

Tlingit-Haida Regional Housing Authority

Wrangell Duplex

Wrangell, AK

PARTICIPANTS

CLIENT:
TLINGIT-HAIDA REGIONAL HOUSING AUTHORITY
5446 JENKINS DRIVE
JUNEAU, AK 99801
907.780.6868

ELECTRICAL ENGINEER:
E/C ENGINEERING
6927 OLD SEWARD HWY, SUITE 200
ANCHORAGE, AK 99518
907.349.9712

ARCHITECT / CIVIL ENGINEER:
R&M ENGINEERING-KETCHIKAN, INC.
7180 REVILLA ROAD, SUITE 300
KETCHIKAN, ALASKA 99901
907.225.7917

MECHANICAL ENGINEER:
SAM THORNTON MECHANICAL ENGINEERING
PO BOX 7162
KETCHIKAN, AK 99901
907.220.7849

CODE REVIEW

PROJECT LOCATION:
Lot 1A, Wrangell, AK

IRC 2021 REVIEW

I. TYPE OF CONSTRUCTION (Chapter 6)

V-B
SPRINKLED - No

II. USE & OCCUPANCY CLASSIFICATION (Chapter 3)

R-3 Residential

III. OCCUPANCY SEPARATIONS (Table 508.4)

1-Hour Separation Between Dwelling Units

IV. BUILDING AREA (Table 503)

ALLOWED: UL SF/STORY, 3 STORIES
PROPOSED: 2417 SF, 1 STORY

V. BUILDING HEIGHT (Table 503)

ALLOWED: 40'
PROPOSED: 16' - 5"

VI. OCCUPANT LOAD (Table 1004.1.2)

RESIDENTIAL 2417 GROSS SF / 200 12

ZONING REVIEW

CITY AND BOROUGH OF WRANGELL TITLE 20 REVIEW

LEGAL DESCRIPTION: LOT 1A

PARCEL NUMBER: 02-032-700

ZONING: SFR, SINGLE FAMILY RESIDENTIAL

LOT SIZE: 18825 SF

COVERAGE:

MAXIMUM: 50%

PROPOSED: 12.8%

BUILDING GROSS AREA: 2417 SF

BUILDING HEIGHT:

MAXIMUM: 25' - 0"

PROPOSED: 16' - 5"

SETBACKS:

MINIMUM: FRONT 20' BACK 20' SIDEYARD 5'

PROPOSED: See Site Plan

PARKING:

MINIMUM: 2

PROPOSED: 2+

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REVISIONS:

Wrangell Duplex

STATUS:

PERMIT
DOCUMENTS

DRAWN BY: NMG
CHECKED BY: NMG
DATE: 2.7.23
PROJECT #: 222321

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SHEET DESCRIPTION:

Cover Sheet

G100

SHEET:

01 of xx

ARCHITECTURAL ABBREVIATIONS

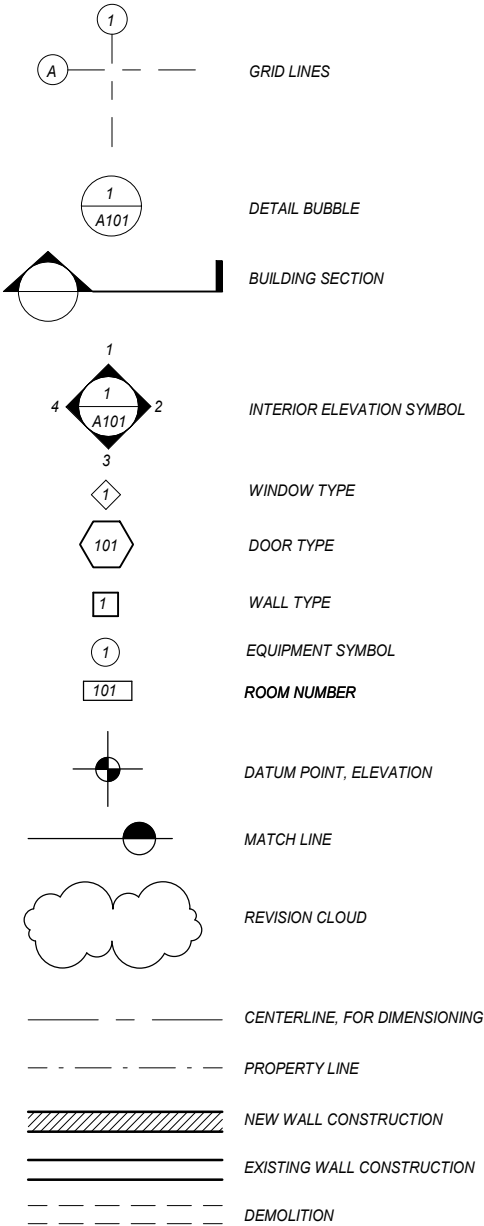
AB	ANCHOR BOLT
ABV	ABOVE
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AL	ALUMINUM
ALT	ALTERNATE
AP	ACCESS PANEL
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
AUTO	AUTOMATIC
BD	BOARD
BKG	BACKING
BLDG	BUILDING
BLKG	BLOCKING
BLW	BELOW
BOT	BOTTOM
BRKT	BRACKET
BSMT	BASEMENT
BTW	BETWEEN
BURS	BUILT UP ROOFING SYSTEM
CAB	CABINET
CB	CATCH BASIN
CCTV	CLOSED CIRCUIT TELEVISION
CG	CORNER GUARD
CEM	CEMENT
CER	CERAMIC
CER TILE	CERAMIC TILE
CL	CENTERLINE
CLG	CEILING
CLJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CASED OPENING
CONC	CONCRETE
CONF	CONFERENCE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CRPT	CARPET
CSWK	CASEWORK
CT	CARPET TILE
CUST	CUSTOM
CW	COLD WATER
DBL	DOUBLE
DEMO	DEMOLISH
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DIM PT	DIMENSION POINT
DISP	DISPENSER
DIST	DISTANCE
DLV	DOOR LOUVER
DMPF	DAMP PROOFING
DN	DOWN
DR	DRAIN
DS	DOWNSPOUT
DT	DRAIN TILE
DWG	DRAWING
DWGS	DRAWINGS
DWR	DRAWER
(E)	EXISTING
E	EAST
EA	EACH
ECAB	ELECTRICAL CABINET
EG	EDGE GUARD
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATION
EMER	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER
EO	ELECTRICAL OUTLET
EQL SP	EQUALLY SPACED
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
EXP	EXPANSION
EXPO	EXPOSED
EXIST	EXISTING
EXT	EXTERIOR

F/F	FACE TO FACE
F.F	FINISH FLOOR
FA	FIRE ALARM
FBD	FIBERBOARD
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FND	FOUNDATION
FDV	FIRE DEPARTMENT VALVE
FE	FIRE EXTINGUISHER
FEB	FIRE EXTINGUISHER BRACKET
FEC	FIRE EXTINGUISHER CABINET
FHY	FIRE HYDRANT
FIN	FINISH
FIN GR	FINISH GRADE
FL	FLOOR(ING)
FLASH	FLASHING
FLEX	FLEXIBLE
FLR SK	FLOOR SINK
FLUOR	FLUORESCENT
FNR	FEMININE NAPKIN RECEPTACLE
FNTD	FEMININE NAPKIN-TAMPON DISPENSER
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONARY
FOS	FACE OF STUD
FRPF	FIREPROOFING
FRZ	FREEZER
FSB	FOLDING SHOWER BENCH
FSTNR	FASTENER
FT	FOOT, FEET
FTG	FOOTING
FURN	FURNITURE
FURR	FURRING
FUS	FOLDING UTILITY SEAT
FUT	FUTURE
FXTR	FIXTURE
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GL	GLASS
GL BLK	GLASS BLOCK
GLULAM	GLUE LAMINATED
GLZ	GLAZING
GND	GROUND
GR	GRADE, GRADING
GRV	GRAVEL
GYP BD	GYPSUM BOARD
H	HIGH
HB	HOSE BIB
HC	HOLLOW CORE
HCP	HANDICAPPED
HD	HEAD
HDBD	HARDBOARD
HDWE	HARDWARE
HM	HOLLOW METAL
HNDRL	HANDRAIL
HR	HOUR
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING, & COOLING
HW	HOT WATER
ID	INSIDE DIAMETER
INCAND	INCANDESCENT
INCL	INCLUDING
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JB	JUNCTION BOX
JT	JOINT
KIT	KITCHEN
KPL	KICK PLATE
KS	KNEE SPACE
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LB	POUND
LF	LINEAR FOOT
LG	LENGTH
LH	LEFT HAND
LIN	LINEAR
LKR	LOCKER
LT	LIGHT
LT WT	LIGHT WEIGHT
LTG	LIGHTING

MACH	MACHINE
MAN	MANUAL
MATL	MATERIAL
MAX	MAXIMUM
MC	MEDICINE CABINET
MECH	MECHANICAL
MEMB	MEMBRANE
MET	METAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MULL	MULLION
(N)	NEW
N	NORTH
NA	NOT APPLICABLE
NAT	NATURAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED-OWNER INSTALLED
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OVHD	OVERHEAD
PBD	PARTICLE BOARD
PCF	POUNDS PER CUBIC FOOT
PERF	PERFORATED
PERIM	PERIMETER
PERM	PERMANENT
PERP	PERPENDICULAR
PH	PANIC HARDWARE
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAT	PLATFORM
PLBG	PLUMBING
PLF	POUNDS PER LINEAL FOOT
PLYWD	PLYWOOD
PNL	PANEL
PREFAB	PREFABRICATED
PRKG	PARKING
PROJ	PROJECT
PROP	PROPERTY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAPER TOWEL DISPENSER
PTD/R	PAPER TOWEL DISPENSER W/ RECEPTACLE
PTR	PAPER TOWEL RECEPTACLE
PVMT	PAVEMENT
PWR	POWER
QT	QUARRY TILE
QTR	QUARTER
QTY	QUANTITY
R	RISER
RA	RETURN AIR
RAD	RADIUS
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFRIGERATOR
REINF	REINFORCED
REQD	REQUIRED
RESIL	RESILIENT
RET	RETURN
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
S	SOUTH
SA	SUPPLY AIR
SASU	SELF-ADHERING SHEET UNDERLAYMENT
SB	SPLASH BLOCK
SC	SOLID CORE
SCD	SEAT COVER DISPENSER
SCHED	SCHEDULED
SCR	SHOWER CURTAIN ROD
SD	SOAP DISPENSER
SECT	SECTION
SEP	SEPARATION
SF	SQUARE FOOT

SHR	SHOWER
SHT	SHEET(ING)
SHV	SHELVES, SHELVING
SIM	SIMILAR
SK	SINK
SP	SPACE, SPACING
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
SQ IN	SQUARE INCH
SST	STAINLESS STEEL
ST	STREET
STAG	STAGGERED
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP CLG	SUSPENDED CEILING
SERV	SERVICE
SYM	SYMBOL
T	TREAD
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TB	TOWEL BAR
TEL	TELEPHONE
TEMP	TEMPORARY
THERM	THERMAL
THK	THICK, THICKNESS
THRES	THRESHOLD
THRU	THROUGH
TOL	TOLERANCE
TYP	TYPICAL
UC	UNDER COUNTER
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
UTIL	UTILITY
VAC	VACUUM
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
W/W	WALL TO WALL
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WF	WIDE FLANGE
WHCH	WHEEL CHAIR
WO	WHERE OCCURS
WR	WATER RESISTANT
WSCT	WAINSCOTING
WT	WEIGHT
WTRPRF	WATERPROOFING
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER

DRAWING SYMBOLS



REVISIONS:

Wrangell Duplex

STATUS:

PERMIT DOCUMENTS

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SHEET DESCRIPTION:

Abbreviations & Symbols

G101

SHEET:

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GENERAL NOTES

- 1) SEE TABLE 1 FOR SURVEY BASIS AND CONTROL.
- 2) EXISTING UNDERGROUND ELECTRICAL LINES SHOWN ON THESE PLANS WERE DEVELOPED BY AN ONSITE MEETING WITH R&M AND THE CITY AND BOROUGH OF WRANGELL. NO LOCATES WERE PERFORMED DUE TO THE LACK OF EQUIPMENT AND CONGESTION OF UTILITIES ON THE SITE. LINES SHOWN ARE SYMBOLIC ONLY AND REPRESENT ASSUMED LOCATIONS BASED ON THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL VERIFY EXISTING WATERLINE LOCATIONS IN THE FIELD.
- 3) EXISTING WATER LINES SHOWN ON THESE PLANS WERE LOCATED BY THE CITY AND BOROUGH OF WRANGELL OR BASED ON ASBUILTS AND/OR LOCAL KNOWLEDGE. DUE TO THE CONGESTION OF UTILITIES IN SOME AREAS, THE LINES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY EXISTING WATERLINE LOCATIONS IN THE FIELD.
- 4) THE PROFILES SHOWN IN THESE PLANS HAVE A VERTICAL EXAGGERATION OF 2.0
- 5) THE CONTRACTOR SHALL INSTALL THE NEW WATER LINE ACCORDING TO THE COORDINATES AND DIMENSIONS GIVEN ON THE PLAN SHEETS. GENERALLY,
- 6) THE CONTRACTOR SHALL SAW-CUT CONCRETE AS NEEDED FOR SEWER MAIN INSTALLATION. SAW-CUT SHALL NOT EXCEED 10' IN WIDTH. LOCATIONS OF NEW MANHOLE CENTER ARE APPROXIMATE ONLY. FIELD ADJUSTMENTS +/-1' ALONG THE PROPOSED ALIGNMENT IS PERMISSIBLE.
- 11) THE CITY OF WRANGELL WILL PROVIDE A FUSION MACHINE AND ELECTRO FUSION MACHINE. FUSION MACHINE IS A MACELROY MODEL 412. THE ELECTROFUSION MACHINE IS AN IPEX GENESIS F3, MODEL 10EF-328-0001.
- 12) TESE PLANS MEET THE LEAD-FREE REQUIREMENTS OF THE SAFE DRINKING WATER ACT, SECTION 1417, 18 AAC 80.205(b)(7), 18 AAC 80.500 INCLUDING NOT CONTAINING MORE THAN 0.2% LEAD WHEN USED WITH RESPECT TO SOLDER AND FLUX AND B) NOT HAVING MORE THAN A WEIGHTED AVERAGE OF 0.25 PERCENT LEAD WHEN USED WITH RESPECT TO WETTED SURFACES OF PIPES, PIPE FITTING, PLUMBING FITTING, AND FIXTURES.

TABLE 1.

SURVEY CONTROL POINTS		
Point #	Northing	Easting
1	1693609.41	2941777.29
2	1693172.11	2941826.99
3	1693967.62	2941715.36
4	1693679.18	2942235.50
5	1693656.57	2942013.41
6	1693817.25	2941984.67
7	1688896.53	2939254.39
8	1695862.61	2938157.98
9	1699348.05	2938452.98
10	1693586.13	2942249.21
11	1693563.52	2942027.12
12	1692913.95	2941856.28
13	1693724.20	2941998.38
14	1688803.48	2939268.09
15	1695769.56	2938171.69
16	1699254.99	2938466.69
17	1692820.90	2941869.99
18	1693516.35	2941791.00
19	1693079.06	2941840.69
20	1693874.57	2941729.06

SURVEY CONTROL POINTS		
Point #	Northing	Easting
500	1693982.90	2941764.86
501	1693632.86	2941804.76
502	1693593.00	2941809.19
503	1693679.10	2942212.32
504	1693661.37	2942234.17
505	1693568.32	2942247.88
506	1693889.84	2941778.57
507	1693539.81	2941818.47
508	1693499.95	2941822.89
509	1693586.05	2942226.03
600	1693919.16	2941780.01
601	1694011.31	2941785.03
602	1693923.66	2941854.88
603	1693926.42	2941900.51
604	1693826.11	2941793.72
605	1693918.25	2941798.73
606	1693830.61	2941868.58
607	1693833.36	2941914.22

LEGEND

FEATURE DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
PROPERTY LINE (INFORMATIONAL)		N/A
CENTERLINE		
CONCRETE		AS NOTED
ASPHALT		AS NOTED
BUILDING LINE		AS NOTED
BUILDING OVERHANG		AS NOTED
EDGE OF ASPHALT/CONCRETE		(PATCH)
EDGE OF GRAVEL		N/A
TOP/TOE/DITCH (GENERAL)		N/A
OVERHEAD UTILITY LINE	XOH XOH XOH	E E E E
UNDERGROUND UTILITY LINE	UGP UGP UGP	N/A
STORM DRAIN	XSD XSD XSD	N/A
SEWER LINE	XSS XSS XSS	SS SS SS SS
SEWER LINE (RECORD)	SS(R) SS(R)	N/A
WATER LINE	XW XW XW XW	V V V V
WATER SERVICE	N/A	W SERV W SERV W SERV
WATER LINE (RECORD)	W(R) W(R)	N/A
FENCE	X X X X	O O O O
GUARD RAIL		N/A
MAJOR CONTOUR		N/A
MINOR CONTOUR		N/A

NOTE: LINE WEIGHTS VARY BETWEEN SHEETS

FEATURE DESCRIPTION	EXISTING	PROPOSED
UTILITY POLE		
GUY ANCHOR		
CONTROL POINT (AS NOTED)		N/A
FOUND MONUMENT (AS NOTED)		N/A
STORM DRAIN MANHOLE		
STORM CATCH BASIN		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT		
BOLLARD/POST (TYPE AS NOTED)		N/A
WATER VALVE		
FIRE HYDRANT		
LIGHT POLE		N/A
ELECTRICAL METER		N/A
SIGN		N/A
TEST PIT		N/A

REVISIONS:

THRHA
WRANGELL DUPLEX

STATUS:
Construction Documents

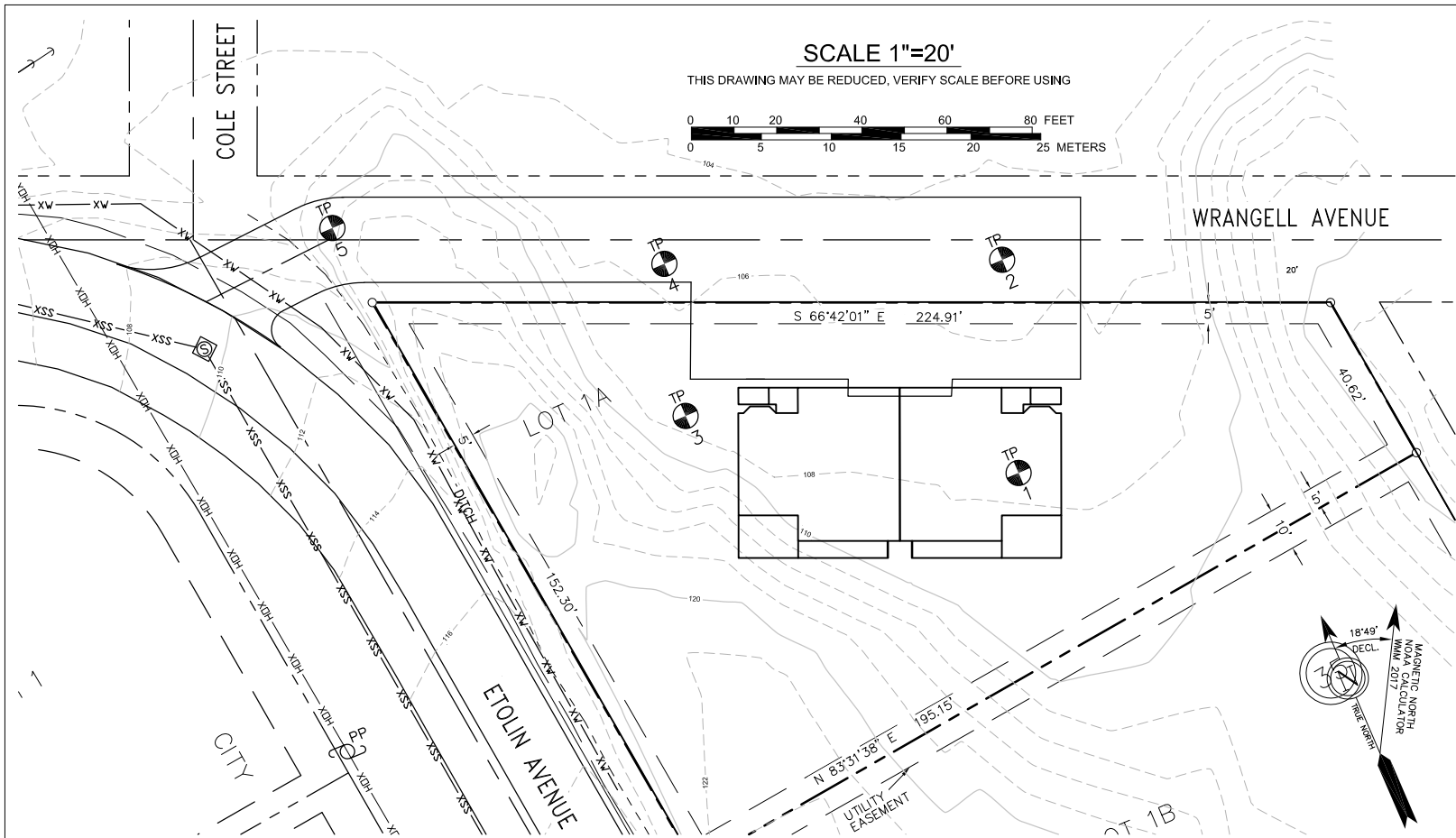
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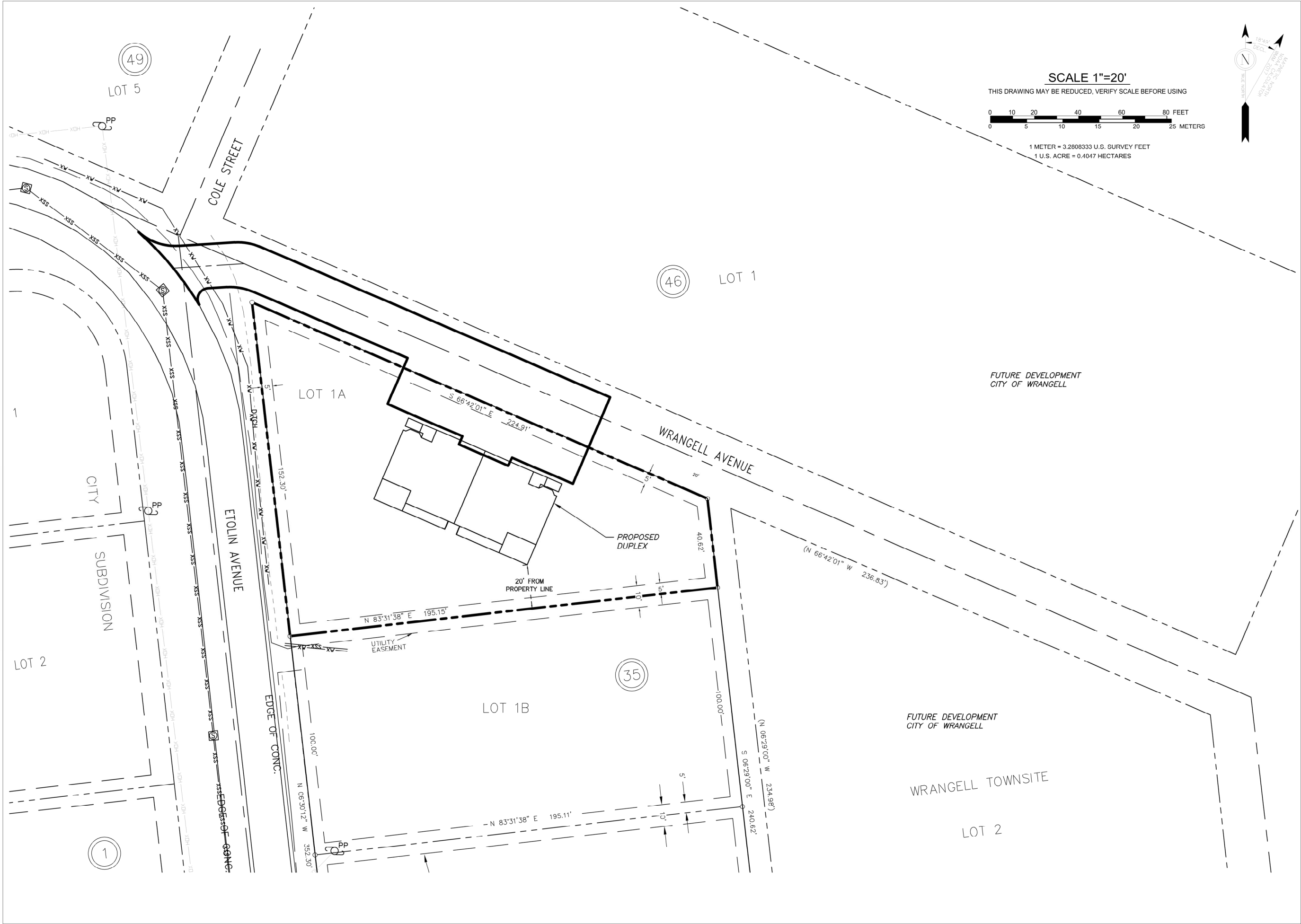
SHEET DESCRIPTION:
Notes, Symbols, & Tables

C001

SHEET:
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TEST PIT-4	
SOIL DESCRIPTION	
DEPTH(FT.)	SOIL GRAPH
	HITACHI EXCAVATOR 6/03/22
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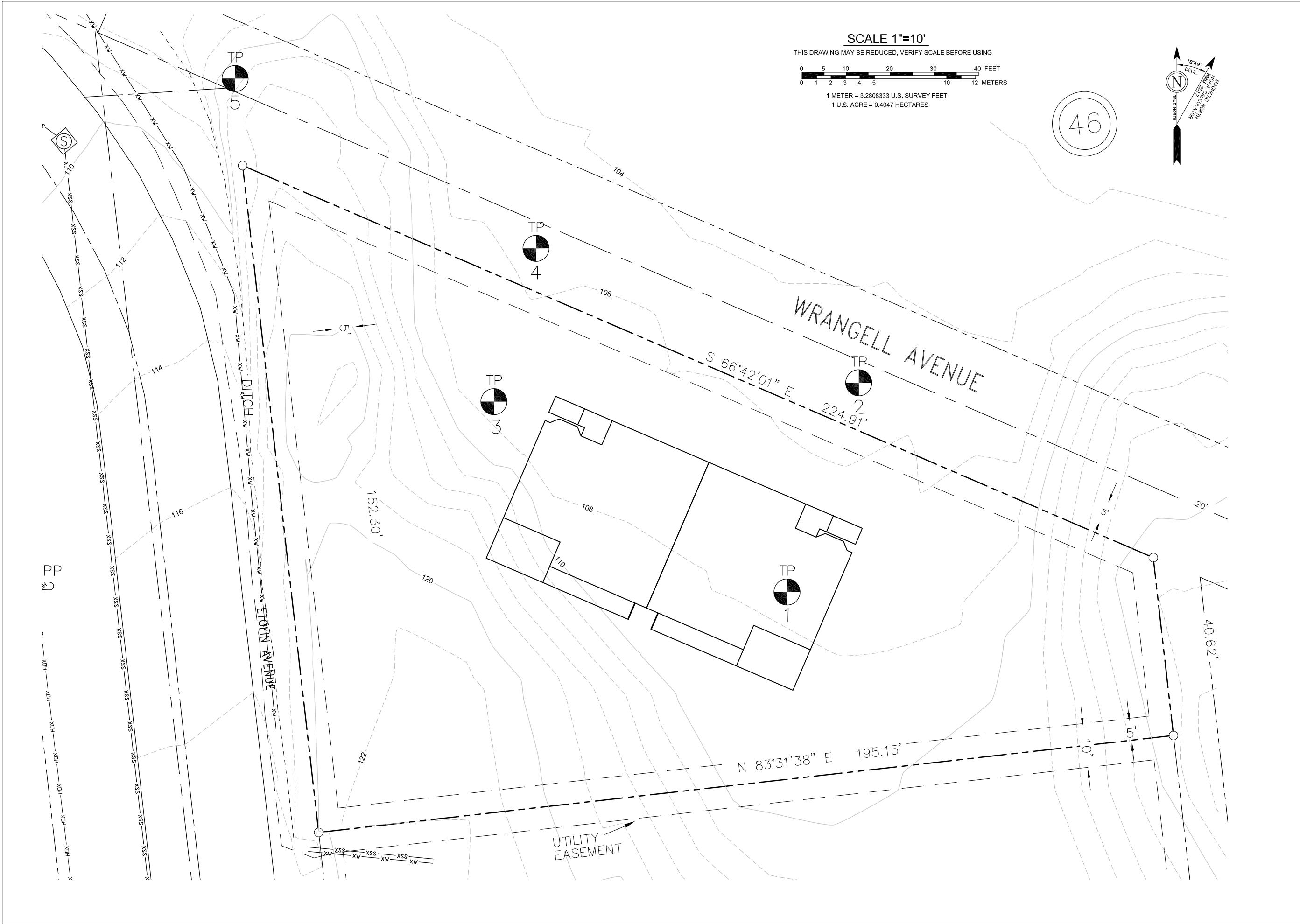


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SHEET DESCRIPTION:
Location Map

C100



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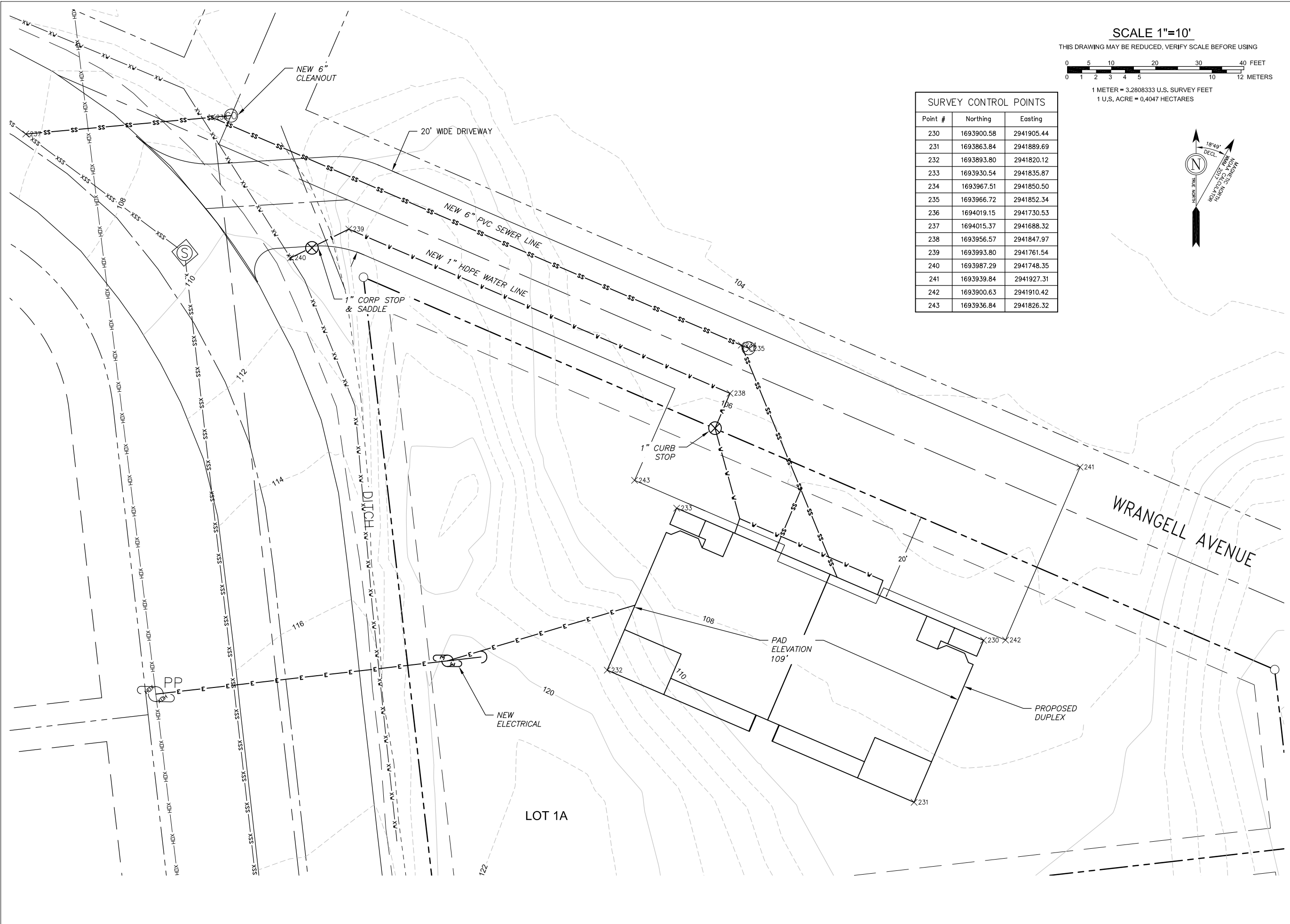
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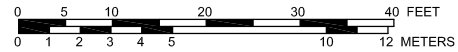


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Existing Conditions

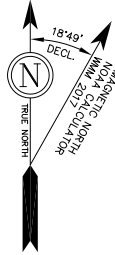


SCALE 1"=10'

THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING



1 METER = 3.2808333 U.S. SURVEY FEET
1 U.S. ACRE = 0.4047 HECTARES



SURVEY CONTROL POINTS		
Point #	Northing	Easting
230	1693900.58	2941905.44
231	1693863.84	2941889.69
232	1693893.80	2941820.12
233	1693930.54	2941835.87
234	1693967.51	2941850.50
235	1693966.72	2941852.34
236	1694019.15	2941730.53
237	1694015.37	2941688.32
238	1693956.57	2941847.97
239	1693993.80	2941761.54
240	1693987.29	2941748.35
241	1693939.84	2941927.31
242	1693900.63	2941910.42
243	1693936.84	2941826.32

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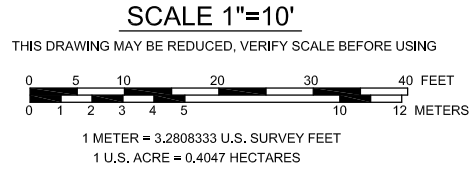
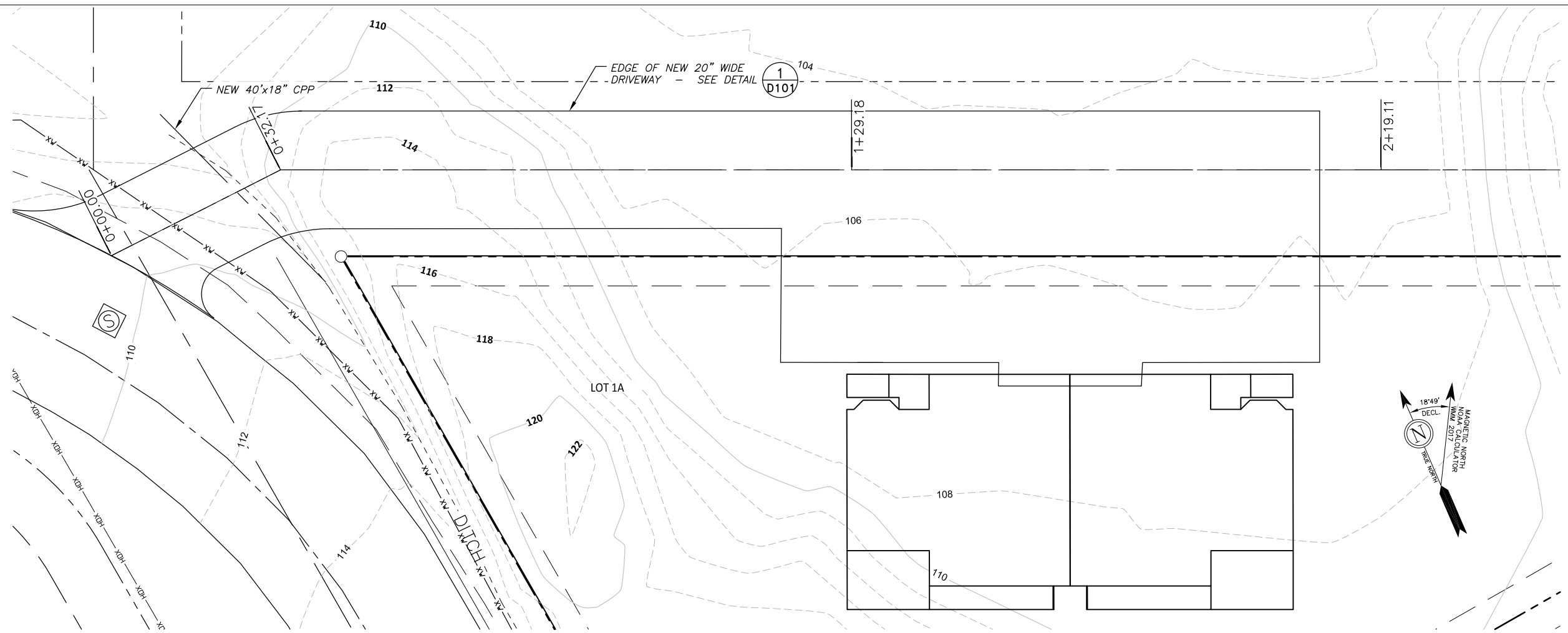
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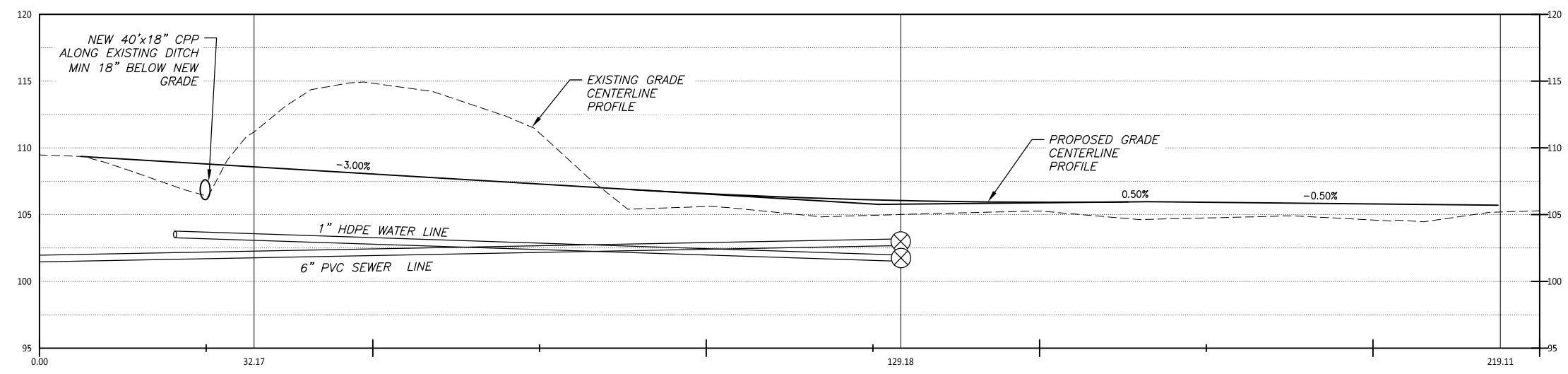
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Site Plan

C102

SHEET:
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Profile View of ROAD CENTERLINE
HORIZONTAL SCALE: 1" = 10' VERTICAL SCALE: 1" = 5'
VERTICAL EXAGGERATION: 2



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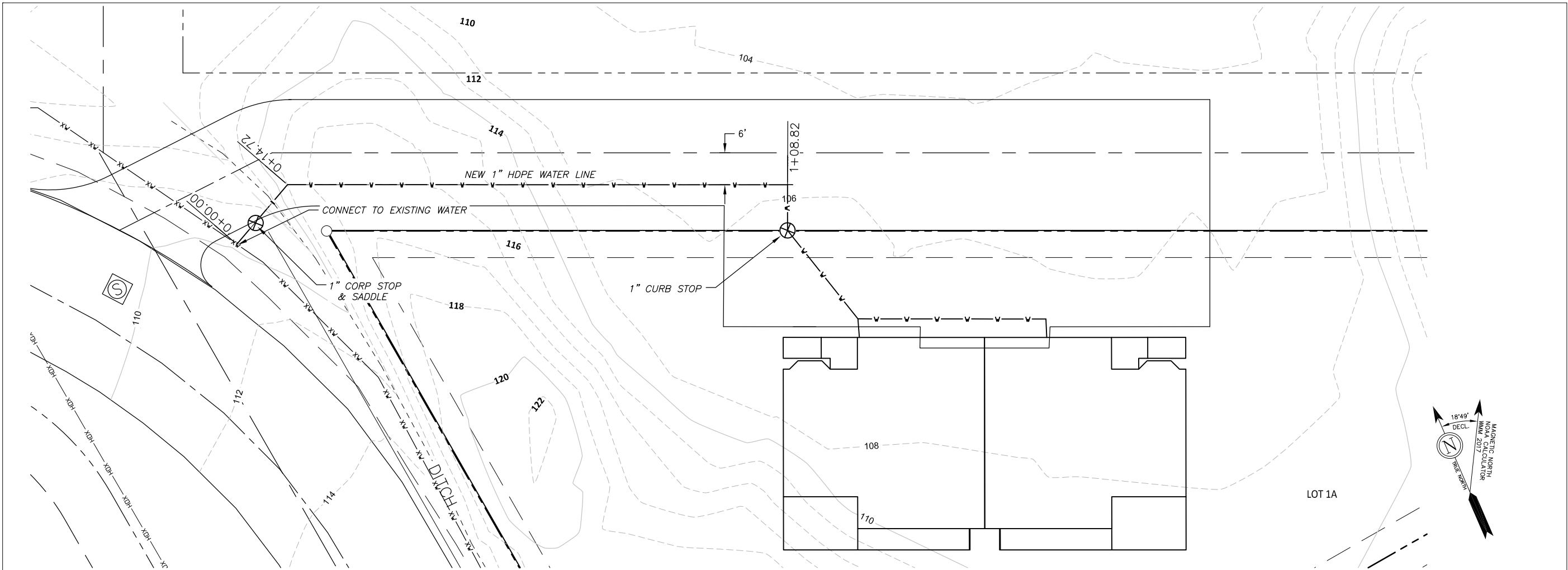
SHEET DESCRIPTION:

Roadway Plan & Profile

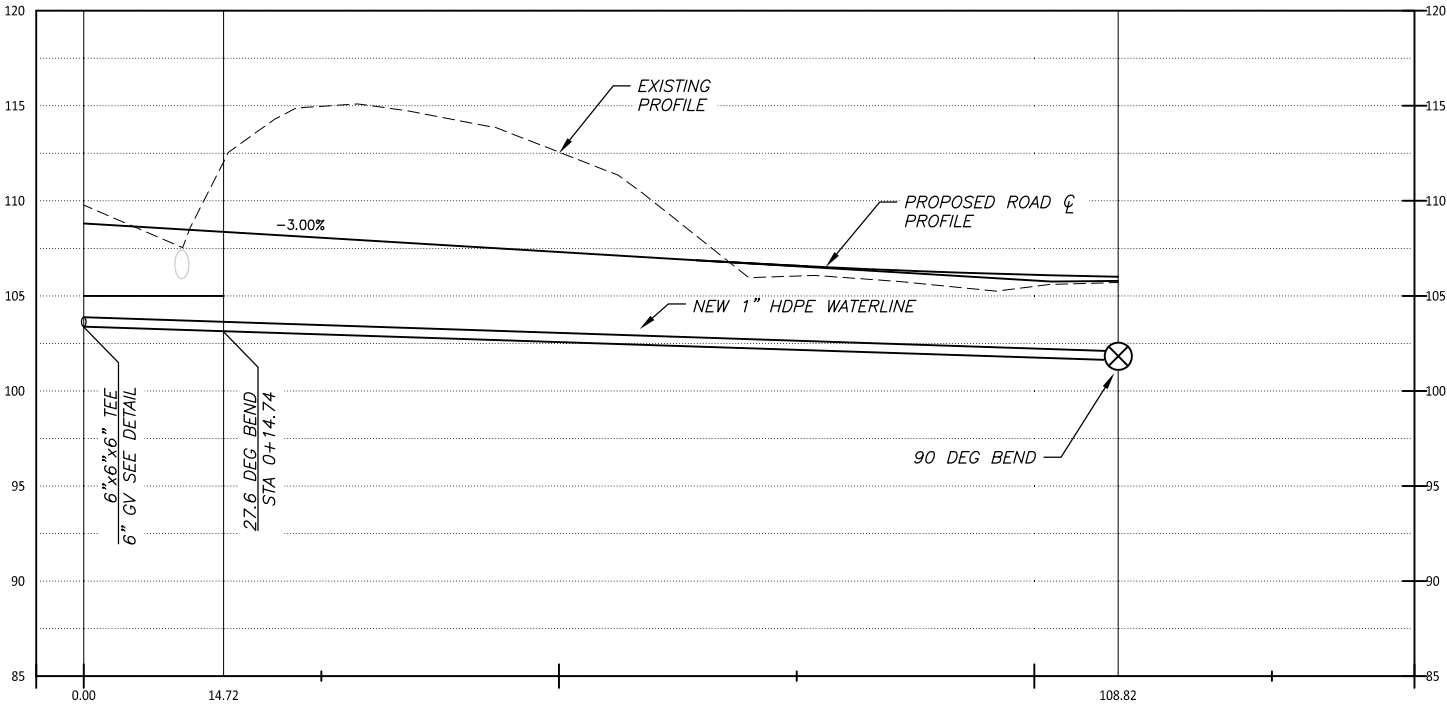
C200

SHEET:

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Profile View of NEW WATER MAIN
HORIZONTAL SCALE: 1" = 10' VERTICAL SCALE: 1" = 5'
VERTICAL EXAGGERATION: 2



SCALE 1"=10'

THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING

0 5 10 20 30 40

0 1 2 3 4 5 10 12

FEET METERS

1 METER = 3.2808333 U.S. SURVEY FEET
1 U.S. ACRE = 0.4047 HECTARES

REVISIONS:

THRHA
WRANGELL DUPLEX

STATUS:
Construction Documents

DRAWN BY: TSS
CHECKED BY: TSS
DATE: 02.06.23
PROJECT #: 222301.03

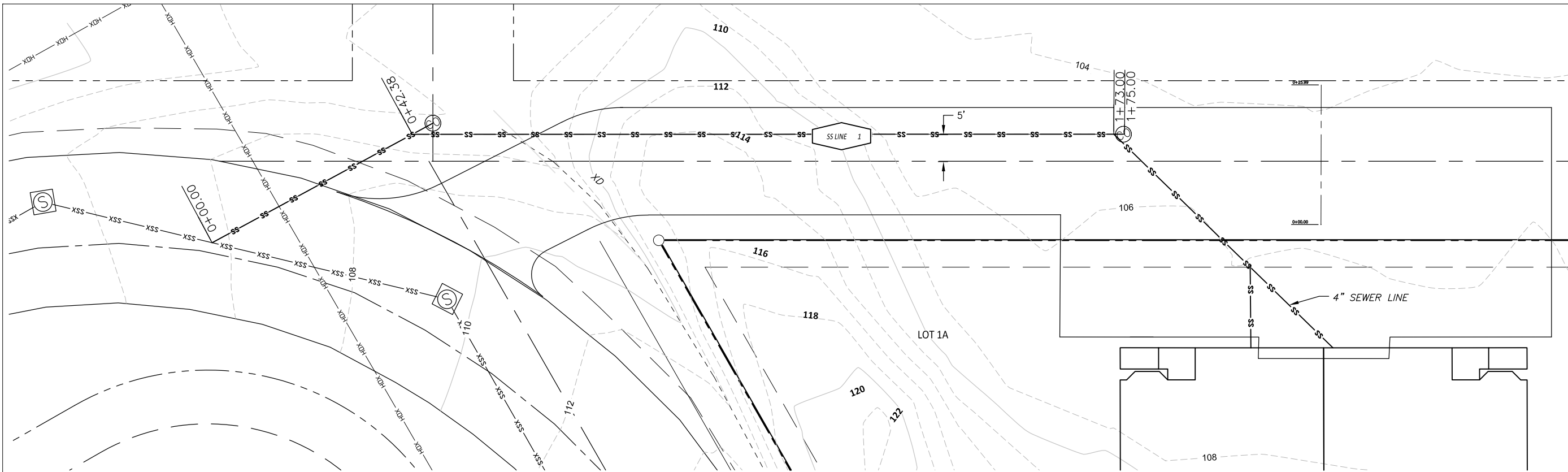
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7180 REVILLA ROAD, SUITE 300
KETCHIKAN, ALASKA 99901
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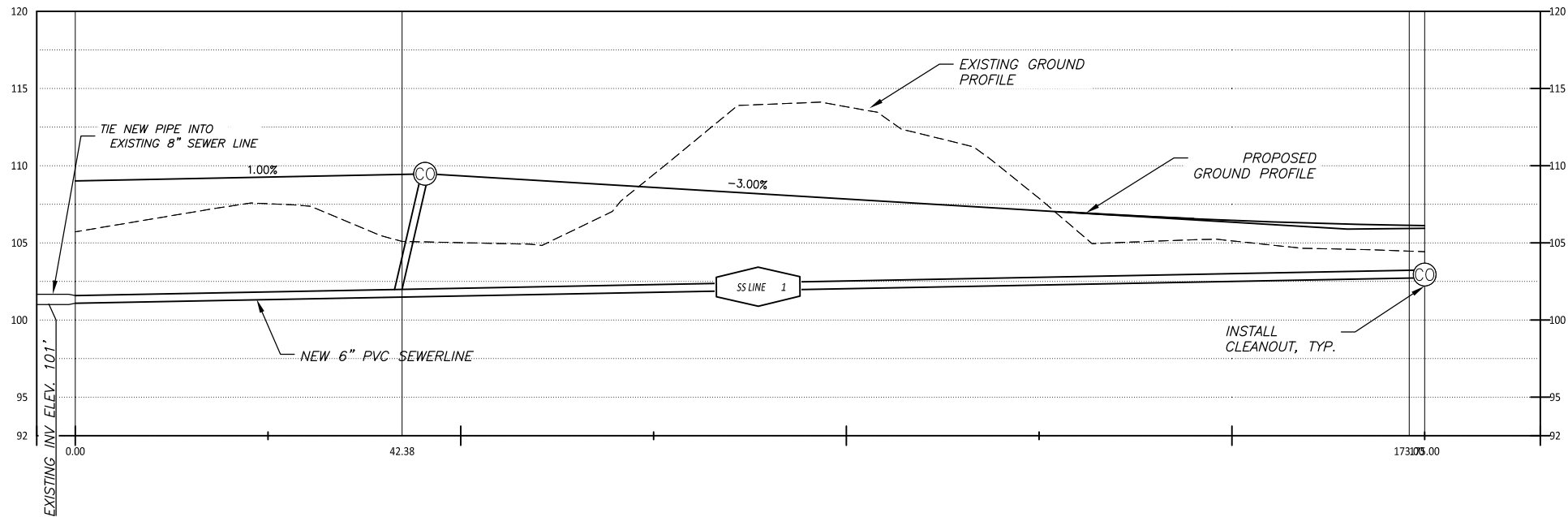


SHEET DESCRIPTION:
Water Line Plan & Profile

C201



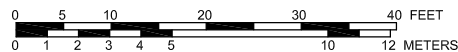
Profile View of NEW SEWER MAIN
HORIZONTAL SCALE: 1" = 10' VERTICAL SCALE: 1" = 5'
VERTICAL EXAGGERATION: 2



SS LINE 1
NEW 175.00 LF
6" C900 PVC
S=0.01 FT/FT
SEE D100/D3

SCALE 1"=10'

THIS DRAWING MAY BE REDUCED, VERIFY SCALE BEFORE USING



1 METER = 3.2808333 U.S. SURVEY FEET
1 U.S. ACRE = 0.4047 HECTARES

REVISIONS:

THRHA
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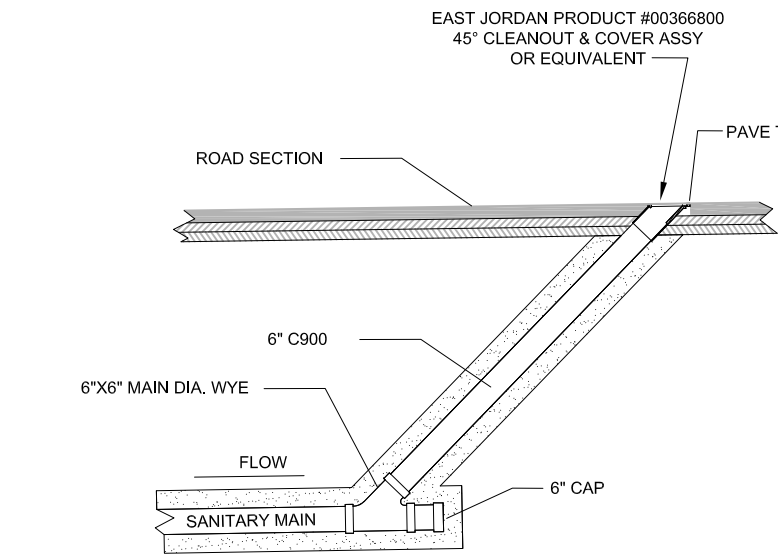
SHEET DESCRIPTION:

Sewer Line Plan &
Profile

C202

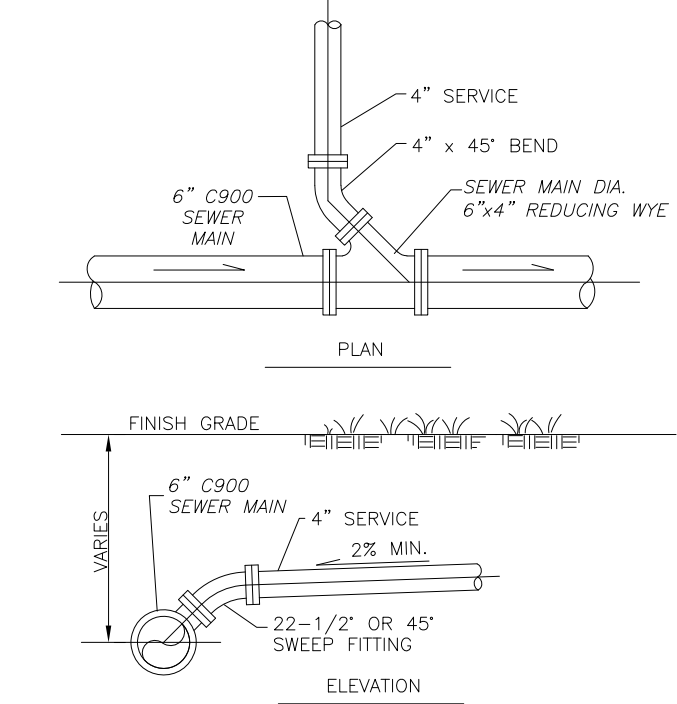
SHEET:

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SANITARY SEWER MAIN CLEANOUT DETAIL

1
D100



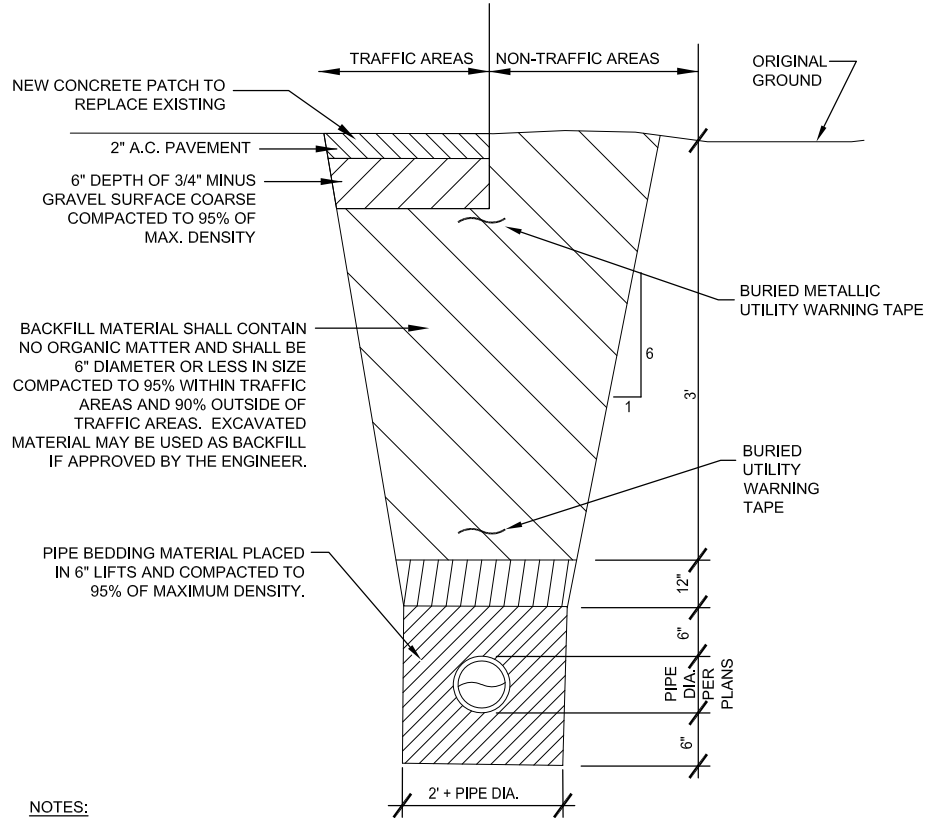
SEWER SERVICE CONNECTION NOTES:

- SERVICE CONNECT SHALL BE 6" MINIMUM DIAMETER.
- SEWER SERVICE PIPING SHALL BE C900 PVC.
- DISTANCE FROM WYE TO MANHOLE, AND THREE MEASURED DISTANCES FROM END OF SERVICE PIPE TO PERMANENT OBJECTS, SHALL BE NOTED ON AS-BUILT PLANS.

SEWER SERVICE CONNECTION DETAIL
FOR FUTURE DEVELOPMENT

2
D100

NOT TO SCALE



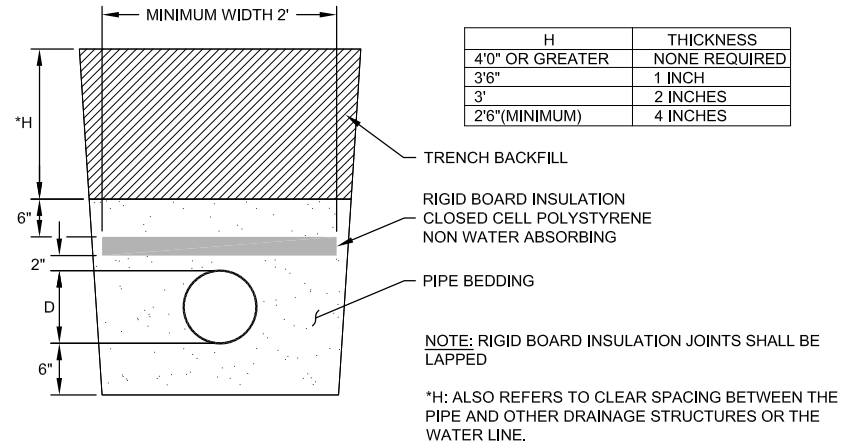
NOTES:

- BACKFILL MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS.
- TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS.
- INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATION ONLY FOR IMPORTED BACKFILL GRAVEL AND RESURFACING REQUIREMENTS.
- IF UNSUITABLE PIPE FOUNDATION MATERIAL IS ENCOUNTERED DURING EXCAVATION, ENGINEER MAY DIRECT THE CONTRACTOR TO OVER-EXCAVATE AND BACKFILL WITH SUITABLE MATERIAL.
- THE DITCH LINE, IF ONE EXISTS, SHALL BE RESHAPED IN SUCH A MANNER TO ALLOW POSITIVE DRAINAGE TO MATCH PRE-CONSTRUCTION CONDITIONS.

3
D100

TYPICAL TRENCH DETAIL

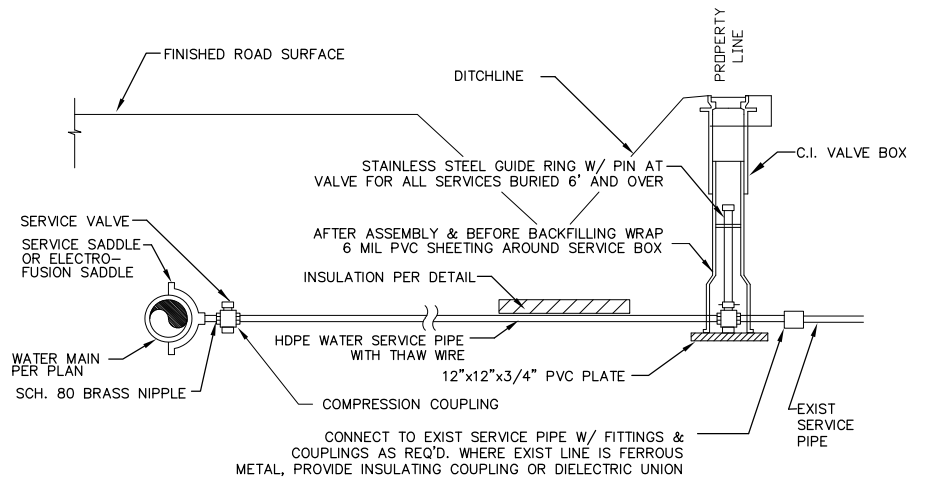
NOT TO SCALE



4
D100

PIPE INSULATION REQUIREMENTS

NOT TO SCALE



NOTES:

- INSTALL TOP OF VALVE BOX IN SHOULDER OF DRIVEWAY OUT OF TRAFFIC AREAS
- ALLOW 12" FOR RAISING VALVE BOX.
- VALVE COVER SHALL BE MARKED "WATER"
- ENLARGED BASE IS REQUIRED FOR 1" SERVICE VALVES AND LARGER.
- WHERE THERE IS NO EXIST. SERVICE, TERMINATE COPPER TUBING W/ COPPER TUBE x FEMALE IPT COUPLING & BRASS PLUG.
- 4" RIGID FOAM INSULATION UNDER DITCHLINE

5
D100

TYPICAL BURIED WATER SERVICE - 2" AND SMALLER

REVISIONS:

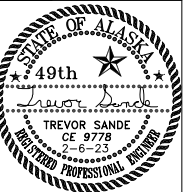
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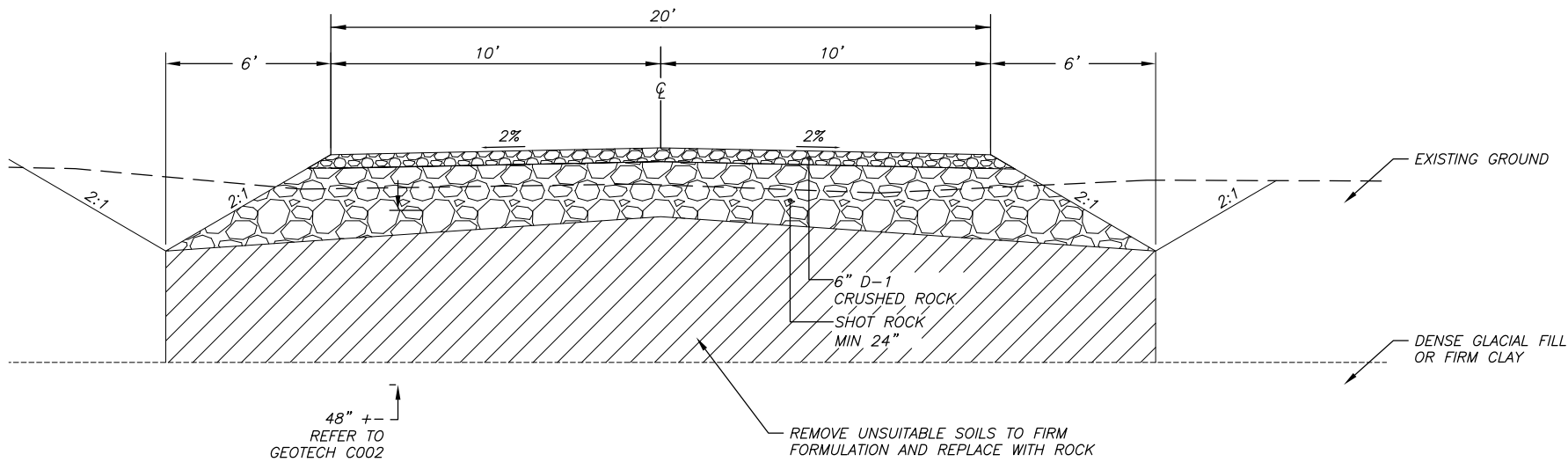


SHEET DESCRIPTION:
Details

D100

SHEET:

10 of 11



1 WRANGELL AVENUE TYPICAL ROAD SECTION
D102 NOT TO SCALE

REVISIONS:

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WRANGELL DUPLEX

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SHEET DESCRIPTION:
Details