

SHADED AREA DENOTES OPEN SPACE. SEE SITE DATA TABLE FOR AREA.

SITE DATA & REQUIREMENTS

	UNIT INFO			CAR PARKING		ADA CAR PARKING		BIKE PARKING			OPEN SPACE
	UNIT TYPE	# OF UNITS	# OF BEDROOMS	PER 40.15.090 MIXED USE (M-U)	PER CBC 11B-208.2	PER 40.25A.040 BICYCLE PARKING STANDARDS	PER 40.15.070 MIXED USE (M-U)	PER ARCHITECTURAL PLANS	PER ARCHITECTURAL PLANS	PER ARCHITECTURAL PLANS	PER ARCHITECTURAL PLANS
RESIDENTIAL	STUDIO	32	32	1	32	1	32	1	32	1	32
	1 BR	96	96	1	96	1	96	1	96	1	96
	2 BR	32	64	1	32	1	64	1	32	1	64
	TOTAL	160	192		160		192		160		192
TECH	TECH SPACE	4	N/A	1/500	54	1/1,500	18	1/1,500	18	1/1,500	18
	TOTAL				214		210		210		210
TOTAL PROVIDED ONSITE					214		216		216		40,100

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 DRAWN BY: BM
 CHECKED BY: ME
 SCALE: 1" = 30'

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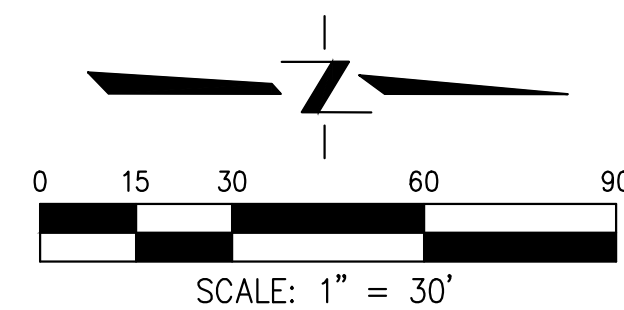
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 SITE PLAN

SHEET 1 OF 4
 DATE: 9/10/18
 JOB NO: 1641.04

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SITE NOTES

SEE SHEET L3 FOR PLANTING LEGEND
 SEE SHEET L4 FOR SHADE CALCULATIONS
 NEW PLANTINGS ARE TO BE IRRIGATED BY A COMBINATION OF SUBSURFACE IN-LINE DRIP AND MATCHED PRECIPITATION OVERHEAD SPRAY. NEW TREES ARE TO BE IRRIGATED BY DEEP ROOT WATERING BUBBLERS.

SITE AREAS

CATEGORY	AREA
ASPHALT PAVING	66,908 SF
PERVIOUS CONCRETE	5,200 SF
CONCRETE PAVING	50,921 SF
BUILDINGS	33,131 SF
NEW PLANTING AREA- ORNAMENTAL PLANTING	21,234 SF
NEW PLANTING AREA- STORMWATER PLANTING	15,121 SF
EXISTING PLANTING AREA TO REMAIN (LAWN)	8,574 SF
TOTAL PROJECT SITE AREA	194,278 SF (4.46 ACRES)
TOTAL REMAINING PARCEL AREA	75,195 SF (1.74 ACRES)

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SHEET **2** OF **4**
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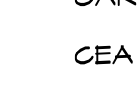
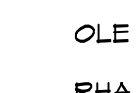

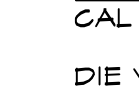
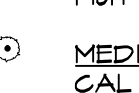
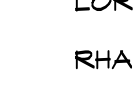



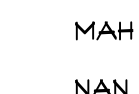



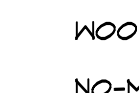










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PLANT SCHEDULE

	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	WATER USE	HxW
	CORNUS FLORIDA 'EDDIES WHITE WONDER'	FLOWERING DOGWOOD	15 GAL	M	25'X15'
	LAGERSTROEMIA X 'NATCHEZ'	GRAPE MYRTLE	15 GAL	L	20'X20'
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	15 GAL	L	40'X30'
	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	15 GAL	M	60'X35'
	QUERCUS SHUMARDII	SHUMARD RED OAK	15 GAL	M	50'X35'
	ULMUS WILSONIANA 'PROSPECTOR'	ELM	15 GAL	L	45'X25'
	ZELKOVA SERRATA 'GREEN VASE'	SAWLEAF ZELKOVA	15 GAL	M	50'X35'
	LARGE GRASSES & GRASS-LIKE PLANTS	BOTANICAL NAME	CONT	WATER USE	HxW
	PHO SPR	PHORMIUM TENAX 'DAZZLER'	1 GAL	L	3'X5'
	PHO WAV	PHORMIUM TENAX 'YELLOW WAVE'	5 GAL	L	5'X5'
	LARGE SHRUBS	BOTANICAL NAME	CONT	WATER USE	HxW
	CAR CAL	CARPENTERIA CALIFORNICA	5 GAL	L	5'X5'
	GEA SKY	CEANOTHUS THYRSIFLORUS 'SKYLARK'	5 GAL	L	5'X5'
	MAH COM	MAHONIA AQUIFOLIUM 'COMPACTA'	5 GAL	L	3'X5'
	OLE LIT	OLEA EUROPAEA 'LITTLE OLLIE'	15 GAL	L	8'X8'
	RHA MOU	RHAMNUS CALIFORNICA 'MOUND SAN BRUNO'	5 GAL	L	6'X6'
	RIB VIB	RIBES VIBURNIFOLIUM	1 GAL	L	4'X6'
	RUS EQU	RUSSELLIA EQUISETIFORMIS	5 GAL	L	5'X5'
	MEDIUM GRASSES & GRASS-LIKE PLANTS	BOTANICAL NAME	CONT	WATER USE	HxW
	CAL KAR	GALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	1 GAL	L	4'X3'
	DIE VEG	DIETES VEGETA	1 GAL	L	3'X3'
	MUH RIG	MUHLENBERGIA RIGENS	1 GAL	L	4'X4'
	MEDIUM SHRUBS	BOTANICAL NAME	CONT	WATER USE	HxW
	CAL DWK	CALLISTEMON VIMINALIS 'LITTLE JOHN'	5 GAL	L	3'X4'
	LOR SUZ	LOROPETALUM CHINENSE RUBRUM 'SUZANNE'	5 GAL	M	4'X4'
	RHA CLA	RHAPHIOLEPIS INDICA 'CLARA'	1 GAL	M	4'X4'
	SAL WIN	SALVIA CLEVELANDII 'WINIFRED GILLMAN'	1 GAL	L	4'X4'
	SMALL GRASSES & GRASS-LIKE PLANTS	BOTANICAL NAME	CONT	WATER USE	HxW
	BOU BLO	BOUTELOUA GRACILIS 'BLONDE AMBITION'	5 GAL	L	2'X2'
	DIA LIS	DIANELLA REVOLUTA 'LITTLE REV'	1 GAL	L	2'X2'
	DIA VAR	DIANELLA TASMANICA 'VARIEGATA'	1 GAL	M	2'X2'
	MIM AUR	MIMULUS AURANTIACUS	1 GAL	L	4'X4'
	SES AUT	SESLERIA AUTUMNALIS	1 GAL	M	2'X2'
	SMALL SHRUBS	BOTANICAL NAME	CONT	WATER USE	HxW
	LAV OTT	LAVANDULA STOECHAS 'OTTO QUAST'	1 GAL	L	2'X3'
	MAH OR2	MAHONIA AQUIFOLIUM 'ORANGE FLAME'	5 GAL	L	2'X3'
	NAN DWA	NANDINA DOMESTICA 'NANA'	1 GAL	M	2'X3'
	ROS NOT	ROSA X 'NOASCHNEE'	2 GAL	M	2.5'X3'
	WES MOR	WESTRINGIA FRUTICOSA 'MORNING LIGHT'	5 GAL	L	3'X3'
	STORMWATER PLANTING	BOTANICAL NAME	CONT	WATER USE	HxW
	CHO ELC	CHONDROPETALUM TECTORUM 'EL CAMPO'	1 GAL	L	2.5'X3.5'
	JUN EFF	JUNCUS EFFUSUS	1 GAL	M	2.5'X2.5'
	JUN ELK	JUNCUS PATENS 'ELK BLUE'	1 GAL	L	2'X2'
	LOM BRE	LOMANDRA LONGIFOLIA 'BREEZE'	1 GAL	L	3'X3'
	LOM LIS	LOMANDRA LONGIFOLIA 'LIME TUFF'	1 GAL	L	2.5'X2.5'
	WOO FIM	WOODWARDIA FIMBRIATA	5 GAL	M	4'X4'
	NO-MOW	NO-MOW BIOFILTRATION SOD (DELTA BLUEGRASS)			
	EXISTING LAWN TO REMAIN				

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 PLANTING LEGEND

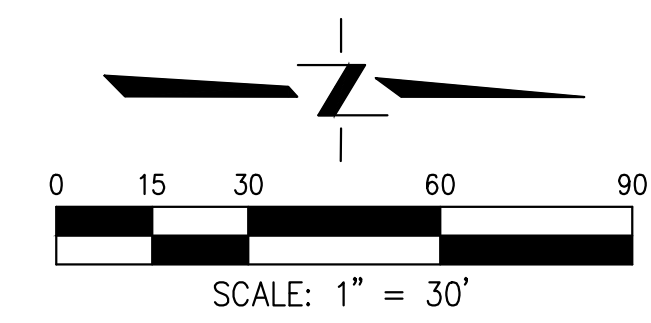
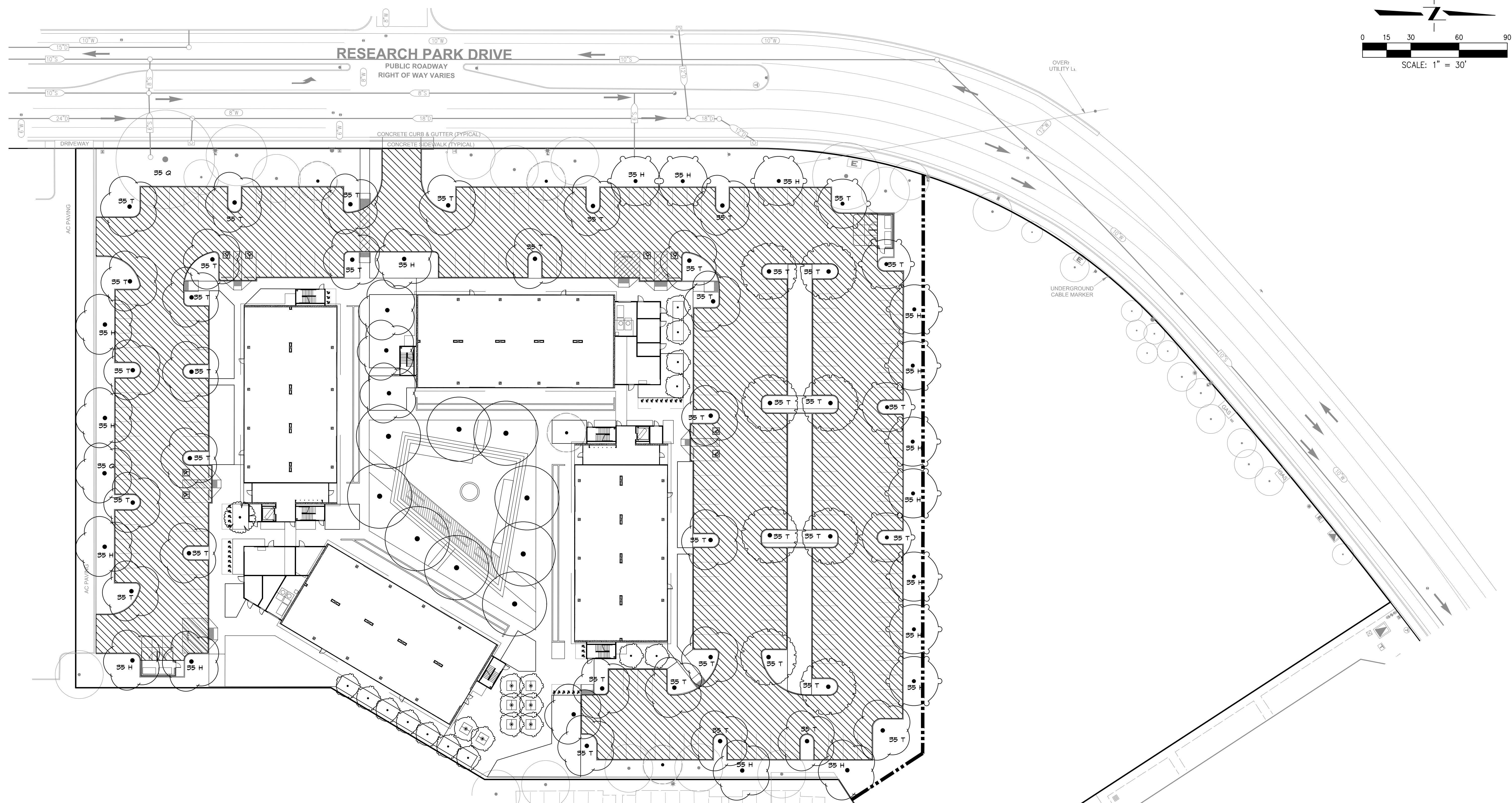
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SHADE CALCULATION TABLE

Tree Diameter	Quantity @ 100% Shade/ Sq. Ft	Quantity @ 75% Shade/ Sq. Ft	Quantity @ 50% Shade/ Sq. Ft	Quantity @ 25% Shade/ Sq. Ft	Total (sq. ft)
35'	@ 962	40 @ 722	18 @ 481	2 @ 240	38018
30'	@ 708	@ 531	@ 354	@ 177	0
25'	@ 491	@ 368	7 @ 246	@ 123	1722
20'	@ 314	@ 236	@ 157	@ 79	0
TOTAL TREE SHADE=					39740
TOTAL PAVED AREA=					71503
PERCENT SHADE =					56%

PAVED VEHICULAR SURFACE AREA INCLUDED IN CALCULATIONS

TREE LEGEND

TREES	BOTANICAL NAME	COMMON NAME	QTY
	CORNUS FLORIDA 'EDDIES WHITE WONDER'	FLOWERING DOGWOOD	21
	LAGERSTROEMIA X 'NATCHEZ'	GRAPE MYRTLE	1
	PISTACIA CHINENSIS 'KEITH DAVEY'	KEITH DAVEY CHINESE PISTACHE	4
	PLATANUS X ACERIFOLIA 'BLOODGOOD'	LONDON PLANE TREE	13
	QUERCUS SHUMARDII	SHUMARD RED OAK	8
	ULMUS WILSONIANA 'PROSPECTOR'	ELM	4
	ZELKOVA SERRATA 'GREEN VASE'	SANLEAF ZELKOVA	34

NOTES:
 1. THE PLAN SHOWS ALL EXISTING AND PROPOSED TREE LOCATIONS ON THE PROJECT SITE. ONLY THOSE TREES USED IN SHADE CALCULATIONS ARE ANNOTATED WITH DIAMETER COVERAGE AND ARE INCLUDED IN THE SHADE CALCULATIONS TABLE.

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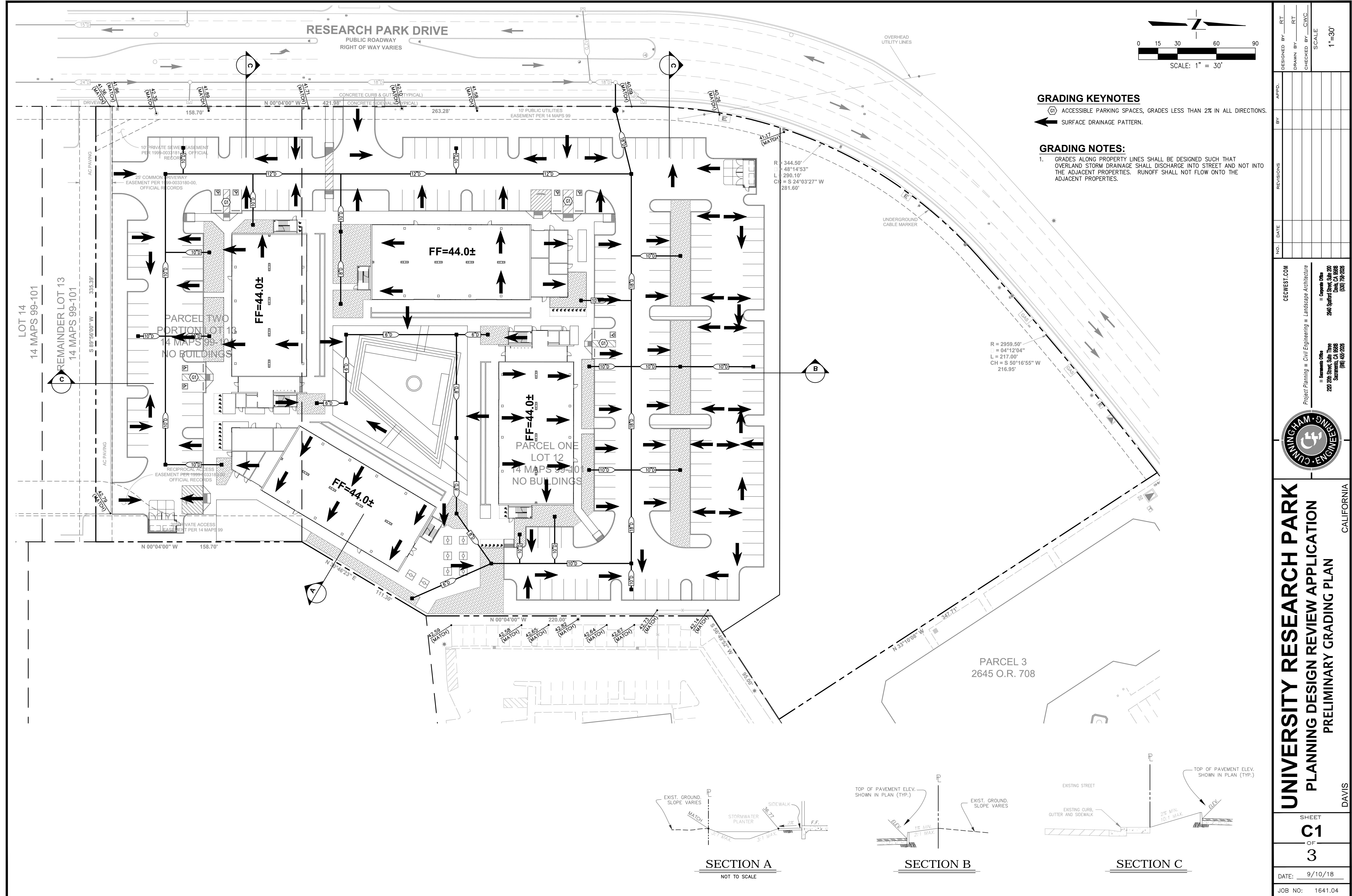
PARKING LOT SHADE CALCULATIONS

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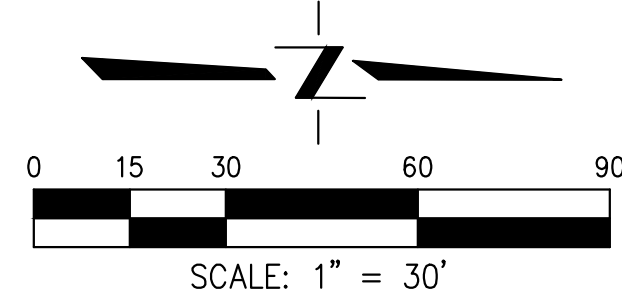
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RESEARCH PARK DRIVE
PUBLIC ROADWAY
RIGHT OF WAY VARIES



GRADING KEYNOTES

- (G) ACCESSIBLE PARKING SPACES, GRADES LESS THAN 2% IN ALL DIRECTIONS.
- ← SURFACE DRAINAGE PATTERN.

GRADING NOTES:

1. GRADES ALONG PROPERTY LINES SHALL BE DESIGNED SUCH THAT OVERLAND STORM DRAINAGE SHALL DISCHARGE INTO STREET AND NOT INTO THE ADJACENT PROPERTIES. RUNOFF SHALL NOT FLOW ONTO THE ADJACENT PROPERTIES.

R = 2959.50'
Δ = 04°12'04"
L = 217.00'
CH = S 50°16'55" W
216.95'

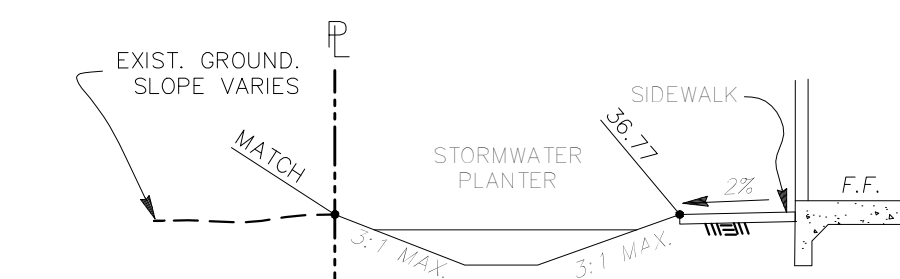
R = 344.50'
Δ = 48°14'53"
L = 290.10'
CH = S 24°03'27" W
281.60'

LOT 14
14 MAPS 99-101

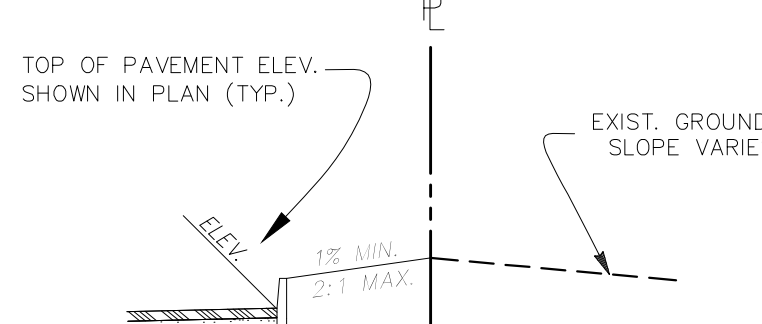
PARCEL TWO
PORTION LOT 13
14 MAPS 99-101
NO BUILDINGS

PARCEL ONE
LOT 12
14 MAPS 99-101
NO BUILDINGS

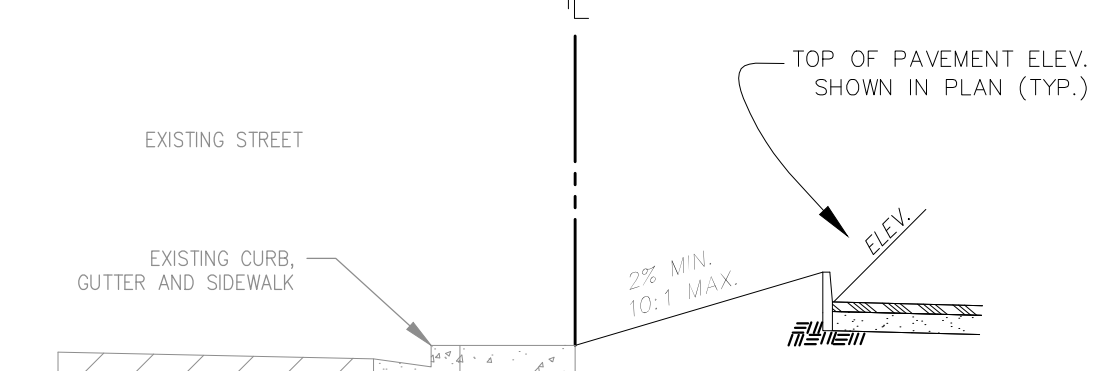
PARCEL 3
2645 O.R. 708



SECTION A
NOT TO SCALE

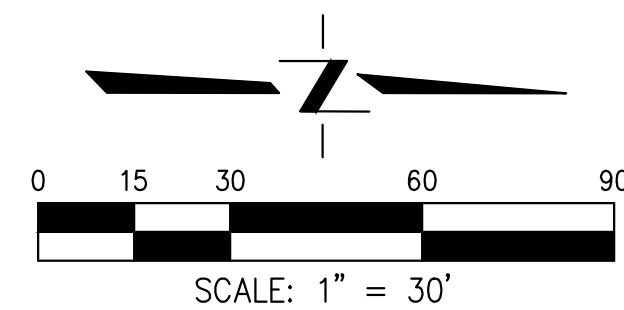
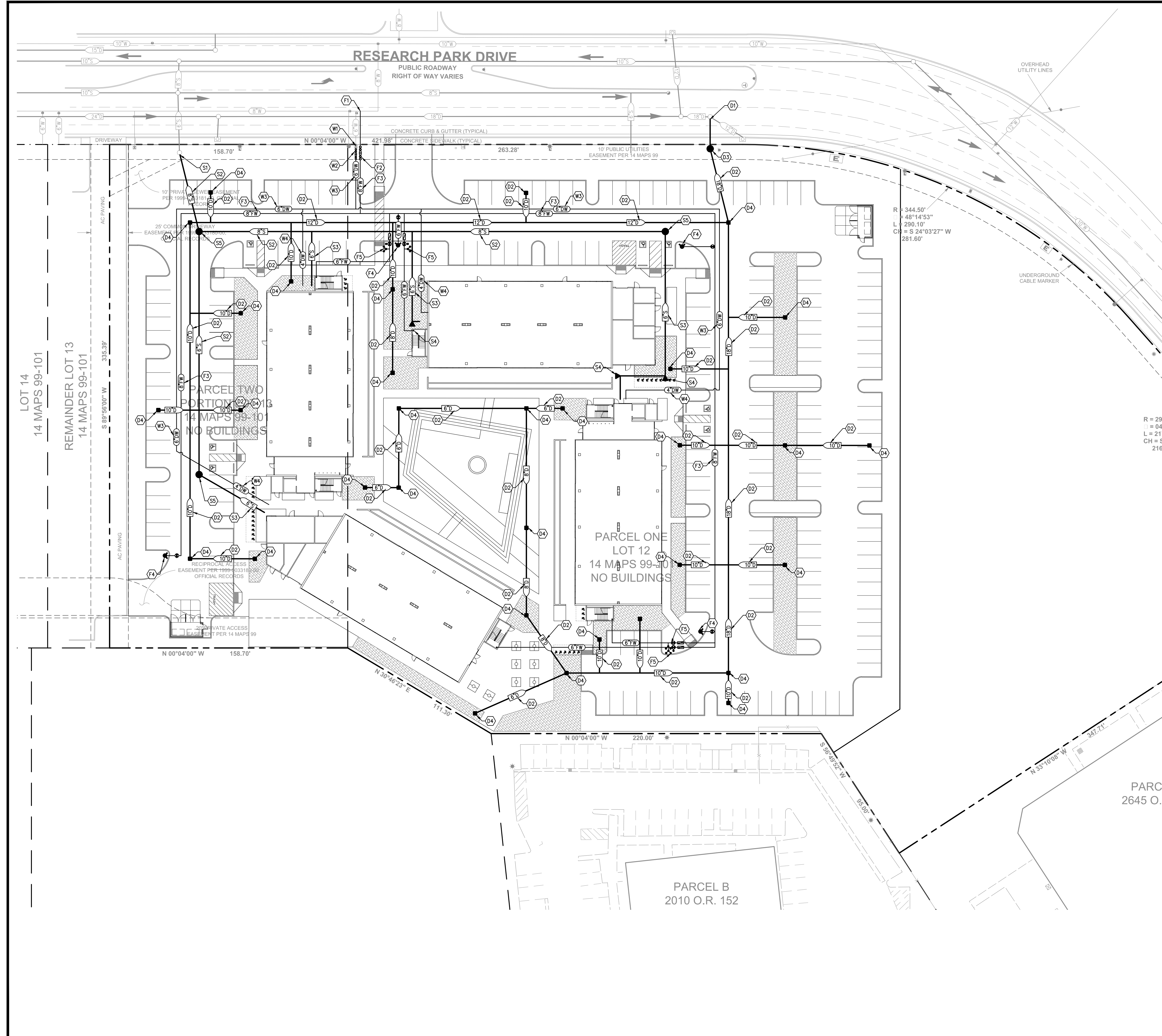


SECTION B



SECTION C

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C1	3		
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SEWER KEYNOTES

- (S1) JOIN SITE SANITARY SEWER MAIN TO EXISTING MANHOLE AS SHOWN.
- (S2) INSTALL SITE SANITARY SEWER MAIN, SIZE PER PLAN.
- (S3) INSTALL 6" SANITARY SEWER SERVICE TO BUILDING.
- (S4) INSTALL 6" SANITARY SEWER CLEANOUT.
- (S5) INSTALL 48" PRECAST SANITARY SEWER MANHOLE.

FIRE WATER KEYNOTES

- (F1) CUT-IN 8"X8"X8" TEE FOR NEW FIRE WATER SERVICE.
- (F2) INSTALL 8" FIRE DOUBLE CHECK DETECTOR CHECK ASSEMBLY.
- (F3) INSTALL 8" SITE FIRE WATER MAIN.
- (F4) INSTALL FIRE HYDRANT ASSEMBLY WITH VALVE.
- (F5) INSTALL 6" FIRE WATER SERVICE TO BUILDING, INCLUDES CHECK VALVE, POST-INDICATOR VALVE AND FIRE DEPARTMENT CONNECTION.

DOMESTIC WATER KEYNOTES

- (W1) REMOVE CAP FROM END OF EXISTING 6" WATER SERVICE STUB AND JOIN SITE DOMESTIC WATER SERVICE TO END OF STUB.
- (W2) INSTALL 6" DOMESTIC WATER SERVICE, INCLUDES METER AND BACKFLOW ASSEMBLY.
- (W3) INSTALL 6" SITE DOMESTIC WATER MAIN.
- (W4) INSTALL 4" DOMESTIC WATER SERVICE TO BUILDING.

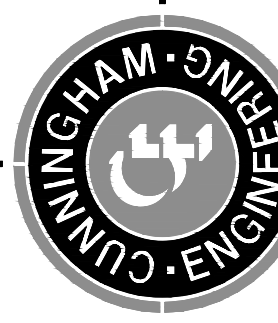
STORM DRAIN KEYNOTES

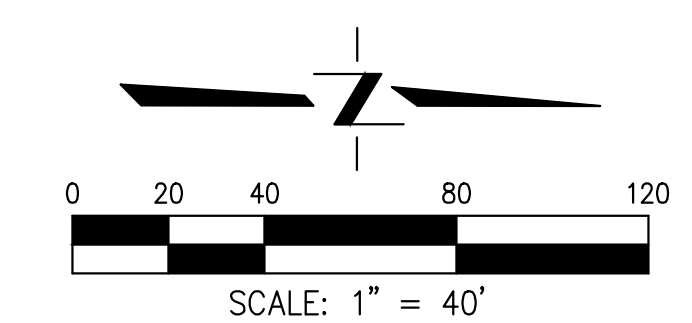
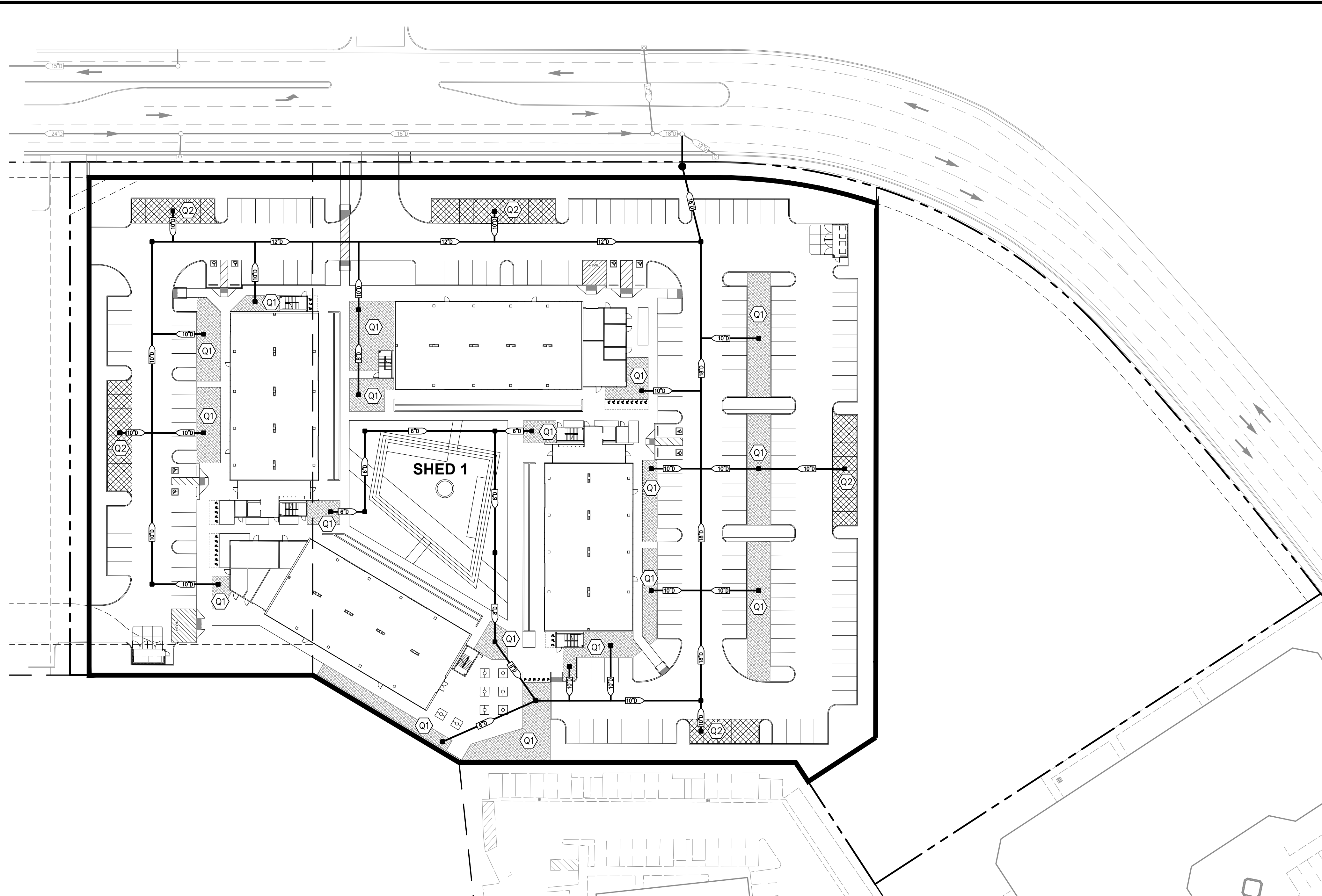
- (D1) JOIN SITE STORM DRAIN MAIN TO EXISTING MANHOLE AS SHOWN.
- (D2) INSTALL SITE STORM DRAIN MAIN, SIZE PER PLAN.
- (D3) INSTALL 48" PRECAST STORM DRAIN MANHOLE.
- (D4) INSTALL DRAIN INLET.

NOTES:

1. ON-SITE WATER SHALL BE PRIVATELY OWNED AND MAINTAINED.
2. ON-SITE SEWER SHALL BE PRIVATELY OWNED AND MAINTAINED.
3. ON-SITE STORM DRAIN SHALL BE PRIVATELY OWNED AND MAINTAINED.

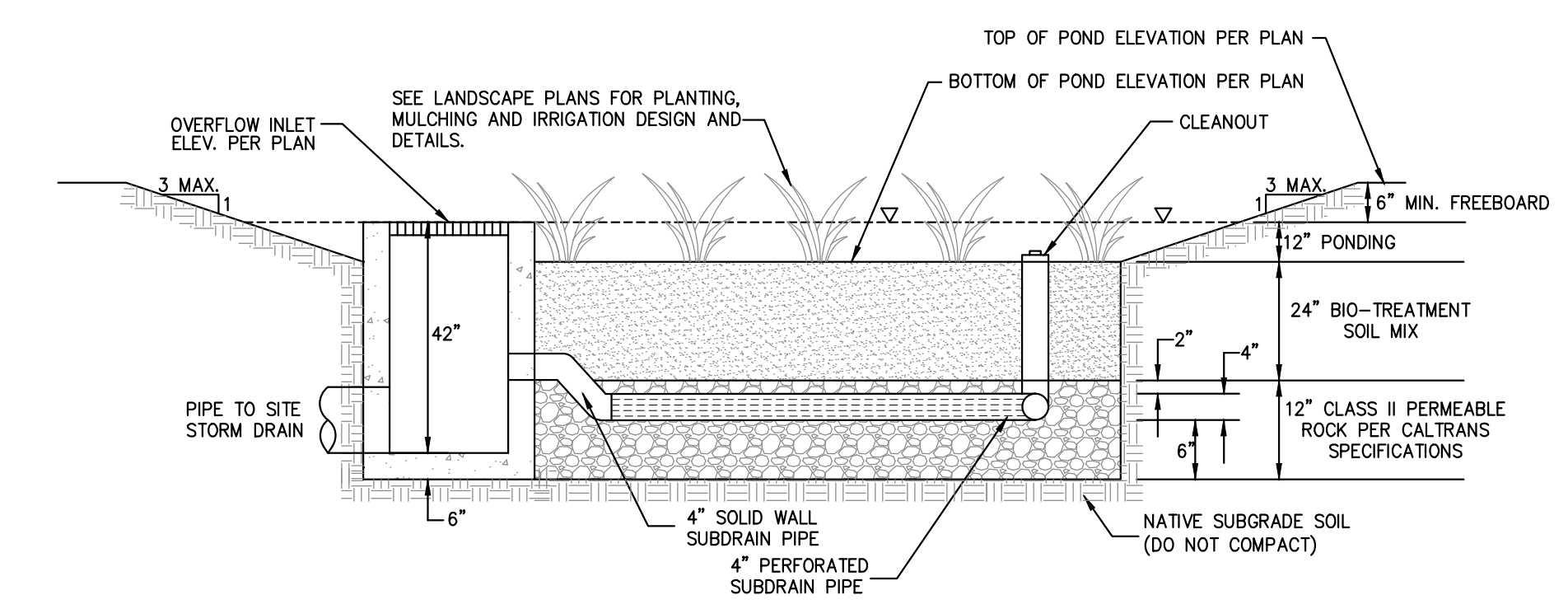
R = 295'
 Δ = 04°1'
 L = 217'
 CH = S 216.8'

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REQUIRED SITE STORMWATER CONTROL MEASURES:

- Q1 CONSTRUCT BIO-RETENTION PLANTER PER DETAIL ON THIS SHEET.
- Q2 CONSTRUCT PERVIOUS CONCRETE PAVEMENT PER DETAIL ON THIS SHEET.



BIO-RETENTION PLANTER DETAIL
NTS

SITE SWQ CALCULATION - SHED 1 - ENTIRE SITE

Calculation Table for Determination of Design Imperviousness (I_{WD})

Site Element	Unit Area (ft ²)	Percent Imperviousness	Weighting Factor ^(b)	Weighted % Imperviousness ^(c,d)
Roof	33,504	100	0.175	17
Asphalt/Concrete	106,811	100	0.556	56
Decomposed Granite/Gravel	0	40	0.000	0
Pervious Pavement	5,200	25	0.027	1
Lawn/Landscape	46,466	0	0.242	0
Total Contributing Area^(a)	191,981		1.000	74

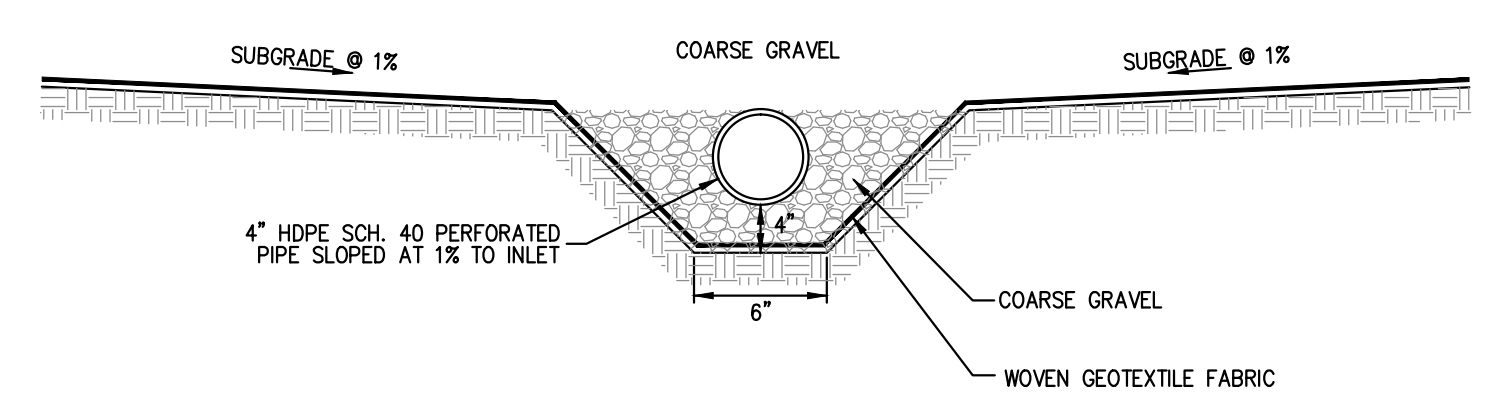
- a. Total contributing area = sum of unit areas
- b. Weighting factor = unit area / total tributary area
- c. Weighted imperviousness = weighting factor x percent imperviousness
- d. Design imperviousness = sum of weighted imperviousness

Bioretention Calculations

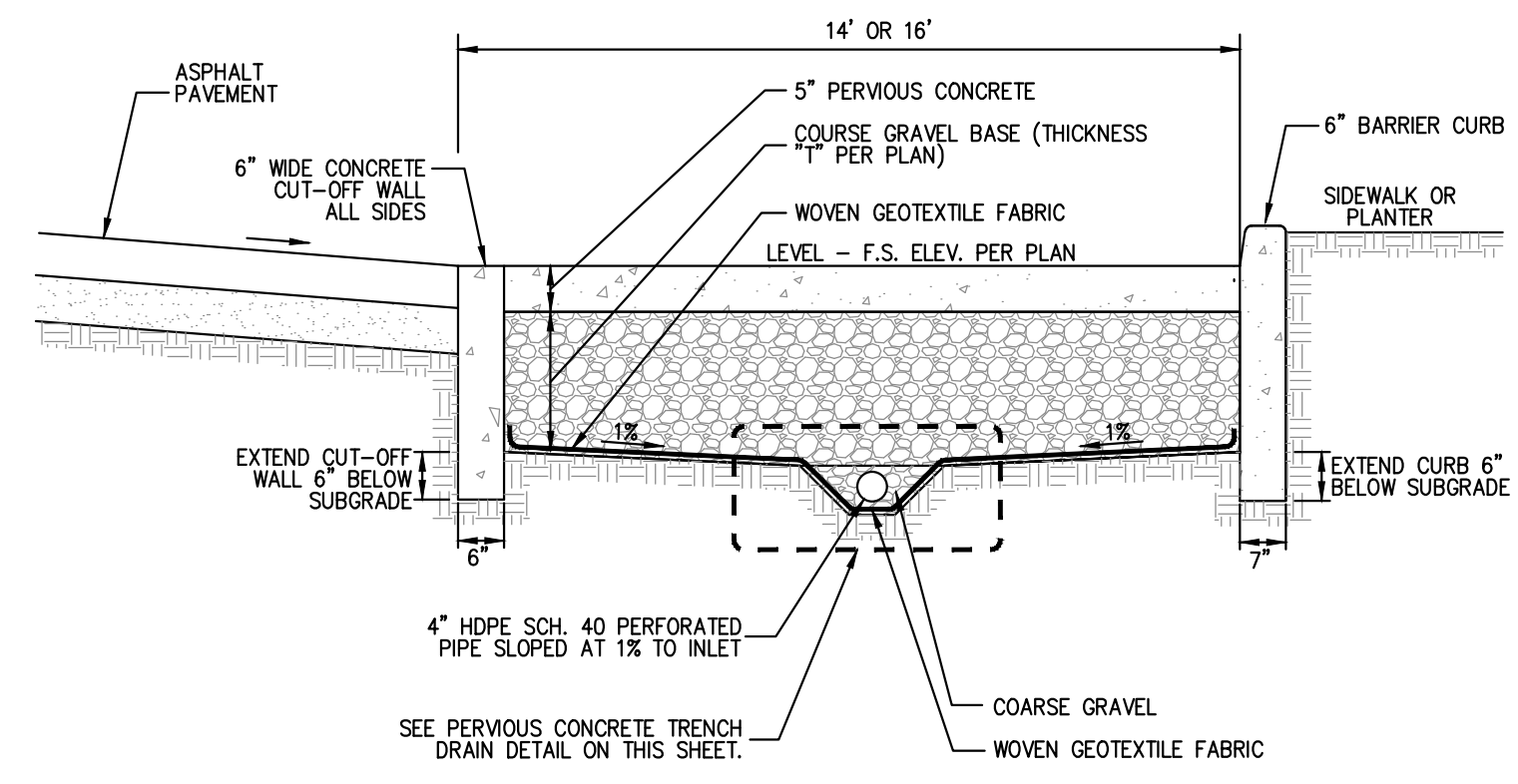
Shed Area	4.41 ac
C	0.53
desired capture (for 48 hr storm)	80%

Vu (in) [From graph on page 333 of CASQA BMP Handbook, 48-hr drawdown]	0.38	Volume Available in Pervious Concrete (cf)	1,560	Volume Available in Bio-Retention	13,127	Total Treatment Volume Available (cf)	14,687
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Notes:
 Calculations based on section 5.5 of the California Stormwater BMP Handbook, dated January 2003 per section E.12.e(ii),(c)2 of the State General Permit, dated February 5, 2013.
 V=Required Capture Volume (cf)
 Vu=Unit Basin Storage Volume (in) (from graph on page 333 of CASQA BMP Handbook)
 I_{WD}=Design Imperviousness
 C=runoff coefficient=0.858 (I_{WD})² - 0.78 (I_{WD}) + 0.774 (I_{WD}) + 0.04



PERVIOUS CONCRETE TRENCH DRAIN DETAIL
NTS



TYPICAL PERVIOUS CONCRETE
NTS

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 SCALE: 1"=40'

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 BY: []
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