

Plan and Elevation Table

LOT #	PLAN NAME	ELEVATION
1	D	TRADITIONAL
2	D	TRADITIONAL
3	D	FARMHOUSE
4	D	FARMHOUSE
5	D	CRAFTSMAN
6	D	CRAFTSMAN
7	A	SPANISH
8	C	FARMHOUSE
9	B	TRADITIONAL
10	A	TRADITIONAL
11	B	TRADITIONAL
12	C	CRAFTSMAN
13	A	SPANISH
14	A	TRADITIONAL
15	A	SPANISH
16	C	TRADITIONAL
17	A	SPANISH
18	D	TRADITIONAL
19	D	TRADITIONAL
20	C	CRAFTSMAN
21	A	SPANISH
22	B	TRADITIONAL
23	A	TRADITIONAL
24	C	TRADITIONAL
25	B	SPANISH
26	A	SPANISH
27	B	TRADITIONAL
28	C	TRADITIONAL
29	B	CRAFTSMAN
30	A	FARMHOUSE
31	A	SPANISH
32	C	TRADITIONAL
33	D	FARMHOUSE
34	D	FARMHOUSE
35	D	FARMHOUSE
36	D	FARMHOUSE
37	C	TRADITIONAL
38	C	FARMHOUSE
39	A	TRADITIONAL
40	B	TRADITIONAL
41	C	TRADITIONAL
42	C	TRADITIONAL
43	A	SPANISH
44	B	CRAFTSMAN
45	C	CRAFTSMAN
46	A	TRADITIONAL
47	B	TRADITIONAL
48	A	FARMHOUSE
49	C	TRADITIONAL
50	C	TRADITIONAL
51	D	CRAFTSMAN
52	D	CRAFTSMAN
53	C	CRAFTSMAN
54	A	SPANISH
55	A	TRADITIONAL
56	A	FARMHOUSE
57	C	FARMHOUSE
58	B	TRADITIONAL
59	A	FARMHOUSE
60	B	CRAFTSMAN
61	C	TRADITIONAL
62	A	SPANISH
63	C	CRAFTSMAN
64	A	FARMHOUSE
65	C	CRAFTSMAN
66	B	TRADITIONAL
67	A	SPANISH
68	B	CRAFTSMAN
69	A	TRADITIONAL
70	B	SPANISH
71	D	FARMHOUSE
72	D	FARMHOUSE
73	C	CRAFTSMAN
74	C	CRAFTSMAN
75	D	FARMHOUSE
76	A	SPANISH
77	A	TRADITIONAL
78	B	TRADITIONAL
79	C	FARMHOUSE
80	B	CRAFTSMAN
81	A	TRADITIONAL
82	B	CRAFTSMAN
83	C	TRADITIONAL
84	A	FARMHOUSE
85	B	TRADITIONAL
86	A	SPANISH

Plan Area Table

Plan	No. Units	Living SF	Garage SF	Patio Area SF	Height
Plan A	27	2,437	400	200	16'6"
Plan B	18	2,803	400	200	18'1"
Plan C	23	1,572	400	200	28'2"
Plan D	18	1,906	400	200	25'5"

Grading Quantities

Location	Cut (CY)	Fill (CY)	Net (CY)	Max Cut	Max Fill
James - West	416	0	416	3.40'	0.0'
James - East	367	0	367	3.79'	0.0'
Storm Water Treatment	3,176	25	3,151	12.83'	0.90'
Lots 1-17 and 51-62	897	1,672	-775	2.24'	1.01'
Lots 18-50	1,081	1,668	-587	2.29'	1.04'
Lots 63-73	185	759	-574	2.29'	0.86'
Diana Avenue	591	12	579	1.56'	0.18'
Murphy Avenue	2,782	114	2,668	2.94'	0.92'
Mimosa Drive	4,684	1	4,683	5.06'	0.28'
Lots 74-86	453	678	-225	1.15'	0.80'
Parcel 2	74	41	33	2.03'	0.67'
Parcel 3	60	199	-139	2.73'	0.83'
Parcel 4	43	90	-47	1.12'	0.80'
Parcel 5	4	440	-436	0.43'	1.26'
Total	14,813	5,699	9,114		

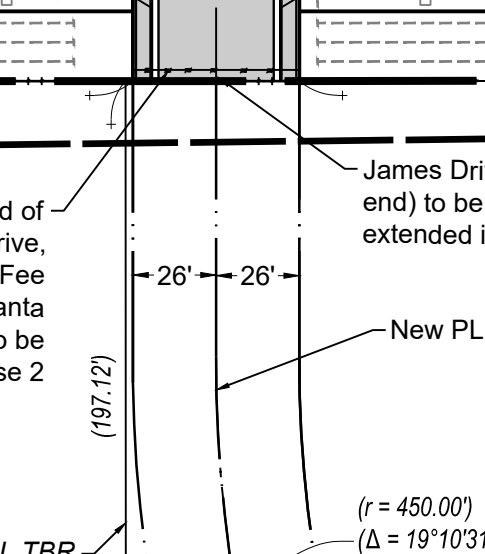
Project Description

Planned development for 89 lots, 100% single-family residential use, proposed 68 single-family detached homes, proposed 18 affordable duet homes sold at low income level. Retention of 2 existing homes for a total of 89 lots.

Scope of Work

SEE SHEET C.02

Vicinity Map



Fire Notes:

1. Fire Sprinklers shall be a deferred submittal.
2. Property is located in the Local Response Area.
3. Property is not in the Wildland Urban Interface (WUI).
4. All proposed driveways to be made of an all weather surface capable of supporting 75,000 lbs.
5. All proposed driveways shall have a max. slope of 15%.
6. Property is not in "very high fire hazard" zone.

Building Notes:

NO. UNITS BEING DEMOLISHED: 1
 TYPE OF CONSTRUCTION: V-B
 OCCUPANCY CLASS: R-3/U

Proposed Setbacks

FRONT.....10' MIN.
 SIDEYARD.....5' MIN.
 REAR.....5' MIN.

Notes:

ASSESSOR'S PARCEL NO: 728-17-015, 728-17-013, 728-17-014, 728-17-037
 PRESENT USE: RESIDENTIAL + VACANT
 PROPOSED USE: RESIDENTIAL
 PRESENT ZONING: A-20SR
 PROPOSED ZONING: A-20SR
 SANITARY SEWER: PRIVATE
 GAS & ELECTRIC: PG&E
 WATER: PRIVATE / CITY OF MORGAN HILL
 TELEPHONE: VERIZON
 EXISTING IMPROVEMENTS: AS SHOWN
 FIRE RESPONSIBILITY AREA: LRA
 WILDLAND URBAN INTERFACE: NO

PERVIOUS AND IMPERVIOUS SURFACES COMPARISON

Existing Condition (sq ft)		Proposed Condition (sq ft)		Difference (sq ft)		
Site (sq ft)	%	Site (sq ft)	%		%	
13,748	598,862	100.00%	598,862	100.00%	0	0.00%
Building Footprint(s)	8,110	1.35%	163,832	27.36%	155,722	26.00%
Streets	10,090	1.68%	102,841	17.17%	92,751	15.49%
Sidewalks, Patios, Paths, etc.	8,841	1.48%	66,821	11.16%	57,980	9.98%
Landscaping	0	0.00%	15,164	2.53%	15,164	2.53%
Undeveloped	571,821	95.48%	43,413	7.25%	-528,408	-88.24%
Permeable Pavement	0	0.00%	0	0.00%	0	0.00%
Total	598,862	100.00%	392,071	65.47%	-206,791	-34.53%
Impervious Surfaces	27,041	4.52%	333,494	55.89%	306,453	51.17%
Pervious Surfaces	571,821	95.48%	58,577	9.78%	-513,244	-85.70%
Total	598,862	100.00%	392,071	65.47%	-206,791	-34.53%

Sheet List Table

Sheet Number	Sheet Title
C.01	Tentative Map & Overall Site Development Plan
C.02	Tentative Map & Site Development Plan
C.03	Tentative Map & Site Development Plan
C.04	Tentative Map
C.05	Tentative Map
C.06	Site Topo and Demolition Plan
C.07	Site Topo and Demolition Plan
C.08	Preliminary Grading and Drainage Plan
C.09	Preliminary Grading and Drainage Plan
C.10	Grading Cross Sections
C.11	Grading Cross Sections
C.12	Street Profiles
C.13	Street Profiles
C.14	Street Profiles
C.15	Site Utility Plan
C.16	Site Utility Plan
C.17	Stormwater Control Plan
C.18	County Std Public Road Yield Study
WW1	Water and Wastewater Facilities Plan
WW2	Water and Wastewater Treatment Layout
WW3	Treatment Details
WW4	Wastewater Disposal Layout Plans
WW5	Wastewater Disposal Details
24	Lighting Plan
25-54	Architectural Plans
55-57	Energy Conservation Plans
58-69	Landscaping Plans

Density Calcs: Total Project

TOTAL PROJECT AREA: 21.566 ACRES
 DEDICATED PUBLIC RIGHT OF WAY: 4.477 ACRES
 PRIVATE OPEN SPACE: 1.232 ACRES
 PROJECT NET ACREAGE: 15.857 ACRES
 NO. UNITS ALLOWED: N/A
 NO. UNITS PROPOSED: 86

Density Calcs: Phase 1 (86 Units)

TOTAL PROJECT AREA: 13.748 ACRES
 DEDICATED PUBLIC RIGHT OF WAY: 3.873 ACRES
 PRIVATE OPEN SPACE: 1.232 ACRES
 PROJECT NET ACREAGE: 9.875 ACRES
 NO. UNITS ALLOWED: N/A
 NO. UNITS PROPOSED: 86

Owners:

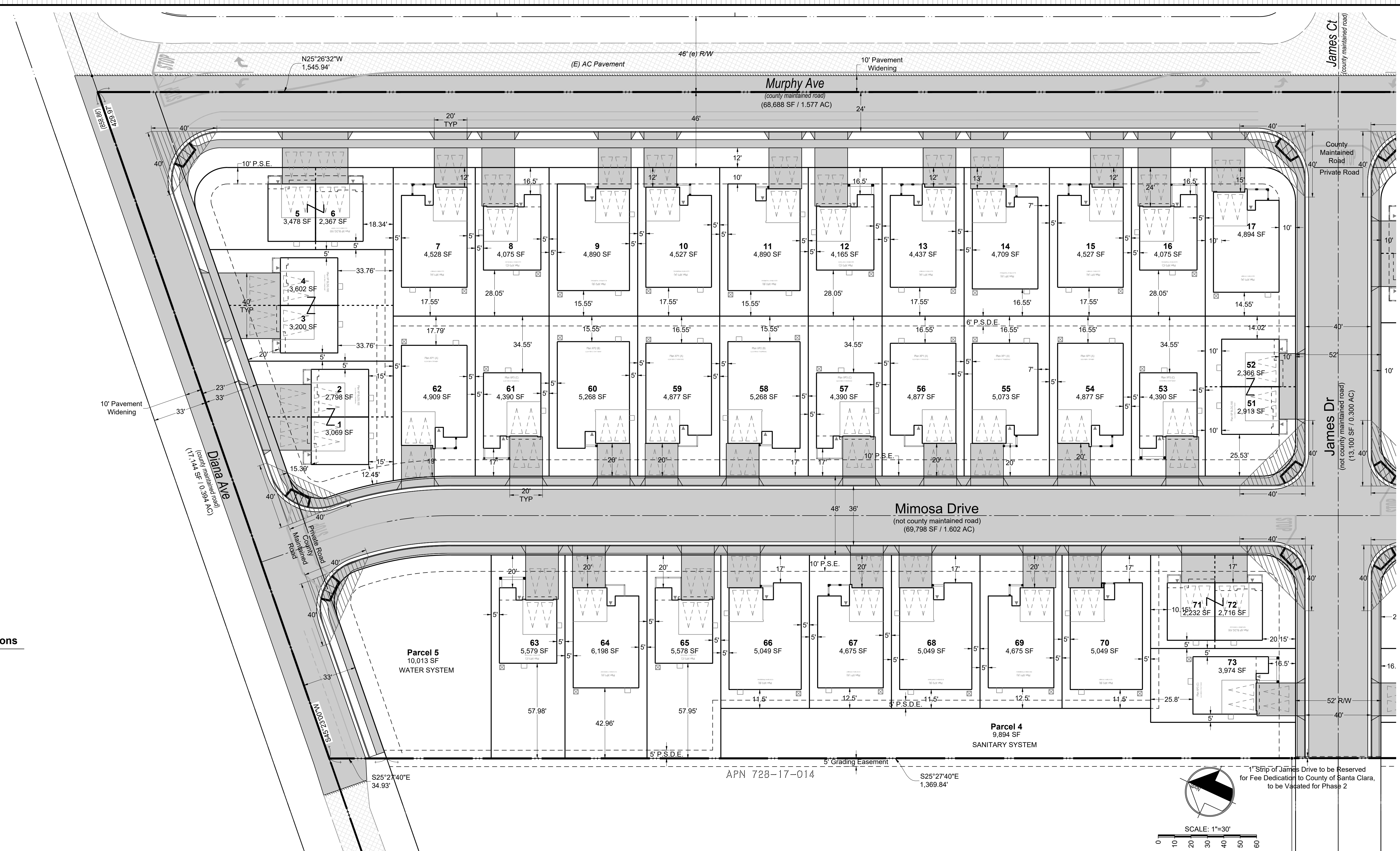
1320 DIANA AVE.
 APN: 728-17-013
 APOLONIO & YOW CHOY SANCHEZ (50% IN TRUST)
 TAI KIM NGU (50% IN TRUST)
 1220 AND 1250 DIANA AVE.
 APN: 728-17-014 & 728-17-015
 DAVID & AKIKO KUBO (KUBO TRUST)
 1250 CONDIT ROAD
 APN: 728-17-037 (PREVIOUS APN: 728-17-032)
 HAPPY ACTIONS, LLC, DANIEL LONG

Engineer:

MH ENGINEERING
 16075 VINEYARD BLVD.
 MORGAN HILL, CA 95037
 (408) 779-7381

Applicant:

NORTH DIANA, LLC
 175 E. MAIN AVE SUITE 130
 MORGAN HILL, CA 95037
 (408) 406-6000



Statement of Dedications

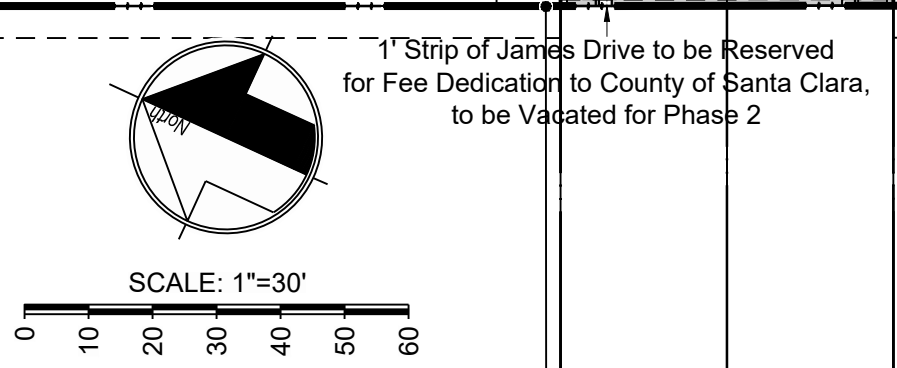
LOT AREAS SHOWN ARE GROSS AND NET. PUBLIC STREET AREAS SHOWN ARE TO BE DEDICATED TO THE COUNTY. PRIVATE STREET AREAS ARE TO BE OWNED AND MAINTAINED BY AN HOA.

Scope of Work

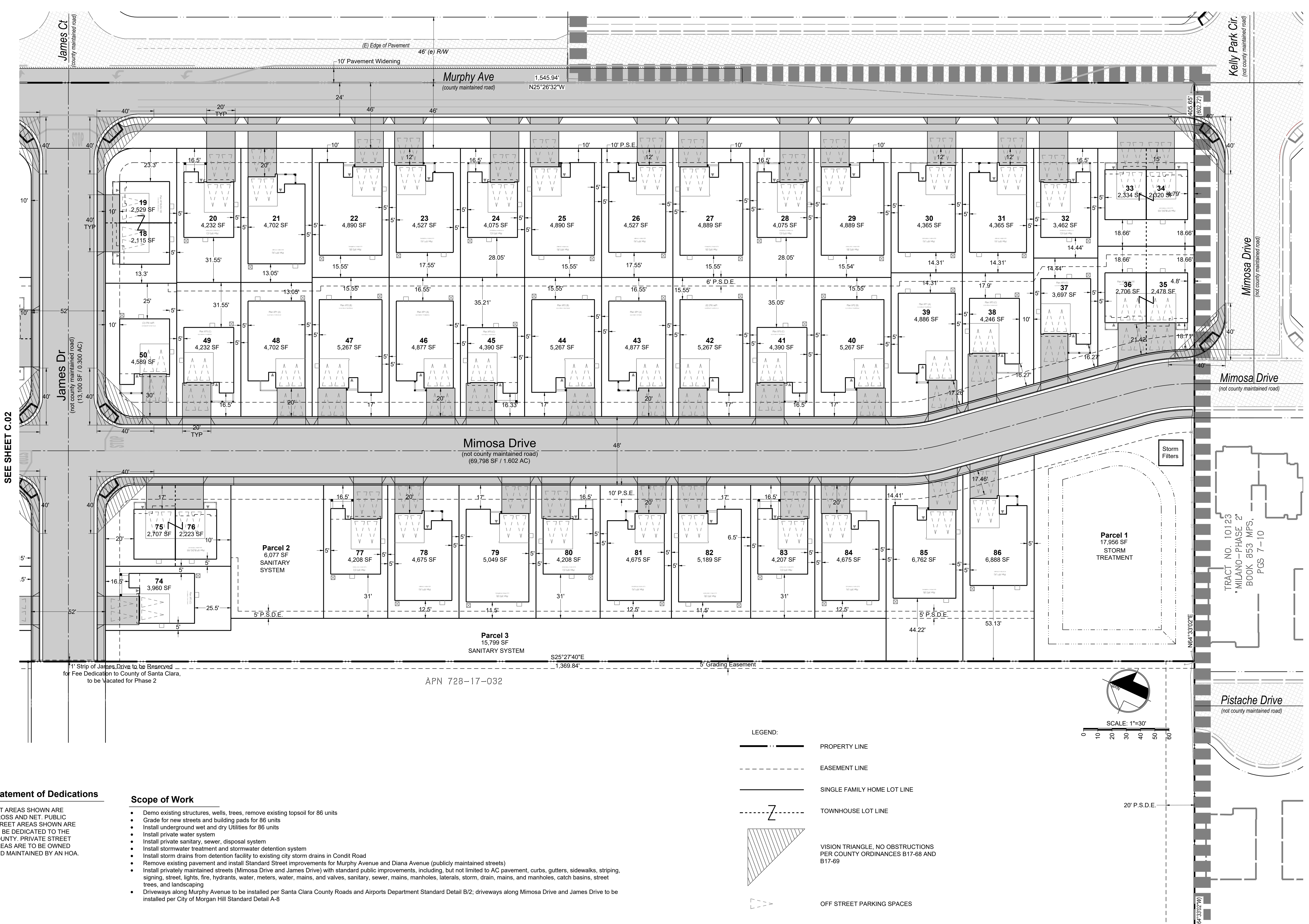
- Demo existing structures, wells, trees, remove existing topsoil for 86 units
- Grade for new streets and building pads for 86 units
- Install underground wet and dry Utilities for 86 units
- Install private water system
- Install private sanitary, sewer, disposal system
- Install stormwater treatment and stormwater detention system
- Install storm drains from detention facility to existing city storm drains in Condit Road
- Remove existing pavement and install Standard Street improvements for Murphy Avenue and Diana Avenue (publicly maintained streets)
- Install privately maintained streets (Mimosa Drive and James Drive) with standard public improvements, including, but not limited to AC pavement, curbs, gutters, sidewalks, striping, signing, street, lights, fire, hydrants, water, meters, water, mains, and valves, sanitary, sewer, mains, manholes, laterals, storm, drain, mains, and manholes, catch basins, street trees, and landscaping
- Driveways along Murphy Avenue and Diana Avenue to be installed per Santa Clara County Roads and Airports Department Standard Detail B/2; driveways along Mimosa Drive and James Drive to be installed per City of Morgan Hill Standard Detail A-8

LEGEND:

- — — — — PROPERTY LINE
- - - - - EASEMENT LINE
- — — — — SINGLE FAMILY HOME LOT LINE
- - - - - TOWNHOUSE LOT LINE
- ▲ VISION TRIANGLE, NO OBSTRUCTIONS PER COUNTY ORDINANCES B17-68 AND B17-69
- OFF STREET PARKING SPACES



SEE SHEET C.03



SEE SHEET C-02

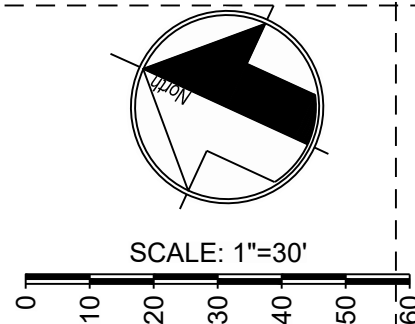
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Scope of Work

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- Driveways along Murphy Avenue to be installed per Santa Clara County Roads and Airports Department Standard Detail B/2; driveways along Mimosa Drive and James Drive to be installed per City of Morgan Hill Standard Detail A-8

APN 728-17-032



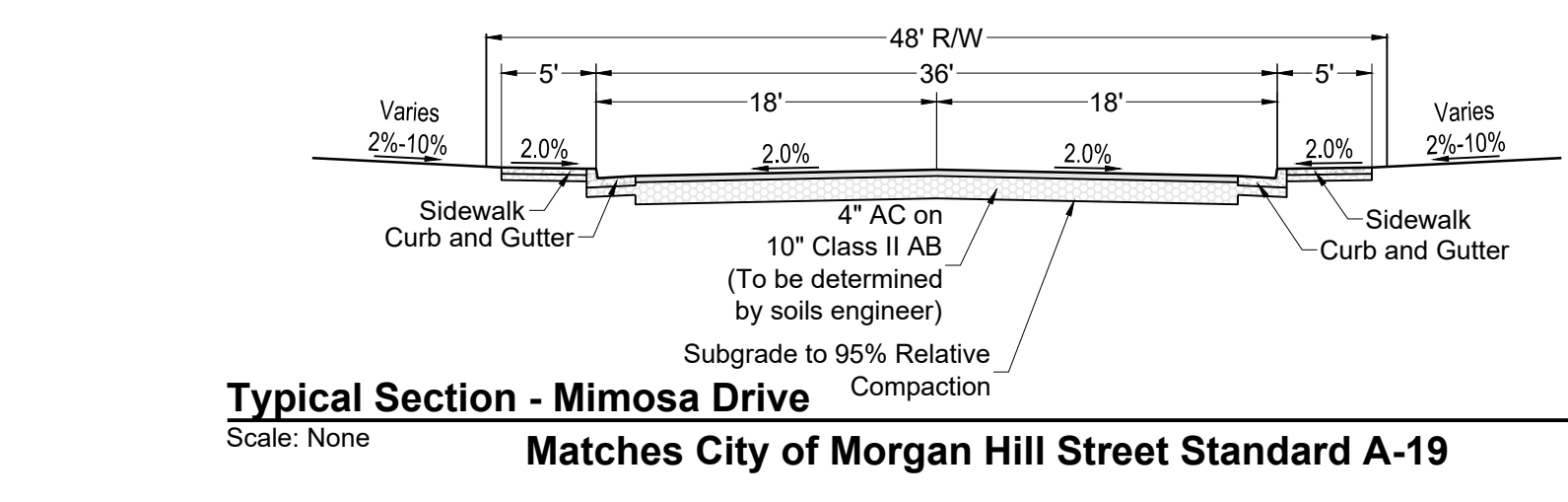
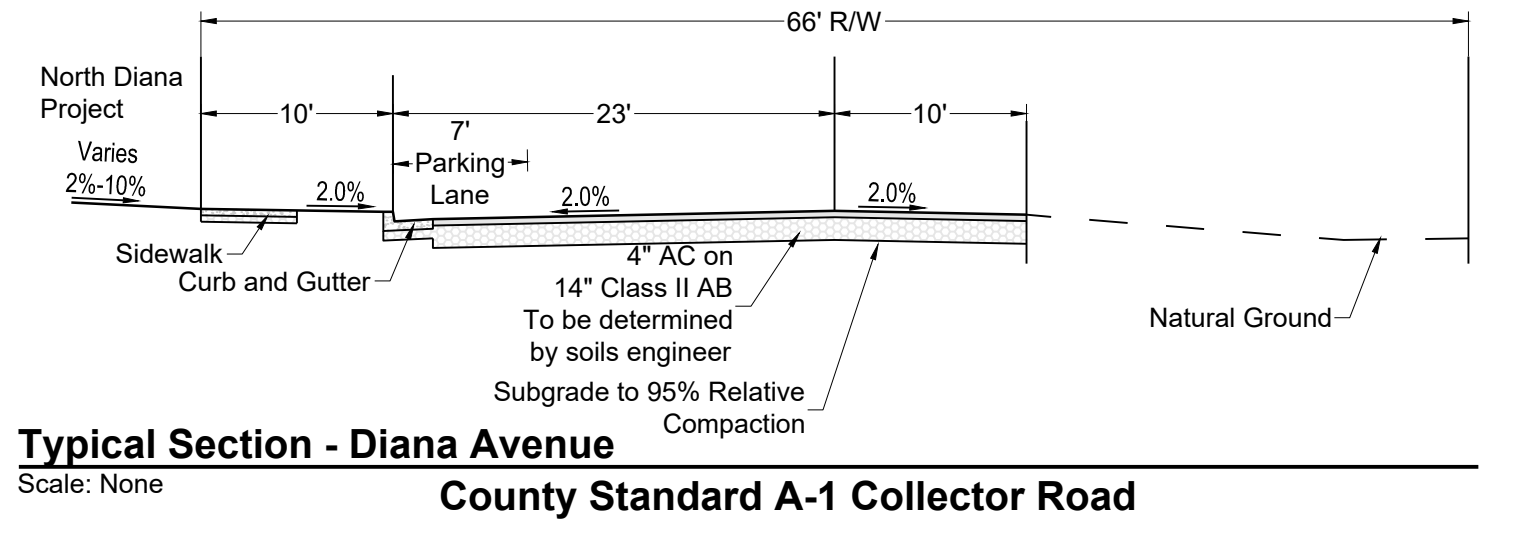
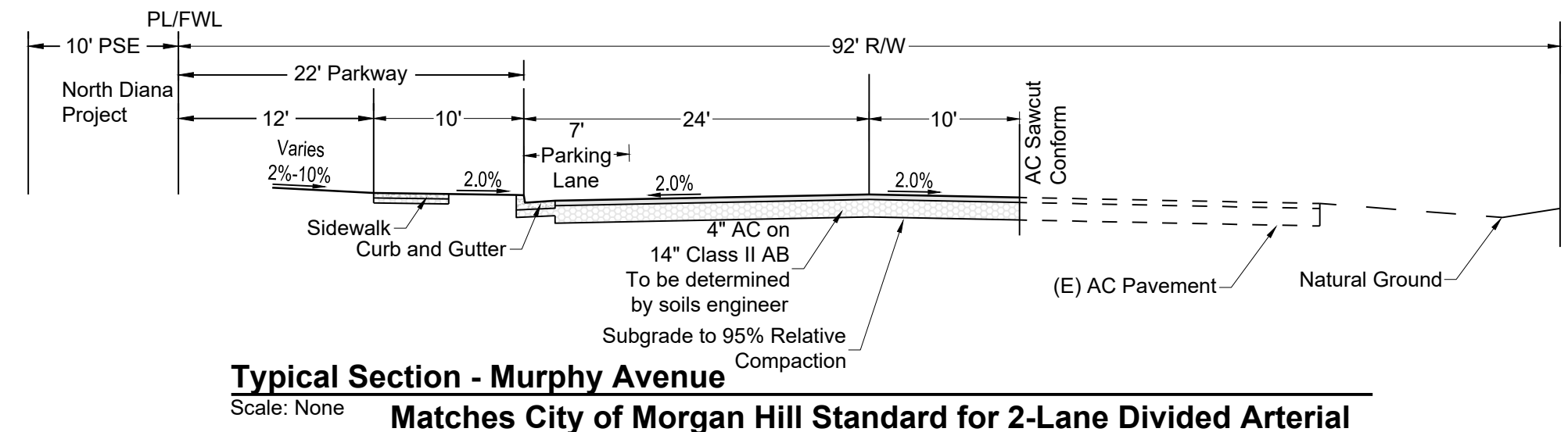
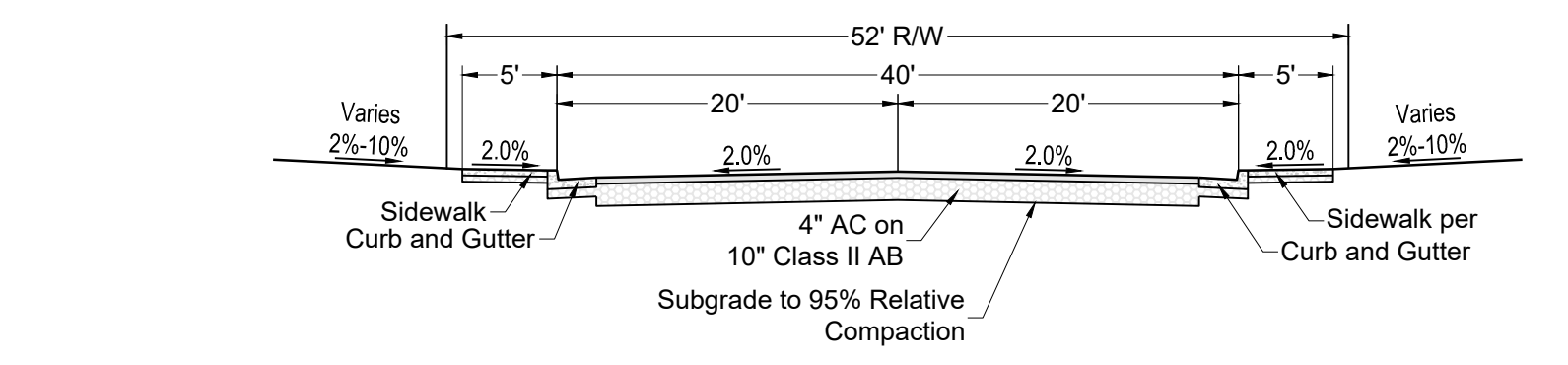
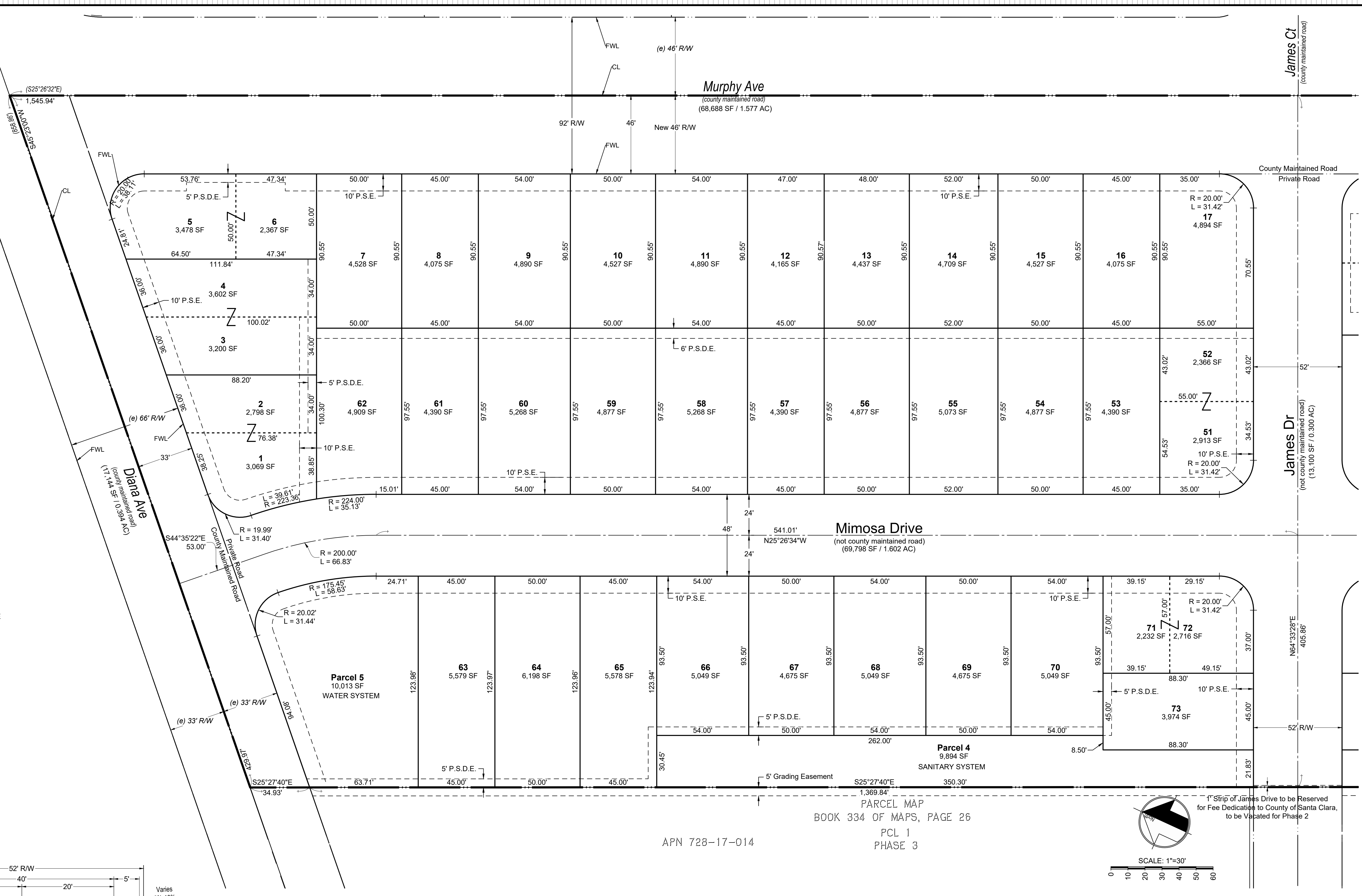
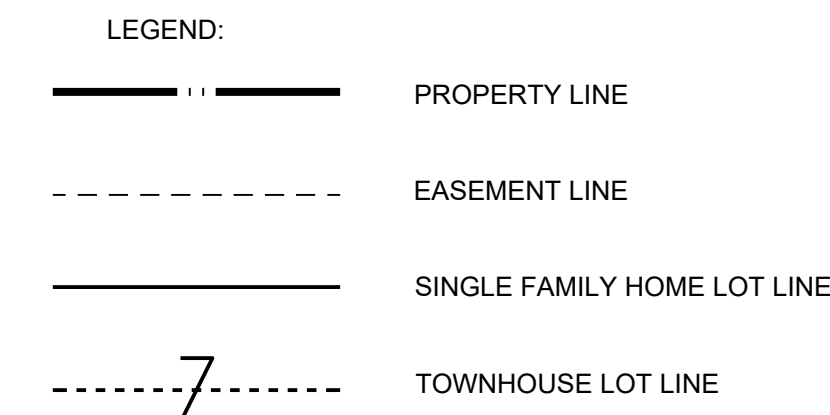
- LEGEND:**
- PROPERTY LINE
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 - ▲ VISION TRIANGLE, NO OBSTRUCTIONS PER COUNTY ORDINANCES B17-68 AND B17-69
 - ▭ OFF STREET PARKING SPACES

Statement of Dedications

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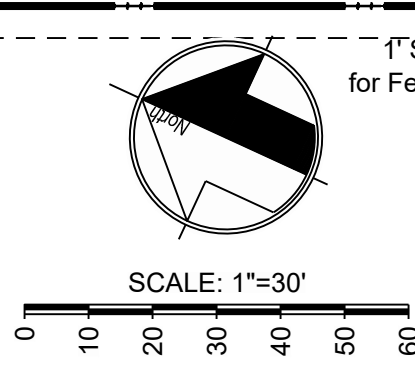
Notes:

- SEE SHEETS C6 AND C7 FOR EXISTING TOPO INCLUDING CONTOURS, STRUCTURES, TREES, ETC.
- SEE SHEETS C1, C2, AND C3 FOR PROPOSED DEVELOPMENT INCLUDING UNITS, SETBACKS, DRIVEWAYS, ETC.
- SEE SHEETS C8 AND C9 FOR PROPOSED GRADING AND DRAINAGE.
- SEE SHEET C12 AND C13 FOR PROPOSED UTILITIES.

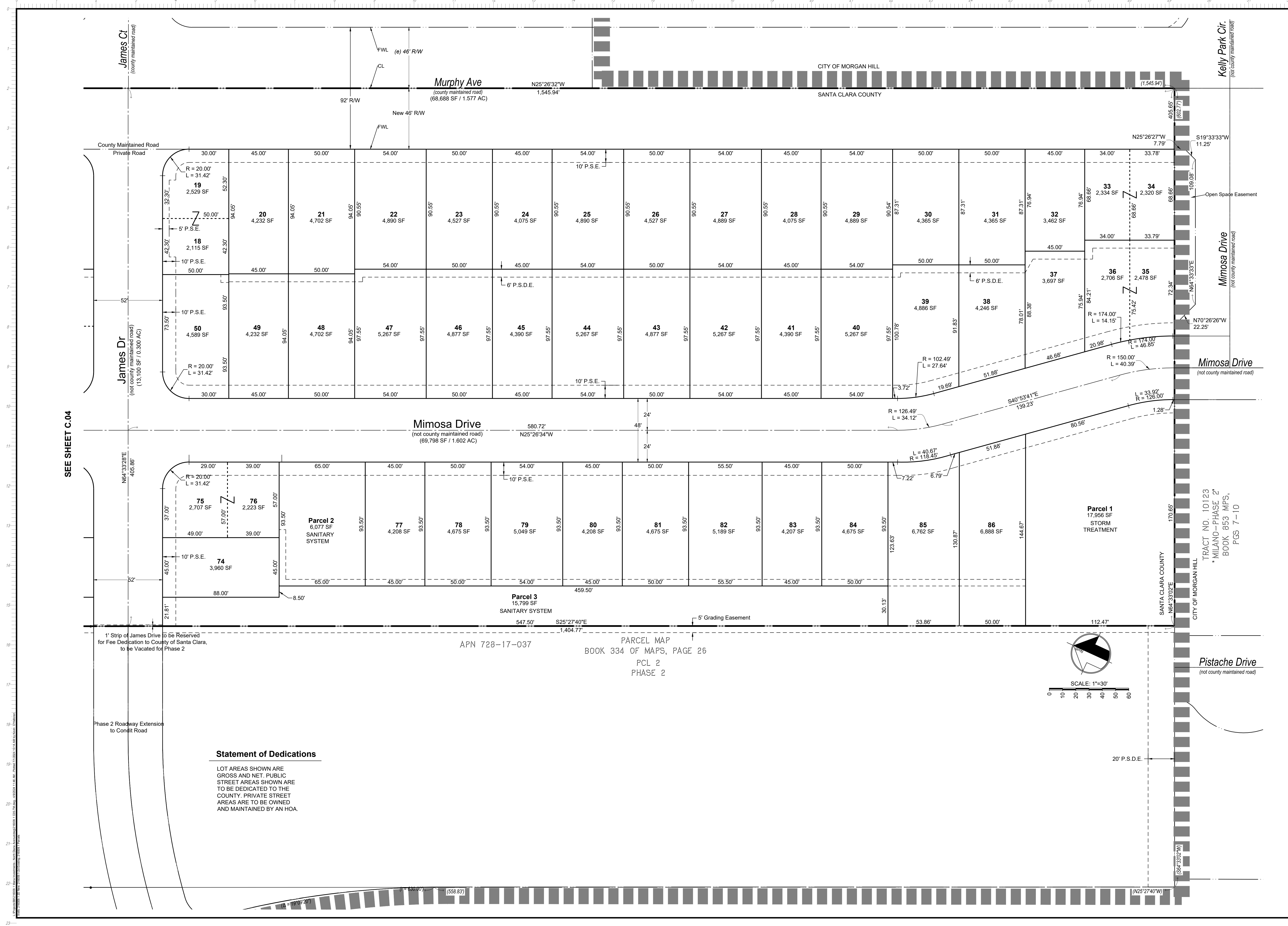


SEE SHEET C.05

PARCEL MAP
 BOOK 334 OF MAPS, PAGE 26
 PCL 1
 PHASE 3



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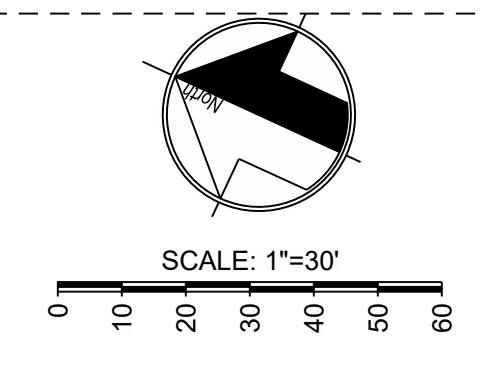


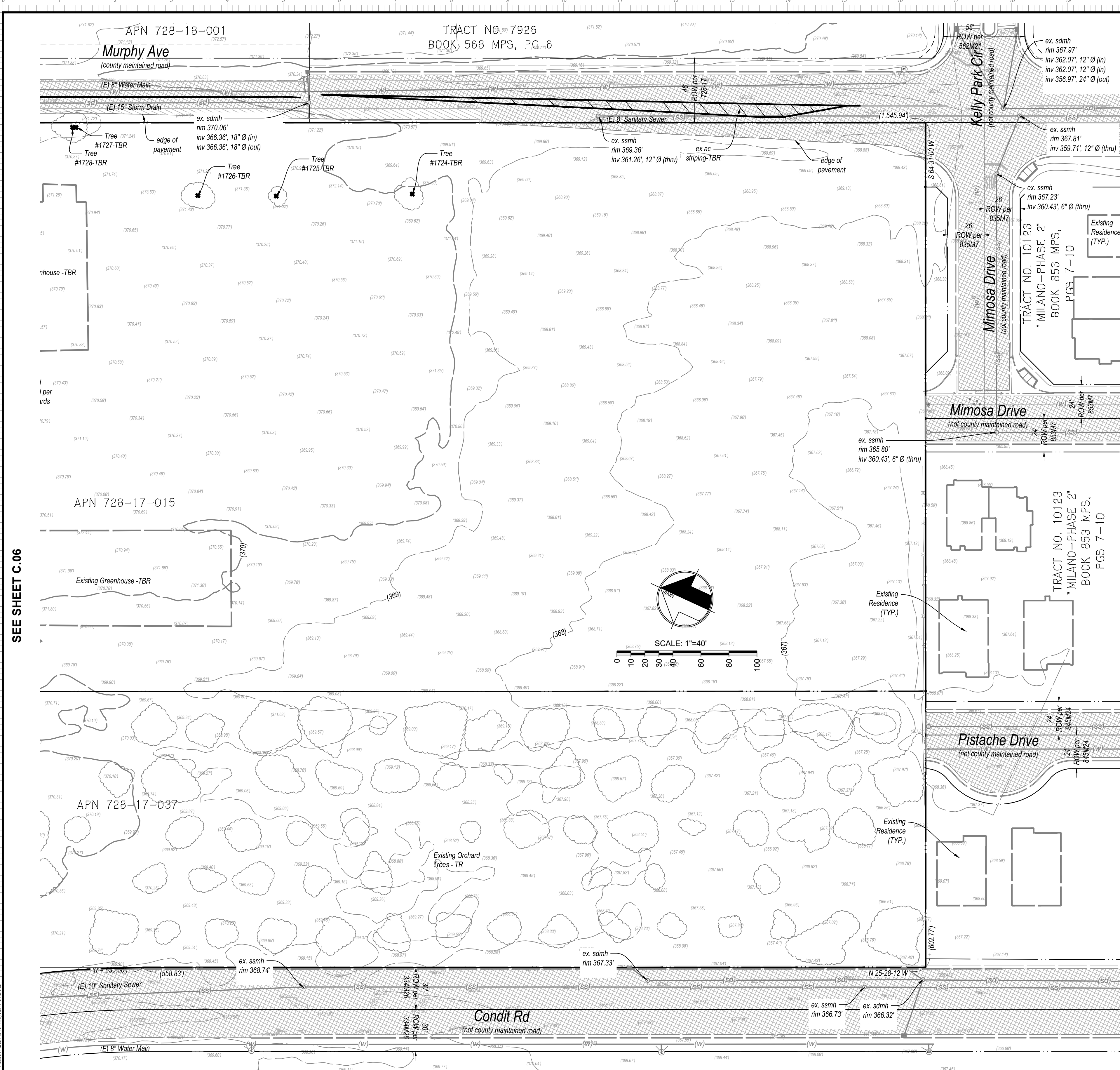
SEE SHEET C.04

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APN 728-17-037
 PARCEL MAP
 BOOK 334 OF MAPS, PAGE 26
 PCL 2
 PHASE 2





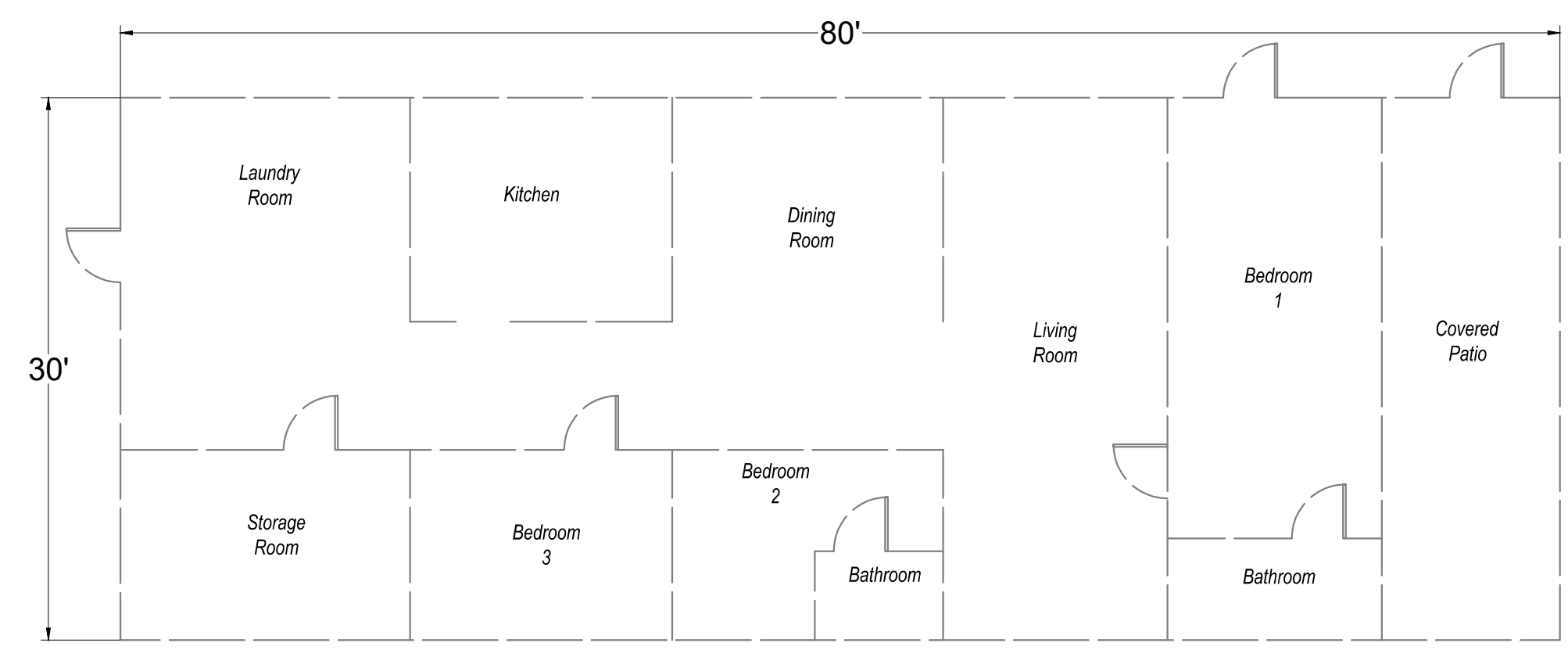
Abbreviations:
 APN- ASSESSOR PARCEL NUMBER
 TR- TO REMAIN
 TBR- TO BE REMOVED
 D.B.H- DIAMETER AT BREAST HEIGHT
 TPZ- SPECIFIED TREE PROTECTION ZONE
 N.T.S.- NOT TO SCALE

Legend

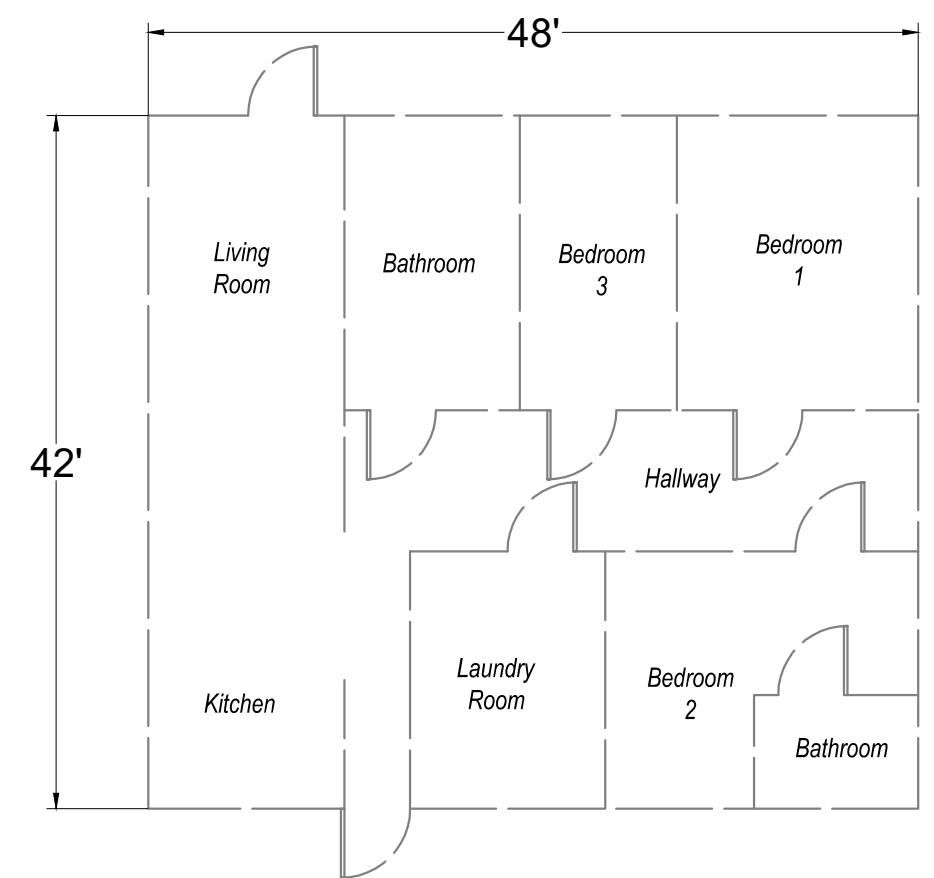
- Water Well
- Remove Tree

Tree ID #	Common Name	Species	D.B.H. (in.)	TPZ (ft.)	Condition	Status
1701	Coast Live Oak	Quercus agrifolia	19.26	21	Fair	TBR
1702	Coast Live Oak	Quercus agrifolia	10	5	Good	TBR
1703	Coast Live Oak	Quercus agrifolia	8.8.9	7	Good	TR
1704	Coast Live Oak	Quercus agrifolia	10	5	Good	TR
1705	Coast Live Oak	Quercus agrifolia	9.5	5	Good	TR
1706	Coast Live Oak	Quercus agrifolia	7	4	Good	TBR
1707	Coast Live Oak	Quercus agrifolia	13	7	Good	TR
1708	Coast Live Oak	Quercus agrifolia	8	4	Good	TR
1709	Black Walnut	Juglans nigra	22	18	Poor	TR
1710	Black Walnut	Juglans nigra	6.6.8.8.5	13	Very Poor	TR
1711	English Walnut	Juglans regia	20	17	Fair	TBR
1712	Coast Live Oak	Quercus Agrifolia	20	13	Good	TBR
1713	Black Walnut	Juglans nigra	Multi 2	4	Fair	TBR
1714	Coast Live Oak	Quercus Agrifolia	7.8.4	8	Fair	TBR
1715	Coast Live Oak	Quercus Agrifolia	5.5.6.4	7	Fair	TBR
1716	Coast Live Oak	Quercus Agrifolia	9.6	7	Fair	TBR
1717	Coast Live Oak	Quercus Agrifolia	4.5	4	Fair	TBR
1718	Coast Live Oak	Quercus Agrifolia	4.5.6	6	Fair	TBR
1719	Chinese Pistache	Pistacia chinensis	Multi 2	4	Fair	TBR
1720	Chinese Pistache	Pistacia chinensis	2.4.2	4	Fair	TBR
1721	Chinese Pistache	Pistacia chinensis	4.4.4	6	Fair	TBR
1722	Black Walnut	Juglans nigra	12.12.14.12.4.4	21	Very Poor	TBR
1723	Deodar Cedar	Cedrus deodara	24	20	Fair	TBR
1724	Privet	Ligustrum lucidum	Multi 4	7	Fair	TBR
1725	Privet	Ligustrum lucidum	8	7	Fair	TBR
1726	Privet	Ligustrum lucidum	4.4.2.2.2.2	6	Fair	TBR
1727	Black Walnut	Juglans nigra	12	10	Poor	TBR
1728	Coast Live Oak	Quercus Agrifolia	6.5	7	Fair	TBR
1729	Black Walnut	Juglans nigra	40	33	Good	TBR
1730	Black Walnut	Juglans nigra	12.12.10.13	20	Good	TBR
1731	Black Walnut	Juglans nigra	9.9.9.10.10.11	18	Good	TBR
1732	Chinese Pistache	Pistacia chinensis	12	8	Fair	TBR
1733	Coast Live Oak	Quercus Agrifolia	17	11	Fair	TBR
1734	Blue Oak	Quercus douglasii	8	7	Fair	TBR
1735	Chinese Pistache	Pistacia chinensis	12	8	Good	TBR
1736	Black Walnut	Juglans nigra	8	7	Very Poor	TBR
1737	Chinese Pistache	Pistacia chinensis	6.6.6	7	Fair	TBR
1738	Coast Live Oak	Quercus Agrifolia	18.21	18	Fair	TBR
1739	Plum	Prunus domestica	5.4.2.2	6	Poor	TBR
1740	Coast Live Oak	Quercus Agrifolia	23	15	Good	TBR
1741	Coast Live Oak	Quercus Agrifolia	23	15	Good	TR
1742	Black Walnut	Juglans nigra	17	14	Good	TBR
1743	Coast Live Oak	Quercus Agrifolia	14	9	Fair	TBR
1744	Coast Live Oak	Quercus Agrifolia	25	17	Good	TBR
1745	Coast Live Oak	Quercus Agrifolia	20	13	Good	TBR
1746	Coast Live Oak	Quercus Agrifolia	20	13	Good	TBR
1747	Coast Live Oak	Quercus Agrifolia	30	20	Fair	TBR
1748	Coast Live Oak	Quercus Agrifolia	20	13	Poor	TBR
1749	Fan Palm	Washingtonia robusta	16	11	Good	TBR
1750	Deodar Cedar	Cedrus deodara	8	5	Good	TBR
1751	Coast Live Oak	Quercus Agrifolia	8	7	Good	TBR
1752	Coast Live Oak	Quercus Agrifolia	7	6	Fair	TBR
1753	Chinese Pistache	Pistacia chinensis	10.10	9	Fair	TBR
1754	Coast Live Oak	Quercus Agrifolia	16	11	Good	TBR
1755	Deodar Cedar	Cedrus deodara	42	28	Good	TR
1756	Italian Cypress	Cupressus sempervirens	10	8	Good	TBR
1757	Italian Cypress	Cupressus sempervirens	10	8	Good	TBR
1758	Coast Live Oak	Quercus Agrifolia	8	7	Good	TR

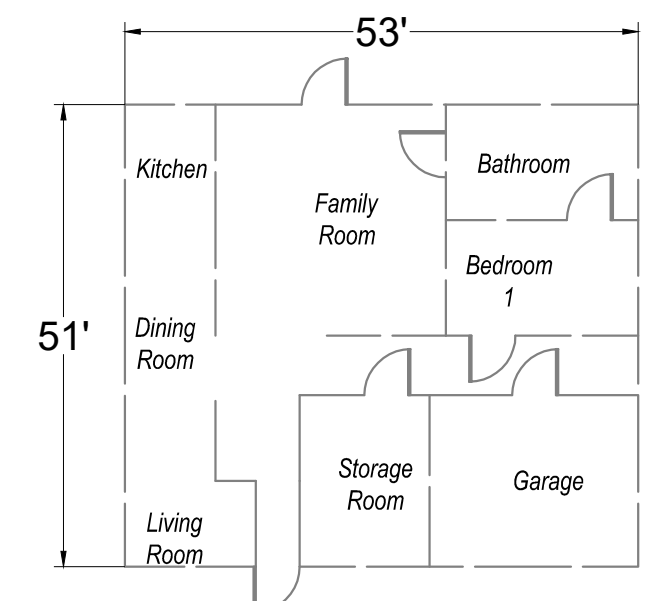
Refer to landscape plans for tree replacement plan



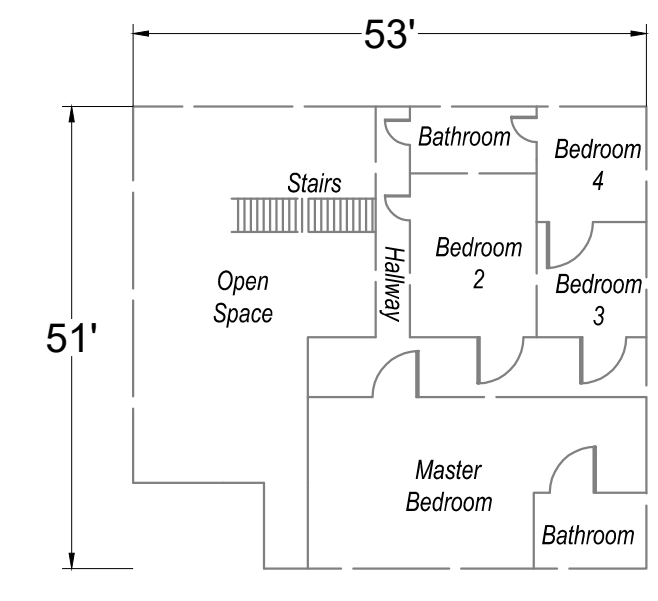
Existing Residence 1 (To Be Demolished) Floor Plan (2400 SF)
 N.T.S.



Existing Residence 2 (To Remain) Floor Plan (2016 SF)
 N.T.S.



Existing Residence 3 (To Remain) 1st Level Floor Plan (2703 SF)
 N.T.S.



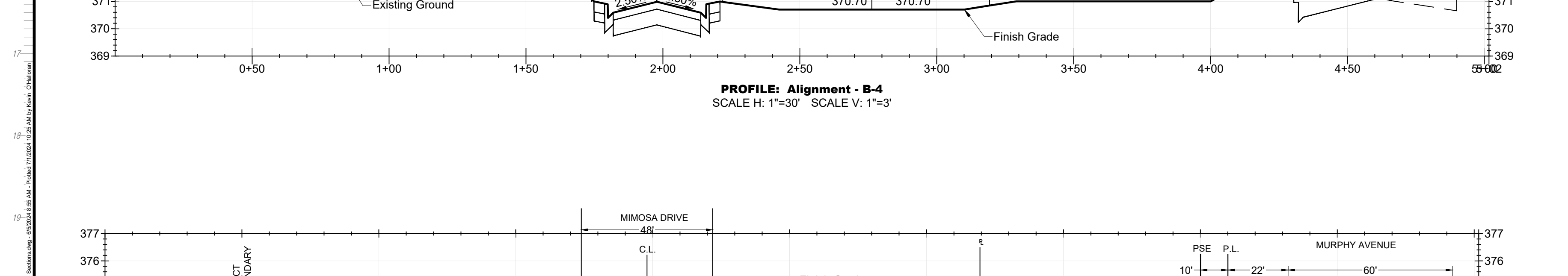
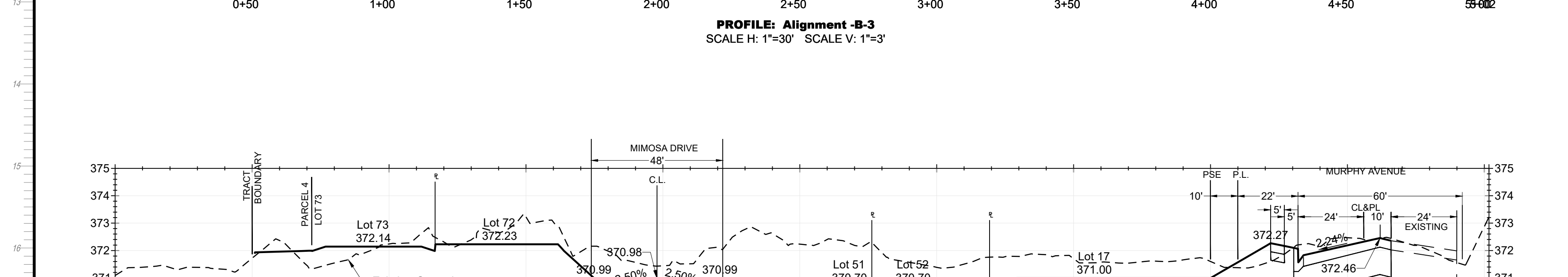
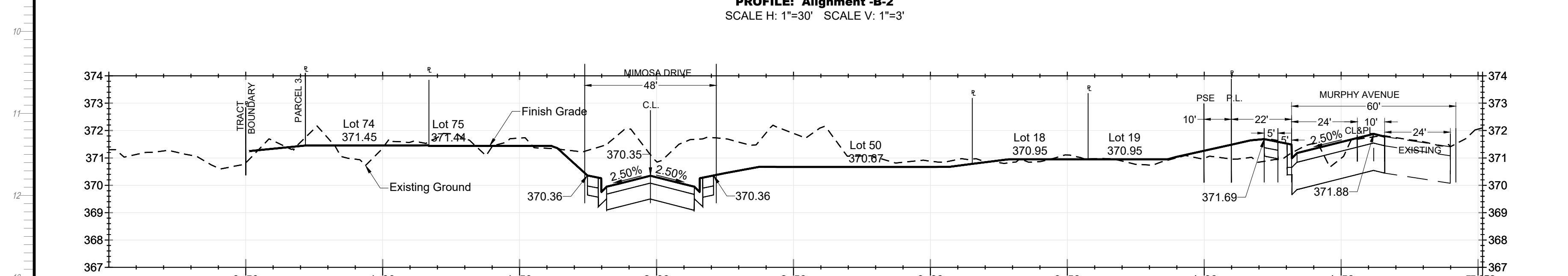
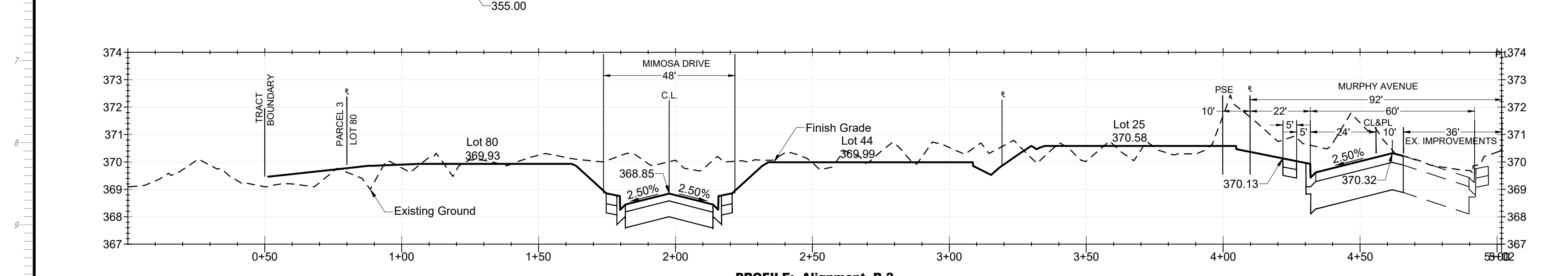
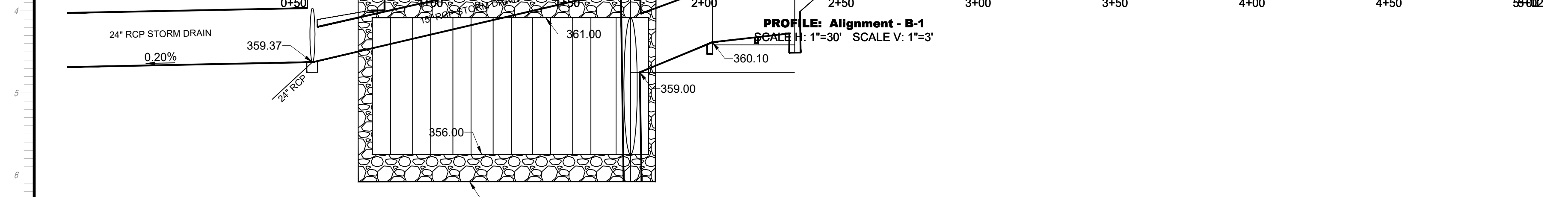
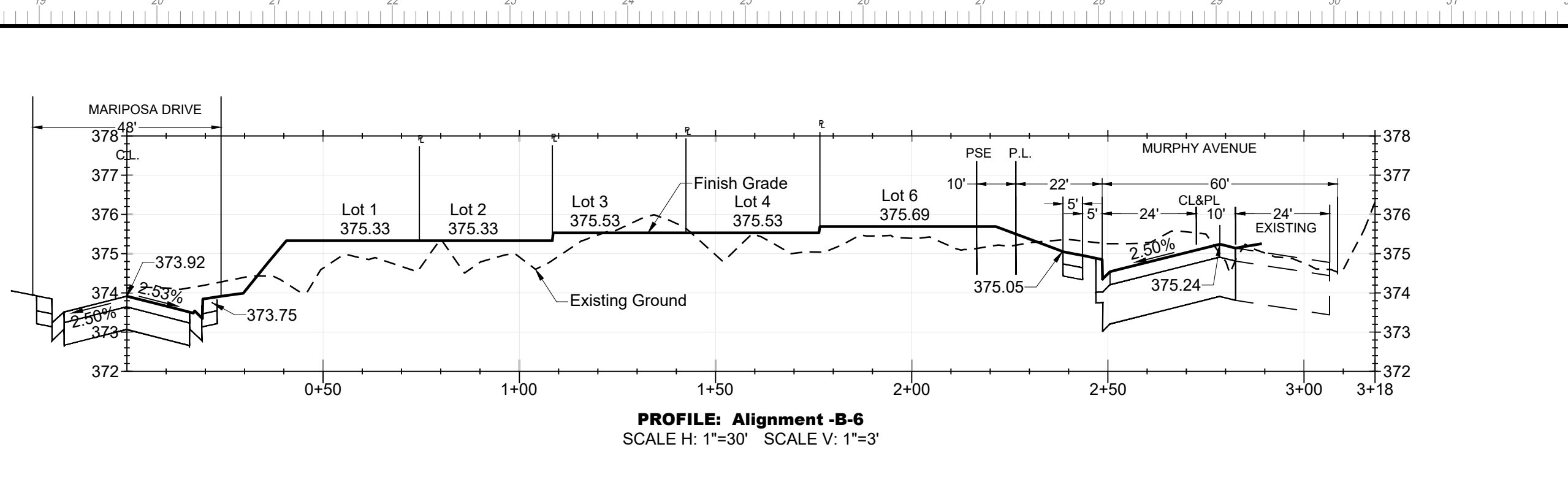
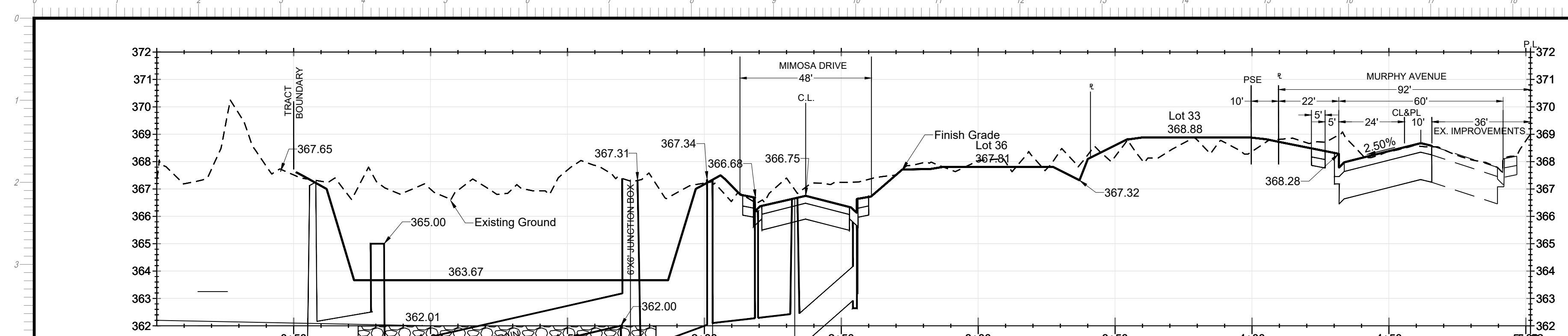
Existing Residence 3 (To Remain) 2nd Level Floor Plan (2443 SF)
 N.T.S.



MH engineering Co.
 Morgan Hill, CA 95037

Site Topo and Demolition Plan
 North Diana

DATE: 7/11/2024
 SCALE: 1"=40'
 DRAWN BY: RS
 CHECKED BY: WJM
 JOB NO: 216009.1
 SHEET: C.07
 OF 18



Grading Quantities

Location	Earth Work Quantities		Max Cut	Max Fill
	Cut (CY)	Fill (CY)		
James - West	416	0	3.40'	0.0'
James - East	367	0	3.79'	0.0'
Storm Water Treatment	3,176	25	12.83'	0.90'
Lots 1-17 and 51-62	897	1,672	2.24'	1.01'
Lots 18-50	1,081	1,668	2.29'	1.04'
Lots 63-73	185	759	2.29'	0.86'
Diana Avenue	591	12	1.56'	0.18'
Murphy Avenue	2,782	114	2.94'	0.92'
Mimosa Drive	4,684	1	5.06'	0.28'
Lots 74-86	453	678	1.15'	0.80'
Parcel 2	74	41	2.03'	0.67'
Parcel 3	60	199	2.73'	0.83'
Parcel 4	43	90	1.12'	0.80'
Parcel 5	4	440	0.43'	1.26'
Total	14,813	5,699		

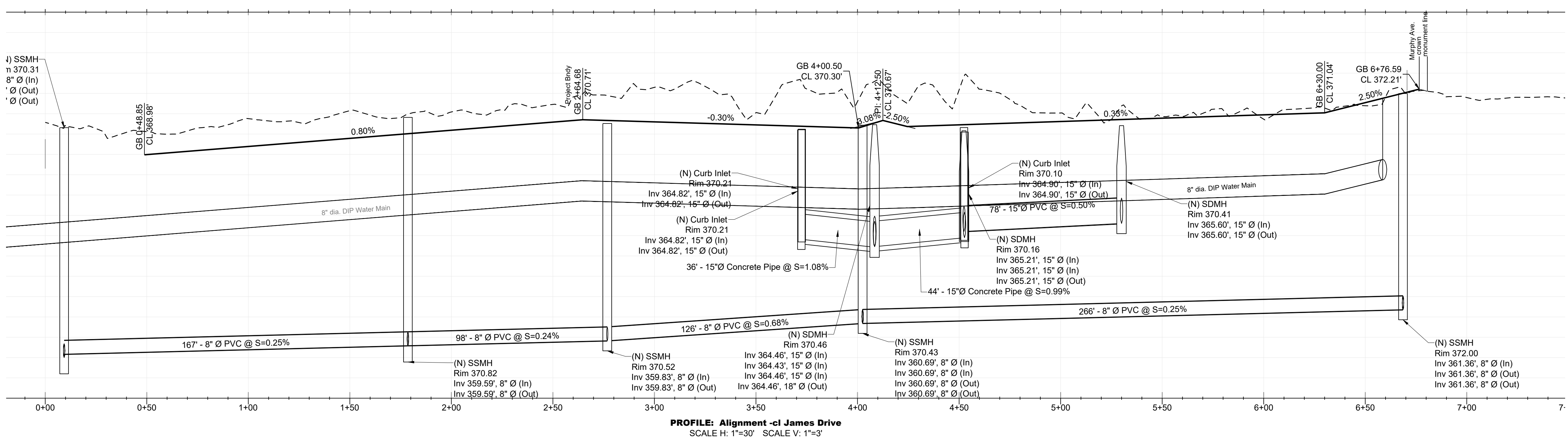
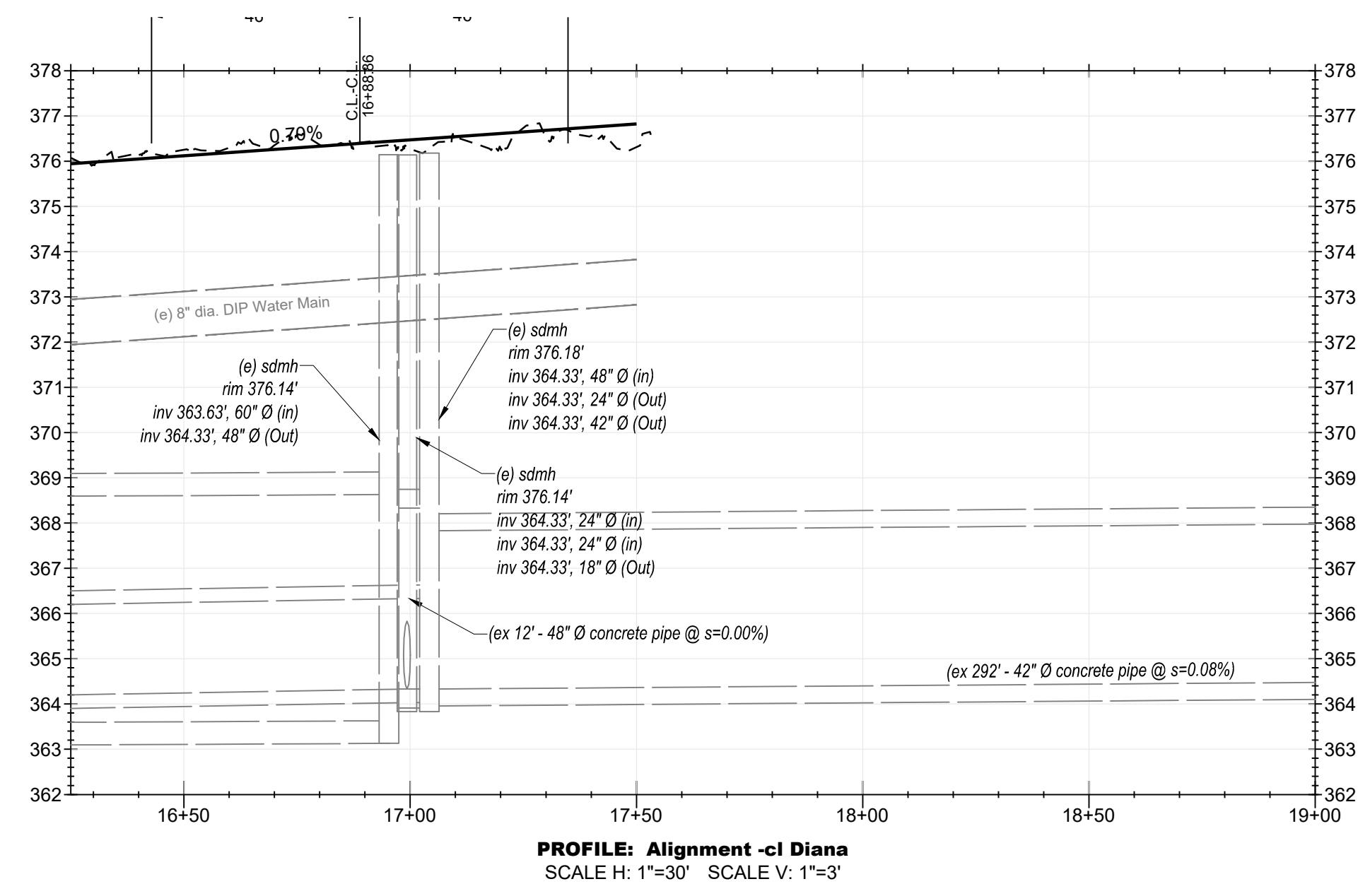
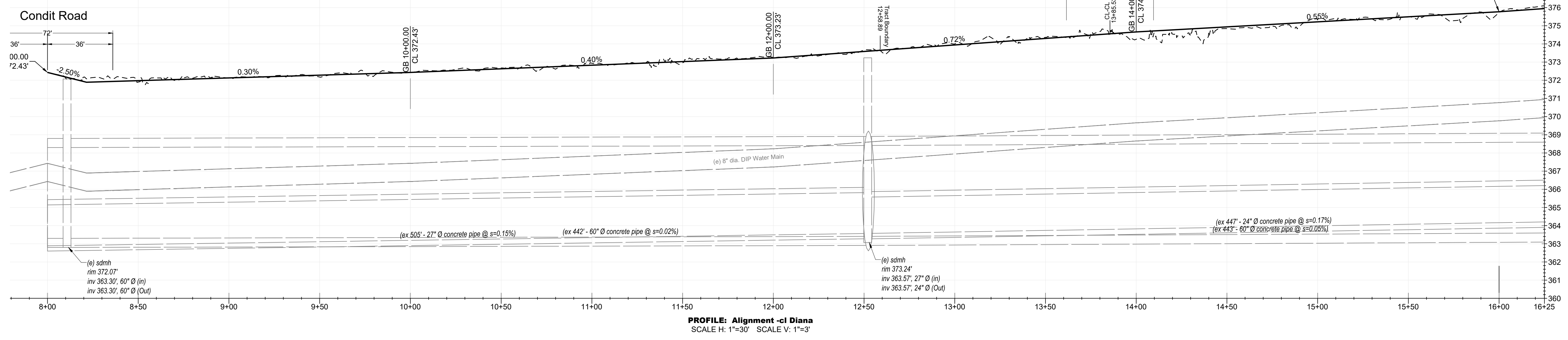
EXCESS MATERIAL TO BE HAULED AWAY TO AN APPROVED DISPOSAL SITE.

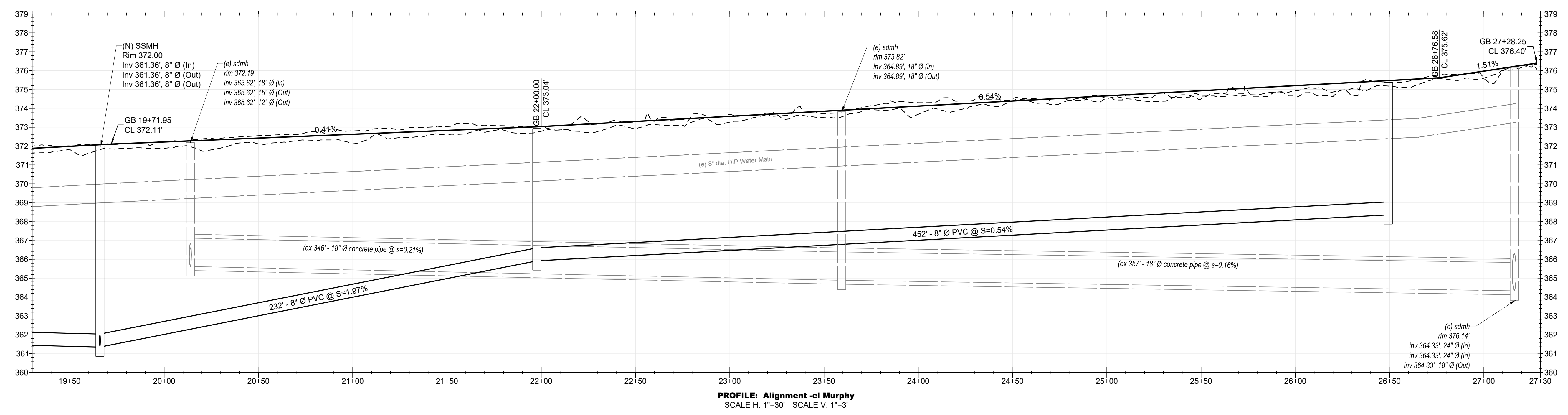
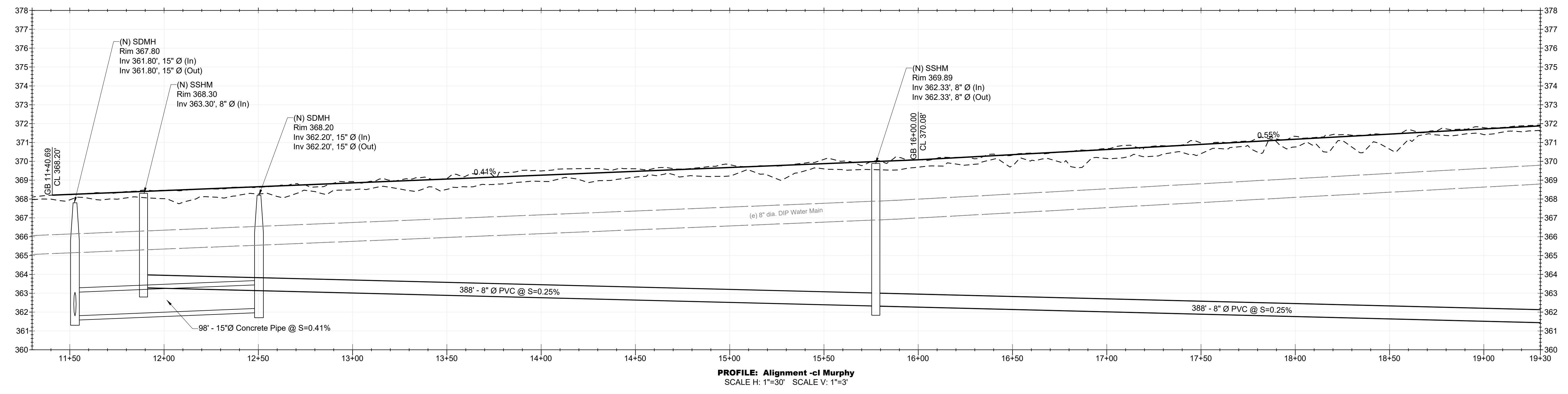


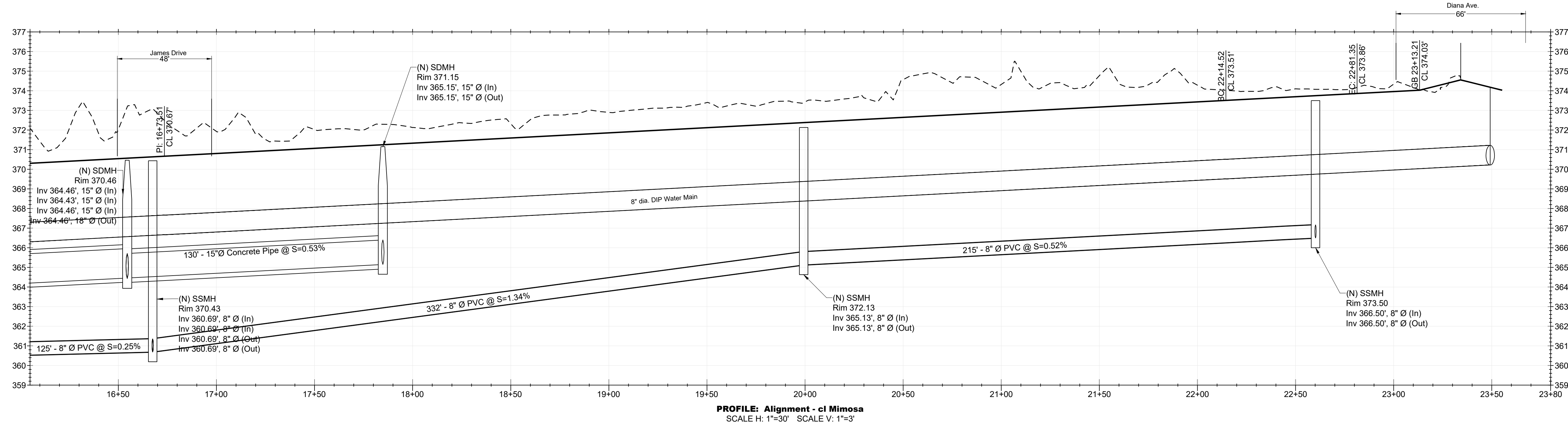
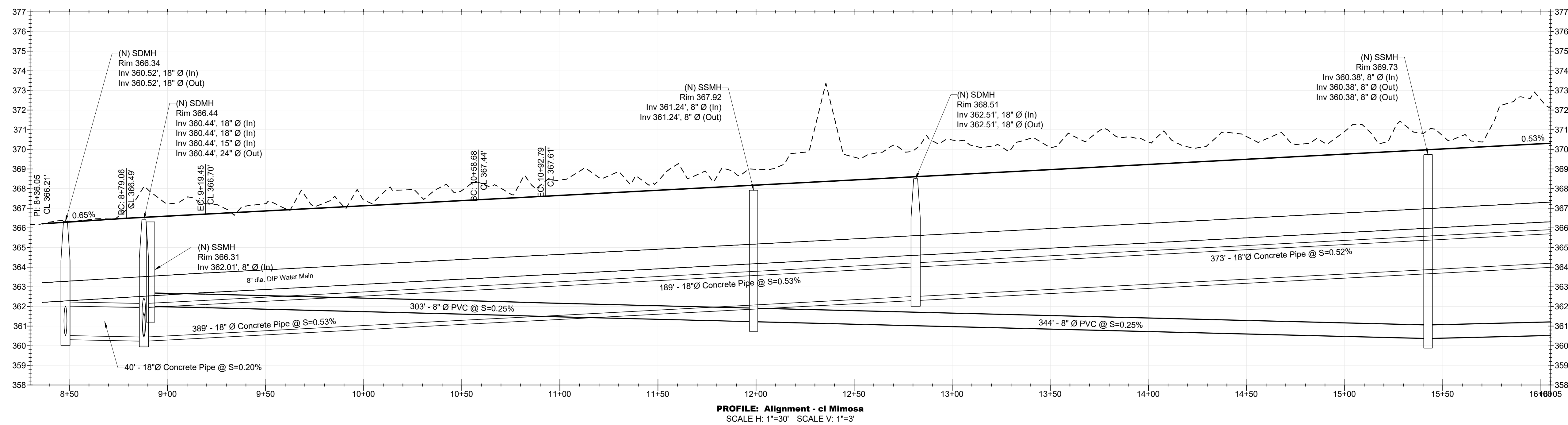
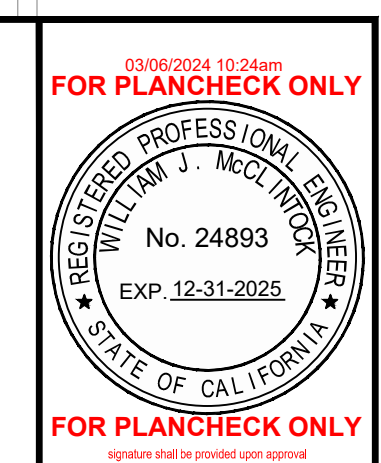
MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

Grading Cross Sections
North Diana

DATE: 7/1/2024
SCALE: 1"=30'
DRAWN BY: RS
CHECKED BY: WJM
JOB NO: **216009.1**
SHEET: **C.11**
OF: **18**



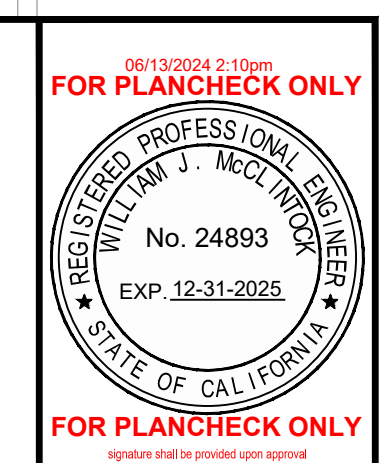




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Morgan Hill, CA 95037

Street Profiles
North Diana

DATE:	7/1/2024
SCALE:	1"=30'
DRAWN BY:	RS
CHECKED BY:	WJM
JOB NO:	216009.1
SHEET:	C.14
OF:	18



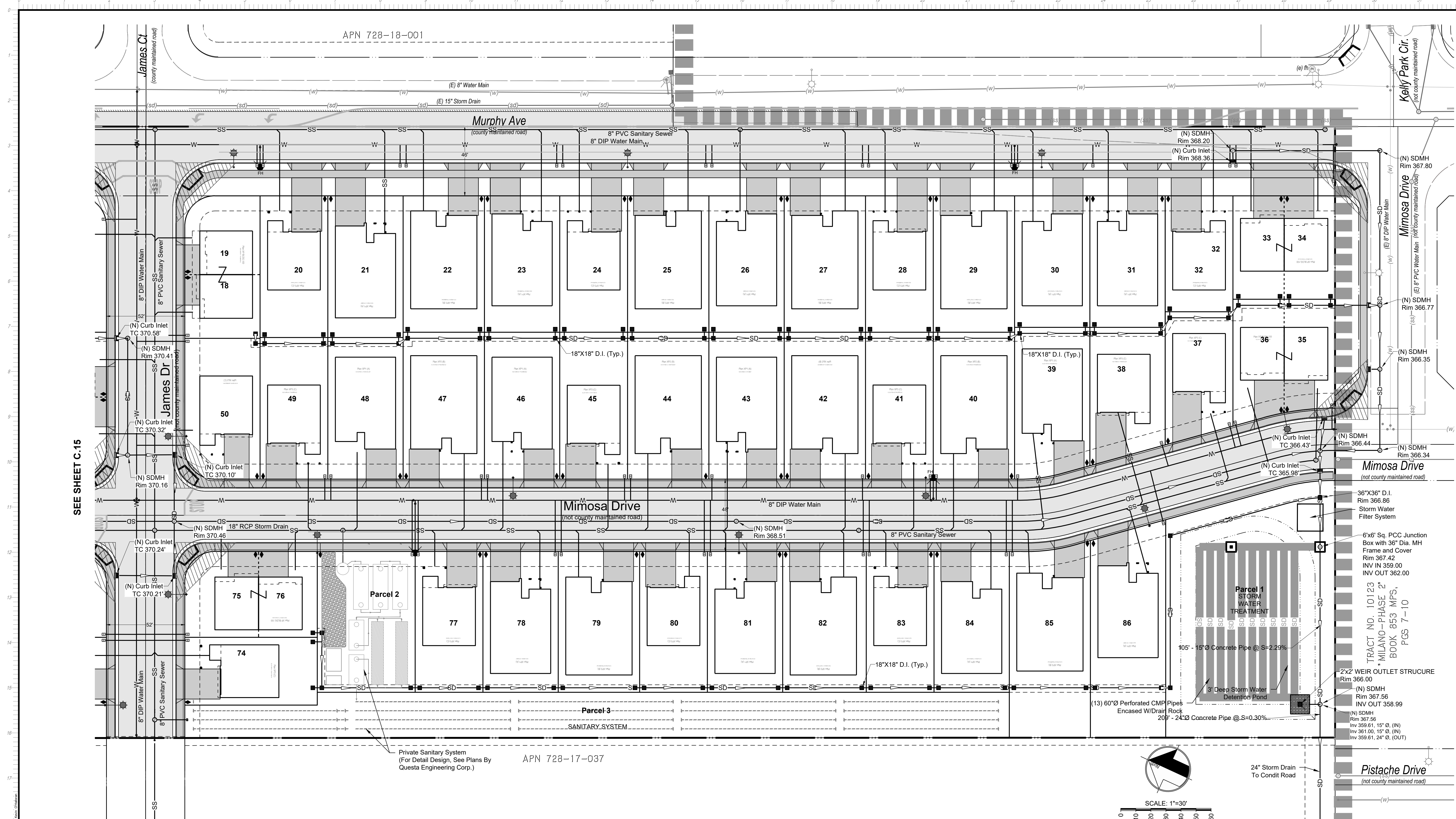
FOR PLANCHHECK ONLY

REGISTERED PROFESSIONAL ENGINEER
WILLIAM J. MCCLINTOCK
No. 24893
EXP. 12-31-2025
STATE OF CALIFORNIA
FOR PLANCHHECK ONLY
Regular and in good standing

MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

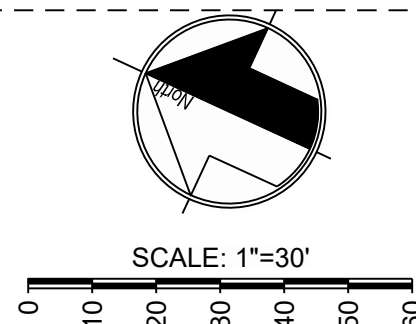
Site Utility Plan
North Diana

DATE: 7/11/2024
SCALE: 1"=30'
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CHECKED BY: WJM
JOB NO: 216009.1
SHEET: C.16
OF: 18

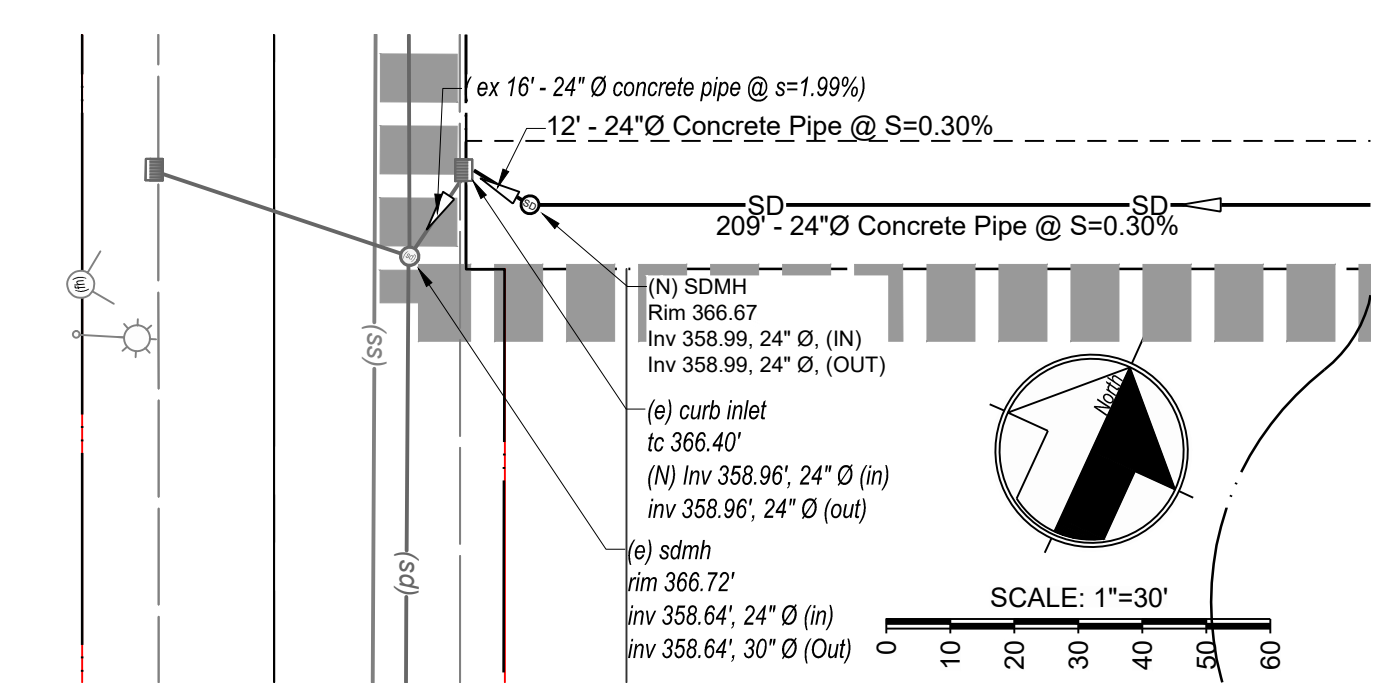


SEE SHEET C.15

Private Sanitary System
(For Detail Design, See Plans By
Questa Engineering Corp.)
APN 728-17-037



SEE BELOW FOR CONTINUATION



SEE ABOVE FOR CONTINUATION

REGISTERED PROFESSIONAL ENGINEER
 WILLIAM J. MCINTOSH
 No. 24893
 EXP. 12-31-2025
 STATE OF CALIFORNIA
 FOR PLANCHHECK ONLY

FOR PLANCHHECK ONLY
 Update and as needed per caption

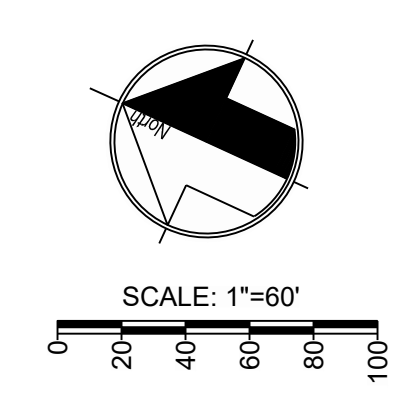
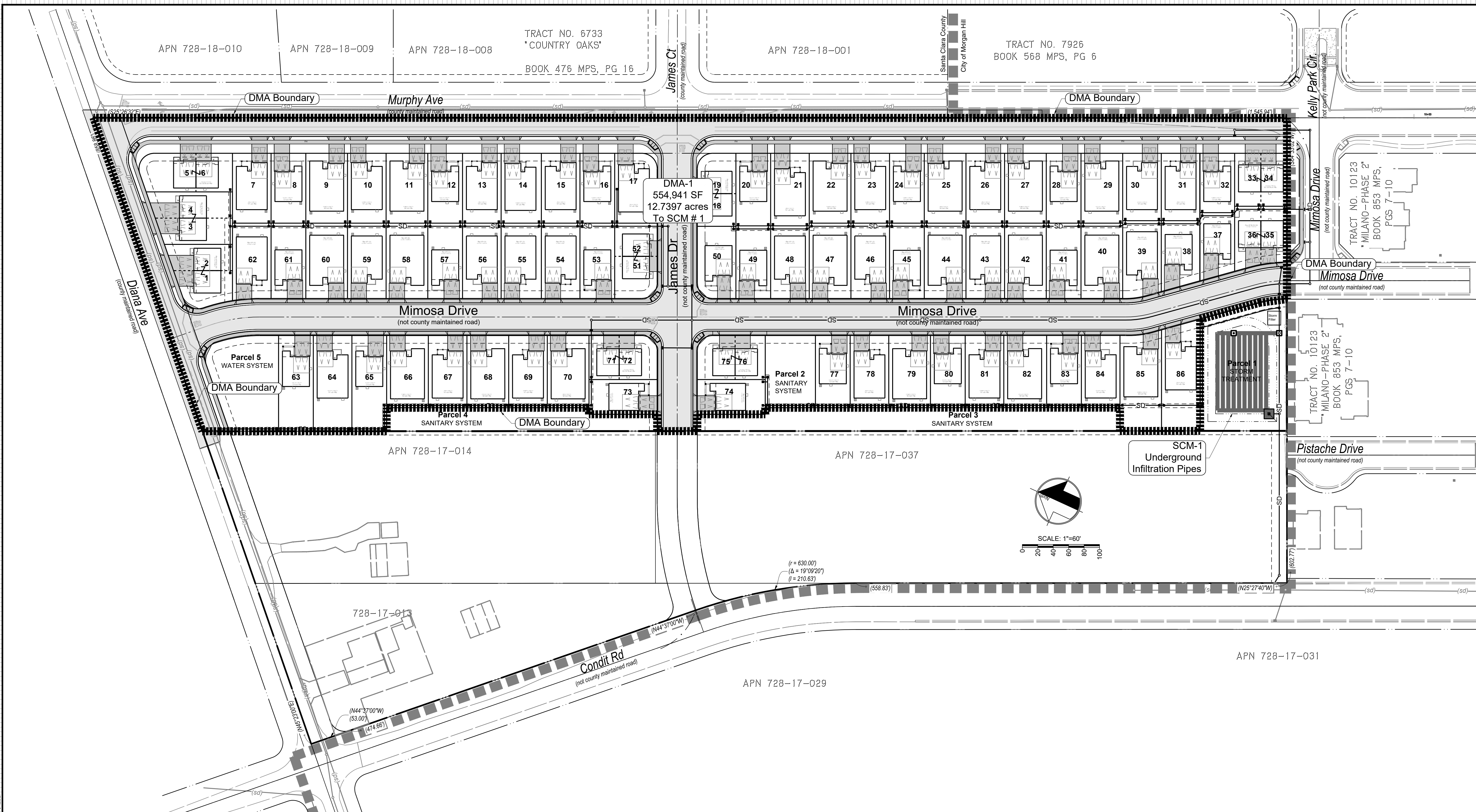
MH engineering Co.
 Morgan Hill, CA 95037
 16075 Vineyard Boulevard

Stormwater Control Plan
North Diana

DATE: 7/1/2024
 SCALE: 1"=60'
 DRAWN BY: RS
 CHECKED BY: WJM

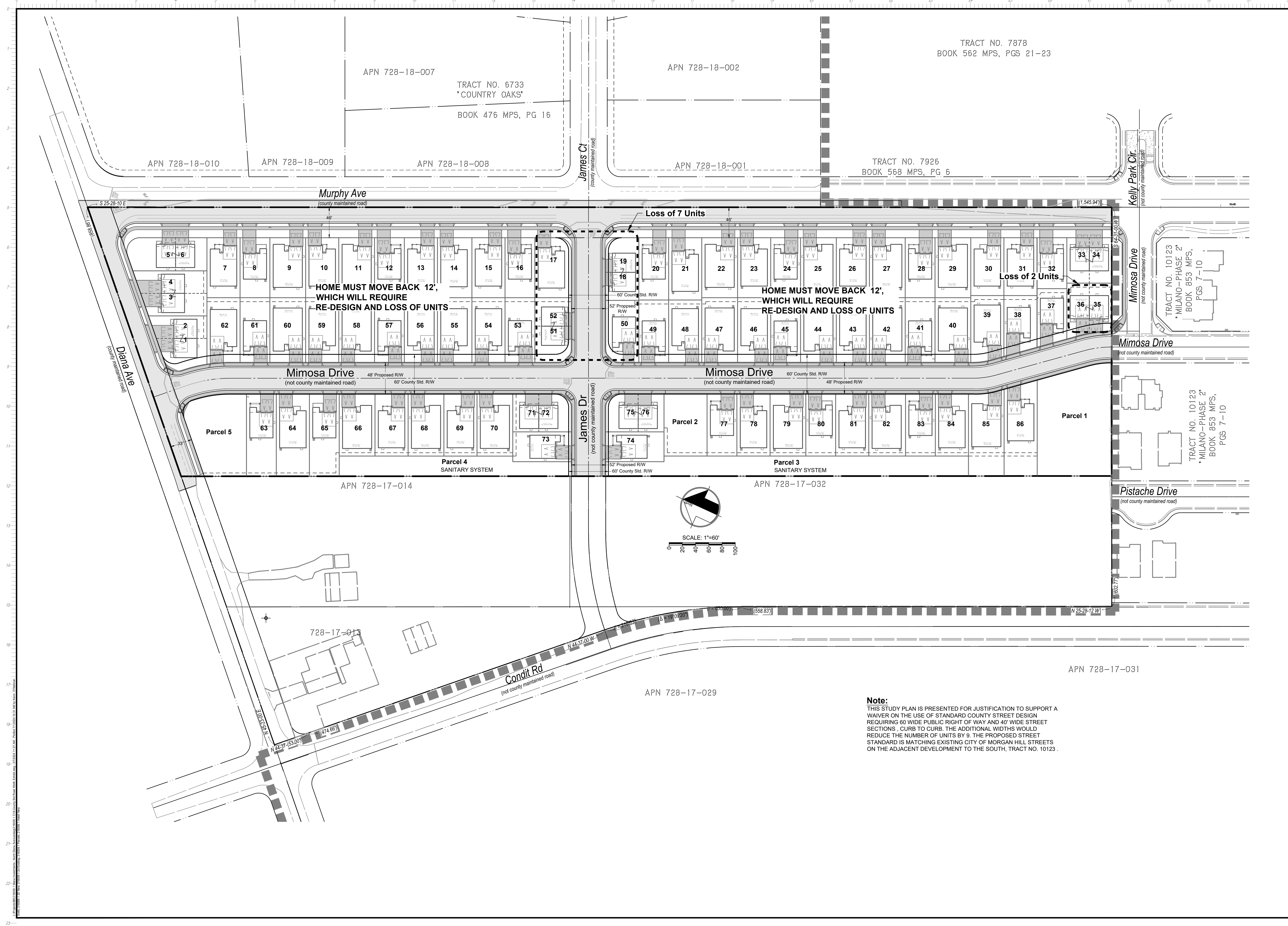
JOB NO.
216009.1

SHEET
C.17
 OF
18

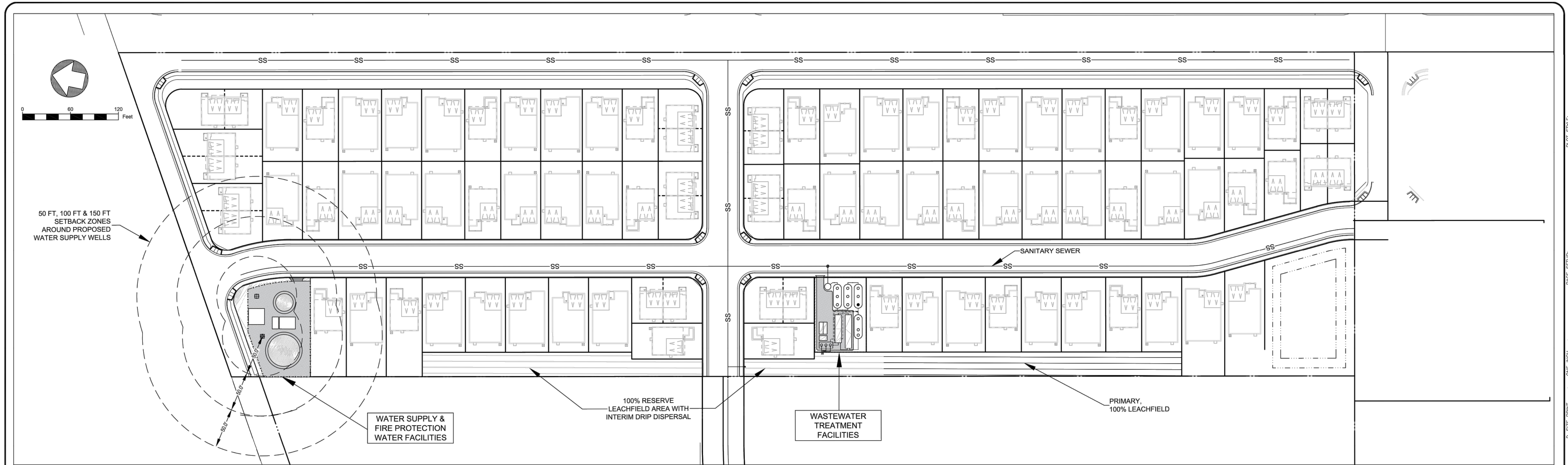


PERVIOUS AND IMPERVIOUS SURFACES COMPARISON					
Existing Condition		Proposed Condition		Difference (sq ft)	
Site (sq ft)	%	Site (sq ft)	%		%
13,748	100.00%	598,862	100.00%	0	0.00%
Building Footprint(s)	8,110	163,832	27.36%	155,722	26.00%
Streets	10090	102841	17.17%	92,751	15.49%
Sidewalks, Patios, Paths, etc.	8,841	66,821	11.16%	57,980	9.68%
Landscaping	0	15,164	2.53%	15,164	2.53%
Undeveloped	571,821	43,413	7.25%	-528,408	-88.24%
Permeable Pavement	0	0	0.00%	0	0.00%
Total	598,862	392,071	65.47%	-206,791	-34.53%
Impervious Surfaces	27,041	333,494	55.69%	306,453	51.17%
Pervious Surfaces	571,821	58,577	9.78%	-513,244	-85.70%
Total	598,862	392,071	65.47%	-206,791	-34.53%

PROJECT: 216009.1 - Stormwater Control Plan - North Diana
 DATE: 7/1/2024
 SCALE: 1"=60'
 DRAWN BY: RS
 CHECKED BY: WJM



Note:
 THIS STUDY PLAN IS PRESENTED FOR JUSTIFICATION TO SUPPORT A WAIVER ON THE USE OF STANDARD COUNTY STREET DESIGN REQUIRING 60' WIDE PUBLIC RIGHT OF WAY AND 40' WIDE STREET SECTIONS, CURB TO CURB. THE ADDITIONAL WIDTHS WOULD REDUCE THE NUMBER OF UNITS BY 9. THE PROPOSED STREET STANDARD IS MATCHING EXISTING CITY OF MORGAN HILL STREETS ON THE ADJACENT DEVELOPMENT TO THE SOUTH, TRACT NO. 10123.



WATER SYSTEM SUMMARY

WATER SOURCE: (2) NEW ALLUVIAL WELLS, ESTIMATED PRODUCTION CAPACITY >50 GPM

WATER SERVICE AREA: 86 SINGLE FAMILY RESIDENTIAL CONNECTIONS
COMMON AREA LANDSCAPING AND UTILITY USES

ESTIMATED WATER DEMAND: MAXIMUM DAY DEMAND (MDD): 43,500 GPD
ESTIMATED ANNUAL WATER USE: 6,328,000 GALS/YR
AVE DAILY WATER DEMAND: 17,350 GPD
AVE WELL PRODUCTION RATE: 12 GPM

DOMESTIC WATER STORAGE: 500 GAL PER RESIDENCE + 500 GAL IRRIG. & UTILITIES = 43,500 GAL
WELDED STEEL TANK, 45,500 GAL MINIMUM; 22' DIA X 16' HIGH

WATER TREATMENT: NO WATER TREATMENT PROPOSED

WATER DISTRIBUTION: HYDRO-PNEUMATIC STORAGE TANK & DISTRIBUTION SYSTEM
ONE PRESSURE ZONE, 50 TO 60 PSI

FIRE SUPPRESSION SUPPLY: 1,500 GPM FOR 2 HOURS = 180,000 GALS
WELDED STEEL TANK, 180,000 GAL MIN; 40' DIA, 20' HIGH

WATER SYSTEM OPERATIONS: CALIFORNIA AMERICAN WATER CO.
MIN. GRADE 1 TREATMENT, GRADE 2 DISTRIBUTION

DRAWING INDEX

SHEET NUMBER	SHEET TITLE
WW 1	WATER & WASTEWATER FACILITIES PLAN
WW 2	WATER FACILITIES & WASTEWATER TREATMENT LAYOUT
WW 3	TREATMENT DETAILS
WW 4	WASTEWATER DISPERSAL LAYOUT PLANS
WW 5	WASTEWATER DISPOSAL DETAILS

WASTEWATER FACILITIES SUMMARY

DESIGN FLOW, 30-DAY AVERAGE: 86 UNITS AT 150 GPD = 12,900 GPD

WASTEWATER COLLECTION: CONVENTIONAL GRAVITY SEWERS W/INFLUENT LIFT STATION

PRIMARY TREATMENT: SEPTIC TANKS; 45,000 GALS CAPACITY; 3.5 DAYS HRT

INFLUENT FLOW EQUALIZATION: 15,000-GAL. PRE-ANOXIC/FLOW EQ TANK

SECONDARY TREATMENT: 15,000 GPD RECIRCULATING TEXTILE FILTER, AX-MAX (ORENCO SYSTEMS)

NITROGEN REMOVAL:
- DENITRIFICATION LOOP THROUGH PRE-ANOXIC/FLOW EQ TANK
- SUPPLEMENTARY DENITRIFICATION LOOP THROUGH PRIMARY TANKS

EFFLUENT LIMITS : BOD: 30 MG/L; TSS: 30 MG/L; TOTAL N: 20 MG/L

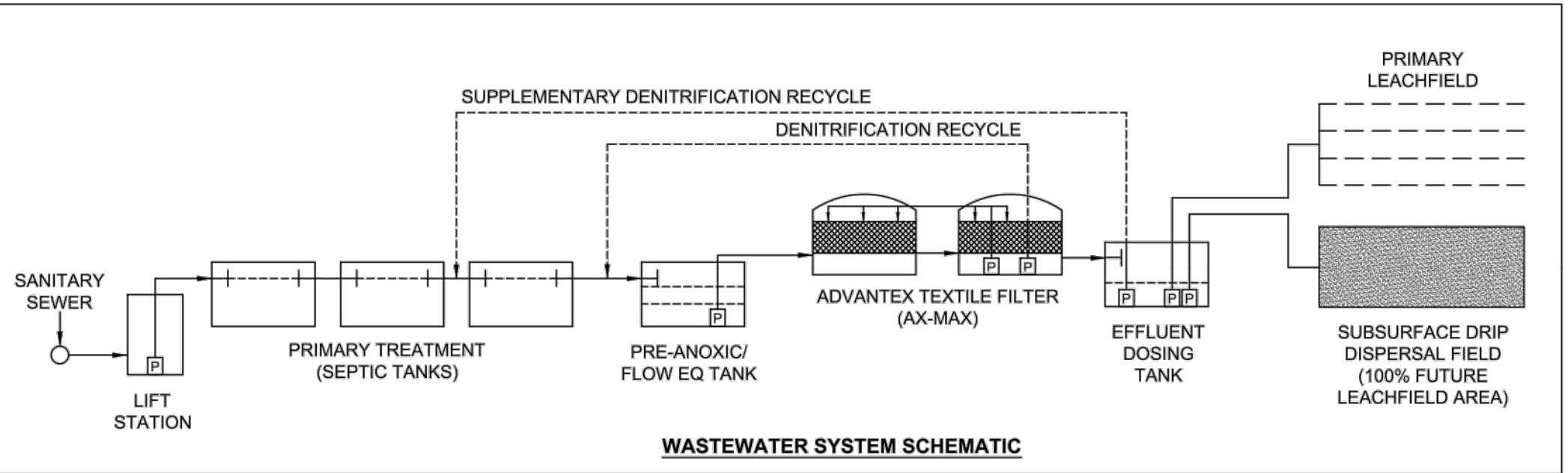
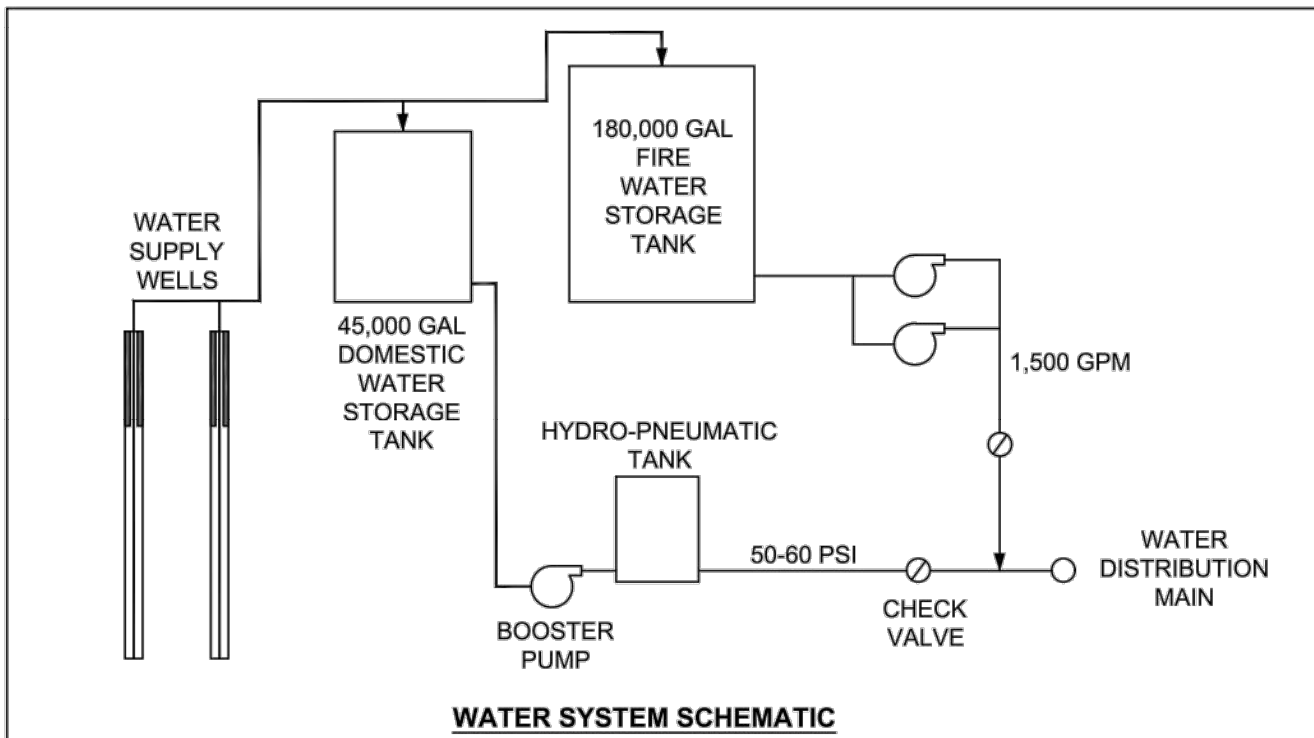
DOSING SYSTEM: 5,000-GAL DOSING TANK, W/DUPEX LEACHFIELD AND DRIP FIELD PUMPS

EFFLUENT DISPERSAL:
- PRIMARY LEACHFIELD: 1,600 LF 24" X 48" TRENCH @ 8.8 GPD/LF = 14,080 GPD
- 100% RESERVE LEACHFIELD AREA: CAPACITY FOR FUTURE 1,600 LF TRENCH
- INTERIM DRIP DISPERSAL IN RESERVE AREA, W/SEASONAL USE @ 8,800 GPD

EMERGENCY POWER: ONSITE STANDBY GENERATOR

MONITORING AND ALARMS: REMOTE TELEMETRY MONITORING AND CONTROL SYSTEM (SCADA)

SYSTEM OPERATIONS: CALIFORNIA AMERICAN WATER CO.; MINIMUM GRADE II OPERATOR



NORTH DIANA

MORGAN HILL, CA

QUESTA
ENGINEERING CORP.

Civil Environmental & Water Resources

(510) 238-0114
FAX (510) 238-2423
questa@questaec.com

P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807



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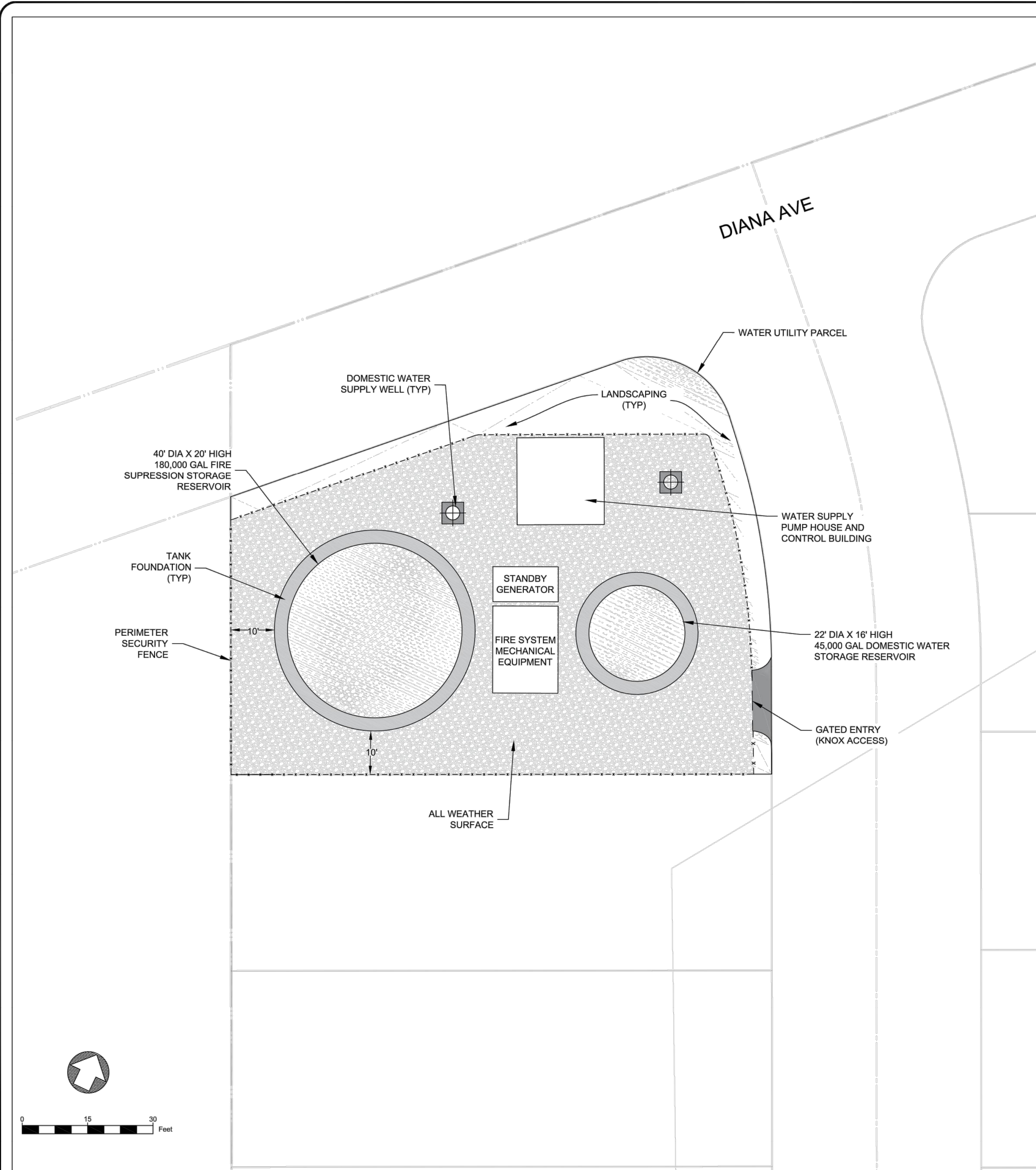
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Drawn: PS
Checked: NH
App'd: NH

WATER AND WASTEWATER FACILITIES PLAN

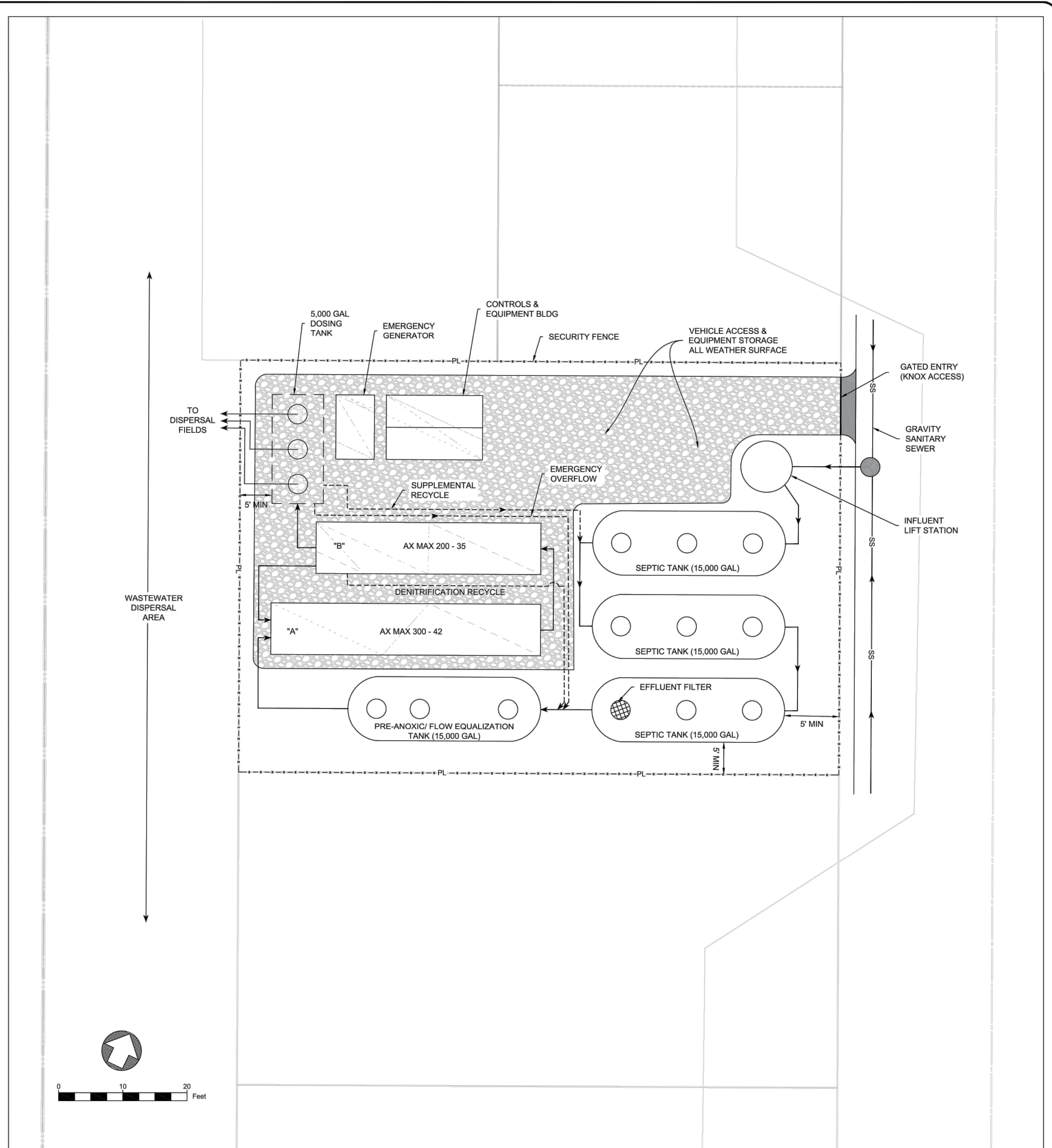
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Scale: AS NOTED	Date: 12/01/23
Sheet: WW1	

PLOT DATE: 12/1/2023
 PLOT STYLE: ONE INCH
 D-SIZE PRINT
 LAST SAVED: 12/1/2023 10:13:00AM
 PROJECT: NORTH DIANA WATER AND WASTEWATER CAD MODEL PROPOSED SEPTIC SYSTEM



**WATER FACILITIES LAYOUT
(PARCEL 5)**



**WASTEWATER TREATMENT LAYOUT
(PARCEL 2)**

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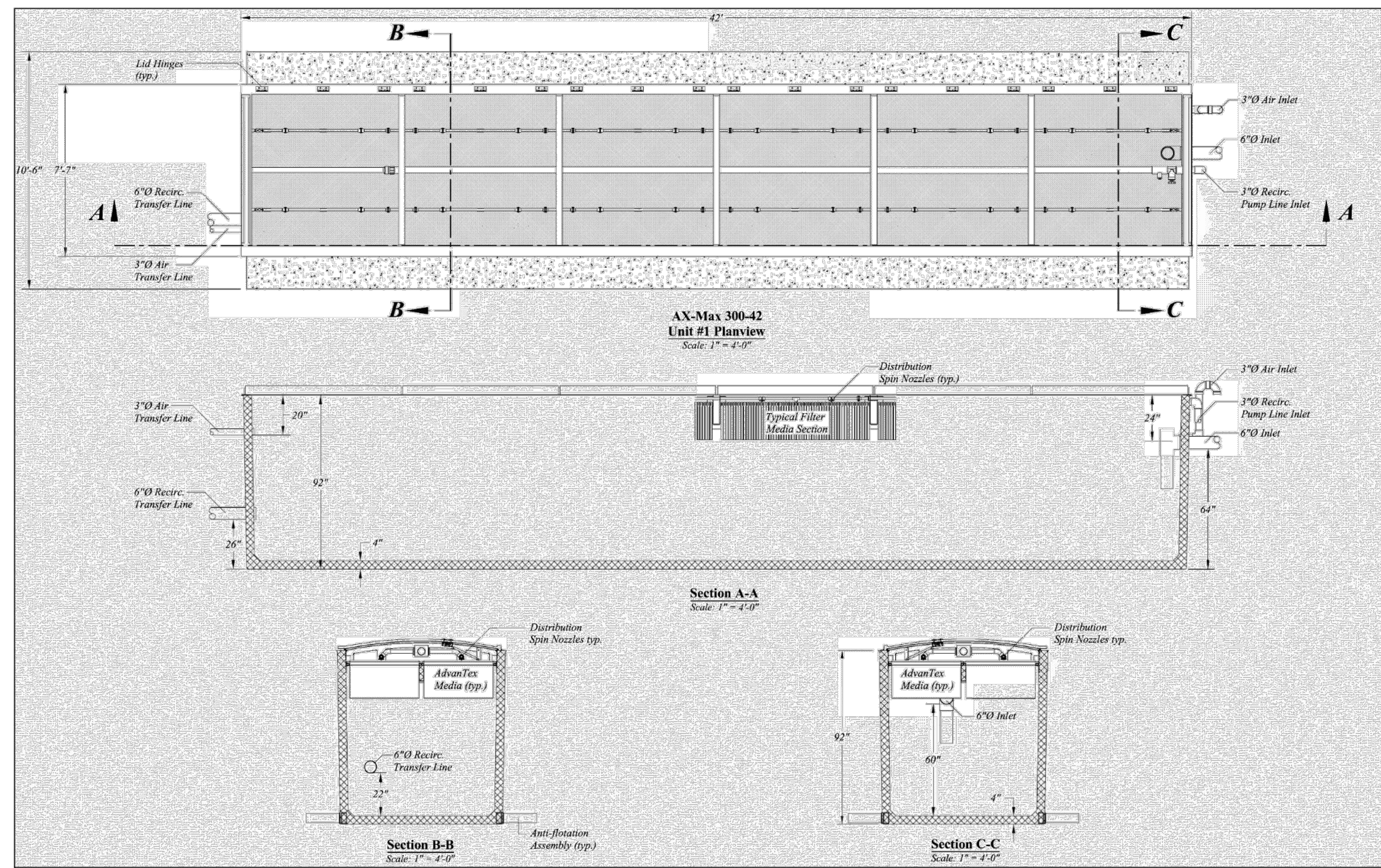


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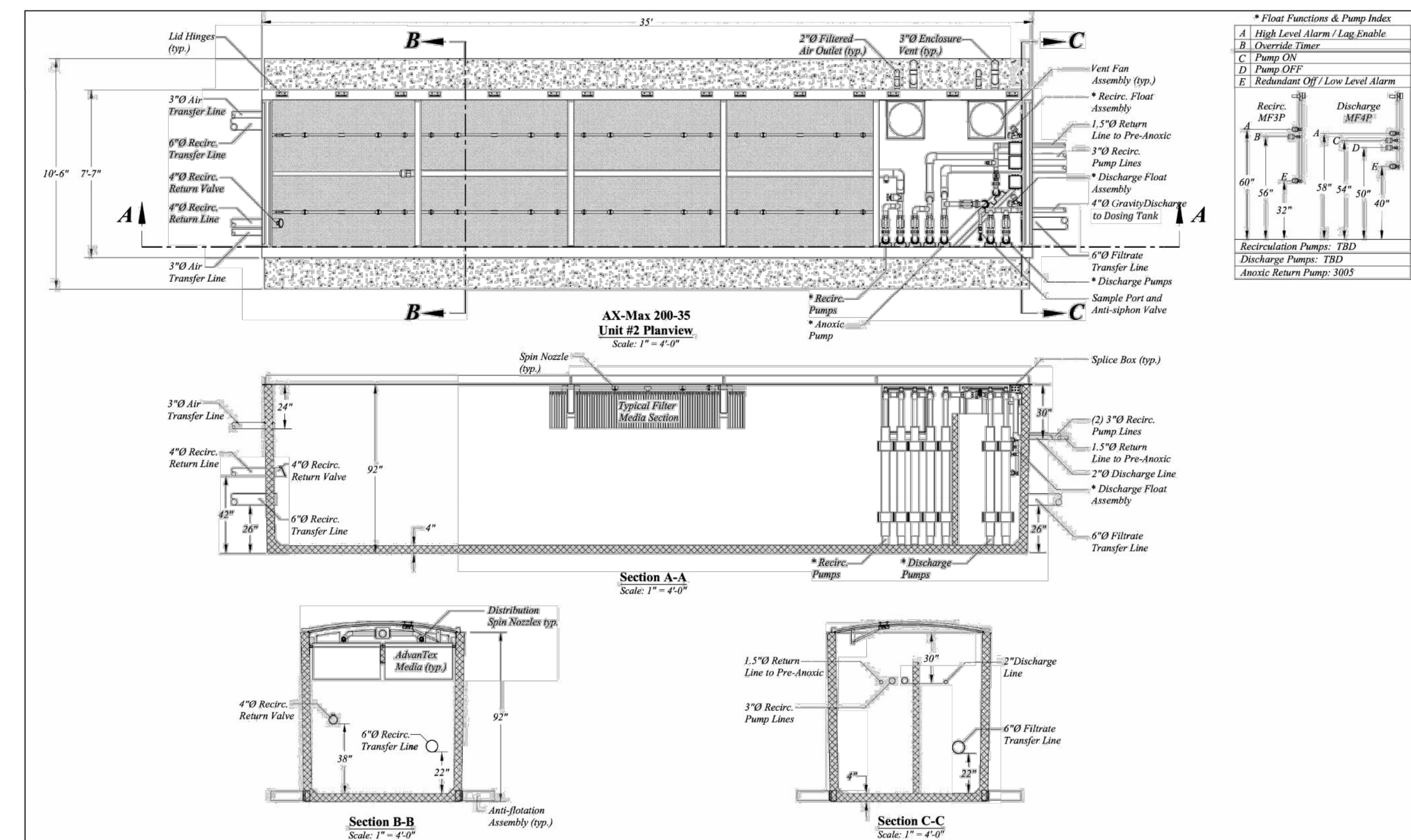
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Checked: NH
App'd: NH

**WATER FACILITIES &
WASTEWATER TREATMENT LAYOUT**
NORTH DIANA

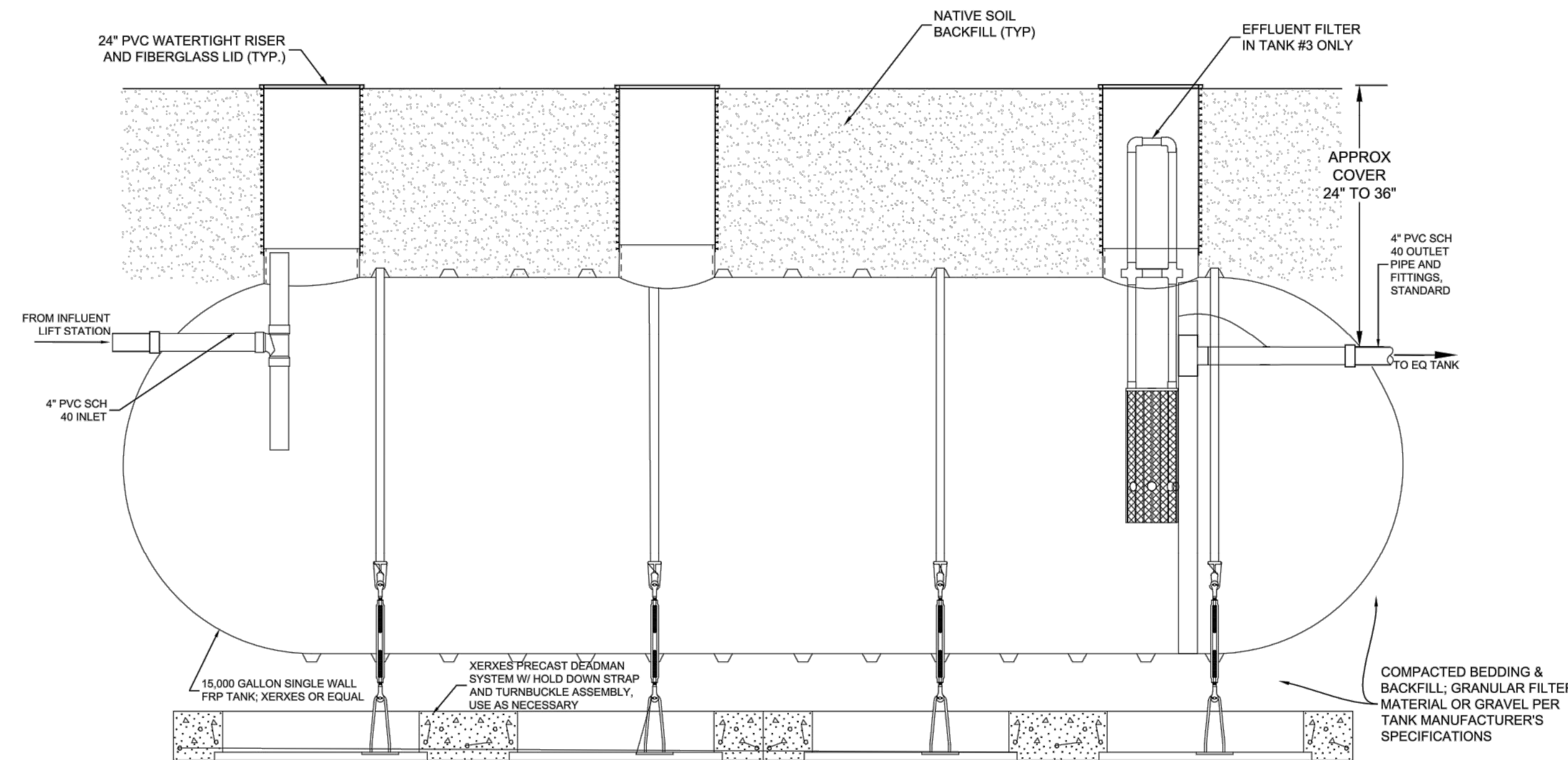
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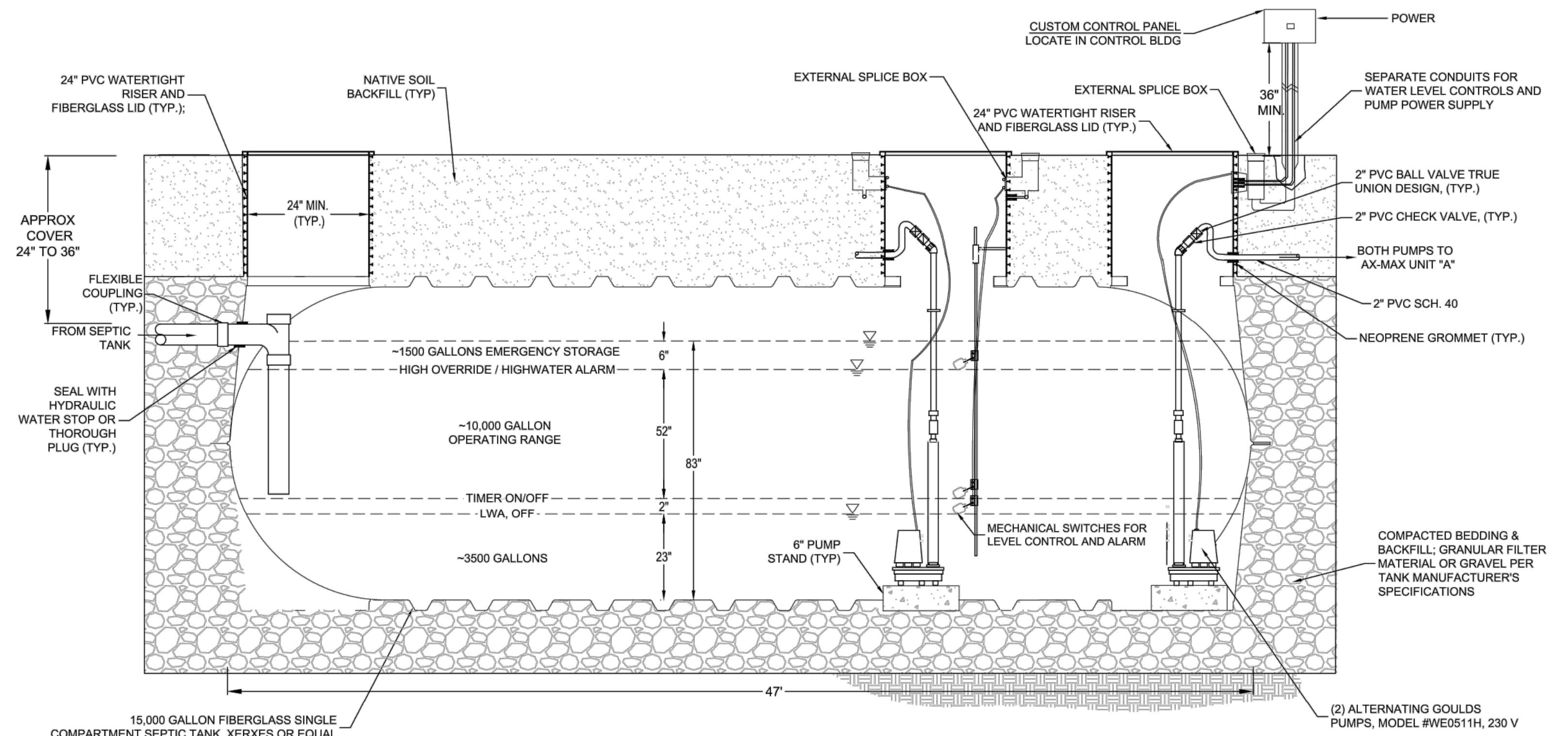
1 AX-MAX300-42
NOT TO SCALE



2 AX-MAX200-35
NOT TO SCALE



3 15,000 GALLON SEPTIC TANK (3 TOTAL)
NOT TO SCALE. 4 ACCESS RISERS AND BAFFLE



4 15,000 GALLON PRE-ANOXIC/ EQ TANK
NOT TO SCALE

NORTH DIANA

MORGAN HILL, CA

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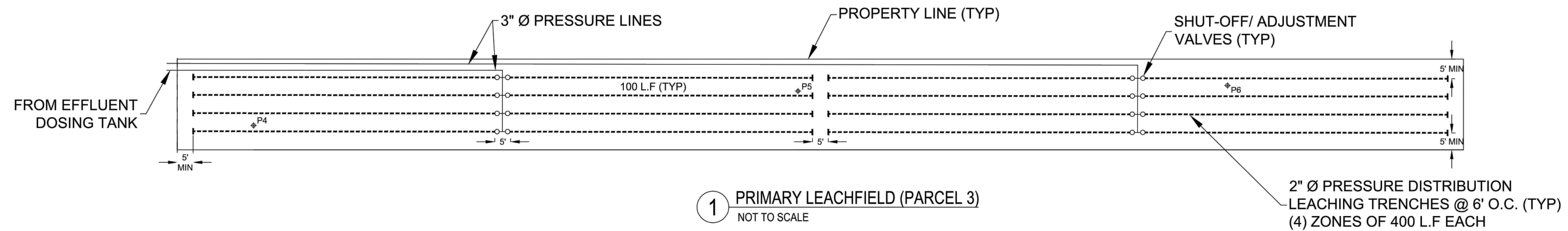
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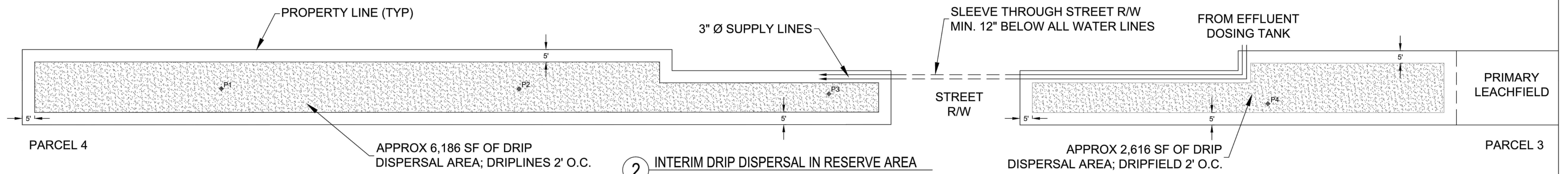
TREATMENT DETAILS

NORTH DIANA

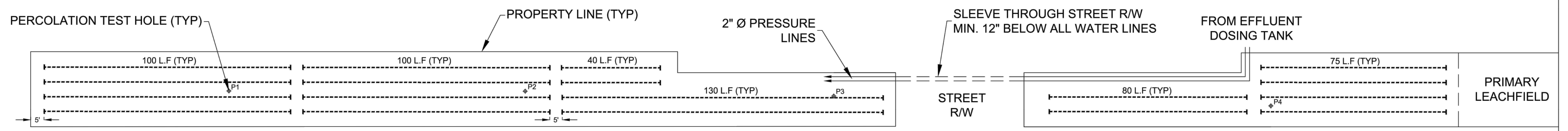
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Scale:	AS NOTED
Date:	12/01/23
Sheet:	WW3



1 PRIMARY LEACHFIELD (PARCEL 3)
NOT TO SCALE
1,600 L.F. OF 24" W X 48" D PRESSURE DISTRIBUTION LEACHING TRENCH



2 INTERIM DRIP DISPERSAL IN RESERVE AREA
NOT TO SCALE
8,800 SF OF SUBSURFACE DRIP DISPERSAL AREA
DRIPLINES @ 8" DEEP FOR SEASONAL USE (APR - NOV)



3 100% RESERVE LEACHFIELD (FUTURE)
NOT TO SCALE
1,600 L.F. OF 24" W X 48" D PRESSURE DISTRIBUTION LEACHING TRENCH

NORTH DIANA
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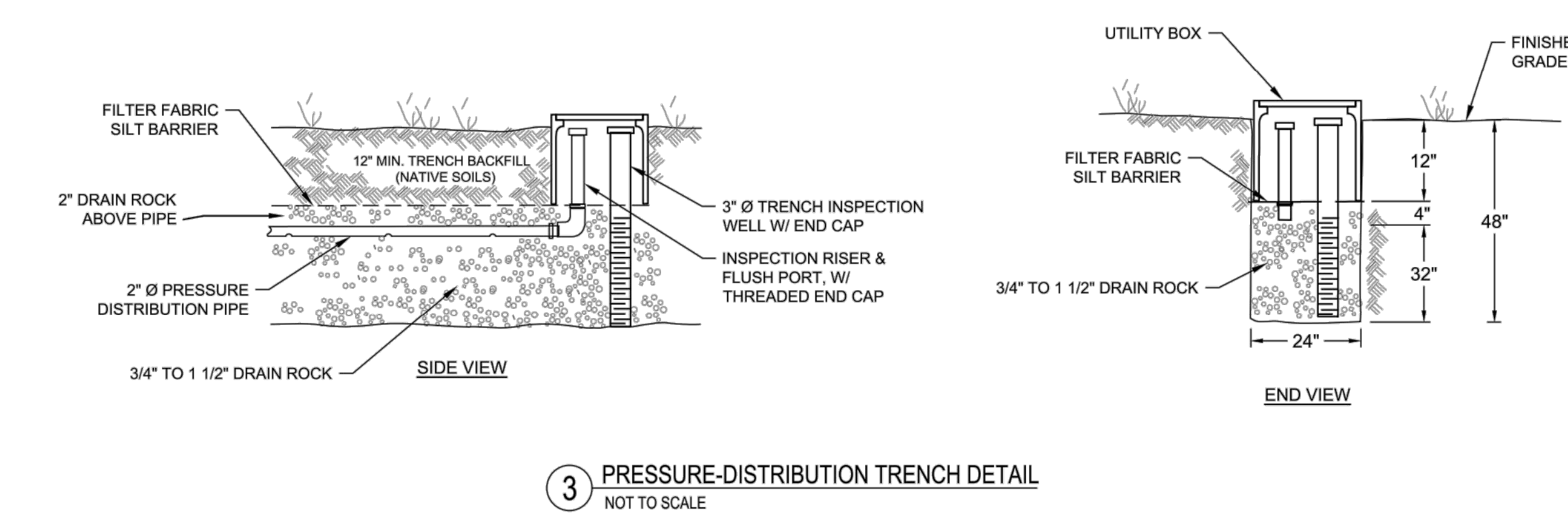
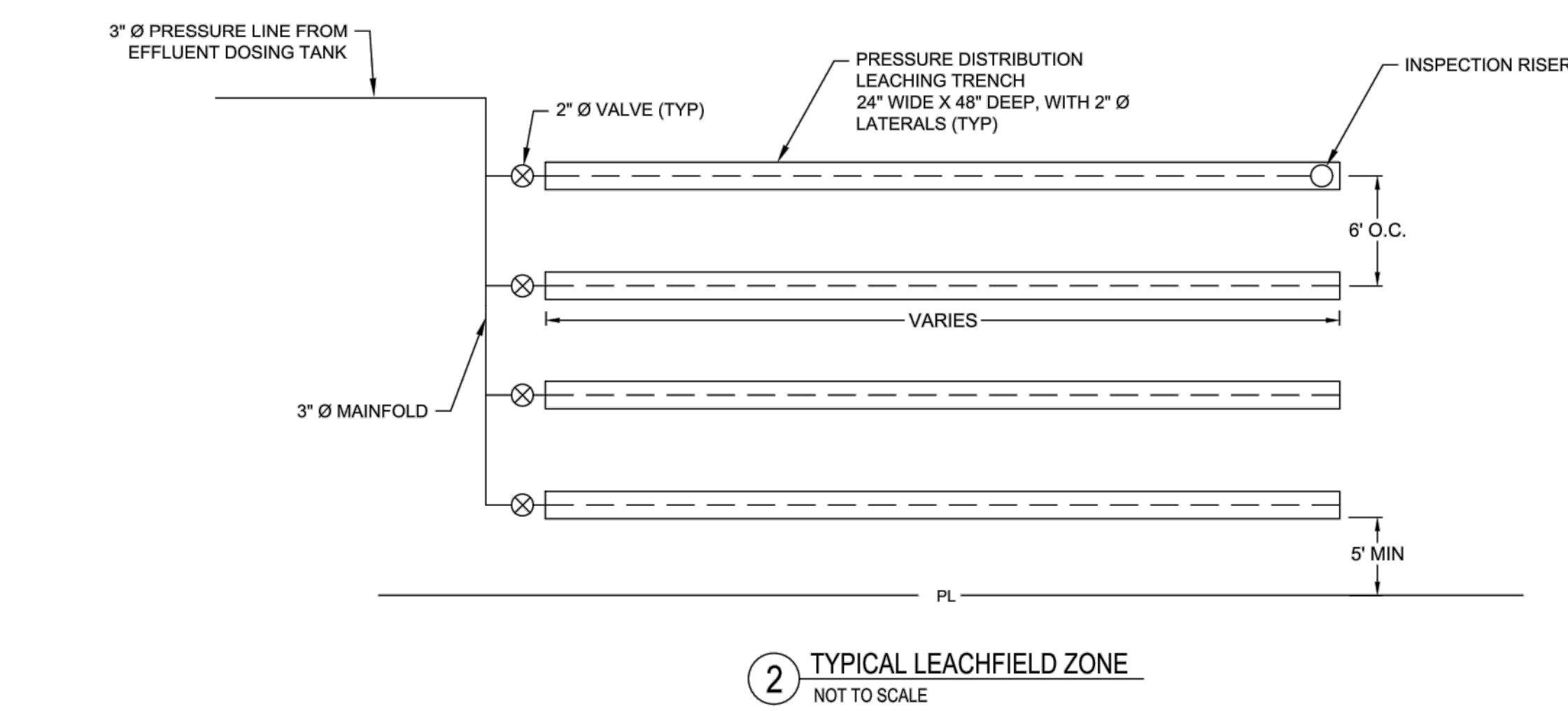
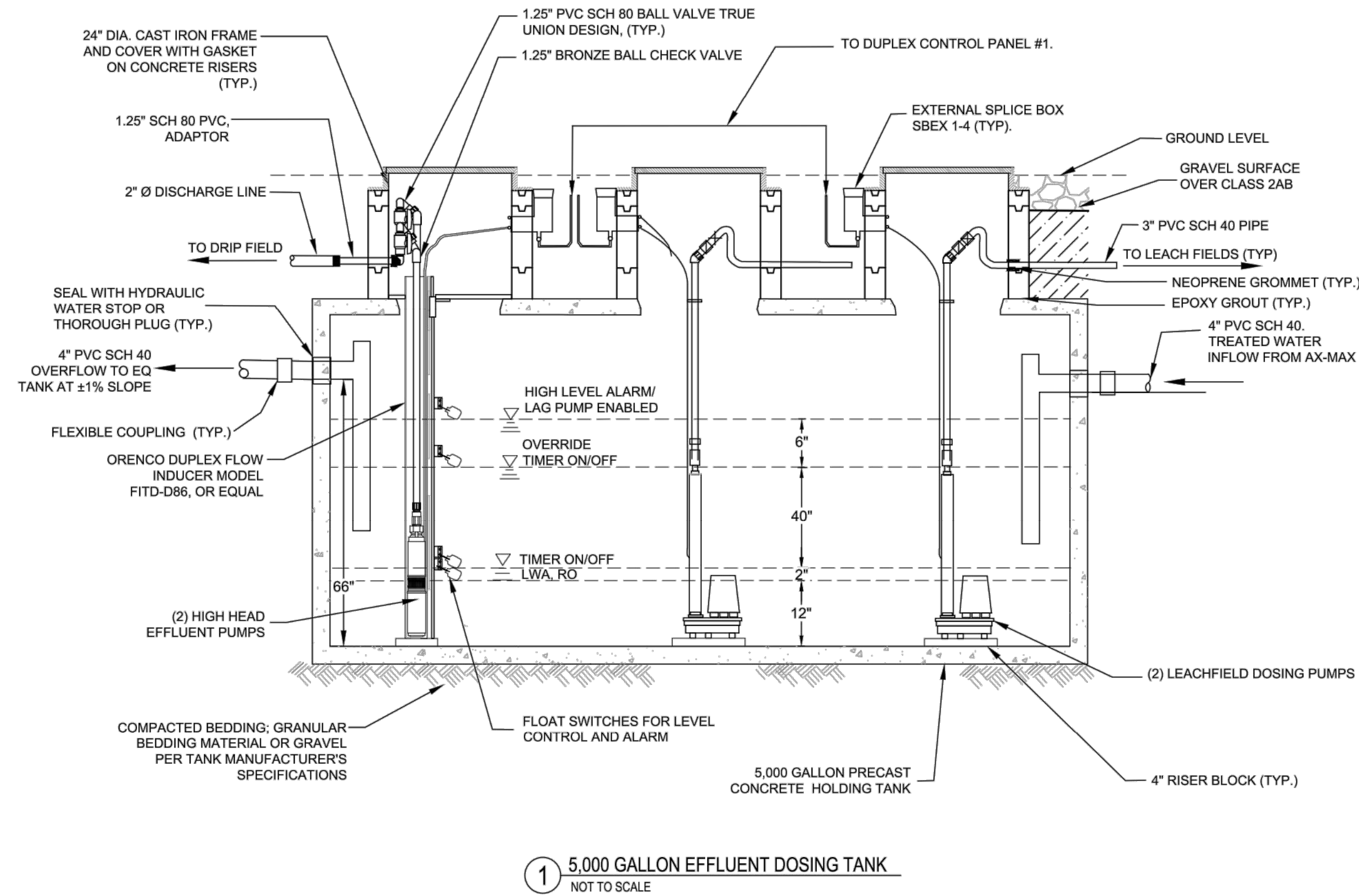
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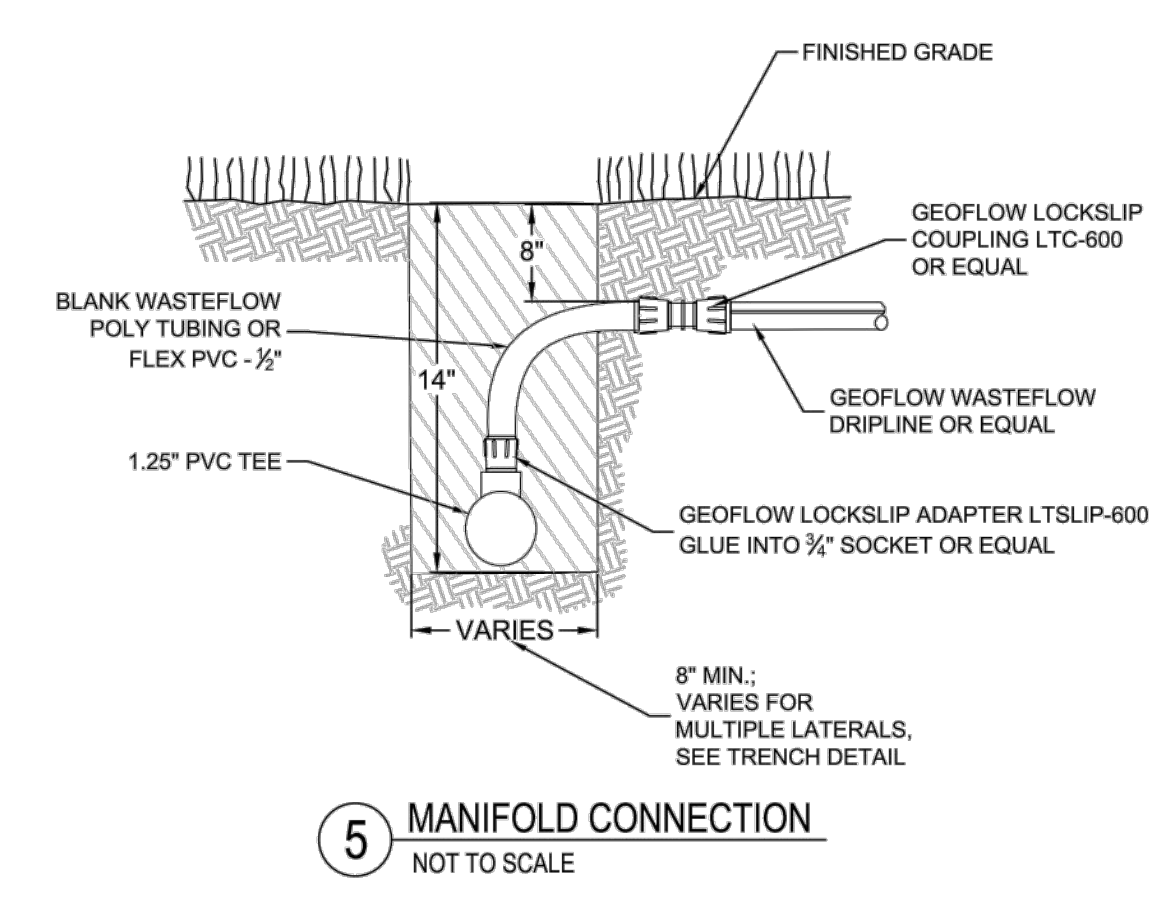
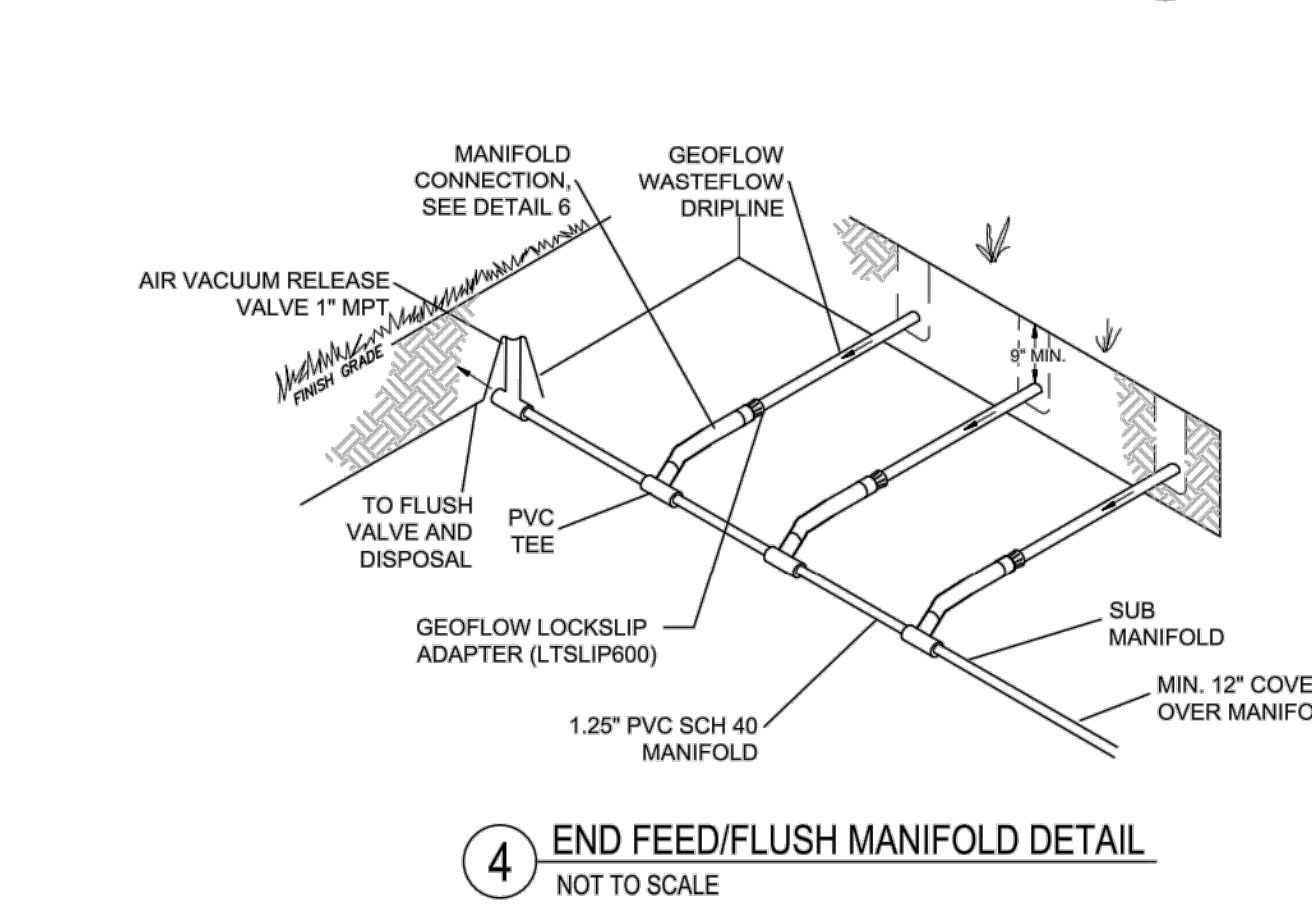
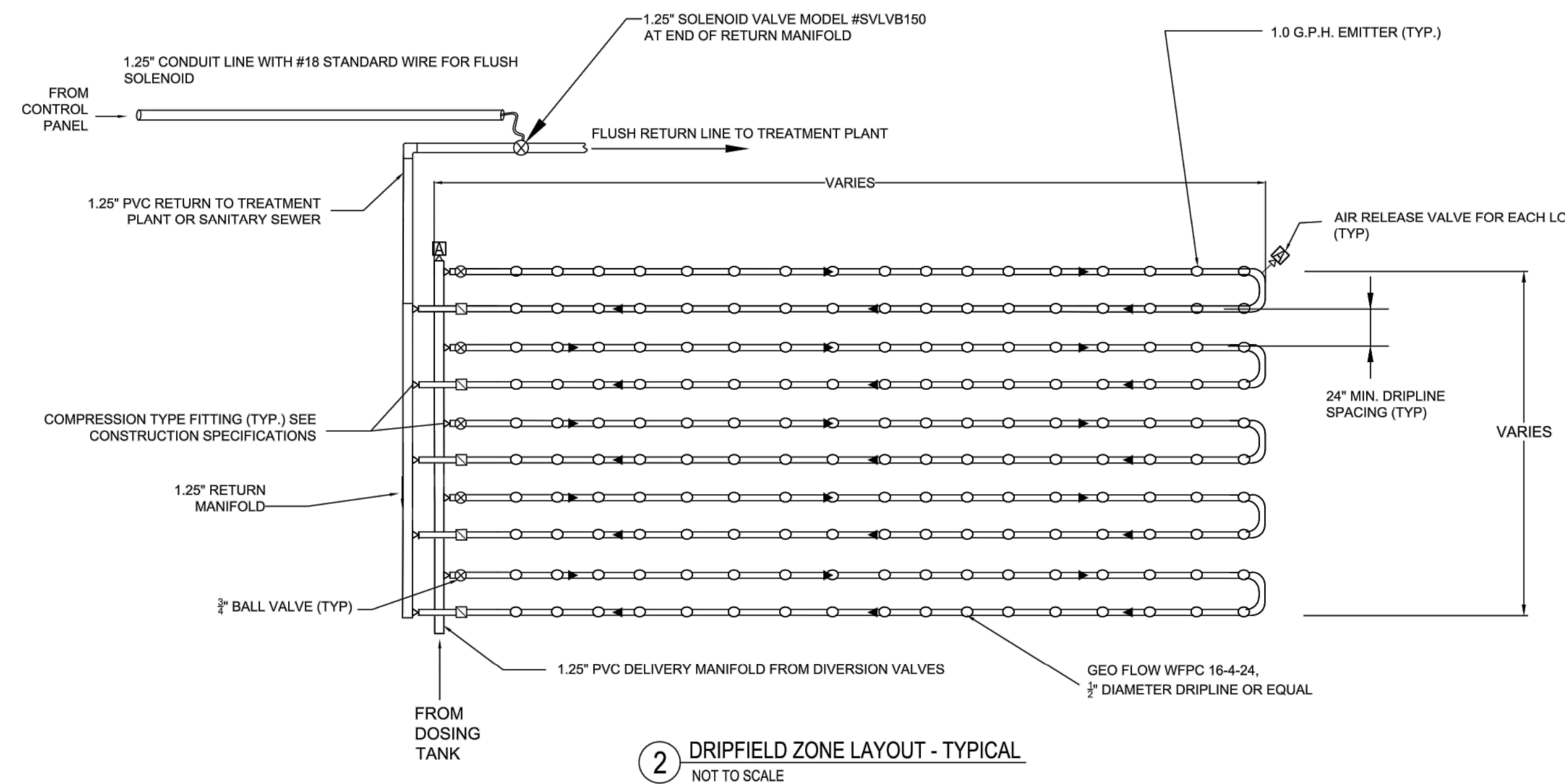
WASTEWATER DISPERSAL LAYOUT PLANS
NORTH DIANA

Size D Project 2300059
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Date: 12/01/23
Sheet: WW4

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NOTE:
1. INSTALL VACUUM/AIR RELIEF VALVES AT HIGH POINTS OF DRIP LINE AND BEFORE EACH CHECK VALVE.
2. THE ROOT INTRUSION INHIBITOR IS TEMPERATURE SENSITIVE. DRIPLINE SHALL BE STORED IN SHADE DURING CONSTRUCTION.



WASTEWATER DISPOSAL SYSTEM DESIGN

- PRESSURE DISTRIBUTION LEACHING TRENCHES:**
- SYSTEM DESIGN FLOW (30-DAY AVE): 86 UNITS @ 150 GPD = 12,900 GPD
 - TRENCH DIMENSIONS: 2' W X 4' D (32" EFFECTIVE SIDEWALL)
 - EFFECTIVE INFILTRATIVE AREA: 7.33 SF PER LF
 - APPLICATION RATE: 1.2 GPD/SF FOR SECONDARY WASTEWATER, 3.1 MPI
 - TRENCH LOADING RATE: (7.33)*(1.2) = 8.8 GPD PER LF
 - TOTAL REQUIRED TRENCH LENGTH PER FIELD: 12,900 GPD/8.8 GPD/LF = 1,466 LF
 - PRIMARY LEACHFIELD: (4) ZONES W/(4) 100-FT LONG TRENCHES EACH = 1,600 LF
 - PRIMARY 100% LEACHFIELD CAPACITY: (1,600 LF)*(8.8 GPD/LF) = 14,080 GPD
 - 100% RESERVE FIELD CAPACITY: 1,610 LF; (1,610 LF)*(8.8 GPD/LF) = 14,168 GPD
 - TOTAL PRIMARY AND RESERVE DISPOSAL CAPACITY: 28,248 GPD (219% OF DESIGN)
- INTERIM DRIP DISPERSAL FIELD**
- INSTALL AND OPERATE SUBSURFACE DRIP DISPERSAL FIELD IN RESERVE AREA
 - SEASONAL OPERATION FROM APRIL-OCTOBER (7-MONTH GROWING SEASON)
 - BENEFITS:
 - ✓ SUB-IRRIGATION OF GRASS OPEN SPACE AREA W/TREATED WASTEWATER
 - ✓ ENHANCED NITROGEN UPTAKE/REMOVAL BY VEGETATION & DENITRIFICATION
 - DRIP TUBING INSTALLED AT 8-INCH DEPTH
 - DRIP DISPERSAL AREA AVAILABLE: 8,800 FT²
 - WASTEWATER LOADING RATE FOR GRAVELLY LOAM SURFACE SOILS: 1.0 GPD/FT²
 - TOTAL POTENTIAL WASTEWATER DISPOSAL CAPACITY: 8,800 GPD
 - ANNUAL VOL. OF WASTEWATER TO DRIP FIELD: 40% OF FLOW (1.88 MGALS)

NORTH DIANA
MORGAN HILL, CA

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Sht	Rev	Date	By	Description	App'd

Design: NH
Drawn: PS
Checked: NH
App'd: NH

WASTEWATER DISPOSAL DETAILS

NORTH DIANA

Size D	Project 2300059
Scale:	AS NOTED
Date:	12/01/23
Sheet:	WW5

PLOT STYLE: ONE INCH D-SIZE SETUP: 12/1/2023 PLOT DATE: 12/1/2023 LAST SAVED: 12/1/2023 PROJECT: NORTH DIANA WATER AND WASTEWATER/CAD MODEL/PROPOSED SEPTIC SYSTEM 10.13.09