

Closure Calculations BELFAIR ESTATES



BOUNDARY

Course: S26°33'11"E Length: 125.00'
Course: N66°17'54"E Length: 150.74'
Length: 38.12' Radius: 1,940.00'
Delta: 1°07'33" Tangent: 19.06'
Chord: 38.12' Course: S28°43'49"E
Course In: N61°49'58"E Course Out: S60°42'24"W
Course: S66°14'34"W Length: 409.83'
Course: N88°57'04"W Length: 782.74'
Course: N0°27'28"E Length: 393.48'
Course: S88°46'19"E Length: 1,042.21'
Course: S26°33'11"E Length: 84.32'
Course: S66°17'54"W Length: 149.97'
Perimeter: 3,176.41' Area: 389,425.419Sq.Ft.
Error Closure: 0.0150 Course: S36°15'05"E
Error North : -0.01209 East: 0.00887
Precision 1: 211,760.67

ROAD

Length: 270.20' Radius: 55.00'
Delta: 281°28'44" Tangent: 44.95'
Chord: 69.61' Course: S34°29'42"E
Course In: S85°14'04"E Course Out: S16°14'40"W
Length: 19.09' Radius: 25.00'
Delta: 43°45'38" Tangent: 10.04'
Chord: 18.63' Course: S84°21'51"W
Course In: S16°14'40"W Course Out: N27°30'57"W
Length: 112.17' Radius: 225.00'
Delta: 28°33'53" Tangent: 57.28'
Chord: 111.02' Course: S76°45'59"W

(Road continued)

Course In: N27°30'57"W	Course Out: S1°02'56"W
Course: N88°57'04"W	Length: 601.62'
Course: N0°27'28"E	Length: 50.00'
Course: S88°57'04"E	Length: 602.14'
Length: 72.88'	Radius: 175.00'
Delta: 23°51'36"	Tangent: 36.97'
Chord: 72.35'	Course: N79°07'08"E
Course In: N1°02'56"E	Course Out: S22°48'40"E
Length: 27.24'	Radius: 25.00'
Delta: 62°25'24"	Tangent: 15.15'
Chord: 25.91'	Course: N35°58'38"E
Course In: N22°48'40"W	Course Out: S85°14'04"E
Perimeter: 1,755.35'	Area: 44,786.381Sq.Ft.
Error Closure: 0.0051	Course: S59°30'23"E
Error North : -0.00260	East: 0.00441

Precision 1: 344,184.31

LOT 1

Course: S1°02'56"W	Length: 120.50'
Course: N88°57'04"W	Length: 75.82'
Course: N0°27'28"E	Length: 120.51'
Course: S88°57'04"E	Length: 77.07'
Perimeter: 393.89'	Area: 9,211.526Sq.Ft.
Error Closure: 0.0076	Course: N63°01'48"E
Error North : 0.00346	East: 0.00680

Precision 1: 51,828.95

LOT 2

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 3

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 4

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

(Lot 4 continued)

Perimeter: 363.00' Area: 7,350.500Sq.Ft.
Error Closure: 0.0000 Course: N0°00'00"E
Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 5

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.
Error Closure: 0.0000 Course: N0°00'00"E
Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 6

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.
Error Closure: 0.0000 Course: N0°00'00"E
Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 7

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 8

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

Perimeter: 363.00' Area: 7,350.500Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 363,000,000.00

LOT 9

Course: S1°02'56"W Length: 120.50'

Course: N88°57'04"W Length: 61.00'

Course: N1°02'56"E Length: 120.50'

Course: S88°57'04"E Length: 61.00'

(Lot 9 continued)

Perimeter: 363.00'	Area: 7,350.500Sq.Ft.
Error Closure: 0.0000	Course: N0°00'00"E
Error North : 0.00000	East: 0.00000

Precision 1: 363,000,000.00

LOT 10

Course: S1°02'56"W	Length: 121.94'
Course: N88°57'04"W	Length: 62.00'
Course: N1°02'56"E	Length: 120.50'
Course: S88°57'04"E	Length: 36.56'
Length: 25.50'	Radius: 225.00'
Delta: 6°29'34"	Tangent: 12.76'
Chord: 25.48'	Course: N87°48'09"E
Course In: N1°02'56"E	Course Out: S5°26'38"E

Perimeter: 366.50'	Area: 7,483.224Sq.Ft.
Error Closure: 0.0040	Course: N40°12'19"E
Error North : 0.00308	East: 0.00260

Precision 1: 91,625.00

LOT 11

Course: S1°02'56"W	Length: 136.54'
Course: N88°57'04"W	Length: 58.00'
Course: N1°02'56"E	Length: 121.94'
Length: 59.99'	Radius: 225.00'
Delta: 15°16'32"	Tangent: 30.17'
Chord: 59.81'	Course: N76°55'06"E
Course In: N5°26'38"W	Course Out: S20°43'10"E

(Lot 11 continued)

Perimeter: 376.48' Area: 7,416.484Sq.Ft.
Error Closure: 0.0014 Course: N9°09'31"W
Error North : 0.00142 East: -0.00023

Precision 1: 268,907.14

LOT 12

Course: S1°02'56"W Length: 148.14'

Course: N88°57'04"W Length: 56.00'

Course: N1°02'56"E Length: 136.54'

Length: 26.69' Radius: 225.00'
Delta: 6°47'47" Tangent: 13.36'
Chord: 26.67' Course: N65°52'56"E
Course In: N20°43'10"W Course Out: S27°30'57"E

Length: 19.09' Radius: 25.00'
Delta: 43°45'38" Tangent: 10.04'
Chord: 18.63' Course: N84°21'51"E
Course In: S27°30'57"E Course Out: N16°14'40"E

Length: 13.52' Radius: 55.00'
Delta: 14°05'11" Tangent: 6.80'
Chord: 13.49' Course: S80°47'55"E
Course In: N16°14'40"E Course Out: S2°09'29"W

Perimeter: 399.99' Area: 8,192.825Sq.Ft.
Error Closure: 0.0007 Course: S1°26'45"W
Error North : -0.00067 East: -0.00002

Precision 1: 571,400.00

LOT 13

Course: S1°02'56"W	Length: 108.52'
Course: S66°14'34"W	Length: 14.41'
Course: N88°57'04"W	Length: 42.92'
Course: N1°02'56"E	Length: 148.14'
Length: 28.64'	Radius: 55.00'
Delta: 29°50'17"	Tangent: 14.65'
Chord: 28.32'	Course: N77°14'21"E
Course In: N2°09'29"E	Course Out: S27°40'48"E
Course: S34°11'19"E	Length: 49.39'
Perimeter: 392.03'	Area: 7,932.154Sq.Ft.
Error Closure: 0.0065	Course: S26°13'45"W
Error North : -0.00581	East: -0.00286

Precision 1: 60,310.77

LOT 14

Course: S46°35'50"E	Length: 164.99'
Course: S66°14'34"W	Length: 120.00'
Course: N1°02'56"E	Length: 108.52'
Course: N34°11'19"W	Length: 49.39'
Length: 20.11'	Radius: 55.00'
Delta: 20°57'10"	Tangent: 10.17'
Chord: 20.00'	Course: N51°50'37"E
Course In: N27°40'48"W	Course Out: S48°37'57"E
Perimeter: 463.01'	Area: 8,898.453Sq.Ft.
Error Closure: 0.0024	Course: N39°48'52"E
Error North : 0.00184	East: 0.00154

Precision 1: 192,920.83

LOT 15

Course: S63°26'49"W	Length: 102.12'
Length: 23.10'	Radius: 29.00'
Delta: 45°38'24"	Tangent: 12.20'
Chord: 22.49'	Course: N69°25'02"W
Course In: N2°14'14"W	Course Out: S43°24'10"W
Course: N46°35'50"W	Length: 46.95'
Course: N63°26'49"E	Length: 133.52'
Course: S26°33'11"E	Length: 60.59'
Perimeter: 366.29'	Area: 7,378.376Sq.Ft.
Error Closure: 0.0072	Course: N29°34'38"E
Error North : 0.00622	East: 0.00353
Precision 1: 50,872.22	

LOT 16

Course: S26°33'11"E	Length: 60.00'
Course: S63°26'49"W	Length: 133.52'
Course: N46°35'50"W	Length: 63.87'
Course: N63°26'49"E	Length: 155.41'
Perimeter: 412.79'	Area: 8,667.714Sq.Ft.
Error Closure: 0.0017	Course: N66°10'43"W
Error North : 0.00069	East: -0.00156
Precision 1: 242,823.53	

LOT 17

Course: N46°35'50"W	Length: 15.87'
Length: 46.50'	Radius: 55.00'
Delta: 48°26'34"	Tangent: 24.74'
Chord: 45.13'	Course: N6°38'13"W
Course In: N72°24'56"W	Course Out: N59°08'30"E
Course: N40°49'26"E	Length: 54.49'
Course: N62°45'26"E	Length: 100.31'
Course: N27°14'47"W	Length: 78.47'
Course: S88°46'19"E	Length: 164.57'
Course: S26°33'11"E	Length: 84.32'
Course: S66°17'54"W	Length: 149.97'
Course: S26°33'11"E	Length: 4.41'
Course: S63°26'49"W	Length: 155.41'
Perimeter: 854.32'	Area: 28,896.664Sq.Ft.
Error Closure: 0.0103	Course: S40°34'28"W
Error North : -0.00782	East: -0.00670
Precision 1: 82,943.69	

LOT 18

Length: 20.30'	Radius: 55.00'
Delta: 21°08'45"	Tangent: 10.27'
Chord: 20.18'	Course: N41°25'52"W
Course In: S59°08'30"W	Course Out: N37°59'45"E
Course: N35°41'01"E	Length: 67.38'
Course: N1°02'56"E	Length: 88.38'
Course: S88°46'19"E	Length: 61.33'
Course: S27°14'47"E	Length: 78.47'

(Lot 18 continued)

Course: S62°45'26"W Length: 100.31'

Course: S40°49'26"W Length: 54.49'

Perimeter: 470.66' Area: 9,327.486Sq.Ft.
Error Closure: 0.0027 Course: S22°08'54"E
Error North : -0.00253 East: 0.00103

Precision 1: 174,318.52

LOT 19

Length: 25.05' Radius: 55.00'
Delta: 26°05'48" Tangent: 12.75'
Chord: 24.83' Course: N65°03'09"W
Course In: S37°59'45"W Course Out: N11°53'57"E

Course: N1°02'56"E Length: 133.95'

Course: S88°46'19"E Length: 61.00'

Course: S1°02'56"W Length: 88.38'

Course: S35°41'01"W Length: 67.38'

Perimeter: 375.77' Area: 7,579.730Sq.Ft.
Error Closure: 0.0012 Course: N54°30'30"W
Error North : 0.00069 East: -0.00096

Precision 1: 313,133.33

LOT 20

Length: 77.50' Radius: 55.00'
Delta: 80°44'18" Tangent: 46.76'
Chord: 71.25' Course: S61°31'48"W
Course In: S11°53'57"W Course Out: N68°50'21"W

Course: N1°02'56"E Length: 99.41'

Course: N1°02'56"E Length: 69.84'

(Lot 20 continued)

Course: S88°46'19"E Length: 62.00'

Course: S1°02'56"W Length: 133.95'

Perimeter: 442.71' Area: 8,760.705Sq.Ft.
Error Closure: 0.0014 Course: N4°08'38"E
Error North : 0.00144 East: 0.00010

Precision 1: 316,214.29

LOT 21

Length: 15.74' Radius: 55.00'
Delta: 16°23'43" Tangent: 7.92'
Chord: 15.68' Course: S12°57'48"W
Course In: S68°50'21"E Course Out: N85°14'04"W

Length: 27.24' Radius: 25.00'
Delta: 62°25'24" Tangent: 15.15'
Chord: 25.91' Course: S35°58'38"W
Course In: N85°14'04"W Course Out: S22°48'40"E

Length: 39.82' Radius: 175.00'
Delta: 13°02'13" Tangent: 20.00'
Chord: 39.73' Course: S73°42'26"W
Course In: N22°48'40"W Course Out: S9°46'27"E

Course: N1°02'56"E Length: 147.84'

Course: S88°57'04"E Length: 56.00'

Course: S1°02'56"W Length: 99.41'

Perimeter: 386.05' Area: 7,676.896Sq.Ft.
Error Closure: 0.0028 Course: S2°47'11"W
Error North : -0.00281 East: -0.00014

Precision 1: 137,875.00

LOT 22

Course: N88°57'04"W	Length: 31.77'
Course: S57°40'55"W	Length: 29.01'
Course: N32°19'05"W	Length: 20.00'
Course: N1°02'56"E	Length: 69.48'
Course: S88°46'19"E	Length: 123.00'
Course: S1°02'56"W	Length: 69.84'
Course: N88°57'04"W	Length: 56.00'
Perimeter: 399.10'	Area: 8,891.098Sq.Ft.
Error Closure: 0.0035	Course: N22°41'09"E
Error North : 0.00319	East: 0.00133

Precision 1: 114,028.57

LOT 23

Length: 33.06'	Radius: 175.00'
Delta: 10°49'23"	Tangent: 16.58'
Chord: 33.01'	Course: S85°38'14"W
Course In: N9°46'27"W	Course Out: S1°02'56"W
Course: N88°57'04"W	Length: 23.14'
Course: N1°02'56"E	Length: 135.00'
Course: N57°40'55"E	Length: 29.01'
Course: S88°57'04"E	Length: 31.77'
Course: S1°02'56"W	Length: 147.84'
Perimeter: 399.82'	Area: 8,226.230Sq.Ft.
Error Closure: 0.0037	Course: N46°21'56"W
Error North : 0.00258	East: -0.00271

Precision 1: 108,059.46

LOT 24

Course: S1°02'56"W Length: 135.00'

Course: N88°57'04"W Length: 56.00'

Course: N1°02'56"E Length: 135.00'

Course: S88°57'04"E Length: 56.00'

Perimeter: 382.00' Area: 7,560.000Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 382,000,000.00

LOT 25

Course: S34°24'57"W Length: 20.00'

Course: N88°57'04"W Length: 56.00'

Course: N88°57'04"W Length: 56.00'

Course: N1°02'56"E Length: 86.57'

Course: S88°46'19"E Length: 123.00'

Course: S1°02'56"W Length: 69.48'

Perimeter: 411.04' Area: 10,532.069Sq.Ft.

Error Closure: 0.0021 Course: N14°39'28"W

Error North : 0.00208 East: -0.00054

Precision 1: 195,738.10

LOT 26

Course: N88°57'04"W	Length: 56.00'
Course: N1°02'56"E	Length: 135.00'
Course: S88°57'04"E	Length: 56.00'
Course: S1°02'56"W	Length: 135.00'
Perimeter: 382.00'	Area: 7,560.000Sq.Ft.
Error Closure: 0.0000	Course: N0°00'00"E
Error North : 0.00000	East: 0.00000

Precision 1: 382,000,000.00

LOT 27

Course: N88°57'04"W	Length: 56.00'
Course: N1°02'56"E	Length: 135.00'
Course: S88°57'04"E	Length: 56.00'
Course: S1°02'56"W	Length: 135.00'
Perimeter: 382.00'	Area: 7,560.000Sq.Ft.
Error Closure: 0.0000	Course: N0°00'00"E
Error North : 0.00000	East: 0.00000

Precision 1: 382,000,000.00

LOT 28

Course: N88°57'04"W	Length: 56.00'
Course: N32°19'05"W	Length: 20.00'
Course: N1°02'56"E	Length: 70.25'
Course: S88°46'19"E	Length: 123.00'
Course: S1°02'56"W	Length: 86.57'

(Lot 28 continued)

Course: N88°57'04"W Length: 56.00'
Perimeter: 411.81' Area: 10,579.350Sq.Ft.
Error Closure: 0.0014 Course: S24°49'09"W
Error North : -0.00131 East: -0.00061

Precision 1: 294,157.14

LOT 29

Course: N88°57'04"W Length: 56.00'
Course: N1°02'56"E Length: 135.00'
Course: S88°57'04"E Length: 56.00'
Course: S1°02'56"W Length: 135.00'
Perimeter: 382.00' Area: 7,560.000Sq.Ft.
Error Closure: 0.0000 Course: N0°00'00"E
Error North : 0.00000 East: 0.00000

Precision 1: 382,000,000.00

LOT 30

Course: S1°02'56"W Length: 135.00'
Course: N88°57'04"W Length: 56.00'
Course: N1°02'56"E Length: 135.00'
Course: S88°57'04"E Length: 56.00'
Perimeter: 382.00' Area: 7,560.000Sq.Ft.
Error Closure: 0.0000 Course: N0°00'00"E
Error North : 0.00000 East: 0.00000

Precision 1: 382,000,000.00

LOT 31

Course: S34°24'57"W Length: 20.00'

Course: N88°57'04"W Length: 56.00'

Course: N88°57'04"W Length: 56.00'

Course: N1°02'56"E Length: 87.33'

Course: S88°46'19"E Length: 123.00'

Course: S1°02'56"W Length: 70.25'

Perimeter: 412.58' Area: 10,626.632Sq.Ft.

Error Closure: 0.0080 Course: S5°14'27"W

Error North : -0.00792 East: -0.00073

Precision 1: 51,572.50

LOT 32

Course: N88°57'04"W Length: 56.00'

Course: N1°02'56"E Length: 135.00'

Course: S88°57'04"E Length: 56.00'

Course: S1°02'56"W Length: 135.00'

Perimeter: 382.00' Area: 7,560.000Sq.Ft.

Error Closure: 0.0000 Course: N0°00'00"E

Error North : 0.00000 East: 0.00000

Precision 1: 382,000,000.00

TRACT A

Course: N88°57'04"W	Length: 199.00'
Course: N0°27'28"E	Length: 222.98'
Course: S88°46'19"E	Length: 201.30'
Course: S1°02'56"W	Length: 87.33'
Course: S1°02'56"W	Length: 135.00'
Perimeter: 845.61'	Area: 44,562.902Sq.Ft.
Error Closure: 0.0088	Course: N8°04'42"W
Error North : 0.00868	East: -0.00123

Precision 1: 96,092.05

TRACT B

Course: N88°57'04"W	Length: 22.00'
Course: N1°02'56"E	Length: 135.00'
Course: N34°24'57"E	Length: 20.00'
Course: S32°19'05"E	Length: 20.00'
Course: S1°02'56"W	Length: 135.00'
Perimeter: 332.00'	Area: 3,153.736Sq.Ft.
Error Closure: 0.0000	Course: N88°57'04"W
Error North : 0.00000	East: -0.00004

Precision 1: 332,000,000.00

TRACT C

Course: N88°57'04"W	Length: 22.00'
Course: N1°02'56"E	Length: 135.00'
Course: N34°24'57"E	Length: 20.00'
Course: S32°19'05"E	Length: 20.00'
Course: S1°02'56"W	Length: 135.00'
Perimeter: 332.00'	Area: 3,153.736Sq.Ft.
Error Closure: 0.0000	Course: N88°57'04"W
Error North : 0.00000	East: -0.00004
Precision 1: 332,000,000.00	

TRACT D

Course: S66°14'34"W	Length: 275.42'
Course: N46°35'50"W	Length: 164.99'
Length: 22.83'	Radius: 55.00'
Delta: 23°46'58"	Tangent: 11.58'
Chord: 22.67'	Course: N29°28'34"E
Course In: N48°37'57"W	Course Out: S72°24'56"E
Course: S46°35'50"E	Length: 15.87'
Course: S46°35'50"E	Length: 63.87'
Course: S46°35'50"E	Length: 46.95'
Length: 23.10'	Radius: 29.00'
Delta: 45°38'24"	Tangent: 12.20'
Chord: 22.49'	Course: S69°25'02"E
Course In: N43°24'10"E	Course Out: S2°14'14"E
Course: N63°26'49"E	Length: 102.12'
Course: N66°17'54"E	Length: 150.74'
Length: 38.12'	Radius: 1,940.00'
Delta: 1°07'33"	Tangent: 19.06'
Chord: 38.12'	Course: S28°43'49"E
Course In: N61°49'58"E	Course Out: S60°42'24"W
Perimeter: 904.02'	Area: 13,327.047Sq.Ft.
Error Closure: 0.0084	Course: S45°06'28"E
Error North : -0.00594	East: 0.00597
Precision 1: 107,620.24	

Single Line List

CWTitle | undefined

855-CWTITLE (855.298.4853)

cwservice@cwtitle.net

www.cwtitle.net

300 ft radius around 619 Harman Way South

Name:	Site Address/ Mail Address:	Phone:	Bed/Bath:	Assessed:	Sale Date:	Price:
Voss, Rosmarie	710 Harman Wy S Orting 98360/ PO Box 357		3/1	\$115,320		\$0
Daley, James D	402 Kansas St SW Orting 98360/ PO Box 1536		2/1	\$232,400	04/28/2000	\$96,500
Orting Comm Baptist Church	615 Harman Wy S Orting 98360/ PO Box 447		3/1	\$0	06/23/1998	\$124,000
Hueneka, Carol F	611 Harman Wy S Orting 98360/ 611 Harman Way S		3/1	\$244,400	09/25/1992	\$0
Eckhoff, Robert	404 Kansas St SW Orting 98360/ PO Box 464		2/1	\$29,800	03/02/1990	\$30,387
Harman, Howard W	701 Harman Wy S Orting 98360/ 5604 Marilane St		3/2.25	\$358,300		\$0
Johnson, Jean	105 Erickson Ln SW Orting 98360/ 105 Erickson Ln SW		3/2.25	\$341,900	01/11/2018	\$285,000
Engfer, Oscar J	310 Kansas St SW Orting 98360/ PO Box 26		4/1.5	\$299,000		\$0
Wilson, Karen	304 McMahan Ln SW Orting 98360/ 304 McMahan Ln SW		3/2.5	\$465,000	12/27/1993	\$161,714
Kilborn, Gary M	101 Erickson Ln SW Orting 98360/ 101 Erickson Ln SW		5/2.5	\$435,700	04/24/2015	\$336,000
Jones, Gary L	103 Erickson Ln SW Orting 98360/ PO Box 837		3/2	\$329,000	04/26/2016	\$0
Smith, Anthony B Jr	603 Harman Wy S Orting 98360/ 20635 5th Ave S		3/1	\$241,400	10/22/2018	\$236,000
Hagen, Alvin D	607 Harman Wy S Orting 98360/ 607 Harman Way S		3/1.5	\$244,300	02/04/2002	\$120,000
Thompson, Jay E	104 Kansas St SW Orting 98360/ PO Box 851		3/1	\$242,000	05/21/2002	\$108,000
Grover-Barnes, Ann	106 Kansas St SW Orting 98360/ PO Box 9		3/2	\$255,200	05/01/2002	\$80,000
Grisham, Jason	108 Kansas St SW Orting 98360/ PO Box 1372		2/1	\$225,200	09/05/2019	\$150,000
Riley, Rieber Tanja A	110 Kansas St SW Orting 98360/ PO Box 1156		3/1	\$206,900	03/02/2018	\$242,500
Temple, Cheryl M	202 Kansas St SW Orting 98360/ PO Box 129		3/2	\$398,200	09/15/1986	\$55,000
Martinez, Jorge M	204 Kansas St SW Orting 98360/ PO Box 1441		3/1.5	\$297,700	07/26/2005	\$221,000
Crosby, Jason	206 Kansas St SW Orting 98360/ PO Box 1483		3/2	\$325,400	08/31/2017	\$276,500
Rogers, Steven R	208 Kansas St SW Orting 98360/ PO Box 805		3/2	\$255,100	02/10/2006	\$236,500
Acosta, Ramiro	210 Kansas St SW Orting 98360/ PO Box 554		3/1	\$232,900	01/03/2007	\$246,698
McCann-Soushek, Tera M	302 Kansas St SW Orting 98360/ PO Box 1871		2/1	\$222,800	05/12/2017	\$217,500
Moss, Devon M	304 Kansas St SW Orting 98360/ PO Box 163		3/1	\$247,000	02/26/2020	\$320,000
Manley, Elizabeth A	401 Fairlane St SW Orting 98360/ PO Box 1892		3/1	\$277,700		\$0
Colorossi, Guy S	404 Fairlane St SW Orting 98360/ PO Box 970		3/2.25	\$333,212		\$0
Calhoun, Chad J	402 Fairlane St SW Orting 98360/ PO Box 1815		3/2.5	\$469,000	11/21/2018	\$430,000
Johnson, Michael	401 Belfair St SW Orting 98360/ 2215 Brookmonte Dr SE		3/1.75	\$327,000	05/15/1987	\$16,000
Dionas, Steve	403 Belfair St SW Orting 98360/ PO Box 595		3/1.75	\$309,600	04/18/2016	\$232,000

Name:	Site Address/ Mail Address:	Phone:	Bed/Bath:	Assessed:	Sale Date:	Price:
Ford, Barbara R	506 Grinnell Ave SW Orting 98360/ PO Box 296		3/1.75	\$329,400	10/17/2008	\$0
Wren, James A	508 Grinnell Ave SW Orting 98360/ PO Box 1421		3/1.75	\$343,000	05/17/2006	\$269,900
Botsford, Stephen H	604 Grinnell Ave SW Orting 98360/ PO Box 274		3/1	\$271,900		\$0
Hartman, Christopher L	101 Beckett Ln SW Orting 98360/ 101 Beckett Ln SW		3/1.75	\$296,100	05/16/2014	\$185,000
Enlow, Robert A	103 Beckett Ln SW Orting 98360/ 103 Beckett Ln SW		3/1.75	\$300,900	07/13/2016	\$245,000
Haley, Tammie L	105 Beckett Ln SW Orting 98360/ 105 Beckett Ln SW		3/1.75	\$272,600	08/19/2004	\$175,000
Lemka, Dennis L	107 Beckett Ln SW Orting 98360/ 107 Beckett Ln SW		3/1.75	\$287,200	09/25/1998	\$117,000
Hoffer, Brodie C	103 McMahon Ln SW Orting 98360/ 103 McMahon Ln SW		3/2	\$258,800	07/08/2010	\$165,000
Groscost, Warren C	105 McMahon Ln SW Orting 98360/ 105 McMahon Ln SW		3/1.75	\$202,700	07/06/1995	\$119,500
White, John A	107 McMahon Ln SW Orting 98360/ 107 McMahon Ln SW		3/1.75	\$297,700	04/01/1993	\$106,500
Love, Carol L	201 McMahon Ln SW Orting 98360/ 201 McMahon Ln SW		3/2	\$283,400	06/17/1993	\$28,000
Backus, Steven W	203 McMahon Ln SW Orting 98360/ 203 McMahon Ln SW		3/2	\$275,900	07/31/1997	\$117,000
Polly, Tyler	205 McMahon Ln SW Orting 98360/ 205 McMahon Ln SW		3/2.25	\$282,900	01/06/2006	\$215,000
Keliher, Jason	702 Harman Wy S Orting 98360/ 702 Harman Way S		2/1	\$218,800	12/12/2017	\$165,000
Pedersen, David	104 Harrison Ln SE Orting 98360/ PO Box 712		3/2	\$288,400		\$0
Thomas, Danny E	618 Harman Wy S Orting 98360/ PO Box 794		3/1.5	\$248,300	10/05/1998	\$110,000
Moan, Ronald	102 Harrison Ln SE Orting 98360/ PO Box 698		3/1	\$285,000		\$0
Hickox, Christopher	608 Harman Wy S Orting 98360/ 9104 246th Ave E		2/1	\$215,600	04/04/2017	\$120,000
Luetzgen, Norma J	616 Harman Wy S Orting 98360/ 616 Harman Way S		2/1	\$207,600	05/09/2008	\$114,500
Gillis, Teresa L	606 Harman Wy S Orting 98360/ 3511 197th Avenue Ct E		2/1	\$173,200	06/24/2020	\$158,500
Meeker, Jeremy J	702 Grinnell Ave SW Orting 98360/ 702 Grinnell Ave SW		3/2.5	\$292,500	10/09/2014	\$195,000
Weisinger, James R	701 Grinnell Ave SW Orting 98360/ 701 Grinnell Ave SW		3/1.75	\$283,100	07/30/2020	\$310,000
Kinzler, Robert T	404 Belfair St SW Orting 98360/ 404 Belfair St SW		3/2.5	\$291,200	08/29/1995	\$121,950
Bodah, Joanne A	303 Coplan St SW Orting 98360/ 303 Coplan St SW		3/2.5	\$283,900	01/30/2004	\$175,000
Shirron, Nicholas J	305 Coplan St SW Orting 98360/ 305 Coplan St SW		3/1.75	\$269,100	12/17/2015	\$184,950
Settle, Lora	307 Coplan St SW Orting 98360/ 307 Coplan St SW		3/2.25	\$292,700	08/09/2004	\$189,950
Morse, Martha	710 Grinnell Ave SW Orting 98360/ 710 Grinnell Ave SW		3/2.5	\$306,100	09/08/1995	\$142,550
Helping, Hand House	318 Icey St SW Orting 98360/ 4321 2nd St SW		3/2	\$0	06/29/2001	\$139,500

Name:	Site Address/ Mail Address:	Phone:	Bed/Bath:	Assessed:	Sale Date:	Price:
McCrory, James	316 Icey St SW Orting 98360/ 316 Icey St SW		3/2	\$269,900	06/22/2007	\$239,950
Robinson, Merry A	314 Icey St SW Orting 98360/ 314 Icey St SW		3/1.75	\$276,800	05/17/2013	\$160,000
Lapping, Steven R	317 Icey St SW Orting 98360/ 317 Icey St SW		3/2.5	\$294,600	04/28/1995	\$113,950
Meek, Richard	704 Grinnell Ave SW Orting 98360/ 704 Grinnell Ave SW		3/1	\$239,700	08/05/2002	\$133,000
Williams, Anna Lisa D	703 Grinnell Ave SW Orting 98360/ 703 Grinnell Ave SW		3/1	\$236,900	11/06/1995	\$95,500
Paulsen, Fritz D	705 Grinnell Ave SW Orting 98360/ 12602 194th Ave Ct E		3/2	\$265,000	04/19/2011	\$138,000
Malone, Diane	311 Icey St SW Orting 98360/ 311 Icey St SW		3/2.5	\$310,900	07/12/2004	\$189,000
Grant, Jayson	309 Icey St SW Orting 98360/ 309 Icey St SW		3/2	\$277,600	08/15/2011	\$160,000
House, Amy E	307 Icey St SW Orting 98360/ 307 Icey St SW		4/2.75	\$344,100	05/02/2019	\$347,000
Euper, Robert A	303 Icey St SW Orting 98360/ 303 Icey St SW		4/2.75	\$341,900	04/14/2020	\$375,000
Shepherd, Deborah L	217 Icey St SW Orting 98360/ 217 Icey St SW		4/2.5	\$348,100	07/15/2009	\$242,500
Martin, Chad W	213 Icey St SW Orting 98360/ 213 Icey St SW		3/2.5	\$298,600	02/01/2006	\$240,000
Hoyt, Christopher H	211 Icey St SW Orting 98360/ PO Box 1328		4/2.5	\$331,900	09/11/2012	\$0
Levack, Matthew	209 Icey St SW Orting 98360/ 209 Icey St SW		3/2.5	\$304,900	09/21/2015	\$234,500
McGuire, Brant	207 Icey St SW Orting 98360/ 207 Icey St SW		3/2.5	\$300,600	07/16/2018	\$296,950
Contreras, Rodriguez Rogelio	205 Icey St SW Orting 98360/ 205 Icey St SW		4/2.75	\$338,100	05/30/2018	\$340,000
Toman, William E	206 Icy St SW Orting 98360/ 206 Icey St SW		3/2.5	\$302,400	02/10/2003	\$166,150
Wagar, Scott T	210 Icey St SW Orting 98360/ PO Box 857		3/2.5	\$324,500	03/27/2002	\$166,950
Walters, Jesse R	212 Icey St SW Orting 98360/ 212 Icey St SW		3/2.5	\$322,300	08/10/2012	\$184,000
Debord, Bonnie A	214 Icey St SW Orting 98360/ 214 Icey St SW		3/2.5	\$350,500	04/17/2020	\$351,000
Yeoman, Gary R	216 Icey St SW Orting 98360/ 216 Icey St SW		4/2.75	\$349,700	06/20/2005	\$234,950
Harvie, Bradley	302 Icey St SW Orting 98360/ 302 Icey St SW		4/2.75	\$366,200	08/02/2006	\$284,950
Mower, Jason	304 Icey St SW Orting 98360/ 304 Icey St SW		3/2.5	\$305,800	12/08/2017	\$281,600
Rios, Aaron	306 Icey St SW Orting 98360/ 306 Icey St SW		3/2.5	\$294,700	06/18/2014	\$185,000
Perry, Angela J	308 Icey St SW Orting 98360/ 308 Icey St SW		3/2.5	\$296,900	05/03/2012	\$149,950

THE INFORMATION PROVIDED IS DEEMED RELIABLE, BUT IS NOT GUARANTEED

Report Produced on 9/11/2020

Rosmarie Voss
PO Box 357
Orting WA 98360

James Daley & Marcy Hodges
PO Box 1536
Orting WA 98360

Orting Comm Baptist Church
PO Box 447
Orting WA 98360

Carol Hueneka
611 Harman Way S
Orting WA 98360

Robert & Franke Eckhoff
PO Box 464
Orting WA 98360

Howard Harman
5604 Marilane St
Yakima WA 98909

Jean Johnson & William McCollum
105 Erickson Ln SW
Orting WA 98360

Oscar Engfer
PO Box 26
Orting WA 98360

Karen Wilson
304 McMahon Ln SW
Orting WA 98360

Gary Kilborn
101 Erickson Ln SW
Orting WA 98360

Gary & Vicki Jones
PO Box 837
Orting WA 98360

Anthony Smith Jr
20635 5th Ave S
Des Moines WA 98198

Alvin Hagen
607 Harman Way S
Orting WA 98360

Jay Thompson
PO Box 851
Orting WA 98360

Ann Grover-Barnes & Alexander
Barnes
PO Box 9
Carbonado WA 98323

Jason Grisham & Maria Smith
PO Box 1372
Orting WA 98360

Rieber Riley
PO Box 1156
Orting WA 98360

Cheryl Temple & John Kelly
PO Box 129
Orting WA 98360

Jorge & Jacqueline Martinez
PO Box 1441
Orting WA 98360

Jason Crosby & Veronica Crockett
PO Box 1483
Orting WA 98360

Steven & Linda Rogers
PO Box 805
Orting WA 98360

Ramiro Acosta
PO Box 554
Orting WA 98360

Tera McCann-Soushek
PO Box 1871
Orting WA 98360

Devon Moss
PO Box 163
Orting WA 98360

Elizabeth & Michael Manley
PO Box 1892
Orting WA 98360

Guy Colorossi
PO Box 970
Orting WA 98360

Chad Calhoun & Heather Halte
PO Box 1815
Orting WA 98360

Michael Johnson
2215 Brookmonte Dr SE
Puyallup WA 98372

Steve Dionas
PO Box 595
Orting WA 98360

Barbara Ford
PO Box 296
Orting WA 98360

James Wren & Lee Vera
PO Box 1421
Orting WA 98360

Stephen & Helen Botsford
PO Box 274
Orting WA 98360

Christopher & Keira Hartman
101 Beckett Ln SW
Orting WA 98360

Robert & Kimberly Enlow
103 Beckett Ln SW
Orting WA 98360

Tammie & Jack Haley
105 Beckett Ln SW
Orting WA 98360

Dennis & Kimberly Lemka
107 Beckett Ln SW
Orting WA 98360

Brodie Hoffer
103 McMahon Ln SW
Orting WA 98360

Warren & Judy Groscoast
105 McMahon Ln SW
Orting WA 98360

John & Debbie White
107 McMahon Ln SW
Orting WA 98360

Carol Love
201 McMahon Ln SW
Orting WA 98360

Steven Backus
203 McMahon Ln SW
Orting WA 98360

Tyler & Renee Polly
205 McMahon Ln SW
Orting WA 98360

Jason Keliher
702 Harman Way S
Orting WA 98360

David Pedersen
PO Box 712
Orting WA 98360

Danny & Robbie Thomas
PO Box 794
Orting WA 98360

Ronald Moan
PO Box 698
Orting WA 98360

Christopher Hickox
9104 246th Ave E
Buckley WA 98321

Norma Luetngen
616 Harman Way S
Orting WA 98360

Teresa Gillis
3511 197th Avenue Ct E
Lake Tapps WA 98391

Jeremy Meeker & Bridget Davis
702 Grinnell Ave SW
Orting WA 98360

James & Stephenie Weisinger
701 Grinnell Ave SW
Orting WA 98360

Robert & Angela Kinzler
404 Belfair St SW
Orting WA 98360

Joanne Bodah
303 Coplan St SW
Orting WA 98360

Nicholas & Rachael Shirron
305 Coplan St SW
Orting WA 98360

Lora & Bradley Settle
307 Coplan St SW
Orting WA 98360

Martha & Mark Morse
710 Grinnell Ave SW
Orting WA 98360

Hand Helping
4321 2nd St SW
Puyallup WA 98373

James & Debra McCrory
316 Icey St SW
Orting WA 98360

Merry & Mark Robinson
314 Icey St SW
Orting WA 98360

Steven & Nancy Lapping
317 Icey St SW
Orting WA 98360

Richard Meek
704 Grinnell Ave SW
Orting WA 98360

Anna Williams
703 Grinnell Ave SW
Orting WA 98360

Fritz & Lynda Paulsen
12602 194th Ave Ct E
Bonney Lake WA 98391

Diane Malone
311 Icey St SW
Orting WA 98360

Jayson Grant
309 Icey St SW
Orting WA 98360

Amy & Robert House
307 Icey St SW
Orting WA 98360

Robert Euper
303 Icey St SW
Orting WA 98360

Deborah Shepherd
217 Icey St SW
Orting WA 98360

Chad & Kristy Martin
213 Icey St SW
Orting WA 98360

Christopher Hoyt
PO Box 1328
Jasper TX 75951

Matthew & Margaret Levack
209 Icey St SW
Orting WA 98360

Brant & Jerylin McGuire
207 Icey St SW
Orting WA 98360

Rodriguez Contreras & Salas Garcia
205 Icey St SW
Orting WA 98360

William & Tammie Toman
206 Icey St SW
Orting WA 98360

Scott & Theresa Wagar
PO Box 857
Orting WA 98360

Jesse & Melissa Walters
212 Icey St SW
Orting WA 98360

Bonnie & Jeffrey Debord
214 Icey St SW
Orting WA 98360

Gary & Candi Yeoman
216 Icey St SW
Orting WA 98360

Bradley & Kimberly Harvie
302 Icey St SW
Orting WA 98360

Jason & Jordan Mower
304 Icey St SW
Orting WA 98360

Aaron & Laura Rios
306 Icey St SW
Orting WA 98360

Angela Perry
308 Icey St SW
Orting WA 98360



Auditor's Office
2401 S. 35th St., Rm 200
Tacoma, WA 98409
Election Center
2501 S. 35th St., Ste. C
Tacoma, WA 98409



Auditor's Office
253-798-7427
Elections
253-798-VOTE (8683)



Website
PierceCountyAuditor.org
Email
Auditor@PierceCountyWa.gov

Recording Map Checklist (WAC 332-130)

This form must accompany the map when it is presented for Recording. Any changes will need a new legibility form.

Type of Map BELFAIR Estates

Acceptable Media:

- Acceptable media are:
 - Any standard material compatible with county processes; or electronic version of the original.
 - ALL** signatures must be made with **black ink**.
 - The media submitted for filing must not have any material on it that is affixed by adhesive.

Legibility:

- The documents submitted, including paper copies, must have uniform contrast throughout the document.
- The documents submitted must be legible and reproducible by the auditor's recording system regardless of the media used for recording.
- No information, on either the original or copies, should be obscured or illegible due to cross hatching, shading, or as a result of poor drafting technique such as lines drawn through text or improper pen size selection (letters or number filled in such that 3's, 6's or 8's are indistinguishable).
- Signatures, date, and seals must be legible on the prints or the party placing the seal must be otherwise identified.
- Text must be 0.08 inches or larger; line widths shall not be less than 0.008 inches (vicinity maps, land surveyor's seals and certificates are excluded).

Indexing:

- The recording officer's information block must be on the bottom or right edge of the map.
- A title block (shows the name of the preparer and is on each sheet of multiple sheets).
- An auditor's certificate (on the first sheet of multiple sheets, although Vol./Pg. and or AFN must be entered by the recording officer on each sheet).
- A surveyor's certificate (on the first sheet of multiple sheets; seal, date, and signature on multiple sheets).

• **The map must provide the following indexing data:**

- S-T-R and the quarter-quarter(s) or approximate quarter-quarter(s) of the section in which the surveyed parcel lies, and a graphic representation of the section divided into quarter-quarters may be used with the quarter-quarter(s) in which the surveyed parcel lies clearly marked.

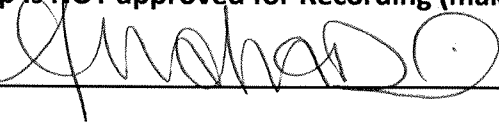
Miscellaneous:

- If the function of the document submitted is to change a previously filed record, it must also have:
 - A title identifying it as a correction, amendment, alteration or change to a previously filed record.
 - A note itemizing the changes.
- For records of survey:
 - The sheet must be 18" X 24"
 - The margins must be 2" on the left and 1/2" for the others, when viewed in landscape orientation.
 - In addition to the map being filed there must be two prints included in the submittal; except that, in counties using imaging systems fewer prints, as determined by the Auditor, may be allowed.

X Map is approved for Recording

_____ Map is NOT approved for Recording (make corrections noted above)

Reviewed by

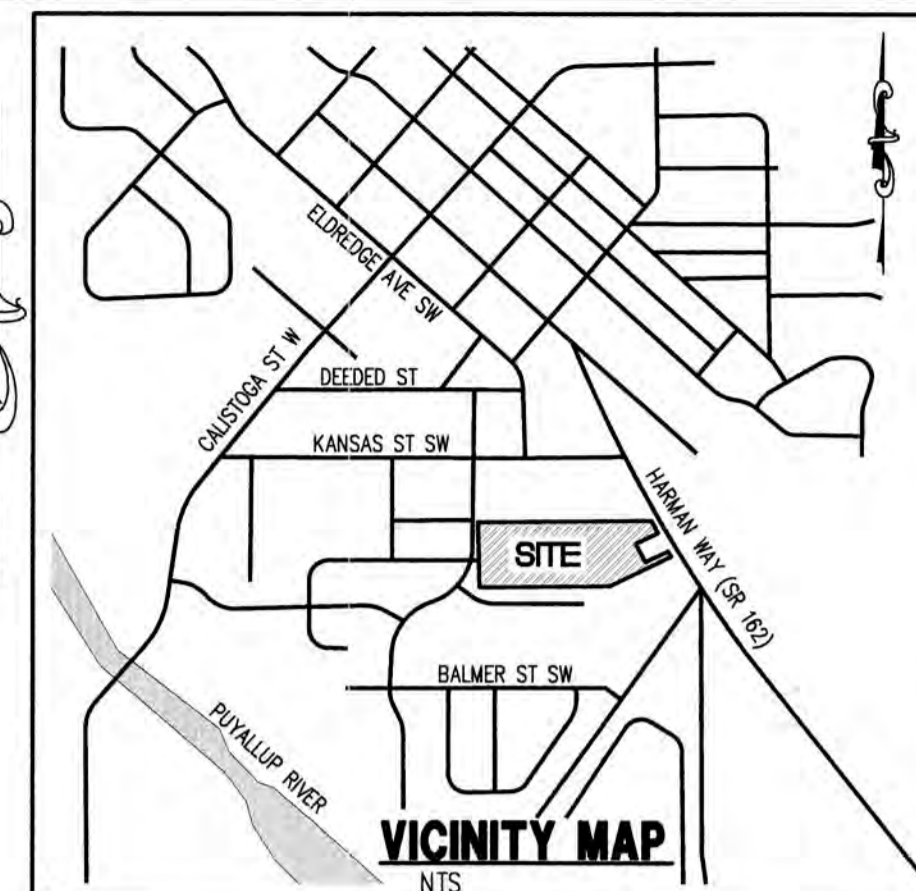
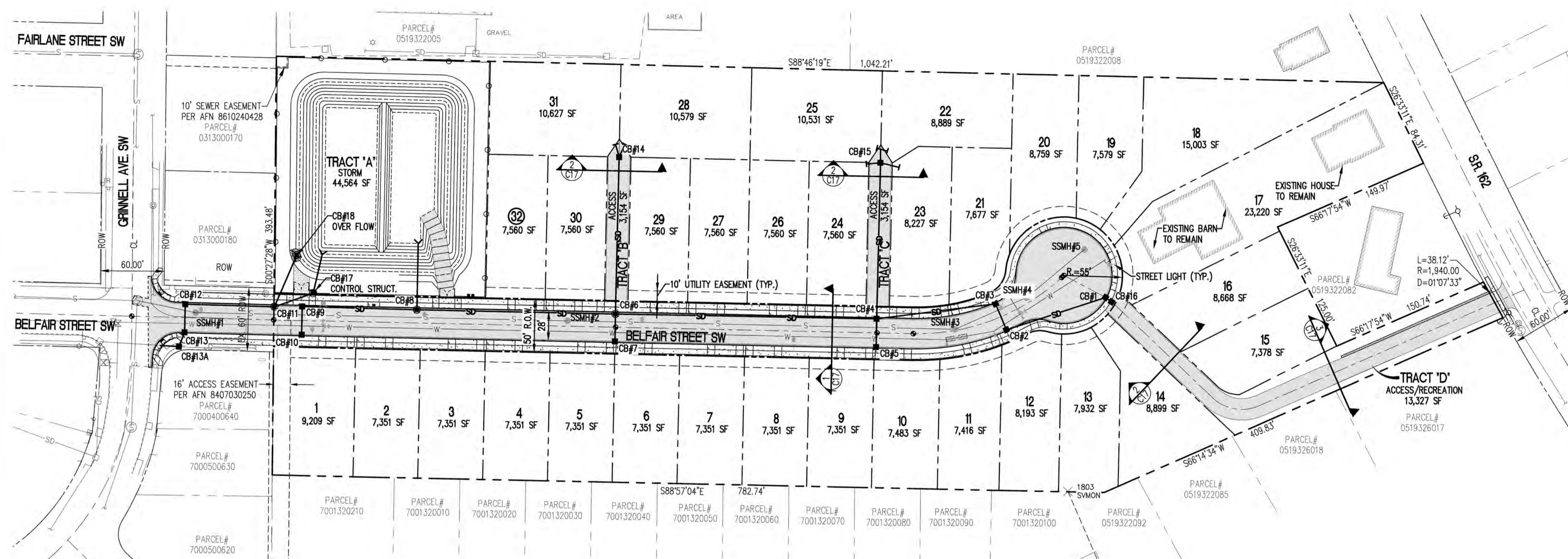
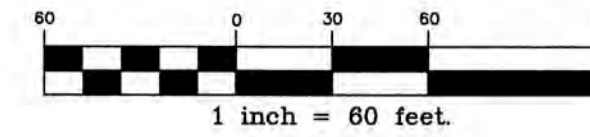


Date

1/7/2021

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON



SITE ADDRESS
619 HARMAN WAY S
ORTING, WA 98360

OWNER/DEVELOPER
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH
ORTING, WA. 98360

PARCEL NUMBER
0519322019

ENGINEER
CES NW INC.
429 29TH STREET, SUITE D
PUYALLUP, WA 98372
(253) 848-4282

ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

EXISTING	DESCRIPTION	PROPOSED
⊙	MONUMENT	⊙
---	MONUMENT LINE	---
---	PROPERTY LINE	---
---	RIGHT OF WAY LINE	---
---	EASEMENT LINE	---
---	BUILDING SETBACK LINE	---
⊕	CHAIN LINK FENCE	⊕
⊕	WOOD FENCE	⊕
⊕	WIRE FENCE	⊕
---	CURB & GUTTER	---
---	EDGE OF PAVEMENT	---
---	CONTOURS	---
⊕	STREET SIGN	⊕
⊕	STORM DRAIN CATCH BASIN	⊕
⊕	STORM DRAIN MANHOLE	⊕
---	STORM DRAIN CLEANOUT	---
---	STORM DRAIN LINE	---
---	ROOF DRAIN LINE	---
⊕	SANITARY SEWER MANHOLE	⊕
⊕	SANITARY SEWER CLEANOUT	⊕
---	SANITARY SEWER LINE	---
---	SANITARY SEWER STUB	---
⊕	FIRE HYDRANT	⊕
⊕	WATER VALVE	⊕
⊕	WATER METER	⊕
⊕	THRUST BLOCKING	⊕
⊕	WATER MAIN	⊕
⊕	LUMINAIRE	⊕
⊕	POWER/UTILITY POLE	⊕
⊕	GUY WIRE	⊕
⊕	GAS MAIN	⊕
⊕	GAS VALVE	⊕
⊕	GAS METER	⊕
⊕	MAIL BOX	⊕
⊕	ASPHALT CONCRETE	⊕
⊕	ASPHALT OVERLAY	⊕
⊕	CEMENT CONCRETE	⊕
---	SAWCUT LINE	---
---	CLEARING LIMITS	---
---	INTERCEPTOR DITCH	---
---	SILT FENCE	---
---	CHECK DAM	---

SITE STATISTICAL BREAK DOWN

EXISTING ZONING:	RESIDENTIAL-URBAN (RU)
GROSS SITE AREA:	389,419 SF (8.94 AC)
ROAD R.O.W.:	45,399 SF (1.04 AC)
NET AREA:	344,020 SF (7.90 AC)
TRACT "A" - STORM	44,564 SF (1.02 AC)
TRACT "B" - SHARED ACCESS	3,154 SF (0.07 AC)
TRACT "C" - SHARED ACCESS	3,154 SF (0.07 AC)
TRACT "D" - SHARED ACCESS/REC.	13,327 SF (0.31 AC)
DENSITY CALCULATIONS:	8.94 AC/32=28%
TOTAL LOTS PROPOSED:	32 LOTS
MINIMUM LOT SIZE:	7,260 SF
FRONT YARD:	25 FEET
SIDE YARD:	8 FEET
SIDE STREET:	10 FEET
REAR YARD:	25 FEET
CORNER YARD:	20 FEET
MAX. BLDG. HT.:	35 FEET
MAX. COVERAGE:	30% (RU ZONING)

EARTHWORK QUANTITIES

3,099 CY CUT
25,575 CY FILL
NET=22,476 CY FILL
QUANTITIES ARE FOR PERMIT PURPOSES ONLY.
CONTRACTOR SHALL VERIFY EARTHWORK QUANTITIES FOR BID PURPOSES.

UTILITIES

SEWER:	CITY OF ORTING
WATER:	CITY OF ORTING
CABLE:	COMCAST - CENTURY LINK
TELEPHONE:	COMCAST - CENTURY LINK
REFUSE:	MURREY'S DISPOSAL
GAS:	PUGET SOUND ENERGY
SCHOOL:	ORTING SCHOOL DISTRICT
POWER:	PUGET SOUND ENERGY
FIRE:	ORTING VALLEY FIRE & RESCUE

FILL SPECIFICATION

FILL MATERIAL SHALL NOT CONTAIN PETROLEUM PRODUCTS, OR SUBSTANCES WHICH ARE HAZARDOUS, DANGEROUS, TOXIC, OR WHICH OTHERWISE VIOLATE ANY STATE, FEDERAL, OR LOCAL LAW, ORDINANCE, CODE, REGULATION, RULE, ORDER, OR STANDARD. ONLY EARTH MATERIAL SHALL BE PLACED IN FILLS.

TRENCH NOTE

IF WORKERS ENTER ANY TRENCH OR OTHER EXCAVATION FOUR OR MORE FEET IN DEPTH THAT DOES NOT MEET THE OPEN PIT REQUIREMENTS OF WSDOT SECTION 2-09.3(3)(b), IT SHALL BE SHORED AND CRIBBED. THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR WORKER SAFETY AND CES NW INC. ASSUMES NO RESPONSIBILITY. ALL TRENCH SAFETY SYSTEMS SHALL MEET THE REQUIREMENTS OF THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT, CHAPTER 49.17 RCW.

TOPOGRAPHIC NOTE

SUBSURFACE UTILITIES AND OTHER FEATURES NOT ACCESSIBLE FROM THE SURFACE AS SHOWN ON THESE PLANS ARE BASED ON UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITY LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES THAT HAPPEN DUE TO THE CONTRACTORS FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UTILITIES. IF CONFLICT SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CES NW INC., ENGINEERING TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION. CES NW INC. ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

UTILITY NOTE

LOCATIONS OF SAID UTILITY, EXCEPT SANITARY SEWERS, AS SHOWN ON THESE PLANS ARE BASED ON UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITY LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY AND ALL DAMAGES THAT HAPPEN DUE TO THE CONTRACTORS FAILURE TO LOCATE EXACTLY AND PRESERVE ANY AND ALL UTILITIES. IF CONFLICT SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT CES NW INC., ENGINEERING TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION. CES NW INC. ASSUMES NO LIABILITY FOR THE LOCATION OF UNDERGROUND UTILITIES.

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF PIERCE, STATE OF WASHINGTON, AND IS DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 32, TOWNSHIP 19 NORTH, RANGE 5 EAST OF THE WILLAMETTE MERIDIAN; THENCE SOUTH ALONG THE WEST LINE OF SAID SUBDIVISION, 400.96 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF THAT CERTAIN TRACT OF LAND CONVEYED TO LESTER E. BACKUS AND SARA E. BACKUS, HUSBAND AND WIFE, BY DEED RECORDED UNDER AUDITOR'S FEE NO. 2726585 AND THE TRUE POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE OF SAID BACKUS TRACT SOUTH 89°58' EAST 539.88 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF THAT CERTAIN TRACT CONVEYED TO GILBERT P. ENGER AND MILDRED M. ENGER, HUSBAND AND WIFE, BY DEED RECORDED UNDER AUDITOR'S FEE NO. 2196240; THENCE ALONG THE SOUTH LINE OF SAID ENGER TRACT CONTINUING SOUTH 89°58' EAST TO THE CENTERLINE OF COUNTY STREET (HARMAN WAY); THENCE ALONG SAID CENTERLINE SOUTH 27°44' EAST 70 FEET; THENCE SOUTH 65°07'22" WEST 180 FEET; THENCE SOUTH 27°44' EAST 125 FEET; THENCE NORTH 65°07'22" EAST 180 FEET TO THE CENTERLINE OF COUNTY STREET HARMAN WAY; THENCE ALONG SAID CENTERLINE SOUTH 27°44' EAST 45 FEET; THENCE SOUTH 65°07'22" WEST 424.37 FEET; THENCE SOUTH 89°51' WEST 800 FEET, MORE OR LESS, TO THE WEST LINE OF SAID SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THENCE NORTH ALONG SAID WEST LINE 393.7 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING;

EXCEPT COUNTY ROAD;
SITUATE IN THE CITY OF ORTING, COUNTY OF PIERCE, STATE OF WASHINGTON.

VERTICAL DATUM

PRIMARY PROJECT BENCHMARK: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION PUBLISHED VERTICAL CONTROL NETWORK BENCHMARK DESIGNATION ID: ORTING MONUMENT ID. NO.: 6399 PUBLISHED ELEVATION: 200.669'
DESCRIPTION: FOUND ENCASED 3" BRASS TRIANGULATION DISK STAMPED XXXX, 0.4' BELOW CASE LID AT THE SOUTHEAST BACK OF WALK INTERSECTION ALONG THE NORTH MARGIN OF SR-162

SITE BENCHMARK & ELEVATION: 202.14'
DESCRIPTION: BRASS SURFACE MONUMENT LOCATED 62' SOUTHERLY OF THE INTERSECTION OF GRINNELL AVE. AND BELFAIR AVE. SAID MONUMENT BEING A PG MONUMENT (POINT OF CURVATURE)

BASIS OF BEARING

HELD GRID BEARING OF S 33°10'21"E BETWEEN FOUND PUBLISHED WASHINGTON STATE DEPARTMENT OF TRANSPORTATION HORIZONTAL CONTROL MONUMENT ID'S #6399 AND #6390 RESPECTIVELY.

SHEET INDEX

- C1 COVER SHEET
- C2 T.E.S.C. PLAN
- C3 T.E.S.C. - NOTES AND DETAILS
- C4 OVERALL GRADING & SITE PLAN
- C5 BELFAIR ST SW STA. 0+00 TO 5+20 - STORM DRAINAGE PLAN & PROFILES
- C6 BELFAIR ST SW STA. 5+20 TO 9+42 - STORM DRAINAGE PLAN & PROFILES
- C7 TRACT 'B' & 'C' - STORM DRAINAGE PLAN & PROFILES
- C8 TRACT 'D' - STORM DRAINAGE PLAN & PROFILES
- C9 STORM POND - PLAN & SECTIONS
- C10 STORM POND - NOTES & DETAILS
- C11 SITE DIMENSIONING PLAN
- C12 INTERSECTION DETAILS
- C13 BELFAIR ST SW STA. 0+00 TO 5+20 - SANITARY SEWER PLAN & PROFILES
- C14 BELFAIR ST SW STA. 5+20 TO 9+42 - SANITARY SEWER PLAN & PROFILES
- C15 BELFAIR ST SW STA. 0+00 TO 5+20 - WATER PLAN & PROFILES
- C16 BELFAIR ST SW STA. 5+20 TO 9+42 - WATER PLAN & PROFILES
- C17 STREET NOTES AND DETAILS
- C18 STREET NOTES AND DETAILS
- C19 STORM NOTES AND DETAILS
- C20 STORM NOTES AND DETAILS
- C21 SEWER NOTES AND DETAILS
- C22 WATER NOTES AND DETAILS

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

QTY ADMINISTRATOR _____ DATE _____

CITY ENGINEER _____ DATE _____

FIRE CHIEF _____ DATE _____

OVFR's review limited to providing input on operational issues only. OVFR has not reviewed the plans for Code compliance.

Project: BELFAIR ESTATES COVER SHEET

Client: HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS

Drawn: RWG

Checked: DPS

Scale: 1" = 60'

Date: 06.21.21

Job No.: 19070

Sheet No.: **C1**

1 of 22 Sheets

Revised: _____

Date: _____

Per City Comments: _____

Per City Comments: _____

Revision: _____

No. _____

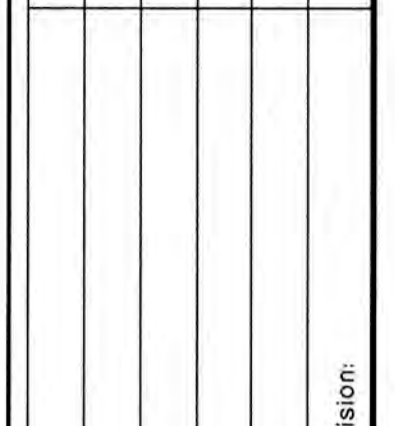
Revision: _____

Date: _____

Revision: _____

Date: _____

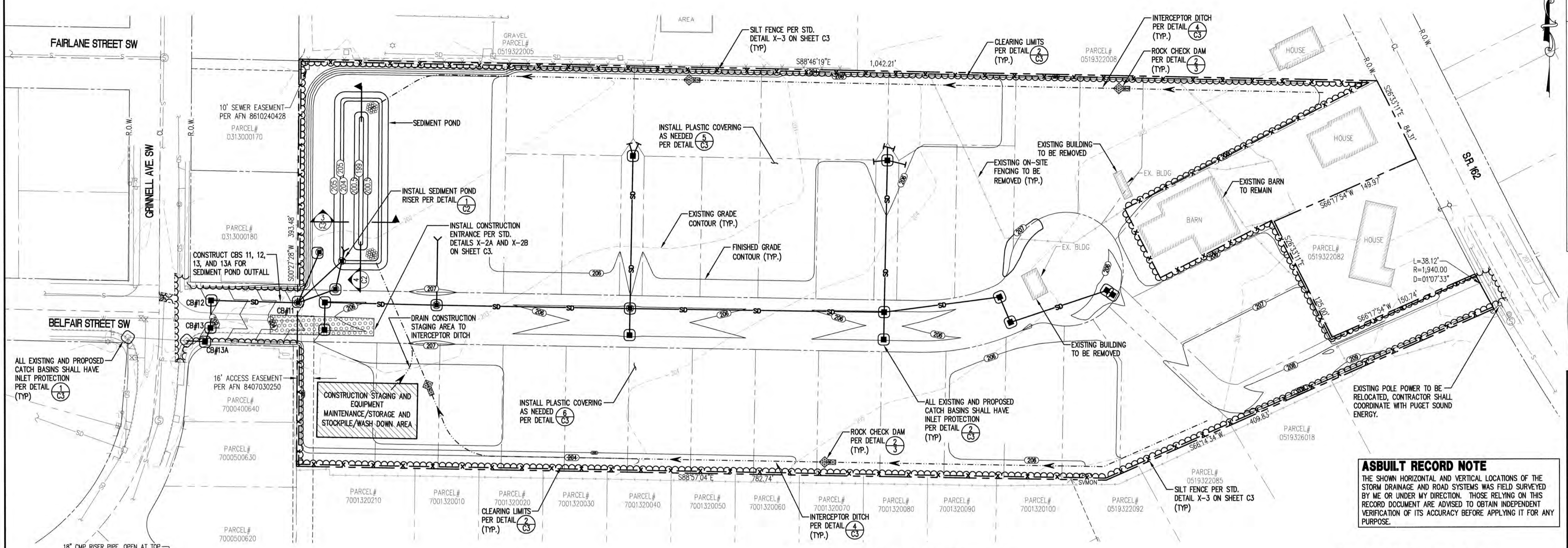
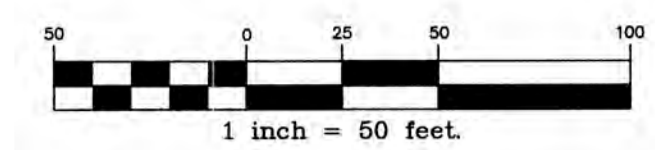
06.24.20	PAS	Int.
05.21.20	PAS	Int.



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Box #253, 848-4282
429 29TH STREET, SUITE D
PUYALLUP, WA 98372
cesnwinc@cesnwinc.com

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON



ALL EXISTING AND PROPOSED CATCH BASINS SHALL HAVE INLET PROTECTION PER DETAIL (TYP.)

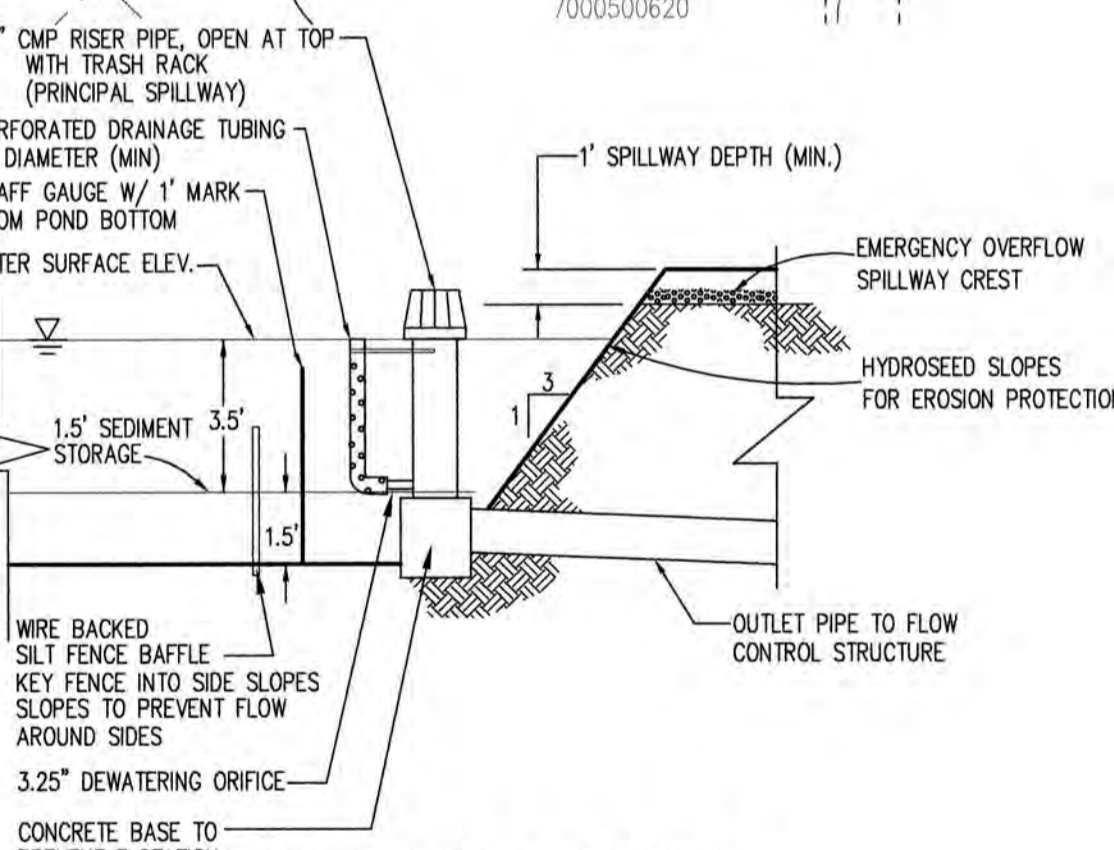
ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

EROSION CONTROL INSPECTION SEQUENCE

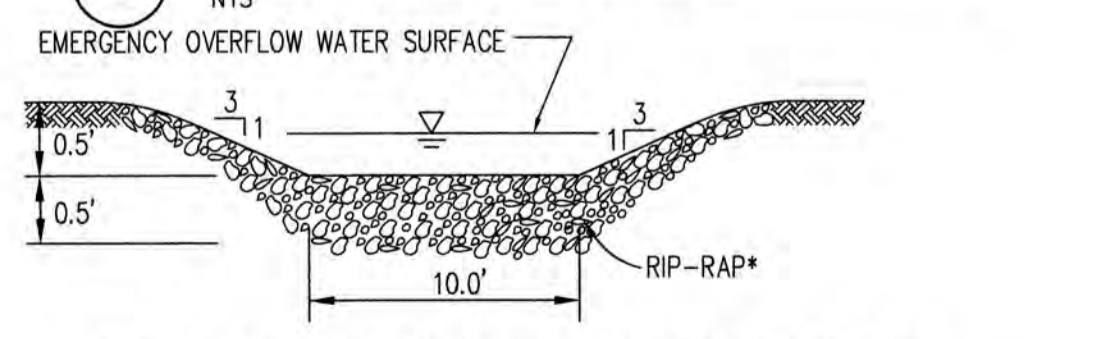
1. THE OWNER'S REPRESENTATIVE SHALL INSPECT ALL EROSION/SEDIMENTATION CONTROL METHODS. THE CONTRACTOR WILL DESIGNATE THE REPRESENTATIVE. THE CONTRACTOR SHALL PROVIDE THE NAME AND PHONE NUMBER OF THE REPRESENTATIVE AT THE PRECONSTRUCTION MEETING.
2. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL BE ADEQUATELY TRAINED IN ALL PRACTICES NECESSARY FOR KEEPING EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.
3. EROSION CONTROL MAINTENANCE AND INSPECTION SHALL BE DONE PER THE FOLLOWING PROCEDURES:
4. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
5. ALL EROSION/SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK DURING BOTH THE WET AND DRY SEASONS AND FOLLOWING ANY RUNOFF GENERATING STORM EVENT DURING THE WET SEASON (OCTOBER 31 TO APRIL 30).
6. ALL ESC MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED AS SOON AS PRACTICAL.
7. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY EMBEDDED. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY. IF THE FILTER FABRIC IS CLOGGED, TORN, OR DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCING WHEN IT HAS REACHED ONE THIRD OF THE HEIGHT OF THE FENCE. IF CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
8. CONSTRUCTION ENTRANCE PAD SHALL BE INSPECTED FOR PROPER FUNCTIONING. SEDIMENT THAT IS TRACKED OFF SITE SHALL BE SWEEP IMMEDIATELY. ANY QUARRY SPILLS THAT ARE TRACKED OFF SITE SHALL BE REMOVED FROM THE ROADWAY IMMEDIATELY. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION. IF NECESSARY A WHEEL WASH AREA SHALL BE INSTALLED. ALL VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE CONSTRUCTION ENTRANCE. IF NECESSARY TEMPORARY FENCING SHALL BE ADDED TO ENSURE VEHICLES USE THE CONSTRUCTION ENTRANCE.
9. CATCH BASIN INSERTS SHALL BE INSPECTED FOR TEARS AND DEPTH OF SEDIMENT. SEDIMENT SHALL BE REMOVED FROM THE INSERTS WHEN IT REACHES A DEPTH OF 12-INCHES. INSERTS SHALL BE REPLACED IF TEARS ARE PRESENT. IF AN INSERT FALLS INTO THE CATCH BASIN IT SHALL BE INSPECTED AND REATTACHED OR REPLACED.
10. CATCH BASIN INLET PROTECTION SHALL BE INSPECTED FOR A CLOGGED CONDITION. REMOVE ROCKS AND REPLACE FILTER MEDIA IF CLOGGING OCCURS.
11. INSPECT TEMPORARY SWALES FOR EROSION BETWEEN DAMS. INSPECT GRASS FOR 100 PERCENT ESTABLISHMENT. RESEED AS NECESSARY. IF SIGNIFICANT EROSION OCCURS PROVIDE RIPRAP ENERGY DISSIPATION MEASURES AS NECESSARY. CHECK SWALE OUTLET FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLE AND REPAIR AS NECESSARY. CHECK THAT CONCENTRATED FLOWS ARE NOT DIRECTED TOWARD SILT FENCE. GRADE AS NECESSARY OR ADD ADDITIONAL TEMPORARY SWALES SO RUNOFF ENTERS THE TEMPORARY SWALE SYSTEM AND IS DIRECTED TO APPROVED OUTLET LOCATION.
12. CHECK DAMS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF THE ORIGINAL DAM HEIGHT. INSPECT FOR EROSION AROUND THE EDGES OF THE DAM AND REPAIR AS NECESSARY.
13. INSPECT THE TEMPORARY SEDIMENT TRAP FOR DEPTH OF SEDIMENT AND DAMAGE TO SIDE SLOPES. BUILT UP SEDIMENT SHALL BE REMOVED FROM TEMPORARY SEDIMENT TRAP WHEN IT REACHES ONE FOOT IN DEPTH. DAMAGE TO SIDE SLOPES SHALL BE REPAIRED. THE STAFF GAUGE SHALL BE INSPECTED FOR PLUMB CONDITION AND VISIBLE MARKINGS. REPAIR OR REPLACE STAFF GAUGE AS NECESSARY.
14. INSPECT OUTLET ENERGY DISSIPATER, RIPRAP, FOR PROPER FUNCTION. REMOVE SEDIMENTS AND ADD ADDITIONAL ROCK AS NECESSARY.
15. INSPECT GRAVEL FILTER BERM FOR DEPTH OF SEDIMENT. REMOVE SEDIMENTS AND ADD ADDITIONAL ROCK AS NECESSARY. INSPECT FOR EROSION AROUND THE EDGES AND REPAIR AS NECESSARY.
16. INSPECT TEMPORARY AND PERMANENT SEEDING AND PLANTING FOR BARE SPOTS, WASHOUTS AND HEALTH GROWTH. RESEED ANY AREA THAT FAILS TO ESTABLISH AT LEAST 80 PERCENT COVER, OR PROVIDE ALTERNATIVE STABILIZATION, SUCH AS MULCHING OR PLASTIC SHEETING, PER THE EROSION CONTROL NOTES. CHECK IRRIGATION DURING DRY SEASON TO ENSURE NO RUNOFF IS CREATED.
17. MULCHING SHALL BE INSPECTED TO VERIFY THAT THE PROPER THICKNESS IS MAINTAINED AND EROSION IS NOT OCCURRING. ADD ADDITIONAL MULCH TO MAINTAIN PROPER THICKNESS. FIX DRAINAGE PROBLEMS CONTRIBUTING TO EROSION AND REMULCH OR PROTECT WITH AN EROSION NET/BLANKET.
18. ELASTIC SHEETING SHALL BE INSPECTED FOR TEARS, OPEN SEAMS, DISLODGED ENDS, AND DETERIORATION DUE TO ULTRAVIOLET RADIATION. TORN AND DETERIORATED SHEETS SHALL BE REPLACED. OPEN SEAMS SHALL BE REPAIRED. DISLODGED ENDS SHALL BE SECURED.
19. ADDITIONAL EROSION CONTROL FACILITIES SHALL BE PROVIDED AS WARRANTED. IF NECESSARY, THE ENGINEER SHALL INSTRUCT THE CONTRACTOR TO PROVIDE ADDITIONAL FACILITIES AS WARRANTED DURING FIELD INSPECTIONS.

CONSTRUCTION SEQUENCE

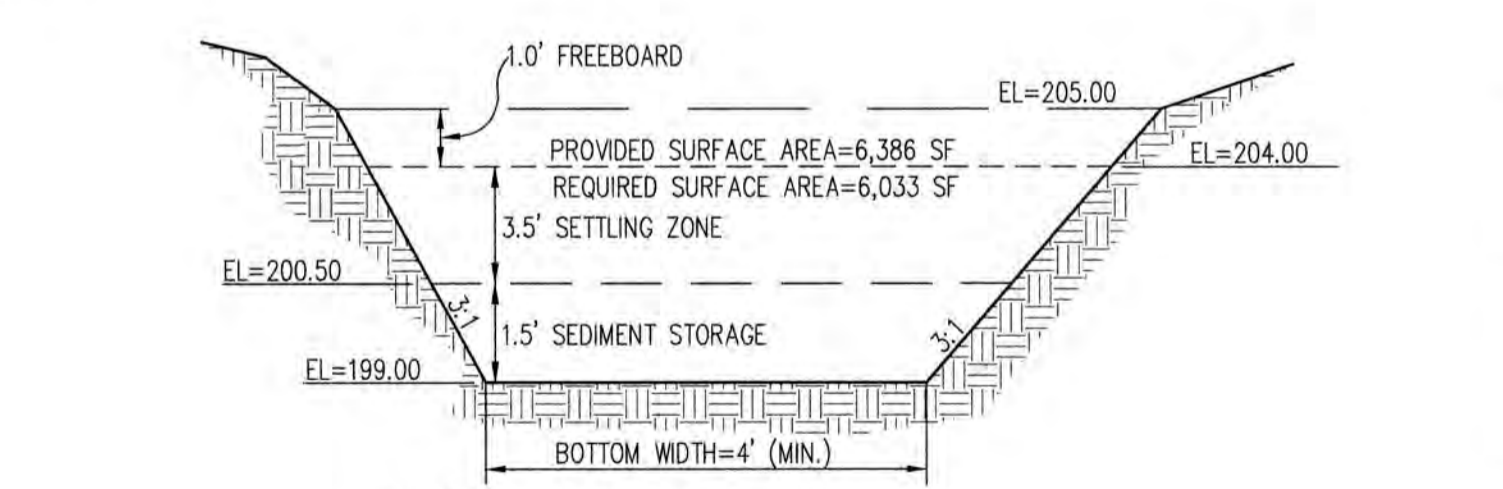
1. ARRANGE AND ATTEND PRE-CONSTRUCTION MEETING WITH CITY OF ORTING.
2. FLAG AND/OR FENCE CLEARING LIMITS.
3. GRADE AND INSTALL CONSTRUCTION ENTRANCE. INSTALL PERIMETER PROTECTION AND PROTECTION (SILT FENCE).
4. CONSTRUCT SEDIMENT POND, RISER, AND CBS 11, 12, 13, AND 13A FOR EROSION CONTROL.
5. CONSTRUCT INTERCEPTOR DITCHES AND ROCK CHECK DAMS.
6. CLEAR AND GRADE SITE. DO NOT CLEAR ANY MORE AREA THAN CAN BE STABILIZED DURING THE WET SEASON IN A GIVEN WORKDAY, PER EROSION CONTROL PLAN.
7. HYDROSEED OR STRAW MULCH EXPOSED SOILS IMMEDIATELY UPON COMPLETION OR IF SOILS ARE TO REMAIN EXPOSED FOR AN EXTENDED PERIOD OF TIME.
8. CONSTRUCT STORM DRAINAGE SYSTEM AND SITE UTILITIES. INSTALL INLET PROTECTION ON ALL NEW CATCH BASINS UNTIL SITE HAS BEEN COMPLETELY STABILIZED.
9. REMOVE CONSTRUCTION ENTRANCE AND CONSTRUCT ASPHALT CONCRETE PAVEMENT SECTIONS PER PLANS.
10. INSTALL LANDSCAPING AND RESTORE OR SUPPLEMENT NATIVE VEGETATION AREAS AS REQUIRED. NATIVE SEED, FERTILIZE, AND MULCH OR STRAW ALL REMAINING DISTURBED AREAS.
11. AFTER SITE HAS BEEN PERMANENTLY STABILIZED, CLEAN STORM DRAINAGE SYSTEM. REMOVE INLET PROTECTION (CB INSERTS). IT IS SUGGESTED THE CB INSERTS REMAIN DURING THE HOME CONSTRUCTION PHASE AND CLEANED PERIODICALLY.
12. REMOVE ALL TEMPORARY EROSION CONTROL FEATURES ONLY AFTER THE PROPOSED IMPROVEMENTS HAVE BEEN FULLY STABILIZED.
13. CALL FOR FINAL INSPECTIONS.



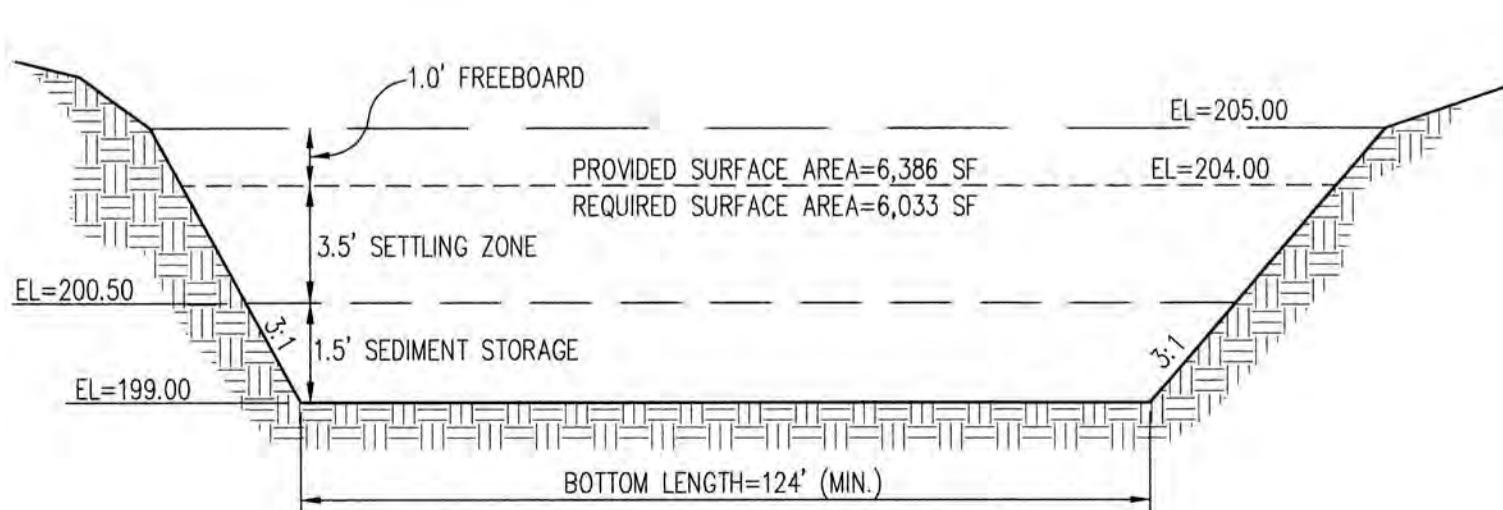
1 SEDIMENT POND RISER DETAIL
NTS



2 EMERGENCY OVERFLOW SPILLWAY
NTS

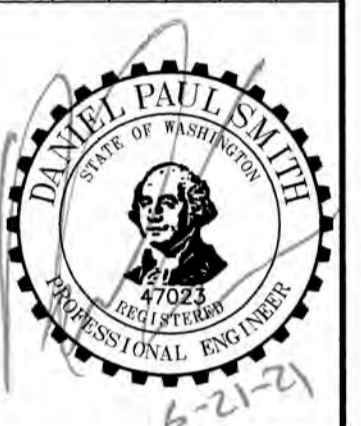


3 SEDIMENT POND X-SECTION
NTS



4 SEDIMENT POND X-SECTION
NTS

06.24.20	PAS	06.21.20	Int.	Date:
06.24.20	PAS	06.21.20	Int.	Date:



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Bus: (253) 848-4282
ceservices@cesnwinc.com
429 29TH STREET, SUITE D
PUNALUP, WA 98372

BELFAIR ESTATES T.E.S.C. PLAN
Project: BELFAIR ESTATES T.E.S.C. PLAN
Client: HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Date: 06.21.21
Job No.: 19070

Scale: 1" = 50'
06.21.21
19070

Sheet No.: **C2**
2 of 22 Sheets

CALL 48 HOURS BEFORE YOU DIG DIAL 811

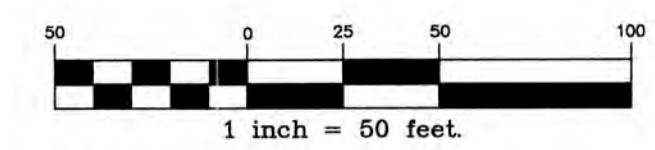
CITY OF ORTING APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVR's review limited to providing input on operational issues only. OVR has not reviewed the plans for Code compliance.

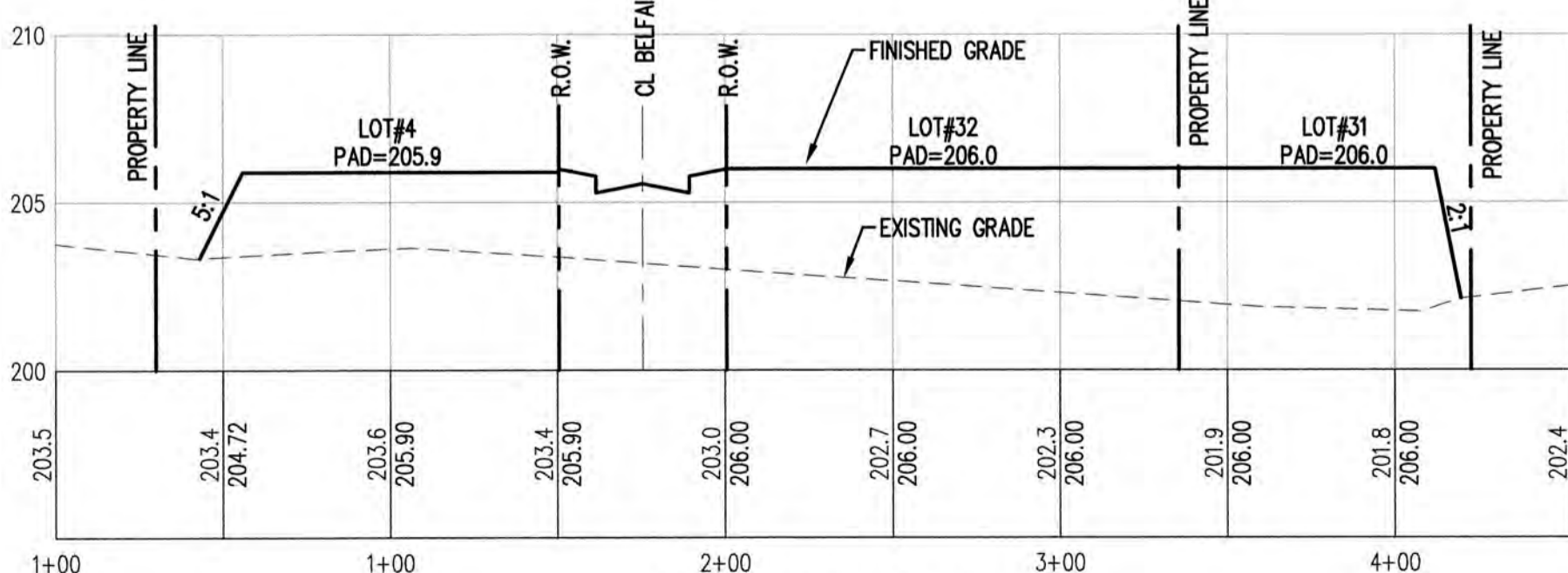
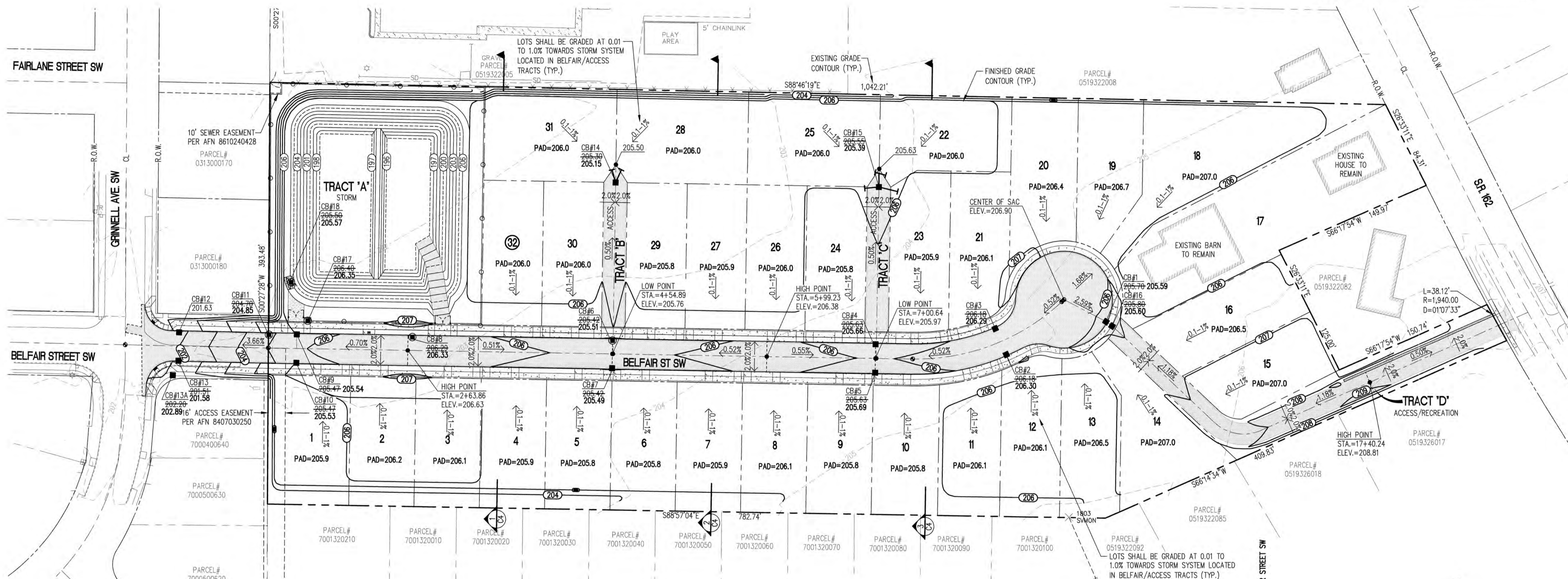
BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

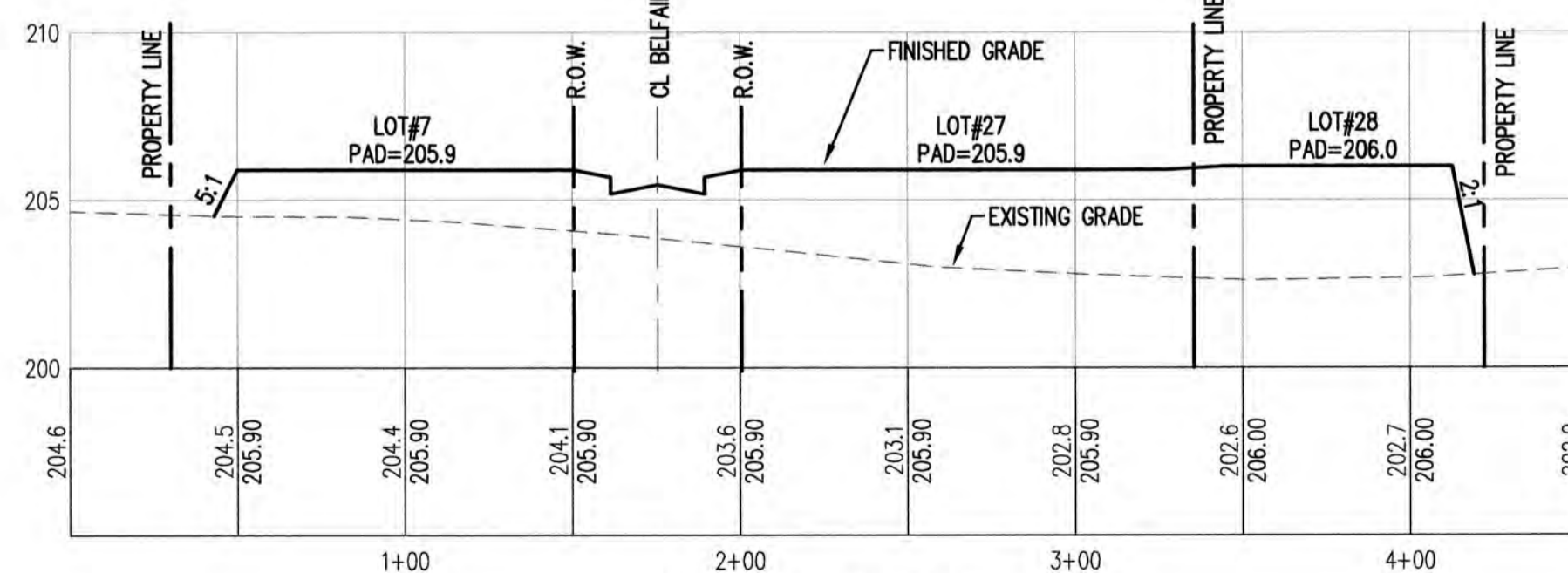


ASBUILT RECORD NOTE

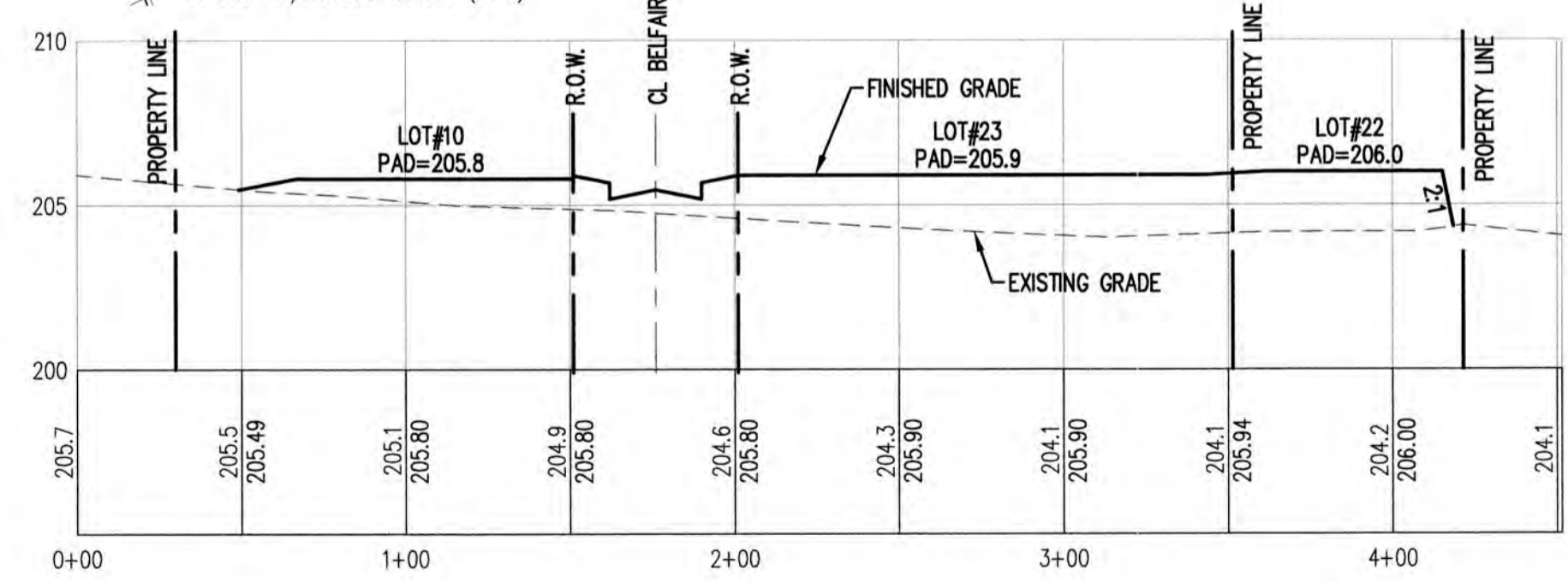
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



SITE SECTION 1
(200' INTERVALS)
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



SITE SECTION 2
(200' INTERVALS)
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



SITE SECTION 3
(200' INTERVALS)
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVFR's review limited to providing input on operational issues only. OVFR has not reviewed the plans for Code compliance.

07.01.20	DPS	PER CITY COMMENTS	No.	Revision:
06.24.20	PAS	PER CITY COMMENTS	No.	Revision:
06.21.20	PAS	PER CITY COMMENTS	No.	Revision:
	Int.			



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 28TH STREET, SUITE D
POYALUP, WA 98572
Bus: (360) 848-4282
ceservices@cesnwinc.com

**BELFAIR ESTATES
OVERALL GRADING PLAN**

Project: **HARMAN DEVELOPMENT, LLC**
Client: 619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWCP
Checked: DPS

Scale: 1" = 50'
Date: 06.21.21
Job No.: 19070

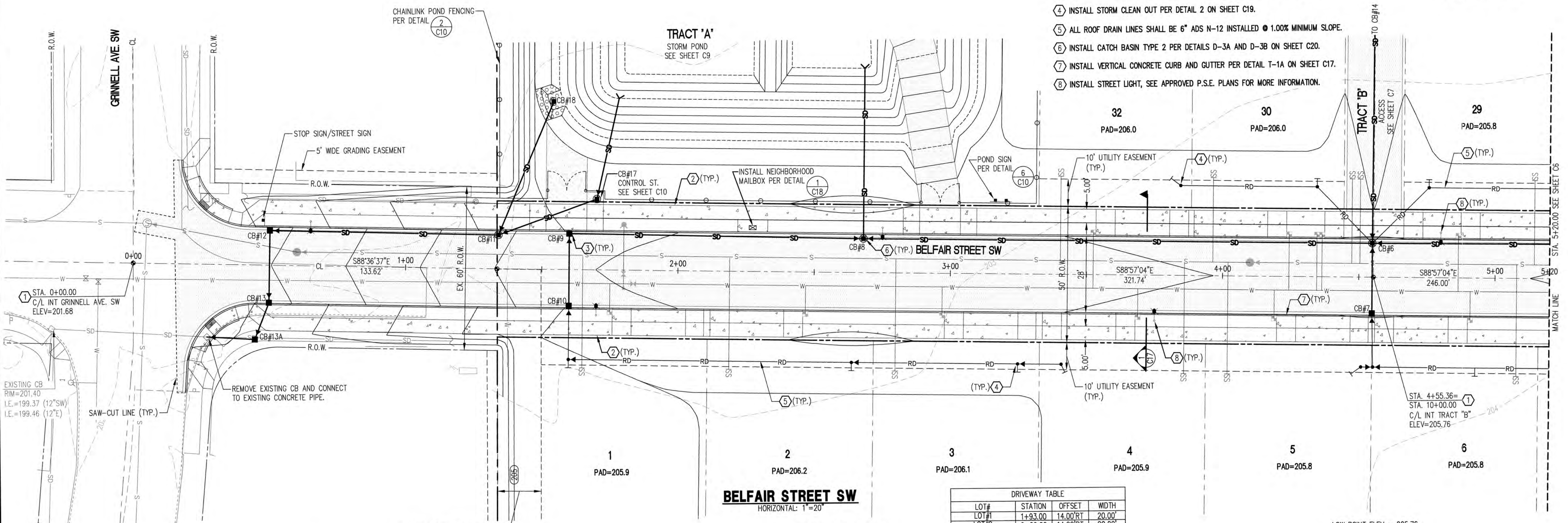
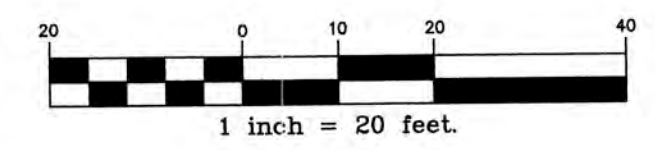
Sheet No.: **C4**
4 of 22 Sheets

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

CONSTRUCTION NOTES

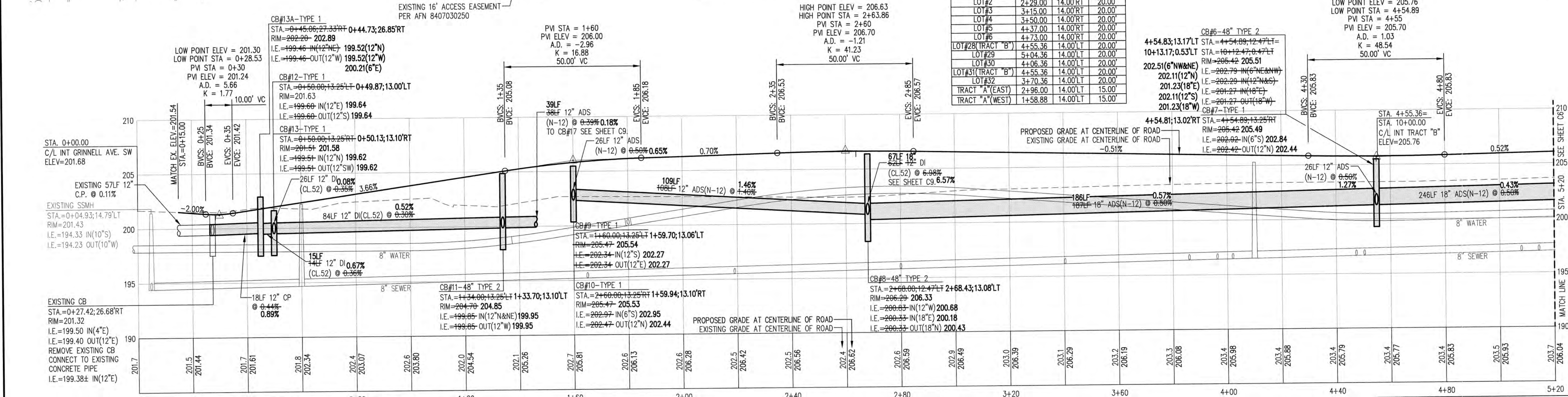
- 1 INSTALL MONUMENT PER DETAILS T-6A AND T-6B ON SHEET C18.
- 2 INSTALL CEMENT CONCRETE SIDEWALK PER DETAILS T-3A AND T-3B ON SHEET C17.
- 3 INSTALL CATCH BASIN TYPE 1 PER DETAILS D-2A AND D-2B ON SHEET C20.
- 4 INSTALL STORM CLEAN OUT PER DETAIL 2 ON SHEET C19.
- 5 ALL ROOF DRAIN LINES SHALL BE 6" ADS N-12 INSTALLED @ 1.00% MINIMUM SLOPE.
- 6 INSTALL CATCH BASIN TYPE 2 PER DETAILS D-3A AND D-3B ON SHEET C20.
- 7 INSTALL VERTICAL CONCRETE CURB AND GUTTER PER DETAIL T-1A ON SHEET C17.
- 8 INSTALL STREET LIGHT, SEE APPROVED P.S.E. PLANS FOR MORE INFORMATION.



BELFAIR STREET SW

HORIZONTAL: 1"=20'

LOT#	STATION	OFFSET	WIDTH
LOT#1	1+93.00	14.00'RT	20.00'
LOT#2	2+29.00	14.00'RT	20.00'
LOT#3	3+15.00	14.00'RT	20.00'
LOT#4	3+50.00	14.00'RT	20.00'
LOT#5	4+37.00	14.00'RT	20.00'
LOT#6	4+73.00	14.00'RT	20.00'
LOT#7(TRACT 'B')	4+55.36	14.00'LT	20.00'
LOT#29	5+04.36	14.00'LT	20.00'
LOT#30	4+06.36	14.00'LT	20.00'
LOT#31(TRACT 'B')	4+55.36	14.00'LT	20.00'
LOT#32	3+70.36	14.00'LT	20.00'
TRACT 'A'(EAST)	2+96.00	14.00'LT	15.00'
TRACT 'A'(WEST)	1+58.88	14.00'LT	15.00'



BELFAIR STREET SW

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

Project: BELFAIR ESTATES
Date: _____

Drawn: RWG
Int: _____

Checked: DPS
Revision: _____

Scale: 1" = 20'
No. _____

Date: 06.21.21
Job No.: 19070

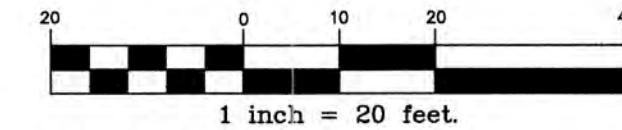
Sheet No.: C5
5 of 22 Sheets

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
PUALLUP, WA 98722
Bus: (253) 848-4282
ceservices@cesnwinc.com

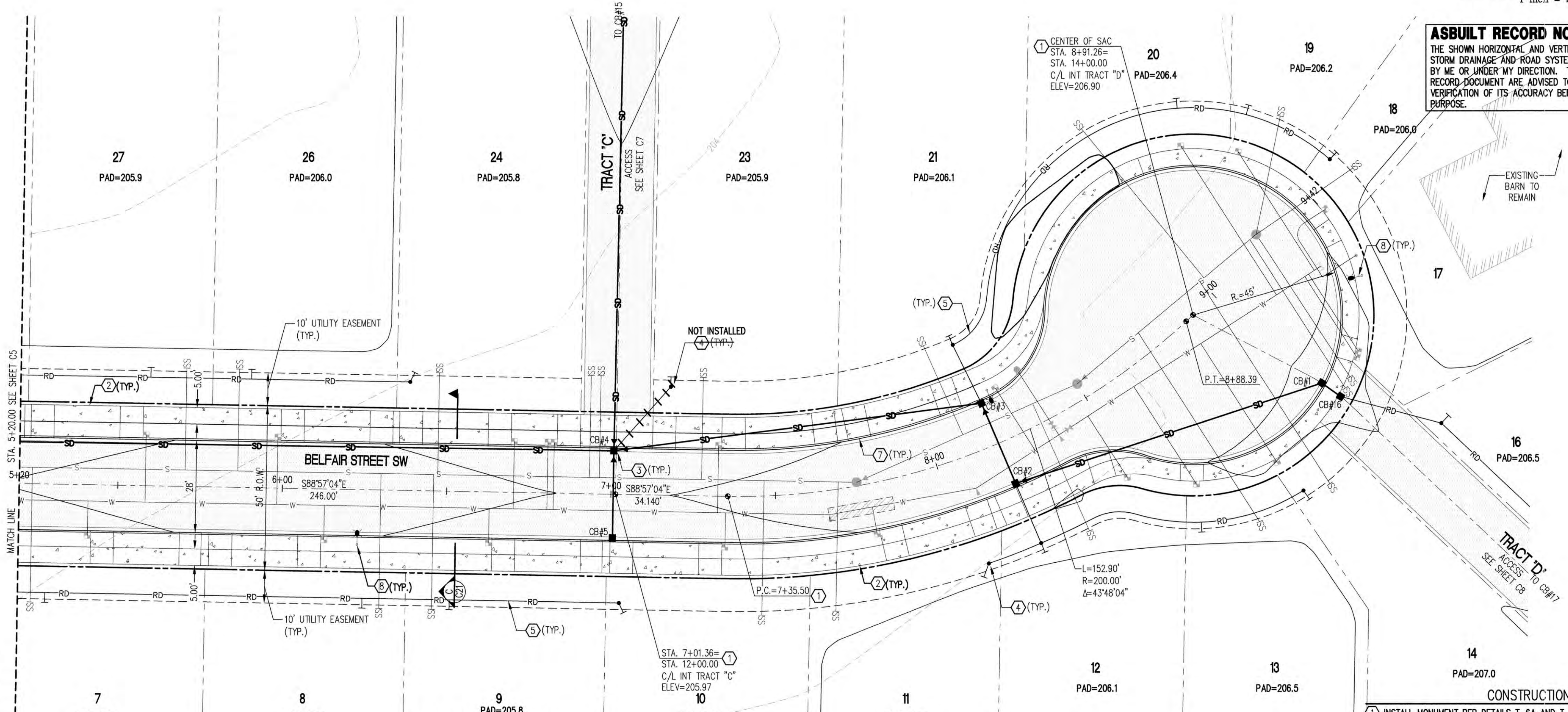
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON



ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

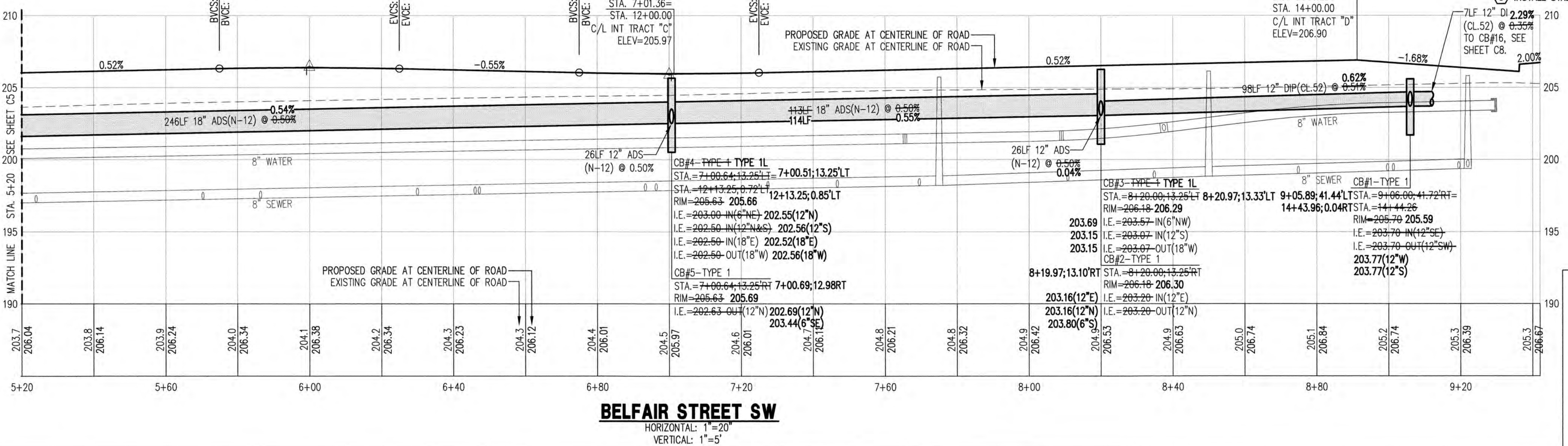


DRIVEWAY TABLE			
LOT#7	5+59.00	14.00'RT	20.00'
LOT#8	5+95.00	14.00'RT	20.00'
LOT#9	6+81.00	14.00'RT	20.00'
LOT#10	7+17.00	14.00'RT	20.00'
LOT#11	7+94.86	14.00'RT	20.00'
LOT#12	8+30.59	14.00'RT	23.50'
LOT#13		DEPRESSED CURB	
LOT#14		DEPRESSED CURB	
LOT#15 (TRACT "D")	9+06.20	42.45'RT	20.00'
LOT#16 (TRACT "D")	9+06.20	42.45'RT	20.00'
LOT#17		EXISTING DRIVEWAY	
LOT#18		DEPRESSED CURB	
LOT#19		DEPRESSED CURB	
LOT#20		DEPRESSED CURB	
LOT#21	7+94.24	14.00'LT	22.00'
LOT#22 (TRACT "C")	6+01.36	14.00'LT	20.00'
LOT#23	7+52.43	14.00'LT	20.00'
LOT#24	6+52.36	14.00'LT	20.00'
LOT#25 (TRACT "C")	6+01.36	14.00'LT	20.00'
LOT#26	6+16.36	14.00'LT	20.00'
LOT#27	5+40.36	14.00'LT	20.00'

BELFAIR STREET SW
HORIZONTAL: 1"=20'

HIGH POINT ELEV = 206.38
HIGH POINT STA = 5+99.23
PVI STA = 6+00
PVI ELEV = 206.45
A.D. = -1.07
K = 46.85
50.00' VC

LOW POINT ELEV = 205.97
LOW POINT STA = 7+00.64
PVI STA = 7+00
PVI ELEV = 205.90
A.D. = 1.07
K = 46.61
50.00' VC



- CONSTRUCTION NOTES**
- INSTALL MONUMENT PER DETAILS T-6A AND T-6B ON SHEET C18.
 - INSTALL CEMENT CONCRETE SIDEWALK PER DETAILS T-3A AND T-3B ON SHEET C17.
 - INSTALL CATCH BASIN TYPE 1 PER DETAILS D-2A AND D-2B ON SHEET C20.
 - INSTALL STORM CLEAN OUT PER DETAIL 2 ON SHEET C19.
 - ALL ROOF DRAIN LINES SHALL BE 6" ADS N-12 INSTALLED @ 1.00% MINIMUM SLOPE.
 - INSTALL CATCH BASIN TYPE 2 PER DETAILS D-3A AND D-3B ON SHEET C20.
 - INSTALL VERTICAL CONCRETE CURB AND GUTTER PER DETAIL T-1A ON SHEET C17.
 - INSTALL STREET LIGHT, SEE APPROVED P.S.E. PLANS FOR MORE INFORMATION.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070

Sheet No.: **C6**

Project: BELFAIR ESTATES
BELFAIR STREET SW STA. 5+20 TO 9+42
PLAN & PROFILE

Client: HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070

Sheet No.: **C6**

6 of 22 Sheets

Revision: _____
No. _____
Int. _____
Date: _____

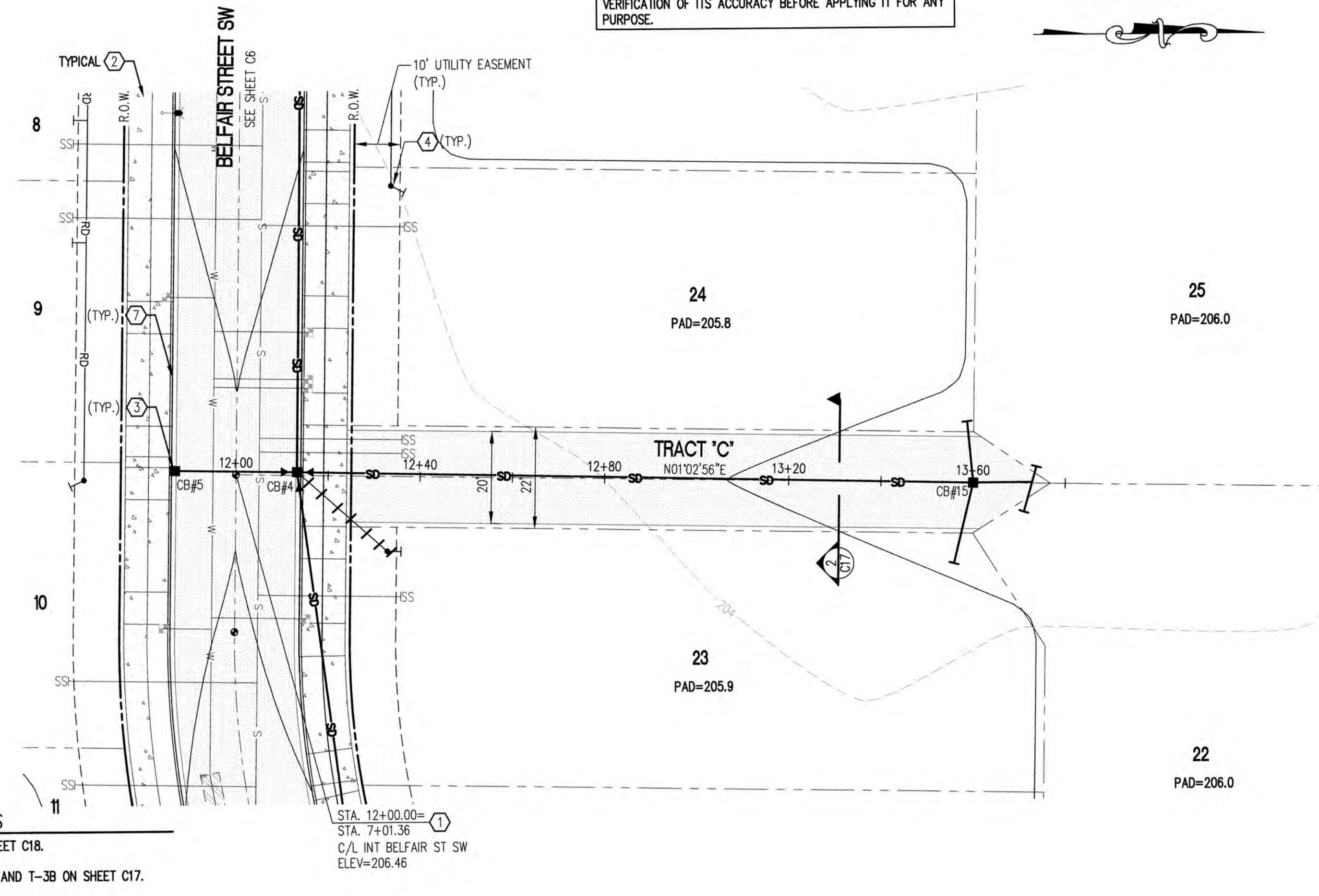
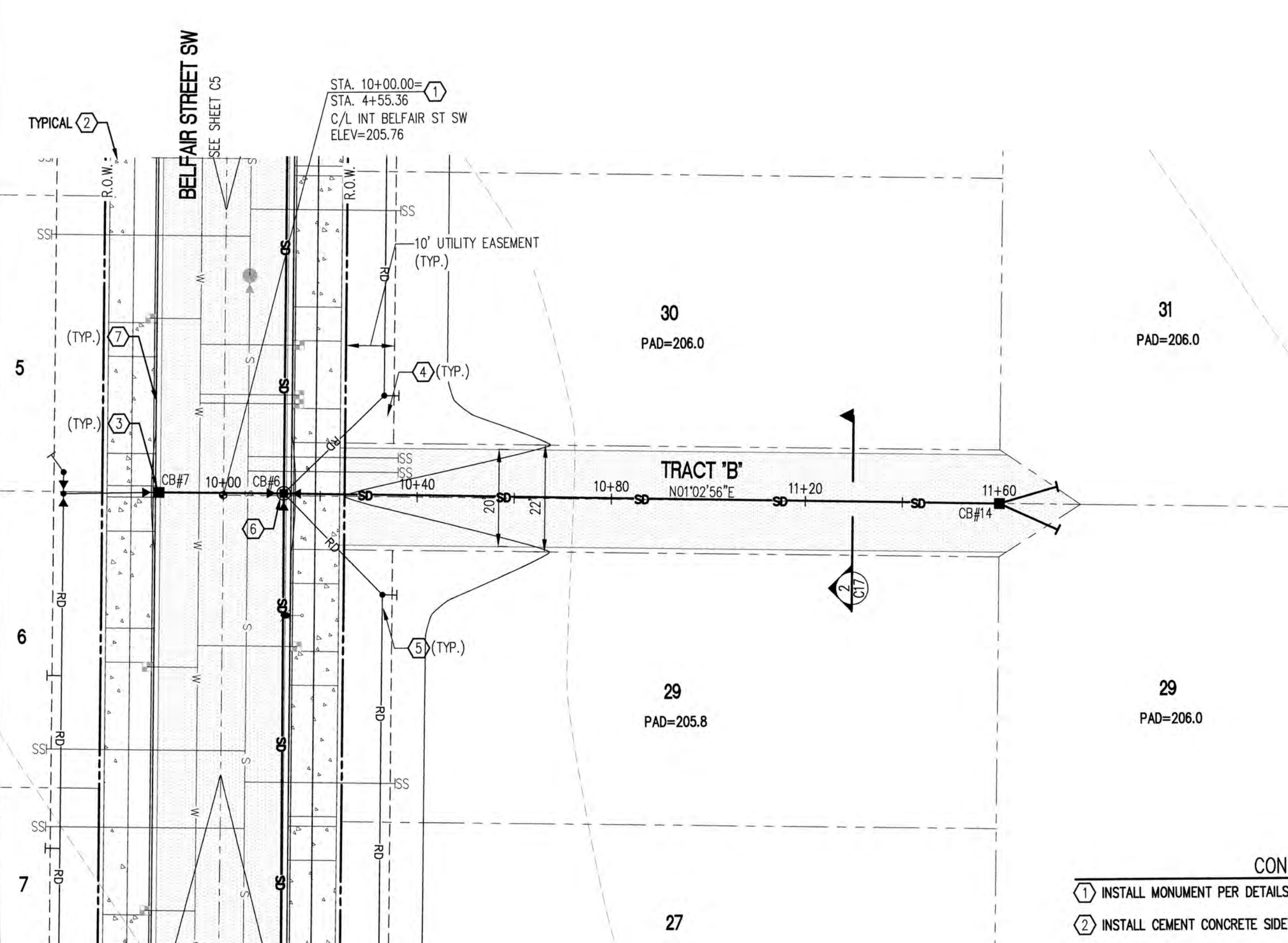
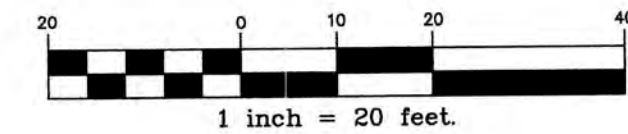
DANIEL PAUL SMITH
PROFESSIONAL ENGINEER
C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Bus: (253) 848-6282
P: (253) 848-6282
ceservices@cesnwinc.com

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



CONSTRUCTION NOTES

- 1 INSTALL MONUMENT PER DETAILS T-6A AND T-6B ON SHEET C18.
- 2 INSTALL CEMENT CONCRETE SIDEWALK PER DETAILS T-3A AND T-3B ON SHEET C17.
- 3 INSTALL CATCH BASIN TYPE 1 PER DETAILS D-2A AND D-2B ON SHEET C20.
- 4 INSTALL STORM CLEAN OUT PER DETAIL 2 ON SHEET C19.
- 5 ALL ROOF DRAIN LINES SHALL BE 6" ADS N-12 INSTALLED @ 1.00% MINIMUM SLOPE.
- 6 INSTALL CATCH BASIN TYPE 2 PER DETAILS D-3A AND D-3B ON SHEET C20.
- 7 INSTALL VERTICAL CONCRETE CURB AND GUTTER PER DETAIL T-1A ON SHEET C17.
- 8 INSTALL STREET LIGHT, SEE APPROVED P.S.E. PLANS FOR MORE INFORMATION.

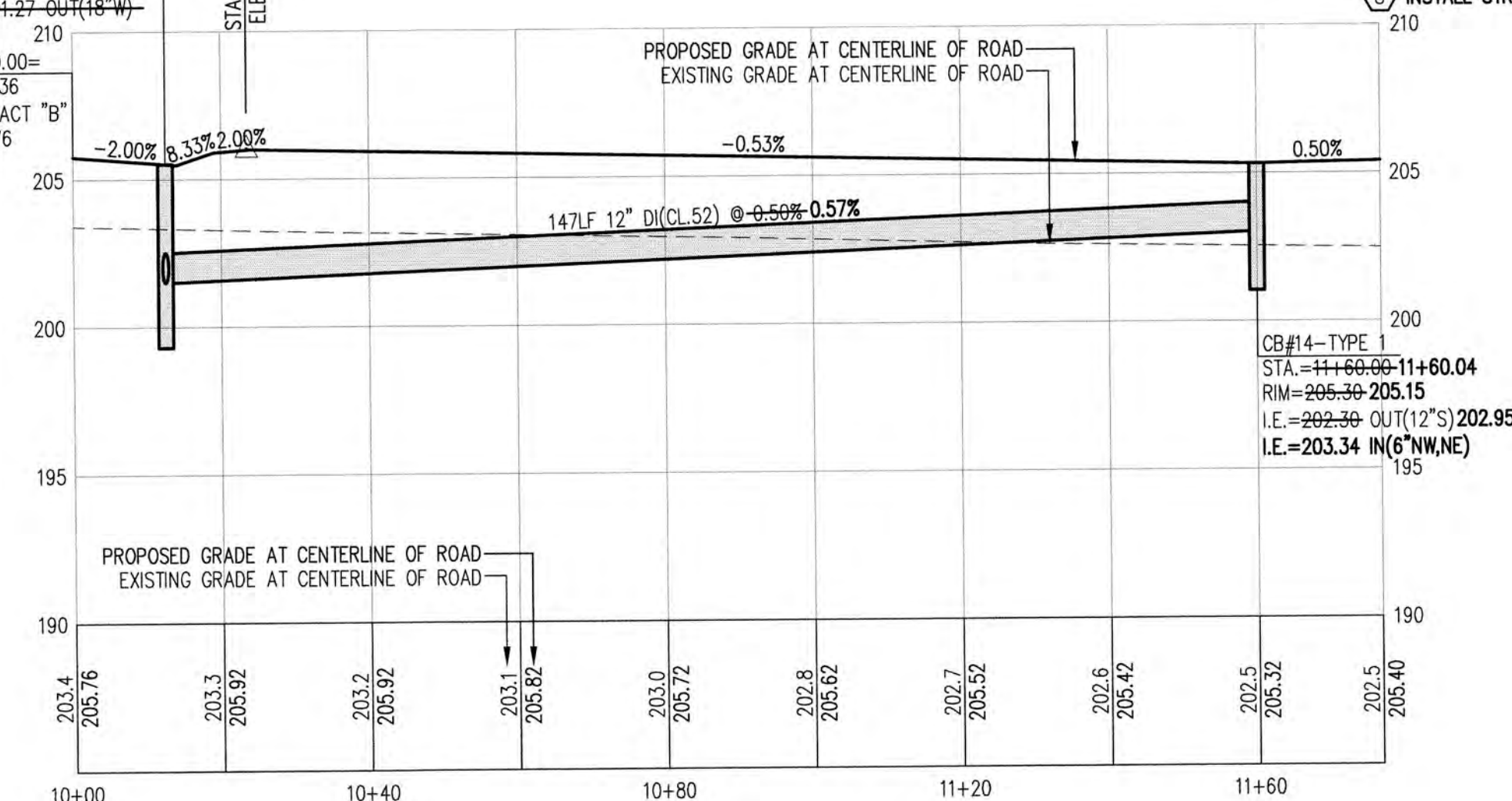
TRACT 'B'

HORIZONTAL: 1"=20'

TRACT 'C'

HORIZONTAL: 1"=20'

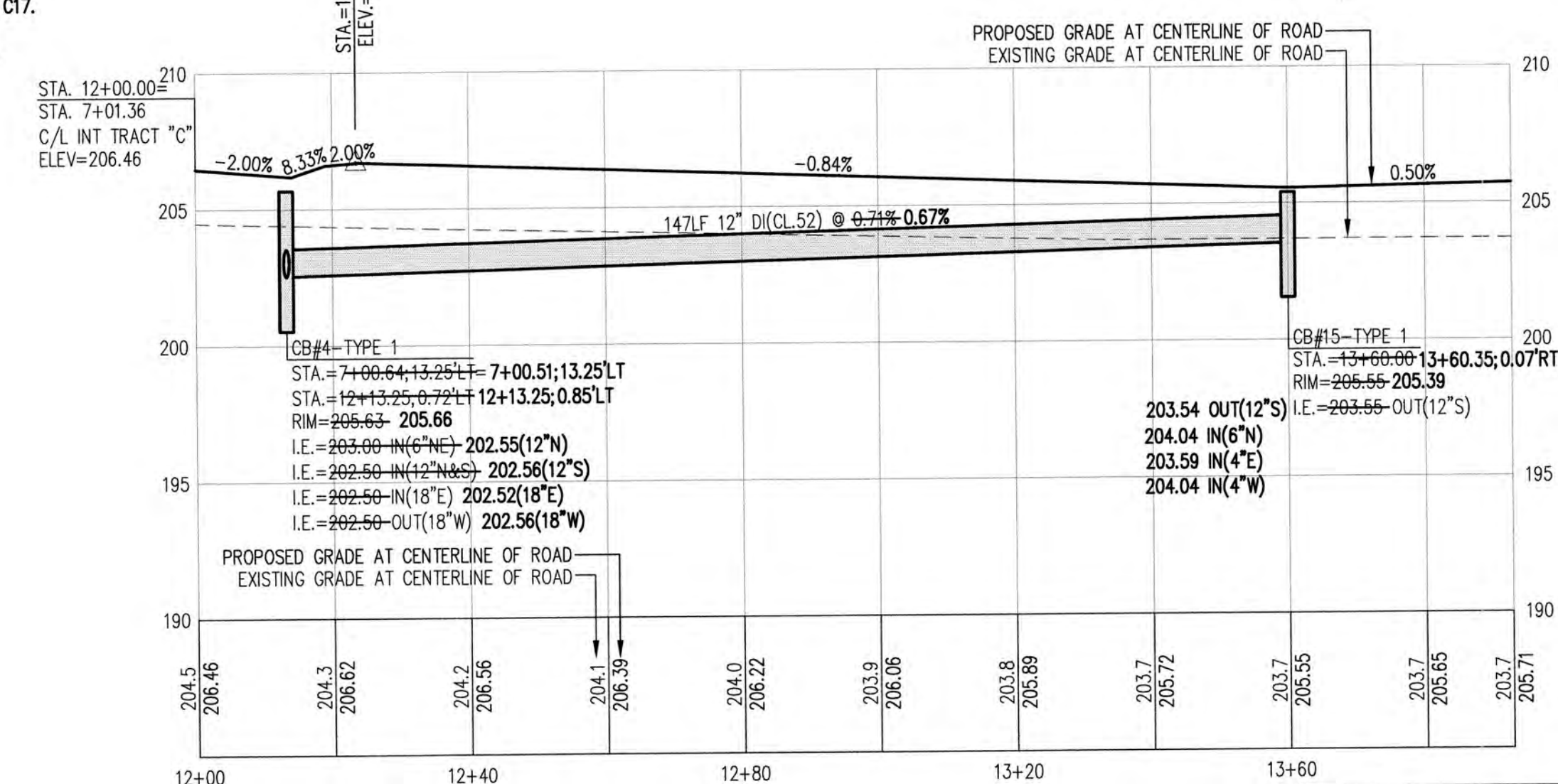
CB#6-48" TYPE 2
4.83;13.17 LT STA.=4+54.89;12.47 LT=13.17;0.53 LT STA.=10+12.47;0.47 LT RIM=205.42-205.51
202.51(6"NW) I.E.=202.79 IN(6"NE&NW)
202.11(12"N) I.E.=202.29 IN(12"NE&S)
201.23(18"E) I.E.=201.27 IN(18"E)
202.11(12"S) I.E.=201.27 OUT(18"W)



TRACT 'B'

HORIZONTAL: 1"=20'

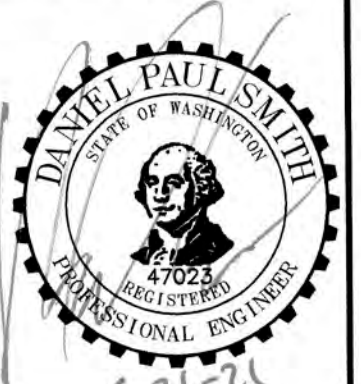
VERTICAL: 1"=5'



TRACT 'C'

HORIZONTAL: 1"=20'

VERTICAL: 1"=5'



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
P.O. Box: (203) 848-4882
PUYALLUP, WA 98372
ceservices@cesnwinc.com

BELFAIR ESTATES
TRACT 'B' & 'C'
PLAN & PROFILE
HARMAN DEVELOPMENT, LLC

Project: BELFAIR ESTATES
Client: HARMAN WAY SOUTH ORTING, WA
Designed: DPS
Drawn: RWG
Checked: DPS
Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070
Sheet No.: **C7**
7 of 22 Sheets

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

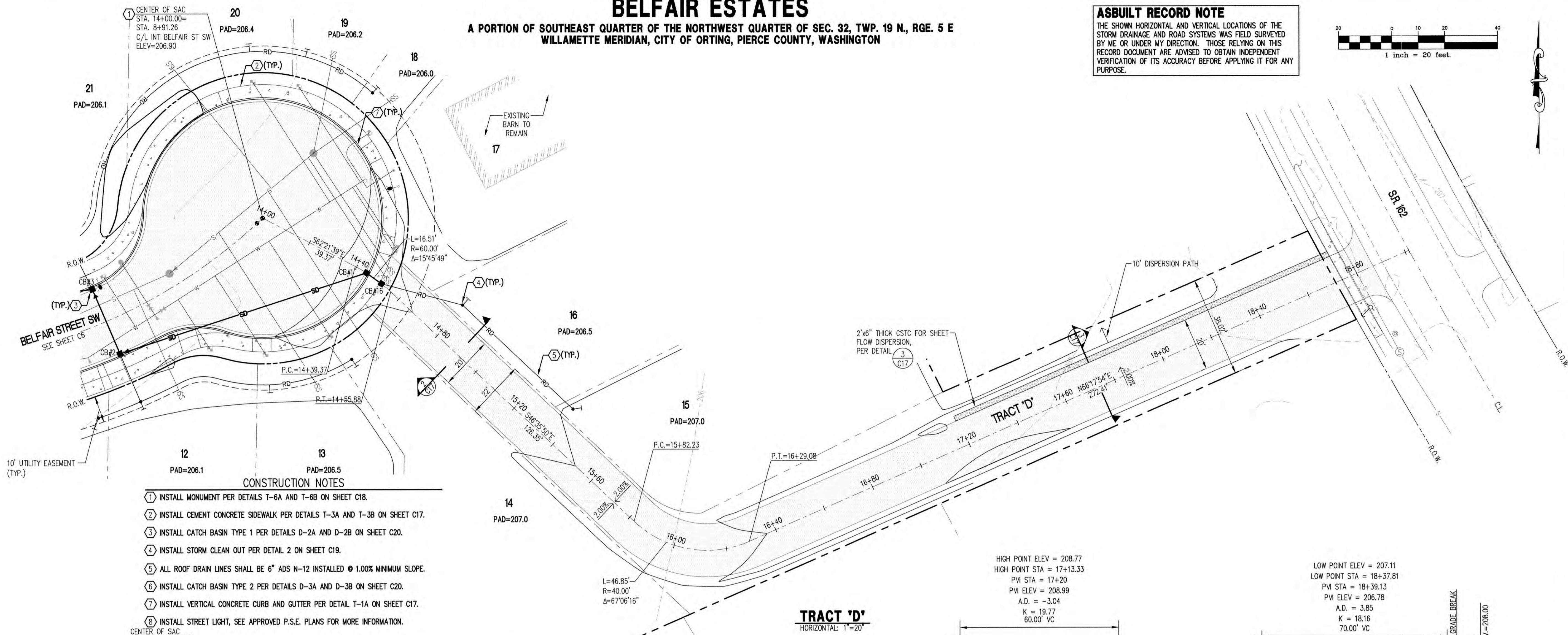
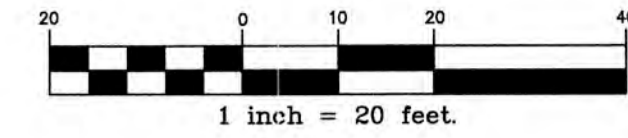
CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVR's review limited to providing input on operational issues only. OVR has not reviewed the plans for Code compliance.

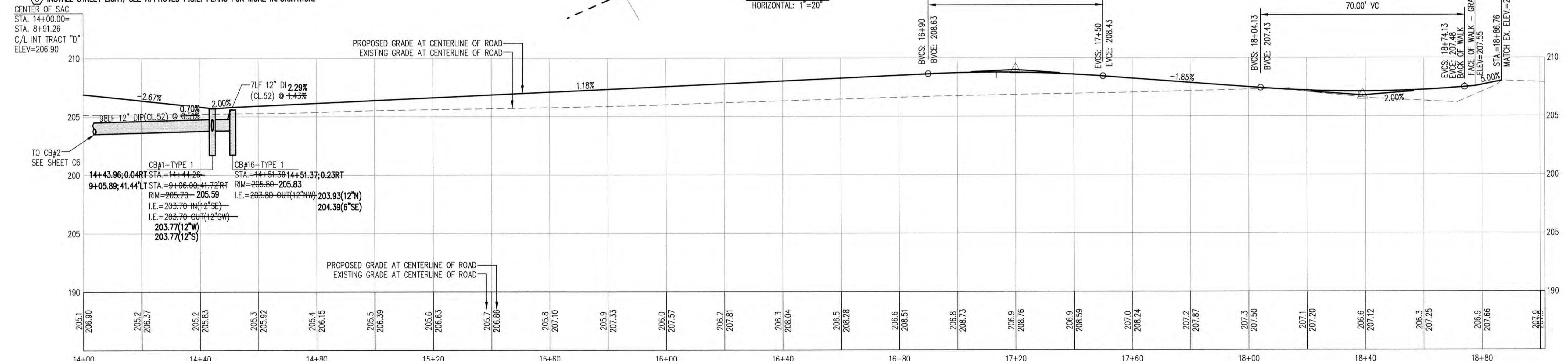
BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



- CONSTRUCTION NOTES**
- INSTALL MONUMENT PER DETAILS T-6A AND T-6B ON SHEET C18.
 - INSTALL CEMENT CONCRETE SIDEWALK PER DETAILS T-3A AND T-3B ON SHEET C17.
 - INSTALL CATCH BASIN TYPE 1 PER DETAILS D-2A AND D-2B ON SHEET C20.
 - INSTALL STORM CLEAN OUT PER DETAIL 2 ON SHEET C19.
 - ALL ROOF DRAIN LINES SHALL BE 6" ADS N-12 INSTALLED @ 1.00% MINIMUM SLOPE.
 - INSTALL CATCH BASIN TYPE 2 PER DETAILS D-3A AND D-3B ON SHEET C20.
 - INSTALL VERTICAL CONCRETE CURB AND GUTTER PER DETAIL T-1A ON SHEET C17.
 - INSTALL STREET LIGHT, SEE APPROVED P.S.E. PLANS FOR MORE INFORMATION.



CENTER OF SAC
STA. 14+00.00=
STA. 8+91.26
C/L INT TRACT "D"
ELEV=206.90

TO CB#2
SEE SHEET C6

CB#1-TYPE 1
14+43.96; 0.04RT STA=14+44.26
9+05.89; 41.44LT STA=9+06.00; 41.72RT
RIM=205.70 - 205.59
I.E.=203.70 - N(12°SE)
I.E.=203.70 - S(12°SW)
203.77(12°N)
203.77(12°S)

CB#16-TYPE 1
STA=14+51.39; 14+51.37; 0.23RT
RIM=205.80 - 205.83
I.E.=203.80 - N(12°NW)
203.93(12°N)
204.39(6°SE)

No.	Revision:	Date:



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Bus: (253) 848-4282
ceservices@cesnwinc.com
429 29th STREET, SUITE D
PUNLOUP, WA 98572

BELFAIR ESTATES
TRACT 'D'
PLAN & PROFILE
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Project: Belfair Estates
City: Orting, WA
Designed: DPS
Drawn: RWG
Checked: DPS
Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070
Sheet No.: **C8**
8 of 22 Sheets

**CALL 48 HOURS
BEFORE YOU DIG
DIAL 811**

CITY OF ORTING
APPROVED FOR CONSTRUCTION

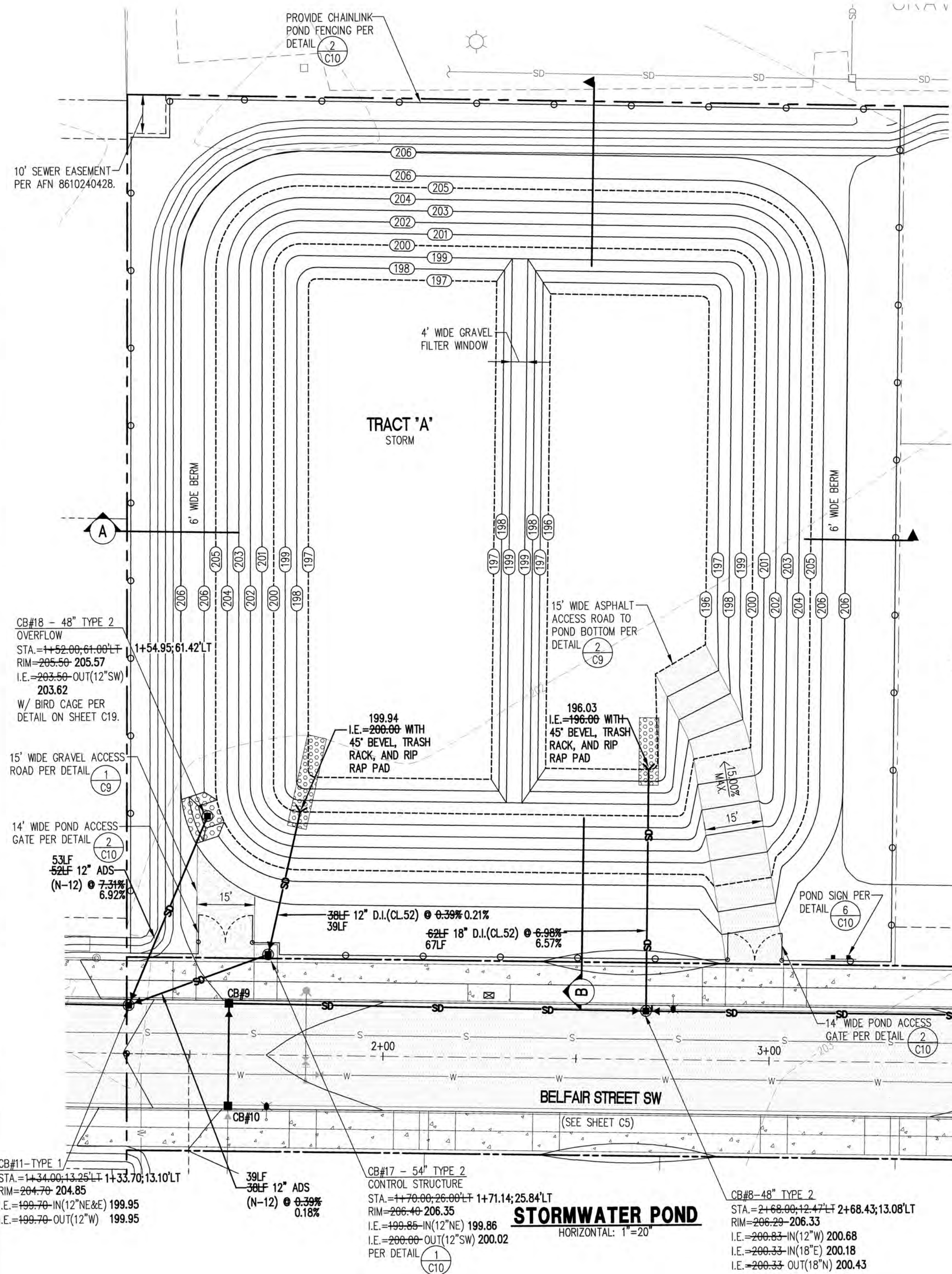
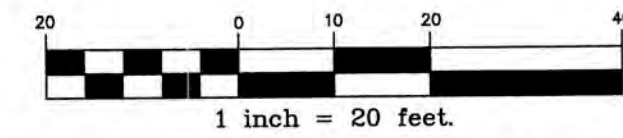
CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____
OVR's review limited to providing input on operational issues only.
OVR has not reviewed the plans for Code compliance.

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



POND BERM EMBANKMENT NOTES

- CONSTRUCT POND BERM EMBANKMENTS ON NATIVE CONSOLIDATED SOIL (OR ADEQUATELY COMPACTED AND STABLE FILL SOILS ANALYZED BY A GEOTECHNICAL ASSESSMENT), WHICH IS FREE OF LOOSE SURFACE SOIL MATERIALS, ROOTS AND OTHER ORGANIC DEBRIS.
- CONSTRUCT POND BERM EMBANKMENTS BY EXCAVATING A "KEY" EQUAL TO 50% OF THE BERM EMBANKMENT CROSS-SECTIONAL HEIGHT AND WIDTH (EXCEPT ON TILL SOILS WHERE THE "KEY" MINIMUM DEPTH CAN BE REDUCED TO 1 FOOT OF EXCAVATION INTO THE TILL).
- POND BERM EMBANKMENT CORES SHALL BE CONSTRUCTED OF COMPACTED SOIL (A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY, STANDARD PROCTOR METHOD PER ASTM D1557) PLACED IN 6-INCH LIFTS, WITH THE FOLLOWING SOIL CHARACTERISTICS PER THE USDA'S TEXTURAL TRIANGLE: A MINIMUM OF 30% CLAY, A MAXIMUM OF 60% SAND, A MAXIMUM OF 60% SILT, WITH NOMINAL GRAVEL AND COBBLE CONTENT OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. (NOTE: IN GENERAL, EXCAVATED GLACIAL TILL WILL BE WELL-SUITED FOR BERM EMBANKMENT MATERIAL.) THE CORE SHALL BE ADEQUATE TO MAKE THE EMBANKMENT IMPERVIOUS.

WETPOND (PROVIDED) STAGE/STORAGE TABLE

ELEVATION	AREA (SF)	VOLUME (CF)
196.00	4,674	0
197.00	5,600	5,137
198.00	6,571	11,223
199.00	7,606	18,311
200.00	8,679	26,454 > 25,540 CF VOLUME REQUIRED

DETENTION POND (PROVIDED) STAGE/STORAGE TABLE

ELEVATION	AREA (SF)	VOLUME (CF)
200.00	17,914	0
201.00	19,578	18,746
202.00	21,314	39,192
203.00	23,110	61,404
204.00	24,959	85,439
205.00	26,863	111,350

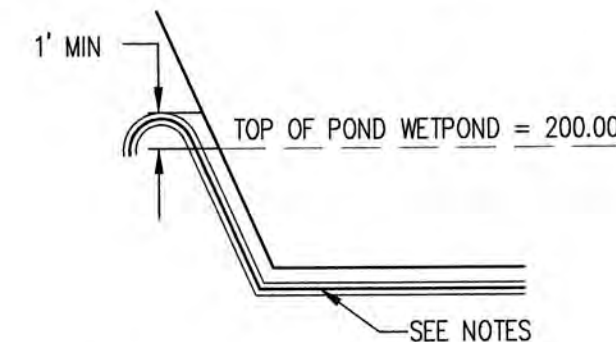
POND LINER NOTE

POND LINER SHALL BE A COMPACTED TILL LINER MEETING THE FOLLOWING SPECIFICATIONS:

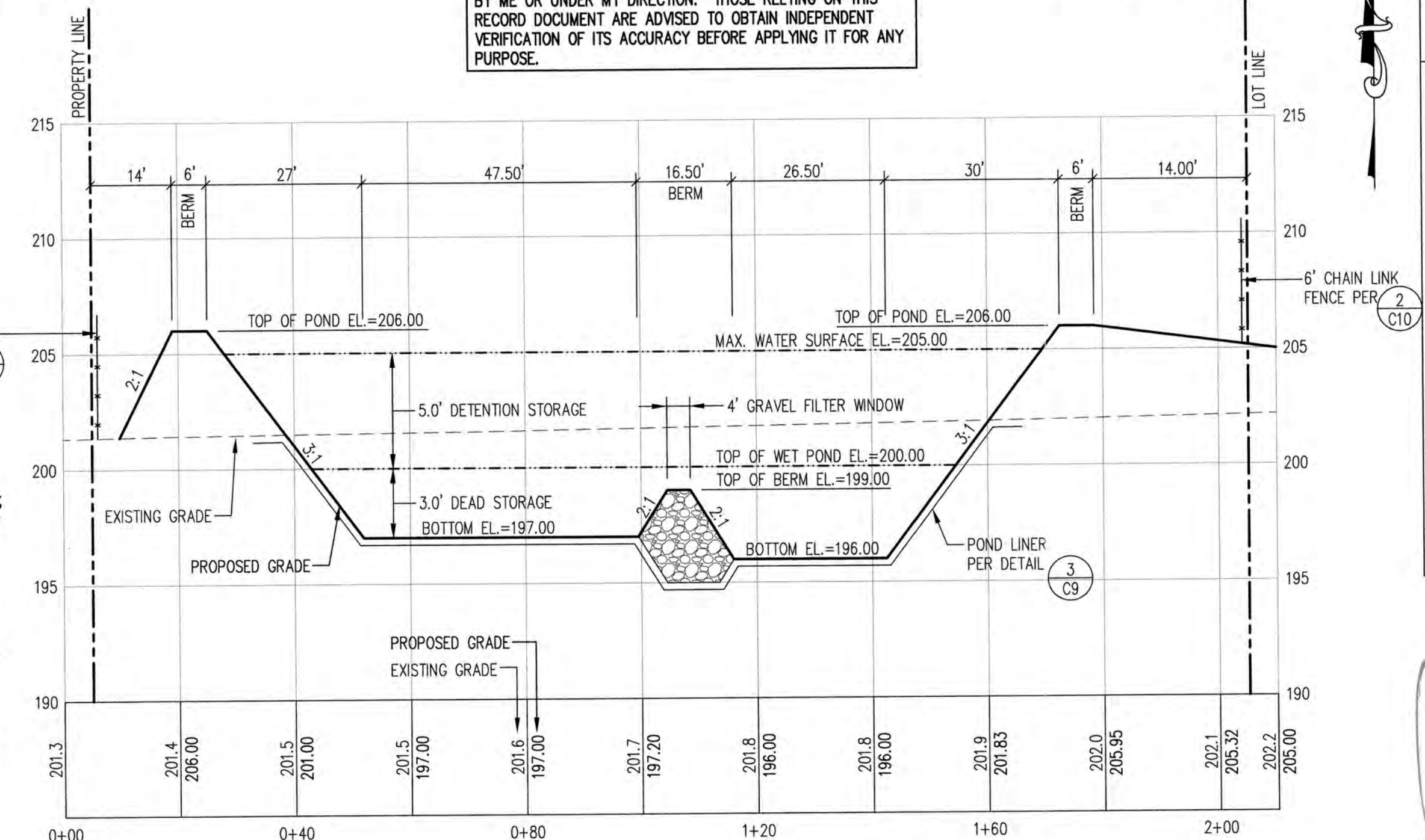
- LINER THICKNESS SHALL BE 18" AFTER COMPACTION.
- SOIL SHALL BE COMPACTED TO 95% MINIMUM DRY DENSITY, MODIFIED PROCTOR METHOD (ASTM D-1557).
- A DIFFERENT DEPTH AND DENSITY SUFFICIENT TO RETARD THE INFILTRATION RATE TO 2.4 x 10⁻⁶ INCHES PER MINUTE MAY ALSO BE USED INSTEAD OF CRITERIA 1 AND 2.
- SOIL SHOULD BE PLACED IN 6-INCH LIFTS.
- SOILS MAY BE USED THAT MEET THE GRADATION IN TABLE 4.3 BELOW.

TABLE 4.3 - COMPACTED TILL LINERS

SIEVE SIZE	PERCENT PASSING
6-INCH	100
4-INCH	90
#4	70-100
#200	20

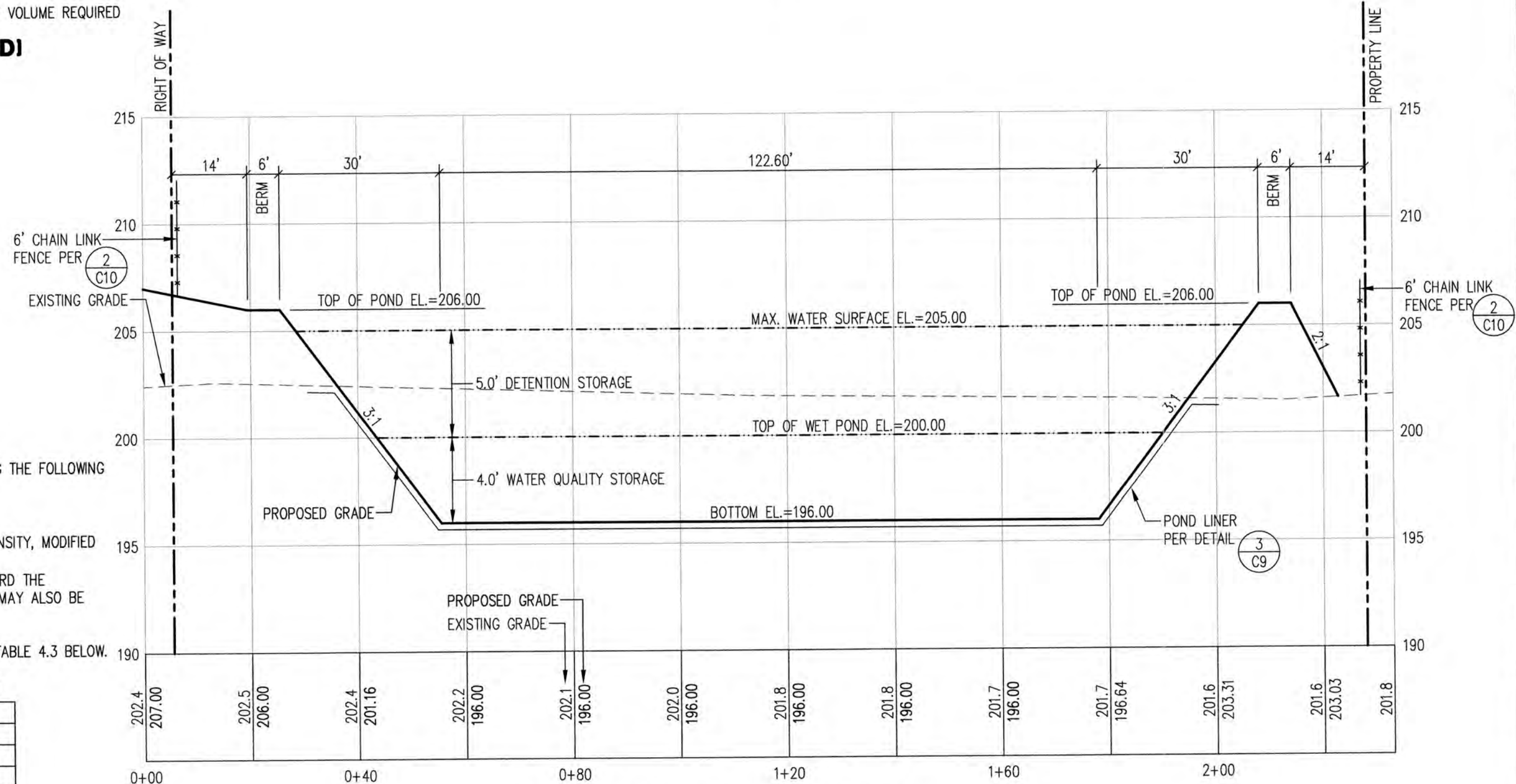


3 POND LINER DETAIL N.T.S.



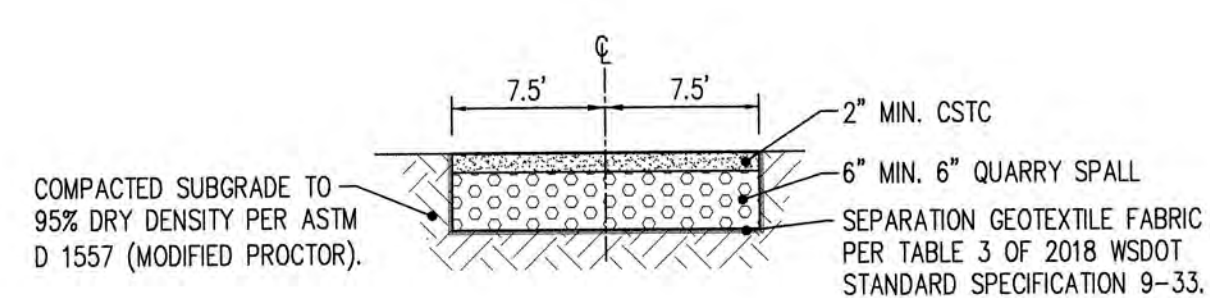
STORMWATER POND - SECTION A

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

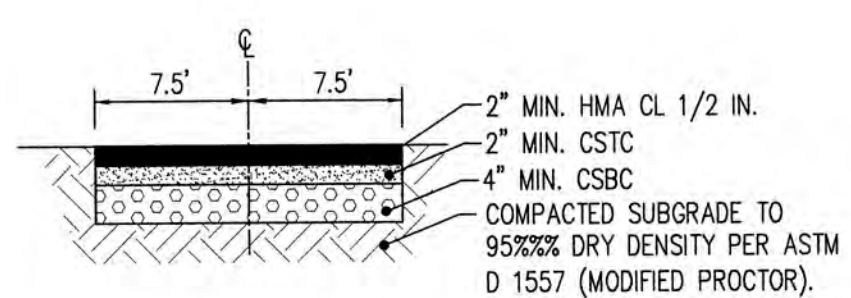


STORMWATER POND - SECTION B

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



1 GRAVEL ACCESS ROAD FOR POND N.T.S.



2 ASPHALT ACCESS ROAD FOR POND N.T.S.

Date:
Int:

Revision:
No.

BELFAIR ESTATES
STORM POND - PLAN & SECTIONS

HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Client: 619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070

Sheet No.: **C9**

9 of 22 Sheets

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

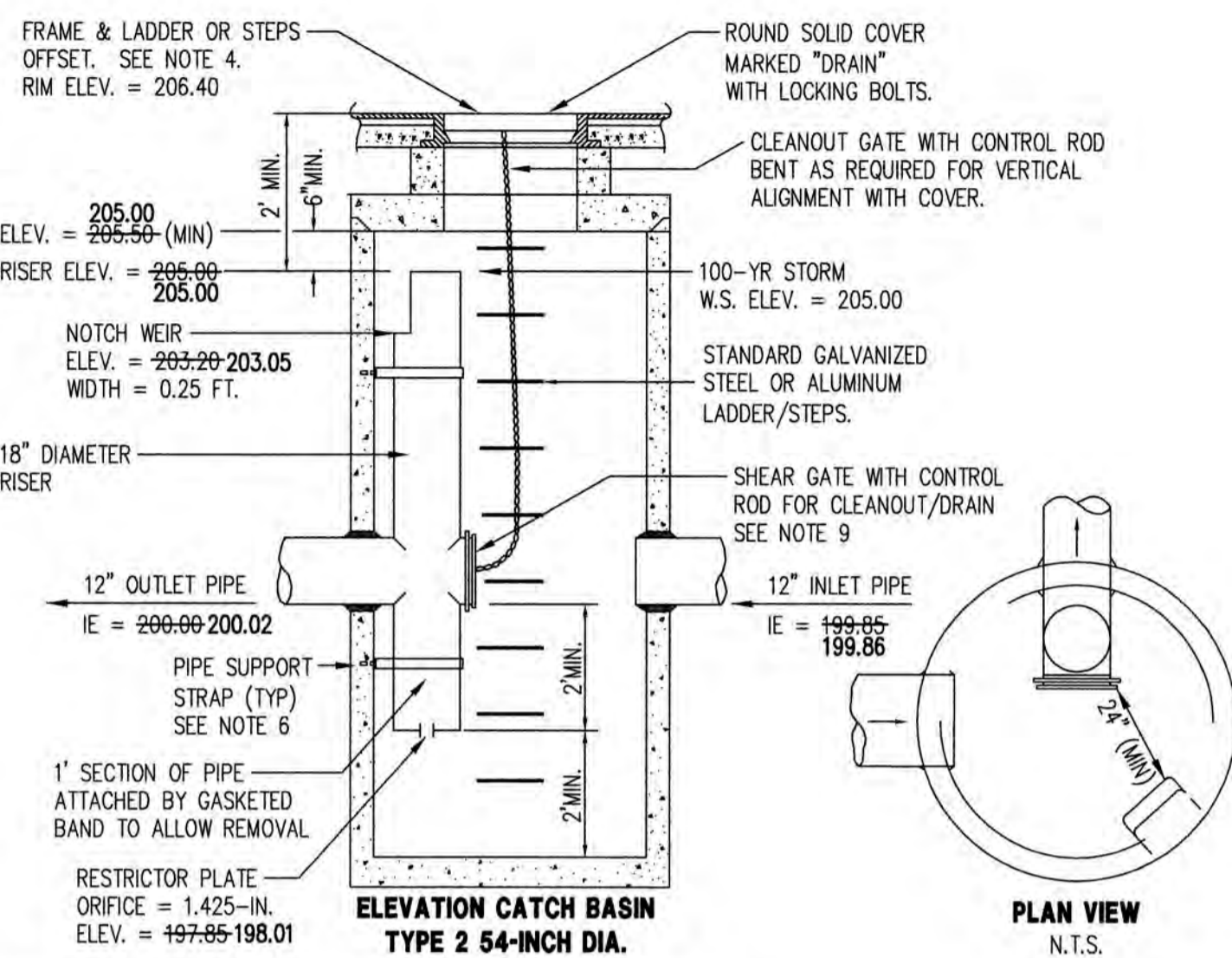
CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVR's review limited to providing input on operational issues only. OVR has not reviewed the plans for Code compliance.

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

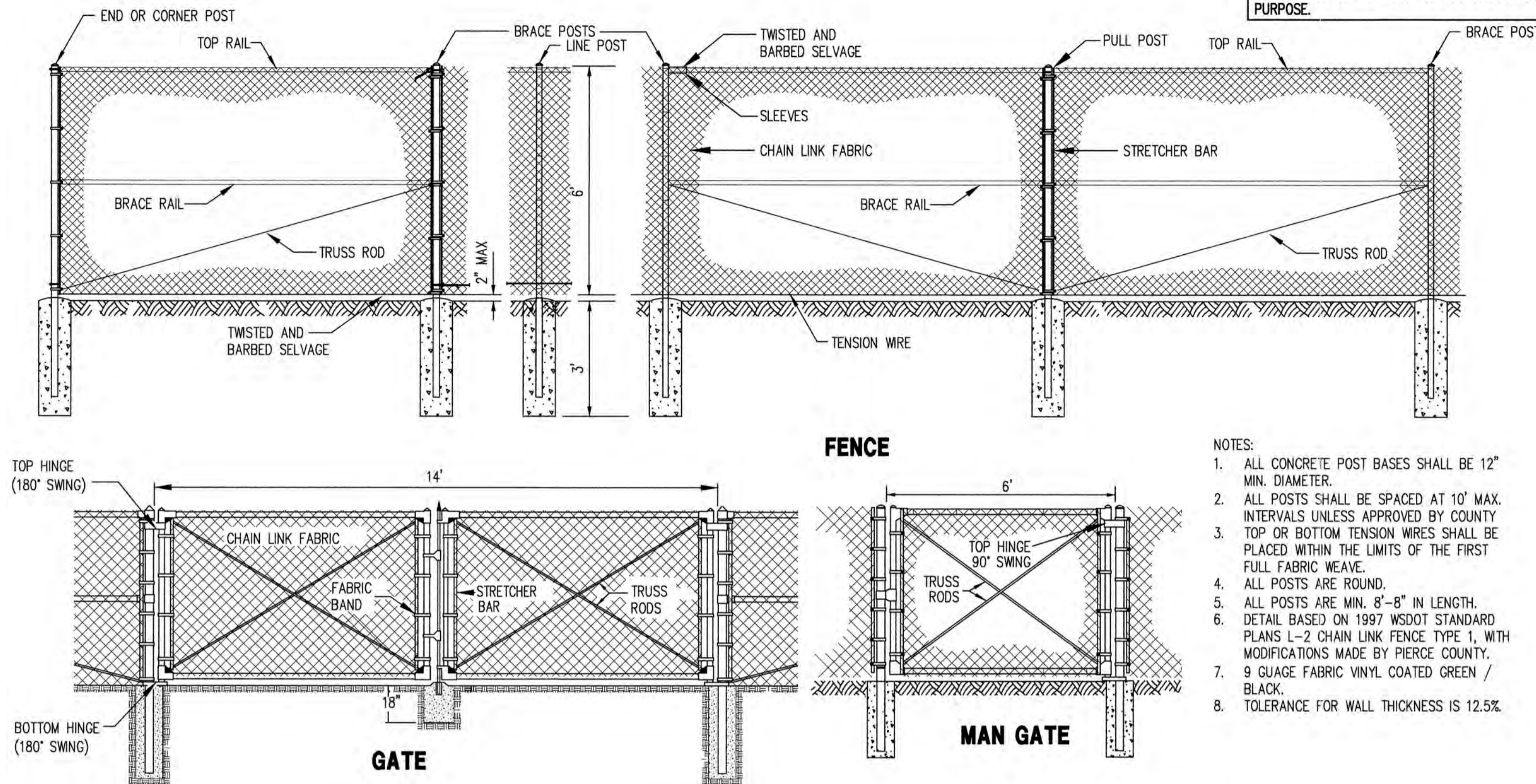
ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



1 CB#17 TYPE 2, 54" CONTROL STRUCTURE
N.T.S.

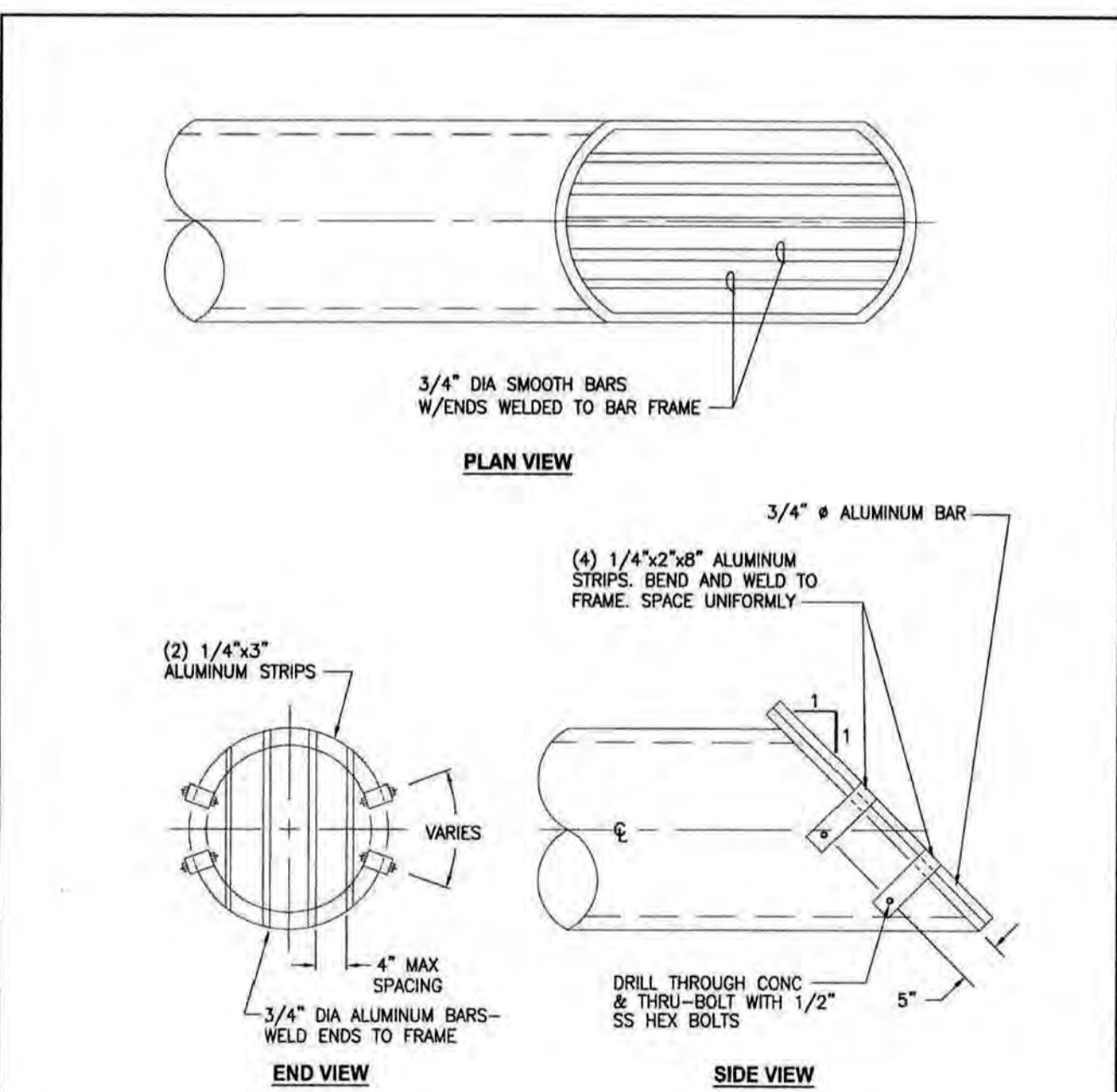
NOTES

- USE A MINIMUM OF A 54" DIAMETER TYPE 2 CATCH BASIN.
- OUTLET CAPACITY: 100-YEAR DEVELOPED PEAK FLOW.
- METAL PARTS: CORROSION RESISTANT. NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT.
- FRAME AND LADDER OR STEPS OFFSET SO:
 - CLEANOUT GATE IS VISIBLE FROM TOP.
 - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - FRAME IS CLEAR OF CURB.
- IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4".
- PROVIDE AT LEAST ONE 3" x .090 INCHES SUPPORT BRACKET ANCHORED TO CONCRETE WALL. (MAXIMUM 3'-0" VERTICAL SPACING)
- LOCATE ELBOW RESTRICTOR(S) AS NECESSARY TO PROVIDE MINIMUM CLEARANCE AS SHOWN.
- LOCATE ADDITIONAL LADDER RUNGS IN STRUCTURES USED AS ACCESS TO TANKS OR VAULTS TO ALLOW ACCESS WHEN CATCH BASIN IS FILLED WITH WATER.
- CLEANOUT GATE:
 - SHEAR GATE, IRON BODY BRONZE MTD. OLYMPIC FTY. STD. OR,
 - LIFT GATE, NO. C/C/1-LG, CASCADE CULVERT INC., OR
 - OTHER DEVICE APPROVED BY ENGINEER.



BRACE RAIL & TOP RAIL			END, CORNER, & PULL POST			LINE & BRACE POST			GATE POST		
I.D. PIPE (INCHES)	WEIGHT PER FOOT (LBS)	WALL THICKNESS (IN)	I.D. PIPE (INCHES)	WEIGHT PER FOOT (LBS)	WALL THICKNESS (IN)	I.D. PIPE (INCHES)	WEIGHT PER FOOT (LBS)	WALL THICKNESS (IN)	I.D. PIPE (INCHES)	WEIGHT PER FOOT (LBS)	WALL THICKNESS (IN)
1-3/4	2.27	0.133	2-1/2	5.79	0.203	2	3.65	0.154	3-1/2	9.12	0.226

2 CHAINLINK FENCE & GATE
N.T.S.



- NOTES**
- WELD AT ALL JOINTS.
 - SHOP DRAWINGS REQUIRED.

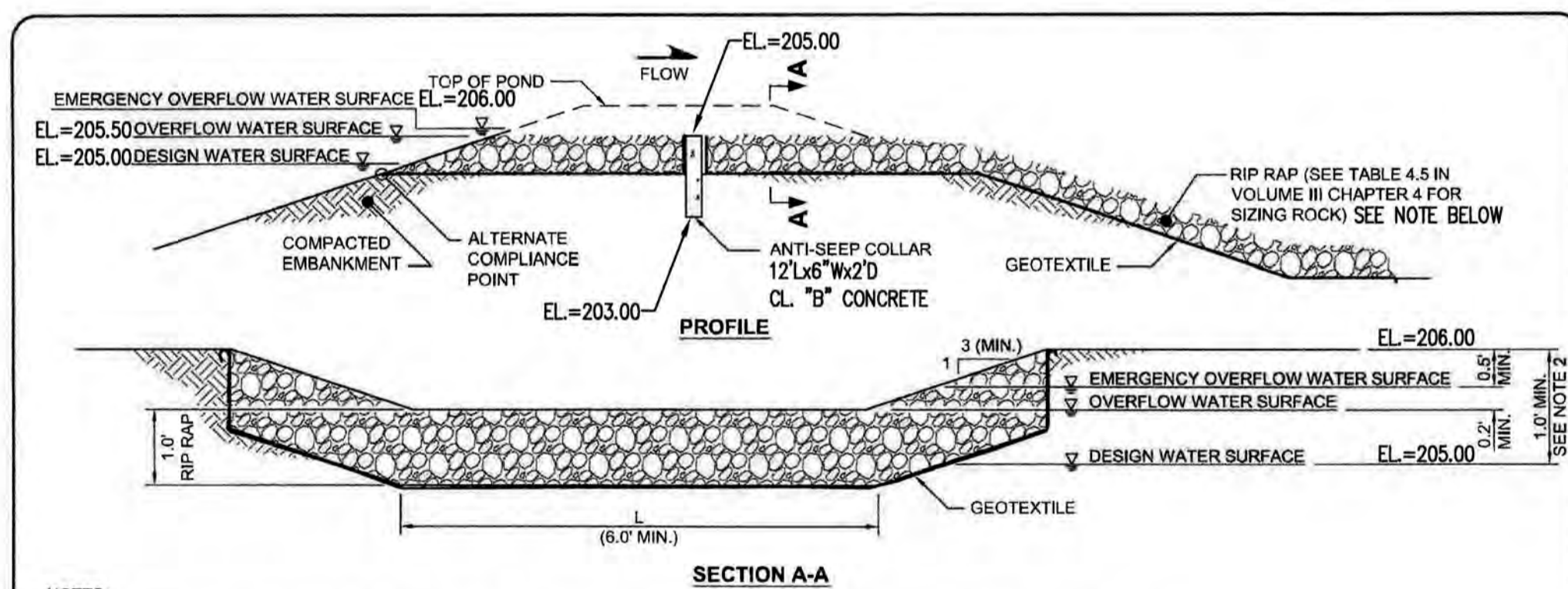
CITY OF ORTING

TRASH RACK

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. D-6

FILE NAME: STD-D-6

3 TRASH RACK
N.T.S.



NOTES:

- THE EMERGENCY OVERFLOW SPILLWAY SHALL BE DESIGNED TO PASS THE 100-YEAR, DESIGN STORM EVENT FOR DEVELOPED CONDITIONS SEE EQUATION AT VOLUME III CHAPTER 3. SPILLWAY SHOULD ONLY HAVE FLOW WHEN A COMPONENT OF THE CONTROL STRUCTURE HAS FAILED OR A STORM GREATER THAN THE DESIGN STORM HAS OCCURRED.
- SPILLWAY SHALL HAVE AN ANTI-SEEP COLLAR TO HOLD OVERFLOW WATER SURFACE ELEVATION OR THE OVERFLOW WATER SURFACE ELEVATION SHALL BE BELOW THE ALTERNATE COMPLIANCE POINT. ENGINEER WILL DESIGN THE ANTI-SEEP COLLAR AND WILL DEMONSTRATE ITS EFFECTIVENESS.
- A CONCRETE LINED SPILLWAY IS AN ACCEPTABLE ALTERNATIVE TO AN ANTI-SEEP COLLAR.

Pierce County
Public Works
Surface Water Management Division
2702 S 42nd Street, Suite 201
Tacoma, Washington 98409-7322

6/2015	2015 SWMM UPDATE	HPH	HRUTKOSKY
6/2012	2012 SWMM UPDATE	HPH	HRUTKOSKY
5/2008	PUBLISH DATE	HPH	HRUTKOSKY
DATE	REVISION	APPROV	DRAWN

HANS P. HUNGER, P.E.
C.I.P. MANAGER

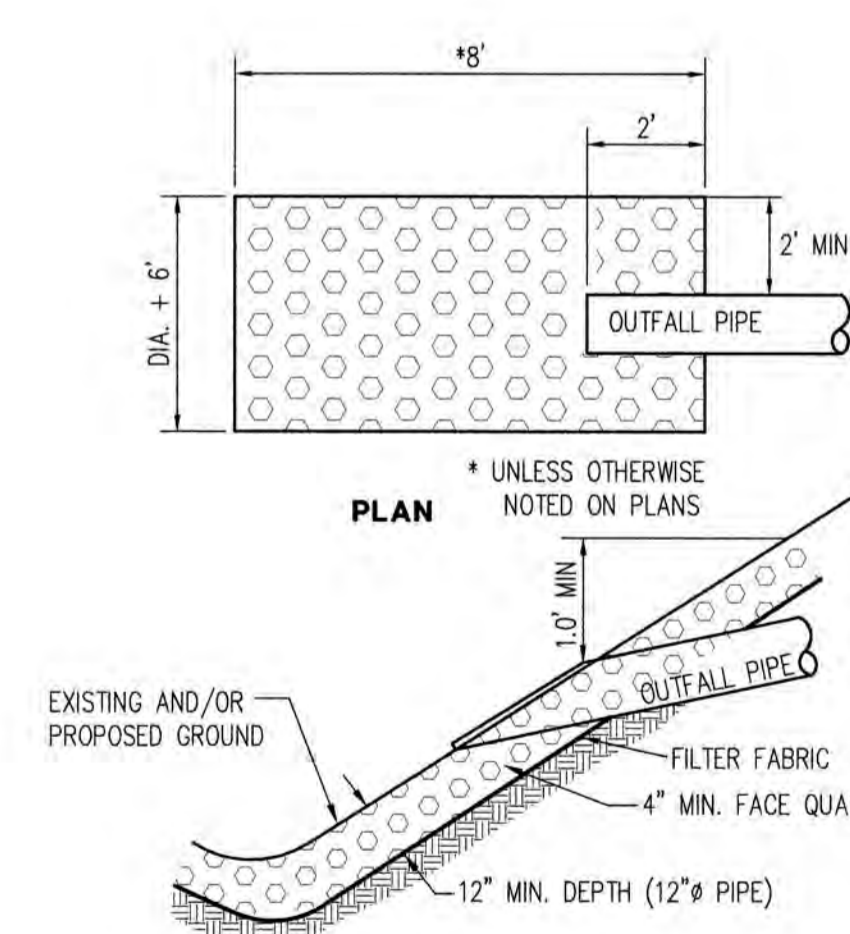
Surface Water Management Division

EMERGENCY OVERFLOW SPILLWAY
(NOT TO SCALE)
7.0

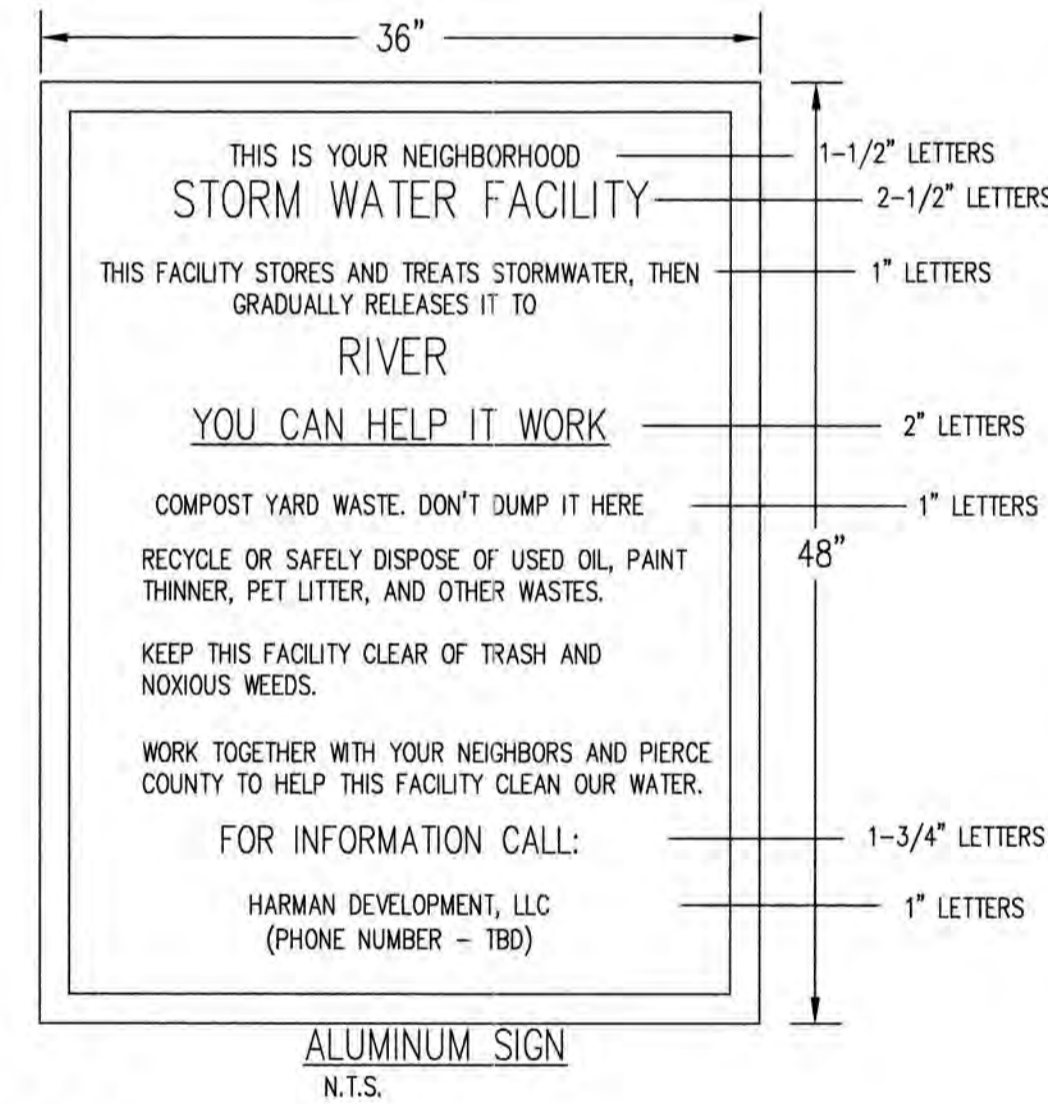
SPILLWAY OUTFALL NOTE

RIPRAP SHALL BE IN ACCORDANCE WITH SECTION 9-13.1 OF THE WSDOT/APWA STANDARD SPECIFICATIONS. RIPRAP SHALL BE A REASONABLY WELL GRADED ASSORTMENT OF ROCK WITH THE FOLLOWING GRADATION:
MAXIMUM STONE SIZE 12"
MEDIUM STONE SIZE 8"
MINIMUM STONE SIZE 2"
RIPRAP THICKNESS OF OUTFALL SHALL BE 1 FOOT.

4 EMERGENCY OVERFLOW SPILLWAY
N.T.S.



5 TYPICAL OUTFALL RIP-RAP
N.T.S.



NOTES

- SIGN WILL BE ALUMINUM, 1/8" THICK
- BLUE LETTERING ON WHITE BACKGROUND WITH THE PIERCE COUNTY LOGO
- FONT STYLE WILL BE "SEAGULL MD BT"
- INSTALL SIGN ON NORTH POND ACCESS GATE FACING NORTH

6 POND SIGN
N.T.S.

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____

CITY ENGINEER _____ DATE _____

FIRE CHIEF _____ DATE _____

Scale: AS NOTED
Date: 06.21.21
Job No.: 19070

Sheet No.: **C10**
10 of 22 Sheets

CALL 48 HOURS BEFORE YOU DIG DIAL 811

Project: BELFAIR ESTATES STORM POND - DETAILS
Client: HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: AS NOTED
Date: 06.21.21
Job No.: 19070

Sheet No.: **C10**
10 of 22 Sheets

Revision:
No. Description
1 PER CITY COMMENTS
2 PER CITY COMMENTS

Date: 06.24.20
06.21.20

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29th Street, Suite D
Puyallup, WA 98972
Bus: (253) 848-4282
ceservices@cesnwinc.com

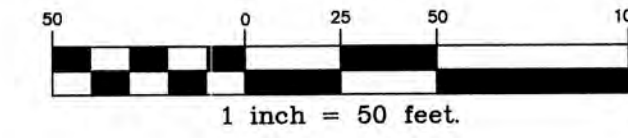
DANIEL PAUL SMITH
REGISTERED PROFESSIONAL ENGINEER
6-21-21

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



No.	Revision:	Date:
1	PER CITY COMMENTS	06.24.20
2	PER CITY COMMENTS	05.21.20



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Bus: (253) 848-4282
cesurvey@cesnwinc.com
429 29TH STREET, SUITE D
POVALLUP, WA 98372

**BELFAIR ESTATES
SITE DIMENSIONING PLAN**

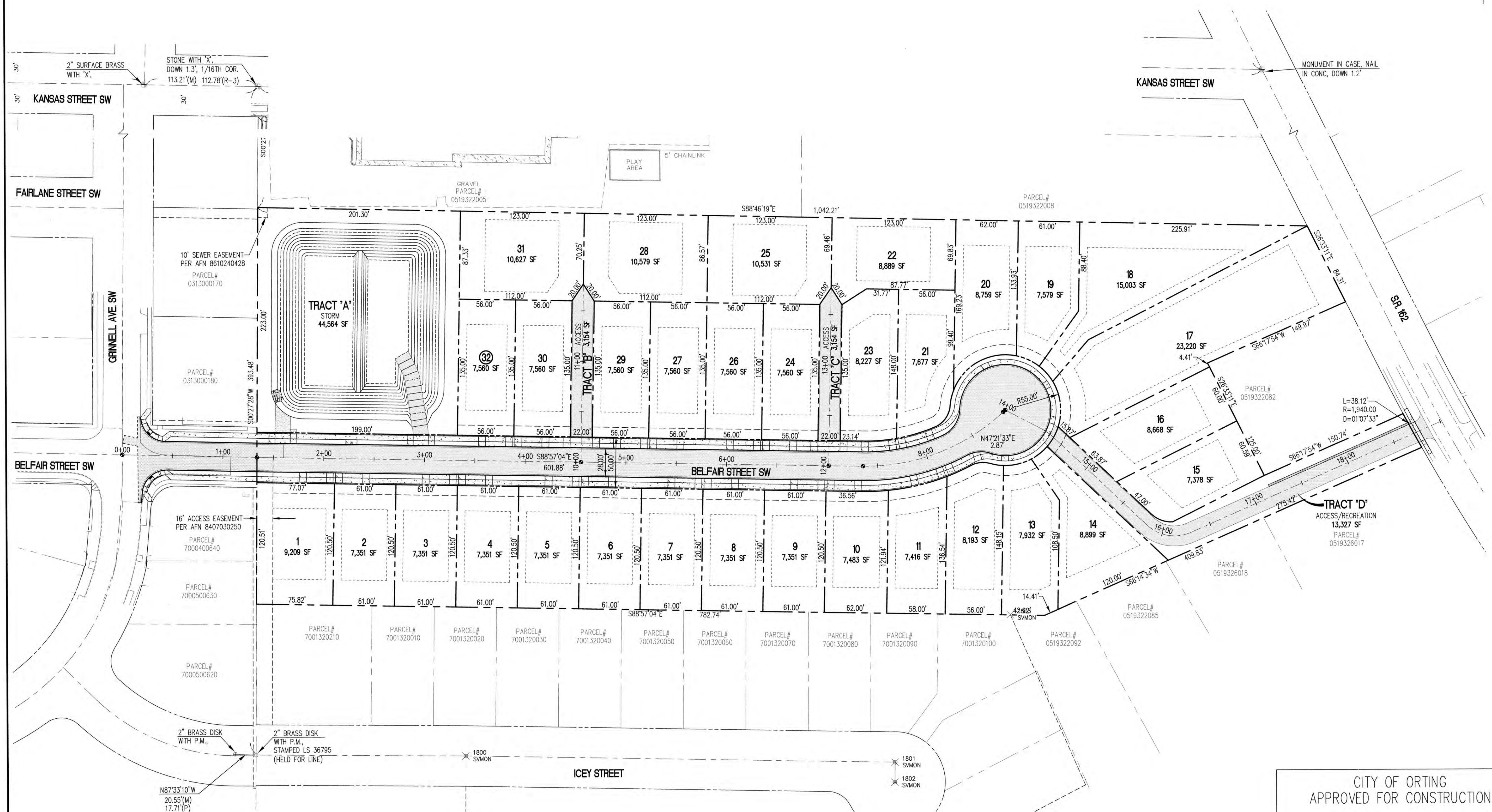
Project: _____
Client: **HARMAN DEVELOPMENT, LLC**
619 HARMAN WAY SOUTH, ORTING, WA

Designed: _____
Drawn: _____
Checked: _____

Scale: 1" = 50'
Date: 06.21.21
Job No.: 19070

Sheet No.: **C11**

11 of 22 Sheets



**CALL 48 HOURS
BEFORE YOU DIG
DIAL 811**

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

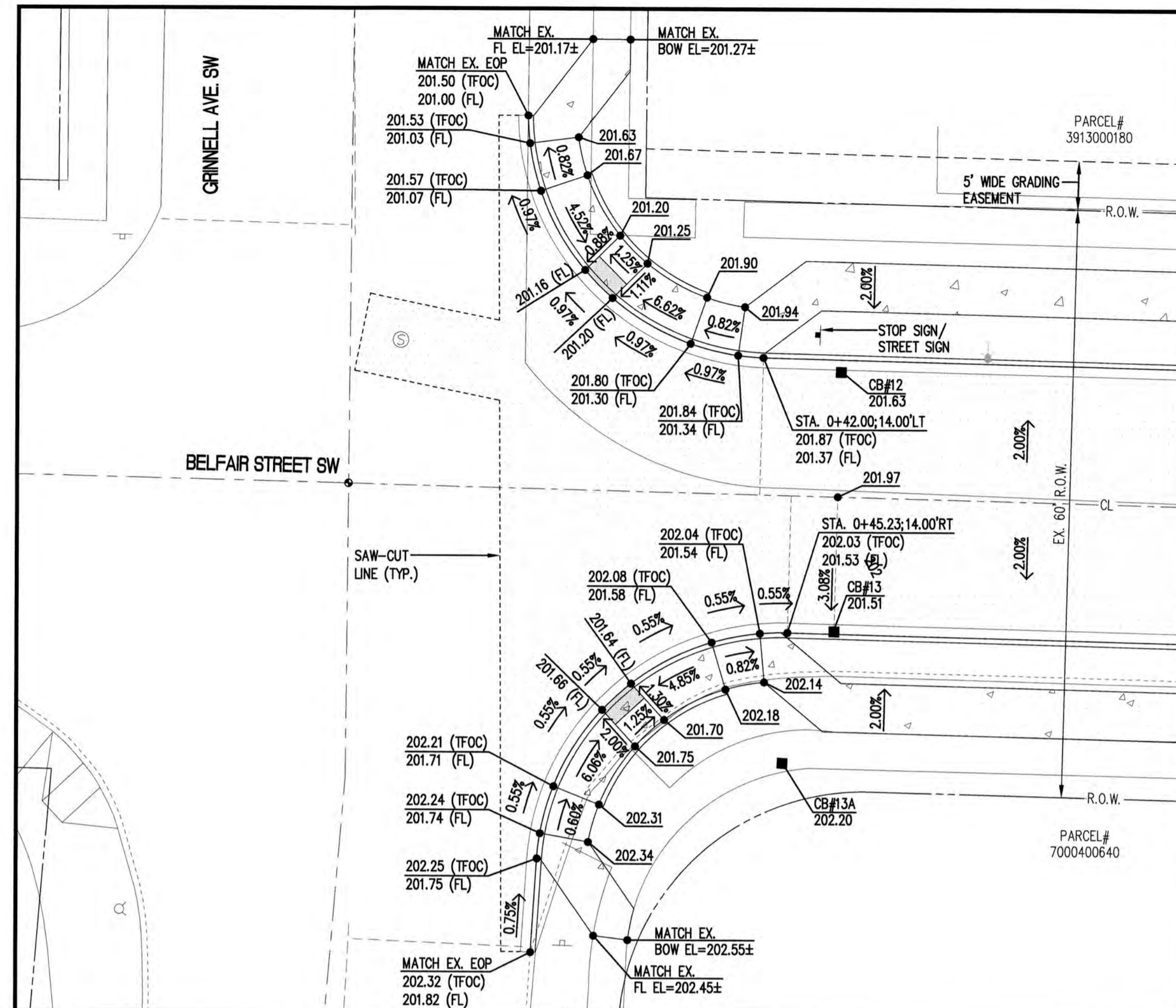
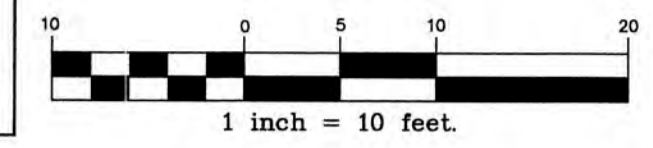
OVR's review limited to providing input on operational issues only.
OVR has not reviewed the plans for Code compliance.

BELFAIR ESTATES

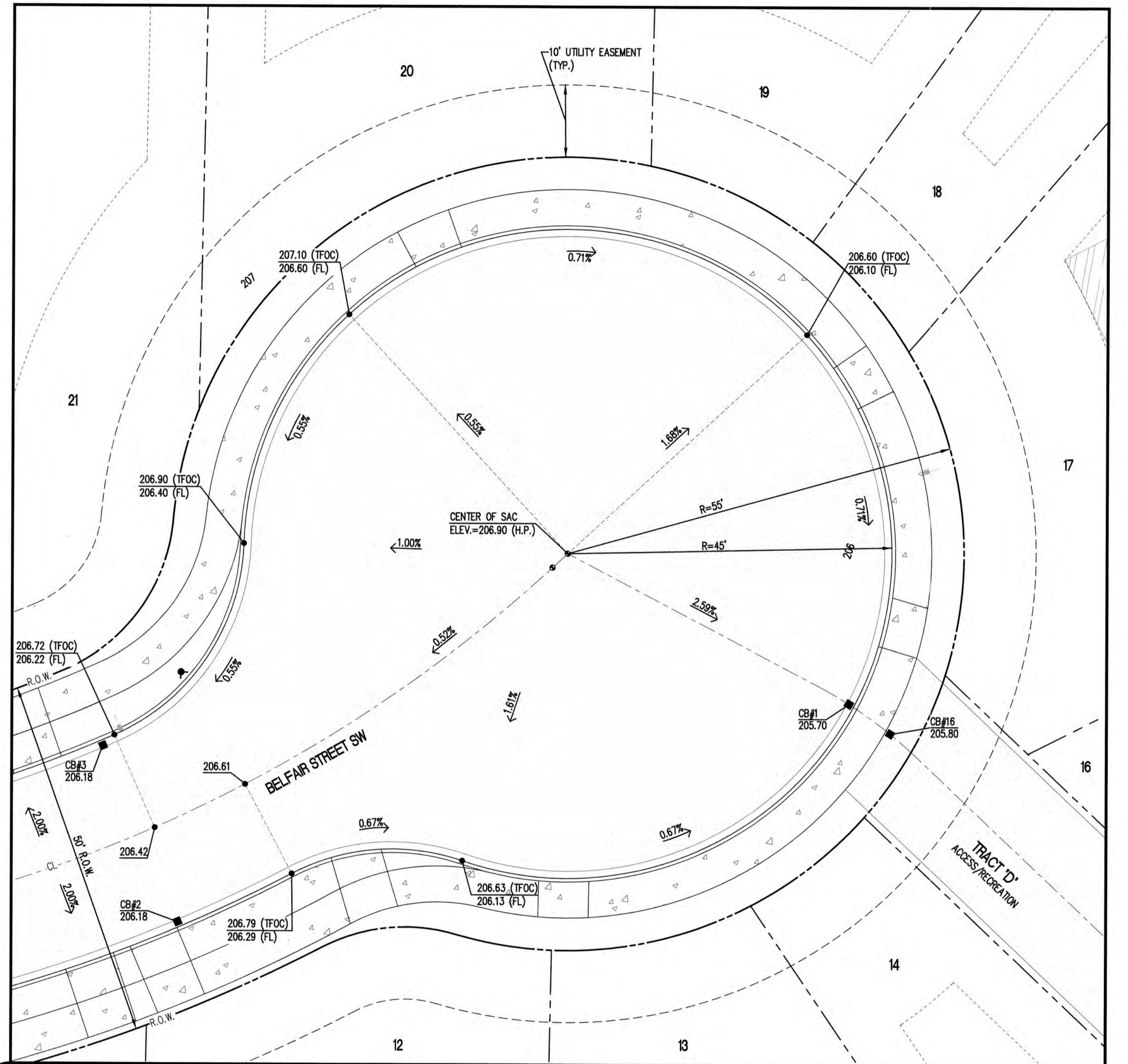
A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

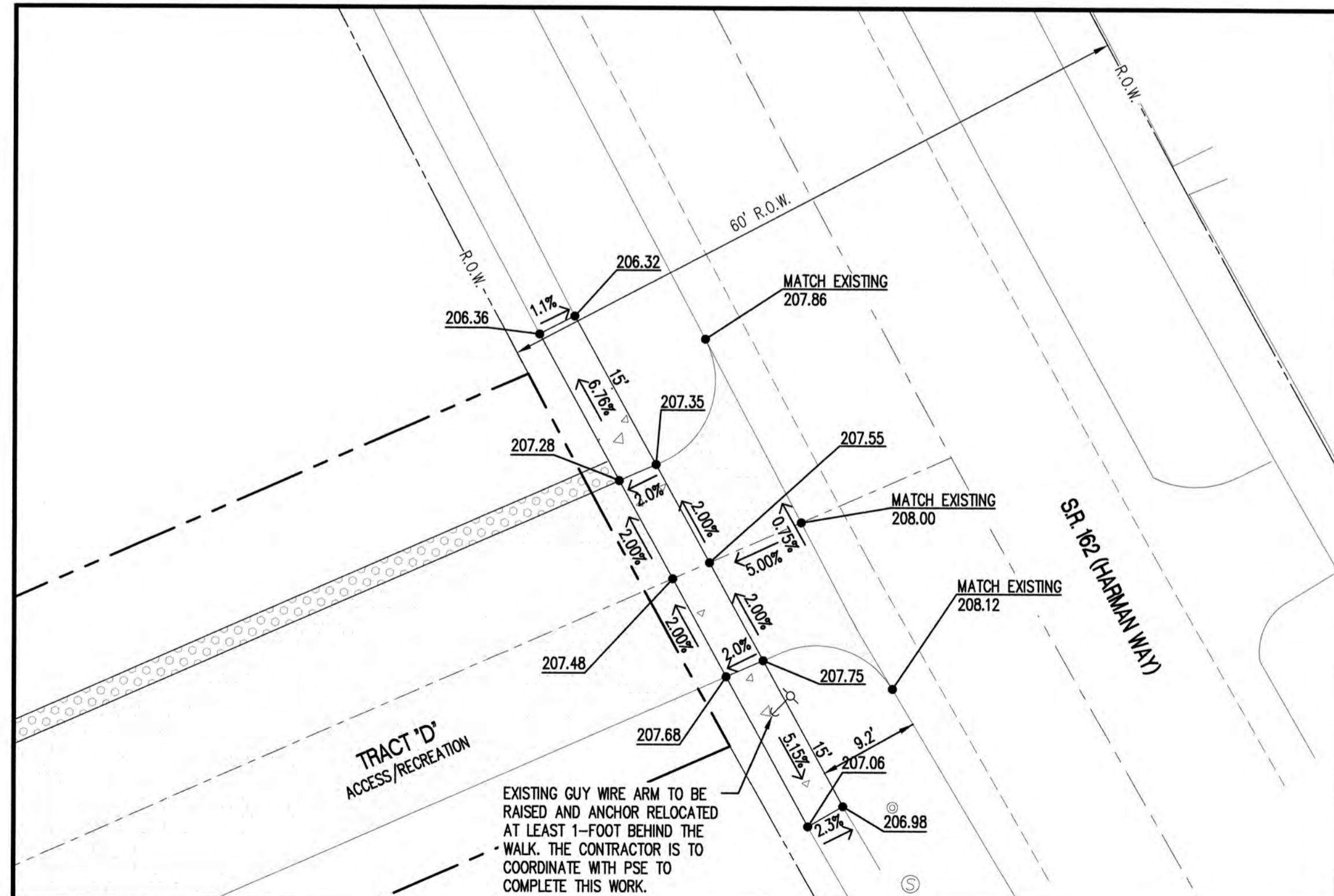
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



**BELFAIR STREET SW
AND GRINNELL AVENUE SW**
SCALE: 1" = 10'



**BELFAIR STREET SW
AND TRACT 'D'**
SCALE: 1" = 20'



**TRACT 'D'
AND S.R. 162 (HARMAON WAY)**
SCALE: 1" = 10'

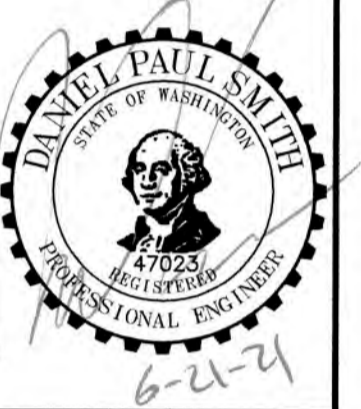
**CALL 48 HOURS
BEFORE YOU DIG
DIAL 811**

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR	DATE
CITY ENGINEER	DATE
FIRE CHIEF	DATE

OVFR's review limited to providing input on operational issues only.
OVFR has not reviewed the plans for Code compliance.

Project:	REVISOR	DATE
1. REVISED SHARED ACCESS FOR POWER POLE	DPS	01.27.21
2. PER CITY COMMENTS	PAS	06.24.20
3. PER CITY COMMENTS	PAS	05.21.20
No.	Revision:	Date:



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Rust: (253) 848-4282
ceser@cesanw.com
ceser@cesanw.com
409 20TH STREET, SUITE D
PUYALLUP, WA 98472

**BELFAIR ESTATES
INTERSECTION DETAILS**
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS
Scale: 1" = 10'
Date: 06.21.21
Job No.: 19070

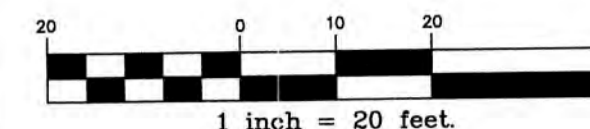
Sheet No.: **C12**
12 of 22 Sheets

BELFAIR ESTATES

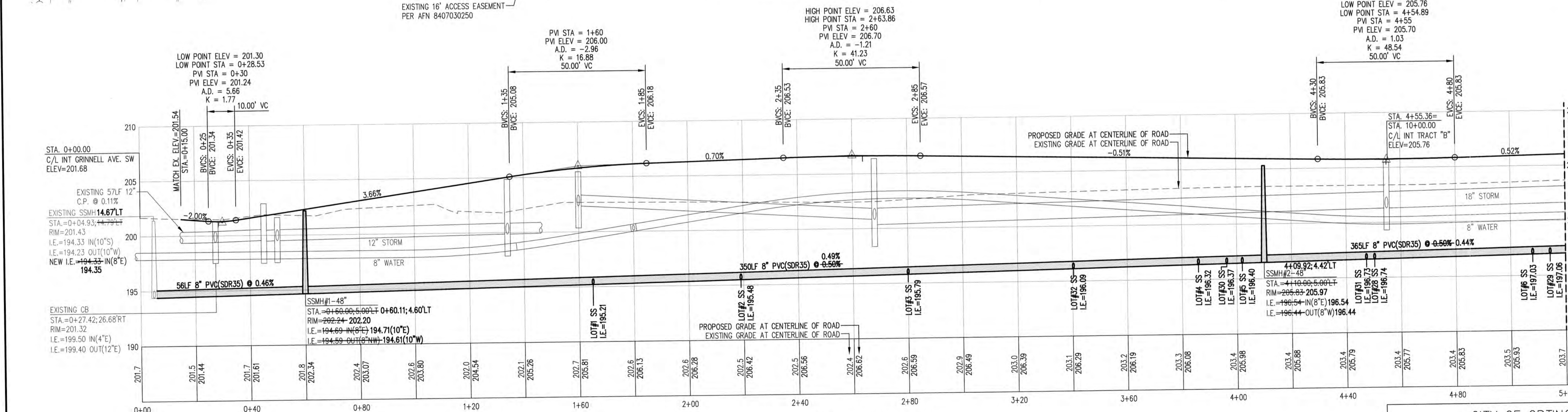
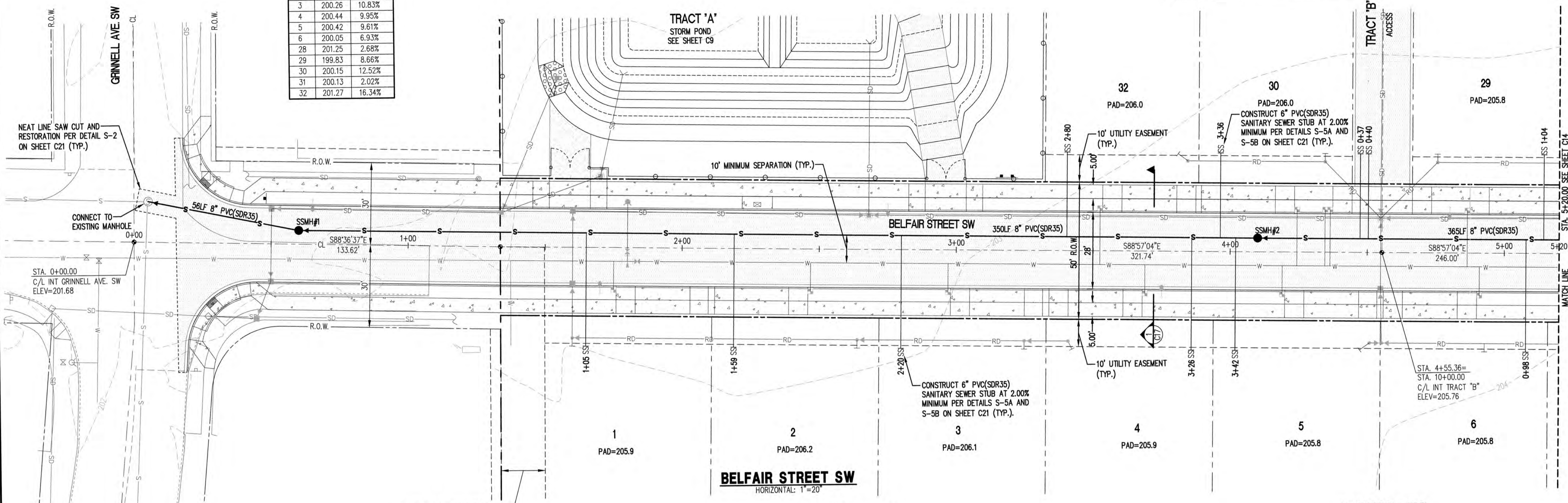
A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



LOT#	INVERT	SLOPE
1	199.94	11.28%
2	200.36	11.55%
3	200.26	10.83%
4	200.44	9.95%
5	200.42	9.61%
6	200.05	6.93%
28	201.25	2.68%
29	199.83	8.66%
30	200.15	12.52%
31	200.13	2.02%
32	201.27	16.34%



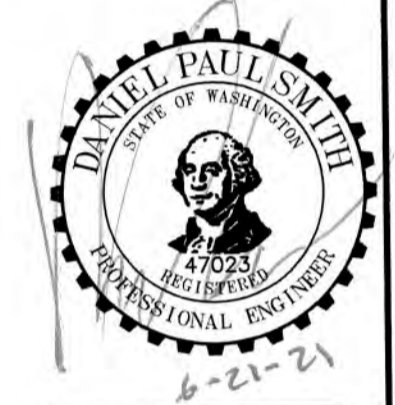
BELFAIR STREET SW
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

No.	Revision



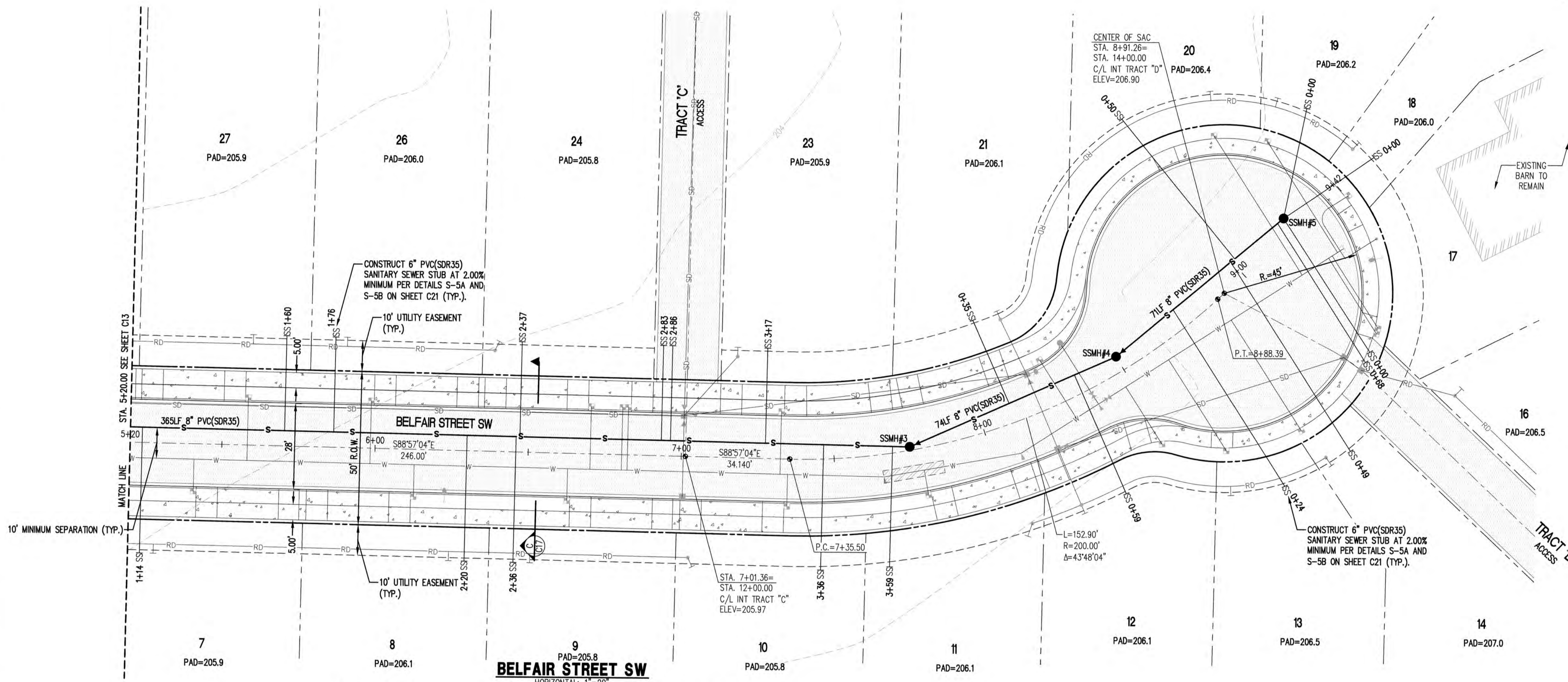
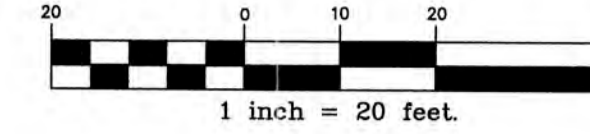
C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
Bus: (253) 848-4282
ceservices@cesnwinc.com
429 29th STREET, SUITE D
PUYALLUP, WA 98372

BELFAIR ESTATES
SANITARY SEWER - STA. 0+00 TO STA. 5+20
BELFAIR STREET SW - PLAN & PROFILE
HARMAN DEVELOPMENT, LLC
Client: 619 HARMAN WAY SOUTH ORTING, WA

Project: _____
Designed: _____ DPS
Drawn: _____ RWG
Checked: _____ DPS
Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070
Sheet No.: **C13**
13 of 22 Sheets

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

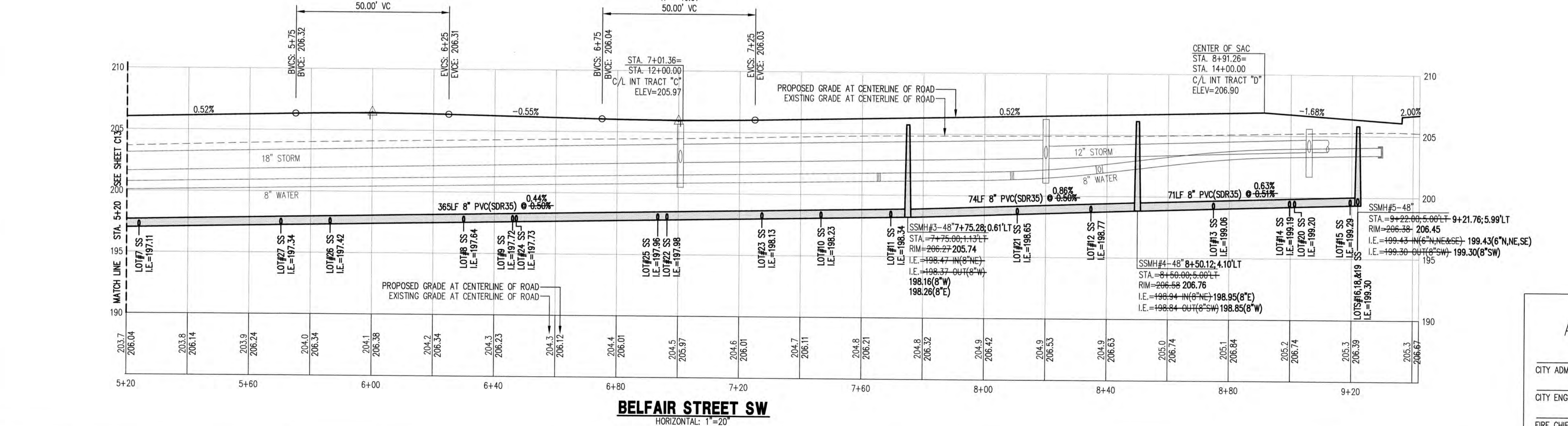


ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

LOT#	INVERT	SLOPE
7	200.08	7.03%
8	200.46	6.64%
9	199.57	4.38%
10	200.34	5.15%
11	200.72	5.84%
12	199.90	2.60%
13	200.91	2.73%
14	200.69	2.06%
15	202.70	2.08%
16	201.10	2.02%
17	N/A	N/A
18	200.25	2.24%
19	200.62	3.17%
20	201.51	3.87%
21	200.88	7.24%
22	201.45	2.08%
23	199.95	5.52%
24	200.57	8.91%
25	201.40	2.06%
26	200.12	9.19%
27	200.14	8.74%

HIGH POINT ELEV = 206.38
HIGH POINT STA = 5+99.23
PVI STA = 6+00
PVI ELEV = 206.45
A.D. = -1.07
K = 46.85
50.00' VC

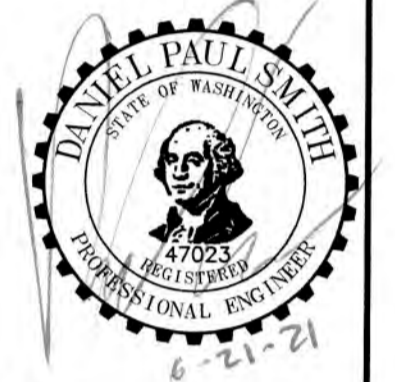
LOW POINT ELEV = 205.97
LOW POINT STA = 7+00.64
PVI STA = 7+00
PVI ELEV = 205.90
A.D. = 1.07
K = 46.61
50.00' VC



CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
409 29TH STREET, SUITE D
PUYALLUP, WA 98372
cesnw@cesnwinc.com

BELFAIR ESTATES
SANITARY SEWER - STA. 5+20 TO 9+42
BELFAIR STREET SW - PLAN & PROFILE
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH-ORTING, WA

Designed: DPS
Drawn: RWC
Checked: DPS
Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070
Sheet No.: **C14**
14 of 22 Sheets

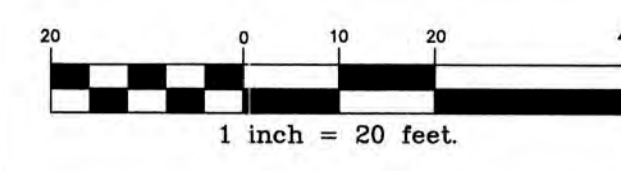
No.	Revision	Date
1	PER CITY COMMENTS	06.24.20
2	PER CITY COMMENTS	05.21.20

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

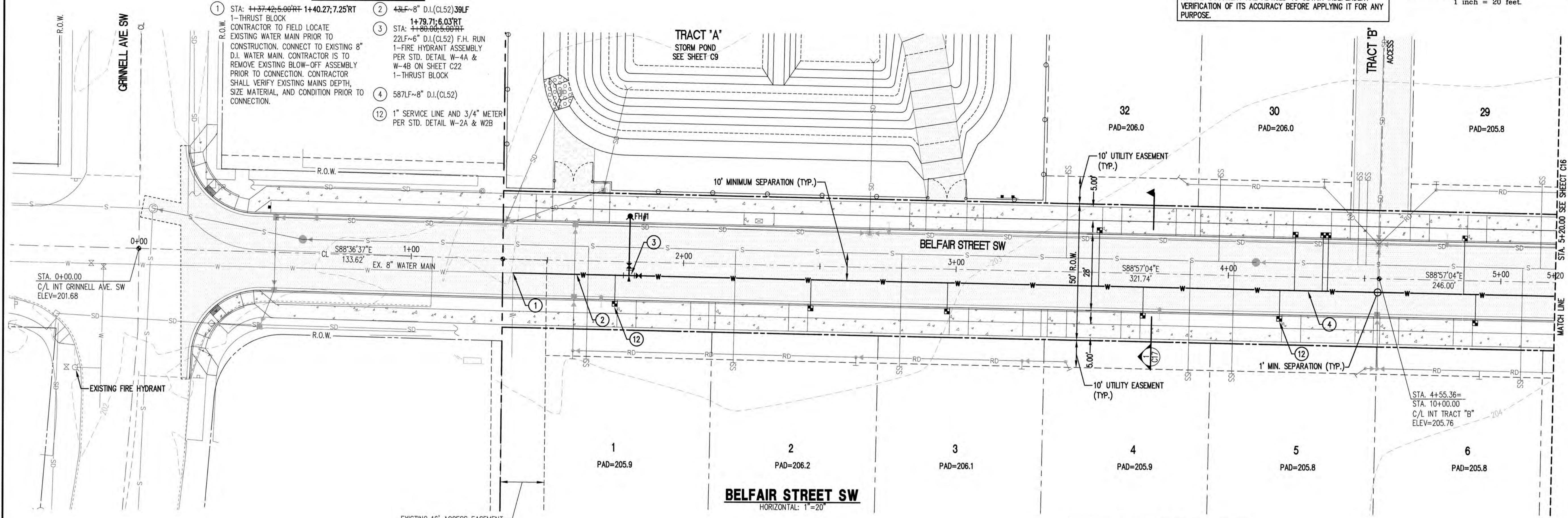
ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

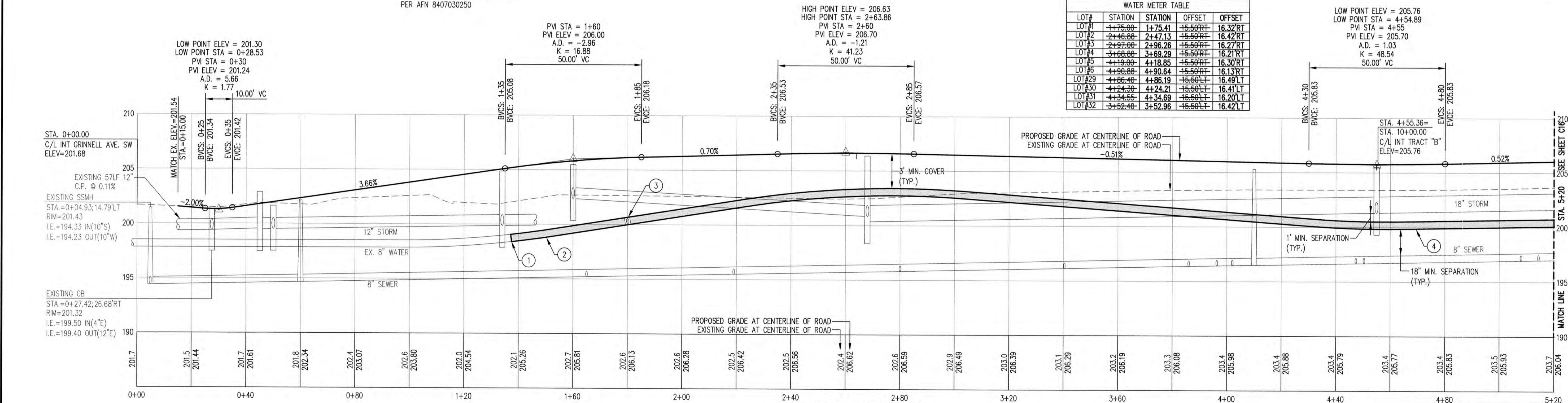


WATER KEY NOTES

- 1 STA: $+137.425.00$ RT $+140.27; 7.25$ RT
1-THRUST BLOCK
CONTRACTOR TO FIELD LOCATE EXISTING WATER MAIN PRIOR TO CONSTRUCTION. CONNECT TO EXISTING 8" D.I. WATER MAIN. CONTRACTOR IS TO REMOVE EXISTING BLOW-OFF ASSEMBLY PRIOR TO CONNECTION. CONTRACTOR SHALL VERIFY EXISTING MAINS DEPTH, SIZE MATERIAL, AND CONDITION PRIOR TO CONNECTION.
- 2 $43L\sim 8"$ D.I.(CL52) 39LF
 $1+79.71; 6.03$ RT
22LF $\sim 6"$ D.I.(CL52) F.H. RUN
1-FIRE HYDRANT ASSEMBLY PER STD. DETAIL W-4A & W-4B ON SHEET C22
1-THRUST BLOCK
- 3 STA: $+189.00; 5.00$ RT
22LF $\sim 6"$ D.I.(CL52) F.H. RUN
1-FIRE HYDRANT ASSEMBLY PER STD. DETAIL W-4A & W-4B ON SHEET C22
1-THRUST BLOCK
- 4 $587L\sim 8"$ D.I.(CL52)
- 12 1" SERVICE LINE AND 3/4" METER PER STD. DETAIL W-2A & W2B



LOT#	STATION	STATION	OFFSET	OFFSET
LOT#1	1+75.00	1+75.41	15.50'RT	16.32'RT
LOT#2	2+46.50	2+47.13	15.50'RT	16.42'RT
LOT#3	2+57.50	2+58.26	15.50'RT	16.27'RT
LOT#4	3+69.50	3+69.29	15.50'RT	16.21'RT
LOT#5	4+19.00	4+18.85	15.50'RT	16.30'RT
LOT#6	4+29.00	4+29.64	15.50'RT	16.13'RT
LOT#29	4+36.40	4+36.19	15.50'LT	16.49'LT
LOT#30	4+24.20	4+24.21	15.50'LT	16.41'LT
LOT#31	4+34.55	4+34.69	15.50'LT	16.20'LT
LOT#32	3+52.40	3+52.96	15.50'LT	16.42'LT



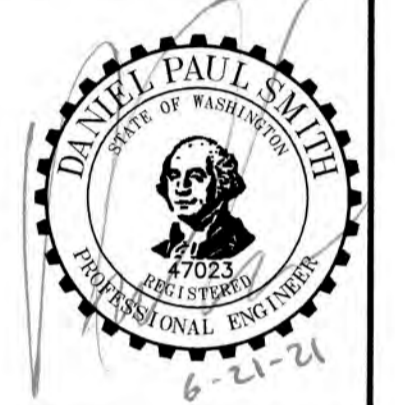
BELFAIR STREET SW
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

No.	Revision:	Date:
1	PER CITY COMMENTS	06.24.20
2	PER CITY COMMENTS	05.21.20



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
408 20TH STREET SUITE D
RYDALUP, WA 98072
ceser@cesnwinc.com

BELFAIR ESTATES
WATER - STA. 0+00 TO STA. 5+20
BELFAIR STREET SW - PLAN & PROFILE
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

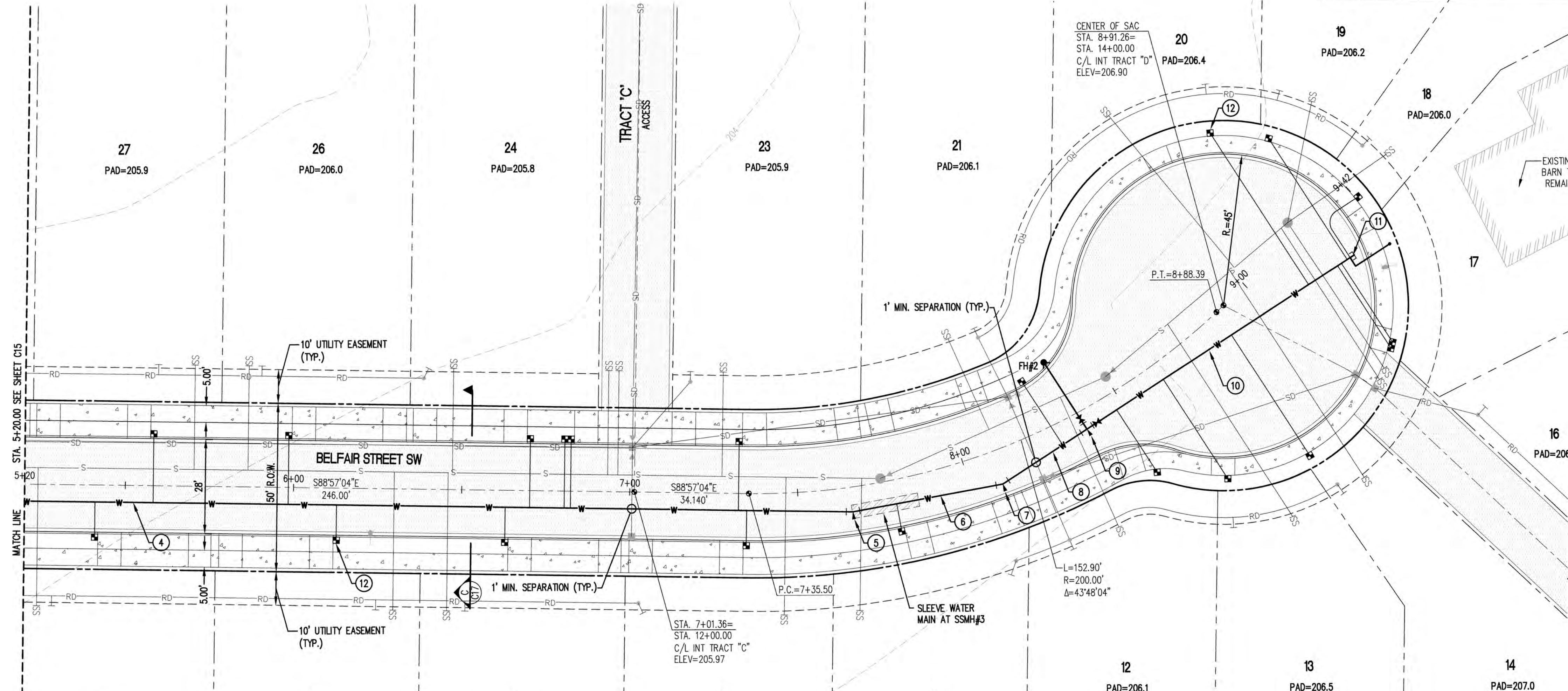
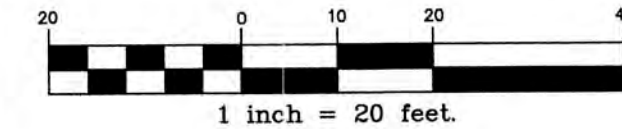
Designed: DPS
Drawn: RWG
Checked: DPS
Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070
Sheet No.: **C15**
15 of 22 Sheets

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



WATER METER TABLE

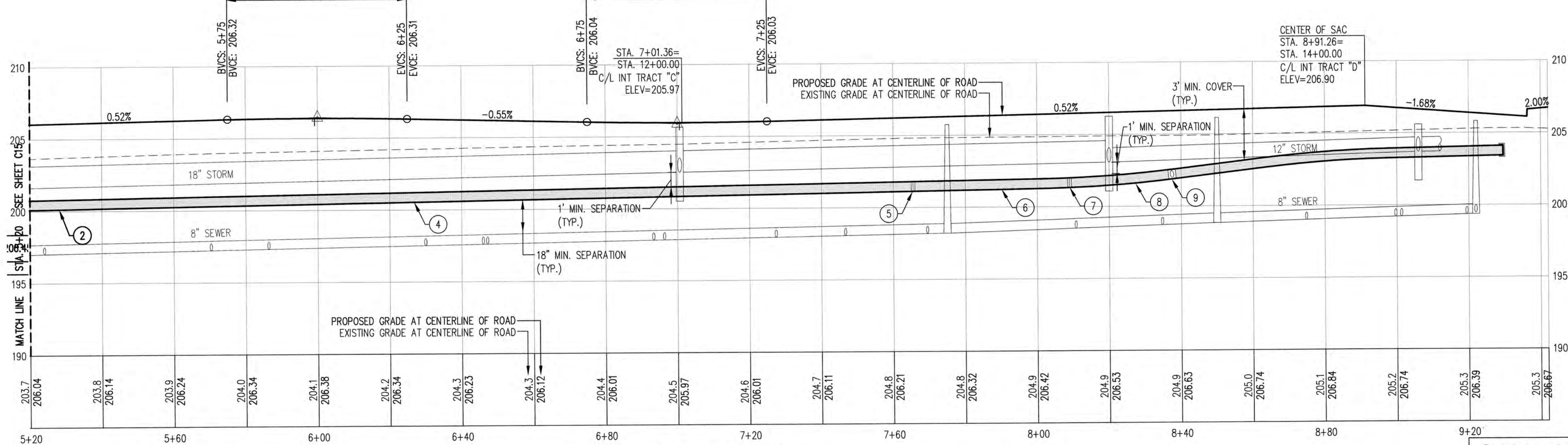
LOT#	STATION	STATION	OFFSET	OFFSET
LOT#7	5+41.00	5+40.07	-15.50 RT	16.36 RT
LOT#8	6+12.00	6+13.00	-15.50 RT	16.22 RT
LOT#9	6+63.00	6+63.34	-15.50 RT	16.12 RT
LOT#10	7+34.00	7+34.83	-15.50 RT	16.07 RT
LOT#11	7+78.15	7+78.02	-15.50 RT	16.22 RT
LOT#12	8+46.20	8+47.35	-27.50 RT	28.44 RT
LOT#13	8+62.30	8+61.46	-40.50 RT	40.68 RT
LOT#14	9+01.30	8+81.43	-50.25 RT	51.30 RT
LOT#15	9+19.14	9+20.25	-43.21 RT	43.52 RT
LOT#16	9+20.79	9+21.37	-42.10 RT	42.51 RT
LOT#17	EXISTING METER			
LOT#18	9+42.00	9+43.56	-3.62 RT	4.21 RT
LOT#19	9+35.00	9+35.55	-27.14 RT	27.86 RT
LOT#20	9+23.70	9+24.22	-40.22 RT	40.64 RT
LOT#21	8+26.20	8+26.66	-15.65 RT	16.66 RT
LOT#22	6+82.40	6+82.60	-15.50 RT	16.39 RT
LOT#23	7+32.42	7+32.73	-15.50 RT	16.35 RT
LOT#24	6+76.30	6+70.20	-15.50 RT	16.21 RT
LOT#25	6+88.50	6+80.50	-15.50 RT	16.34 RT
LOT#26	5+99.40	5+98.30	-15.50 RT	16.24 RT
LOT#27	5+58.70	5+58.40	-15.50 RT	16.18 RT

8 BELFAIR STREET SW
PAD=206.1
HIGH POINT ELEV = 206.38
HIGH POINT STA = 5+99.23
PVI STA = 6+00
PVI ELEV = 206.45
A.D. = -1.07
K = 46.85
50.00' VC

9 BELFAIR STREET SW
PAD=205.8
HORIZONTAL: 1"=20'
LOW POINT ELEV = 205.97
LOW POINT STA = 7+00.64
PVI STA = 7+00
PVI ELEV = 205.90
A.D. = 1.07
K = 46.61
50.00' VC

WATER KEY NOTES

- ④ 587LF~8" D.I.(CL52)
- ⑤ STA: 7+65.50; 7.33'RT
1-8"x11.25" BEND(MJ)
1-THRUST BLOCK
- ⑥ 45LF~8" D.I.(CL52)
- ⑦ STA: 8+09.00; 10.20'RT
1-8"x22.50" BEND(MJ)
1-THRUST BLOCK
- ⑧ 30LF~8" D.I.(CL52)
- ⑨ STA: 8+37.35; 5.67'RT
24LF~6" D.I.(CL52) F.H. RUN
1-FIRE HYDRANT ASSEMBLY
PER STD. DETAIL W-4A & W-4B
1-THRUST BLOCK
- ⑩ 92LF
94LF~8" D.I.(CL52)
- ⑪ STA: 9+28.54; 15.24'RT
9+30.00; 15.42'RT
1-8" PLUG(MJ)
1-2" BLOW-OFF ASSEMBLY
PER STD. DETAIL W-7B
1-THRUST BLOCK
- ⑫ 1" SERVICE LINE AND 3/4" METER
PER STD. DETAIL W-2A & W2B



BELFAIR STREET SW
HORIZONTAL: 1"=20'

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

Project: BELFAIR ESTATES
WATER - STA. 5+20 TO STA. 9+42
BELFAIR STREET SW - PLAN & PROFILE

Client: HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWS
Checked: DPS

Scale: 1" = 20'
Date: 06.21.21
Job No.: 19070

Sheet No.: **C16**

16 of 22 Sheets

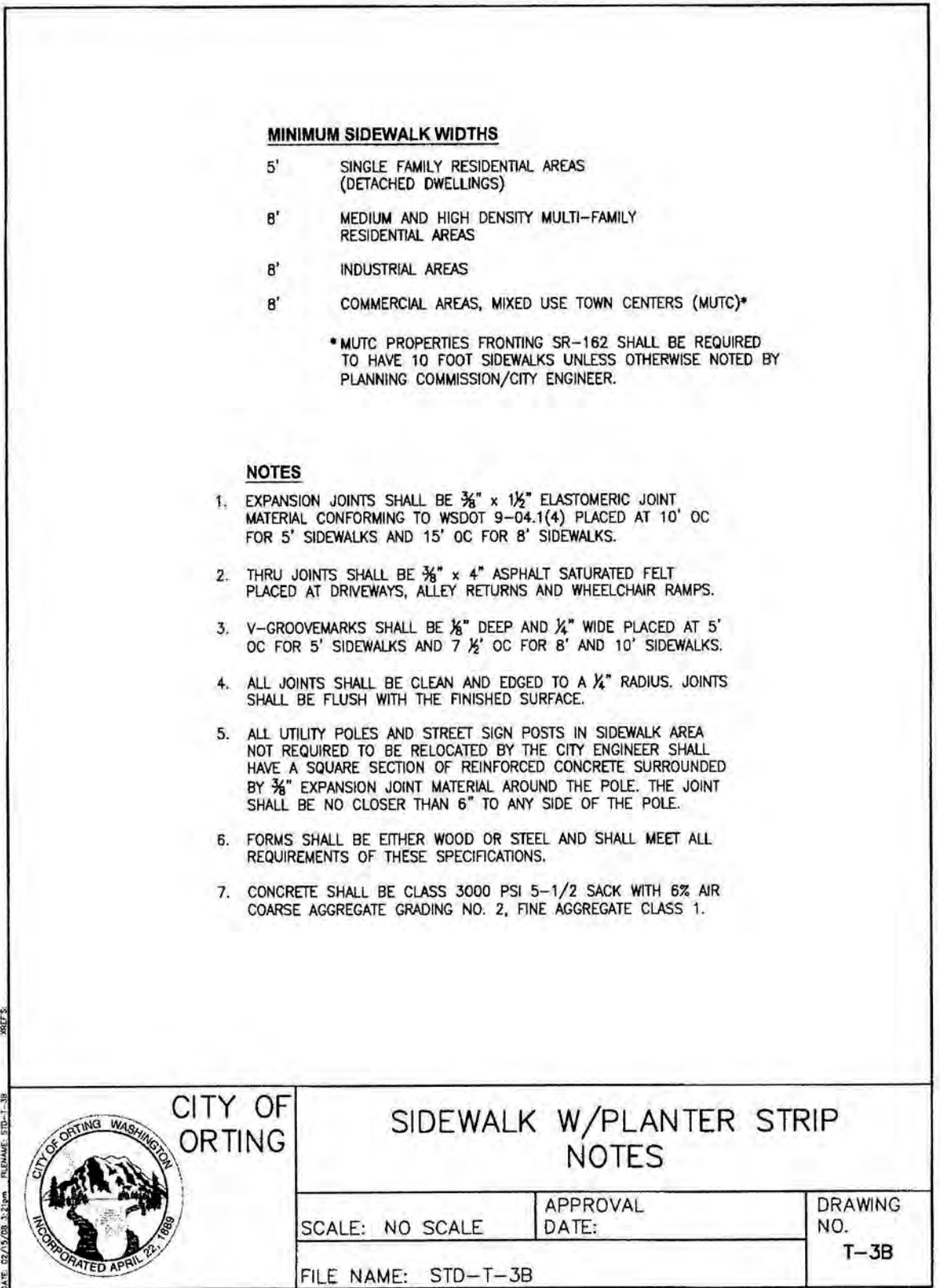
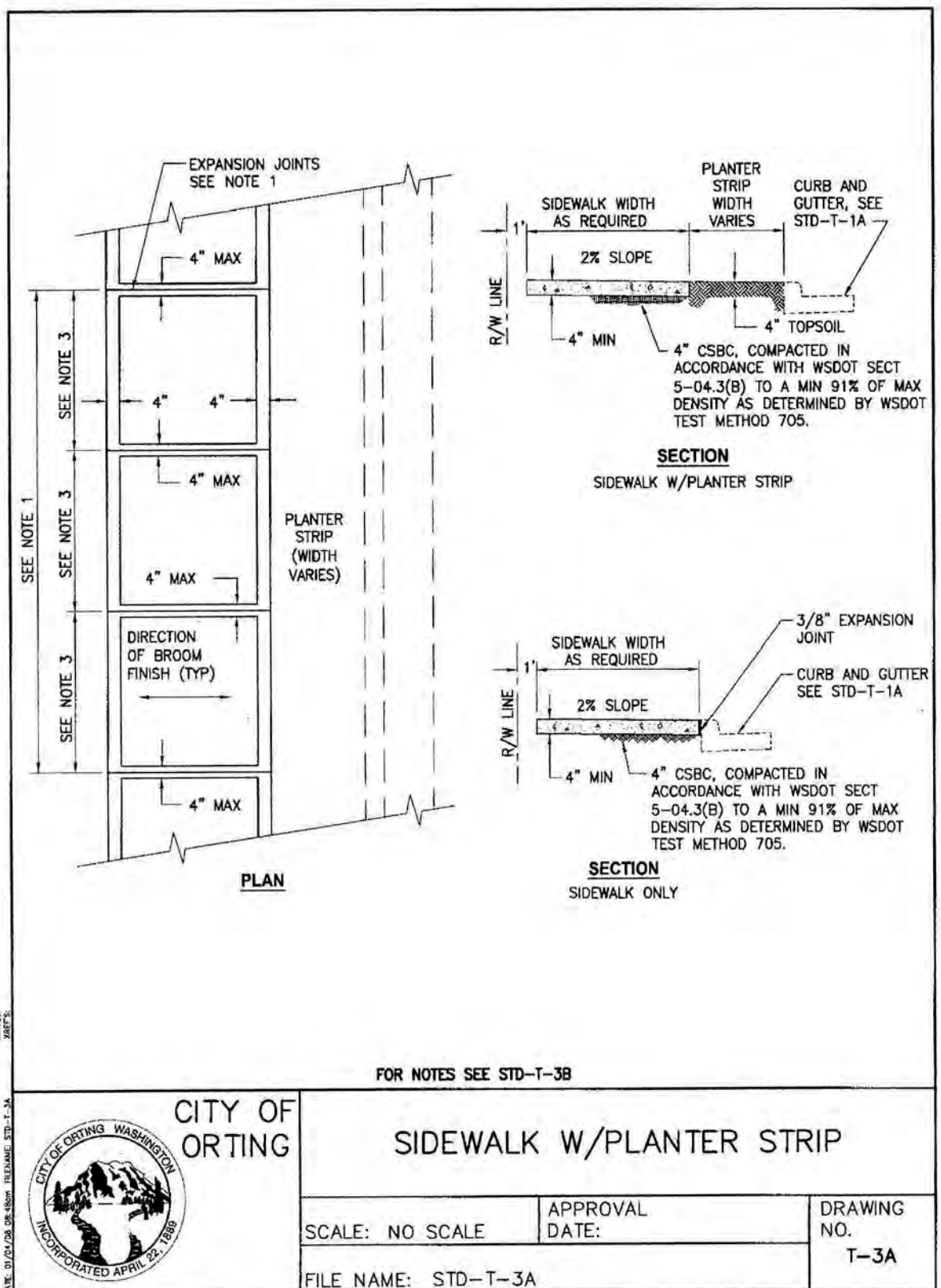
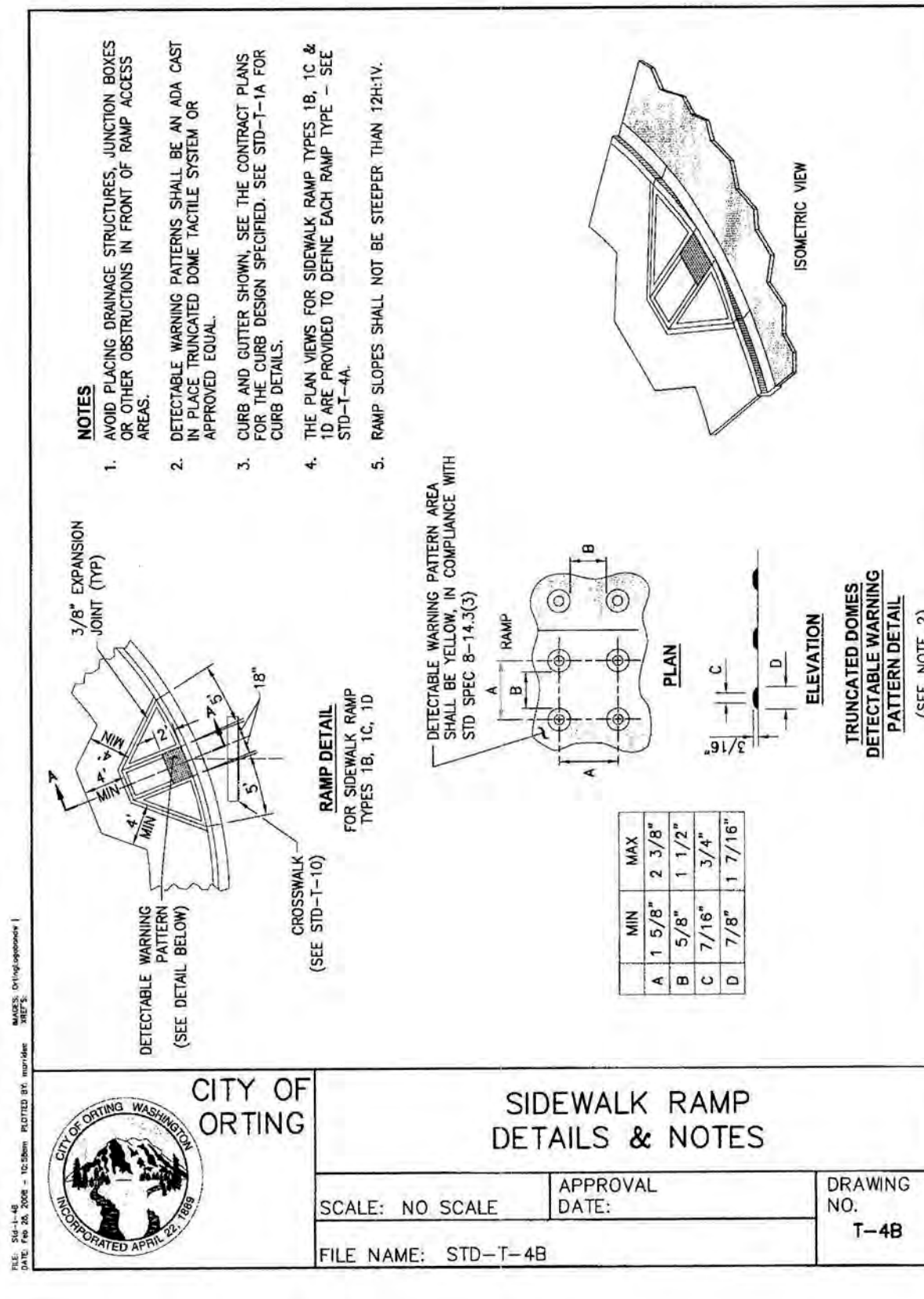
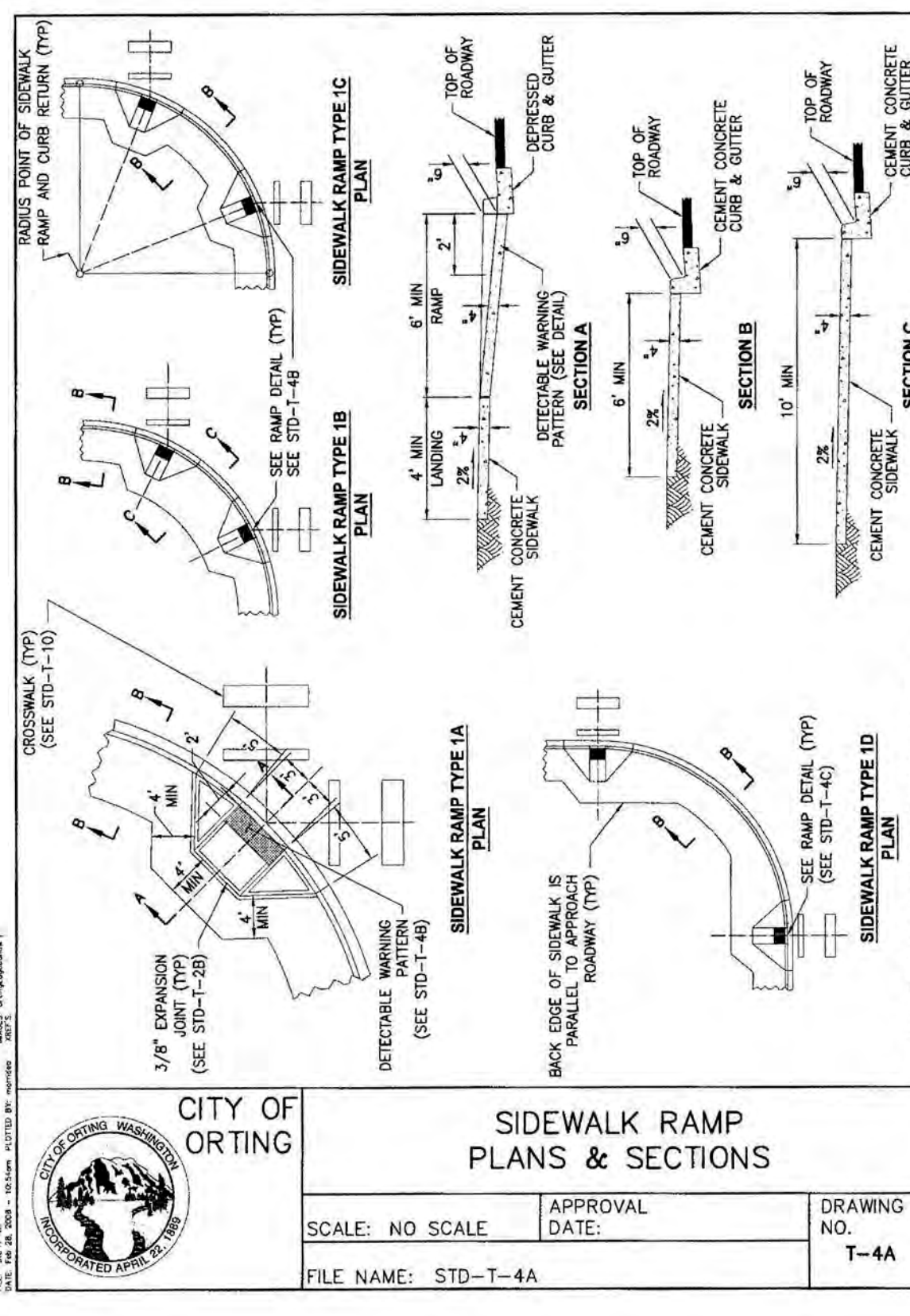
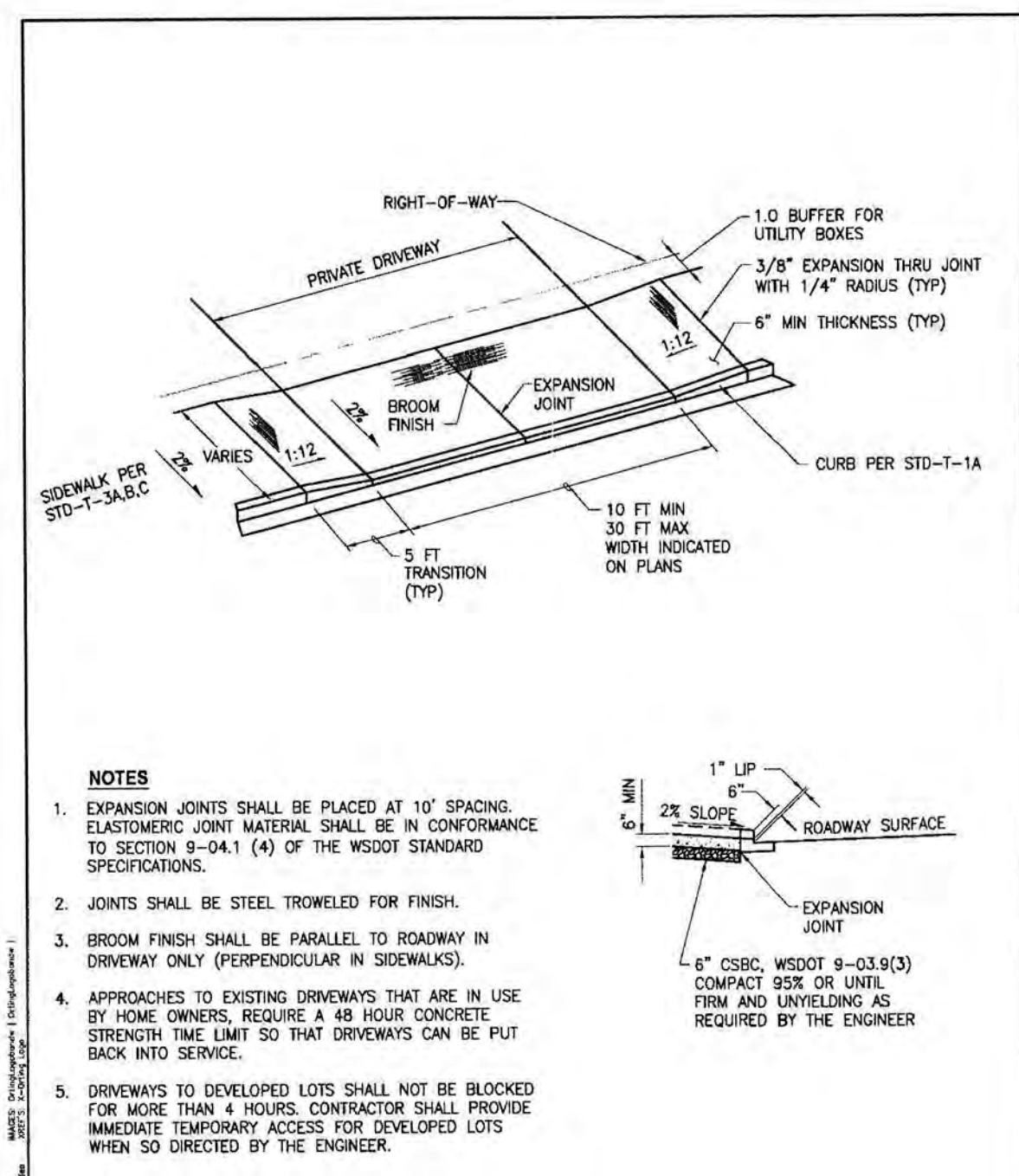
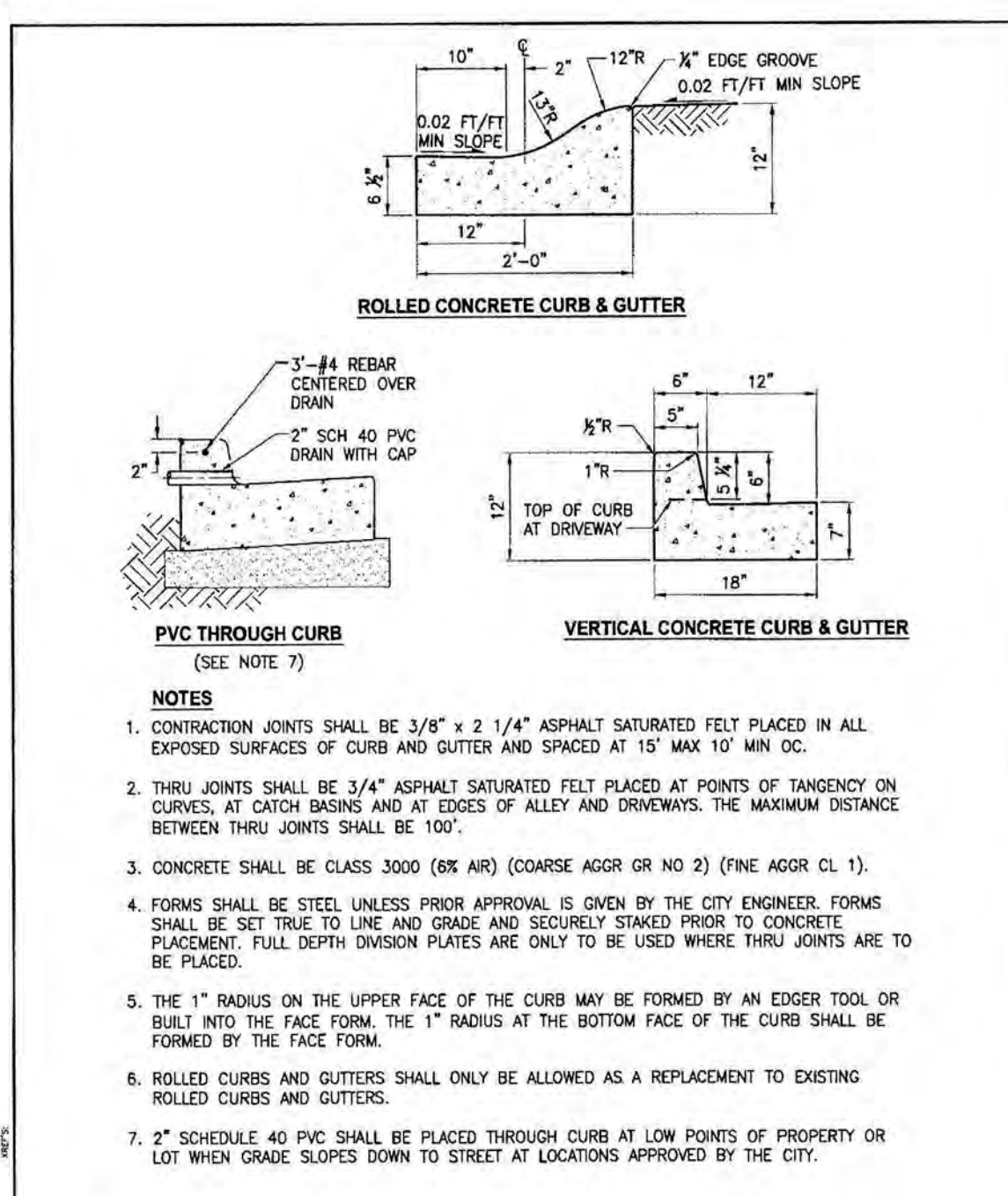
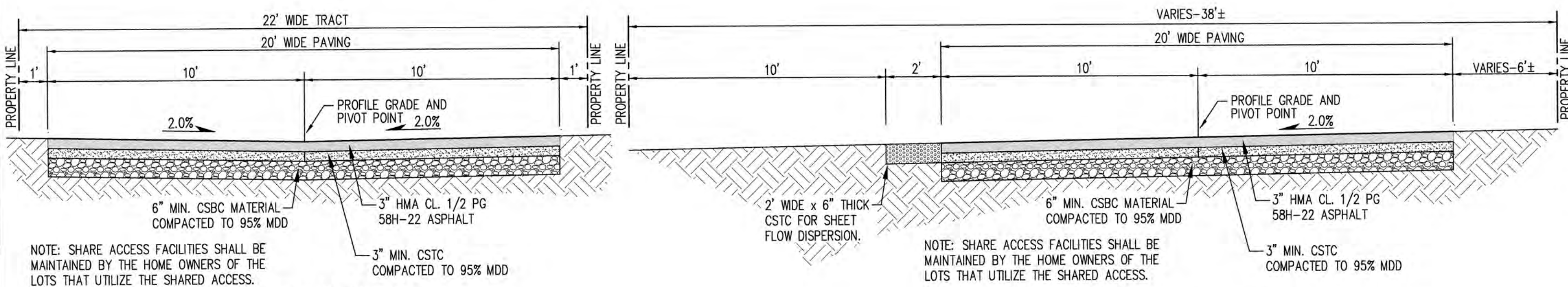
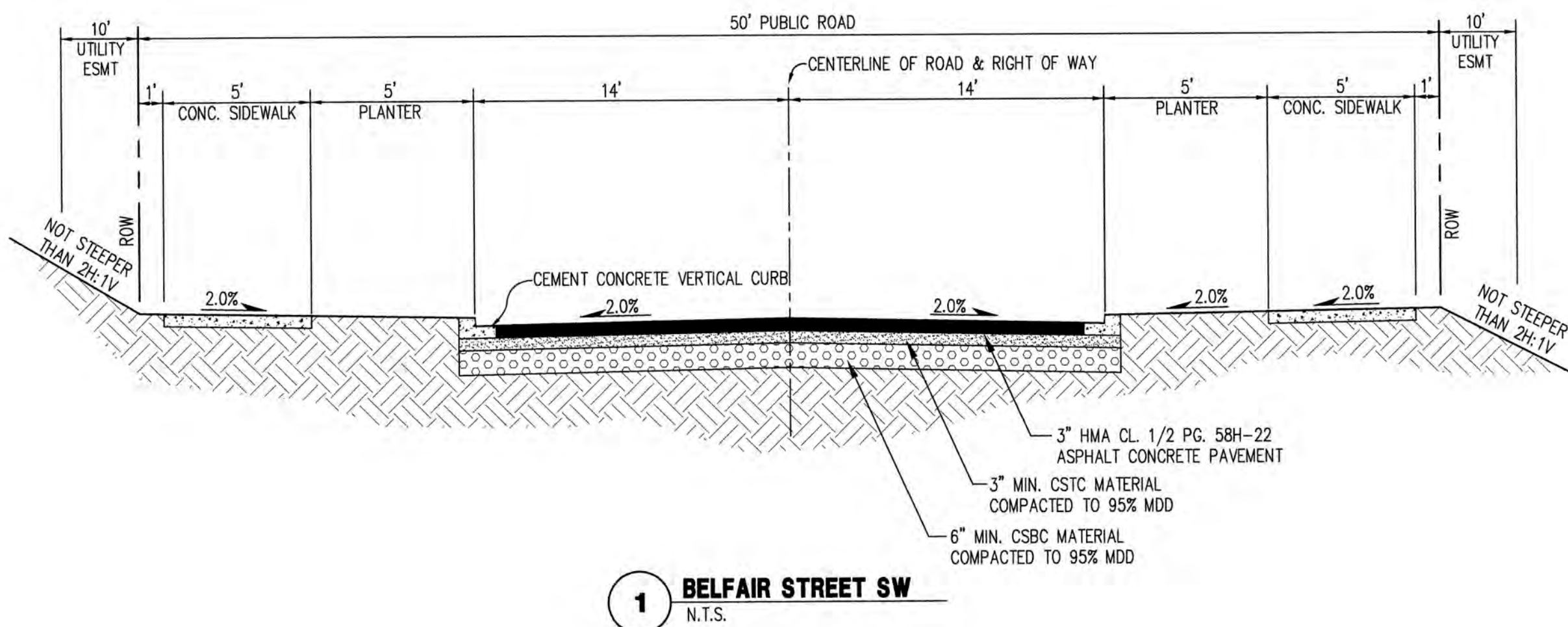
REVISIONS:

No.	Description	Date
3	REVISED KEYNOTE 9	07.01.20
2	PER CITY COMMENTS	06.24.20
1	PER CITY COMMENTS	05.21.20

Professional Engineer Seal: DANIEL PAUL SMITH, CIVIL ENGINEERING & SURVEYING, INC. License No. 62121

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON



ASBULT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVR's review limited to providing input on operational issues only. OVR has not reviewed the plans for Code compliance.

Project: BELFAIR ESTATES STREET NOTES & DETAILS

Client: HARMAN DEVELOPMENT, LLC

619 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: AS NOTED
Date: 06.21.20
Job No.: 19070

Sheet No.: **C17**

17 of 22 Sheets

Date: 06.24.20

PAS PER CITY COMMENTS

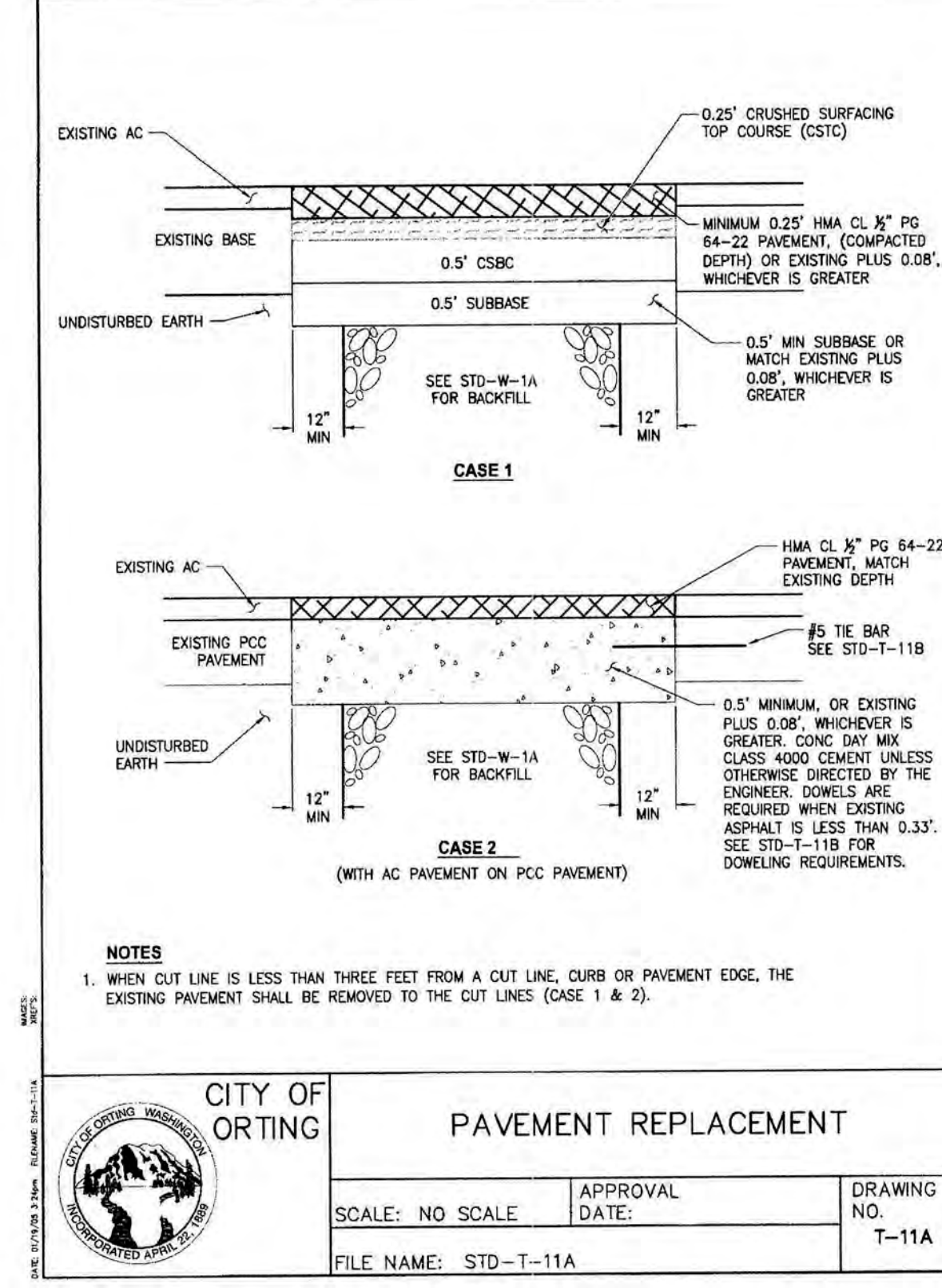
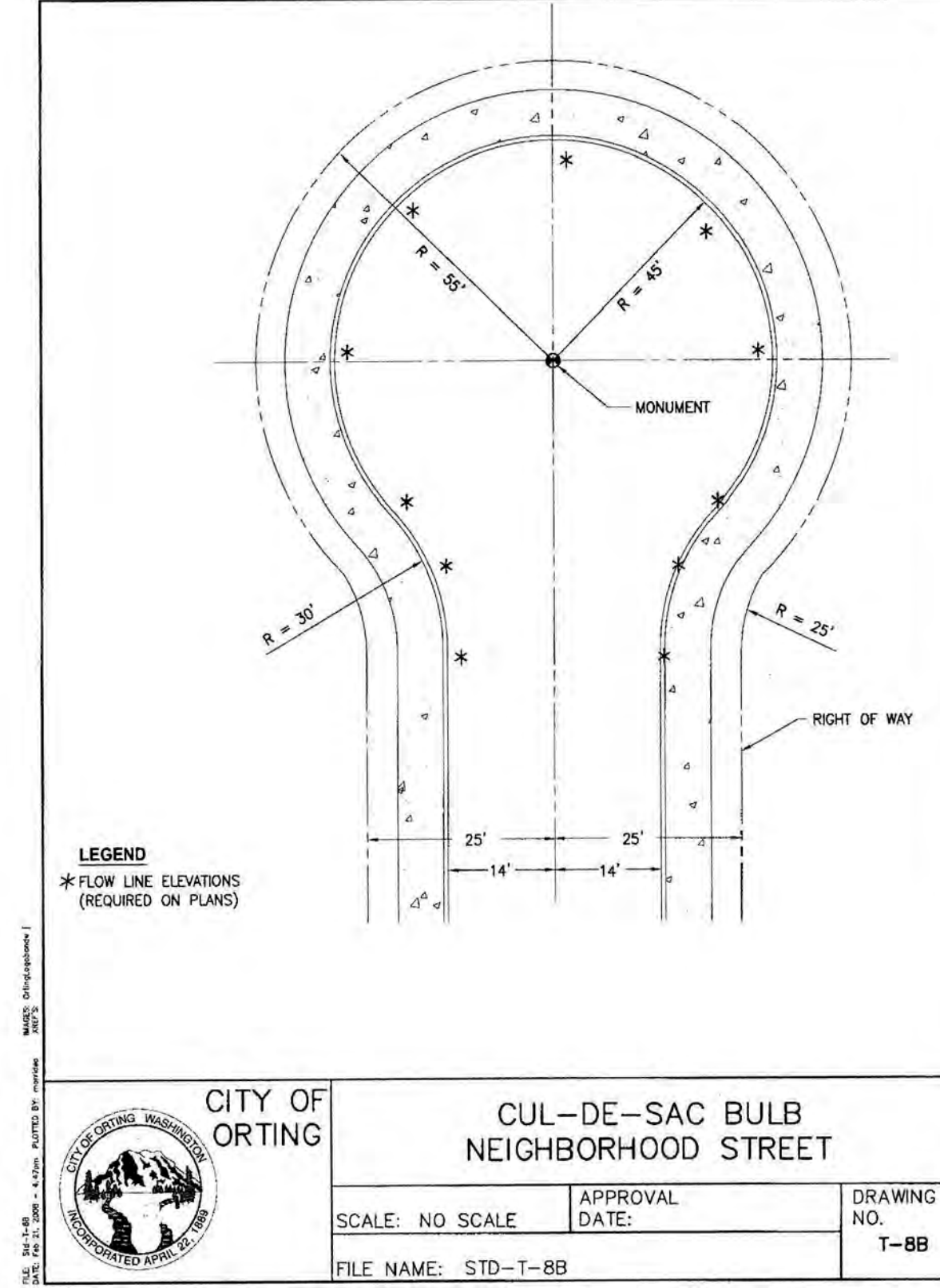
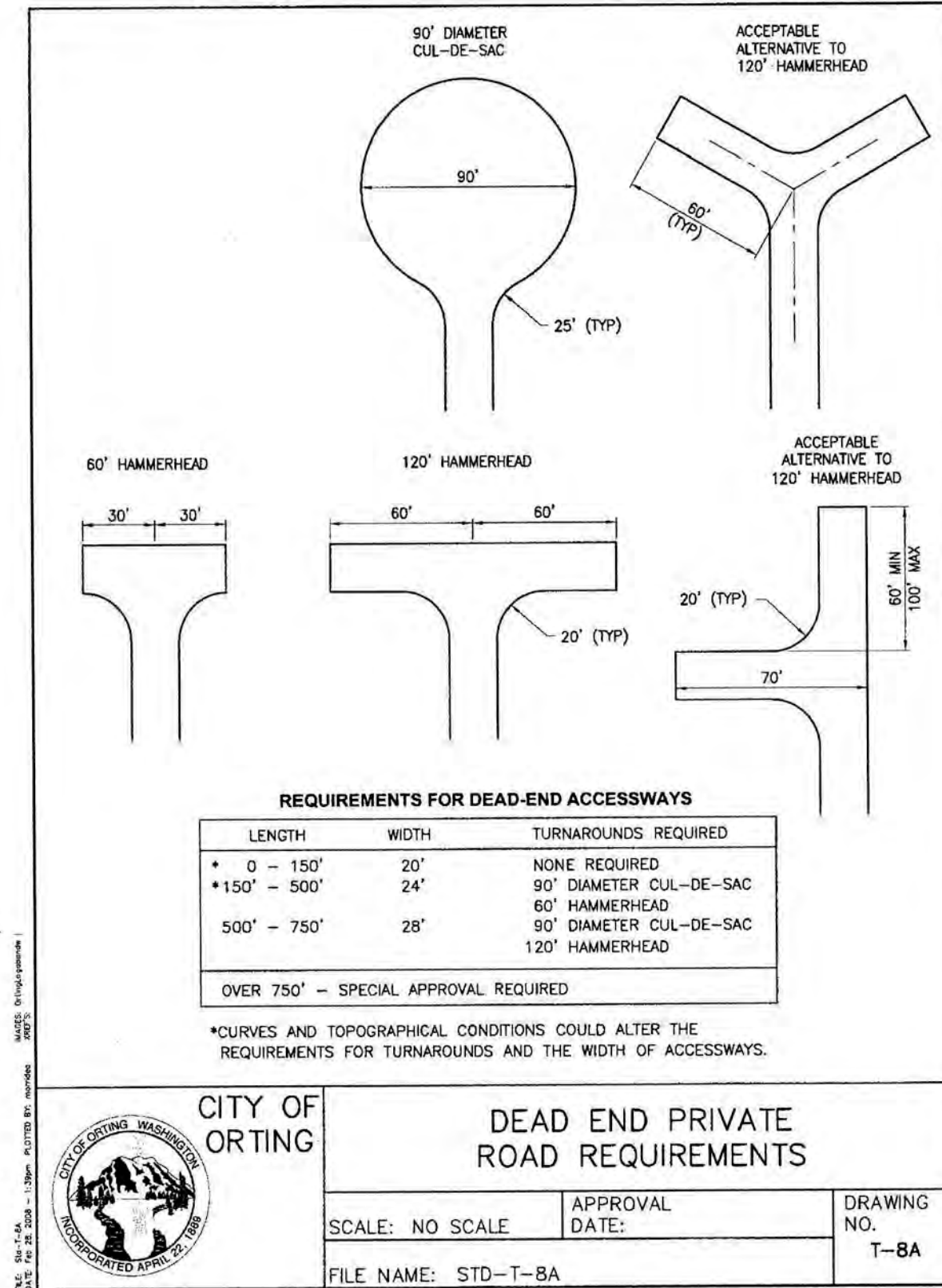
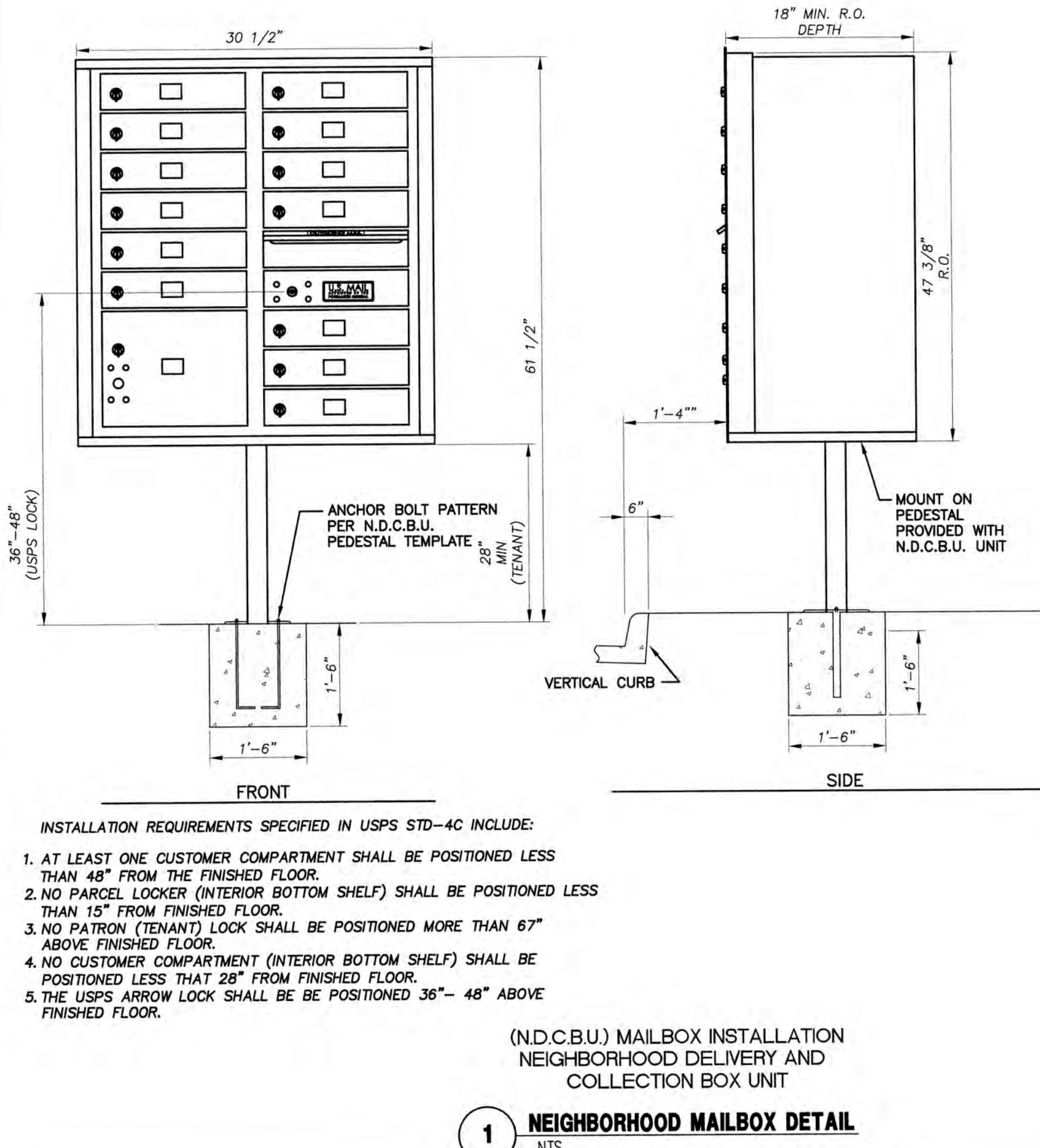
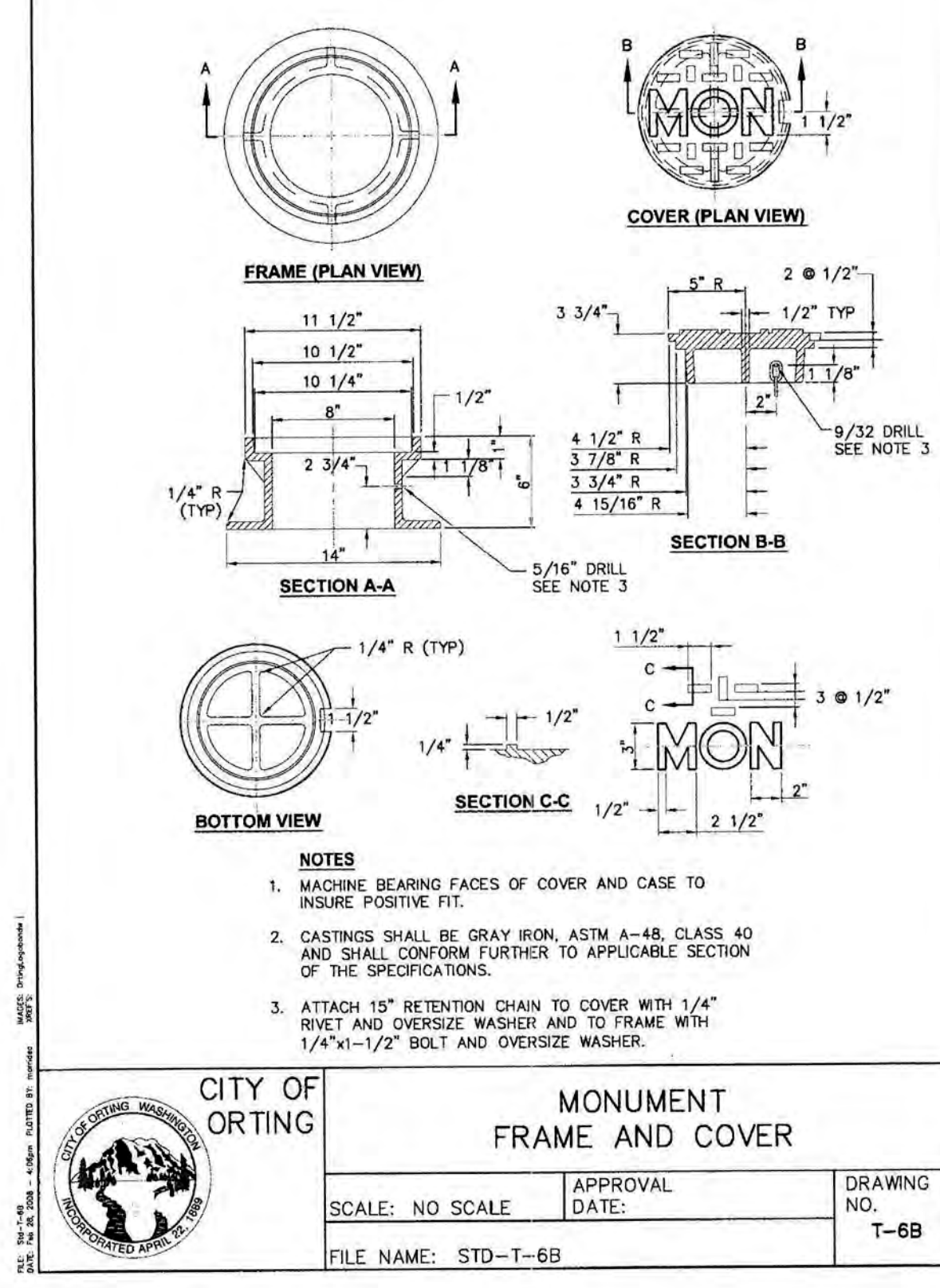
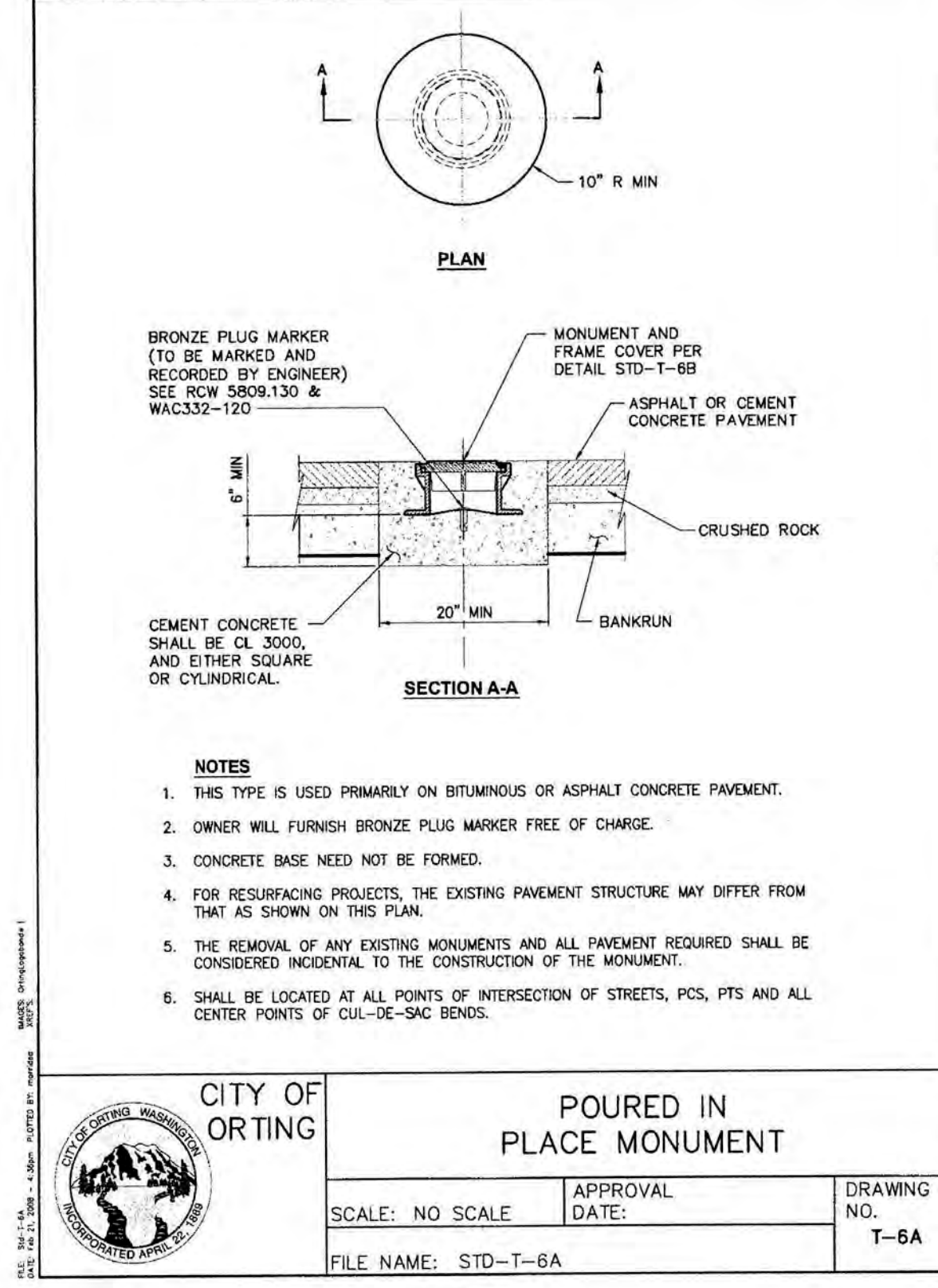
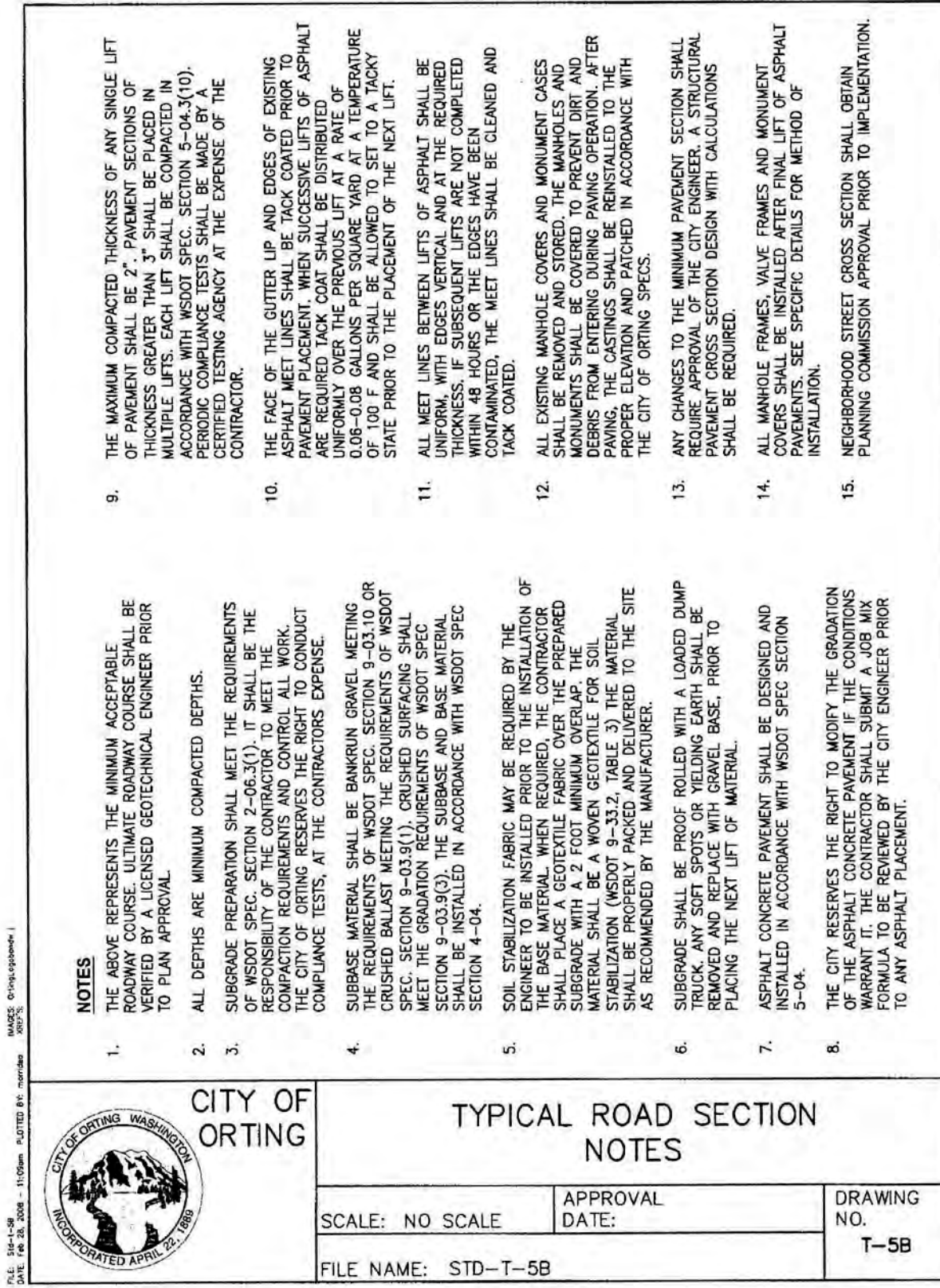
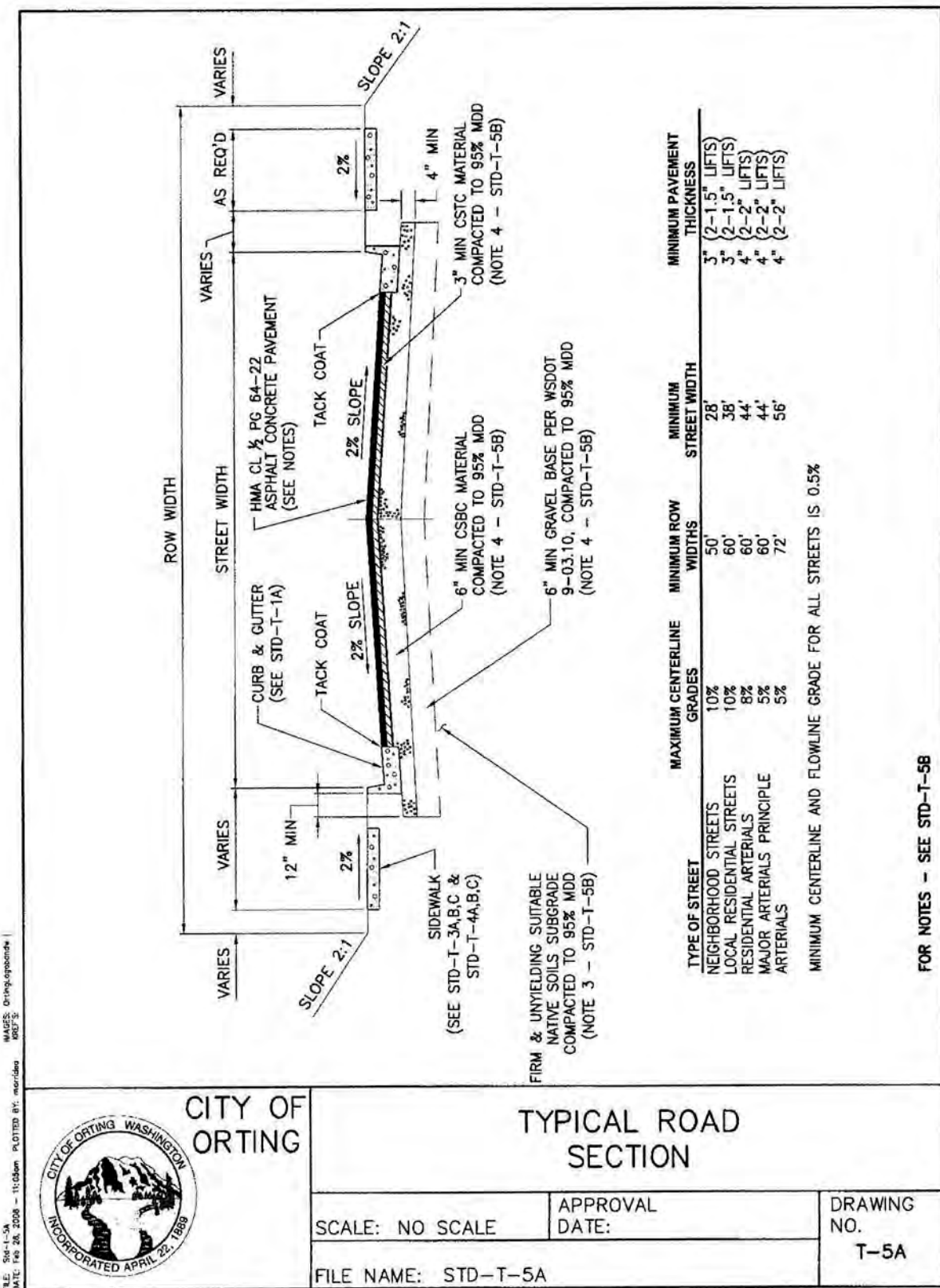
PAS PER CITY COMMENTS

Int. Revision:

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
PUYALLUP, WA 98372
Phone: (253) 848-4282
Email: cesnw@cesnwnw.com

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON



ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVER's review limited to providing input on operational issues only. OVER has not reviewed the plans for Code compliance.

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
PUYALLUP, WA 98372
Bus: (206) 648-4282
cesnwtnc@cesnwtnc.com

HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Project: _____
Client: _____

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: AS NOTED
Date: 06.21.20
Job No.: 19070

Sheet No.: **C18**
18 of 22 Sheets

Revision: _____
No. _____
Date: _____

PER CITY COMMENTS
PER CITY COMMENTS

DANIEL PAUL SMITH
REGISTERED PROFESSIONAL ENGINEER
NO. 47023
6-21-21

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N, RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

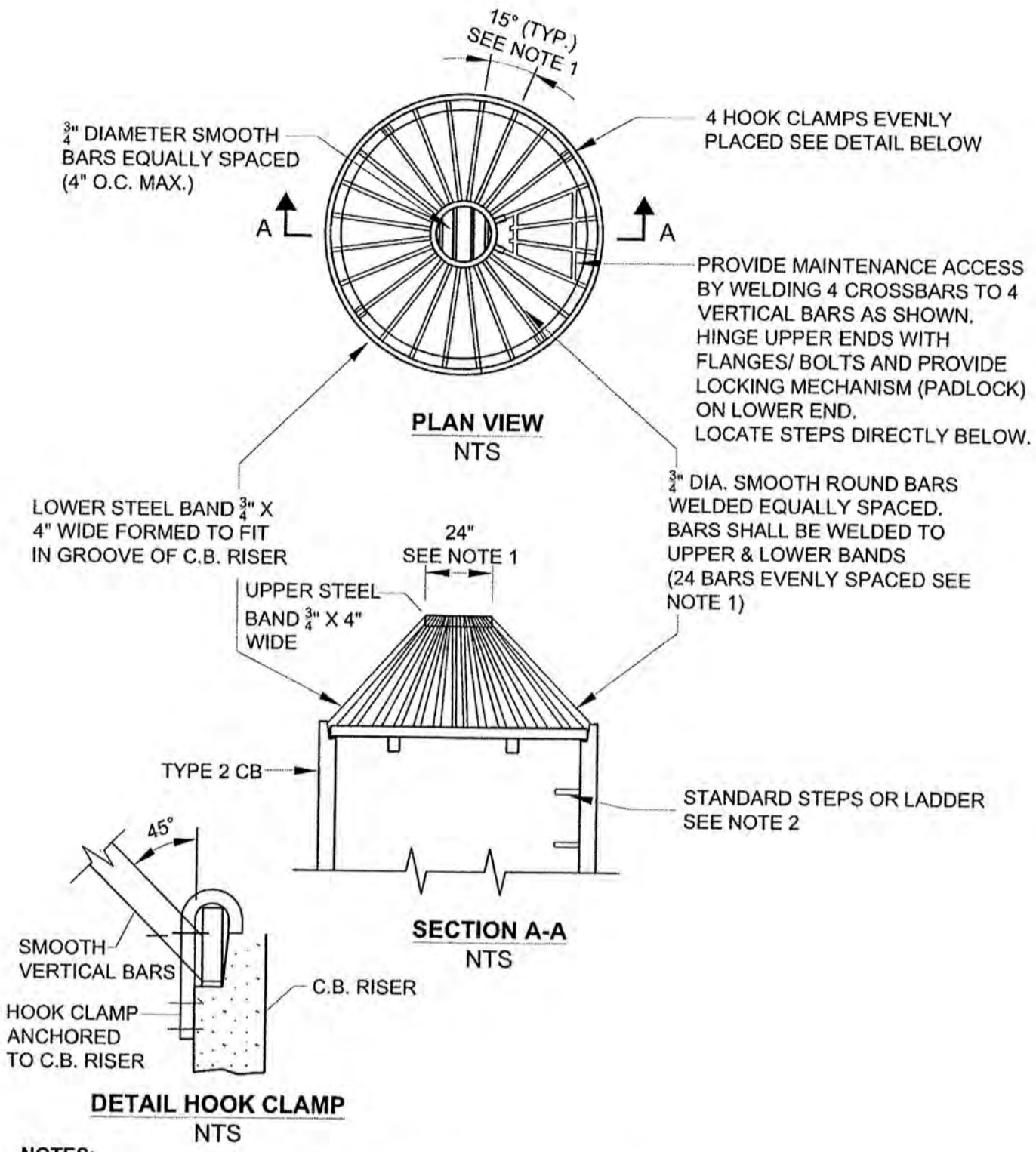
ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WERE FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

GENERAL NOTES

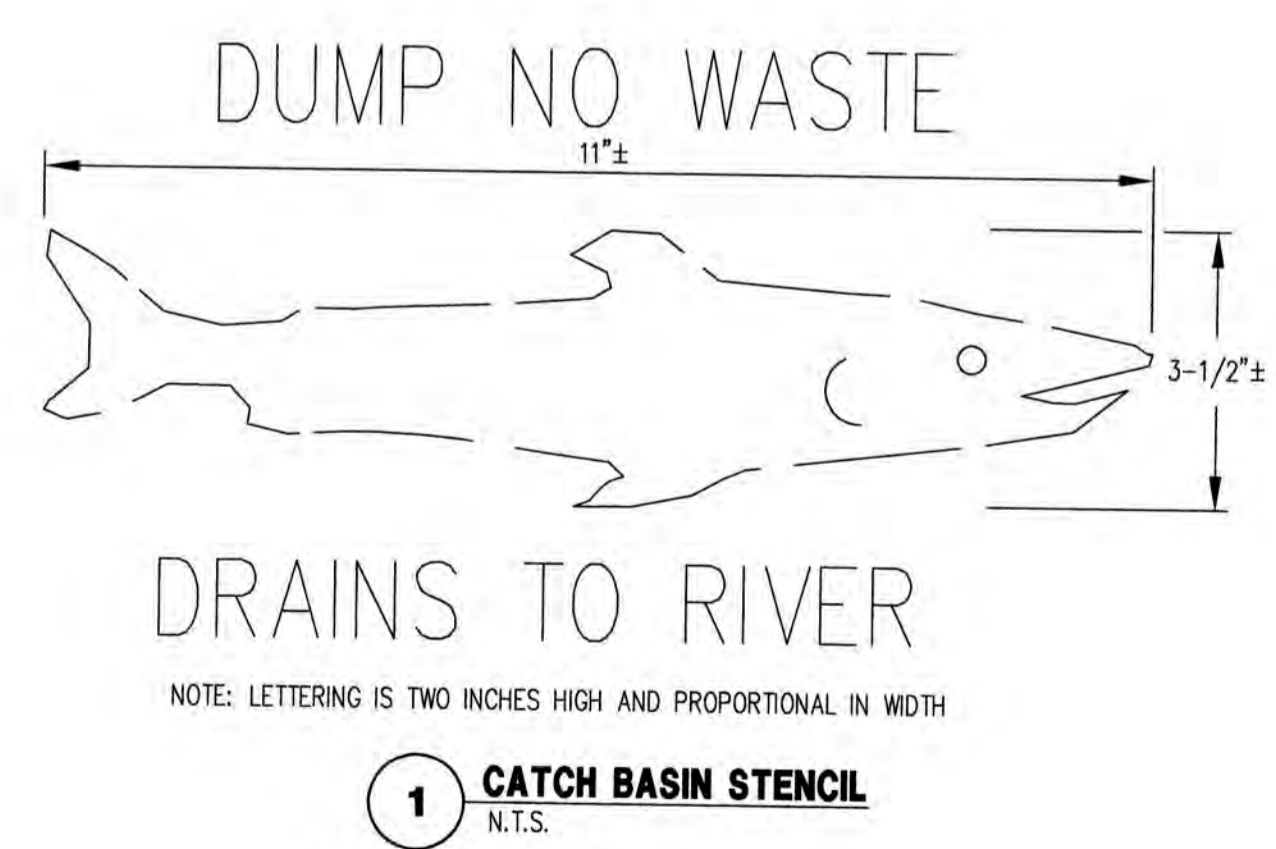
- THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT CITY HALL TO BE ATTENDED BY ALL MAJOR CONTRACTORS, REPRESENTATIVES OF INVOLVED UTILITIES, AND THE CITY OF ORTING. CONTACT THE PUBLIC WORKS ENGINEERING DIVISION TO SCHEDULE THE MEETING. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO FINAL ACCEPTANCE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF ORTING CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO ANY IMPLEMENTATION IN THE FIELD.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE TRUE ELEVATIONS AND LOCATIONS OF UTILITIES.
- ALL CONSTRUCTION SURVEYING FOR EXTENSIONS OF PUBLIC FACILITIES SHALL BE DONE UNDER THE DIRECTION OF A WASHINGTON STATE LICENSED LAND SURVEYOR OR A WASHINGTON STATE LICENSED PROFESSIONAL CIVIL ENGINEER.
- FRONT PROPERTY CORNERS SHALL BE SET BY A LAND SURVEYOR LICENSED IN THE STATE OF WASHINGTON PRIOR TO THE START OF CONSTRUCTION.
- DURING CONSTRUCTION, ALL PUBLIC STREETS ADJACENT TO THIS PROJECT SHALL BE KEPT CLEAN OF ALL MATERIAL DEPOSITS RESULTING FROM ON-SITE CONSTRUCTION, AND EXISTING STRUCTURES SHALL BE PROTECTED AS DIRECTED BY THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING HOMEOWNERS OF THE INTENDED CONSTRUCTION SCHEDULE.
- CERTIFIED RECORD DRAWINGS ARE REQUIRED PRIOR TO PROJECT ACCEPTANCE.
- A NPDES STORMWATER GENERAL PERMIT MAY BE REQUIRED BY THE DEPARTMENT OF ECOLOGY FOR THIS PROJECT. FOR INFORMATION CONTACT THE DEPARTMENT OF ECOLOGY (360-407-6300).
- ANY DISTURBANCE OR DAMAGE TO CRITICAL AREAS AND ASSOCIATED BUFFERS, OR SIGNIFICANT TREES FOR PRESERVATION AND PROTECTION SHALL BE MITIGATED IN ACCORDANCE WITH A MITIGATION PLAN REVIEWED AND APPROVED BY THE CITY'S PLANNING DIVISION.
- NO SURVEY MONUMENT SHALL BE REMOVED OR DESTROYED (THE PHYSICAL DISTURBANCE OR COVERING OF A MONUMENT SUCH THAT THE SURVEY POINT IS NO LONGER VISIBLE OR READILY ACCESSIBLE) BEFORE A PERMIT IS OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES (DNR). WAC 332-120-030(2) STATES "IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING CONSTRUCTION WORK OR OTHER ACTIVITY (INCLUDING ROAD AND STREET RESURFACING PROJECTS) TO ADEQUATELY SEARCH THE RECORDS AND THE PHYSICAL AREA OF THE PROPOSED CONSTRUCTION WORK OR OTHER ACTIVITY FOR THE PURPOSE OF LOCATING AND REFERENCING ANY KNOWN OR EXISTING SURVEY MONUMENTS." CONSTRUCTION SHALL NOT COMMENCE UNTIL WAC OUTLINED IN CHAPTER 332-120 IS COMPLIED WITH. SURVEY MONUMENTS SUBJECT TO WAC 332-120-030(2) INCLUDE LOCAL CONTROL POINTS AND LAND BOUNDARY SURVEY CORNERS.
- CONTRACTOR SHALL USE ENVIRONMENTALLY ACCEPTABLE LUBRICANTS COMPOSED OF BIODEGRADABLE BASE OILS SUCH AS VEGETABLE OILS, SYNTHETIC ESTERS, AND POLYALKYLENE GLYCOLS IN EQUIPMENT OPERATED IN OR NEAR THE WATER.
- PIPE BEDDING SHALL CONFORM TO 9-03.12(3) AND SHALL EXTEND 6 INCHES ABOVE AND BELOW THE PIPE. THE BASE OF THE EXCAVATION SHOULD BE AS DRY AS POSSIBLE AND ALL LOOSENED SOIL, ORGANIC MATERIAL AND OTHER DEBRIS REMOVED. ANY BEDDING MATERIAL SHOULD BE PLACED ON A FIRM NON-YIELDING, RELATIVELY DRY SUBGRADE. THE TOP 6 INCHES OF BEDDING SHOULD BE CONTOURED TO FIT THE PIPE. PIPE ZONE MATERIAL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 6 INCHES (LOOSE THICKNESS), COMPACTED TO 90 PERCENT DENSITY AS THE STANDARD (ASTM D 1557), AND SHOULD BE BROUGHT UP EVENLY ON BOTH SIDES OF THE PIPE FOR ITS FULL LENGTH UP TO AT LEAST 6 INCHES ABOVE THE TOP OF THE PIPE. COMPACTION WITHIN THE PIPE ZONE SHOULD BE ACCOMPLISHED WITH HAND-OPERATED LIGHTWEIGHT EQUIPMENT AS APPROVED BY THE PIPELINE MANUFACTURER TO AVOID PIPE DAMAGE.

STREET NOTES

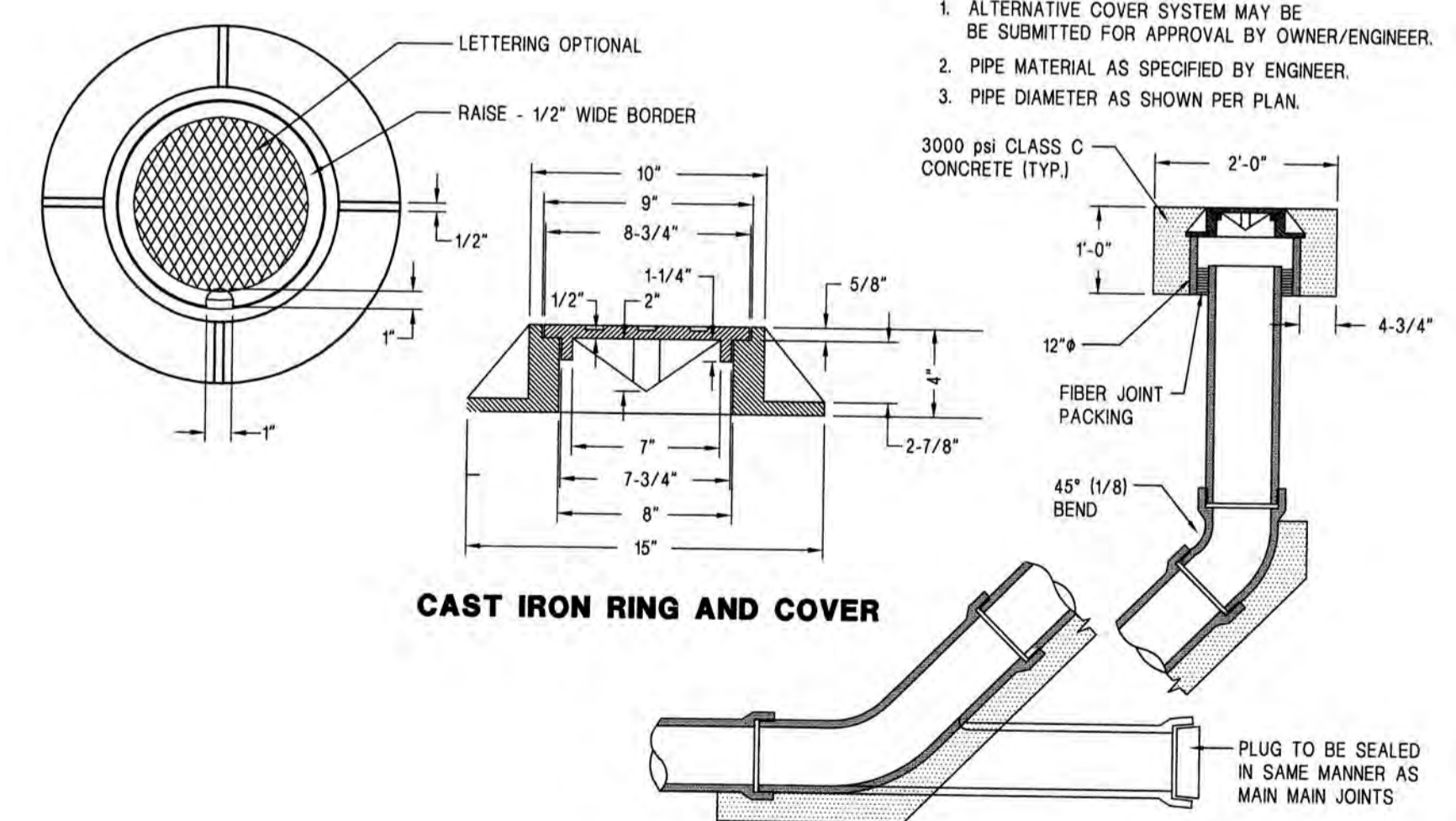
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH THE MUTCD MANUAL. PRIOR TO DISRUPTION OF ANY TRAFFIC, TRAFFIC CONTROL PLANS SHALL BE PREPARED AND SUBMITTED TO THE CITY FOR POSSIBLE APPROVAL. NO WORK SHALL COMMENCE UNTIL ALL APPROVED TRAFFIC CONTROL IS IN PLACE. WORK SHALL CEASE WHEN TRAFFIC CONTROL FAILS TO MEET MINIMUM REQUIREMENTS.
- ALL CURB AND GUTTER, STREET GRADES, SIDEWALK GRADES, AND ANY OTHER VERTICAL AND/OR HORIZONTAL ALIGNMENT SHALL BE STAKED BY AN ENGINEERING OR SURVEYING FIRM CAPABLE OF PERFORMING SUCH WORK. SUCH FIRMS SHALL BE CURRENTLY LICENSED IN THE STATE OF WASHINGTON TO PERFORM SUCH WORK.
- WHERE NEW ASPHALT JOINS EXISTING, THE EXISTING ASPHALT SHALL BE CUT TO A NEAT VERTICAL EDGE AND TACKED WITH ASPHALT EMULSION TYPE CSS 1 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE NEW ASPHALT SHALL BE FEATHERED BACK OVER EXISTING TO PROVIDE FOR A SEAL AT THE SAW CUT LOCATION AND THE JOINT SEALED WITH GRADE AR-4000W PAVING ASPHALT. A SAND BLANKET SHALL BE APPLIED TO THE SURFACE TO MINIMIZE "TRACKING" OF SAME.
- COMPACTION OF SUBGRADE, ROCK, AND ASPHALT SHALL BE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATIONS.
- FORM AND SUBGRADE INSPECTION BY THE CITY IS REQUIRED BEFORE POURING CONCRETE. A MINIMUM TWO (2) WORKING DAYS NOTICE ARE REQUIRED TO BE PROVIDED TO THE CITY OBSERVER FOR FORM INSPECTION.
- ALL STREETS, CURB AND GUTTERS, SIDEWALKS, AND ASSOCIATED APPURTENANCES SHALL BE CLEANED TO THE SATISFACTION OF THE CITY PRIOR TO FINAL ACCEPTANCE.



- NOTES:**
- DIMENSIONS ARE FOR ILLUSTRATION ON 54" DIAMETER CB. FOR DIFFERENT DIAMETER CB'S ADJUST TO MAINTAIN 45° ANGLE ON "VERTICAL" BARS AND 7" O.C. MAXIMUM SPACING OF BARS AROUND LOWER STEEL BAND.
 - METAL PARTS MUST BE CORROSION RESISTANT; BARS MUST BE STAINLESS STEEL OR ALUMINIZED STEEL.
 - THIS DEBRIS BARRIER IS ALSO RECOMMENDED FOR USE ON THE INLET TO ROADWAY CROSS-CULVERTS WITH HIGH POTENTIAL FOR DEBRIS COLLECTION (EXCEPT ON TYPE 2 STREAMS).
 - THIS DEBRIS BARRIER IS FOR USE OUTSIDE OF ROAD RIGHT-OF-WAY ONLY. FOR DEBRIS CAGES WITHIN ROAD RIGHT-OF-WAY



1 CATCH BASIN STENCIL
N.T.S.



2 CLEAN OUT
N.T.S.

- NOTES:**
- ALTERNATIVE COVER SYSTEM MAY BE SUBMITTED FOR APPROVAL BY OWNER/ENGINEER.
 - PIPE MATERIAL AS SPECIFIED BY ENGINEER.
 - PIPE DIAMETER AS SHOWN PER PLAN.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

Project:	619 HARMAN WAY SOUTH ORTING, WA
Client:	HARMAN DEVELOPMENT, LLC
Designed:	DPS
Drawn:	RWG
Checked:	DPS
Scale:	AS NOTED
Date:	06.21.21
Job No.:	19070
Sheet No.:	C19
Per City Comments:	Per City Comments
Per City Comments:	Per City Comments
Revision:	Int.
Date:	06.24.20
Date:	05.21.20



C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
POVALLIP, WA 98372
Bus: (253) 848-4882
ceservices@cesnwinc.com

BELFAIR ESTATES
STORM NOTES & DETAILS

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

NOTES

- CATCH BASINS TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS (M 193) AND ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR SPECIFICATIONS.
- AS AN ACCEPTABLE ALTERNATE TO REBAR, WELDED WIRE FABRIC HAVING A MINIMUM TENSILE STRENGTH OF 60,000 PSI PER FOOT MAY BE USED. WELDED WIRE FABRIC SHALL COMPLY TO ASTM A 497 AND SHALL BE PLACED IN THE KNOCKOUTS. THE BOTTOM OF THE PRECAST BASE SECTION MAY BE ROUNDED.
- WITH CURBS OR WALLS TO BE FINISHED WITH GUARDS OR WALLS, FINISHED KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM.
- KNOCKOUTS MAY BE ON ALL 4 SIDES OF THE PRECAST BASE SECTION. KNOCKOUTS MAY BE EITHER ROUNDED OR 90° SHARP. PIPE TO BE INSTALLED IN FACTORY SUPPLIED KNOCKOUTS.
- KNOCKOUT OR CUTOUT HOLE SIZE IS TO BE EQUAL TO PIPE OUTER DIAMETER PLUS CATCH BASIN WALL THICKNESS. MAXIMUM HOLE SIZE IS 36" FOR 48" CATCH BASIN, 42" FOR 54" CATCH BASIN. MINIMUM DISTANCE BETWEEN HOLES IS 8".
- PRECAST BASE SECTIONS OF THE TYPE SHOWN SHALL BE FINISHED TO ASSURE NON-HOOKING FIT.
- CATCH BASIN FRAME AND GRATE SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-1-6210. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-HOOKING FIT.
- FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.

1-#5 BAR HOOP
2-#5 BAR HOOP
#3 BAR EACH CORNER
#5 BAR EACH SIDE
#5 BAR EACH WAY

CITY OF ORTING
CATCH BASIN TYPE 1

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-2A
FILE NAME: STD-D-2A

CITY OF ORTING
CATCH BASIN TYPE 1 PLACEMENT

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-2B
FILE NAME: STD-D-2B

CITY OF ORTING
CATCH BASIN TYPE 2

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-3A
FILE NAME: STD-D-3A

NOTES

- CATCH BASINS TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (ASHTO M 199) AND ASTM C 890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
- HANDHOLDS IN RISER OR ADJUSTMENT SECTION SHALL HAVE 3" MINIMUM CLEARANCE. STEPS IN CATCH BASIN SHALL HAVE 6" MINIMUM CLEARANCE. NO STEPS ARE REQUIRED WHEN "D" IS 4' OR LESS.
- ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS A ALL PRECAST CONCRETE SHALL OBTAIN 4000 PSI AT 28 DAYS.
- PRECAST BASES SHALL BE FINISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM.
- KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTER DIAMETER PLUS CATCH BASIN WALL THICKNESS. MAXIMUM HOLE SIZE IS 36" FOR 48" CATCH BASIN, 42" FOR 54" CATCH BASIN. MINIMUM DISTANCE BETWEEN HOLES IS 8".
- FRAME AND GRATE OR RING AND COVER SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-1-6210. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-HOOKING FIT.
- ALL BASE REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MINIMUM CLEARANCE.
- THE BOTTOM OF THE PRECAST CATCH BASIN MAY BE ROUNDED. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.
- TYPE 3 SIMILAR EXCEPT WITH WALL PERFORATIONS FOR STORMWATER EXFILTRATION.

CITY OF ORTING
CATCH BASIN TYPE 2 NOTES

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-3B
FILE NAME: STD-D-3B

CITY OF ORTING
CATCH BASIN TYPE 2 PLACEMENT

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-3C
FILE NAME: STD-D-3C

CATCH BASIN DIMENSION TABLE

DIA	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL in 2/ft IN EACH DIRECTION	
					INTEGRAL BASE	SEPARATE BASE
48"	4"	6"	36"	8"	0.15	0.23
54"	4 1/2"	6"	42"	8"	0.19	0.19
60"	5"	8"	48"	8"	0.25	0.25
72"	6"	8"	60"	12"	0.24	0.35
96"	8"	12"	84"	12"	0.29	0.39

CITY OF ORTING
CATCH BASIN TYPE 2

SCALE: NO SCALE
APPROVAL DATE: _____
DRAWING NO. D-3D
FILE NAME: STD-D-3D

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

Project:	BELFAIR ESTATES	Drawn:	DPS
Client:	HARMAN DEVELOPMENT, LLC	Checked:	RWG
Scale:	AS NOTED	Date:	06.21.21
Job No.:	19070	Sheet No.:	C20
Revision:		Date:	

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
439 20TH STREET, SUITE D
FOYALLUP, WA 98572
cesertices@cesanwinc.com

BELFAIR ESTATES
STORM NOTES & DETAILS

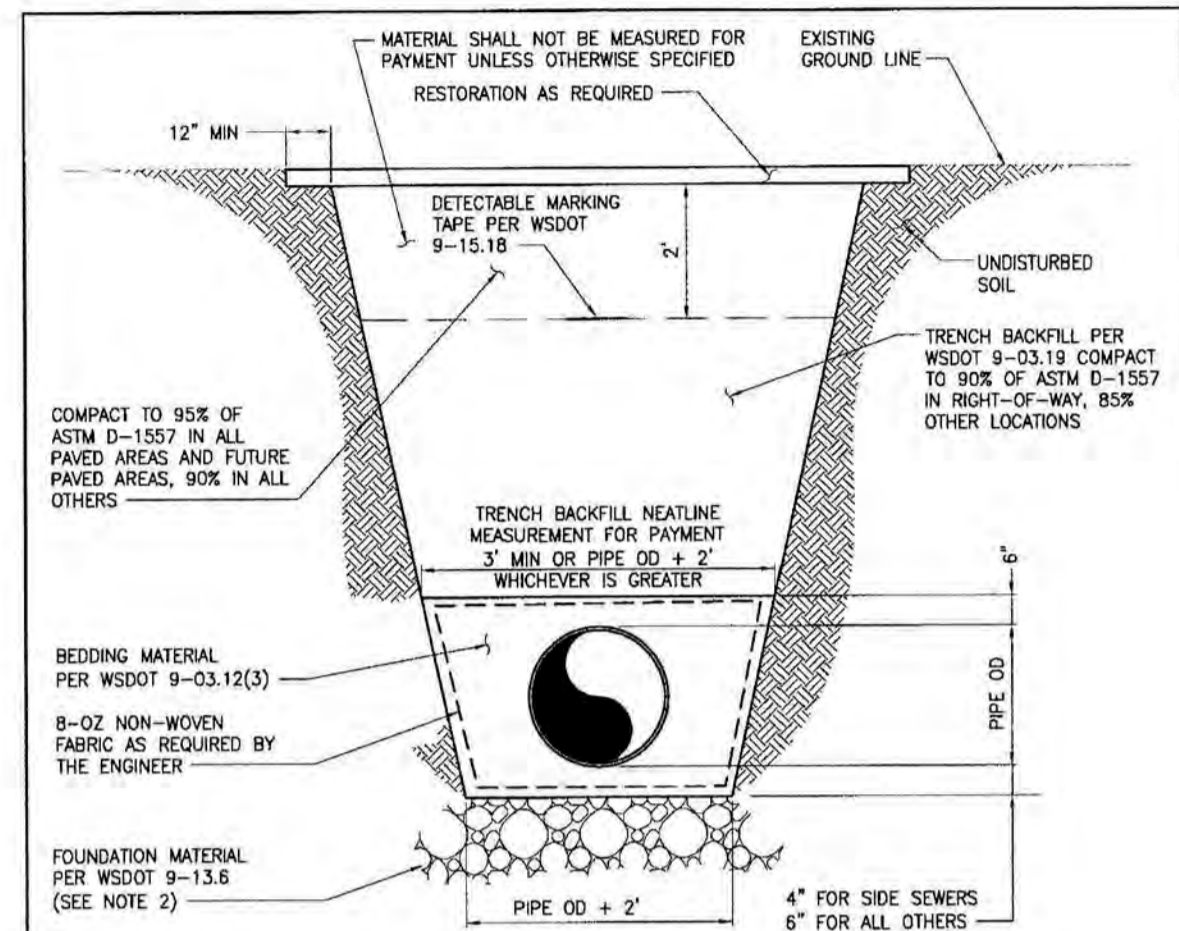
HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

ASBUILT RECORD NOTE

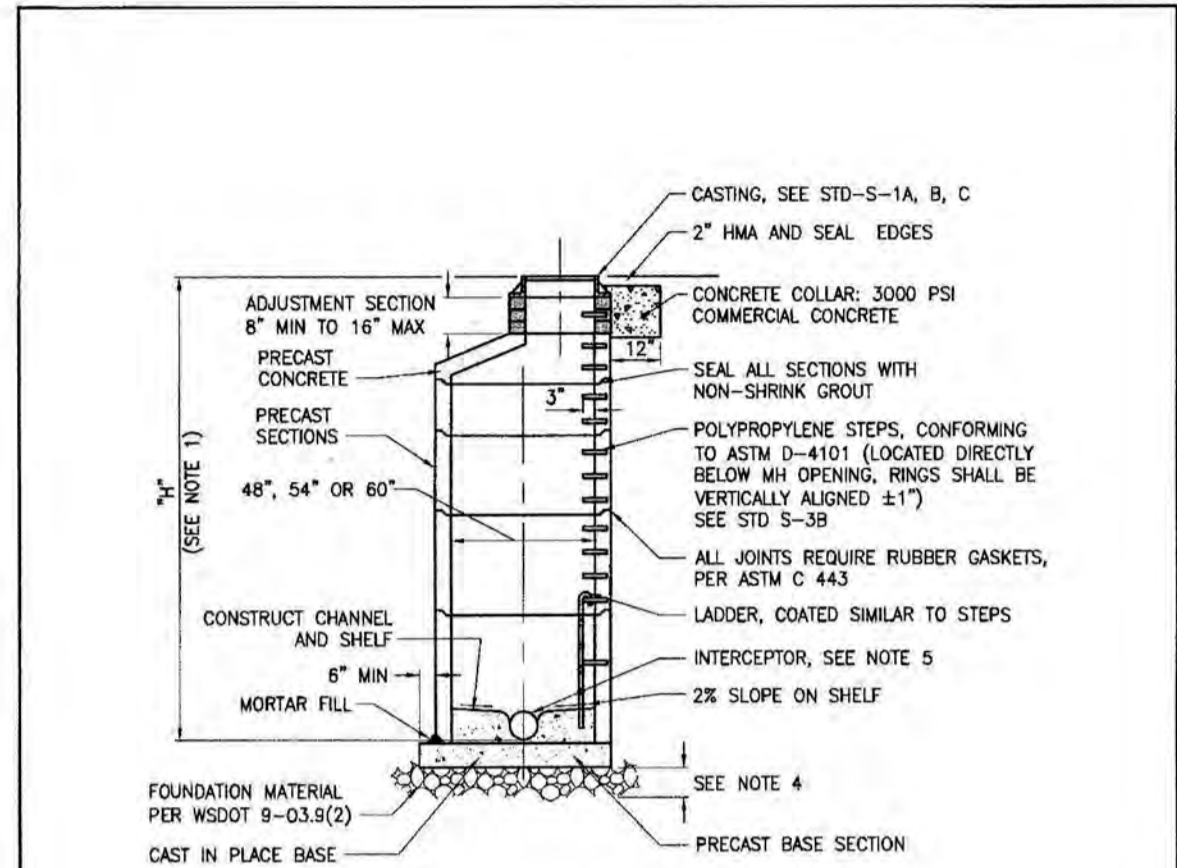
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



- NOTES**
- FOUNDATION MATERIAL REQUIRED WHERE NECESSARY TO ACHIEVE A FIRM AND UNYIELDING SUB-BASE. DEPTH AS REQUIRED.
 - NO NATIVE MATERIAL SHALL BE USED FOR BACKFILL UNLESS APPROVED BY THE CITY ENGINEER IN WRITING.
 - SEWER MAIN AND LATERAL INSTALLATIONS SHALL BE VIDEO INSPECTED. SEE SPECIAL PROVISIONS FOR REQUIREMENTS.
 - CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" OF VERTICAL SEPARATION AND 10' OF HORIZONTAL SEPARATION BETWEEN WATER AND SEWER LINES OR ENCASE PER SECTION C1-9 OF DOE CRITERIA FOR SEWAGE WORKS DESIGN.

CITY OF ORTING
SANITARY SEWER OR STORM TRENCH

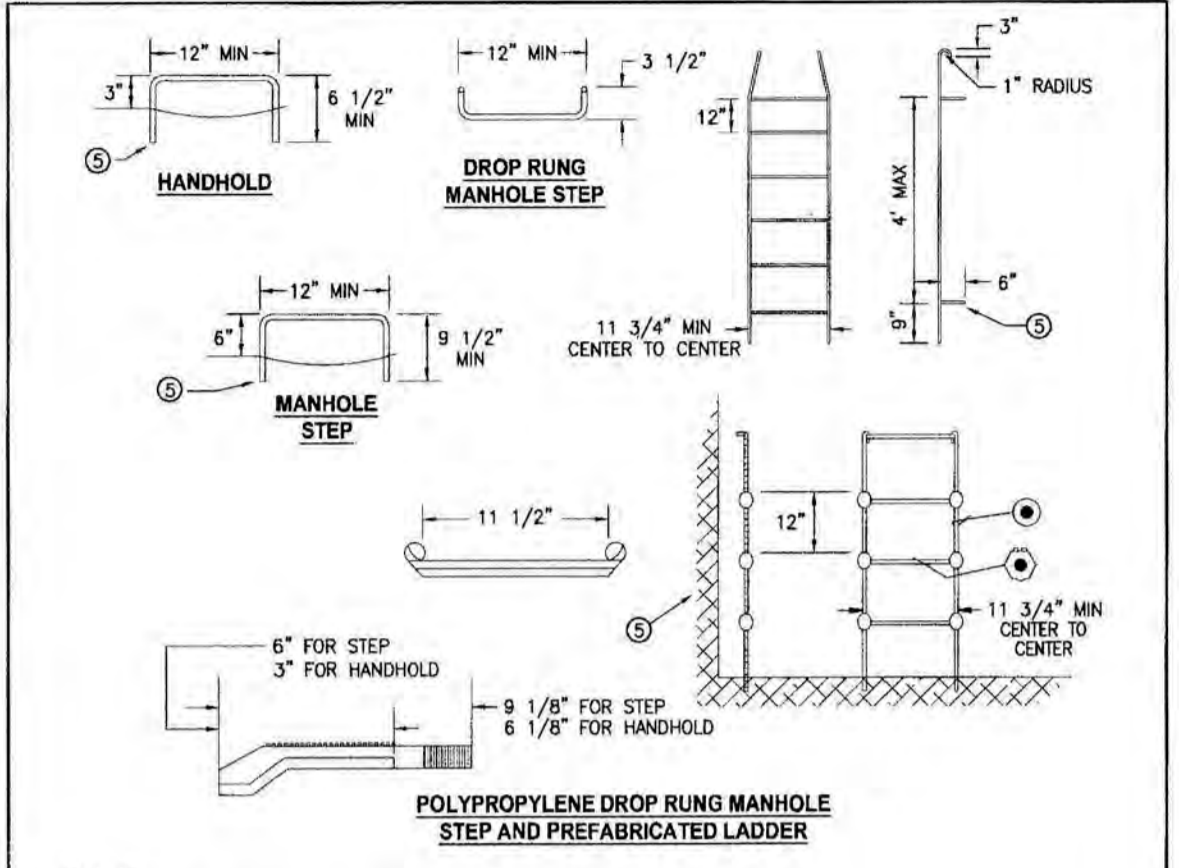
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-2
FILE NAME: STD-S-2



- NOTES**
- WHEN "H" IS LESS THAN 8' USE TYPE III MANHOLE, SEE WSDOT STD PLAN B-23c.
 - WHEN "H" IS GREATER THAN 20', MANHOLE SHALL BE 80" DIAMETER.
 - WALL OPENING REQUIREMENTS FOR PIPE, SEE WSDOT STD PLAN B-23a & B-23c.
 - FOUNDATION MATERIAL SHALL BE 6" MIN OR AS REQUIRED TO ACHIEVE A FIRM AND UNYIELDING SUB-BASE.
 - USE KOR-N-SEAL BOOT OR OTHER APPROVED WATER TIGHT FLEXIBLE BOOT.
 - MANHOLES SHALL BE SEALED WITH TAMOSEAL CEMENT BASED WATERPROOF FINISH OR APPROVED EQUAL.

CITY OF ORTING
TYPE 1 MANHOLE

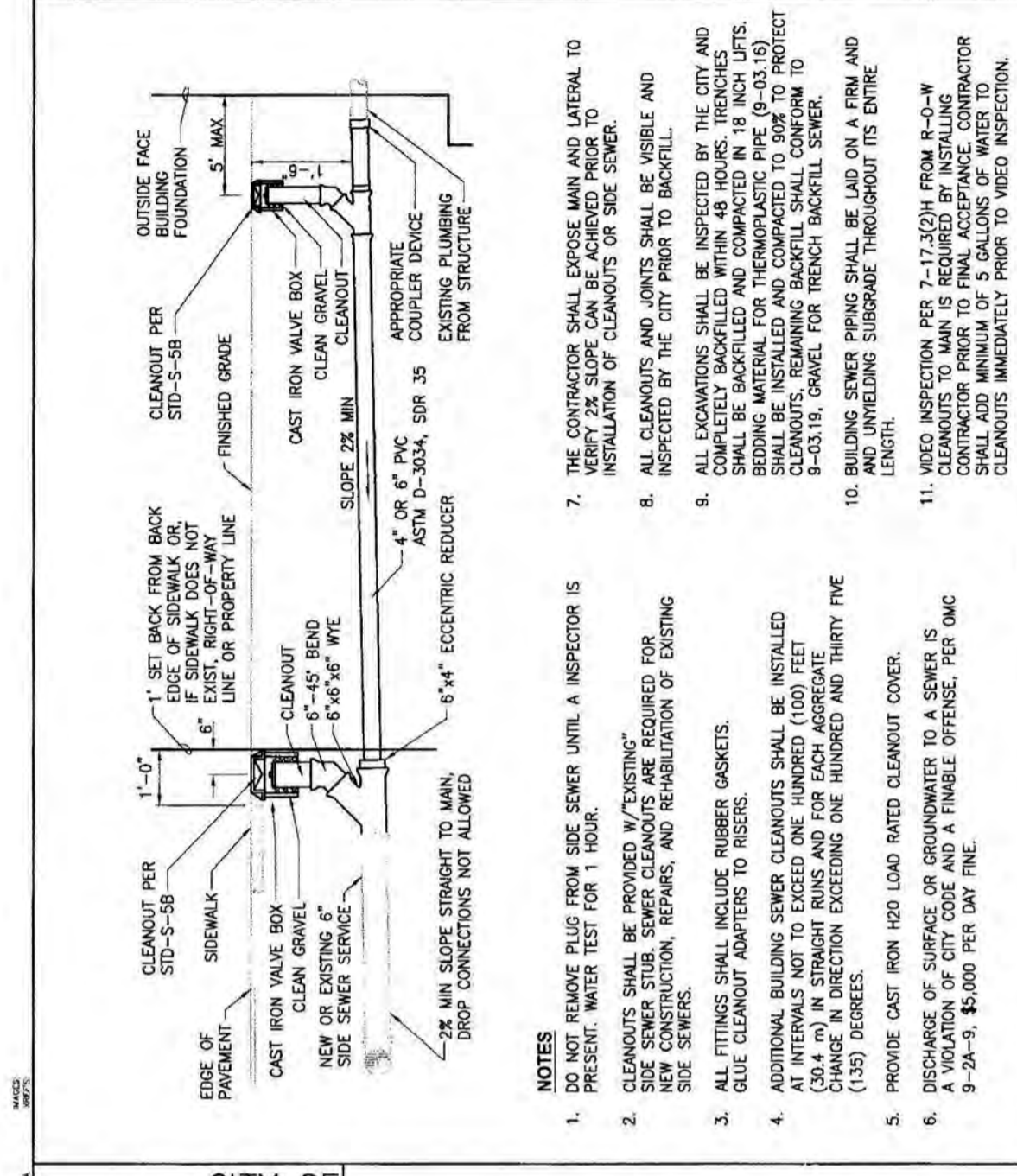
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-3A
FILE NAME: STD-S-3A



- NOTES**
- MANHOLE STEPS CONFORMING TO SECTION R, ASTM C-478, ASHTO M-199 REQUIREMENTS AND REQUIREMENTS OF ASTM D-4101 FOR POLYPROPYLENE AND ASTM A-815 FOR 1/2" GRADE REINFORCED POLYPROPYLENE STEPS, AND ALL WISHA AND OSHA SPECIFICATIONS, ARE ACCEPTABLE PROVIDED THEY ARE PRE-APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
 - DROP RUNG STEPS ARE TO BE #8 GALVANIZED DEFORMED REBAR.
 - PREFABRICATED LADDERS ARE TO BE #7 GALVANIZED SMOOTH STEEL.
 - MANHOLE PREFABRICATED LADDER STEPS SHALL BE PARALLEL OR APPROXIMATELY RADIAL AT THE OPTION OF THE MANUFACTURER, EXCEPT THAT ALL STEPS IN ANY MANHOLE SHALL BE THE SAME.
 - PENETRATION OF OUTER WALL BY A STEP LADDER OR LADDER LEG IS PROHIBITED.

CITY OF ORTING
MANHOLE RING AND SAFETY STEPS

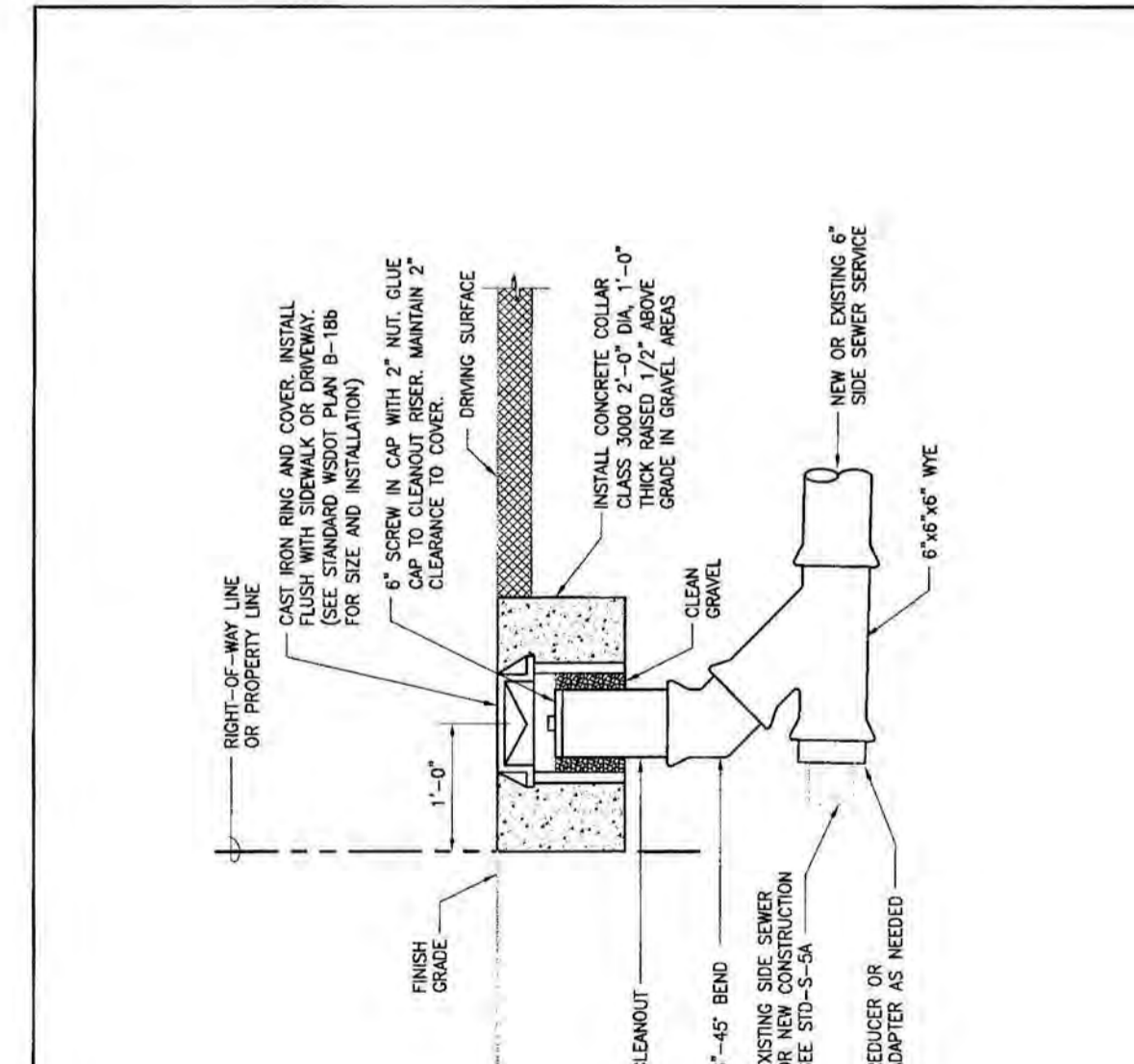
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-3B
FILE NAME: STD-S-3B



- NOTES**
- DO NOT REMOVE PLUG FROM SIDE SEWER UNTIL AN INSPECTOR IS PRESENT. WATER TEST FOR 1 HOUR.
 - CLEANOUTS SHALL BE PROVIDED AT EXISTING TRENCHES FOR NEW CONSTRUCTION, REPAIRS, AND REHABILITATION OF EXISTING SIDE SEWERS.
 - ALL FITTINGS SHALL INCLUDE RUBBER GASKETS. GUE CLEANOUT ADAPTERS TO RISERS.
 - ADDITIONAL BUILDING SEWER CLEANOUTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED ONE HUNDRED (100) FEET. CLEANOUTS SHALL BE INSTALLED AT 90 DEGREE ANGLES TO CHANGE IN DIRECTION EXCEEDING ONE HUNDRED AND THIRTY (130) DEGREES.
 - PROVIDE CAST IRON HD LOAD RATED CLEANOUT COVER.
 - DISCHARGE OF SURFACE OR GROUNDWATER TO A SEWER IS A VIOLATION OF CITY CODE AND A FINABLE OFFENSE. PER DMC 9-20-4, \$5,000 PER DAY FINE.

CITY OF ORTING
SIDE/BUILDING SEWER

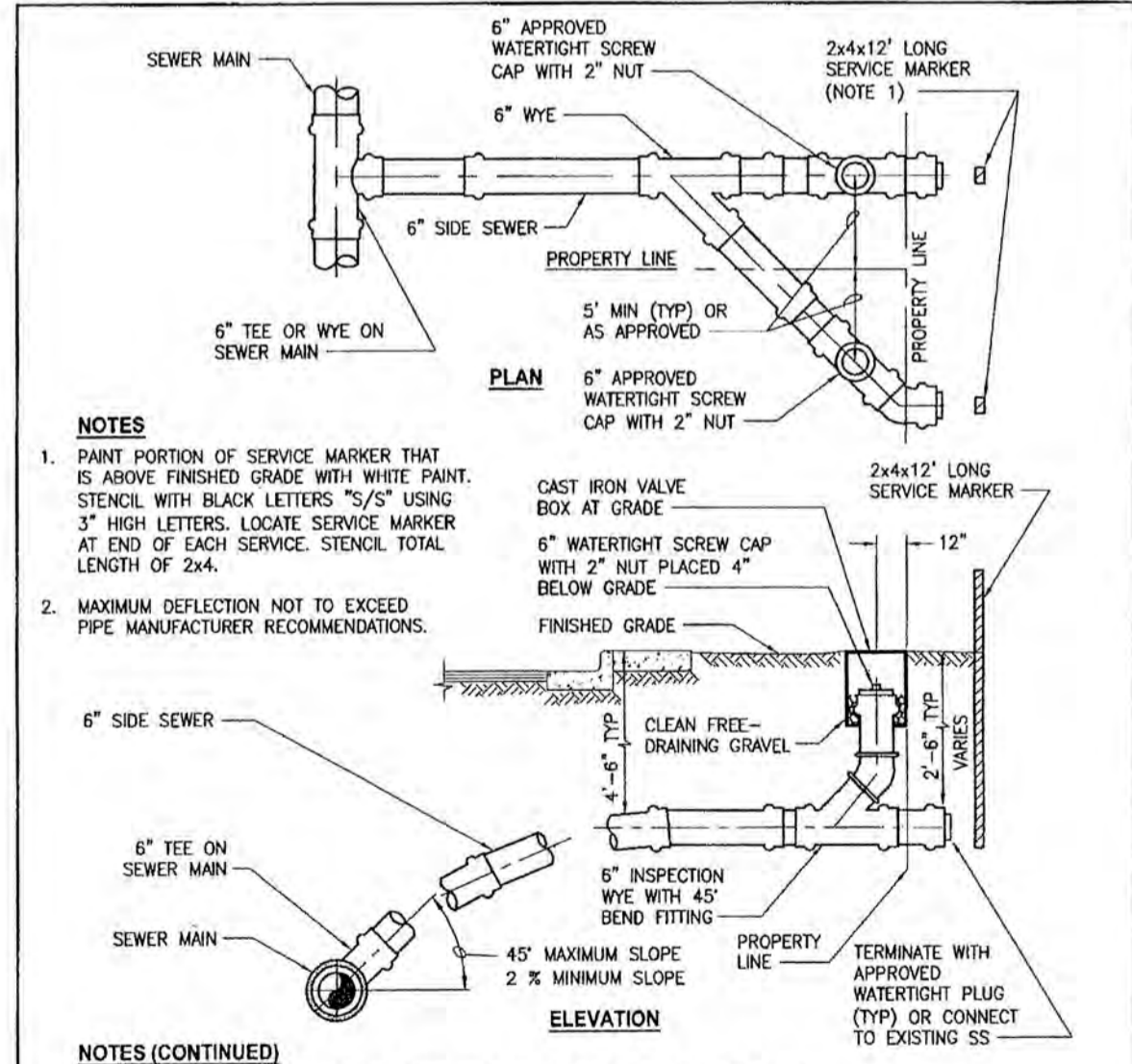
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-5A
FILE NAME: STD-S-5A



- NOTES**
- CAST IRON RING AND COVER. INSTALL AND FINISH TO FINISHED GRADE (SEE STANDARD WSDOT PLAN B-118 FOR SIZE AND INSTALLATION).
 - 6" SCREW IN CAP WITH 2" NUT, GLUE CAP TO CLEANOUT RISER. MAINTAIN 2" CLEARANCE TO CURB DRIVING SURFACE.
 - INSTALL CONCRETE COLLAR. CLASS 3000 2'-0" DIA. 1'-0" THICK RASSED 1/2" ABOVE GRADE IN GRAVEL MEDIA.
 - NEW OR EXISTING 6" SIDE SEWER SERVICE.
 - 6" x 6" x 6" WYE.
 - 6" x 45" BEND.
 - EXISTING SIDE SEWERS OR NEW CONSTRUCTION SEE STD-S-5A.
 - REDUCER OR ADAPTER AS NEEDED.

CITY OF ORTING
SIDE SEWER CLEANOUT

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-5B
FILE NAME: STD-S-5B



- NOTES**
- PAINT PORTION OF SERVICE MARKER THAT IS ABOVE FINISHED GRADE WITH WHITE PAINT. STENCIL WITH BLACK LETTERS 7/8" USING 3" HIGH LETTERS. LOCATE SERVICE MARKER AT END OF EACH SERVICE. STENCIL TOTAL LENGTH OF 24".
 - MAXIMUM DEFLECTION NOT TO EXCEED PIPE MANUFACTURER RECOMMENDATIONS.
 - SIDE SEWER LATERAL SHALL BE THE SAME MATERIAL AS THE MAIN LINE SEWER AND BEDDED THE SAME.
 - PIPE BEDDING PER WSDOT 9-03.9(3)
 - A LOAD-BEARING CASTING & COVER SHALL BE USED ON ALL CLEANOUTS.
 - MINIMUM SIDE SEWER DIAMETER WITHIN THE RIGHT-OF-WAY SHALL BE 6". THE CITY RESERVES THE RIGHT TO REQUIRE INCREASED SIDE SEWER DIAMETER AS NEEDED TO ACCOMMODATE INCREASED FLOWS.

CITY OF ORTING
TYPICAL SPLIT SIDE SEWER DETAIL

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. S-5C
FILE NAME: STD-S-5C

SANITARY SEWER NOTES

- WORK SHALL NOT COMMENCE UNTIL APPROVAL IS RECEIVED FROM THE STATE DEPARTMENT OF ECOLOGY.
- NOTIFY THE CITY OF ORTING 72 HOURS (3 WORKING DAYS) PRIOR TO BEGINNING CONSTRUCTION AND FOR ANY RESTART OF WORK.
- PROVIDE THE CITY'S OBSERVER WITH A COPY OF ALL CUT SHEETS PRIOR TO CONSTRUCTION.
- CONNECTION TO AN EXISTING MAIN SHALL BE DONE SO AS TO PREVENT ANY FOREIGN MATERIALS FROM ENTERING EXISTING SEWERS.
- IN THE EVENT THAT AN EXISTING UTILITY IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY AND THE UTILITY COMPANY (IF APPLICABLE) IMMEDIATELY.
- THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO ENSURE THAT THE EXISTING FACILITIES REMAIN FULLY OPERATIONAL DURING ALL STAGES OF CONSTRUCTION.
- ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE CONTRACTOR'S EXPENSE.
- SIDE SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DWGS S-5A AND S-5C. INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT (WISHA).
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 10' HORIZONTAL AND 18" OF VERTICAL CLEARANCE BETWEEN WATER AND SANITARY SEWER LINES. IF THIS CRITERIA CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE ENCASEMENT PER SECTION C1-9.1 OF THE WASHINGTON DEPARTMENT OF ECOLOGY CRITERIA FOR SEWAGE WORKS DESIGN MANUAL.
- ALL SEWER PIPE SHALL BE PVC OR DUCTILE IRON. PVC SEWER PIPE SHALL CONFORM TO ASTM D-3034, SDR35 FOR PIPE SIZES 15-INCH AND SMALLER, DUCTILE IRON PIPE SHALL BE CLASS 51 OR GREATER UNLESS OTHERWISE NOTED. TRENCHING, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH CITY STANDARD DWG S-2. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
- PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL VERIFY THAT THE LINE AND GRADE OF THE MAIN MEETS THE CITY OF ORTING STANDARDS. IMMEDIATELY PRIOR TO STARTING THE VIDEO INSPECTION, THE CONTRACTOR SHALL FLUSH THE MAINS AND INSERT A VISIBLE DYE (COLOR AS APPROVED BY THE CITY) INTO THE MAINS TO AID IN IDENTIFYING THE DEPTHS OF ANY PONDS ENCOUNTERED DURING THE INSPECTION. PONDED DEPTHS THAT EXCEED 1/2 INCH WILL REQUIRE THE MAIN TO BE REPAIRED UNLESS OTHERWISE APPROVED BY THE CITY.
- SEWER SHALL BE TESTED ACCORDING TO SECTION 7-17 OF THE LATEST EDITIONS OF THE CITY OF ORTING DEVELOPMENT STANDARDS AND WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
- ALL SANITARY SEWER PIPING SPECIFIED AS DUCTILE IRON SHALL BE PRESSURE TESTED TO ENSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
- ALL DUCTILE IRON PIPE FOR SANITARY SEWER APPLICATIONS SHALL BE LINED WITH PROTECTO 401 CERAMIC EPOXY OR APPROVED EQUAL.
- FIELD LOK GASKETS ARE REQUIRED ON ALL DUCTILE IRON PIPE FOR SANITARY SEWER APPLICATIONS.

CALL 48 HOURS BEFORE YOU DIG DIAL 811

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

OVFR's review limited to providing input on operational issues only. OVFR has not reviewed the plans for Code compliance.

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
POVALLUP, WA 98072
Bus: (360) 848-4282
ceservices@cesnwinc.com

DANIEL PAUL SMITH
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
7023
6-21-21

BELFAIR ESTATES SEWER NOTES & DETAILS

Project: BELFAIR ESTATES
Client: HARMAN DEVELOPMENT, LLC
618 HARMAN WAY SOUTH ORTING, WA

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: AS NOTED
Date: 06.21.21
Job No.: 19070

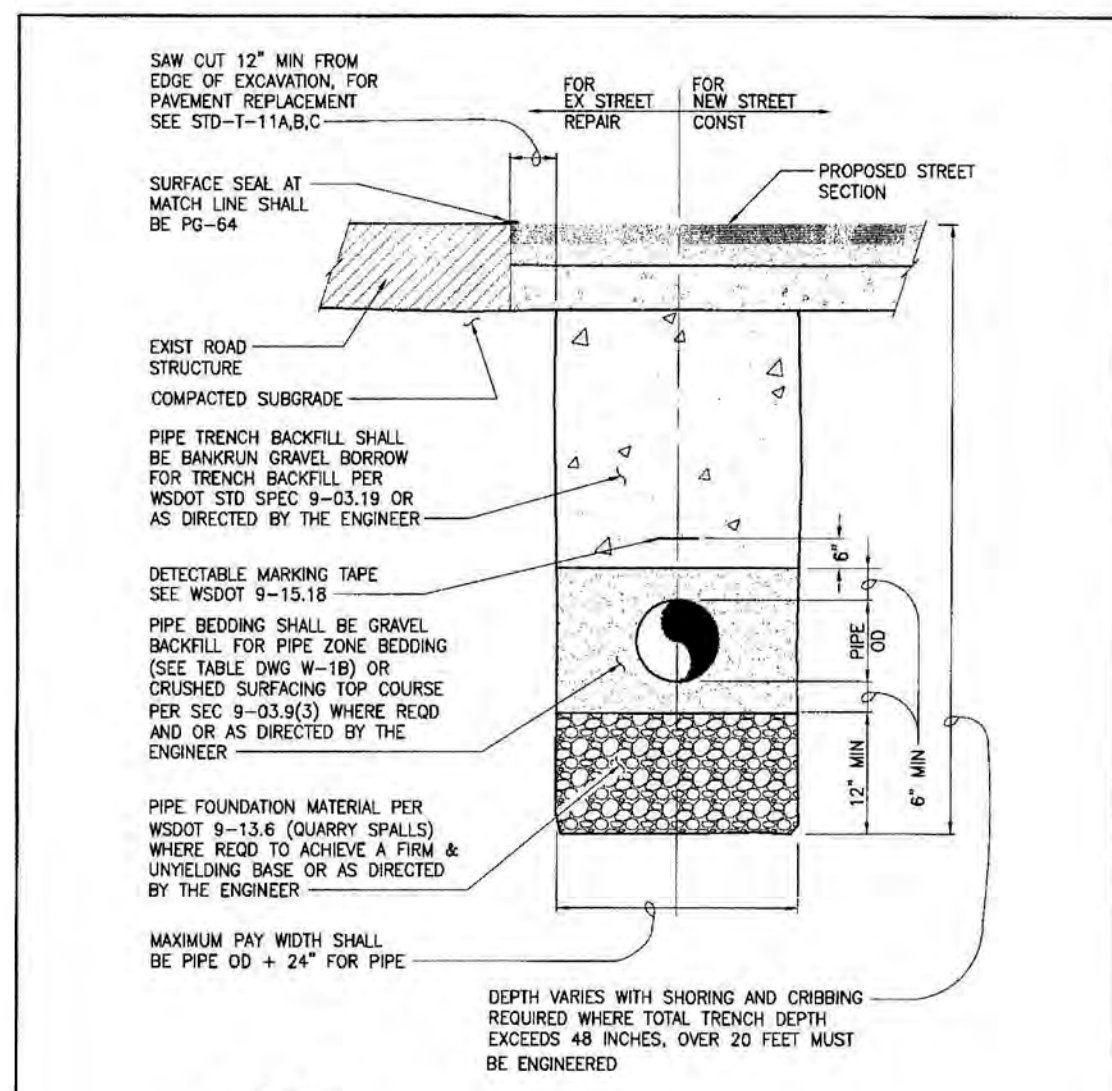
Sheet No.: **C21**
21 of 22 Sheets

Revision: _____
No. _____
PER CITY COMMENTS
PER CITY COMMENTS
Date: _____

BELFAIR ESTATES

A PORTION OF SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SEC. 32, TWP. 19 N., RGE. 5 E
WILLAMETTE MERIDIAN, CITY OF ORTING, PIERCE COUNTY, WASHINGTON

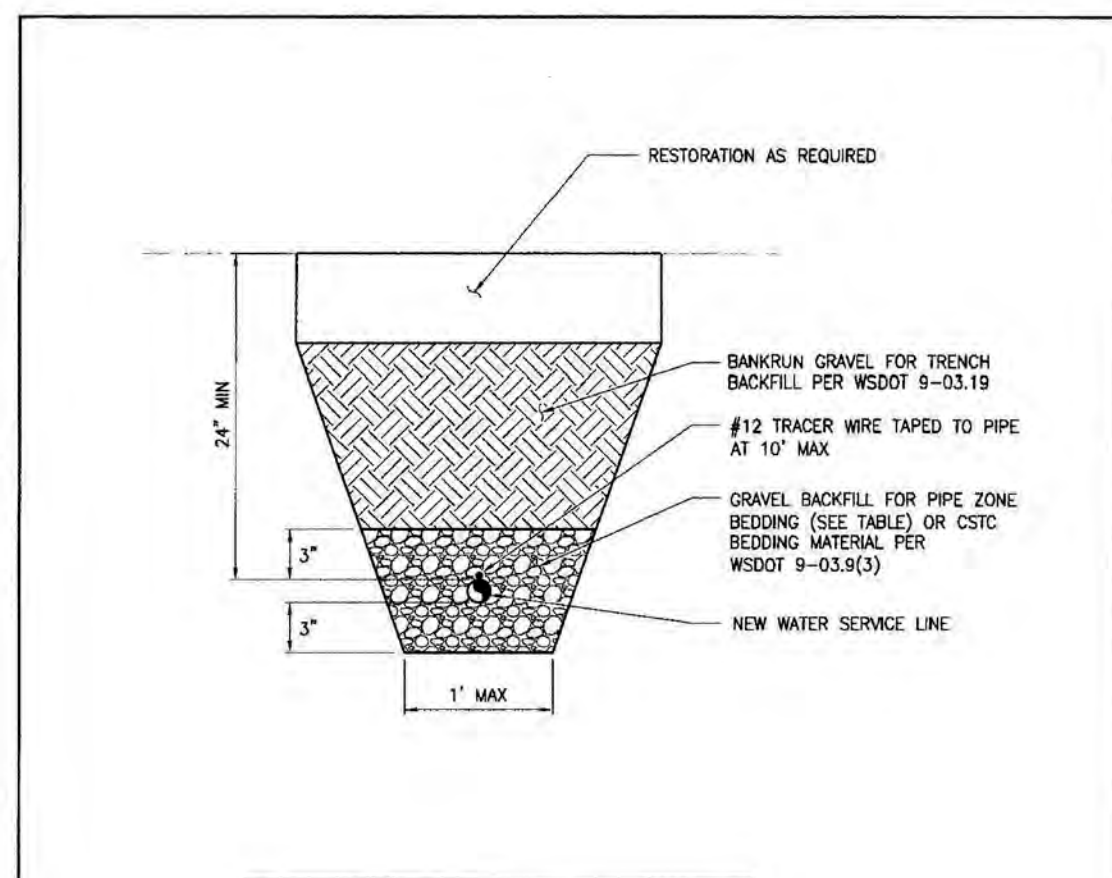
ASBUILT RECORD NOTE
THE SHOWN HORIZONTAL AND VERTICAL LOCATIONS OF THE STORM DRAINAGE AND ROAD SYSTEMS WAS FIELD SURVEYED BY ME OR UNDER MY DIRECTION. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



- NOTES**
- ALL BACKFILL SHALL BE COMPACTED TO 90% OPTIMUM DENSITY.
 - FOR PIPE COVER LESS THAN 36\"/>

CITY OF ORTING
STANDARD FIRE HYDRANT

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-4A
FILE NAME: STD-W-4A



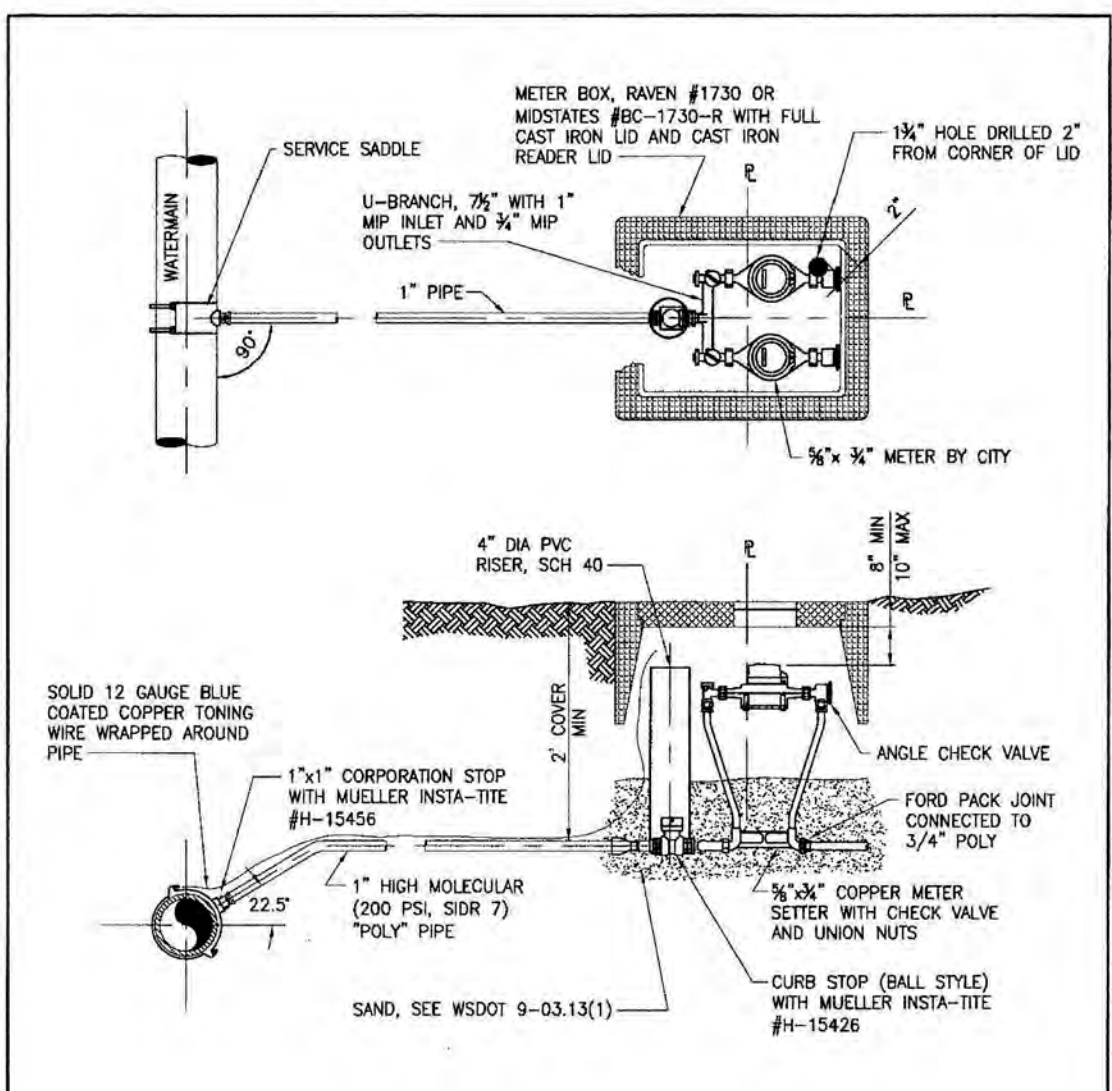
GRAVEL BACKFILL FOR PIPE BEDDING

SIEVE SIZE	PERCENT PASSING
3/4\"/>	

- NOTES**
- FOR SINGLE METER SERVICE, SEE NOTE 9, STD-W-2B.
 - SEE STD-W-2B FOR ADDITIONAL DOUBLE & SINGLE METER NOTES.

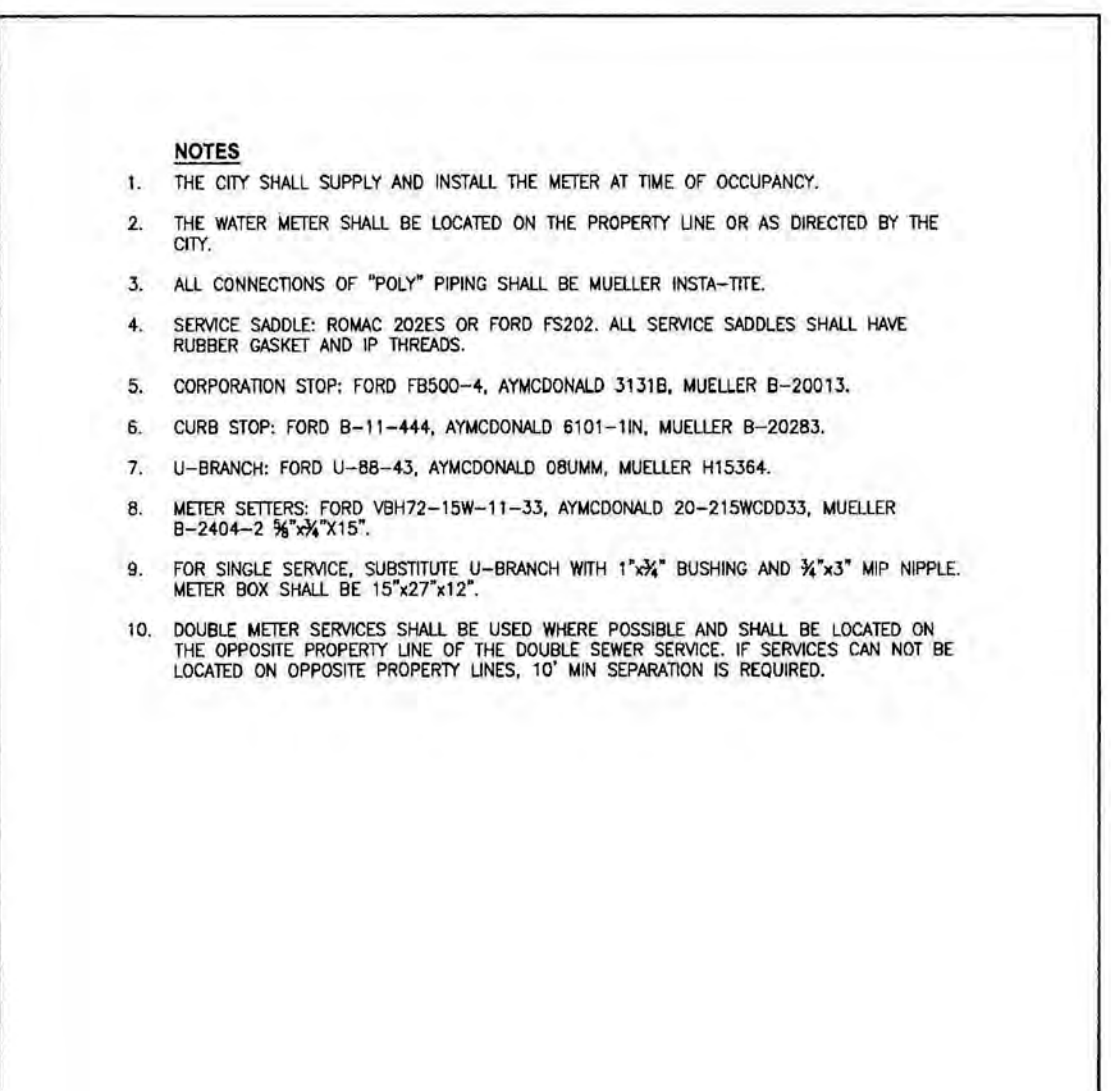
CITY OF ORTING
WATER SERVICE AND BEDDING WITHIN RIGHT-OF-WAY

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-1B
FILE NAME: STD-W-1B



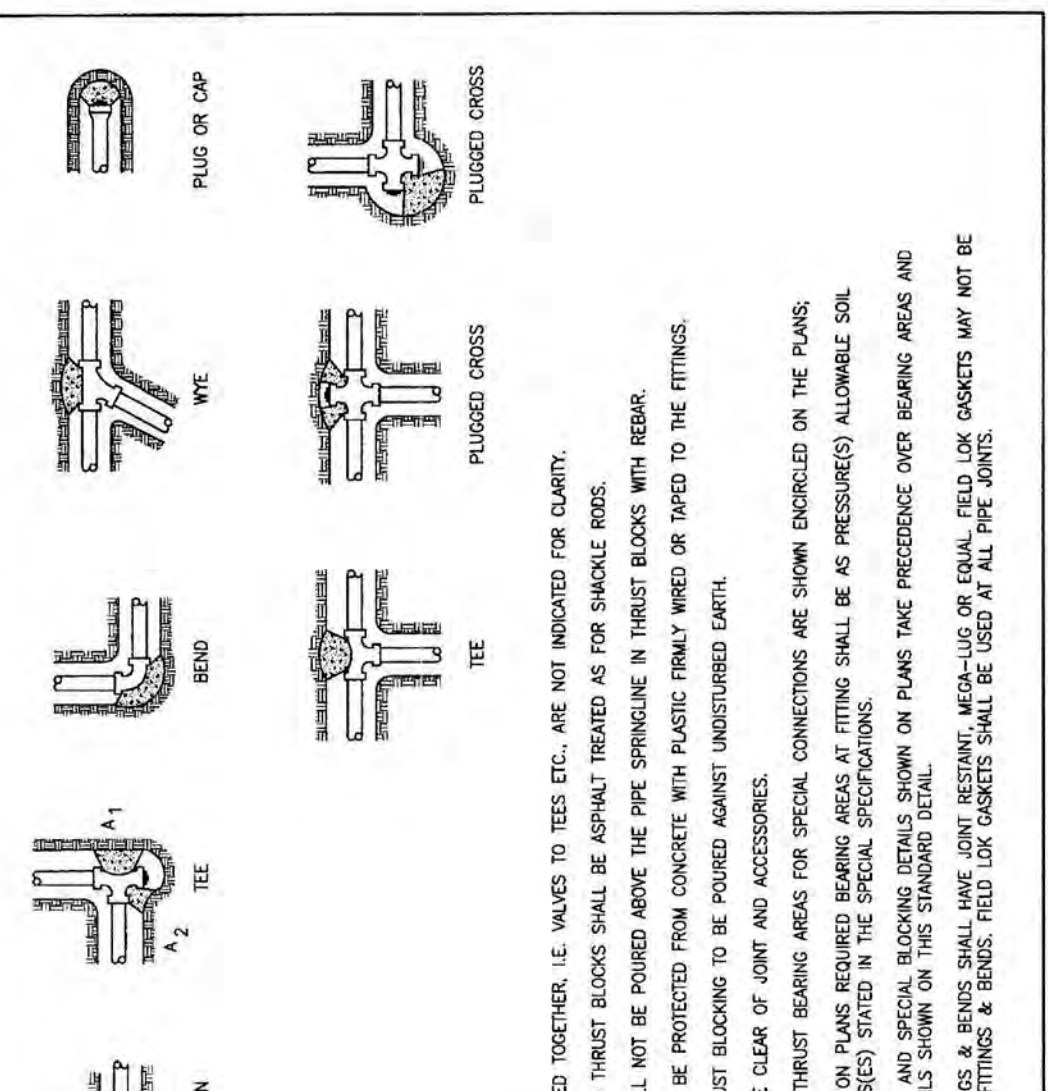
- NOTES**
- FOR SINGLE METER SERVICE, SEE NOTE 9, STD-W-2B.
 - SEE STD-W-2B FOR ADDITIONAL DOUBLE & SINGLE METER NOTES.

CITY OF ORTING
5/8\"/>



- NOTES**
- THE CITY SHALL SUPPLY AND INSTALL THE METER AT TIME OF OCCUPANCY.
 - THE WATER METER SHALL BE LOCATED ON THE PROPERTY LINE OR AS DIRECTED BY THE CITY.
 - ALL CONNECTIONS OF \"POLY\" PIPING SHALL BE MUELLER INSTA-TITE.
 - SERVICE SADDLE: ROMAC 202'S OR FORD FS202. ALL SERVICE SADDLES SHALL HAVE RUBBER GASKET AND IP THREADS.
 - CORPORATION STOP: FORD FB500-4, AYMCODNALD 3131B, MUELLER B-20013.
 - CURB STOP: FORD B-11-444, AYMCODNALD 6101-IN, MUELLER B-20283.
 - U-BRANCH: FORD U-88-43, AYMCODNALD 08UM, MUELLER H15364.
 - METER SETTERS: FORD VBH72-15W-11-33, AYMCODNALD 20-215WDD33, MUELLER B-2404-2 3/4\"/>

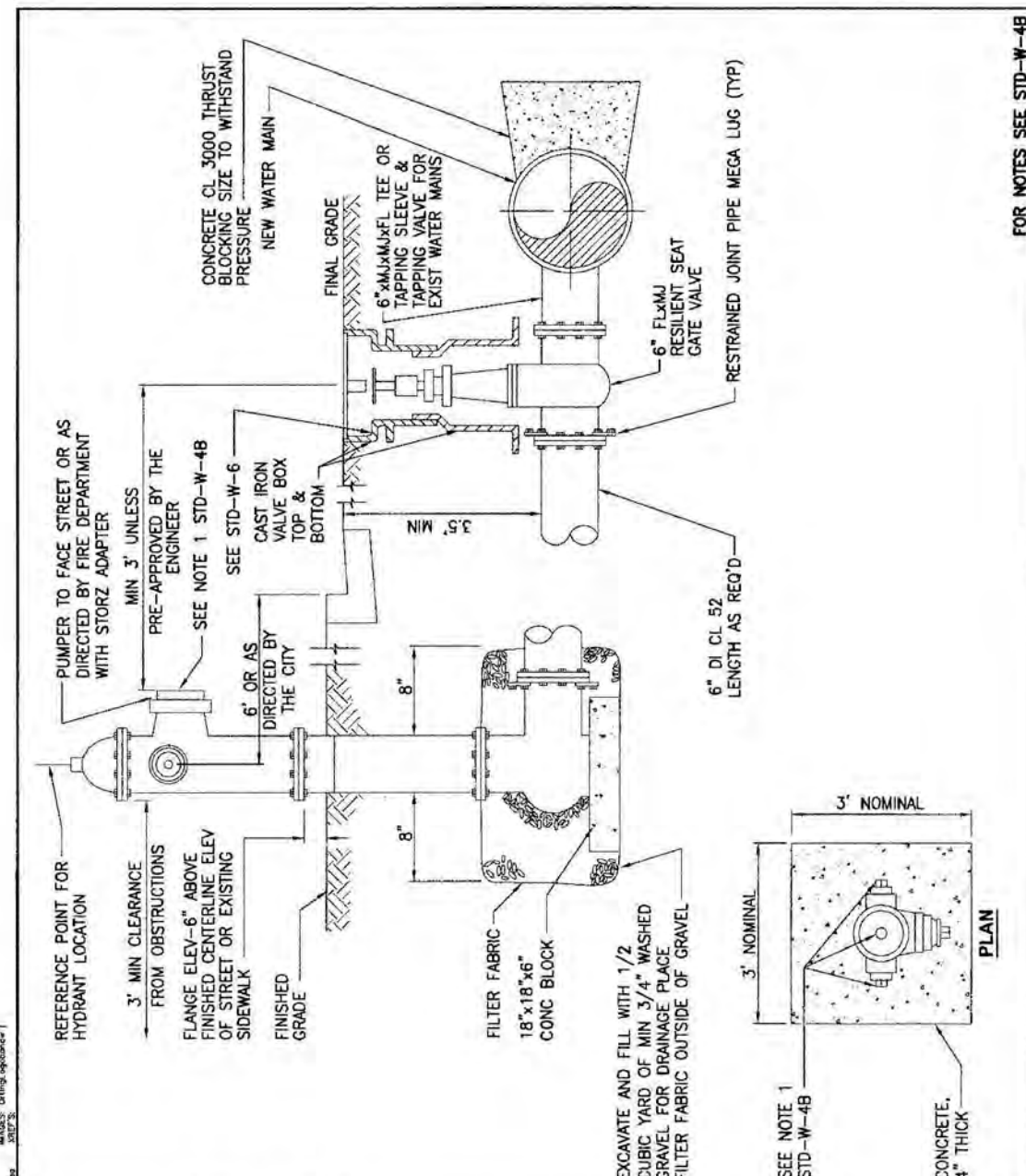
CITY OF ORTING
5/8\"/>



- NOTES**
- FITTINGS FLANGED TOGETHER, I.E. VALVES TO TEES ETC., ARE NOT INDICATED FOR CLARITY.
 - REPAIR USED IN THRUST BLOCKS SHALL BE ASPHALT TREATED AS FOR SHAKALE ROADS.
 - CONCRETE SHALL NOT BE POURED ABOVE THE PIPE SPRINGLINE IN THRUST BLOCKS WITH REBAR.
 - FITTINGS SHALL BE PROTECTED FROM CONCRETE WITH PLASTIC FINLY WREED OR TAPE TO THE FITTINGS.
 - CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 - KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
 - THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCLOSED ON THE PLANS.
 - IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS PRESSURES ALLOWABLE SOIL BEARING STRESS(S) SPECIFIED IN THE SPECIAL SPECIFICATIONS.
 - BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.
 - ALL PIPE FITTINGS & BENDS SHALL HAVE JOINT RESISTANT, MEGA-LUG OR EQUAL, FIELD LUG GASKETS MAY NOT BE USED AT PIPE FITTINGS & BENDS. FIELD LUG GASKETS SHALL BE USED AT ALL PIPE JOINTS.

CITY OF ORTING
THRUST BLOCKING

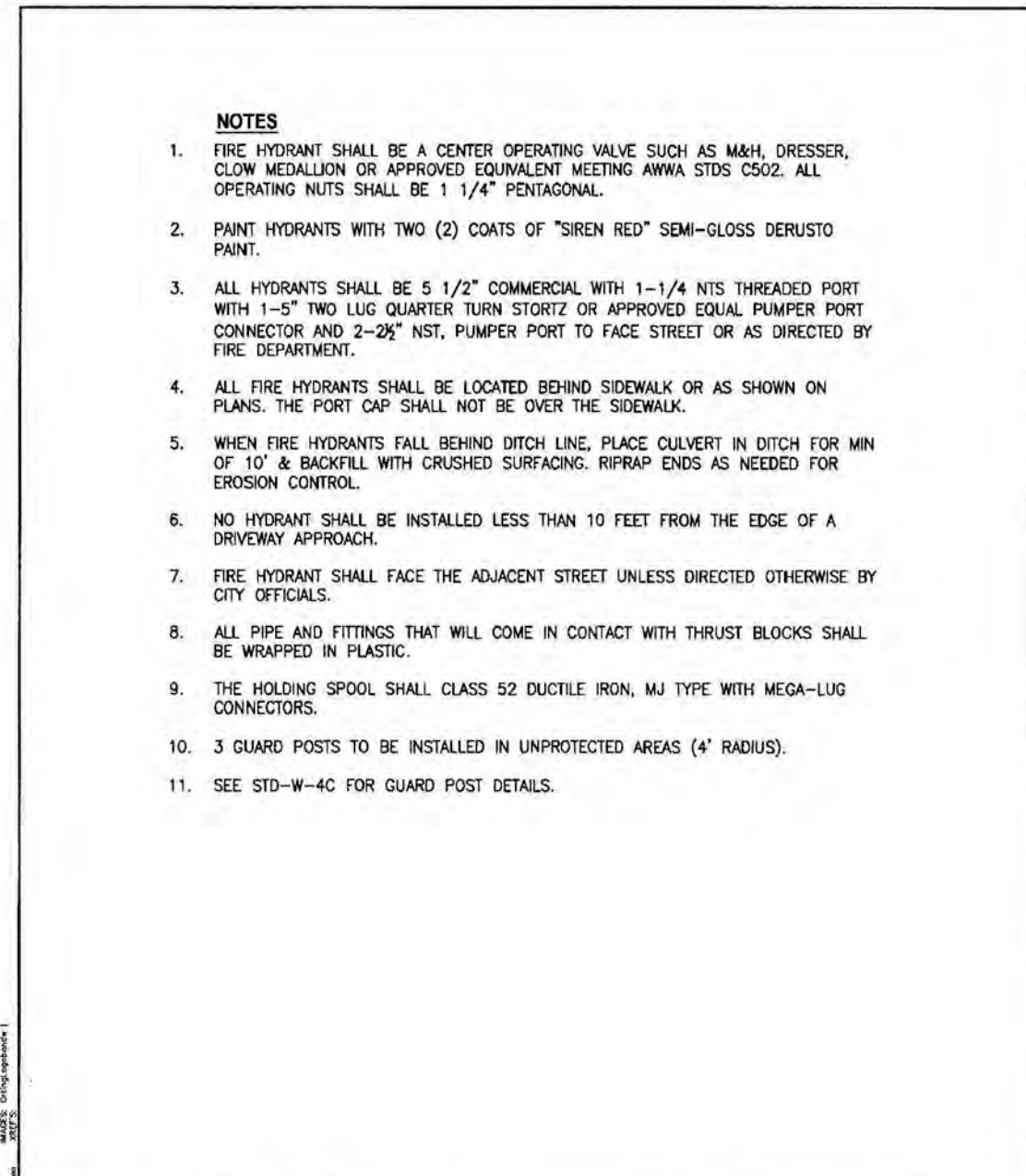
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-8
FILE NAME: STD-W-8



- NOTES**
- FIRE HYDRANT SHALL BE A CENTER OPERATING VALVE SUCH AS M&H, DRESSER, CLOW MEDALION OR APPROVED EQUIVALENT MEETING ANNA STDS C502. ALL OPERATING NUTS SHALL BE 1 1/4\"/>

CITY OF ORTING
STANDARD FIRE HYDRANT

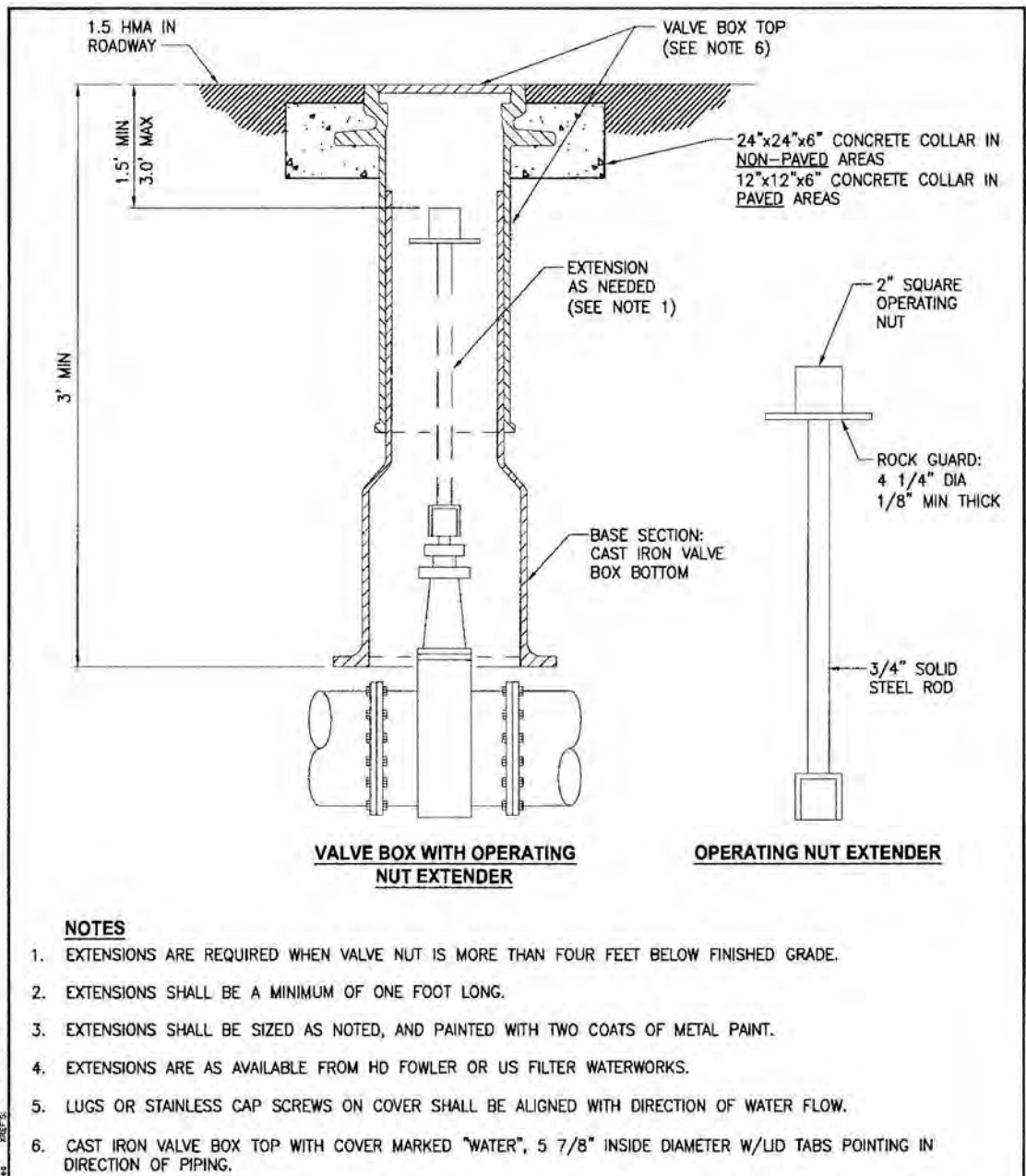
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-4A
FILE NAME: STD-W-4A



- NOTES**
- EXTENSIONS ARE REQUIRED WHEN VALVE NUT IS MORE THAN FOUR FEET BELOW FINISHED GRADE.
 - EXTENSIONS SHALL BE A MINIMUM OF ONE FOOT LONG.
 - EXTENSIONS SHALL BE SIZED AS NOTED, AND PAINTED WITH TWO COATS OF METAL PAINT.
 - EXTENSIONS ARE AS AVAILABLE FROM HD POWLER OR US FILTER WATERWORKS.
 - LUGS OR STAINLESS CAP SCREWS ON COVER SHALL BE ALIGNED WITH DIRECTION OF WATER FLOW.
 - CAST IRON VALVE BOX TOP WITH COVER MARKED \"WATER\", 5 7/8\"/>

CITY OF ORTING
STANDARD FIRE HYDRANT NOTES

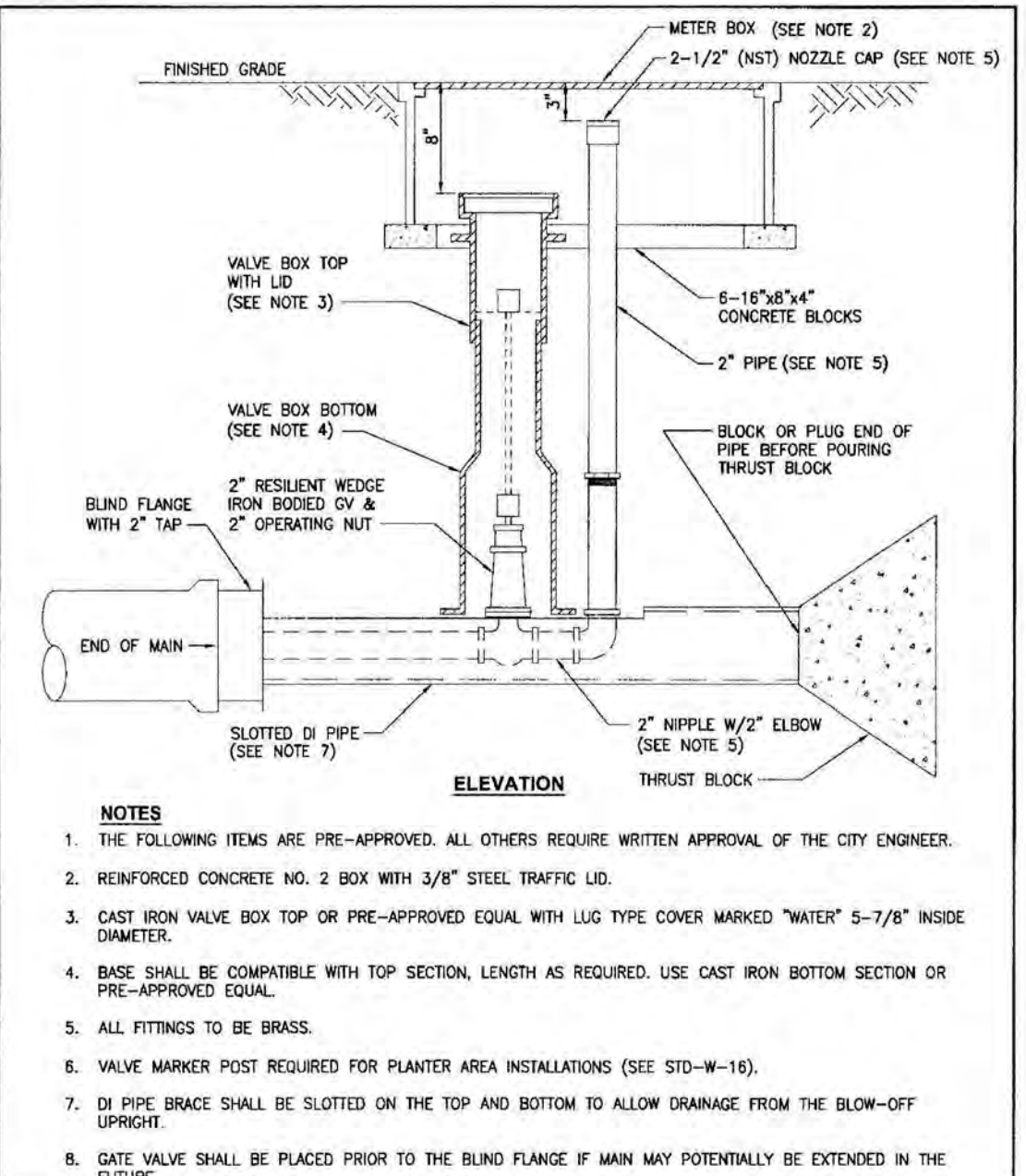
SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-4B
FILE NAME: STD-W-4B



- NOTES**
- THE FOLLOWING ITEMS ARE PRE-APPROVED. ALL OTHERS REQUIRE WRITTEN APPROVAL OF THE CITY ENGINEER.
 - REINFORCED CONCRETE NO. 2 BOX WITH 3/8\"/>

CITY OF ORTING
VALVE BOX & OPERATING NUT EXTENDER

SCALE: NO SCALE APPROVAL DATE: DRAWING NO. W-6
FILE NAME: STD-W-6



- NOTES**
- THE FOLLOWING ITEMS ARE PRE-APPROVED. ALL OTHERS REQUIRE WRITTEN APPROVAL OF THE CITY ENGINEER.
 - REINFORCED CONCRETE NO. 2 BOX WITH 3/8\"/>

CITY OF ORTING
END OF MAIN 2\"/>

CITY OF ORTING
APPROVED FOR CONSTRUCTION

CITY ADMINISTRATOR _____ DATE _____
CITY ENGINEER _____ DATE _____
FIRE CHIEF _____ DATE _____

DESIGNED: DPS
DRAWN: RWG
CHECKED: DPS

Scale: AS NOTED
Date: 06.21.21
Job No.: 19070

Sheet No.: **C22**

22 of 22 Sheets

CALL 48 HOURS BEFORE YOU DIG DIAL 811

C.E.S. NW INC.
CIVIL ENGINEERING & SURVEYING
429 29TH STREET, SUITE D
FOUNTAIN, WA 98072
Phone: (253) 646-6282
ceservices@cesnwinc.com

BELFAIR ESTATES
WATER NOTES & DETAILS

HARMAN DEVELOPMENT, LLC
619 HARMAN WAY SOUTH ORTING, WA

Project: _____
Client: _____

Designed: DPS
Drawn: RWG
Checked: DPS

Scale: AS NOTED
Date: 06.21.21
Job No.: 19070

Sheet No.: **C22**

22 of 22 Sheets



JECB

**Geotechnical Engineering
Special Inspections
Materials Testing
Construction Inspections**

Date: 8-15-20

Project: Belfair Estates- Orting

File #: 20-0017

**LLOYD ENTERPRISES
34667 PACIFIC HWY S
FEDERAL WAY, WA. 98003**

Attn: Mr. Randy Lloyd

Re: Pond Bottom Soils
Project: Belfair Estates
619 Harman Way South
Orting, WA.

To Whom It May Concern:

This letter summarizes the results of our particle size analysis (ASTM D422) testing at the above referenced site in Orting, WA. and our recommendations for the Pond Bottom Soils. Sampling was done by our field inspector in the Pond Bottom.

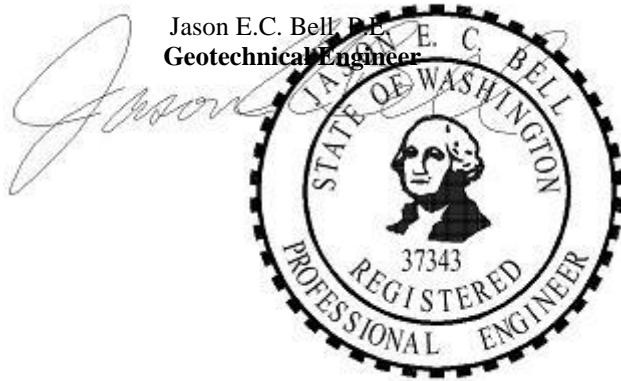
Sampling was performed on the native Pond Bottom soils to verify that the soils meet the requirements of the submitted and approved plans and specifications "Pond Liner Note" and Table 4.3- Compacted Till Liners. This required particle size analysis (ASTM D422) testing. It was established that the sample met project plans and specification requirements for Compacted Till Liners.

The current pond bottom soils analysis meets the specified gradation put forth in Table 4.3- "Compacted Till Liners". The Pond Liner Notes in the Plans assumes that the soils will be imported. This requires them being placed and compacted in 6 inch lifts. Since the current pond bottom soils meet the required gradation it is our opinion that the pond bottom soils not be disturbed and instead left in-place. Since the pond bottom soils consist of cut soils and not fill we do not see any reason to compact the pond bottom soils. See attached tests for results.

We appreciate this opportunity to be of service to you and we look forward to working with you in the future. If you have any questions concerning the test results, the procedures used, or if we can be of any further assistance please call on us at **(253) 405-4654**.

Respectfully Submitted,
JECB

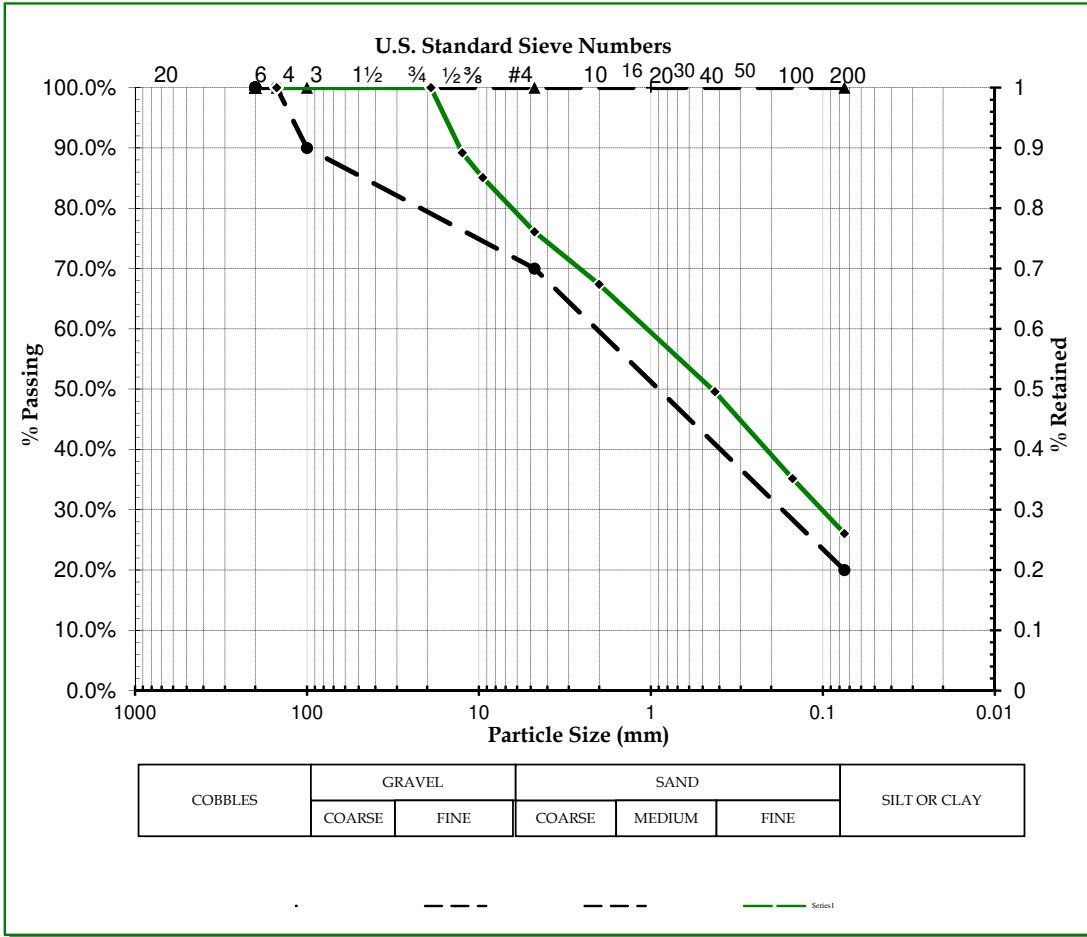
Jason E.C. Bell, P.E.
Geotechnical Engineer



Jamie Hicks,
Technical Director /Field Supervisor

JECB Sieve Report

Date Received: 8/4/20	Sample Description: Native from Pond Bottom	Source: Native	Unified Soils Classification System: SM, Silty Sand with Gravel
Project: Belfair Estates	Location: Pond Bottom	Sample #: 20-0034	Specifications: Pond Bottom Till Liner



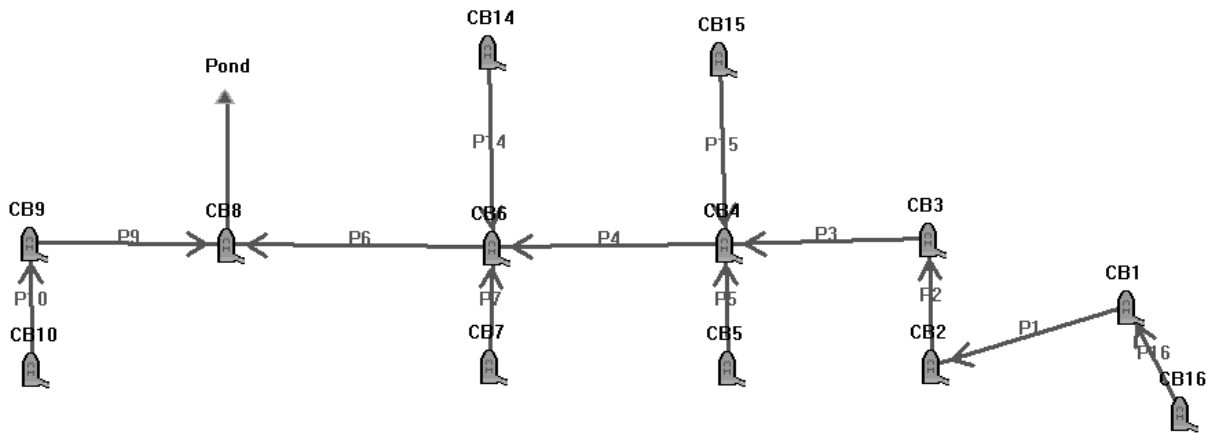
Sample Meets Specs ? Yes
% Gravel: 23.9%
% Sand: 50.0%
% Fines: 26.1%
$D_{(10)} = 0.03$ mm
$D_{(30)} = 0.11$ mm
$D_{(60)} = 1.35$ mm
$D_{(90)} = 7.10$ mm
Curvature Coef, C_c: 0.30
Uniformity Coef, C_u: 46.78
Fineness Modulus: 2.82
Dust Ratio (#200/#40): 0.53
Sand/Silt ratio (#10/#200): 2.6
Sand Equivalent: N/A
Fracture count (Sgl/Dbf): N/A

Coarse Aggregate		Actual	Interpolated	Fine Aggregate				Actual	Interpolated	Specs	
		Cumulative	Cumulative	Specs		Cumulative	Cumulative				
Sieve Size	Percent	Percent	Specs	Specs	Sieve Size	Percent	Percent	Specs	Specs	Max	Min
US	Metric	Passing	Passing	Max	Min	US	Metric	Passing	Passing	Max	Min
6.00"	150.00	100.0%	100.0%	100.0%	100.0%	#4	4.75	76.1%	76.1%	100.0%	70.0%
4.00"	100.00	100.0%	100.0%	100.0%	90.0%	#8	2.360		68.5%		
3.00"	75.00	100.0%	100.0%			#10	2.000	67.4%	67.4%		
2.50"	63.00	100.0%	100.0%			#16	1.180		58.1%		
2.00"	50.00	100.0%	100.0%			#20	0.850		54.4%		
1.75"	45.00	100.0%	100.0%			#30	0.600		51.6%		
1.50"	37.50	100.0%	100.0%			#40	0.425	49.6%	49.6%		
1.25"	31.50	100.0%	100.0%			#50	0.300		43.0%		
1.00"	25.00	100.0%	100.0%			#60	0.250		40.4%		
7/8"	22.40	100.0%	100.0%			#80	0.180		36.7%		
3/4"	19.00	100.0%	100.0%			#100	0.150	35.2%	35.2%		
5/8"	16.00		95.0%			#140	0.106		29.8%		
1/2"	12.50	89.2%	89.2%			#170	0.090		27.9%		
3/8"	9.50	85.1%	85.1%			#200	0.075	26.1%	26.1%	100.0%	20.0%
1/4"	6.30		79.0%								

ROUTEHYD [] THRU [To Pond] USING TYPE1A AND [25 yr] NOTZERO RELATIVE

Reach	Area	Flow	Full Q	% Full	nDepth	Size	nVel	fVel	CBasin / Hyd
----	ac	cfs	cfs	ratio	ft	----	ft/s	ft/s	-----
P14	0.6000	0.3858	2.9219	0.13	0.2454	12" Diam	2.5789	3.7202	CB14
P7	1.2000	0.7716	4.3614	0.18	0.2847	12" Diam	4.1870	5.5531	CB7
P15	0.5100	0.3260	3.1678	0.10	0.2167	12" Diam	2.6005	4.0334	CB15
P5	0.6400	0.4117	2.7366	0.15	0.2621	12" Diam	2.5081	3.4843	CB5
P16	0.5800	0.3728	7.8964	0.05	0.1479	12" Diam	5.1516	10.0540	CB16
P1	1.4400	0.9241	4.1087	0.22	0.3224	12" Diam	4.2217	5.2314	CB1
P2	1.8600	1.1933	0.7740	1.54	-1.0000	12" Diam	1.5417	0.9855	CB2
P3	2.1600	1.3847	8.4621	0.16	0.4104	18" Diam	3.5312	4.7886	CB3
P4	3.9600	2.5391	8.3848	0.30	0.5662	18" Diam	4.1582	4.7449	CB4
P6	6.7900	4.3564	8.5767	0.51	0.7570	18" Diam	4.8725	4.8534	CB6
P10	0.4400	0.2821	3.1202	0.09	0.2032	12" Diam	2.4666	3.9727	CB10
P9	0.5400	0.3469	4.6763	0.07	0.1843	12" Diam	3.4874	5.9540	CB9
P8	7.3300	4.7034	29.2470	0.16	0.4068	18" Diam	12.1437	16.5504	

From Node	To Node	Rch Loss	App Head	Bend Loss	Junct Loss	HW Elev	Max El/ Rim El
----	----	ft	ft	ft	ft	ft	ft
	Pond					196.8611	
CB8	Pond	201.6072	0.3687	0.4793	0.0239	201.7417	206.3300
CB6	CB8	202.3939	-----	-----	-----	202.3939	205.5100
CB14	CB6	203.2967	-----	-----	-----	203.2967	205.1500
CB7	CB6	202.9436	-----	-----	-----	202.9436	205.4900
CB4	CB6	203.4018	0.1936	0.0011	0.0681	203.2773	205.6600
CB15	CB4	203.8564	-----	-----	-----	203.8564	205.3900
CB5	CB4	203.3975	-----	-----	-----	203.3975	205.6900
CB3	CB4	203.7501	0.0358	0.0477	-----	203.7619	206.2900
CB2	CB3	204.2177	0.0215	0.0286	-----	204.2248	206.3000
CB1	CB2	204.3317	0.4121	0.4389	-----	204.3586	205.5900
CB16	CB1	204.8534	-----	-----	-----	204.8534	205.8300
CB9	CB8	202.5931	0.0945	0.1257	-----	202.6244	205.5400
CB10	CB9	202.7330	-----	-----	-----	202.7330	205.5300



CB1 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB1	0.55	8.00	0.1903	0.86	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB1

Hyd Method: SBUH Hyd Loss Method: SCS CN Number
Peak Factor: 484.00 SCS Abs: 0.20
Storm Dur 24.00 hrs

	Area	CN	TC
Pervious	0.4500 ac	86.00	0.10 hrs
Impervious	0.4100 ac	98.00	0.10 hrs
Total	0.8600 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.4500 ac

Impervious CN Data:

Imp 98.00 0.4100 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB2 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB2	0.27	8.00	0.0929	0.42	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB2

Hyd Method: SBUH Hyd Loss Method: SCS CN Number
Peak Factor: 484.00 SCS Abs: 0.20
Storm Dur 24.00 hrs

	Area	CN	TC
Pervious	0.2200 ac	86.00	0.10 hrs
Impervious	0.2000 ac	98.00	0.10 hrs
Total	0.4200 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.2200 ac

Impervious CN Data:

Imp 98.00 0.2000 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB3 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB3	0.19	8.00	0.0661	0.30	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB3

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.1600 ac	86.00	0.10 hrs
Impervious	0.1400 ac	98.00	0.10 hrs
Total	0.3000 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.1600 ac

Impervious CN Data:

Imp 98.00 0.1400 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB4 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB4	0.42	8.00	0.1438	0.65	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB4

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.3400 ac	86.00	0.10 hrs
Impervious	0.3100 ac	98.00	0.10 hrs
Total	0.6500 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.3400 ac

Impervious CN Data:

Imp 98.00 0.3100 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB5 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB5	0.41	8.00	0.1421	0.64	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB5

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.3300 ac	86.00	0.10 hrs
Impervious	0.3100 ac	98.00	0.10 hrs
Total	0.6400 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.3300 ac

Impervious CN Data:

Imp 98.00 0.3100 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB6 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB6	0.66	8.00	0.2278	1.03	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB6

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.5400 ac	86.00	0.10 hrs
Impervious	0.4900 ac	98.00	0.10 hrs
Total	1.0300 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.5400 ac

Impervious CN Data:

Imp 98.00 0.4900 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB7 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB7	0.77	8.00	0.2663	1.20	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB7

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.6200 ac	86.00	0.10 hrs
Impervious	0.5800 ac	98.00	0.10 hrs
Total	1.2000 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.6200 ac

Impervious CN Data:

Imp 98.00 0.5800 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB9 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB9	0.06	8.00	0.0223	0.10	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB9

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.0500 ac	86.00	0.10 hrs
Impervious	0.0500 ac	98.00	0.10 hrs
Total	0.1000 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.0500 ac

Impervious CN Data:

Imp 98.00 0.0500 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB10 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB10	0.28	8.00	0.0974	0.44	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB10

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.2300 ac	86.00	0.10 hrs
Impervious	0.2100 ac	98.00	0.10 hrs
Total	0.4400 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.2300 ac

Impervious CN Data:

Imp 98.00 0.2100 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB14 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB14	0.39	8.00	0.1331	0.60	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB14

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.3100 ac	86.00	0.10 hrs
Impervious	0.2900 ac	98.00	0.10 hrs
Total	0.6000 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.3100 ac

Impervious CN Data:

Imp 98.00 0.2900 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB15 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB15	0.33	8.00	0.1125	0.51	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB15

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.2700 ac	86.00	0.10 hrs
Impervious	0.2400 ac	98.00	0.10 hrs
Total	0.5100 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.2700 ac

Impervious CN Data:

Imp 98.00 0.2400 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

CB16 Event Summary:

BasinID	Peak Q	Peak T	Peak Vol	Area	Method	Raintype	Event
-----	(cfs)	(hrs)	(ac-ft)	ac	/Loss		
CB16	0.37	8.00	0.1287	0.58	SBUH/SCS	TYPE1A	25 yr

Drainage Area: CB16

Hyd Method:	SBUH Hyd	Loss Method:	SCS CN Number
Peak Factor:	484.00	SCS Abs:	0.20
Storm Dur	24.00 hrs		
	Area	CN	TC
Pervious	0.3000 ac	86.00	0.10 hrs
Impervious	0.2800 ac	98.00	0.10 hrs
Total	0.5800 ac		

Supporting Data:**Pervious CN Data:**

Yards 86.00 0.3000 ac

Impervious CN Data:

Imp 98.00 0.2800 ac

Pervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

Impervious TC Data:

Flow type:	Description:	Length:	Slope:	Coeff:	Travel Time
Fixed	TR-55 min	0.00 ft	0.00%	6.0000	6.00 min

From: [Jenny Cho](#)
To: [Don Babineau](#)
Subject: RE: Belfair Estates Final Plat - Orting CES#19070
Date: Friday, May 21, 2021 1:46:55 PM

It's approved. We will sign it off when the taxes are paid. Thank you Don.

From: Don Babineau <dbabineau@cesnwinc.com>
Sent: Friday, May 21, 2021 1:35 PM
To: Jenny Cho <jenny.cho@piercecounitywa.gov>
Subject: RE: Belfair Estates Final Plat - Orting CES#19070

Here you go Jenny.

And thank you so much for your prompt service!

Don Babineau
Senior Planner

CES ♦NW

429 29th Street NE – Ste D
Puyallup, WA 98372
253.848.4282
dbabineau@cesnwinc.com

From: Jenny Cho <jenny.cho@piercecounitywa.gov>
Sent: Friday, May 21, 2021 12:39 PM
To: Don Babineau <dbabineau@cesnwinc.com>
Subject: RE: Belfair Estates Final Plat - Orting CES#19070

Hi Don,

The Tract A is missing from sheet 1. Please email me the revision and I will approve it.

Thank you.

From: Don Babineau <dbabineau@cesnwinc.com>
Sent: Wednesday, May 19, 2021 4:25 PM
To: Jenny Cho <jenny.cho@piercecounitywa.gov>
Subject: RE: Belfair Estates Final Plat - Orting CES#19070

Hi Jenny,

Attached is the revised final plat addressing your comments. We confirmed the storm tract will be private and have adjusted the notes accordingly. Please also note the city has approved the

additional name on the final plat to read "Tahoma Valley Estates also known as Belfair Estates". We understand the review fees will need to be paid prior to recording.

Please review so we can submit your approval email to Orting for a complete application.

Thank you,

Don Babineau
Senior Planner

CES •NW

429 29th Street NE - Ste D
Puyallup, WA 98372
253.848.4282
dbabineau@cesnwinc.com

From: Jenny Cho <jenny.cho@piercecounitywa.gov>
Sent: Friday, May 14, 2021 12:10 PM
To: Don Babineau <dbabineau@cesnwinc.com>
Subject: RE: Belfair Estates Final Plat - Orting CES#19070

Hi Don,

Please find attached review comments.

Thank you.

From: Don Babineau <dbabineau@cesnwinc.com>
Sent: Wednesday, May 5, 2021 4:13 PM
To: Jenny Cho <jenny.cho@piercecounitywa.gov>
Subject: Belfair Estates Final Plat - Orting CES#19070

Hi Jenny,

Attached is another final plat in City of Orting jurisdiction which requires your review.

Please contact me with questions or concerns.

Thank you,

Don Babineau
Senior Planner

CES •NW

429 29th Street NE - Ste D

Puyallup, WA 98372
253.848.4282
dbabineau@cesnwinc.com

CITY OF ORTING

DETERMINATION OF NON-SIGNIFICANCE

Application Number: 2017-01
Applicant Name: Abbey Road Land Development Group, LLC.
Address of Proposal: 619 Harman Way, S. Orting, Washington 98360, Parcels 0519322019 and 0519322082, Section 32, Township 19, Range 05.

SUMMARY OF PROPOSED ACTION

The Applicant has applied for approval of a Preliminary Planned Subdivision of 9.54 acres to create 32 new single family lots with private storm water management tracts.

The City has made this SEPA Determination in accordance with Chapter 5, Title 5, Orting Municipal Code: SEPA - Environmental Determination.

SEPA DETERMINATION: DNS DNS with conditions
 DNS involving non-exempt grading or demolition or involving another agency with jurisdiction

BACKGROUND DATA

Site Location: The subject site is located in the southern part of the City between Grinnell Avenue SW and Harman Way (SR 162).
Zoning: Residential Urban
Parcel Size: Approximately 9.54 acres
Existing Use: Vacant (an existing residence and accessory buildings are located on a 1.35 parcel that will be Lot 32).
Zoning in Vicinity: Residential Urban
Uses in Vicinity: Single family residences, vacant

Proposal Description: Development of a subdivision for detached dwellings, street, stormwater management tract, and a homeowners' association.

Public Comment: Comments may be submitted in writing or delivered orally up to the closing of the Public Hearing in February, 2017.

SEPA DETERMINATION

Environmental review resulting in a Threshold Determination is required pursuant to the State Environmental Policy Act (SEPA), WAC 197-11, and the Orting SEPA Ordinance (Orting Municipal Code Title 5, Chapter 5.) The information in the application and the experience of the lead agency with review of similar projects form the basis for this analysis and decision.

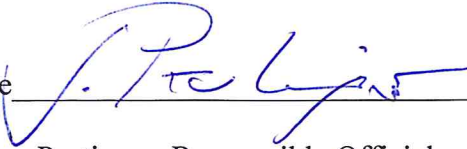
The City has analyzed the application submitted by the project applicant; reviewed the project plans and any additional information in the file have been considered. As indicated in the record, this action will result in adverse impacts to the environment. However, due to their temporary nature and limited effects, the impacts are not expected to be significant, or suitable mitigation measures have been identified to address the impacts.

DECISION

This decision was made after review by the responsible official on behalf of the lead agency of the prior environmental review and other information submitted with this application and on file with the responsible department. This constitutes the Threshold Determination and form. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment so long as the mitigating measures identified in the adopted SEPA documents and permit-related requirements of the Washington State Department of Ecology are implemented. An EIS is not required under RCW 43.21.030(2) (c).

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on the proposal for 14 days from the date below. Comments must be submitted by January 27, 2017.

Signature  Date 1/19/17
Joe Pestinger, Responsible Official

**CITY OF ORTING
STAFF REPORT
and
PLANNING COMMISSION RECOMMENDATION**

Belfair Estates Preliminary Subdivision (PS 2016-01)

Applicant/owner: Harman Development LLC.
619 Harman Way South
Orting, Washington 98360
ATTN: David Harman

Applicant Engineer: Abby Road Group LLC
923 Shaw Road, Suite A
Puyallup, Washington 98372
ATTN: Giles F. Hulsmann III

Property Location:

The subject site is located in the southern part of the City between Grinnell Avenue SW and Harman Way (SR 162). The address of the site is 619 Harman Way, S. Orting, Washington 98360, Parcels 0519322019 and 0519322082, Section 32, Township 19, Range 05.

Parcel Size:

The subject parcel size is 9.54 Acres.

Description of Proposal:

The proposed subdivision would create 31 lots for the construction of detached single family residences. One additional lot would be created for the existing Harman home area. The average lot size would be 8,765 square feet. Four private tracts totaling 50,200 square feet in area would be held for storm water management, setbacks, and pedestrian access for homeowner use. One flag lot would be created. Access to the lots would be via a 60 foot wide public cul-de-sac street connecting to Grinnell Avenue SW. The street would feature sidewalks and all utilities. The existing Harman home would be lot 32 and would also have access to Harman Way SW.

Zoning:

Residential Urban (RU)

Preliminary plat complies with this provision.

E. "Flood, Inundation Or Swamp Conditions":

No portion of the project lies within the floodway. A portion of the project lies within the 100 year flood plain, and construction and infrastructure elevations shall be mitigated per City, state, and federal guidelines.

F. "Bonds":

To be completed prior to recording of final plat.

OMC 12-8-2: "Certificate to Accompany Final Plat":

To be completed with final plat.

OMC 12-8-3: "General Requirements for Filing Plat":

To be completed with final plat.

OMC 12-8-4: "Compliance with Public Works Standards":

Complies, or will be addressed during the review of construction plans for infrastructure improvements.

OMC 15-4-1 "Procedures for Processing Permit Applications":

The proposal is a Type 4 process requiring a Planning Commission open record hearing and recommendation to the City Council, which will hold a closed record hearing prior to any approval action.

OMC 15-5-1 "Application"

Preliminary plat application complies with this provision.

OMC 15-5-2 "Pre-application Meetings":

Preliminary plat application complies with this provision. A Pre-application meeting was held on October 25, 2016, with follow up telephonic and email conversations in December, 2016 and January, 2017.

OMC 15-5-3 "Contents of Application":

Preliminary plat application complies with this provision. In addition to the SEPA checklist, the application included a Traffic Impact Analysis prepared by Heath & Associates, Inc. dated November, 2016, and a preliminary Geotechnical Investigation Report by Cobalt Geosciences, dated December 2. The City growth rate is currently higher than the 2% used in the Traffic Impact Analysis due to recent development. However, staff believes that that difference would not significantly change the conclusions of the analysis.

OMC 15-5-4 "Letter of Completeness":

Preliminary plat application complies with this provision. Letter of Completeness was issued on January, 18, 2017.

OMC 15-5-5 "Technical Review Committee":

Preliminary plat application complies with this provision. Technical review was conducted by City staff, Parametrix engineering, and BHC (planning) consultants.

Preliminary plat application

OMC 15-5-6 "Environmental Review": complies with this provision. A DNS was issued on January, 19, 2017.

OMC 15-6 "Impact Fees":

Traffic, School, and Park impact fees will be levied per City ordinance.

OMC 15-7-1 "Development Application":

Preliminary plat application complies with this provision. A Notice of Development Application was published in the The Tacoma News Tribune on January 20, 2017 and posted on the subject property and at City Hall. The notice was mailed to property owners within 500 feet of the parcel on January 19, 2017. The notice complied with all provisions of OMC 15-7-1.

OMC 15-7-2 "Administrative Approval":

Not Applicable

OMC 15-7-3 "Public Hearing":

A Notice of Public Hearing will be published in the The News Tribune on January 19, 2017 and posted on the subject property and at City Hall. Copies of the notice were mailed to all property owners of record within 500 feet of the subject property.

OMC 15-7-4 and 15-7-5:

Not applicable.

Staff Conclusions and Recommendations:

A. Staff Recommendations

The following recommendations are made in conformance with existing federal and state laws, the Orting Municipal Code and other applicable codes, the City of Orting Comprehensive Plan, Pierce County Planning Policies, and technical input from consulting professionals and the City of Orting Staff. The staff has concluded that the proposed development meets the approval criteria for Preliminary Subdivisions (OMC 12-5-3) and recommends approval with the following conditions:

1. The applicant shall provide easements for conveyance of water and storm water through the site as approved by the City Engineer.
2. The applicant shall provide storm water management analysis and plans consistent with City and State standards during the design phase.
3. All erosion control, grading, street improvements, water, sanitary and storm sewer, and other public infrastructure designs shall be reviewed and approved by the City Engineer prior to the start of construction.
4. Streets dedicated to the city shall be a minimum 50' right-of-way with curb, gutter and sidewalks as specified by the City of Orting development standards.
5. The applicant shall provide traffic signs and street signs per City direction
6. The applicant shall purchase and install street lights as approved by the City and enter into a service and maintenance agreement with Puget Sound Energy. The terms of this agreement shall be transferred to the City of Orting upon approval of the final plat documents and acceptance of the streets and utilities by bill of sale.
7. The applicant shall enter into a Developer Extension Agreement for water, sewer, and storm water utilities subject to approval by the City attorney upon approval of

the Preliminary Plat and prior to any review or construction activity associated thereof.

8. The applicant shall provide mailboxes or receptacles as specified by the Orting branch of the U.S. Post Office prior to final plat approval
9. The applicant shall coordinate with all private utilities such as gas, power, phone, cable, etc. and shall complete underground installation thereof prior to final plat approval.
10. The applicant shall construct a six-foot wood fence along all perimeter property lines. Once the final plat is recorded, ownership and maintenance of said fence(s) shall become the responsibility of the respective lot owner(s).
11. The applicant shall pay all fees, General Facility Charges (GFCs), and any other appropriate charges prior to final plat approval.
12. School impact fees shall be paid to the Orting School District prior to issuance of any building permits.
13. Park impact fees shall be paid to the City of Orting prior to issuance of any building permits.
14. Homeowners' association covenants shall be submitted for City review prior to final subdivision approval.

OMC 12-5-3(C) Public Interest:

The proposed development will serve the public interest in the following ways:

1. "Belfair Estates" will provide a natural extension of Orting's residential areas. The design of the project is consistent with existing development and amenities located in the City
2. The project is consistent with provisions of the City of Orting Comprehensive Plan except for the lack of connectivity to other future neighborhoods.
3. The storm water management system will provide for surface water to be treated on-site and conveyed to the municipal system.
4. The proposed lots and setbacks meet the minimum requirements of the Residential Urban Zone, and are consistent with the goals and policies of the Comprehensive Plan.

5. The project will create no significant environmental impact beyond the temporary impacts associated with construction.

Exhibits:

1. Preliminary Plat Application
2. SEPA Environmental Checklist and Determination
3. Written public comments
4. Preliminary Plat Map with elevation and street cross sections

Planning Commission Recommendation:

Commissioner Greg Hogan moved to recommend Belfair Estates Preliminary Subdivision for approval to the City Council as presented, with staff report conditions. Commissioner Dennis Paschke seconded the motion. Motion passed with four (4) yay and one (1) recusal.



Kelly Cochran
Planning Commission Co-Chair

2-16-17
Date



CITY OF ORTING

104 BRIDGE ST S, PO BOX 489, ORTING WA 98360
Phone: (360) 893-2219 FAX: (360) 893-6809
www.cityoforting.org

NOTICE OF APPLICATION

Project Name: Tahoma Valley Estates (aka Belfair Estates)

Applicant: Harman Development, LLC

Date of Application: May 24, 2021

Date of Notice of Complete Application: June 30, 2021

Date of Notice of Application: July 12, 2021

Project Address: 619 Harman Way S, Orting, WA 98360

Site Legal Description: Parcel number 0519322019

Project description: Final plat application to subdivide the 9.02-acre property located into 32 single-family residential lots (one of which will contain the existing home), a road (Belfair St SW), two access tracts (Tracts B and C), an access/ recreation tract (Tract D), and a storm tract (Tract A). City Council approved the preliminary plat on February 22, 2017.

SEPA Determination: The City issued a Determination of Nonsignificance on January 19, 2017.

Requested approvals: Final Plat

Application Materials: Transmittal; Final Subdivision Checklist; Application and Affidavit of Ownership; Final Plat; Title Guarantee; Draft CC&Rs; Lot Closures; Mailing Labels; Pierce County Recording Map Checklist; As-builts; Approval Email from Pierce County.

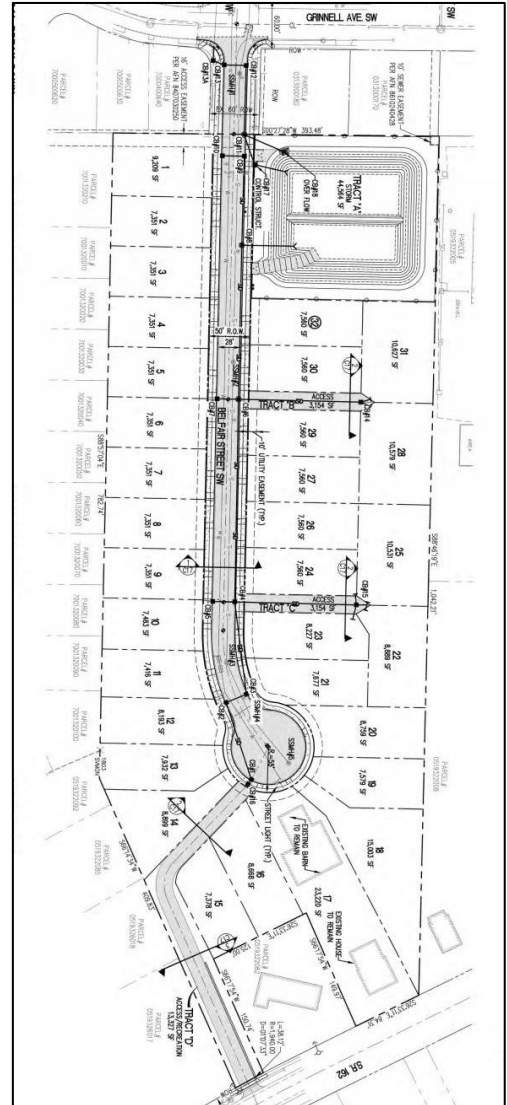
All application materials are public record and may be requested for viewing by any member of the public by appointment.

City staff contact: Emily Adams, AICP - City Planner at
EAdams@cityoforting.org

Date, time, and place of public hearing: The open public hearing before the Planning Commission will occur on **August 2, 2021 at 7:00pm** at City Hall and virtually. It will be noticed separately.

The City Council shall make a decision on approval or denial of the application within statutory limits.

The public comment period ends July 26, 2021 at 1:00pm. Any person may comment on the application, receive notice of and participate in any hearings, and request a copy of the decision once made. Any person with standing may appeal the final decision. Please email comments to eadams@cityoforting.org or by mail to PO Box 489, Orting, WA 98360.





CITY OF ORTING

104 BRIDGE ST S, PO BOX 489, ORTING WA 98360
Phone: (360) 893-2219 FAX: (360) 893-6809
www.cityoforting.org

NOTICE OF PUBLIC HEARING

Project Name: Tahoma Valley Estates (aka Belfair Estates)

Applicant: Harman Development, LLC

Date of Application: May 24, 2021

Date of Notice of Complete Application: June 30, 2021

Date of Notice of Application: July 12, 2021

Date, time, and place of public hearing: The open public hearing before the Planning Commission will occur on **August 2, 2021 at 7:00pm** at City Hall at 104 Bridge St S, or by virtual attendance:

https://bluejeans.com/514127836/6047?src=join_info

Phone Dial-in: +1.408.419.1715 +1.408.915.6290

Meeting ID: 514 127 836 Participant Passcode: 6047

Project Address: 619 Harman Way S, Orting, WA 98360

Site Legal Description: Parcel number 0519322019

Project description: Final plat application to subdivide the 9.02-acre property into 32 single-family residential lots (one of which will contain the existing home), a road (Belfair St SW), two access tracts (Tracts B and C), an access/ recreation tract (Tract D), and a storm tract (Tract A). City Council approved the preliminary plat on February 22, 2017.

SEPA Determination: The City issued a Determination of Nonsignificance on January 19, 2017.

Requested approvals: Final Plat

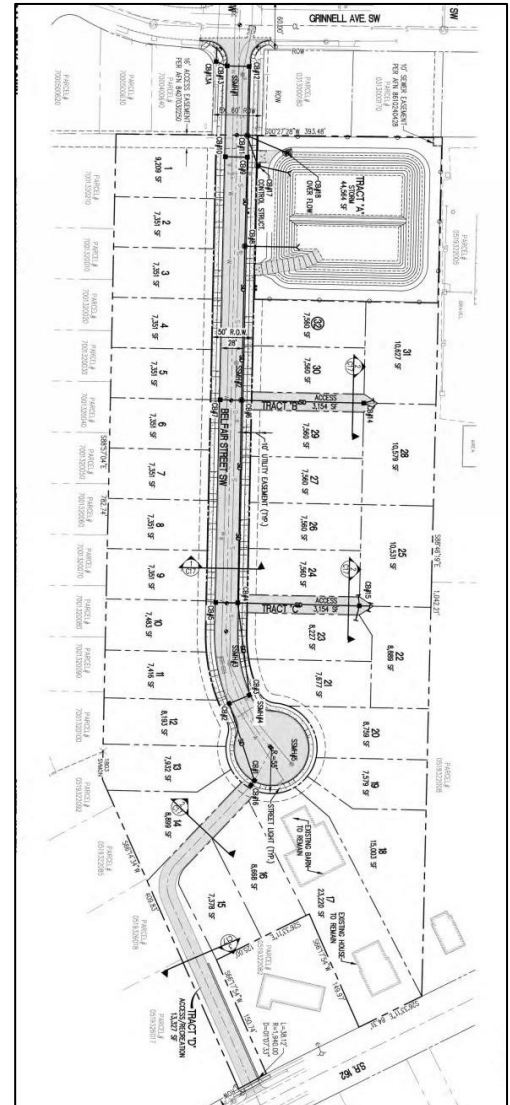
Application Materials: Transmittal; Final Subdivision Checklist; Application and Affidavit of Ownership; Final Plat; Title Guarantee; Draft CC&Rs; Lot Closures; Mailing Labels; Pierce County Recording Map Checklist; As-builts; Approval Email from Pierce County.

All application materials are public record and may be requested for viewing by any member of the public by appointment.

City staff contact: Emily Adams, AICP - City Planner at EAdams@cityoforting.org

The City Council shall make a decision on approval or denial of the application within statutory limits.

The public comment period ends August 2, 2021 at 1:00pm. Any person may comment on the application, receive notice of and participate in any hearings, and request a copy of the decision once made. Any person with standing may appeal the final decision. Please email comments to eadams@cityoforting.org or by mail to PO Box 489, Orting, WA 98360.



**CITY OF ORTING
WASHINGTON
RESOLUTION NO. 2021-XX**

**A RESOLUTION OF THE CITY OF ORTING,
WASHINGTON, APPROVING THE FINAL PLAT FOR THE
PLAT OF TAHOMA VALLEY ESTATES.**

WHEREAS, the Orting City Council approved the preliminary plat for Belfair Estates (now referred to as Tahoma Valley Estates) with conditions on February 22, 2017; and

WHEREAS, on May 24, 2021 property owner Harman Development LLC submitted an application to the City for final plat on the lot located at 619 Harman Way S in the City of Orting, County of Pierce, State of Washington; and

WHEREAS the application was circulated among City staff for review and a Notice of Application was issued on July 12, 2021; and

WHEREAS, the application for final plat has been reviewed pursuant to the criteria for final plat review in Orting Municipal Code (OMC) Title 12, Chapter 6, Section 5 and staff have found the criteria and conditions of preliminary plat approval have been satisfied; and

WHEREAS, in accordance with OMC 15-4-1 the Orting Planning Commission held an open record public hearing on August 2, 2021 and recommended approval of the final plat by a 5-0 vote; and

WHEREAS, Orting City Council held a closed record hearing at its regular meeting on August 11, 2021 and reviewed the final plat application;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ORTING, WASHINGTON AS FOLLOWS:

Section 1. Findings. The City Council hereby finds that the plat of Tahoma Valley Estates (aka Belair Estates) meets the criteria for approval of a final plat application pursuant to the criteria in OMC 12-6-5 and preliminary plat conditions. Attached hereto and incorporated by this reference as Exhibit A is the Staff Report, containing findings of fact that the Council hereby adopts as its additional findings of fact in support of this decision.

Section 2. Authorization. The final plat for Tahoma Valley Estates is approved and the Mayor, City Engineer, City Treasurer, Planning Commission Chair, and City Clerk are hereby authorized to sign the final plat mylar for recording.

Section 3. Corrections. The City Clerk and the codifiers of this resolution are authorized to make necessary clerical corrections to this resolution including, but not limited to, the correction of scrivener's errors, references, numbering, section/ subsection numbers and any references thereto.

Section 4. Effective Date. This Resolution shall become effective immediately upon adoption and signature as provided by law.

RESOLVED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE 11th DAY OF AUGUST, 2021.

CITY OF ORTING

Joshua Penner, Mayor

ATTEST/AUTHENTICATED:

Kim Agfalvi, City Clerk

Approved as to form:

Charlotte Archer
Inslee, Best, Doezie & Ryder, P.S.
City Attorney

Filed with the City Clerk:
Passed by the City Council:
Date of Publication:
Effective Date:

NOTICE IS HEREBY GIVEN

the Orting Planning Commission will hold a Public Hearing. The purpose of this hearing is to receive public testimony regarding a proposal made by Harman Development LLC and CES NW Inc. for Final Plat Approval to subdivide the 9.02-acre property located at 619 Harman Way S (parcel 0519322019), into 32 single-family residential lots (one of which will contain the existing home), a road (Belfair St SW), two access tracts (Tracts B and C), an access/ recreation tract (Tract D), and a storm tract (Tract A).

The hearing will be held at a regular Planning Commission Meeting on August 2, 2021 at 7:00pm. The City is utilizing in person AND remote attendance for the hearing, the public is welcome to attend by a log in or call in number and then entering the Meeting ID. To join the meeting/hearing on a computer or mobile phone: https://bluejeans.com/514127836/6047?s-rc=join_info or by Phone Dial-in: +1.408.915.6290 Meeting ID: 514 127 836 and Participant Passcode: 6047. Or attend in person at City Hall, 104 Bridge Street South.

If you are unable to join the hearing written comments may be submitted to City Planner Emily Adams electronically, no later than 1:00pm on August 2, 2021 at EAdams@cityoforting.org. Written comments will be sent to the Commission prior to the hearing and will become part of the public record. Further information may be obtained by emailing Emily Adams at the email above or by phone at 253-284-0263.

IPL0033262
Jul 22 2021

Total Control Panel

[Login](#)

To: eadams@cityoforting.org
From: postmaster@wave2adportal.com

Message Score: 1
My Spam Blocking Level: High

High (60): **Pass**
Medium (75): **Pass**
Low (90): **Pass**

[Block](#) this sender
[Block](#) wave2adportal.com

This message was delivered because the content filter score did not exceed your filter level.



Planning Commission Staff Report

Project Name:	Sign Code Amendments
Applicant:	City of Orting
Date of Staff Report:	June 25, 2021, revised July 9, 2021
Date of Meeting:	August 2, 2021
Staff Recommendation:	Approval
City Staff Contact:	Emily Adams, AICP Contract City Planner
Public Comment Period:	June 25 – July 7 and July 23 – August 2 following notices of public hearing.
Public Notice:	Type 5 applications do not require notice of application per OMC 15-4-1. Notice of a public hearing was published and posted 10 days prior to the hearing per OMC 15-7-3.

Exhibits:

1. Staff Report
2. Notice of first Planning Commission public hearing
3. Notice of second Planning Commission public hearing
4. Proposed Ordinance

Findings of Fact

Currently under the sign code section and architectural design review code section internally illuminated signs are not permitted, but rather specify that signs shall be illuminated by indirect lighting.

Council directed staff to look at the City's current sign code and consider ways to amend the code to allow for electronic changing message center signs. Staff was also directed to look at the temporary sign regulations, specifically for flutter signs to ensure regulations required maintenance of the signs to keep them upright, and in good repair.

Changing Message Signs

The proposal is to amend the sign code and architectural design review (ADR) code to allow for internally lit, changing message signs. This includes new and revised definitions (including reducing message length intervals from 30 to 10 seconds), amended purpose statements, and new and revised regulations. This type of sign will only be permitted as a secondary sign, a businesses primary sign can not be an internally lit sign or electronic changing message sign (the intent for these primary signs to conform to the sign and ADR code as it exists today, prior to these amendments)

These amendments allow signs to evolve with technology, and provides a means to the City and City's business to have a sign that is easily programmed to change messages, in compliance with the proposed code, rather than having to have manual changing message signs which takes staff time and money to do.

Temporary Signs

The second part of the proposal is to add additional temporary sign regulations to require maintenance and securing of the signs, reduce the amount of time temporary signs are allowed to be displayed in a calendar year, remove flutter flags as a permitted sign type, and exempt temporary signs associated with special event permits from location regulations (to allow for things like signs in the park for the farmers market).

The length of time a temporary sign is currently allowed to be displayed is six, 30 days periods, allowing temporary signs to be displayed for six months out of the year. This is much longer than other jurisdictions, examples include:

- Enumclaw: 45 or 60 days
- Gig Harbor: 30 days
- Eatonville: 30 days (most temporary signs)
- Milton: 30 - 90 days
- Buckley: 30 days and 120 for temporary business signs
- Bonney Lake: 60 days

The proposal is to reduce that to three 30-day periods, or a total of three months.

Over the past months the planning commission has noted that many of these types of signs are seen fallen over, on the ground, and is disrepair. These code amendments aim to give flutter signs a definition, to be more easily identified and regulated, and provide for specific regulations in regard to securing and maintaining signs.

Public Hearing

A public hearing was held by the Planning Commission on July 7, 2021. No comments were received.

A second public hearing will be held on August 2, 2021.

Staff Recommendation

Staff recommends approval of the ordinance and amendments as proposed.

Appeal

Recommendations of the planning commission may be appealed, by applicants or parties of record, from the planning commission hearing, to the city council per OMC 15-10-2.

**CITY OF ORTING
WASHINGTON
ORDINANCE NO. 2021-XX**

**AN ORDINANCE OF THE CITY OF ORTING,
WASHINGTON, RELATING TO SIGNS AND
ARCHITECTURAL DESIGN REVIEW REQUIREMENTS;
AMENDING ORTING MUNICIPAL CODE CHAPTER 13-7
AND SECTION 13-6-7; PROVIDING FOR SEVERABILITY;
AND ESTABLISHING AN EFFECTIVE DATE**

WHEREAS, the City of Orting is a non-charter optional municipal code city as provided in Title 35A RCW, incorporated under the laws of the state of Washington; and

WHEREAS, the City desires to update its regulations for signs to respond to evolving technology and maintain an aesthetically pleasing streetscape; and

WHEREAS, the current sign code does not permit electronic reader boards anywhere in the City; and

WHEREAS, in accordance with the requirement set forth in RCW 36.70A.106, the City provided the Washington State Department of Commerce notice of the City's intent to adopt the proposed ordinance on June 3 for its expedited review and comment period; and

WHEREAS, the City's Planning Commission held a public hearing on the proposed amendments on July 7, 2021 and proposed a recommendation and forwarded it to the City Council to adopt the proposed OMC amendments; and

WHEREAS, the City Council held a public hearing on the proposed OMC amendments on July 28, 2021, considered the proposed code amendments and the entire record, including recommendations from the Planning Commission; and

WHEREAS, the City Council has determined that the proposed regulations are in accord with the Comprehensive Plan, will not adversely affect the public health, safety, or general welfare, and are in the best interest of the citizens of the City;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORTING, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are hereby adopted and incorporated as Findings of Fact and/or Conclusion of Law of the City Council. The City Council bases its findings and conclusions on the entire record of testimony and exhibits, including all written and oral testimony before the Planning Commission and the City Council.

Section 2. OMC Section 13-7-1, Amended. Orting Municipal Code Section 13-7-1 is hereby amended as follows:

13-7-1: FINDINGS AND PURPOSE

A. Findings. The City Council finds as follows:

16. Brightly lit signs, flashing electronic signs, and overly animated signs waste valuable energy, contribute to light pollution, produce hazardous glare, and create the potential for distracting or confusing motorists, thereby negatively impacting the health, safety, and welfare of the public. ~~Further, digital billboards have the potential to distract drivers for a significantly longer time than non-digital billboards creating a greater potential for driver distraction;~~

Section 3. OMC Section 13-7-2, Amended. Orting Municipal Code Section 13-7-2 is hereby amended as follows:

13-7-2: DEFINITIONS

CHANGING MESSAGE SIGN CENTER. An exterior, electrically controlled permanent sign that displays different copy changes on the same lamp bank which change at intervals of thirty (30) seconds or greater. This includes electronic reader boards.

SANDWICH BOARD/SIDEWALK SIGN: A temporary portable sign consisting of two (2) sign faces hinged at the top and separated at the bottom to make it self-standing.

FLUTTER SIGN: A sign made of cloth, plastic or similar material affixed to a pole that is located outdoors. Flutter or flutter flag signs are "temporary signs," securely anchored for safety but not permanently anchored to a structure, or weighted base. This type of sign is prohibited.

READER BOARD: A permanent sign face designed to allow copy changes either by manual or electronic means in which the message is static and can only be changed physically by the owner/operator.

Section 4. OMC Section 13-7-4, Amended. Orting Municipal Code Section 13-7-4 is hereby amended as follows:

13-7-4: GENERAL REGULATIONS

- F. Illumination: All sign Indirect illumination shall be by indirect lighting and is preferred and shall be lighted in such a manner that glare from the light source is not visible to pedestrian or vehicle traffic. Internally illuminated signs must adhere to the standards in OMC 13-7-4.L. Internally illuminated signs shall be designed to emphasize the lighting of the sign text, message and/or symbols, while minimizing the lighting of the background of the sign face. Temporary signs shall not be illuminated.

L. Internally Illuminated Signs

1. Internally illuminated signs are only permitted as a secondary, permanent sign, supplementary to a business's primary sign which shall not be internally illuminated or be a changing message sign.
2. The text that changes in a changing message sign is limited to a single color and must be a warm-toned off-white or similar color and the background must be a dark toned color as approved by the planning commission in compliance OMC 13-6-7 design review standards. The colors of the sign, letters, and background shall remain fixed.
3. Signs shall have a maximum luminance of not more than 0.2 footcandles over ambient lighting conditions.
4. Changing message signs shall have dimming capability to allow adjustment of sign brightness when required by the City to accommodate local ambient conditions.
5. An electronic message may not change more frequently than every thirty (30) seconds;
6. Rotating, traveling, pulsing, flashing or oscillating light sources, lasers, beacons, searchlights or strobe lighting shall not be permitted.
7. Electronic signs shall not exceed the number, type, size, and height requirements set forth in OMC 13-7-9;
8. Electronic signs shall be permitted only in the MUCTN, MUTC, and PF zones.
9. The sign structure must comply with the architectural design review standards found in OMC 13-6-7.

Section 5. OMC Section 13-7-6, Amended. Orting Municipal Code Section 13-7-6 is hereby amended as follows:

13-7-6: PROHIBITED SIGNS, ALL ZONES:

- C. Signs which blink, flash, rotate, contain changing images or text that are electronically generated, or are animated by lighting in any fashion that exceed the requirements of OMC 13-7-4. ~~or that are internally illuminated~~

Section 6. OMC Section 13-7-8, Amended. Orting Municipal Code Section 13-7-8 is hereby amended as follows:

13-7-8: TEMPORARY SIGNS:

B. ~~Placement And Size~~ **General Requirements.**

1. No temporary signs shall be located within the center median of principal, minor, and collector arterials or within roundabouts, traffic circles, or islands, or within ten (10) feet from any intersection so as to preserve driver site visibility. No temporary signs over thirty-six (36) inches in height are permitted within fifteen feet (15') of a road or driveway.
2. Temporary signs shall not be illuminated.
3. Temporary signs shall not be attached to any utility pole, fence, building, structure, object, tree or other vegetation located upon or within any public right-of-way or publicly owned or maintained land.
4. Except as provided herein, temporary signs shall not be erected without the permission of the owner of the property on which they are located, nor shall they be placed in such a manner as to obstruct or interfere with traffic or endanger the health or safety of people or endanger property.
5. Temporary signs shall be made of weather-resistant materials and shall be securely, anchored to a weighted base or structure or able to stand freely without toppling or blowing over. Signs and parts of signs that are blown or carried away from their intended location may be collected and disposed of as litter.
6. Temporary signs shall be maintained in good repair.
7. Flutter flag signs are not a permitted type of sign.
8. Temporary signs on public property, other than public rights of way, are prohibited, except:
 - i. Two (2) temporary signs may be utilized for permitted special events held on public property subject to a valid special event permit for the duration of the special event, provided:
 1. The temporary signs shall not be affixed to any structures or fixtures owned by the City; and
 2. The temporary signs shall not exceed a maximum height of six (6) feet from the ground.

C. Additional Regulations Specific to Temporary Commercial Signs.

1. General Commercial Signs.

- a. No business or other party shall display more than two (2) temporary commercial signs simultaneously for no longer than thirty (30) continuous days.
- b. No two (2) temporary signs may be closer together than thirty (30) feet.
- c. Temporary signs may be displayed for no more than ~~six~~ three non-consecutive (63) 30-day periods, per sign, within a calendar year.

Section 7. OMC Section 13-6-9, Amended. Orting Municipal Code Section 13-6-9 is hereby amended as follows:

13-6-7 ARCHITECTURAL DESIGN REVIEW:

D. Architectural Design Review Standards: The following standards shall be employed in determining whether the application is consistent with turn of century: western or Victorian design theme:

5. Signs: The following standards may be used by the planning commission to interpret and apply the provisions of section 13-7-4 of this title to site specific conditions:

- ~~d. Illuminated exterior signs are not characteristic of early 1900s design and shall not be allowed; and~~
- e. Illuminated exterior signs are not characteristic of early 1900s design and shall not be allowed as the primary business sign; and

- f. Signs shall are preferred to be illuminated by indirect lighting ~~and~~ which shall be lighted in such a manner that glare from the light source is not visible to pedestrian or vehicle traffic.

Section 8. Severability. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 9. Codification. The City Council authorizes the City Clerk to correct any non-substantive errors herein, codify the above, and publish the amended code.

Section 10. Effective Date. This Ordinance shall be published in the official newspaper of the City and shall take effect and be in full force five (5) days after the date of publication.

**ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON
THE ___ DAY OF ____, 2021.**

CITY OF ORTING

Joshua Penner, Mayor

ATTEST/AUTHENTICATED:

Kim Agfalvi, City Clerk, CMC

Approved as to form:

Charlotte A. Archer
Inslee, Best, Doezie & Ryder, P.S.
City Attorney

Filed with the City Clerk:
Passed by the City Council:
Date of Publication:
Effective Date:

NOTICE OF ORTING PLANNING COMMISSION PUBLIC HEARING

Monday, August 2nd, 2021 – 7:00 pm

NOTICE IS HEREBY GIVEN the Orting Planning Commission will be holding a Public Hearing. . The purpose of this hearing is to receive public testimony regarding a proposal to amend Orting Municipal Code Title 13-7: Sign Regulations and Title 13-6-7: Architectural Design Review. The amendments to the code are to include the regulations to allow for electronic reader boards that meet certain standards in the MUTCN, MUTC, and PF zones and amending the temporary sign code to ensure signs are sturdy, in good condition, not allow flutter flag signs, and limit the length of time they may be up within a calendar year.

The hearing will be held at a regular Planning Commission Meeting on August 2, 2021 at 7:00pm. The City is utilizing both in person AND remote attendance for the hearing. Comments made be made by the public by a log in or call in number and then entering the Meeting ID.

To join the meeting/hearing on a computer or mobile phone: https://bluejeans.com/514127836/6047?src=join_info or by Phone Dial-in: +1.408.915.6290

Meeting ID: 514 127 836 and Participant Passcode: 6047

In person: City Hall, 104 Bridge Street South

If you are unable to join the hearing written comments may be submitted to City Planner Emily Adams electronically, no later than 1:00pm on Aug. 2, 2021 at EAdams@cityoforting.org or by mail to the Planning Commission secretary at PO Box 489, Orting, WA, 98360.

Written comments will be sent to the Commission prior to the hearing and will become part of the public record. Further information may be obtained by emailing Emily Adams at the email above or by phone at 253-284-0263.



NOTICE OF ORTING PLANNING COMMISSION PUBLIC HEARING

Wednesday, July 7th, 2021 – 7:00 pm

NOTICE IS HEREBY GIVEN the Orting Planning Commission will be holding a Public Hearing. . The purpose of this hearing is to receive public testimony regarding a proposal to amend Orting Municipal Code Title 13-7: Sign Regulations and Title 13-6-7: Architectural Design Review. The amendments to the code are to include the regulations to allow for electronic reader boards that meet certain standards in the MUTCN, MUTC, and PF zones and amending the temporary sign code to ensure signs are sturdy, in good condition, and limit the length of time they may be up within a calendar year.

The hearing will be held at a regular Planning Commission Meeting on July 7, 2021 at 7:00pm. The City is utilizing both in person AND remote attendance for the hearing. Comments made be made by the public by a log in or call in number and then entering the Meeting ID.

To join the meeting/hearing on a computer or mobile phone: <https://bluejeans.com/887792009/4933>

Phone Dial-in: +1.408.419.1715 then enter meeting ID: 887 792 009

In person: City Hall, 104 Bridge Street South

If you are unable to join the hearing written comments may be submitted to City Planner Emily Adams electronically, no later than 1:00pm on July 7, 2021 at EAdams@cityoforting.org or by mail to the Planning Commission secretary at PO Box 489, Orting, WA, 98360.

Written comments will be sent to the Commission prior to the hearing and will become part of the public record. Further information may be obtained by emailing Emily Adams at the email above or by phone at 253-284-0263.

