ORDINANCE NO. 2022-03-12

AN ORDINANCE APPROVING A FINAL PLAT AND SITE PLAN FOR 43 NORTH APARTMENTS, LOCATED IN THE VICINITY OF 43 NORTH 100 EAST IN THE CC-1 (CENTRAL COMMERCIAL) ZONE.

BE IT ORDAINED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH,

PART I

DEVELOPMENT APPROVED – ZONE MAP AMENDED

A. The final plat and site plan for 43 North Apartments, located at 43 North 100 East, American Fork, Utah, as set forth in Attachment A, is hereby approved.

B. Said plans are hereby adopted as an amendment to the Official Zone Map and territory included in the Plans are hereby designated as Large Scale Development Overlay Zone 584.

C. Said plans shall hereafter constitute the zone requirements applicable within the property so described.

PART II

ENFORCEMENT, PENALTY, SEVERABILITY, EFFECTIVE DATE

A. Hereafter, these amendments shall be construed as part of the Zoning Ordinance of American Fork, Utah, to the same effect as if originally a part thereof, and all provisions of said Ordinance shall be applicable thereto including, but not limited to, the enforcement, violation, and penalty provision thereof.

B. All ordinances, or resolutions, or parts thereof, in conflict with the provisions of this ordinance are hereby repealed.

C. This ordinance shall take effect upon its passage and posting as required by state law.

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF AMERICAN FORK, UTAH, THIS 29th DAY OF MARCH 2022.

Kevin L. Barnes

Kevin Barnes, Council Member

AMERICAN FORK CITY CORPORATE SEAL UTAH COUNTY STATE OF UTAH

ATTEST:

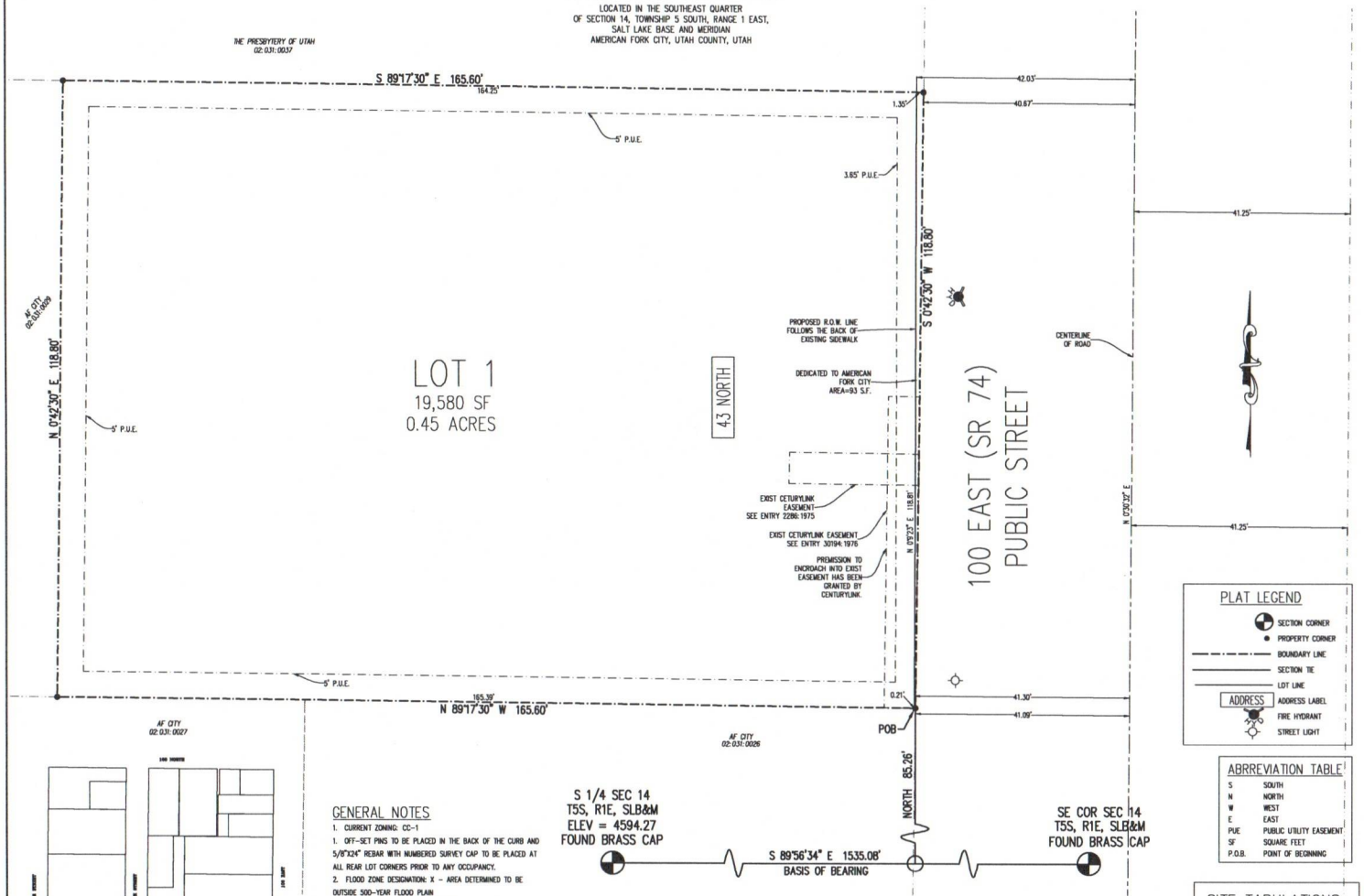
Terilyn Lurker

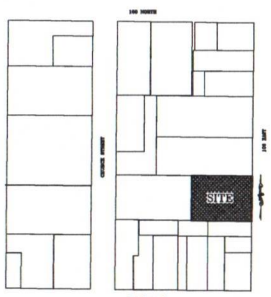
Terilyn Lurker, City Recorder

43 NORTH APARTMENTS PLAT "A"

ADDRESS: 43 NORTH 100 EAST

LOCATED IN THE SOUTHEAST QUARTER
OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH





VICINITY PLAN

GENERAL NOTES

1. CURRENT ZONING: CC-1
1. OFF-SET PINS TO BE PLACED IN THE BACK OF THE CURB AND 5/8"X24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL REAR LOT CORNERS PRIOR TO ANY OCCUPANCY.
2. FLOOD ZONE DESIGNATION: X – AREA DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAIN
   FIRM MAP PANEL #: 49049C0168F
3. SETBACKS AND BUILDABLE AREA WILL BE IN ACCORDANCE W/ CURRENT ZONING.
4. THERE WAS NO GROUND WATER ENCOUNTERED IN THIS SUBDIVISION PER THE GEOTECHNICAL STUDY.
5. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY HOME UNTIL (1) ASPHALT PAVING IS INSTALLED; AND (2) FIRE HYDRANTS ARE INSTALLED, APPROVED AND CHARGED.
6. NO FOOTINGS, EAVES, ETC. CAN BE WITHIN ANY OF THE EASEMENTS.
7. DRY UTILITES TO BE INSTALLED PRIOR TO BUILDING PERMIT.

10 5 0 10 20 30
Scale 1" = 10'

LAND SURVEYOR:
AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

PLAT LEGEND

- SECTION CORNER
- PROPERTY CORNER
- BOUNDARY LINE
- SECTION TIE
- LOT LINE
- ADDRESS — ADDRESS LABEL
- FIRE HYDRANT
- STREET LIGHT

ABRREVIATION TABLE

S	SOUTH
N	NORTH
W	WEST
E	EAST
PUE	PUBLIC UTILITY EASEMENT
SF	SQUARE FEET
P.O.B.	POINT OF BEGINNING

SITE TABULATIONS:

TOTAL PROPERTY AREA = 19,763 S.F.
RIGHT-OF-WAY AREA = 93 S.F.
LOT AREA = 19,580 S.F.

SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS _____ DAY OF _____ A.D. 20____,
BY THE SEWER AUTHORITY.

SEWER & WATER AUTHORITY

Surveyor's Seal	Notary Public Seal	Clerk-Recorder Seal	

SURVEYOR'S CERTIFICATE

I, AARON D. THOMAS, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NO. 8418780, IN ACCORDANCE WITH TITLE 58, CHAPTER 22 OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, A SURVEY WAS COMPLETED IN ACCORDANCE WITH SECTION 17-23-17. I FURTHER CERTIFY THAT I HAVE VERIFIED ALL MEASUREMENTS AND THAT MONUMENTS HAVE BEEN PLACED AS SHOWN ON THIS PLAT. I HEREBY STATE THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, BELIEF AND IN MY PROFESSIONAL OPINION.

DATE (SEE SEAL BELOW)

BOUNDARY DESCRIPTION

ALL OF LOT 12, AMENDED BLOCK 18, PLAT "A", AMERICAN FORK CITY SURVEY AS RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER, ALSO BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 12, AMENDED BLOCK 18, PLAT "A", AMERICAN FORK CITY SURVEY, SAID POINT BEING LOCATED SOUTH 89°56'34" EAST ALONG SECTION LINE 1535.08 FEET AND NORTH 85.26 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°17'30" WEST 165.60 FEET; THENCE NORTH 0°42'30" EAST 118.80 FEET; THENCE SOUTH 89°17'30" EAST 165.60 FEET; THENCE SOUTH 0°42'30" WEST 118.80 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINS = 0.45 ACRES MORE OR LESS

NUMBER OF LOTS = 1

BASIS OF BEARING: THE LINE BETWEEN THE SOUTHEAST QUARTER AND THE SOUTHEAST CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN WHICH BEARS SOUTH 89°56'34" EAST

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THE MAP, AND SUBJECT TO ANY CONDITIONS AND RESTRICTIONS STATED HEREON, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, BLOCKS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.
IN WITNESS HEREOF, WE HAVE HERELUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20___.

ACKNOWLEDGMENT

STATE OF UTAH
COUNTY OF UTAH S.S.

ON THE _____ DAY OF _____ 20___, PERSONALLY APPEARED BEFORE ME THE SIGNERS OF THE FOREGOING DEDICATION WHO DULY ACKNOWLEDGE TO ME THAT THEY DID EXCUTE THE SAME.

MY COMMISSION EXPIRES NOTARY PUBLIC (SEE SEAL BELOW)

ACCEPTANCE BY LEGISLATIVE BODY

THE CITY COUNCIL OF AMERICAN FORK CITY, COUNTY OF UTAH, APPROVES THIS SUBDIVISION SUBJECT TO THE CONDITIONS AND RESTRICTIONS STATED HEREON AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC.
THIS _____ DAY OF _____, 20___.

MAYOR — CITY COUNCIL MEMBER
CITY COUNCIL MEMBER — CITY COUNCIL MEMBER
CITY COUNCIL MEMBER — CITY COUNCIL MEMBER

APPROVED
CITY ENGINEER

ATTEST
CLERK RECORDER (SEE SEAL BELOW)

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, 20___, BY THE AMERICAN FORK CITY PLANNING COMMISSION.

PLANNING DIRECTOR — CHAIRPERSON, PLANNING COMMISSION.

PLAT "A"

43 NORTH APARTMENTS

A COMMERCIAL SUBDIVISION

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SLB&M

AMERICAN FORK CITY, UTAH COUNTY, UTAH

SCALE: 1" = 10 FEET

43 NORTH APARTMENTS

ADDRESS: 43 NORTH 100 EAST

LOCATED IN THE SOUTHEAST QUARTER
OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH

VICINITY PLAN

CONTACT LIST:

COMPANY		CONTACT	PHONE
CENTURY LINK	– TELEPHONE	K.C. Lunt	(435) 623 4252
ROCKY MNT. POWER	– POWER	Teria Walker	(801) 756 1310
COMCAST	– CABLE	Elysia Valdez	(801) 401 3017
COMCAST	– FIBER TEL	Sade Christensen	(801) 369 7360
QUESTAR GAS	– GAS (FOREMAN)	Wendy Edwards	(801) 853 8513
QUESTAR GAS	– GAS (HP)	Gaylan Sorensen	(801) 370 6577
AMERICAN FORK CITY	– WATER	Jay Brems	(801) 763 3060
AMERICAN FORK CITY	– SEWER	Ashton Hardy	(801) 763 3060
AMERICAN FORK CITY	– STORM	Ashton Hardy	(801) 763 3060
AMERICAN FORK CITY	– SWPPP	Harlan Nielson	(801) 763 3060
AMERICAN FORK CITY	– P.I.	Jay Brems	(801) 763 3060
AMERICAN FORK CITY	– PLANNING	Adam Olsen	(801) 763 3060
AMERICAN FORK CITY	– ENGINEERING	Ben Hunter	(801) 763 3060
AMERICAN FORK CITY	– INSPECTOR	Dee Howard	(801) 763 3060
FIRE MARSHALL	– FIRE DEPT	Mat Socco	(801) 763 3045
AF FIBER		Kyle Petersen	(801) 400–2933
AF FLOOD IRRIGATION COMPANY		Ernie John	(801) 471 6576
FIRE & RESCUE			911
TIMPANOGOS SPECIAL SERVICE DISTRICT		David Barlow	(801) 756 5231

SHEET INDEX

C1 COVER SHEET
C2 SITE PLAN
C3 DEMOLITION PLAN
C4 UTILITY PLAN
C5 GRADING & DRAINAGE PLAN
C6 EROSION CONTROL PLAN
C7 BMP DETAILS
C8 AMERICAN FORK STANDARD CONSTRUCTION NOTES
C9 DETAIL SHEET
C10 DETAIL SHEET
C11 DETAIL SHEET
ALTA SURVEY

ABBREVIATION TABLE

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
EA	EDGE OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
SF	SQUARE FOOTAGE
P.U.E.	PUBLIC UTILITY EASEMENT
SLB&M	SALT LAKE BASE & MERIDIAN
COR	CORNER
N	NORTH
S	SOUTH
E	EAST
W	WEST
P.I.	PRESSURIZED IRRIGATION
SS	SANITARY SEWER
SD	STORM DRAIN
T	TOWNSHIP
R	RANGE
RCP	REINFORCED CONCRETE PIPE
WM	WATER METER
CB	CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT
L.F.	LINEAR FEET
S=%	SLOPE
IE	INVERT ELEVATION
C.O.	CLEAN OUT
SL	SEWER LATERAL

NOTES TO CONTRACTOR

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE AND ALL UNDERGROUND UTILITIES, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.

4/15/21 DWP

SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

811 Know what's below. Call before you dig.

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM) – FOUND BRASS CAP
TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66

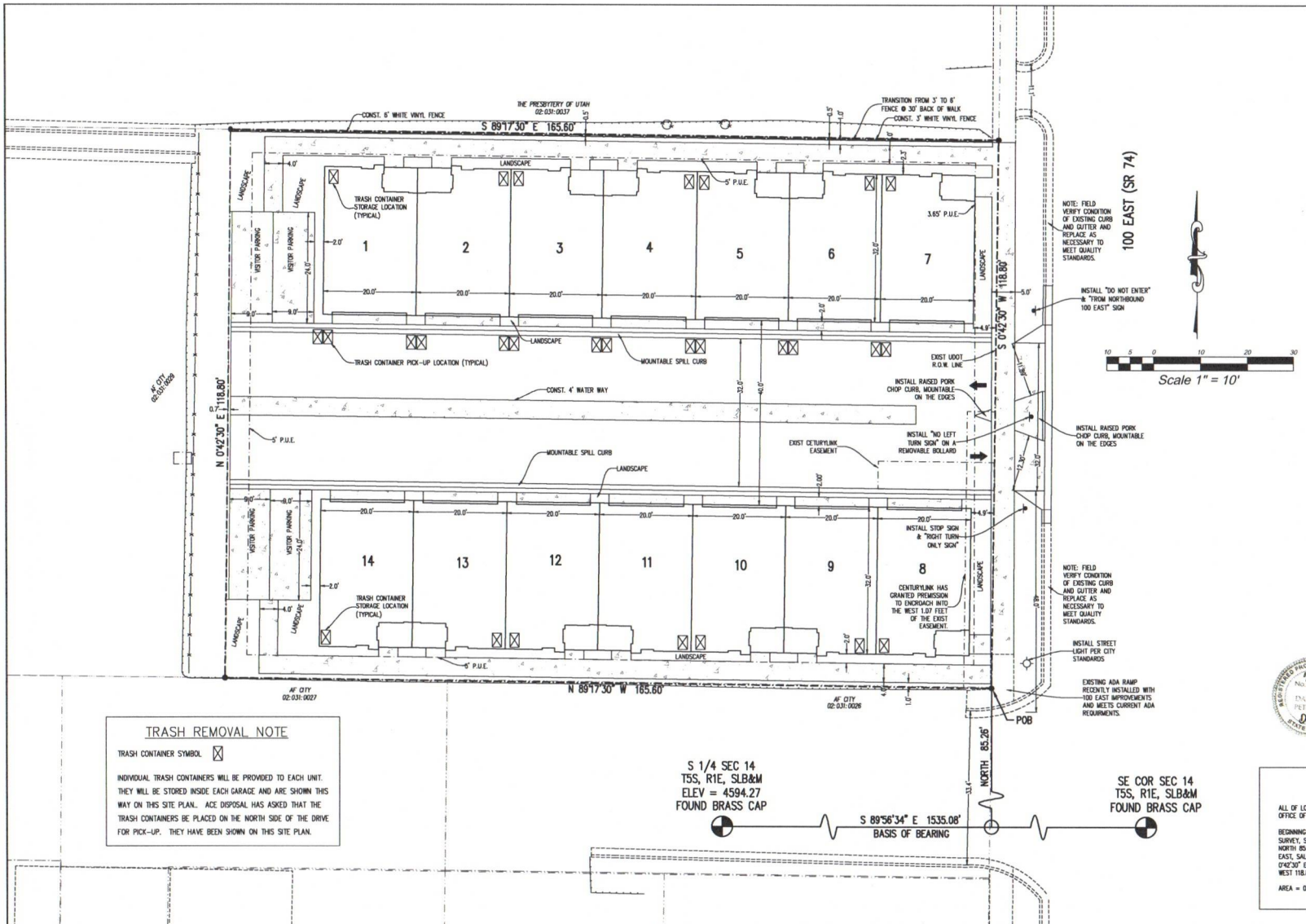
REVISIONS

Rev.	Date	Description
2	06/17/21	REVISED PER CITY COMMENTS

Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-550-3992

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS		
AMERICAN FORK		UTAH
Drawn by: D.W.P.	COVER SHEET	Scale: NTS
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C1



ON-SITE PAVEMENT DESIGN

3" ASPHALT
6" AGGREGATE BASE

OR

6" CONCRETE
5" UNTREATED ROAD BASE

GENERAL SITE NOTES

1. CURRENT ZONING: CC-1
2. ALL CONSTRUCTION TO CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS.
3. SURVEYING BY AZTEC SURVEYING
4. TYPE OF BUILDING: BUILDING CONSTRUCTION TYPE V-B
5. TYPE OF OCCUPANCY: R-2
6. TYPE OF CONSTRUCTION: CONSTRUCTION MATERIALS WOOD FRAMING
7. BUILDING TOTAL SQUARE FOOTAGE (ALL BUILDINGS & FLOORS): 27,840 S.F.
8. PROPOSED BUILDING PARKING TABULATIONS:

PARKING REQUIRED:	2.25 STALLS PER UNIT
TOTAL UNITS: 14	
TOTAL PARKING REQUIRED:	32 STALLS.
GARAGE PARKING PROVIDED:	28 STALLS
VISITOR PARKING PROVIDED:	4 STALLS
TOTAL PARKING PROVIDED:	32 STALLS

9. BUILDING HEIGHT = SEE BUILDING ELEVATIONS
10. THERE WILL BE THREE BEDROOMS PER UNIT FOR 42 TOTAL BEDROOMS WITHIN THE PROJECT.
10. FLOOD ZONE DESIGNATION: ZONE X , FIRM MAP PANEL #: 49049C0168F, EFFECTIVE DATE: 06/19/2020
11. ALL SITE LIGHTING WILL BE BUILDING MOUNTED.
12. EACH UNIT TO INDIVIDUAL GARBAGE CAN.

STATE ROAD – 74 POSTED SPEED LIMIT

POSTED SPEED LIMIT ON SR-74 IS 30 MPH

UDOT NOTE

ALL STRIPING REMOVAL WILL BE TO UDOT STANDARDS – NO GRINDING

SITE TABULATIONS:

TOTAL PROPERTY AREA = 19,763 S.F. = 100%
BUILDING/ROOF AREA = 8,949 S.F. = 45.6%
IMPERVIOUS AREA = 8,949 S.F. = 45.5%
LANDSCAPE AREA = 1,762 S.F. = 9.0%

TRASH REMOVAL NOTE

TRASH CONTAINER SYMBOL ☒

INDIVIDUAL TRASH CONTAINERS WILL BE PROVIDED TO EACH UNIT. THEY WILL BE STORED INSIDE EACH GARAGE AND ARE SHOWN THIS WAY ON THIS SITE PLAN.. ACE DISPOSAL HAS ASKED THAT THE TRASH CONTAINERS BE PLACED ON THE NORTH SIDE OF THE DRIVE FOR PICK-UP. THEY HAVE BEEN SHOWN ON THIS SITE PLAN.

BOUNDARY DESCRIPTION

ALL OF LOT 12, AMENDED BLOCK 18, PLAT "A", AMERICAN FORK CITY SURVEY AS RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER, ALSO BEING DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 12, AMENDED BLOCK 18, PLAT "A", AMERICAN FORK CITY SURVEY, SAID POINT BEING LOCATED SOUTH 89°56'34" EAST ALONG SECTION LINE 1535.08 FEET AND NORTH 85.26 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°17'30" WEST 165.60 FEET; THENCE NORTH 0°42'30" EAST 118.80 FEET; THENCE SOUTH 89°17'30" EAST 165.60 FEET; THENCE SOUTH 0°42'30" WEST 118.80 FEET TO THE POINT OF BEGINNING.

AREA = 0.45 ACRES

SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

811 Know what's below. Call before you dig.

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM) – FOUND BRASS CAP
TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66

REVISIONS

Rev.	Date	Description
1	05/18/21	REVISED PER CITY REVIEW #1
2	06/11/21	REVISED PER CITY COMMENTS
3	08/19/21	REVISED PER CITY COMMENTS
4	11/13/21	REVISED PER CITY COMMENTS
1	01/04/22	ADDED TRASH CONTAINER LOCATIONS TO THE PLANS

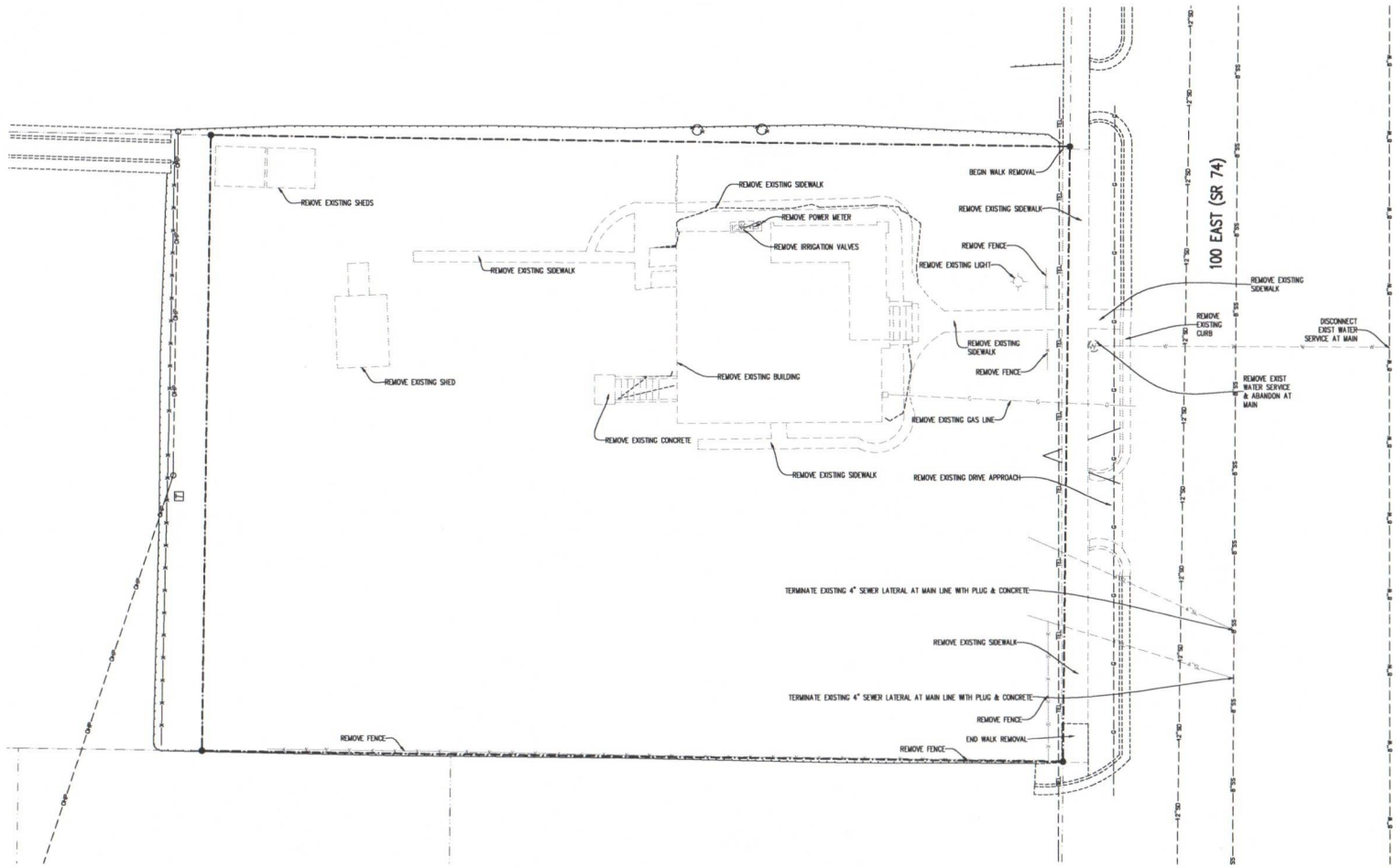
Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-356-1992

EXCEL ENGINEERING
David W. Peterson, P.E., License #270193
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS

AMERICAN FORK UTAH

Drawn by: D.W.P.	SITE PLAN	Scale: 1"=10'
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C2



SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
LEHI, UT. 84043
AZTECENGINEERING@GMAIL.COM

Know what's below. Call before you dig.

BENCH MARK
SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN ELEVATION = 4594.27 (NGVD 29 DATUM) – FOUND BRASS CAP TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66

REVISIONS

Rev.	Date	Description
2	06/17/21	REVISED PER CITY COMMENTS
3	08/19/21	REVISED PER CITY COMMENTS
4	11/15/21	REVISED PER CITY COMMENTS

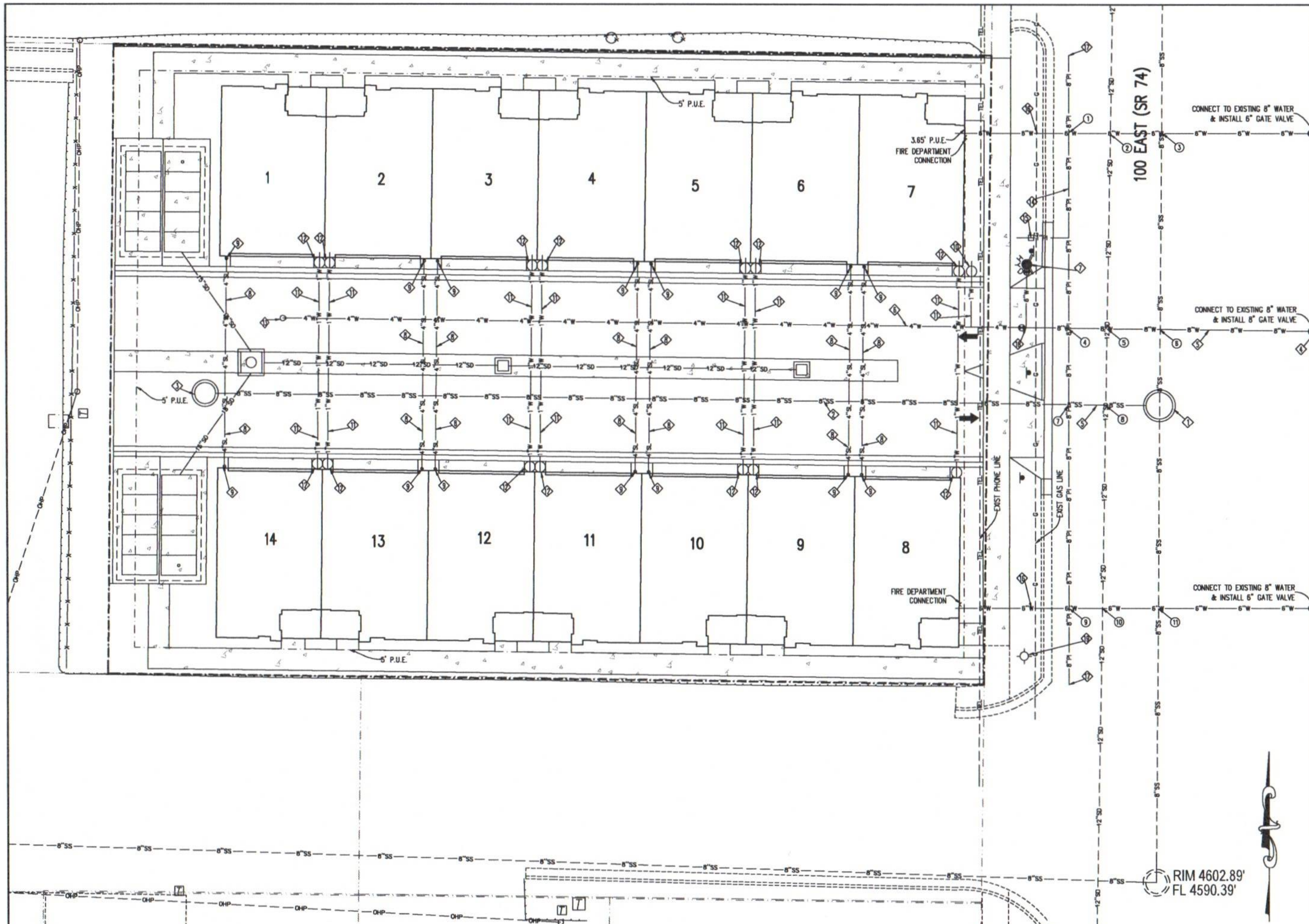
Developer: Dp-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-536-3992

EXCEL ENGINEERING
David W. Pilcones, P.E., License #178393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; dave@excelcivil.com

43 NORTH APARTMENTS

AMERICAN FORK UTAH

Drawn by: D.W.P.	DEMOLITION PLAN	Scale: 1"=10'
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C3



SEWER NOTES:

1. ALL SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY OF AMERICAN FORK PUBLIC WORKS DEPARTMENT BEFORE BACKFILLING IS ACCOMPLISHED.
2. SEWER LATERALS ARE TO BE INSTALLED AT A MINIMUM SLOPE OF 2%
3. NEW SERVICE LATERALS SHALL BE PVC PLASTIC PIPE CONFORMING TO ASTM D3034 SDR35
4. ALL LATERAL CONNECTIONS SHALL "INSERT-A-TEE" OR WYE AT TEN O'CLOCK OR TWO O'CLOCK POSITIONING TO CENTER OF MAIN LINE AND SHALL BE ENCASED IN CONCRETE AFTER INSPECTION IS MADE.
5. THERE SHALL BE A MINIMUM 3 FEET OF COVER OVER ALL SEWER LATERAL LINES AND 3.5 FEET MINIMUM COVER AT PROPERTY LINE.
6. THERE SHALL BE A MAXIMUM DISTANCE OF 5 FEET FROM THE FOUNDATION WALL TO THE FIRST EXTERIOR CLEANOUT WITH A MAXIMUM DISTANCE BETWEEN CLEANOUTS OF 75 FEET.
7. THERE SHALL A BE CLEANOUT AT ANY 90° BEND OR ANY COMBINATION OF BENDS IN EXCESS OF 90°.
8. CLEANOUT STANDPIPE CAN BE CAST IRON OR IRON OR PVC WITH CAST IRON CAP OR BRASS CAP.
9. ALL CLEANOUTS SHALL REMAIN VISIBLE AND ACCESSIBLE.
10. ALL SEWER CONSTRUCTION MUST CONFORM TO AF CITY STANDARD DRAWINGS.

WATER NOTES:

1. ALL WATER MAINS, TRANSMISSION AND DISTRIBUTION LINES, SHALL BE CONSTRUCTED USING DUCTILE IRON IN ACCORDANCE WITH AWWA C151 AND ANSI A-21.51
2. DUCTILE IRON PIPE SHALL BE CLASS 50 FOR SLIP-ON OR MECHANICAL JOINT PIPING (CLASS 51 FOR 6 INCH SIZE AND UNDER) AND CLASS 53 FOR FLANGED JOINT PIPING UNLESS OTHERWISE REQUIRED BY THE CITY ENGINEER.
3. ALL WATER CONSTRUCTION TO CONFORM TO AF CITY STANDARD DRAWINGS.
4. WATER LINE MIN. COVER IS 48" TO TOP OF PIPE.
5. WATER SERVICE MATERIAL TO BE POLY PIPE.

GENERAL UTILITY NOTES:

1. THERE ARE NO EXISTING LAND DRAINAGE SYSTEMS, WETLANDS, OR DRAINAGE AREAS TRIBUTARY TO THIS SITE.
2. NO UTILITY LINE EXTENSIONS REQUIRED FROM ADJACENT PROPERTY OWNERS.
3. ALL CONSTRUCTION SHALL CONFORM TO AMERICAN FORK CITY STANDARDS AND SPECIFICATIONS, LATEST EDITION.
4. ALL ROOF DRAINS WILL BE CONVEYED TO THE APPROPRIATE UNDERGROUND FACILITY WHERE POSSIBLE, NOT CONVEYED ACROSS PARKING OR SIDEWALK. ROOF DRAINS SHOULD DISCHARGE AT LEAST 10 FEET FROM FOUNDATIONS OR BACKFILL LIMITS, WHICHEVER IS GREATER. CONNECT ALL ROOF DRAINS TO STORM DRAIN PIPING SHOWN WHERE POSSIBLE.

FIRE HYDANT NOTE

1. CONSTRUCTION TYPE = VB
2. TOTAL SQUARE FOOTAGE (EACH 7-PLEX) = 13,920 S.F.
3. REQUIRED FIRE FLOW = 3,250 GPM
4. FIRE SPRINKLE REDUCES REQUIRED FIRE FLOW TO MIN. 1,500 GPM
5. HYDRANTS REQUIRED FOR 1,500 GPM = 1
6. THE (1) NEW FIRE HYDRANT ON THE SITE SATISFY THIS REQUIREMENT.

UDOT NOTES:

1. LOCATE ALL ABOVE GROUND UTILITIES (UTILITY POLES, FIRE HYDRANTS) 18" BEHIND THE CURB.
2. LOCATE ABOVE GROUND UTILITIES CLEAR OF AND BEYOND THE AASHTO DEFINE CLEAR ZONE WHEN CURB IS ABSENT.
3. BORE ALL UTILITIES WITHIN THE PAVED SURFACE. FOR ALL UTILITY TAPS, FLOWABLE FILL (50-150 PSI/UDOT SPECIFICATION 03575) AND 7" OF PG GRADE SUPERPAVE MIX DESIGN ASPHALT MUST CONFORM TO UDOT SPECIFICATION 02741.

UTILITY KEYED NOTES ◈

1. INSTALL 5' DIAMETER SEWER MANHOLE, RIM=4603.65 (MATCH EXISTING ASPHALT), 8" IE IN=4592.20, MATCH EXISTING 8" IE THRU=4592.00
2. INSTALL 175.3 L.F. 8" PVC SDR-35 SEWER @ S=1.70%
3. INSTALL 4' DIAMETER SEWER MANHOLE, RIM=4603.19, 8" IE OUT=4595.19
4. CONNECT TO EXISTING 8" WATER LINE AND INSTALL 8" GATE VALVE AT CONNECTION
5. CONST. 8" CUL. LINE (DIP). BORE UTILITY UNDER STATE ROAD PER UDOT SPECIFICATIONS.
6. INSTALL 4" DIP WATER LINE
7. INSTALL FIRE HYDRANT & VALVE
8. INSTALL 4" PVC SDR-35 SEWER LATERAL @ S=2% MIN.
9. INSTALL 4" SEWER CLEANOUT
10. INSTALL WATER SERVICE @ METER FOR IRRIGATION. INSTALL BACKFLOW PREVENTOR.
11. INSTALL 1" WATER SERVICE LINE
12. INSTALL 1" WATER METER WITH TRAFFIC RATED LID.
13. INSTALL 4" BLOW-OFF
14. INSTALL 8" P.I. LINE (DIP). THIS WILL BE A DRY LINE. PATCH ASPHALT AS NECESSARY.
15. INSTALL 1" P.I. SERVICE & METER BOX FOR FUTURE USE WHEN P.I. MAIN IS ACTIVE
16. INSTALL 6" DIP FIRE LINE
17. STUB & PLUG 8" P.I. MAIN.
18. INSTALL 8" TEE W/ 6" & 4" REDUCERS. INSTALL 4" GATE VALVE ON THE WEST 4" LINE COMING OFF THE TEE.
19. INSTALL STREET LIGHT PER CITY STANDARDS.

UTILITY CROSSING NOTES ⓪

1. FL 8" PI LINE=4600.65, TOP 6" WATER LINE=4599.32, CLEARANCE=1.33'
2. FL 12" SD=4601.61, TOP 6" WATER LINE=4599.32, CLEARANCE=2.29'
3. FL 6" WATER LINE=4598.82, TOP 8" SEWER=4593.64, CLEARANCE=5.18'
4. FL 8" PI LINE=4600.62, TOP 8" WATER LINE=4599.29, CLEARANCE=1.33'
5. FL 12" SD=4601.28, TOP 8" WATER LINE=4599.29, CLEARANCE=1.99'
6. FL 8" WATER LINE=4598.62, TOP 8" SEWER=4592.97, CLEARANCE=5.65'
7. FL 8" PI LINE=4599.92, TOP 8" SEWER LINE=4593.12, CLEARANCE=6.8'
8. FL 12" SD=4601.16, TOP 8" SEWER LINE=4593.00, CLEARANCE=8.16'
9. FL 8" PI LINE=4599.80, TOP 6" WATER LINE=4598.48, CLEARANCE=1.32'
10. FL 12" SD=4600.81, TOP 6" WATER LINE=4598.48, CLEARANCE=2.33'
11. FL 6" WATER LINE=4597.98, TOP 8" SEWER=4592.01, CLEARANCE=5.97'

EXISTING DRY UTILITY NOTE

THE EXISTING POWER LINES FOR THIS SITE ARE ON THE WEST SIDE OF THE PROPERTY. NO EXISTING POWER LINES ARE ALONG THE 100 EAST FRONTAGE. EXISTING TELEPHONE LINES ARE SHOWN ON THE PLAN ALONG THE 100 EAST FRONTAGE. NO OTHER COMMUNICATION LINES ARE ALONG THE FRONTAGE. THE EXISTING GAS LINES ARE SHOWN BEHIND THE CURB ON 100 EAST.

NOTES TO CONTRACTOR

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE AND ALL UNDERGROUND UTILITIES, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.

UTILITY LEGEND

- FIRE HYDRANT
- PRESSURE IRRIG.
- CULINARY WATER
- SEWER PIPE PVC SDR-35
- STORM DRAIN PIPE
- EDGE OF ASPHALT
- FENCE
- OVERHEAD POWER LINE
- GAS LINE
- ◈ SEE SEWER KEYED NOTES
- ⓪ UTILITY CROSSING KEYED NOTE

STORM DRAIN EMERGENCY OVERFLOW NOTE

SEE SHEET C5 FOR THE EMERGENCY OVERFLOW LOCATION THAT IS AT THE LIP OF CURB AT 100 EAST NEAR THE NORTHEAST CORNER OF UNIT 8.

STORM DRAIN DESIGN

SEE SHEET C5 FOR STORM DRAIN DESIGN

811 Know what's below. Call before you dig.

10 5 0 10 20 30

Scale 1" = 10'

REGISTERED PROFESSIONAL ENGINEER 11/15/21 DAVID W. PETERSON DWP STATE OF UTAH

SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEEPING@GMAIL.COM

SEWER MAINTENANCE NOTE

THE PROPOSED UNITS WILL BE RENTED. THIS PROJECT WILL NOT HAVE AN HOA. THE PROPERTY OWNER WILL BE RESPONSIBLE TO MAINTAIN THE SEWER MAINS AND LATERALS ON-SITE.

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM) - FOUND BRASS CAP
TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66

REVISIONS

Rev.	Date	Description
2	06/17/21	REVISED PER CITY COMMENTS
3	08/19/21	REVISED PER CITY COMMENTS
4	11/15/21	REVISED PER CITY COMMENTS

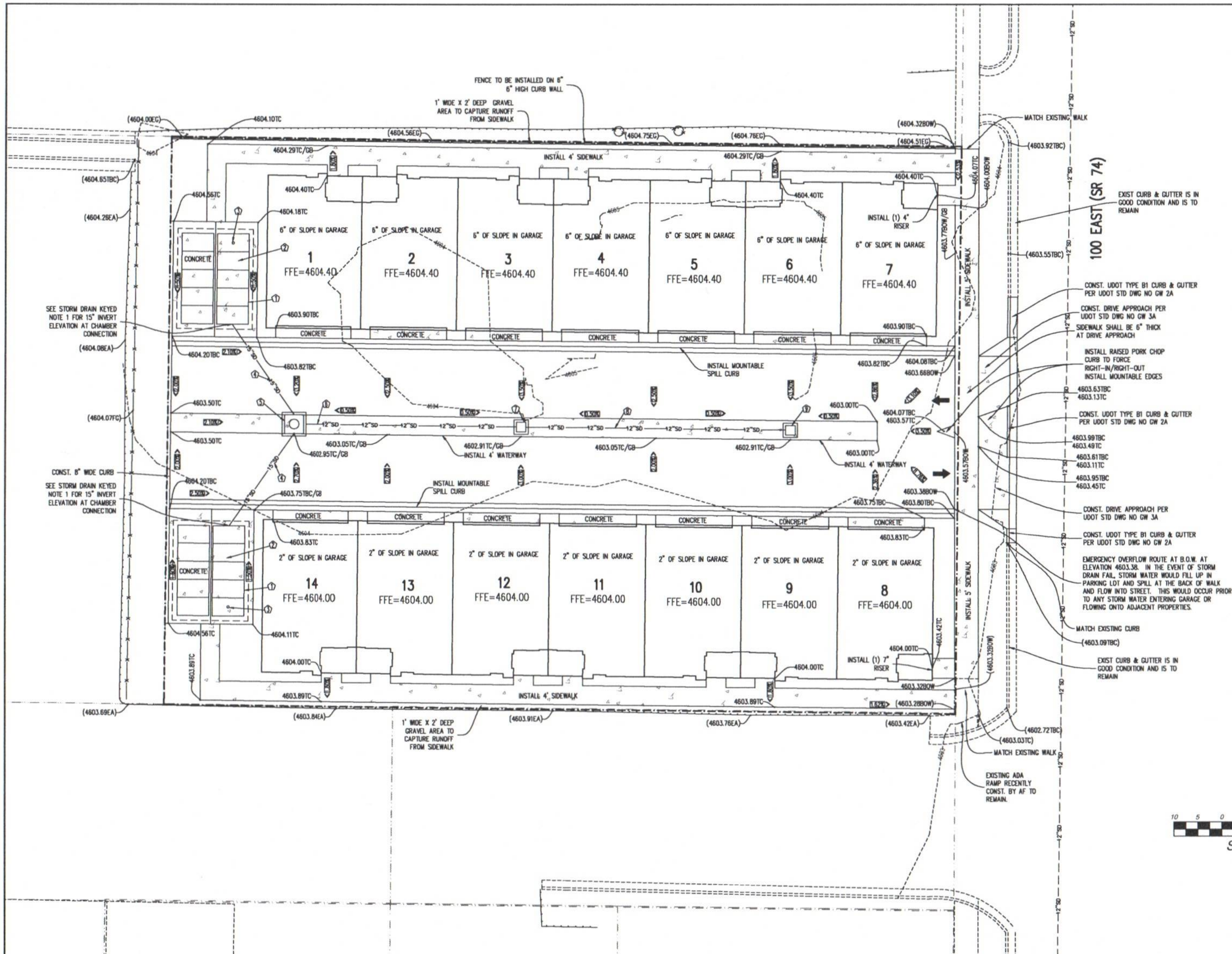
Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-550-3992

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS

AMERICAN FORK UTAH

Drawn by: D.W.P.	UTILITY PLAN	Scale: 1"=10'
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C4



STORM DRAIN KEYED NOTES

1. INSTALL CULTEC RECHARGER SYSTEM. INSTALL (10) RECHARGER 902HD CHAMBERS WITH 12" STONE ABOVE AND 18" BELOW. TOP OF GRAVEL=4602.50, TOP OF CHAMBER=4601.50, BOTTOM OF CHAMBER=4597.50, 15" IE IN CHAMBER=4597.69, BOTTOM OF GRAVEL=4595.50, INSTALL PER CULTEC STANDARD DETAILS AND SPECIFICATIONS.
2. INSTALL SEPARATOR ROW
3. INSTALL INSPECTION PORT
4. INSTALL 23 L.F. 15" ADS @ S=5.9%
5. INSTALL 4'X4' CONCRETE INLET BOX WITH 2' DIA. GRATED LID, GRATE=4602.83, 15" IE OUT=4599.05, 12" IE IN=4599.30, INSTALL SNOUT TYPE 18F OVER 15" OUTLET PIPE ON THE NORTH AND SOUTH OUTLETS FROM THE BOX, IE BOX=4595.83
6. INSTALL 44 L.F. 12" ADS @ S=0.5%
7. INSTALL 2'X2' CONCRETE INLET BOX WITH GRATE, GRATE=4602.79, 12" IE THRU=4599.52
8. INSTALL 54 L.F. 12" ADS @ S=0.5%
9. INSTALL 2'X2' CONCRETE INLET BOX WITH GRATE, GRATE=4602.79, 12" IE OUT=4599.79

ROOF DRAIN NOTE

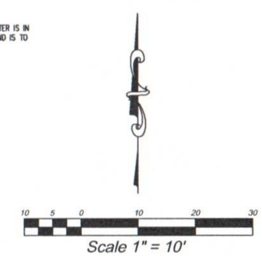
CONNECT ALL ROOF DRAINS FROM BUILDINGS UNDERGROUND USING 4" OR 6" ADS PIPE AT A MINIMUM SLOPE OF 1%. CONNECT DIRECTLY INTO THE PROPOSED ADS PIPE WITH AN INSERTA-TEE OR INTO SIDE OF THE CULTEC CHAMBERS.

ON-SITE PAVEMENT DESIGN

3" ASPHALT
6" AGGREGATE BASE

OR

6" CONCRETE
5" UNTREATED ROAD BASE



GRADING LEGEND

FFE	FINISHED FLOOR ELEV.
BOW	BACK OF WALK
GB	GRADE BREAK
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB
TA	TOP OF ASPHALT
EA	EDGE OF ASPHALT
RIM	RIM ELEVATION
FL	FLOWLINE
EG	EXIST GROUND
FG	FINISHED GRADE
TW	TOP OF WALL
BW	BOTTOM OF WALL
IE	INVERT ELEVATION
<0.00%	DIRECTION OF DRAINAGE
(0000.00TBC)	EXISTING ELEVATION
0000.00TBC	PROPOSED ELEVATION
4808	EXISTING CONTOUR
00	PROPOSED CONTOUR
00	STORM DRAIN KEYED NOTE

SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

811 Know what's below. Call before you dig.

BENCH MARK

SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN
ELEVATION = 4594.27 (NGVD 29 DATUM) – FOUND BRASS CAP
TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66

REVISIONS

Rev.	Date	Description
2	06/17/21	REVISED PER CITY COMMENTS
3	11/15/21	REVISED PER CITY COMMENTS

Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-550-3992

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS

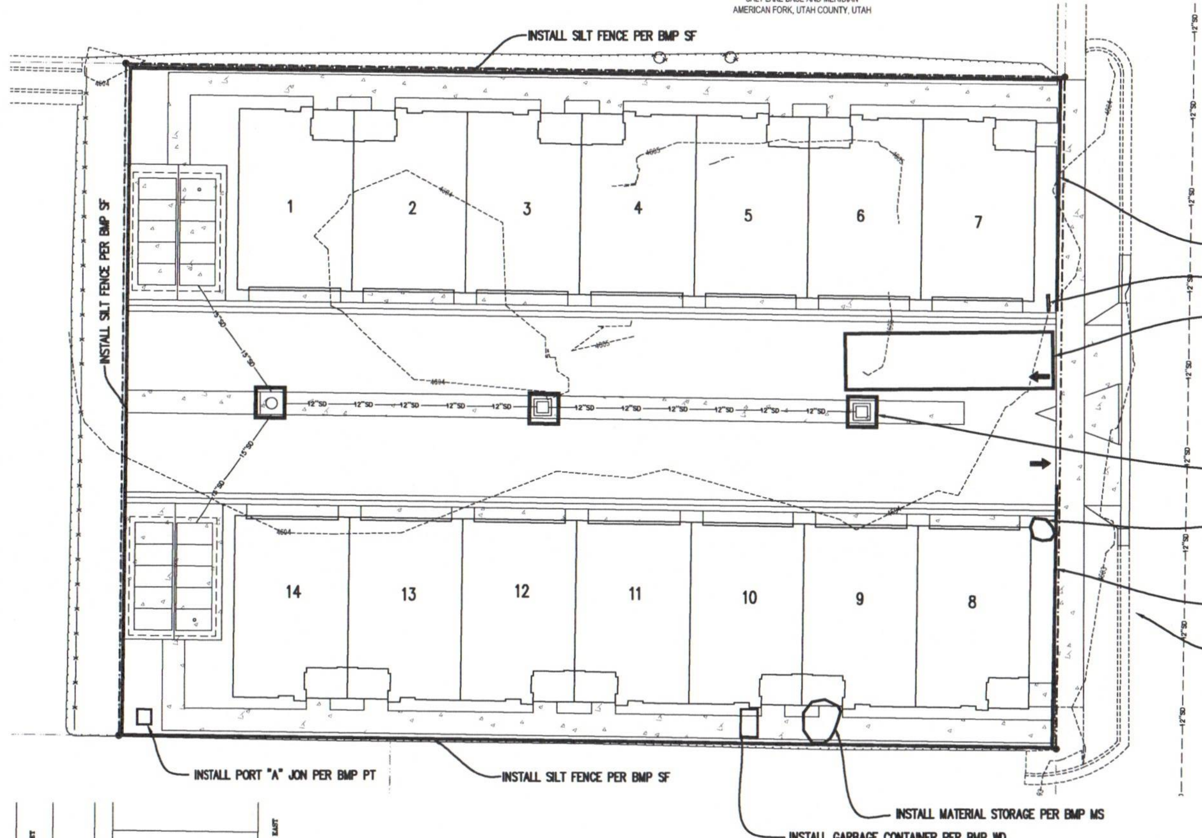
AMERICAN FORK UTAH

Drawn by: D.W.P.	GRADING & DRAINAGE PLAN	Scale: 1"=10'
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C5

43 NORTH APARTMENTS

ADDRESS: 43 NORTH 100 EAST

LOCATED IN THE SOUTHEAST QUARTER
OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK, UTAH COUNTY, UTAH



10 5 0 10 20 30

Scale 1" = 10'

SWPPP Storm Water Pollution Prevention Plan

A Utah Pollutant Discharge Elimination System (UPDES) permit covers this construction site. If any Non-Storm water discharge or severe vehicle tracking occurs please call 420-1272.

Project Name: 123abc

MINIMUM SIGN DIMENSION = 4'X4'

SWPPP Location: ABC Company Construction Trailer
100 W Center

SWPPP Contact: John Doe
XYZ Environmental
801-111-2233

NOI 8.5"x 11"

NOI 8.5"x 11"

SWPPP Drawing 17"x 22"

PERCOLATION RATE: 15 MINUTES PER INCH

DISTURBED AREA = 0.45 ACRES

C-VALUE BEFORE CONSTRUCTION = 0.30
C-VALUE AFTER CONSTRUCTION = 0.83

NOTE: CIVIL ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE IMPLEMENTATION OF THIS PLAN DURING CONSTRUCTION. SUCH RESPONSIBILITY IS SOLELY THE CONTRACTOR'S.

SWPPP CONTACT LIST:

COMPANY	CONTACT	PHONE
AF STORM DRAIN SEWER	Ashton Hardy	(801) 404 6162
AF STORM WATER INSPECTOR	Harlan Nielson	(801) 404 6361
AF FLOOD IRRIGATION COMPANY	Ernie Johns	(801) 756 6626
TIMPANOGOS SPECIAL SERVICE DISTRICT	Jon Adams	(801) 756 5231

SITE OPERATOR IS RESPONSIBLE FOR THE FOLLOWING:

1. SUBMITTING A NOTICE OF INTENT (NOI) TO THE UTAH STATE DIVISION OF WATER QUALITY. A COPY OF THE NOI MUST BE SUBMITTED TO AMERICAN FORK CITY.
2. SUBMITTING A SWPPP DOCUMENT TO AMERICAN FOR CITY FOR APPROVAL BEFORE CONSTRUCTION.
3. OBTAIN A LAND DISTURBANCE PERMIT FROM AMERICAN FORK CITY AT LEAST 15 DAYS PRIOR TO CONSTRUCTION.

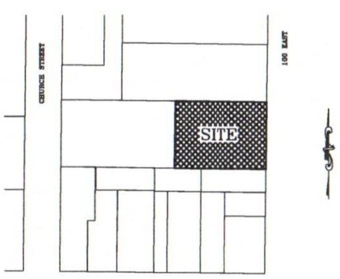
SWMP CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PE STAMP, SIGN AND DATE

EROSION CONTROL NOTES:

1. CONSTRUCT A SILT FENCE AS SHOWN ON PLAN. SEE BMP SF.
2. INSTALL SEDIMENT TRAP IN FRONT OF ALL SILT FENCES. SEE BMP ST.
3. CONST. A 15'X50'X2' DEEP COBBLE VEHICLE TRACKING CONTROL AREA AS SHOWN ON PLAN. SEE BMP SCEWA
4. INSTALL CONCRETE WASH OUT AREA. SEE BMP CWM
5. INSTALL FILTER FABRIC UNDER CONSTRUCTED STORM DRAIN INLETS.
6. INSTALL GARBAGE CONTAINER. SEE BMP WD
7. INSTALL PORTABLE TOILET. SEE BMP PT
8. INSTALL MATERIALS STORAGE AREA. SEE BMP MS
9. CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
10. CONTRACTOR TO WATER SITE AT LEAST WEEKLY OR MORE FREQUENTLY AS NEEDED TO CONTROL DUST POLLUTION.
11. SWEEP STREET. SEE BMPS DC & PLSV
12. INSTALL LANDSCAPING. SEE BMP TPS
13. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE BMP'S. CONTACT DEVELOPER FOR CONTRACTOR INFORMATION.



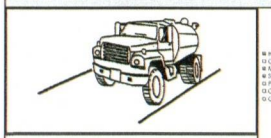
VICINITY PLAN

SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

Know what's below. Call before you dig.

BENCH MARK	REVISIONS			Developer: Op-prop LLC	43 NORTH APARTMENTS		
SOUTH QUARTER CORNER, SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN ELEVATION = 4594.27 (NGVD 29 DATUM) – FOUND BRASS CAP TO CONVERT ELEVATIONS TO NAVD88, RAISE 3.39' HIGH FOR A MONUMENT ELEVATION OF 4597.66	Rev.	Date	Description	564 W. 700 S. #405 Pleasant Grove, UT 84062 801-550-3992	AMERICAN FORK		UTAH
	2	06/17/21	REVISED PER CITY COMMENTS	EXCEL ENGINEERING David W. Peterson, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-1504; david@excelcivil.com	Drawn by: D.W.P.	EROSION CONTROL PLAN	Scale: 1"=10'
					Designed by: D.W.P.		Date: 03/02/21
					Checked by: D.W.P.		C6

BMP: Dust Controls — DC



Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

Application:
Dust control is useful in any process, area, loading and unloading area, material handling area, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.

Installation/Application Criteria:
- Two kinds of street sweepers are common: brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- Mechanical equipment should be operated according to the manufacturers' recommendations, and should be inspected regularly.
- Water may be sprayed on the ground surface to maintain dry soils, making it less susceptible to wind erosion.

Limitations:
- Street sweeping is labor and equipment intensive and may not be effective for all pollutants.
- Water sprayed from water trucks must be done at a rate such that the water is absorbed in the soil. If excessive amounts of water are used, it may run off, carrying soil with it.

Maintenance:
If excess water results from water spraying, dust-contaminated waters should not be allowed to run off site. Areas may need to be sprayed to keep dust from spreading.

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ☒ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ☐ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

BMP: Parking Lot Sweeping/Vacuuming — PLSV

Program Elements
- ☐ New Development
- ☐ Residential
- ☐ Commercial Activities
- ☐ Industrial Activities
- ☒ Municipal Facilities
- ☒ Illegal Discharges

Description:
Reduce the discharges of pollutants to stormwater from parking lot surfaces by conducting parking lot cleaning on a regular basis.

Approach:
- Predict parking prior to and during sweeping.
- Establish frequency of sweeping based on anticipated need and observations of debris and sediment accumulation.
- Increase sweeping frequency just before the rainy season.
- Lots that generate greater amounts of debris or sediment must be swept more frequently. These include lots associated with or adjacent to recreational, commercial, or industrial areas, or other areas of high vehicle or pedestrian traffic.
- Manually remove debris from corners or other areas of the parking lot that equipment cannot reach.
- Keep accurate operation logs to track programs.
- Equipment selection can be key for this particular BMP. There are two types used: the mechanical broom sweeper (more effective at picking up large debris and cleaning wet streets), and the vacuum sweeper (more effective at removing fine particles and associated heavy metals). It may be useful to have the ability to use both kinds.

Limitations:
- Conventional sweepers are not able to remove oil and grease.
- Mechanical sweepers are not effective at removing finer sediments.
- Effectiveness may also be limited by parking lot conditions, presence of parked vehicles, presence of construction projects, climatic conditions and condition of curbs.

Maintenance:
- Acquisition and maintenance of equipment is generally handled by the company hired to perform the sweeping/vacuuming.

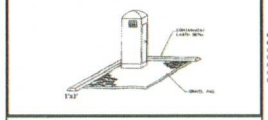
Targeted Pollutants
- ☒ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ☒ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ☒ Floatable Materials
- ☒ Bacteria & Viruses

- ☒ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☒ O&M Costs
- ☒ Regulatory
- ☒ Training
- ☒ Staffing
- ☒ Administrative

☐ High ☒ Medium ☐ Low

BMP: Portable Toilets — PT



Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
Temporary on-site sanitary facilities for construction personnel.

Application:
All sites with no permanent sanitary facilities, or where permanent facility is too far from activities.

Installation/Application Criteria:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill protection/leak.
- Stake toilets to prevent them from tipping.

Limitations:
No limitations.

Maintenance:
- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collections should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

Adapted from Salt Lake County BMP Fact Sheet

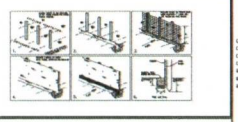
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Waste

- ☒ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

BMP: Silt Fence — SF



Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
A temporary sediment barrier consisting of an enclosed filter fabric stretched across or around to supporting posts.

Application:
- 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 near top of stream bank.
- Inlet protection: place fence surrounding catch basins.

Installation/Application Criteria:
- Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or ringer, with trailing edge entering into anchor trench.
- Backfill trench over filter fabric to anchor.

Limitations:
- Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- Recommended maximum upgradient slope length of 150 feet
- Recommended maximum uphill grade of 21 (50%)
- Recommended maximum flow rate of 0.5 cfs
- Ponding should not be allowed behind fence

Maintenance:
- Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- Look for runoff bypassing ends of barrier, or undercutting barrier.
- Repair or replace damaged pieces of the barrier and remove accumulated sediment.
- Reanchor fence as necessary to prevent shorts-offing.
- Remove accumulated sediment when it reaches ½ the height of the fence.

Adapted from Salt Lake County BMP Fact Sheet

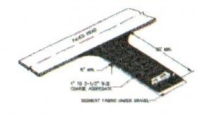
Targeted Pollutants
- ☒ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ☒ High Impact
- ☐ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

BMP: Stabilized Construction Entrance and Wash Area — SCEWA



Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

Description:
A stabilized pad of crushed stone located where construction traffic enters or leaves the site from a to paved surface. The area can be used to spray off vehicles before they leave the site.

Applications:
At any point of ingress or egress of a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

Installation/Application Criteria:
- Clear and grub area and grade to provide maximum slope of 2%.
- Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).
- Place coarse aggregate, 1 to 2-1/2 inches inside, to a minimum depth of 6 inches.
- Provide water to the area that can be used to spray off vehicles as needed to prevent the tracking of mud off of the construction site. This may not be needed during periods of work, but is needed when construction is proceeding under wet conditions.
- Provide berming as needed to prevent sediment laden wash water from entering storm water facilities, or other water bodies, or leaving the site.

Limitations:
- Requires periodic top dressing with additional stones.
- Should be used in conjunction with street sweeping on adjacent public right-of-way.
- Must be situated such that wash water does not run off site.

Maintenance:
- Inspect daily for loss of gravel or sediment buildup.
- Inspect adjacent roadway for sediment deposit and clean by shoveling and sweeping.
- Repair entrance and replace gravel as required to maintain control in good working condition.
- Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

Adapted from Salt Lake County BMP Fact Sheet

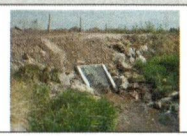
Targeted Pollutants
- ☒ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ☐ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

BMP: BMP Inspection and Maintenance — BMPIM



Description:
Inspect and maintain all structural BMP's (both existing and new) on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.

Approach:
Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.
- Annual inspections.
- Prioritize maintenance to clean, maintain, and repair or replace structures in areas beginning with the highest pollutant loading.
- Clean structural BMP's to high pollutant areas just before the wet season to remove sediments and debris accumulated during the summer and fall.
- Keep accurate logs of what structures were maintained and when they were maintained.
- Record the amount of waste collected.

Limitations:
- Availability of trained staff.

Applications
- ☐ Manufacturing
- ☒ Material Handling
- ☒ Vehicle Maintenance
- ☐ Construction
- ☐ Commercial Activities
- ☐ Roadways
- ☒ Waste Containment
- ☒ Housekeeping Practices

Targeted Pollutants
- ☒ Sediment
- ☒ Nutrients
- ☒ Heavy Metals
- ☒ Toxic Materials
- ☒ Oxygen Demanding Substances
- ☒ Oil & Grease
- ☒ Floatable Materials
- ☒ Bacteria & Viruses

- ☒ High Impact
- ☒ Medium Impact
- ☒ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☒ Staffing
- ☒ Training
- ☒ Administrative

☐ High ☒ Medium ☐ Low

BMP: Vehicle And Equipment Cleaning — VEC

Objectives
- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and/or training employees and subcontractors.

Installation/Application:
- Use off-site commercial washing businesses as much as possible. Washing vehicles and equipment outdoors on in areas where wash water flows into paved surfaces or into drainage pathways can pollute storm water. If you wash a large number of vehicles or pieces of equipment, consider conducting the work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash water properly. Performing the wash off-site can also be economical by eliminating the need for a separate washing operation at your site.
- If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.
- Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.

Limitations:
- Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades.
- Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance.

Maintenance:
- Minimal, some berm repair may be necessary.

Adapted from Salt Lake County BMP Fact Sheet

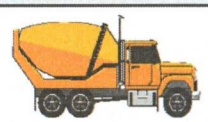
Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

- ☐ High Impact
- ☐ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☐ O&M Costs
- ☐ Maintenance
- ☐ Training

☐ High ☒ Medium ☐ Low

BMP: Concrete Waste Management — CWM



Objectives
- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

Applications:
This technique is applicable to all types of sites.

Installation/Application Criteria:
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on site.
- Perform washout of concrete trucks off site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet).
- Train employees and subcontractors in proper concrete waste management.

Limitations:
- Off-site washout of concrete wastes may not always be possible.

Maintenance:
- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Waste

- ☒ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☐ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

BMP: Spill Clean-Up — SCU

Objectives
- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

Application:
All sites.

General:
- Store controlled materials within a storage area.
- Educate personnel on prevention and clean-up techniques.
- Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

Methods:
- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR SUPPLY SPILL CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #801-536-4100) for any spill of reportable quantity.

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants
- ☐ Sediment
- ☐ Nutrients
- ☒ Toxic Materials
- ☒ Oil & Grease
- ☒ Floatable Materials
- ☐ Other Waste

- ☒ High Impact
- ☐ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements
- ☒ Capital Costs
- ☐ O&M Costs
- ☐ Maintenance
- ☒ Training

☐ High ☒ Medium ☐ Low

Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-556-3992

EXCEL ENGINEERING
David W. Palmer, P.E., License #278193
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504, david@excelcivil.com

43 NORTH APARTMENTS

AMERICAN FORK — UTAH

Drawn by: D.W.P.	BMP DETAILS	Scale: NTS
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C7

GENERAL NOTES

1. City of American Fork, A.P.W.A, Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. Item Numbers listed refer to City of American Fork Item Numbers unless otherwise noted.
2. The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
3. The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.
4. The Contractor shall notify the City of American Fork, Public Works Department in writing at least 7 working days prior to beginning construction and request a pre-construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre-construction meeting.
5. The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
6. Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City of American Fork, Public Works Department, that documents "as _ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.
7. The Contractor shall restrict construction activity to public right_of_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
8. The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.
9. Non_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
10. The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross_sections that existed before construction.
11. Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
12. Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) must be approved by the City Engineer.
13. All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
14. All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
15. All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City of American Fork. Precast concrete products without proof of inspection shall not be approved for installation.
16. All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.
17. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.
18. All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 - inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.
19. Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
20. Permits to construct in the right-of-way of existing streets must be obtained from the City of American Fork, Public Works Department before commencing construction.
21. The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
22. Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.
23. The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City of American Fork standard construction drawings.
24. Any modification to the work shown on drawings must have prior written approval by the City Engineer.
25. Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition
26. Public street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a green background.
27. Private street signs shall meet all City of American Fork specifications with lettering colored in white displayed over a blue background

UTILITIES

1. The following utilities are known to be located within the limits of this project:

COMPANY		CONTACT	PHONE
CENTURYLINK	- TELEPHONE	Ryan Allred	(385) 223 0084
ROCKY MTN. POWER	- POWER	Teria Walker	(801) 756 1310
COMCAST	- CABLE	Elysia Valdez	(801) 401 3017
QUESTAR GAS	- GAS	Wendy Edwards	(801) 853 8513
AMERICAN FORK CITY	- WATER	Jay Brems	(801) 763 3060
AMERICAN FORK CITY	- SEWER	Ashton Hardy	(801) 763 3060
AMERICAN FORK CITY	- STORM	Ashton Hardy	(801) 763 3060
AMERICAN FORK CITY	- SWPPP	Harlan Nielsen	(801) 763 3060
AMERICAN FORK CITY	- P.I.	Jay Brems	(801) 763 3060
AMERICAN FORK CITY	- PLANNING	Adam Olsen	(801) 763 3000
AMERICAN FORK CITY	- ENGINEERING	Ben Hunter	(801) 763 3060
FIRE MARSHALL	- FIRE DEPT	Mat Sacco	(801) 7633040
FIRE & RESCUE			911

2. The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800-662-4111) at least 2 working days before start of construction.
3. The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City of American Fork and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
4. Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
5. When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

TRAFFIC CONTROL

1. Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.
2. All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.
3. At all other hours the Contractor shall maintain minimum one _ lane two _ way traffic. Traffic circulation must be supervised by a Certified Flagger.
4. Steady _ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5. Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.
6. The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.
7. The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.
8. Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

EROSION AND SEDIMENT CONTROL

1. The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
2. The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.
3. A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.
4. A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.
5. The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
6. Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
7. The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
8. Disturbed areas that will remain un-worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.
9. Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

WATER LINE

1. All water line materials shall be provided and installed according to current specifications of the City of American Fork, Water Department.
2. All public water pipe with a diameter 3 inches to 8 inches shall be Ductile Iron, Class 53. Public water pipe 12 inches in diameter or larger shall be Ductile Iron, Class 54.
3. Only fire hydrants conforming to City of American Fork standards will be approved for use.
4. Public water lines shall be disinfected by the City of American Fork, Water Department. Requests for water line chlorination shall be made through the City of American Fork, Water Department. The cost for chlorination shall be paid for by the Contractor.
5. All water lines shall be disinfected according to City of American Fork Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).
6. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City of American Fork, Water Department.
7. The Contractor shall be responsible for all costs associated with the disinfection of all water lines construction per this plan. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications.
8. The Contractor shall paint all fire hydrants according to City of American Fork standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.
9. No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City of American Fork, Water Department and have been accepted by the Public Works Department.
10. The Contractor shall notify the City of American Fork, Water Department at (801) 763 3060 at least 24 hours before tapping into existing water lines.
11. All water main stationing shall be based on street centerline stationing.
12. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
13. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.
14. All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

SANITARY SEWER

1. Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of American Fork, Public Works Department and the Utah Department of Health Code and Regulations.
2. The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.
3. Pipe for 6-inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be used at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of American Fork Construction Inspection Division quality control requirements.
4. All manhole lids shall be provided with continuous self_sealing gaskets.
5. The approved construction drawings shall show where bolt_down lids are required.
6. Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of American Fork sanitary manhole standard drawing. Manhole lids shall include the word SEWER.
7. All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.
7. At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.
8. Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.
9. Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited according to the American Fork Code of Ordinances.
10. All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.
11. Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.
12. Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.
13. The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.
14. All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.

STORM SEWER

1. All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro _ seeded and hydro _ mulched according to the City of American Fork Standard Specifications.
2. Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
3. Granular backfill shall be compacted granular material according to American Fork City Standard Specifications.
4. All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5. Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.
6. Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.
7. Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

STRIPING AND SIGNING

1. All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.
2. All signing must be done following MUTCD Manual recommendations, current edition.
3. Only sand-blasting is allowed for removal of existing striping.
4. Contractor is responsible for removal of conflicting existing striping.
5. Materials used for striping must comply with the Utah Department of Transportation standard specifications.

MAIL DELIVERY

1. The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.
2. This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.
3. Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
4. Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

1. The Contractor shall make proper arrangements with the American Fork City, Water Department for the use of fire hydrants when used for work performed under this project's approval.

PRESSURIZED IRRIGATION LINE

1. All Pressurized irrigation line materials shall be provided and installed according to current specifications of the City of American Fork, PI Department.
2. All pressurized irrigation pipe with a diameter 3 inches to 12 inches shall be C900 PVC purple pipe.
3. Pressure testing shall be performed in accordance with the City of American Fork, Construction and Material Specifications. The Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the lines have been pressure tested addressed to the City of American Fork, PI Department.
4. The Contractor shall notify the City of American Fork, PI Department at (801) 404-6129 Jay Brems at least 24 hours before tapping into existing water lines.
5. All pressurized irrigation line stationing shall be based on street centerline stationing.
6. All bends, joint deflections and fittings shall be backed with concrete per City of American Fork standards.
7. The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of pressurized irrigation service. Interruption of pressurized irrigation service shall be minimized and must be approved by the City Engineer.
8. All water lines shall be placed at a minimum depth of 2 feet measured from top of finished grade to top of pressurized irrigation line. Pressurized irrigation lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

REGISTERED PROFESSIONAL ENGINEER
No. 270393
DAVID W. PETERSON
9/15/21
DWP
STATE OF UTAH

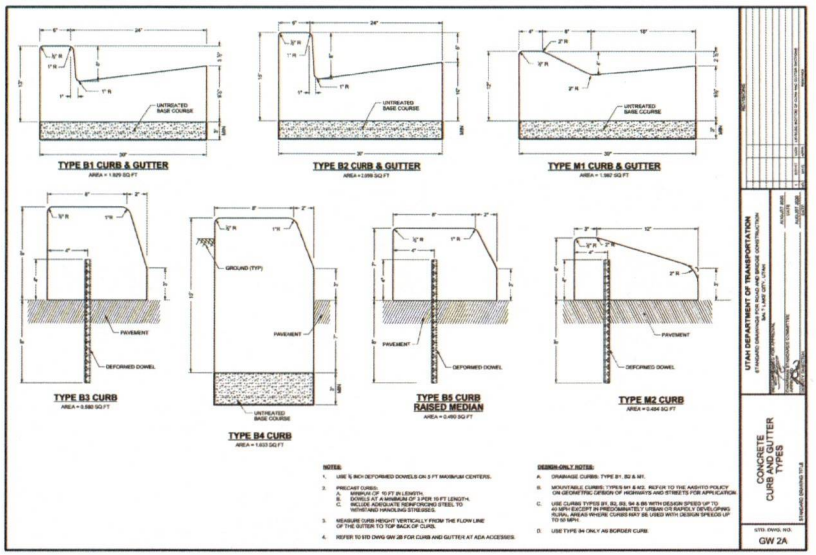
Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-550-3992

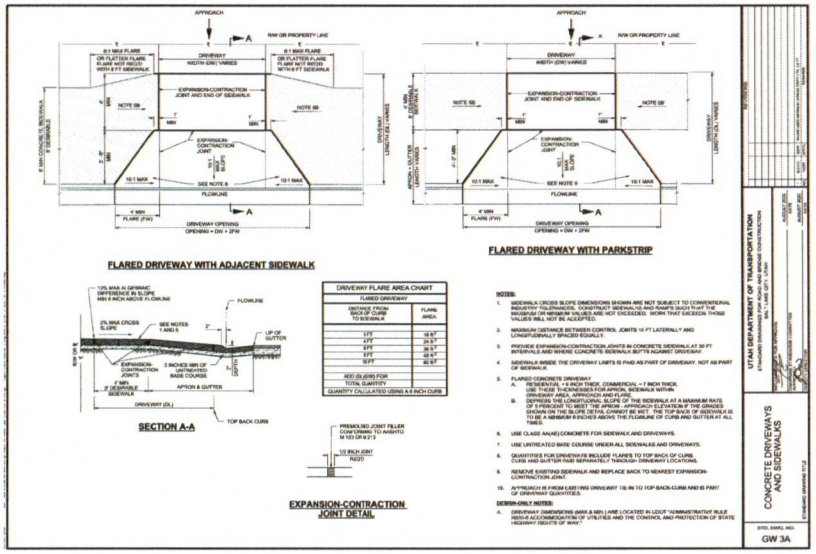
EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS

AMERICAN FORK — UTAH

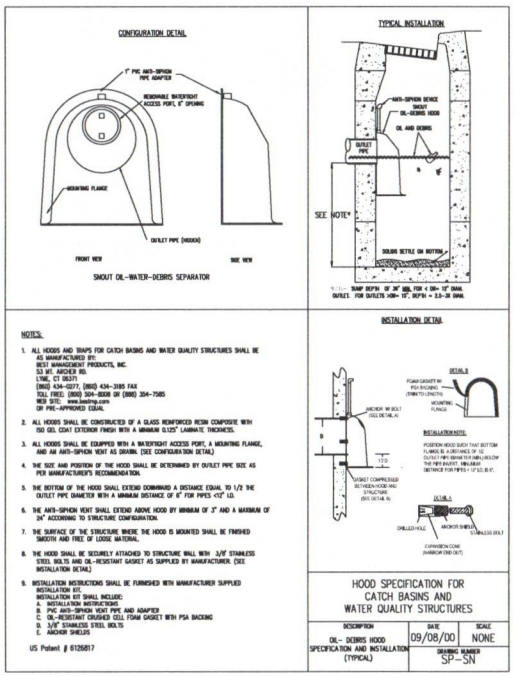
Drawn by: D.W.P.	AMERICAN FORK STANDARD CONSTRUCTION NOTES	Scale: NTS
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C8



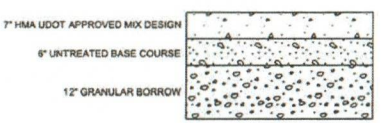


UDOT NOTES

1. UDOT RESERVES THE RIGHT, AT ITS OPTION, TO INSTALL A RAISED MEDIAN ISLAND OR RESTRICT THE ACCESS TO A RIGHT-IN OR RIGHT-OUT AT ANY TIME.
2. WORK ON THE UDOT RIGHT-OF-WAY IS SEASONALLY RESTRICTED FROM OCTOBER 15 TO APRIL 15.
3. ROW WORK: WORK IS NOT ALLOWED ON THE RIGHT-OF-WAY DURING THE AM/PM PEAK TRAFFIC HOURS (6:00-9:00 A.M AND 3:30 – 6:00 P.M.). ADDITIONAL WORK RESTRICTIONS OR MODIFICATIONS MAY BE IMPOSED AT THE TIME OF ENCROACHMENT PERMIT.
4. REPLACE ALL PAVEMENT MARKINGS IN KIND (TAPE WITH TAPE AND PAINT WITH PAINT). INSTALL ALL PAINT LINES WITH PERMANENT PAINT APPLICATION PER UDOT SPECIFICATION 02765. PAINT MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT'S PERMITS OFFICER.
5. ALL NEW PAVEMENT WORDS, ARROWS, AND SYMBOLS MARKING WITHIN THE RIGHT-OF-WAY SHALL BE PRE-FORMED THERMO PLASTIC. ALL LETTERS, ARROWS, AND SYMBOLS SHALL CONFORM WITH THE "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION.
6. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY MUST BE HIGH INTENSITY GRADE (TYPE IX SHEETING) WITH B3 SLIP BASE. INSTALL ALL SIGNS PER UDOT SN SERIES STANDARD DRAWINGS.
7. BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE GENERAL CONTRACTOR IS REQUIRED TO OBTAIN AN ENCROACHMENT PERMIT FROM THE APPLICABLE REGION'S PERMITS OFFICE BEFORE WORKING WITHIN THE STATE RIGHT-OF-WAY.
8. NO ROAD CUTS ALLOWED ON THIS JOB.
9. FOR ALL UTILITY TAPS (ROAD CUTS), USE FLOWABLE FILL PER UDOT'S CURRENT MIX DESIGN (50-150 PSI) UDOT SPEC. 03575.
10. ALL UTILITIES WITHIN THE PAVED SURFACE MUST BE BORED.
11. FOR EXCAVATIONS OUTSIDE OF THE ROADWAY, BACK FILL WITH UDOT APPROVED GRANULAR BORROW AND ROAD BASE. COMPACTION PER UDOT SPEC. 2056 AND 2721.
12. OWNER, DEVELOPER, AND/OR THE CONTRACTOR IS REQUIRED TO HIRE AN INDEPENDENT COMPANY FOR ALL TESTING WITHIN THE UDOT RIGHT-OF-WAY.
13. OWNER, DEVELOPER, AND THE CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGE TO THE UDOT RIGHT-OF-WAY THAT MAY BE DIRECTLY OR INDIRECTLY CAUSED BY THE DEVELOPMENT ACTIVITY.
14. TRAFFIC SIGNAL INSTALLATION OR MODIFICATION REQUIRES A SEPARATE WARRANTY BOND ONCE THE WORK HAS BEEN COMPLETED AND ACCEPTED. THE PERMITTEE IS RESPONSIBLE FOR HIRING AN INDEPENDENT INSPECTION COMPANY TO PERFORM INSPECTION SERVICES FOR ALL SIGNAL WORK COMPLETED. FOR A LIST OF THE UDOT APPROVED CONTRACTORS AND CONSULTANTS CONTACT THE APPROPRIATE REGIONS TRAFFIC SIGNALS ENGINEER.
15. PARTIAL CONCRETE PANEL REPLACEMENT IS NOT ALLOWED. WHEN PANELS ARE REMOVED, THE ENTIRE PANEL IS REQUIRED TO BE REPLACED PER UDOT STANDARDS, SPECIFICATIONS, AND STANDARD DRAWINGS.
16. DOUBLE SAW CUT THE CONCRETE TO PREVENT THE SPALLING OF OTHER CONCRETE PANELS AND TO AVOID OTHER CUTS. OVER CUTS AND SPALLS WILL REQUIRE FULL PANEL REPLACEMENT.
17. ALL ABOVE GROUND FEATURES INCLUDING UTILITIES (POLES, FIRE HYDRANTS, BOXES, ETC.) MUST BE RELOCATED OUT OF THE AASHTO CLEAR ZONE OR A MINIMUM OF 18" BEHIND CURB.



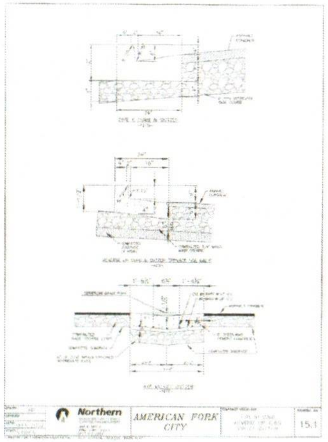
SNOUT DETAIL

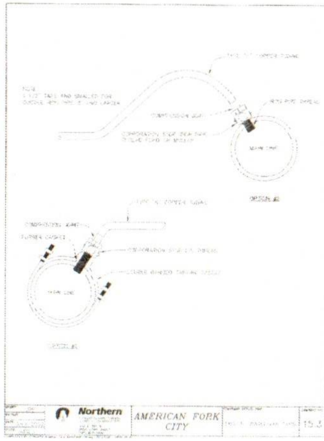


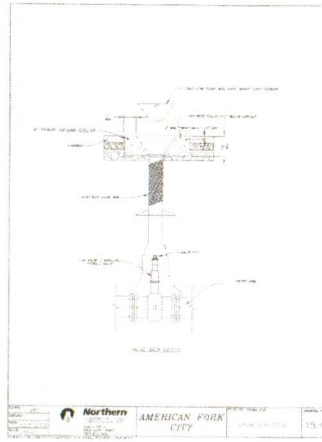
PAVEMENT SECTION FOR STATE HIGHWAY

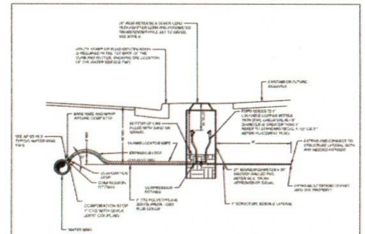
NOTE: ALL MATERIALS TO MEET UDOT SPECIFICATIONS

Developer: Dp-prop LLC 564 W. 700 S. #405 Pleasant Grove, UT 84062 801-556-3992	43 NORTH APARTMENTS AMERICAN FORK UTAH	
EXCEL ENGINEERING David W. Pokorny, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com	Drawn by: D.W.P. Designed by: D.W.P. Checked by: D.W.P. DETAIL SHEET	Scale: NTS Date: 03/02/21 C9







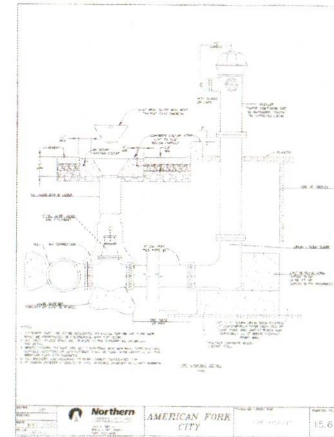


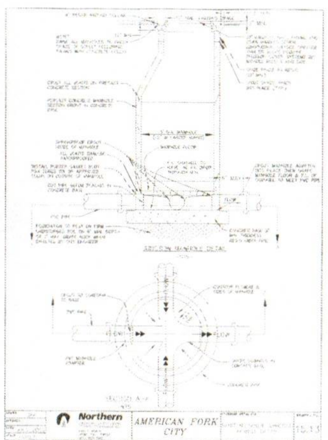
1" CULINARY WATER SERVICE CONNECTION

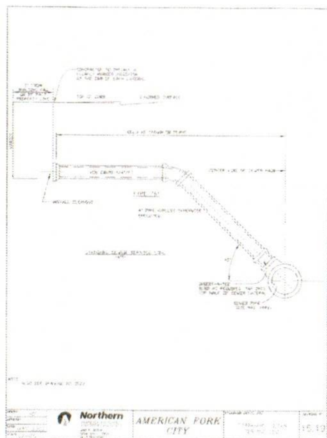
NOTES:

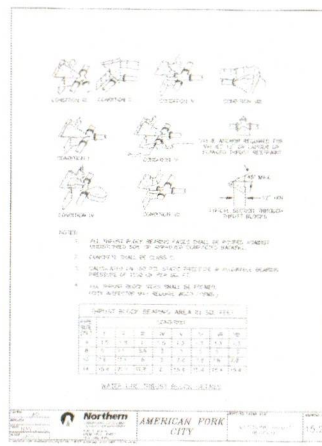
1. METER BOX, COVER, COPPERSETTER, CORPORATION STOP & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10'
4. (EDGE TO EDGE)FROM ANY EXISTING OR PROPOSED SEWER LATERAL. (PER UTAH CODE R309-550-7)
5. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18" ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE. (PER UTAH CODE R309-550-7)
6. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS.
7. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE D&L SUPPLY MODEL B-5021(LIGHT TRAFFIC) WITH A RECESSED TRANSPONDER HOLE SET TO GRADE.
8. ALL FITTINGS SHALL BE CTS.
9. SPLICING /REPAIR OF EXISTING POLY PIPE MECHANICAL COMPRESSION WITH INTERNAL STIFFENERS ARE REQUIRED MUST BE APPROVED BY AMERICAN FORK CITY.
10. LATERALS SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO SETTER AND FROM SETTER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 42" UNLESS APPROVED BY THE CITY ENGINEER.
11. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB.

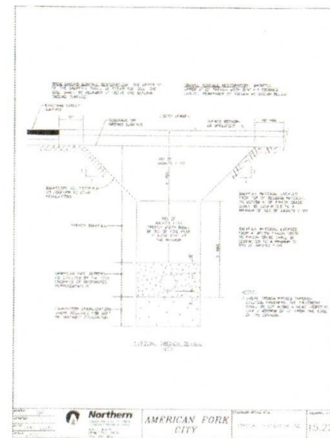
DRAWN BY NLP	AMERICAN FORK	AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801)763-3030	1" CULINARY WATER SERVICE CONNECTION	DRAWING NO. 15.5
REVISED ABM				
DATE 9/19/2019				
SCALE VARIES				

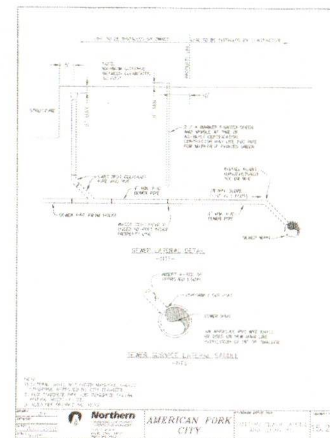












Developer: Op-prop LLC 564 W. 700 S. #405 Pleasant Grove, UT 84062 801-550-3992	43 NORTH APARTMENTS		
	AMERICAN FORK		UTAH
EXCEL ENGINEERING David W. Peterson, P.E., License #270393 12 West 100 North, Suite 201, American Fork, UT 84003 P: (801) 756-4504; david@excelcivil.com	Drawn by: D.W.P.	DETAIL SHEET	Scale: NTS
	Designed by: D.W.P.		Date: 03/02/21
	Checked by: D.W.P.		C10

CULTEC RECHARGER 902HD® SPECIFICATIONS

GENERAL

CULTEC RECHARGER® 902HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. OR CANADA BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416).
2. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
   - A. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
   - B. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
   - C. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
3. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
   - A. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430.
   - B. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
   - C. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95
5. THE CHAMBER SHALL BE STRUCTURAL FOAM INJECTION MOLDED OF BLUE VIRGIN HIGH MOLECULAR WEIGHT IMPACT-MODIFIED POLYPROPYLENE.
6. THE CHAMBER SHALL BE ARCHED IN SHAPE.
7. THE CHAMBER SHALL BE OPEN-BOTTOMED.
8. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER® 902HD SHALL BE 48 INCHES (1219 MM) TALL, 78 INCHES (1981 MM) WIDE AND 4.25 FEET (1.30 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 902HD SHALL BE 3.67 FEET (1.12 M).
10. MULTIPLE CHAMBERS MAY BE CONNECTED TO FORM DIFFERENT LENGTH ROWS. EACH ROW SHALL BEGIN AND END WITH A SEPARATELY FORMED CULTEC RECHARGER® 902HD END CAP. MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (900 MM) PVC.
11. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™ FC-48 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 10 INCHES (250 MM) HDPE AND 12 INCHES (300 MM) PVC.
12. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 49 INCHES (1245 MM) LONG.
13. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 902HD CHAMBER SHALL BE 17.31 FT^3/ FT (1.61 M^3 / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 902HD SHALL BE 63.47 FT^3 / UNIT (1.80 M^3 / UNIT) - WITHOUT STONE.
14. THE NOMINAL STORAGE VOLUME OF THE HVLV™ FC-48 FEED CONNECTOR SHALL BE 0.913 FT^3 / FT (0.085 M^3 / M) - WITHOUT STONE.
15. THE RECHARGER 902HD CHAMBER SHALL HAVE 5 CORRUGATIONS.
16. THE CHAMBER SHALL BE CAPABLE OF ACCEPTING A 6 INCH (150 MM) INSPECTION PORT OPENING AT THE TOP CENTER OF EACH CHAMBER, CENTERED ON THE CORRUGATION CREST.
17. THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES.
18. MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 8.3 FEET (2.53 M).

END CAP PARAMETERS

1. THE CULTEC RECHARGER® 902HD END CAP (REFERRED TO AS 'END CAP') SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, INC. OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416).
2. THE END CAP SHALL BE TWIN-SHEET THERMOFORMED OF VIRGIN HIGH MOLECULAR WEIGHT POLYETHYLENE.
3. THE END CAP SHALL BE JOINED AT THE BEGINNING AND END OF EACH ROW OF CHAMBERS USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.
4. THE NOMINAL DIMENSIONS OF THE END CAP SHALL BE 48.5 INCHES (1231 MM) TALL, 78 INCHES (1982 MM) WIDE AND 9.7 INCHES (246 MM) LONG. WHEN JOINED WITH A RECHARGER 902HD CHAMBER, THE INSTALLED LENGTH OF THE END CAP SHALL BE 6.2 INCHES (157 MM).
5. THE NOMINAL STORAGE VOLUME OF THE END CAP SHALL BE 5.34 FT^3/ FT (0.50 M^3 / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF AN INTERLOCKED END CAP SHALL BE 2.76 FT^3 / UNIT (0.08 M^3 / UNIT) - WITHOUT STONE.
6. MAXIMUM INLET OPENING ON THE END CAP IS 30 INCHES (750 MM) HDPE OR 36 INCHES (900 MM) PVC.
7. THE END CAP SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12.

CULTEC HVLV FC-48 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL

CULTEC HVLV FC-48 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 902HD STORMWATER CHAMBERS.

FEED CONNECTOR PARAMETERS

1. THE FEED CONNECTOR SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE FEED CONNECTOR SHALL BE VACUUM THERMOFORMED OF BLACK HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).
3. THE FEED CONNECTOR SHALL BE ARCHED IN SHAPE.
4. THE FEED CONNECTOR SHALL BE OPEN-BOTTOMED.
5. THE NOMINAL DIMENSIONS OF THE CULTEC HVLV FC-48 FEED CONNECTOR SHALL BE 12 INCHES (305 mm) TALL, 16 INCHES (406 mm) WIDE AND 49 INCHES (1245 mm) LONG.
6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-48 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 m³ / m) - WITHOUT STONE.
7. THE HVLV FC-48 FEED CONNECTOR SHALL HAVE 4 CORRUGATIONS.
8. THE HVLV FC-48 FEED CONNECTOR MUST BE FORMED AS A WHOLE UNIT HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
9. THE FEED CONNECTOR SHALL BE DESIGNED TO WITHSTAND AASHTO HS-25 DEFINED LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
10. THE FEED CONNECTOR SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

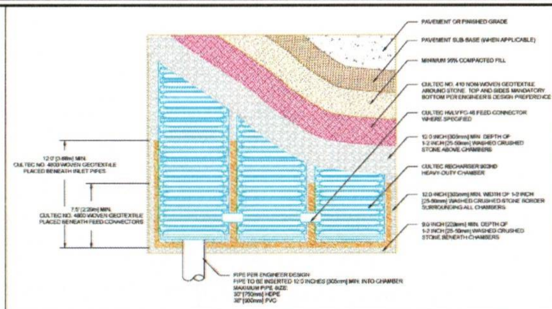
CULTEC NO. 4800™ WOVEN GEOTEXTILE

CULTEC NO. 4800 WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

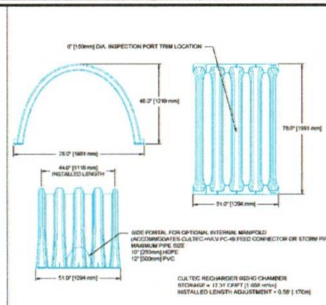
GEOTEXTILE PARAMETERS

1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT2 (470 LPM/M2) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 90% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

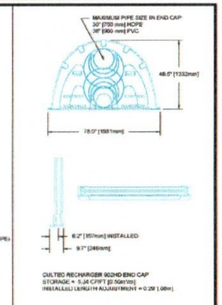
902HD 1.0 — **GENERAL NOTES**



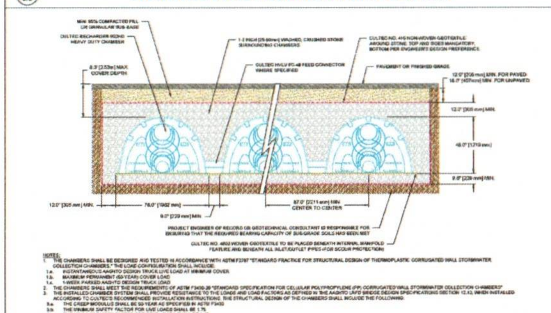
902HD 2.0 — **CULTEC RECHARGER 902HD HEAVY DUTY PLAN VIEW**



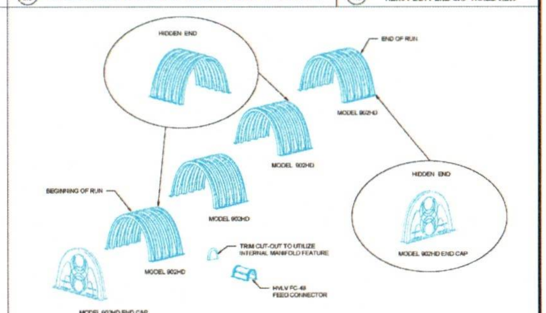
902HD 3.0 — **CULTEC RECHARGER 902HD HEAVY DUTY THREE VIEW**



902HD 4.0 — **CULTEC RECHARGER 902HD HEAVY DUTY END CAP THREE VIEW**

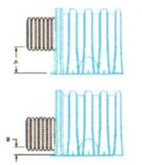


902HD 5.0 — **CULTEC RECHARGER 902HD HEAVY DUTY CROSS SECTION**



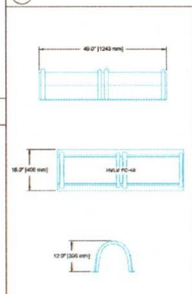
902HD 6.0 — **CULTEC RECHARGER 902HD HEAVY DUTY TYPICAL INTERLOCK**

PIPE	A	B
6" [150 mm]	N/A	N/A
8" [200 mm]	N/A	N/A
10" [250 mm]	N/A	N/A
12" [300 mm]	29.50" [749 mm]	2.29" [57 mm]
15" [375 mm]	26.50" [673 mm]	2.29" [57 mm]
18" [450 mm]	23.50" [597 mm]	2.50" [64 mm]
24" [600 mm]	16.50" [420 mm]	3.00" [76 mm]

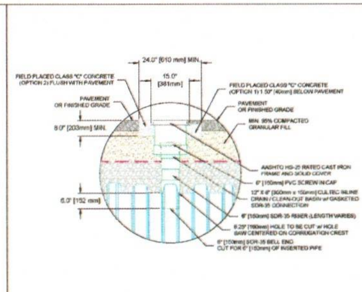


*THE TYPICAL INVERT TABLE ABOVE IS BASED ON THE INSIDE DIAMETER OF STANDARD CORRUGATED PLASTIC PIPE. THE HEAVY DUTY END CAP HAS PRE-MARKED TRIM LINES FOR PIPE DIAMETERS 12" (300mm), 15" (375mm), 18" (450mm) AND 24" (600mm). PIPES OF ANY SIZE AND MATERIAL UP TO 24" MAY BE PLACED AT CUSTOM LOCATIONS AND CUSTOM INVERTS. THE CROWN OF THE PIPE MUST REMAIN A MINIMUM OF 4" (100mm) FROM THE EDGE OF THE HEAVY DUTY END CAP.

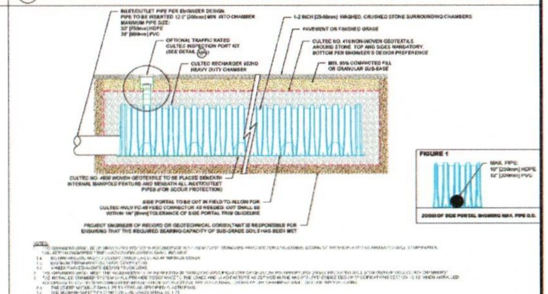
902HD 7.0 — **CULTEC RECHARGER 902HD TYPICAL PIPE INVERTS**



902HD 8.0 — **CULTEC HVLV FC-48 FEED CONNECTOR THREE VIEW**



902HD 9.0 — **CULTEC INSPECTION PORT - ZOOM DETAIL**



902HD 10.0 — **CULTEC INTERNAL MANIFOLD - OPTIONAL INSPECTION PORT DETAIL**

CULTEC, Inc.™
Subsurface Stormwater Management Systems
P.O. Box 280 — PH: (203) 775-4416
878 Federal Road — PH: (800) 4-CULTEC
Brookfield, CT 06804 — FX: (203) 775-1462
www.cultec.com — tech@cultec.com

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE CULTEC SYSTEM'S DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE PROJECT ENGINEER OF RECORD'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S MINIMUM REQUIREMENTS. CULTEC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS.

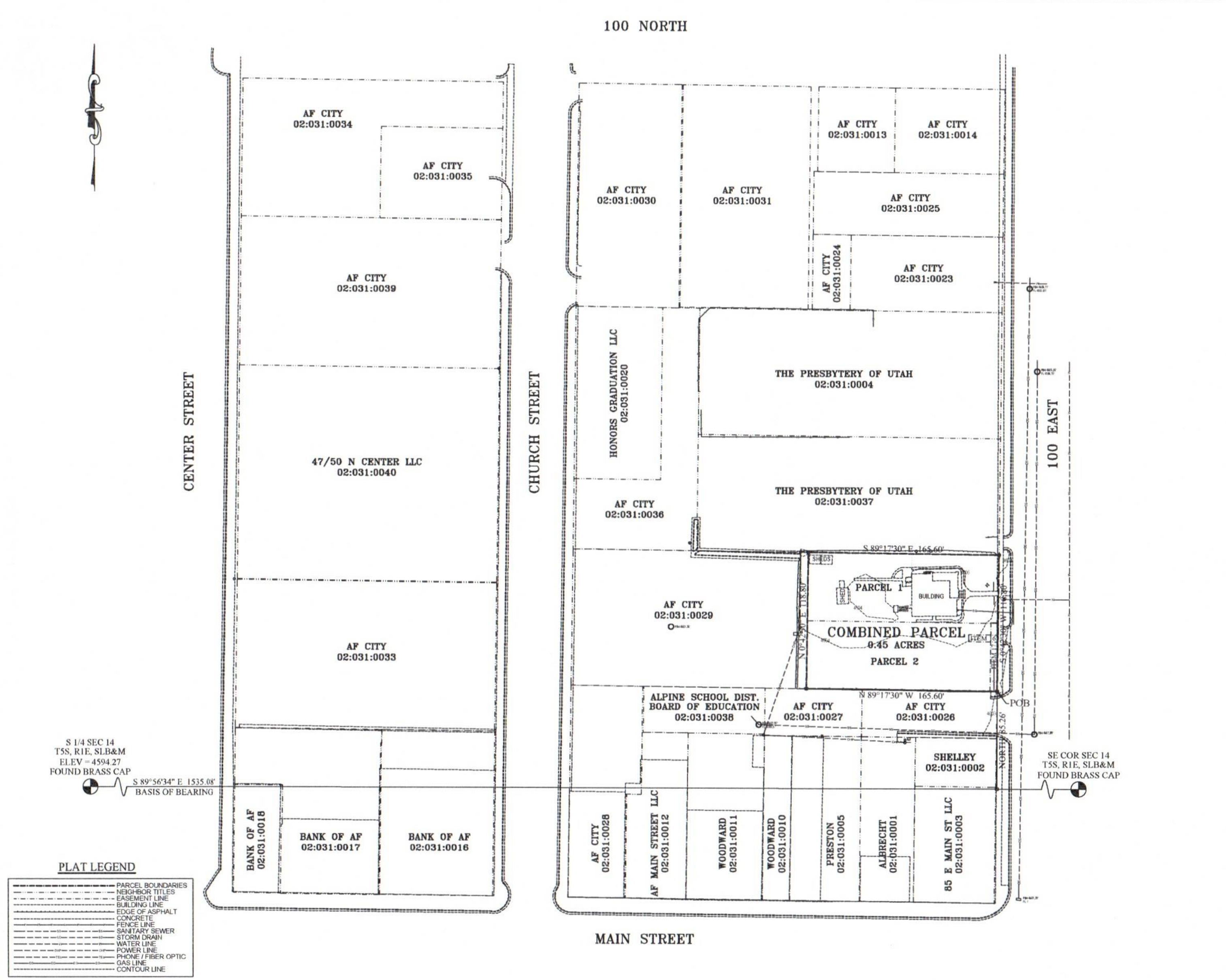
RECHARGER 902HD
DETAIL SHEET
TRAFFIC APPLICATION

CULTEC STORMWATER CHAMBER			
PROJECT NO:	-	DATE:	03/2020
DESIGNED BY:	TECH	CHECKED BY:	TECH
SCALE:	N.T.S.	SHEET NO:	1 OF 2

Developer: Op-prop LLC
564 W. 700 S. #405
Pleasant Grove, UT 84062
801-550-3992

EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; david@excelcivil.com

43 NORTH APARTMENTS		
AMERICAN FORK		UTAH
Drawn by: D.W.P.	DETAIL SHEET	Scale: NTS
Designed by: D.W.P.		Date: 03/02/21
Checked by: D.W.P.		C11



ALTA / NSPS TABLE "A"

1. MONUMENTS PLACED MONUMENTS PLACED AT EXTERIOR CORNERS.
2. ADDRESS 43 NORTH 100 EAST, AMERICAN FORK, UT 84003
3. FLOOD ZONE CLASSIFICATION FEMA FIRM PANEL 49049C0168F EFFECTIVE 06/19/2020. ZONE X - OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN
4. GROSS LAND AREA TOTAL AREA = 0.45 ACRES.
5. VERTICAL RELIEF GROUND SURVEY. S QTR COR. SEC. 14 = 4594.27'
6a. CURRENT ZONING CLASSIFICATION CC-1, CENTRAL COMMERCIAL
8. SUBSTANTIAL VISIBLE IMPROVEMENTS SEE MAP FOR LOCATED IMPROVEMENTS.
9. PARKING AREAS NO PAVED PARKING AREAS ON SITE.
11. LOCATION OF UTILITIES, VISIBLE & MARKED SEE MAP AND FOLLOWING NOTE
13. NAMES OF ADJOINING OWNERS SEE MAP
14. NEAREST STREET INTERSECTION SEE MAP FOR ADJACENT STREET LOCATIONS
16. OBSERVED EVIDENCE OF RECENT CONSTRUCTION NONE FOUND
17. STREET CONSTRUCTION/CHANGES IN ALIGNMENT NONE FOUND

* ITEM 11 - UTILITIES WERE LOCATED BASED ON VISIBLE STRUCTURES AND OTHER VISIBLE EVIDENCES. NO GUARANTEE IS GIVEN THAT ADDITIONAL UTILITIES DO NOT EXIST ON THE SITE WHICH ARE NOT VISIBLE OR MARKED ON THE GROUND. IT IS RECOMMENDED THAT BLUESTAKES BE CALLED PRIOR TO ANY EXCAVATION.

COMMITMENT FOR TITLE INSURANCE

A COMMITMENT FOR TITLE INSURANCE # L38353E, ISSUED BY GRIFFITHS & TURNER TITLE SERVICES INC., DATED NOVEMBER 4, 2020.

SCHEDULE A:
ITEM 1-4 SURVEYOR MAKES NO COMMENT
ITEM 5 SEE LEGAL DESCRIPTIONS FOR CORRECTED DESCRIPTION.
SCHEDULE B-I:
ITEM A-G SURVEYOR MAKES NO COMMENT
SCHEDULE B-II
ITEM 1-2 SURVEYOR MAKES NO COMMENT
ITEM 3-5 SEE SURVEYOR'S NARRATIVE FOR DISCUSSION ON RIGHT-OF-WAY ALONG 100 E
ITEM 6-10 SURVEYOR MAKES NO COMMENT
ITEM 11 NO UTILITY EASEMENTS NOTED. SEE SURVEYOR'S NARRATIVE ABOUT 100 E.
ITEM 12-14 SURVEYOR MAKES NO COMMENT.
ITEM 15 ENTRY 8441:1927 - BLANKET POWER EASEMENT. NOT PLOTTABLE.
ITEM 16 ENTRY 2286:1975 - PHONE EASEMENT. SEE MAP FOR LOCATION
ITEM 17 ENTRY 30194:1976 - PHONE EASEMENT. SEE MAP FOR LOCATION
ITEM 18 SURVEYOR MAKES NO COMMENT

SURVEYOR'S NARRATIVE

The Basis of Bearing for this survey is South 89°56'34" East along Section Line from the South Quarter Corner of Section 14, Township 5 South, Range 1 East, Salt Lake Base and Meridian to the Southeast Corner of said Section 14. Both monuments were located as shown on county tie sheets. The block survey is based on the Amended Plat of Block 18, Plat "A", American Fork City Survey. Block definition shows Center Street, Church Street and 100 East Street as parallel to one another with Main Street being perpendicular. Locations of said street improvements show that Center and Church Streets are parallel with Main Street being perpendicular. However, 100 East Street has a deviation of approximately 7 feet along the block line. The deviation may be due to the reconstruction of 100 East at some time after the definition of Block 18 to allow for better flow to the North as 100 East is a major collector. This deviation causes the existing sidewalk to overlap into Lot 12 a distance of 0.2 feet on the south side of Lot 12 and 1.35 feet on the north side of Lot 12 instead of being exactly 1 foot behind the walk as is the case at the southeast corner of the block. The East/West position of the block definition is based on the existing street improvements along Church Street and verified by existing buildings and fence lines. The North/South position of the block is based on existing sidewalks, building lines and fence lines. The purpose of this survey was to determine an overall boundary and locate existing improvements to facilitate the design of future improvements.

AS-SURVEYED DESCRIPTION

All of Lot 12, Amended Block 18, Plat "A", American Fork City Survey as recorded in the office of the Utah County Recorder, also being described as follows:

Beginning at the Southeast Corner of Lot 12, Amended Block 18, Plat "A", American Fork City Survey, said point being located South 89°56'34" East along section line 1535.08 feet and North 85.26 feet from the South Quarter Corner of Section 14, Township 5 South, Range 1 East, Salt Lake Base and Meridian; thence North 89°17'30" West 165.60 feet; thence North 0°42'30" East 118.80 feet; thence South 89°17'30" East 165.60 feet; thence South 0°42'30" West 118.80 feet to the point of beginning.
Area = 0.45 Acres

LEGAL DESCRIPTIONS

PARCEL 1
THE NORTH HALF OF LOT 12, BLOCK 18, *AMENDED* PLAT "A", AMERICAN FORK CITY SURVEY, ACCORDING TO THE OFFICIAL PLAT THEREOF ON FILE AND OF RECORD IN THE OFFICE OF THE UTAH COUNTY RECORDER.

PARCEL 2
THE SOUTH HALF OF LOT 12, BLOCK 18, *AMENDED* PLAT "A", AMERICAN FORK CITY SURVEY, ACCORDING TO THE OFFICIAL PLAT THEREOF ON FILE AND OF RECORD IN THE OFFICE OF THE UTAH COUNTY RECORDER.

CERTIFICATION

To Dustin Kuttler; GT Title Services, Inc.; and Old Republic National Title Insurance Company:

This is to cerfity that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6a, 8, 9, 11, 13, 14, 16, and 17 of Table A thereof. The field work was completed in December 2020.

12-18-2020
DATE AARON D. THOMAS - PLS NO. 6418780

PROFESSIONAL LAND SURVEYOR
AARON D. THOMAS
12-18-2020
STATE OF UTAH

40 20 0 40 80 120
Scale 1" = 40'

PROJECT NAME	WILSON PARCELS
ADDRESS +/-	43 NORTH 100 EAST
CITY:	AMERICAN FORK
COUNTY:	UTAH
STATE:	UTAH

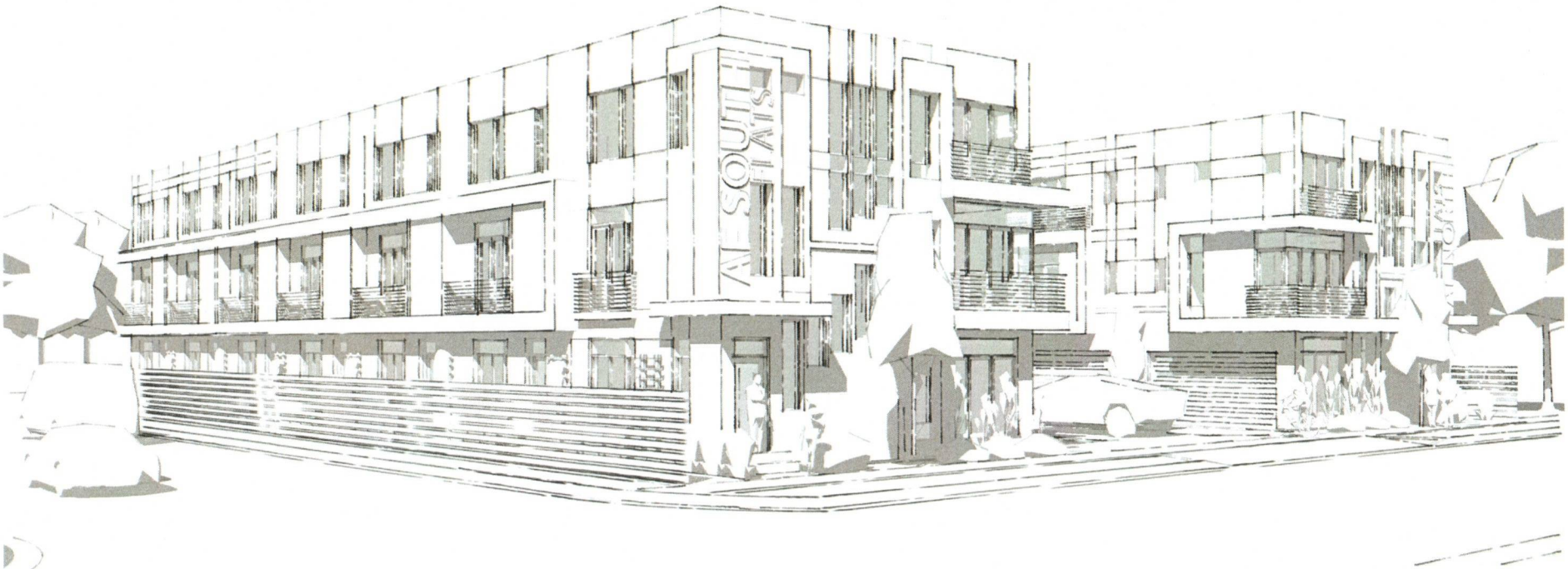
SURVEYOR: AZTEC ENGINEERING INC.
732 N. 780 W.
AMERICAN FORK, UT. 84003
AZTECENGINEERING@GMAIL.COM

CIVIL ENGINEER: EXCEL ENGINEERING
David W. Peterson, P.E., License #270393
12 West 100 North, Suite 201, American Fork, UT 84003
P: (801) 756-4504; F: (801) 756-4511

ALTA / NSPS LAND TITLE SURVEY

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SLB&M

SHEET:	1 OF 1
DATE:	DEC. 18, 2020
SCALE:	1"=40'



AMERICAN FORK FLATS

DESIGN REVIEW PACKAGE

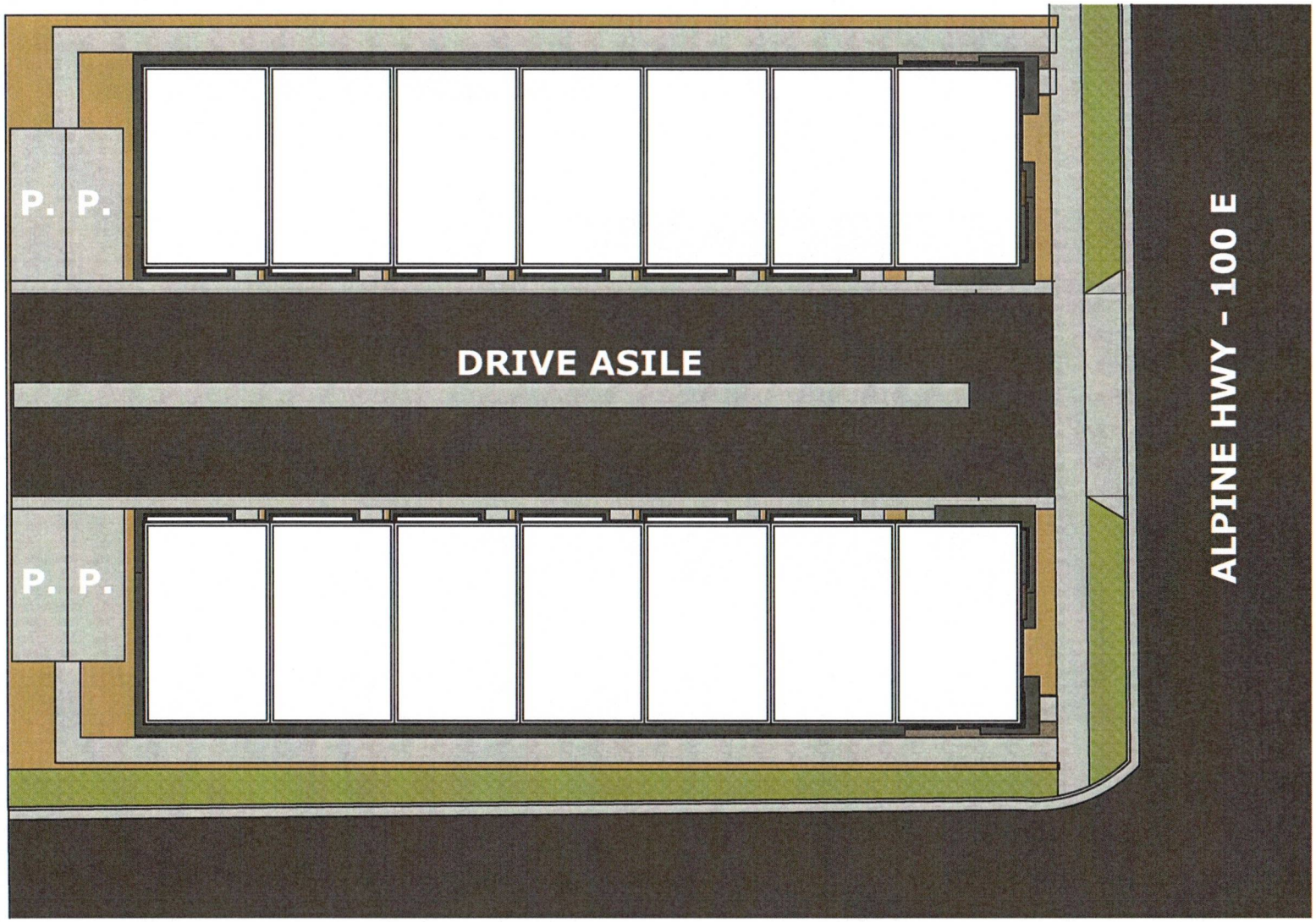
AMERICAN FORK TOWNHOMES

PROJECT NUMBER AE2020.344

STREET VIEW PERSPECTIVE SKETCH

5 JANUARY 2022

ae urbia
architects and engineers



SITE PLAN

PROJECT NUMBER AE2020.344

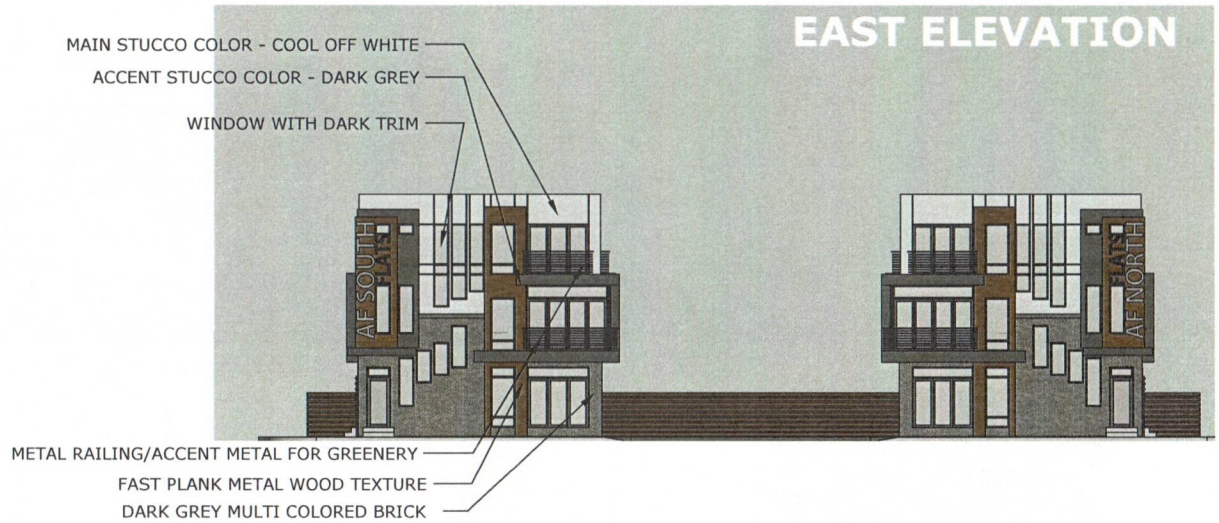
SCALE 1/16" = 1'-0"

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

aeurbia
architects and engineers



BUILDING ELEVATIONS

DESIGN REVIEW PACKAGE

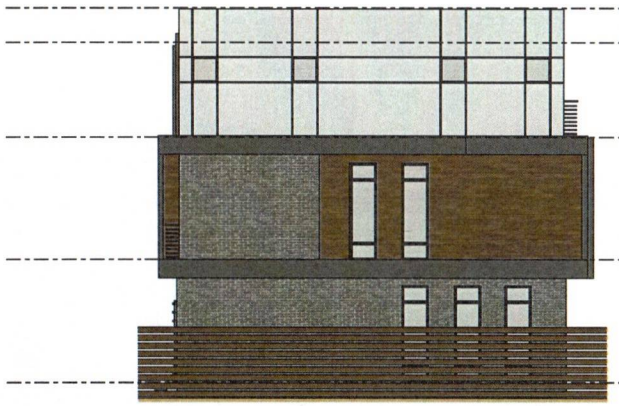
AMERICAN FORK TOWNHOMES

5 JANUARY 2022

PROJECT NUMBER AE2020.344

SCALE 1/16" = 1'-0"

aeurbia architects and engineers



WEST END ELEVATION

EAST END ELEVATION

HEIGHT ELEVATIONS

DESIGN REVIEW PACKAGE

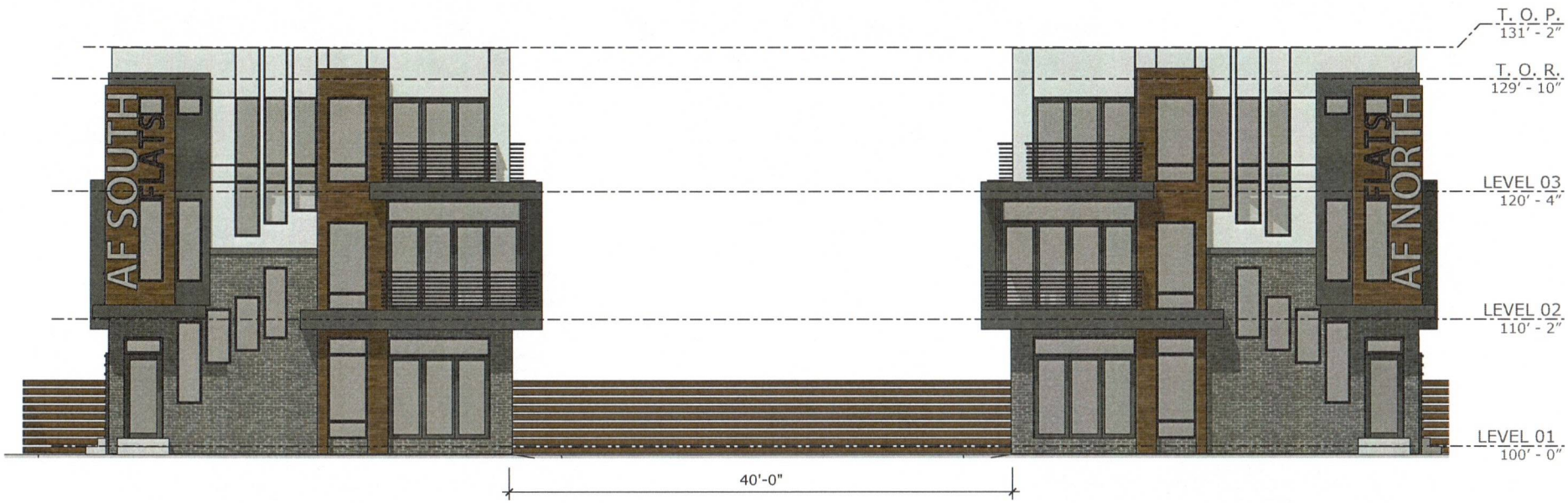
AMERICAN FORK TOWNHOMES

5 JANUARY 2022

PROJECT NUMBER AE2020.344

SCALE 1/16" = 1'-0"

aeurbia architects and engineers



HEIGHT ELEVATIONS

DESIGN REVIEW PACKAGE

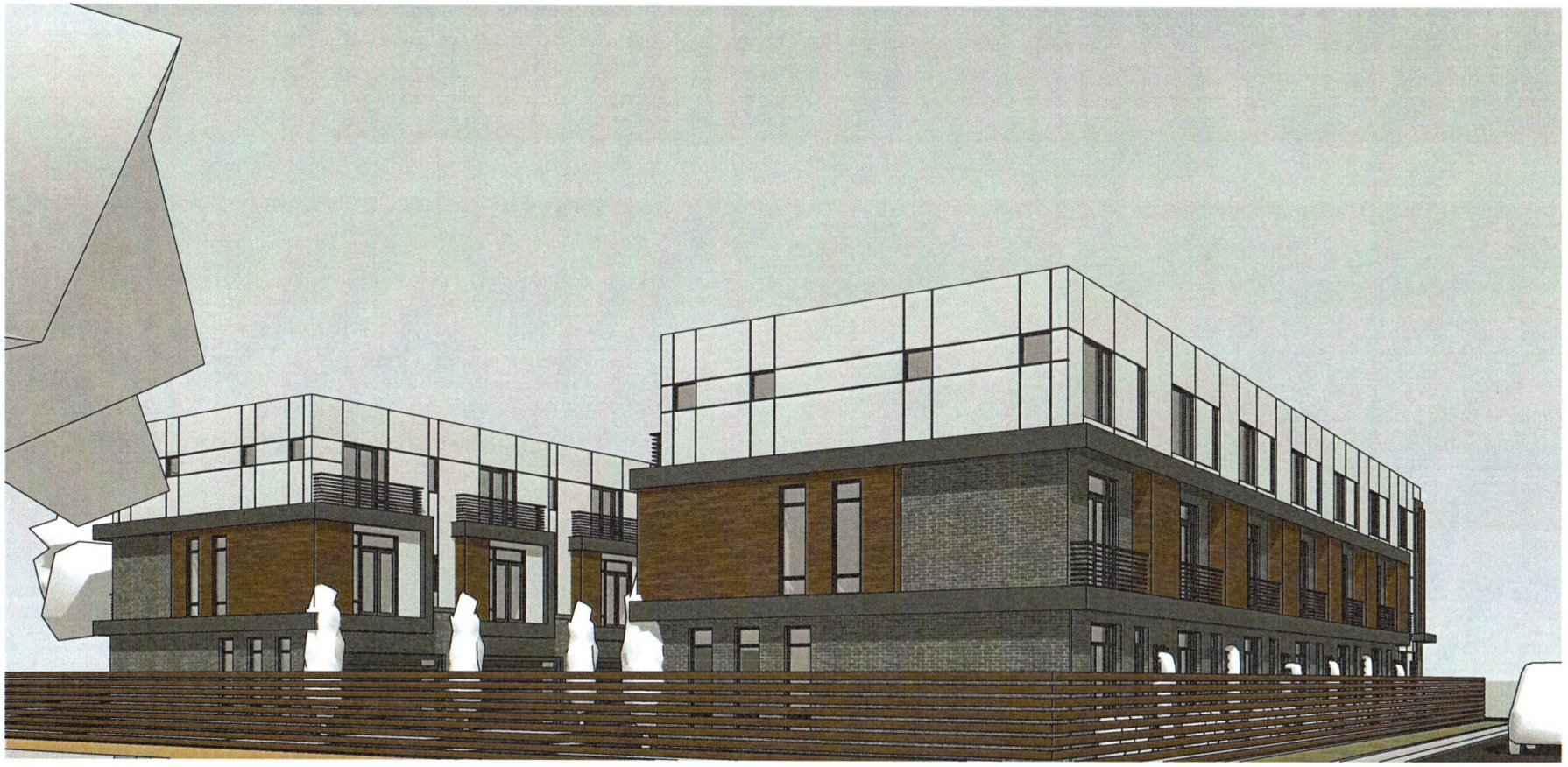
AMERICAN FORK TOWNHOMES

5 JANUARY 2022

PROJECT NUMBER AE2020.344

SCALE 1/16" = 1'-0"

aeurbia architects and engineers



END VIEW TOWHOMES

PROJECT NUMBER AE2020.344

PERSPECTIVE VIEW

DESIGN REVIEW PACKAGE

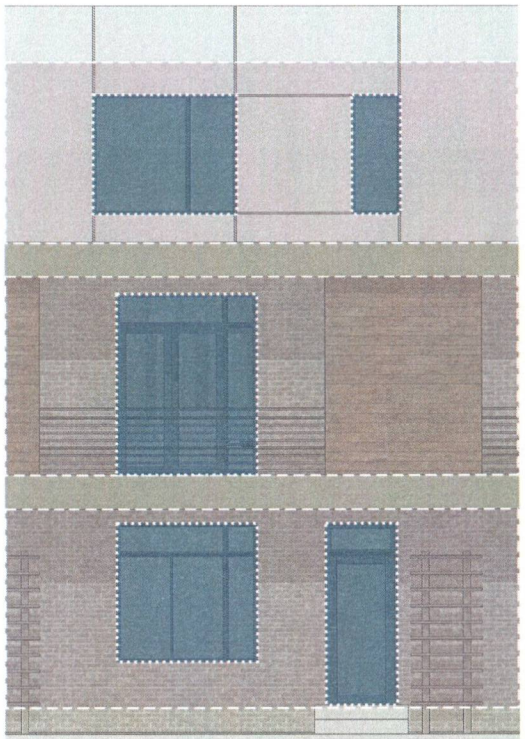
AMERICAN FORK TOWNHOMES

5 JANUARY 2022

ae urbia
architects and engineers

OPENING

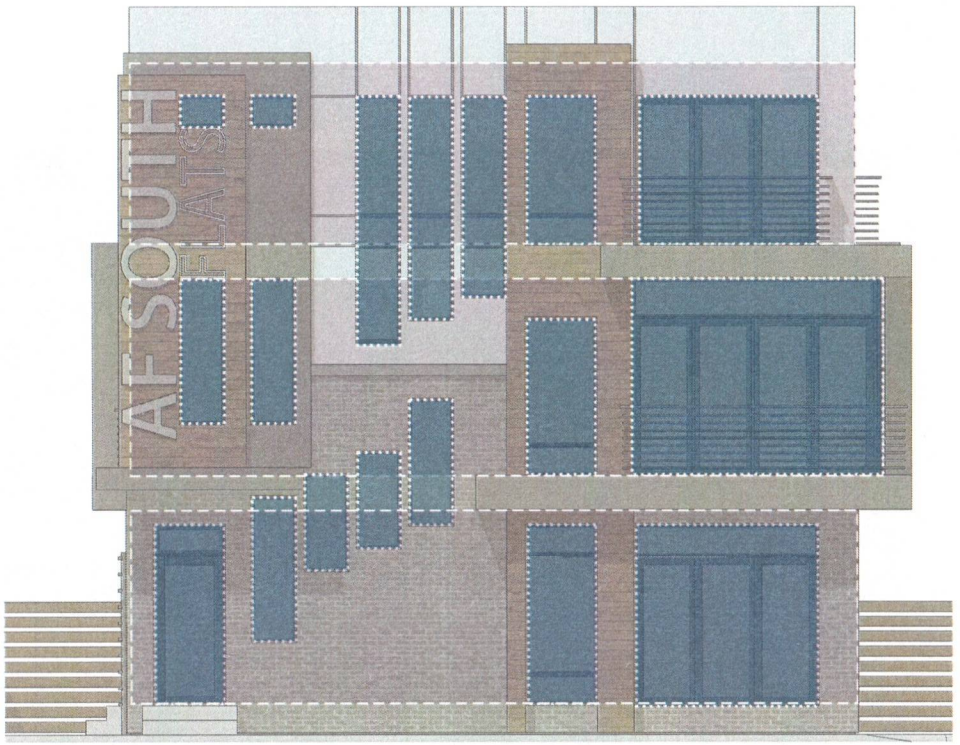
WALL AREA



TYPICAL ELEVATION

511 SQ FT
TOTAL SURFACE AREA

31.1 % OPENINGS REQUIRMENT - 159 SQ FT
OPENINGS



FRONT MAIN ELEVATION

838 SQ FT
TOTAL SURFACE AREA

53.9 % OPENINGS/SIGNAGE - 452 SQ FT

ELEVATION PERCENTAGES

PERCENTAGE OPENINGS

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

SCALE ae urbia architects and engineers

PROJECT NUMBER AE2020.344

SCALE 3/16" = 1'-0"

CODE TAKEN FROM WEBSITE

17.4.401 CENTRAL COMMERCIAL ZONE

D - 5

All buildings abutting a street shall have at **least one entrance** facing onto said street, with a maximum building setback range of 10'-15' from said street, with the exception of gasoline service stations (see #7 below).

At least **fifty percent** of any wall area that faces a street or other public space shall contain

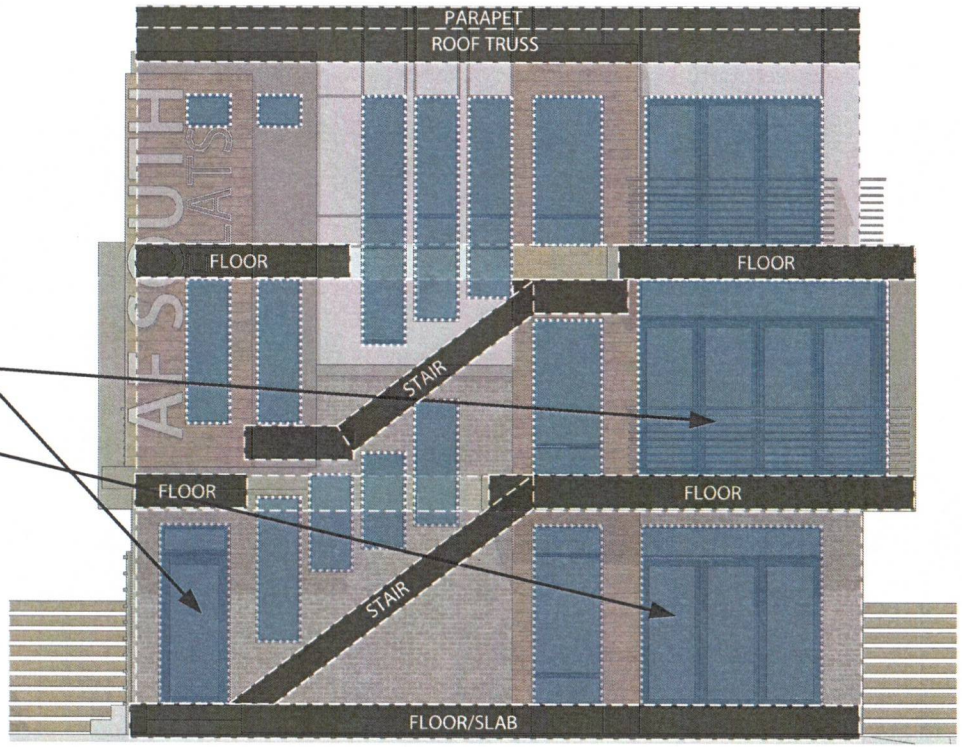
display areas, windows, or doorways.

Windows must allow views into working areas or lobbies, pedestrian entrances or display areas. Walls facing side streets must contain at least twenty-five percent of the wall space in windows, display areas, or doors. Blank walls (i.e., walls without any doors or windows) are prohibited. A variety of compatible exterior materials (minimum 4), colors and design shall be used on all buildings. Architectural style shall consider historical precedent and material used within the downtown area and compliment that precedent.

OPENING

WALL AREA

NOT A WALL



FRONT MAIN ELEVATION

838 SQ FT
TOTAL SURFACE AREA

53.9 % OPENINGS/SIGNAGE - 452 SQ FT

CODE TAKEN FROM WEBSITE

SEEING AS A WALL ECLOSES A SPACE AND A WINDOW CAN PROVIED A VIEW INTO THAT SPACE WE KEPT THE REQUIRED 50% OPENINGS TO AREAS WHERE ABLE TO PROVIED A VIEW TO THE INSIDE THE CALCULATION IS TAKEN FROM EXTRAPOLATING THE WALL ARE BETWEEN THE GROUND FLOOR/SLAB AND THE BEARING OF ROOF. THAT TOTAL AREA IS 838 SQ FT AND OUR OPENINGS TOTAL 452 SQ FT GIVING US ALMOST 54% OPENING BASED ON THE FACADE THAT FACES THE STREET.

OPENINGS WRITE UP

ELEVATION PERCENTAGES

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

ae urbia architects and engineers

PROJECT NUMBER AE2020.344

SCALE 3/16" = 1'-0"

ARCHITECTURAL STYLE

The design of the townhomes is based off several elements found within a couple blocks of the property to allow the project to tie into its surrounding context. The townhomes are designed to be more of a complimentary building that adds to the quality of the environment while allowing more historical detailed buildings to be more predominate in the community. The townhomes are also proportionate to older brownstone townhome units and the pedestrian experience.

The first contextual element is the masonry base of brick - that can be seen along countless retail stores along Main Street. This helps to ground the townhomes and relate them back to the brick base retail buildings along Main Street and the historical brick buildings.

The second contextual element is the upper paneling effect which is found on many of the historical retail stores whether renovated or original.

The third design element is the repetition of the punched openings for windows in the façade. This relates back to the repetition of punched openings found in older buildings.

Lastly the design is complimented with simple banding and vertical elements. These are a design homage back to historical detailing, done in a manner that compliments the design and provides overhead protections to the townhome unit entrances.

CONCEPTUAL RENDERING

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

aeurbia architects and engineers

PROJECT NUMBER AE2020.344

DAYLIGHT

CONCEPTUAL RENDERING

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

PROJECT NUMBER AE2020.344

DAYLIGHT

aeurbia
architects and engineers

CONCEPTUAL RENDERING

PROJECT NUMBER AE2020.344

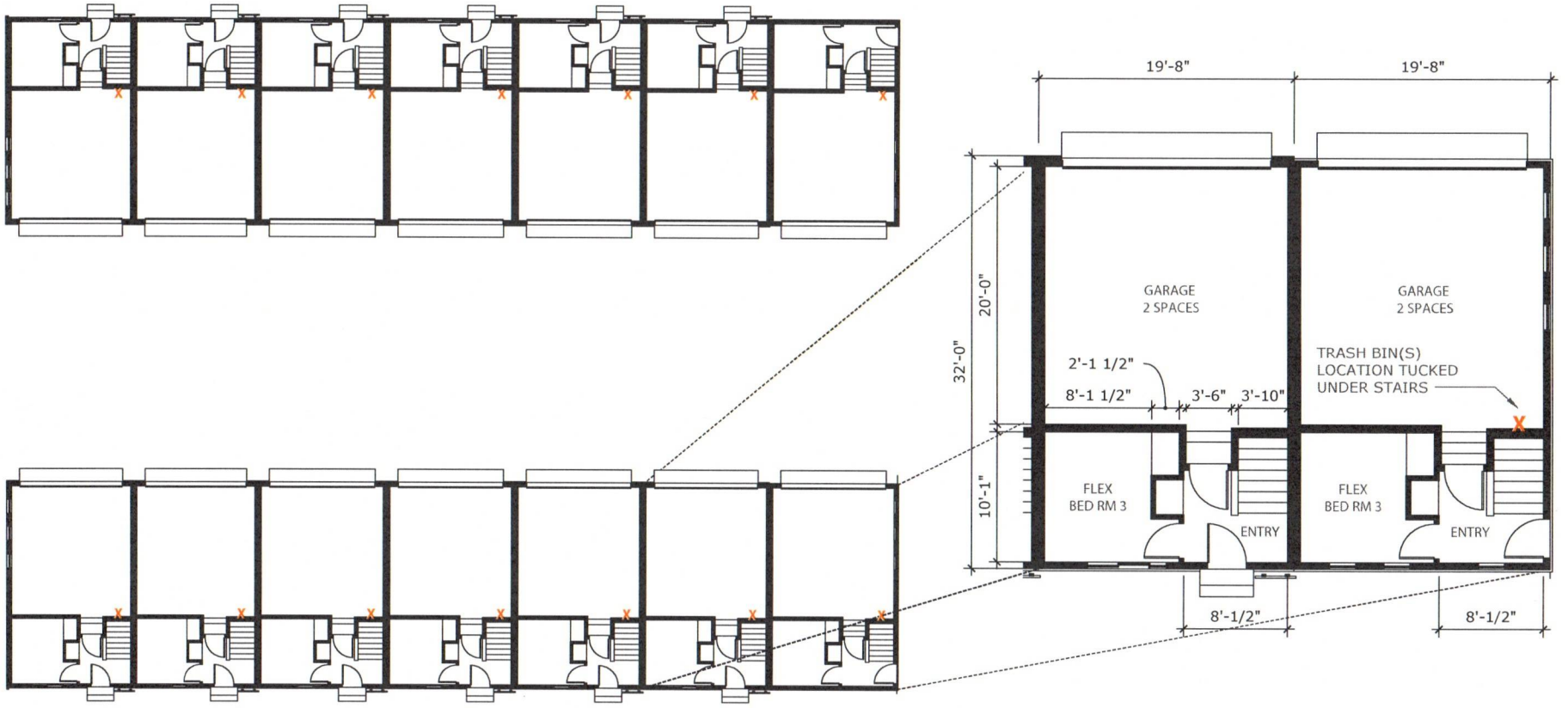
TWILIGHT

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

aeurbia
architects and engineers



TRASH LOCATIONS

DESIGN REVIEW PACKAGE

AMERICAN FORK TOWNHOMES

5 JANUARY 2022

PROJECT NUMBER AE2020.344

aeurbia architects and engineers