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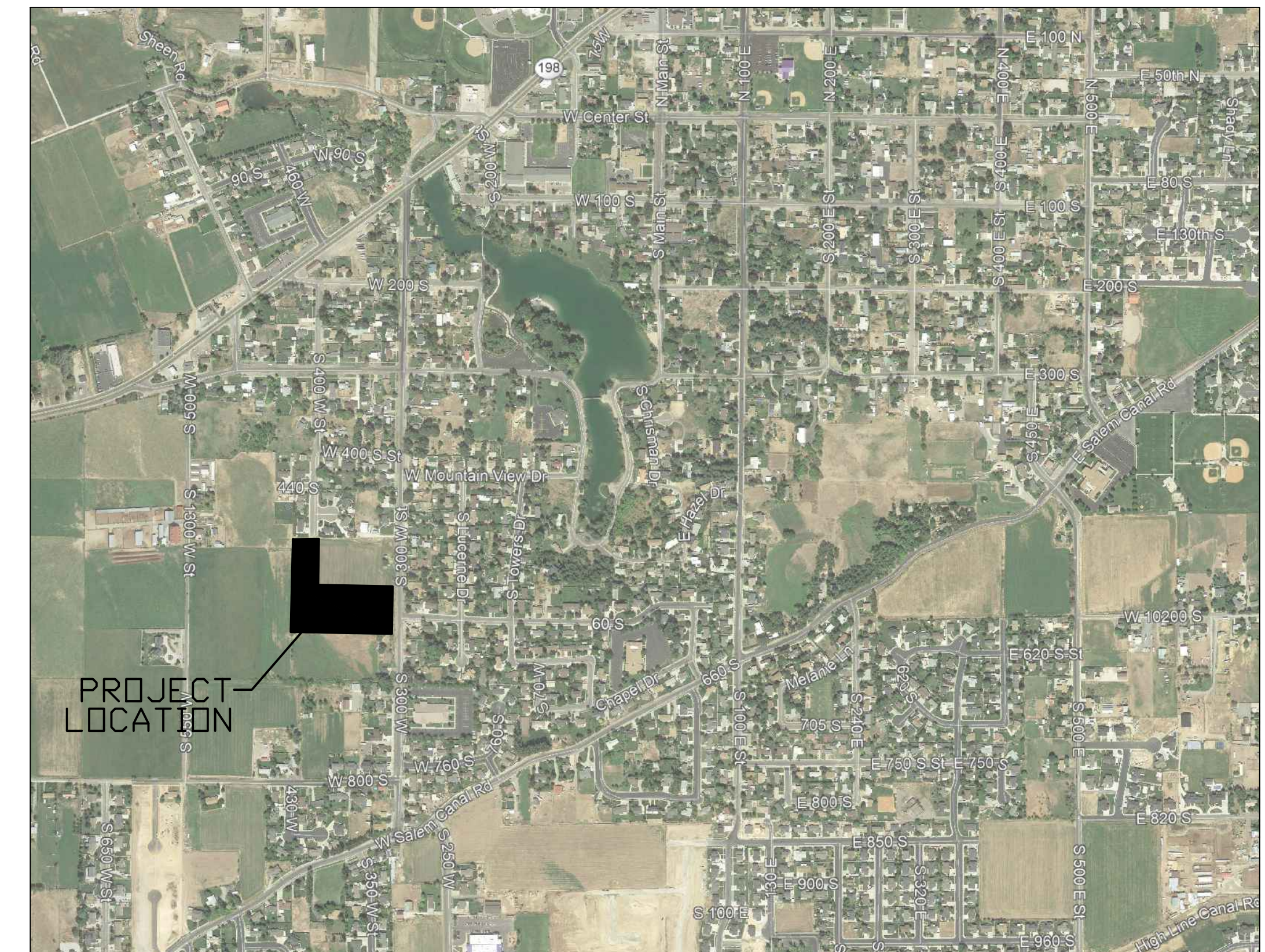
PLANS BY OTHERS NOTES:

1. SMITH STEELWORKS TO PROVIDE THE PAVILION AND PAVILION/RESTROOM PLANS. THESE PLANS WILL BE PROVIDED ONCE THE PAVILION AND PAVILION/RESTROOM ARE PURCHASED FROM SMITH STEELWORKS. THE PAVILION PLANS WILL INCLUDE THE STAMPED ENGINEERING DRAWINGS FOR THE ELECTRICAL AND STRUCTURAL. THE PAVILION/RESTROOM WILL INCLUDE THE STAMPED ENGINEERING DRAWINGS FOR THE STRUCTURAL BUT DOES NOT INCLUDE THE ELECTRICAL AND PLUMBING DRAWINGS. CONTRACTOR TO PROVIDE ELECTRICAL AND PLUMBING DRAWINGS FOR THE RESTROOM.

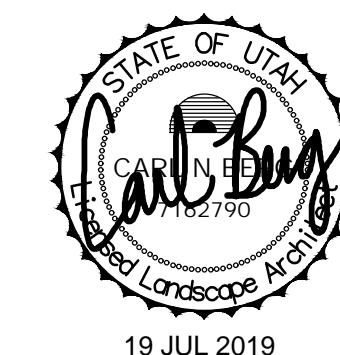
SMITH STEELWORKS
270 WEST 500 SOUTH
SPANISH FORK, UTAH 84660
(801) 414-1724

2. THE FINAL SPLASH PAD DESIGN AND PLAYGROUND EQUIPMENT TO BE PROVIDED BY SALEM CITY.

STAN & KALLE COLE PARK CONSTRUCTION PLANS



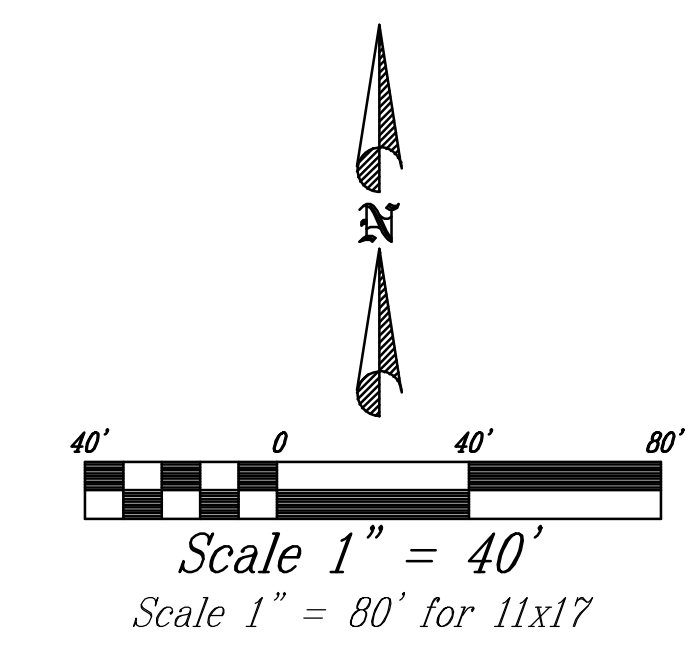
SALEM CITY
VICINITY MAP



380 E Main St, Suite 204
Midway, Ut 84049 ph. (801) 723-2000

DESIGN BY: CNB DATE: 19 JUL 2019 SHEET
DRAWN BY: CNB REV: L00

SALEM CITY
COLE PARK
COVER SHEET



- LEGEND**
- EXW— EXISTING CULINARY WATER
 - EXP1— EXISTING PRESSURIZED IRRIGATION
 - EXSS— EXISTING SEWER
 - EXSD— EXISTING STORM DRAIN
 - EXISTING PIPED DITCH
 - EXHP— EXISTING OVERHEAD POWER LINES
 - EXPP EXISTING POWER POLE

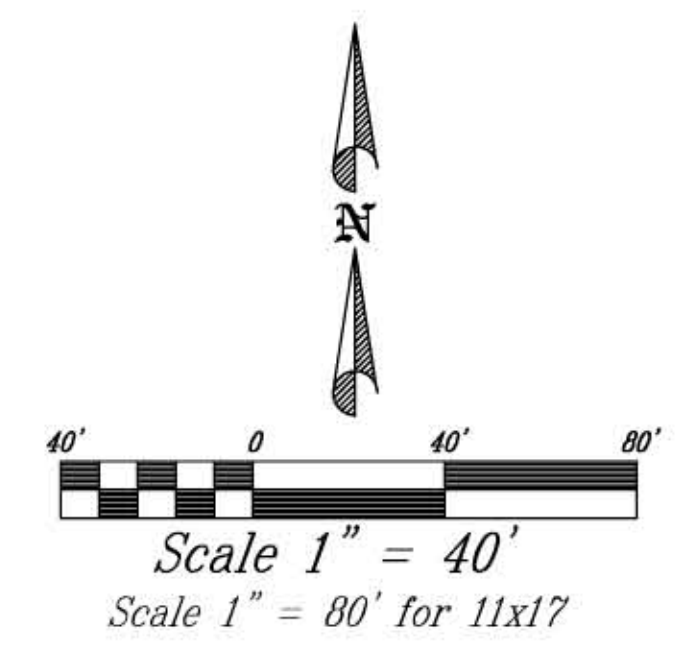
POWER NOTES:
 EXISTING POWER ALONG 300 WEST TO BE BURIED BEHIND SIDEWALK. CONTRACTOR TO COORDINATE FINAL LOCATION WITH SALEM CITY POWER.

BLUE STAKE NOTE:
 LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.



19 JUL 2019

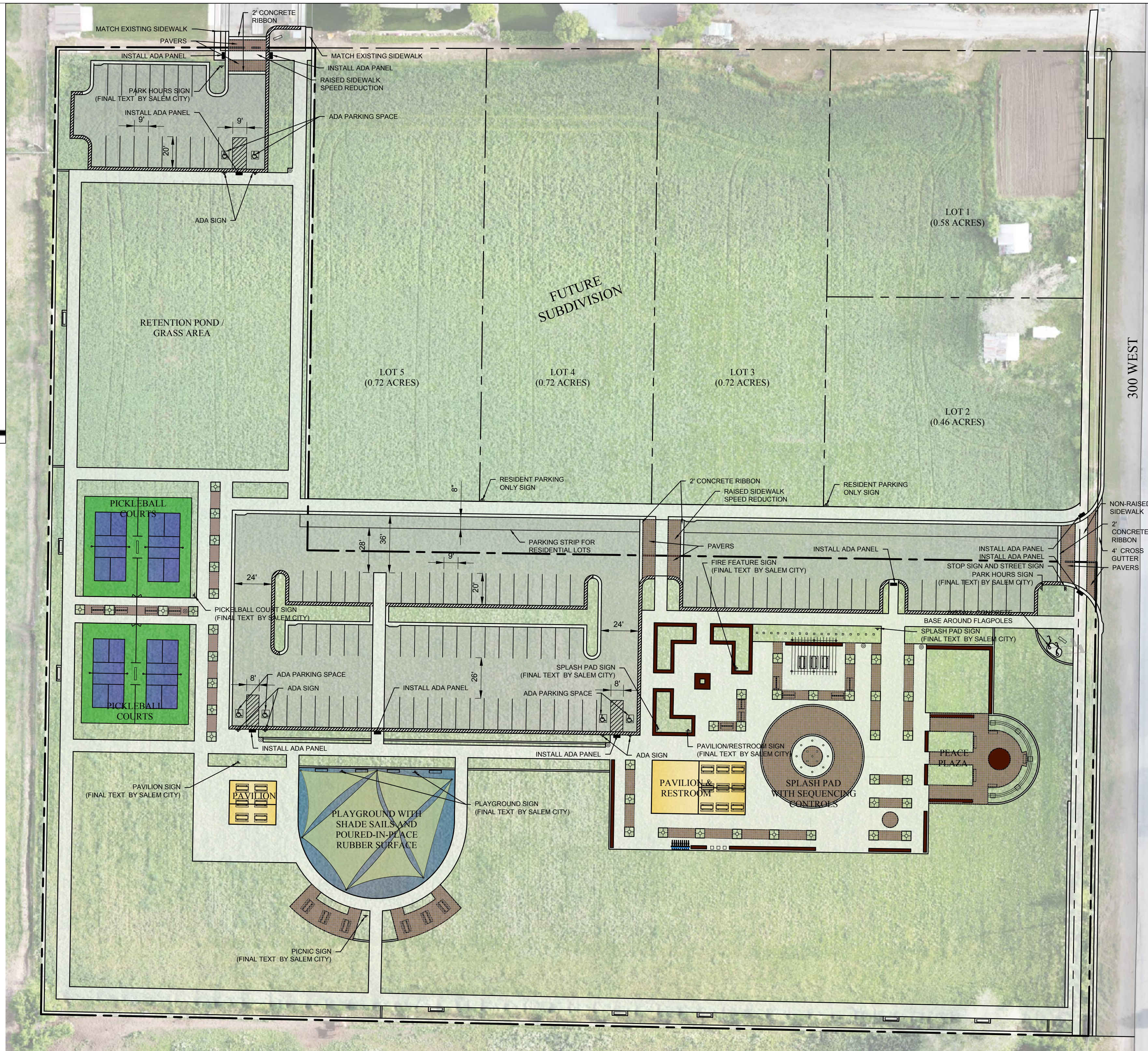
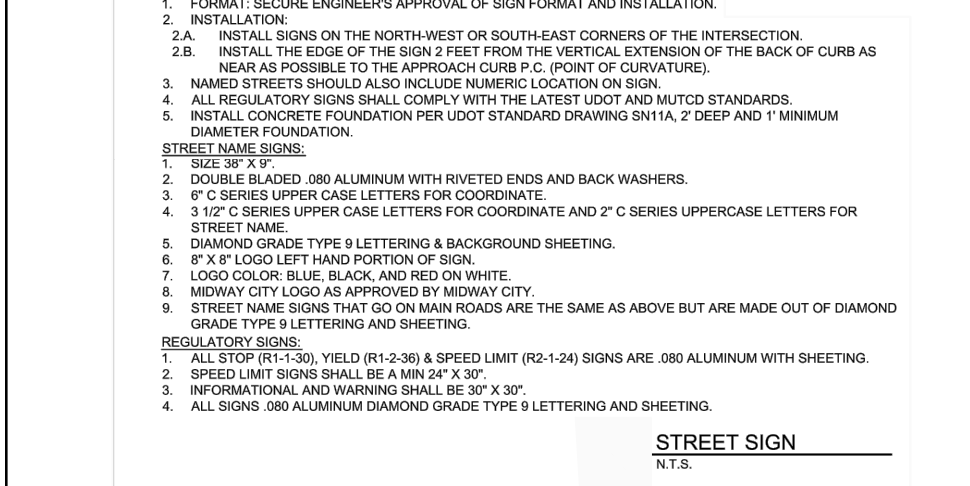
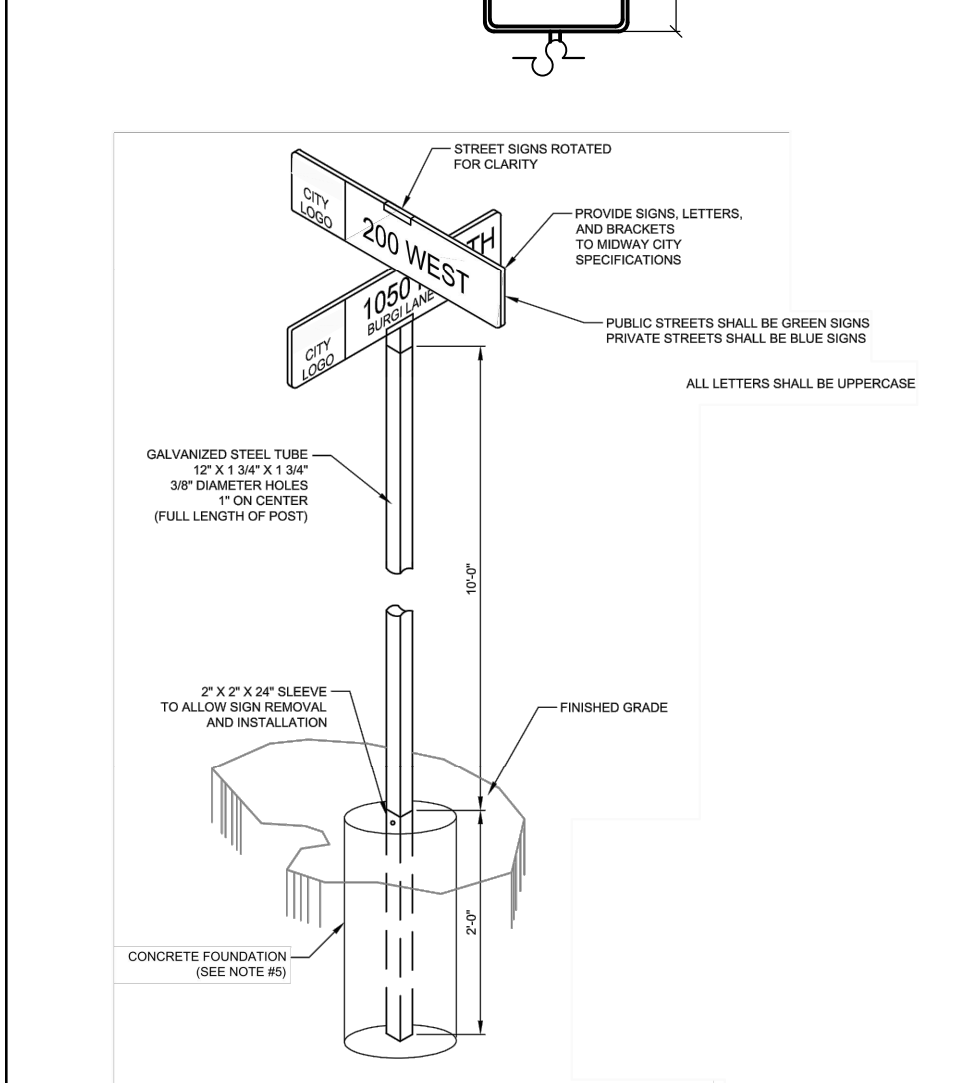
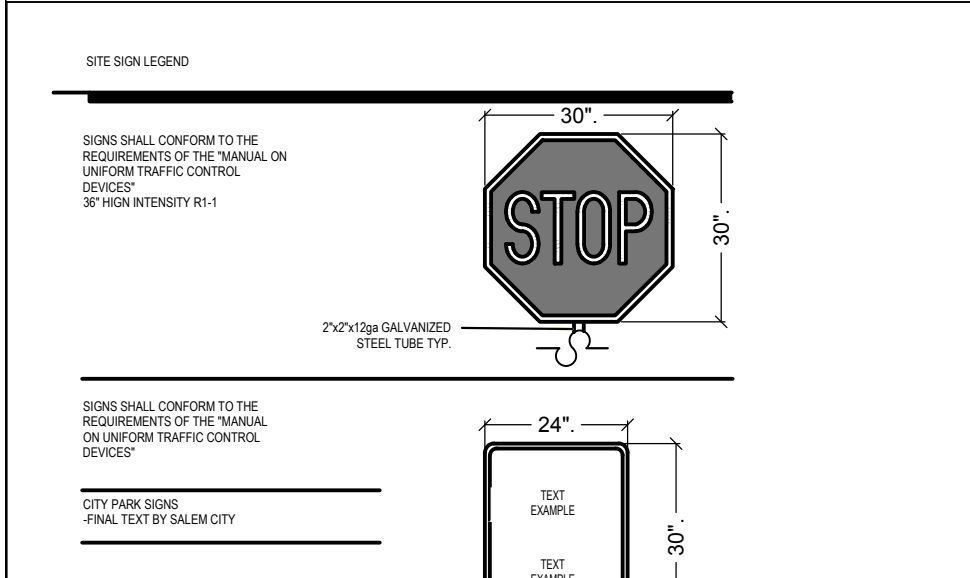
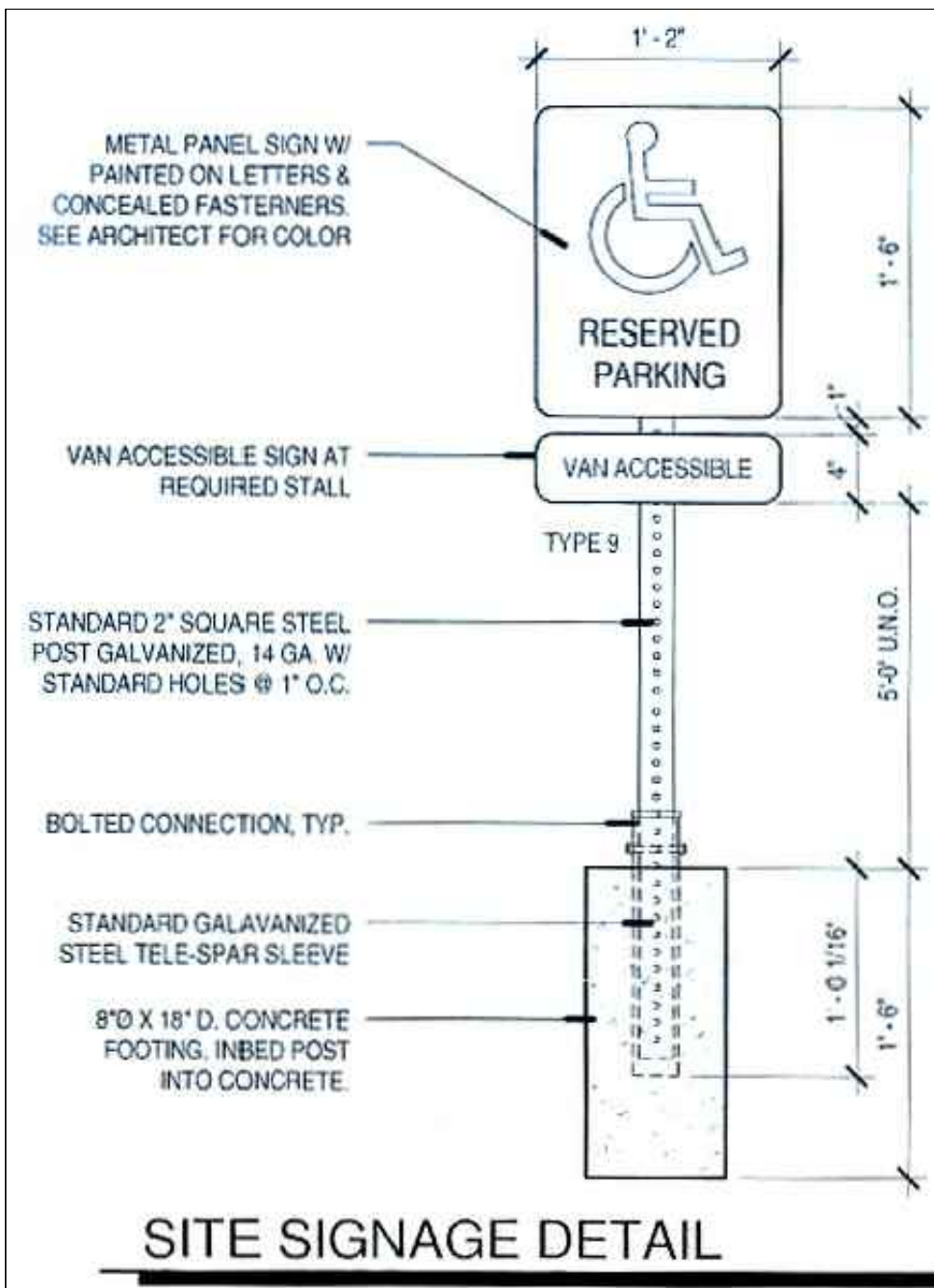
SALEM CITY COLE PARK	
EXISTING CONDITIONS PLAN	
380 E Main St, Suite 204 Midway, Ut 84049 ph. (801) 723-2000	
DESIGN BY: CNB	DATE: 19 JULY 2019
DRAWN BY: CNB	REV:
	SHEET L01



- LAND USE CALCS**
 PARK AREA: 5.86 ACRES
 PARKING SPACES: 108 SPACES (6 ADA SPACES)
- AMENITIES**
 -7,240 SF PLAYGROUND AREA
 -PLAYGROUND EQUIPMENT WITH SHADE SAILS
 -PLAYGROUND RUBBER SURFACE
 -GRASS PLAY FIELDS
 -PICKLEBALL COURTS (4)
 -PEACE PLAZA WITH ARCH PERGOLA AND SCULPTURE
 -PAVILION (30'x28') WITH 6 TABLES
 -RESTROOM / PAVILION (60'x34') WITH 9 TABLES
 -SPLASH PAD WITH COLORED CONCRETE, PAVERS, TREE GRATES
 -PERGOLA WITH 3 TABLES
 -BIKE RACK
 -TRASH RECEPTACLES (6)
 -FLAG POLE (2)
 -SEAT WALLS
 -GRASS AMPHITHEATER
 -BENCHES
 -PICNIC AREA WITH 6 TABLES, PAVERS
 -8' CONCRETE SIDEWALKS



SALEM CITY COLE PARK	
SITE PLAN	
380 E Main St, Suite 204 Midway, Ut 84049 ph. (801) 723-2000	
DESIGN BY: CNB	DATE: 19 JULY 2019
DRAWN BY: CNB	REV:
SHEET L02	

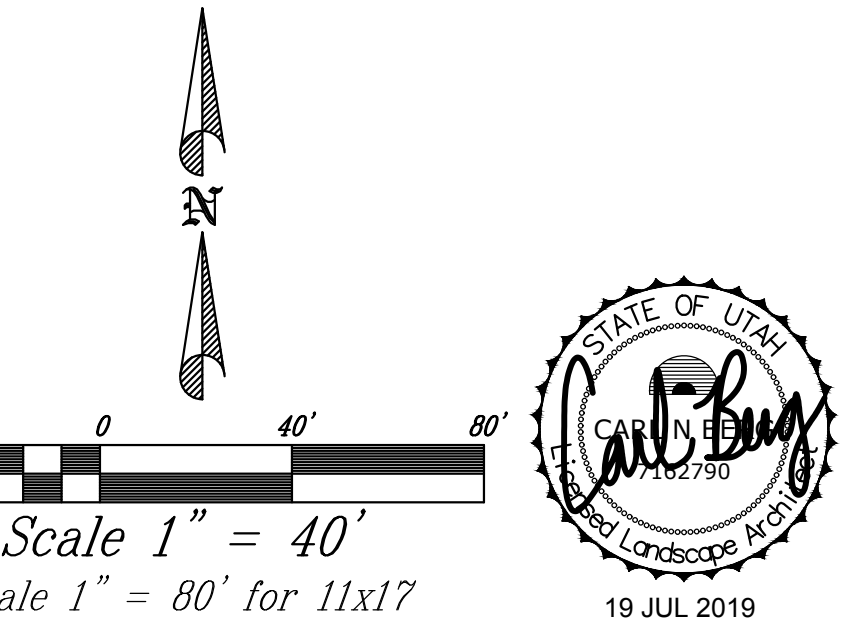
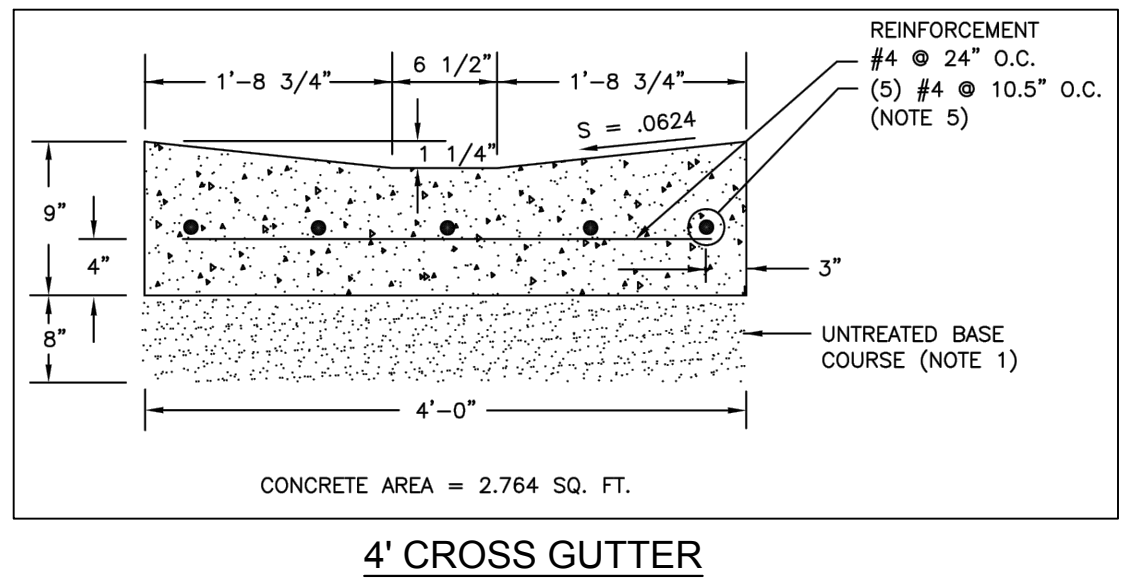
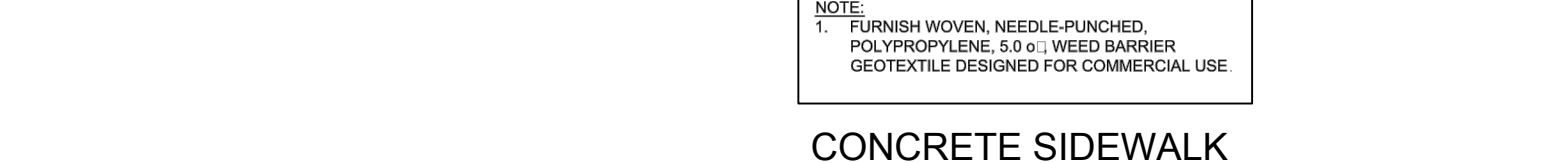
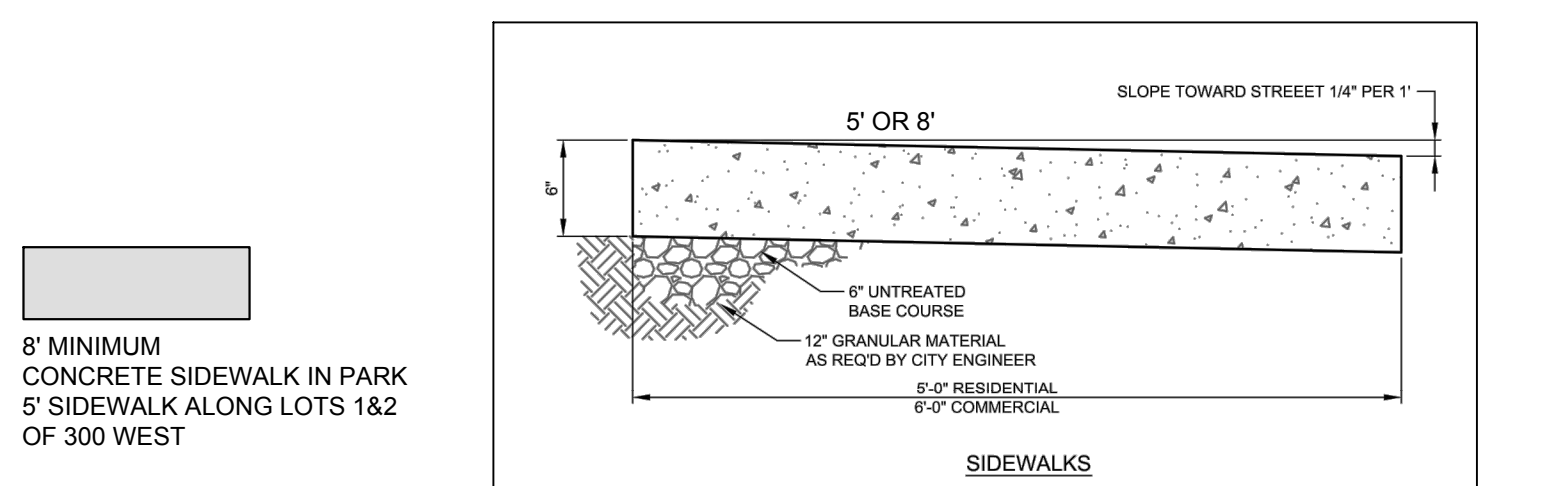
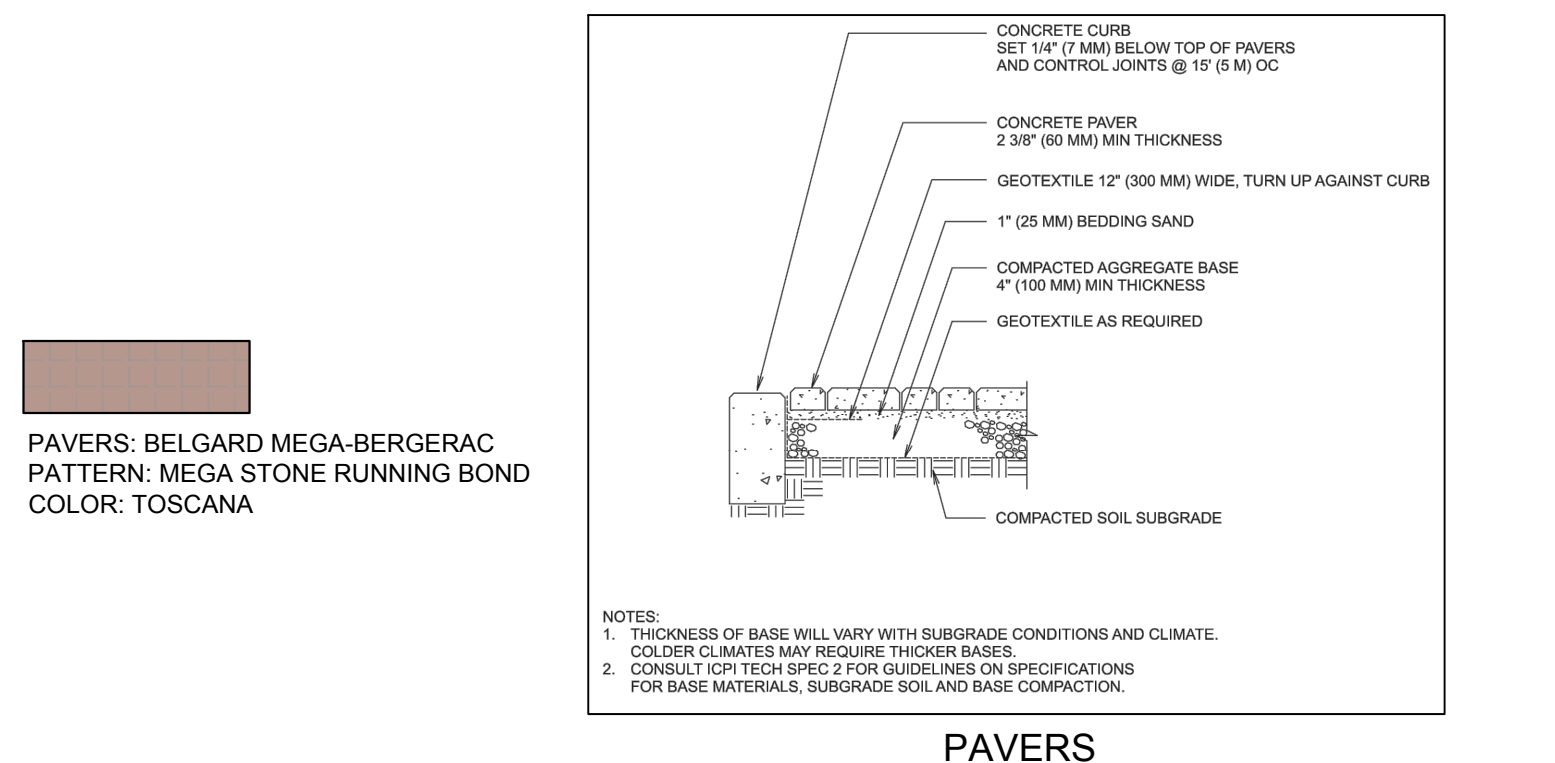
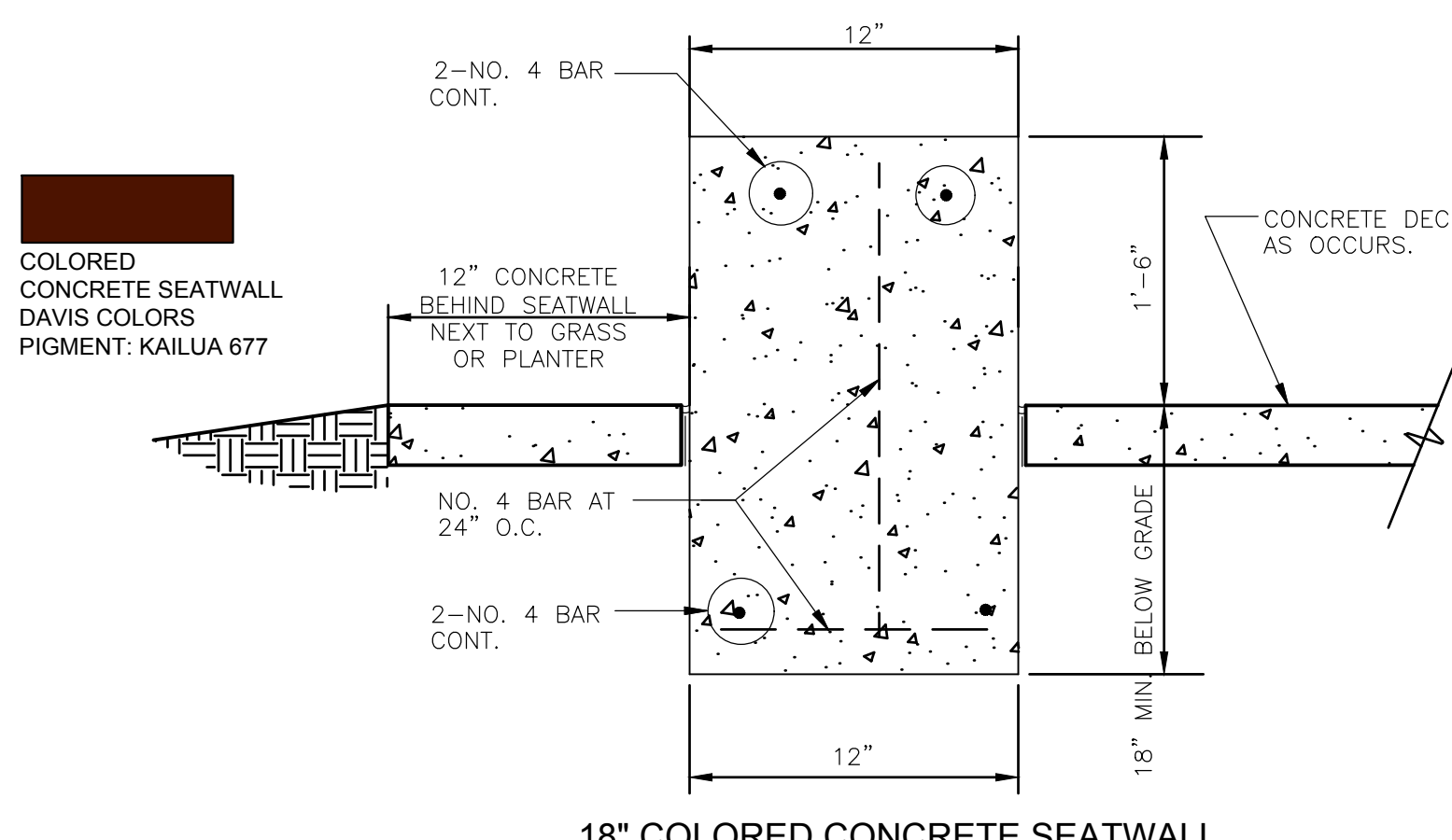
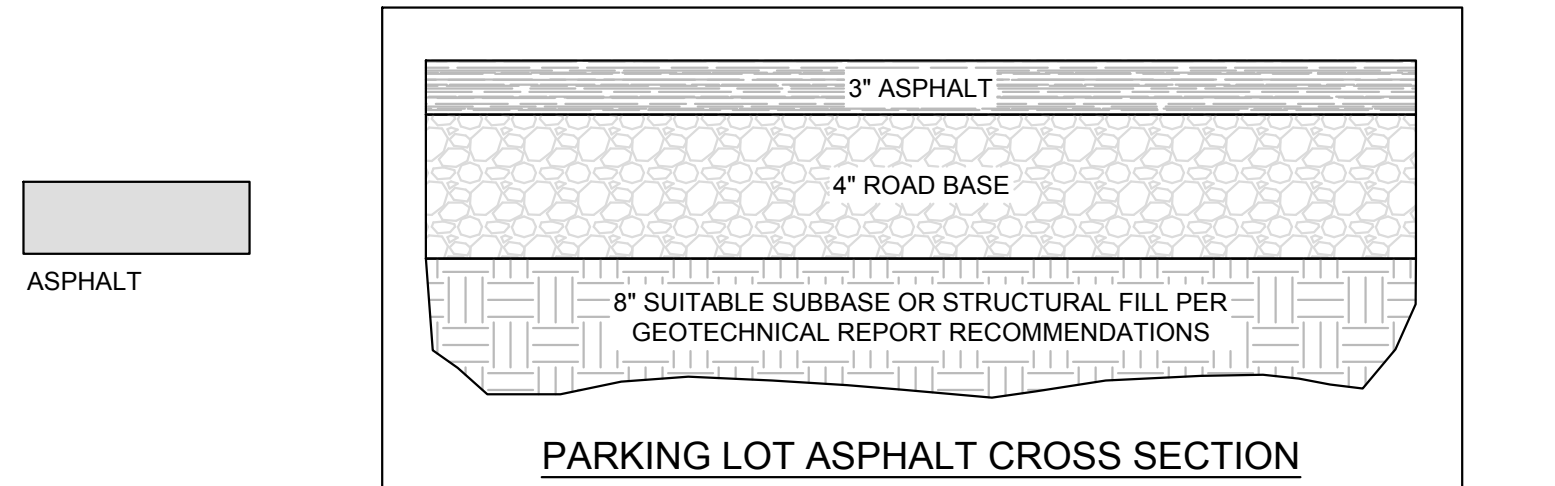


SIGN NOTES:
 1. ALL STREET SIGNS AND STOP SIGNS PER MUTCD.

ADA RAMP NOTES:
 1. ADA RAMPS TO BE INSTALLED AT ALL STREET AND DRIVEWAY CROSSINGS.

PAVEMENT MARKING NOTES:
 A. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ARCHITECT/ENGINEER/OWNER.
 B. ALLOW PAVING TO AGE FOR 7 DAYS MINIMUM BEFORE STARTING PAVEMENT MARKING.
 C. SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST.
 D. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS.
 1. BROADCAST GLASS BEADS UNIFORMLY INTO WET PAVEMENT MARKINGS AT A RATE OF 6 LB/GAL.
 E. COLOR
 1. YELLOW: PARKING STALLS
 2. BLUE: HANDICAP INSIGNIA AT APPROPRIATE STALLS.
 3. RED: FIRE LANES

LEGEND:

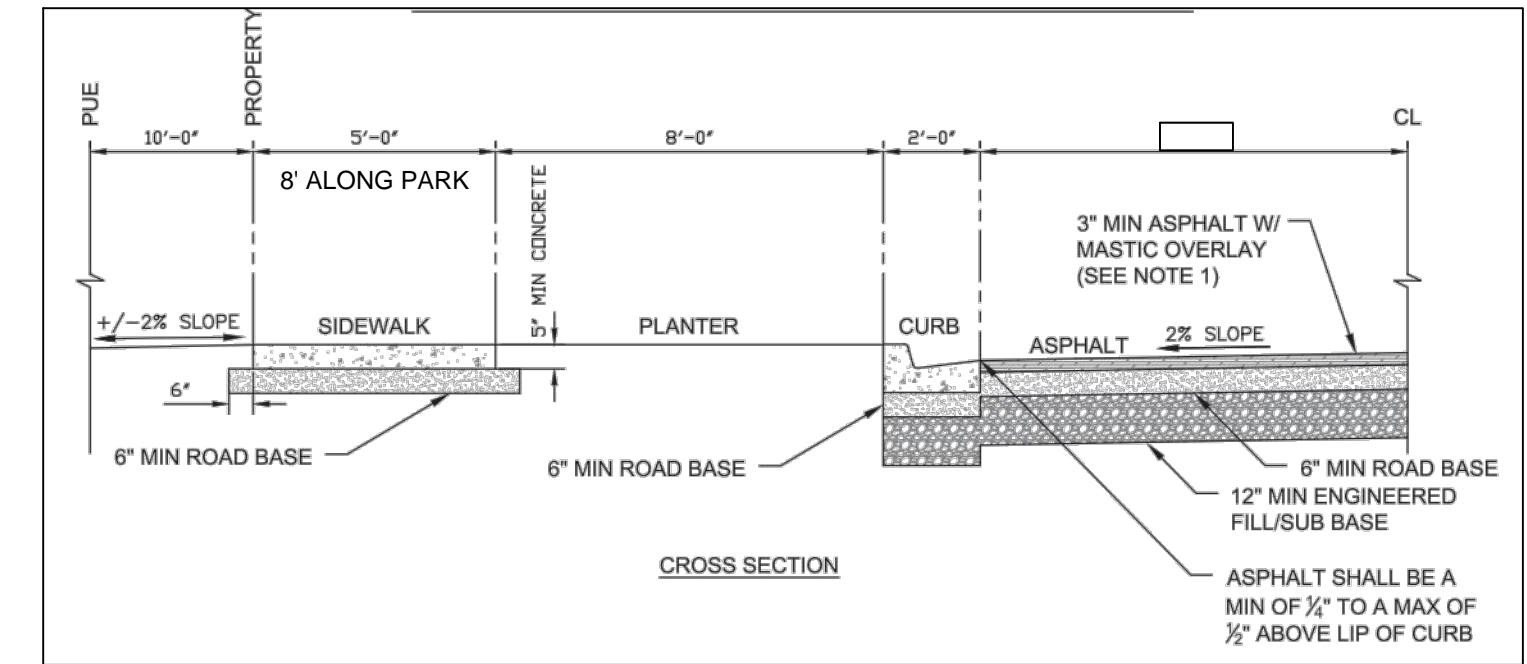
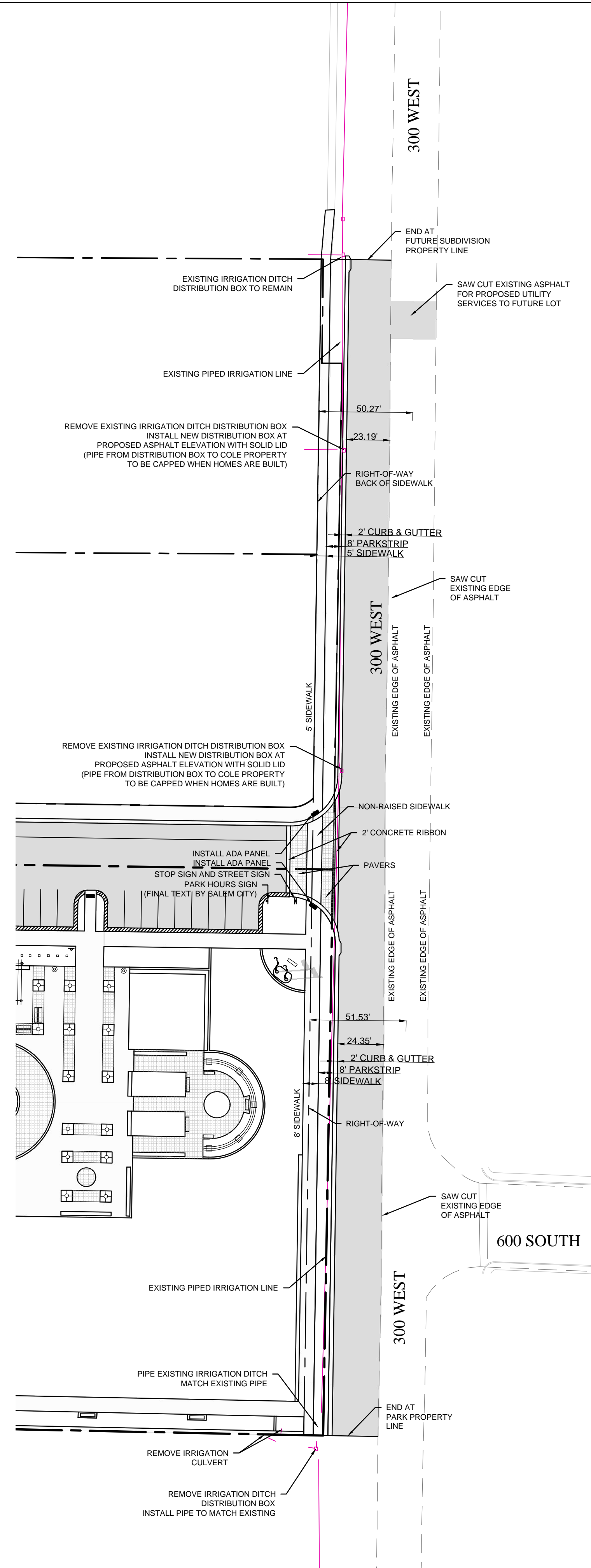
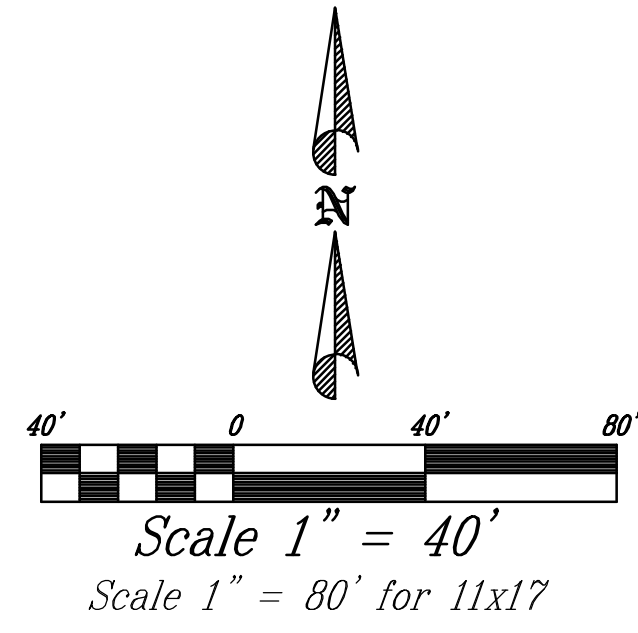


SALEM CITY
 COLE PARK
 PAVING, SIDEWALK,
 STRIPING & SIGNAGE PLAN

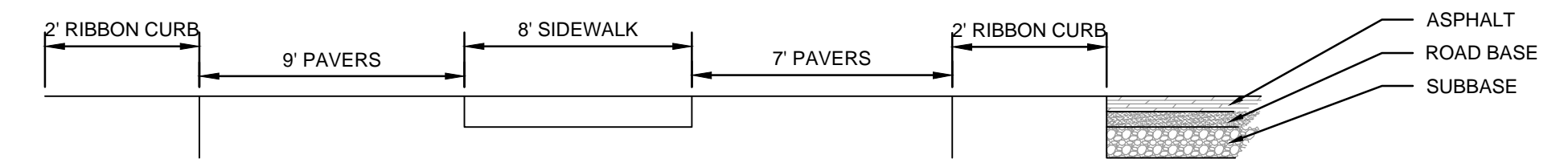
berg
 LANDSCAPE ARCHITECTS

380 E Main St, Suite 204
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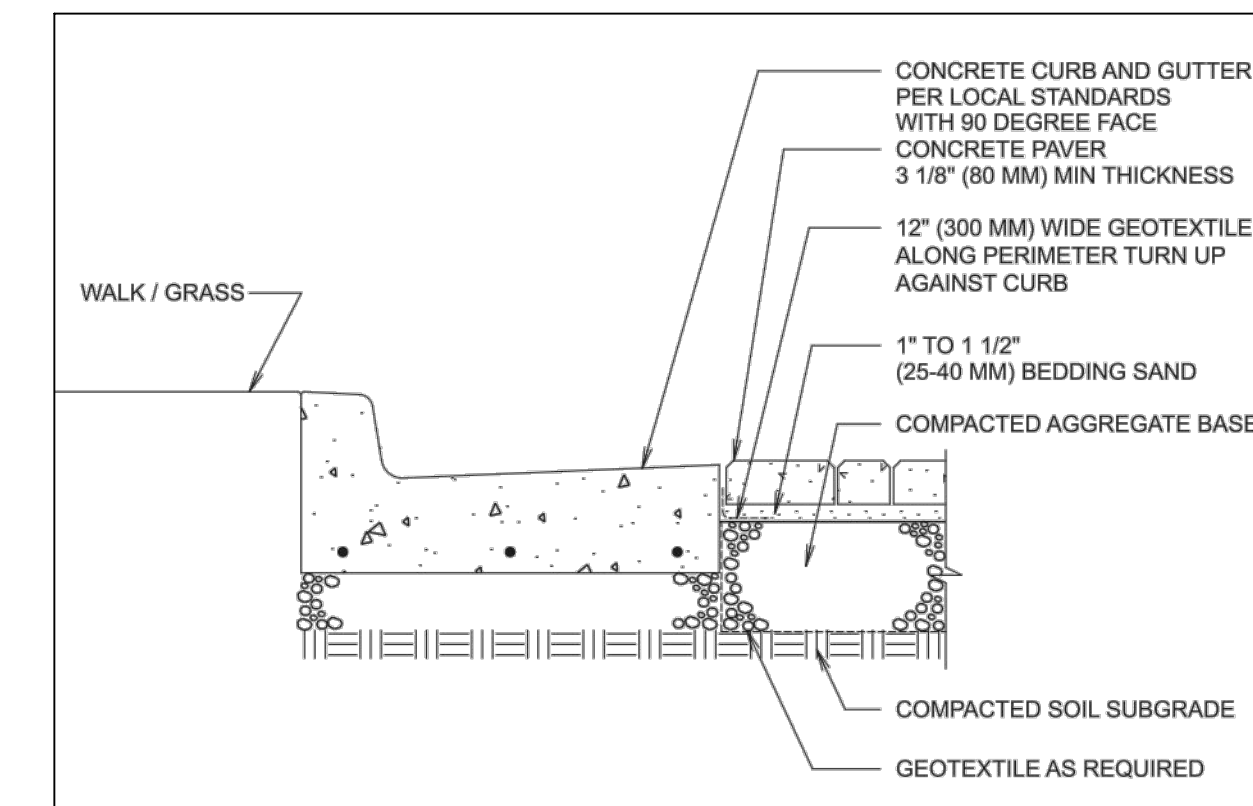
DESIGN BY: CNB DATE: 19 JULY 2019 SHEET
 DRAWN BY: CNB REV: L03



300 WEST IMPROVEMENTS



PAVERS AT INTERSECTION DETAIL

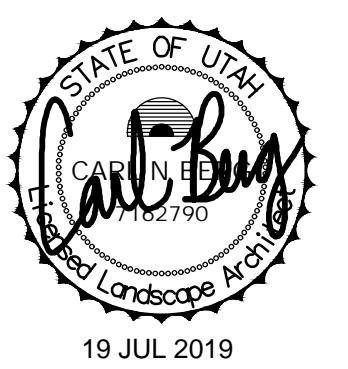


PAVERS

ADA RAMP NOTE:
1. ADA RAMPS TO BE INSTALLED AT ALL STREET AND DRIVEWAY CROSSINGS.

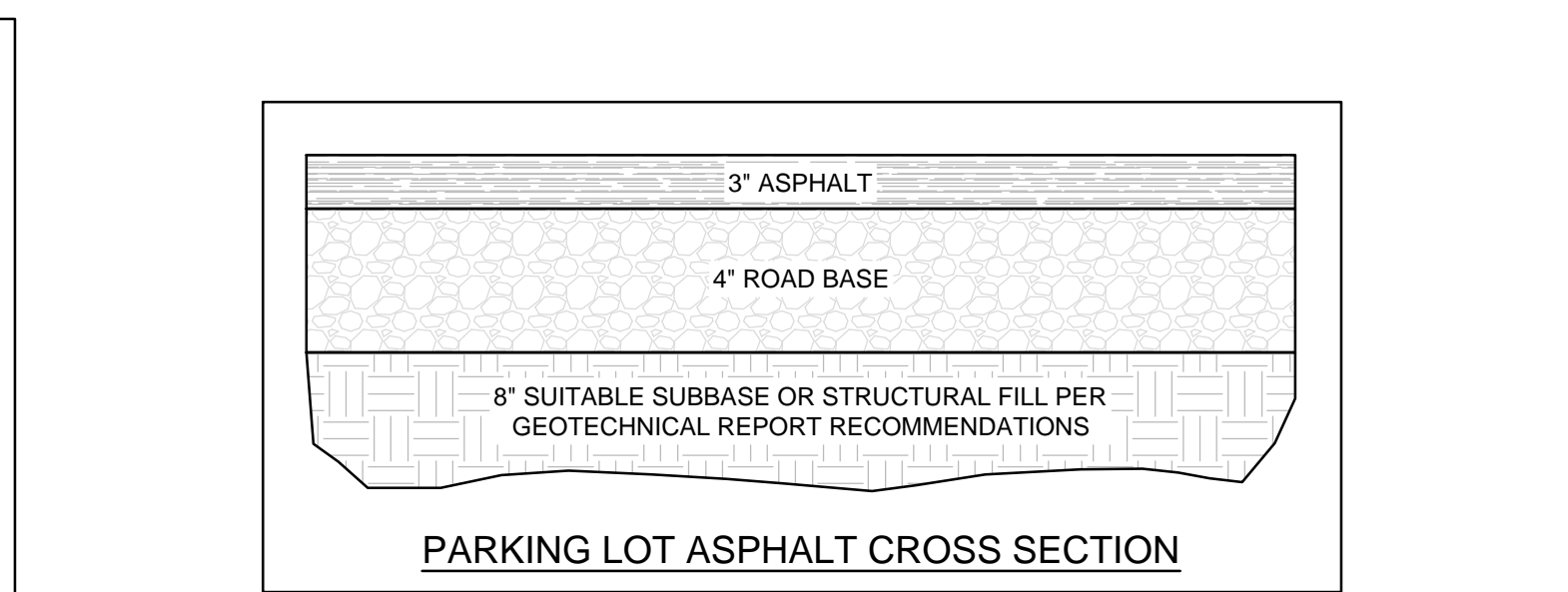
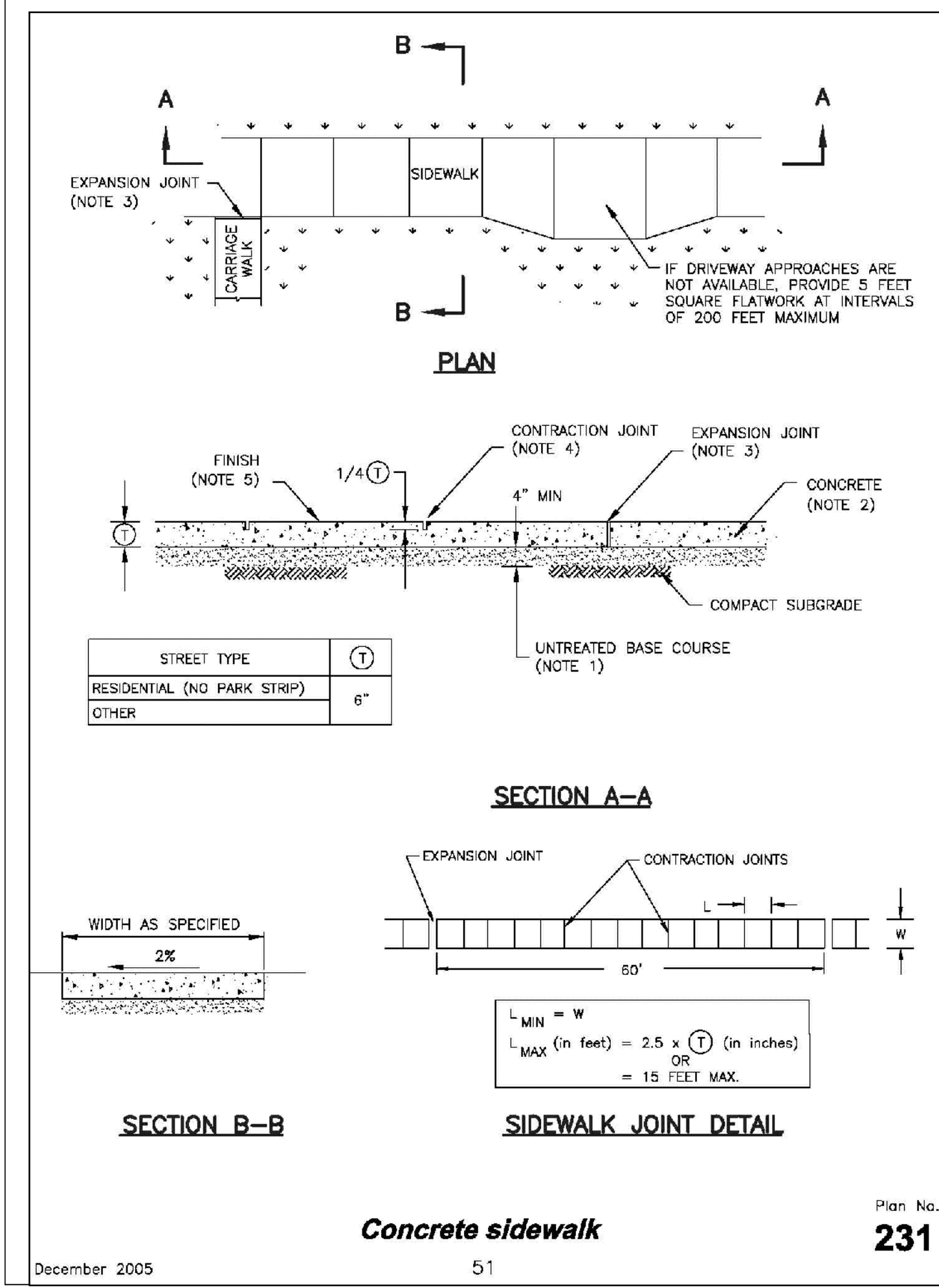
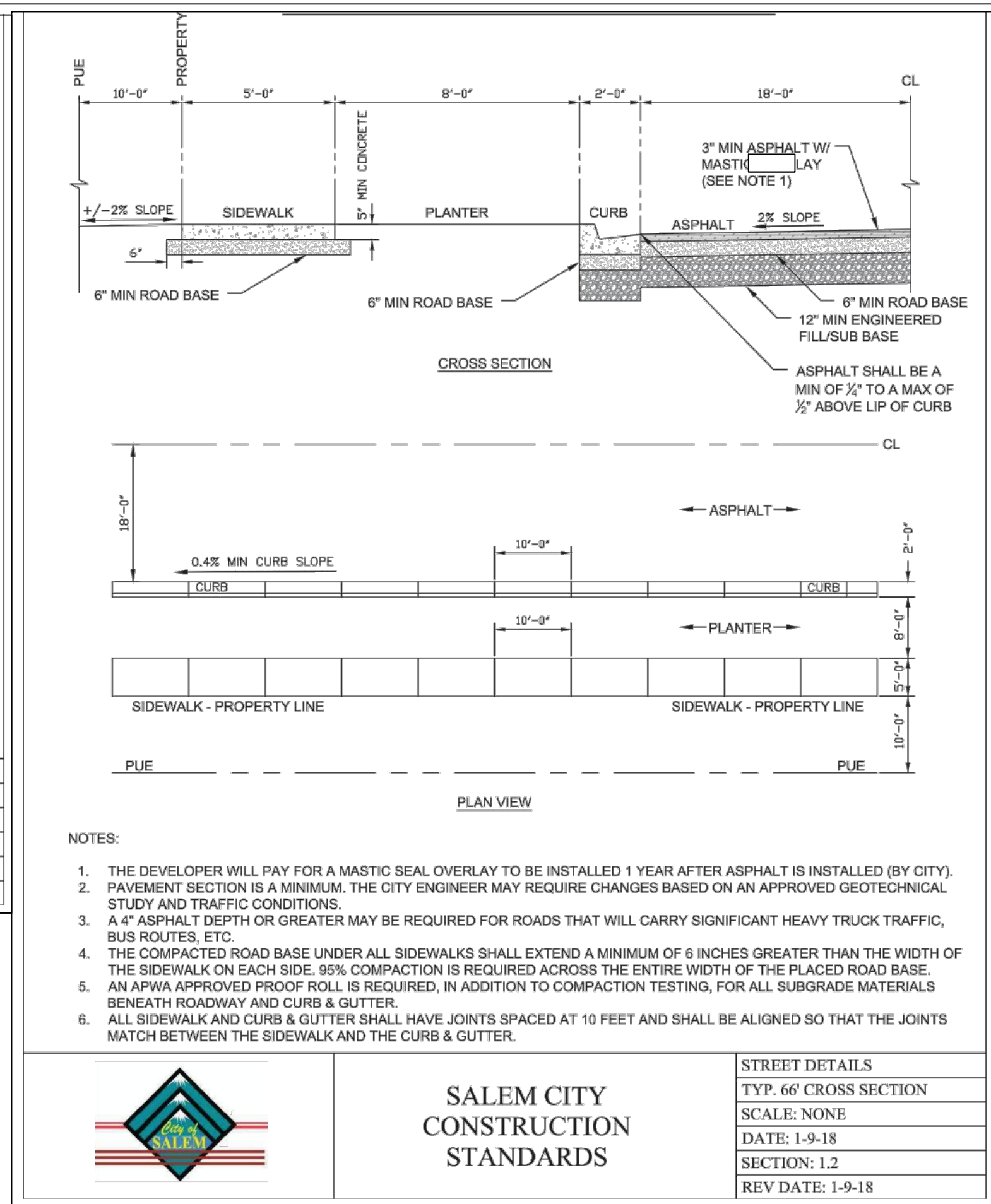
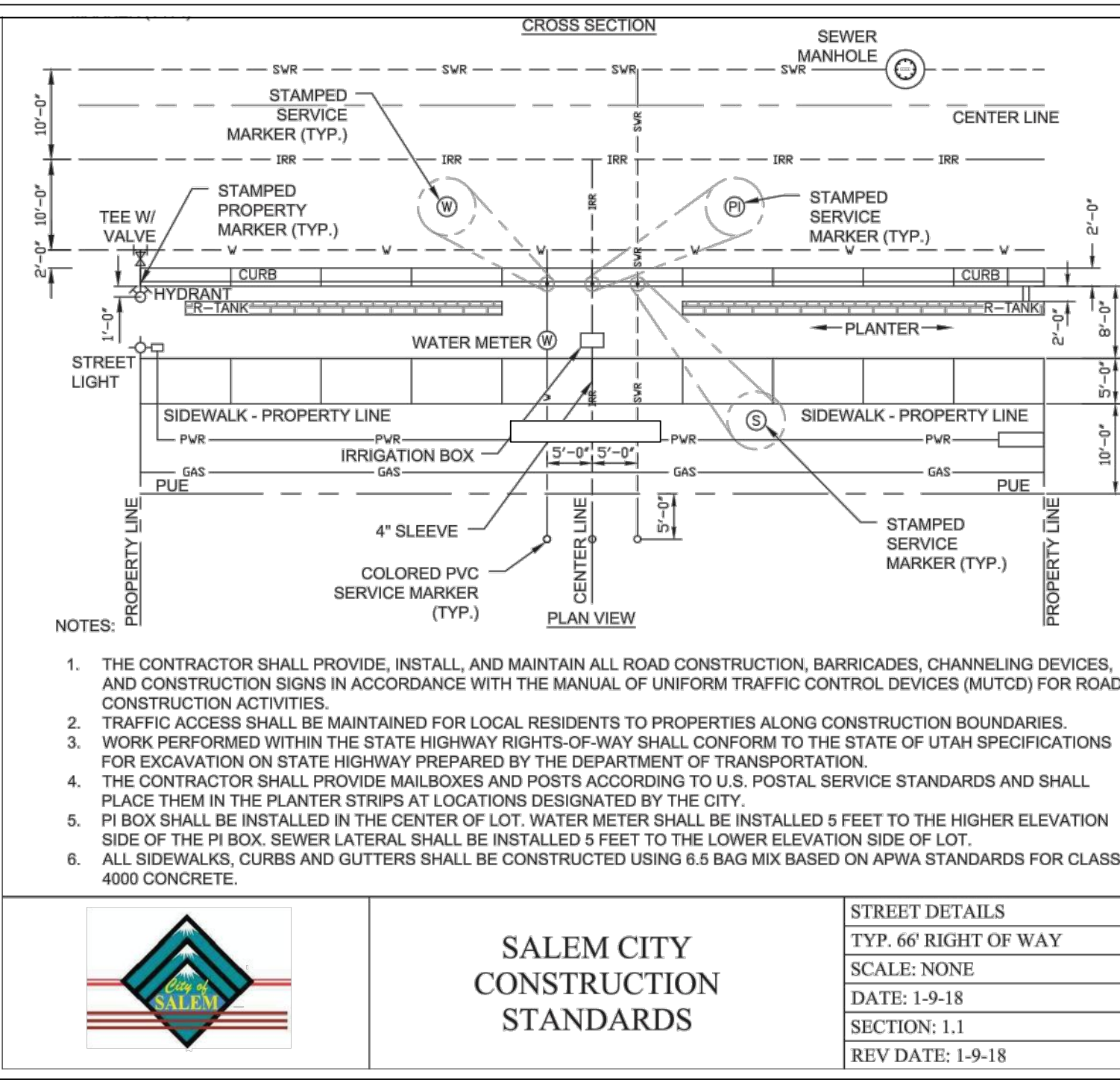
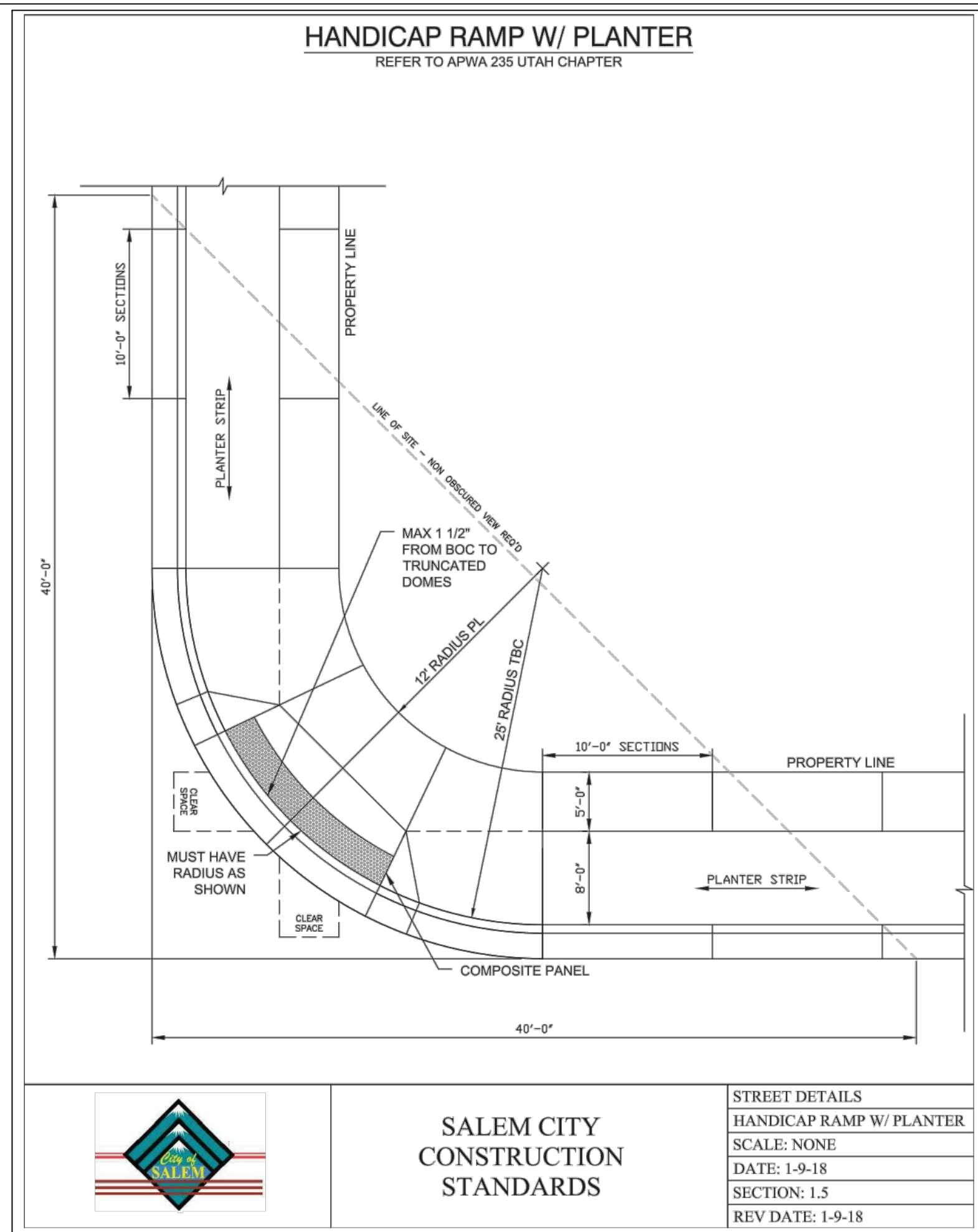
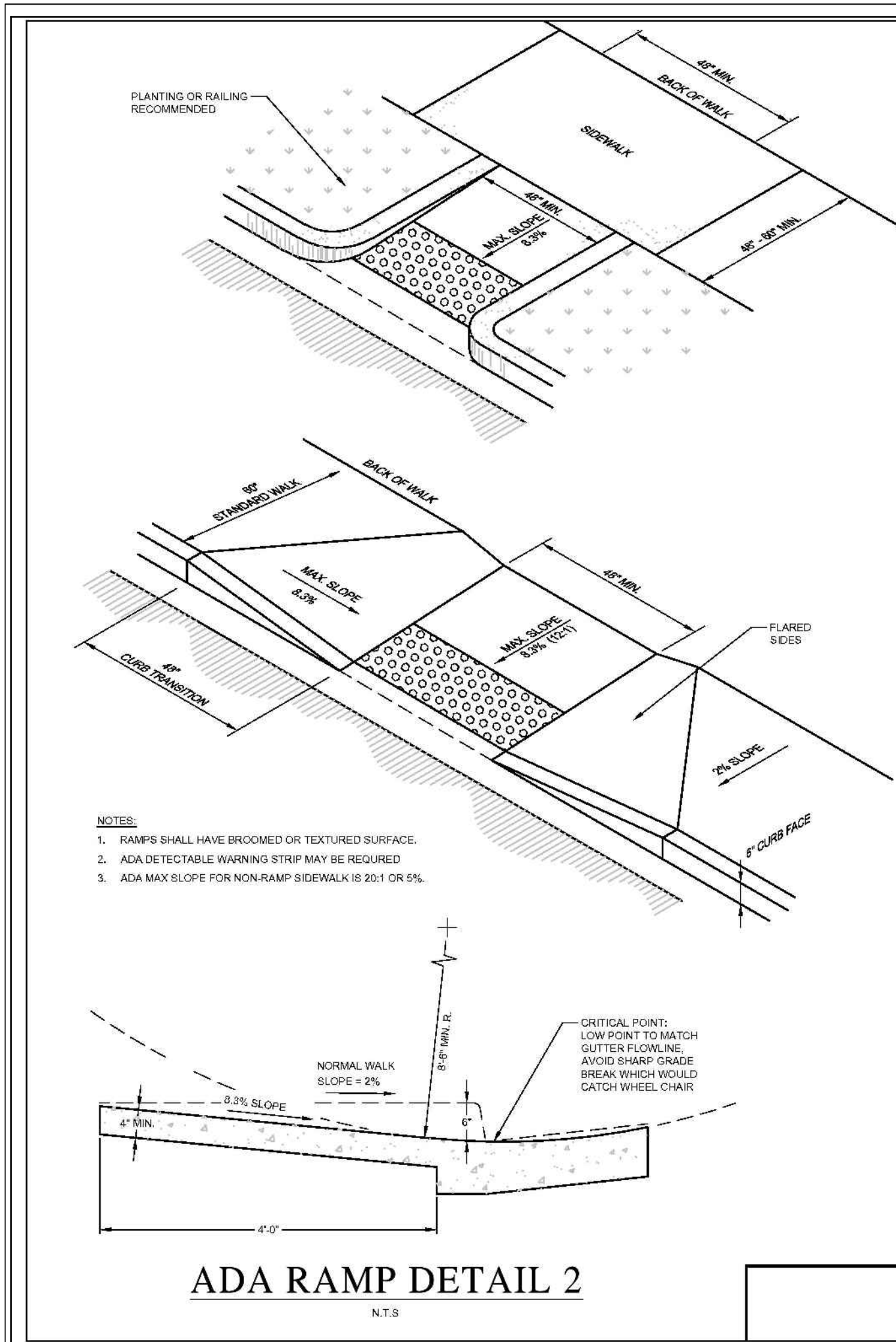
LIGHT POLE NOTE:
1. SEE ELECTRICAL PLANS FOR STREET LIGHTING.

LEGEND
 PAVERS
 EXISTING PIPED IRRIGATION DITCH

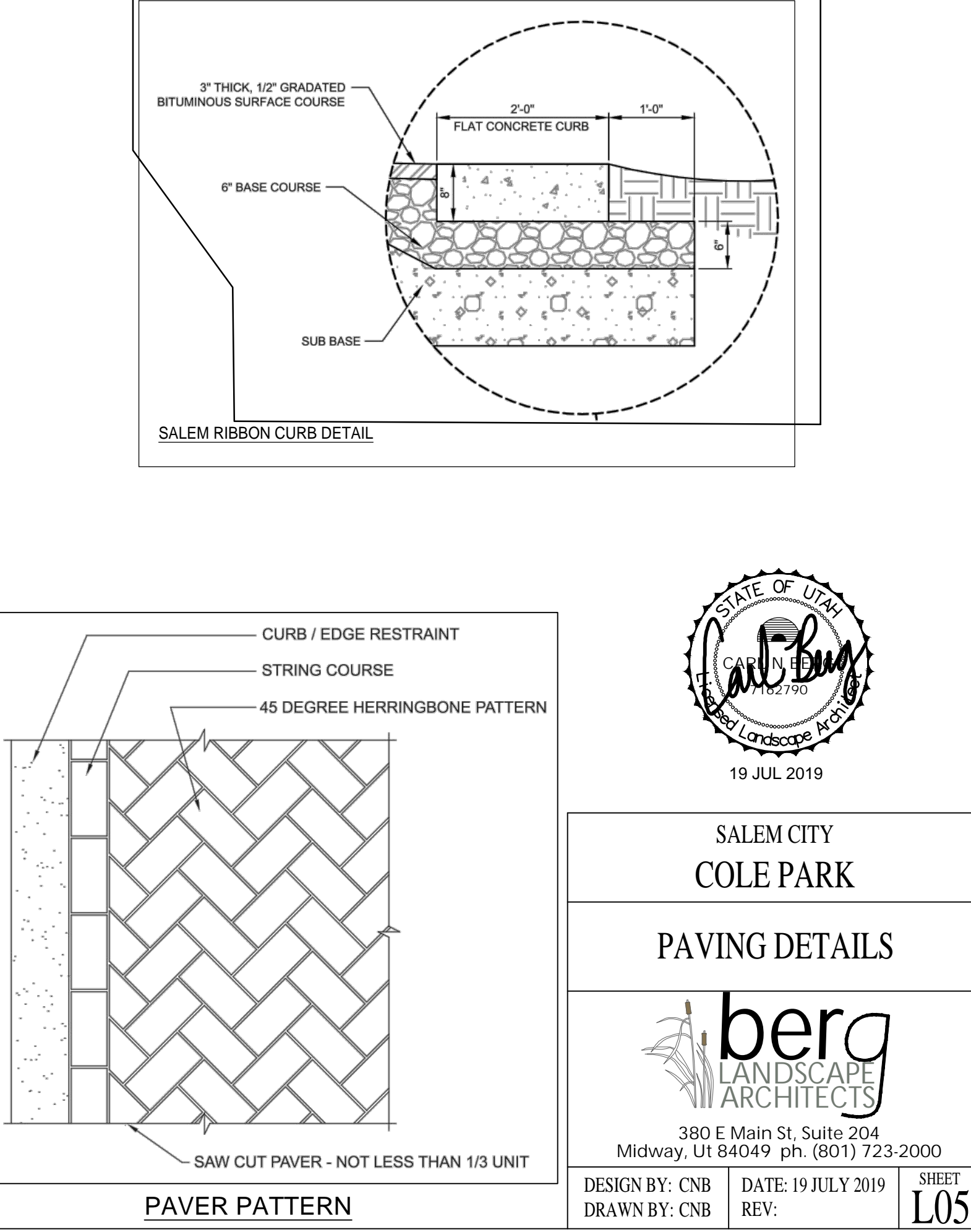
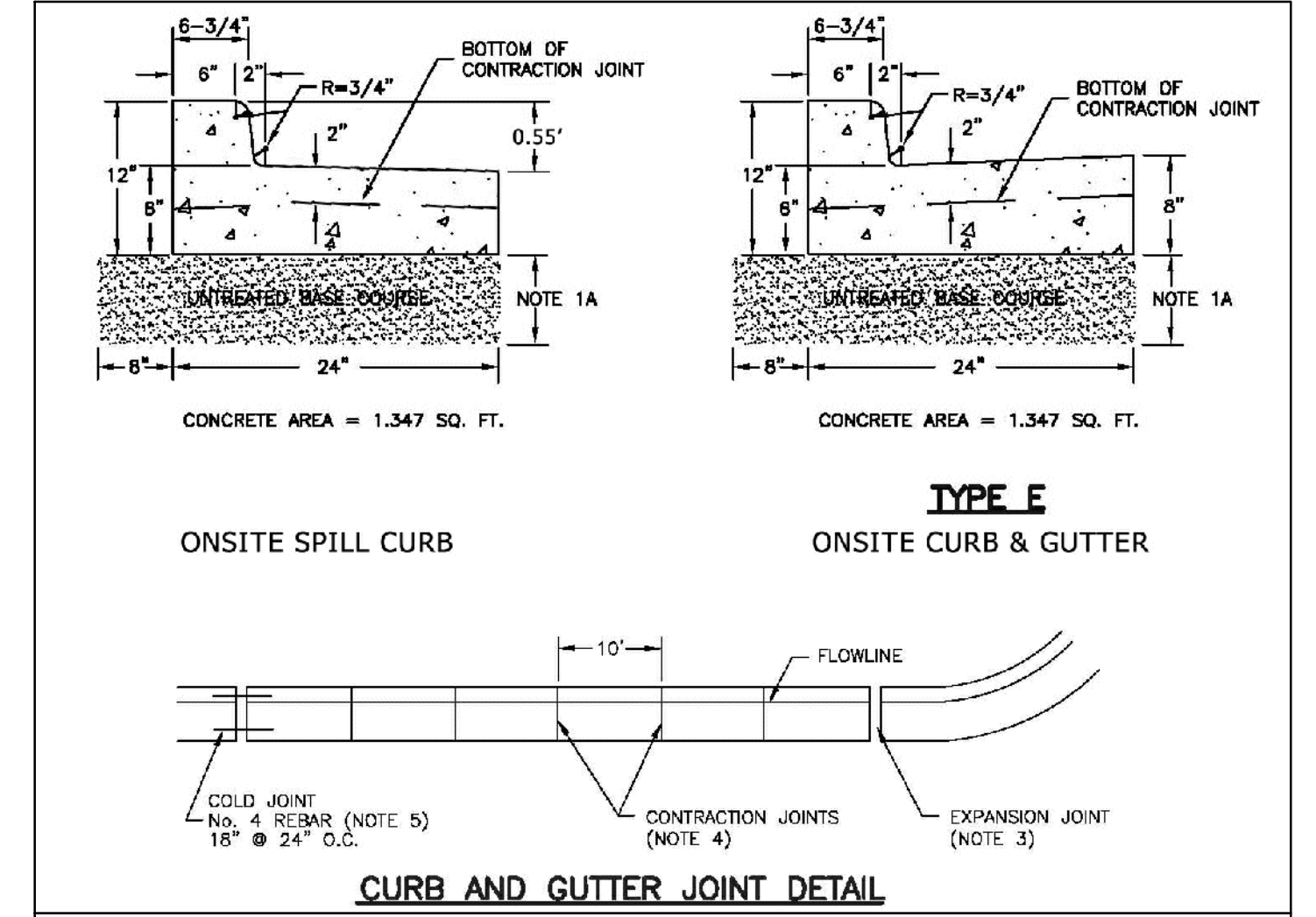


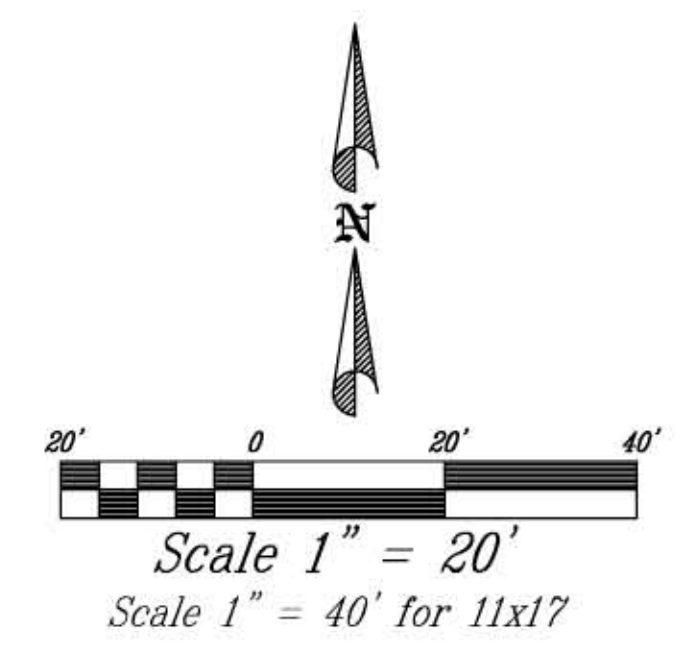
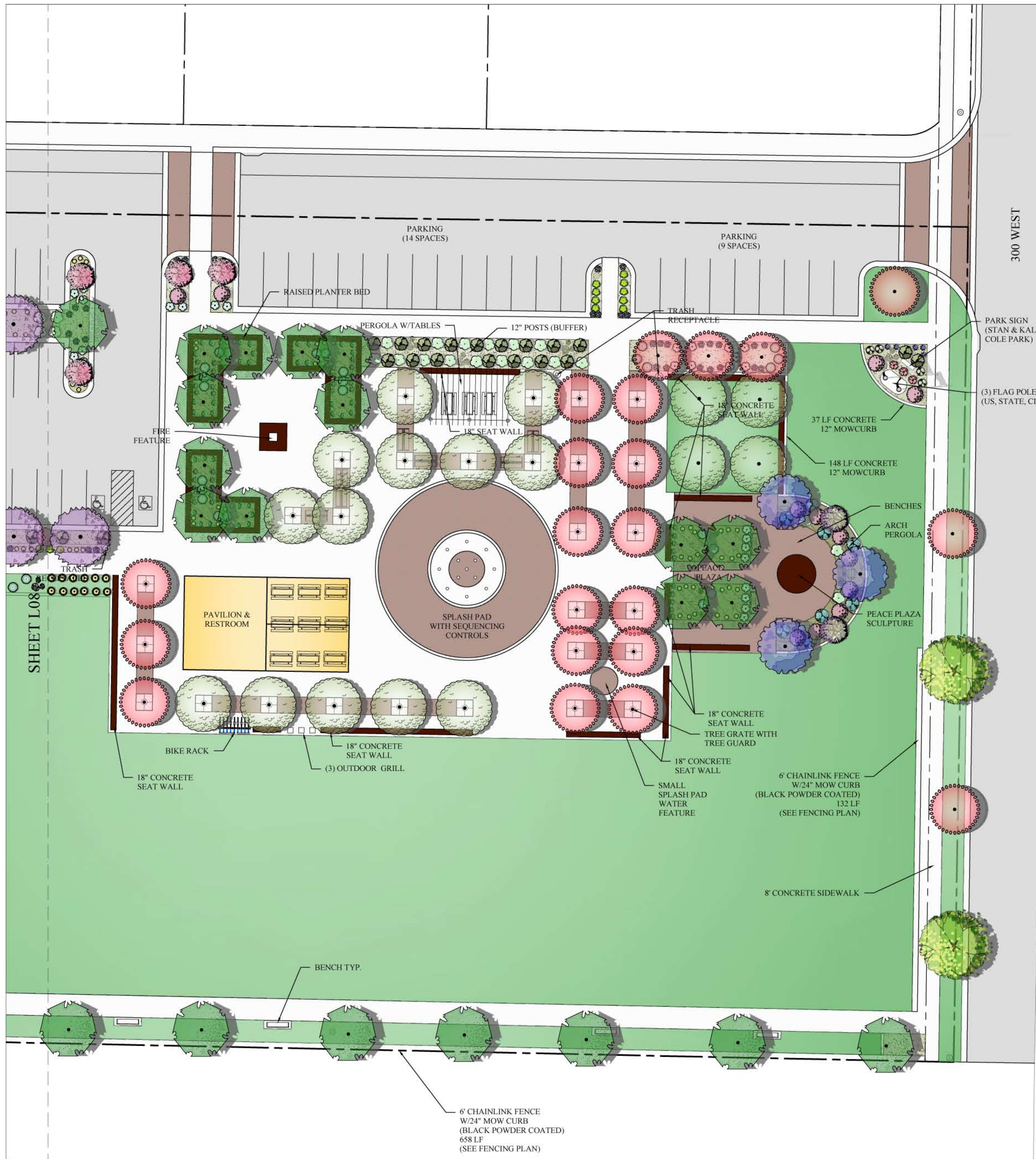
19 JUL 2019

SALEM CITY COLE PARK	
300 WEST IMPROVEMENTS PLAN	
 380 E Main St, Suite 204 Midway, Ut 84049 ph. (801) 723-2000	
DESIGN BY: CNB	DATE: 19 JULY 2019
DRAWN BY: CNB	REV: _____
SHEET L04	



- Concrete sidewalk**
- UNTREATED BASE COURSE: Provide material specified in APWA Section 32 11 23.
 - Do not use gravel as a substitute for untreated base course without ENGINEER'S permission.
 - Place material per APWA Section 32 05 10.
 - Compact per APWA Section 31 23 26 to a modified proctor density of 95 percent or greater. Maximum lift thickness before compaction is 8 inches when using riding compaction equipment or 6 inches when using hand held compaction equipment.
 - CONCRETE: Class 4000 per APWA Section 03 30 04.
 - If necessary, provide concrete that achieves design strength in less than 7 days. Caution: concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
 - Place concrete per APWA Section 03 30 10.
 - Provide 1/2 inch radius on concrete edges exposed to public view
 - Cure concrete per APWA Section 03 39 00 with type ID Class A or B (clear with fugitive dye) membrane forming compound unless specified otherwise.
 - EXPANSION JOINT: Make expansion joints vertical, full depth, 1/2 inch wide with type F1 joint filler material per APWA Section 32 13 73.
 - Set top of filler flush with surface of concrete.
 - Expansion joints are not required in slip formwork except at the start or end of the installation activity.
 - CONTRACTION JOINT: Make contraction joints vertical.
 - 1/8 inch wide and 1 inch deep or 1/4 slab thickness if slab is greater than 4 inches thick.
 - Maximum length to width ratio for non-square panels is 1.5 to 1.
 - FINISH: Broomed.





PLANT SCHEDULE SHEET 1

TREES	COMMON / BOTANICAL NAME	CONT	CAL
	Crimson King Maple / <i>Acer platanoides</i> 'Crimson King'	B & B	2" Cal
	Eastern Redbud / <i>Cercis canadensis</i>	B & B	2" Cal
	Flowering Cherry / <i>Prunus serrulata</i> 'Kwanzan'	B & B	2" Cal
	Japanese Wisteria / <i>Wisteria floribunda</i>	B & B	2" Cal
	Shademaster Locust / <i>Gleditsia triacanthos inermis</i> 'Shademaster'™	B & B	2" Cal
	Silver Linden / <i>Tilia tomentosa</i>	B & B	2" Cal
	Spring Snow Crab Apple / <i>Malus x 'Spring Snow'</i>	B & B	2" Cal
	Wisteria / <i>Wisteria macrostachya</i> 'Blue Moon'	B & B	2" Cal
SHRUBS	COMMON / BOTANICAL NAME	CONT	
	Bailmer Hydrangea / <i>Hydrangea macrophylla</i> 'Endless Summer'™	5 gal	
	Blue Mist Shrub / <i>Caryopteris x clandonensis</i> 'Dark Knight'	5 gal	
	Coral Charm Peony / <i>Paeonia x 'Coral Charm'</i>	5 gal	
	Creeping Mahonia / <i>Mahonia repens</i>	5 gal	
	Dwarf Globe Blue Spruce / <i>Picea pungens</i> 'Globosa'	5 gal	
	Green Mound Alpine Currant / <i>Ribes alpinum</i> 'Green Mound'	5 gal	
	Incrediball White Hydrangea / <i>Hydrangea arborescens</i> 'Incrediball'	5 gal	
	Miss Kim Korean Lilac / <i>Syringa pubescens</i> 'Miss Kim'	5 gal	
	Spirea / <i>Spiraea japonica</i> 'Goldmound'	5 gal	
	White Drift Rose / <i>Rosa x 'White Drift'</i>	5 gal	
GRASSES	COMMON / BOTANICAL NAME	CONT	
	Feather Reed Grass / <i>Calamagrostis x acutiflora</i> 'Karl Foerster'	2 gal	
PERENNIALS	COMMON / BOTANICAL NAME	CONT	
	Emerald Blue Moss Phlox / <i>Phlox subulata</i> 'Emerald Blue'	1 gal	
	German Iris / <i>Iris germanica</i>	1 gal	
	May Night Sage / <i>Salvia nemorosa</i> 'May Night'	1 gal	
	Stella de Oro Daylily / <i>Hemerocallis x 'Stella de Oro'</i>	1 gal	
GROUND COVERS	COMMON / BOTANICAL NAME	CONT	
	2" Perma-Bark w/DewittPro-5 Weed Barrier / Washed Landscape Rock	Stone	
	Kentucky Bluegrass / <i>Poa pratensis</i>	sod	
	Wood Mulch / Wood Mulch	mulch	
	Mountain Valley Boulder Cluster-Blond		

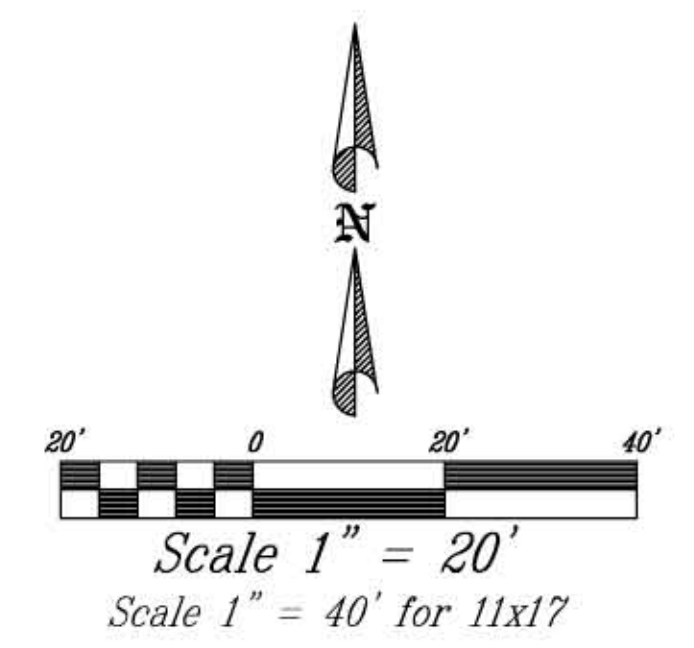
LANDSCAPE NOTES:
 TREE STAKES REQUIRED ON ALL TREES PLANTED ALONG WALKWAYS OR NEAR PLAYGROUNDS.
 LANDSCAPE BOULDERS TO BE 36-48" IN HEIGHT.



SALEM CITY
 COLE PARK
 PLANTING PLAN (SHEET 1)

380 E Main St, Suite 204
 Midway, Ut 84049 ph. (801) 723-2000

DESIGN BY: CNB	DATE: 19 JULY 2019	SHEET L07
DRAWN BY: CNB	REV:	



LANDSCAPE NOTES:
TREE STAKES REQUIRED ON ALL TREES PLANTED ALONG WALKWAYS OR NEAR PLAYGROUNDS.
LANDSCAPE BOULDERS TO BE 36-48" IN HEIGHT.

PLANT SCHEDULE SHEET 2

TREES	COMMON / BOTANICAL NAME	CONT	CAL
	Crimson King Maple / <i>Acer platanoides</i> 'Crimson King'	B&B	2" Cal
	Eastern Redbud / <i>Cercis canadensis</i>	B&B	2" Cal
	Flowering Cherry / <i>Prunus serrulata</i> 'Kwanzan'	B & B	2" Cal
	Littleleaf Linden / <i>Tilia cordata</i>	B&B	2" Cal
	Shademaster Locust / <i>Gleditsia triacanthos inermis</i> 'Shademaster'™	B&B	2" Cal
	Spring Snow Crab Apple / <i>Malus x 'Spring Snow'</i>	B & B	2" Cal
SHRUBS	COMMON / BOTANICAL NAME	CONT	
	Arctic Fire Dogwood / <i>Cornus sanguinea</i> 'Arctic Fire'™	5 gal	
	Bailmer Hydrangea / <i>Hydrangea macrophylla</i> 'Endless Summer'™	5 gal	
	Blue Mist Shrub / <i>Caryopteris x clandonensis</i> 'Dark Knight'	5 gal	
	Compact Burning Bush / <i>Euonymus alatus</i> 'Compactus'	5 gal	
	Coral Charm Peony / <i>Paeonia x 'Coral Charm'</i>	5 gal	
	Dwarf Globe Blue Spruce / <i>Picea pungens</i> 'Globosa'	5 gal	
	Green Mound Alpine Currant / <i>Ribes alpinum</i> 'Green Mound'	5 gal	
	Incrediball White Hydrangea / <i>Hydrangea arborescens</i> 'Incrediball'	5 gal	
	Karl Rosenfield Peony / <i>Paeonia lactiflora</i> 'Karl Rosenfield'	5 gal	
	Miss Kim Korean Lilac / <i>Syringa pubescens</i> 'Miss Kim'	5 gal	
	Purple Leaf Sand Cherry / <i>Prunus x cistena</i>	5 gal	
	Rose Of Sharon / <i>Hibiscus syriacus</i>	5 gal	
	Spiraea / <i>Spiraea japonica</i> 'Goldmound'	5 gal	
	Summer Snowflake Japanese Snowball / <i>Viburnum plicatum tomentosum</i>	5 gal	
	Tallhedge Buckthorn / <i>Rhamnus frangula columnaris</i>	5 gal	
	White Drift Rose / <i>Rosa x 'White Drift'</i>	5 gal	
GRASSES	COMMON / BOTANICAL NAME	CONT	
	Feather Reed Grass / <i>Calamagrostis x acutiflora</i> 'Karl Foerster'	2 gal	
PERENNIALS	COMMON / BOTANICAL NAME	CONT	
	German Iris / <i>Iris germanica</i>	1 gal	
	Stella de Oro Daylily / <i>Hemerocallis x 'Stella de Oro'</i>	1 gal	
GROUND COVERS	COMMON / BOTANICAL NAME	CONT	
	2" Perma-Bark w/DewittPro-5 Weed Barrier / Washed Landscape Rock	Stone	
	Kentucky Bluegrass / <i>Poa pratensis</i>	sod	
	Mountain Valley Boulder Cluster-Blond		



19 JUL 2019

SALEM CITY
COLE PARK

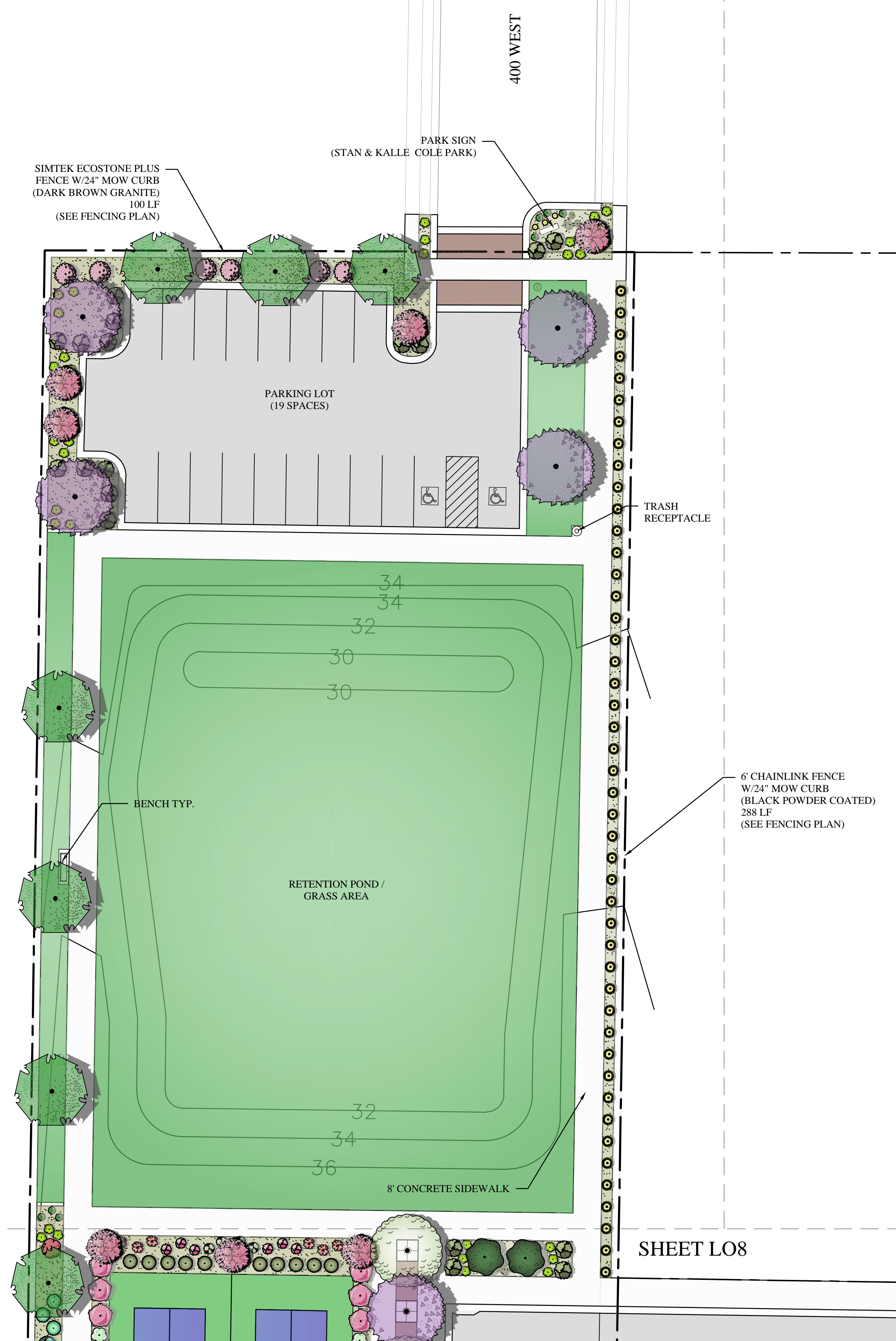
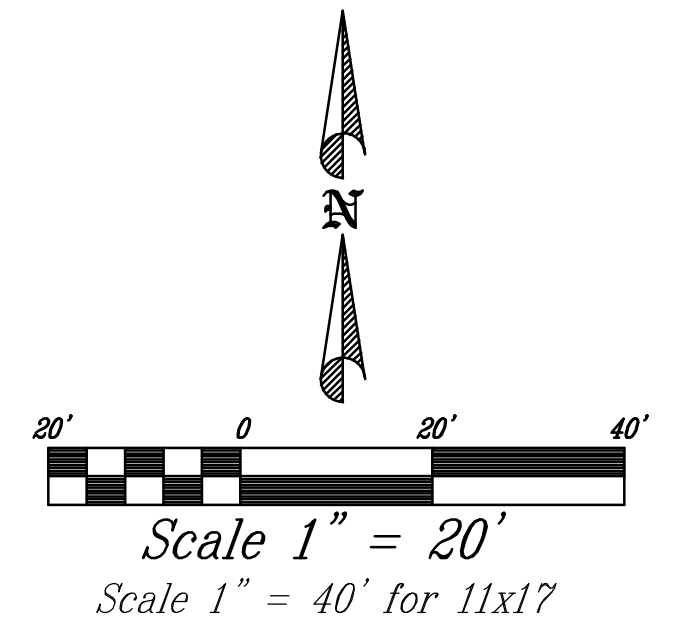
PLANTING PLAN (SHEET 2)

berg
LANDSCAPE ARCHITECTS

380 E Main St, Suite 204
Midway, Ut 84049 ph. (801) 723-2000

DESIGN BY: CNB DATE: 19 JULY 2019
DRAWN BY: CNB REV:

SHEET
L08



LANDSCAPE NOTES:
 TREE STAKES REQUIRED ON ALL TREES PLANTED ALONG WALKWAYS OR NEAR PLAYGROUNDS.
 LANDSCAPE BOULDERS TO BE 36-48" IN HEIGHT.

PLANT SCHEDULE SHEET3

TREES	COMMON / BOTANICAL NAME	CONT	CAL
	Crimson King Maple / <i>Acer platanoides</i> 'Crimson King'	B&B	2" Cal
	Eastern Redbud / <i>Cercis canadensis</i>	B&B	2" Cal
	Shademaster Locust / <i>Gleditsia triacanthos inermis</i> 'Shademaster'™	B&B	2" Cal
SHRUBS	COMMON / BOTANICAL NAME	CONT	
	Coral Charm Peony / <i>Paeonia</i> x 'Coral Charm'	5 gal	
	Dwarf Globe Blue Spruce / <i>Picea pungens</i> 'Globosa'	5 gal	
	Karl Rosenfield Peony / <i>Paeonia lactiflora</i> 'Karl Rosenfield'	5 gal	
	Miss Kim Korean Lilac / <i>Syringa pubescens</i> 'Miss Kim'	5 gal	
	Spirea / <i>Spiraea japonica</i> 'Goldmound'	5 gal	
	White Drift Rose / <i>Rosa</i> x 'White Drift'	5 gal	
GRASSES	COMMON / BOTANICAL NAME	CONT	
	Feather Reed Grass / <i>Calamagrostis x acutiflora</i> 'Karl Foerster'	2 gal	
PERENNIALS	COMMON / BOTANICAL NAME	CONT	
	Emerald Blue Moss Phlox / <i>Phlox subulata</i> 'Emerald Blue'	1 gal	
	Stella de Oro Daylily / <i>Hemerocallis</i> x 'Stella de Oro'	1 gal	
GROUND COVERS	COMMON / BOTANICAL NAME	CONT	
	2" Perma-Bark w/DewittPro-5 Weed Barrier / Washed Landscape Rock	Stone	
	Kentucky Bluegrass / <i>Poa pratensis</i>	sod	
	Mountain Valley Boulder Cluster-Blond		

SHEET L08



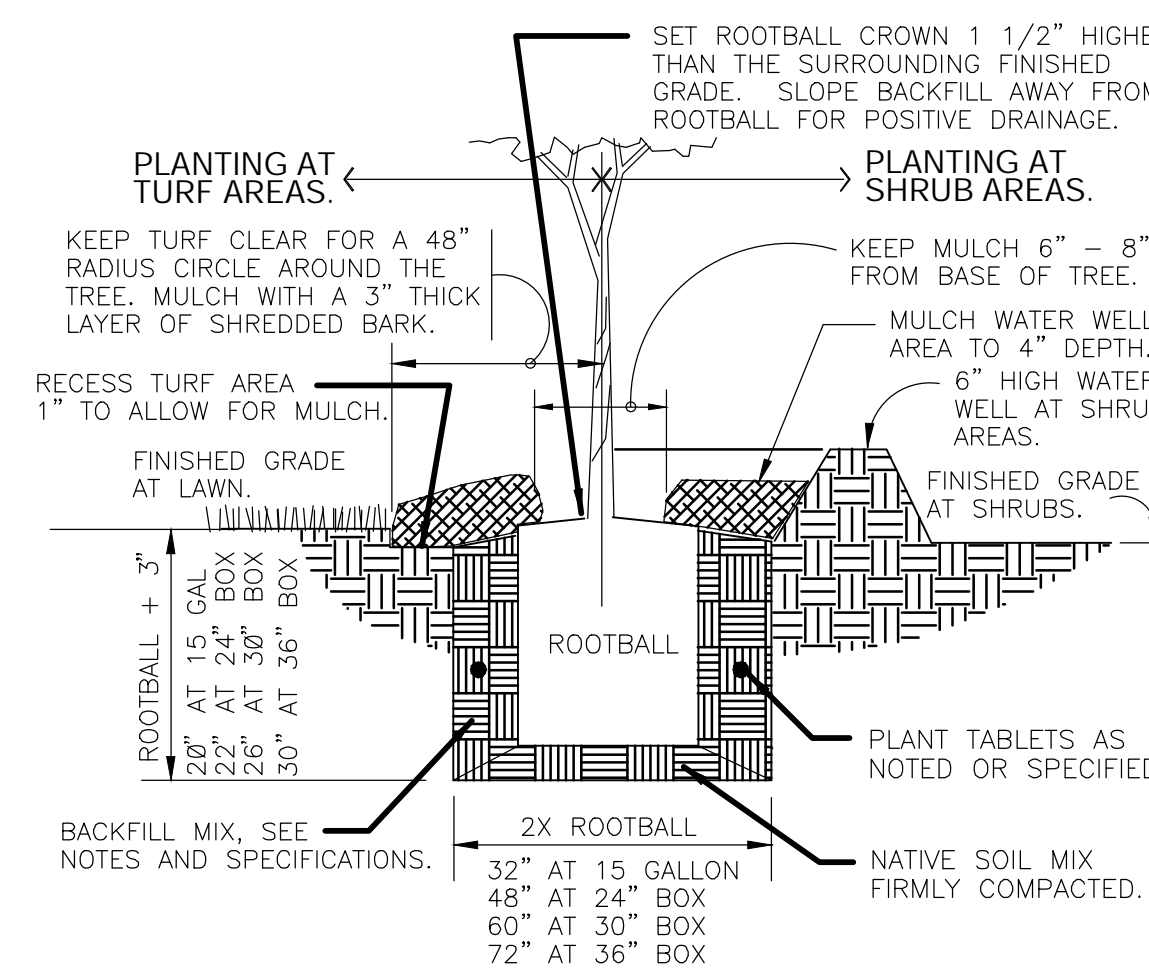
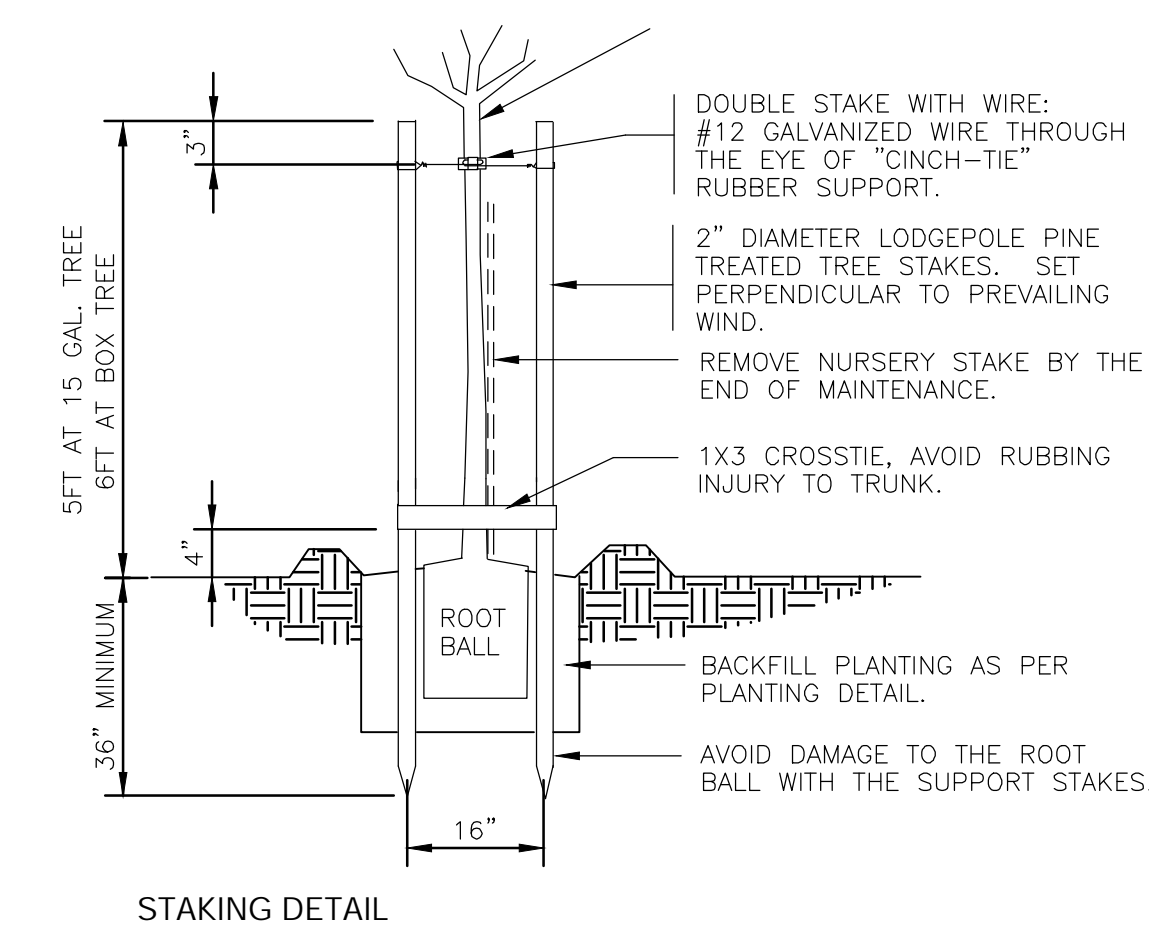
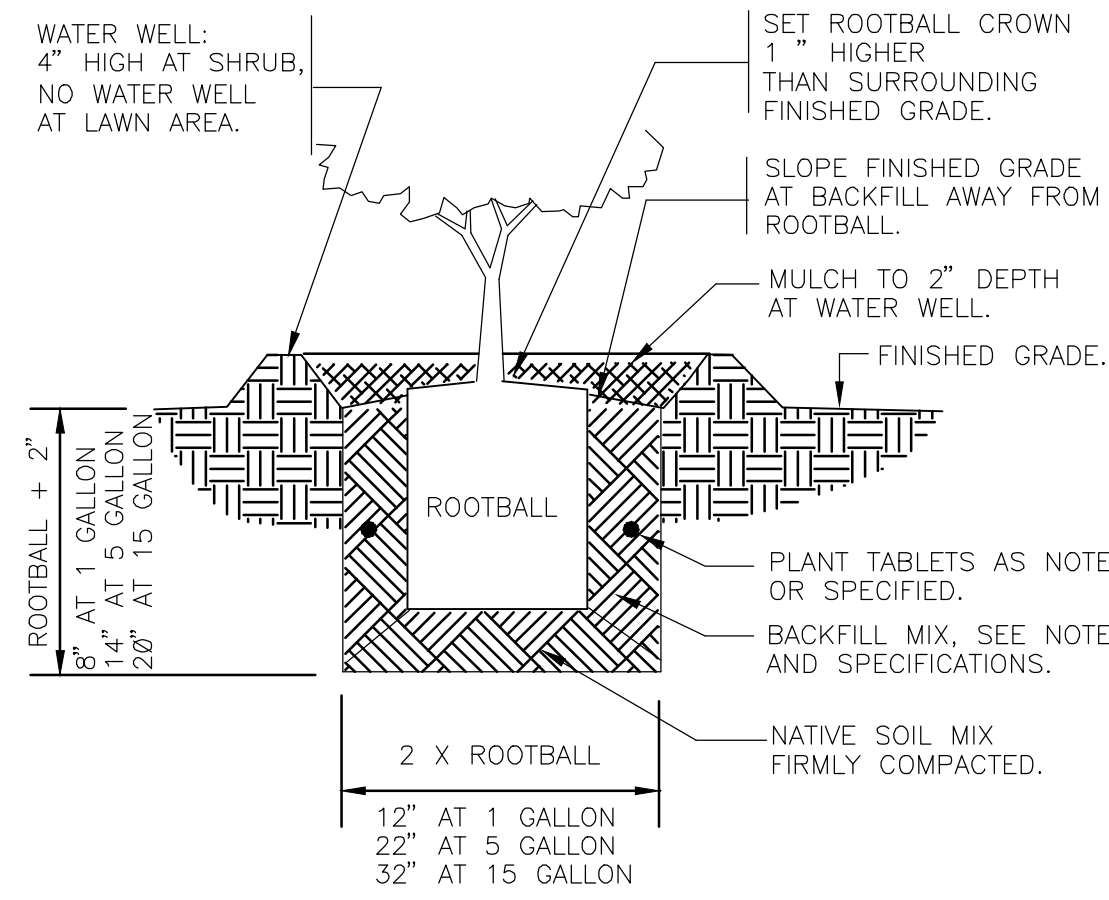
SALEM CITY
 COLE PARK
 PLANTING PLAN (SHEET 3)



DESIGN BY: CNB DATE: 19 JULY 2019 SHEET L09
 DRAWN BY: CNB REV:

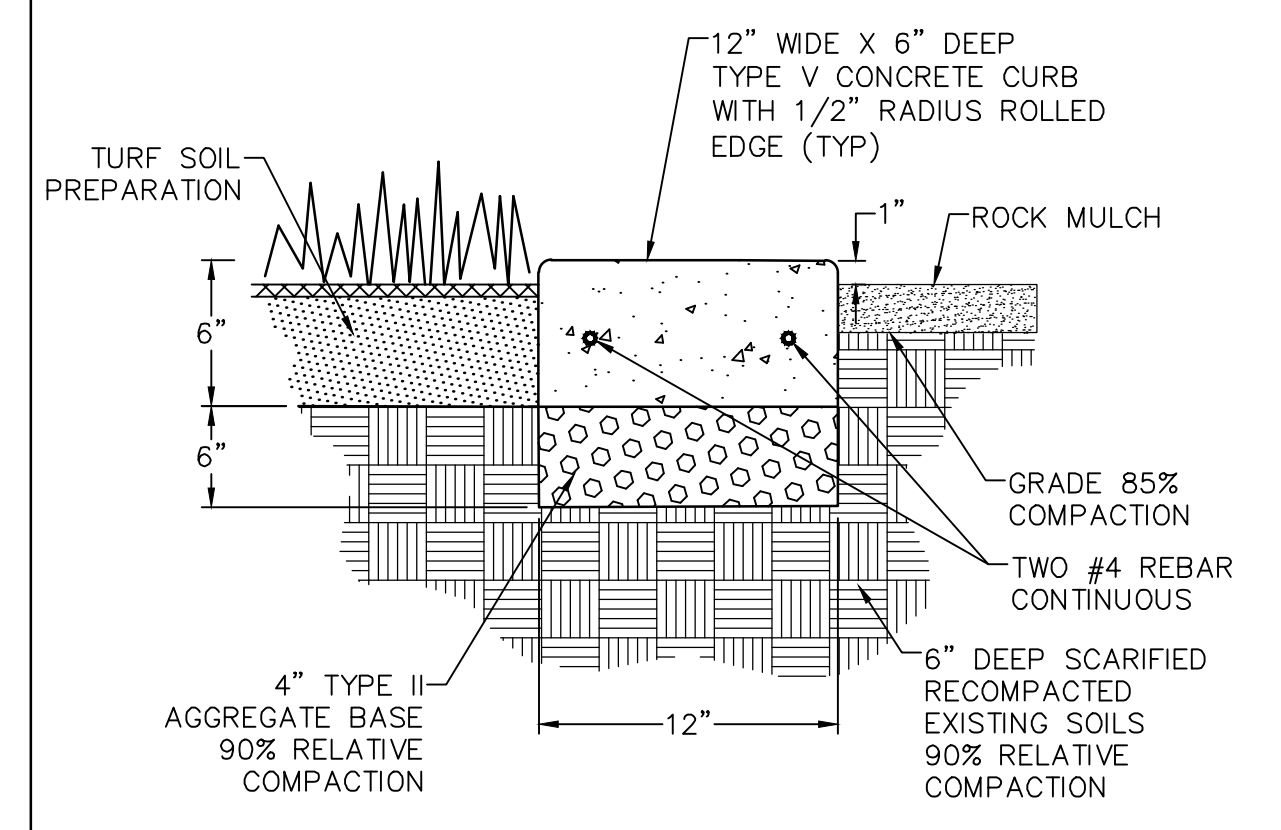
GENERAL PLANTING NOTES:

1. CODES, LAWS, REGULATIONS & PERMITS BY FEDERAL, STATE, COUNTY AND CITY AGENCIES FOR DESIGN CONCEPT, MATERIALS AND WORKMANSHIP MUST BE RESEARCHED AND SATISFIED BY THE CONTRACTOR. REPORT ANY PROBLEMS OR REQUIREMENTS TO THE LANDSCAPE ARCHITECT. THE CONTRACTOR MUST VERIFY THE REGULATIONS FOR AND SECURE ANY PERMITS BEFORE BEGINNING CONSTRUCTION. THE COST FOR THE PERMIT FEES MAY BE SUBMITTED TO THE OWNER FOR REIMBURSEMENT. CALL BLUE STAKES AND REFER TO DRAINAGE AND CIVIL PLANS BEFORE ANY TRENCHING OR EXCAVATION.
2. CONSTRUCTION SAFETY & CLEANUP MUST MEET OSHA STANDARDS AT ALL TIMES. ALL CONTRACTORS MUST HAVE ADEQUATE LIABILITY, PERSONNEL INJURY AND PROPERTY DAMAGE INSURANCE. CLEAN UP MUST BE PERFORMED DAILY, AND ALL HARDSCAPE ELEMENTS MUST BE WASHED FREE OF DIRT AND MUD ON FINAL CLEAN UP. CONSTRUCTION MUST OCCUR IN A TIMELY MANNER.
3. LANDSCAPE PLANS AND DETAIL DRAWINGS ARE SCHEMATIC ONLY. DISCREPANCIES MAY EXIST, INCLUDING BUT NOT LIMITED TO BUILDING LOCATION, PROPERTY LINES, ANY DIMENSIONS SPECIFIED OR IMPLIED. THE CONTRACTOR WILL BE REQUIRED TO ADJUST PLANS AS NECESSARY TO RETAIN CONCEPT INTEGRITY. CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT IF DISCREPANCIES EXIST.
4. PLANT MATERIAL EXCAVATION. CONTRACTOR TO CALL BLUE STAKE AND MAKE REFERENCE TO DRAINAGE AND CIVIL PLANS BEFORE EXCAVATION FOR PLANT MATERIAL. ALL HOLES MUST ALLOW FOR A MINIMUM OF SIX (6) INCHES OF SPECIFIED PLANTING MIX BACKFILL MATERIAL ON ALL SIDES OF ROOT BALL FOR SHRUBS, AND 3X BALL DIAMETER FOR TREES.
5. PLANT MATERIAL BACKFILL MUST BE A WELL MIXED COMBINATION OF 2/3 NATIVE SOIL AND 1/3 ORGANIC COMPOSED MATERIAL. DEEP WATER ALL PLANT MATERIAL IMMEDIATELY AFTER PLANTING. ADD BACKFILL MATERIAL TO DEPRESSIONS AS NECESSARY.
6. PLANT MATERIAL AND LANDSCAPE ELEMENTS WILL BE GUARANTEED FOR ONE YEAR AFTER FINAL ACCEPTANCE. ANY ITEMS THAT ARE NOT FIRST CLASS PREMIUM QUALITY WILL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. PLANT MATERIAL THAT IS NOT PREMIUM QUALITY OR APPEARS STRESSED IN ANY WAY DURING THE GUARANTEE PERIOD MAY REQUIRE REPLACEMENT. THE CONTRACTOR MUST SCHEDULE A PRE AND POST GUARANTEE MEETING WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION. FAILURE TO DO SO WILL MEAN THE OFFICIAL GUARANTEE PERIOD HAS NOT BEEN ACTIVATED OR DE-ACTIVATED.
7. PLANT MATERIAL SHALL CONFORM TO NURSERY STANDARDS ACCORDING TO AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) AND SHALL BE FREE FROM ALL PESTS, EGGS, DISEASES, AND SHALL BE REPRESENTATIVE OF SPECIES IN SIZE, QUALITY, FORM, COLOR AND NOT ROOT BOUND, DAMAGED OR SUBSTANDARD IN ANY WAY. 10% OF EACH PLANT MATERIAL SPECIES SHALL BE TAGGED WITH BOTANICAL NAME FROM THE NURSERY OR SUPPLIER, TAGS SHALL REMAIN ON PLANT MATERIAL UNTIL FINAL ACCEPTANCE.
8. TOP SOIL MUST BE A PREMIUM QUALITY DARK SANDY LOAM, FREE OF ROCKS, CLODS, ROOTS, AND PLANT MATTER. THE TOPSOIL WILL BE EVENLY SPREAD AND SMOOTH GRADED ON A CAREFULLY PREPARED SUBGRADE TO A DEPTH OF FOUR (4) INCHES IN SHRUB AREAS, FOUR (4) INCHES UNDER SOD AREAS.
9. AS SHOWN ON THE PLANS. 2"-4" ROCK MULCH TO A DEPTH OF FOUR (4) INCHES OVER DEWITT PRO-5 WEED BARRIER. WOOD MULCH TO A DEPTH OF FOUR (4) INCHES OVER DEWITT PRO-5 WEED BARRIER. MULCH SHALL BE EVENLY SPREAD ON A CAREFULLY PREPARED GRADE TO A MINIMUM DEPTH AS SPECIFIED, THE TOP OF ALL AREAS OF MULCH SHALL BE ONE (1) INCH BELOW THE GRADE OF THE ADJACENT CURB, WALK, OR EDGE OF PAVEMENT.
10. SOD MUST BE PREMIUM QUALITY, ULTRA GREEN, EVENLY CUT, ESTABLISHED, HEALTHY, WEED AND DISEASE FREE, AND FROM AN APPROVED SOURCE. SOD MUST BE DELIVERED AND LAID IMMEDIATELY AFTER CUTTING. SOD MUST BE LAID WITHOUT GAPS BETWEEN PIECES ON A CAREFULLY PREPARED TOPSOIL LAYER. THE LAID SOD MUST BE IMMEDIATELY WATERED AFTER INSTALLATION. ANY BURNED AREAS WILL REQUIRE REPLACEMENT. ADJUST SPRINKLER SYSTEM TO ASSURE HEALTHY GREEN SURVIVAL OF THE SOD WITHOUT WATER WASTE.
11. FERTILIZER FOR SOD AREAS SHALL BE PELLETIZED, N-P-K AS APPROVED BY LANDSCAPE ARCHITECT FOR SEASONAL ADJUSTMENT. USE 20 LBS PER 5,000 SQUARE FEET OR AS PER MANUFACTURER'S SPECIFICATIONS. SPREAD EVENLY ON A CAREFULLY PREPARED TOPSOIL LAYER JUST PRIOR TO LAYING SOD.
12. QUANTITIES LISTED ON PLANS ARE FOR THE CONTRACTORS CONVENIENCE. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL QUANTITIES LISTED ON THE PLANS AND THE AVAILABILITY OF ALL PLANT MATERIALS AND THEIR SPECIFIED SIZES PRIOR TO SUBMITTING A BID. THE CONTRACTOR MUST NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO SUBMITTING A BID IF THE CONTRACTOR DETERMINES A QUANTITY DEFICIENCY OR AVAILABILITY PROBLEM WITH SPECIFIED MATERIAL.
13. STAKING AND GUYING REMOVAL IS THE CONTRACTORS RESPONSIBILITY. CONTRACTOR SHALL REMOVE TREE GUYING AND STAKING IN A TIMELY MANNER ONCE STAKED TREES HAVE TAKEN ROOT. NO STAKING SHALL REMAIN BEYOND A REASONABLE TIME FOR ROOT PENETRATION AND STABILIZATION.
14. TREE WRAPPING MAY BE USED TO PROTECT YOUNG TREES FROM WINTER DAMAGE. TREE WRAPS SHALL BE INSTALLED IN THE FALL. IF THE CONTRACTOR INSTALLS WRAPS FOR TREE PROTECTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROMPTLY REMOVE WRAPS THE FOLLOWING SPRING.
15. AUTOMATIC IRRIGATION SYSTEMS SHALL FULLY IRRIGATE ALL LANDSCAPE MATERIAL.



2 SHRUB PLANTING

1" = 1'-0" 329333.13-01

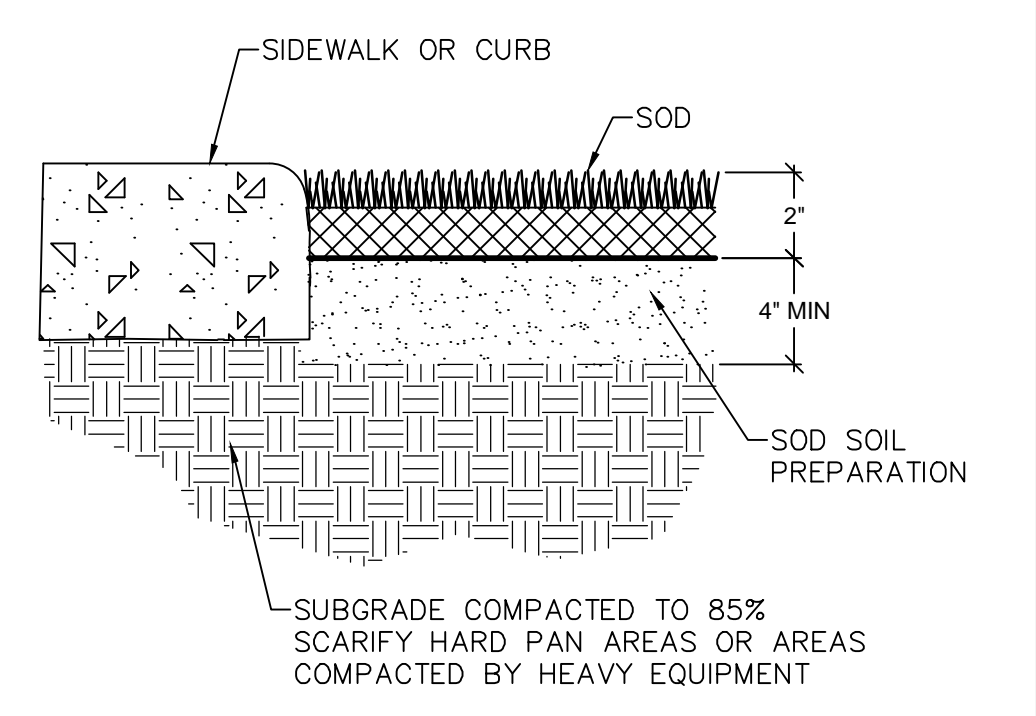


CONCRETE LANDSCAPE CURB

NTS

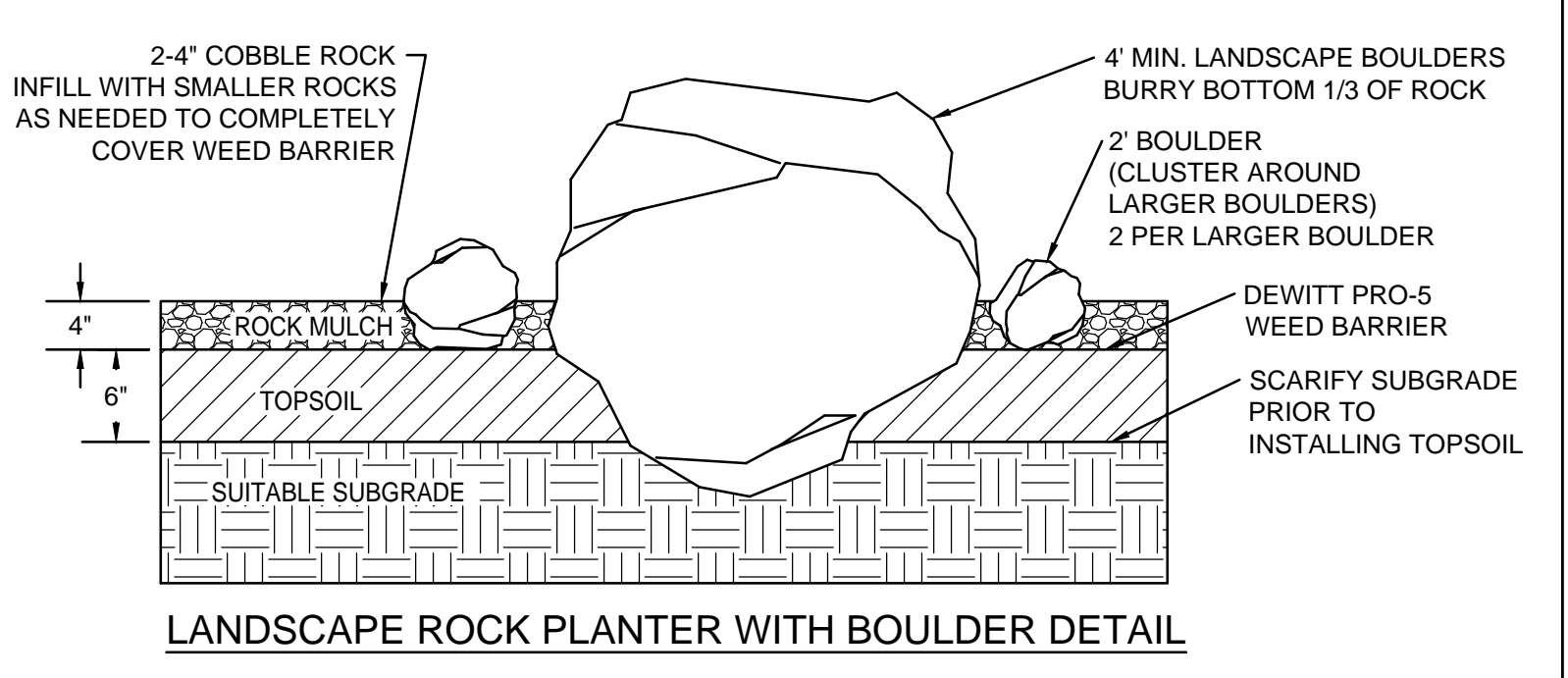
1 TREE PLANTING DOUBLE STAKE

1" = 1'-0" DETAIL-FILE

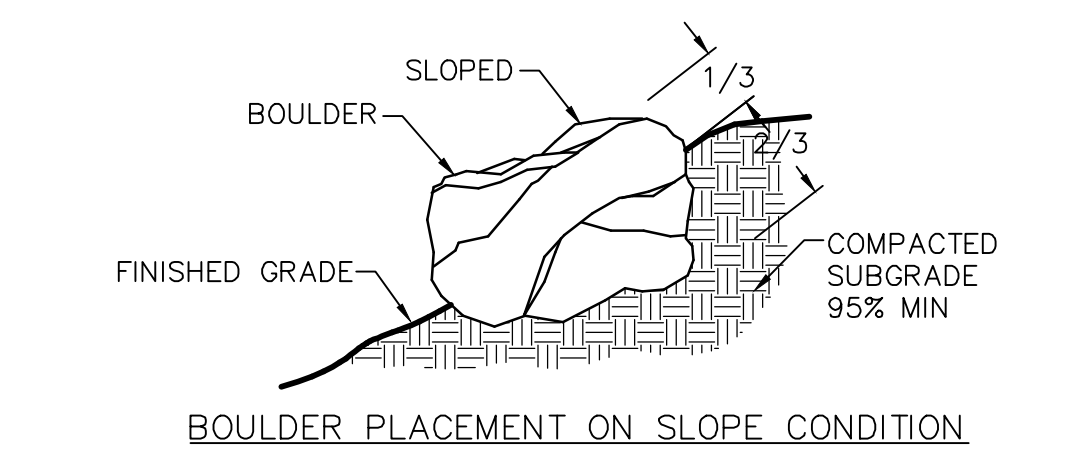


SOD PLANTING

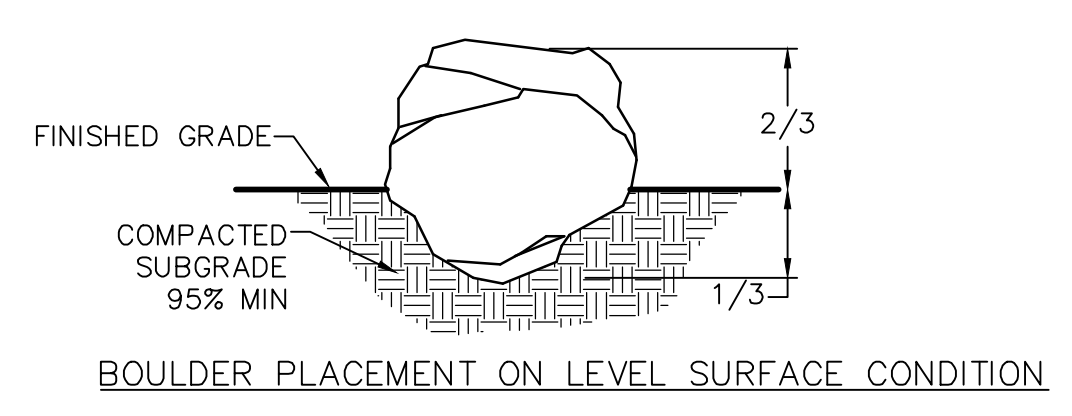
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LANDSCAPE ROCK PLANTER WITH BOULDER DETAIL



BOULDER PLACEMENT ON SLOPE CONDITION

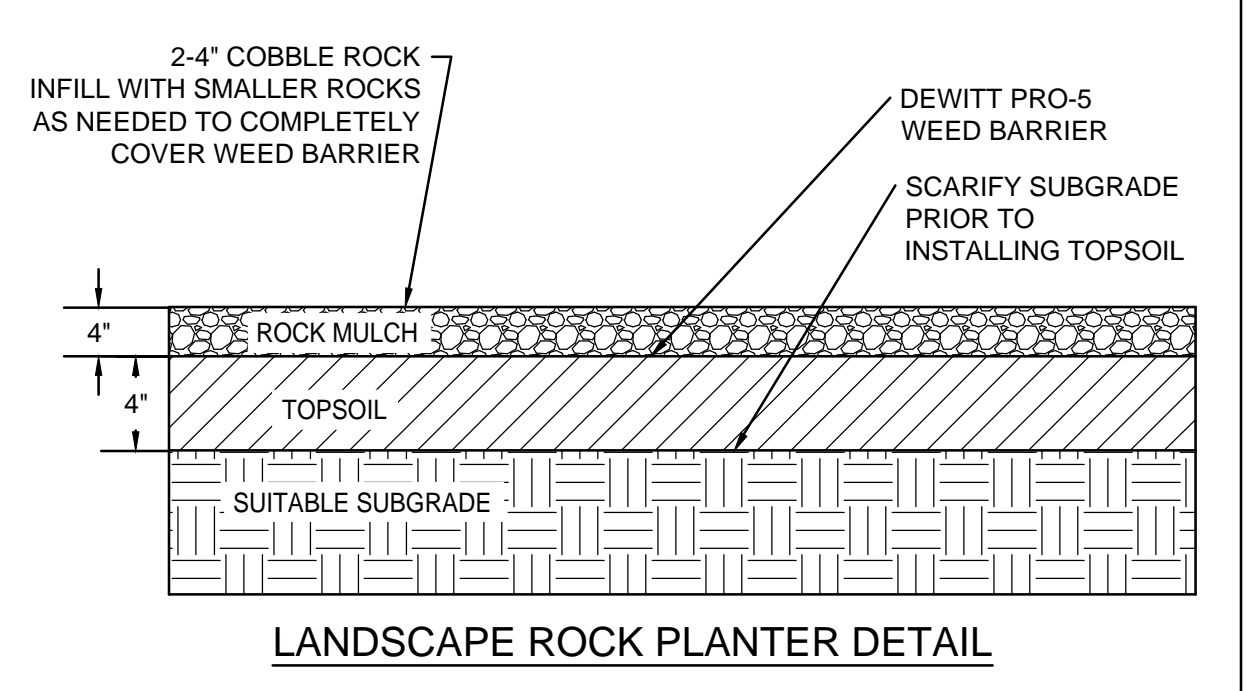


BOULDER PLACEMENT ON LEVEL SURFACE CONDITION

- NOTE:
1. BOULDERS TO BE CLEAN AND UNMARKED.
2. BURY MIN OF 1/3 TO 1/2 OF BOULDER INTO FINISH GRADE ON LEVEL OR SLOPED GRADES.

BOULDER PLACEMENT

NTS



LANDSCAPE ROCK PLANTER DETAIL

PLANT SCHEDULE				
TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL
	27	Crimson King Maple / Acer platanoides 'Crimson King'	B&B	2' Cal
	18	Eastern Redbud / Cercis canadensis	B&B	2' Cal
	23	Flowering Cherry / Prunus serrulata 'Kwanzan'	B & B	2' Cal
	2	Japanese Wisteria / Wisteria floribunda	B&B	2' Cal
	8	Littleleaf Linden / Tilia cordata	B&B	2' Cal
	54	Shademaster Locust / Gleditsia triacanthos inermis 'Shademaster' TM	B&B	2' Cal
	2	Silver Linden / Tilia tomentosa	B & B	2' Cal
	28	Spring Snow Crab Apple / Malus x 'Spring Snow'	B & B	2' Cal
	3	Wisteria / Wisteria macrostachya 'Blue Moon'	B&B	2' Cal
SHRUBS	QTY	COMMON / BOTANICAL NAME	CONT	
	33	Arctic Fire Dogwood / Cornus sanguinea 'Arctic Fire' TM	5 gal	
	58	Ballmer Hydrangea / Hydrangea macrophylla 'Endless Summer' TM	5 gal	
	49	Blue Mist Shrub / Caryopteris x clandonensis 'Dark Knight'	5 gal	
	12	Compact Burning Bush / Euonymus alatus 'Compactus'	5 gal	
	15	Coral Charm Peony / Paeonia x 'Coral Charm'	5 gal	
	40	Creeping Mahonia / Mahonia repens	5 gal	
	61	Dwarf Globe Blue Spruce / Picea pungens 'Globosa'	5 gal	
	31	Green Mound Alpine Currant / Ribes alpinum 'Green Mound'	5 gal	
	47	Incrediball White Hydrangea / Hydrangea arborescens 'Incrediball'	5 gal	
	12	Karl Rosenfield Peony / Paeonia lactiflora 'Karl Rosenfield'	5 gal	
	26	Miss Kim Korean Lilac / Syringa pubescens 'Miss Kim'	5 gal	
	5	Purple Leaf Sand Cherry / Prunus x cistena	5 gal	
	25	Rose Of Sharon / Hibiscus syriacus	5 gal	
	78	Spirea / Spiraea japonica 'Goldmound'	5 gal	
	10	Summer Snowflake Japanese Snowball / Viburnum plicatum tomentosum	5 gal	
	20	Tailhedge Buckthorn / Rhamnus frangula columnaris	5 gal	
	12	White Drift Rose / Rosa x 'White Drift'	5 gal	
GRASSES	QTY	COMMON / BOTANICAL NAME	CONT	
	53	Feather Reed Grass / Calamagrostis x acutiflora 'Karl Foerster'	2 gal	
PERENNIALS	QTY	COMMON / BOTANICAL NAME	CONT	
	44	Emerald Blue Moss Phlox / Phlox subulata 'Emerald Blue'	1 gal	
	77	German Iris / Iris germanica	1 gal	
	5	May Night Sage / Salvia nemorosa 'May Night'	1 gal	
	112	Stella de Oro Daylily / Hemerocallis x 'Stella de Oro'	1 gal	
GROUND COVERS	QTY	COMMON / BOTANICAL NAME	CONT	
	18,663 sf	2" Perma-Bark w/DewittPro-5 Weed Barrier / Washed Landscape Rock	Stone	
	105,135 sf	Kentucky Bluegrass / Poa pratensis	sod	
	2,667 sf	Wood Mulch / Wood Mulch	mulch	
	21	Mountain Valley Boulder Cluster-Blond		



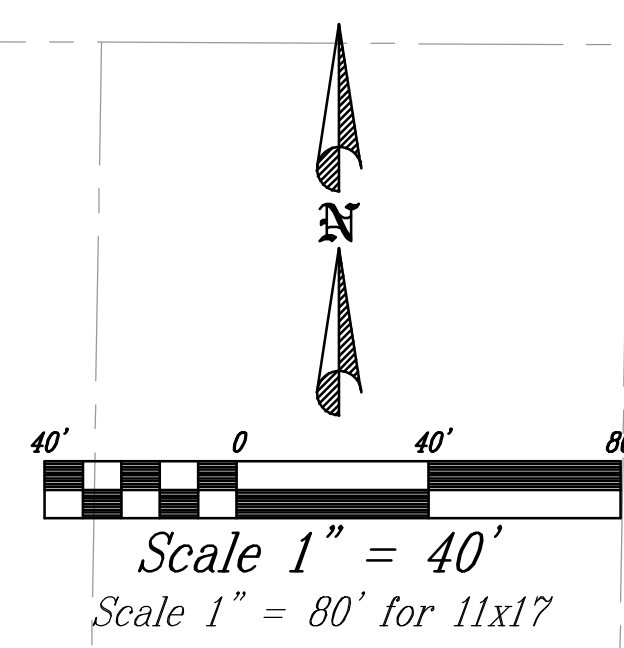
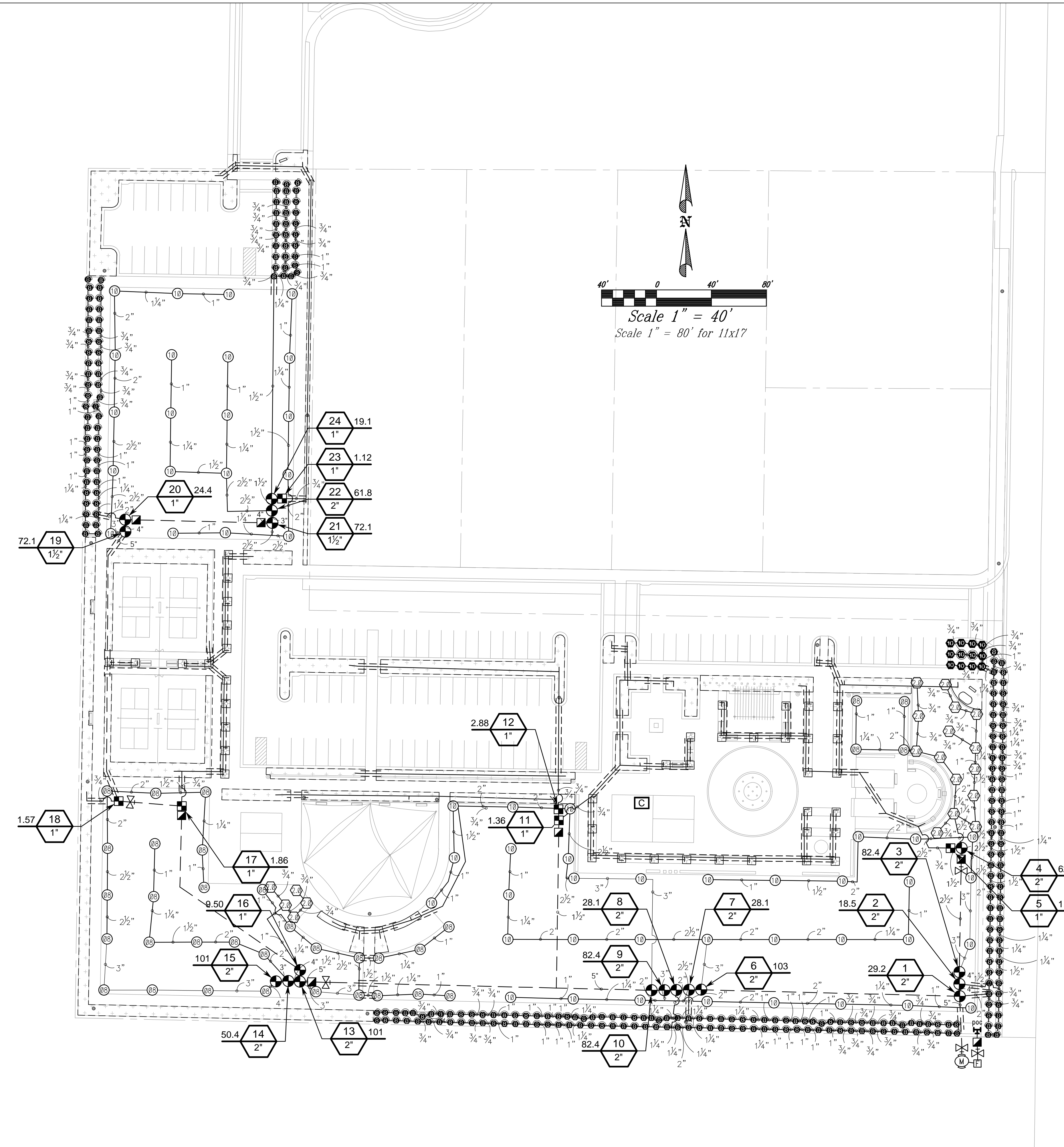
SALEM CITY
COLE PARK
LANDSCAPE DETAILS &
PLANTING SCHEDULE

berg
LANDSCAPE ARCHITECTS

380 E Main St, Suite 204
Midway, UT 84049 ph. (801) 723-2000

DESIGN BY: CNB DATE: 19 JULY 2019 SHEET
DRAWN BY: CNB REV: L10

19 JUL 2019



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
Q T H F	Rain Bird RD-06-P30-F-NP 8 Series MPR Turf Spray, 6.0" Pop-Up, with 30 psi in-stem pressure regulation, Flow-Shield Technology, and Non-Potable Cover (purple cap), 1/2" NPT female threaded inlet.	268	30		
Q T H F	Rain Bird RD-06-P30-F-NP 10 Series MPR Turf Spray, 6.0" Pop-Up, with 30 psi in-stem pressure regulation, Flow-Shield Technology, and Non-Potable Cover (purple cap), 1/2" NPT female threaded inlet.	2	30		
10HE-VAN 12HE-VAN 10HE-VAN 15HE-VAN	Rain Bird RD-06-P30-F-NP ADJ Turf Spray, 6.0" Pop-Up, with 30 psi in-stem pressure regulation, Flow-Shield Technology, and Non-Potable Cover (purple cap), 1/2" NPT female threaded inlet.	11	30		
Q T H F	Hunter I-20-04-LA-SS-NCV Turf Rotor, 4.0" Pop-Up, Adjustable and Full Circle. Stainless Steel Riser, Low Angle Nozzle.	20	40	1.90	27"
10	Hunter I-40-06-SS Turf Rotor, 6.0" Pop-Up, Adjustable to Full Circle, Drain Check Valve, Stainless Steel Riser, 1" Female NPT Inlet Threads, Standard Nozzle.	34	50	8.40	45"
10	Hunter I-40-06-SS Turf Rotor, 6.0" Pop-Up, Adjustable to Full Circle, Drain Check Valve, Stainless Steel Riser, 1" Female NPT Inlet Threads, Standard Nozzle.	54	50	10.3	49"
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
■	Rain Bird XCZ-100-PRB-COM 1" Wide Flow Drip Control Kit for Commercial Applications. 1" Ball Valve with 1" PESB Valve and 1" Pressure Regulating 40psi Quick-Check Basket Filter. 0.3gpm to 20gpm.	6			
□	Area to Receive Drip Emitters Netafim WPC with Bug Cap Single Outlet Pressure Compensating Drip Emitter, 5psi Internal Check Valve, with a Barb Inlet x Nipple Outlet. Bug Cap Included. Emitter Notes: 0.5 GPH emitters (1 assigned to each 1 gal plant) 0.5 GPH emitters (1 assigned to each 2 gal plant) 0.5 GPH emitters (2 assigned to each 5 gal plant) 2.0 GPH emitters (3 assigned to each B & B, 1" Cal plant) 2.0 GPH emitters (3 assigned to each B & B, 2" Cal plant) 2.0 GPH emitters (3 assigned to each B & B, 5-7" plant)	21,928 s.f.			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
●	Rain Bird PESB-PRS-D 1" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulating Module, and Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	3			
●	Rain Bird PESB-PRS-D 1-1/2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulating Module, and Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	2			
●	Rain Bird PESB-PRS-D 2" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulating Module, and Scrubber Technology for Reliable Performance in Dirty Water Irrigation Applications.	13			
■	Rain Bird 44-LRC 1" 1" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Locking Thermoplastic Rubber Cover, and 2-Piece Body.	7			
⊗	Landscape Products Inc. BBV 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2" 3" Full Port Brass Ball Valve. Suitable for a full range of liquids and gases in residential and commercial applications.	5			
M	HydroPoint WTF3-300-PD-NC 3" WeatherTRAK Flow3 Hydrometer with power supply is best for direct direct wire installations. See Flow3 with FlowLink for other installation options.	1			
C	HydroPoint WTOXR-C-H2O48-SWM 18-gauge, stainless steel, wall mount enclosure w/ key-lock entry. Station valve decoders not included.	1			
F	Amiad 3" Mini Sigma Filter 250 Amiad 3" Mini Sigma automatic self-cleaning filter with max flow rate of 220 gpm.	1			
POC	Point of Connection 3"	1			
—	Irrigation Lateral Line: PVC Schedule 40 3/4"	3,925 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 1"	1,233 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 1 1/4"	1,195 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 1 1/2"	591.1 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 2"	1,012 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 2 1/2"	519.9 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 3"	480.2 l.f.			
—	Irrigation Lateral Line: PVC Schedule 40 4"	13.2 l.f.			
—	Irrigation Mainline: PVC Schedule 40 1 1/2"	154.5 l.f.			
—	Irrigation Mainline: PVC Schedule 40 2 1/2"	90.4 l.f.			
—	Irrigation Mainline: PVC Schedule 40 3"	18.0 l.f.			
—	Irrigation Mainline: PVC Schedule 40 4"	142.0 l.f.			
—	Irrigation Mainline: PVC Schedule 40 5"	986.0 l.f.			
—	Pipe Sleeve: PVC Schedule 40	1,321 l.f.			

CRITICAL ANALYSIS

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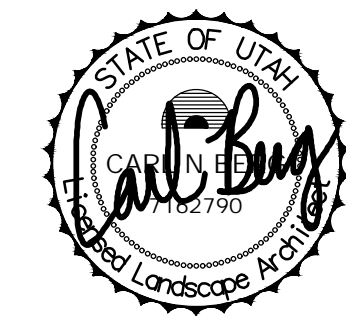
P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Point of Connection Size: 3"
Flow Available: 181.61 gpm

PRESSURE AVAILABLE
Static Pressure at POC: 70.00 psi
Pressure Available: 70.00 psi

DESIGN ANALYSIS
Maximum Multi-valve Flow: 181.61 gpm
Flow Available at POC: 181.61 gpm
Residual Flow Available: 0.00 gpm

Critical Station:
Design Pressure: 21
Friction Loss: 50.00 psi
Fittings Loss: 4.38 psi
Elevation Loss: 0.44 psi
Loss through Valve: 0.00 psi
Pressure Req. at Critical Station: 60.01 psi
Loss for Fittings: 0.00 psi
Loss for Main Line: 3.17 psi
Loss for POC to Valve Elevation: 0.00 psi
Loss for Backflow: 0.00 psi
Loss for Master Valve: 3.89 psi
Critical Station Pressure at POC: 67.07 psi
Pressure Available: 70.00 psi
Residual Pressure Available: 2.93 psi



SALEM CITY
COLE PARK

IRRIGATION PLAN

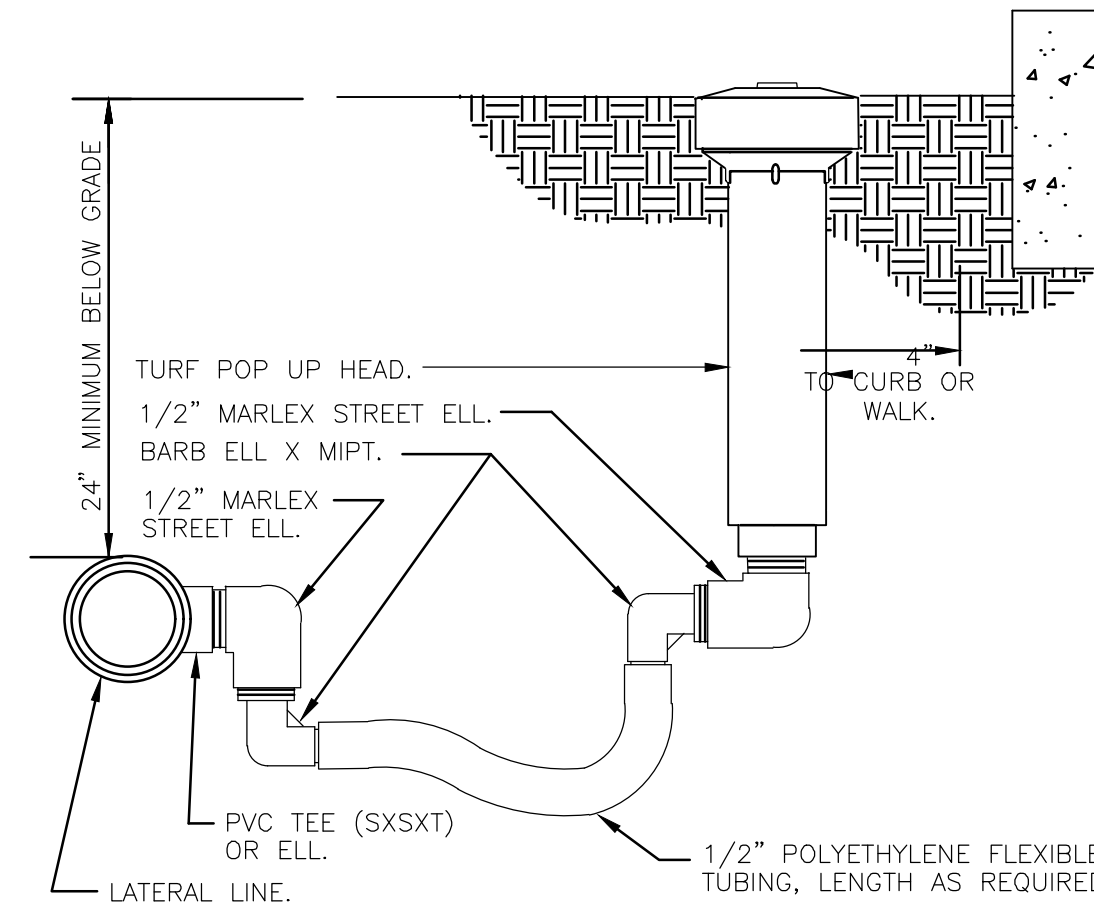
berg
LANDSCAPE ARCHITECTS
380 E Main St, Suite 204
Midway, UT 84049 ph. (801) 723-2000

DESIGN BY: CNB DATE: 19 JULY 2019 SHEET
DRAWN BY: CNB REV: L11

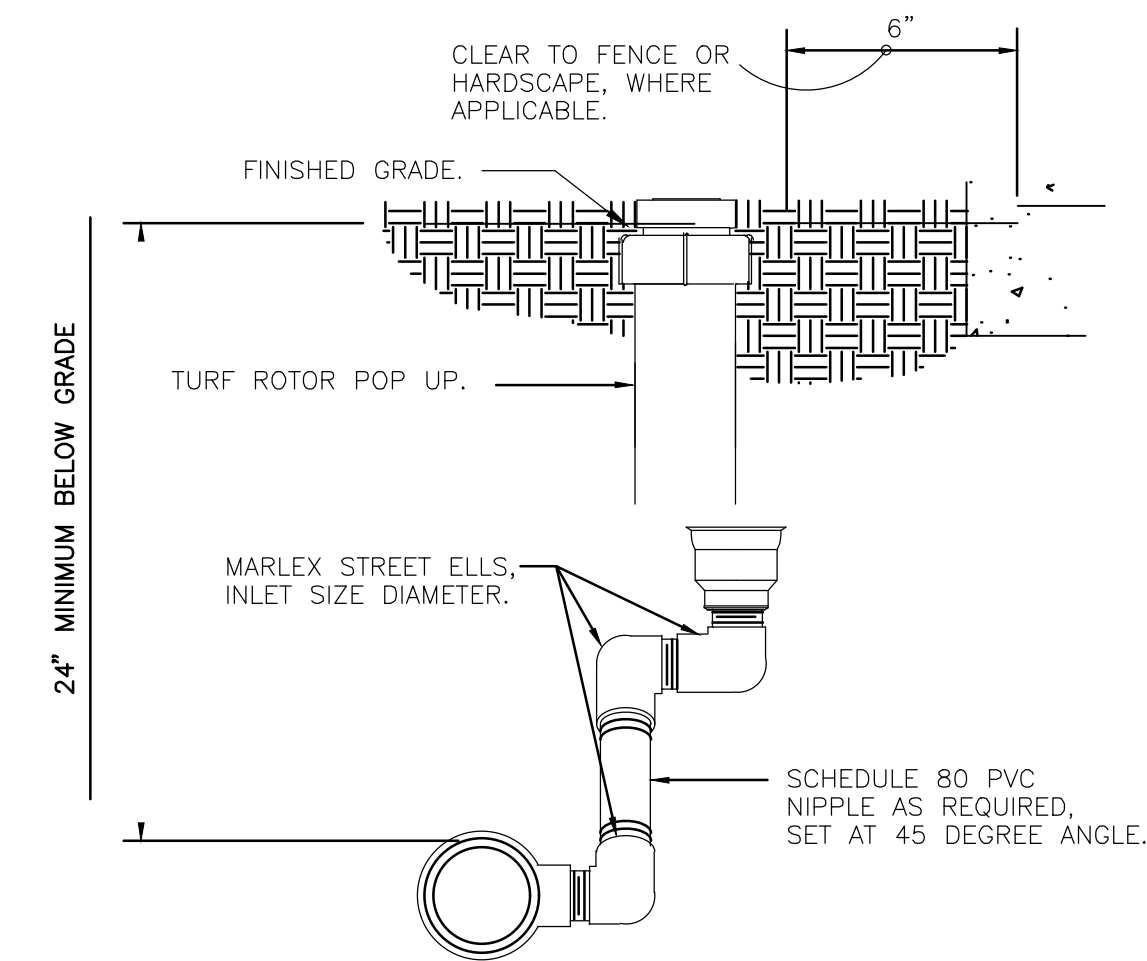
GENERAL IRRIGATION NOTES:

- THE DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AS IT MAY NOT BE POSSIBLE TO ACCURATELY DEPICT THE EXACT LOCATIONS FOR ALL MATERIAL, OR ANTICIPATE THOSE IN-FIELD VARIATIONS WHICH MAY REQUIRE ADJUSTMENT ON SITE. THE INSTALLER SHALL BE EXPECTED TO MAKE MINOR MODIFICATIONS WHICH MAY BE NECESSARY TO MAINTAIN COMPLETE AND ACCURATE COVERAGE, WITHOUT DEVIATION FROM THE DESIGN CONCEPTS OR INTENT. THE FINAL LOCATIONS OF ALL MAJOR EQUIPMENT, SUCH AS CONTROLLERS, VALVES, SUPPLY CONNECTIONS, MAINLINES, ETC. SHALL BE DETERMINED IN THE FIELD, USING THE DRAWINGS AS A GUIDE, AND APPROVED PRIOR TO INSTALLATION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH PREVAILING CODES AND REGULATIONS. ALTHOUGH DUE DILIGENCE HAS BEEN EXERCISED IN THE PREPARATION OF THE DOCUMENTS TO AVOID CONFLICTS, THE RESPONSIBILITY FOR VERIFICATION AND CONFORMANCE TO THE PARTICULAR CODES FOR THIS LOCATION SHALL REMAIN SOLELY THAT OF THE INSTALLER, THE INSTALLER SHALL OBTAIN ANY NECESSARY LOCATES, PERMITS AND INSPECTIONS.
- ALL WORK SHALL BE CLOSELY COORDINATED WITH THAT OF OTHER TRADES, IN ORDER TO AVOID CONFLICTS. THE INSTALLATION SHALL BE COORDINATED WITH ALL NEW AND EXISTING IMPROVEMENTS, AND WITH THE ACTUAL BEDLINES, SOD LIMITS AND PLANT LOCATIONS.
- ALL MATERIAL AND LABOR REQUIRED TO PROVIDE A COMPLETE, OPERATIONAL, AND FULLY GUARANTEED SYSTEM SHALL BE CONSIDERED PART OF THE WORK, WHETHER OR NOT THEY ARE SPECIFICALLY INDICATED IN THE DOCUMENTS. LANDSCAPE CONTRACTOR SHALL CHANGE NOZZLES AS NECESSARY TO ASSURE PROPERTY COVERAGE, TAKING INTO CONSIDERATION ON SITE OBSTRUCTIONS, PREVAILING WINDS, ETC. ANY MATERIAL NECESSARY FOR COMPLETE COVERAGE SHALL BE ADDED BY THE LANDSCAPE CONTRACTOR AT NO EXTRA COST TO THE OWNER (I.E. HEADS, PIPE, FITTINGS).
- UNLESS SPECIFICALLY STATED IN THE DOCUMENTS, ALL MAINLINE PIPING AND WIRING PASSING UNDER PAVED SURFACES SHALL BE SLEEVED WITH SCH. 40 PVC SIZED TWO SIZES LARGER THAN THE CONTAINED PIPE, OR 1" OR LARGER AS NEEDED FOR CONTROL WIRING. LATERAL PIPING PASSING UNDER TRAFFIC-BEARING PAVEMENT OF ANY WIDTH, OR UNDER SIDEWALKS 4' IN WIDTH OR GREATER, SHALL BE SLEEVED IN A SIMILAR MANNER. IT SHALL BE ASSUMED THAT ALL SLEEVING IS TO BE PART OF THIS WORK, UNLESS SPECIFICALLY EXCEPTED IN THE DOCUMENTS. ANY NEEDED SLEEVES WHICH ARE UNUSABLE OR CANNOT BE FOUND SHALL BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER. ROADWAY/DRIVEWAY SLEEVES ARE CALLED OUT ON THIS DRAWING. ALL SIDEWALK SLEEVES ARE NOT SHOWN, BUT ARE UNDERSTOOD.
- CONTROL WIRING SHALL BE ROUTED WITH THE MAINLINE WHEREVER POSSIBLE.
- ALL HEADS SHALL BE OF THE PROPER TYPE FOR THE PLANT MATERIAL WHERE LOCATED, AND SHALL BE INSTALLED IN THE PRESCRIBED MANNER, PLUMB, AND WITH THE PROPER HEIGHT WITH RESPECT TO GRADE AND PLANT HEIGHT. ALL HEADS AND OTHER EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE AND UNIFORM CLEARANCES FROM ALL PAVING, CURBS, SIDEWALKS, WALLS, AND OTHER OBSTACLES, SO THAT DAMAGE TO EQUIPMENT DOES NOT OCCUR DURING LANDSCAPE MAINTENANCE OPERATIONS. ALL SPRINKLERS SHALL BE ADJUSTED TO OBTAIN MAXIMUM COVERAGE OF PLANT MATERIAL. WHILE MINIMIZING OVERSPRAY ONTO WINDOWS OR WALLS, OR OTHER IMPERVIOUS SURFACES, PARTICULARLY WOODWORK AND/OR TRIM. THE INSTALLER SHALL UTILIZE SUITABLE PRESSURE-COMPENSATING SCREENS OR ADJUSTABLE-ARC NOZZLES WHERE REQUIRED TO ACHIEVE MAXIMUM COVERAGE CONTROL.
- EACH CONTROLLER SHALL REQUIRE A STANDARD 120-VAC POWER FEED, WHICH SHALL BE COORDINATED AND HOOKED UP BY THE INSTALLER OR HIS DESIGNATED ELECTRICIAN. A 3-WIRE POWER INPUT SURGE ARRESTOR SHALL BE PROVIDED ON THE POWER FEED, AND A DEDICATED GROUND ROD OR RODS SHALL BE INSTALLED, WHICH PROVIDE A RESISTANCE OF NO GREATER THAN 10 OHMS TO EARTH.
- HARCO FITTINGS ARE REQUIRED ON AND NEAR ALL CHANGES IN DIRECTION.
- LATERAL LINES SHALL BE NO SMALLER THAN 1". PIPES SHALL CARRY NO MORE THAN THE FOLLOWING.

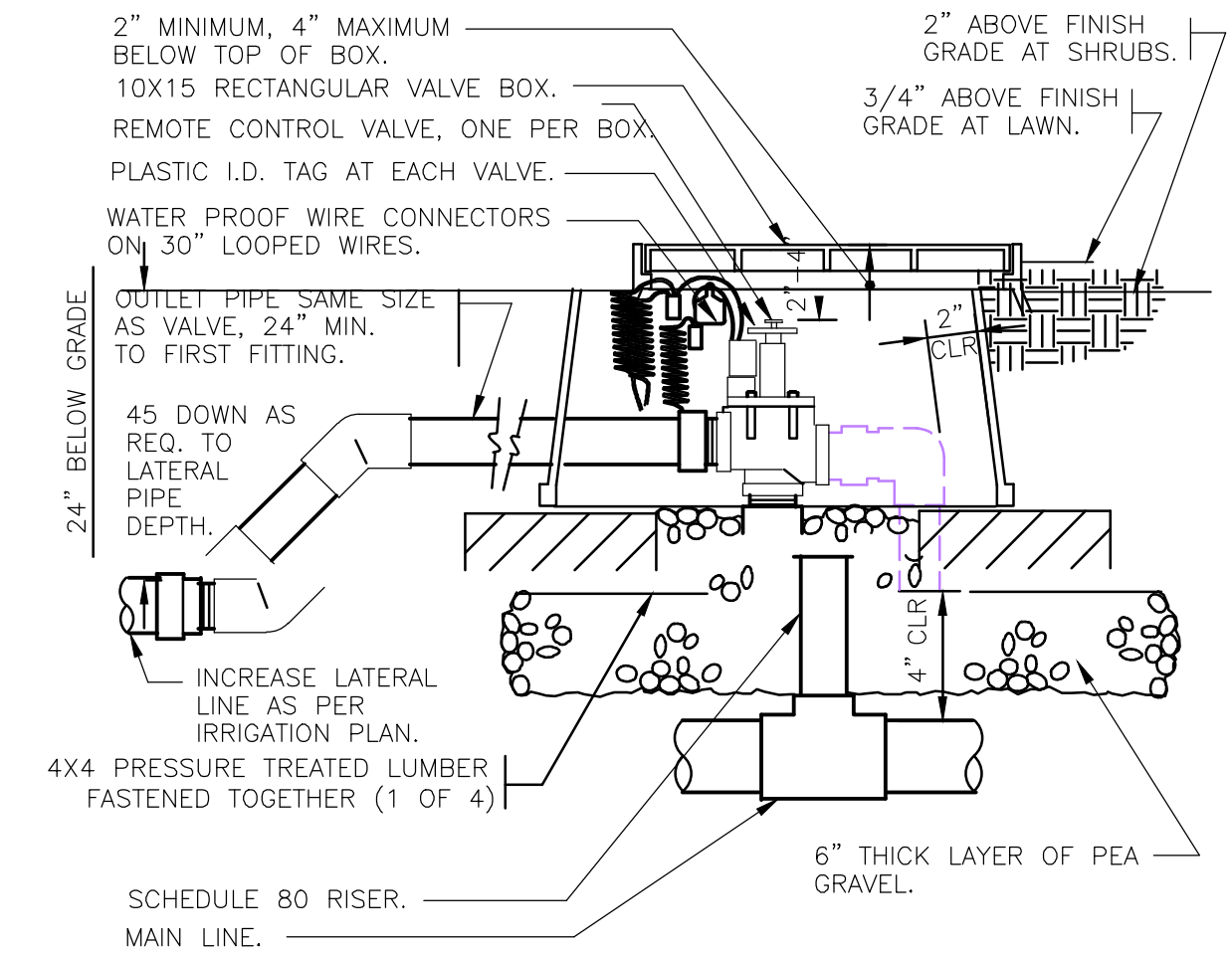
1" PIPE MAX.	12GPM
1 1/4" PIPE MAX.	22GPM
1 1/2" PIPE MAX.	30GPM
2" PIPE MAX.	50GPM
2 1/2" PIPE MAX.	75GPM
3" PIPE MAX.	110GPM
4" PIPE MAX.	190GPM
- INSTALL MANUAL DRAINS AT ALL LOW POINTS ON THE MAINLINE PIPE WITH ADEQUATELY SIZED SUMPS.
- THE INSTALLER SHALL BE EXPECTED TO BE FAMILIAR WITH AND FOLLOW THE INSTRUCTIONS CONTAINED HEREIN, ON THE DRAWINGS, IN THE CONSTRUCTION DETAILS, AND IN THE WRITTEN SPECIFICATIONS. SHOULD A CONFLICT BE DISCOVERED WITHIN THE DOCUMENTS, IMMEDIATELY NOTIFY THE PROJECT MANAGER AND REQUEST CLARIFICATION.
- PROVIDE A REPRODUCIBLE IRRIGATION PLAN TO ARCHITECT AND OWNER SHOWING ALL PIPE, HEADS, VALVES, DRAINS, CLOCKS, ETC. AFTER CONSTRUCTION. PROVIDE INSTRUCTIONS TO MAINTENANCE PERSONNEL FOR WINTERIZATION. PROVIDE A COLOR CODED PLAN AT THE CONTROLLER LOCATION.



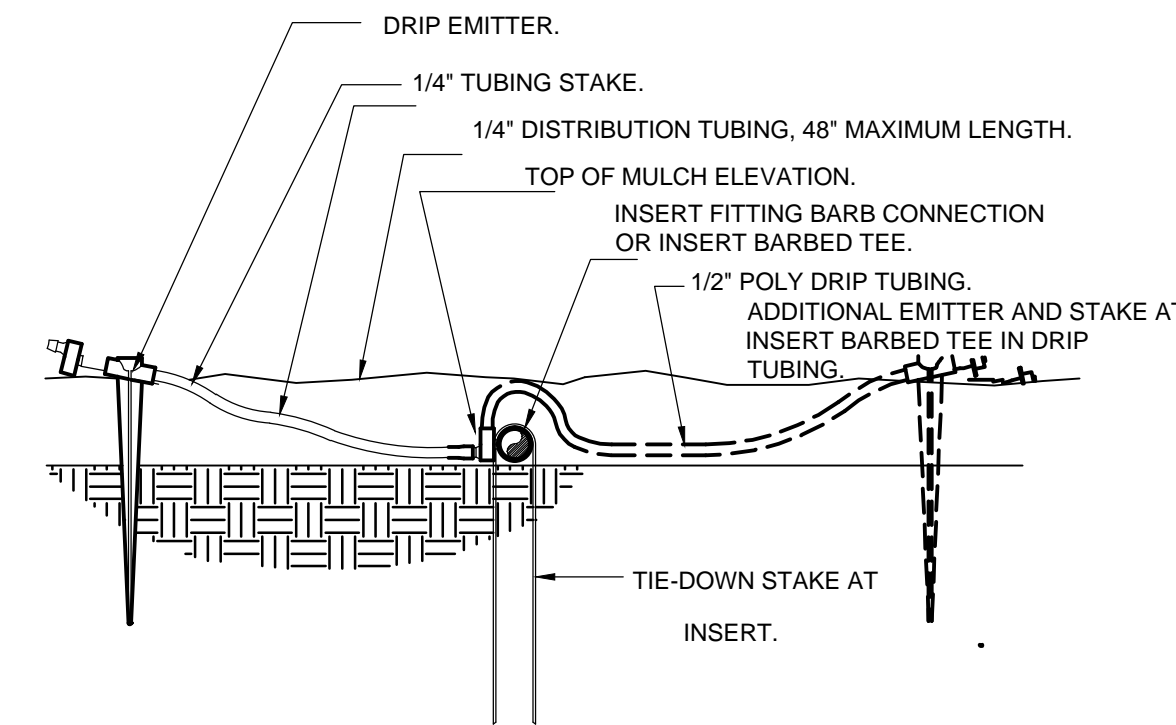
1 TURF SPRAY FLEX ASSEMBLY



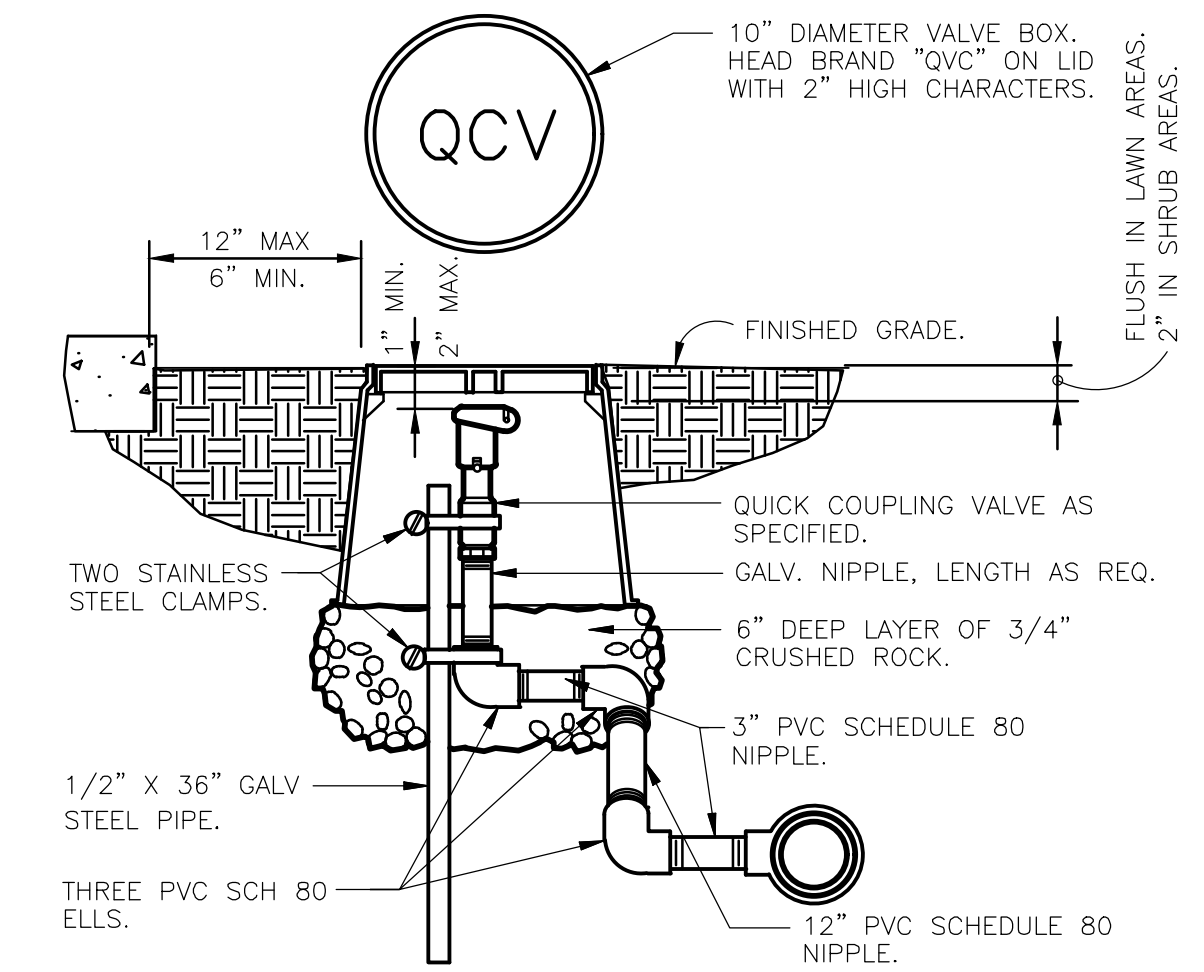
2 TURN ROTOR MARLEX ASSEMBLY



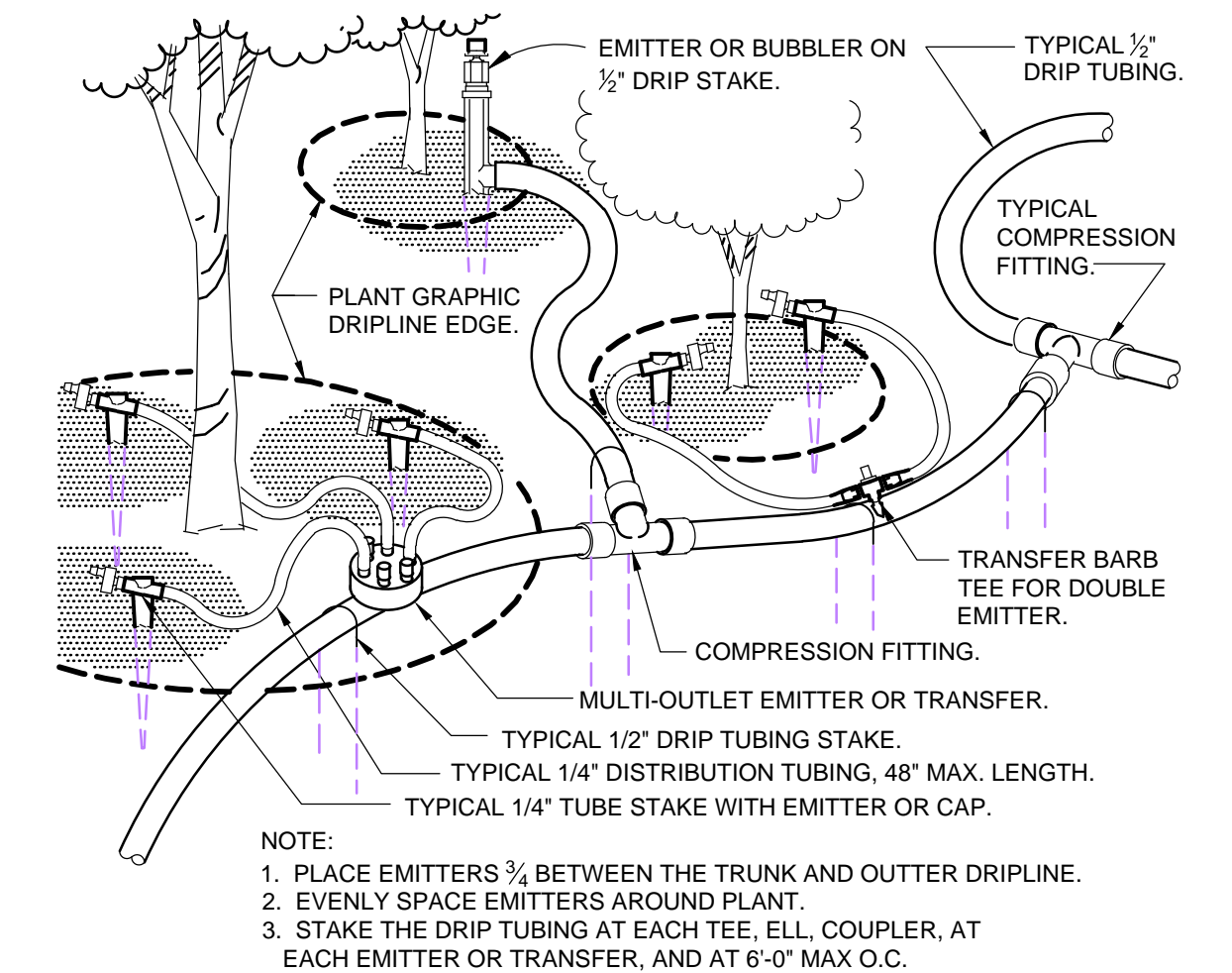
3 ELECTRIC REMOTE CONTROL VALVE



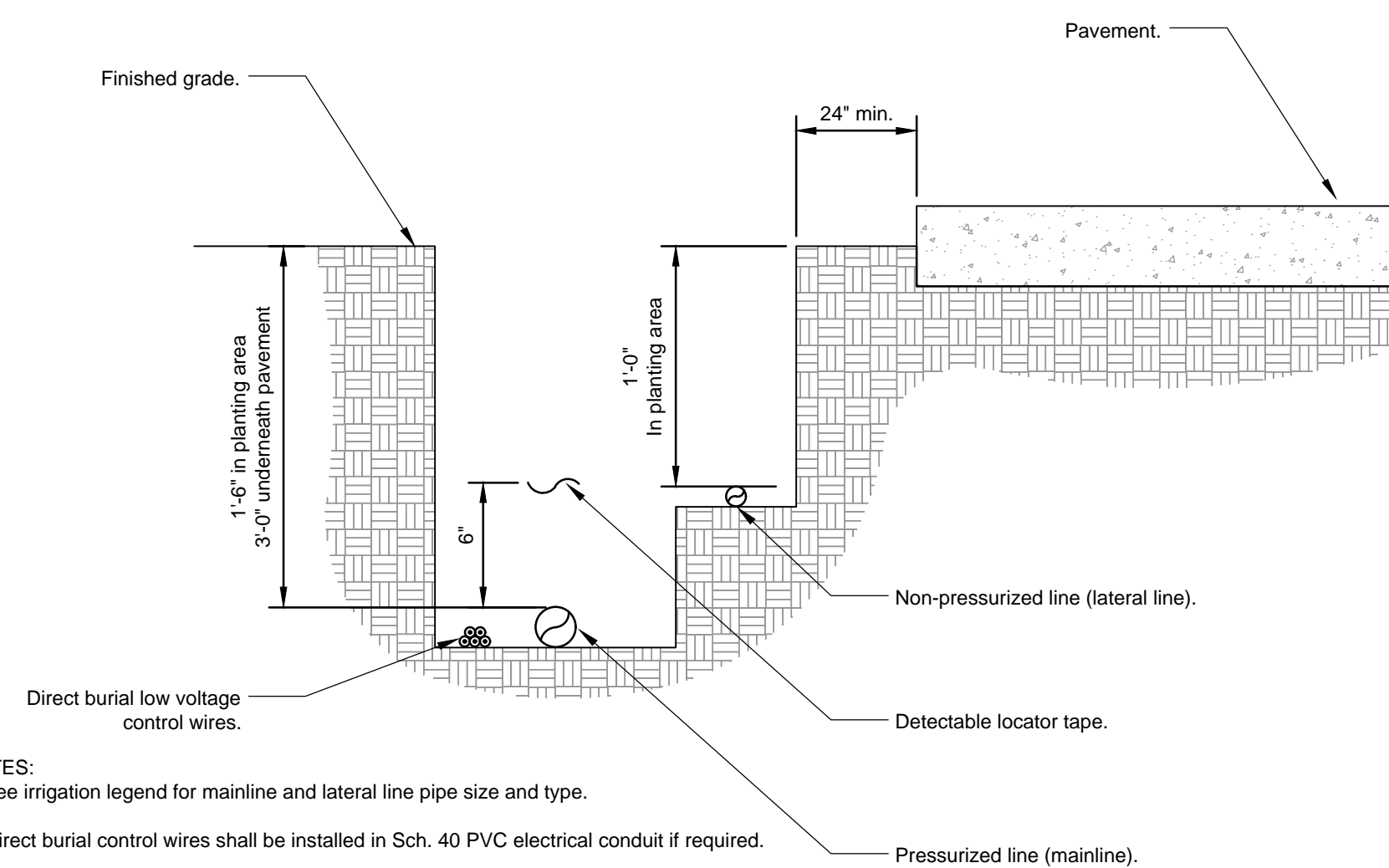
4 DRIP EMITTER AT 1/4" TUBING



5 QUICK COUPLING VALVE IN BOX



6 TYPICAL DRIP TUBING

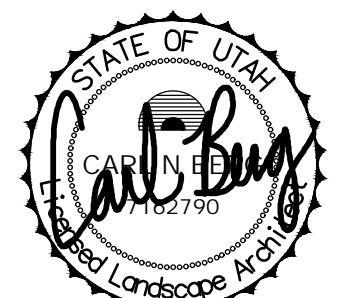


- NOTES:
- See irrigation legend for mainline and lateral line pipe size and type.
 - Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
 - 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
 - Detectable locator tape shall be located six inches (6") above the entire mainline run.

7 IRRIGATION TRENCHING

1 1/2" = 1'-0"

URBAN TREE FOUNDATION 2014
OPEN SOURCE FREE TO USE
FX-IR-FX-AUXEQ-08



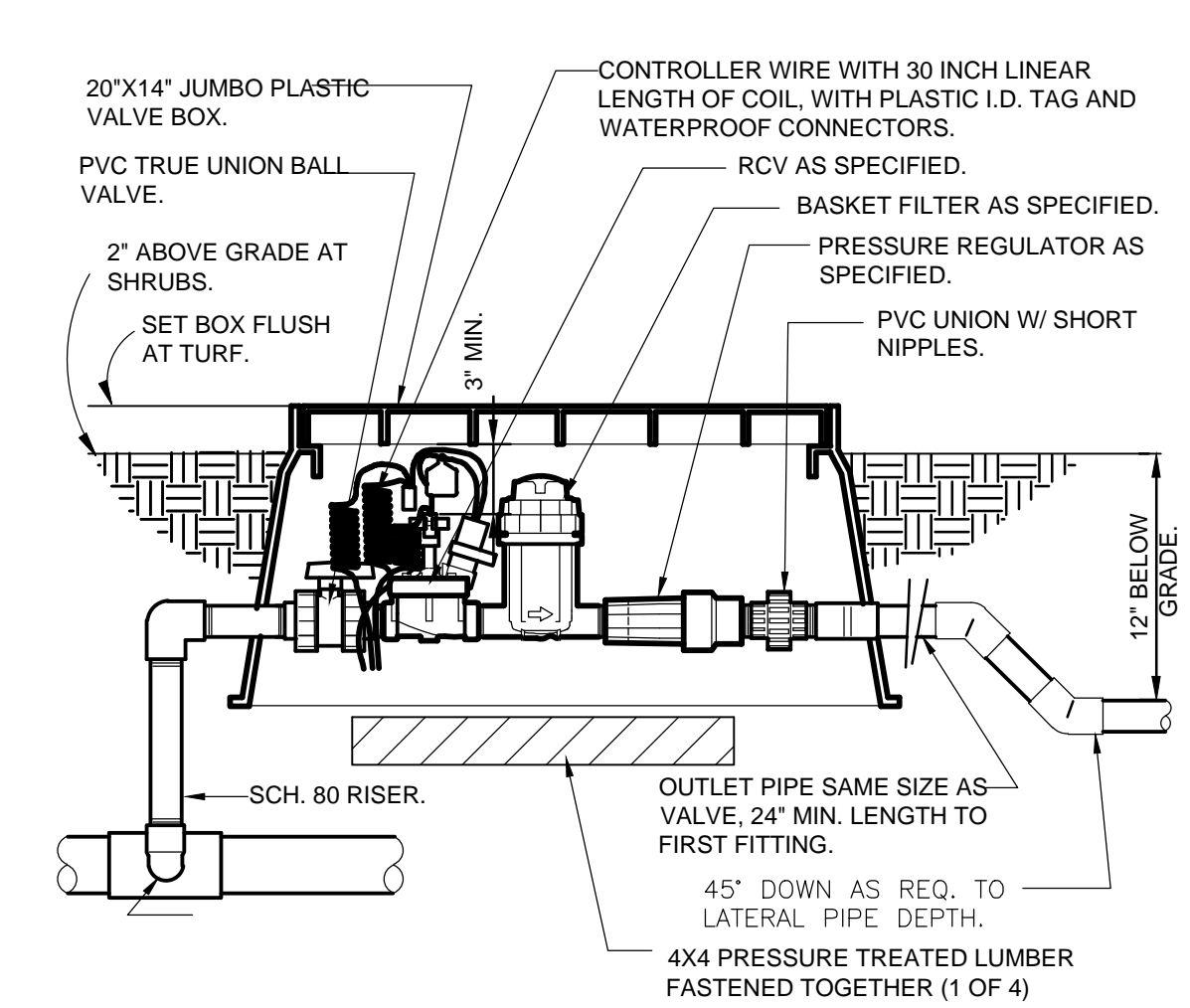
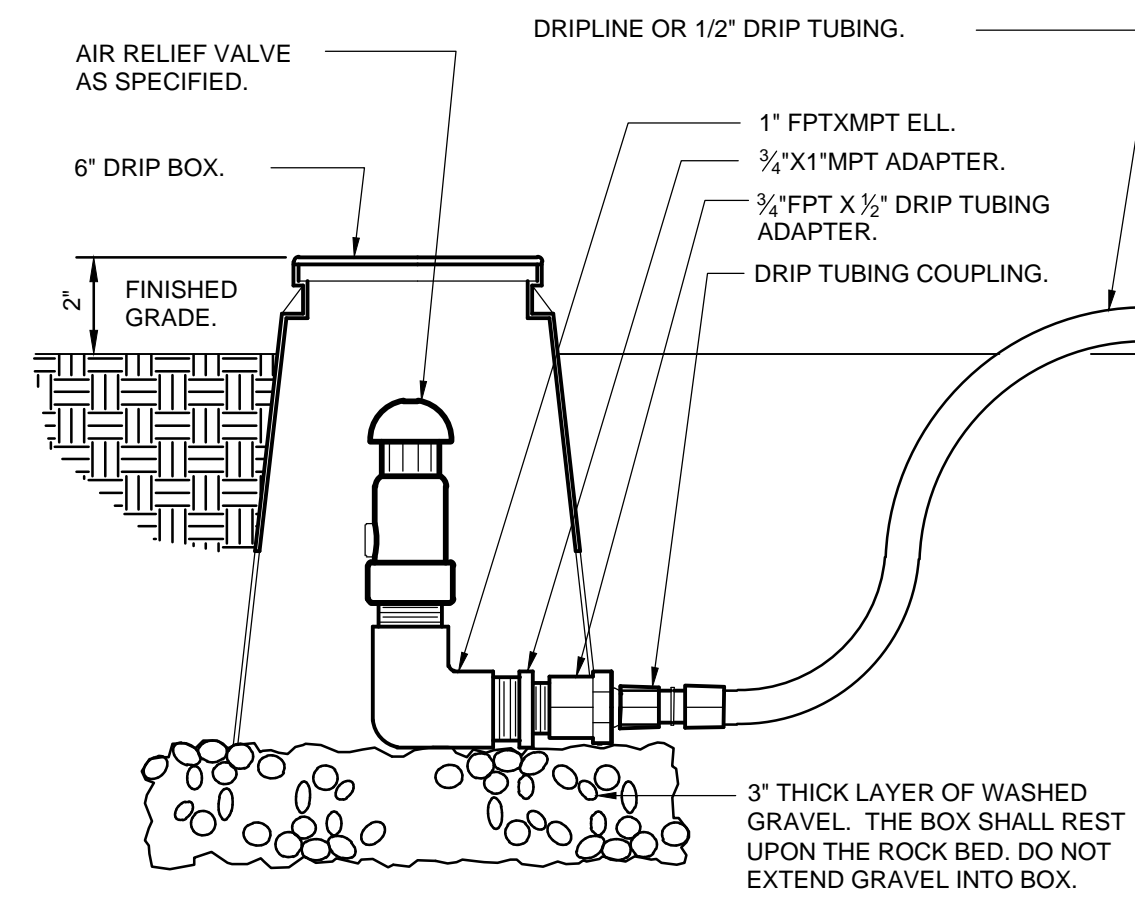
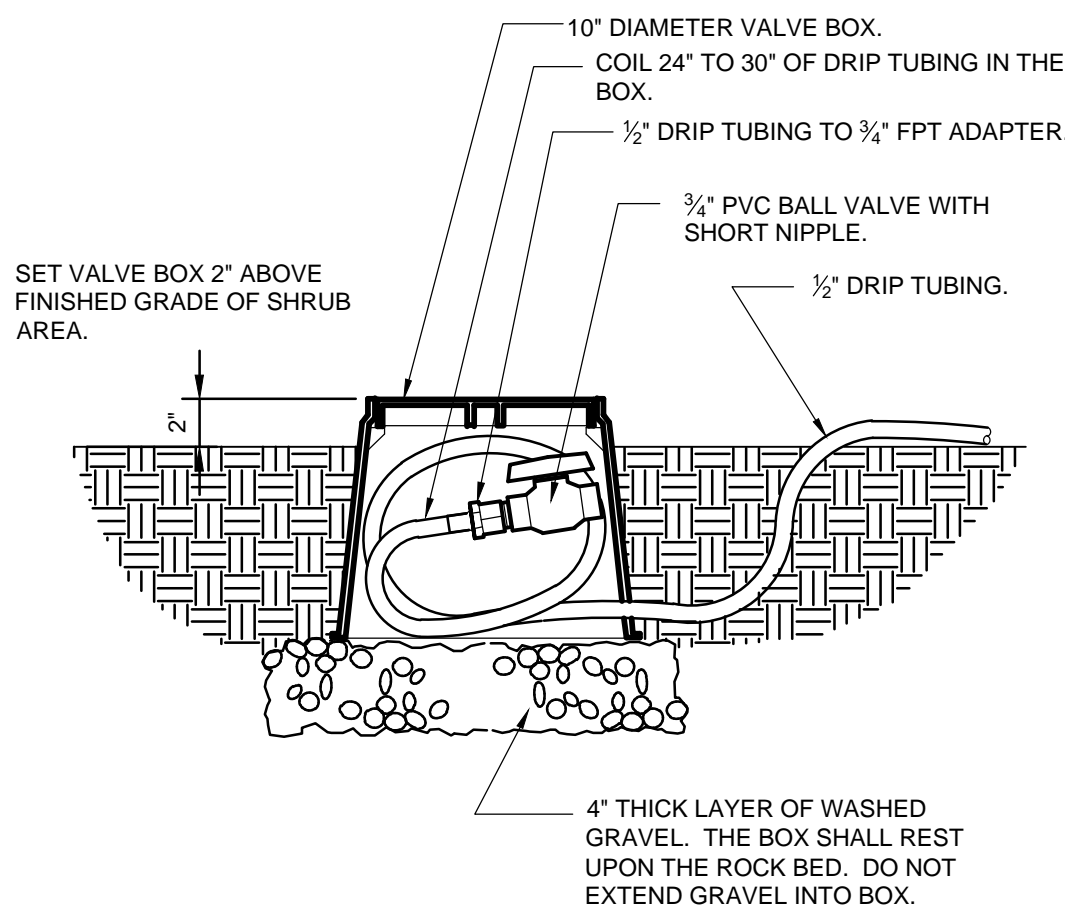
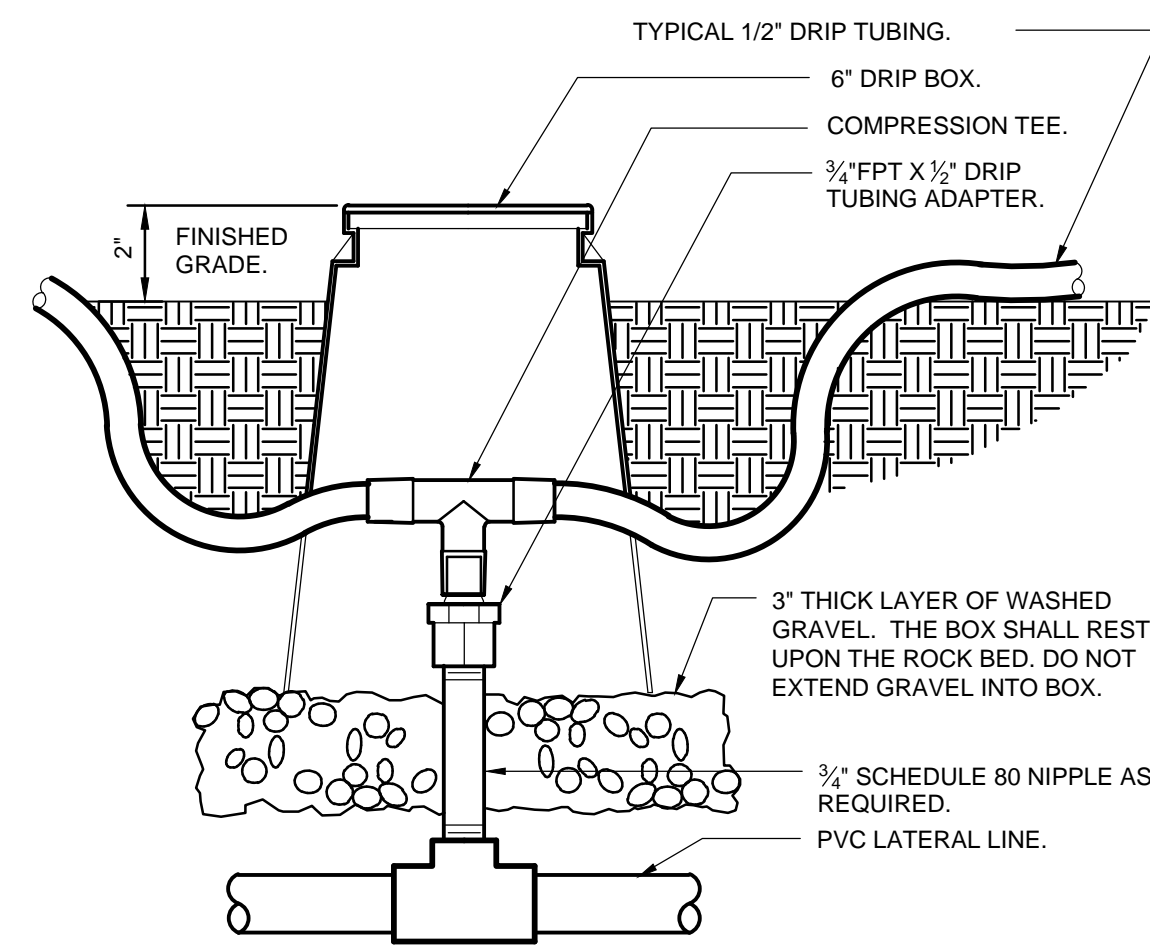
19 JUL 2019

SALEM CITY
COLE PARK
IRRIGATION DETAILS
SHEET 1

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LANDSCAPE ARCHITECTS

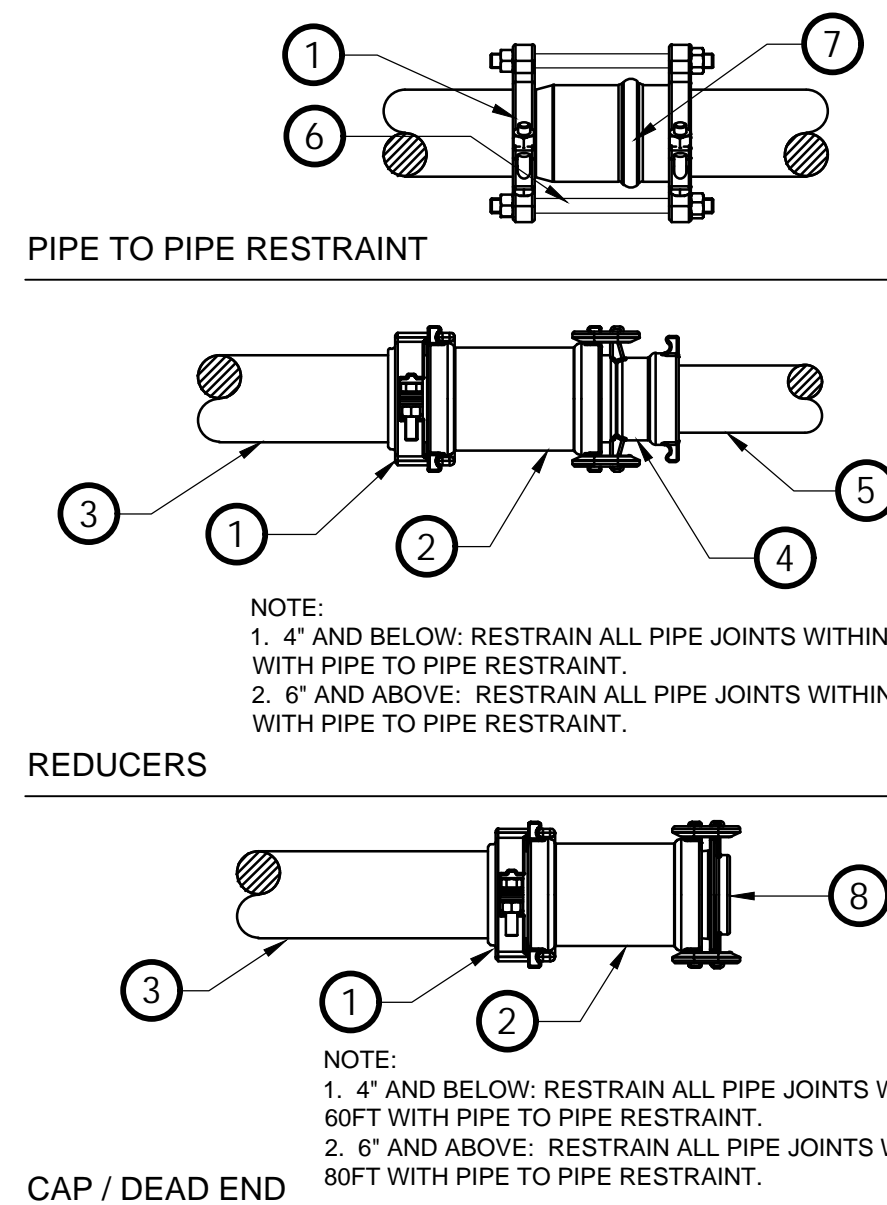
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9 ZONE CONTROL

3" = 1'-0"



- 1 TYPICAL DUCTILE IRON GRIP RING AT PIPE.
- 2 TYPICAL DUCTILE IRON FITTING WITH RESTRAINT LUGS. FITTINGS SHALL HAVE DEEP BELL PUSH-ON JOINTS WITH GASKETS.
- 3 TYPICAL IPS PVC PIPE, PREPARED FOR FITTING AS PER NOTES AND MFG DIRECTIONS.
- 4 SPIGOT END OF REDUCER INSERTING INTO THE BELL OF JOINT. "LOCK" REDUCER TO MAIN FITTING.
- 5 REDUCED PIPE AS REQUIRED.
- 6 TYPICAL RESTRAINT BOLT ATTACHED TO EACH GRIP RING.
- 7 IPS PVC PIPE JOINT AS OCCURS.
- 8 DUCTILE IRON END CAP AND PLUG.

14 HARCO PIPE TO PIPE JOINT RESTRAINT SYSTEM

N.T.S.

FX-IR-HAR-JOIN-03

INSPECTION: PRIOR TO BACKFILLING AROUND DRAIN, SECURE INSPECTION OF DRAIN INSTALLATION BY LANDSCAPE ARCHITECT. SYSTEM MUST BE PRESSURIZED DURING INSPECTION.

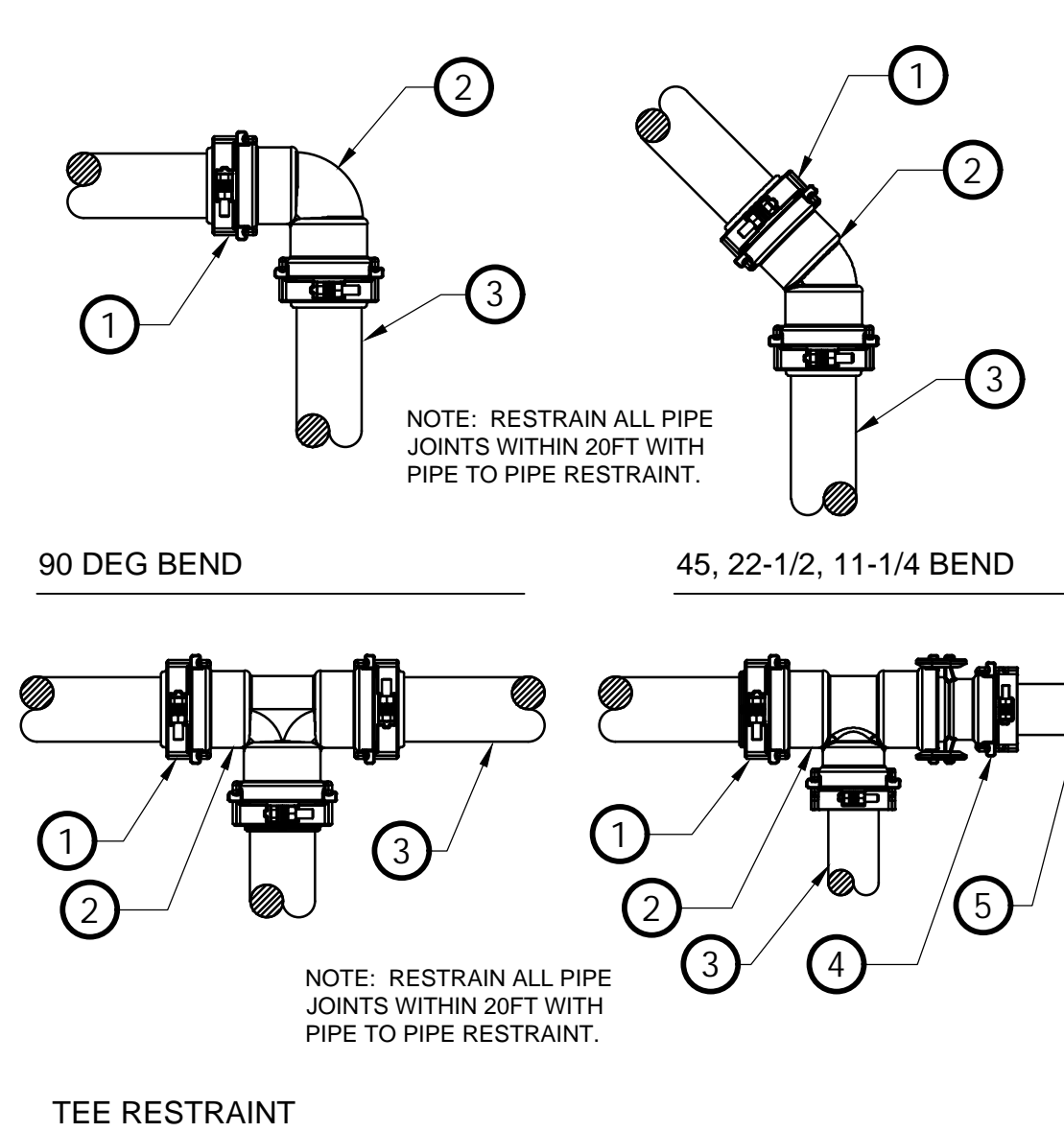
BACKFILL: INSTALL BACKFILL MATERIAL AROUND PIPE AND VALVE AND COMPACT TO PREVENT SETTLING.

PLACEMENT: PROVIDE POSITIVE DRAINAGE IN ENTIRE SYSTEM. DON NOT INSTALL AUTOMATIC DRAIN VALVES ON THE END OF LATERAL PIPES. INSTALL UPSTREAM OF THE LAST HEAD OR AT A LOW POINT TO OBTAIN FULL DRAINAGE.

INSTALLATION: LOCATE ALL VALVES AT ALL LOW POINTS ON CIRCUIT PIPE.

10 DRIP FLUSH VALVE

1 1/2" = 1'-0"



- 1 TYPICAL DUCTILE IRON GRIP RING AT PIPE.
- 2 TYPICAL DUCTILE IRON FITTING WITH RESTRAINT LUGS. FITTINGS SHALL HAVE DEEP BELL PUSH-ON JOINTS WITH GASKETS.
- 3 TYPICAL IPS PVC PIPE, PREPARED FOR FITTING AS PER NOTES AND MFG DIRECTIONS.
- 4 SPIGOT END OF REDUCER INSERTING INTO THE BELL OF JOINT. "LOCK" REDUCER TO MAIN FITTING.
- 5 REDUCED PIPE AS REQUIRED.

15 HARCO FITTING TO PIPE JOINT RESTRAINT SYSTEM

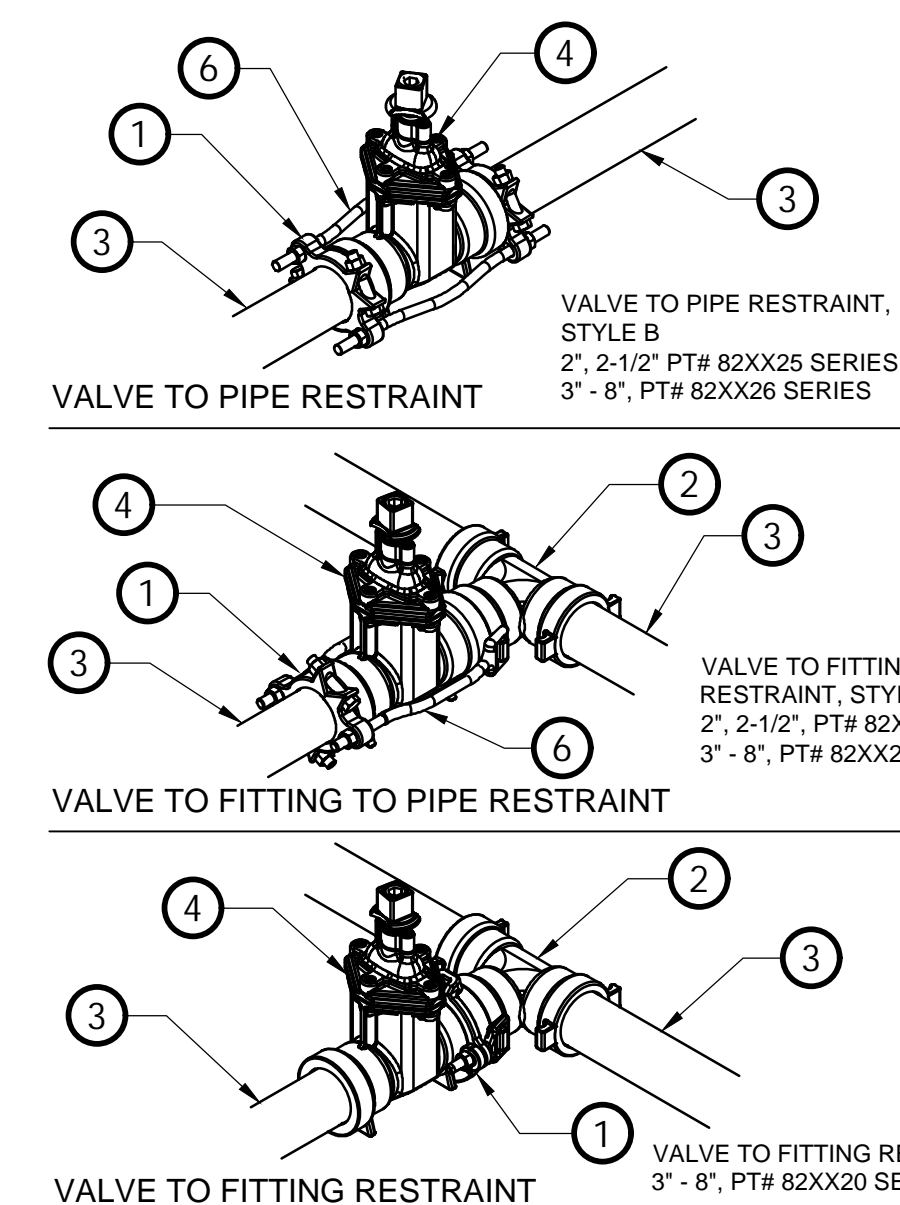
N.T.S.

FX-IR-HAR-JOIN-13

1. REVIEW THE MANUFACTURER PIPE PREPARATION DIRECTIONS FOR CUTTING THE PIPE, CLEANING, MARKING, LUBRICATING, AND ALIGNING AND FITTING.
2. INSERT THE BEVELED SPIGOT PIPE INTO THE FITTING.
3. ASSEMBLE GRIP RING ON PIPE AND TIGHTEN CLAMP BOLTS PER MFG DIRECTIONS.
4. SLIDE I-BOLTS THROUGH SLOTS IN GRIP RINGS AND AROUND FITTING LUGS, TIGHTEN TO MFG SPECS.

11 DRIP AIR RELIEF VALVE IN BOX

3" = 1'-0"



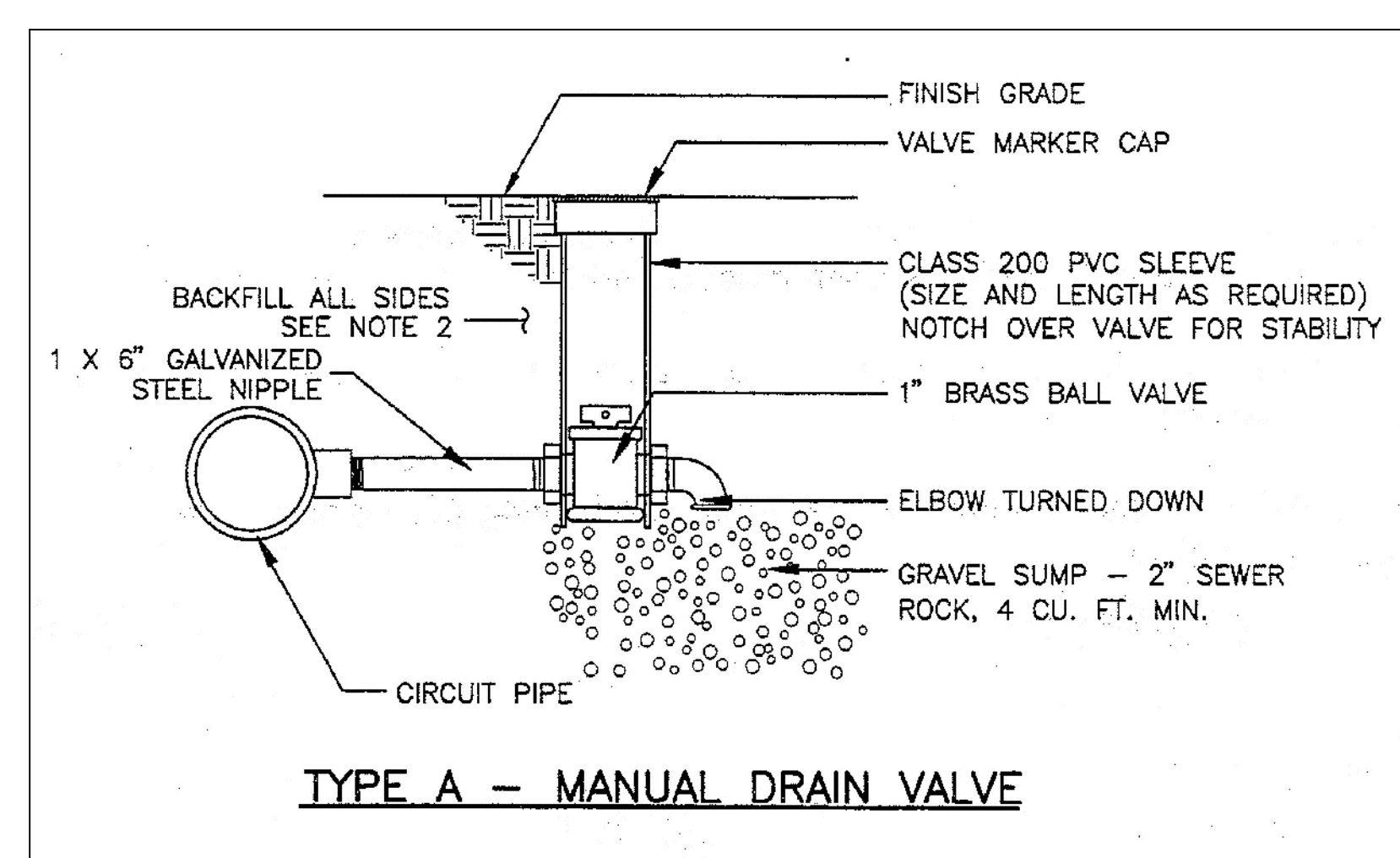
- 1 TYPICAL DUCTILE IRON GRIP RING AT PIPE.
- 2 TYPICAL DUCTILE IRON FITTING WITH RESTRAINT LUGS. FITTINGS SHALL HAVE DEEP BELL PUSH-ON JOINTS WITH GASKETS.
- 3 TYPICAL IPS PVC PIPE, PREPARED FOR FITTING AS PER NOTES AND MFG DIRECTIONS.
- 4 DUCTILE IRON ISOLATION VALVE, PUSH-ON TYPE FOR USE WITH IPS PVC PIPE, WITH RESTRAINING RINGS.
- 6 TYPICAL RESTRAINT BOLT ATTACHED TO EACH GRIP RING.

16 HARCO VALVE TO PIPE/FITTING RESTRAINT SYSTEM

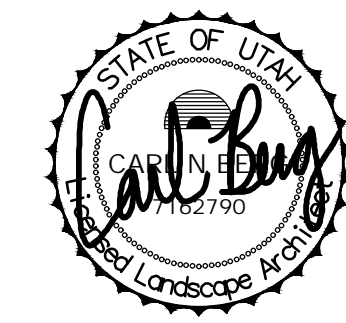
N.T.S.

FX-IR-HAR-JOIN-23

1. HARCO FITTINGS JOINT RESTRAINTS, PH (434) 845-7094. REVIEW THE MANUFACTURER PIPE PREPARATION DIRECTIONS FOR CUTTING THE PIPE, CLEANING, MARKING, LUBRICATING, AND ALIGNING AND FITTING.



TYPE A - MANUAL DRAIN VALVE



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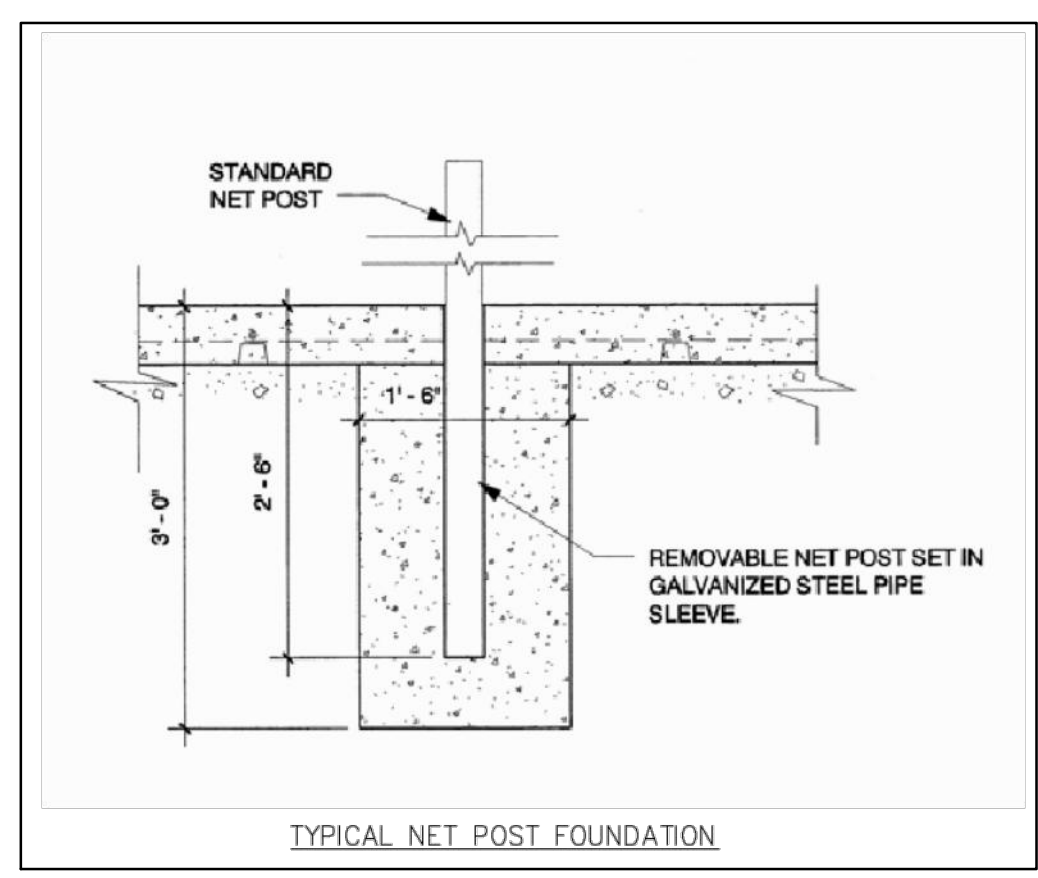
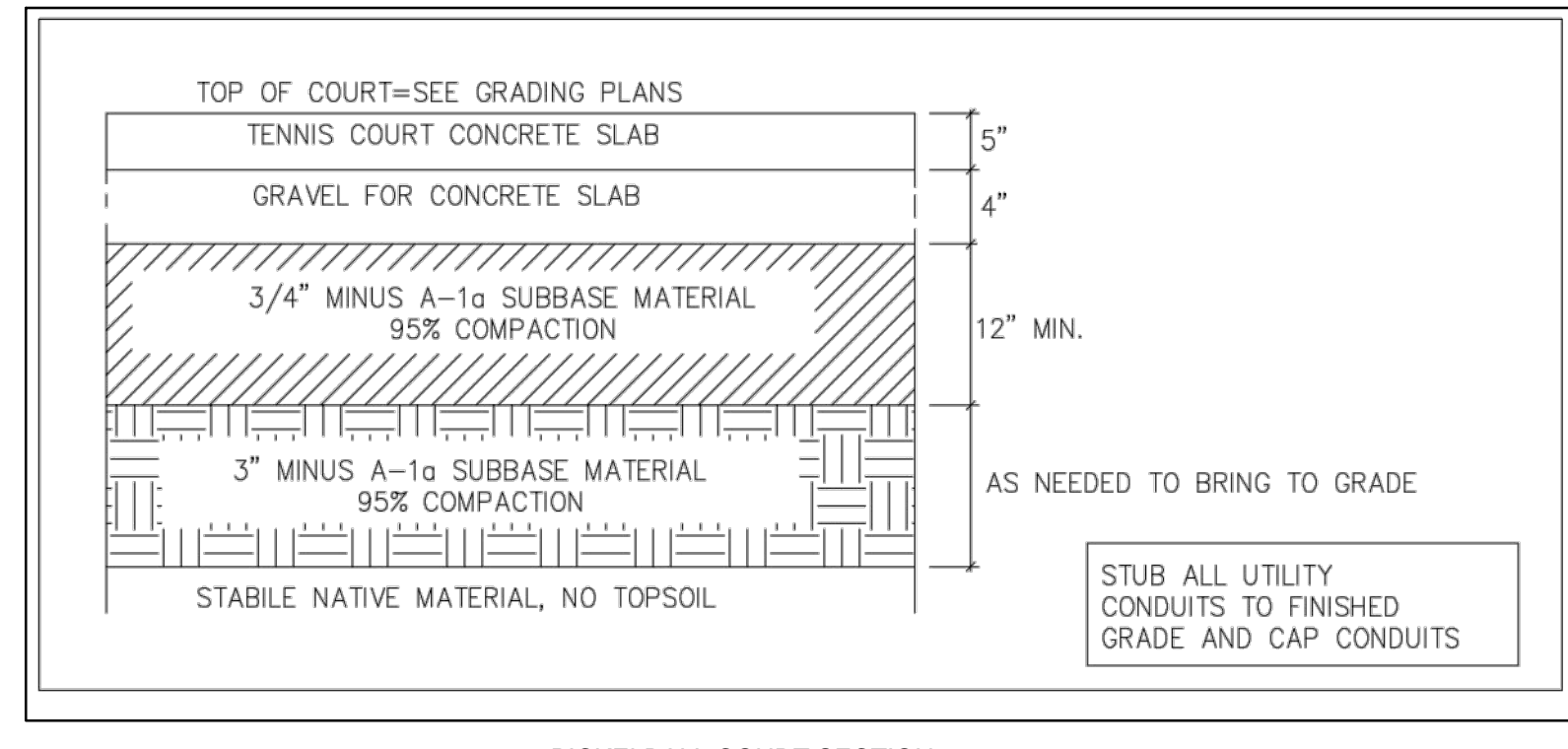
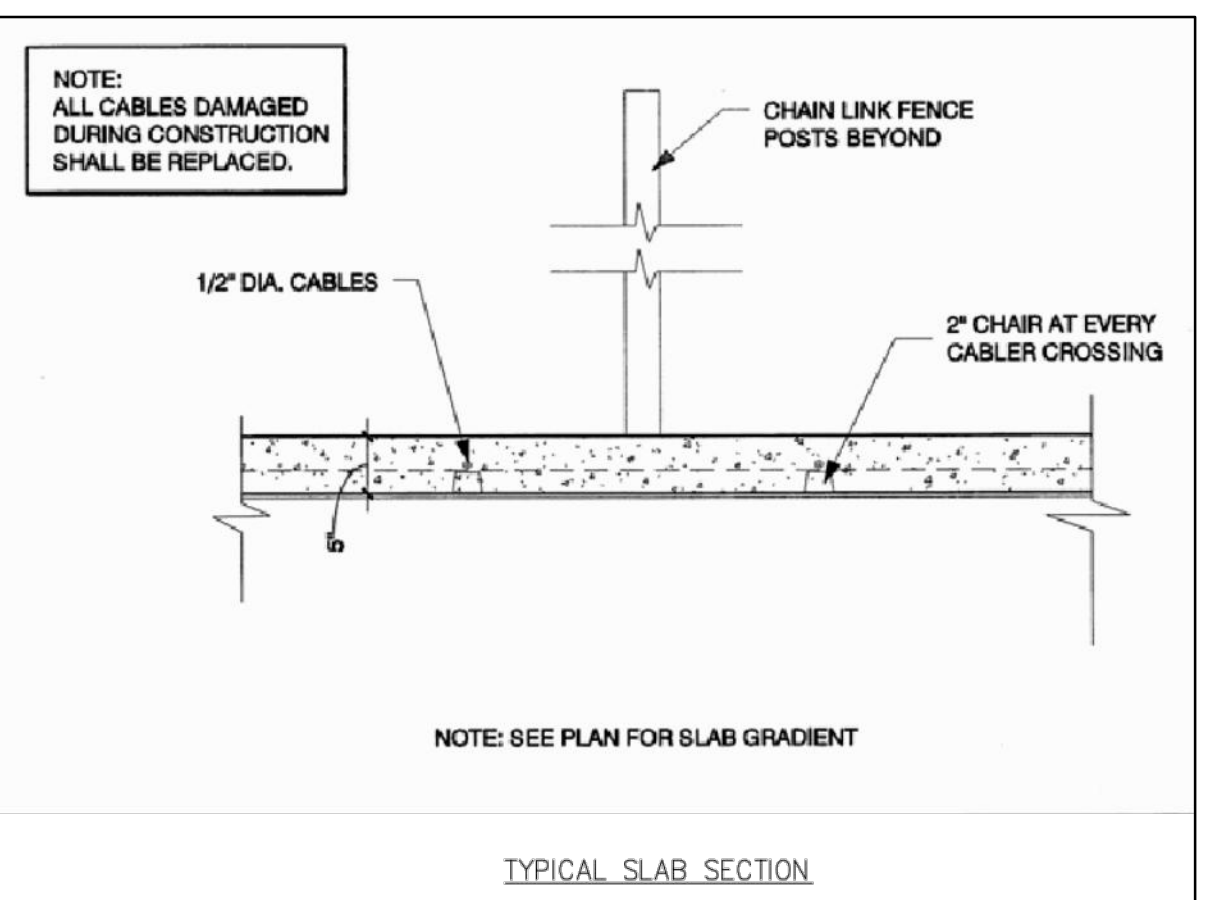
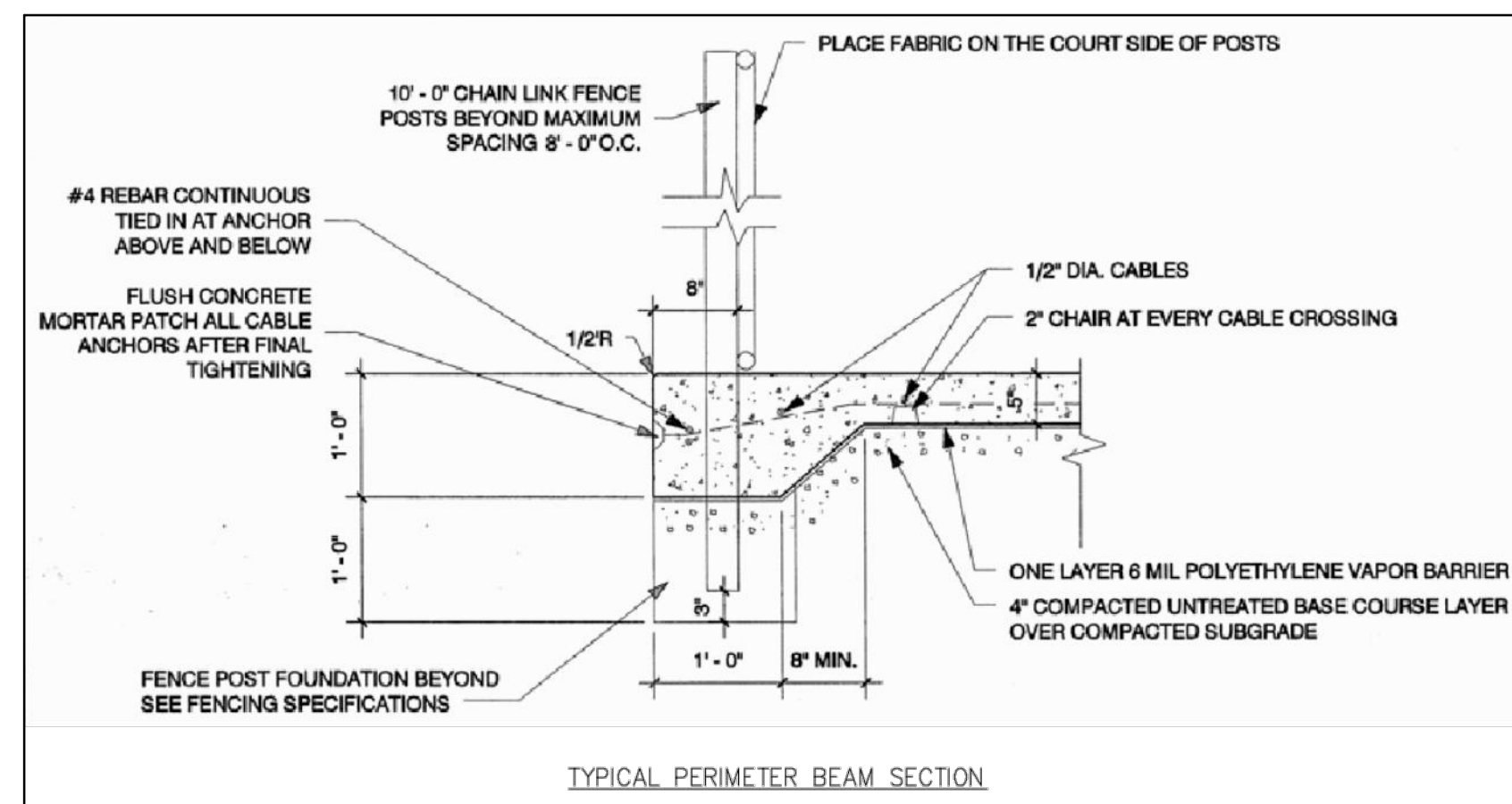
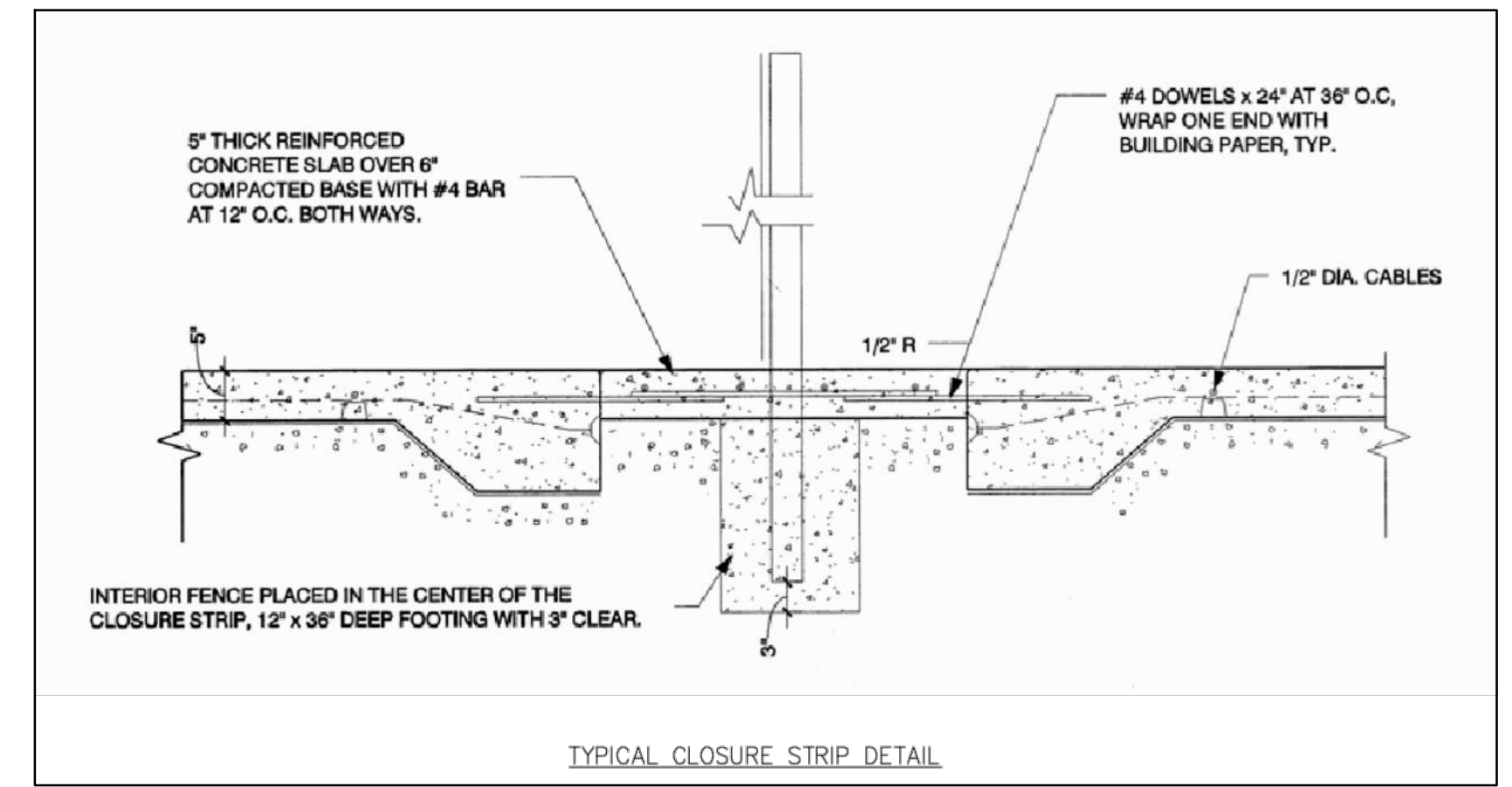
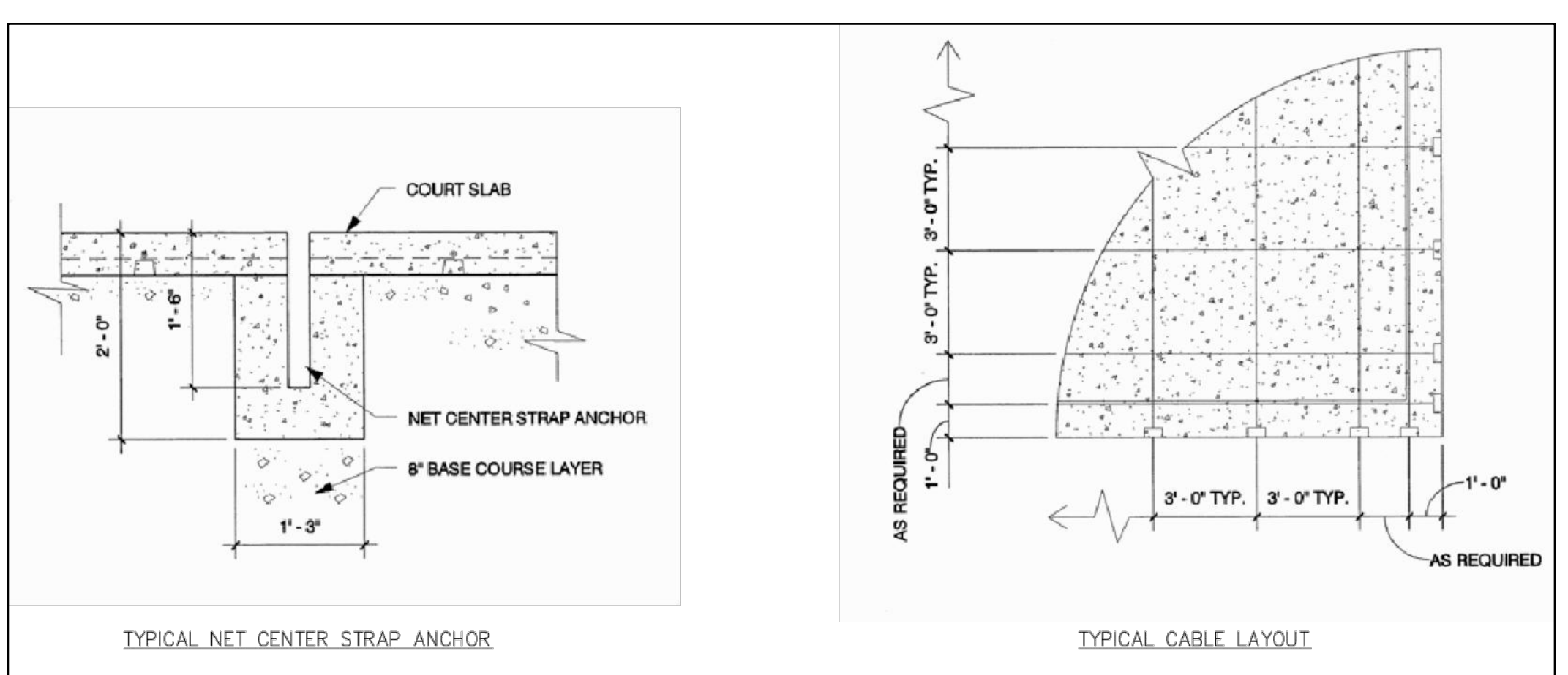
DESIGN BY: CNB DATE: 19 JULY 2019 SHEET
DRAWN BY: CNB REV: L13



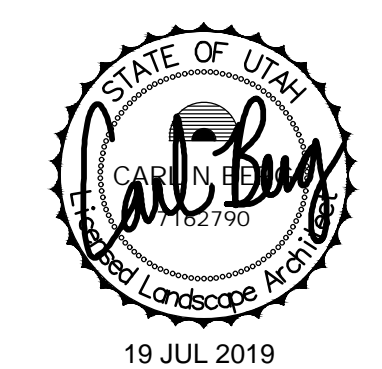
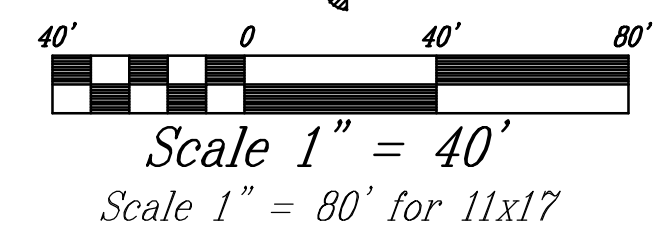
- GENERAL NOTES:**
- CONTRACTOR TO INSTALL A COMPLETE PICKLEBALL COURT INCLUDING, POST-TENSION CONCRETE, NET POSTS & APPURTENANCES, COURT SURFACE, STRIPING, FENCING, AND GATES.
 - EARTHWORK SUPPORTING THE POST-TENSIONED CONCRETE COURTS SHALL BE IN ACCORDANCE WITH THE DRAWING DETAILS AND GEOTECHNICAL REPORT.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING. OWNER RESERVES THE RIGHT TO SPOT CHECK CONSTRUCTION STAKING PROVIDED BY CONTRACTOR.
 - FINISHED COURT SURFACE SHALL LIE IN A TRUE PLANE AT THE ELEVATIONS AND SLOPES GIVEN IN THE GRADING PLAN.
 - CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF GRADING ERRORS OR ISSUES ARE ENCOUNTERED DURING CONSTRUCTION AND SHALL COOPERATE WITH OWNER FOR ADJUSTMENT SOLUTIONS PRIOR TO CONTINUING WITH THE WORK.

- POST-TENSIONING PLAN NOTES:**
- SAND LEVELING COURSE SHALL BE COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY.
 - POST-TENSIONING TENDONS SHALL BE 3/8" DIAMETER GRADE 270 KSI SINGLE-STRANDED UNBONDED TENDONS WITH WEDGE TYPE ANCHORING SYSTEMS.
 - POST-TENSIONING TENDONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-415 AND THE FINAL TENDON ASSEMBLY SHALL CONFORM TO THE POST-TENSIONING INSTITUTE'S (PTI) SPECIFICATION FOR UNBONDED SINGLE STRAND TENDONS.
 - TENDONS SHALL BE STRAIGHT, UNIFORMLY SPACED, AND INSTALLED PER MANUFACTURER RECOMMENDATIONS, BUT MAY BE MOVED HORIZONTALLY UP TO 12 INCHES TO AVOID OBSTRUCTIONS IN THE SLAB.
 - TENDONS SHALL BE PROPERLY SUPPORTED OR CHAIRED IN THE MIDDLE OF THE SLAB AND SHOULD BE SECURED TO MAINTAIN THEIR HORIZONTAL AND VERTICAL POSITIONS DURING PLACEMENT OF THE CONCRETE.
 - SLAB CONCRETE SHALL BE TYPE I WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN, INCLUDING PROJECTED CURE RATE FROM 0 TO 28 DAYS, TO THE OWNER AT LEAST ONE WEEK PRIOR TO PLACING SLAB.
 - THE CONCRETE MIX DESIGN SHALL BE SELECTED TO MINIMIZE EARLY CURING AND SHRINKAGE CRACKING THAT MAY FORM PRIOR TO TENDON STRESSING.
 - THE CONTRACTOR SHALL PROVIDE MEANS TO ENSURE THAT CONCRETE IS NOT SPLATTERED ON FENCE POSTS, LIGHT POLES, GATE POSTS, CONDUITS, OR OTHER EXISTING FACILITIES DURING CONSTRUCTION OF SLAB.
 - POST-TENSIONED SLABS SHALL BE PLACED IN INDIVIDUAL, CONTINUOUS POURS (NO CONSTRUCTION JOINTS SHALL BE ALLOWED IN THE FIELD).
 - SLAB STRESSING SHALL OCCUR AT A CONCRETE STRENGTH OF 1,700 PSI OR GREATER. CONTRACTOR MAY CONSIDER TENSIONING UP TO 50% OF THE MAXIMUM ULTIMATE TENSILE STRENGTH 24 HOURS AFTER PLACEMENT OF CONCRETE.
 - TENDONS SHALL BE TEMPORARILY STRESSED TO 80% OF THEIR MINIMUM ULTIMATE TENSILE STRENGTH TO OVERCOME FRICTION AND TO ENABLE WEDGE SEATING.
 - CLOSURE STRIPS AND MOW STRIPS SHALL NOT BE PLACED UNTIL SHORTENING IN THE POST-TENSIONED SLABS HAS OCCURRED.
 - ALL CONSTRUCTION-PHASE HARDWARE WHICH MAY CAUSE RESTRAINT TO SHORTENING IN THE SLAB, INCLUDING PINS HOLDING SCREED CUPS, SHALL BE REMOVED FROM THE SLAB BEFORE SET OCCURS.
 - CONTRACTOR SHALL PLACE ASTM C171 POLYETHYLENE SHEETING (ULTRA CURE NCF BY UNIVERSAL FOREST PRODUCTS, INC. OR APPROVED EQUAL) OVER SLAB FOR MOISTURE LOSS AND REFLECTANCE CONTROL DURING SLAB CURE.

- LIGHTING NOTES:**
- SEE ELECTRICAL PLANS FOR LIGHTING LOCATIONS, FIXTURES AND DETAILS.



SEE SHEET L05 FOR NON-POST TENSION CONCRETE AND SIDEWALKS DETAILS AND FOR CONCRETE AROUND THE PICKLEBALL COURT



SALEM CITY
COLE PARK
PICKLEBALL COURTS
PLAN & DETAILS

berg
LANDSCAPE ARCHITECTS

380 E Main St, Suite 204
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DRAWN BY: CNB

DATE: 19 JULY 2019
REV:

SHEET
L14



BENCH WITH BACK

SMITH STEELWORKS CLASSIC BENCH WITH SALEM CITY LOGO LASER CUT INTO THE BACK MIDDLE OF THE BENCH - COLOR: COPPER CANYON
8 FOOT BENCHES = 28
6 FOOT BENCHES = 7



BENCH WITHOUT BACK

SMITH STEELWORKS CLASSIC BENCH WITHOUT BACK - COLOR: COPPER CANYON
-2 TOTAL (PICKLEBALL COURTS)



ALUMINUM PICNIC TABLE

SMITH STEELWORKS 8' ALUMINUM PICNIC TABLE WITH NON-TIPPING LEGS
TOTAL 8' TABLES = 24



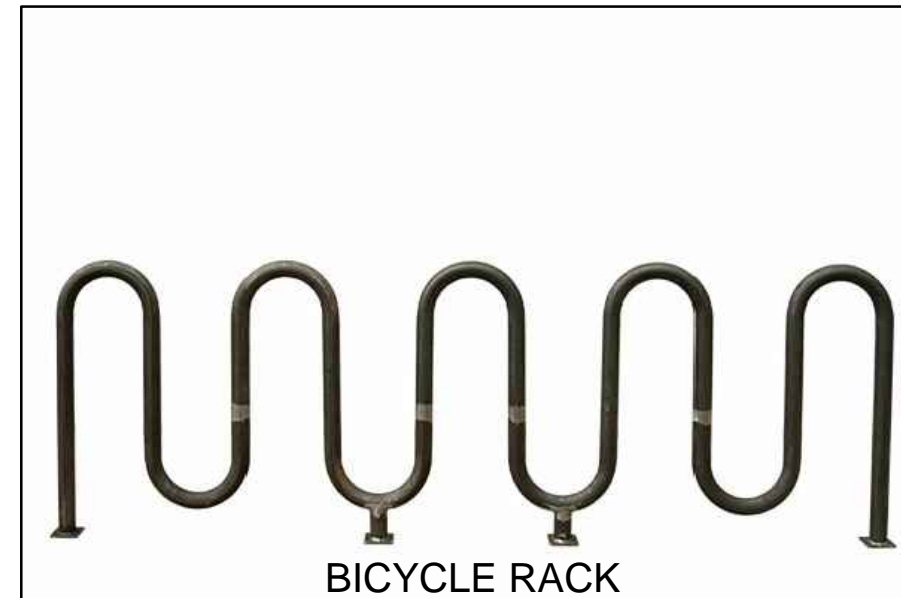
TRASH RECEPTACLE

SMITH STEELWORKS CLASSIC 32 GAL TRASH RECEPTACLE WITH SALEM CITY LOGO ATTACHED TO CONCRETE - COLOR: COPPER CANYON
TOTAL TRASH RECEPTACLES = 6



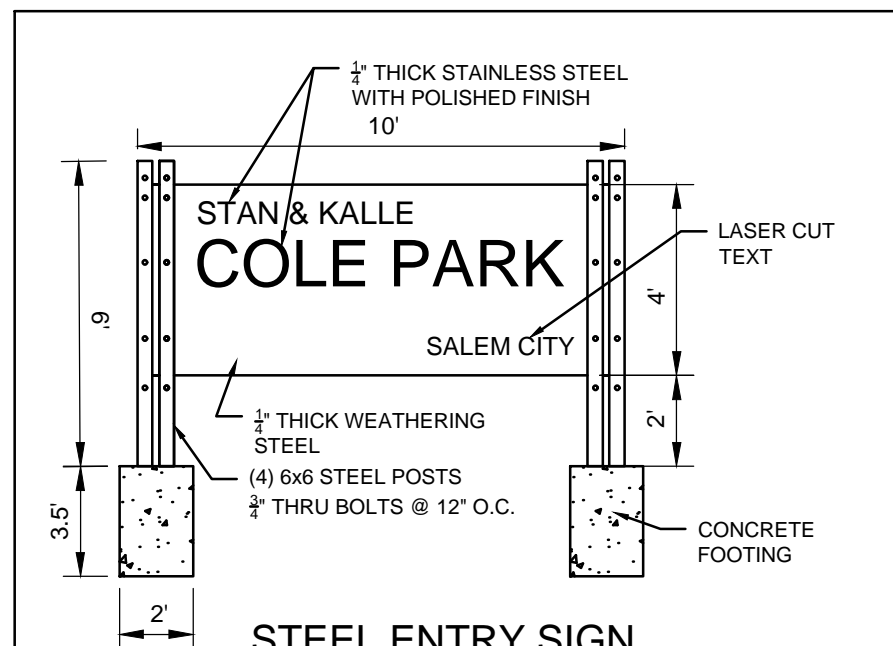
OUTDOOR GRILL

SMITH STEELWORKS OUTDOOR GRILL ATTACHED TO CONCRETE
TOTAL OUTDOOR GRILLS = 3



BICYCLE RACK

SMITH STEELWORKS 9 LOOP BIKE RACK
TOTAL BIKE RACKS = 1



STEEL ENTRY SIGN

TOTAL STEEL ENTRY SIGNS = 2

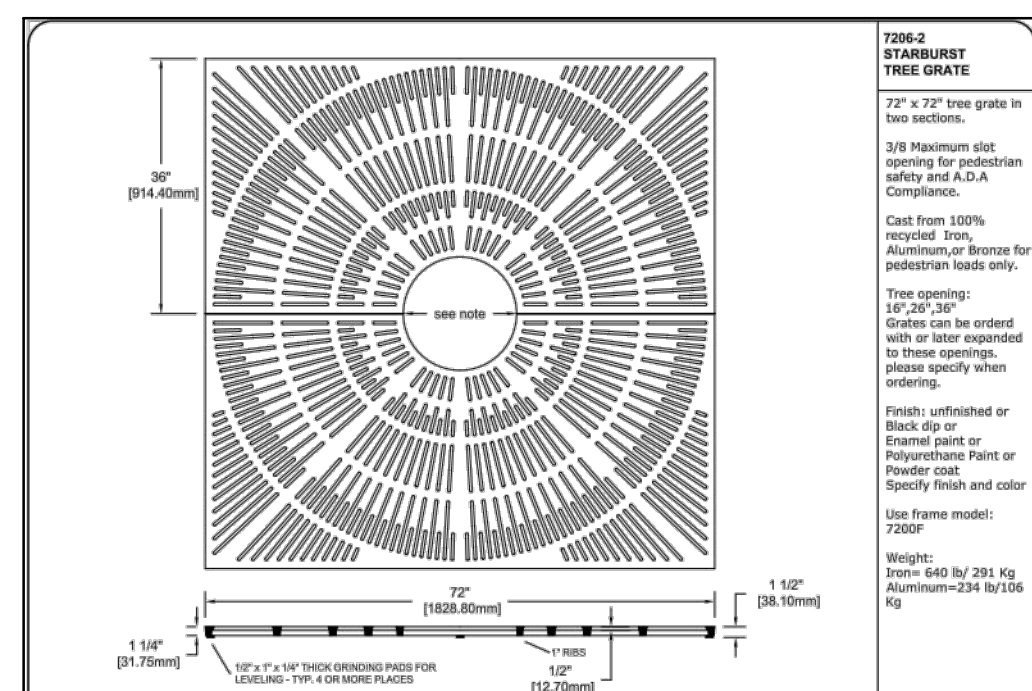


EXAMPLE SCULPTURE

LIFE SIZE BRONZE SCULPTURE WITH (3) PEOPLE - FARMERS WITH SHOVELS WITH 3' CONCRETE BASE



FIRE FEATURE EXAMPLE
CONCRETE GAS FIRE FEATURE, 200,000 BTUs, 24" FLAME HEIGHT, WITH 30" STAINLESS STEEL BURNER, BURNER PAN, IGNITION KIT, REGULATOR, FIRE ROCK AND SHUT OFF VALVE IN LOCKABLE BOX. SQUARE 10'x10'
36" HEIGHT
3'x3' FIRE OPENING
4' WIDE CONCRETE BORDER



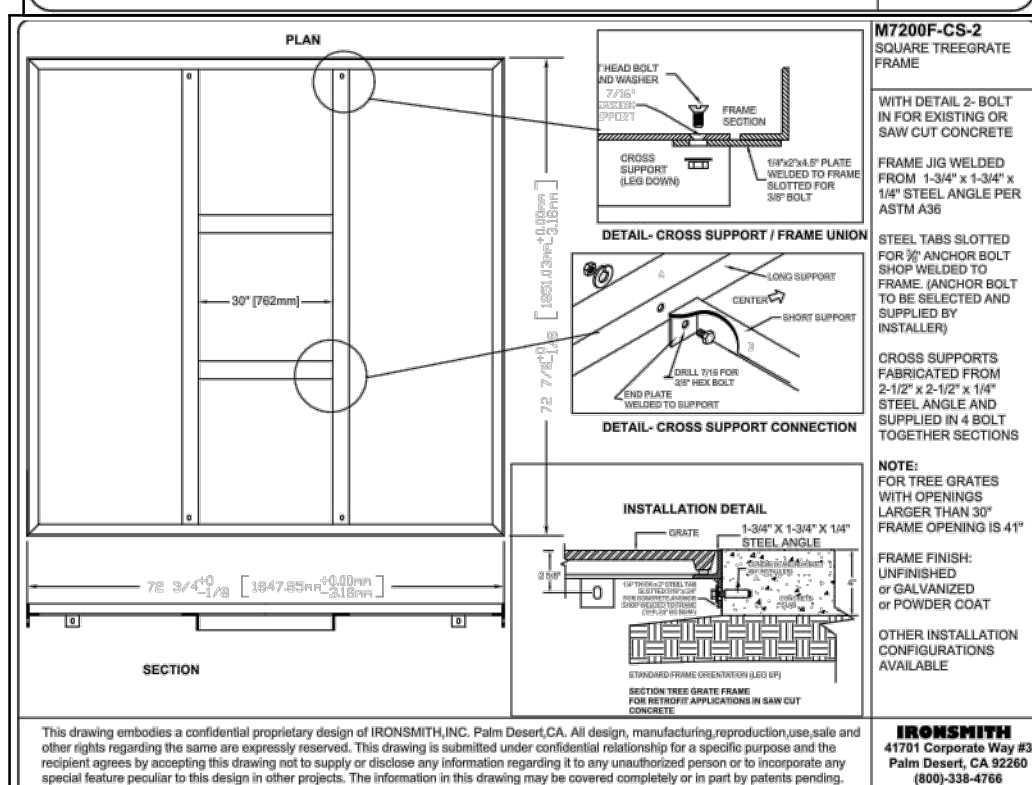
TREE GRATES

6'x6' STEEL TREE GRATES = 42 TOTAL



GLULAM BEAM PAVILION

30'x28' PAVILION = 1
60'x34' PAVILION WITH RESTROOM = 1



TREE GUARD

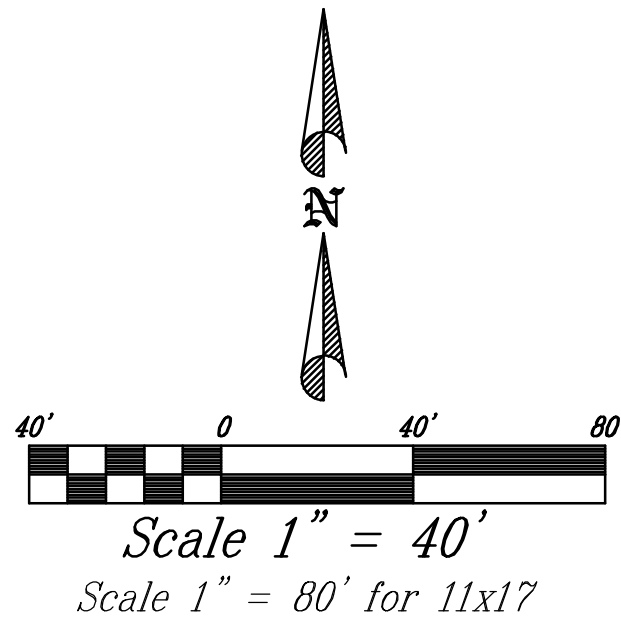
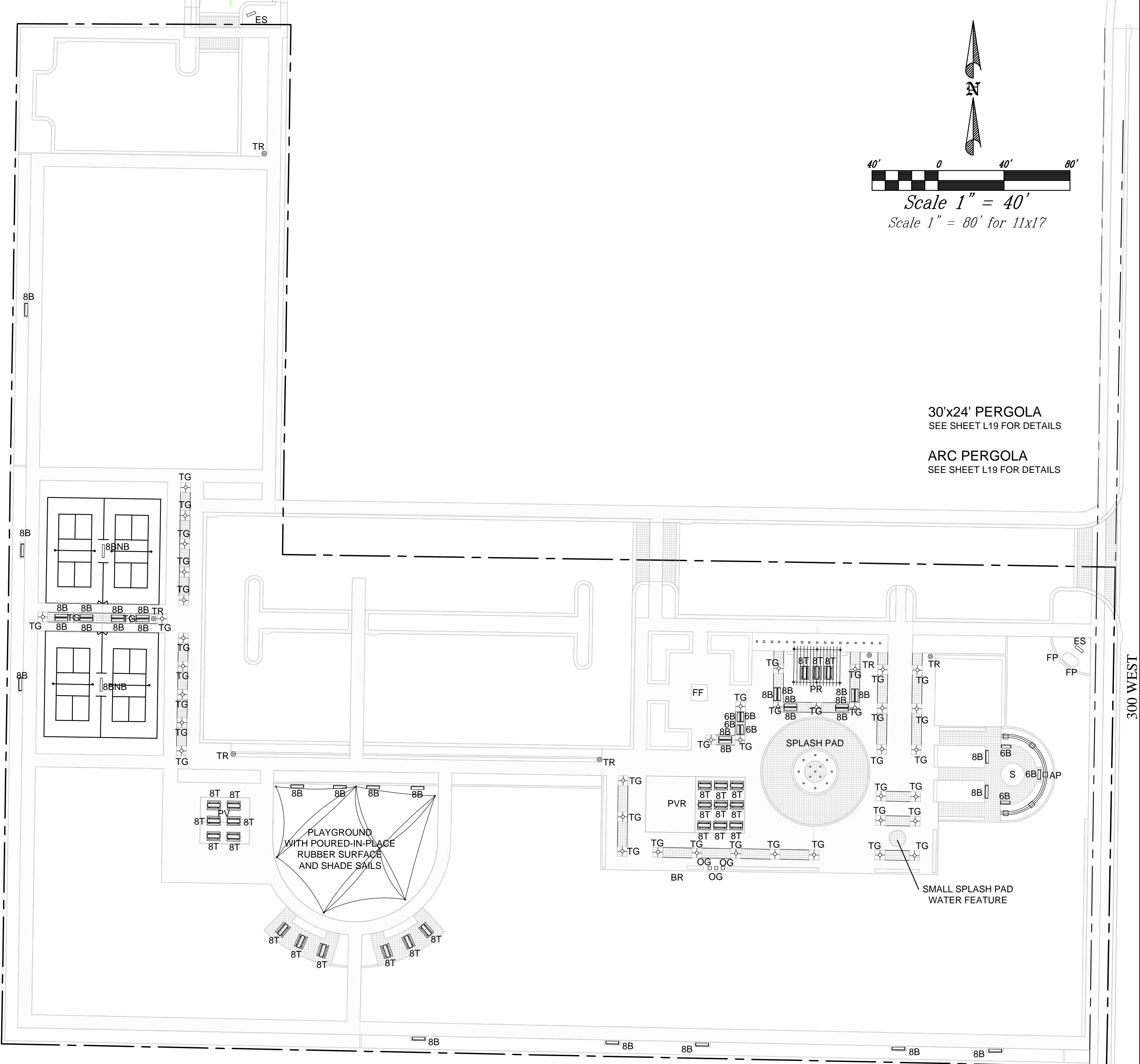
BLACK POWDER COATED TREE GUARD = 42 TOTAL

FLAGPOLES
(1) - 30' AMERICAN FLAG POLE
(1) - 25' STATE FLAG POLE

STANDARD FLAGPOLE FEATURES
-GOLD ANODIZED ALUMINUM BALL
-CAST ALUMINUM SINGLE REVOLVING TRUCK ASSEMBLY WITH ALUMINUM PULLEY
-COMPLETE EXTERNAL HALYARD ASSEMBLY
-ROPE HALYARD - #10 POLYPROPYLENE
-TOW HEAVY-DUTY STAINLESS STEEL SWIVEL SNAP HOOKS
-TWO NEOPRENE SNAP HOOK COVERS
-9" HEAVY-DUTY ALUMINUM CLEAT
-SPUN ALUMINUM FLASH COLLAR
-GALVANIZED 16-GAUGE CORRUGATED STEEL GROUND SLEEVE WITH STEEL GROUNDING SPIKE

INCLUDE WITH OPTIONAL FEATURES
-LOCKING CLEAT AND HALYARD COVERS
-DOUBLE REVOLVING TRUCK

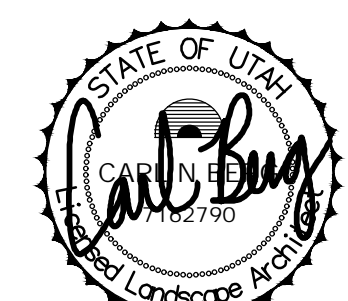
Model	Mast Height	Ball Dia.	Top Dia.	Wkt. Dia.	Set Dia.	Flange Dia.	Flange Wd.	Max. Flg. Spc.	Wkt. Spc.	Wkt. Spc. Int.
ESR25061	25'	6"	3.5"	1.88"	2'-6"	1	186	5'x8"	165	250
ESR30061	30'	6"	3.5"	1.88"	3'-0"	1	200	6'x10"	170	190



30'x24' PERGOLA
SEE SHEET L19 FOR DETAILS
ARC PERGOLA
SEE SHEET L19 FOR DETAILS

AMENITIES NOTE:
FOR ADDITIONAL INFORMATION SEE BUILDING PLAN SHEETS

- LEGEND:**
8B 8' BENCH
6B 6' BENCH
8BNB 8' BENCH WITHOUT BACK
8T 8' ALUMINUM TABLE
TR 32 GAL TRASH RECEPTACLE
OG OUTDOOR GRILL
BR BICYCLE RACK
ES STEEL ENTRY SIGN
S SCULPTURE
FF GAS FIRE FEATURE
TG TREE GRATE & TREE GUARD
PV PAVILION
PVR PAVILION WITH RESTROOM
AP 30'x24' PERGOLA
AR ARC PERGOLA
FP FLAG POLE



SALEM CITY
COLE PARK

AMENITIES PLAN



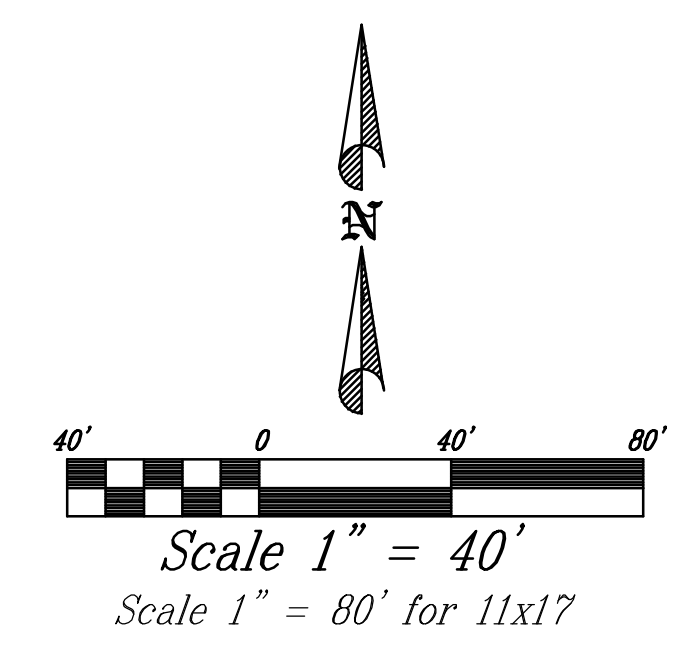
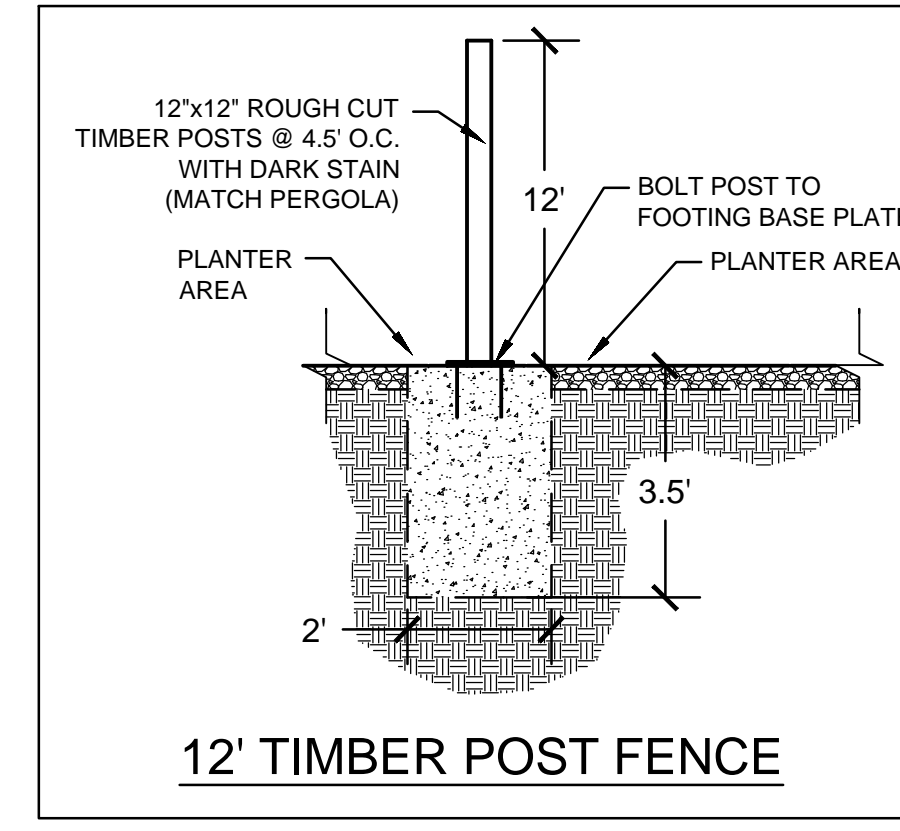
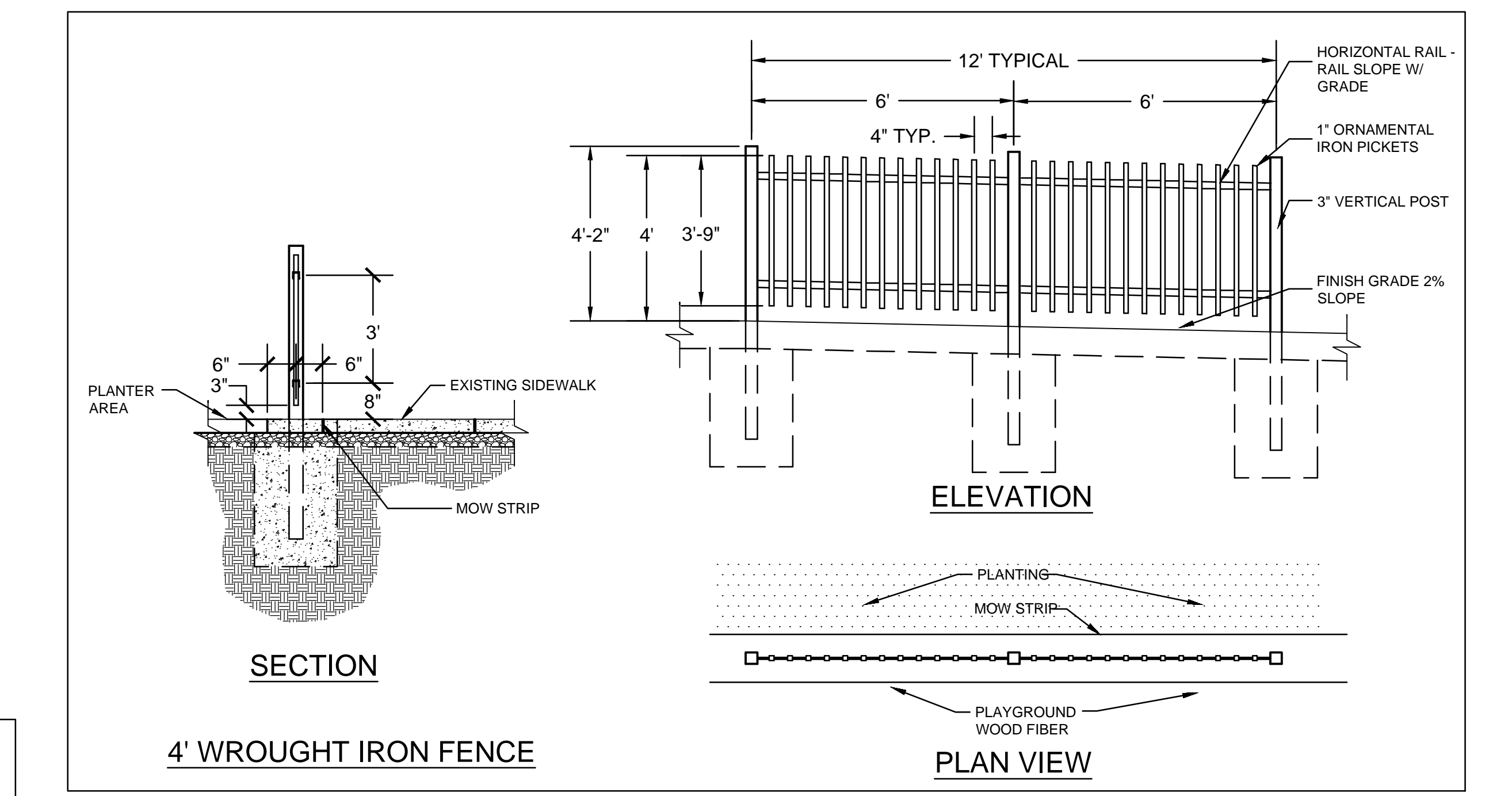
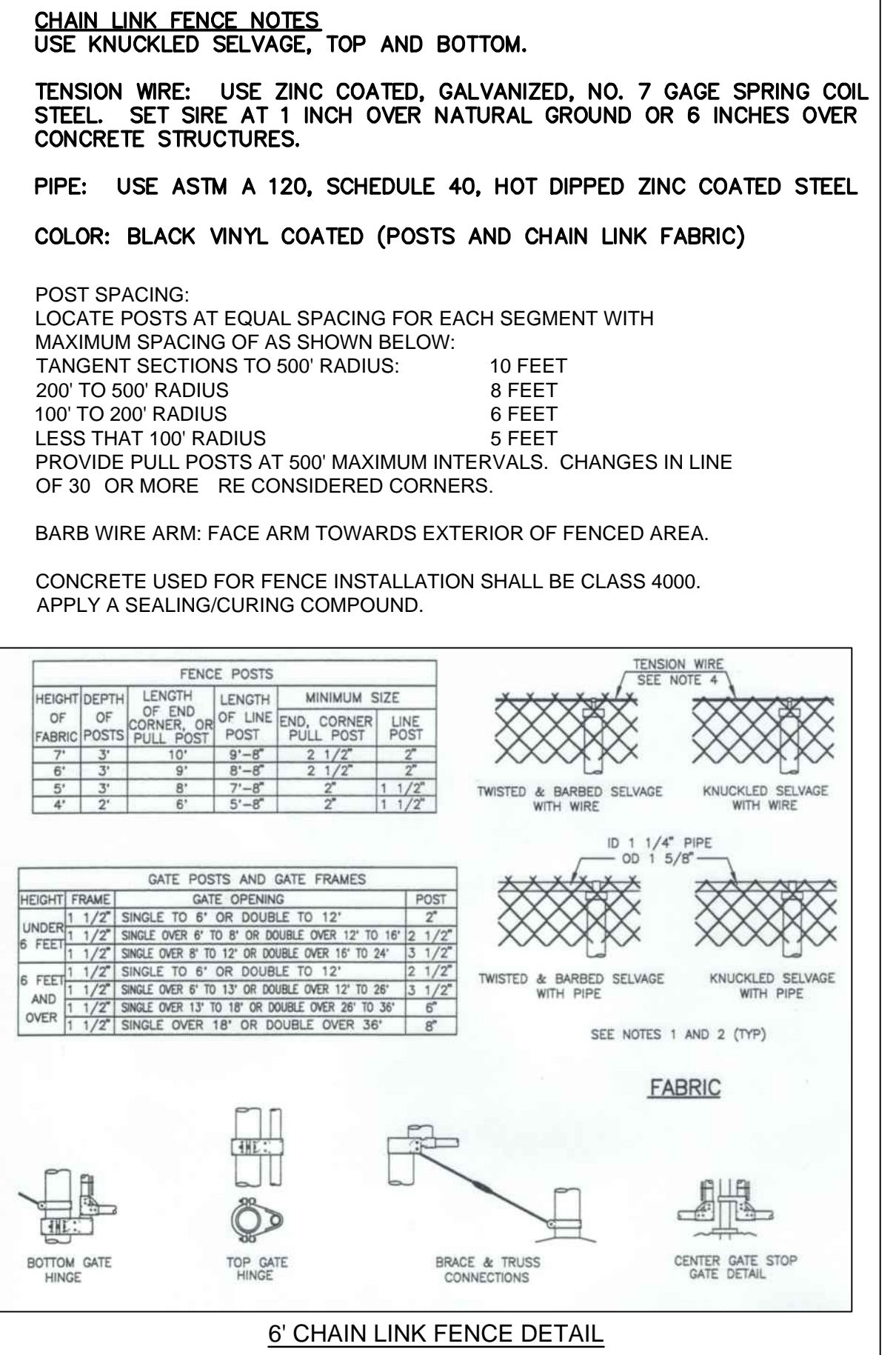
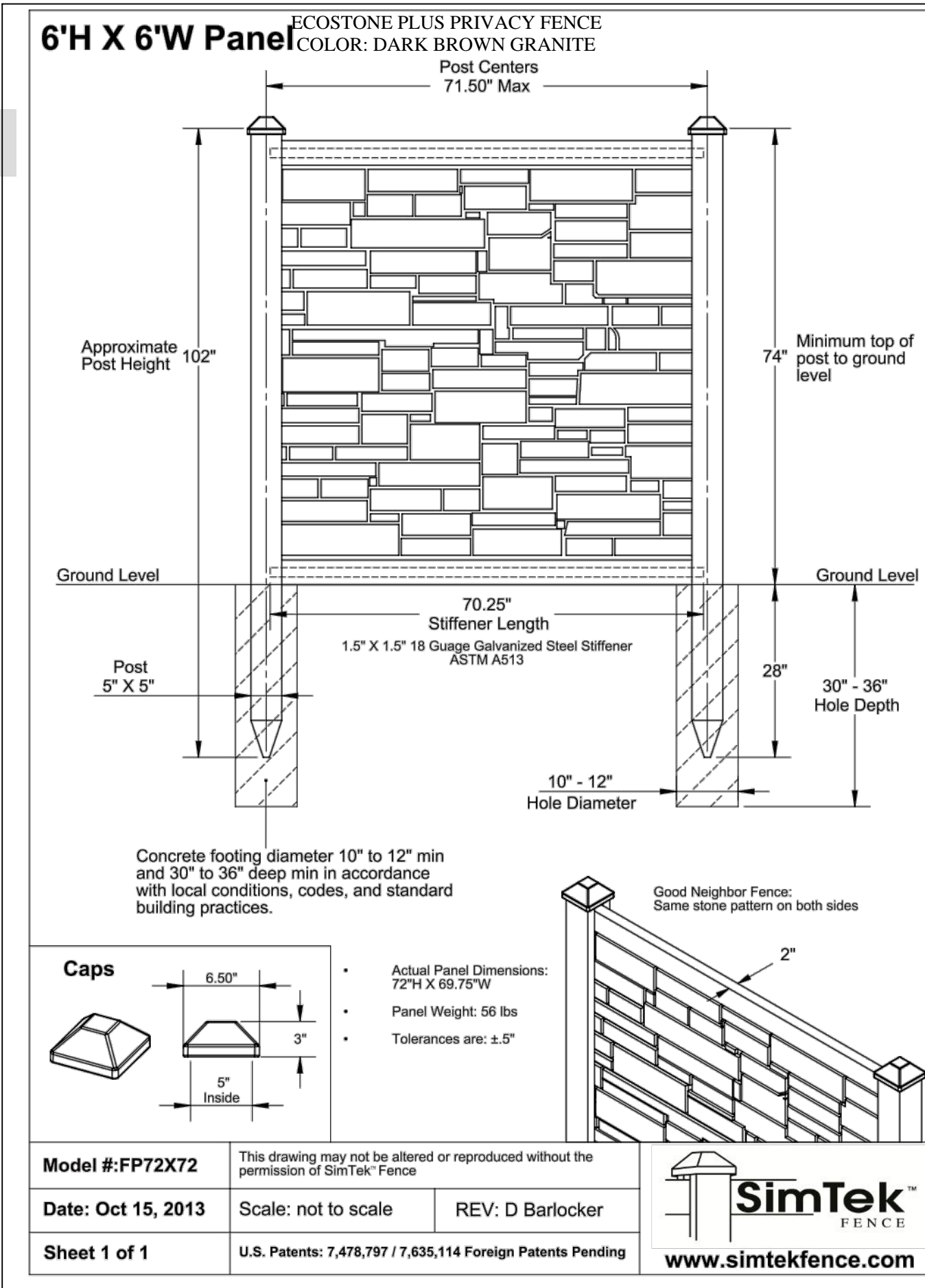
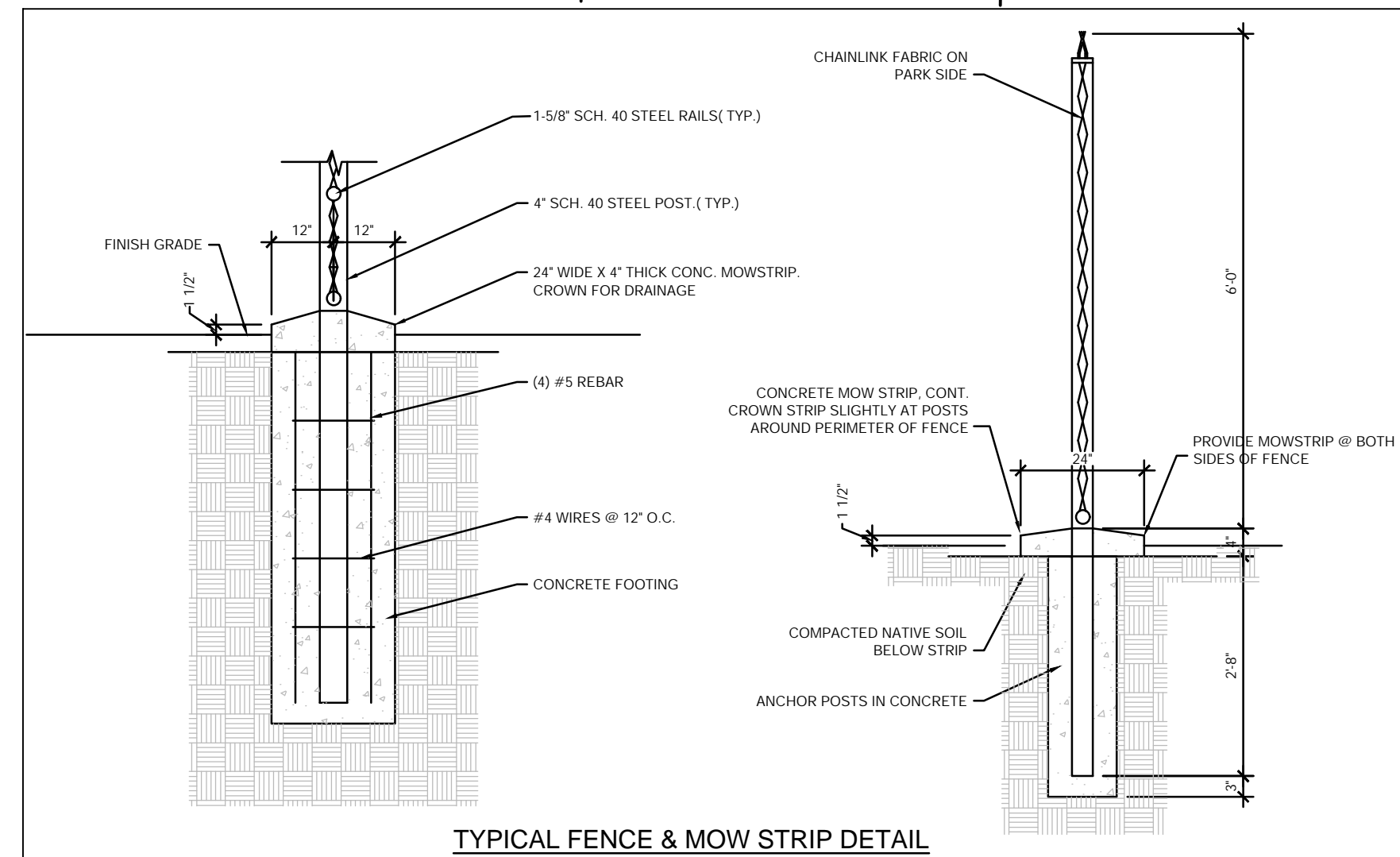
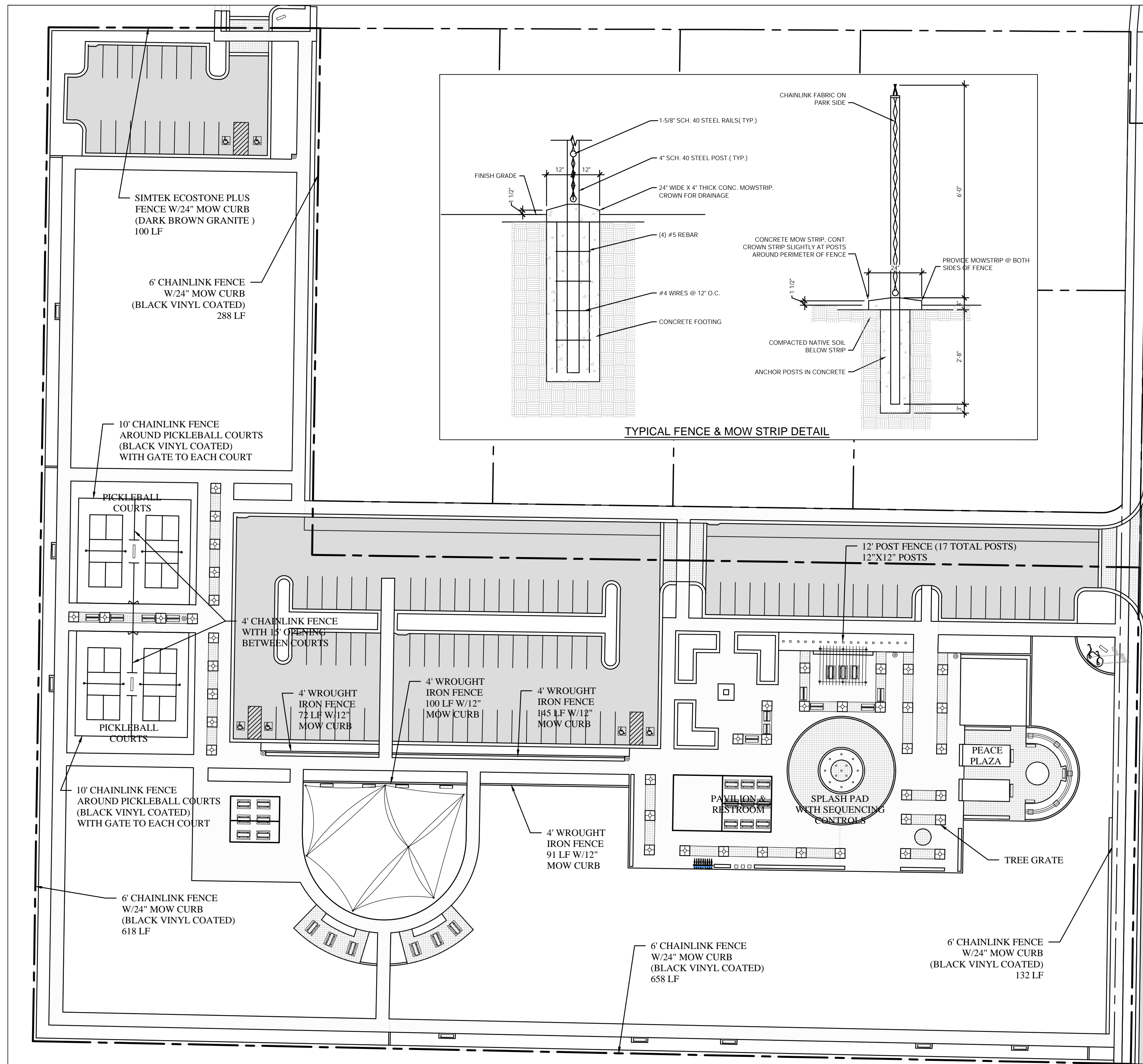
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DATE: 19 JULY 2019
REV:

19 JUL 2019

SHEET
L15



SALEM CITY
COLE PARK

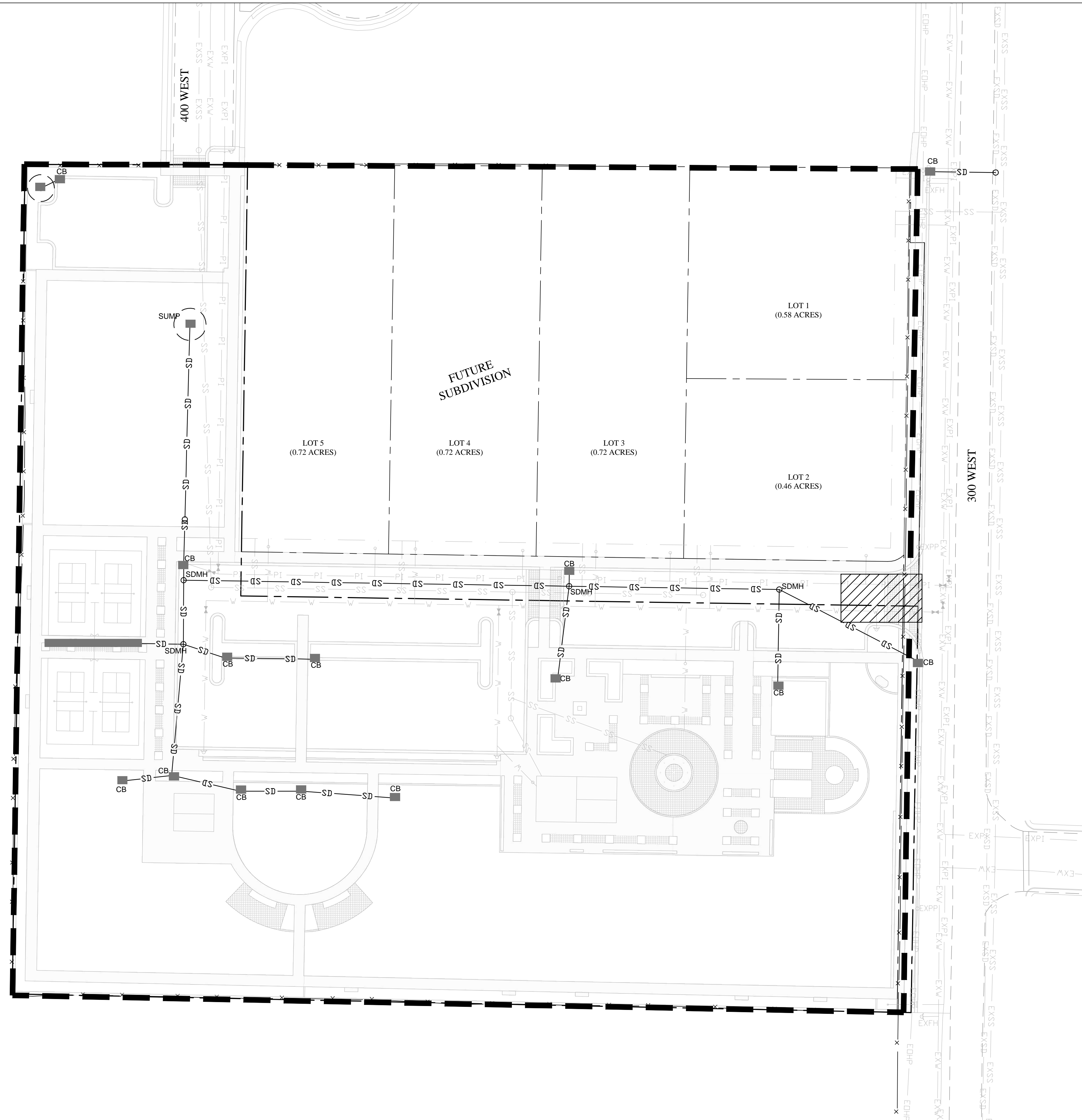
FENCING PLAN

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LANDSCAPE ARCHITECTS

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DESIGN BY: CNB DATE: 01 JULY 2019
DRAWN BY: CNB REV: 19 JUL 2019

SHEET **L16**

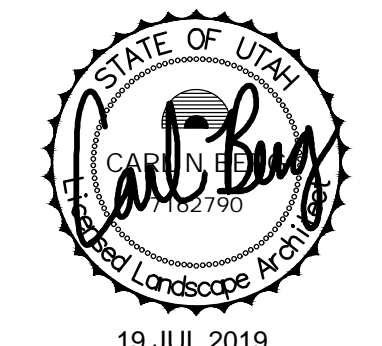


LEGEND

- INSTALL FILTER MEDIA IN CATCH BASIN & SUMPS
- INSTALL SILT FENCE ALONG PROJECT LIMITS (AS INDICATED ON PLAN)
- STABILIZED CONSTRUCTION ACCESS

- NOTES:**
1. CONTRACTOR TO REVIEW BEST MANAGEMENT PRACTICES FOR STORM WATER RUNOFF CONTROL AT CFPUB.EPA.GOV/NPDES/STORMWATER/MENUBMP.
 2. CONTRACTOR SHALL KEEP EXISTING CURB AND GUTTER FREE OF MUD, SEDIMENT AND DEBRIS TO ALLOW A FREE FLOW OF RUNOFF. PERIODIC CLEANING OF THE GUTTER AND MAINTENANCE MAY BE NECESSARY.
 3. A UPDES GENERAL CONSTRUCTION PERMIT IS REQUIRED. THE CONTRACTOR SHALL APPLY FOR THE PERMIT AND SHALL PROVIDE A COPY OF THE APPROVED PERMIT TO SALEM CITY PRIOR TO CONSTRUCTION.

Scale 1" = 40'
Scale 1" = 80' for 11x17



19 JUL 2019

SALEM CITY COLE PARK		
STORM WATER POLLUTION PREVENTION PLAN		
380 E Main St, Suite 204 Midway, Ut 84049 ph. (801) 723-2000		
DESIGN BY: CNB DRAWN BY: CNB	DATE: 19 JULY 2019 REV:	SHEET L17

TEMPORARY CONTROLS

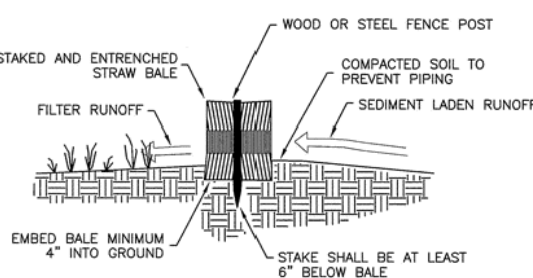
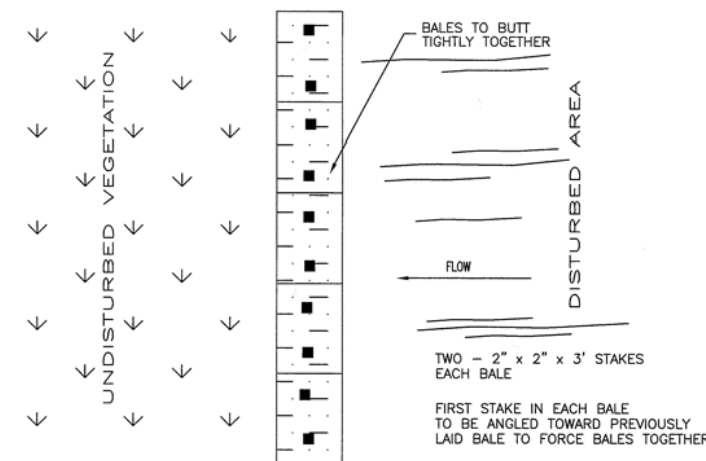
SURFACE WATER CONTROL

- Control all on-site surface water. Provide proper drainage so flooding of the site or adjacent property does not occur.
- Provide and maintain ample means and devices with which to properly remove and properly dispose of all water entering the site.
- Immediately prior to suspension of construction operations for any reason, provide proper and necessary drainage of Work site area.
- Provide berms or channels as necessary to prevent flooding or saturation of substrate. Promptly remove all water collecting in depressions.
- Dispose of water in a manner that will not cause damage to adjacent areas or facilities.

EROSION CONTROL

- Use measures such as berms, dikes, dams, sediment basins, fiber mat netting, gravel, mulches, slopes, drains and other erosion control devices or methods to prevent erosion and sedimentation.
- Provide construction and earthwork methods which control surface drainage from cut, fill, borrow, and waste disposal areas, to prevent erosion and sedimentation.
- Inspect earthwork during execution to detect any evidence of the start of erosion. Apply corrective measures as required.

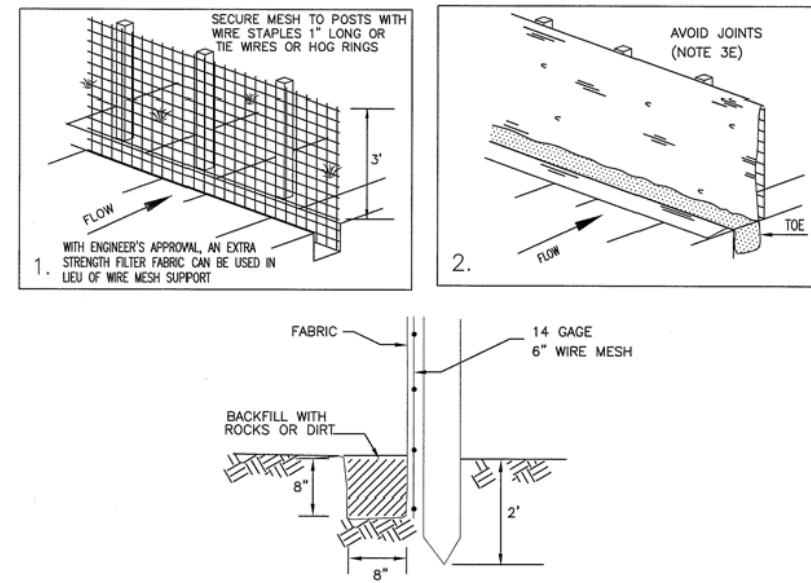
NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INTENDED TO BE USED FOR THE CONSTRUCTION OF THIS TYPE OF INSTALLATION UNLESS THE TYPE OF INSTALLATION IS SPECIFICALLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



Straw bale barrier

- DESCRIPTION:** A temporary sediment barrier consisting of a row of entrenched and anchored straw bales.
- APPLICATION:** To intercept and detain small amounts of sediment from disturbed areas of limited extent. To decrease the velocity of sheet flows and low-to-moderate level channel flows.
 - Perimeter Control: Place barrier at down gradient limits of disturbance.
 - Sediment Barrier: Place barrier at toe of slope or soil stockpile.
 - Protection of Existing Waterways: Place barrier at top of stream bank.
 - Inlet Protection.
- INSTALLATION/APPLICATION CRITERIA:**
 - Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting each other.
 - All bales shall be either wire-bound or string-tied. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales (in order to prevent deterioration of the bindings).
 - The gaps between bales shall be checked (filled by wedging) with straw to prevent water from escaping between the bales. Loose straw scattered over the area immediately uphill from a straw bale barrier tends to increase barrier efficiency.
 - When bales are installed at the toe of a slope, they should be placed away from the slope for increased storage capacity.
 - Straw bale barriers shall be removed when they have served their usefulness, but not before the up-slope areas have been permanently stabilized.
- MAINTENANCE:**
 - Inspect immediately after any rainfall and at least daily during prolonged rainfall.
 - Close attention must be paid to the repair of damaged bales, end runs and undercutting beneath bales.
 - Necessary repairs or replacement of bales must be accomplished promptly.
 - Remove sediment deposits after each rainfall. The must be removed when the level of deposition reaches approximately one-half the height of the bale(s).
 - Realign bales to provide a continuous barrier and to fill gaps.
 - Recompact soil around bales as necessary to prevent piping.

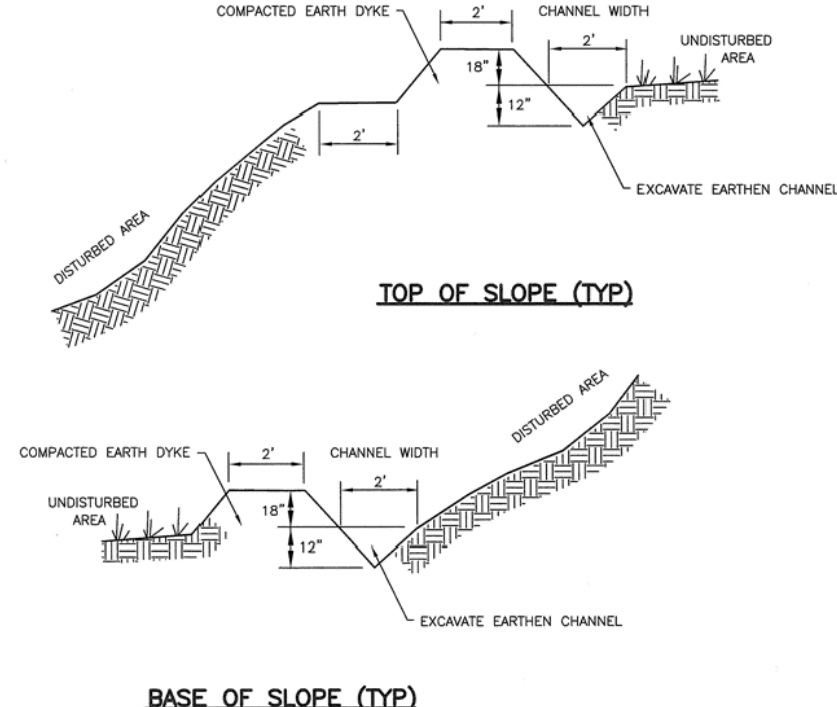
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Silt fence

- DESCRIPTION:** A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenchment.
- APPLICATION:** To intercept sediment from disturbed areas of limited extent.
 - Perimeter Control: Place barrier at down gradient limits of disturbance.
 - Sediment Barrier: Place barrier at toe of slope or soil stockpile.
 - Protection of Existing Waterways: Place barrier at top of stream bank.
 - Inlet Protection.
- INSTALLATION/APPLICATION CRITERIA:**
 - Synthetic filter fabric shall be a pervious sheet of polypropylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg. F. to 120 deg. F.
 - Burlap shall be 10 ounces per square yard of fabric.
 - Posts for silt fences shall be either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet. Steel posts shall have projections for fastening wire to them.
 - The fabric is cut on site to desired width, unrolled, and draped over the barrier. The fabric toe is secured with rocks or dirt. The fabric is secured to the mesh with twin, staples or similar devices.
 - When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap.
 - When used to control sediments from a steep slope, silt fences should be placed away from the toe of the slope for increased holding capacity.
- MAINTENANCE:**
 - Inspect immediately after each rainfall and at least daily during prolonged rainfall.
 - Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, the fabric shall be replaced promptly.
 - Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
 - Re-anchor fence as necessary to prevent shortcutting.
 - Inspect for runoff bypassing ends of barriers or undercutting barriers.

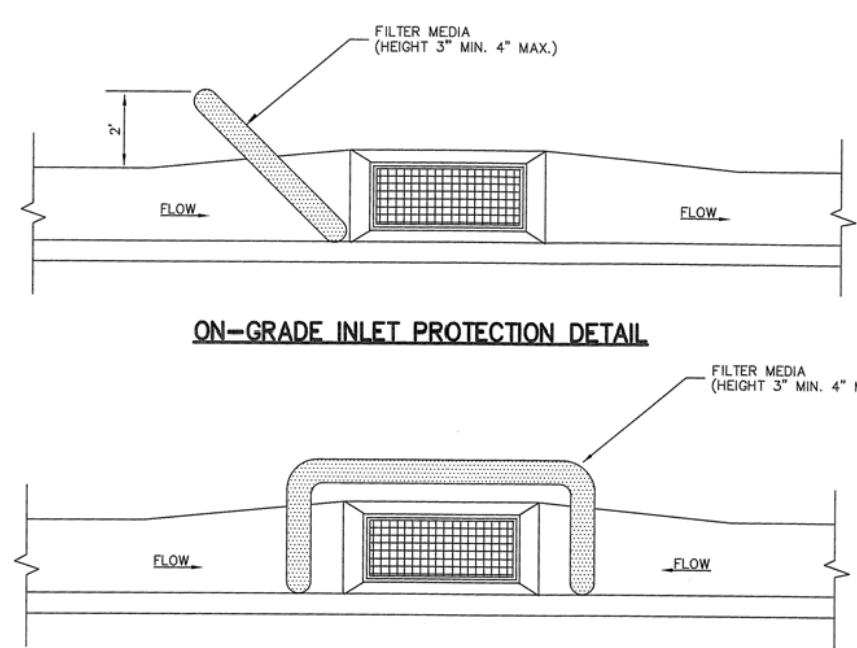
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Diversion dike

- DESCRIPTION:** A temporary ridge of compacted soil located at the top or base of a sloping disturbed area.
- APPLICATION:** To intercept up gradient runoff and convey around construction site. To divert sediment laden runoff.
 - Construct along midpoint of construction slope to intercept runoff and channel to controlled discharge point.
 - Construct around base of soil stockpiles to capture sediment.
 - Construct around perimeter of disturbed areas to capture sediment.
- INSTALLATION/APPLICATION CRITERIA:**
 - The dike should be built before construction begins.
 - Clear and grub area for dike construction.
 - Excavate channel and place soil on down gradient side.
 - Shape and machine compact excavated soil to form ridge.
 - Place erosion protection (rip rap, mulch) at outlet. Stabilize channel and ridge as required with mulch, gravel or vegetative cover. Temporary or permanent seeding and mulch shall be applied to the dike within 15 days of construction.
 - The dike should be located to minimize damages by construction operations and traffic.
- MAINTENANCE:**
 - Inspect immediately after each rainfall and at least daily during prolonged rainfall.
 - Look for runoff breaching dike or eroding channel or side slopes.
 - Check discharge point for erosion or bypassing of flows.
 - Repair and stabilize as necessary.
 - Inspect daily during vehicular activity on slope, check for and repair any traffic damage.

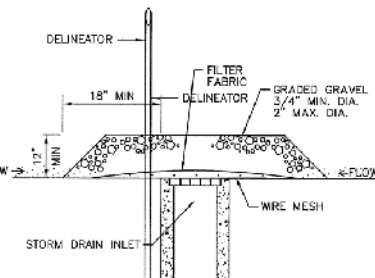
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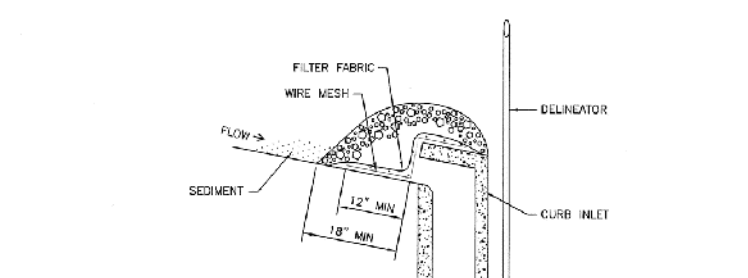
Inlet protection - gravel sock

- DESCRIPTION:** Placement of gravel sock on grade upstream of, or in front of storm drain inlets to filter or pond water runoff.
- APPLICATION:** At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
- INSTALLATION/APPLICATION CRITERIA:**
 - On-grade inlet protection:
 - On-grade inlet protection should be used when completely blocking a storm drain inlet box would result in forcing water further downstream would cause flooding or other undesirable results.
 - Prepare filter media (gravel sock, straw waddle, or other approved media) in accordance with manufacturer's recommendations.
 - Install filter media just upstream of the inlet box.
 - Filter media shall butt tightly against the face of the curb and angle at approximately a 45 degree angle away from the curb to trap runoff between the media and the curb.
 - Excessive flows will flow either over or around the filter media and into the inlet box.
 - Expect ponding behind the filter media.
 - Drop inlet protection:
 - Drop inlet protection should be used at low points in the curb and when diverting flows further downstream will not cause undesirable results.
 - Prepare filter media (gravel sock, straw waddle, or other approved media) in accordance with manufacturer's recommendations.
 - Install filter media around the entire perimeter of the inlet grate.
 - Filter media shall butt tightly against the face of the curb on both sides of the inlet grate.
 - Excessive flows will either flow around the media or over the top and into the inlet box.
- MAINTENANCE:**
 - Inspect inlet protection after every large storm event and at a minimum of once monthly.
 - Remove sediment accumulated when it reaches 2 inches in depth.
 - Replace filter medium when damage has occurred or when medium is no longer functioning as intended.

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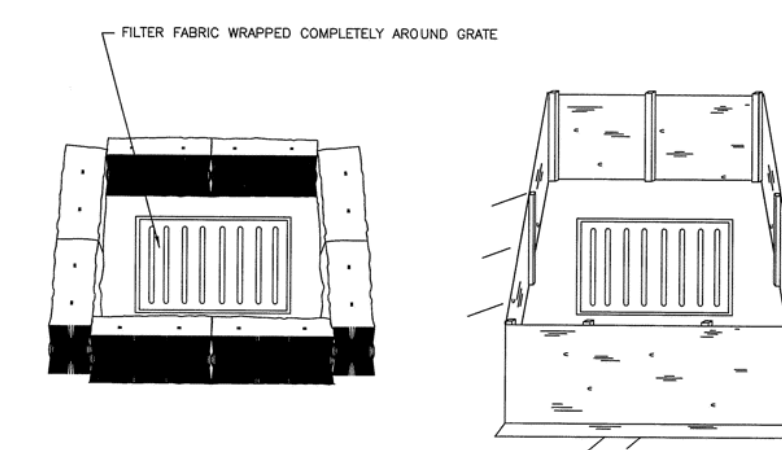
Drop inlet protection



Inlet protection - gravel

- DESCRIPTION:** Placement of gravel filter over storm drain inlet to filter water runoff.
- APPLICATION:** At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
- INSTALLATION/APPLICATION CRITERIA:**
 - Place 1/2 inch opening wire mesh over the inlet grate extending one foot past the grate in all directions.
 - Place filter fabric over the mesh. Filter fabric should be selected based on soil type.
 - Place graded gravel (2 inch to 4 inch in size), to a minimum depth of 12 inches, forming a wall around the grate on all sides. The wall shall have side slopes so that gravel does not spill over the grate.
 - The filter fabric immediately over the grate needs to remain exposed so that the grate can be visually inspected.
 - Place a delineator at the inlet grate so that the gravel surrounding it will not inadvertently be graded or moved and to protect the inlet from damage.
- MAINTENANCE:**
 - Inspect inlet protection after every large storm event and at a minimum of once monthly.
 - Remove sediment accumulated when it reaches 4 inches in depth.
 - Replace filter fabric and clean or replace gravel if clogging is apparent.

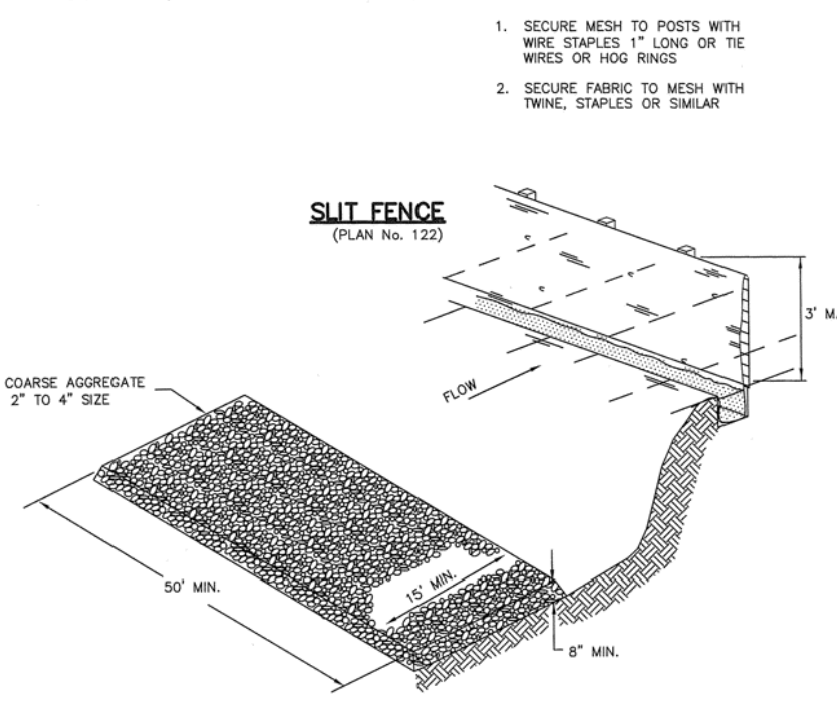
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Inlet protection - fence or straw bale

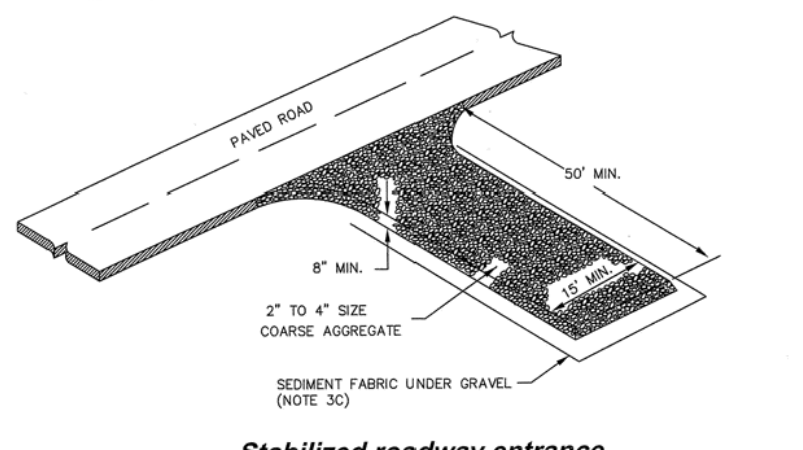
- DESCRIPTION:** A temporary sediment barrier around storm drain inlet.
- APPLICATION:** At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
- INSTALLATION/APPLICATION CRITERIA:**
 - Provide up gradient sediment controls, such as silt fence during construction of inlet.
 - When construction of inlet is complete erect straw bale barrier, silt fence or other approved sediment barrier to surround perimeter of inlet.
 - Install filter fabric completely around grate.
- MAINTENANCE:**
 - Inspect inlet protection after every large storm event and at a minimum of once monthly.
 - Remove sediment accumulated when it reaches 4 inches in depth.
 - Repair or re-align barrier or fence as needed.
 - Look for bypassing or undercutting and re-compact soil around barrier or fence as required.

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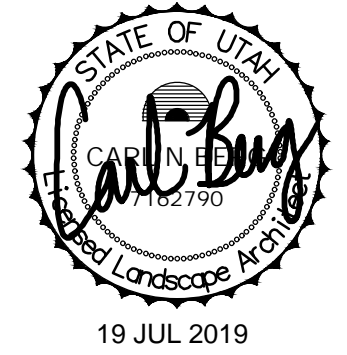


- DESCRIPTION:** A temporary stabilized pad of gravel for general washing of equipment and construction vehicles.
- APPLICATION:** At any site where regular washing of vehicles and equipment will occur. May also be used as a filling point for water trucks limiting erosion caused by overflow or spillage of water.
- INSTALLATION/APPLICATION CRITERIA:**
 - Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
 - Compact subgrade.
 - Place filter fabric under wash down area if desired (recommended for wash area that remains more than 3 months).
 - Install silt fence down gradient (see Plan No. 122).
- MAINTENANCE:**
 - Requires periodic top dressing with additional stones.
 - Solely used to control sediment in wash water. Cannot be utilized for washing equipment or vehicles that may cause contamination of runoff (such as fertilizer equipment or concrete equipment).
 - The wash area shall be maintained in a condition that will prevent tracking or flow of mud onto public rights-of-way.
 - Periodic top dressing with 2 inch stone may be required, as conditions demand, and repair any structures used to trap sediments.
 - Inspect daily for loss of gravel or sediment buildup.
 - Inspect adjacent areas for sediment deposit and install additional controls as necessary.
 - Expand stabilized area as required to accommodate activities.
 - Maintain silt fence as outlined in Plan No. 122.

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- DESCRIPTION:** A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.
- APPLICATION:** At any site where vehicles and equipment enter the public right of way.
- INSTALLATION/APPLICATION CRITERIA:**
 - Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
 - Compact subgrade.
 - Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).
- MAINTENANCE:**
 - Requires periodic top dressing with additional stones.
 - Prevent tracking or flow of mud into the public right-of-way.
 - Periodic top dressing with 2 inches stone may be required, as conditions demand, and repair any structures used to trap sediments.
 - Inspect daily for loss of gravel or sediment buildup.
 - Inspect adjacent areas for sediment deposit and install additional controls as necessary.
 - Expand stabilized area as required to accommodate activities.



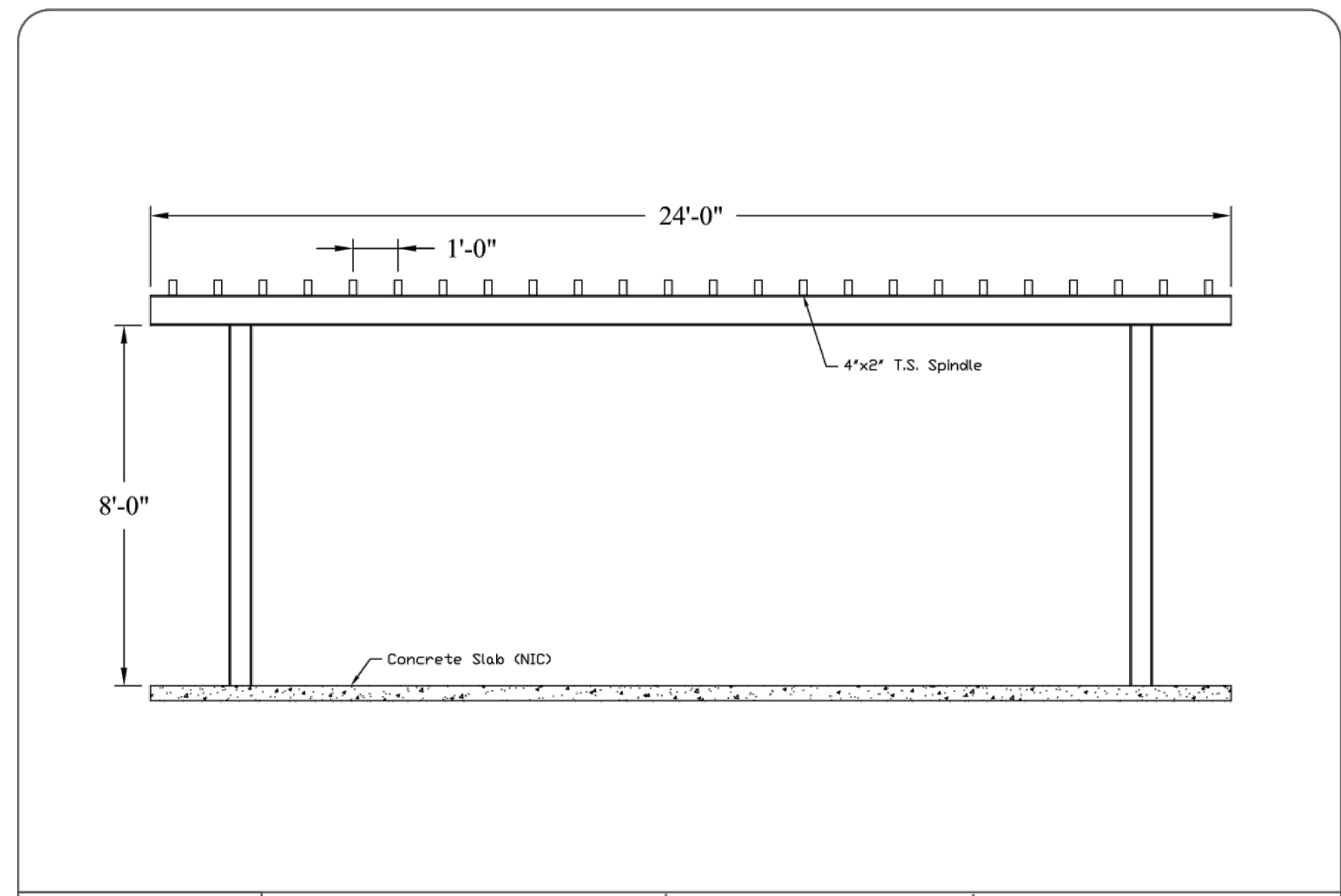
19 JUL 2019

SALEM CITY
COLE PARK
STORM WATER POLLUTION
PREVENTION DETAILS

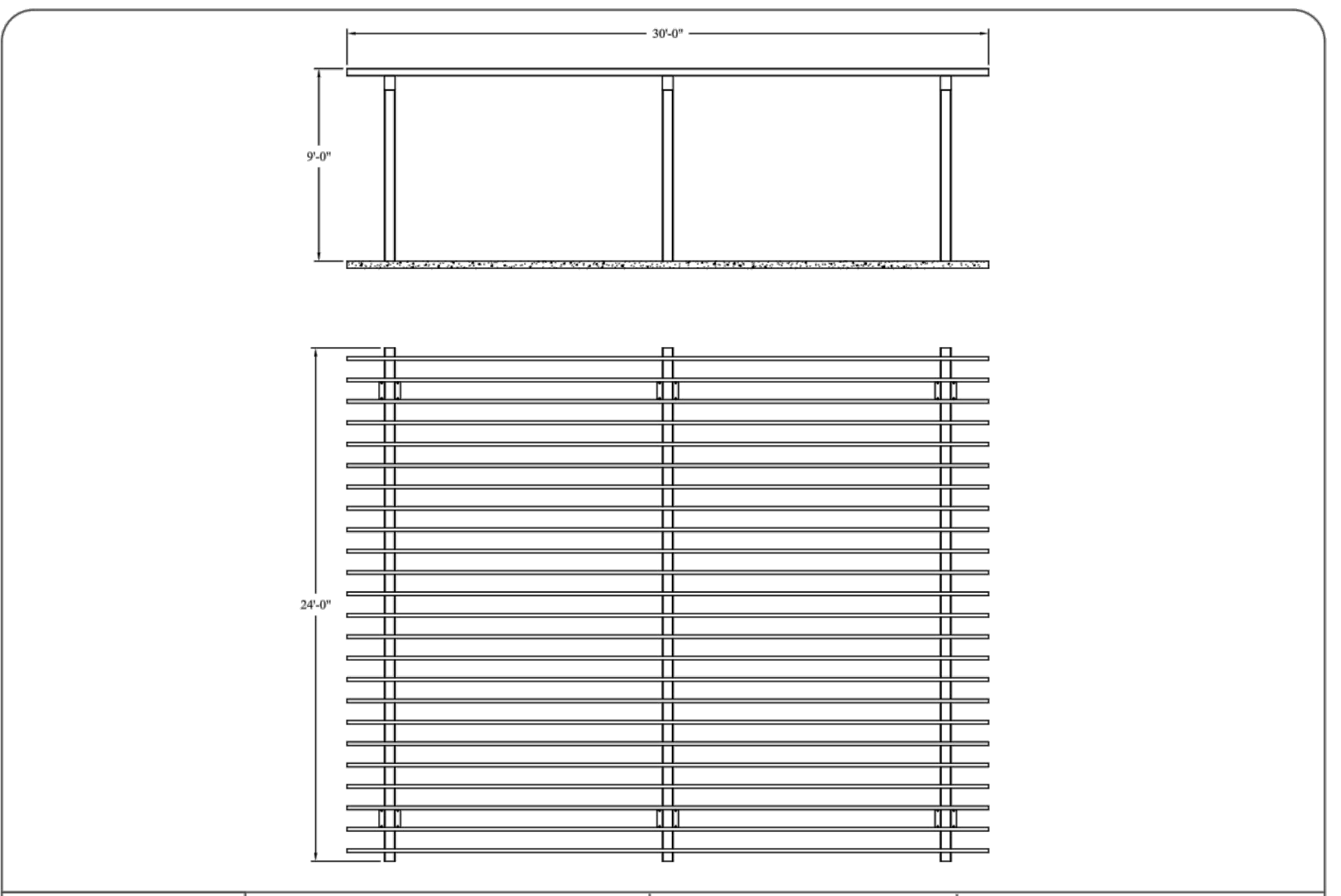


380 E Main St, Suite 204
Midway, UT 84049 ph. (801) 723-2000

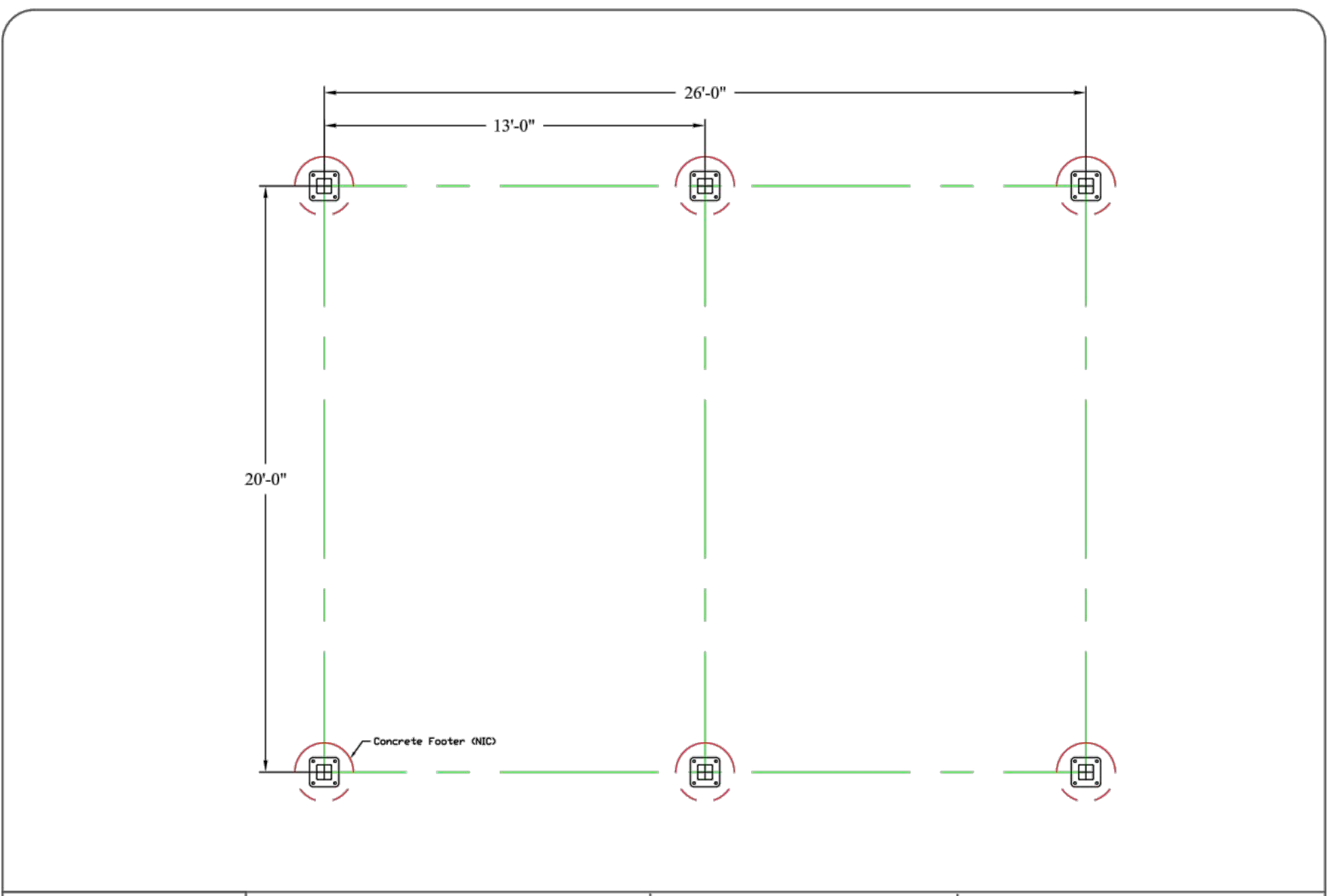
DESIGN BY: CNB DATE: 19 JULY 2019 SHEET
DRAWN BY: CNB REV: L18



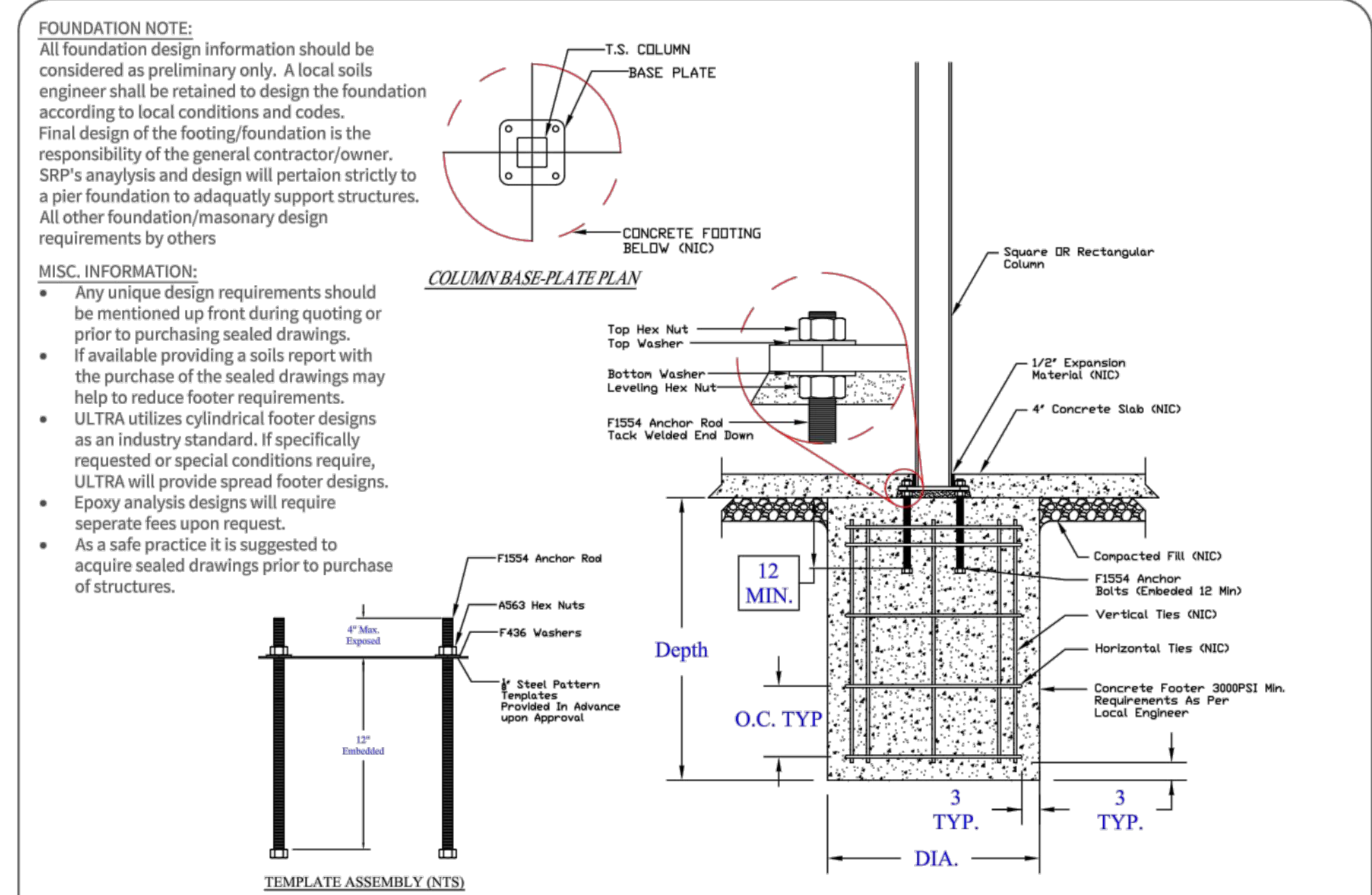
	DESCRIPTION: 24'x30' (AS) Flat Top Trellis Structure	DATE: 7/23/2019	DRAWN BY: ACA	<i>These drawings are for reference only and should not be used as construction details. They show the general character and rough dimensions of the structural features. Exact spans, fasteners, materials, and foundations can be determined by a licensed structural engineer upon request.</i>
	QUOTE #: QU00184811	PROJECT NAME: COLE PARK	SCALE: NOT TO SCALE	



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GENERAL MATERIAL SPECIFICATIONS & NOTES:

- ALL STRUCTURAL STEEL TUBING SHALL BE ASTM A-500 GRADE B-C.
- ALL OTHER STEEL (PLATES, GUSSETS, ETC.) SHALL BE ASTM A-36.
- ALL WELDING IS TO BE DONE IN ACCORDANCE WITH LATEST AWS STANDARDS. ALL WELDS ARE TO DEVELOP FULL STRENGTH OF COMPONENT PARTS. (E17081 ELECTRODES)
- INCLUDED HARDWARE IS TO BE ASTM A-325 UNLESS OTHERWISE NOTED.
- PRODUCTION OF LAMINATED MATERIALS WILL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD ANSI A190.1

STRUCTURAL GLUED LAMINATED TIMBER:

- IF INCLUDED TONGUE & GROOVE WILL BE #1 Grade V-GROOVED SYP CONTAINING 15-20% MOISTURE CONTENT.
- POWDER COATING PROCESS

STAGE 1 - Blast all steel to "Near White" condition to remove all surface rust and oil.
 STAGE 2 - Remove dust from the blast process in stage 1.
 STAGE 3 - This stage is the Electrostatic Application of Epoxy TGIC Powder Coating Zinc Rich Primer. Unlike any other shelter manufacturer, we are utilizing an actual TGIC Zinc Powder Coating Rich Primer. This stage 3 application is applied at 3 mils and has been salt spray tested for 4,000+ hours using the ASTM Method B117. (Note: The 4,000 hours of salt spray testing is only with the Zinc Rich TGIC Powder Coat Primer and before the Stage 5.)
 STAGE 4 - This process heats the steel and primer to ensure optimal adhesion with the next stage.
 STAGE 5 - This stage is the Electrostatic application of TGIC Top Powder Coat at 3 mils. This application, along with the Stage 4 Epoxy TGIC Powder Coating Zinc Rich Primer, produces a total of 6 mils of finished Powder Coating and has tested at 5,000+ hours using the ASTM Method B117. It is important to note that testing was discontinued at 5,000 hours.
 STAGE 6 - Curing Process: The final stage is to allow coated components the time to cure by cooling down.

- IF INCLUDED METAL ROOFING IS TO BE ACRYLIC COATED GALVALUME® FLUROPOLYMER (Kynar 500® PVDF resin-based). ALL METAL ROOFING WILL COME PRE-CUT UNLESS NOTED OTHERWISE. METAL ROOFING TRIMS WILL COME IN STANDARD SECTIONS AND WILL REQUIRE NOTCHING OR CUTTING IN FIELD.

GENERAL NOTES:

- UNLESS REQUESTED THIS BUILDING HAS BEEN DESIGNED AS A FREE STANDING, OPEN STRUCTURE. IF WALLS ARE TO BE ADDED, OR IF THE BUILDING IS TO ADJOIN ANOTHER STRUCTURE, OR IF OTHER MODIFICATIONS ARE TO BE MADE, THE STRUCTURE MUST BE REENGINEERED PRIOR TO THESE MODIFICATIONS.
- IF SPECIFICATIONS ARE PROVIDED ALL DESIGNS ARE TO BE CONSIDERED TO BE AS EQUAL AND NOT AN EXACT MATCH. DESIGNS WILL CONFORM TO ULTRAS MANUFACTURING METHODS AND MATERIALS AVAILABLE.

ABBREVIATIONS:

- AS - ALL STEEL
- SF - STEEL FRAME
- DT - DUO-TOP
- T&G - TONGUE & GROOVE
- NIC - NOT IN CONTRACT
- O.C. - ON CENTER
- TYP - TYPICAL

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	QUOTE #: QU00184811	PROJECT NAME: COLE PARK	SCALE: NOT TO SCALE	

PERGOLA NOTES:

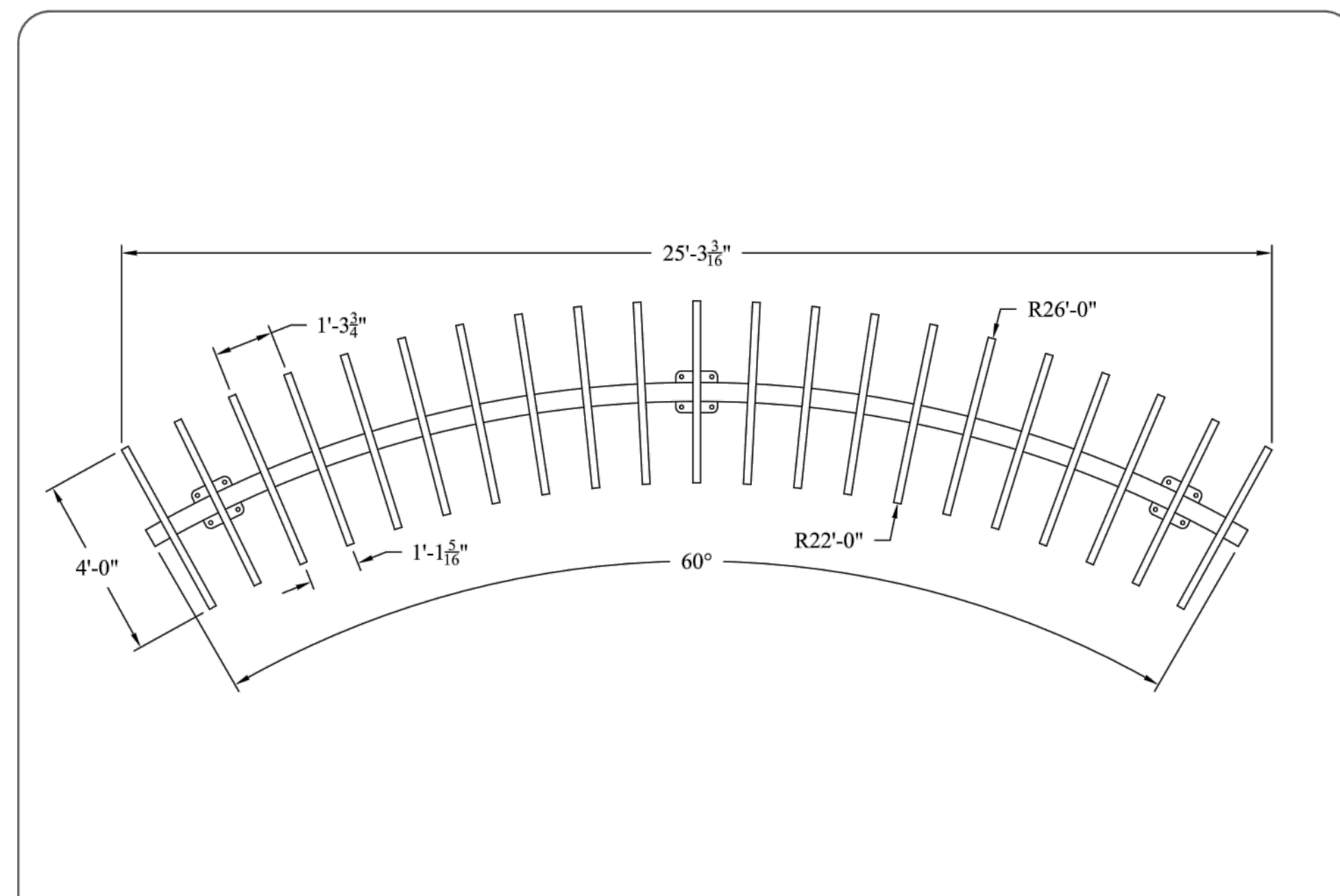
- THESE PLANS ARE FOR REFERENCE ONLY.
- ULTRASHELTER TO PROVIDE FINAL STRUCTURAL ENGINEERING DRAWINGS PRIOR TO CONSTRUCTION.
- COLOR TO BE SELECTED BY OWNER.

SALEM CITY
COLE PARK

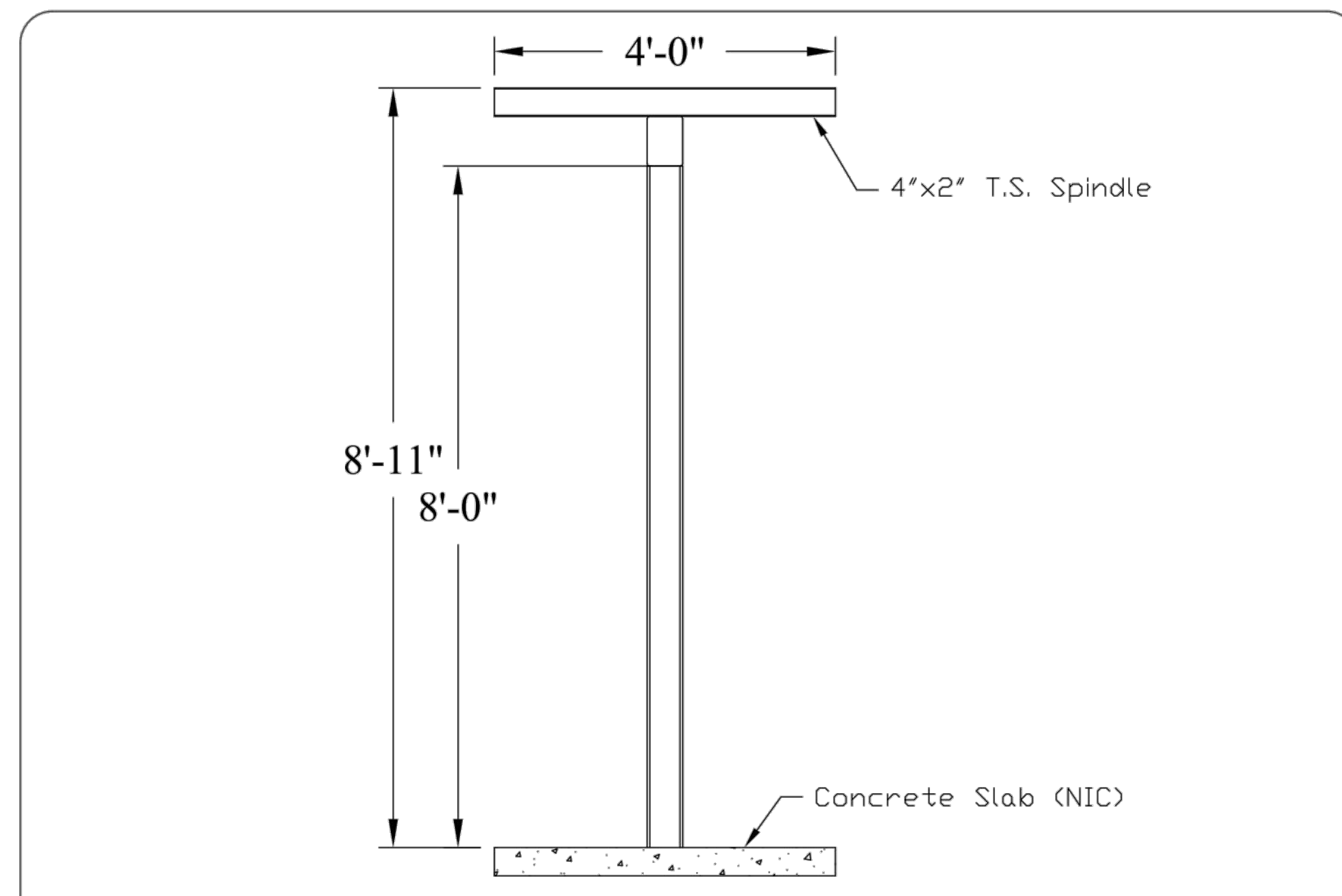
30'x24' PERGOLA
DETAIL

380 E Main St, Suite 204
Midway, Ut 84049 ph. (801) 723-2000

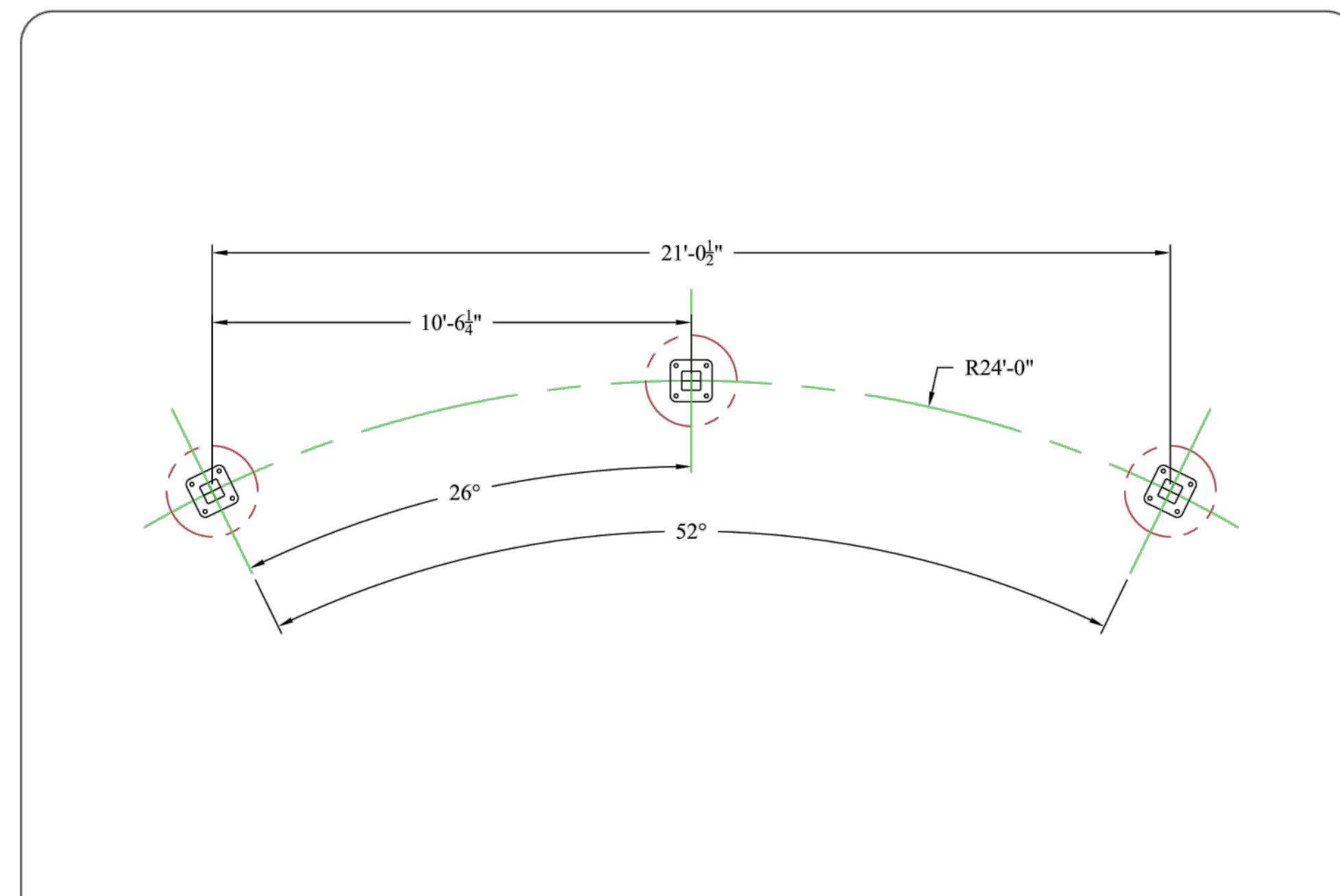
DESIGN BY: CNB	DATE: 19 JULY 2019	SHEET L19
DRAWN BY: CNB	REV:	



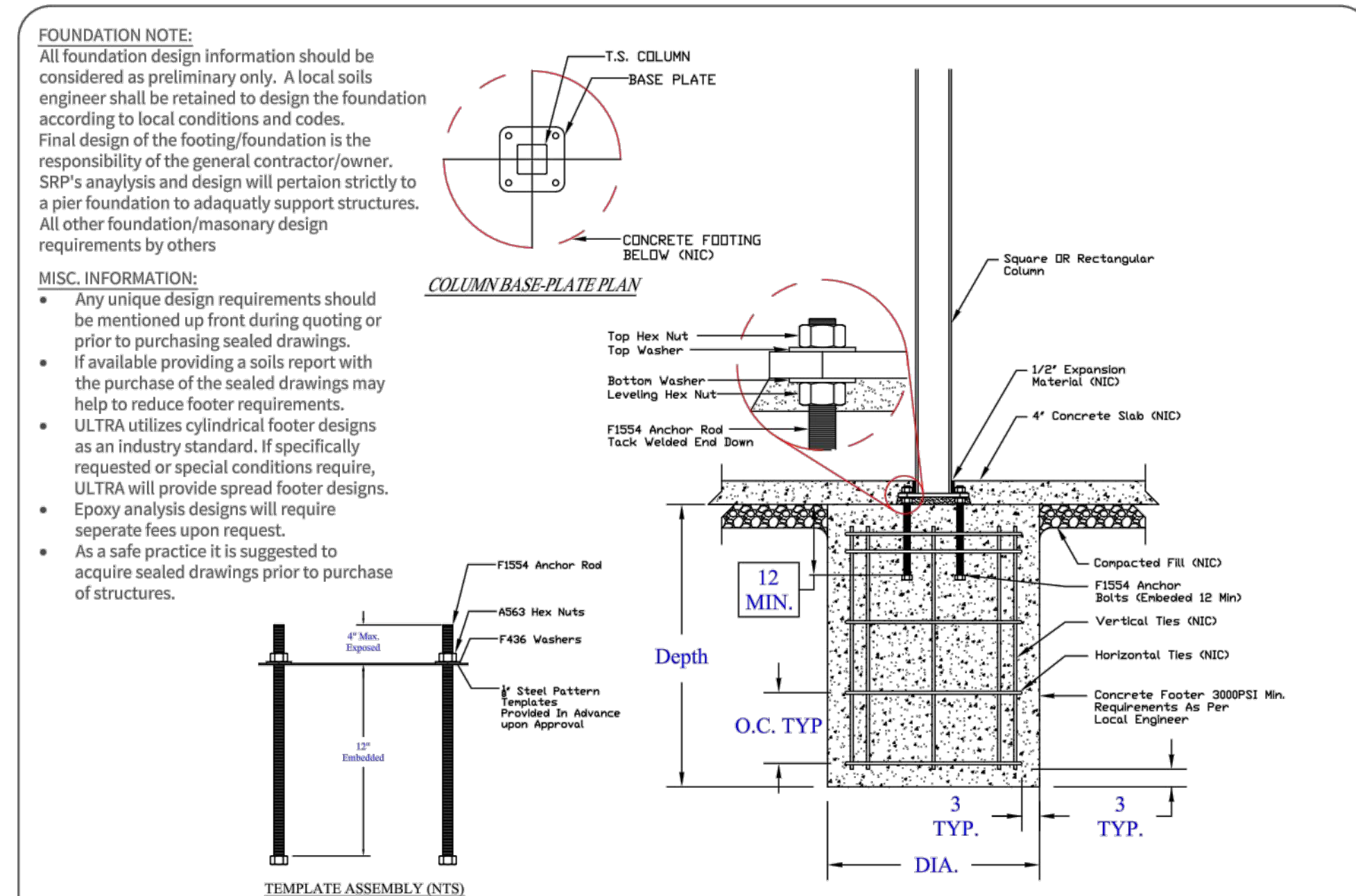
	DESCRIPTION: 4'x25' (AS) Curved Center Post Trellis Structure	DATE: 7/23/2019	DRAWN BY: ACA	<i>These drawings are for reference only and should not be used as construction details. They show the general character and rough dimensions of the structural features. Exact spans, fasteners, materials, and foundations can be determined by a licensed structural engineer upon request.</i>
	QUOTE #: QU00184811	PROJECT NAME: COLE PARK	SCALE: NOT TO SCALE	



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- ALL OTHER STEEL (PLATES, GUSSETS, ETC.) SHALL BE ASTM A-36.
- ALL WELDING IS TO BE DONE IN ACCORDANCE WITH LATEST AWS STANDARDS. ALL WELDS ARE TO DEVELOP FULL STRENGTH OF COMPONENT PARTS. (E17081 ELECTRODES)
- INCLUDED HARDWARE IS TO BE ASTM A-325 UNLESS OTHERWISE NOTED.
- PRODUCTION OF LAMINATED MATERIALS WILL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD ANSI A190.1 STRUCTURAL GLUED LAMINATED TIMBER.
- IF INCLUDED TONGUE & GROOVE WILL BE #1 Grade V-GROOVED SYP CONTAINING 15-20% MOISTURE CONTENT.
- POWDER COATING PROCESS
 STAGE 1 - Blast all steel to "Near White" condition to remove all surface rust and oil.
 STAGE 2 - Remove dust from the blast process in stage 1.
 STAGE 3 - This stage is the Electrostatic Application of Epoxy TGIC Powder Coating Zinc Rich Primer. Unlike any other shelter manufacturer, we are utilizing an actual TGIC Zinc Powder Coating Rich Primer. This stage 3 application is applied at 3 mils and has been salt spray tested for 4,000+ hours using the ASTM Method B117. (Note: The 4,000 hours of salt spray testing is only with the Zinc Rich TGIC Powder Coat Primer and before the Stage 5.
 STAGE 4 - This process heats the steel and primer to ensure optimal adhesion with the next stage.
 STAGE 5 - This stage is the Electrostatic application of TGIC Top Powder Coat at 3 mils. This application, along with the Stage 4 Epoxy TGIC Powder Coating Zinc Rich Primer, produces a total of 6 mils of finished Powder Coating and has tested at 5,000+ hours using the ASTM Method B117. It is important to note that testing was discontinued at 5,000 hours.
 STAGE 6 - Curing Process: The final stage is to allow coated components the time to cure by cooling down.
- IF INCLUDED METAL ROOFING IS TO BE ACRYLIC COATED GALVALUME® FLUOROPOLYMER (Kynar 500® PVDF resin-based). ALL METAL ROOFING WILL COME PRE-CUT UNLESS NOTED OTHERWISE. METAL ROOFING TRIMS WILL COME IN STANDARD SECTIONS AND WILL REQUIRE NOTCHING OR CUTTING IN FIELD.

GENERAL NOTES:

- UNLESS REQUESTED THIS BUILDING HAS BEEN DESIGNED AS A FREE STANDING, OPEN STRUCTURE. IF WALLS ARE TO BE ADDED, OR IF THE BUILDING IS TO ADJOIN ANOTHER STRUCTURE, OR IF OTHER MODIFICATIONS ARE TO BE MADE, THE STRUCTURE MUST BE REENGINEERED PRIOR TO THESE MODIFICATIONS.
- IF SPECIFICATIONS ARE PROVIDED ALL DESIGNS ARE TO BE CONSIDERED TO BE AS EQUAL AND NOT AN EXACT MATCH. DESIGNS WILL CONFORM TO ULTRAS MANUFACTURING METHODS AND MATERIALS AVAILABLE.

ABBREVIATIONS:

- AS - ALL STEEL
- SF - STEEL FRAME
- DT - DUO-TOP
- T&G - TONGUE & GROOVE
- NIC - NOT IN CONTRACT
- O.C. - ON CENTER
- TYP. - TYPICAL

	DESCRIPTION: 4'x25' (AS) Curved Center Post Trellis Structure	DATE: 7/23/2019	DRAWN BY: ACA	<i>These drawings are for reference only and should not be used as construction details. They show the general character and rough dimensions of the structural features. Exact spans, fasteners, materials, and foundations can be determined by a licensed structural engineer upon request.</i>
	QUOTE #: QU00184811	PROJECT NAME: COLE PARK	SCALE: NOT TO SCALE	

PERGOLA NOTES:

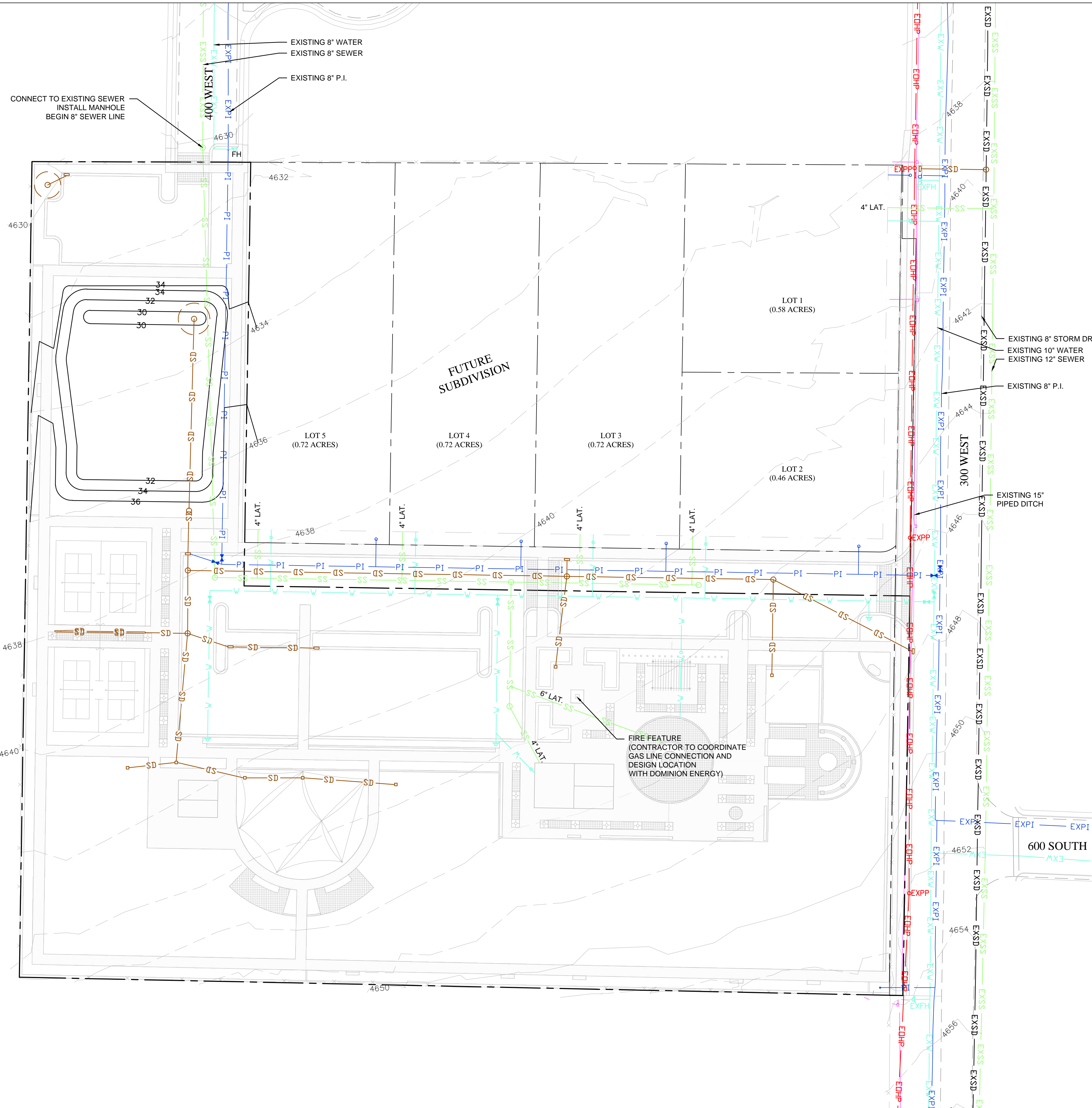
- THESE PLANS ARE FOR REFERENCE ONLY.
- ULTRASHELTER TO PROVIDE FINAL STRUCTURAL ENGINEERING DRAWINGS PRIOR TO CONSTRUCTION.
- COLOR TO BE SELECTED BY OWNER.

SALEM CITY
COLE PARK

ARC PERGOLA
DETAIL

380 E Main St, Suite 204
Midway, Ut 84049 ph. (801) 723-2000

DESIGN BY: CNB	DATE: 19 JULY 2019	SHEET
DRAWN BY: CNB	REV:	L20



- SALEM CITY GENERAL CONSTRUCTION NOTES:**
1. ALL MAINLINE PIPING SHALL BE PLACED WITH A MINIMUM OF 4' COVER OVER THE TOP OF THE PIPE. GAS LINES SHALL BE PLACED WITH A MINIMUM OF 2' COVER.
 2. ALL CULINARY WATER AND PRESSURIZED IRRIGATION MAIN LINE PIPE SHALL BE PVC C900 DR 18 CLASS 150 UNLESS OTHERWISE APPROVED BY THE CITY.
 3. ALL NEW CULINARY WATER AND PRESSURIZED IRRIGATION MAIN LINE PIPE SHALL BE 8" IN DIAMETER.
 4. AIR PRESSURE TESTING DRY CULINARY WATER OR PRESSURIZED IRRIGATION PIPE LINES SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 5. ONLY CITY PERSONNEL SHALL OPEN AND CLOSE CITY WATER VALVES, UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY.
 6. ALL WATER SAMPLES FOR CULINARY WATER TESTING SHALL BE COLLECTED AND DELIVERED BY CITY PERSONNEL. THE CONTRACTOR SHALL PAY FOR THE TESTING EXPENSE.
 7. TAPPING INTO WATER LINES SHALL NOT BE ALLOWED IN GROUNDWATER OR MUD.
 8. ALL MAINLINE SEWER PIPING 8" TO 15" SHALL BE PVC AND SHALL BE SUPPLIED IN LENGTHS NO LONGER THAN 13'.
 9. ALL SEWER SERVICE LATERALS TAPS ON EXISTING LINES SHALL BE "INSERTA-TEE-TYPE" CONNECTIONS.
 10. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL ROAD CONSTRUCTION, BARRICADES, CHANNELING DEVICES, AND CONSTRUCTION SIGNS IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR ROAD CONSTRUCTION ACTIVITIES.
 11. TRAFFIC ACCESS SHALL BE MAINTAINED FOR LOCAL RESIDENTS TO PROPERTIES ALONG CONSTRUCTION BOUNDARIES.
 12. ALL DEBRIS RESULTING FROM WORK ON THE PROJECT SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE APPROPRIATE ARRANGEMENTS FOR DISPOSAL SITES AT WHICH DEBRIS MAY BE LAWFULLY DISPOSED.
 13. NO OPEN BURNING OF CONSTRUCTION DEBRIS SHALL BE ALLOWED.
 14. ALL SEWER, PRESSURIZED IRRIGATION, CULINARY WATER, STORM DRAIN, POWER AND NATURAL GAS UTILITIES TO MEET SALEM CITY STANDARDS AND SPECIFICATIONS.

- LEGEND**
- EXW EXISTING CULINARY WATER
 - W PROPOSED CULINARY WATER
 - EXPI EXISTING PRESSURIZED IRRIGATION
 - PI PROPOSED PRESSURIZED IRRIGATION
 - EXSS EXISTING SEWER
 - SS PROPOSED SEWER
 - EXSD EXISTING STORM DRAIN
 - SD PROPOSED STORM DRAIN
 - EXISTING 15" PIPED DITCH
 - EOHP EXISTING OVERHEAD POWER LINES
 - EXPP EXISTING POWER POLE
 - LP PROPOSED 13" CITY LIGHT POLE
 - FH FIRE HYDRANT
 - EXFH EXISTING FIRE HYDRANT

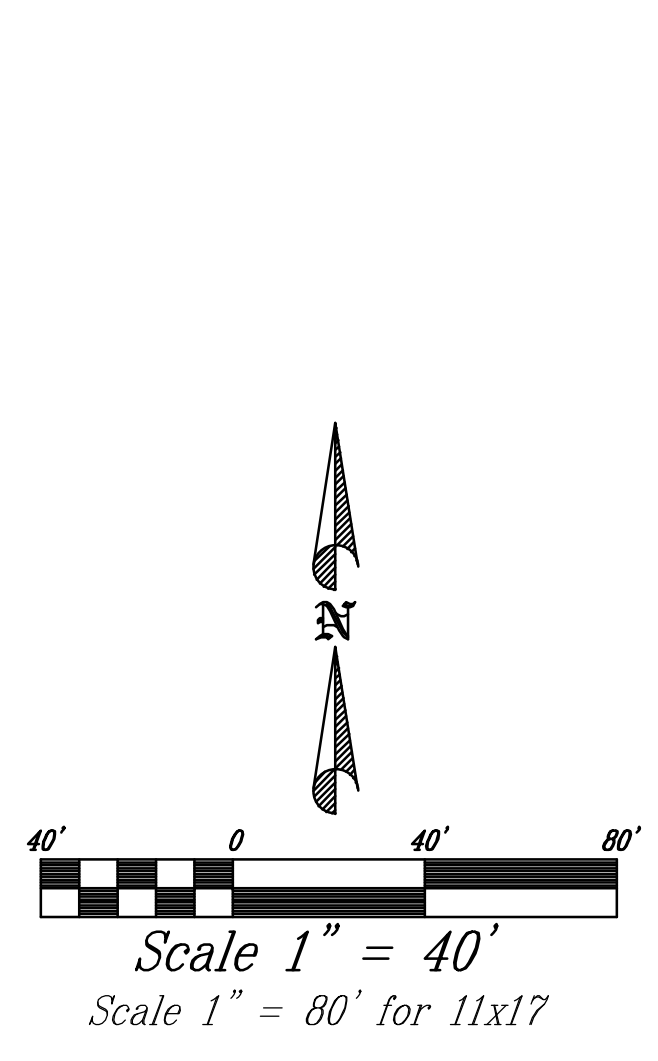
- POWER NOTES:**
1. EXISTING POWER ALONG 300 WEST TO BE BURIED BEHIND SIDEWALK. CONTRACTOR TO COORDINATE FINAL LOCATION WITH SALEM CITY POWER.
 2. SALEM CITY TO FINALIZE PUBLIC UTILITY EASEMENT FOR POWER TO FUTURE LOTS.
 3. CONTRACTOR TO COORDINATE FINAL POWER DESIGN LOCATION WITH SALEM CITY POWER FOR POWER TO FUTURE LOTS.

- NATURAL GAS NOTE:**
1. SALEM CITY TO FINALIZE PUBLIC UTILITY EASEMENT LOCATION FOR NATURAL GAS TO FUTURE LOTS AND FIRE FEATURE IN PARK.
 2. CONTRACTOR TO COORDINATE FINAL NATURAL GAS DESIGN LOCATION WITH DOMINION ENERGY FOR NATURAL GAS TO FUTURE LOTS AND FIRE FEATURE IN PARK.

TRENT JOHNSON
DOMINION ENERGY UTAH
PRE-CONSTRUCTION (CENTRAL UTAH REGION)
CELL: (801) 319-7442

BLUE STAKE NOTE:
LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.

SEE SHEETS C02 AND C03 FOR WATER AND IRRIGATION PLANS AND DETAILS
SEE SHEETS C04-C06 FOR SEWER PLANS AND DETAILS
SEE SHEETS C07-C09 FOR STORM DRAIN PLANS AND DETAILS

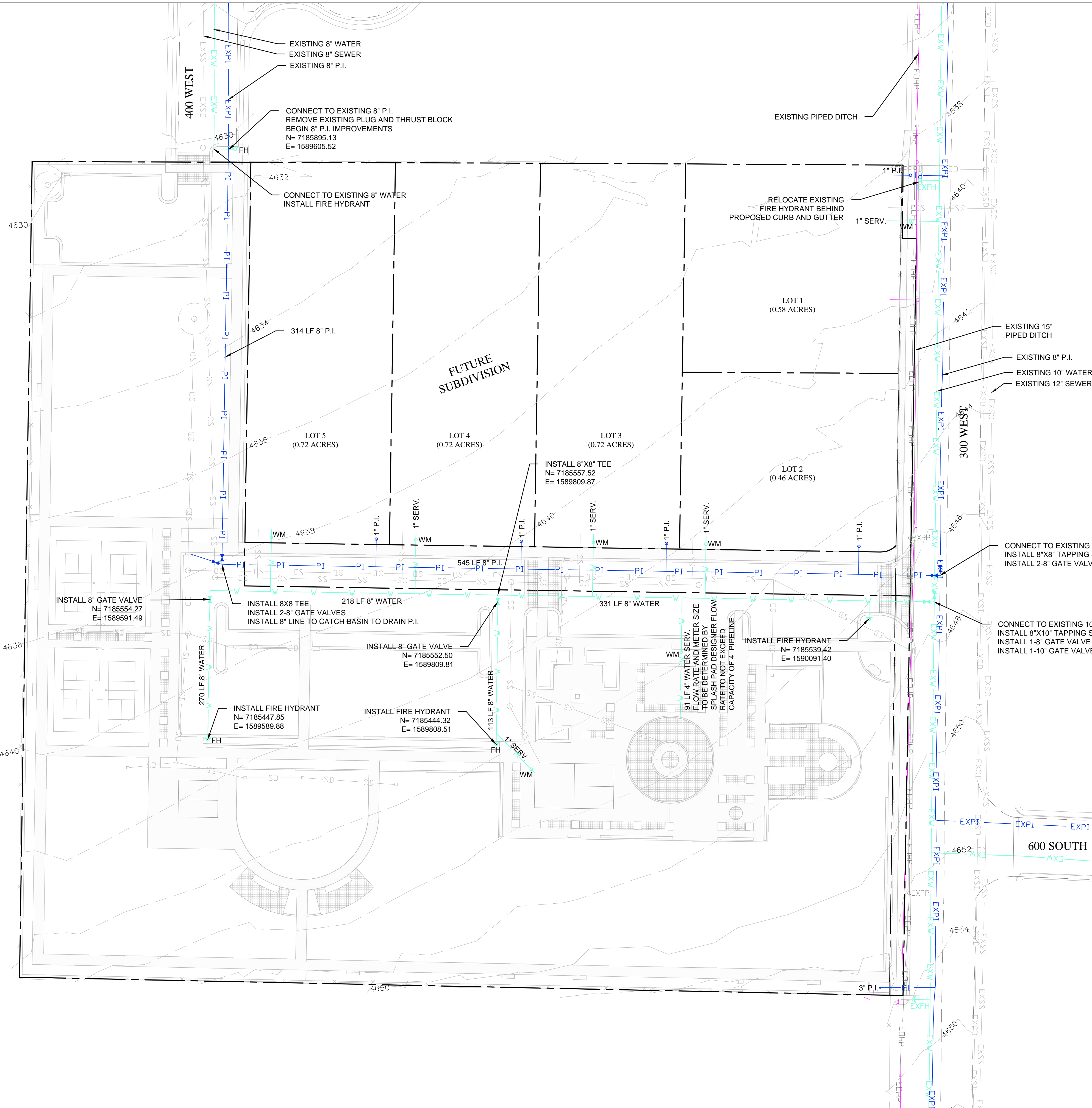


STATE OF UTAH
PAUL D. BERG
PROFESSIONAL ENGINEER
19 July 2019

SALEM CITY
COLE PARK
OVERALL UTILITY PLAN

BERG ENGINEERING
380 E Main St. Suite 204
Midway, UT 84049
ph 435.657.9749

DESIGN BY: CNB
DRAWN BY: CNB
DATE: 19 JULY 2019
REV:
SHEET
C01



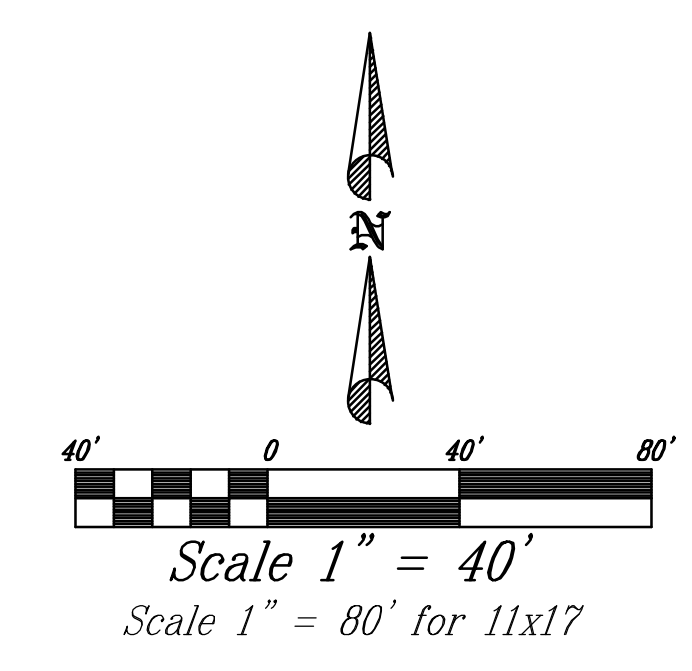
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LEGEND

	EXW	EXISTING CULINARY WATER
	W	PROPOSED CULINARY WATER
	EXPI	EXISTING PRESSURIZED IRRIGATION
	PI	PROPOSED PRESSURIZED IRRIGATION
	EXSS	EXISTING SEWER
	SS	PROPOSED SEWER
	EXSD	EXISTING STORM DRAIN
	SD	PROPOSED STORM DRAIN
		EXISTING 15" PIPED DITCH
	EOHP	EXISTING OVERHEAD POWER LINES
	EXPP	EXISTING POWER POLE
	LP	PROPOSED 13' CITY LIGHT POLE
	FH	FIRE HYDRANT
	EXFH	EXISTING FIRE HYDRANT

POWER NOTES:
EXISTING POWER ALONG 300 WEST TO BE BURIED BEHIND SIDEWALK. CONTRACTOR TO COORDINATE FINAL LOCATION WITH SALEM CITY POWER.

BLUE STAKE NOTE:
LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.

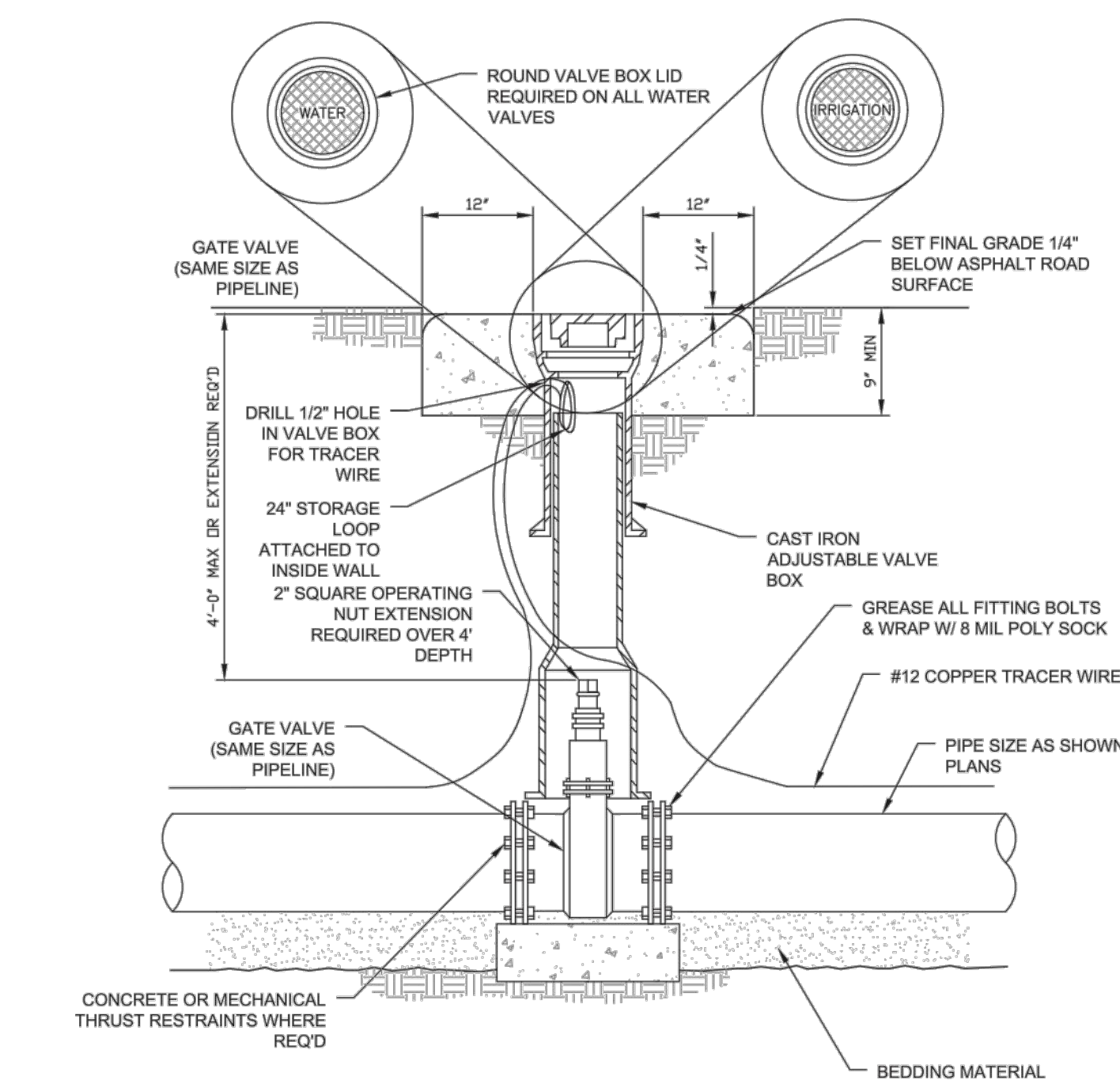


SALEM CITY COLE PARK	
WATER AND PRESSURIZED IRRIGATION PLAN	
380 E Main St. Suite 204 Midway, UT 84049 ph 435.657.9749	
DESIGN BY: CNB DRAWN BY: CNB	DATE: 19 JULY 2019 REV: C02

GATE VALVE - WATER / PRESSURE IRRIGATION

APPROVED MATERIALS / SUPPLIERS:
WATEROUS OR MUELLER PER APWA C509

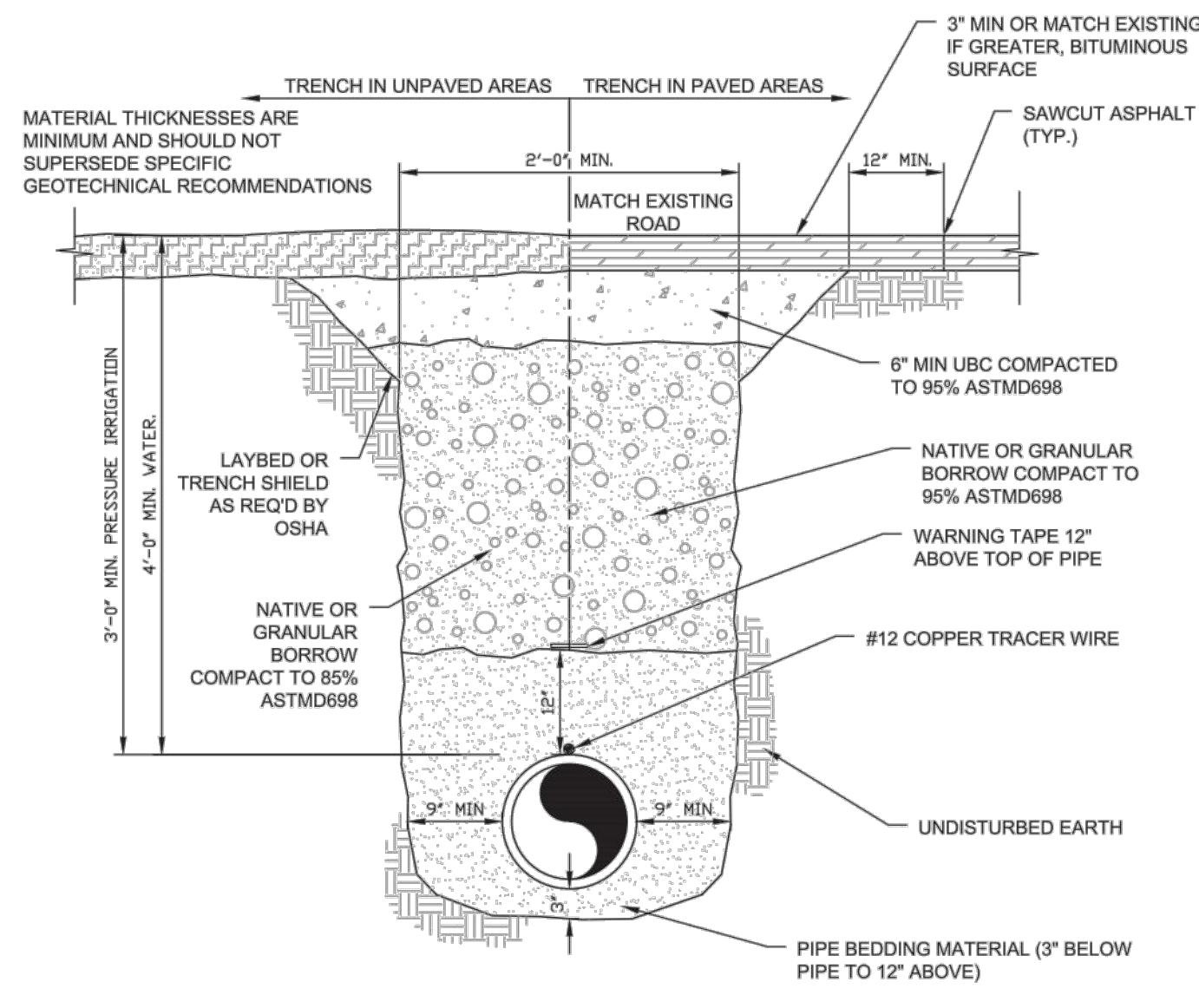
REPLACES APWA PLAN NO. 574



- NOTES:
- ONLY CITY PERSONNEL SHALL OPEN AND CLOSE WATER VALVES, UNLESS APPROVED OTHERWISE IN WRITING BY THE CITY.
 - ALL CONCRETE COLLARS SHOWN WITH VALVE BOXES SHALL BE INSTALLED AFTER ASPHALT HAS BEEN INSTALLED.

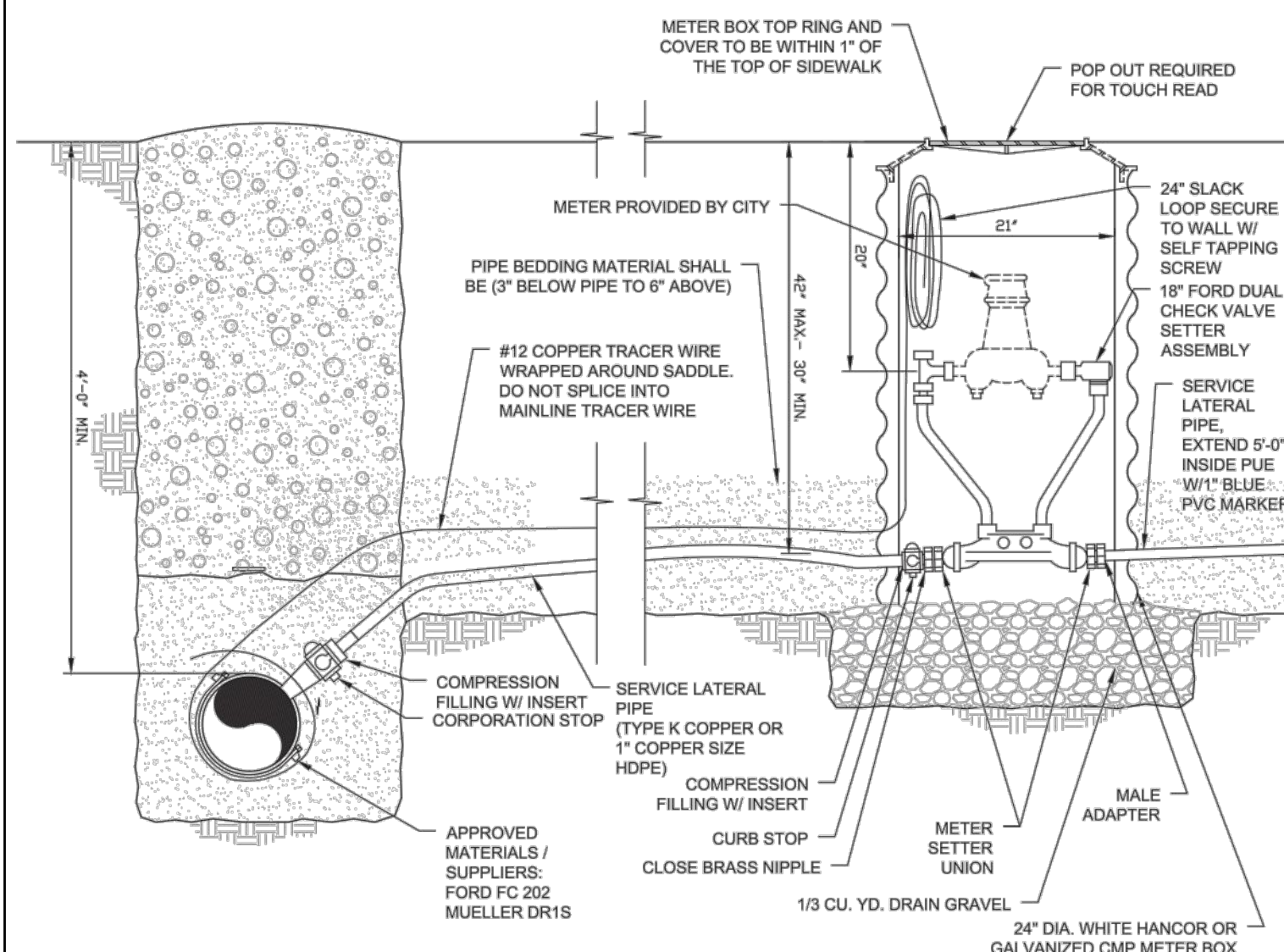
TYPICAL TRENCH - WATER / PRESSURE IRRIGATION

REPLACES APWA PLAN NO. 381 - 382

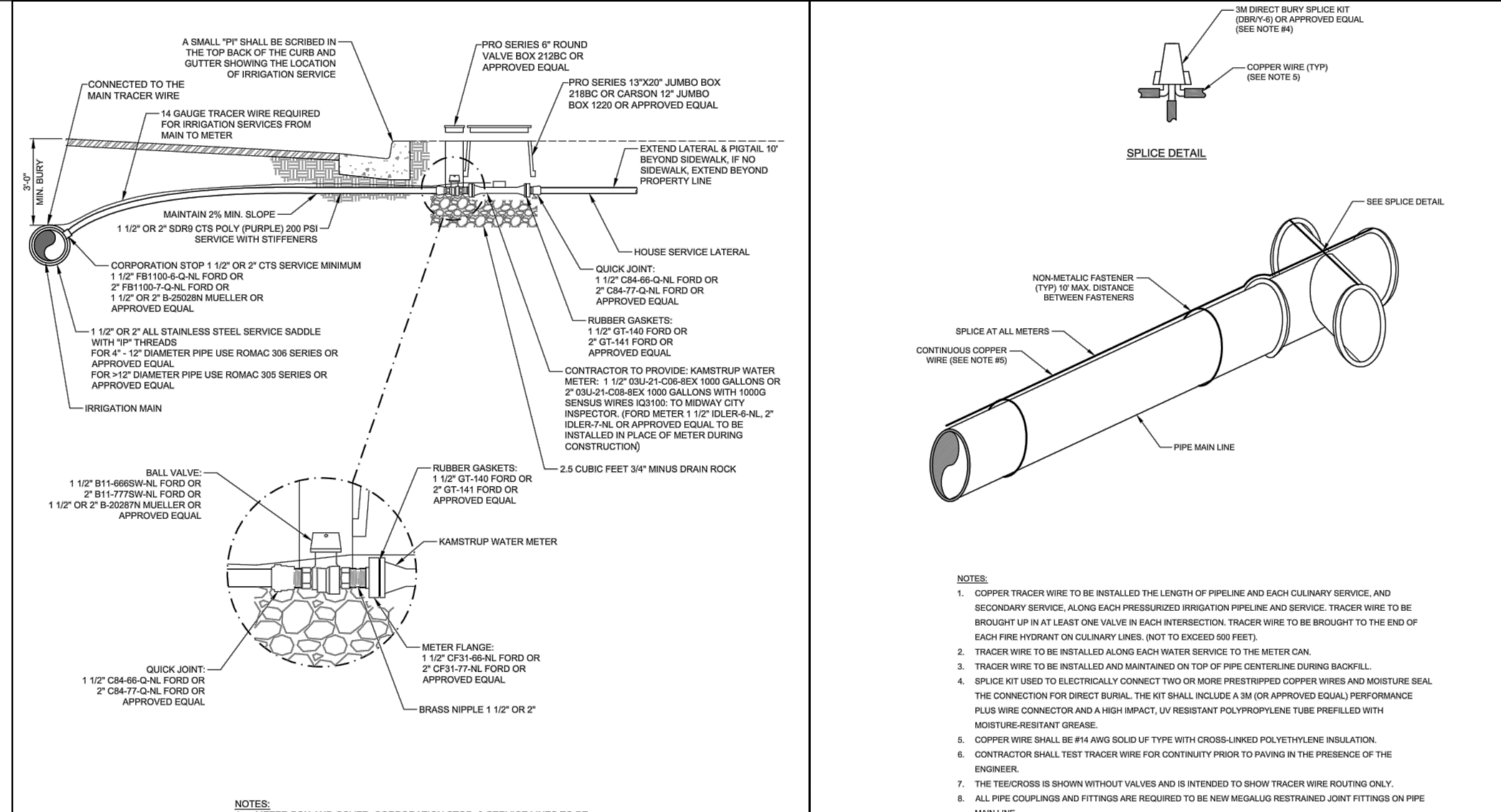


1" WATER SERVICE CONNECTION

REPLACES APWA PLAN NO. 521

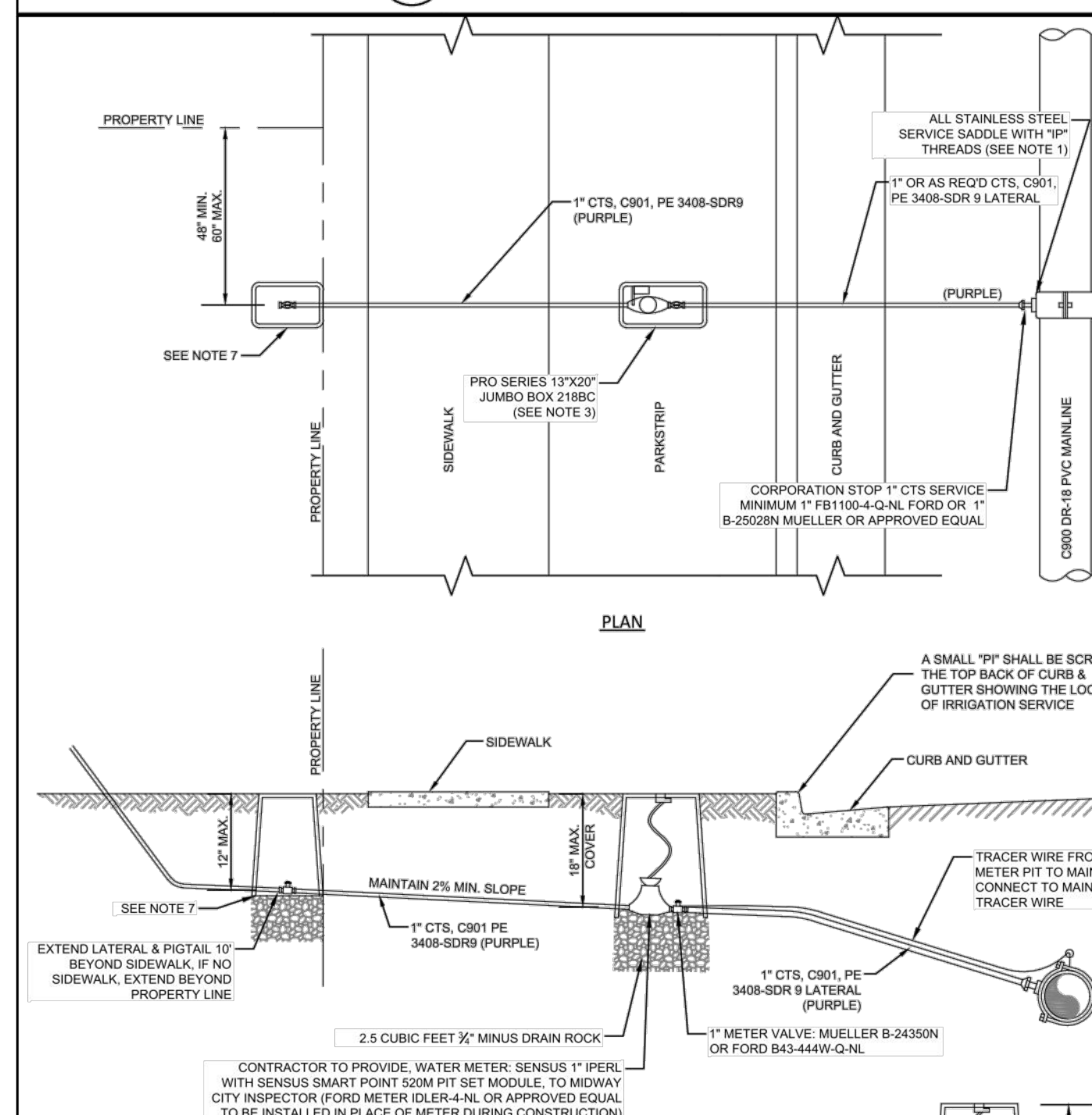


- NOTES:
- NO COUPLINGS SHALL BE ALLOWED BETWEEN THE MAIN AND METER BASE.
 - WATER SERVICE CONNECTIONS LARGER THAN 1" REQUIRE PRIOR SUBMITTALS AND APPROVAL BY THE CITY.
 - WHEN USING H.D.P.E. INSERTS SHALL BE INSTALLED WHERE FITTINGS ARE PLACED.



- NOTES:
- METER BOX AND COVER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY DEVELOPER.
 - STAINLESS STEEL STIFFENERS ON ALL POLY CONNECTIONS.
 - BALL VALVE SHOULD BE ACCESSIBLE FROM INSIDE OF VALVE BOX.
 - IRRIGATION METER WILL NOT BE INSTALLED IF VALVE BOX AND METER BOX IS INSTALLED INCORRECTLY OR IN A DRIVEWAY.
 - METER TO BE INSTALLED OFF OF THE GROUND.

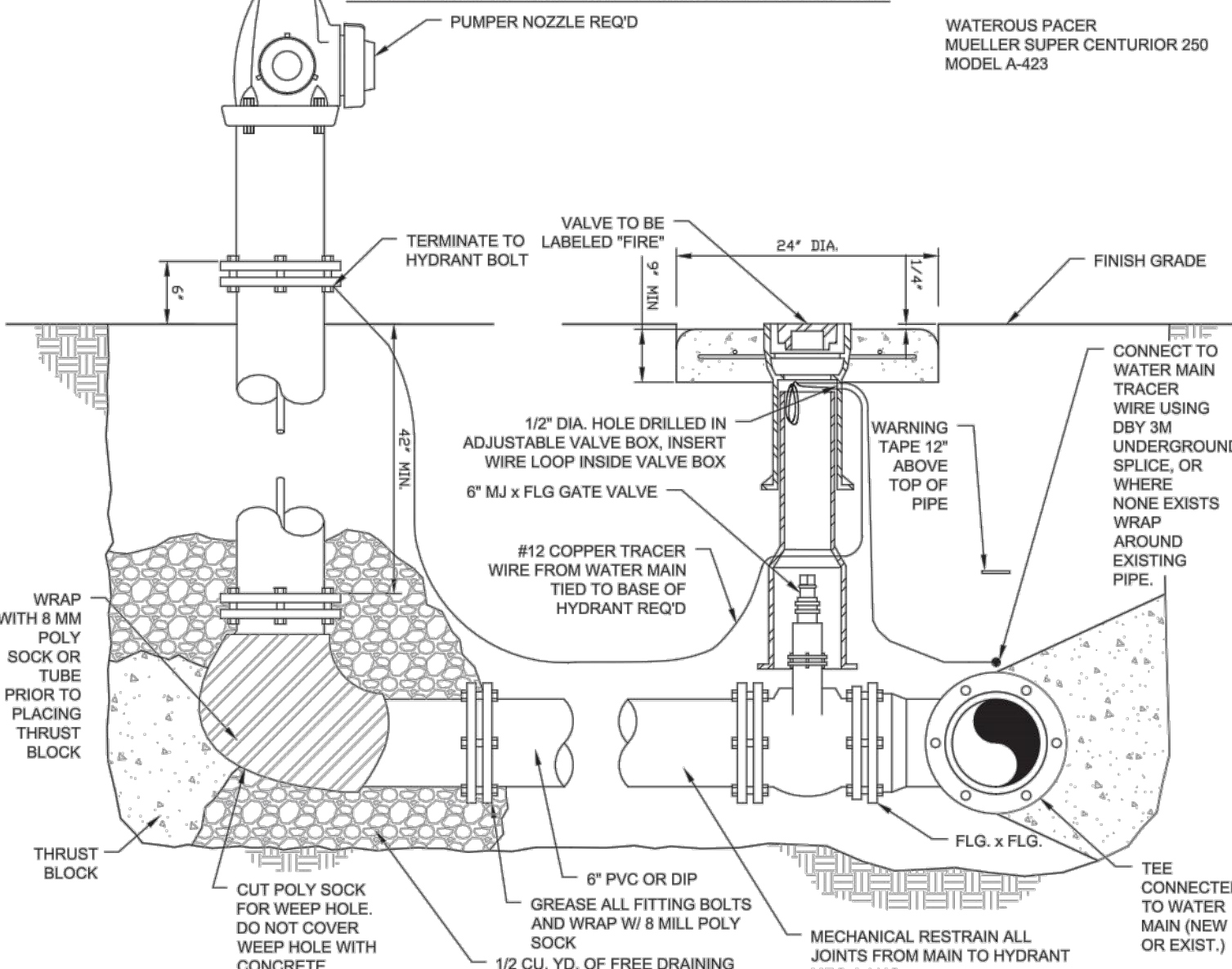
1 1/2" AND 2" IRRIGATION SERVICE CONNECTION



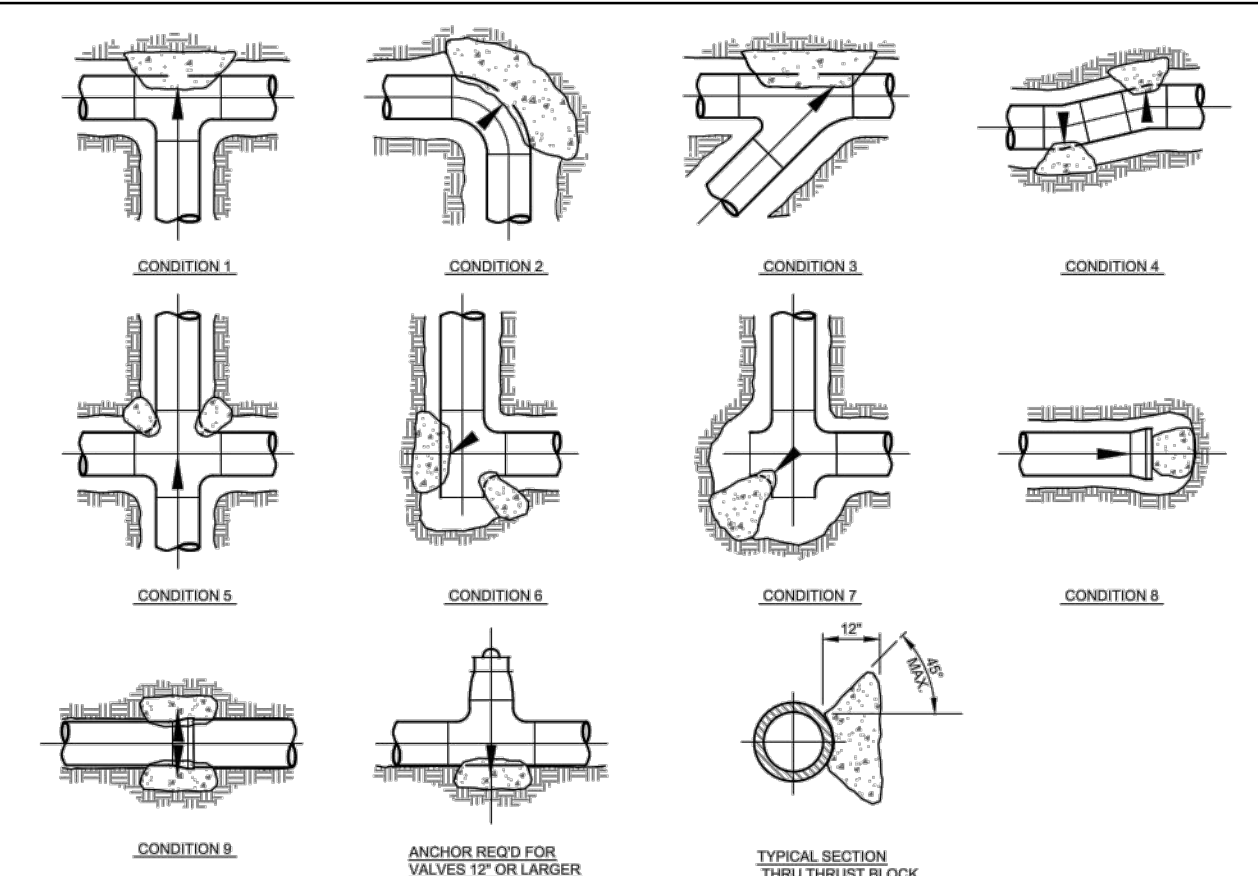
- NOTES:
- CONSULT MC ENGINEER FOR MAINLINE PIPE SIZES GREATER THAN 12" OR FOR MAINLINE PIPE MATERIAL OTHER THAN C900 PVC. HOT TAPPING NOT ALLOWED. ALL STAINLESS STEEL SERVICE SADDLE WITH 1/2" THREADS FOR 4" - 12" DIAMETER PIPE USE ROMAC 306 SERIES OR APPROVED EQUAL. FOR 12" DIAMETER PIPE USE ROMAC 306 SERIES OR APPROVED EQUAL.
 - METER & ENCLOSURE SHALL BE LOCATED BEHIND CURB WITHIN STREET R.O.W. OR PUBLIC UTILITY EASEMENT IF NO CURB OR GUTTER EXISTS.
 - INSURE VALVE CONTROL NUT CAN BE SERVICED BY WRENCH WHEN POSITIONING UNDER ENCLOSURE LID.
 - ALL COMPRESSION-TYPE CONNECTIONS REQUIRE STAINLESS STEEL INSERT STIFFENERS.
 - THE TUBING SHOULD BE INSERTED INTO THE FITTING SO THAT THE END OF THE TUBING IS WELL PAST THE RUBBER GASKET AND AT LEAST 1/2" FROM THE BOTTOM OF THE SOCKET.
 - ALL WORK SHALL BE INSPECTED & APPROVED BY MC INSPECTOR PRIOR TO BACKFILL. ALL INSPECTIONS SHALL BE COORDINATED 24 HOURS IN ADVANCE.
 - CONTROL VALVE AND BOX ARE RECOMMENDED AND ARE PRIORITY OWNER'S RESPONSIBILITY.
 - TRACER WIRE REQUIRED ON MAINLINE AND SERVICE LATERALS.

FIRE HYDRANT W/ THRUST BLOCKS

APPROVED MATERIALS / SUPPLIERS:
WATEROUS PACER MUELLER SUPER CENTURIOR 250 MODEL A-423

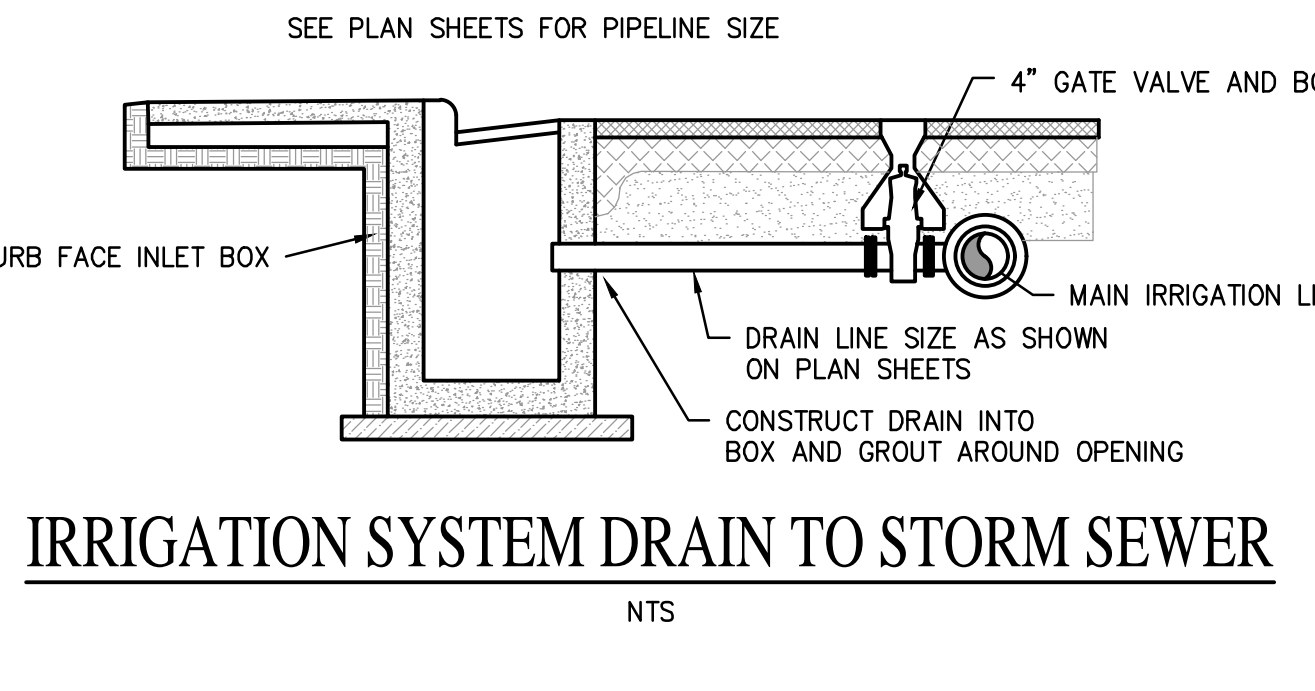


- NOTES:
- HYDRANT SHALL BE NEW AND PAINTED RED. ALL BOLTS SHALL BE FREE FROM CONCRETE AND SHALL BE FULLY ACCESSIBLE.
 - MAINTAIN A 3' CLEAR ZONE AROUND HYDRANT.
 - HYDRANT EXTENSIONS SHALL BE INSTALLED AS REQUIRED TO PROVIDE THE HYDRANT HEIGHT AS SHOWN.
 - HYDRANTS LOCATED IN CUL-DE-SACS SHALL HAVE CONCRETE THRUST BLOCKS AS REQ'D BY CITY ENGINEER.



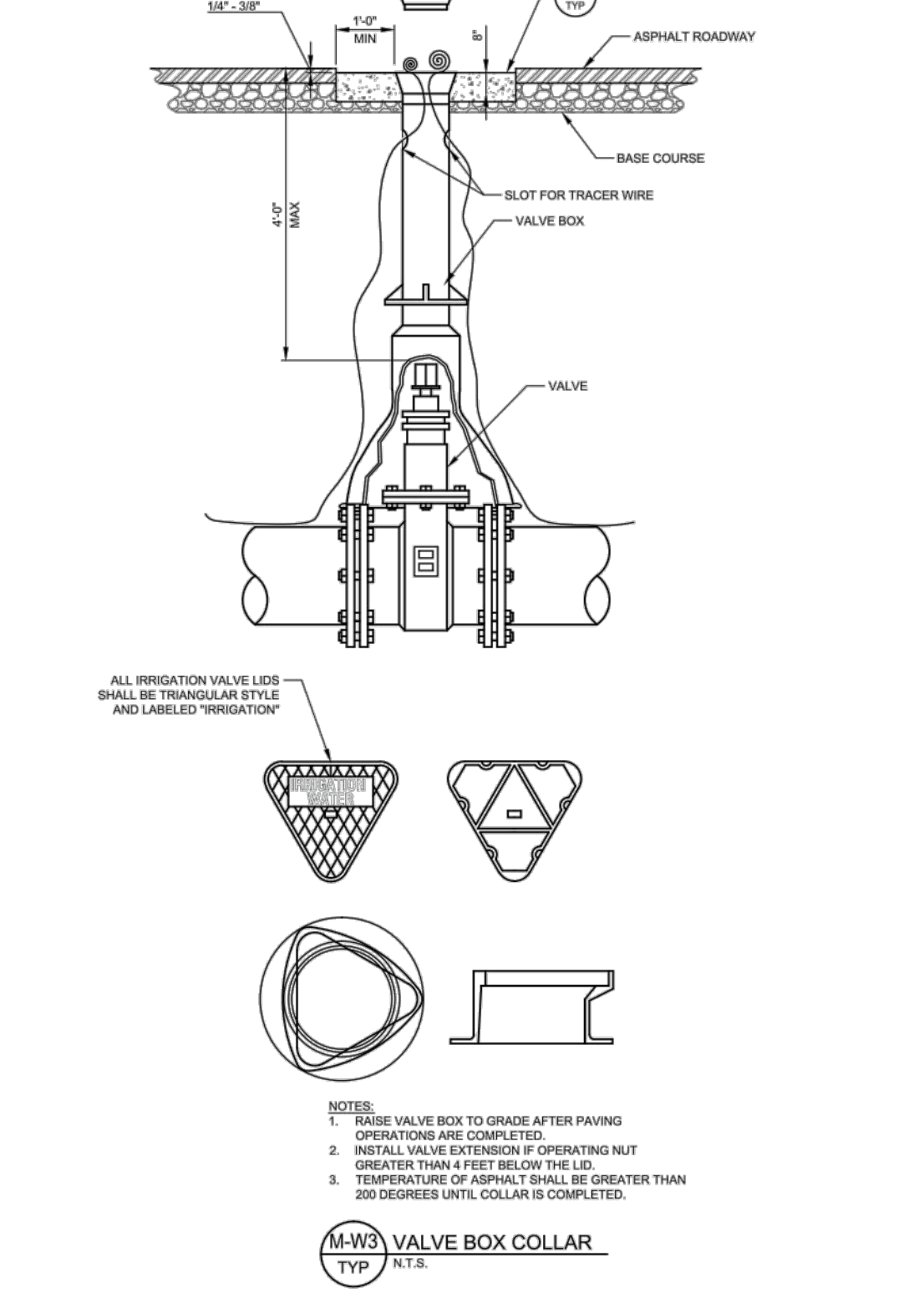
PIPE SIZE	CONDITION								
	1	2	3	4	5	6	7	8	9
4	2.5	3.3	2.6	1.3	1.3	2.0	3.3	2.6	1.3
6	4.6	6.5	3.9	2.0	2.8	3.3	6.5	4.6	2.0
8	7.6	11.0	5.9	3.3	3.9	5.9	11.0	7.6	3.3
10	12.4	17.8	8.8	5.2	6.5	8.8	17.8	12.4	5.2
12	17.8	24.8	13.8	7.8	8.1	12.3	24.8	17.8	7.8
14	24.0	33.8	18.2	9.7	10.3	16.9	33.8	24.0	9.7
16	31.1	44.0	23.8	12.7	13.6	21.2	44.0	31.1	12.7
20	45.6	66.8	37.2	18.8	21.2	36.3	66.8	45.6	18.8
24	69.8	95.1	48.3	24.9					24.9

M-W-12 TYPICAL PIPE THRUST BLOCKING TYP. N.T.S.



IRRIGATION SYSTEM DRAIN TO STORM SEWER

NTS



M-W-3 VALVE BOX COLLAR TYP. N.T.S.

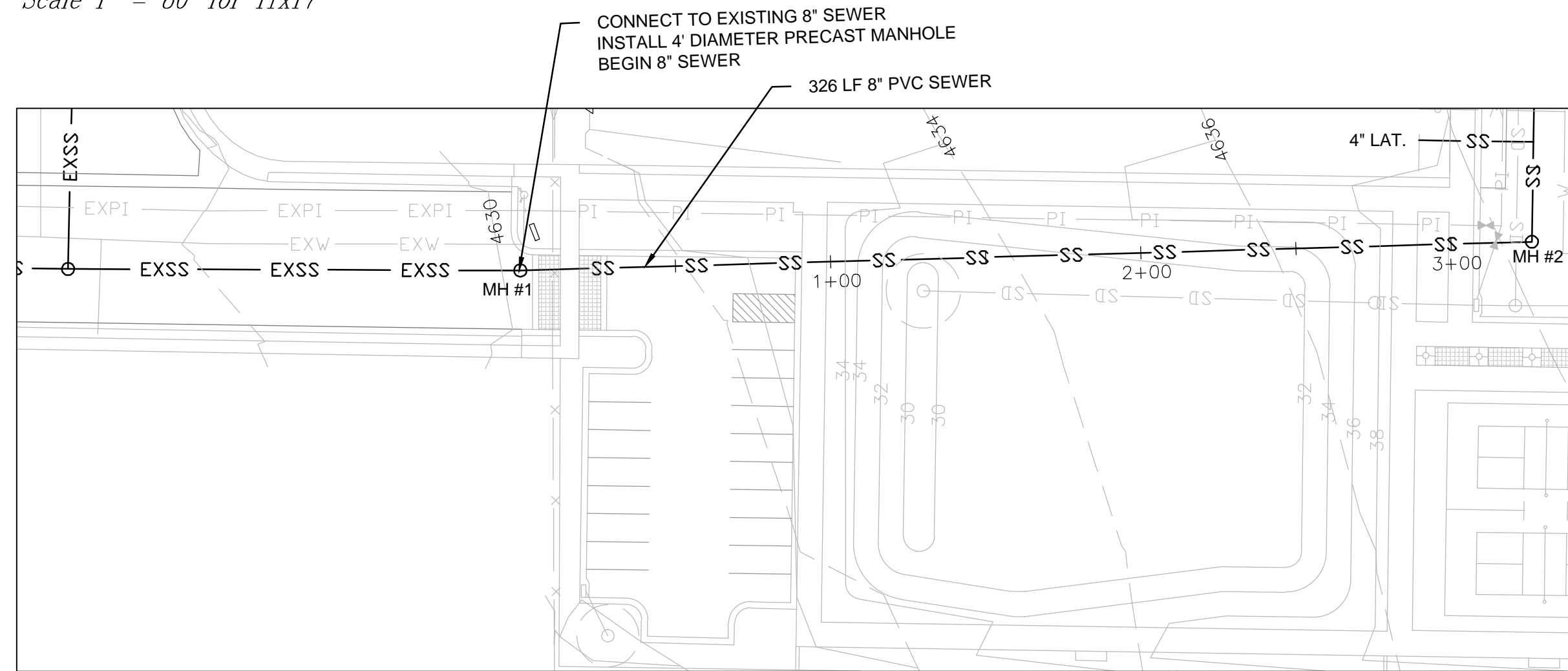
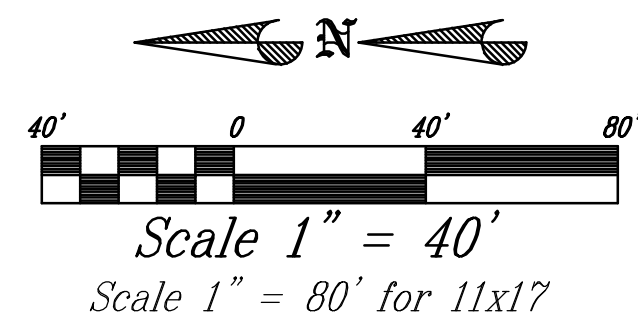
SALEM CITY
COLE PARK
WATER CONSTRUCTION
DETAILS

BERG ENGINEERING
380 E Main St. Suite 204
Midway, UT 84049
ph 435.657.9749

DESIGN BY: CNB
DRAWN BY: CNB

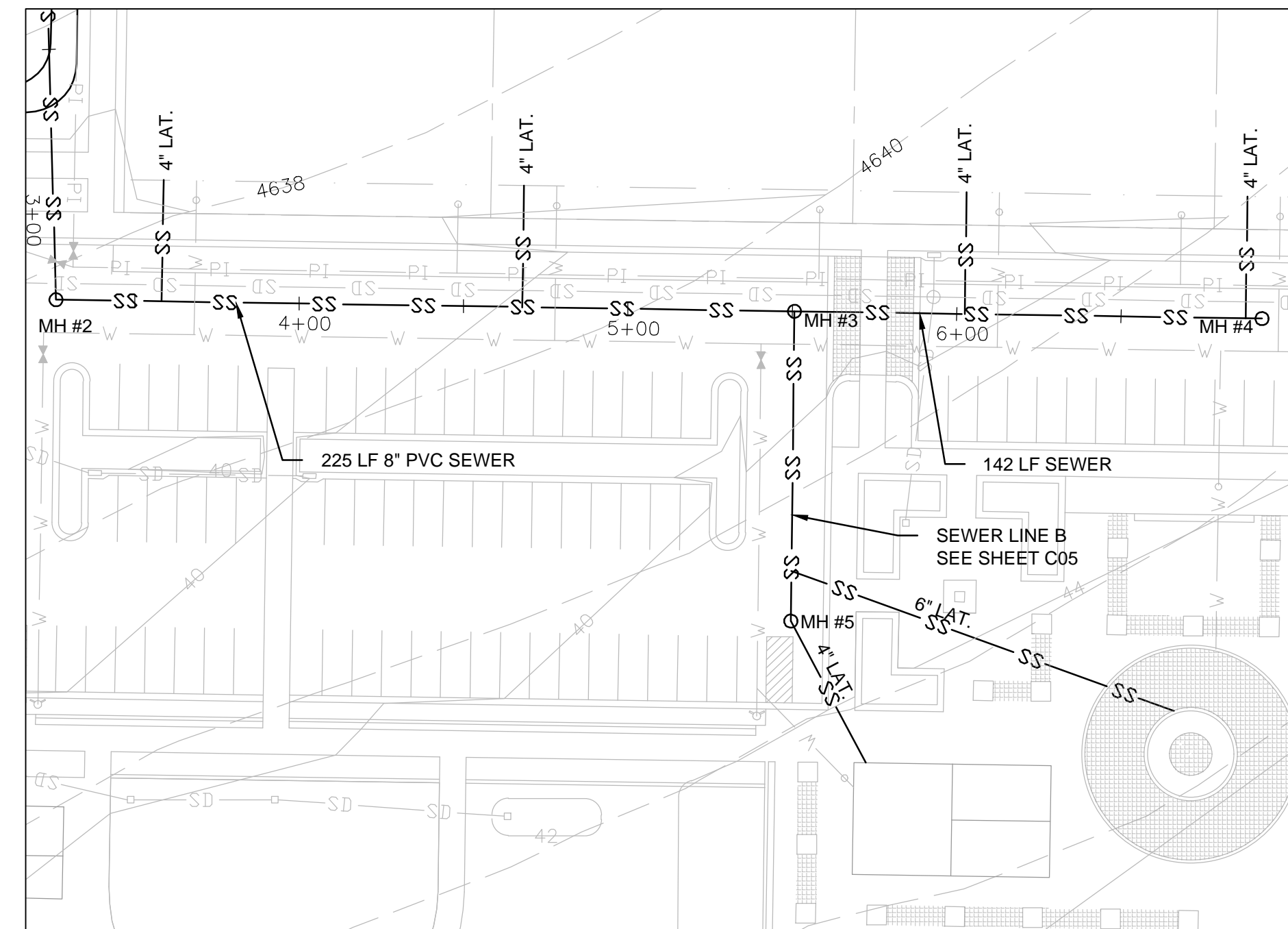
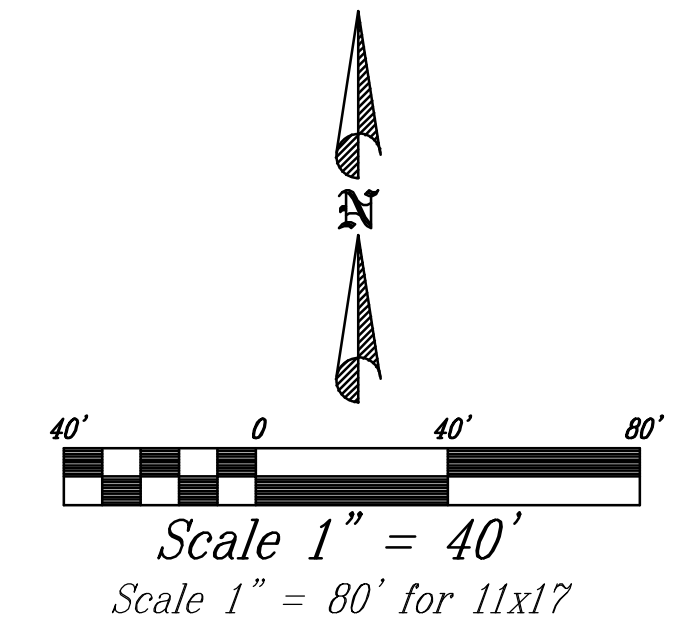
DATE: 19 JULY 2019
REV: C03

STATE OF UTAH
PAUL D. BERG
PROFESSIONAL ENGINEER
19 JULY 2019



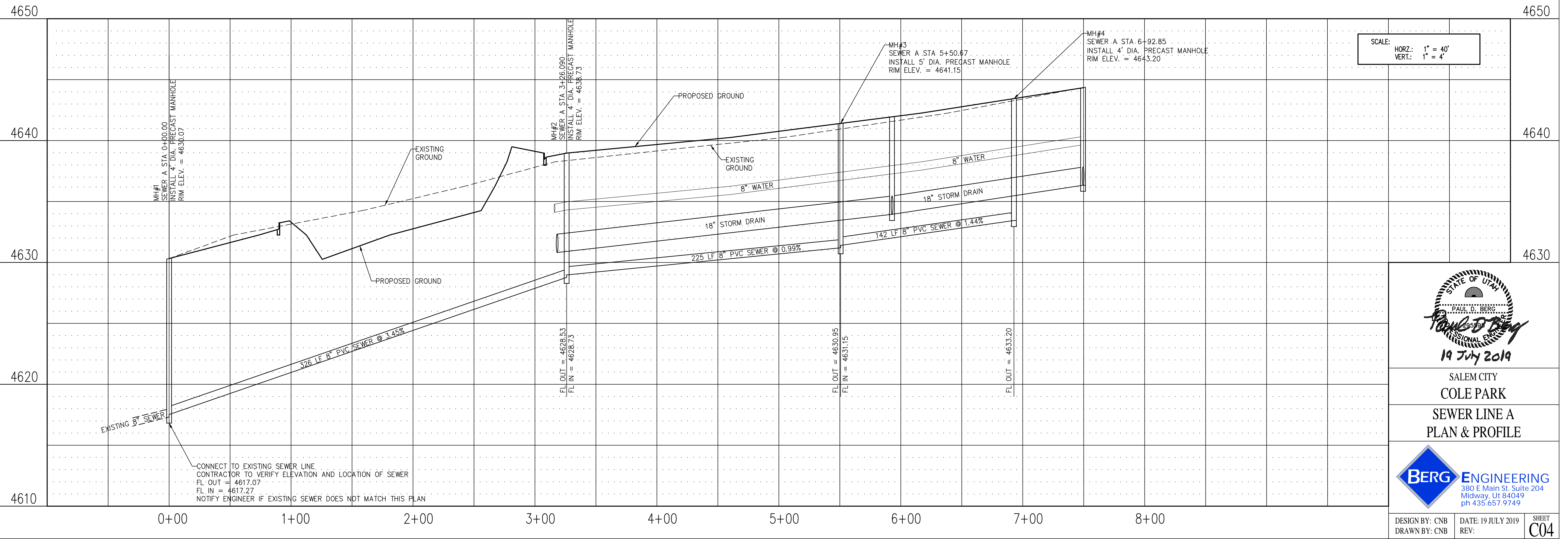
DESIGN SURVEY NOTE:
 SURVEY PROVIDED TO BERG ENGINEERING BY SALEM CITY. SURVEYOR FOR CONSTRUCTION STAKING SHALL CONTACT SALEM CITY FOR BENCHMARK AND COORDINATE FILED MONUMENTS. BERG ENGINEERING IS NOT RESPONSIBLE FOR COMPLETENESS OF SURVEY. CONTRACTOR SHALL NOTIFY BERG ENGINEERING IF DISCREPANCIES ARE FOUND.

SEWER NOTE:
 ALL SEWER CONSTRUCTION SHALL MEET SALEM CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.



- LEGEND**
- EXW — EXISTING CULINARY WATER
 - W — PROPOSED CULINARY WATER
 - EXPI — EXISTING PRESSURIZED IRRIGATION
 - PI — PROPOSED PRESSURIZED IRRIGATION
 - EXSS — EXISTING SEWER
 - SS — PROPOSED SEWER
 - SD — PROPOSED STORM DRAIN
 - — EXISTING PIPED DITCH
 - EOHP — EXISTING OVERHEAD POWER LINES
 - EXPP — EXISTING POWER POLE
 - LP — PROPOSED 15' CITY LIGHT POLE

BLUE STAKE NOTE:
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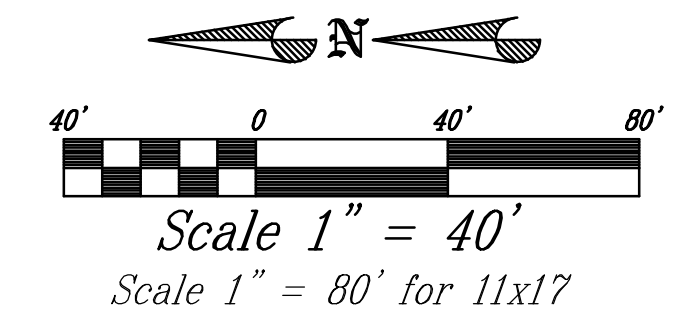


SCALE:
 HORIZ.: 1" = 40'
 VERT.: 1" = 4'

19 July 2019
 SALEM CITY
 COLE PARK
 SEWER LINE A
 PLAN & PROFILE

 380 E Main St. Suite 204
 Midway, UT 84049
 ph 435.657.9749

DESIGN BY: CNB
 DRAWN BY: CNB
 DATE: 19 JULY 2019
 REV:
 SHEET
C04

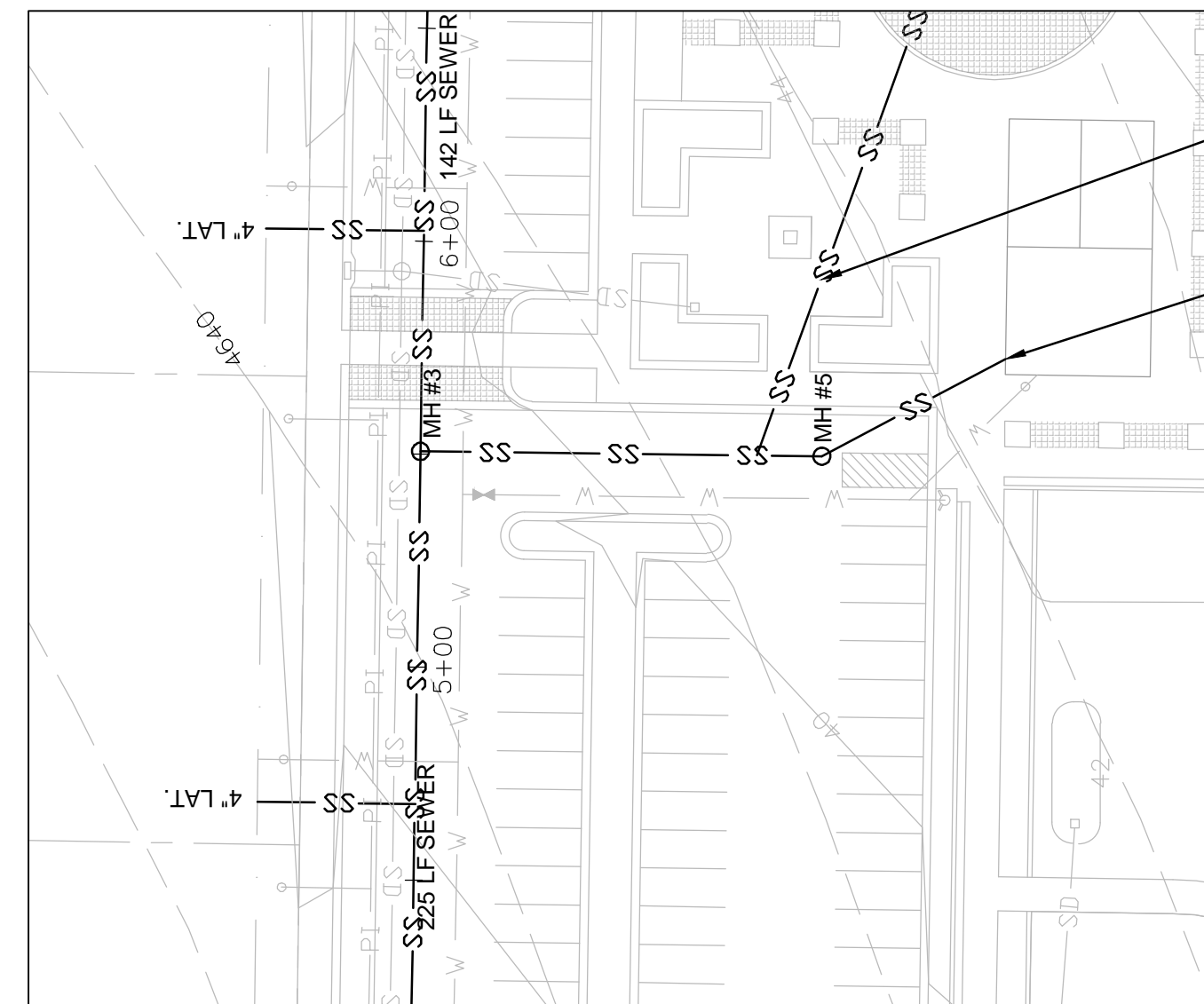


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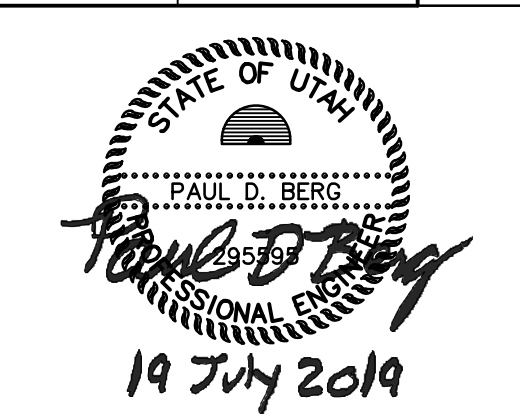
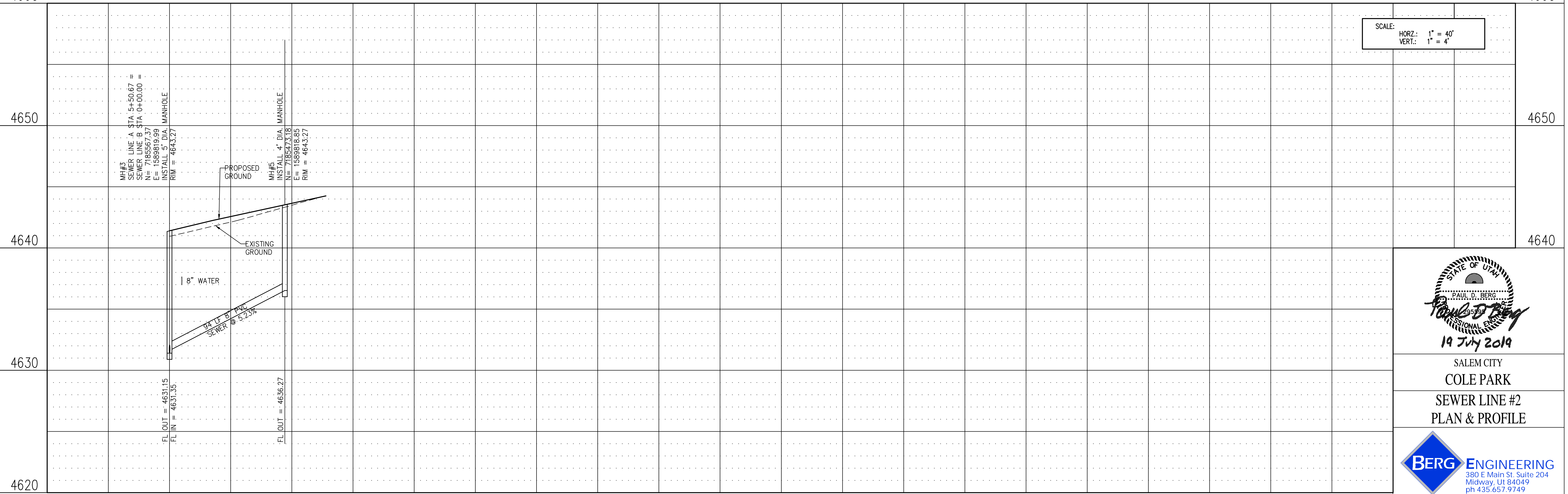
INSTALL 124 LF 6" PVC SEWER LATERAL @ 2.00%

INSTALL 49 LF 4" PVC SEWER LATERAL @ 2.00%

4660

4660

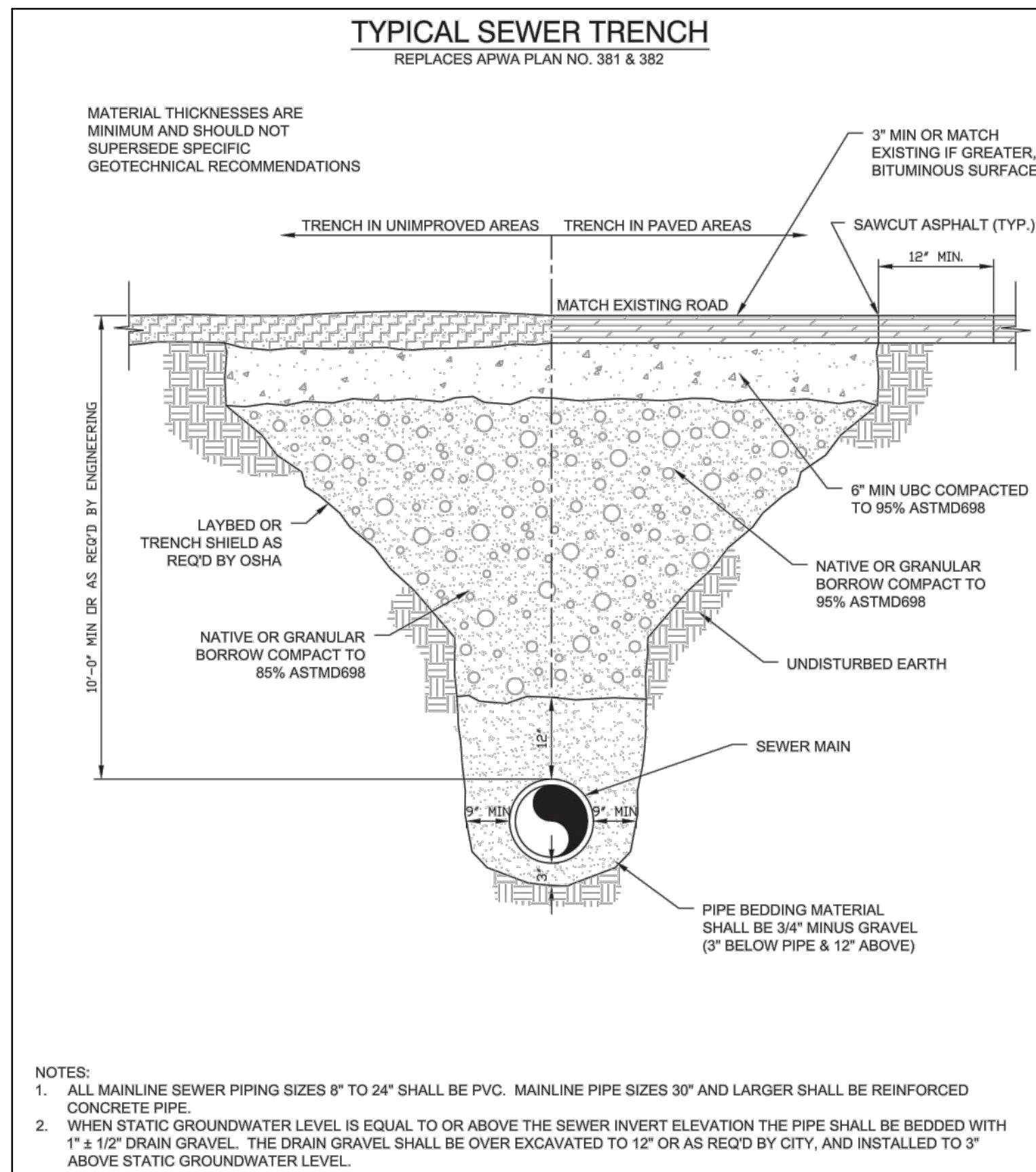
SCALE:
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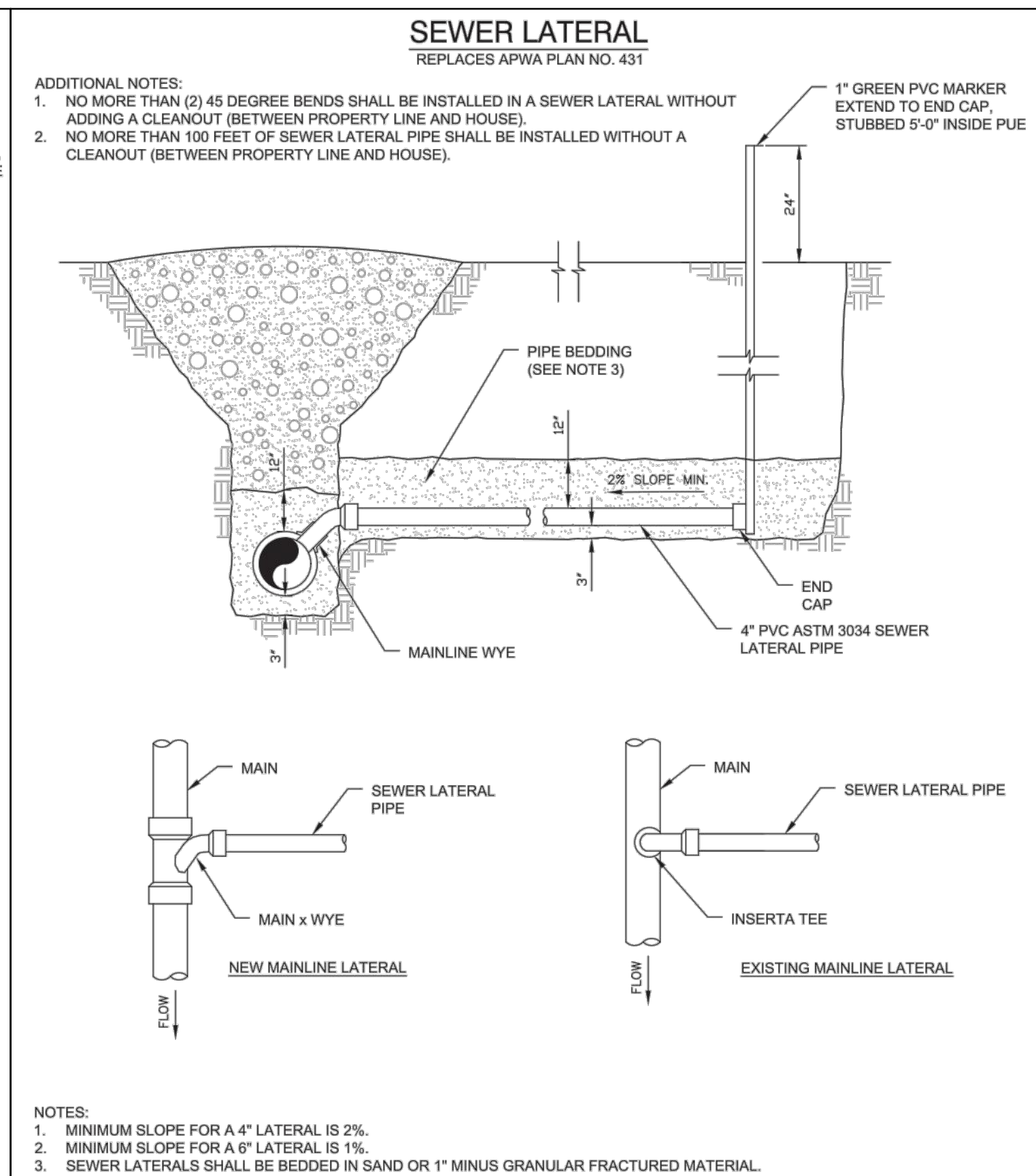
SALEM CITY
 COLE PARK
 SEWER LINE #2
 PLAN & PROFILE



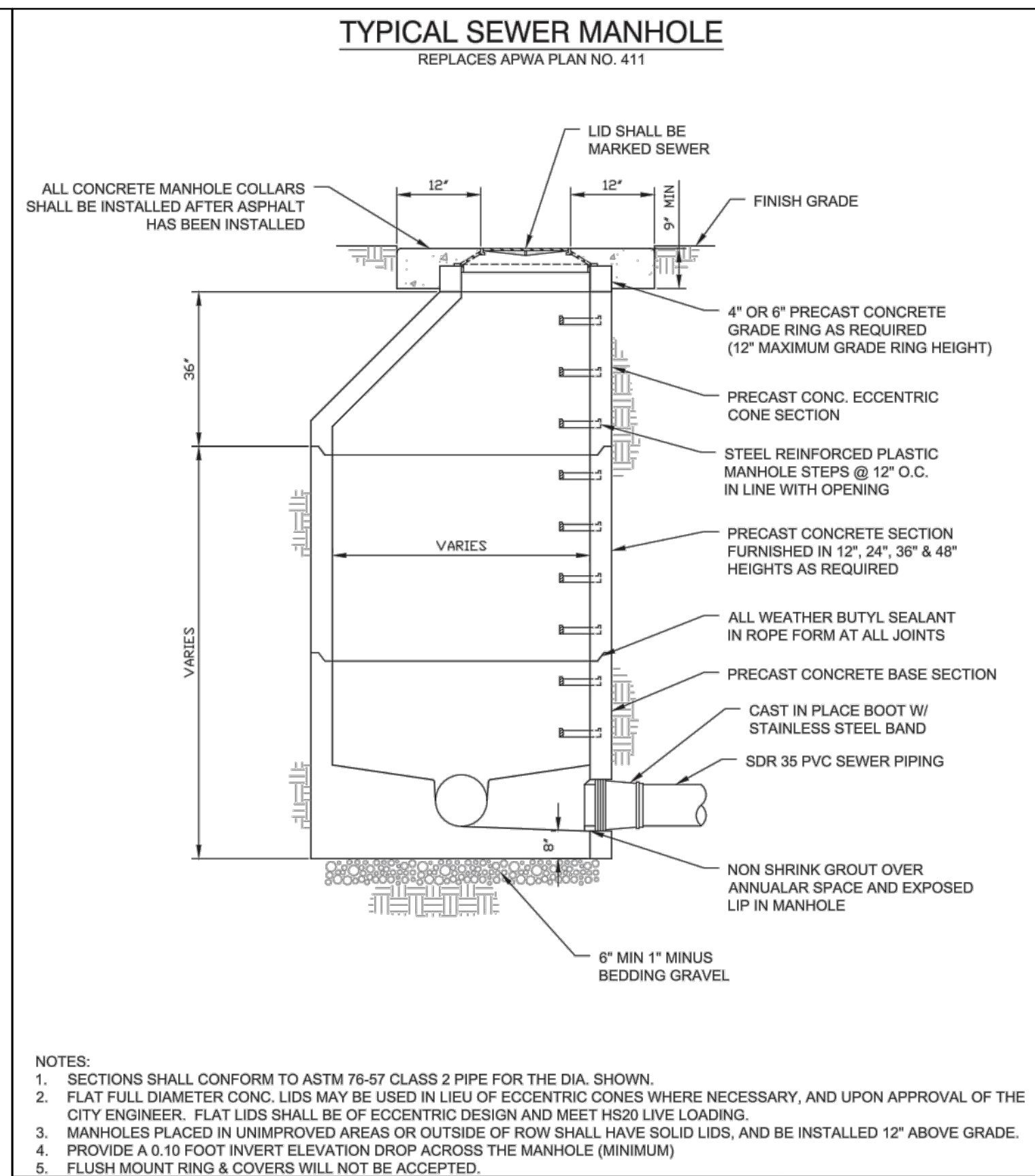
DESIGN BY: CNB
 DRAWN BY: CNB
 DATE: 19 JULY 2019
 REV:
 SHEET
 C05



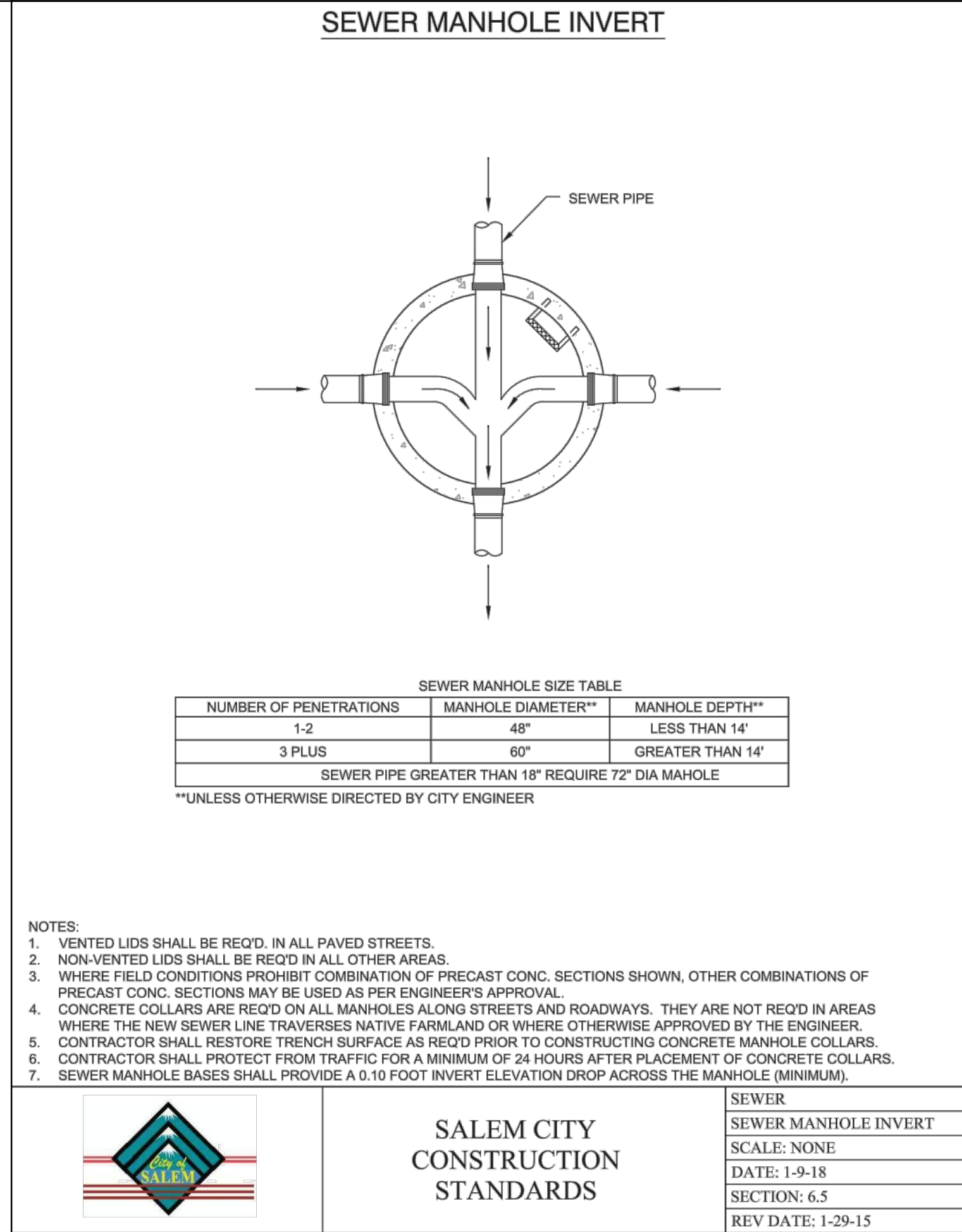
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		TYP TRENCH
		SCALE: NONE
		DATE: 1-9-18
		REV DATE: 1-29-15



	SALEM CITY CONSTRUCTION STANDARDS	SEWER
		SEWER LATERAL
		SCALE: NONE
		DATE: 1-9-18
		REV DATE: 1-9-18



	SALEM CITY CONSTRUCTION STANDARDS	SEWER
		SEWER MANHOLE
		SCALE: NONE
		DATE: 1-9-18
		REV DATE: 1-9-18

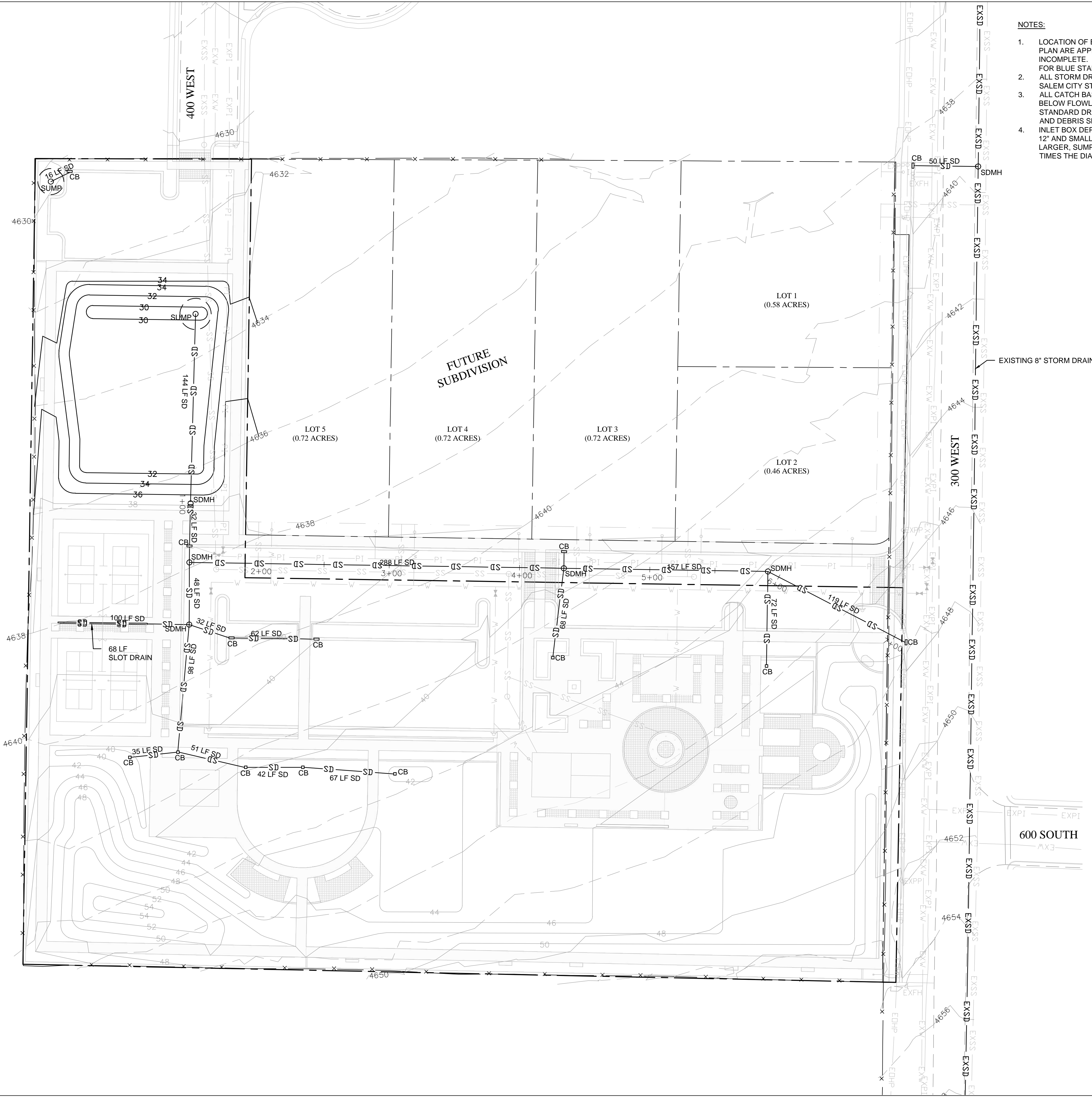


STATE OF UTAH
PAUL D. BERG
PROFESSIONAL ENGINEER
19 July 2019

SALEM CITY
COLE PARK
SEWER CONSTRUCTION
DETAILS

BERG ENGINEERING
380 E Main St. Suite 204
Midway, UT 84049
ph 435.657.9749

DESIGN BY: CNB	DATE: 19 JULY 2019	SHEET
DRAWN BY: CNB	REV:	C06



NOTES:

1. LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.
2. ALL STORM DRAIN CONSTRUCTION SHALL MEET SALEM CITY STANDARDS AND SPECIFICATIONS. ALL CATCH BASIN BOTTOM OF BOXES SHALL BE 1' BELOW FLOWLINE ELEVATION PER SALEM CITY STANDARD DRAWING SECTION 2.1 UNLESS AN OIL AND DEBRIS SEPARATOR IS INSTALLED.
3. INLET BOX DEPTH SHALL BE 36" FOR OUTLET DIA. 12" AND SMALLER. FOR OUTLET DIA. 15" AND LARGER, SUMP DEPTH SHALL EQUAL 2.5 TO 3.0 TIMES THE DIA. OF THE OUTLET PIPE.
- 4.

Table 1 - Runoff Coefficient

Drainage Basin	Total Area (acres)	C=0.90 Roads & Parking (acres)	C=0.85 Park Hardscape (acres)	C=0.15 Landscaping (acres)	Composite Runoff Coefficient
Park	6.55	1.58	2.17	2.80	0.56

Table 2 - 100 Year Storm Peak Runoff and Volume

Time Period (min)	Rainfall Intensity (in / hr)	Area (acres)	Developed Runoff Coefficient	Peak Runoff Rate (cfs)	Total Runoff Volume (cf)
15	4.00	6.55	0.56	14.75	13,271
30	2.69	6.55	0.56	9.92	17,850
60	1.67	6.55	0.56	6.16	22,163
120	0.92	6.55	0.56	3.39	24,419
180	0.63	6.55	0.56	2.32	25,083
360	0.34	6.55	0.56	1.25	27,074
720	0.20	6.55	0.56	0.74	31,851
1440	0.11	6.55	0.56	0.41	35,036

Table 3 - Retention Pond Design

Time Period (min)	Total Runoff Volume (cf)	Soil Percolation Rate (inch / hour)	3' Sump Volume (cf)	Percolation from Sumps (cf)	Storage Needed in Ponds (cf)
15	13,271	4.0	273	24	12,974
30	17,850	4.0	273	49	17,528
60	22,163	4.0	273	97	21,793
120	24,419	4.0	273	194	23,952
180	25,083	4.0	273	292	24,518
360	27,074	4.0	273	583	26,217
720	31,851	4.0	273	1,166	30,412
1440	35,036	4.0	273	2,333	32,431

Table 4 - Retention Pond Storage Volume

Elevation (ft)	Pond Depth (ft)	Pond Area (sq)	Pond Volume (cf)	Pond Volume (acre-ft)
4630	0.00	928	0	0.00
4631	1.00	12,291	6,600	0.15
4632	2.00	14,102	19,796	0.45
4633	3.00	16,013	34,854	0.80
4634	4.00	18,026	51,873	1.19

contains the 100 year storm +1' freeboard

Rainfall intensity for Payson NOAA Station 42-6724 used
Infiltration rate of 4.0 inches per hour per geotech report.

BLUE STAKE NOTE:
LOCATION OF EXISTING UTILITIES SHOWN ON PLAN ARE APPROXIMATE AND MAY BE INCOMPLETE. CONTRACTOR IS RESPONSIBLE FOR BLUE STAKING OF UTILITIES.

DESIGN SURVEY NOTE:
SURVEY PROVIDED TO BERG ENGINEERING BY SALEM CITY. SURVEYOR FOR CONSTRUCTION STAKING SHALL CONTACT SALEM CITY FOR BENCHMARK AND COORDINATE FILED MONUMENTS. BERG ENGINEERING IS NOT RESPONSIBLE FOR COMPLETENESS OF SURVEY. CONTRACTOR SHALL NOTIFY BERG ENGINEERING IF DISCREPANCIES ARE FOUND.

STORM DRAIN NOTE:
ALL STORM DRAIN CONSTRUCTION SHALL MEET SALEM CITY CONSTRUCTION STANDARDS AND SPECIFICATIONS.

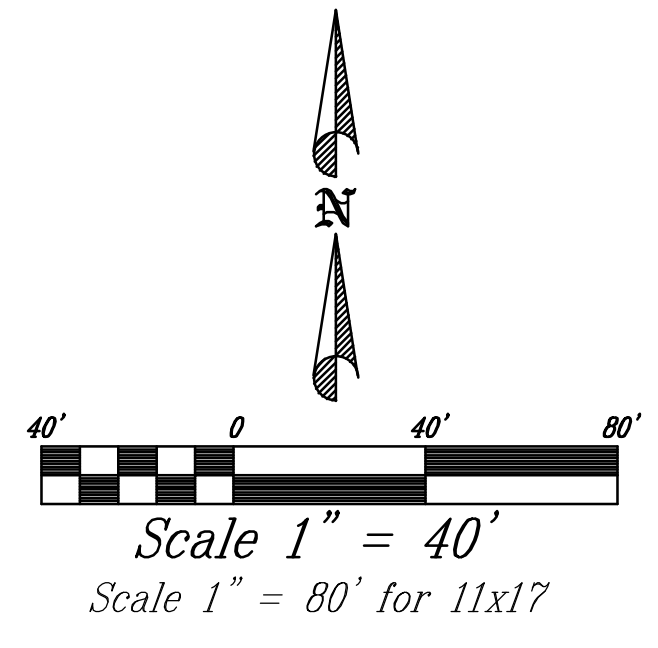
- LEGEND**
- EXW - EXISTING CULINARY WATER
 - WP - PROPOSED CULINARY WATER
 - EXP1 - EXISTING PRESSURIZED IRRIGATION
 - PI - PROPOSED PRESSURIZED IRRIGATION
 - EXSS - EXISTING SEWER
 - SS - PROPOSED SEWER
 - EXSD - EXISTING STORM DRAIN
 - SD - PROPOSED STORM DRAIN
 - SDMH - STORM DRAIN MANHOLE
 - CB - CATCH BASIN

SALEM CITY
COLE PARK

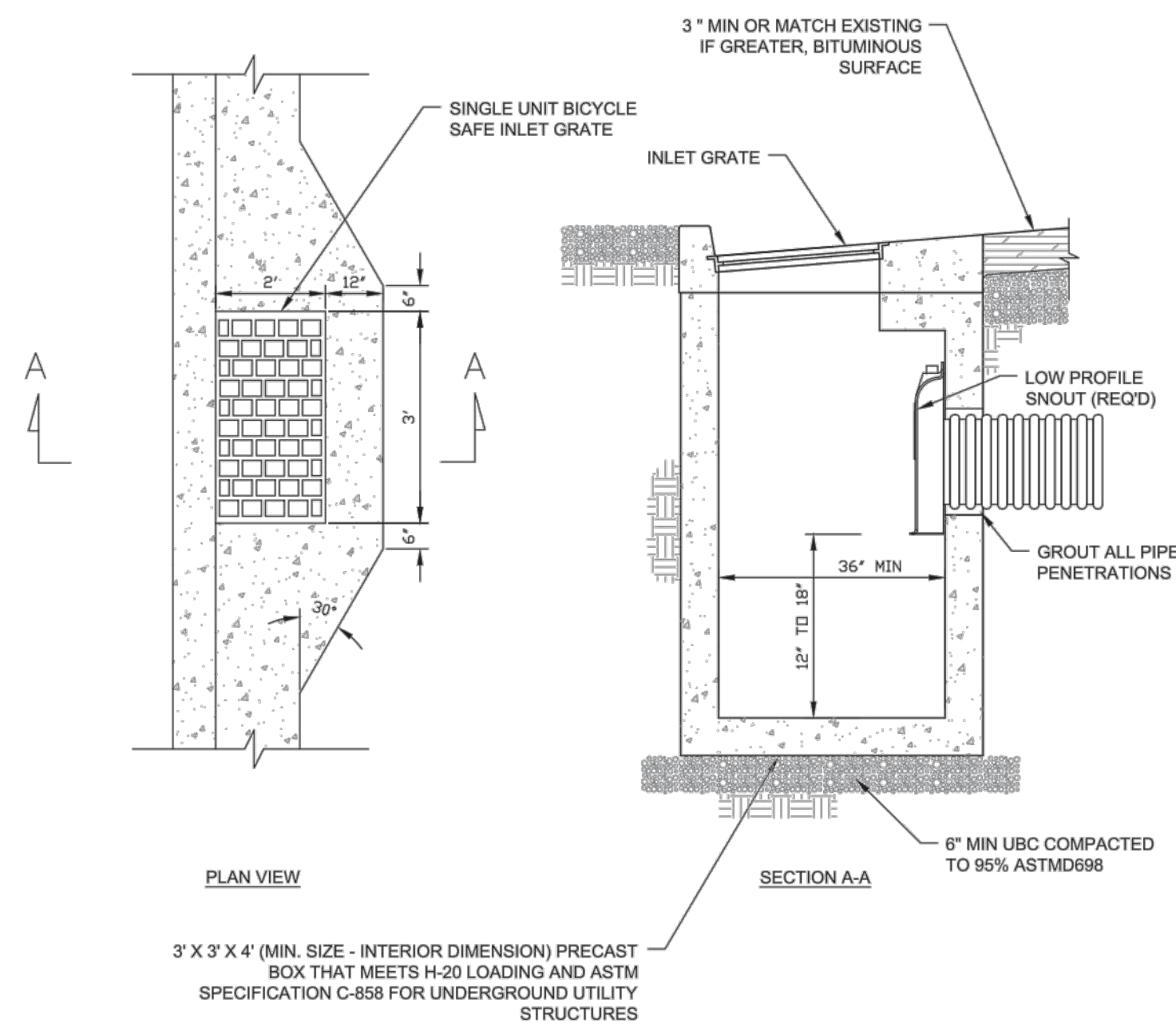
STORM DRAIN PLAN

380 E Main St. Suite 204
Midway, UT 84049
ph 435.657.9749

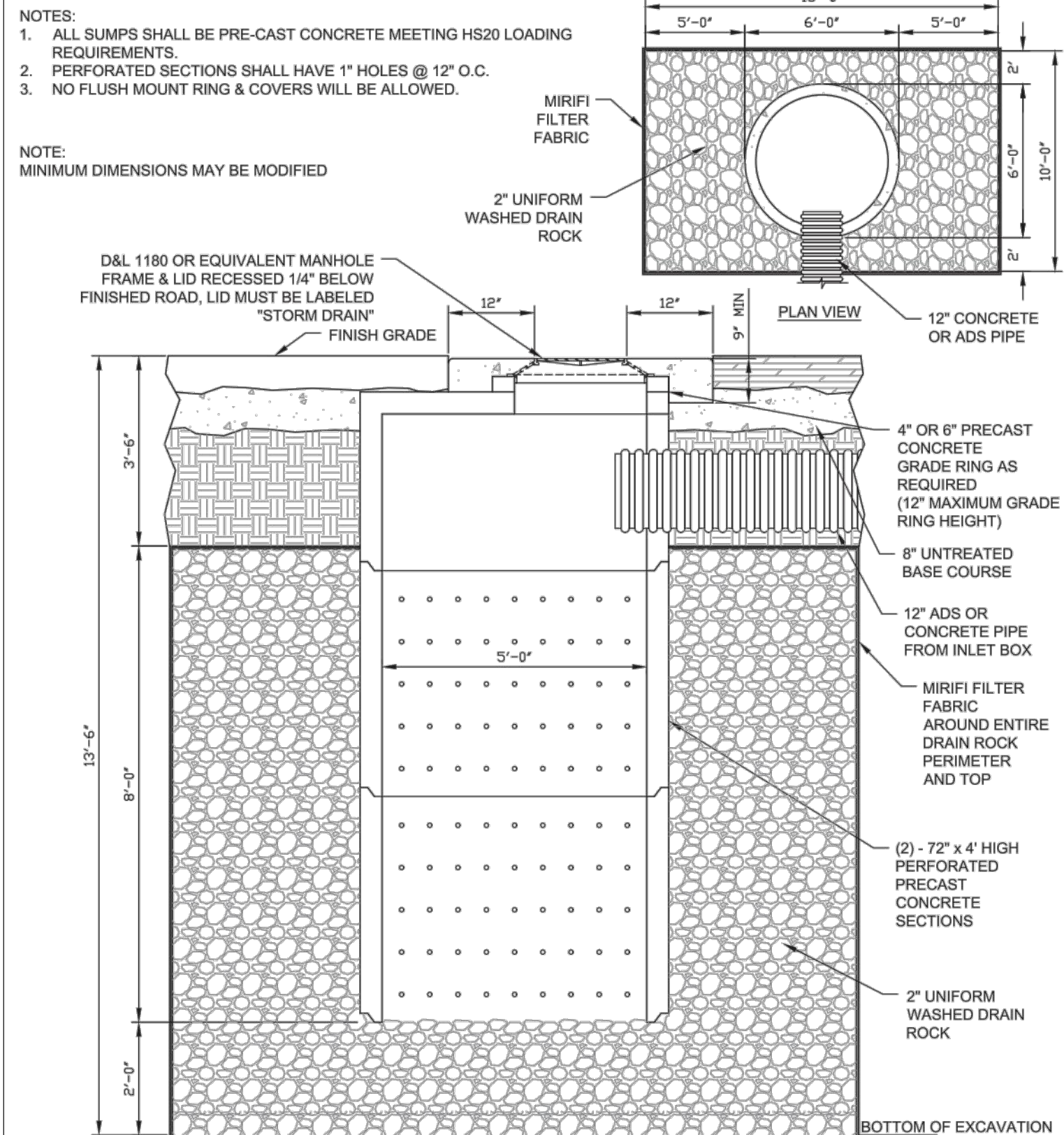
DESIGN BY: CNB DATE: 19 JULY 2019
DRAWN BY: CNB REV: SHEET **C07**



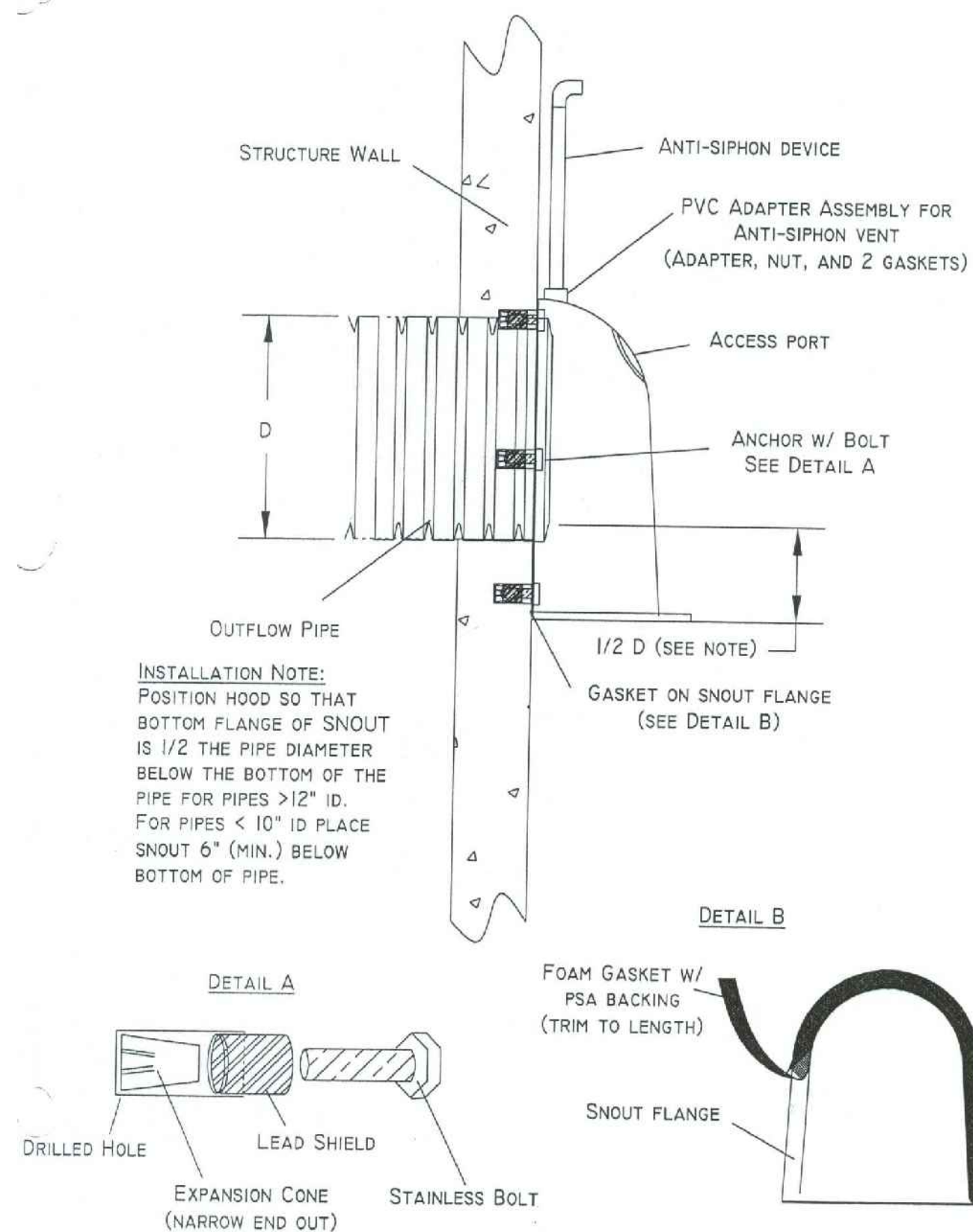
CURB INLET BOX ASSEMBLY



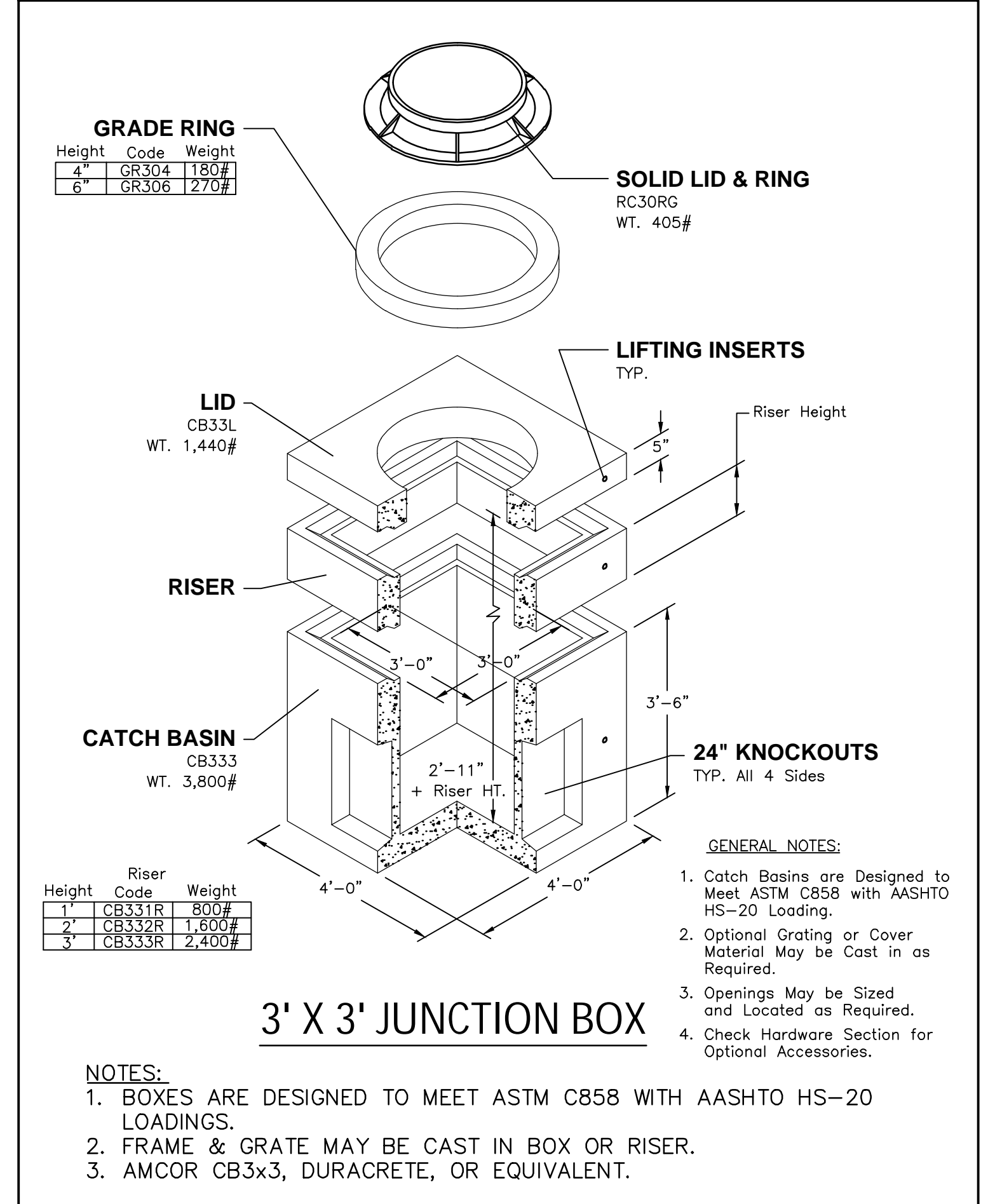
MANHOLE SUMP



BEST MANAGEMENT PRODUCTS, INC. "SNOOT" OIL & DEBRIS STOP INSTALLATION DIAGRAM (TYPICAL)



FOR STORM DRAIN MANHOLES SEE PRECAST SEWER MANHOLE DETAIL ON SHEET C05.



NOTES:
1. BOXES ARE DESIGNED TO MEET ASTM C858 WITH AASHTO HS-20 LOADINGS.
2. FRAME & GRATE MAY BE CAST IN BOX OR RISER.
3. AMCOR CB3x3, DURACRETE, OR EQUIVALENT.

SALEM CITY CONSTRUCTION STANDARDS

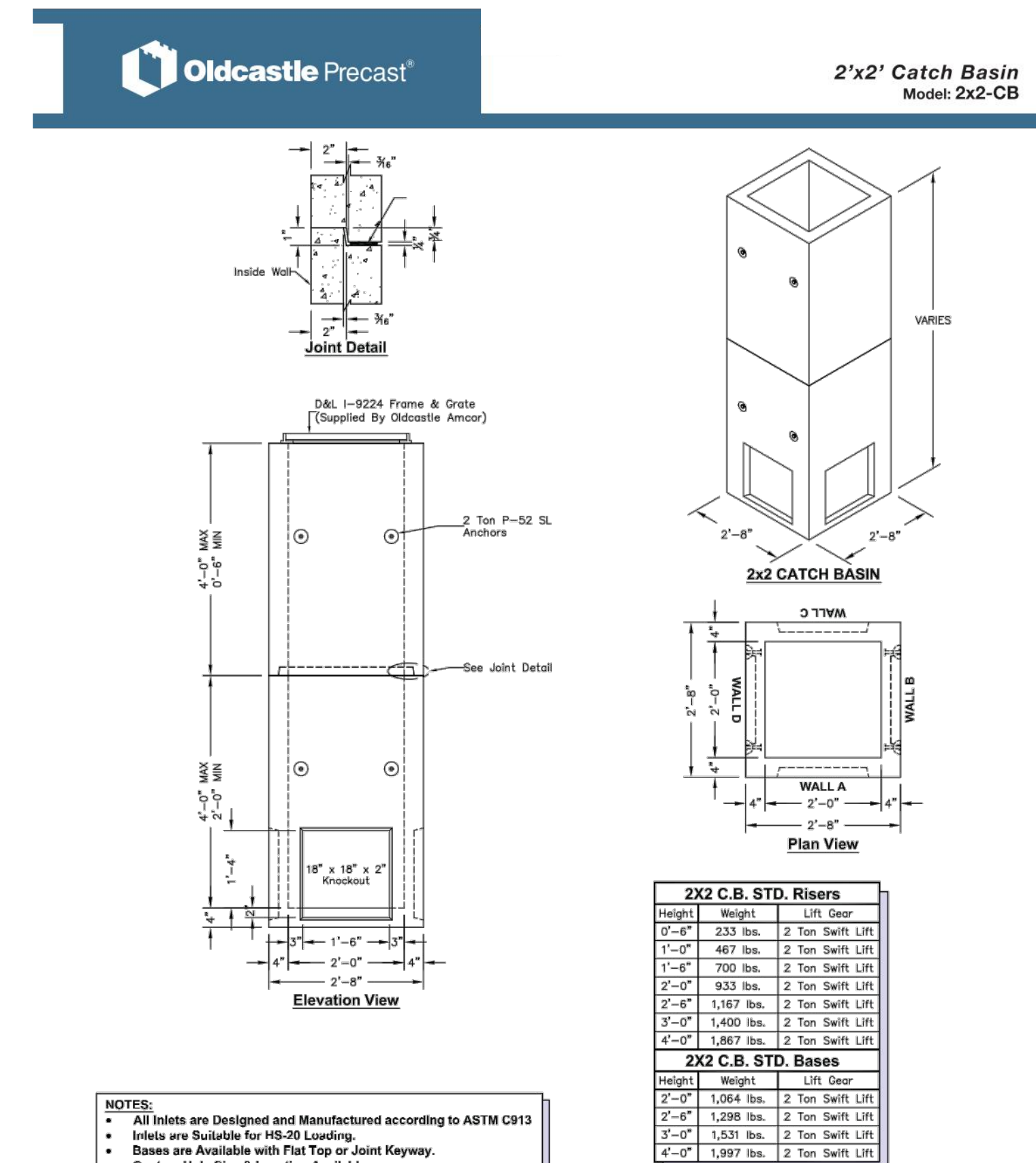
STORM DRAIN COLLECTION
CURB INLET BOX ASSEMBLY
SCALE: NONE
DATE: 1-9-18
SECTION: 2.1
REV DATE: 1-9-18

SALEM CITY CONSTRUCTION STANDARDS

STORM DRAIN COLLECTION
MANHOLE SUMP
SCALE: NONE
DATE: 1-9-18
SECTION: 2.2
REV DATE: 1-9-18

STORM DRAIN NOTES:

- CONTRACTOR AND SURVEYOR SHALL REFER TO STORM DRAIN PLAN AND PROFILES FOR CATCH BASIN RIM ELEVATIONS.
- CONTRACTOR TO REFER TO STORM DRAIN PLAN AND PROFILE SHEETS FOR COORDINATES AND/OR STATIONING FOR CATCH BASINS AND SUMPS WITHIN THE PROJECT.
- CONTRACTOR TO REFER TO PLANS FOR REQUIRED SUMP DEPTH. ALL SUMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THIS SHEET.
- ALL REFERENCES TO MIRAFI FILTER FABRIC ON THIS DETAIL SHEET SHALL BE A MINIMUM OF MIRAFI 140N OR ENGINEER APPROVED EQUIVALENT.
- ALL 15" SNOOT OIL AND WATER SEPARATOR OR EQUIVALENT SHALL BE INSTALLED IN THE CATCH BASIN BEFORE EACH SUMP.
- ALL RETENTION PONDS SHALL BE SIZED AND GRADED AS SHOWN ON THE STORM DRAIN PLAN. ALL RETENTION PONDS WITH SUMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THIS SHEET.
- ALL STORM DRAIN CONSTRUCTION SHALL COMPLY WITH SALEM CITY STANDARDS AND SPECIFICATIONS AND WITH THESE PLANS.



2X2 C.B. STD. Risers			
Height	Weight	Lift Gear	
0'-6"	233 lbs.	2 Ton Swift Lift	
1'-0"	467 lbs.	2 Ton Swift Lift	
1'-6"	700 lbs.	2 Ton Swift Lift	
2'-0"	933 lbs.	2 Ton Swift Lift	
2'-6"	1,167 lbs.	2 Ton Swift Lift	
3'-0"	1,400 lbs.	2 Ton Swift Lift	
4'-0"	1,897 lbs.	2 Ton Swift Lift	

2X2 C.B. STD. Bases			
Height	Weight	Lift Gear	
2'-0"	1,064 lbs.	2 Ton Swift Lift	
2'-6"	1,298 lbs.	2 Ton Swift Lift	
3'-0"	1,531 lbs.	2 Ton Swift Lift	
4'-0"	1,997 lbs.	2 Ton Swift Lift	

- NOTES:
• All inlets are designed and manufactured according to ASTM C913
• Inlets are suitable for HS-20 Loading.
• Bases are available with Flat Top or Joint Keyway.
• Custom Hole Size & Location Available.

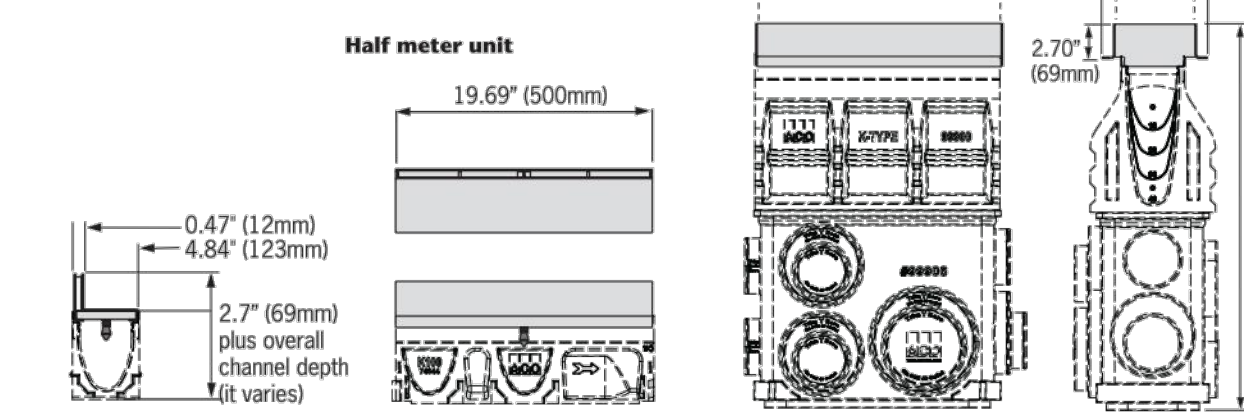
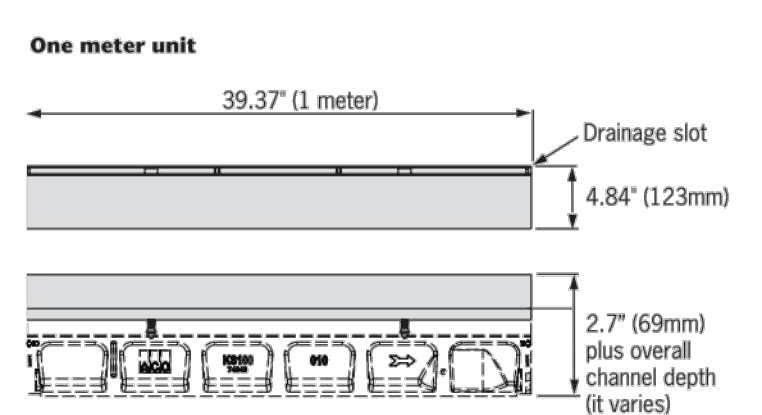


SALEM CITY
COLE PARK
STORM DRAIN
CONSTRUCTION DETAILS



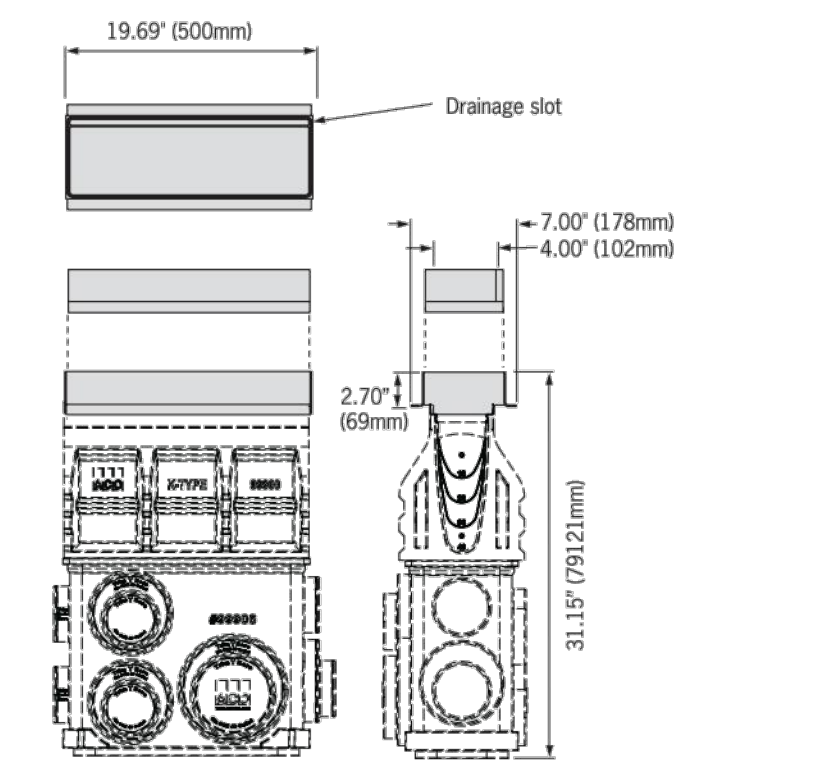
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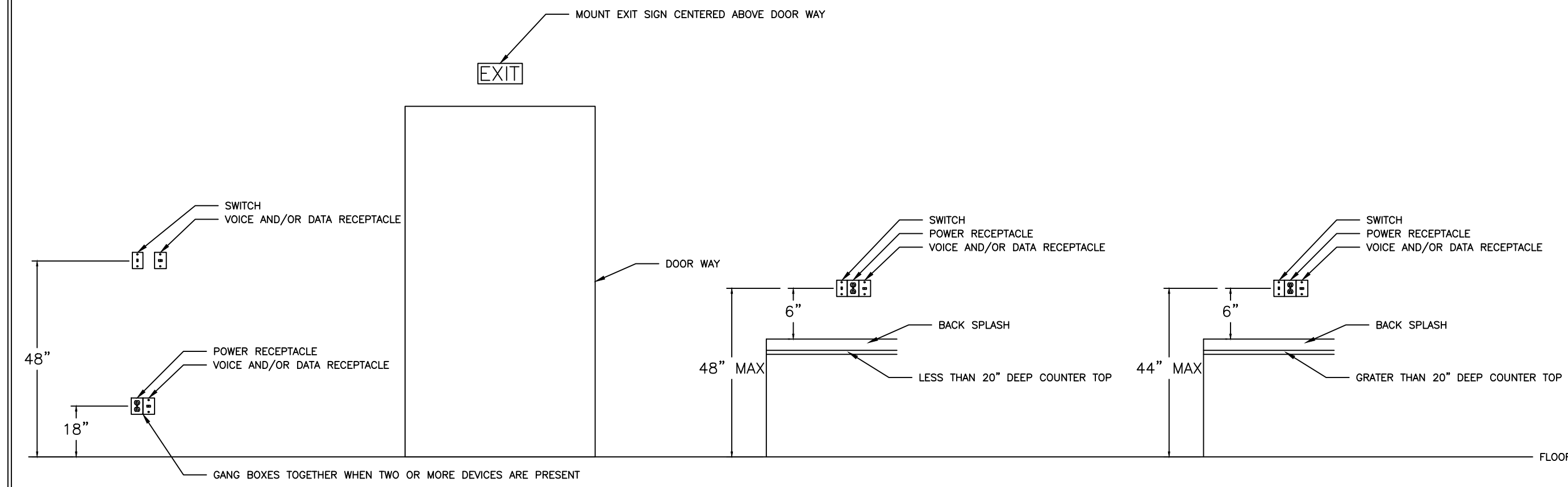
SHEET
C09



SLOT DRAIN DETAIL

Access unit (must be used with catch basin and can also be used with channels)





A ELECTRICAL POWER & LIGHTING DEVICES TYPICAL MOUNTING HEIGHTS
SCALE: NONE

ELECTRICAL DEVICE SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
SWITCHES	
⌚	SINGLE POLE SWITCH
⌚	TWO POLE SWITCH
⌚	THREE WAY SWITCH
⌚	FOUR WAY SWITCH
⌚	DIMMER SWITCH (PROVIDE DIMMER COMPATIBLE WITH LIGHT(S) BEING CONTROLLED)
⌚	DIMMER THREE WAY SWITCH (PROVIDE DIMMER COMPATIBLE WITH LIGHT(S) BEING CONTROLLED)
⌚	MASTER OVERRIDE SWITCH
⌚	ELECTRIC TIMER SWITCH
⌚	SWITCH WITH RED PILOT LIGHT IN HANDLE
⌚	MANUAL MOTOR STARTER WITH HEATER ELEMENTS
⌚	WALL MOUNTED OCCUPANCY SENSOR SWITCH (DUAL TECHNOLOGY)
⌚	WALL MOUNTED VACANCY SENSOR SWITCH (DUAL TECHNOLOGY)
⌚	CEILING MOUNTED OCCUPANCY SENSOR (DUAL TECHNOLOGY)
⌚	CEILING MOUNTED VACANCY SENSOR (DUAL TECHNOLOGY)
⌚	DAYLIGHT SENSOR (CLOSED LOOP)
⌚	POWER PACK FOR OCCUPANCY / VACANCY / DAYLIGHT SENSOR MOUNTED IN ACCESSIBLE CEILING
⌚	PROGRAMMABLE LIGHTING ROOM CONTROLLER
⌚	PHOTOCELL SENSOR
POWER RECEPTACLES & DEVICES	
⌚	SINGLE RECEPTACLE
⌚	DUPLEX RECEPTACLE
⌚	RECEPTACLE MOUNTED ABOVE COUNTER (COORDINATE WITH ARCHITECTURAL DRAWINGS)
⌚	HALF SWITCH RECEPTACLE (LABEL ON FACE PLATE FOR EACH OUTLET)
⌚	DOUBLE DUPLEX RECEPTACLE
⌚	ELECTRIC WATER COOLER GFCI RECEPTACLE (COORDINATE WITH PLUMBING CONTRACTOR)
⌚	GROUND FAULT CURRENT INTERRUPTER DUPLEX RECEPTACLE
⌚	GROUND FAULT CURRENT INTERRUPTER DUPLEX RECEPTACLE IN WEATHER PROOF ENCLOSURE
⌚	ISOLATED GROUND DUPLEX RECEPTACLE
⌚	SPECIAL PURPOSE OUTLET (TYPE SPECIFIED IN CD)
⌚	SPECIAL PURPOSE OUTLET (TYPE SPECIFIED IN CD)
⌚	POWER RECEPTACLE LOCATED IN FLOOR (TYPE SPECIFIED IN CD)
⌚	POWER RECEPTACLE LOCATED IN CEILING
⌚	WALL FURNITURE CONNECTION (USE SEALTIGHT FROM WALL TO FURNITURE)
⌚	FLOOR FURNITURE CONNECTION (USE SEALTIGHT TO FURNITURE, TYPE SPECIFIED IN CD)
⌚	CEILING FURNITURE CONNECTION (POLE PROVIDED BY FURNITURE VENDOR UNO)
TELECOMMUNICATION DEVICES	
⌚	VOICE OUTLET (# INDICATES THE NUMBER OF CAT6 CABLES)
⌚	DATA OUTLET (# INDICATES THE NUMBER OF CAT6 CABLES)
⌚	VOICE & DATA OUTLET (#/# INDICATES THE NUMBER OF CAT6 CABLES FOR VOICE / DATA)
⌚	COAX OUTLET (# INDICATES THE NUMBER OF RG6 CABLES)
⌚	SPECIAL OUTLET (TYPE SPECIFIED IN CONSTRUCTION DOCUMENTS)
⌚	TELECOMMUNICATION OUTLET LOCATED IN FLOOR
⌚	TELECOMMUNICATION OUTLET LOCATED IN CEILING
⌚	WALL FURNITURE CONNECTION (USE SEALTIGHT FROM WALL TO FURNITURE)
⌚	FLOOR FURNITURE CONNECTION (USE SEALTIGHT TO FURNITURE, TYPE SPECIFIED IN CD)
⌚	CEILING FURNITURE CONNECTION (POLE PROVIDED BY FURNITURE VENDOR UNO)

ELECTRICAL LIGHTING SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
LUMINAIRES (SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL DETAILS)	
⌚	LUMINAIRES (APPROXIMATE SHAPE AND SIZED FOR CLARITY)
⌚	STRIP, NEON AND FIBER OPTIC LUMINAIRES
⌚	EXIT SIGN (NUMBER OF FACES (SHADED) AND ARROW(S) AS SHOWN)
⌚	EMERGENCY LIGHT WITH BATTERY PACK
LUMINAIRE MOUNTING	
⌚	RECESSED LUMINAIRES
⌚	SUSPENDED LUMINAIRES
⌚	WALL MOUNTED LUMINAIRES
⌚	POLE TOP MOUNTED LUMINAIRES (ROUND OR SQUARE POLE)
⌚	POLE WITH ARM MOUNTED LUMINAIRES (ROUND OR SQUARE POLE)
⌚	GROUND OR FLOOR MOUNTED LUMINAIRES
⌚	TRACK MOUNTED (LENGTH DRAWN TO SCALE, LUMINAIRE TYPES AND QUANTITIES AS SHOWN)
LUMINAIRE OPTIC ORIENTATION	
⌚	HORIZONTAL ZERO LINE
⌚	PRIMARY LUMINAIRE ORIENTATION
⌚	DIRECTIONAL AIMING LINE (FROM PHOTOMETRIC CENTER TO TARGET)
LUMINAIRE ANNOTATION	
⌚	LUMINAIRES THAT PROVIDE EMERGENCY ILLUMINATION
⌚	LUMINAIRES THAT PROVIDE EMERGENCY ILLUMINATION
⌚	LUMINAIRES THAT PROVIDE NIGHT LIGHT ILLUMINATION
⌚	MOUNTING HEIGHT
⌚	LUMINAIRE TAG (# INDICATES THE NUMBER OF LUMINAIRES IN THE AREA, ESTIMATE ONLY)
⌚	LOWER CASE SUBSCRIPT INDICATES SWITCH IDENTIFICATION
⌚	UPPER CASE SUBSCRIPT INDICATES CIRCUIT IDENTIFICATION

ELECTRICAL ANNOTATION SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
RACEWAY AND CONDUCTORS	
⌚	ONE CIRCUIT, 2#12 THWN (CU), 1#12 THWN (CU) GND
⌚	TWO CIRCUITS (SHARED NEUTRAL), 3#12 THWN (CU), 1#12 THWN (CU) GND
⌚	THREE CIRCUITS (SHARED NEUTRAL), 4#12 THWN (CU), 1#12 THWN (CU) GND
⌚	THREE CIRCUITS (SHARED NEUTRAL), 4#10 THWN (CU), 1#10 THWN (CU) GND
⌚	ONE CIRCUIT, 2#12 THWN (CU), 1#12 THWN (CU) GROUND, 1#12 THWN (CU) ISO GND
⌚	TWO CIRCUITS (DEDICATE NEUTRALS), 4#12 THWN (CU), 1#12 THWN (CU) GND
⌚	THREE CIRCUITS (DEDICATE NEUTRALS), 6#12 THWN (CU), 1#12 THWN (CU) GND
⌚	ELECTRICAL JUNCTION BOX (SIZE PER NFPA 70)
⌚	RACEWAY AND/OR CONDUCTORS CONCEALED BELOW FLOOR OR BELOW FINISHED GRADE
⌚	FLEXIBLE CONDUIT, STEEL OR SEALTIGHT
ABBREVIATIONS	
F.B.O.	FURNISHED BY OTHERS
F.&I.B.O.	FURNISHED & INSTALLED BY OTHERS
F.V.M.H.	FIELD VERIFY MOUNTING HEIGHT
A/R	AS REQUIRED
N/A	NOT APPLICABLE OR NOT AVAILABLE
W	MOUNT 48" FROM THE FINISHED FLOOR TO THE CENTER OF DEVICE
C	MOUNT COUNTER HEIGHT (FIELD VERIFY MOUNTING HEIGHT)
CD	CONSTRUCTION DOCUMENT(S)
CU	COPPER
AL	ALUMINUM
WP	WEATHERPROOF
NL	NIGHTLIGHT
E	EMERGENCY
ISO	ISOLATED
GND	GROUND
UNO	UNLESS NOTED OTHERWISE
(D)	TO BE REMOVED OR DEMOLISHED
(E)	TO REMAIN OR EXISTING
(M)	TO BE MOVED OR RELOCATED
(N)	NEW
(V)	TO BE PROVIDED BY VENDOR
(O)	TO BE PROVIDED BY OWNER

ELECTRICAL FIRE ALARM SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
PANELS	
⌚	FIRE ALARM CONTROL PANEL
⌚	FIRE ALARM REMOTE DISPLAY
⌚	FIRE ALARM REMOTE TERMINAL
⌚	FIRE ALARM NOTIFICATION POWER SUPPLY
⌚	FIRE ALARM AMPLIFIER POWER SUPPLY
ADDRESSABLE MODULES	
⌚	FIRE ALARM MANUAL PULL STATION
⌚	FIRE ALARM MONITOR MODULE
⌚	FIRE ALARM RELAY MODULE
⌚	FIRE ALARM CONTROL POINT MODULE
⌚	FIRE ALARM CONVENTIONAL ZONE MODULE
⌚	FIRE ALARM LINE ISOLATION MODULE
⌚	FIRE ALARM SMOKE DETECTOR
⌚	FIRE ALARM HEAT DETECTOR
⌚	FIRE ALARM DUCT DETECTOR
NOTIFICATION DEVICES	
⌚	FIRE ALARM BELL
⌚	FIRE ALARM HORN
⌚	FIRE ALARM STROBE
⌚	FIRE ALARM HORN STROBE
FIRE SPRINKLER DEVICES (F.&I.B.O.)	
⌚	FIRE SPRINKLER FLOW SWITCH
⌚	FIRE SPRINKLER TAMPER SWITCH
⌚	FIRE SPRINKLER PRESSURE SWITCH

ELECTRICAL MOTOR AND EQUIPMENT HOOK-UP SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
MOTOR AND EQUIPMENT HOOK-UP	
⌚	ELECTRIC MOTOR HOOK-UP (FURNISHED AND INSTALLED BY OTHERS UNLESS NOTED OTHERWISE)
⌚	ELECTRIC EQUIPMENT HOOK-UP (JUNCTION BOX WITH FLEXIBLE CONDUIT, STEEL OR SEALTIGHT)
XXAF	DISCONNECT SWITCH (NON-FUSIBLE) (AF = FRAME SIZE)
XXX	DISCONNECT SWITCH (FUSIBLE) (AF = FRAME SIZE, AT = TRIP SETTING)
XXX	DISCONNECT SWITCH (CIRCUIT BREAKER) (AF = FRAME SIZE, AT = TRIP SETTING)
XXX	MAGNETIC STARTER (STYLE = FNR, FVR, ATD, ETC)
XXX	COMBINATION STARTER
XXX	CONTRACTOR - SELF-ENCLOSED

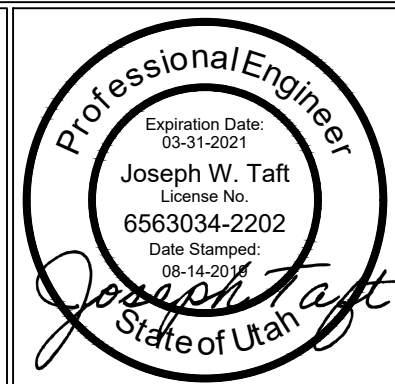
ELECTRICAL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH ALL LOCALLY ADOPTED BUILDING CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS, SHOP DRAWINGS, SUBMITTALS, ETC. PRIOR TO ROUGH-IN AND SHALL IMMEDIATELY NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL BE EXPERIENCED IN THE TYPE OF CONSTRUCTION AND WITH THE MATERIALS AND SYSTEMS SPECIFIED.
- THE CONTRACTOR SHALL BE FAMILIAR WITH THE EXISTING SITE CONDITIONS.
- ALL ALTERNATES MUST BE APPROVED BY ENGINEER PRIOR TO BID DATE INCLUDING ANY EQUIPMENT THAT HAS BEEN NOTED WITH A "FOR EQUIPMENT" STATEMENT. PROPOSED ALTERNATES MUST BE SUBMITTED TO ENGINEER AT LEAST ONE WEEK PRIOR TO BID DATE TO BE CONSIDERED.
- THE CONTRACTOR SHALL COORDINATE ALL UTILITIES PRIOR TO ROUGH-IN AND SHALL IMMEDIATELY NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL PROVIDE ALL UTILITY VAULTS & PADS AS REQUIRED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
- ALL MV SWITCHGEAR, SECTIONALIZING CABINETS AND MV TO LV STEP DOWN TRANSFORMERS SHALL BE PROVIDED AND INSTALLED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
- ALL MV CABLE SHALL BE PROVIDED AND INSTALLED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS PRIOR TO ROUGH-IN AND SHALL IMMEDIATELY NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL FOR ALL ELECTRICAL, TELECOMMUNICATION AND OTHER ROOMS AS NOTED, SHOWING THE LAYOUT OF THE ELECTRICAL, TELECOMMUNICATION AND/OR SYSTEMS EQUIPMENT USING ACTUAL EQUIPMENT DIMENSIONS AND REQUIRED CLEARANCES FOR PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT.
- THE CONTRACTOR SHALL USE COPPER CONDUCTORS UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL USE A PVC SCHEDULE 40 CONDUIT RACEWAY SYSTEM WITH RIDGED STEEL ELBOWS FOR ALL UNDERGROUND RACEWAY. LARGE RADIUS ELBOWS WILL BE REQUIRED ON ALL CONDUITS 1" AND LARGER. LARGE RADIUS FIBERGLASS ELBOWS ARE ACCEPTABLE ON UTILITY UNDERGROUND CONDUITS WHERE APPROVED BY THE LOCAL UTILITY. THE CONTRACTOR SHALL USE A MINIMUM OF 1" CONDUIT FOR ALL UNDERGROUND RACEWAY EXTENDING BEYOND THE ENVELOPE OF THE BUILDING UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL USE A EMT CONDUIT RACEWAY SYSTEM IN ALL INTERIOR EXPOSED AREAS AND ON THE HOME RUNS IN CONCEALED AREAS. THE CONTRACTOR SHALL USE A MINIMUM SIZE OF 0.75" CONDUIT UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE PERMITTED TO USE MC CABLE AFTER THE FIRST BOX IN CONCEALED AREAS. ALSO IN EXPOSED AREAS THE CONTRACTOR SHALL BE PERMITTED TO USE MC CABLE FOR LIGHT FIXTURE WHIPS WHERE THE MC CABLE DOES NOT EXCEED 6'-0", UNLESS NOTED OTHERWISE.
- IN WAREHOUSE AREAS THE CONTRACTOR CAN USE MC CABLE ABOVE 15'-0" UNLESS NOTED OTHERWISE. RUNS MUST BE MADE SQUARE TO THE BUILDING AND INSTALLED IN A NEAT AND WORKMAN LIKE MANNER.
- THE CONTRACTOR SHALL BE PERMITTED TO USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT IN EXPOSED AREAS FOR FURNITURE OR MOTOR HOOK-UP WHERE THE LIQUIDTIGHT FLEXIBLE METAL CONDUIT DOES NOT EXCEED 6'-0" UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE PERMITTED TO USE FLEXIBLE METAL CONDUIT IN EXPOSED AREAS FOR MOTOR AND TRANSFORMER HOOK-UP WHERE THE FLEXIBLE METAL CONDUIT DOES NOT EXCEED 6'-0" UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL SEAL ALL RACEWAY PENETRATIONS OF THE BUILDING EXTERIOR WITH AN APPROVED METHOD FOR THE TYPE OF MATERIAL BEING PENETRATED AND MAINTAIN THE FIRE RATING.
- THE CONTRACTOR SHALL MAINTAIN ALL FLOOR, WALL AND CEILING FIRE RATINGS. BOXES, RACEWAY, DEVICES, LIGHT FIXTURES, ETC. THAT PENETRATE FIRE RATED FLOORS, WALLS AND CEILING SHALL BE SEALED WITH AN APPROVED LISTED MATERIAL TO MAINTAIN THE FIRE RATING OF THE FLOORS, WALLS AND CEILING.
- THE CONTRACTOR SHALL USED THE FOLLOWING COLOR CODING SCHEME FOR ALL CONDUCTORS:
AC SYSTEM PHASE A PHASE B PHASE C NEUTRAL GROUND**
480V, 277V, 3ø, 4W BROWN ORANGE YELLOW GRAY GREEN
480V, 3ø, 3W BROWN ORANGE YELLOW N/A GREEN
240V, 3ø, 3W BLACK RED BLUE N/A GREEN
240/120V, 1ø, 3W BLACK RED N/A WHITE GREEN
240/120V, 3ø, 4W BLACK ORANGE* BLUE WHITE GREEN
208/120V, 3ø, 4W BLACK RED BLUE WHITE GREEN
*PHASE B SHALL BE WIRED AS THE HIGH-LEG.
**ALL ISOLATED GROUND CONDUCTORS SHALL BE GREEN WITH A YELLOW STRIPE.
- THE CONTRACTOR SHALL VERIFY ALL VOLTAGE DROP CALCULATIONS BASED ON THE ACTUAL ROUTE OF THE CONDUCTOR(S) AND IF NEEDED FURNISH AND INSTALL LARGER AND TO MEET THE FOLLOWING REQUIREMENTS. MAXIMUM VOLTAGE DROP ALLOWANCE ON FEEDERS IS 2%, MAXIMUM VOLTAGE DROP ON BRANCH CIRCUITS IS 3%. IF APPROVED BY THE ENGINEER A COMBINED VOLTAGE DROP OF 5% FOR THE FEEDER AND BRANCH CIRCUIT CAN BE USED.
- THE CONTRACTOR SHALL PROVIDE SEISMIC BRACING FOR ALL ELECTRICAL EQUIPMENT, RACEWAYS, CABLE TRAYS, BUSBARS, LIGHT FIXTURES, ETC. PER THE REQUIREMENTS OF THE BUILDING CODE. AT A MINIMUM, LIGHT FIXTURES SHALL BE SUPPORTED WITH AT LEAST TWO (2) #12 AWG STEEL WIRE FROM OPPOSITE CORNERS OF THE LIGHT FIXTURE AND ALL ELECTRICAL DISTRIBUTION EQUIPMENT MUST BE SECURED PER THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL LABEL ALL ELECTRICAL DISTRIBUTION EQUIPMENT INCLUDING BUT NOT LIMITED TO SWITCHGEAR, SWITCHGEAR, PANELBOARDS, TRANSFORMERS, SAFETY SWITCHES, AUTOMATIC TRANSFER SWITCHES (ATS), MANUAL TRANSFER SWITCHES (MTS), UNINTERRUPTIBLE POWER SUPPLY (UPS), ETC. BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
- THE CONTRACTOR SHALL LABEL ALL DEVICES INCLUDING BUT NOT LIMITED TO SWITCHES, OUTLETS, FLOOR BOXES, FURNITURE CONNECTIONS, ETC. WITH THE NAMES OF THE SUPPLYING CIRCUIT(S) ON THE FACE OF THE DEVICE BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
- THE CONTRACTOR SHALL LABEL ALL JUNCTION BOXES WITH THE NAME OF THE CIRCUIT(S) BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. IF HAND WRITTEN LABELS ARE USED ALL HAND WRITING MUST BE LEGIBLE. OTHERWISE, HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
- THE CONTRACTOR SHALL PROVIDE A CLEAN WORK AREA THROUGHOUT CONSTRUCTION, REMOVING ALL PACKAGING AND WASTE DUE TO THE INSTALLATION. THE CONTRACTOR SHALL ALSO CLEAN ALL ELECTRICAL EQUIPMENT (INTERNALLY AND EXTERNALLY), LIGHT FIXTURES, DEVICES, ETC. PRIOR TO SUBSTANTIAL COMPLETION.
- THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER COMPLETE RECORD OF ALL FIELD CHANGES NOT DOCUMENTED BY RF, ADDENDUM, ETC. TO BE INCLUDED IN THE OWNERS RECORD DOCUMENTS.

BLUE STAKES OF UTAH

- THE CONTRACTOR SHALL CONTACT ALL INVOLVED PROPERTY OWNERS, UTILITIES AND OTHER CONTRACTORS INVOLVED WITH THE SITE BEFORE DIGGING AND SHALL OBEY STATE "CALL BEFORE YOU DIG" LAWS.
- REGULAR NOTICE:
THE EXCAVATOR MUST CALL BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS AND NOT MORE THAN FOURTEEN (14) CALENDAR DAYS PRIOR TO DOING ANY EXCAVATION WORK. THE REQUEST IS VALID FOR FOURTEEN (14) CALENDAR DAYS.
- UPDATE NOTICE:
IF EXCAVATION ACTIVITY WILL CONTINUE BEYOND THE FOURTEEN (14) DAY PRIOR THE EXCAVATOR SHALL UPDATE THE REQUEST AT LEAST TWO (2) BUSINESS DAYS BUT NO SOONER THAN SIX (6) CALENDAR DAYS BEFORE THE ORIGINAL REQUEST'S EXPIRATION DATE. THE EXCAVATOR SHALL CONTINUE TO GIVE NOTICE IN LIKE MANNER FOR EACH FOURTEEN (14) CALENDAR DAY PERIOD IN WHICH EXCAVATION ACTIVITIES CONTINUE.
- IF ANY MEMBER UTILITIES HAS FAILED TO NOTIFY OR LOCATE THEIR FACILITIES THE EXCAVATOR SHALL CONTACT BLUE STAKES OF UTAH AND FILE A SECOND NOTICE.
- ASK FOR STAKES OR FLAG MARKINGS IN LIEU OF PAINT.
- DO NOT DIG WITH IN TWO (2) FEET OF MARKINGS UNLESS THE UTILITY COMPANY IS PRESENT.
- BLUE STAKES OF UTAH CAN BE REACHED AT (800) 962-4111 (TOLL-FREE)
- ADDITIONAL INFORMATION CAN BE FOUND AT www.bluestakes.org

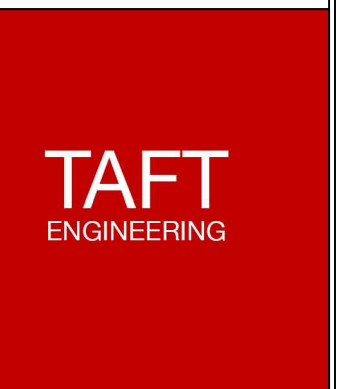
ELECTRICAL REVISIONS	
DESCRIPTION	DATE



TAFT ENGINEERING
Taft Engineering, LLC
8610 South Sandy Parkway, Suite #200
Sandy, Utah 84070
(801) 971-3724

Project Number: 01-0027-2019
Status: PERMIT SET
Date: 08-14-2019
Sheet Number: E000

COLE PARK APPROXIMATELY 500' SOUTH 300' WEST SALEM CITY, UT 84653
ELECTRICAL SYMBOL SCHEDULES AND GENERAL NOTES



Taft Engineering, LLC
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Sandy, Utah 84070
(801) 971-3724

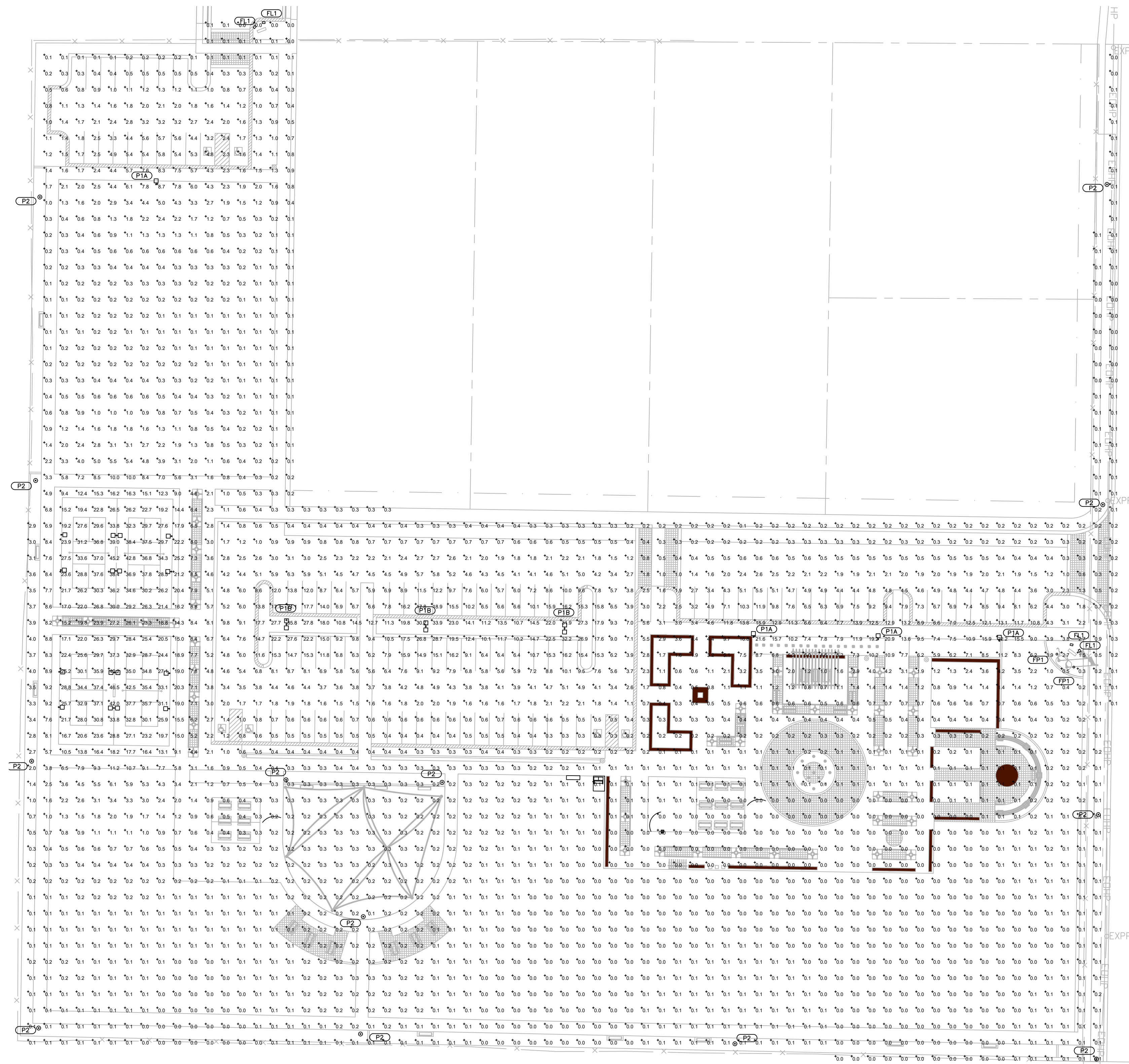
COLE PARK
APPROXIMATELY 500 SOUTH 300 WEST
SALEM CITY, UT 84653
ELECTRICAL SITE PHOTOMETRIC PLAN

Project Number:
01-0027-2019

Status:
PERMIT SET

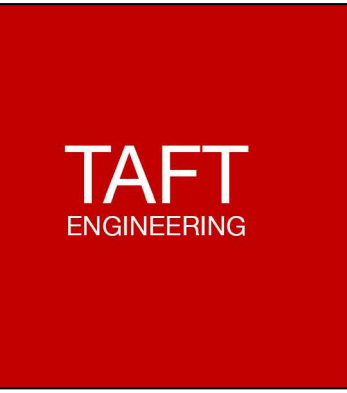
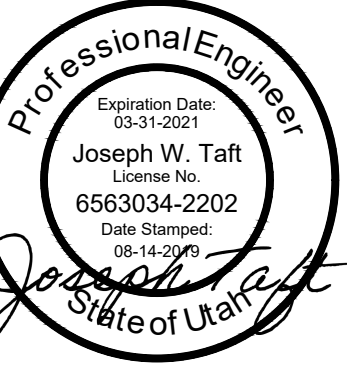
Date:
08-14-2019

Sheet Number:
E101A

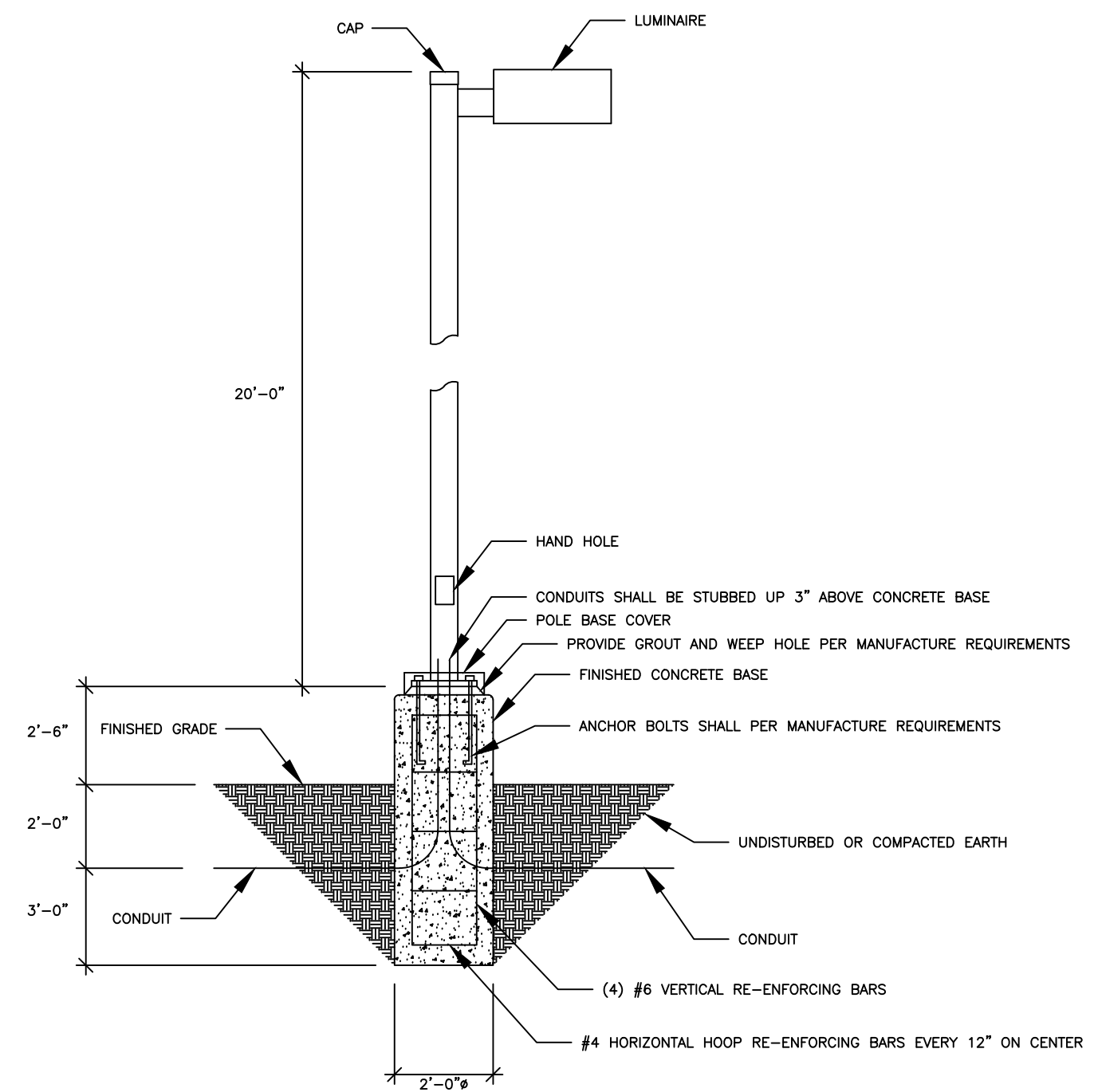


1 ELECTRICAL SITE PHOTOMETRIC PLAN
SCALE: 1" = 40'-0"

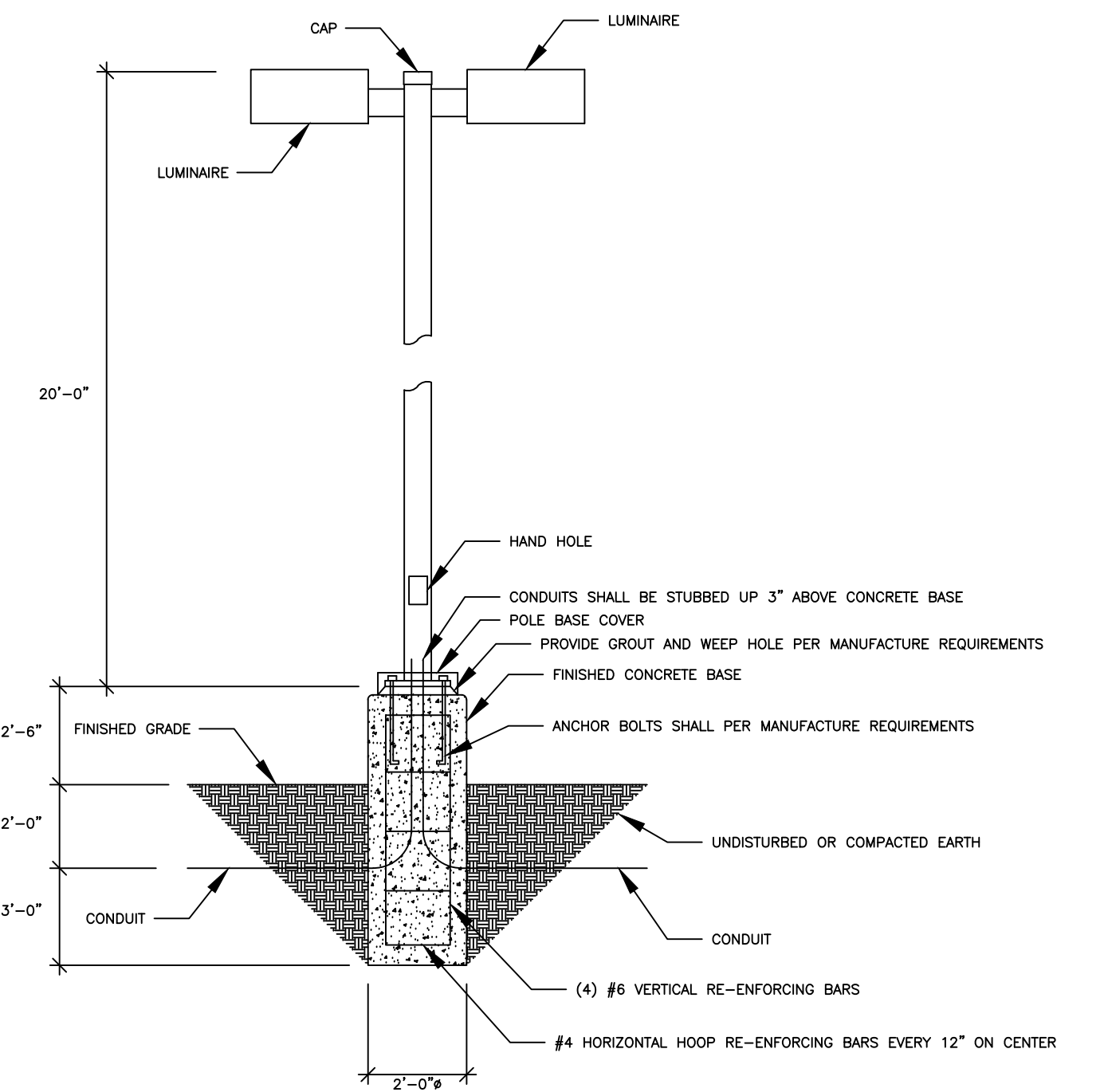
ELECTRICAL REVISIONS		
NO.	DESCRIPTION	DATE



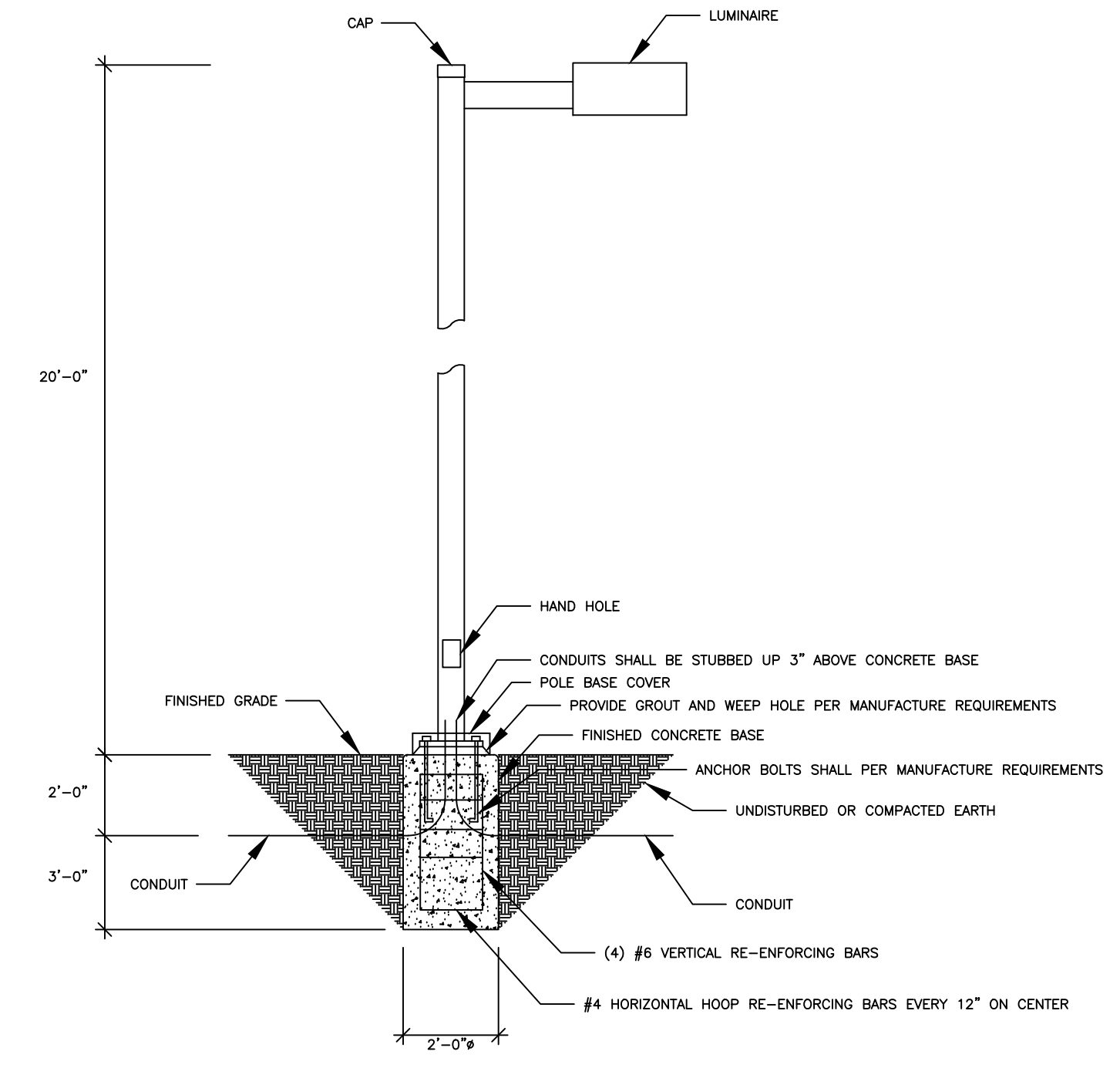
Taft Engineering, LLC
8610 South Sandy Parkway, Suite #200
Sandy, Utah 84070
(801) 971-3724



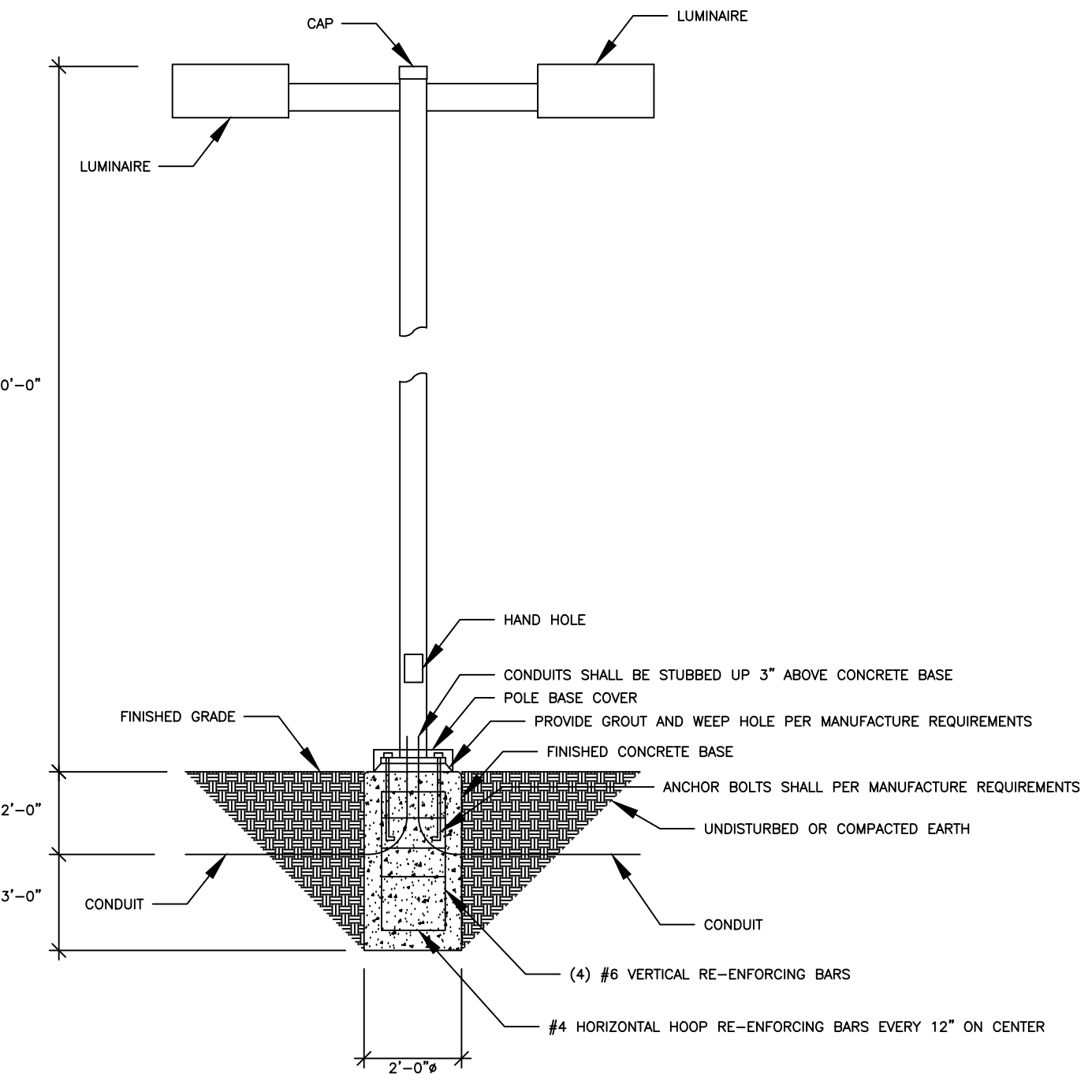
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SCALE: NONE



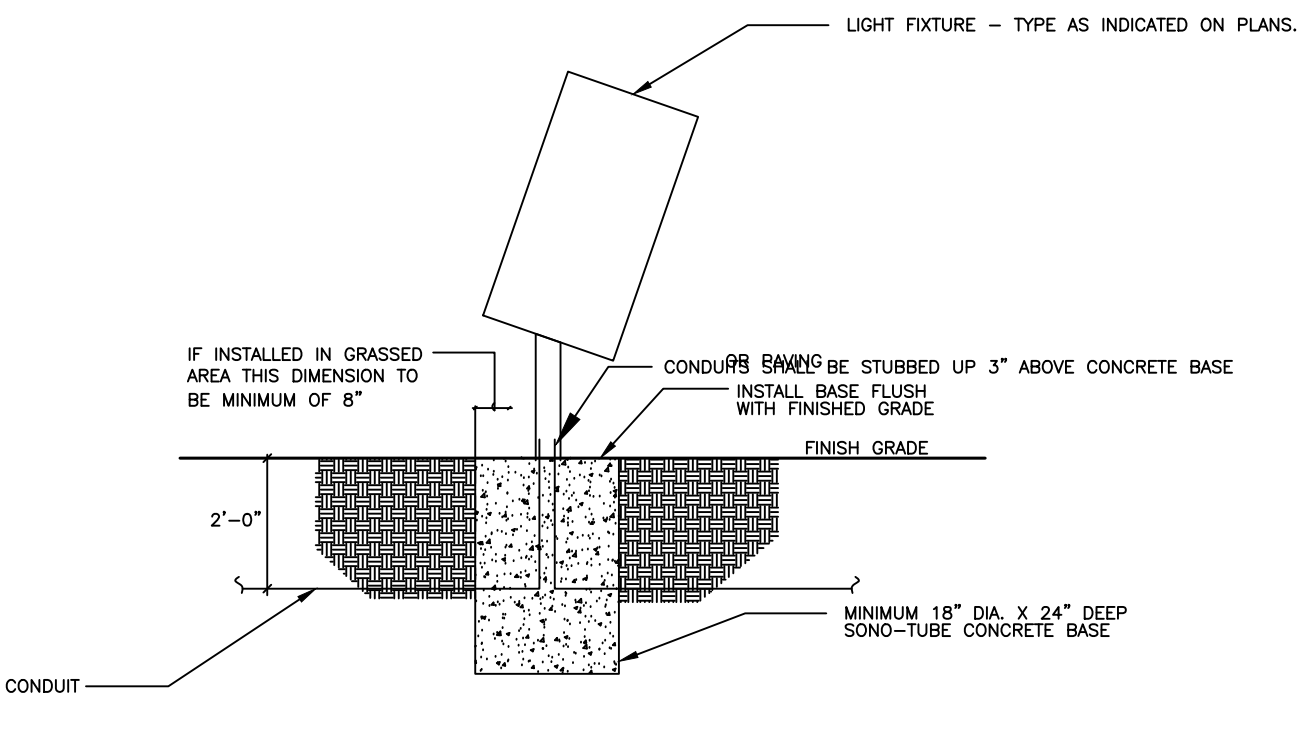
B ELECTRICAL POLE LIGHT DETAIL (P1B)
SCALE: NONE



C ELECTRICAL POLE LIGHT DETAIL (P3A)
SCALE: NONE



D ELECTRICAL POLE LIGHT DETAIL (P3B)
SCALE: NONE



F ELECTRICAL FLOOD LIGHT DETAIL (FL1)
SCALE: NONE

COLE PARK
APPROXIMATELY 500 SOUTH 300 WEST
SALEM CITY, UT 84653

ELECTRICAL DETAILS

Project Number:
01-0027-2019

Status:
PERMIT SET

Date:
08-14-2019

Sheet Number:

E601

ELECTRICAL REVISIONS		
NO.	DESCRIPTION	DATE

STREET LIGHTING

GENERAL

The following general requirements shall apply to street lights installed in new underground residential subdivisions/developments (subdivisions) located within the service area of Salem City Power (within Salem City).

Salem City Power will provide electric power for street lights at no cost, except as otherwise provided below in the Street Light Layouts section.

Salem City Power standard (Town and Country) street lights (poles, fixtures and wiring) shall be used except as provided in item 5, and 6 below. The standard street light pole (direct embedded or concrete base) is a W.J. Whatley, Inc. Catalog No. E3020-20-60-N1.3 or approved equivalent and the standard fixture (pole top mounted) is a (100 watt high pressure sodium lamp) or approved LED equal.

Salem City Power standard street lights will be installed in accordance with Salem City Power's Line Extension Policy.

Salem City Power standard street lighting will be owned and maintained by Salem City Power. Conduit systems for street lighting wiring shall be installed by contractors/developers in accordance with Drawing E.6.4. Installation of lighting fixture will be determined by power dept. as time allows.

Development specific decorative (non Salem City Power standard) street lighting (poles, fixtures and wiring) may be installed in subdivisions with homeowners associations.

Decorative lighting (service disconnect, poles, luminaries, lamps, conduit and wiring) installed in underground subdivisions with homeowners associations shall be installed by contractors/developers, and owned by the homeowners associations. Power for the street lights will be provided by Salem City Power in accordance with item 1 above.

Street Light Layouts

The following layout requirements shall apply to Salem City Power standard and decorative street lighting installations:

Layouts for Salem City Power standard street light installations will be prepared by Salem City Power.

Layouts for decorative street light installations shall be prepared by contractors/developers, utilizing the general requirements included subsequently in this section. Contractors/developers shall provide drawings of proposed layouts for decorative street lighting to Salem City Power for

review and approval. Catalog information on the poles, luminaries and lamps proposed for use shall be provided by contractors/developers with the light layouts.

In general, street lights shall be placed at three and four way intersections, and at 90 degree turns (elbows). See Drawing E.6.3 for typical street lighting layout.

Street lights shall also be installed between intersections at staggered spacings of approximately 400 feet. Decorative street lights may be installed at lesser spacings, but homeowners associations will be billed for the electric power usage of the additional lights. See Drawing E.6.3 for typical street lighting layout.

Decorative street lights may be installed (300 foot non-staggered spacing) on medians (islands) in streets with islands at least 10 feet in width. Decorative street lights may be installed at lesser spacings, but homeowners associations will be billed for the electric power usage of the additional lights.

Luminaries for decorative street lights shall be Type III, include a photo cell receptacle and shall be suitable for use with a 100 watt high pressure sodium lamp or LED equivalent. Use of luminaries with higher wattage lamps or other light sources (metal halide or mercury vapor) must be approved by Salem City Power. Additional charges for excess electric power usage may be assessed to homeowners associations. House side shields shall be provided if required. Street light poles shall provide a minimum mounting height for luminaries of 16 feet.

Point(s) of Delivery for Decorative Lighting

The point(s) of delivery for decorative street lights shall be at a location(s) approved by Salem City Power. Contractors/developers shall provide drawings of proposed locations for points of delivery for decorative street lighting to the Salem City Power for review and approval. These points of delivery shall typically be proximate to Salem City Power owned pad mounted transformers or secondary junction boxes. The layout of decorative lights shall be so as to minimize the number of delivery points required.

All points of delivery for decorative street lights shall include a disconnect with over current protective device(s) [fuse(s) or breaker(s)]. The rating of the over current protection shall be compatible with the current rating of the wiring connected to the device. The disconnect shall be service entrance rated, tamper proof, equipped with provisions for locking, installed in a NEMA 3R enclosure and mounted on a building wall, or substantial wood or steel post. The disconnect and appurtenant facilities shall be installed in accordance with the applicable articles of the National Electric Code (NEC).

Facilities installed at decorative street light points of delivery shall be inspected by the Salem City electrical inspector prior to connection to the Salem City Power electrical system.

Wiring from Salem City Power pad mounting transformers or secondary junction boxes and disconnects for decorative lighting will be installed, owned and maintained by Salem City Power

and installed in conduits (source side conduit systems) provided (furnished and installed) by contractors/developers (reference paragraph D of this section). Salem City Power will own and maintain the source side conduits after the street light installation is completed.

Conduit for Salem City Power Standard and Decorative Street Lights

Salem City Power wiring for Salem City Power standard and decorative street lights shall be installed in direct buried conduit.

Salem City Power Standard Street Lights:

Contractors/developers shall provide (purchase and install) all street lighting conduit systems (conduit, fitting, elbows, conduit cement, etc.) for Salem City Power standard street lights. Salem City Power will own and maintain the conduit systems after the street light installation is completed. The conduit systems shall extend from Salem City Power pad mounted transformers or secondary junction boxes to street light locations. The contractor/developer shall be responsible for proper routing and placement (burial depth, excavation, bedding, backfill and compaction) of conduits, and for the location of conduit end points (stubs ups) at pad mounted transformers and/or secondary junction boxes, and street light locations.

Decorative Street Lights:


Contractors/developers shall provide (purchase and install) source side conduit systems between decorative street light delivery points and Salem City Power pad mounted transformers and/or secondary junction boxes. Salem City Power will own and maintain the source side conduit systems after the street light installation is completed. The contractor/developer shall be responsible for proper routing and placement of conduits, and for the location of conduit end points (stubs ups) at pad mounted transformer and/or secondary junction box locations. The contractor/developers shall also be responsible for terminating the conduit at the line side of the disconnecting means at delivery points. Salem City Power will install the wiring from transformer or secondary junction box to the delivery point and terminate the wiring at the source of the disconnect.


Conduit types and capping shall be in accordance with the conduits paragraphs of this document.


STREET LIGHTING CONDUIT REQUIREMENTS


The contractor/developer shall be responsible for the installation of street lighting conduit systems (1 inch diameter) extending from transformer or secondary junction boxes to lighting fixture locations. Light fixtures should be located at street intersections where possible. There should be no more than 200/300 feet between lights. See drawing E.6.4 for a typical street lighting layout. The contractor is responsible for proper location and centering of conduit end points for lighting fixture installations. The City, under the terms of its Line Extension Policy, shall furnish and install lighting fixtures and light fixture service cables. Commercial areas shall be required to place conduit to light city streets bordering their development. Lights shall be

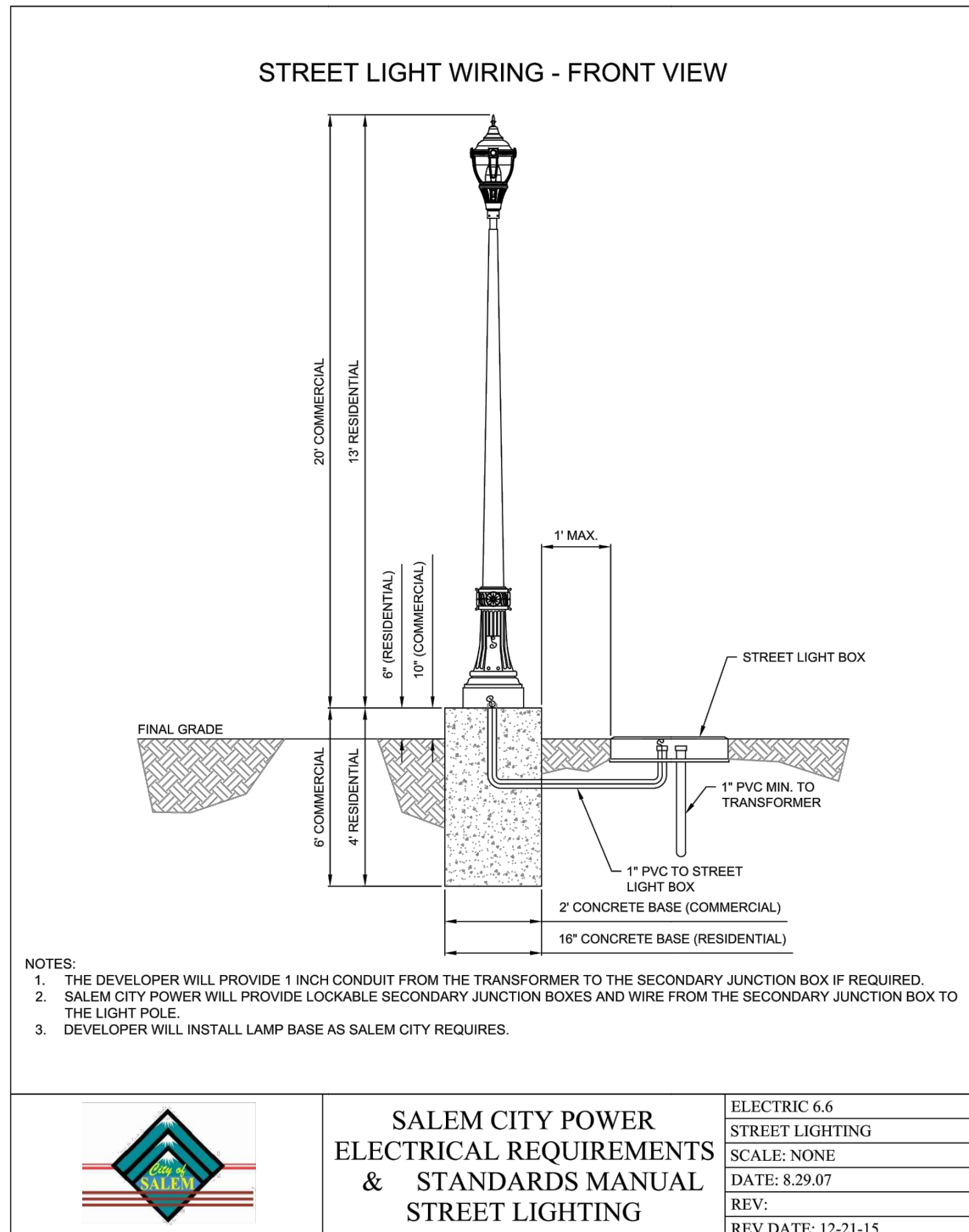
paid for by the Developer and installed by the Power Department. Light placement shall be at each intersections and one for every 200 feet as approved by the Power Department. Light type and size shall be determined by the Power Department according to road size and area.

	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.1
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		


	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.2
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		

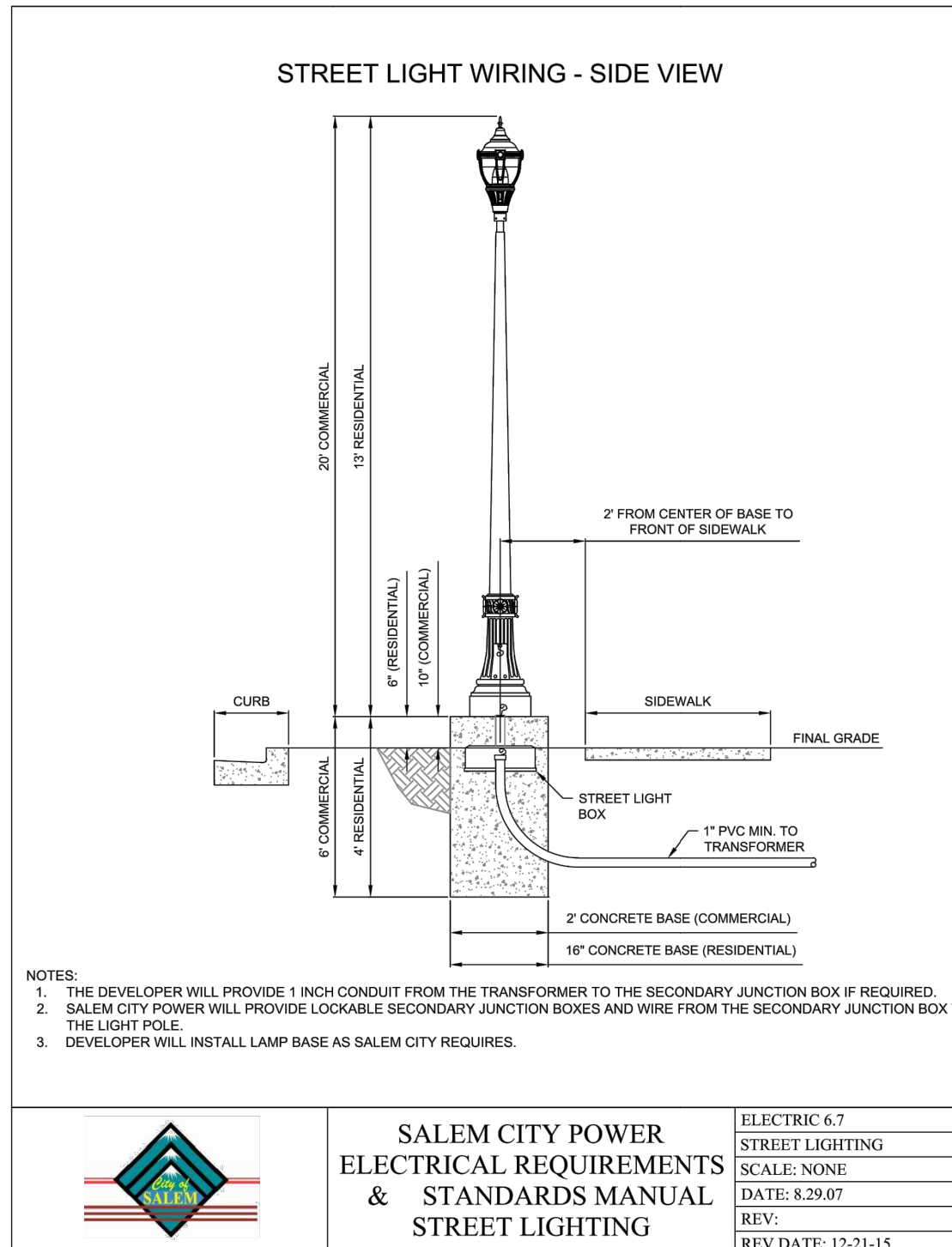
	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.3
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		

	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.4
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		




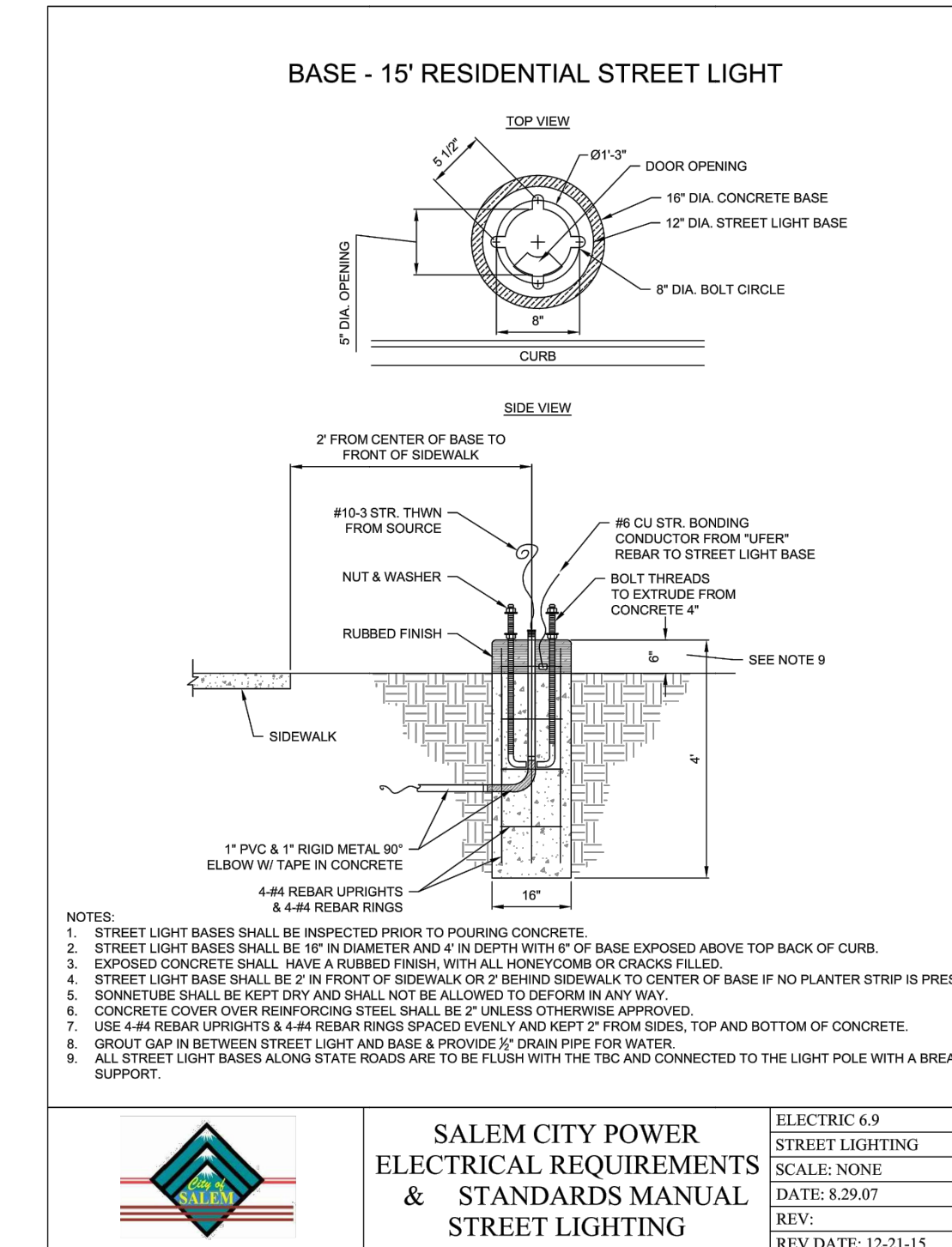
- NOTES:
1. THE DEVELOPER WILL PROVIDE 1 INCH CONDUIT FROM THE TRANSFORMER TO THE SECONDARY JUNCTION BOX IF REQUIRED.
 2. SALEM CITY POWER WILL PROVIDE LOCKABLE SECONDARY JUNCTION BOXES AND WIRE FROM THE SECONDARY JUNCTION BOX TO THE LIGHT POLE.
 3. DEVELOPER WILL INSTALL LAMP BASE AS SALEM CITY REQUIRES.

	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.6
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		




- NOTES:
1. THE DEVELOPER WILL PROVIDE 1 INCH CONDUIT FROM THE TRANSFORMER TO THE SECONDARY JUNCTION BOX IF REQUIRED.
 2. SALEM CITY POWER WILL PROVIDE LOCKABLE SECONDARY JUNCTION BOXES AND WIRE FROM THE SECONDARY JUNCTION BOX TO THE LIGHT POLE.
 3. DEVELOPER WILL INSTALL LAMP BASE AS SALEM CITY REQUIRES.

	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.7
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		



- NOTES:
1. STREET LIGHT BASES SHALL BE INSPECTED PRIOR TO POURING CONCRETE.
 2. STREET LIGHT BASES SHALL BE 16" IN DIAMETER AND 4" IN DEPTH WITH 1/2" OF BASE EXPOSED ABOVE TOP BACK OF CURB.
 3. EXPOSED CONCRETE SHALL HAVE A RUBBED FINISH WITH ALL HONEYCOMB OR CRACKS FILLED.
 4. STREET LIGHT BASE SHALL BE 2" IN FRONT OF SIDEWALK OR 2" BEHIND SIDEWALK TO CENTER OF BASE IF NO PLANTER STRIP IS PRESENT.
 5. SONNETUBE SHALL BE KEPT DRY AND SHALL NOT BE ALLOWED TO DEFORM IN ANY WAY.
 6. CONCRETE COVER OVER REINFORCEMENT SHALL BE 2" UNLESS OTHERWISE APPROVED.
 7. USE 4-#4 REBAR UPRIGHTS & 4-#4 REBAR RINGS SPACED EVENLY AND KEPT 2" FROM SIDES, TOP AND BOTTOM OF CONCRETE.
 8. GROUT GAP BETWEEN STREET LIGHT AND BASE & PROVIDE 1/2" DRAIN PIPE FOR WATER.
 9. ALL STREET LIGHT BASES ALONG STATE ROADS ARE TO BE FLUSH WITH THE T&C AND CONNECTED TO THE LIGHT POLE WITH A BREAKAWAY SUPPORT.

	SALEM CITY POWER ELECTRICAL REQUIREMENTS & STANDARDS MANUAL STREET LIGHTING	ELECTRIC 6.9
		STREET LIGHTING
		SCALE: NONE
		DATE: 8-29-07
REV:		
REV DATE: 12-21-15		

A ELECTRICAL STREET LIGHT DETAILS
SCALE: NONE

ELECTRICAL REVISIONS	
DESCRIPTION	DATE



TAFT ENGINEERING

Taft Engineering, LLC
8610 South Sandy Parkway, Suite #200
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(801) 971-3724

COLE PARK
APPROXIMATELY 500' SOUTH 300' WEST
SALEM CITY, UT 84653

ELECTRICAL DETAILS

Project Number: 01-0027-2019

Status: PERMIT SET

Date: 08-14-2019

Sheet Number: E602



TAFT
ENGINEERING

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(801) 971-3724

GENERAL REQUIREMENTS

PURPOSE

This section was prepared to aid developers, contractors, engineers and customers in establishing electric service for new and remodeled structures. We recognize that you may require personal assistance from our staff, and we encourage you to contact us by calling Salem City Power to discuss electric service requirements with us. It is the desire of Salem Power, and the local electrical code enforcing authority to provide you, the Customer (developers, contractors, owners, etc.) with high quality, safe electric service.

In order to avoid unnecessary repetition, the "Power Department" as used in the following pages shall mean Salem City Power Department.

The requirements are intended to apply to new developments.

As a general rule, if the matter in question is not presented herein, then it is not allowed unless approved by the City's power department.

Any power required for private use (i.e. light, sprinkler, etc.) shall be metered.

CODES AND ORDINANCES

It is necessary that the construction of new or remodeled installations conform to applicable provisions of the National Electrical Code (NEC), National Electrical Safety Code (NESC), and State of Utah Electrical Service Regulations, as well as City and County ordinances and codes. This includes OSHA rules both during construction and maintenance.

CHANGES OR CONFLICTS IN REQUIREMENTS AND GUIDELINES

Some of the information in this section is based on the aforementioned governmental codes and ordinances as well as Salem City Power specific requirements as stated herein. These requirements and guidelines are issued with the intent of complying with all applicable codes, ordinances, regulations, and tariffs; however, in the case of conflict, the appropriate regulation, tariff, code, or ordinance will supersede the interpretation offered in this manual. In addition, these requirements are subject to change in the event that the governing codes, ordinances, regulations, or tariffs are changed. The Power Department should be consulted in case of doubt on the applicability of any item.

The phrase "consult Power Department" as used in this manual shall mean a consultation with Salem City Power Department Superintendent is to be made for each and every installation or project.

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
GENERAL REQUIREMENTS**

ELECTRIC 1.1
GENERAL REQUIREMENTS
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

APPLICATION FOR SERVICE

It is important that the Power Department office be provided as early as possible with accurate load information and the date when the Customer will require service, so all necessary arrangements for the service may be completed. Request for service to large residential developments normally require 60 days advance planning by the Power Department in order to serve the load. Installations requiring transformers or other equipment not in stock may require six months lead time or more.

The Power Department is available to provide advice on service requirements and related problems relative to electric energy utilization for new, existing, and reconstructed installations. The Developer will be held liable for any damage to Power Department equipment.

When conditions are encountered during construction that require changes in the initial, agreed upon service arrangements, the Power Department must be consulted so mutually satisfactory alternative arrangements can be made. Adequate notice must be given to the Power Department and approval granted regarding changes or additions.

TYPES OF SERVICE FURNISHED

The electric service available is 60 hertz (cycles), alternating current, single or three-phase. The secondary voltages and connections available are given below:

Overhead Service (Not Included)

Underground Service

Single-phase, 120/240 volt, three-wire, grounded
Three-phase, 208Y/120 volt, four-wire, grounded, wye
Three-phase, 480Y/277 volt, four-wire, grounded, wye

The nominal primary voltage of Salem City's power distribution system may differ from one service area to another. Under certain conditions, primary delivery will be supplied at the distribution voltage standard for the location at which it is requested.

APPROVAL FOR SERVICE

It is required that an electrical installation be approved by the electrical inspection authority having jurisdiction and be the Power Department, as stated herein, before it can be energized by the Power Department. The service will be energized by the Power Department only after all service requirements and inspections have been met.

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
GENERAL REQUIREMENTS**

ELECTRIC 1.2
GENERAL REQUIREMENTS
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

PERMANENT SERVICE CONNECTION

Only authorized Power Department employees shall make the permanent (or temporary) connection or disconnection of the Power Departments' electric service to a building, structure or subdivision interconnections.

SEALS

The purpose of seals by the Power Department on meters and associated service equipment is to prevent injury and/or tampering.

Under normal circumstances, seals are not to be removed except by the Power Department. If an emergency should require seal removal (only by authorized electrical contractors) without prior notification, the Power Department must be notified as soon as possible, so the installation can be inspected and the seal replaced. When this occurs, the party removing the seal shall accept all liability for damage or alteration to equipment, injury to persons or property, and loss of revenue to the Power Department from the time the seal is removed until 72 hours after the Power Department has been notified that the equipment is ready to be re-sealed.

WORK ACTIVITY NEAR HIGH VOLTAGE OVERHEAD POWER LINES

As set forth in Section 54-8c-1 through 54-8c-7 of the Utah Code, no person or thing may be brought within 10 feet of any high voltage overhead line unless:

The responsible party has notified the Power Department or Utility operating the high voltage line of the intended activity; and

The responsible party and the Power Department or Utility have completed mutually satisfactory safety precautions for the activity; and

The responsible party has made prior arrangements to pay the Power Department or Utility for the mutually satisfactory safety precautions (if applicable).

The Power Department recommends a minimum of 3 business day's notice be given before any work near its lines is scheduled to begin.

NOTE: The National Electrical Safety Code requires that homes, buildings, bridges, signs, antennas, etc. have sufficient horizontal and vertical clearance to overhead power lines. Consult the Power Department for applicable distances.

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
GENERAL REQUIREMENTS**

ELECTRIC 1.3
GENERAL REQUIREMENTS
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

UNDERGROUND PRIMARY/SECONDARY SYSTEM REQUIREMENTS OF SUBDIVISION AND COMMERCIAL AREAS

The intent of this policy is to set forth the Developer's installation requirements and to outline specific installation standards. Along with requirements indicated in this section applicable requirements as indicated in other sections of this document apply to commercial and residential developments.

Where a development within the service area of the City is to be subdivided into residential or commercial lots and has been approved by the appropriate Planning and Zoning Boards, the electrical distribution system will be installed underground in accordance with the City's connection fee and line extension policy. The subdivision Developer shall provide the City with the easements necessary for the most efficient installation of the required distribution system. All electrical systems installed by the Developer shall be front lot construction unless otherwise approved by the Salem City Power Department.

The following subsections serve as a guide for specific requirements of commercial and residential developments; however, the developer is responsible for coordinating with the Power Department to insure that the intents of this policy are met.

APPLICATION

For commercial, industrial, residential subdivisions, mobile home parks, and apartment complex applications, the request for service shall include a plot plan indicating equipment size. Commercial or industrial plot plans should show preferred service and meter locations and a single-line diagram of the overall electrical system. The request must show all load information, for commercial developments load information should include lighting, receptacle, water heating, cooking, electric heat, air conditioning, and motor loads, plus sufficient information on equipment operations to allow the kilowatt demand of the load to be estimated. The Power Department shall review the drawings and return the drawing set marked "Approved" or "Unapproved" with an indication of required changes.

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
GENERAL REQUIREMENTS**

ELECTRIC 1.4
GENERAL REQUIREMENTS
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

TRENCHING AND CONDUIT

TRENCHING

The developer is to provide the trench for all required conduit systems and, following installation of the conduit by the Developer, backfill to meet Power Department requirements. The Power Department, under the terms of the City's Line Extension policy, will install both primary (medium voltage 12.47 kV or 7.2 kV) and secondary cables (below 480 volts).

To assure the final grade has been established, the trenching will be started after the curbs and gutters have been installed unless approved by the Salem City Power Department.

Call Before You Dig

Utah Law Section 54-8A-1 through 54-8A-11 requires the Blue Stakes One Call Location Center be notified at least two working days prior to excavation. The excavation must not be started until locations have been made.

Depth

SEE CHART ON E2.3 FOR TRENCHING DEPTHS. The property owner is responsible at their own cost to insure that proper burial depth clearance listed below is maintained even after excavation of the property. Any questions on impaired burial depths should be immediately brought to the attention of the Power Department. Under certain conditions, with prior Power Department approval, cable/conduit systems may be buried with less cover provided that mechanical protection is installed by the Developer to the Power Departments specifications.

Width

All trenches meet OSHA requirements. Primary/secondary combined trenches shall be a minimum of 18 inches wide at the bottom. Trenches 12 inches wide will be approved for a single service only.

Backfill

The developer will be responsible for backfilling trenches he provides. The Developer must provide 10' of sand to be placed on top of conduits and shall have red warning tape on top of sand. Where trenches cross structural fill, typical of road crossings, the trench backfill shall consist of like kind structural fill. All primary trenches and all road crossings trenches (including secondary) shall be compacted to 95% compaction of the maximum dry density as determined by ASTM D 1557 (standard). All primary and secondary conduit systems shall have placement of red warning tape 6" below final grade. The tape shall be of the type specific for the application.

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
TRENCHING AND CONDUIT**

ELECTRIC 2.1
TRENCHING AND CONDUIT
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

Joint Use

Typically, joint use between other utilities of power department trenches is not allowed unless approved by the Power Department. Any joint use between telephone, TV, and other electrical communication cables must be pre-approved by the Power Department and installed in accordance with the Power Department specifications. The Power Department normally will not install electrical cables in a common trench with non-electric utilities such as water, gas, and sewer, unless unusual conditions such as adverse soil or route restrictions exist. All such installations require the prior approval of the Power Department.

CONDUIT

The Power Department requires the use of conduit for all underground primary and secondary cable installations, including lighting circuits. Rigid galvanized steel, IMC and gray electrical grade PVC schedule 40 (underground only) conduit are acceptable materials for conduits installed by the Customer.

All 90-degree bends are to be Long Sweep for all conduit sizes. All primary and secondary elbows are to be PVC for 2", 3", 4" and 6" conduits, steel elbows for 6" conduit for riser poles. 3" PVC with 24" radius 90-degree bends are allowed at residence if 200 amp or less.

All conduits shall be terminated at the open end with plastic bushings.

All underground metallic conduit must be tape wrapped with suitable tape for the application.

Residential primary conduit sizes must be three (2) inch. Secondary conduit size shall be three (3) inches from transformers to junction domes and two (2) inches from transformer or dome or transformer to resident. 400 amp residential service requires 3" conduit. A 36" radius schedule 80 PVC, Rigid or IMC at residence and 36" radius schedule 40 PVC at dome or transformer is allowed.

All conduits end points shall be sealed or taped to prevent debris from plugging the conduit and future use (1" PVC painted red). The Developer shall be responsible for cleaning conduits if the Power Department is unable to install or pull the service cable.

Along with conduits extending to secondary junction boxes, each transformer pad and secondary box shall have ten (10) foot conduit stub outs for interconnection to adjacent homes.

Prior to backfilling, the Developer must notify the Power Department for an inspection, following the inspection the Power Department shall issue a notice to proceed slip, allowing backfilling.

2" CONDUIT REQUIREMENTS

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
TRENCHING AND CONDUIT**

ELECTRIC 2.2
TRENCHING AND CONDUIT
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

Along with conduit requirements for the installation of power cables the Developer must provide a 2" conduit system. The conduit system shall consist of 1- two (2) inch gray PVC schedule 40 conduit and shall parallel the primary power system and to the secondary junction boxes. All applicable requirements pertaining to the installation of the power conduit system apply to 2" conduit system.

PRE-CONSTRUCTION MEETINGS AND ACCEPTABLE PRACTICES

Before work commences developer will meet with a Power Department representative to discuss the construction process. Work must be done according to acceptable work practices.

TABLE 5

	Supplied By		Installed By	
	Salem City	Customer	Salem City	Customer
Transformer	X		X	
Trans. Sleeve	X		X	X
Secondary Box	X		X	X
Primary Junction	X		X	X
Prim. Junct. Sleeve	X		X	X
Riser Pole Material		X	X	X
		See Section 4	See Section 4	
Conduits				X
Conductors	X*		X*	
Street Lights	X	X	X	
Meter Base		X	X	X
Meter	X	X	X	X
C.T. Can		X	X	X
C.T. SS	X		X	X
Test Switches		X	X	X
Service Wire		X	X	X
Power Pole	X		X	

* Service wires from transformer, secondary box or riser to meter base, installed and supplied by customer.
* C.T. cans will be required on all commercial services over 200 amps.
* All Meter bases and C.T. cans will comply with Salem City Power Department requirements

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
TRENCHING AND CONDUIT**

ELECTRIC 2.3
TRENCHING AND CONDUIT
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

SYSTEM JOINT USE TRENCH

CONDUIT SIZE	DEPTH
2"	4'-0"
3"	4'-0"
4"	4'-0"
6"	6'-0"

CONDUIT SIZE	DEPTH
1"	3'-0"
2"	3'-0"
3"	3'-0"

**SALEM CITY POWER
ELECTRICAL REQUIREMENTS
& STANDARDS MANUAL
RESIDENTIAL SERVICES**

ELECTRIC 2.4
TRENCHING AND CONDUIT
SCALE: NONE
DATE: 8.29.07
REV:
REV DATE: 12-21-15

(A) ELECTRICAL POWER UTILITY DETAILS (CONTINUES ON SHEET E604)
SCALE: NONE

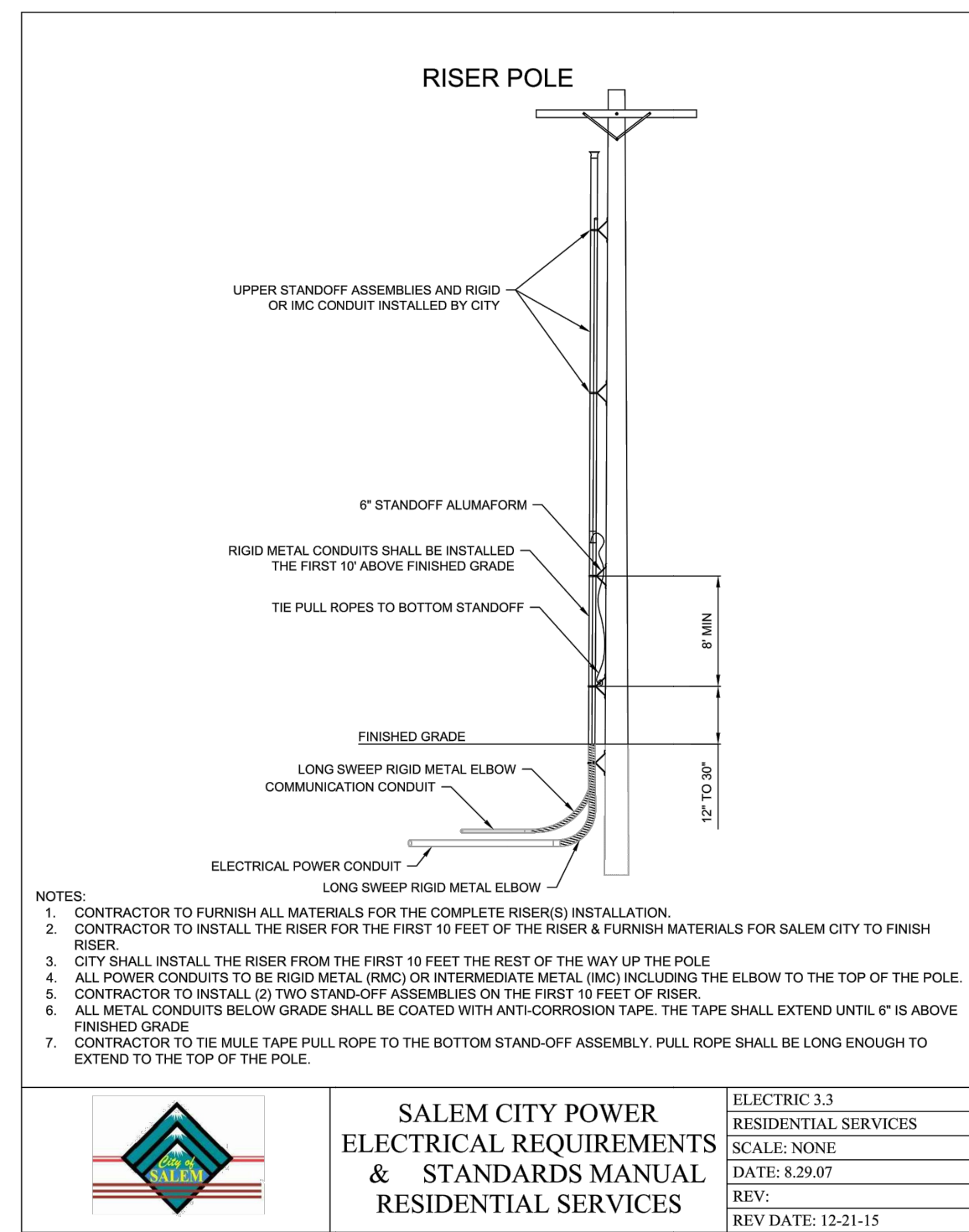
ELECTRICAL REVISIONS		
NO.	DESCRIPTION	DATE

Project Number:
01-0027-2019

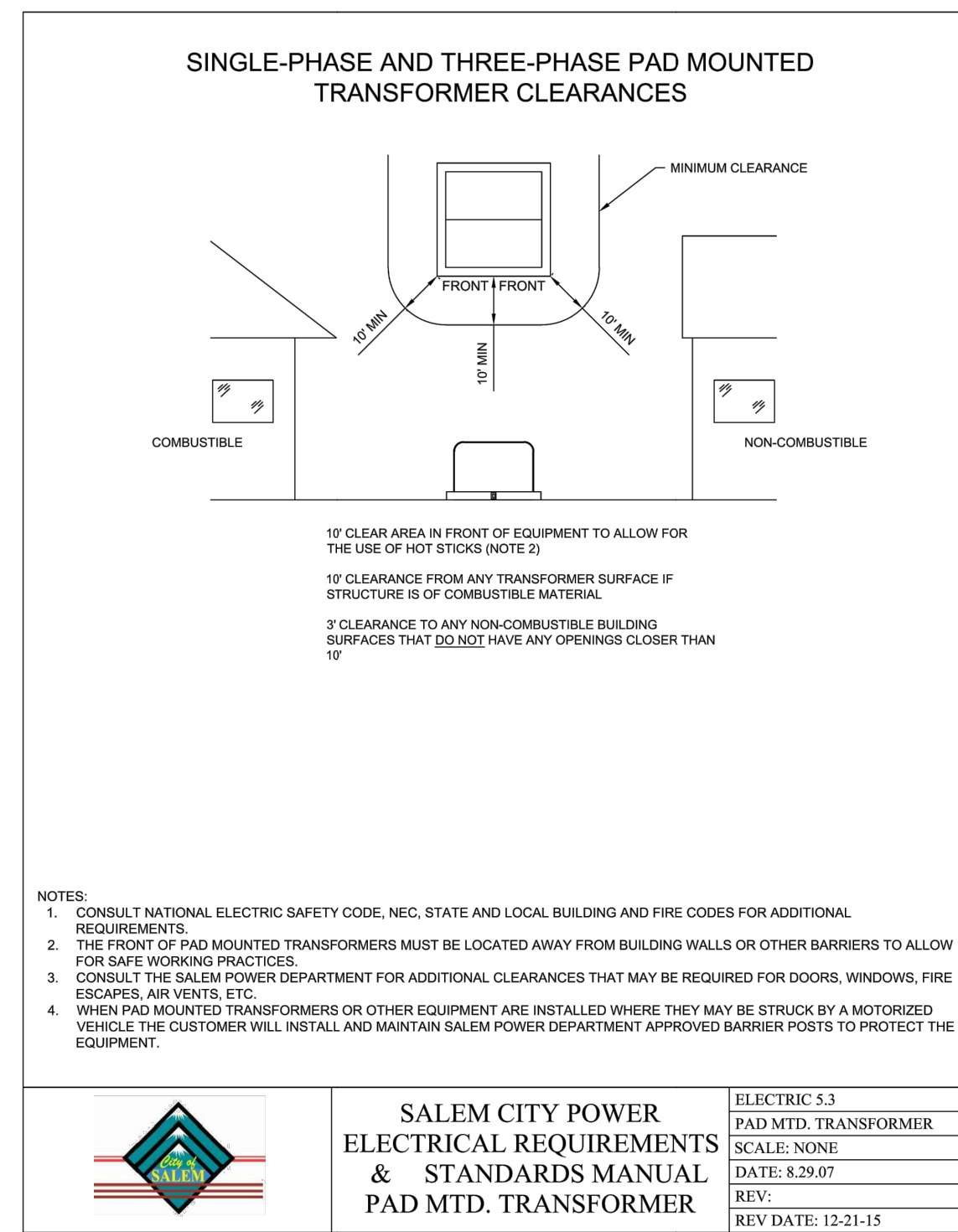
Status:
PERMIT SET

Date:
08-14-2019

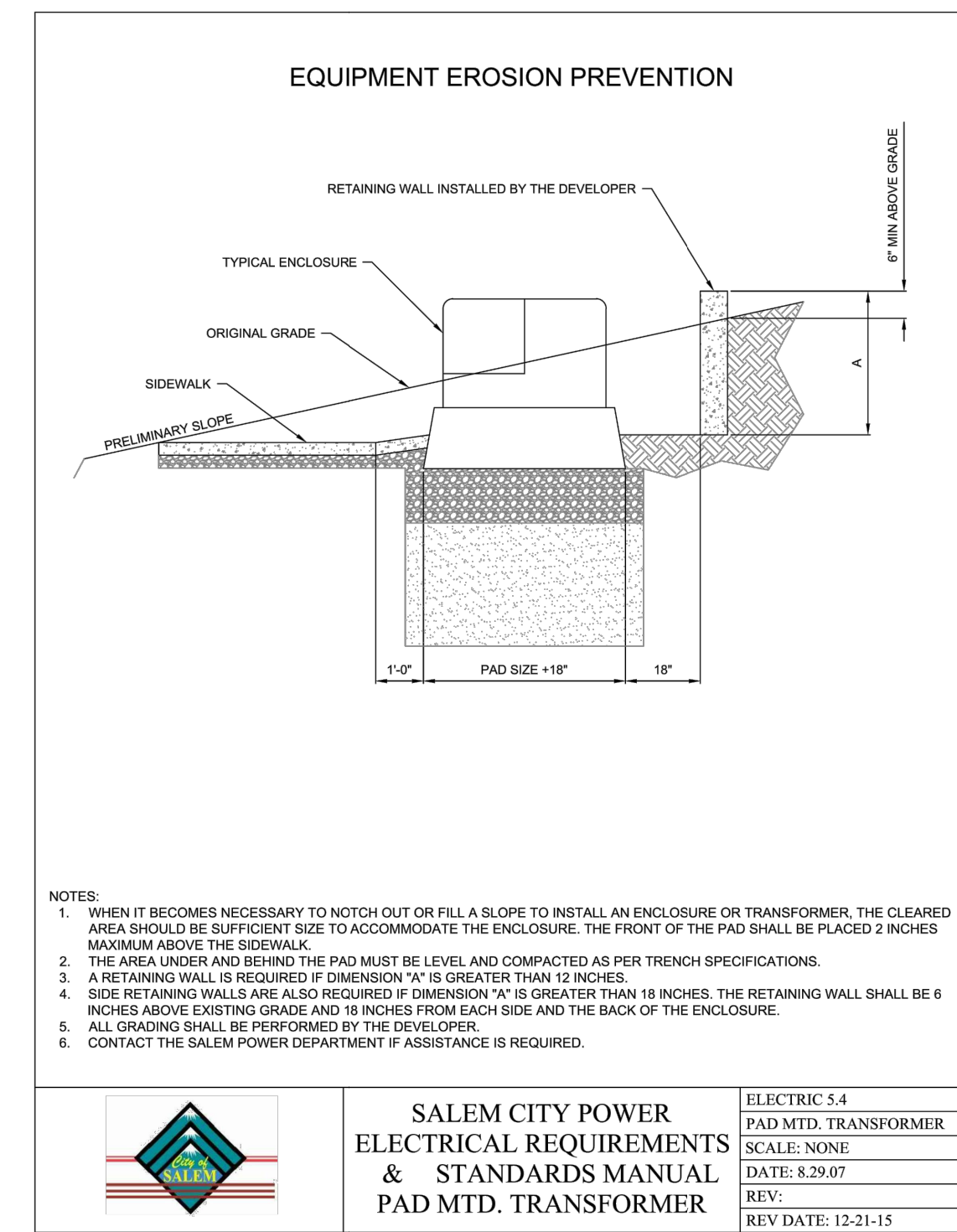
Sheet Number:
E603



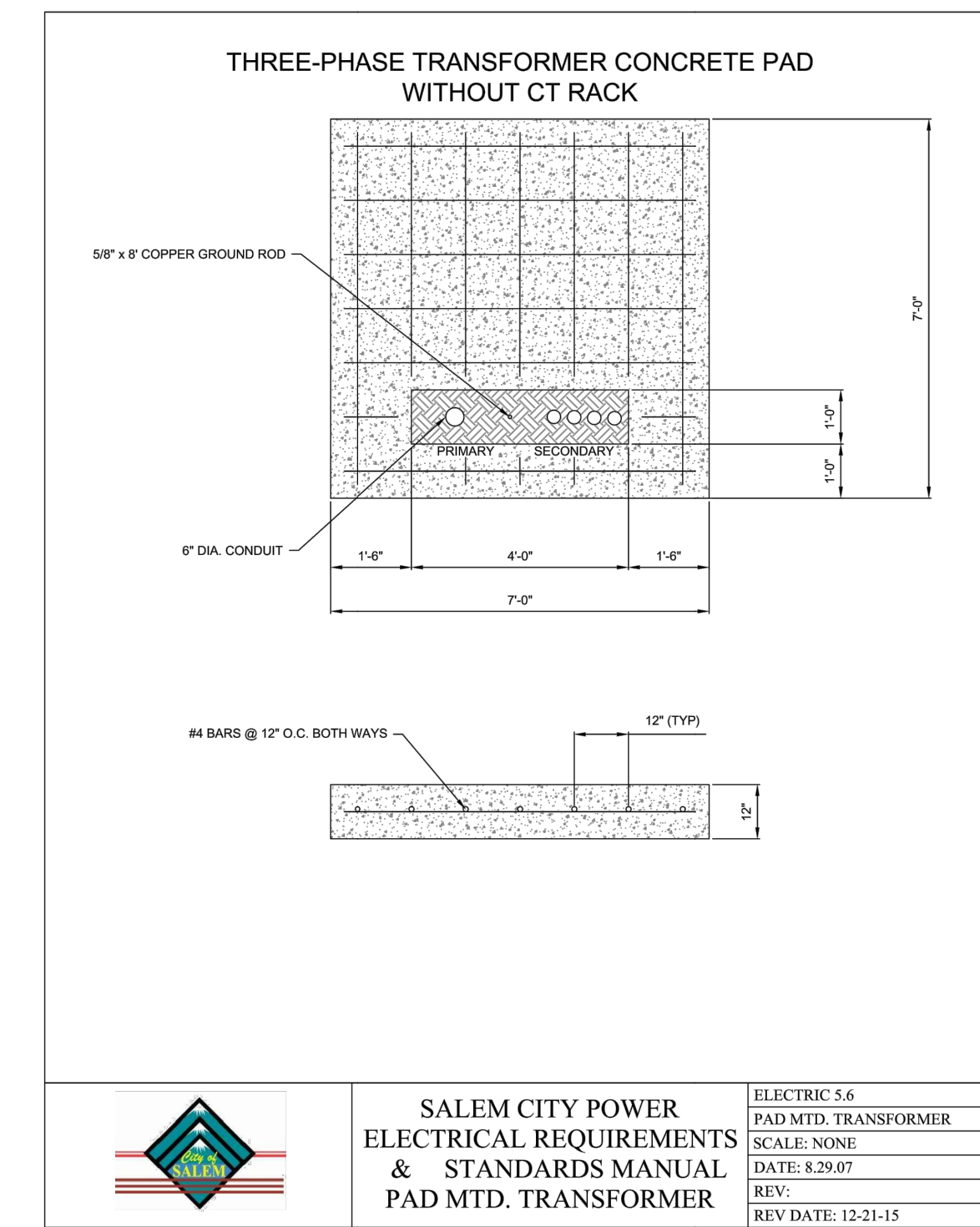
	SALEM CITY POWER	ELECTRIC 3.3
	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	RESIDENTIAL SERVICES
	RESIDENTIAL SERVICES	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	



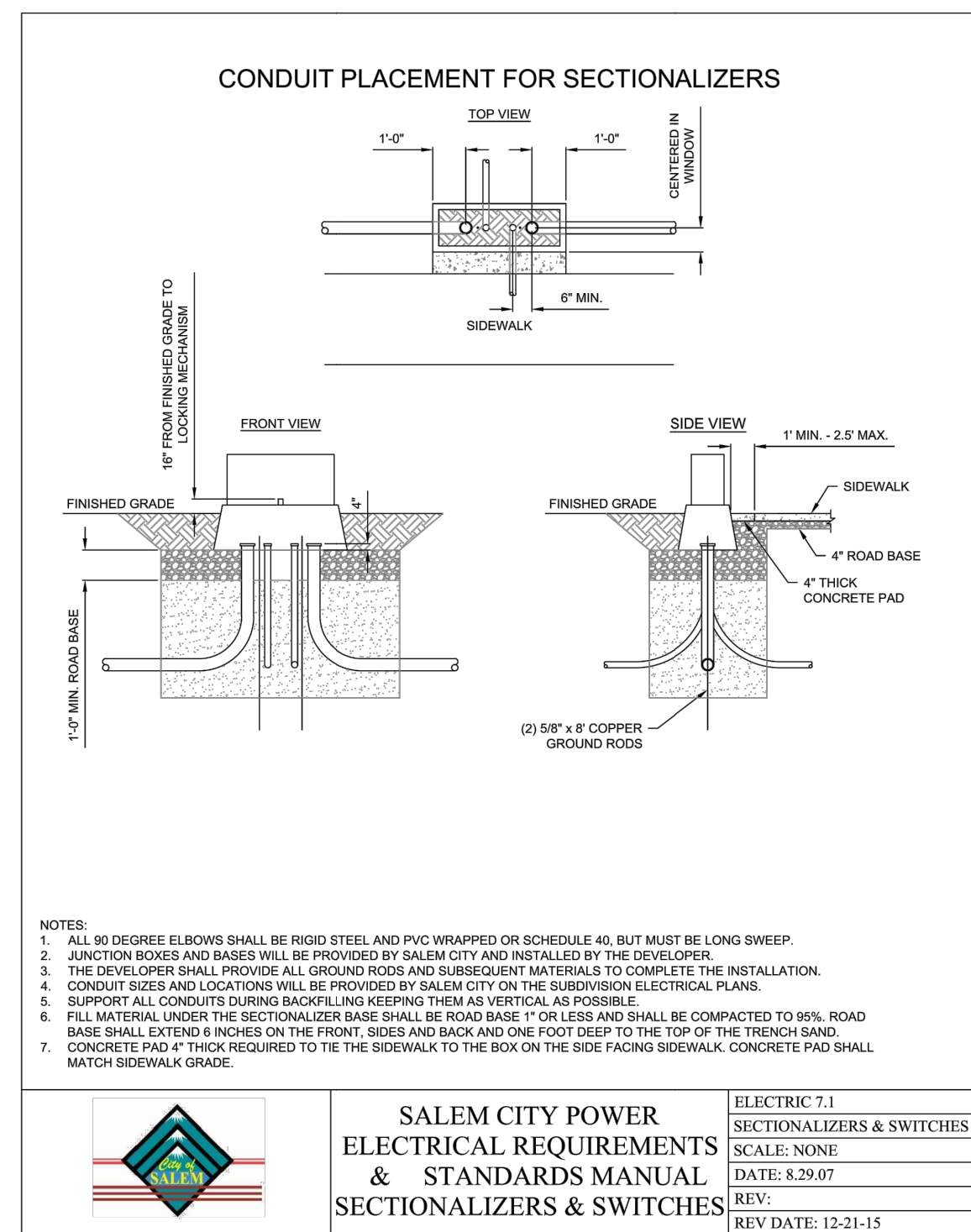
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	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	PAD MTD. TRANSFORMER
	PAD MTD. TRANSFORMER	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	



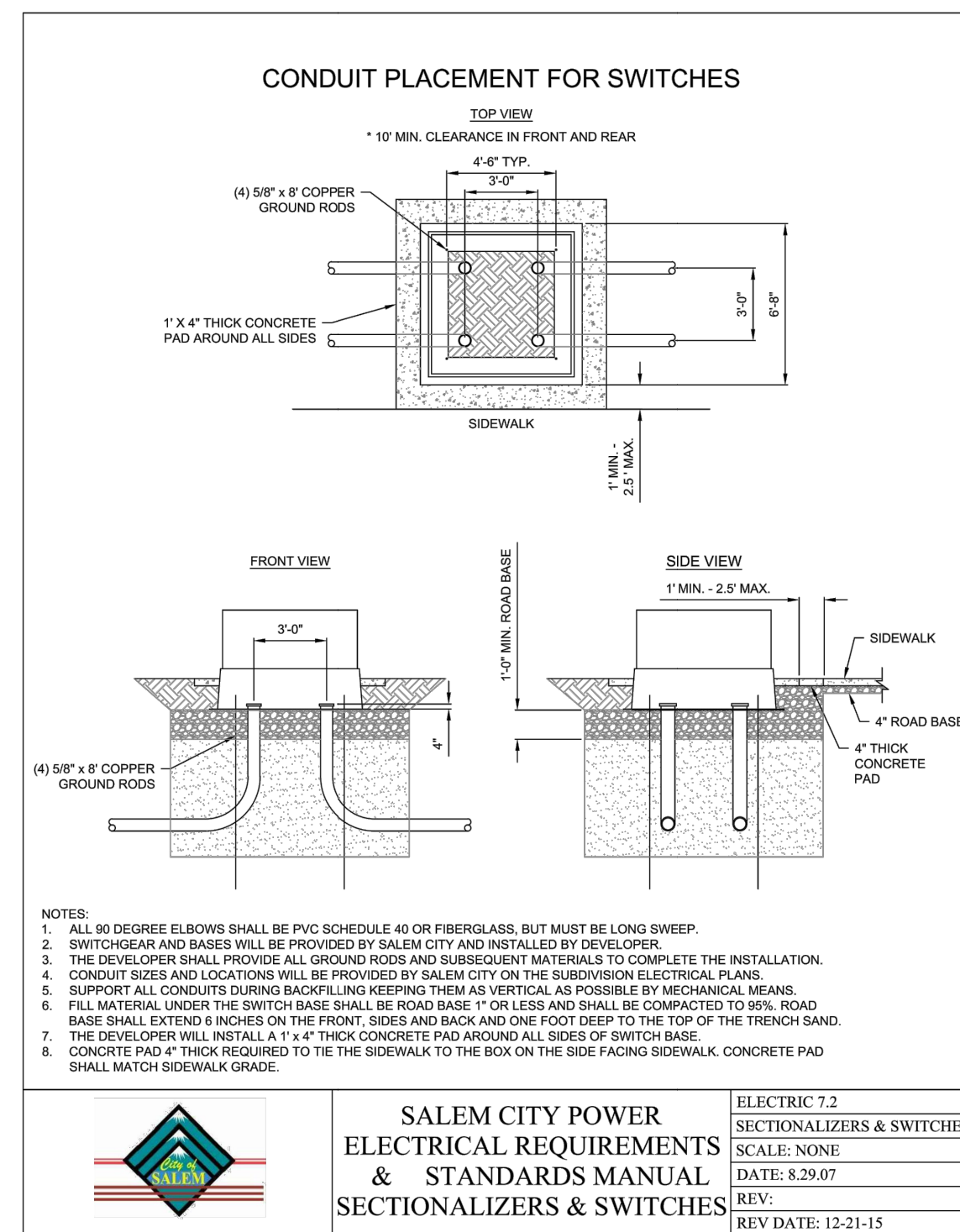
	SALEM CITY POWER	ELECTRIC 5.4
	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	PAD MTD. TRANSFORMER
	PAD MTD. TRANSFORMER	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	



	SALEM CITY POWER	ELECTRIC 5.6
	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	PAD MTD. TRANSFORMER
	PAD MTD. TRANSFORMER	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	



	SALEM CITY POWER	ELECTRIC 7.1
	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	SECTIONALIZERS & SWITCHES
	SECTIONALIZERS & SWITCHES	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	



	SALEM CITY POWER	ELECTRIC 7.2
	ELECTRICAL REQUIREMENTS & STANDARDS MANUAL	SECTIONALIZERS & SWITCHES
	SECTIONALIZERS & SWITCHES	SCALE: NONE
		DATE: 8.29.07
	REV: _____	
	REV DATE: 12-21-15	

(A) ELECTRICAL POWER UTILITY DETAILS (CONTINUES FROM SHEET E603)

SCALE: NONE

ELECTRICAL REVISIONS	
NO.	DATE



TAFT
ENGINEERING

Taft Engineering, LLC
8610 South Sandy Parkway, Suite #200
Sandy, Utah 84070
(801) 971-3724

Project Number: 01-0027-2019

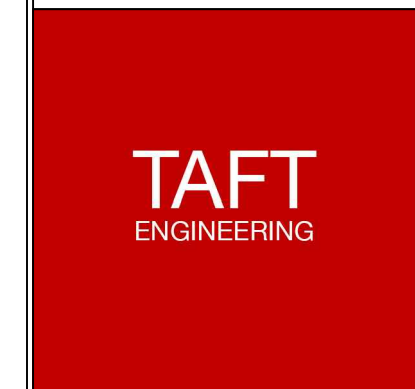
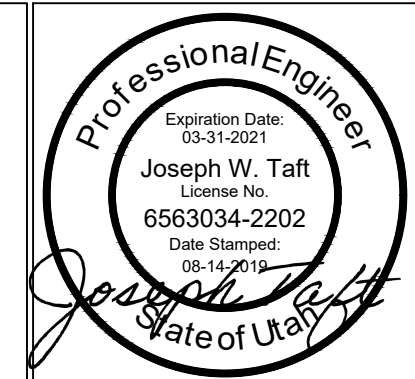
Status: PERMIT SET

Date: 08-14-2019

Sheet Number: E604

COLE PARK
APPROXIMATELY 500' SOUTH 300' WEST
SALEM CITY, UT 84653

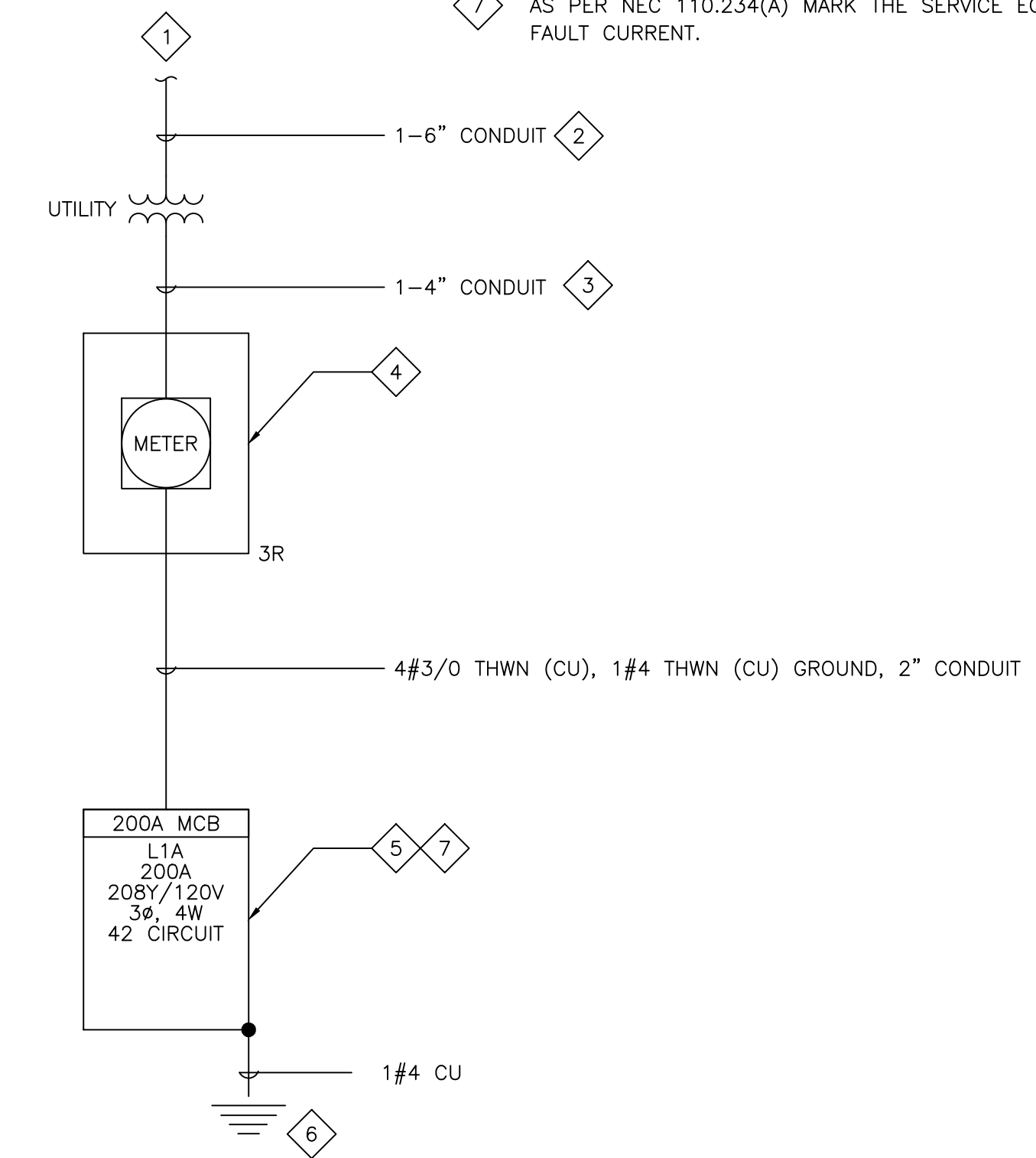
ELECTRICAL DETAILS



Taft Engineering, LLC
 8610 South Sandy Parkway, Suite #200
 Sandy, Utah 84070
 (801) 971-3724

ELECTRICAL KEY NOTES:

- 1 COORDINATE CONNECTION WITH LOCAL POWER UTILITY COMPANY.
- 2 VERIFY CONDUIT SIZE WITH LOCAL UTILITY PRIOR TO BID.
- 3 VERIFY CONDUIT SIZE WITH LOCAL UTILITY PRIOR TO BID. IF SECONDARY CONDUCTORS ARE REQUIRED TO BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, INCLUDE WORK IN BID.
- 4 PROVIDE 200A 3Ø, 4W METER BASE WITH NEMA 3R ENCLOSURE, EUSERC 305. VERIFY METER REQUIREMENTS WITH LOCAL UTILITY PRIOR TO BID.
- 5 PROVIDE 200A 3Ø, 4W PANEL INSIDE OF RESTROOM BUILDING MAINTENANCE CLOSET.
- 6 PROVIDE GROUNDING ELECTRODES PER NEC 250 BUT NOT LESS THAN TWO GROUND RODS AND AND METAL WATER PIPE.
- 7 AS PER NEC 110.234(A) MARK THE SERVICE EQUIPMENT WITH THE AVAILBLE FAULT CURRENT.



1 ELECTRICAL POWER RISER DIAGRAM
 SCALE: NONE

COLE PARK
 APPROXIMATELY 500 SOUTH 300 WEST
 SALEM CITY, UT 84653
 ELECTRICAL RISER DIAGRAM

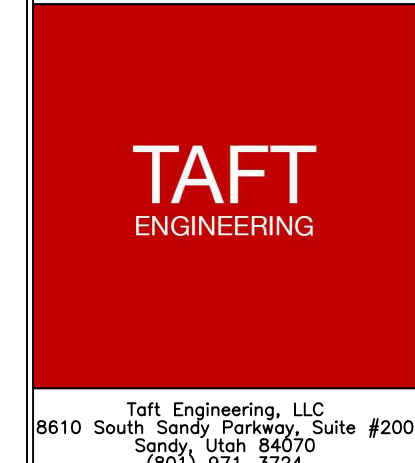
Project Number:
 01-0027-2019
 Status:
 PERMIT SET
 Date:
 08-14-2019
 Sheet Number:

ELECTRICAL REVISIONS		
NO.	DESCRIPTION	DATE

E701

ELECTRICAL LIGHT FIXTURE SCHEDULE (TYPE)									
TYPE	QUANTITY (ESTIMATE ONLY)	DESCRIPTION	MANUFACTURER(S)	CATALOG NUMBER(S)	LIGHT SOURCE	WATTS PER FIXTURE	VOLTAGE	MOUNTING	NOTES
P1A	4	ONE HEADED POLE LIGHT	VISIONAIRE	1 X VLX-1-T3-192LC-7-4K-UNV-AM-SCBA-DIM/WVC SNTS-SS-7-20-12BC-136-S1-SCBA-HCR	LED 49816lm, 4000K	421	UNV	20'-0" SQUARE POLE	SEE DETAIL A/E601
P1B	3	TWO HEADED POLE LIGHT	VISIONAIRE	2 X VLX-1-T3-192LC-7-4K-UNV-AM-SCBA-DIM/WVC SNTS-SS-7-20-12BC-136-S1-SCBA-HCR	LED 99632lm, 4000K	842	UNV	20'-0" SQUARE POLE	SEE DETAIL B/E601
P2	13	14" RESIDENTIAL STANDARD CITY LIGHT	ACUITY	AWDE2 P20 30K AS M BK 8 N S BZ H PCLL AD L25 NYA 14 FSJ Z0 P07 ABG BKZ	LED 5000lm, 3000K, 70CRI	39	UNV	POLE LIGHT	SEE DETAILS ON SHEETS E602
P3A	8	ONE HEAD 20'-0" POLE FOR PICKLE BALL COURT LIGHT	NLS LIGHTING	1 X VUE-2-TT-96L-1-40K-UNV-TA-SCBA	LED 33180lm, 4000K, 80CRI	316	UNV	20'-0" POLE ON CONCRETE BASE	SEE DETAIL C/E601
P3A	4	TWO HEAD 20'-0" POLE FOR PICKLE BALL COURT LIGHT	NLS LIGHTING	2 X VUE-2-TT-96L-1-40K-UNV-TA-SCBA	LED 33180lm, 4000K, 80CRI	632	UNV	20'-0" POLE ON CONCRETE BASE	SEE DETAIL D/E601
FP1	2	FLAG POLE LIGHT	PHILIPS HADCO	SL43-SCBA-C-F-N-N-N	LED 860-3270lm, 4000K	10-33	UNV	MOUNT IN-GRADE (COORDINATE WITH LANDSCAPE AND ARCHITECT)	FINAL POWER AND AMING WILL BE DONE IN THE PRESENCE OF ARCHITECT AND ELECTRICAL ENGINEER.
FL1	4	FLOOD LIGHT	PHILIPS HADCO	FL40-NW-C1-FL-B-BZ	LED 4400lm, 4000K	40	UNV	MOUNT ON CONCRETE BASE	SEE DETAIL E/E601
S1	3	8' HIGH ABUSE LINEAR	NEW STAR	NSL8-12-40-1-08-UN-DM-ST	LED 8,000, 4000K, 80CRI	62	UNV	SURFACE MOUNTED	PROVIDE WITH TAMPER PROOF HARDWARE. PROVIDE BUILT-IN OCCUPANCY/PHOTOCELL SENSOR WITH THE ABILITY TO DIM TO 40% LIGHT OUTPUT OVER 60 SECONDS WHEN NO MOVEMENT IS DETECTED FOR 15 MINUTES. TURN OFF IF NO MOVEMENT IS DETECTED AFTER 30 MINUTES.
			METALUX	HVSL2-8-LD4-HI-40-UNV-D-EDC1-WL-SCBA					
			COLUMBIA	LXEM-8-LW-RFP-ED-U-TIP					

NOTES:
1. OWNER / ARCHITECT TO DETERMINE FINISH OF FIXTURES
2. ALTERNATE MANUFACTURES ACCEPTABLE IF PRE-APPROVED BY ENGINEER BEFORE BID DATE. SEE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL DETAILS.



PANEL SCHEDULE														
PANEL NAME: L1A VOLTS: 120/208 TYPE: <input checked="" type="checkbox"/> BOLT ON BUS: <input type="checkbox"/> COPPER BUS LUGS: <input type="checkbox"/> SUB FEED LUGS (TOP)														
BUS RATING: 225A PHASE: 3 <input type="checkbox"/> PLUG ON <input checked="" type="checkbox"/> ALUMINUM BUS <input type="checkbox"/> SUB FEED LUGS (BOTTOM)														
MAIN BREAKER: 200A WIRE: 4 <input type="checkbox"/> FUSIBLE <input checked="" type="checkbox"/> GROUND BUS <input type="checkbox"/> FEED THRU LUGS (TOP)														
<input type="checkbox"/> ISOLATED GROUND BUS <input type="checkbox"/> FEED THRU LUGS (BOTTOM)														
<input type="checkbox"/> MAIN LUGS ONLY (TOP)														
<input type="checkbox"/> MAIN LUGS ONLY (BOTTOM)														
BRANCH BREAKERS														
BREAKER DESCRIPTION	AMPS	POL	CIR. NO.	LEFT PHASE LOAD			RIGHT PHASE LOAD			CIR. NO.	AMPS	POL	BREAKER DESCRIPTION	
SITE PERIMETER LIGHTING	20	2	1	250			251			2	2	20	2	NORTH PARKING LOT LIGHTING
SITE PERIMETER LIGHTING	20	2	3		250				1263	6	8	20	2	SOUTH-WEST PARKING LOT LIGHTING
PLAYGROUND LIGHTING	20	2	7	250		250	1263			8	10	20	2	SOUTH-EAST PARKING LOT LIGHTING
EAST PAVILION CO & LIS (FUTURE)	20	1	11		600	150	1080		705	12	14	20	2	NORTH PICKLE BALL
WEST PAVILION CO & LIS (FUTURE)	20	1	15		600		1264			16	20	20	2	SOUTH PICKLE BALL
SPLASH PAD POWER (FUTURE)	20	1	17			1600	1264		1264	18	20	20	1	SOUTH PICKLE BALL
SPLASH PAD POWER (FUTURE)	20	1	19			1600	1264			20	20	20	1	LAWN SPRINKLER POWER
SPLASH PAD POWER (FUTURE)	20	1	21			1600	1264			22	20	20	1	RESTROOM CO & LIS (FUTURE)
SPARE	20	1	23			0	1600		800	24	20	20	1	MENS HAND DRYER (FUTURE)
SPARE	20	1	25			0	1600		1600	26	20	20	1	WOMENS HAND DRYER (FUTURE)
SPARE	20	1	27			0	0		0	28	20	20	1	SPARE
SPARE	20	1	29			0	0		0	30	20	20	1	SPARE
SPARE	20	1	31			0	0		0	32				SPARE
SPARE	20	1	33			0	0		0	34				SPARE
SPARE	20	1	35			0	0		0	36				SPARE
SPARE	20	1	37			0	0		0	38				SPARE
SPARE	20	1	39			0	0		0	40				SPARE
SPARE	20	1	41			0	0		0	42				SPARE
LEFT SUB TOTAL				2700	2600	2000	5458	5084	4032					RIGHT SUB TOTAL
FEED-THRU TOTAL														
ENCLOSURE:				TOTAL	8158	7884	6032							
NEMA RATING: 1				AMPS PER PHASE	68	64	50							
FEEDER: <input type="checkbox"/> TOP				TOTAL CONNECT LOAD (kVA):	22									
<input checked="" type="checkbox"/> BOTTOM				TOTAL CONNECT LOAD (AMPS):	61									
MOUNTING: <input type="checkbox"/> FLUSH														
<input checked="" type="checkbox"/> SURFACE														
GENERAL NOTES: 1. LABEL PANEL WITH ENGRAVED NAME TAGS.														

COLE PARK
 APPROXIMATELY 500 SOUTH 300 WEST
 SALEM CITY, UT 84653
 ELECTRICAL SCHEDULES

Project Number: 01-0027-2019
 Status: PERMIT SET
 Date: 08-14-2019
 Sheet Number: E801

ELECTRICAL REVISIONS		
NO.	DESCRIPTION	DATE

26010 – GENERAL REQUIREMENTS

Part 1 – GENERAL

1.01 GENERAL CONDITIONS

A. The General Conditions are a part of this contract.

1.02 DESCRIPTION OF WORK

A. Provide all items, articles, materials, operations or methods listed, mentioned or schedules on the drawings or herein specified, including all labor, material, equipment, and incidentals necessary and required for their completion.

- 26020 – Material and Methods
26030 – Electrical Services
26040 – Electrical Distribution
26050 – Lighting Fixtures
26060 – Communication Conduit System
26070 – Fire Alarm System
26080 – Generator

1.03 DRAWINGS AND SPECIFICATIONS

A. Electrical drawings are diagrammatic, but shall be followed as closely as actual construction and work of other contractors will permit. Home runs shall be installed from outlets as shown on drawings.
B. Deviations from drawings required to make work of this contract conform to building as constructed, as to work of other contractors, shall be made by the Contractor at his expense.
C. Before submitting bid, the Contractor shall familiarize himself with the architectural and mechanical plans.
D. Items in the plans and specifications that are in conflict, not understood, or incomplete shall be referred to the Architect for clarifications before submitting bid.
E. The Contractor shall keep a record set of drawings neatly marked with all changes from the original design.

1.04 INDUSTRY STANDARDS

- A. The following is an abbreviation list of organizations and publications specified herein:
1. NEC – National Electrical Code
2. NEMA – National Electrical Manufacturers' Association
3. UL – Underwriters Laboratories, Inc.

1.05 CODES AND PERMITS

A. The installation and materials shall comply with all laws applying to electrical installations in effect, with the regulations of the NEC where such regulations of the Public Utility Company furnishing the service.
The building owner is responsible to pay for power & communication utility connection and impact fees.

1.06 DRAWINGS

A. Contractor shall submit to the Architect Eight (8) bound sets of shop drawings, consisting of electrical panelboards, fire alarm system, and light fixtures.
B. Contractor shall check all shop drawings for conformance with contract documents before submitting to Architect.
C. Contractor shall be responsible for conformance with plans and specifications; for dimension to be confirmed and correlated at the job site.

1.07 TESTS

A. This Contractor shall furnish a permit and certificate of acceptance for all work installed by him, including inspection fee for all motors.
On completion of the work, the installation shall be tested free from all grounds and short circuits.

1.08 GUARANTEE

A. This Contractor shall guarantee all materials, workmanship and the successful operation of all equipment and apparatus under this contract for a period of one (1) year or as the law requires from the date of final acceptance of the whole work.
He shall guarantee to repair or replace at his own expense any part of the apparatus which may show defect during that time.

1.09 SUBSTITUTES

A. Refer to General, Supplementary and Special Conditions for instructions on bidding substitute materials and systems.

26020 – MATERIALS AND METHODS

Part 1 – General

1.01 GENERAL CONDITIONS

A. The General Conditions are a part of this contract.

1.02 SCOPE OF WORK

A. This Contractor shall furnish all labor and materials required to complete all the electrical work shown on the drawings and as specified herein.

1.03 MATERIALS

A. All materials shall be UL approved unless otherwise required and shall be delivered to the site at such stages of the work as will expedite the work as a whole.
The materials shall be there stored in original cartons until ready for use in such a manner as to permit ready observation by the Architect or his representative.

1.04 ALTERNATE MATERIALS

A. Manufacturers' names are listed to establish function and quality of materials or equipment. Materials so listed shall be bid as specified unless written approval is obtained to substitute materials of equal quality by other manufacturers at least five working days prior to bid opening.
Letters requesting approval and including complete engineering information describing performance and showing dimensions shall be submitted to Architect and two copies shall be submitted to the Engineer.

1.05 EXCAVATION

A. Trenching or other excavation necessitated under this contract shall include proper backfilling, compaction and grading of excess earth.
All rubbish or wasted shall be removed and premises left clean as far as this construction is concerned.

1.06 CONDUCTORS

A. All wiring shall be done with copper conductors sized according to the drawings. Minimum wire size shall be #12 AWG, except as noted.
Wire #10 AWG and larger shall be stranded. The insulation shall be type THHN or THW or as shown on drawings and shall conform with NEC for the particular application.

B. Wires shall not be pulled into conduits until the entire system is completely installed and swabbed out and the building, except interior finish, is substantially completed.
Only approved wire lubricant shall be applied to conductors.
All wires of the same circuit shall run in the same conduit.
Neutral conductors shall not be paralleled nor tied together, except at neutral bus in panelboards.

C. Splices, taps, and terminals shall be made in accordance with NEC and shall be made in junction boxes, outlets and panelboards approved for the purpose.
Ideal wire connectors or equal shall be used for all splices. All wire shall run in metallic raceways.

1.07 RACEWAYS

A. Conduits shall be either rigid steel, intermediate metal conduit (IMC) or electrical metallic tubing (EMT) as required by NEC and shall be of standard type and manufacture.
Conduits in damp wet locations, in earth fill, in slab on grade or where subject to mechanical injury shall be standard weight rigid galvanized conduit or IMC.
Heavy duty plastic conduit, equal to Carlon PV-dut type 40, 90 degree C UL approved, may be used for conduits used for service entrance conductors and panelboard feeders where concealed in concrete, installed below slab on grade or buried and encased in three inches (3") of concrete.

B. All raceways shall be installed as one complete system with all joints in pipes and all connection to boxes made electrically and mechanically correct.
Raceways shall be installed with a pitch down toward boxes in wet or damp areas and shall enter boxes squarely without drop covers or bunching. They shall be firmly secured with standard fittings.

C. No raceway shall run on roof deck, be cut into insulation or be so located as to endanger the strength of structural members.
No horizontal runs shall be made in structural walls without permission of the structural engineer.
Conduits buried in concrete slabs shall not exceed 1/3 of the depth of slab and shall be covered by not less than 1/3 depth of concrete.
Conduits may be run under floor where necessary, with approval of Architect.

D. All conduits shall be run concealed in hollow spaces of walls or ceiling, except where otherwise noted.
Conduits shall be run exposed on ceilings in unfinished areas.
Exposed conduits shall be routed in a workmanlike manner on surface of wall or ceiling, shall be parallel to wall and ceiling, and shall not span across bottom of joists, except where directed by Electrical Engineer.
Condulets shall be used where required to provide a neat and workmanlike installation.

E. Conduit shall be supported within two feet (2') of all couplings and, where exposed, equally spaced not further apart than eight feet (8').
Conduit shall be supported on approved types of galvanized wall brackets, ceiling trapeze, strap hangers or pipe straps, secured by means of toggle bolts on hollow masonry units, expansion bolts in concrete or brick, machine screws on metal surfaces, and wood screws on wood construction.
Maintain six inches (6") minimum clearance between conduits and lay-in ceilings.
Conduits shall not be anchored to or touch ceiling suspension wires.
All empty conduits shall be provided with pull wire having nine inch (9") leads at each outlet or termination.
Empty conduits shall be clearly and permanently tagged at all outlets and terminations indicating purpose, origin and destination.

1.08 FITTINGS AND BUSHINGS

A. All EMT couplings and fittings shall be steel rain-tight compression or steel set screw type equal to Thomas & Betts.
Grounding type insulated bushings, equal to OZ type BLG or SBLG, shall be used where required by code.
OZ wall entrance seals shall be used at all below grade wall penetrations.
Plastic bushings shall be used on conduit 1-1/4" and larger at all terminations.
OZ wall entrance seals shall be required for all conduits entering building below grade.
Expansion fittings, equal to OZ type AX, shall be used at all expansion joints where cast in slab, for exposed work flexible connections shall be provided.
Use OZ type DX expansion fittings in concrete.
Provide a bonding bushing on service entrance conduit at main panel.

1.09 BOXES

A. At each current consuming or switching outlet, provide an approved outlet box of not less than No. 14 gauge steel and of the same finish as the raceway.
Gang boxes sized as required shall be provided for bands of more than one device.
All boxes at outlets intended for fixtures shall have approved fixture studs fastened to the boxes with approved fasteners.
No outlet box shall be so located as to displace or interfere with reinforcing steel in concrete slabs, beams, joists or columns.
B. Ceiling outlet boxes in reinforced concrete joint construction shall be located in headers between the joists.
All boxes shall be set plumb and level and shall be firmly secured in place so that the face of the box cover will be flush with the finished wall or ceiling line.
Provide box extensions to extend box flush with wall finish per NEC 370-10.

C. Only such knockouts shall be removed from the boxes as are required for connections.
Junction boxes, pull boxes and outlet boxes for devices shall be sized as required by NEC, shall be 4" square by 2" deep minimum, and shall be provided with a suitable cover of same material as box.
Junction boxes recessed in ceiling or walls shall be provided with 1-1/2" raised plaster ring and cover plate to match plates for devices.
In unfinished areas, provide a suitable cover of same material as box.
Outlet boxes in wet or damp areas shall be provided with seals to keep moisture out.

1.10 LABELS

A. Provide labels identifying all conductors entering pull boxes and junction boxes.
Identify all raceway systems where exposed and all empty outlet boxes.
Label shall be on inside cover on junction boxes in finished areas and on outside of cover on boxes in unfinished areas.
Provide nameplates on all motor controls, switches and pilot lights, pilot lights, empty cabinets, contactors, momentary contact switches, time switches, and other miscellaneous devices whose function is not apparent from observation and as directed by Architect.

B. Labels shall be engraved metal tags, plates or embossed plastic tape.

C. Nameplates shall be black laminated mica or equal with white engraved capital letters on black with white beveled edges, utilize red background for emergency panels and apparatus.

1.11 INSTALLATION

A. The Contractor shall be held solely responsible for the proper installation of his work.
He shall arrange with the proper contractors for the building of anchors, etc., and for the leaving of required chases, openings, etc., and shall do all cutting and patching made necessary by his failure or neglect to make such arrangements with others.
Any cutting or patching done by this Contractor shall be subject to the directions of the Architect and shall not be started until approval has been obtained.

- B. Unless otherwise indicated or directed, the heights to the center of outlets or equipment shall be as follows:
Receptacles 18" Intercom stations 48"
Telephone outlet 18" Wall switches 48"
Clock outlet 98" Distribution panels 72" top
Bells and horns 82" Disconnect switches 60"
Speakers 98" Motor controllers 60"
Fire alarm station 48"

C. Before placing outlets and equipment, the Contractor shall consult the drawings and specifications of other trades for conflict with equipment, cabinets, shelves, etc.
Where such conflicts exist, the Contractor shall consult with the Architect for exact location of outlets.

26030 – ELECTRICAL SERVICES

Part 1 – GENERAL

1.01 GENERAL CONDITIONS

A. The General Conditions are a part of this contract.

1.02 SCOPE OF WORK

A. This Contractor shall furnish all labor and materials required to complete all the electrical work shown on the drawings and as specified herein.

1.03 SERVICE ENTRANCE

A. Three phase 277/480 volt, 4 wire, 60 cycle.

1.04 SERVICE DROP

A. Underground service shall be installed as shown on plans.
Extend up service pole as directed by Power Company if plans call for extension up pole.

B. Contractor shall verify exact location of service entrance and voltage available with local Power Company before commencing with electrical installation.
If any changes are required from system shown on drawings, Contractor shall receive written approval for Architect before making changes.

1.05 METERING EQUIPMENT

A. Meter and current transformers shall be provided by local Power Company.
Contractor shall provide and install meter base and transformer can sized as required by Power Company.

1.06 GROUNDING SYSTEM

A. The conduit system and neutral conductor of the wiring system shall be grounded to the cold water pipe having a continuous path to earth in compliance with NEC.
Point of connection to the water system shall be as near as practicable to the service entrance.
Run grounding conductor in conduit.

B. Provide bonding jumper same size as system, ground to provide ground continuity from customer's side of metallic line service entrance and street side of metallic mains.

C. In addition to the water pipe ground system, the Contractor shall install a made electrode ground system consisting of two (2) 3/4" x10' copperweld rods spaced not closer than ten feet (10') part.
Grounding conductors and connections to ground rods shall be protected from damage and shall be placed to avoid disconnect by unauthorized personnel.
Interconnect with water pipe ground system.

D. Ground and bond all cabinets, motor frames, conduit systems, electrical appliances, equipment, etc. as required by NEC.
Grounding connection shall be accessible for inspection.

E. Conduit system shall not serve as the sole grounding conductor, a separate ground is required in all conduits or cables that contain wiring over 50 volts.
However, in all plastic conduits and where an equipment ground wire is required, it shall be a copper conductor, sized per NEC Table 250-95.
Terminate grounding conductors in outlet boxes per NEC 250-114 and on ground terminal strips in panelboards.
Do not connect to neutral bus.

26040 – ELECTRICAL DISTRIBUTION

Part 1 – GENERAL

1.01 GENERAL CONDITIONS

A. The General Conditions are a part of this contract.

1.02 SCOPE OF WORK

A. This Contractor shall furnish all labor and materials required to complete all the electrical work shown on the drawings and as specified herein.

1.03 PANELBOARDS

A. Panelboards shall be complete with concealed trim clamps, door with concealed hinges, flush lock, permanent numbering system, and breakers as shown on the drawings.
Breakers used for switching shall carry label indicating "Approved for Switching".
Panelboards specified are Square-D with fast trim fronts.
Panelboards as manufactured Siemens, General Electric, or Cutler Hammer and conforming to this specification and to dimensions shown on drawings, are approved as equals.

C. Panelboard layout, circuit numbers, etc., shall conform with Panelboard Schedule shown on drawings.
Circuits numbered as shown on drawings shall be connected to respective circuit numbers in panelboard.
D. Provide a neatly typed or lettered index for all circuits served by each panel using permanent room numbers or names as directed by the Architect.
Each index shall be enclosed in an approved holder on the inside of the cabinet door.

E. Provide hardware in spaces for mounting of future breakers.
All panelboards shall be keyed the same.

F. Provide and install ground terminal strip in all panelboards with grounding conductors.
Anchor and ground strip securely to can.
Terminate each grounding conductor individually.

G. Panels and distribution switchgear with fused switches shall have metal nameplate permanently secured on outside of each switch door.
Nameplate shall indicate "fuse type", "maximum fuse amps" as shown on drawings.

H. Semi-flush mount flush mounted panelboards which protrude from the wall.
Fur around panel as directed by Architect.

1.04 FUSES

A. The fused distribution system is designed to provide current-limitation and component protection.
To retain these design standards, all fuses shall be of the same manufacture.

B. Ampere ratings shall be as listed in plans.
Interrupting ratings shall be 200,000 amperes for branch feeder and main fuses, unless otherwise noted.

C. Fuses rated 1/10 to 600 amperes shall be UL Class RK-5 dual-element, current-limiting.
All dual-element fuses shall have separate overload and short circuit elements.
Bussman Low-Peak Dual-Element Fuses LPN-LPS.

D. Fuses rated 601 to 6000 amperes shall be UL Class L with time-delay.
Bussman Hi-Cap Time-Delay Fuse KRP-C.

E. When indicated on plans, fuses protection circuit-breaker panelboards shall be Class KR-1 or Class L current-limiting fuses.
Bussman Limiftron Fast Acting Fuses KTN-KTS-KTU.

F. Motor circuit fuses rated 1/10 to 600 amperes shall be sized one ampere rating above the selected heater element.
Fuse ampere rating shall not exceed 125% of motor FLA.
Abnormal motor conditions requiring increased ampere ratings shall be referred to the Electrical Engineer.
Fuses rated 1/10 to 60 amperes shall be UL Class RK-5 Dual-Element.
Bussman Fusetron Dual-Element Fuses FRM-FRS.
Fuses rated 65 to 600 amperes shall be UL Class RK-5 dual-element, current-limiting.
Bussman Low-Peak Dual-Element Fuses LPN-LPS.

G. Motor circuit fuses rated 601 to 6000 amperes shall be sized at 150% of motor nameplate.
Fuses shall be UL Class L with time-delay.
Bussman Hi-Cap Time-Delay Fuse KRP-C.

H. Spare fuses shall be furnished.
Spares shall amount to 10% of installed fuses with a minimum of one set of each fuse type and ampere rating.
The set shall equal the number of poles in the appropriate switch.

I. Provide spare fuse cabinet equal to Bussman for storing spare fuses.
Mount on wall near main panel or as directed by Architect.

1.05 HEATING, VENTILATION, AND MISCELLANEOUS EQUIPMENT

A. The Electrical Contractor shall perform all line voltage wiring and make all line voltage connections to equipment, except where noted otherwise.
Line voltage shall be that voltage at 50 volts and above.

B. The Contractor shall install all starters and controls furnished to by the Contractors of other trades and furnish and install all starters, controls and disconnect switches shown on the drawings, or not provided by other Contractors.

C. The Contractor shall perform all wiring required for interlocking equipment of other trades installed under this contract.
Interlock wiring for mechanical system shall be done as specified under the mechanical section of these specifications.

D. Low voltage equipment and wiring shall be installed by others or as specified under the mechanical section of these specifications or as shown on the drawings.

1.06 WIRING DEVICES

A. General:
All devices shall be specification grade and shall be Hubbell, P&S, Leviton or as noted.
All devices shall be of one manufacture.
Install hospital grade devices where indicated on plans.

B. Switches:
Flush toggle type AC quiet, 20 amp, color per architect or owner, Pass & Seymour 20AC1, 20AC3, 20AC4 for spec grade, 2601, 2603, 2604 where decorator devices are called out or equals by Hubbell or Leviton.

C. Receptacles:
3-wire flush grounding type, 125 volt, 20 amp, color per architect, Pass & Seymour 5352 for spec grade, 26252 for 15 amp decorator & 26352 for 20 amp decorator style, GFI outlet, IG outlets must be 15 or 20 amp spec grade as noted.
Equals by Hubbell or Leviton are acceptable.
Weatherproof receptacles shall have Pass & Seymour WP-26 or WP-B W.P. covers appropriate.

D. Clock outlets:
Single grounded receptacle equal to Hubbell 5235 with stainless steel plate.

E. Plates:
Lexan plastic color to match device, equal to P&S RP series.

F. Special Purpose Outlet:
Provide 4-11/16" square by 2-1/8" deep junction box minimum with raise plaster ring, flexible metallic conduit with ground wire and wire or receptacle as required.
Plaster ring shall be 2-gang for #8 conductor and larger.
Larger junction boxes shall be provided where required.
Installation shall be watertight in wet or damp locations.
Make all line voltage connections to equipment.
Verify exact location of all equipment before installing feeders and conduits.
Notify Architect of any changes required from requirement shown on drawings.

G. Floor Outlets:
Shall be equal to Walker Parkersburgh 880 Series steel floor box with #895 brass cover plates for power, #896 CK-1 brass cover plate for telephone.
Provide carpet flanges in carpeted areas.
Where required, service fitting shall be provided as specified on drawings.

H. Time Switch:
1. Shall be equal to Tork W300 for outside lights and Tork #7200 24-hour clock for indoor lights.
Provide NEMA Type 1B enclosure with key lock and size as required where flush mounting is specified.

I. Disconnect Switches:
1. Shall be equal to Square D with rating as required by NEC and shall be weatherproof where located outside.

(a) Single Phase: Motor starting switch with thermal overload.
Omit overloads when included in controller.

(b) Three Phase: Safety switch NEMA type ND fusible.
Fuse with Buss dual element fuses sized and 125% of motor full load amps or at next standard fuse size.

2. Disconnect means for each motor controller shall be provided with auxiliary contacts as required (or separate disconnect switch adjacent to controller disconnect) for disconnecting controller control circuit from its source of power.

J. Starters:
1. Shall be equal to Siemens A-C magnetic full voltage RQ-21 starter complete with pilot light, three heaters, selector switch and properly rated for motor it serves.
Starters with disconnect switch shall be equal to RQ-21 combination starter with fusible disconnect switch, having auxiliary contacts for control of separately derived control circuit for operating holding coil.
Rating of holding coil voltage and number of interlocks shall be as required by associated equipment or as specified under the mechanical section of these specifications.
Size thermal overload units for full load ampere ratings shown on motor nameplate.
Record motor nameplate full load ampere rating and horsepower in each starter.

26050 – LIGHTING FIXTURES
Part 1 – GENERAL
1.01 GENERAL CONDITIONS
A. The General Conditions are a part of this contract.

1.02 SCOPE OF WORK
A. This Contractor shall furnish all labor and materials required to complete all the electrical work shown on the drawings and as specified herein.

1.03 EQUIPMENT
A. Fixtures as described and scheduled on the drawings and herein shall be furnished and installed complete with all necessary wiring, sockets, lamps, ballasts, auxiliaries, plaster frames, supports, etc.
Contractor shall be responsible for verifying correct mounting required for each fixture.

B. Fixture supports shall be provided in accordance with the NEC and as specified herein.
Outlet boxes supporting fixtures shall be firmly anchored to permanent building structures.

Fixtures weighing more than 50 pounds and all fluorescent fixtures shall be firmly anchored to 1-1/2" steel channel supported by permanent building structure.
Spacing between supports for fluorescent fixtures shall be not greater than eight feet (8') and there shall be not less than two (2) supports for each fluorescent fixture.

All surface mounted fixtures shall mount tight against ceiling expect spacers shall be provided for combustible ceilings as required by fixture manufacturer.
Fixtures shall not be supported from the ceiling or lath of wood, metal or composition.
Recessed fixtures designed for grid type ceilings shall be earthquake supported by 4 #12 galv. steel wires attached to structure.

C. All recessed fixtures shall be removable from the front and shall have tape connection conductors having and insulation suitable for the temperature encountered running from the fixture terminal connection to an outlet box, placed at least one foot (1') from the fixture.
Such tape shall extend in at least four feet (4') but not more than six feet (6') of flexible conduit.
Outlet box shall be accessible when fixture is removed.

D. Where permitted by code, recessed fixtures may be wired directly with supply conductors having insulation suitable for the temperature noted on the fixture.

E. Where there is a discrepancy between the quantity of fixtures shown on the drawings and the quantity of fixtures shown in the fixture symbol, the quantity shown on the drawings shall govern.

F. All fixtures located in wet or damp areas shall be rated for the specific area and shall carry label indicating approved for wet or damp location.

G. Typically fixtures are LED rated 3500K for interior lighting and 4000K for exterior applications.
Where fluorescent fixtures are utilized they shall have ELECTRONIC ballasts with no more than 20% total harmonic disturbance.
All lamps must be full spectrum T-8 spec. 3500 style.

26060 – COMMUNICATION CONDUIT SYSTEM
Part 1 – GENERAL

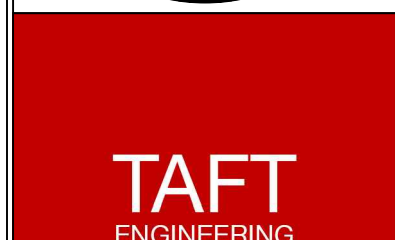
1.01 GENERAL CONDITIONS
A. The General Conditions are a part of this contract.

1.02 SCOPE OF WORK
A. This Contractor shall furnish all labor and materials required to complete all the electrical work shown on the drawings and as specified herein.

1.03 EQUIPMENT
A. Underground service shall be installed as shown on drawings.
Contractor shall verify exact location of service entrance with the Telephone Company before commencing with electrical installation.
If any changes are required from those shown on the drawings, Contractor shall obtain written approval from Architect before making changes.

B. Voice/data outlets shall be standard 4" x 4" box with telephone face plate to match plates for devices.

C. Provide raceway system as shown on drawings.
Surface mounted raceways terminating at location of telephone equipment shall be neatly racked and stubbed up 6" above floor and 6" below ceiling.
Secure conduits to 1" channel mounted on wall.
Provide bushings on all conduits.



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ELECTRICAL SPECIFICATIONS

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Table with 2 columns: DESCRIPTION, DATE. Header: ELECTRICAL REVISIONS. Includes a revision symbol (A) in the first row.