y. specified soil mix
 - c.f. bagged Canadian shredded peat moss
 - Ibs. specified commercial fertilizer
 - lbs. single superphosphate
 - 1 lb. iron sulfate

- B. Backfill mix for Backfill mix for Rhododendrons & Azaleas shall consist of 2/3 above specified backfill mix and 1/3 fine grind hem-fir bark mulch. (Submit sample for approval to landscape architect)
- C. Prepared backfill mix shall be thoroughly blended and mixed in an area adjacent to the planting work, and shall be accurately proportioned using a suitable container. Unused site soil excavated from plant pits shall be disposed of off-site. Protect backfill mix from moisture until it has been placed in backfill around plants.

2.11 CHEMICAL HERBICIDE:

A weed control pre-emergent herbicide which is approved for ornamental nursery stock and approved by the Landscape Architect/Owner. Application of herbicide must be in compliance with all local and state codes and laws. Do not use Casaron or Norasac brands. Apply at conclusion of specified maintenance period. Verify compatibility of herbicide with landscape plant materials.

2.12 SPECIFIED MATERIALS:

Contractor is required to keep all labels, bags, and other containers for all fertilizers, chemical soil amendments, pre-emergents, herbicides and other chemicals until approved by the Landscape Architect as proof that specified materials and quantities have been used. Failure to do so shall result in additional amendments required to meet these specifications and be verified by the Landscape Architect.

2.13 STAKES & GUYING:

Stakes and guys shall be installed as shown on Plans.

2.14 ROOT BARRIER

A. Root Barrier Panel EP-2450 by NDS, or approved equal, shall be installed at the edge of any paving within 8ft. of the tree trunk.

PART III: EXECUTION

3.01 LAYOUT OF PLANTING:

- A. Plant and lawn area location and staking will be the responsibility of the Contractor, subject to the approval of the Landscape Architect.
- B. The Contractor shall place the plants starting from the perimeter of the bed area and progressing to the center of any planting bed as shown on the plans and details.
- C. Tree locations show on the plans shall be considered approximate unless shown with specific distance. Tree locations shall be adjusted so that the tree is not directly in front of sprinkler heads, lights or signage. Street trees shall be staked and reviewed on site with landscape architect after street signs have been staked by General Contractor.
- D. Plant material quantities shown on the plans are approximate and for reference only. The Contractor is responsible for determining the exact number of plants required to place all plants at the spacing indicated, and to verify those indicated quantities with plan drawings.

3.02 PLANT BED PREPARATION:

- A. All planting areas shall be prepared so that they remain weed and debris free until the time of final acceptance. The planting areas shall include all planting beds and those areas shown on the plans or directed by the Landscape Architect/Owner.
- B. Preparation of all planting areas shall be undertaken as indicated on the plans and shall include the following:
 - 1. Kill and remove existing weeds and vegetation except as directed by Landscape Architect or indicated otherwise on plans.
 - 2. Remove all debris, including asphalt, stumps, rocks, and clods from all planting surfaces.

- 3. Scarify and cultivate existing compacted subgrades in proposed landscape beds prior to any grading operations.
- 4. Supply specified topsoil and soil amendment to depths indicated on plans, in specifications, and in details. All landscape areas shall receive topsoil, whether indicated on the plans or not, so that finish grades after soil preparation and bed mulch application shall conform to final grading requirements listed in the following paragraphs.

3.03 FINISH GRADING

A. SURFACES:

All planting surfaces shall be left with a firm, uniform surface, free of undulations or other irregularities. Remove all rocks, clods, and debris from all planting surfaces. Finish grade of all non-turf areas shall be 2" below tops of adjacent pavements and curbs, unless indicated otherwise on plans.

B. PRELIMINARY GRADING:

Shall be done in such a manner as to anticipate the finished grade. Excess soil shall be removed or redistributed before application of soil mix, fertilizer, and mulch. Where soil is to be replaced by plants and mulch, allowance shall be made so that when finish grading has begun, there shall be no deficiency in the specified depth of mulched planting beds.

C. FINAL GRADING AND DRAINAGE:

The Contractor shall bear final responsibility for proper surface drainage of the site and the features thereon. Any discrepancy in the drawings or specifications, obstructions on the site, or prior work done by another party which the Contractor feels precludes establishing proper drainage, shall be brought to the attention of the Landscape Architect in writing for correction or relief of said responsibility.

D. STRUCTURAL FILL AREAS:

Any landscape areas occurring within structural fill zones shall have said structural fill materials excavated to a depth of 12" below finish grades in shrub beds and 6" below finish grades in lawn areas, and replaced with specified topsoil. Dispose of excavated materials off site.

3.04 SOIL PREPARATION (All Landscape Areas)

- A. All areas on the plan to receive soil preparation shall first be cultivated to a light and friable consistency, where upon the following ingredients, per 1000 s.f., shall be uniformly tilled into the top 6"-8" of soil, using a rototiller or similar machine, and then thoroughly watered down: 9 c.y. specified soil amendment (3" average depth)
 - 15 lbs. commercial fertilizer
 - 15 lbs. iron sulfate

10 lbs. triple superphosphate (0-45-0)

100 lbs. agricultural gypsum

- B. All soil preparation and planting operations shall be conducted under favorable weather conditions only. Soil shall not be worked when excessively dry or wet. Landscape Architect reserves the right to stop any work taking place during a period when conditions are considered detrimental to soil structure or plant growth. Fine grade as specified above.
- C. All planting beds shall be approved by Landscape Architect before rototilling (with soil amendments distributed over surface of bed) and after rototilling has been completed. All beds shall be approved for fine grading before planting operations.

3.05 SOIL PREPARATION (All lawn areas, seed, sod or hydro-seed)

- A. Procedural operations shall be the same for items A through C in paragraph 3.04 above, except for soil amendments.
- B. Soil Amendments shall consist of the following per 1,000 square feet:

- 9c.y. specified soil amendment (3" average depth)
- 100 lbs. dolomite lime
- 100 lbs. agricultural gypsum
- 15 lbs. commercial fertilizer
- C. Finish grade shall be $\frac{1}{2}$ " below all adjoining paved surfaces.
- D. Refer to Section 32919 specifications if hydroseeding is required.

3.06 ORDER OF PLANTING:

In mixed planting areas, trees shall be planted first, followed by the larger shrubs, low shrubs, and then ground covers.

3.07 PLANTING (TREES AND SHRUBS):

- A. Planting shall be done only when conditions favorable for planting exist. Under no circumstances will planting during freezing weather or in frozen ground be permitted.
- B. Before excavation, plants to be installed shall be placed as indicated on planting plan. The Landscape Architect shall check locations of all plants in the field and shall indicate the exact position before actual planting operation proceeds.
- C. Set trees and shrubs in center of pits, plumb and straight. Except in lawn areas, plant at such a level that after settlement, the crown of the plant will be flush with finish grading and forming a shallow trough directly over the ball of the earth and slightly smaller than the pit to facilitate watering.
- D. Set plants in backfill mixture to such depth that the top of the plant ball will be flush with finished grade. Backfill the remainder of the hole and soak thoroughly. Water the backfill until saturated to the full depth of the hole. Pour Top Dress fertilizer over the surface of plant basin at indicated rates. Keep empty containers per paragraph 2.12. Install fertilizer tablets as specified.
- E. A mound of earth shall be formed as directed around each tree and shrub so as to produce a shallow basin to retain water, the diameter to exceed the diameter of the root spread. Plants shall be watered in place during and after backfilling. Trees planted in lawn areas shall receive no watering basins, but shall be centered in a 3'-0" diameter circle mulched with bed mulch.
- F. Prune plants only at time of planting and according to standard horticultural practice to preserve the natural character of the plant. Pruning to be done under supervision of Landscape Architect. Remove all dead wood, suckers, and broken or badly bruised branches. Use only clean, sharp tools. Paint cuts over 3/4" diameter, covering exposed areas with tree paint.
- G. Immediately after planting operations are complete, beds and pits shall be dressed off so as to achieve a neat and presentable appearance.
- H. Planting operations shall be identical for all plants to be transplanted. Refer to plans and directions from Landscape Architect.

3.08 GROUND COVER:

- A. Spacing: Space plant material in plant areas and at the spacing shown, in neat rows, insuring complete coverage of all planting areas under and around trees and shrubs. Triangular spacing is required unless specified otherwise on plans. Pour Top Dress fertilizer around plant surface at indicated rates.
- B. Watering: Water plants immediately after planting. No plant shall be out of their container more than thirty (30) minutes before being planted and watered.
- C. Apply pre-emergent herbicide to all ground cover and shrub beds at conclusion of specified maintenance period. Do not use Casaron or Norasac Brands.

D. Mulching: Re-cultivate compacted soil, rake smooth and distribute bed mulch to a 3" depth on the surface of trees, ground cover and shrub areas. Remove any bed mulch that falls over the ground covers or shrubs. Do not apply Bed Mulch to wildflower beds, if used.

3.09 SOD INSTALLATION:

- A. Sod installation shall not begin until the sprinkler system is complete and operating.
- B. Soil preparation and fine grading shall be performed as previously specified for lawn areas; however, in addition, 5 lbs./1000 s.f. of 38-0-0 fertilizer shall be raked into the top two (2) inches of soil.
- C. The area shall then be rolled in two directions, the second to be done at right angles to the first rolling, until a smooth, uniform grade has been produced. The finish grade before sod installation shall be one (1) inch below adjacent pavements. The lawn bed shall be inspected and approved by the Landscape Architect prior to sodding.
- D. Sod shall be unrolled in place, with careful attention to staggering pieces and tight joints. Immediately after placement, soak with water. Roll sod after second watering.

3.10 SEED BED PREPARATION AND PLANTING (for seeding of non-hydro seed areas)

- A. The Contractor shall notify the Landscape Architect not less than 24 hours in advance of any seed bed preparation, and shall not begin the work until areas prepared or designated for seeding have been approved. Seeding shall not be done during windy weather or when the ground is frozen. Seed and fertilizer shall be placed at the rate and mixture specified.
- B. Seed bed preparation, fine grading, and fertilizing shall be the same as for sod installation specified in Paragraph 3.09 above, except that 38-0-0 shall be applied after germination. Seed mix shall be applied at a rate of 6 lbs./1000 s.f. Seed mix shall consist of the following blend:
 - 60% Turf Type Perennial Ryegrass
 - 20% Bluegrass
 - 20% Hard Fescue
- C. Upon completion of seeding operations a mulch of finely ground peat moss shall be uniformly applied at the rate of 2 cubic yards per 1000 s.f. to obtain a $\frac{1}{2}$ " $\frac{3}{4}$ " depth.
- D. Erect a temporary protective barrier of acceptable materials around new seed, sod or hydroseed lawn areas and post warning signs, where necessary, to prevent damage or harmful effects to the lawn areas.
- E. Prior to acceptance, the lawn shall be mowed a minimum of one cutting after the grass has attained a height of at least 2 inches. The cutting height shall not be less than 1 inch or exceed 2 inches in height with all cuttings removed. Acceptance of lawn planting as herein specified shall be based on a uniform stand of grass and uniform grade at the time of final inspection. Areas that are bare or have a poor stand of grass and areas not having a uniform grade throughout shall be reseeded and regraded until Landscape Architect gives final approval. The acceptance of seeded lawn areas shall not be contingent upon final inspection, but contingent upon a healthy, vigorous, established stand of grass. Completion of final inspection shall not free Contractor from responsibility for healthy, vigorous grass.

3.11 RESPONSIBILITY DURING CONSTRUCTION:

- A. The Contractor shall insure adequate and proper care of all plant material, and work done on this project until the contract is completed and accepted. Adequate and proper care shall include keeping all plant material in a healthy, growing condition.
- B. The Contractor shall have sole responsibility for keeping the planted areas free from insect infestation, weeds and grass, litter, and other debris, along with retaining the finished grades in a neat uniform condition.
- C. The General Contractor is responsible for ensuring that other work (trenching, electrical, signage, lighting, painting, sealing, staining, etc...) occurring in lawn or plant areas does not damage newly installed landscaping. Landscape damaged by other trades after installation

shall be repaired at the cost of the General Contractor at no additional cost to Owner or Landscape Contractor.

3.12 CLEANUP AND PROTECTION

- A. During landscape work, keep pavements clean and work area in an orderly condition as determined by the Owner's Representative. Failure to comply will result in a stop work order issued.
- B. Protect landscape work and materials from damage due to landscape operations, operations by other Contractors, and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.
- C. Remove debris, soil and fertilizer from all paved surfaces, curbs and walks.
- D. At completion of each area of work, remove landscape contractor generated debris, equipment and surplus materials.
- E. Material removed shall be disposed of off site by the Contractor.

3.13 PRE-MAINTENANCE

- A. Pre-maintenance as herein specified shall immediately follow completion of each planting operation and shall continue through the General Inspection and until acceptance of the planting project.
- B. Ground cover plants shall be kept in a healthy, vigorous growing condition by watering, replanting, weeding, and cultivation of the entire area of the bed.
- C. Trees and shrubs shall be watered, weeded, cultivated and replaced immediately if not in a healthy growing condition.
- D. Smooth grade all earth surfaces removing weeds, debris, and breaking clods and leave in an acceptable condition.
- E. It is the Contractor's responsibility to protect new plant and lawn areas from damage during the installation and maintenance periods. This shall include damage caused by theft, vandalism or adverse weather conditions.

3.14 SUBSTANTIAL COMPLETION

A. Substantial completion of the work, as judged by the Owner's Representative, shall mark the star of the 60 day maintenance period under paragraph MAINTENANCE below.

3.15 MAINTENANCE & PLANT ESTABLISHMENT PERIOD

- A. Maintenance as required under paragraph PRE-MAINTENANCE above shall extend for 60 consecutive calendar days following general inspection and acceptance of contract work. Additional maintenance activities for this 60 day period shall include:
 - 1. Protect all areas against damage, including erosion and trespass, and provide all necessary safeguards. Maintain and keep in good repair all temporary barriers erected to prevent trespass.
 - 2. Keep all walks and paved areas clean. Keep site free from debris resulting from landscape work and maintenance.
 - 3. Repair all damaged planted areas and replace plants immediately upon discovery of damage or loss. Straighten and tighten tree stakes and guys as needed.
 - 4. Check all barriers and temporary fencing daily during the work week and repair or replace immediately as needed.
 - 5. Maintain adequate moisture in soil to ensure vigorous growth. This includes non-irrigated areas.
 - 6. Keep contract areas free from weeds by cultivating, hoeing, or hand pulling. Use of chemical weed killers will not relieve the Contractor of the responsibility for keeping areas free from weeds over 1 inch in height at all times.

- 7. Water, fertilizer, and mow lawn areas in accordance with normal nursery practice and in accordance with these specifications.
 - a. Water lawn three times daily for ten (10) days. Following the 10 day period, watering shall be done in accordance with the Owner's watering schedule.
 - b. Lawn shall be fertilized with an accepted organic fertilizer every 30 days.
 - c. Lawn shall be kept at a height of between two (2) and three (3) inches at all times. Catch and remove all lawn cuttings after each mowing.
- 8. During the 60 day maintenance & plant establishment period, Contractor is responsible for protecting all landscape areas as outlined in item "1". Any plants not in a healthy, vigorous, thriving condition at the end of the 60 day period shall be replaced, based on the Landscape Architect's judgement. This shall include plants damaged by theft, vandalism or adverse weather conditions.

3.16 FINAL PROJECT CLOSE-OUT

The final project close-out of work for acceptance of the work will be made at the conclusion of the 60 day maintenance and plant establishment period, upon successful completion of all punch list items. At this time, all plants must be in a healthy growing condition, weeds not in evidence, pruning complete, staking and tying secure, sprinkler risers vertical, and sprinklers performing as per manufacturer's description. Acceptance shall follow upon meeting these requirements. Acceptance of the work shall mark the start of all workmanship and plant guarantees.

3.17 CLEAN-UP

Upon completion of the work under this section, Contractor shall remove from the premises all surplus materials, tools, equipment, rubbish, and debris; wash all dirt and fertilizer from pavements, curbs, walls and other structures resulting from their work and leave the work in clean, neat and workmanlike conditions satisfactory to the Landscape Architect.

3.18 GUARANTEE

- A. The Contractor shall furnish to the Owner any guarantee or warranty furnished as a normal trade practice in connection with their purchase of equipment, materials, or items which are used on the project.
- B. All plant materials shall be guaranteed to be in a living, healthy, and disease-free condition from the date of acceptance to the completion of one full year, or one full growing season, whichever is longer. One full growing season shall be considered for the purpose of this contract as the period from April 1st to October 1st of any given year. All plant material replaced during the guarantee period shall guaranteed for year. Contractor shall not be held responsible for theft, vandalism or adverse weather conditions beyond the 60-day maintenance period.

END OF SECTION