NEW LONGVIEW TOWNHOMES
FINAL DEVELOPMENT PLANS
LEE'S SUMMIT, MISSOURI

PROJECT NUMBER: 021-2987

BOX REAL ESTATE DEVELOPMENT
CONTACT: RUSSELL PEARSON
3152 SW GRANDSTAND CR.
LEE'S SUMMIT, MO 64081
913.735.9861

OWNER:

BOX Real Estate Development

3152 SW GRANDSTAND CR.
LEE'S SUMMIT, MO 64081
913.735.9861

LANDSCAPE ARCHITECT:

the olsson studio

1814 MAIN ST.
KANSAS CITY, MO 64108
816.842.8844

CIVIL ENGINEER:

olsson

1301 BURLINGTON ST.
NORTH KANSAS CITY, MO 64116
816.361.1177

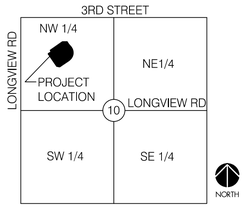
ARCHITECTS:

clockwork
ARCHITECTURE + BRANDING AGENCY

423 DELAWARE SUITE 102
KANSAS CITY, MO 64105
660.815.1316

PW+A

500 LOVETT BLVD SUITE 260
HOUSTON, TX 77006
713.522.2724



LOCATION MAP
SEC. 10, TWP. 47 N., RGE. 32 W.
(NTS)

VICINITY MAP

NOT TO SCALE NORTH

DRAWING DATE

2021 JUNE 16	FINAL DEVELOPMENT PLANS
2021 JULY 28	FINAL DEVELOPMENT PLANS 2ND SUBMITTAL
2021 OCTOBER 14	FINAL DEVELOPMENT PLANS 3RD SUBMITTAL
2021 NOVEMBER 15	FINAL DEVELOPMENT PLANS 4TH SUBMITTAL
2021 DECEMBER 02	FINAL DEVELOPMENT PLANS 5TH SUBMITTAL

MISSOURI ONE CALL SYSTEM

MISSOURI ONE CALL:

THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS AND TO THE BEST OF OUR KNOWLEDGE CONSTITUTES ALL KNOW FACILITIES. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISSOURI ONE CALL SYSTEMS, INC. AT 1-800-344-7483 IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

PROPERTY DESCRIPTION:

LOT 2, MINOR PLAT OF FASCINATION AT NEW LONGVIEW, LOTS 1 & 2, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI.
CONTAINING 6.76 ACRES MORE OR LESS.

BENCHMARK

THE STATION IS A KC METRO DISK SET IN CONCRETE AND FLUSH WITH THE GROUND. THE STATION IS TAMPED JA-147, 2000. STATION JA-148

STATE OF MISSOURI
BRANDON D MCBRIDE
NUMBER LA2010008447
LANDSCAPE ARCHITECT
10/14/2021

SHEEX INDEX

Sheet #	Sheet Description	Final Development Plans 06/16/2021	Final Development Plans 2nd Submittal 07/28/2021	Final Development Plans 3rd Submittal 10/14/2021	Final Development Plans 4th Submittal 11/15/2021	Final Development Plans 5th Submittal 12/02/2021
	COVER SHEET	X	X	X	X	X
L000	PROJECT SHEET	X	X	X	X	X
L100	GENERAL NOTES	X	X	X	X	X
L101	EXISTING CONDITIONS	X	X	X	X	X
L102	GENERAL LAYOUT	X	X	X	X	X
L103	FIRE LANE STRIPING PLAN		X	X	X	X
L200	SITE OVERALL PLAN	X	X	X	X	X
L201	SITE PLAN	X	X	X	X	X
L202	SITE PLAN	X	X	X	X	X
L203	SITE PLAN	X	X	X	X	X
L204	SITE PLAN	X	X	X	X	X
L205	HARDSCAPE DETAILS		X	X	X	X
L300	LANDSCAPE OVERALL PLAN	X	X	X	X	X
L301	LANDSCAPE OVERSTORY PLAN	X	X	X	X	X
L310	LANDSCAPE UNDERSTORY PLAN	X	X	X	X	X
L311	LANDSCAPE UNDERSTORY PLAN	X	X	X	X	X
L312	LANDSCAPE UNDERSTORY PLAN	X	X	X	X	X
L313	LANDSCAPE UNDERSTORY PLAN	X	X	X	X	X
L390	LANDSCAPE DETAILS	X	X	X	X	X
C100	OVERALL GRADING PLAN	X	X	X	X	X
C101	GRADING PLAN	X	X	X	X	X
C102	GRADING PLAN	X	X	X	X	X
C103	GRADING PLAN	X	X	X	X	X
C104	GRADING PLAN	X	X	X	X	X
C104A	SPOT ELEVATION DETAIL		X	X	X	X
C104B	SPOT ELEVATION DETAIL		X	X	X	X
C104C	SPOT ELEVATION DETAIL		X	X	X	X
C105	ROADWAY TYPICAL SECTIONS	X	X	X	X	X
C106	ROADWAY TYPICAL SECTIONS	X	X	X	X	X
C107	ROADWAY TYPICAL SECTIONS	X	X	X	X	X
C108	ROADWAY TYPICAL SECTIONS	X	X	X	X	X
C109	ROAD PLAN & PROFILE SW CURRY ROAD	X	X	X	X	X
C110	ROAD PLAN & PROFILE SW CURRY ROAD	X	X	X	X	X
C111	ROAD PLAN & PROFILE ALLEY #1	X	X	X	X	X
C112	ROAD PLAN & PROFILE ALLEY #1	X	X	X	X	X
C113	ROAD PLAN & PROFILE SW BRUMMEL ROAD	X	X	X	X	X
C114	ROAD PLAN & PROFILE SW BRUMMEL ROAD	X	X	X	X	X
C115	ROAD PLAN & PROFILE ALLEY #2	X	X	X	X	X
C116	ROAD PLAN & PROFILE SW HAVERFORD ROAD	X	X	X	X	X
C117	ROAD PLAN & PROFILE SW HAVERFORD ROAD	X	X	X	X	X
C118	ROAD PLAN & PROFILE ALLEY #3	X	X	X	X	X
C119	TRAFFIC CONTROL PLAN	X	X	X	X	X
C120	SIDEWALK RAMP & CROSSWALK DETAIL 01	X	X	X	X	X
C121	SIDEWALK RAMP & CROSSWALK DETAIL 02	X	X	X	X	X
C122	SIDEWALK RAMP & CROSSWALK DETAIL 03	X	X	X	X	X
C123	SIDEWALK RAMP & CROSSWALK DETAIL 04	X	X	X	X	X
C124	SIDEWALK RAMP & CROSSWALK DETAIL 05	X	X	X	X	X
C125	SIDEWALK RAMP & CROSSWALK DETAIL 06	X	X	X	X	X
C126	SIDEWALK RAMP & CROSSWALK DETAIL 07	X	X	X	X	X
C127	SIDEWALK RAMP & CROSSWALK DETAIL 08	X	X	X	X	X
C128	SIDEWALK RAMP & CROSSWALK DETAIL 09	X	X	X	X	X
C129	CONSTRUCTION DETAILS	X	X	X	X	X
C130	CONSTRUCTION DETAILS		X	X	X	X
C131	STORM SEWER GENERAL LAYOUT	X	X	X	X	X
C132	STROM SEWER PLAN & PROFILE LINE 2,3, & 4	X	X	X	X	X
C133	STROM SEWER PLAN & PROFILE LINE 5	X	X	X	X	X
C134	STROM SEWER PLAN & PROFILE LINE 6 &9	X	X	X	X	X
C135	STROM SEWER PLAN & PROFILE LINE 7 & 8	X	X	X	X	X
C136	DRAINAGE MAP		X	X	X	X
C137	DRAINAGE TABLES	X	X	X	X	X
C138	STROM SEWER DETAILS	X	X	X	X	X
C139	STROM SEWER DETAILS	X	X	X	X	X
C140	SANITARY SEWER GENERAL LAYOUT	X	X	X	X	X
C141	SANITARY SEWER LINE 1 PLAN & PROFILE	X	X	X	X	X
C142	SANITARY SEWER LINE 2 PLAN & PROFILE	X	X	X	X	X
C143	SANITARY SEWER LINE 3&4 PLAN & PROFILE	X	X	X	X	X
C144	SANITARY SEWER LINE 5 PLAN & PROFILE	X	X	X	X	X
C145	SANITARY SEWER LINE 5 PLAN & PROFILE	X	X	X	X	X
C146	STORM SEWER CALCULATIONS	X	X	X	X	X
C147	STANITARY SEWER DETAILS	X	X	X	X	X
C148	STANITARY SEWER DETAILS	X	X	X	X	X
C149	PRIVATE WATER PLAN (GENERAL LAYOUT)	X	X	X	X	X
C150	WATER MAIN 3 PLAN & PROFILE	X	X	X	X	X
C151	WATER MAIN 4 PLAN & PROFILE	X	X	X	X	X
C152	WATER MAIN 5 PLAN & PROFILE	X	X	X	X	X
C153	WATER DETAILS	X	X	X	X	X
C154	WATER DETAILS		X	X	X	X
E100	SITE LIGHTING PHOTOMETRICS PLAN	X	X	X	X	X
E101	SITE LIGHTING PHOTOMETRICS DETAILS	X	X	X	X	X
E102	SITE LIGHTING POWER		X	X	X	X
E103	ELECTRICAL DETAILS		X	X	X	X
E104	ELECTRICAL DETAILS		X	X	X	X
E105	ELECTRICAL SPECIFICATIONS		X	X	X	X
A00	SITE PLAN			X	X	X
A01	SITE PHASING PLAN					X
A02	UNIT A - FLOOR PLAN			X	X	X
A03	UNIT A - ELEVATIONS			X	X	X
A04	UNIT B - FLOOR PLAN			X	X	X
A05	UNIT B - ELEVATIONS			X	X	X
A06	A + B - BLOCK 1 ELEV.			X	X	X
A07	A + B - BLOCK 2 ELEV.			X	X	X
A08	UNIT C - FLOOR PLAN			X	X	X
A09	UNIT C - ELEVATIONS			X	X	X
A10	UNIT D - FLOOR PLAN			X	X	X
A11	UNIT D - ELEVATIONS			X	X	X
A12	C + D - BLOCK ELEV.			X	X	X
A13	C + D - BLOCK ELEV.			X	X	X
A14	BASE COLOR PALETTES				X	X
A15	UNIT E - FLOOR PLAN			X	X	X
A16	UNIT E - ELEVATIONS			X	X	X
A17	UNIT E - ELEVATION SIDE			X	X	X
A18	UNIT F - FLOOR PLAN			X	X	X
A19	UNIT F - ELEVATIONS			X	X	X
A20	E + F - BLOCK 3 ELEV.			X	X	X
A21	E + F - BLOCK 4 ELEV.			X	X	X
A22	E + F - BLOCKS 5+6 ELEV.					X
A23	UNIT G - FLOOR PLAN			X	X	X
A24	UNIT G - ELEVATIONS			X	X	X
A25	UNIT H - FLOOR PLAN			X	X	X
A26	UNIT H - ELEVATIONS			X	X	X
A27	G + H - BLOCK ELEV.				X	X
A28	G + H - BLOCK ELEV.				X	X
	HOME COLOR SELECTION GUIDE				X	

DEVELOPMENT DATA

EXISTING ZONING	PMIX
GROSS AREA (AC.)	7.13 AC
PROPOSED STREET R/W (AC.)	0 AC
NET AREA (AC.)	7.13 AC
IMPERVIOUS COVERAGE	55%
LAND USE (EXISTING/PROPOSED)	UNDEVELOPED / TOWNHOUSE
# OF UNITS	80

DEVELOPMENT DATA CONTINUED

LOT TYPE	LOT DIMENSIONS	# OF LOTS	BUILDING LIVABLE SPACE FOOTPRINT	# OF FLOORS	TOTAL LOT TYPE GROSS FLOOR AREA (S.F.)	F.A.R.	REQURIED PARKING RATIO	GARAGE SPACES PER UNIT	REQUIRED PARKING SPACES	PROVIDED PARKING SPACES
LOT A	59' X 24'	13	36' X 24'	3 STORIES	2,533	1.79	2:1	2	26	26/ GARAGE
LOT B	59' X 16'	11	36' X 16'	3 STORIES	1,663	1.76	2:1	1	22	11/ GARAGE
LOT C	70' X 24'	10	43" X 24'	3 STORIES	2,886	1.72	2:1	2	20	20/ GARAGE
LOT D	70' X 18'	11	43' X 18'	3 STORIES	2,191	1.74	2:1	2	22	22/ GARAGE
LOT E	91' X 26'	13	43' X 26'	2 STORIES	3,370	1.42	2:1	2	26	26/ GARAGE
LOT F	91' X 20'	6	43' X 20'	2 STORIES	2,675	1.47	2:1	2	12	12/ GARAGE
LOT G	77' X 24'	9	43' X 24'	3 STORIES	2,886	1.56	2:1	2	18	18/ GARAGE
LOT H	77' X 18'	7	43' X 18'	3 STORIES	2,291	1.65	2:1	2	14	14/ GARAGE
TOTAL NUMBER OF LOTS		**80**	TOTAL GARAGE PARKING							149
MARKED PARKING (NEW LONGVIEW BLVD, KESSLER RD, HAVERFORD RD, & SOUTH ALLEY)										54
ON-STREET PARKING (CURRY RD, HAVERFORD RD, & BRUMMEL RD)										38
TOTAL PARKING									**160**	**241**

SEC. 15.1240 - GROSS FLOOR AREA (GFA)
FLOOR AREA, GROSS SHALL MEAN THE SUM OF THE GROSS HORIZONTAL AREAS OF THE SEVERAL FLOORS, MEASURED IN SQUARE FEET, INCLUDING THE BASEMENT FLOOR, MEASURED FROM THE EXTERIOR FACES OF THE EXTERIOR WALLS OR FROM THE CENTERLINE OF WALLS SEPARATING TWO BUILDINGS. THE TOTAL FLOOR AREA OF A BUILDING SHALL ALSO INCLUDE ELEVATOR SHAFTS AND STAIRWAYS AT EACH FLOOR; FLOOR SPACE USED FOR MECHANICAL EQUIPMENT, PENTHOUSES, INTERIOR BALCONIES AND MEZZANINES, ENCLOSED PORCHES, AND FLOOR AREA DEVOTED TO ACCESSORY USES. THE TOTAL FLOOR AREA SHALL NOT INCLUDE: AREAS OR SPACE DEVOTED TO OFF-STREET PARKING OR LOADING; AND UNCOVERED PORCHES, TERRACES AND LOADING DOCKS.

SEC. 15.1230 - FLOOR AREA RATIO (FAR)
FLOOR AREA RATIO SHALL MEAN THE NUMERICAL VALUE OBTAINED THROUGH DIVIDING THE GROSS FLOOR AREA OF A BUILDING OR BUILDINGS BY THE AREA OF THE LOT ON WHICH THE BUILDING OR BUILDINGS ARE LOCATED.

PROJECT DESIGN CRITERIA:

CODE EDITIONS USED:
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL RESIDENTIAL CODE
2018 INTERNATIONAL FIRE CODE
2017 NATIONAL ELECTRICAL CODE
ICC/ANSI A117.1-2009, ACCESSIBLE AND USEABLE BUILDING AND FACILITIES

GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, MISSOURI IN CURRENT USAGE. ALL STANDARDS NOT COVERED BY THE CITY SHALL BE APWA STANDARDS IN CURRENT USAGE UNLESS OTHERWISE NOTED.
2. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE UTILITY INFORMATION IS NOT MEANT TO BE ALL INCLUSIVE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCES, AND TO AVOID DAMAGE THERETO.
3. CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO COMMENCING WORK, SATISFY HIMSELF AS TO, AND ACCEPT THE SITE CONDITIONS TO BE ENCOUNTERED.
4. WHERE THE NEW IMPROVEMENTS ABUT EXISTING IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING THE ELEVATION OF THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL PROVIDE A SECURE SITE TO PROTECT VEHICLES AND PEDESTRIANS FROM ACCIDENTAL FALLS AND HARM FROM THE CONSTRUCTION PROCESS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR DE-WATERING CONSTRUCTION AREAS IN ORDER TO PERMIT CONTINUATION OF THE WORK. ANY WATER ACCUMULATION SHALL BE REMOVED BY PUMPING.
7. CONTRACTOR IS RESPONSIBLE FOR ALL QUANTITIES OR MATERIALS AS SHOWN IN THESE PLANS. CONTRACTOR SHALL ACCOMMODATE ALL SLOPE AND GRADE CONDITIONS IN THEIR CALCULATION OF MATERIAL QUANTITIES FOR ALL WORK SHOWN ON THESE PLANS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS. OWNER SHALL APPROVE MEASURES USED TO ALLOW TENANTS AND SHOPPERS PROPER ACCESS DURING CONSTRUCTION.

UTILITY SERVICE NUMBERS:

NAME: LEE'S SUMMIT PUBLIC WORKS
PHONE: 816-969-1800

NAME: LEE'S SUMMIT WATER UTILITIES DEPARTMENT
PHONE: 816-969-1900

NAME: SPIRE (MGE)
PHONE: 314-342-0500

NAME: AT&T
PHONE: 800-286-8313

NAME: EVERGY
PHONE: 816-471-5275

NAME: SPECTRUM (TWC)
PHONE: 877-772-2253

NAME: GOOGLE FIBER
PHONE: 877-454-6959

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHTECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St.
Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA-2017009884
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

PROJECT SHEET

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by:	LS
checked by:	BM
approved by:	KPS
QA/QC by:	KPS
project no.:	021-02987
drawing no.:	L_CVR_02102987
date:	10.14.2021

SHEET
L000

GENERAL NOTES

1. ALL PAVING DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

2. REFER TO DETAIL SHEET FOR INSTALLATION OF SIGNS.

3. CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE AND ALIGNMENT TO PROVIDE SMOOTH SURFACE TRANSITIONS BETWEEN NEW ENTRANCE DRIVES AND EXISTING STREETS.

4. CONTRACTOR SHALL MATCH EXISTING CURB & GUTTER IN GRADE, SIZE, TYPE, AND ALIGNMENT AT CONNECTIONS TO EXISTING STREETS.

5. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH THE OWNER'S SITE WORK SPECIFICATIONS.

6. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AS SHOWN IN THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS.

7. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, SIDEWALK AND SPECIFIC BUILDING AREA TREATMENTS AND IMPROVEMENTS. FOR EXACT BUILDING DIMENSIONS, SEE ARCHITECTURAL PLANS. CONTRACTOR TO STAKE AND CONSTRUCT FOUNDATIONS AND FOOTINGS FROM STRUCTURAL PLAN. BUILDING DIMENSIONS ON THIS PLAN ARE FOR REFERENCE ONLY.

8. ALL DIMENSIONS SHOWN ON BUILDING ARE TO OUTSIDE FACE OF BUILDING.

9. CONTRACTOR SHALL COORDINATE PROTECTION OF BUILDING CORNERS, TRANSFORMERS, AND ALL OTHER APPLICABLE STRUCTURES WITH GUARD POST BOLLARDS WITHIN 5' OF THE BUILDINGS TO BE INSTALLED BY GENERAL CONTRACTOR.

10. PARKING LOT STRIPING SHALL BE INCLUDED IN PAVING CONTRACTOR'S SCOPE OF WORK. ALL STRIPING IS TO BE TWO LAYERS, 4" STROKE, REFLECTIVE PAINT, INCLUDING ADA SYMBOL AND HATCHING. PAINT COLOR TO BE WHITE ON ASPHALT AND YELLOW ON CONCRETE.

11. ALL ACCESSIBLE PARKING SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.

12. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH A LIST OF ALL SUBCONTRACTORS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.

13. ALL ASPHALT PAVING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF LEES SUMMIT DESIGN AND CONSTRUCTION MANUAL SECTION 2200.

14. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR, AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO, AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO: DRAINAGE UTILITIES, PAVEMENT, STRIPING, CURB, ETC. ANY WORK IN CITY R.O.W. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS AND SURVEY MONUMENTS AND IS RESPONSIBLE FOR RE-ESTABLISHMENT OF ANY PROPERTY CORNERS OR SURVEY MONUMENTS IF DISTURBED BY CONSTRUCTION ACTIVITIES.

15. SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

16. ALL CONSTRUCTION IN STATE HIGHWAY DEPARTMENT RIGHT-OF-WAY SHALL BE COORDINATED WITH THE HIGHWAY DEPARTMENT RESIDENT MAINTENANCE ENGINEER PRIOR TO START OF CONSTRUCTION. LATEST SPECIFICATIONS ADOPTED BY US DEPARTMENT OF TRANSPORTATION AND STATE HIGHWAY DEPARTMENT SHALL GOVERN ON THIS PROJECT.

17. ALL SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE RELEVANT UTILITY COMPANY OR REGULATORY AUTHORITY, AND THE SPECIFICATIONS FOR THE CONSTRUCTION OF THE EXISTING IMPROVEMENTS WHICH ARE BEING ALTERED OR REPLACED. CONTRACTOR SHALL CONTACT THE ENGINEER FOR SPECIFICATION SECTIONS FOR ITEMS SUCH AS LANDSCAPING AND IRRIGATION THAT ARE AFFECTED BY THE WORK BUT NOT COMPLETELY DETAILED OR SPECIFIED ON THESE PLANS.

18. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF LEE'S SUMMIT, MISSOURI STANDARDS AND SPECIFICATIONS.

19. ALL CURB RETURN RADII ARE 4.0' UNLESS OTHERWISE NOTED.

20. SITE TOPOGRAPHY TAKEN FROM FIELD WORK BY OLSSON ON THE SURVEY DATED 10-2016 AND UPDATED ON $\frac{5}{2021}$ ALONG NORTH PROPERTY LINE. CONTRACTOR TO VERIFY EXISTING CONDITIONS OF THE SITE THAT MAY NOT BE REPRESENTATIVE OF THE CONSTRUCTION PLANS.

WETLANDS NOTICE:

1. ANY DEVELOPMENT, EXCAVATION, CONSTRUCTION, OR FILLING IN A U.S. CORPS OF ENGINEERS DESIGNATED WETLAND IS SUBJECT TO LOCAL, STATE AND FEDERAL APPROVALS. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS AND/OR RESTRICTIONS AND ANY VIOLATION WILL BE SUBJECT TO FEDERAL PENALTY. THE CONTRACTOR SHALL HOLD THE OWNER/DEVELOPER, THE ENGINEER AND THE LOCAL GOVERNING AGENCIES HARMLESS AGAINST SUCH VIOLATION.

WARRANTY/DISCLAIMER:

1. THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A TEMPORARY BASIS AT THE SITE.

FLOOD CERTIFICATION:

1. THE ENTIRE SITE IS LOCATED WITHIN ZONE X, "AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 290174 0412G, REVISION DATE JANUARY 20, 2017

OIL/GAS WELLS:

NO OIL OR GAS WELLS LOCATED WITHIN THE PROJECT LIMITS.

INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, GEOLOGICAL SURVEY GEOSCIENCES TECHNICAL RESOURCE ASSESSMENT TOOL (GEOSTRAT).

DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR RAISING AND REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.

2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE OWNER'S SITE WORK SPECIFICATIONS.

4. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE AND ADJUSTMENTS DUE TO CONFLICTS OR GRADING TO ANY EXISTING STRUCTURES OR UNDERGROUND UTILITIES THAT ARE TO REMAIN IN PLACE.

5. ALL ITEMS DESIGNATED TO BE DEMOLISHED AND REMOVED FROM THE SITE SHALL BE DISPOSED OF IN AN APPROPRIATE LOCATION IN ACCORDANCE WITH STATE OR LOCAL GUIDELINES.

6. PUBLIC STREETS AND SIDEWALKS SHALL BE KEPT CLEAN AND CLEAR OF TRASH AND DEBRIS FROM DEMOLITION OPERATIONS AT ALL TIMES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST AND EROSION CONTROL DURING DEMOLITION OPERATIONS.

8. THE CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES PRIOR TO REMOVAL OR RELOCATION OF ANY UTILITIES AND TO SAFELY STOP SERVICES AND DISMANTLE SERVICE LINES PRIOR TO BEGINNING DEMOLITION OPERATIONS.

9. CONTRACTOR IS TO REMOVE AND RE-USE SEWER PIPES, POWER POLES AND GUY WIRES, WATER LINES AND METERS, VEGETATION, ASPHALT, AND OTHER UNSUITABLE DEBRIS OR MATERIAL. SHOWN OR NOT SHOWN WITHIN CONSTRUCTION LIMITS AND WHERE NECESSARY TO ALLOW FOR CONSTRUCTION ACTIVITY. ALL MATERIAL TO BE REMOVED AS UNCLASSIFIED EXCAVATION.

10. ALL CAVITIES CREATED BY REMOVAL OF EXISTING FACILITIES IN THE AREA OF PROPOSED CONSTRUCTION SHALL BE FILLED AND COMPACTED IN ACCORDANCE WITH THE SITE WORK SPECIFICATIONS TO SUBGRADE ELEVATION.

11. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING OVERHEAD ELECTRICAL POWER LINES.

12. EXISTING UTILITIES ARE SHOWN AS LOCATED AND IDENTIFIED IN THE FIELD BY UTILITY COMPANY REPRESENTATIVE. THE OWNER AND THE ENGINEER MAKE NO ASSURANCE OF THE ACTUAL LOCATION, DEPTH, SIZE OR TYPE OF UTILITY LINES SHOWN. THE OWNER AND THE ENGINEER MAKES NO ASSURANCE THAT ALL OF THE EXISTING UTILITY LINES ON THE SITE ARE SHOWN.

GRADING AND CLEARING NOTES:

1. EXISTING UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION WORK. ANY DAMAGE TO EXISTING STRUCTURES, UTILITIES, FENCES AND/OR INCIDENTALS NOT DESIGNATED FOR REMOVAL SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

2. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEES SUMMIT, MISSOURI (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED DRIVE LANES.

3. CONTRACTOR SHALL PROVIDE A LEVEL BUILDING PAD BASED UPON PROPOSED FINISHED FLOOR ELEVATION TO ± 0.10' OR AS ESTABLISHED THROUGH ALTERNATIVE BID DOCUMENTS.

4. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH A MINIMUM OF FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

5. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND/ OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND/ OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.

6. CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS AS CALLED OUT IN THE GEOTECHNICAL REPORT AND ENGINEERING EVALUATION AS PROVIDED BY THE GEOTECHNICAL ENGINEER.

7. ALL EMBANKMENT SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 9". EMBANKMENT PLACED WITHIN THE PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). EMBANKMENT PLACED WITHIN THE BUILDING AREAS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF 0 TO 4 PERCENT ABOVE OPTIMUM MOISTURE CONTENT AS DEFINED BY THE STANDARD PROCTOR COMPACTION PROCEDURE. ALL EMBANKMENT PLACED WITHIN 18" OF THE BUILDING SUBGRADE SHOULD HAVE A LIQUID LIMIT LESS THAN 60. THE GEOTECHNICAL REPORT SHALL SUPERSEDE RECOMMENDATIONS AS STATED IN THIS PLAN SET.

UTILITY CONSTRUCTION NOTES:

1. PRIOR TO INSTALLATION OF ANY PROPOSED UTILITY THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS WITH EXISTING UTILITIES AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF CONFLICTS WITH EXISTING UTILITIES.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT IS THE CONTRACTORS RESPONSIBILITY TO RELOCATE AND/OR ADJUST ALL EXISTING UTILITIES THAT CONFLICT WITH PROPOSED SITE IMPROVEMENTS.

3. UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON OR WITHIN THE SPECIFICATIONS:
ALL STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER CITY STANDARD DETAILS.
ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND ENDS OF FLARED END SECTIONS.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION.

5. TELEPHONE CONDUIT SHALL HAVE A MINIMUM COVER OF 30". CONDUIT SHALL BE DUAL 4" SCHEDULE 40 PVC. CONTRACTOR SHALL COORDINATE LOCATION WITH THE UTILITY REPRESENTATIVE AND LOCATE PVC CROSSINGS AS NECESSARY. SEE ELEC. PLANS FOR ENTRANCE LOCATIONS.

6. FOR ALL SERVICE LINE ENTRANCE LOCATIONS WITHIN THE BUILDING, INCLUDING ROOF DRAIN CONNECTIONS, SEE ARCHITECTURAL PLANS AND DETAILS.

7. ALL WATER SERVICE LINES SHALL BE A MINIMUM OF 48" BELOW FINISHED GRADE.

8. ALL SANITARY SEWER LINES SHALL BE SDR-26 WITH 42" MIN. COVER.

9. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS A MINIMUM OF 48 HOURS PRIOR TO DISRUPTION.

10. ALL ELECTRIC AND TELEPHONE, INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTION'S SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.

11. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWINGS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.

12. ALL PRIVATE INSTALLATIONS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS AS ADOPTED BY THE CITY OF LEE'S SUMMMIT, MISSOURI.

13. EXTENSION OF BOTH DOMESTIC WATER SERVICE AND FIRE PROTECTION LINE MAY NOT BE PROVIDED UNTIL PUBLIC MAIN HAS BEEN TESTED AND ACCEPTED BY WRITTEN AUTHORIZATION FROM LEE'S SUMMIT WATER DEPARTMENT.

14. CONTRACTOR TO CONTACT LEE'S SUMMIT WATER SERVICES DEPARTMENT FOR MAIN LINE TAP AND METER SET A MINIMUM OF 48 HOURS PRIOR TO CONNECTION.

17. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL THE APPROPRIATE PERMITS HAVE BEEN PULLED FROM THE CITY OF LEE'S SUMMIT AND/OR JACKSON COUNTY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.

18. ALL ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 ELECTRICAL PVC, AS CALLED OUT AND HAVE AN AVERAGE OF 36" TO 42" COVER WITH A MINIMUM OF 30" CONFORMING TO THE CURRENT REGULATIONS SET FORTH BY MISSOURI PUBLIC SERVICE. SEE MECH. PLANS FOR ENTRANCE LOCATIONS.

19. CONTRACTOR SHALL MAKE APPLICATION WITH SPIRE ENERGY FOR PROPOSED METER.

LEGEND

GENERAL	
ACU	AIR CONDITIONING UNIT
AST	ARROW STRAIGHT
ATL	ARROW TURN LEFT
ATR	ARROW TURN RIGHT
BLB	BILLBOARD
BOV	BLOW OFF VALVE
BSH	BUSH
COL	COLUMN
CTR	CONIFEROUS TREE
DRN	DRAIN GRATE
DTR	DECIDUOUS TREE
FLP	FLAG POLE
GDP	GUARD POST
GPL	GUY POLE
GTP	GREASE TRAP
GUY	GUY WIRE
HCP	ACCESSABLE PARKING MARKER
LST	LIFT STATION
MLB	MAILBOX
MP	MILE POST MARKER
MWL	MONITORING WELL
PIV	POST INDICATOR VALVE
PPT	PROPANE TANK
RAT	RADIO TOWER
SAD	SATELLITE
SCV	SPRINKLER CONTROL VALVE
SGN	SIGN
SLB	STREET LIGHT BOX
SLC	STREET LIGHT CABINET
SPB	SPRINKLER BOX
SPH	SPRINKLER HEAD
STP	STUMP
SVL	SEWER VALVE
TCB	TRAFFIC CONTROL BOX
TSA	TRAFFIC SIGNAL WITH MAST ARM
TSC	TRAFFIC SIGNAL CABINET
TSMH	TRAFFIC SIGNAL MANHOLE
TSP	TRAFFIC SIGNAL POLE
	EXISTING TREELINE
	PROPOSED TREELINE
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	FUTURE SIDEWALK
	EXISTING BUILDINGS
	PROPOSED BUILDINGS
	FUTURE BUILDINGS
	EXISTING EDGE OF PAVEMENT
	PROPOSED EDGE OF PAVEMENT
	FUTURE EDGE OF PAVEMENT
	EXISTING ROADWAY CENTER LINE
	PROPOSED ROADWAY CENTER LINE
	FUTURE ROADWAY CENTER LINE
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	FUTURE CURB & GUTTER
R	RADIUS
L	ARC DISTANCE
D	DELTA / CENTRAL ANGLE
EASEMENTS & SETBACKS	
A.E.	ACCESS EASEMENT
B.M.P.	BEST MANAGEMENT PRACTICE EASEMENT
B.L.	BUILDING SETBACK
C.T.V.E.	CABLE TV EASEEMNT
C.E.	CONSERVATION EASEMENT
C.G.E.	CONSTRUCTION GRADING EASEMENT
F.P.E.	FLOOD PLAIN EASEMENT
F.O.E.	FIBER OPTIC EASEMENT
F.P.S.E.	FIRE PROTECTION SYSTEM EASEMENT
F.L.E.	FUEL LINE EASEMENT
L.S.E.	LANDSCAPE EASEMENT
G.E.	NATURAL GAS EASEMENT
T.E.	TELEPHONE EASEMENT
E.E.	POWER\ELECTRIC EASEMENT
P.S.	PARKING SETBACK
S.B.	STREAM BUFFER
S.D.E.	SURFACE DRAINAGE EASEMENT
SIGHT DIST. ESMT.	SIGHT DISTANCE EASEMENT
S.E.	SANITARY SEWER EASEMENT
S.L.E.	STEAM LINE EASEMENT
D.E.	STORM DRAINAGE EASEMENT
S.W.M.E.	STORM WATER MANAGEMENT EASEMENT
T.C.D.S.E.	TEMPORARY CUL-DE-SAC EASEMENT
TEMP. ESMT.	TEMPORARY EASEMENT
TRAIL ESMT.	TRAIL\PATH EASEMENT
U.E.	UTILITY EASEMENT
W.E.	WATER EASEMENT
F.Y.S	FRONT YARD SETBACK
R.Y.S.	REAR YARD SETBACK
S.Y.S.	SIDE YARD SETBACK
CONTOURS	
100	EXISTING INDEX CONTOURS
100	EXISTING INTERMEDIATE CONTOURS
100	PROPOSED INDEX CONTOURS
100	PROPOSED INTERMEDIATE CONTOURS

SURVEY MARKERS	
BMK	BENCHMARK
CPT	CONTROL POINT
FND	FOUND MONUMENT
ROW	ROW MARKER
SCR	SECTION CORNER
SET	SET MONUMENT
BOUNDARIES	
	SECTION LINE
EP	EXISTING PROPERTY BOUNDARY
PL	PROPOSED PROPERTY BOUNDARY
	EXISTING LOT LINE
	PROPOSED LOT LINE
ER/W	EXISTING RIGHT-OF-WAY
R/W	PROPOSED RIGHT-OF-WAY
UTILITIES	
CAB	CABLE BOX
CAV	CABLE VAULT
TVP	TELEVISION PEDESTAL
TVR	TELEVISION RISER
ECTVOH	EXISTING CABLE TV, OVERHEAD
ECTV	EXISTING CABLE TV, UNDERGROUND
CTVOH	PROPOSED CABLE TV, OVERHEAD
CTV	PROPOSED CABLE TV, UNDERGROUND
FOB	FIBER OPTIC BOX
FOM	FIBER OPTIC MANHOLE
FOP	FIBER OPTIC PEDESTAL
FOV	FIBER OPTIC VAULT
EFOOH	EXISTING FIBER OPTIC, OVERHEAD
EFO	EXISTING FIBER OPTIC, UNDERGROUND
FOOH	PROPOSED FIBER OPTIC, OVERHEAD
FO	PROPOSED FIBER OPTIC, UNDERGROUND
FDC	FIRE DEPT. CONNECTION
EFP	EXISTING FIRE PROTECTION SYSTEM LINE
FP	PROPOSED FIRE PROTECTION SYSTEM LINE
EFL	EXISTING FUEL LINE
FPL	PROPOSED FUEL LINE
GAR	GAS RISER
GMH	GAS MANHOLE
GMK	GAS MARKER
GMT	GAS METER
GRG	GAS REGULATOR
GVL	GAS VALVE
EG	EXISTING NATURAL GAS LINE
G	PROPOSED NATURAL GAS LINE
TEC	TELEPHONE CABINET
TEP	TELEPHONE PEDESTAL
TER	TELEPHONE RISER
TEV	TELEPHONE VAULT
TMH	TELEPHONE MANHOLE
ETELOH	EXISTING TELEPHONE LINE, OVERHEAD
ETEL	EXISTING TELEPHONE LINE, UNDERGROUND
TELOH	PROPOSED TELEPHONE LINE, OVERHEAD
TEL	PROPOSED TELEPHONE LINE, UNDERGROUND
GLT	GROUND LIGHT
LTP	LIGHT POLE
PWP	POWER POLE
TRF	ELECTRIC TRANSFORMER
EBX	ELECTRIC BOX
ELC	ELECTRIC CABINET
ELR	ELECTRIC RISER
EMH	ELECTRIC MANHOLE
EMT	ELECTRIC METER
ESC	ELECTRIC SECTIONALIZER
EVT	ELECTRIC VAULT
YDL	YARD LIGHT
EEOH	EXISTING POWER\ELECTRIC LINE, OVERHEAD
EE	EXISTING POWER\ELECTRIC LINE, UNDERGROUND
SCO	SEWER CLEANOUT
SSMH	SANITARY MANHOLE
SS	EXISTING SANITARY SEWER
SS	PROPOSED SANITARY SEWER
FSS	FUTURE SANITARY SEWER
ESL	EXISTING STEAM LINE
SL	PROPOSED STEAM LINE
SDMH	STORM SEWER MANHOLE
FES	FLARED END SECTION
RDN	ROOF DRAIN
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
FH	FIRE HYDRANT
WMH	WATER MANHOLE
WMK	WATER MARKER
WMT	WATER METER
WVL	WATER VALVE
W	EXISTING WATER LINE
W	PROPOSED WATER LINE

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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA-2017000844
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GENERAL NOTES

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by:	LS
checked by:	BM
approved by:	KPS
QA/QC by:	KPS
project no.:	021-02987
drawing no.:	L_CVR_02102987
date:	10.14.2021

SHEET
L100

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Control Point Information				
Point Number	Elevation	North	Easting	Description
CP #102	988.71	999264.487	2804343.208	At intersection of SW. Fascincation Dr. and SW Kessler Dr. go south along SW. Kessler Dr. to where curb jogs right (west) up against sidewalk.
CP#100	988.67	999658.163	2803977.829	At intersection of SW Fascination Drive and SW Kessler Drive go west along SW Fascination Drive to west side of parking stalls on south side of street.
CP #26	1010.42	999510.913	2803459.510	In south east quadrant of roundabout located at intersection of S.W. Fascination Dr. and Longview Parkway. West 1' to east edge of sidewalk. Southwest to corner of side walk where side walk ends but will be connected to at a later date.
CP#101	1003.96	999030.752	2803749.080	At intersection of Longview Parkway and SW Fascination Drive go south to second entrance on east signe of Longview Parkway.

1 EXISTING CONDITIONS

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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2017002484
LANDSCAPE ARCHITECT
10/14/2021

REVISIONS			
REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

EXISTING CONDITIONS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_EXC01_02102987
date: 10.14.2021

SHEET
L101

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\OSTU\Final Development Plans\L_EXC01_02102987.dwg USER: bmcbride
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1 GENERAL LAYOUT

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NUMBER
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10/14/2021

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GENERAL LAYOUT

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

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SHEET
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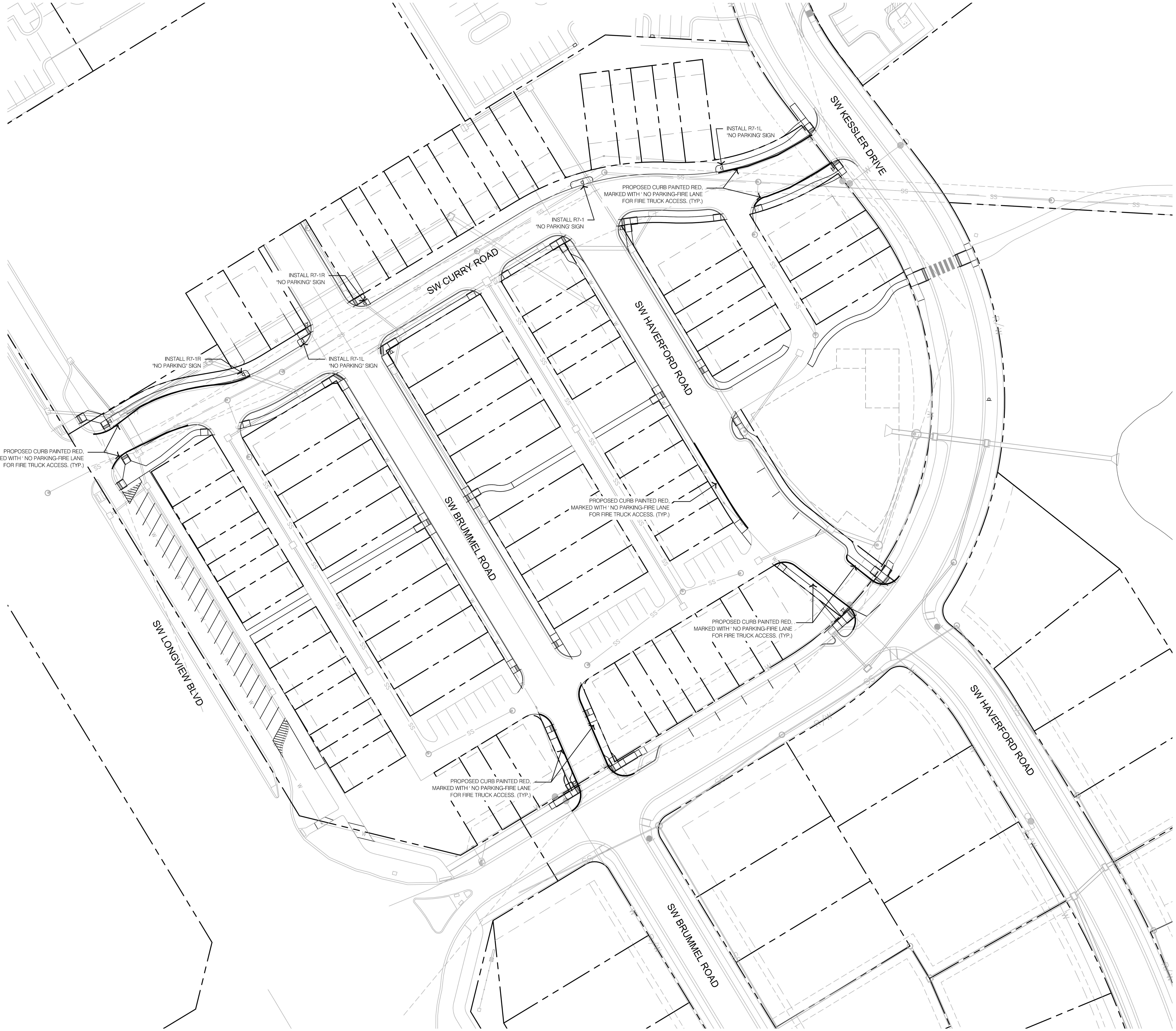
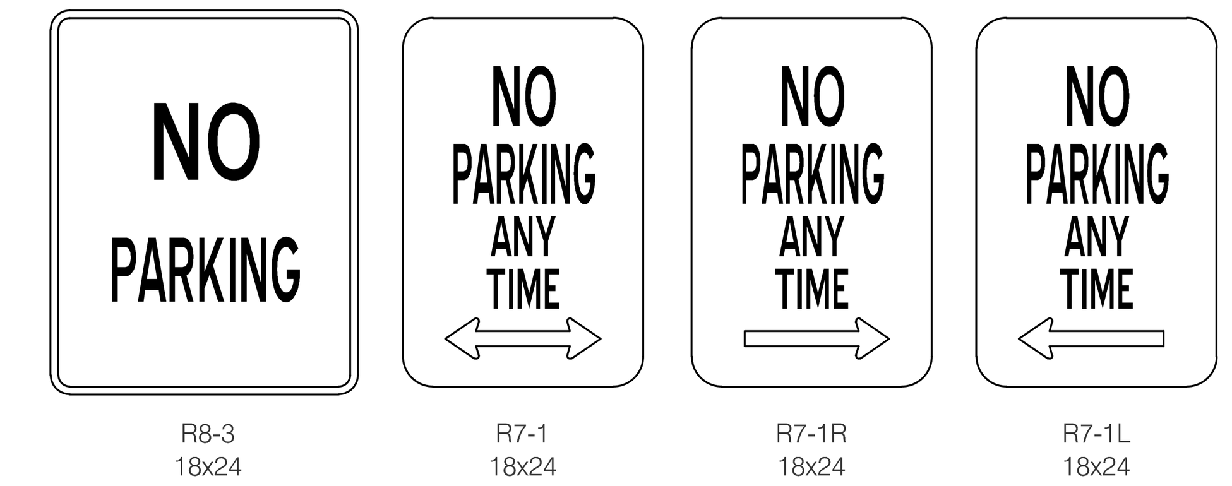


1 FIRE LANE STRIPING PLAN



GENERAL NOTES:
1. SEE APWA SECTION 2306 (LATEST EDITION) FOR ALL PAVEMENT MARKING MATERIAL AND INSTALLATION.

2. ALL SIGN INSTALLATIONS ARE THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR PER CITY ORDINANCE AND SHALL COMPLY WITH THE CITY STANDARD AND MUTCD. STREET NAME SIGNS SHALL ALSO BE INSTALLED IN ACCORDANCE WITH THE CITY'S STREET NAME SIGN SPECIFICATION.

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STATE OF MISSOURI
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10/14/2021

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FIRE LANE STRIPING PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

2021

LEE'S SUMMIT, MO

drawn by: LS
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approved by: KPS
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project no.: 021-02987
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date: 10.14.2021

SHEET
L103

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\OSTU\Final Development Plans\L_GEN01_02102987.dwg USER: bmcbride
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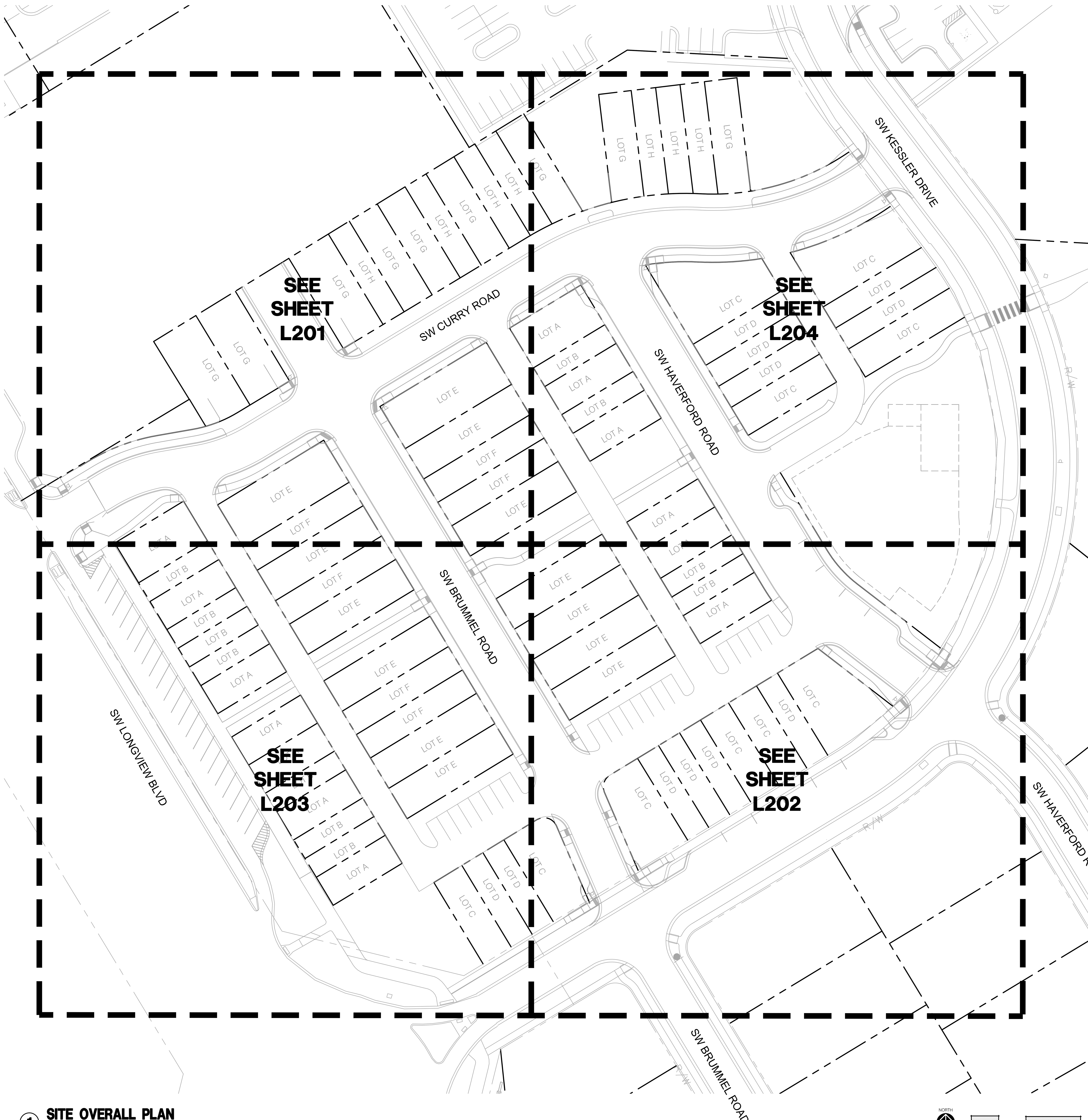

1 SITE OVERALL PLAN

SITE PLAN GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, MISSOURI IN CURRENT USAGE. ALL STANDARDS NOT COVERED BY THE CITY SHALL BE APWA STANDARDS IN CURRENT USAGE UNLESS OTHERWISE NOTED.

2. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE UTILITY INFORMATION IS NOT MEANT TO BE ALL INCLUSIVE. THE CONTRACTOR SHALL NOTIFY MISSOURI ONE CALL (811) BEFORE THE START OF ANY EXCAVATION WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION TO PROVIDE NON-INTERRUPTION OF SERVICE, TO ENSURE PROPER CLEARANCES, AND TO AVOID DAMAGE THERETO.

3. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

4. CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO COMMENCING WORK, SATISFY HIMSELF AS TO, AND ACCEPT THE SITE CONDITIONS TO BE ENCOUNTERED.

5. WHERE THE NEW IMPROVEMENTS ABUT EXISTING IMPROVEMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING THE ELEVATION OF THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED.

6. THE CONTRACTOR SHALL PROVIDE A SECURE SITE TO PROTECT VEHICLES AND PEDESTRIANS FROM ACCIDENTAL FALLS AND HARM FROM THE CONSTRUCTION PROCESS.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR DE-WATERING CONSTRUCTION AREAS IN ORDER TO PERMIT CONTINUATION OF THE WORK. ANY WATER ACCUMULATION SHALL BE REMOVED BY PUMPING.

8. CONTRACTOR IS RESPONSIBLE FOR ALL QUANTITIES OR MATERIALS AS SHOWN IN THESE PLANS. CONTRACTOR SHALL ACCOMMODATE ALL SLOPE AND GRADE CONDITIONS IN THEIR CALCULATION OF MATERIAL QUANTITIES FOR ALL WORK SHOWN ON THESE PLANS.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS. OWNER SHALL APPROVE MEASURES USED TO ALLOW TENANTS AND SHOPPERS PROPER ACCESS DURING CONSTRUCTION.

10. CONTRACTOR SHALL TAKE CARE TO CREATE SMOOTH UNIFORM FINISH GRADES IN ALL AREAS.

11. SLOPES SHALL BE MADE WITH A 4 TO 1 MAXIMUM GRADE FOR MAINTENANCE PURPOSES, UNLESS OTHERWISE NOTED.

12. CONTRACTOR SHALL MATCH GRADES AT EXISTING IMPROVEMENTS.

13. ALL SPOT ELEVATIONS SHOWN ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

14. CONTRACTOR SHALL ADJUST ALL VALVE BOXES, MANHOLE RING COVERS, AND OTHER UTILITY APPURTENANCES TO MATCH FINISH GRADE ELEVATIONS.

15. TURF & SHRUB BED AREAS SHALL BE GRADED AS NECESSARY TO ALLOW A 2% SLOPE TO INLET LOCATIONS AND SWALES.

16. ALL WORK CONSTRUCTED UNDER THESE PLANS SHALL MEET SLOPE REQUIREMENTS PER THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, THE 2012 TAS STANDARDS FOR ACCESSIBLE DESIGN, AND INTERNATIONAL BUILDING CODE IN CURRENT USAGE. MAXIMUM 5% RUNNING SLOPE AND MAXIMUM 2% CROSS SLOPE FOR SIDEWALKS.

17. ALL WORK CONSTRUCTED UNDER THESE PLANS SHALL HAVE A MINIMUM OF A 1% SLOPE. LANDSCAPE BEDS AND TURF AREAS SHALL HAVE A MINIMUM OF A 2% SLOPE.

18. CHANGES IN LEVEL SHALL NOT BE GREATER THAN 1/4" AND A MAXIMUM OF 1/2" ARE ALLOWED WITH A BEVELED SLOPE NOT STEEPER THAN 1:2.

19. B.L. TO ALIGN TO BUILDING SETBACK

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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA-2017000244
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE OVERALL PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

2021

LEE'S SUMMIT, MO

drawn by:	LS
checked by:	BM
approved by:	KPS
QA/QC by:	KPS
project no.:	021-02987
drawing no.:	L_OVR_02102987
date:	10.14.2021

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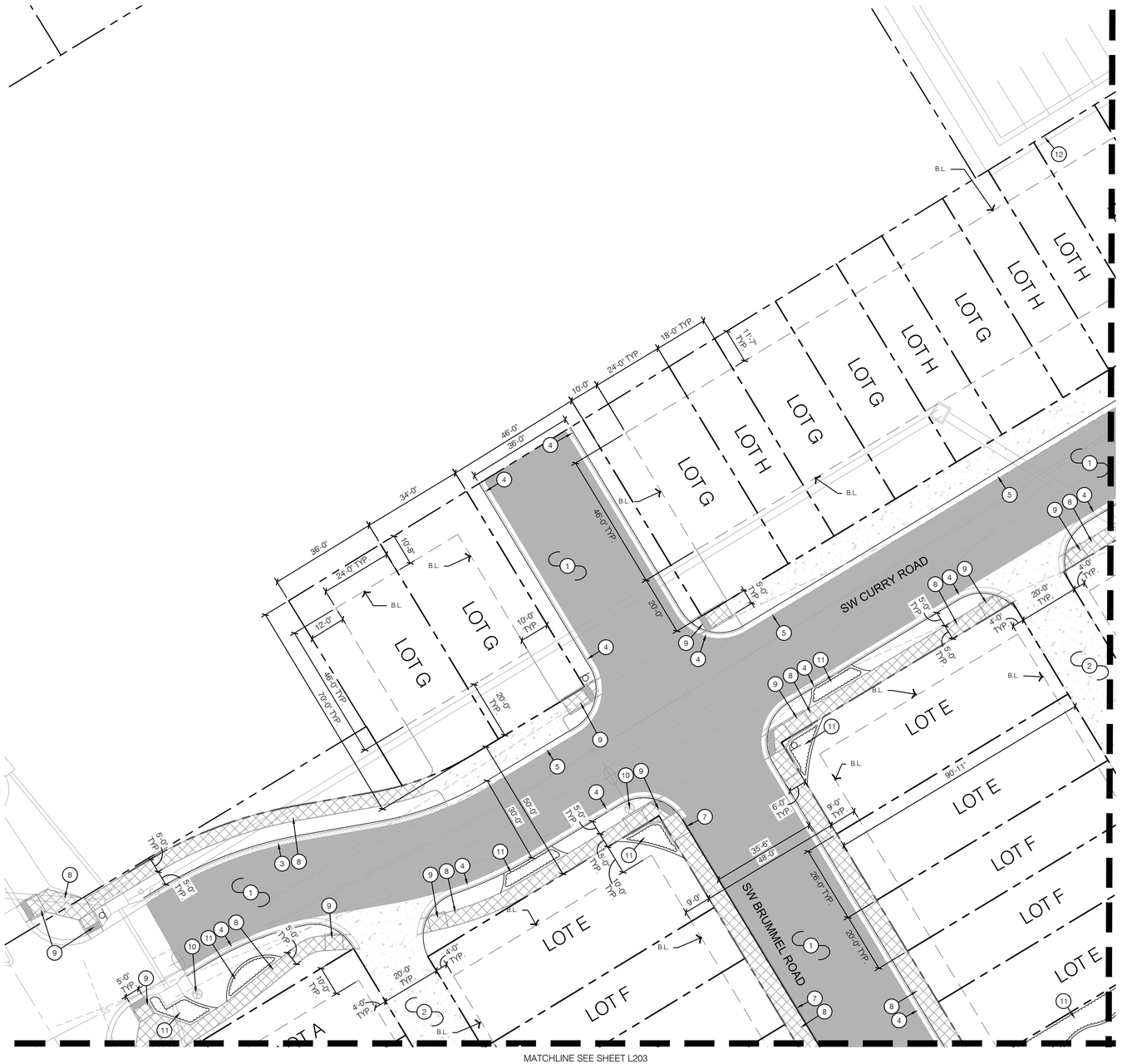
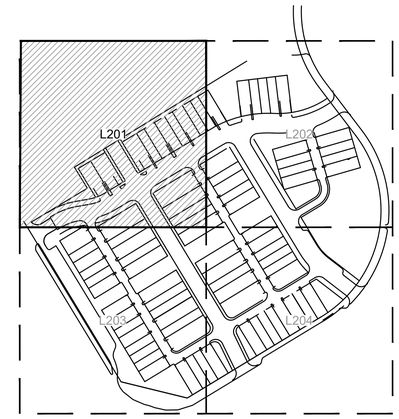


1 **SITE PLAN**



KEYMAP

SITE PLAN LEGEND:

- RIGHT OF WAY / PROPERTY LINE
- BUILDING SETBACK
- SHEET MATCHLINE
- HEAVY DUTY CONCRETE PAVING
- HEAVY DUTY ASPHALT PAVING
- CONCRETE PAVING
- CG-1 CURB & GUTTER
- CG-1 DRY CURB & GUTTER
- CG-2 CURB & GUTTER
- RIBBON CURB
- C1 CURB

SITE PLAN NOTES:

1. CONSTRUCT HEAVY DUTY ASPHALT PAVING; REF: C105-C108
2. CONSTRUCT HEAVY DUTY CONCRETE PAVEMENT; REF: C105-C108
3. CONSTRUCT CG-1 DRY CURB; REF: C129
4. CONSTRUCT CG-1 CURB; REF: C129
5. CONSTRUCT CG-2 CURB; REF: C129
6. CONSTRUCT RIBBON CURB; REF: C129
7. CONSTRUCT C1 CURB; REF: C129
8. CONSTRUCT STANDARD CONCRETE SIDEWALK PAVEMENT; REF: 1/L205
9. CONSTRUCT ACCESSIBLE SIDEWALK RAMP (SEE SPOT ELEVATION PLANS)
10. LIGHT FIXTURE; REF: LIGHTING PLANS
11. PLANTING BED; REF: LANDSCAPE PLANS
12. EXISTING SIDEWALK

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St.
Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2007004644
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_SIT01_02102987
date: 10.14.2021

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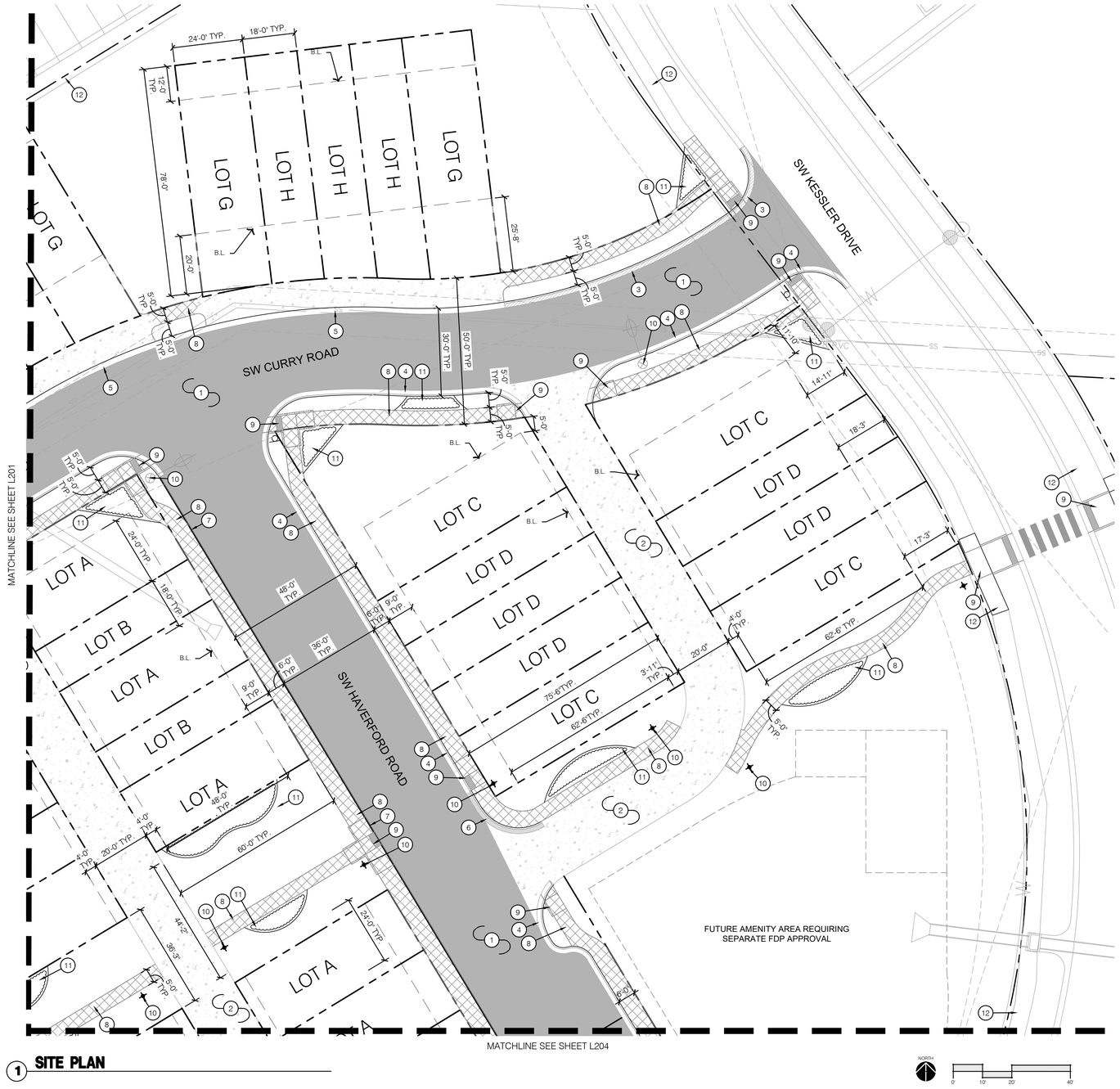

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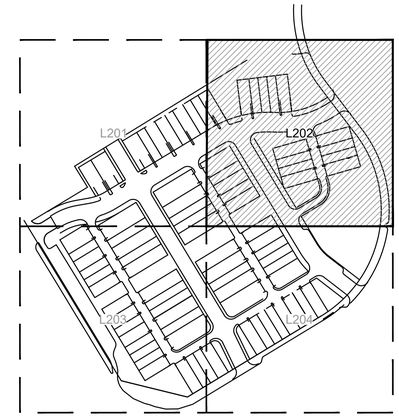

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- CG-1 DRY CURB & GUTTER
- CG-2 CURB & GUTTER
- RIBBON CURB
- C1 CURB

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BRANDON D. MCBRIDE
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LANDSCAPE ARCHITECT
10/14/2021

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SITE PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
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SHEET
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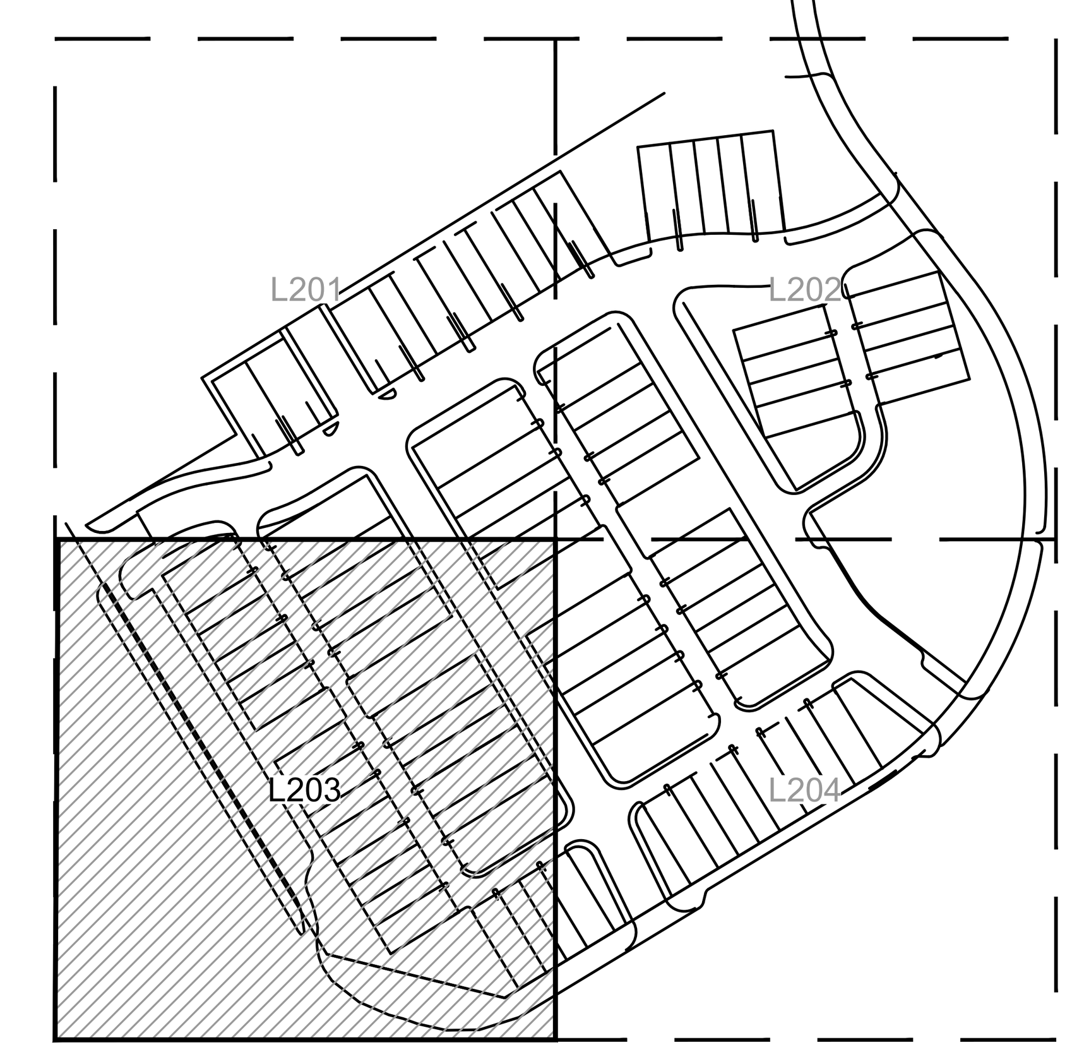
1 SITE PLAN



KEYMAP

SITE PLAN LEGEND:

RIGHT OF WAY / PROPERTY LINE
BUILDING SETBACK
SHEET MATCHLINE
HEAVY DUTY CONCRETE PAVING
HEAVY DUTY ASPHALT PAVING
CONCRETE PAVING
CG-1 CURB & GUTTER
CG-1 DRY CURB & GUTTER
CG-2 CURB & GUTTER
RIBBON CURB
C1 CURB

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STATE OF MISSOURI — BRANDON D. MCBRIDE — LANDSCAPE ARCHITECT — 10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_SIT01_02102987
date: 10.14.2021

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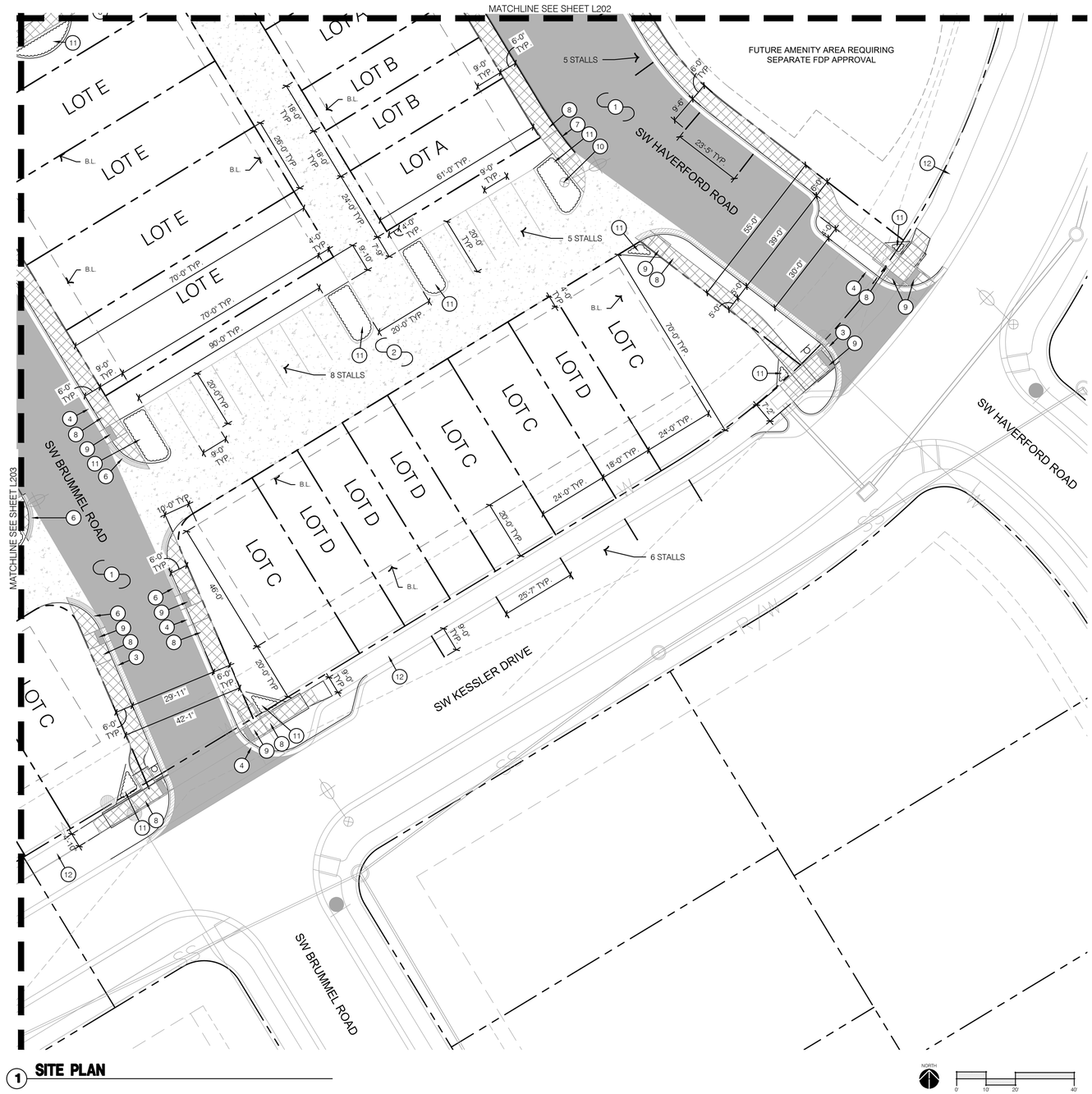
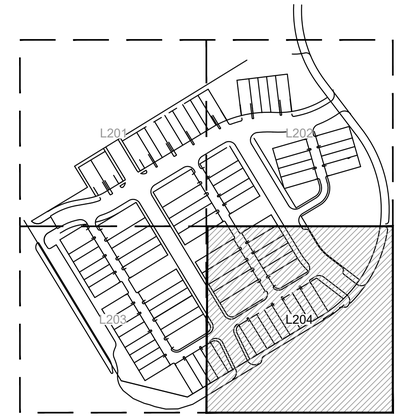


1 SITE PLAN



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12. EXISTING SIDEWALK

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1814 Main St.
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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2007004844
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

2021

LEE'S SUMMIT, MO

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_SIT01_02102987
date: 10.14.2021

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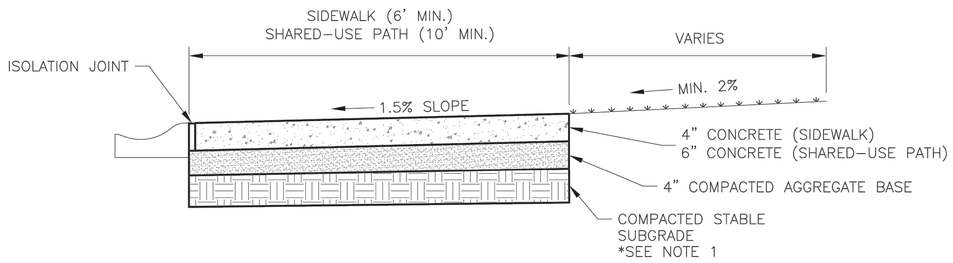
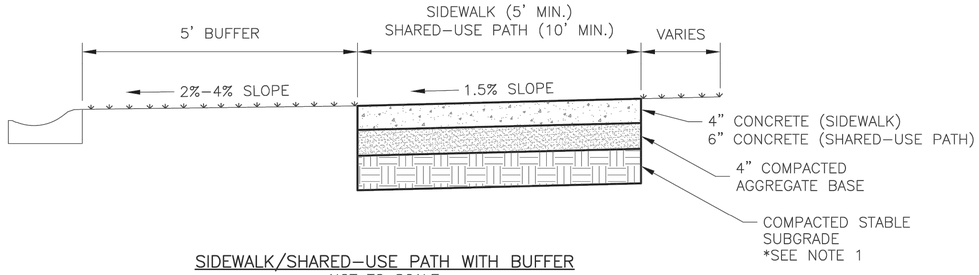


SIDEWALK/SHARED–USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED–USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED–USE PATHS.
4. ALL SIDEWALK/SHARED–USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 100 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED–USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED–USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED–USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED–USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 05/2021
Drawn By: MJF
Checked By: DL

SIDEWALK/SHARED-USE PATH DETAIL

GEN-2

1 SIDEWALK DETAILS

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OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St.
Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2007004
LANDSCAPE ARCHITECT
10/14/2021

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

HARDSCAPE DETAILS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
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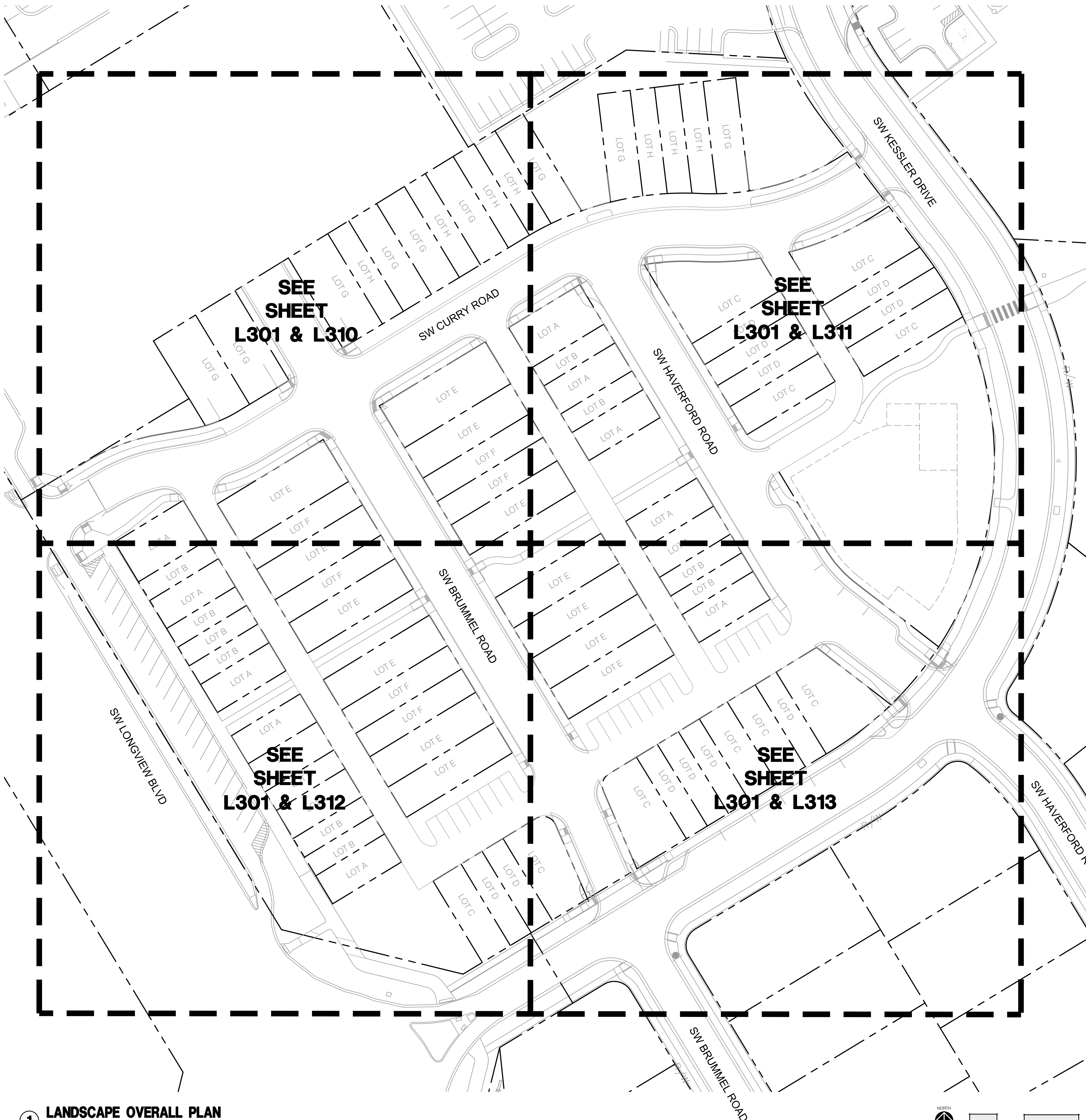

1 LANDSCAPE OVERALL PLAN

LANDSCAPE GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, MISSOURI IN CURRENT USAGE. ALL STANDARDS NOT COVERED BY THE CITY SHALL BE APWA STANDARDS IN CURRENT USAGE UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES, DRAIN LINES AND IRRIGATION PIPING PRIOR TO COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, DRAIN LINES AND IRRIGATION PIPING.
3. CONTRACTOR SHALL VERIFY AND COORDINATE ALL FINAL GRADES WITH LANDSCAPE ARCHITECT PRIOR TO COMPLETION.
4. DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE AND SHALL BE REMOVED AT FREQUENT INTERVALS. AT COMPLETION OF WORK IN EACH AREA, THE CONTRACTOR SHALL GATHER AND REMOVE ALL DEBRIS, EQUIPMENT, AND EXCESS MATERIAL FROM THAT AREA. AT FINAL COMPLETION OF ALL WORK HE SHALL REMOVE ALL SUCH ITEMS FROM THE PREMISES.
5. LOCATION AND PLACEMENT OF ALL PLANT MATERIAL SHALL BE COORDINATED WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. THE LANDSCAPE PLANTING PLAN GRAPHICALLY ILLUSTRATES OVERALL PLANT MASSINGS. EACH PLANT SPECIES SHALL BE PLACED IN THE FIELD TO UTILIZE THE GREATEST COVERAGE OF THE GROUND PLANE. THE FOLLOWING APPLIES FOR INDIVIDUAL PLANTINGS:
   -ALL EVERGREEN SHRUBS AND CREEPING GROUNDCOVERS SHALL BE MINIMUM OF 2' FROM ANY PAVING EDGE.
   -ALL PLANTS OF THE SAME SPECIES SHALL BE EQUALLY SPACED AND SITED FOR THE BEST AESTHETIC VIEWING.
   -ALL TREES, EVERGREEN OR DECIDUOUS, SHALL BE A MINIMUM OF 4' FROM ANY PAVING EDGE.
7. ANY SUBSTITUTION OF SPECIFIED PLANT MATERIAL WILL NOT BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
8. MULCH ALL PLANTING AREAS TO A DEPTH OF 3" DEPTH ACCORDING TO PLANS AND SPECIFICATIONS. SAMPLES SHALL BE APPROVED BY LANDSCAPE ARCHITECT.
9. ALL PLANT MATERIAL WILL BE HEALTHY, VIGOROUS AND FREE OF DISEASE AND INSECTS PER AAN STANDARDS. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY INFERIOR OR OTHERWISE UNSUITABLE PLANT MATERIAL PROPOSED FOR USE ON THE PROJECT.
10. ALL PLANTING BEDS NOT FULLY CONTAINED BY CONCRETE CURBS OR WALKS SHALL BE EDGED ACCORDING TO PLANS AND SPECIFICATIONS.
11. PLANTS AND LANDSCAPE MATERIALS SHALL BE INSTALLED AS DETAILED ON PLANS.
12. PLANT BACKFILL FOR TREES AND SHRUBS SHALL BE PER SPECIFICATIONS.
13. ALL PLANTING BEDS SHALL BE TREATED WITH DACTHAL PRE-EMERGENT HERBICIDE AT MANUFACTURER RECOMMENDED RATES AND SHALL BE COVERED WITH SPECIFIED MULCH APPLICATION. APPLY LIGHTER APPLICATION OF DACTHAL HERBICIDE TO TOP OF MULCH LAYER.
14. ALL AREAS DISTURBED DURING CONSTRUCTION THAT ARE NOT DESIGNATED AS PLANTING BEDS OR PAVEMENT AREAS SHALL BE SEEDED WITH A TURF TYPE TALL FESCUE PER SPECIFICATIONS.
15. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER OWNER'S FINAL ACCEPTANCE OF FINISHED JOB. ALL DEAD AND DAMAGED PLANT MATERIAL SHALL BE REPLACED BY LANDSCAPE CONTRACTOR AT THEIR EXPENSE. LANDSCAPE CONTRACTOR SHALL MAINTAIN PLANT MATERIAL UNTIL FINAL ACCEPTANCE.
16. ALL LANDSCAPE BEDS SHALL BE MOUNDED AS SHOWN ON PLANS AND DETAILS.
17. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ACTUAL PLANT QUANTITIES REQUIRED TO COMPLETE THE PROJECT AS SHOWN ON THE PLANS, AND BASE THEIR BID ACCORDINGLY.
18. PLANT KEY DESCRIPTION.

WP / 3 — PLANT TYPE / QUANTITY

ochsner hare + hare
the olsson studio
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STATE OF MISSOURI — BRANDON D. MCBRIDE — NUMBER LA-2017009081 — LANDSCAPE ARCHITECT — 10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

LANDSCAPE OVERALL PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

2021

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1 LANDSCAPE OVERSTORY PLAN

NORTH
0 20' 40' 80'

PLANT SCHEDULE

DECIDUOUS TREES	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
AMM	ACER MIYABEI 'MORTON' TM	STATE STREET MIYABEI MAPLE	3" CAL	B&B	14
ATS	ACER TRUNCATUM SHANTUNG	SHANTUNG MAPLE	3" CAL.	B&B	10
ATP	ACER TRUNCATUM X PLATANOIDES 'KEITHSFORM' TM	NORWEGIAN SUNSET MAPLE	3" CAL	B&B	10
CBF	CARPINUS BETULUS 'FASTIGIATA'	PYRAMIDAL EUROPEAN HORNBEAN	3" CAL.	B&B	10
CVW	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	3" CAL	B&B	2
GDE	GYMNOCLADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	3" CAL	B&B	6
MPW	MACLURA POMIFERA 'WHITE SHIELD'	WHITE SHIELD OSAGE ORANGE	3" CAL.	B&B	4
PAB	PLATANUS X ACERIFOLIA 'BLOODGOOD'	BLOODGOOD LONDON PLANE TREE	3" CAL.	B&B	7
QAW	QUERCUS ALBA	WHITE OAK	3" CAL	B&B	2
TDM	TAXODIUM DISTICHUM 'MICKELSON' TM	SHAWNEE BRAVE BALD CYPRESS	3" CAL.	B&B	10
UPE	ULMUS PROPINQUA 'JFS-BIEBERICH' TM	EMERALD SUNSHINE ELM	2.5" CAL	B&B	9
ZSV	ZELKOVA SERRATA 'VILLAGE GREEN'	VILLAGE GREEN SAWLEAF ZELKOVA	3" CAL	B&B	13

ORNAMENTAL TREES	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
ABT	ACER BUERGERIANUM	TRIDENT MAPLE	3" CAL.	B&B	9
ATS	ACER TRUNCATUM	SHANTUNG MAPLE	3" CAL	B&B	8
CCT	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'	OKLAHOMA TEXAS REDBUD	3" CAL.	B&B	4
MJJ	MAGNOLIA X 'JANE'	JANE MAGNOLIA	3" CAL.	B&B	4
MAA	MALUS X 'ADIRONDACK'	ADIRONDACK CRABAPPLE	3" CAL.	B&B	5
MPP	MALUS X 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	3" CAL.	B&B	8
MSC	MALUS X 'SARGENTII'	SARGENT CRABAPPLE	3" CAL	B&B	4
MSS	MALUS X 'SPRING SNOW'	SPRING SNOW CRABAPPLE	3" CAL	B&B	12
SRI	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	3" CAL	B&B	9

LANDSCAPE REQUIREMENTS:

LANDSCAPING AND SCREENING REQUIREMENTS		REQUIRED PLANTS	SHOWN PLANTS
LEE'S SUMMIT, MISSOURI			
CODE OF ORDINANCES: DIVISION III - LANDSCAPING, BUFFERS AND TREE PROTECTION			
SITE ZONED: PMIX			
TOTAL PROPERTY: 7.133 ACRES (310,734.99 SQ FT)			
STREET FRONTAGE TREES:			
SEC. 8.790	ONE TREE PER 30 FEET OF STREET FRONTAGE, PUBLIC OR PRIVATE		
	TREES MAY BE CLUSTERED OR ARRANGED WITHIN THE SETBACK. A MIN. 20' LANDSCAPE STRIP SHALL BE PROVIDED ALONG THE FULL LENTH O THE STREET FRONTAGE, EXCEPT WHERE THE BUILDING SETBACK IS LESS THEN 20'.		
	SW KESSLER DRIVE		
	TOTAL STREET FRONTAGE = 992 LF		
	(992/ 30 = 29.7)	30 TREES	30 TREES
	SW LONGVIEW BOULEVARD		
	TOTAL STREET FRONTAGE = 477 LF		
	(477/ 30 = 16.2)	16 TREES	16 TREES
	SW CURRY ROAD		
	TOTAL STREET FRONTAGE = 622 LF		
	(622/ 30 = 20.63)	21 TREES	21 TREES
	SW BRUMMEL ROAD		
	TOTAL STREET FRONTAGE = 545 LF		
	(545/ 30 = 18.16)	19 TREES	20 TREES
	SW HAVERFORD ROAD		
	TOTAL STREET FRONTAGE = 432 LF		
	(441/ 40 = 14.70)	15 TREES	22 TREES
OPEN YARD TREES:			
SEC. 8.790	BUILDING FOOTPRINT = 94,373 SQ FT		
	216,362 / 5,000 = 43.27 TREES	43 TREES	50 TREES
	LANDSCAPE TOTALS	**144 TREES**	**159 TREES**
STREET FRONTAGE SHRUBS:			
SEC. 8.790	ONE SHRUB PER 20 FEET OF STREET FRONTAGE		
	A MINIMUM 20 FEET WIDE LANDSCAPE STRIP SHALL BE PROVIDED ALONG THE FULL LENGTH OF ANY STREET FRONTAGE, EXCEPT WHERE THE BUILDING SETBACK IS LESS THAN 20 FEET.		
	SW KESSLER DRIVE		
	TOTAL STREET FRONTAGE = 992 LF		
	(992/ 20 = 49.6)	50 SHRUBS	52 SHRUBS
	SW LONGVIEW BOULEVARD		
	TOTAL STREET FRONTAGE = 477 LF		
	(477/ 20 = 23.85)	24 SHRUBS	30 SHRUBS
	SW CURRY ROAD		
	TOTAL STREET FRONTAGE = 622 LF		
	(622/ 20 = 31.1)	33 SHRUBS	33 SHRUBS
	SW BRUMMEL ROAD		
	TOTAL STREET FRONTAGE = 545 LF		
	(545/ 20 = 27.25)	28 SHRUBS	28 SHRUBS
	SW HAVERFORD ROAD		
	TOTAL STREET FRONTAGE = 432 LF		
	(432/ 20 = 21.6)	22 SHRUBS	25 SHRUBS
OPEN YARD SHRUBS:			
SEC. 8.790	TWO SHRUBS PER 5,000 SQUARE FEET OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT		
	TOTAL LOT AREA = 310,735 SQ FT		
	BUILDING FOOTPRINT = 94,373 SQ FT		
	216,362 / 5,000 = 43.27 X 2 = 86.54 SHRUBS	87 SHRUBS	137 SHRUBS
	OPEN AREAS NOT COVERED WITH OTHER MATERIALS SHALL BE COVERED WITH SOD.		
LANDSCAPE TOTALS		**244 SHRUBS**	**305 SHRUBS**

LANDSCAPE LEGEND:

RIGHT OF WAY / PROPERTY LINE

OVERSTORY TREE

ORNAMENTAL TREE

SHRUB BED

LANDSCAPE PLAN NOTES:

1. PLANTING BED WITH HARDWOOD MULCH; REF: SPECIFICATION, LANDSCAPE PLANS AND LANDSCAPE DETAILS
2. SIGHT TRIANGLE

ochsner hare + hare
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Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA-2017000284
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

LANDSCAPE OVERSTORY PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by:	LS
checked by:	BM
approved by:	KPS
QA/QC by:	KPS
project no.:	021-02987
drawing no.:	LSC_OVR_02102987
date:	10.14.2021

SHEET
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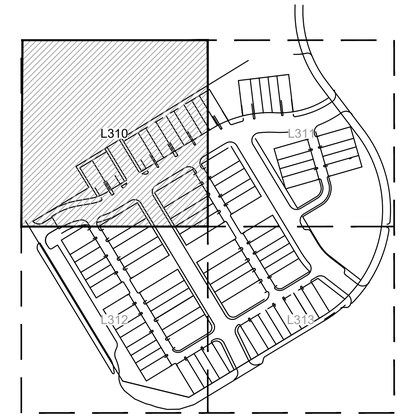
1 LANDSCAPE UNDERSTORY PLAN



KEYMAP

LANDSCAPE LEGEND:

- RIGHT OF WAY / PROPERTY LINE
- SHEET MATCHLINE
- OVERSTORY TREE
- ORNAMENTAL TREE
- SHRUB BED
- TURF TYPE FESCUE SOD
- TURF TYPE FESCUE SEED

LANDSCAPE PLAN NOTES:

1. AREA TO BE SODDED WITH TURF TYPE FESCUE SOD; REF: SPECIFICATIONS
2. AREA TO BE SEEDED WITH TURF TYPE FESCUE SEED; REF: SPECIFICATIONS
3. INSTALL METAL BED EDGE: REF; 5/L390
4. LANDSCAPE BED WITH HARDWOOD MULCH; REF SPECIFICATIONS, LANDSCAPE PLANS AND LANDSCAPE DETAILS

PLANT SCHEDULE

DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY
CS	CORNUS SERICEA `FARROW` TM	ARCTIC FIRE RED TWIG DOGWOOD	5 GAL	24
CK	CORNUS SERICEA `KELSEYI`	KELSEYI DWARF REDTWIG DOGWOOD	5 GAL	21
HF	HYPERICUM FRONDOSUM 'SUNBURST'	SUNBURST HYPERICUM	5 GAL	12
IH	ITEA VIRGINICA `HENRY`S GARNET`	HENRY`S GARNET SWEETSPIRE	5 GAL	8
IL	ITEA VIRGINICA `LITTLE HENRY` TM	LITTLE HENRY SWEETSPIRE	5 GAL	4
PD	PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' TM	LITTLE DEVIL NINEBARK	5 GAL	46
RA	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC	5 GAL	5
VM	VIBURNUM CARLESII 'SMVCB' TM	SPICE BABY KOREANSPICE VIBURNUM	5 GAL	8
WB	WEIGELA FLORIDA 'BRAMWELL' TM	FINE WINE WEIGELA	5 GAL	81

EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY
JF	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL	14

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STATE OF MISSOURI
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LANDSCAPE ARCHITECT
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LANDSCAPE UNDERSTORY PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

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checked by: BM
approved by: KPS
QA/QC by: KPS
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drawing no.: L-LSC_UND_02102987
date: 10.14.2021

SHEET
L310

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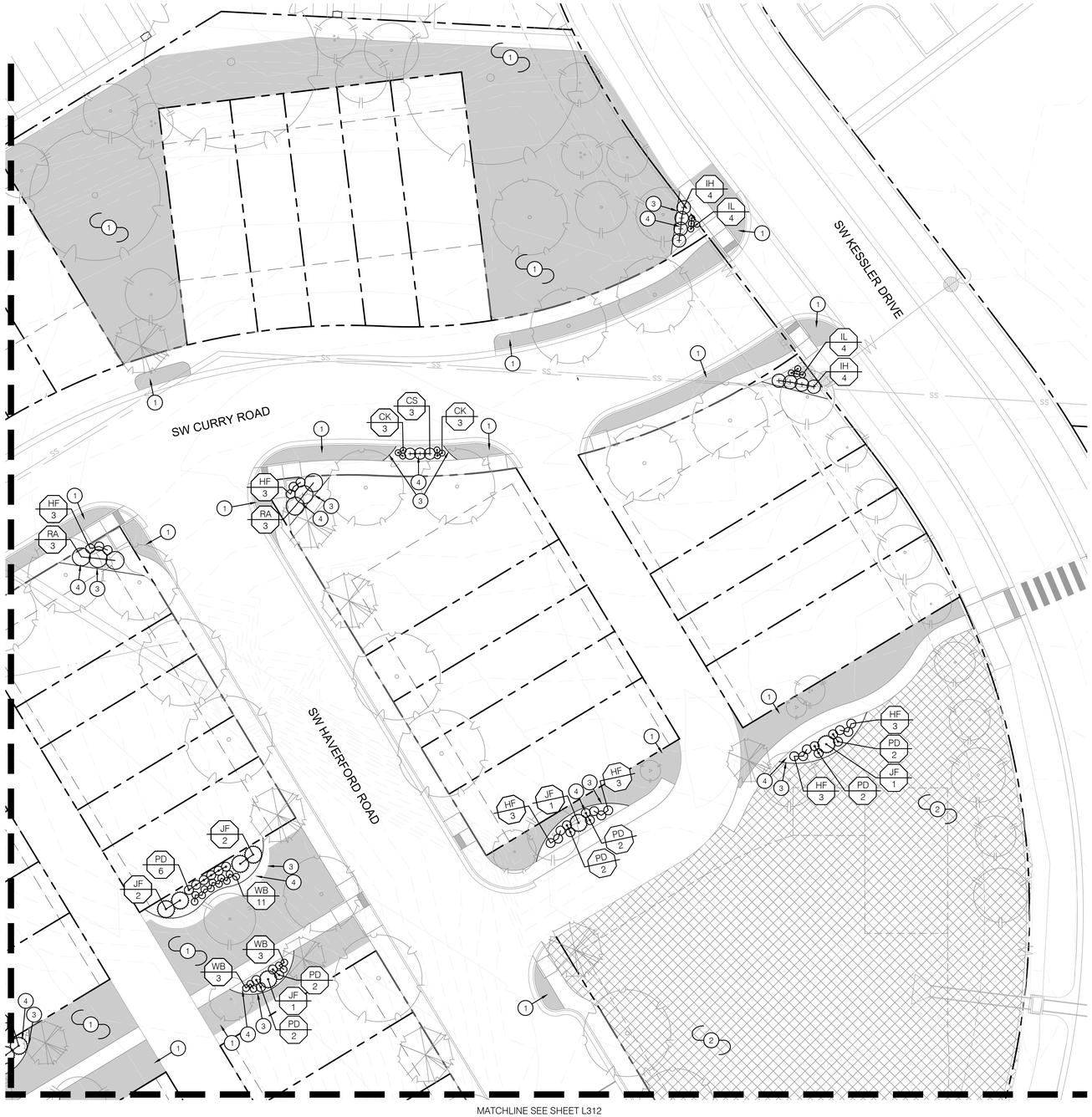
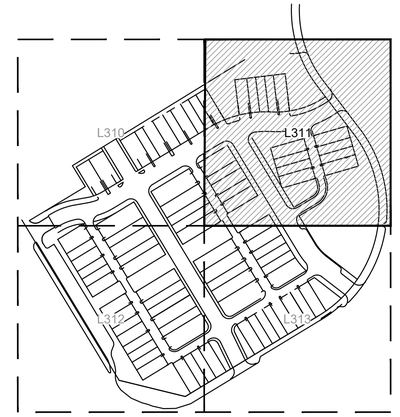


1 LANDSCAPE UNDERSTORY PLAN



KEYMAP

LANDSCAPE LEGEND:

- RIGHT OF WAY / PROPERTY LINE
- SHEET MATCHLINE
- OVERSTORY TREE
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- SHRUB BED
- TURF TYPE FESCUE SOD
- TURF TYPE FESCUE SEED

LANDSCAPE PLAN NOTES:

1. AREA TO BE SODDED WITH TURF TYPE FESCUE SOD; REF: SPECIFICATIONS
2. AREA TO BE SEEDED WITH TURF TYPE FESCUE SEED; REF: SPECIFICATIONS
3. INSTALL METAL BED EDGE: REF; 5/L390
4. LANDSCAPE BED WITH HARDWOOD MULCH; REF SPECIFICATIONS, LANDSCAPE PLANS AND LANDSCAPE DETAILS

PLANT SCHEDULE

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EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	QTY
JF	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL	14

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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2017002484
LANDSCAPE ARCHITECT
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LANDSCAPE UNDERSTORY PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_LSC_UND_02102987
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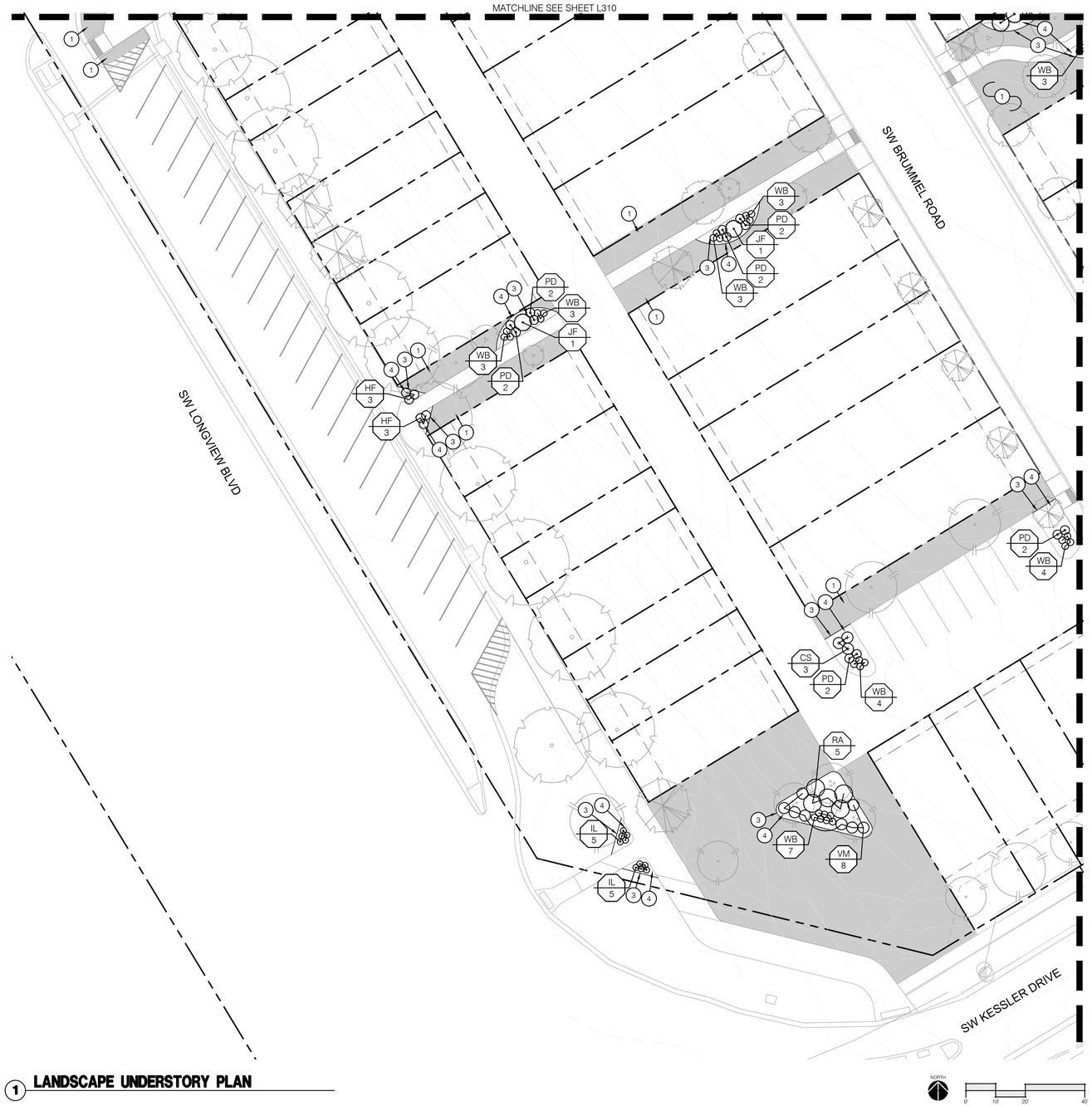
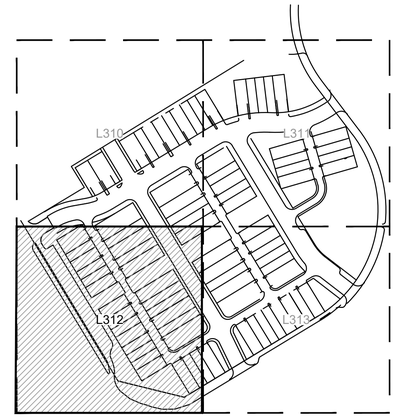


1 LANDSCAPE UNDERSTORY PLAN



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BRANDON D. MCBRIDE
NUMBER LA2017002484
LANDSCAPE ARCHITECT
10/14/2021

REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

LANDSCAPE UNDERSTORY PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

2021

LEE'S SUMMIT, MO

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing no.: L_LSC_UND_02102987
date: 10.14.2021

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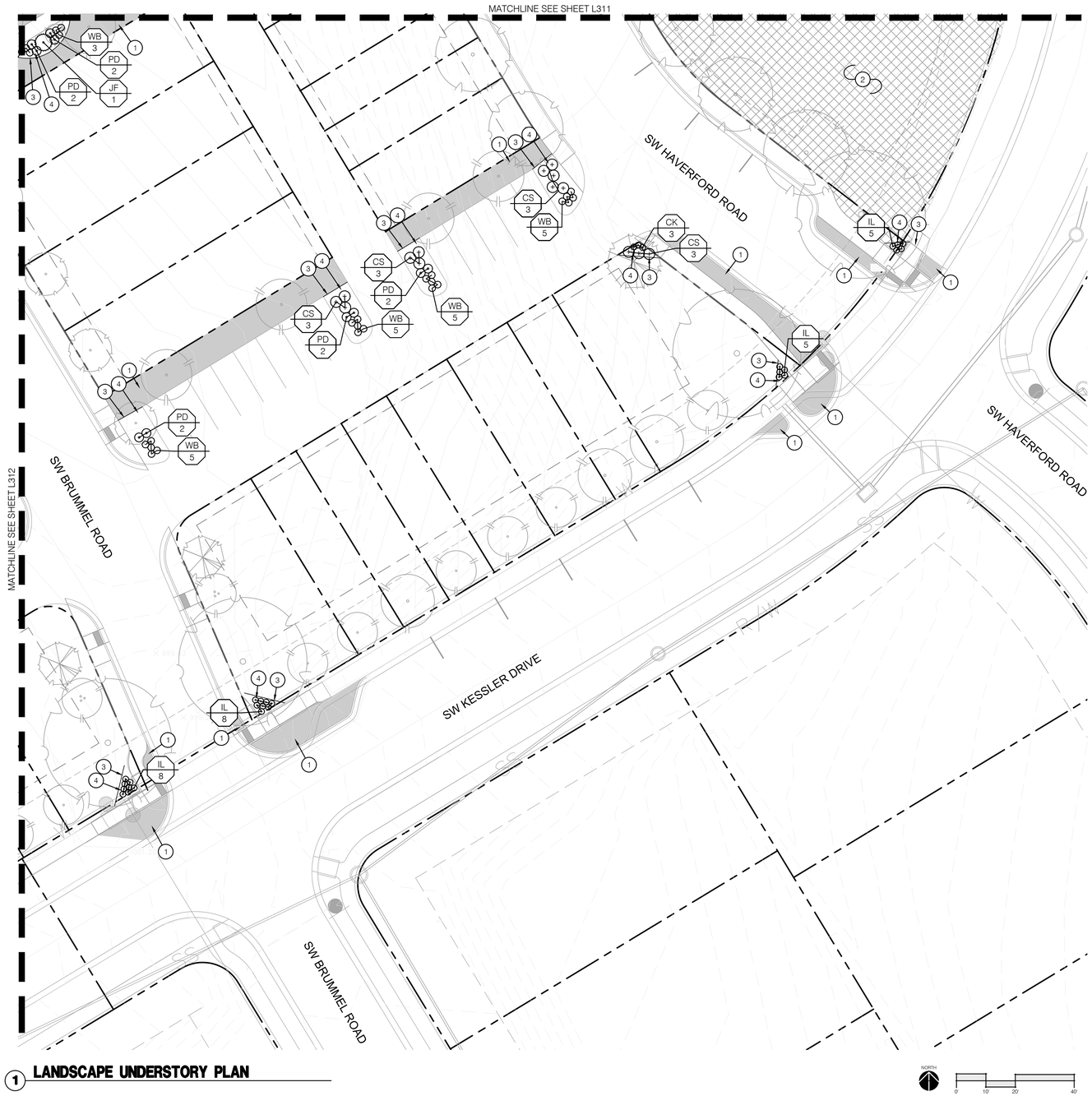
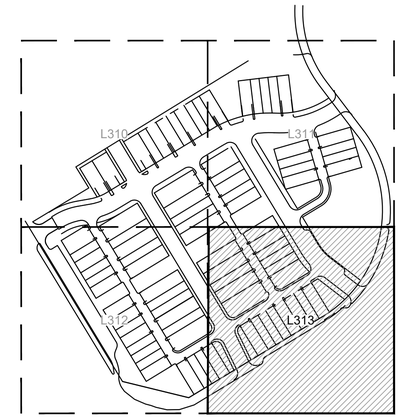


1 LANDSCAPE UNDERSTORY PLAN



KEYMAP

LANDSCAPE LEGEND:

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3. INSTALL METAL BED EDGE: REF; 5/L390
4. LANDSCAPE BED WITH HARDWOOD MULCH; REF SPECIFICATIONS, LANDSCAPE PLANS AND LANDSCAPE DETAILS

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JF	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL	14

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STATE OF MISSOURI
BRANDON D. MCBRIDE
NUMBER LA2007004844
LANDSCAPE ARCHITECT
10/14/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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LANDSCAPE UNDERSTORY PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
checked by: BM
approved by: KPS
QA/QC by: KPS
project no.: 021-02987
drawing na.: LSC_UND_02102987
date: 10.14.2021

SHEET
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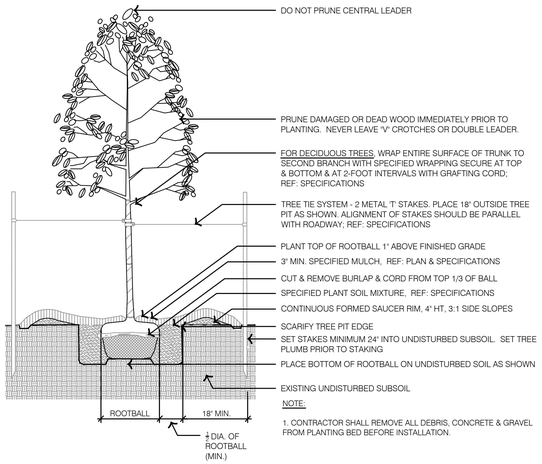
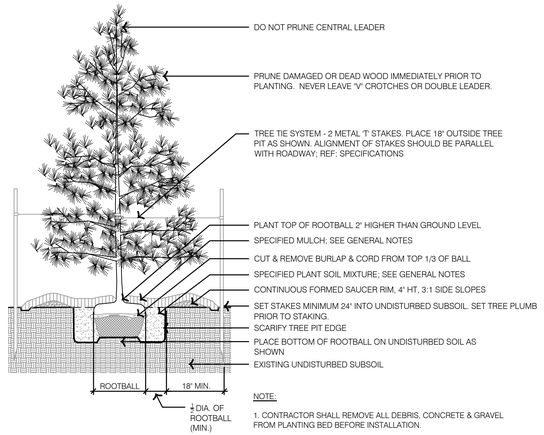


NOTE:

1. CONTRACTOR SHALL REMOVE ALL DEBRIS, CONCRETE & GRAVEL FROM PLANTING BED BEFORE INSTALLATION.

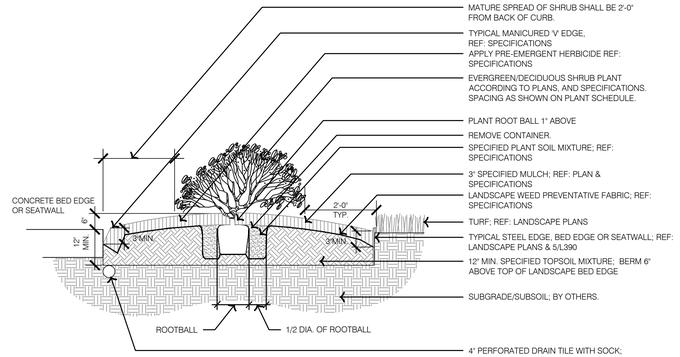
1 TYPICAL DECIDUOUS TREE PLANTING



NOTE:

1. CONTRACTOR SHALL REMOVE ALL DEBRIS, CONCRETE & GRAVEL FROM PLANTING BED BEFORE INSTALLATION.

2 TYPICAL EVERGREEN TREE PLANTING



NOTE:

1. CONTRACTOR SHALL REMOVE ALL DEBRIS, CONCRETE & GRAVEL FROM PLANTING BED BEFORE INSTALLATION.

2. MULCH SHALL BE 1" BELOW ADJACENT PAVEMENT, CURB AND METAL EDGING.

3 TYPICAL SHRUB PLANTING

NOTE:

1. CONTRACTOR SHALL REMOVE ALL DEBRIS, CONCRETE & GRAVEL FROM PLANTING BED BEFORE INSTALLATION.

2. MULCH SHALL BE 1" BELOW ADJACENT PAVEMENT, CURB AND METAL EDGING.

4 TYPICAL GROUNDCOVER & PERENNIAL PLANTING

NOTE:
SET ALL EDGING 1" ABOVE FINISH GRADE AS SHOWN. EDGING SHALL BUTT ALL CONCRETE CURBS AND WALKS PERPENDICULAR AND FLUSH WITH GRADES OF CONCRETE. ALL JOINTS TO BE WELDED OR SECURELY STAKED.

5 TYPICAL STEEL BED EDGE

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LANDSCAPE DETAILS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: LS
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SHEET
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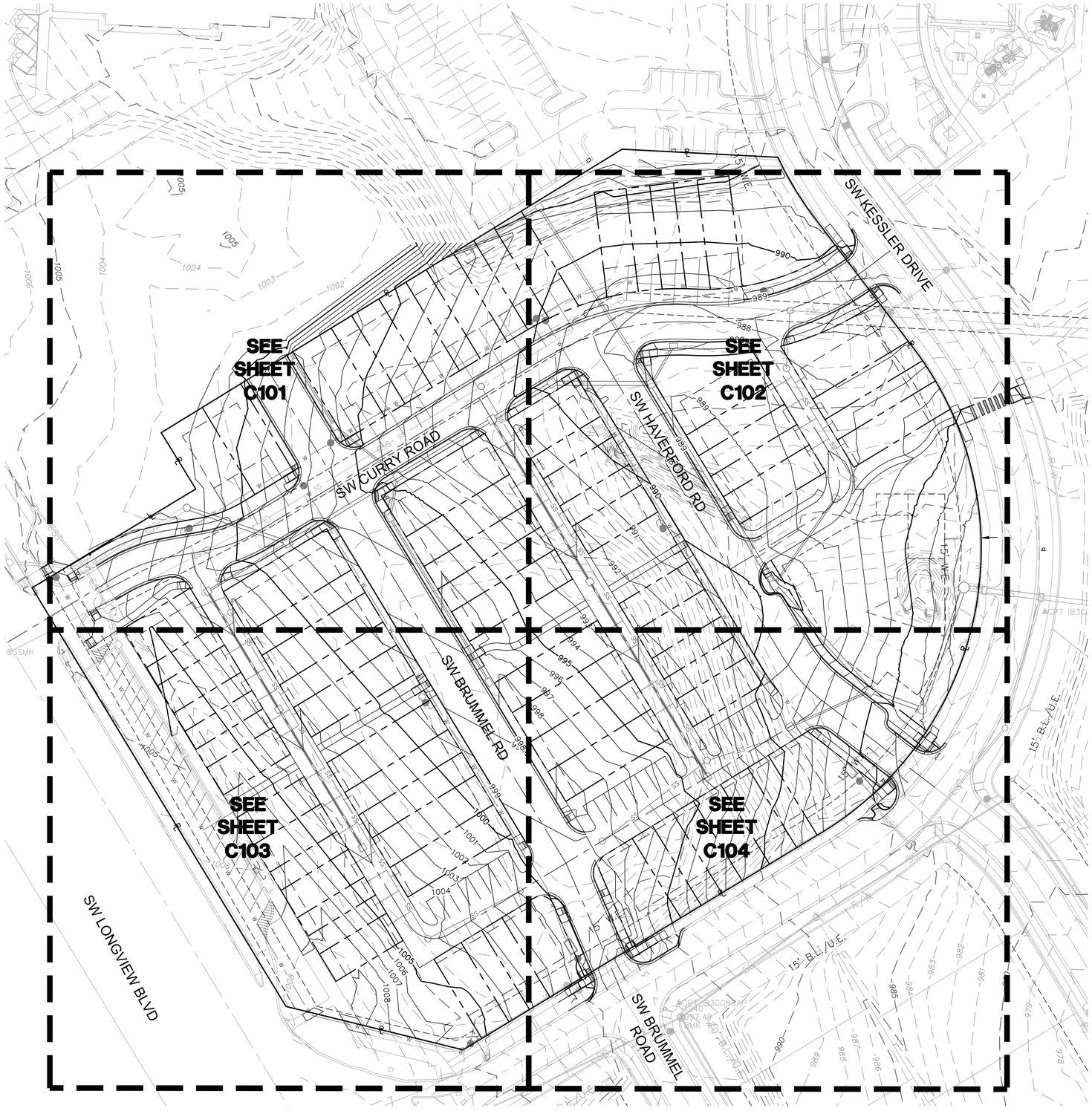

GRADING LEGEND

- PROPERTY LINE
- RIGHT–OF–WAY LINE
- CENTER LINE
- EXISTING EASEMENT
- EXISTING CONTOUR 1370
- EXISTING CONTOUR 1371
- PROPOSED EASEMENT
- PROPOSED CONTOUR 1370
- PROPOSED CONTOUR 1371
- PROPOSED DITCH

GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT–OF–WAY.

2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.

3. ALL EMBANKMENT OUTSIDE OF RIGHT–OF–WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D–698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF –0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

4. PLOT PLANS SHALL BE REQUIRED PRIOR TO BUILDING UNITS WITH FINAL LAYOUTS.

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
SITE	32,873	7,657

EARTHWORK QUANTITIES NOTES:
1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.

2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

N

0' 20' 40' 80'
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10/14/21
PROFESSIONAL ENGINEER

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OVERALL GRADING PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD
LEE'S SUMMIT, MO
2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_GRD01_02102987
date: 08.25.2021

SHEET
C100

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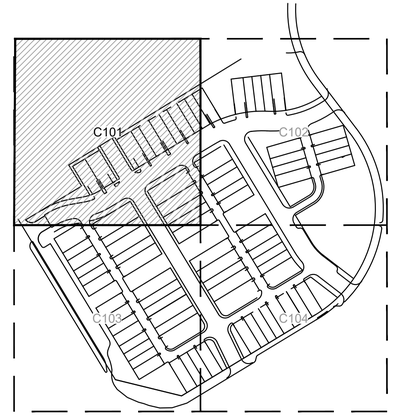
GRADING LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CENTER LINE
- EXISTING EASEMENT
- 1370 EXISTING CONTOUR
- 1371 EXISTING CONTOUR
- PROPOSED EASEMENT
- 1370 PROPOSED CONTOUR
- 1371 PROPOSED CONTOUR
- PROPOSED DITCH



KEYMAP

N

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SCALE IN FEET

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GRADING PLAN

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451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

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C101

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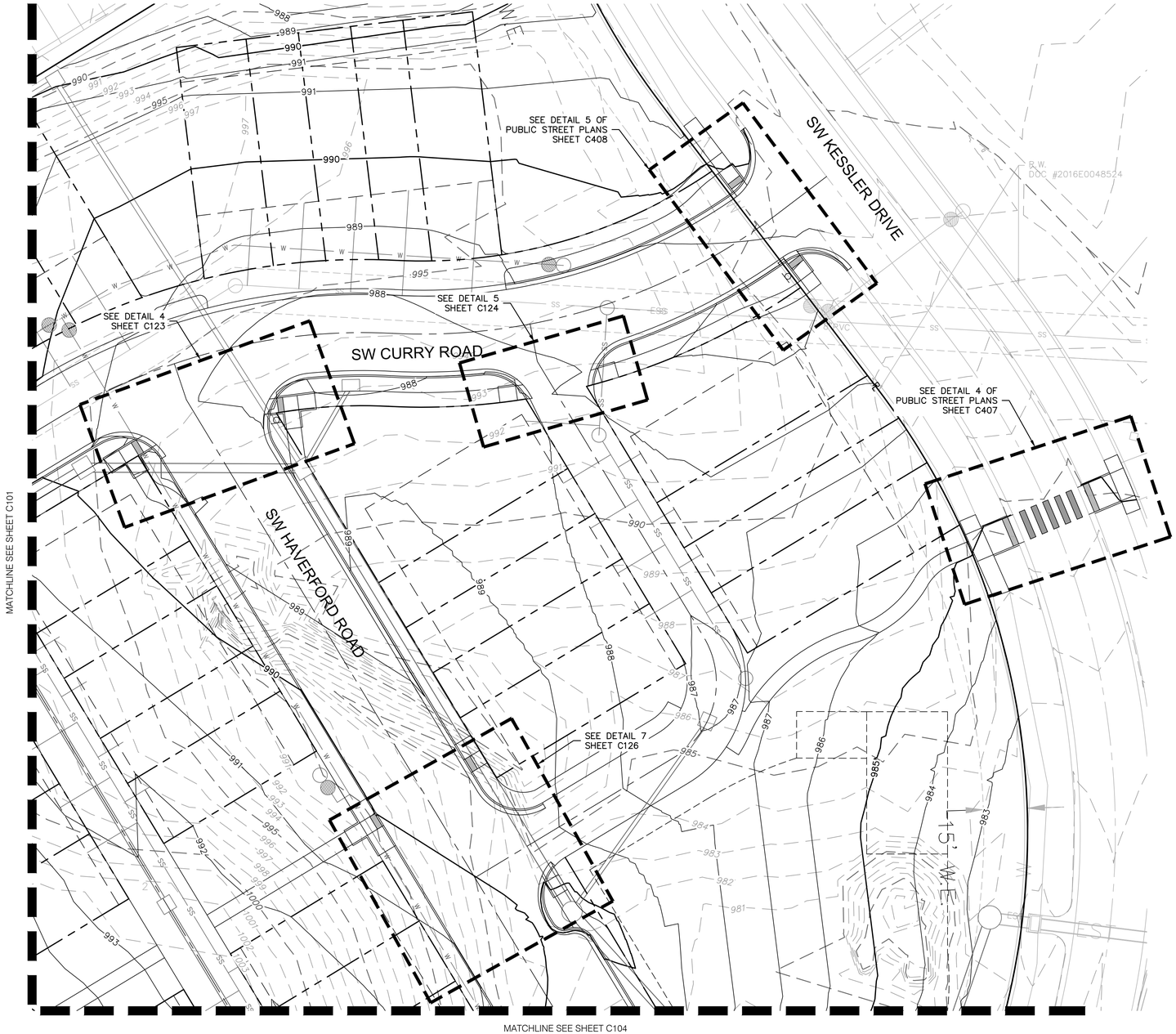
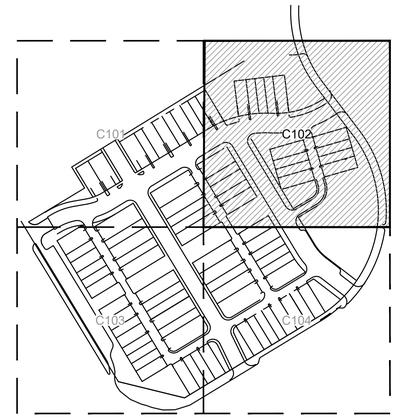
GRADING LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CENTER LINE
- EXISTING EASEMENT
- 1370 EXISTING CONTOUR
- 1371 EXISTING CONTOUR
- PROPOSED EASEMENT
- 1370 PROPOSED CONTOUR
- 1371 PROPOSED CONTOUR
- PROPOSED DITCH





KEYMAP

N

0' 10' 20' 40'
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LEE'S SUMMIT, MO

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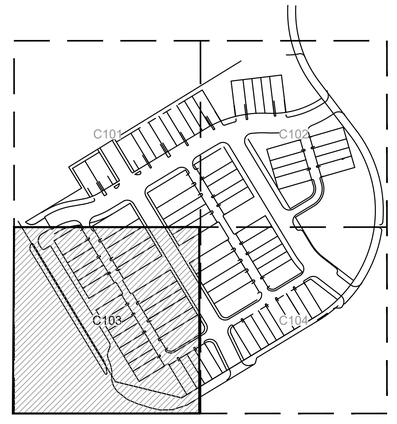
GRADING LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CENTER LINE
- EXISTING EASEMENT
- 1370 EXISTING CONTOUR
- 1371 EXISTING CONTOUR
- PROPOSED EASEMENT
- 1370 PROPOSED CONTOUR
- 1371 PROPOSED CONTOUR
- PROPOSED DITCH



KEYMAP

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GRADING PLAN

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451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

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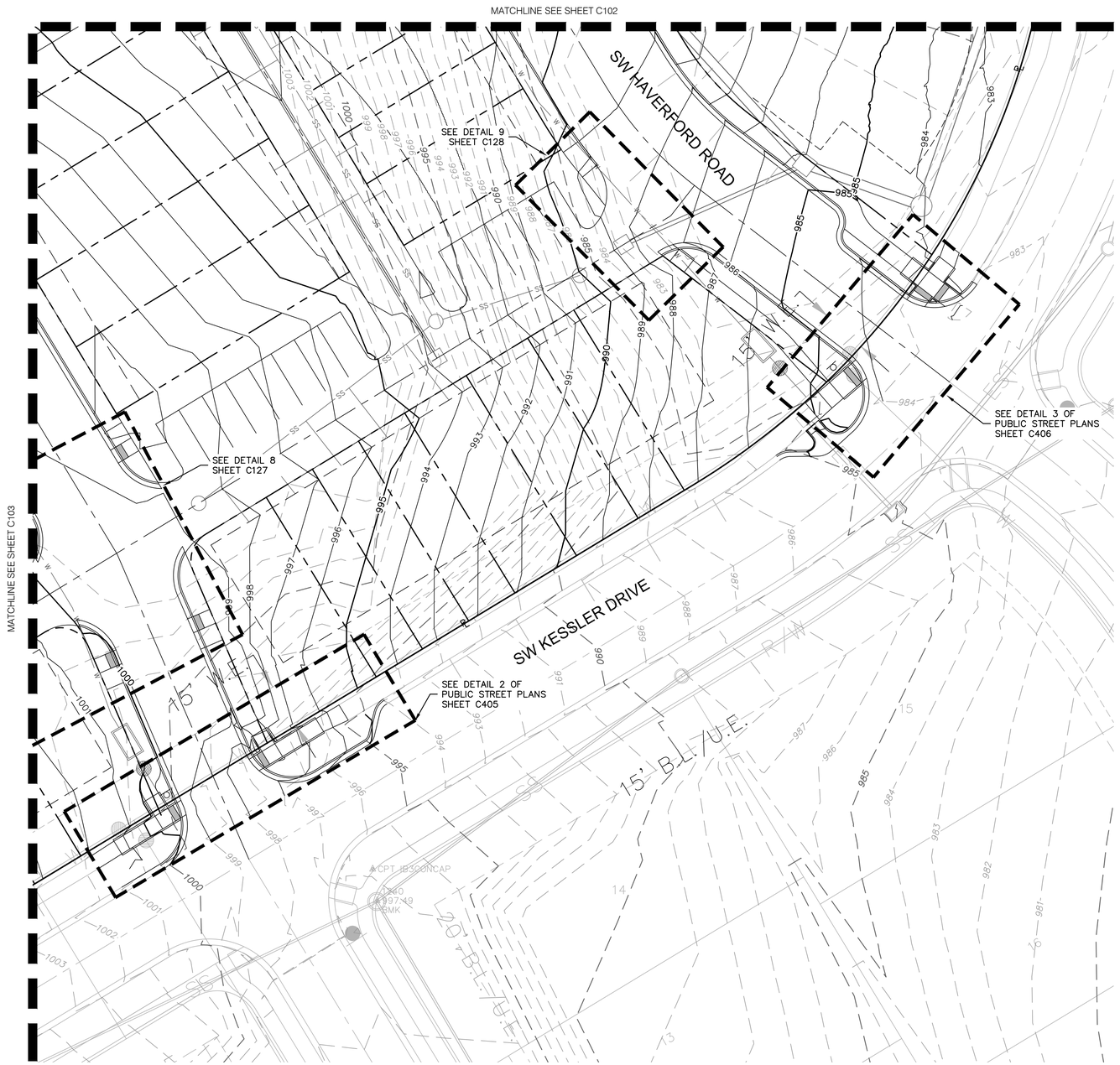
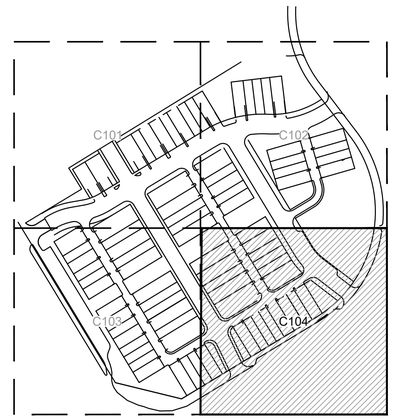


GRADING LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CENTER LINE
- EXISTING EASEMENT
- 1370 EXISTING CONTOUR
- 1371 EXISTING CONTOUR
- PROPOSED EASEMENT
- 1370 PROPOSED CONTOUR
- 1371 PROPOSED CONTOUR
- PROPOSED DITCH



KEYMAP

N

0' 10' 20' 40'
SCALE IN FEET

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GRADING PLAN

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451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

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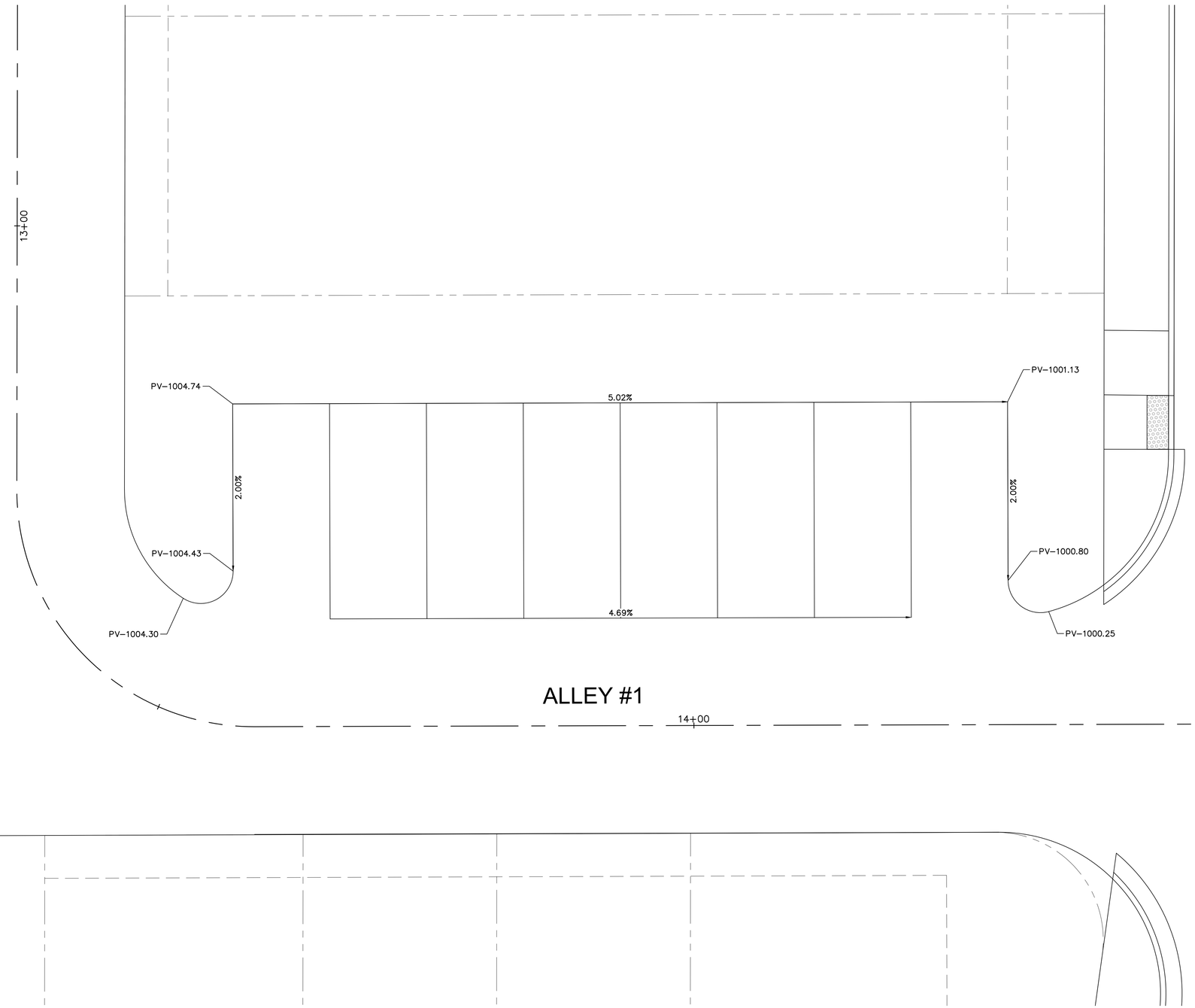

SPOT ELEVATIONS DETAIL 10

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWALK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

N

0' 2.5' 5' 10'
SCALE IN FEET

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SPOT ELEVATION DETAIL
GNCV

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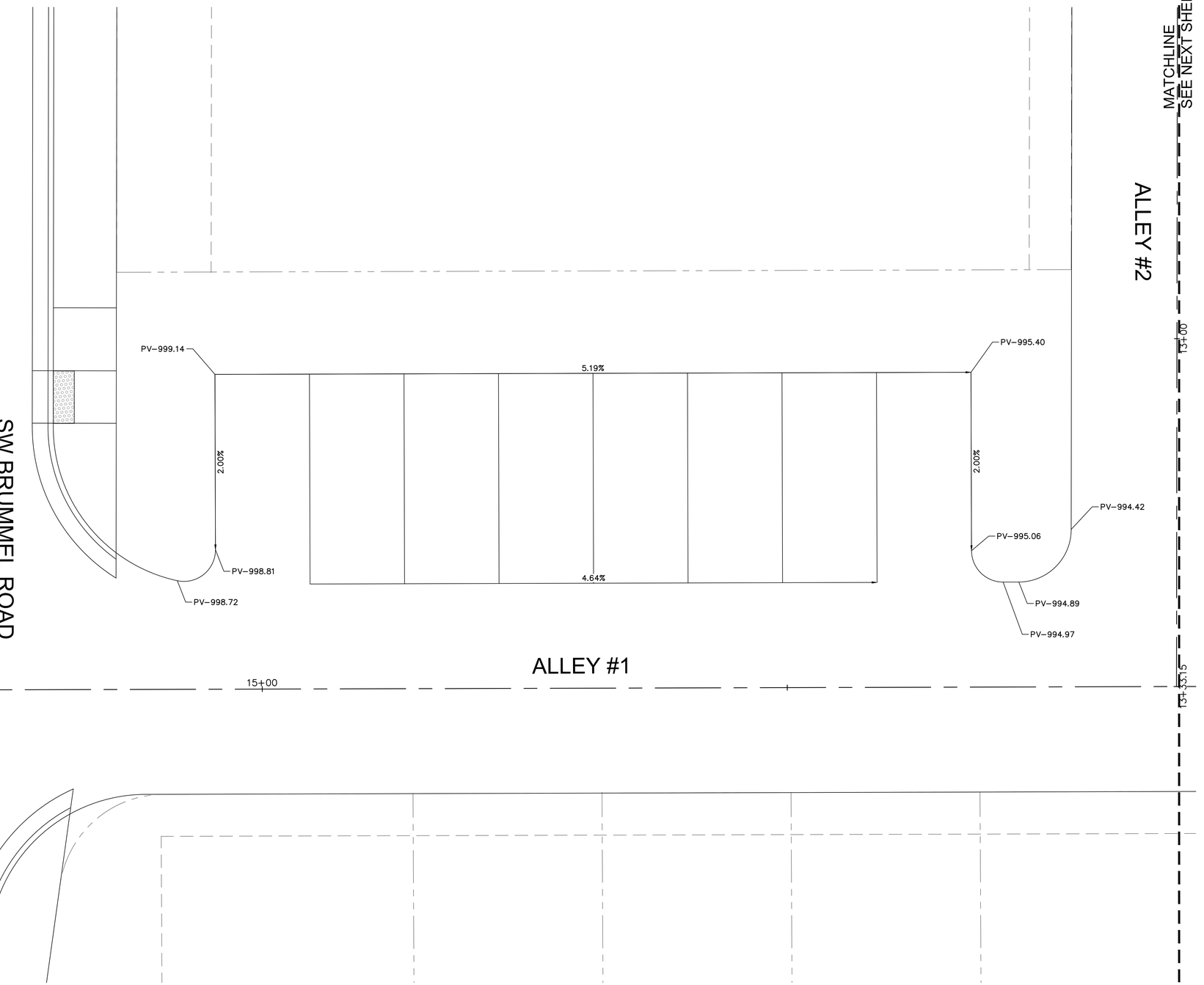

SPOT ELEVATIONS DETAIL 11

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWALK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

N

0' 2.5' 5' 10'
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SPOT ELEVATION DETAIL
GNCV

NEW LONGVIEW TOWNHOMES
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LEE'S SUMMIT, MO

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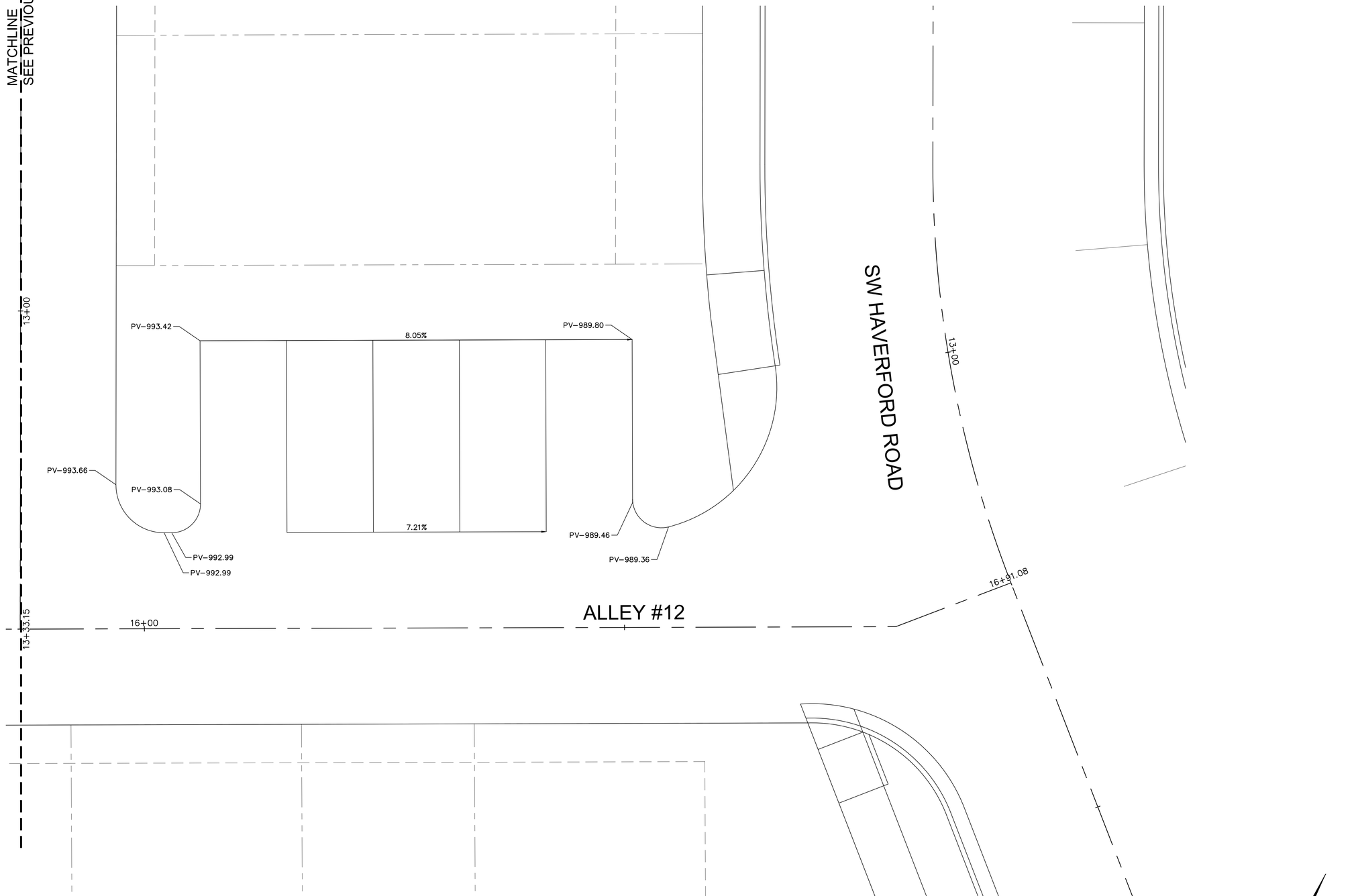

SPOT ELEVATIONS DETAIL 01

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWALK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

0' 2.5' 5' 10'
SCALE IN FEET

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SPOT ELEVATION DETAIL
GNCV

NEW LONGVIEW TOWNHOMES
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LEE'S SUMMIT, MO

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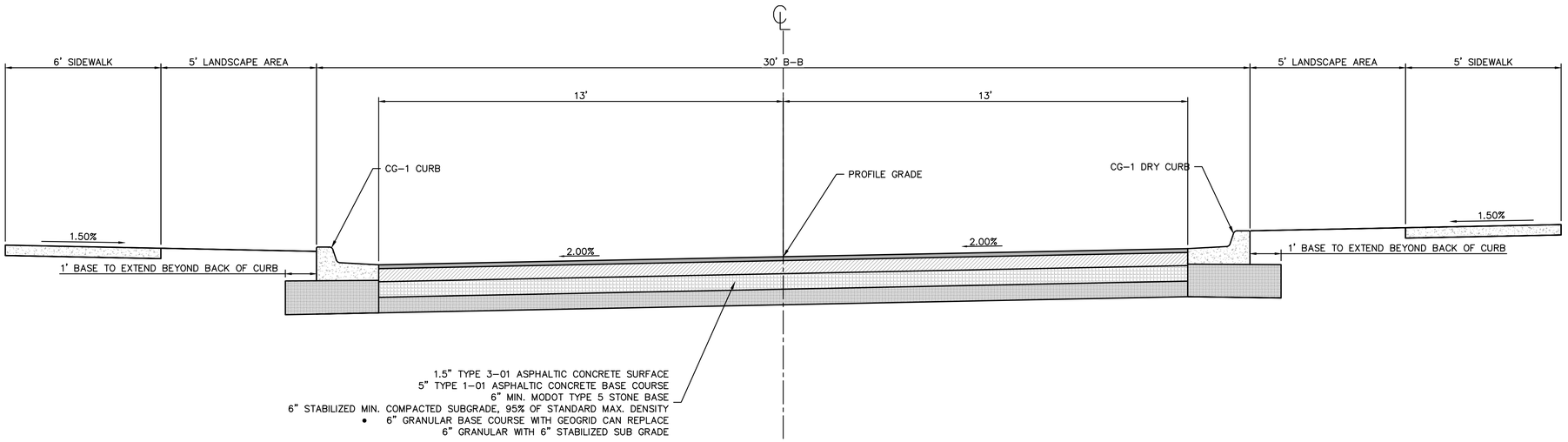
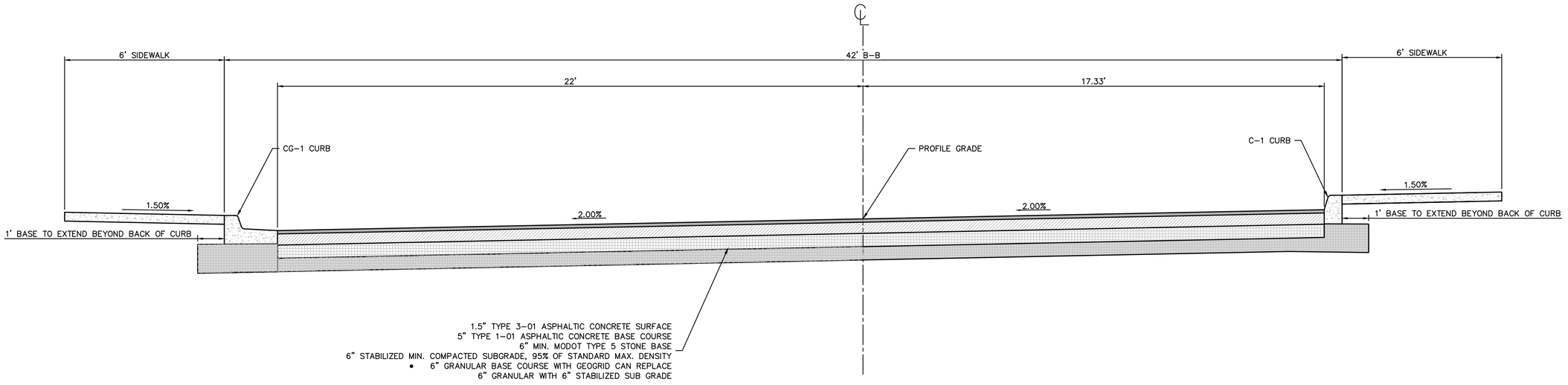


TYPICAL SECTION

SW HAVERFORD ROAD
DETACHED SIDEWALK

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW HAVERFORD ROAD	STA: 12+42.55 TO STA: 13+08.79



TYPICAL SECTION

SW HAVERFORD ROAD WITH
PARALLEL PARKING

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW HAVERFORD ROAD	STA: 12+42.55 TO STA: 13+08.79

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ROADWAY TYPICAL SECTIONS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
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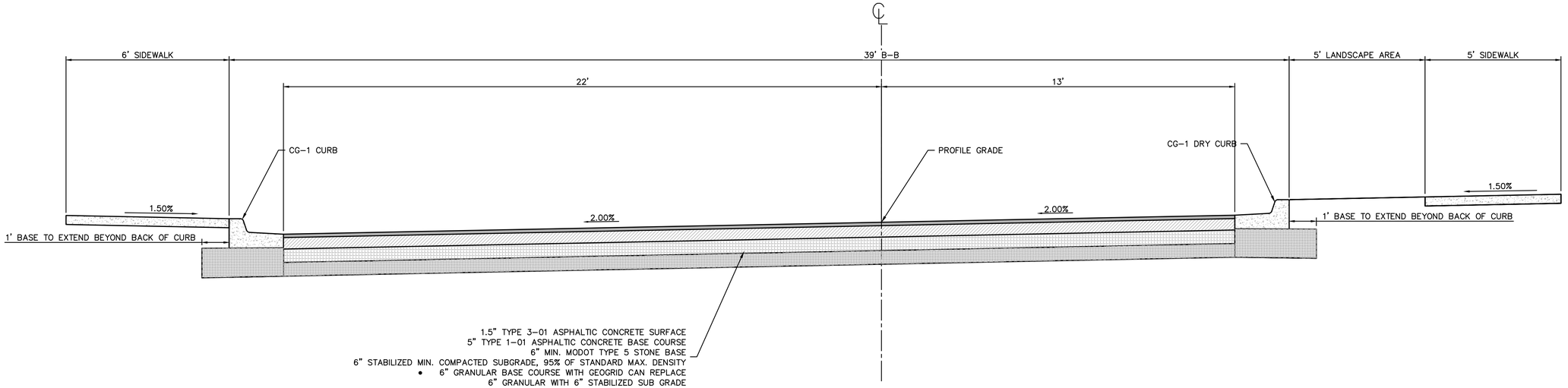
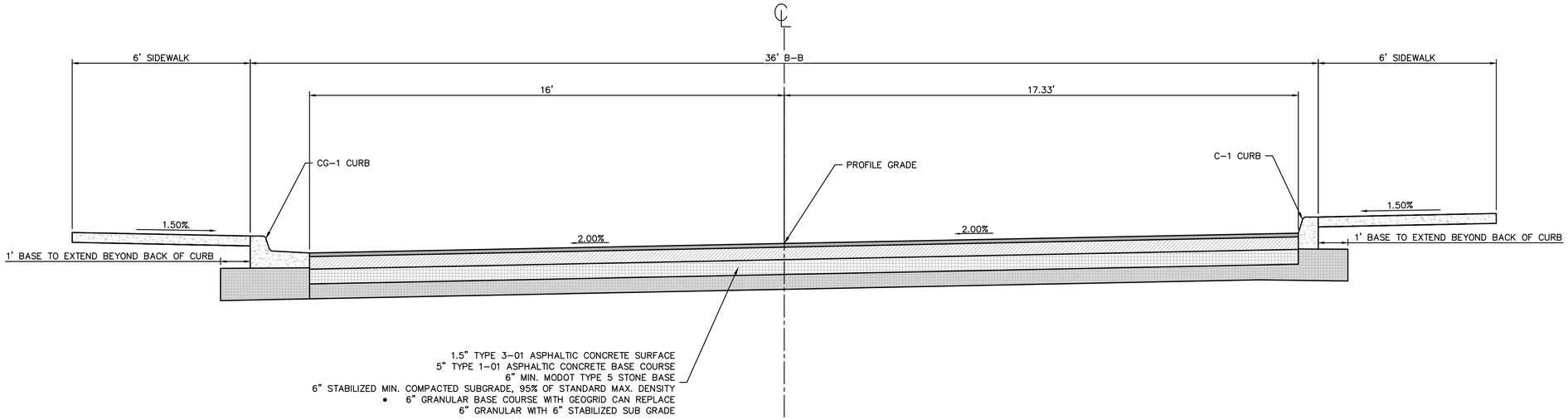


TYPICAL SECTION

SW HAVERFORD ROAD WITH
PARALLEL PARKING

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW HAVERFORD ROAD	STA: 13+28.81 TO STA: 13+66.27



TYPICAL SECTION

SW BRUMMEL/SW HAVERFORD ROAD
ATTACHED SIDEWALK AND C-1 CURB RIGHT

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW BRUMMEL ROAD	STA: 11+32.09 TO STA: 14+10.14
SW HAVERFORD ROAD	STA: 10+25.83 TO STA: 11+61.49

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ROADWAY TYPICAL SECTIONS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

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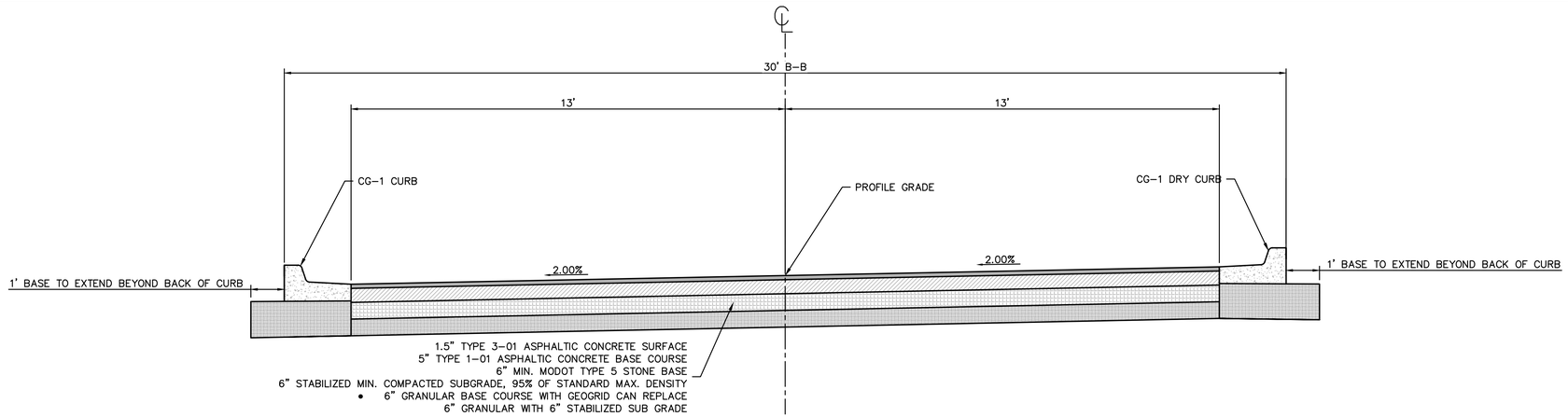
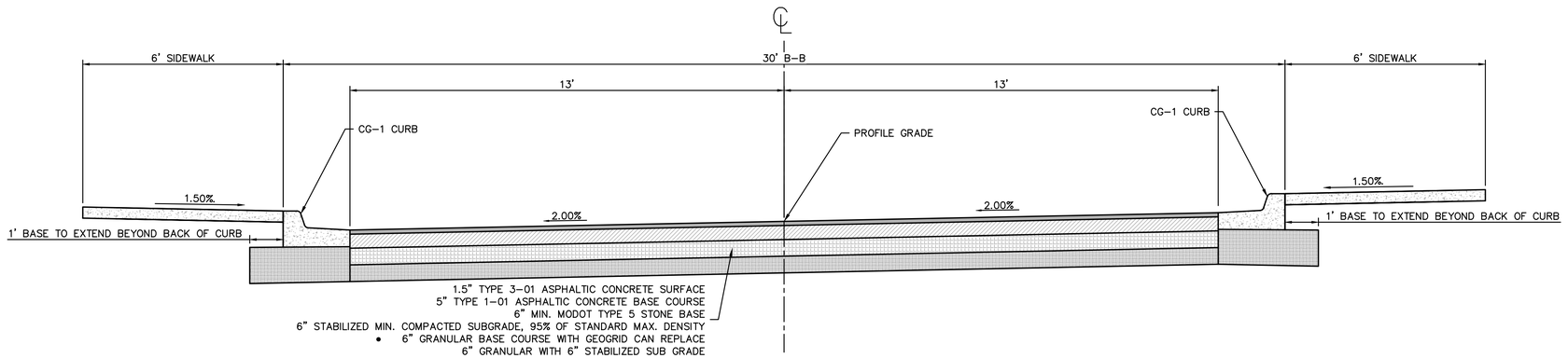


TYPICAL SECTION

SW BRUMMEL ROAD
W/O SIDEWALK

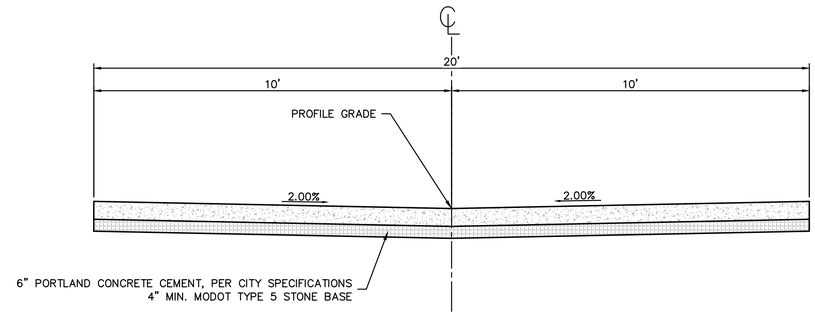
LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW BRUMMEL ROAD	STA: 10+00.00 TO STA: 10+72.02



TYPICAL SECTION

SW BRUMMEL ROAD
ATTACHED SIDEWALK

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW BRUMMEL ROAD	STA: 14+65.06 TO STA: 15+19.94



TYPICAL SECTION

ALLEY

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
ALLEY #1	STA: 10+13.00 TO STA: 14+28.28
ALLEY #1	STA: 14+88.88 TO STA: 16+54.61
ALLEY #2	STA: 10+13.00 TO STA: 13+18.19
ALLEY #3	STA: 10+13.00 TO STA: 12+36.78

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ROADWAY TYPICAL SECTIONS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

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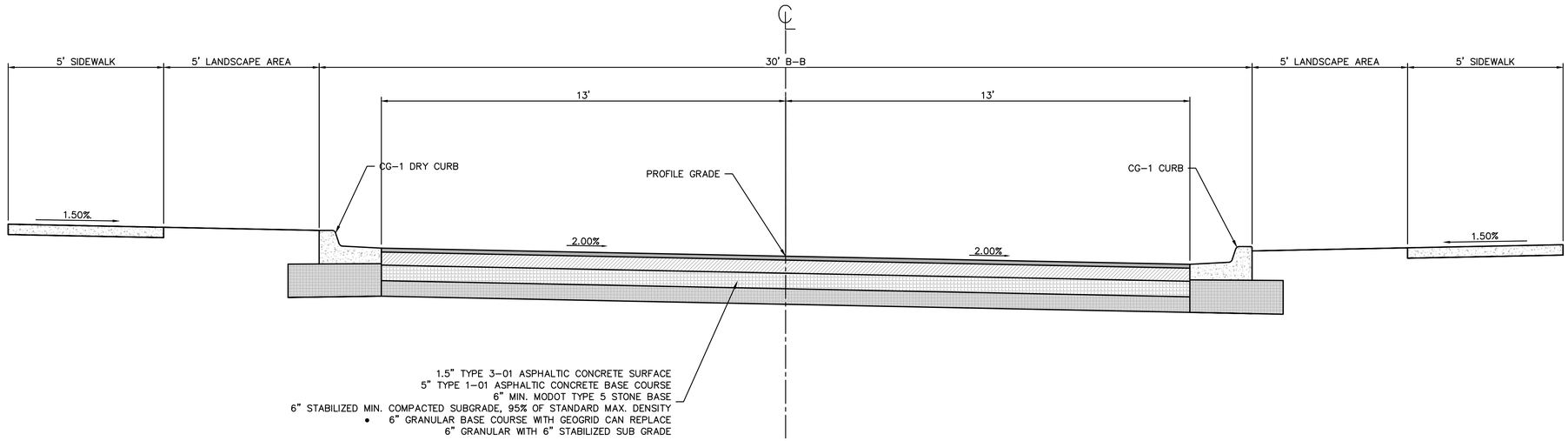
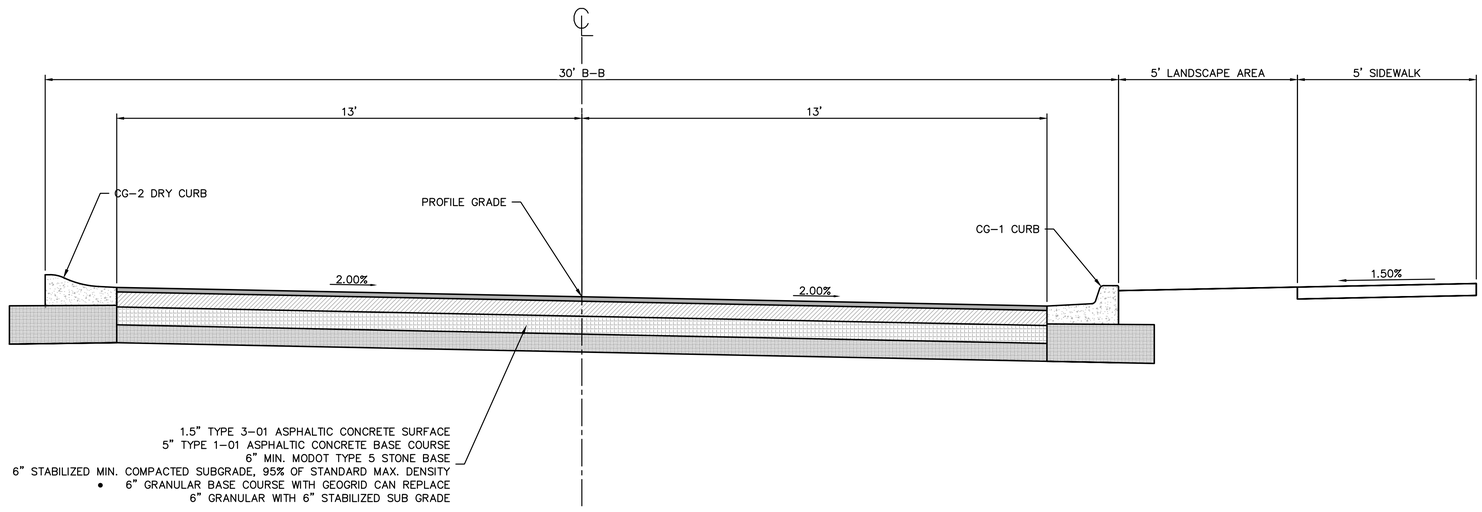


TYPICAL SECTION

SW CURRY ROAD DETACHED SIDEWALK

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW CURRY ROAD	STA: 10+49.62 TO STA: 11+55.40
SW CURRY ROAD	STA: 15+80.51 TO STA: 16+73.26



TYPICAL SECTION

SW CURRY ROAD DETACHED SIDEWALK
AND CG-2 CURB LEFT

LOCATION	
ROAD IDENTIFICATION	STATION TO STATION
SW CURRY ROAD	STA: 11+55.40 TO STA: 15+80.81

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10/14/21
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REVISIONS

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ROADWAY TYPICAL SECTIONS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD
LEE'S SUMMIT, MO
2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_TYP01_02102987
date: 08.25.2021

SHEET
C108

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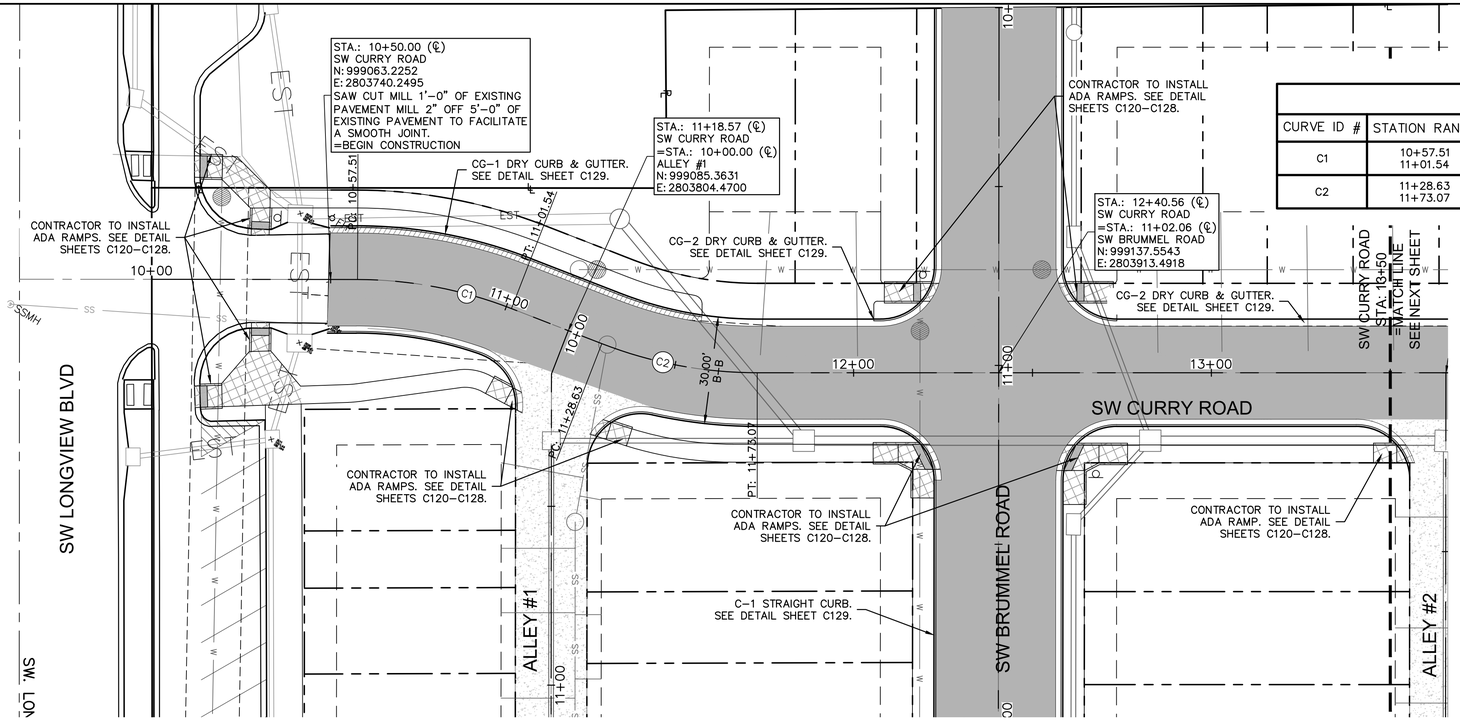
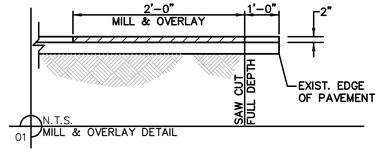
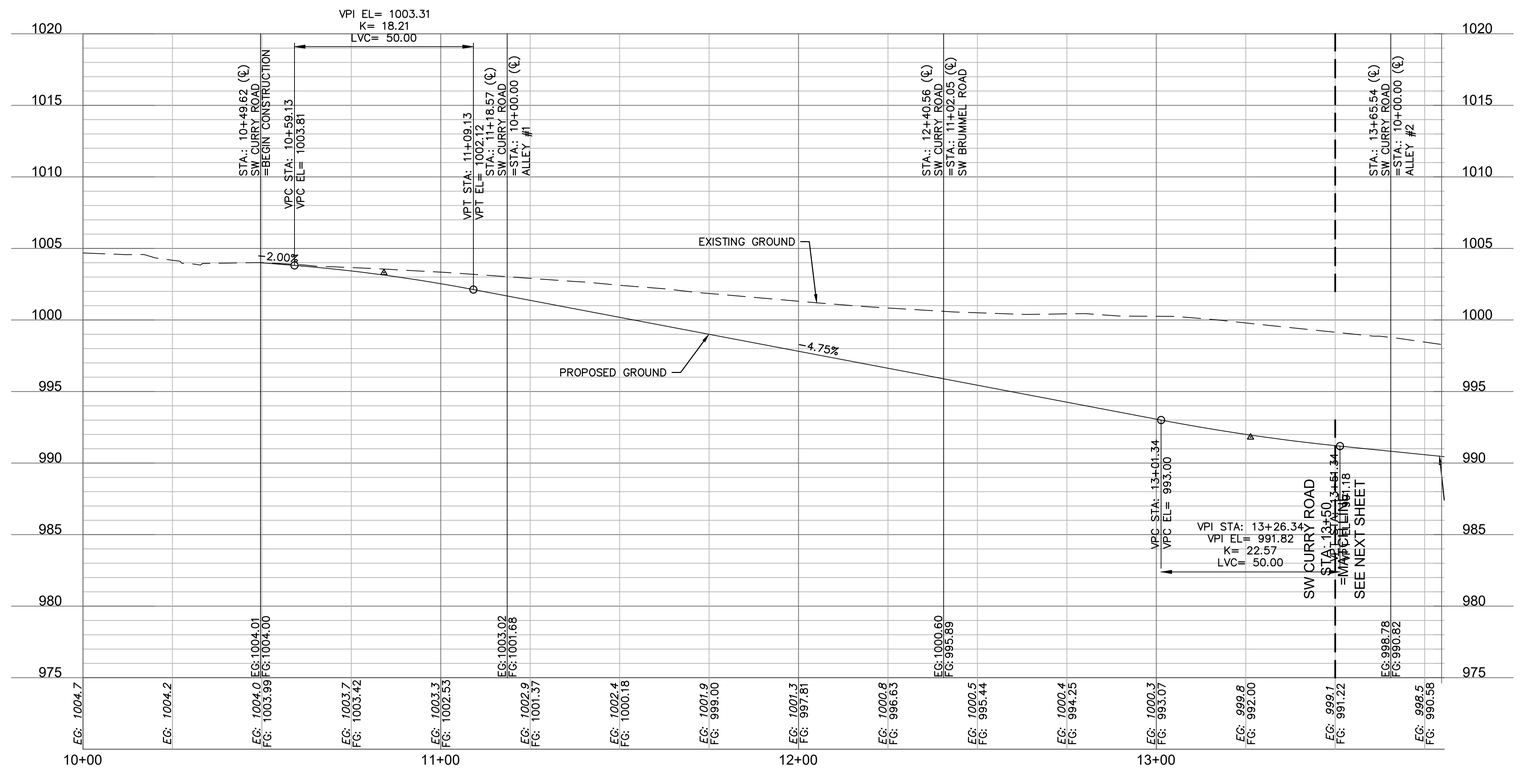
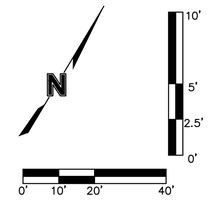


ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	10+57.51 11+01.54	N: 999067.11 E: 2803746.68	N: 999082.42 E: 2803787.70	120.00	44.03	021°01'26"	N69°31'57"E	43.79
C2	11+28.63 11+73.07	N: 999087.10 E: 2803814.38	N: 999102.62 E: 2803855.75	120.00	44.44	021°13'10"	N69°26'05"E	44.19



LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.





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REVISIONS

ROAD PLAN & PROFILE SW CURRY ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_RPP01_02102987
date:	08.25.2021

SHEET
C109

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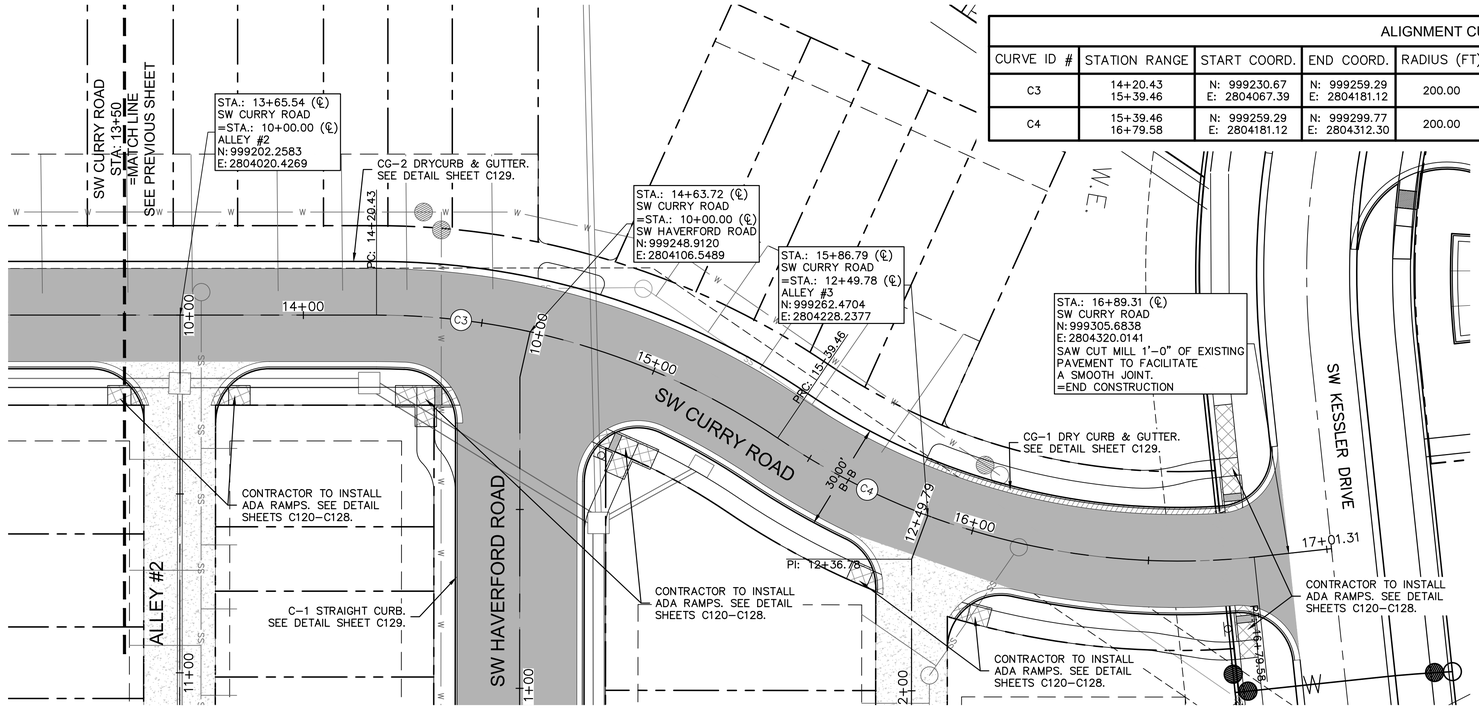
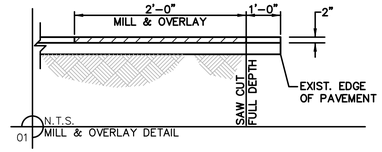
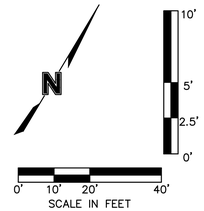
ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C3	14+20.43 15+39.46	N: 999230.67 E: 2804067.39	N: 999259.29 E: 2804181.12	200.00	119.03	034°05'55"	N75°52'28"E	117.28
C4	15+39.46 16+79.58	N: 999259.29 E: 2804181.12	N: 999299.77 E: 2804312.30	200.00	140.12	040°08'32"	N72°51'09"E	137.27

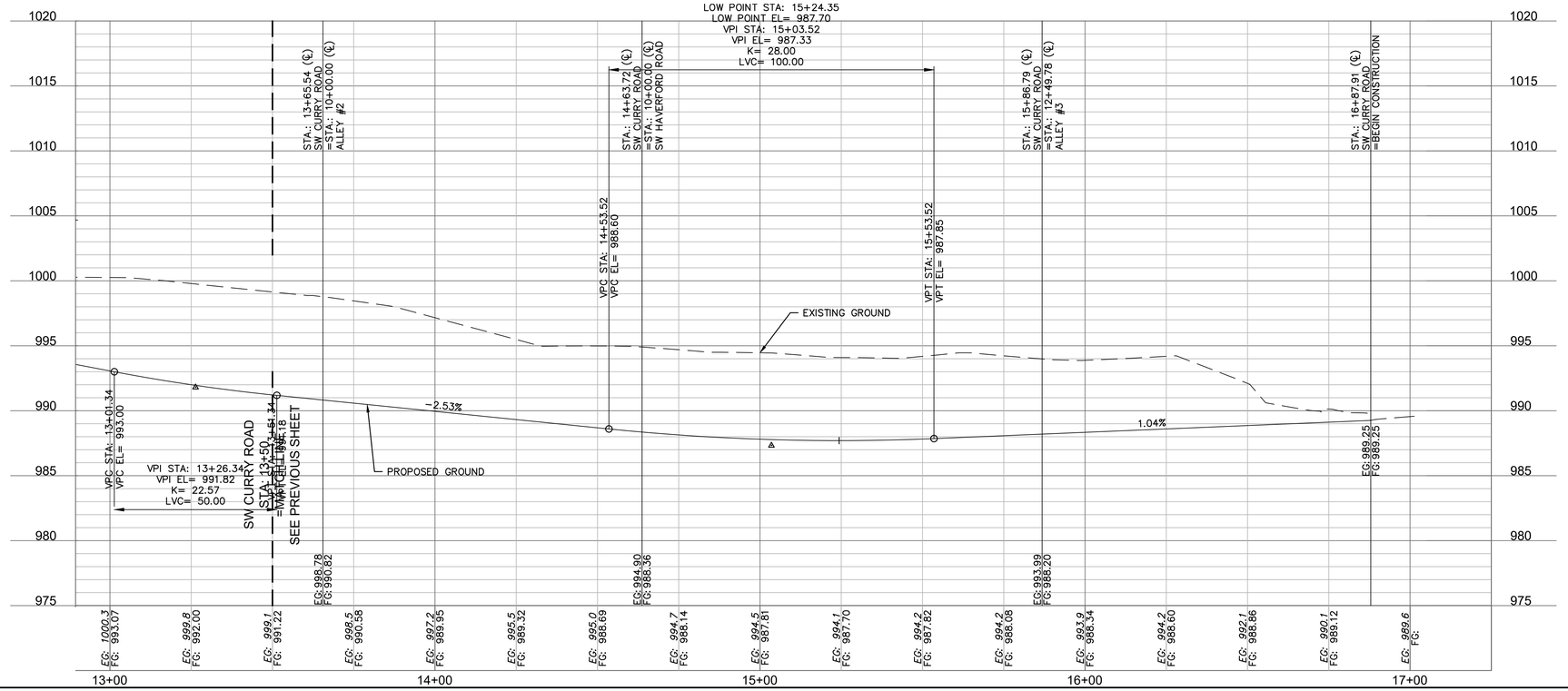
LEGEND

- ADA SIDEWALK RAMP
- CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
- ASPHALT PAVEMENT SEE DETAIL SHEET C129.
- CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
- CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
- CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
- C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
- RIBBON CURB SEE DETAIL SHEET C129.









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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ROAD PLAN & PROFILE SW CURRY ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
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approved by: JES
QA/QC by: JES
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drawing no.: C_RPP01_02102987
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SHEET
C110

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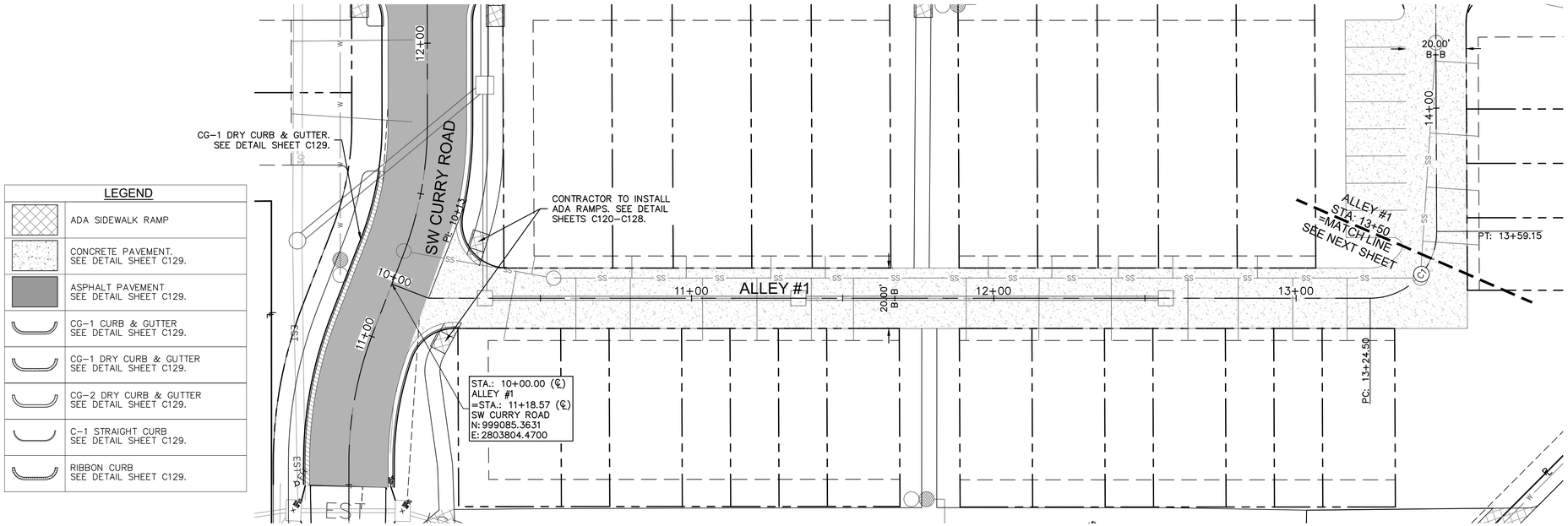
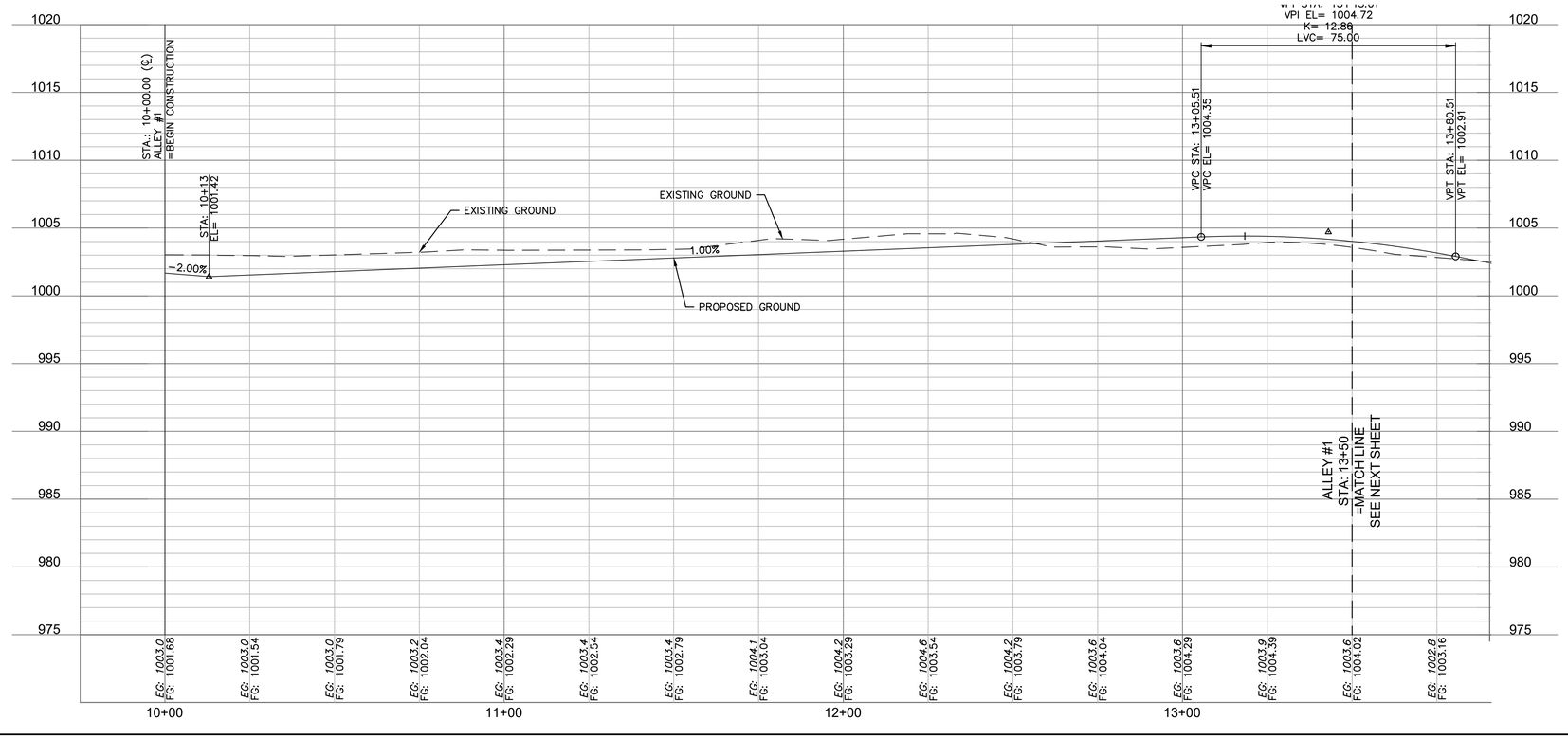
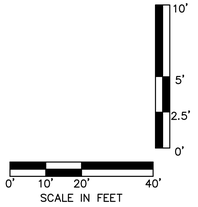
USER: glowrey



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	13+24.50 13+59.15	N: 998805.88 E: 2803967.71	N: 998798.47 E: 2803997.99	22.00	34.65	090°13'56"	S76°14'08"E	31.18





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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ROAD PLAN & PROFILE ALLEY #1

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_RPP02_02102987
date: 08.25.2021

SHEET
C111

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_RPP02_02102987.dwg
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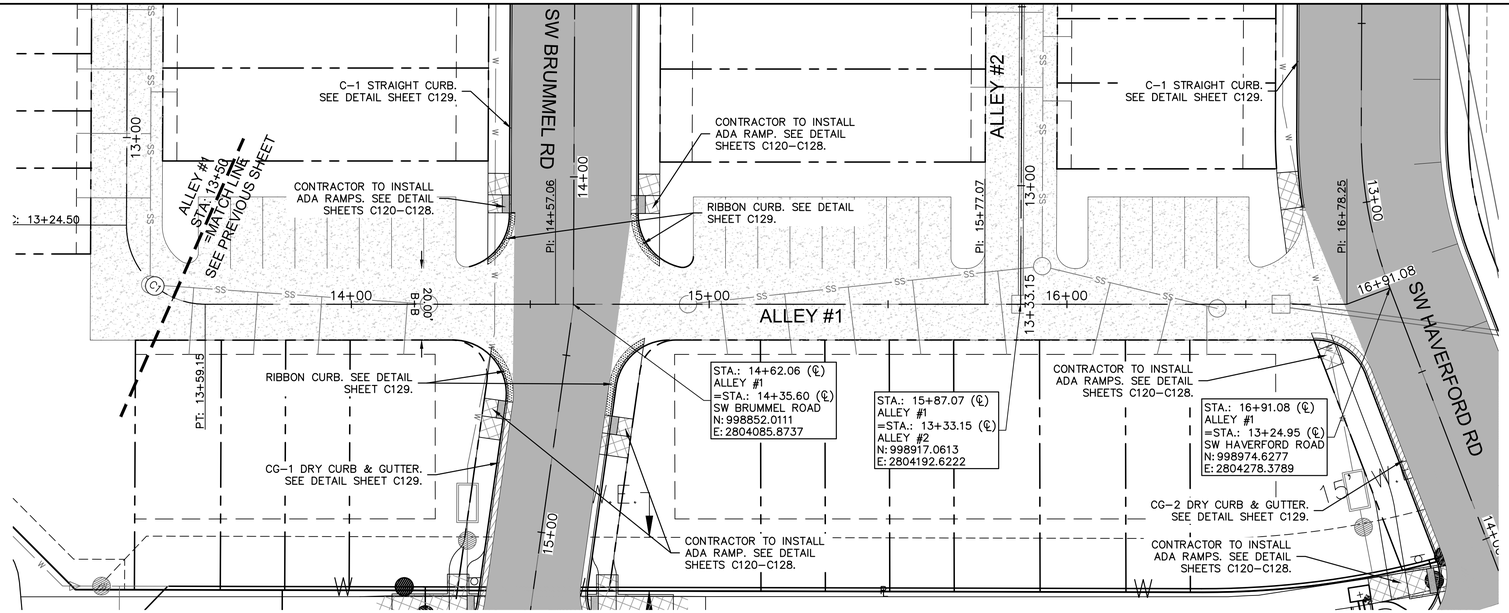
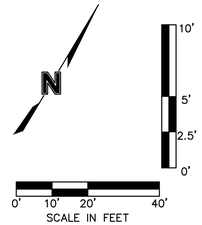
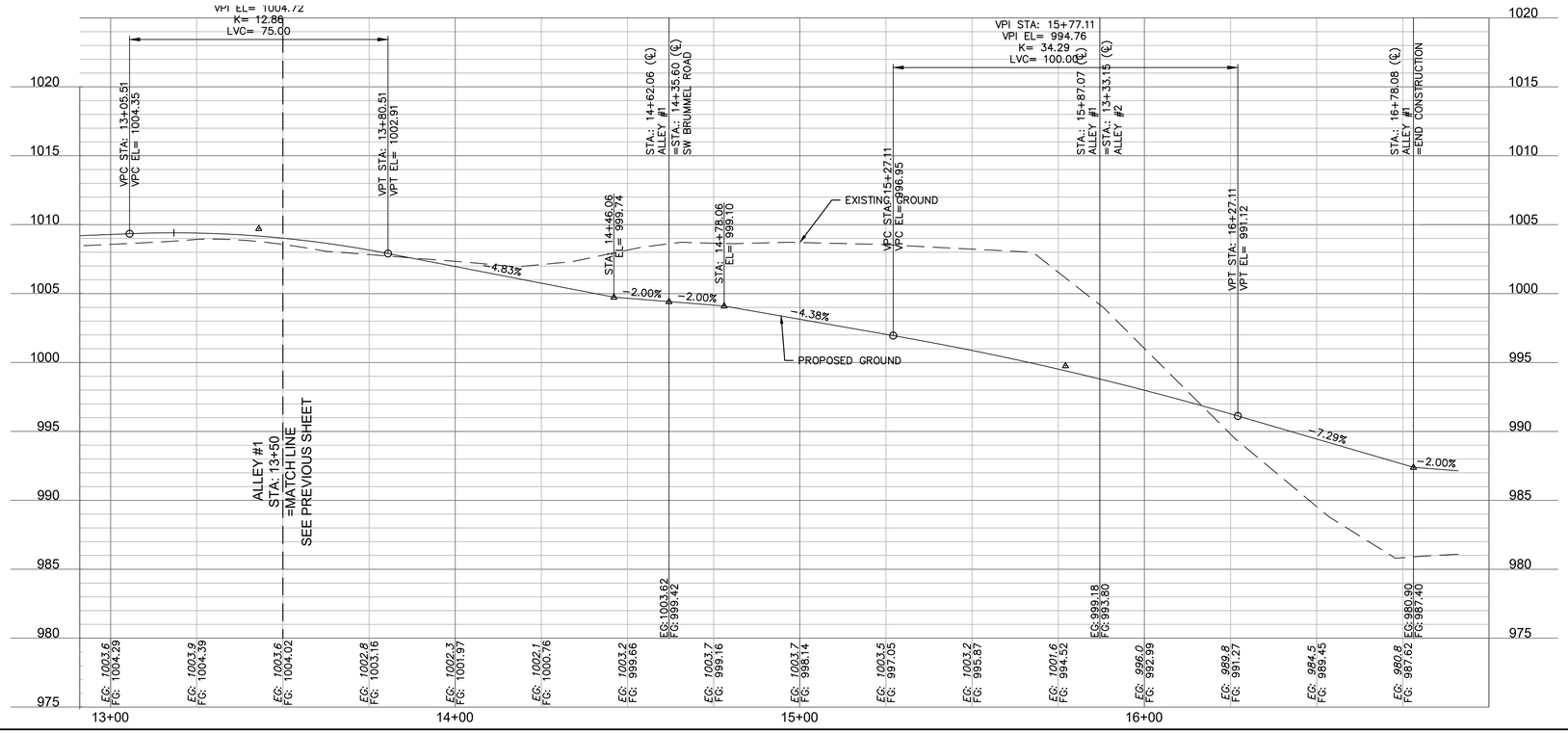
USER: qlowrey C_PSURF_02102987 C_PPATT_02102987



LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	13+24.50 13+59.15	N: 998805.88 E: 2803967.71	N: 998798.47 E: 2803997.99	22.00	34.65	090°13'56"	S76°14'08"E	31.18





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REVISIONS

ROAD PLAN & PROFILE ALLEY #1

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_RPP02_02102987
date:	08.25.2021

SHEET
C112

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DATE: Sep 07, 2021 10:59am
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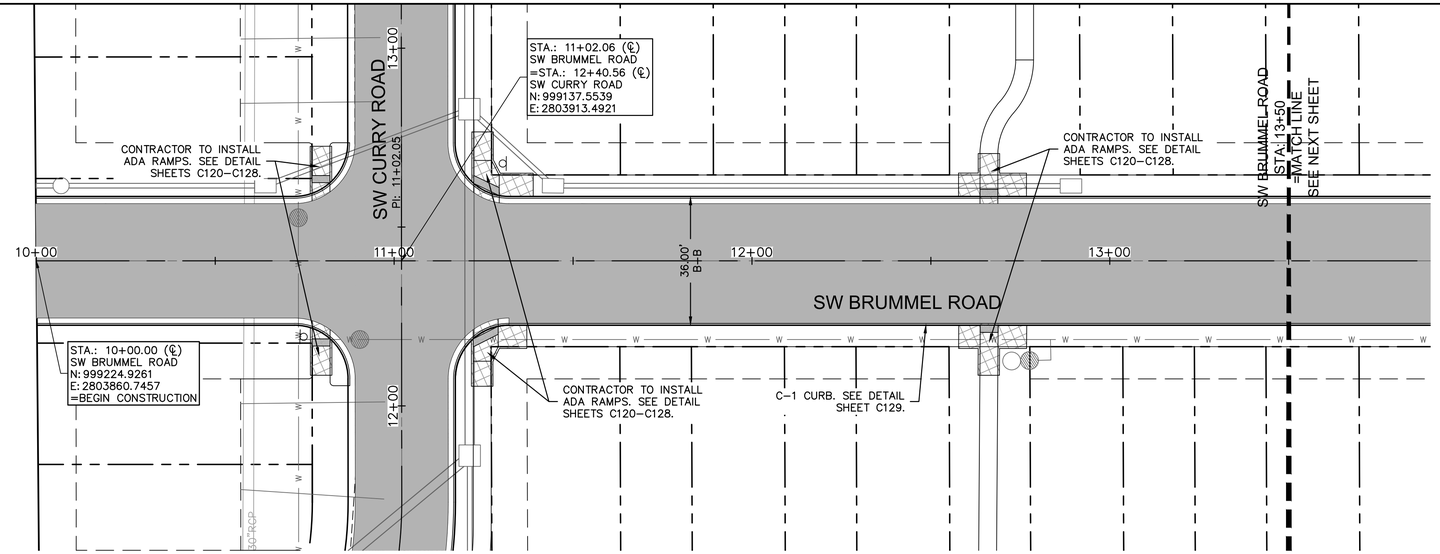
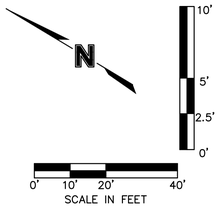
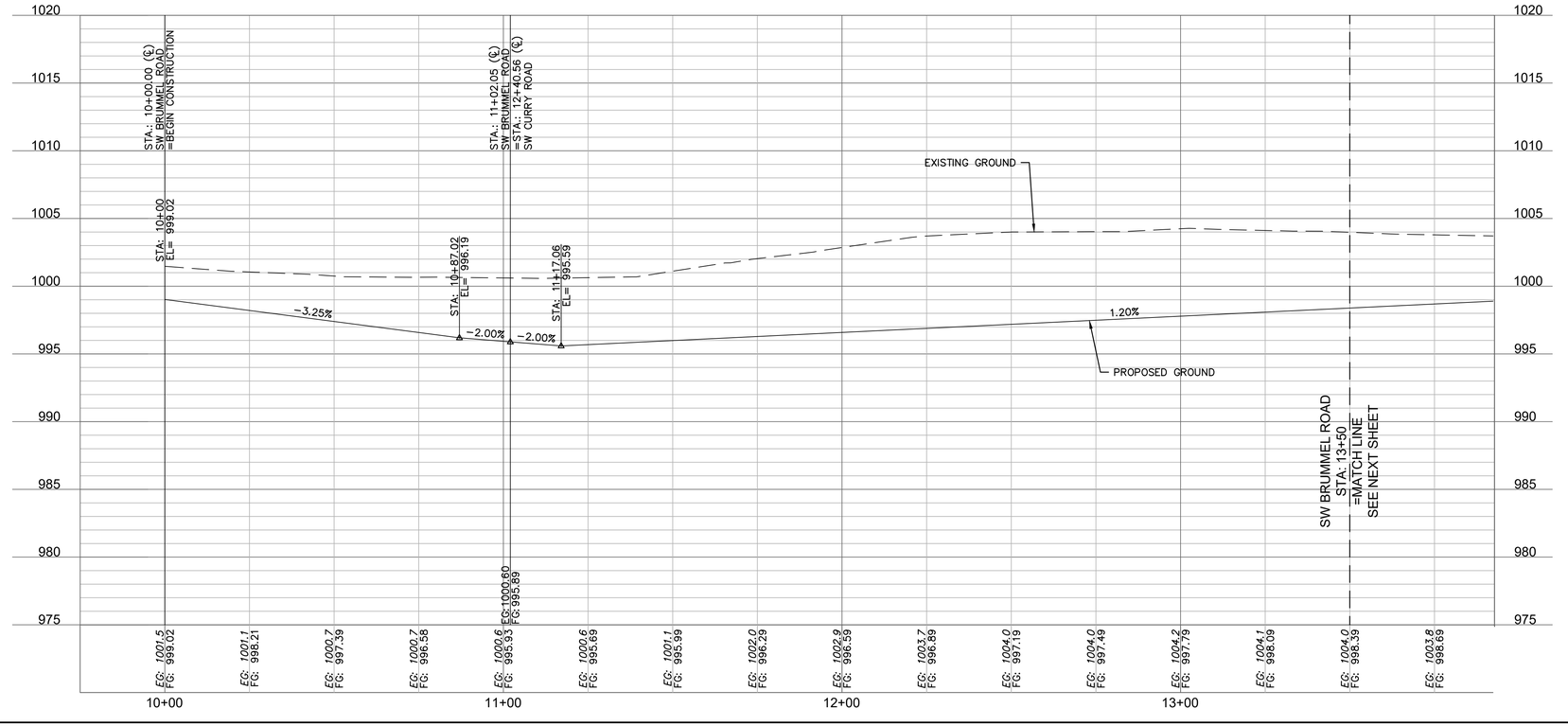
USER: qlowrey

LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.







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PROFESSIONAL ENGINEER

REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROAD PLAN & PROFILE SW BRUMMEL ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

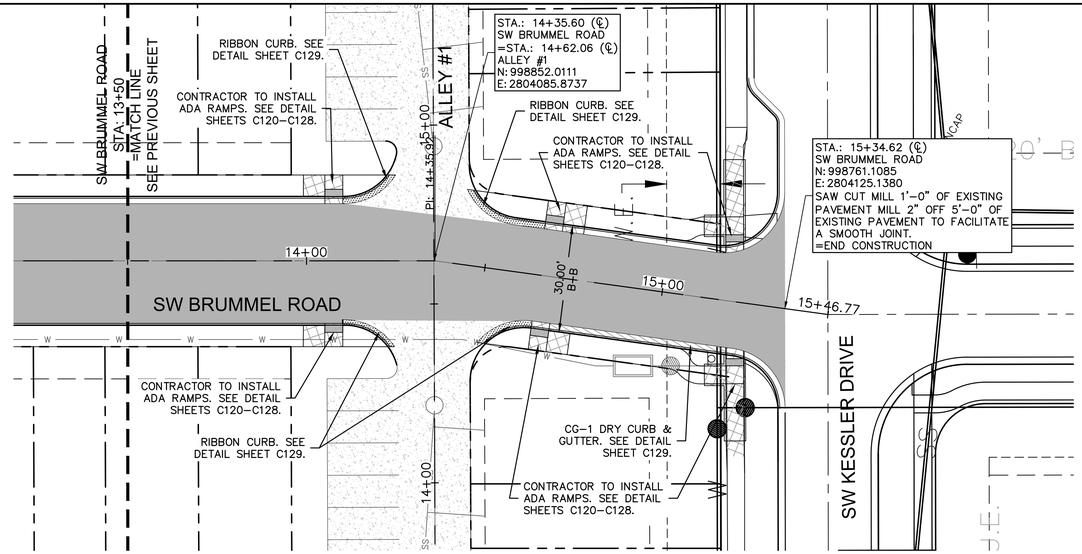
2021

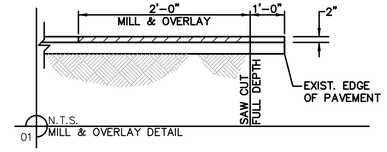
drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_RPP03_02102987
date: 08.25.2021

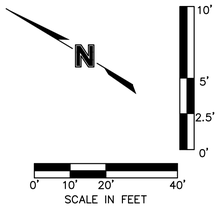
SHEET
C113

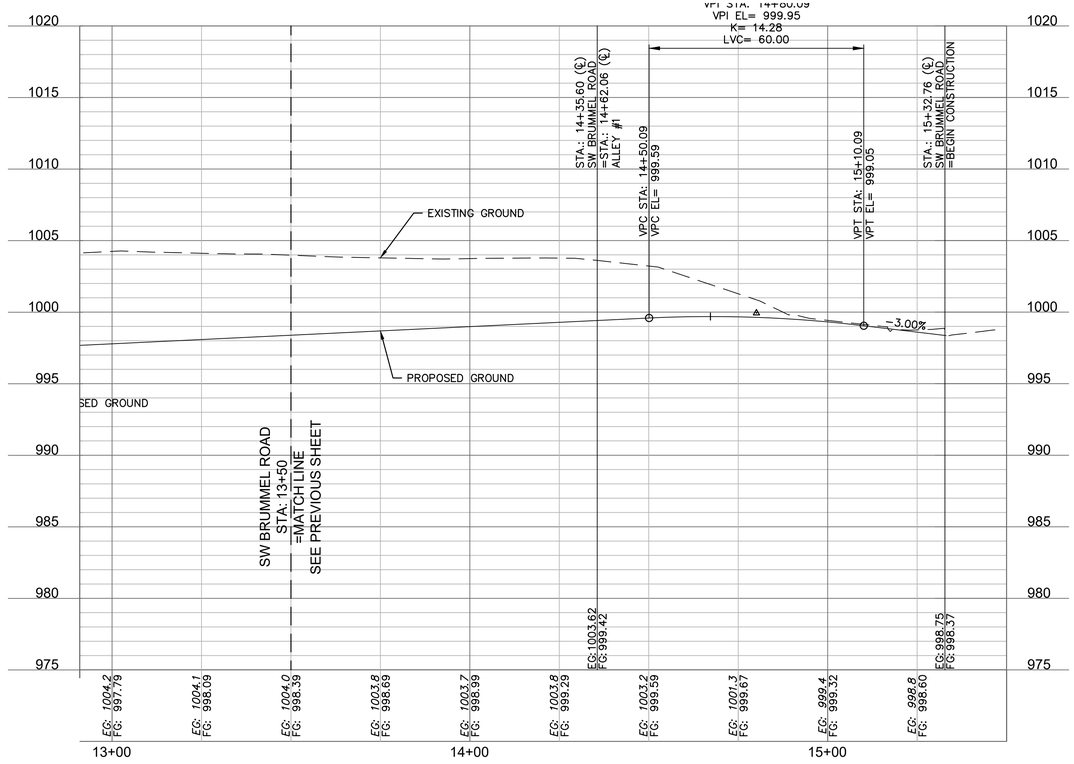
DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_RPP03_02102987.dwg
DATE: Sep 07, 2021 11:00am
XREFS: C_PTTBLK_02102987 C_PUTIL_02102987 C_PBASE_02102987 C_PPATT_02102987
USER: qlowrey
C_PSURF_02102987 C_PBNDY_02102987 C_XBASE_02102987

LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT. SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.









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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROAD PLAN & PROFILE SW BRUMMEL ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_RPP03_02102987
date:	08.25.2021

SHEET
C114

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DATE: Sep 07, 2021 11:00am
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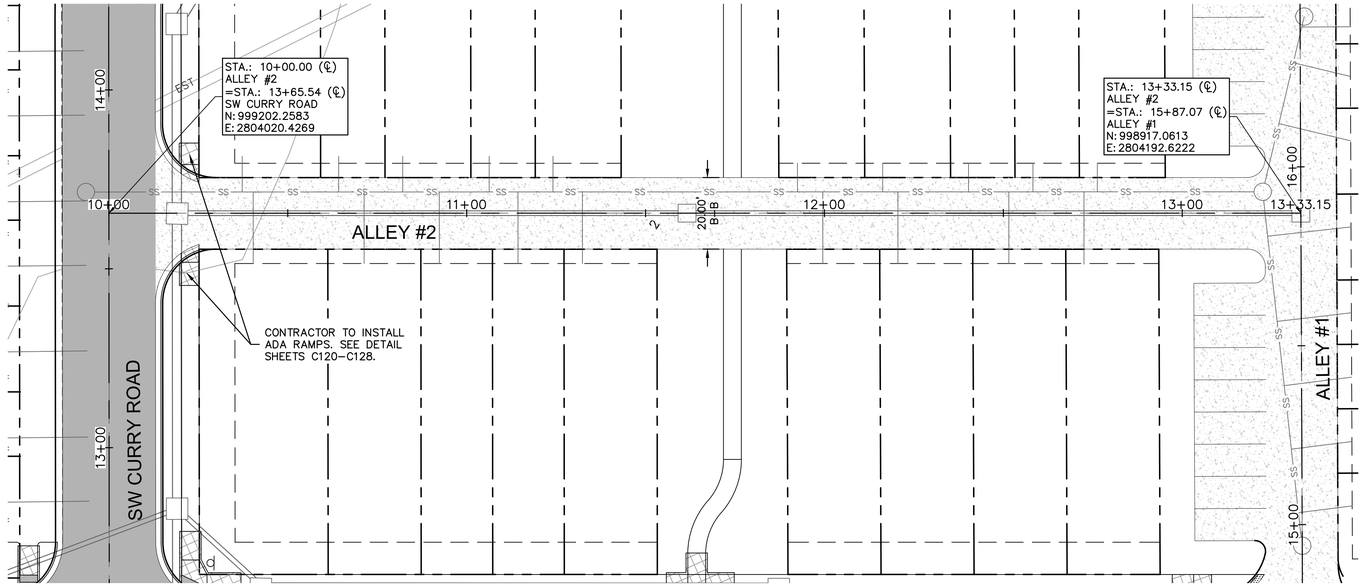
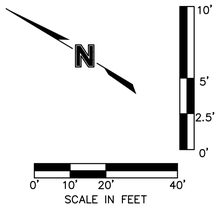
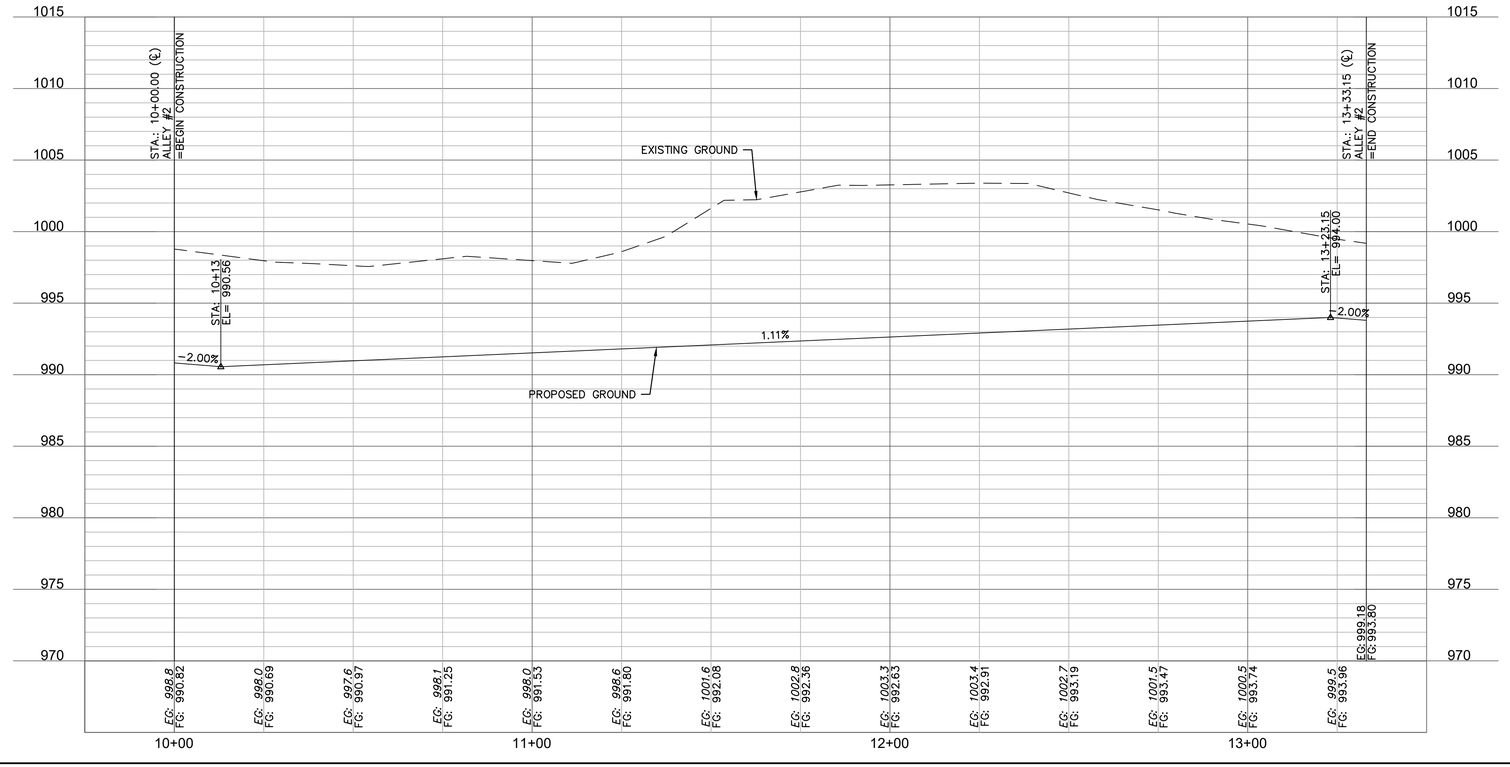
USER: qlowrey

LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.







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ROAD PLAN & PROFILE ALLEY #2

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_RPP03_02102987
date:	08.25.2021

SHEET
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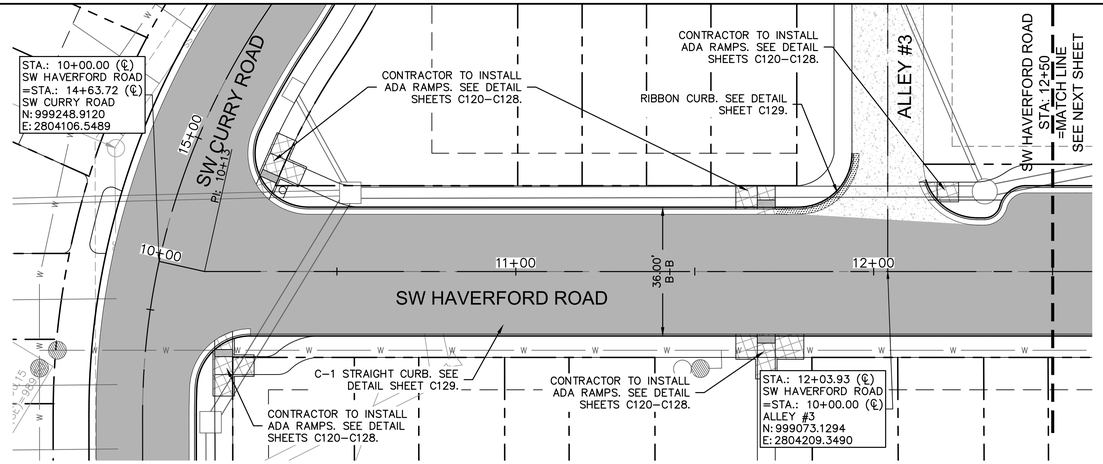
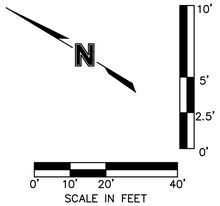
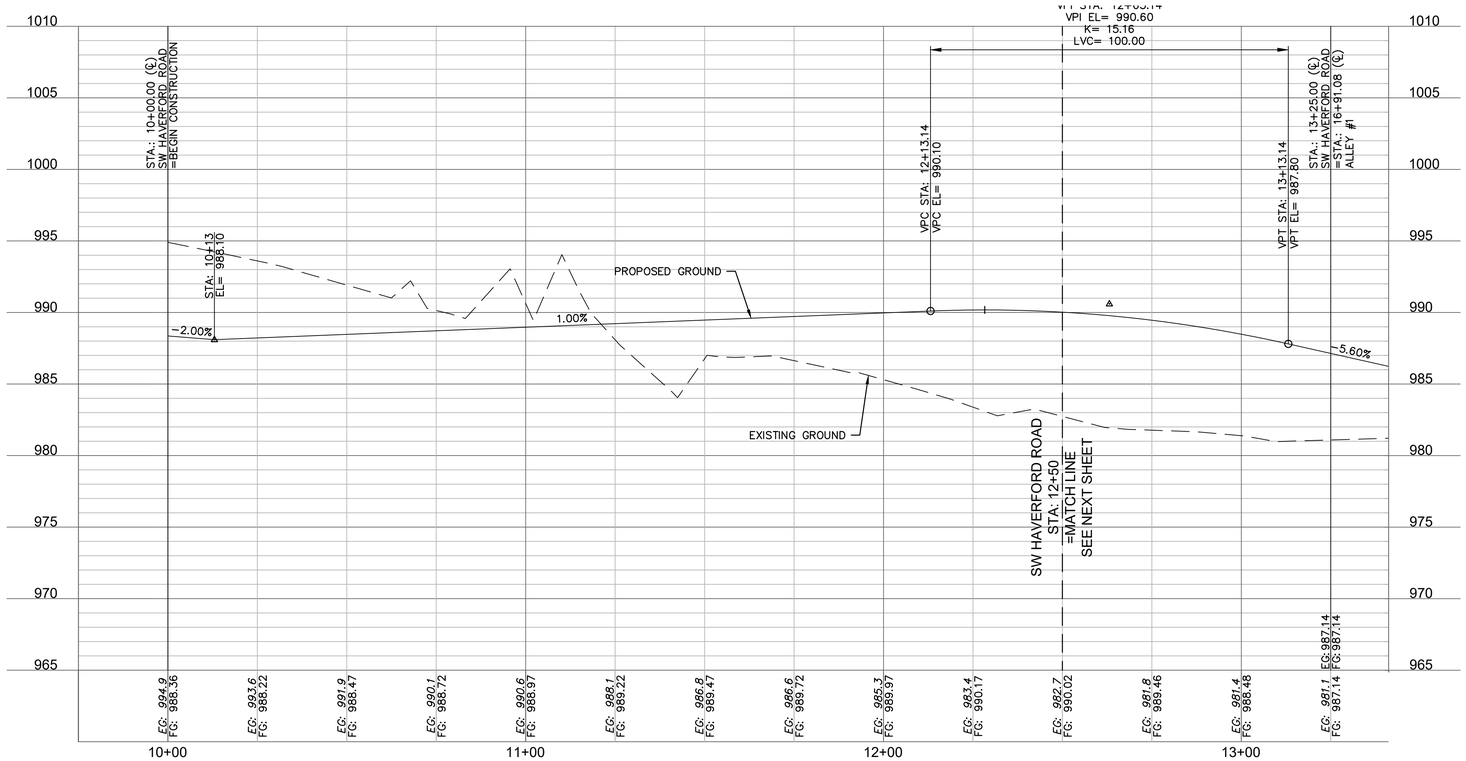
C_PSURF_02102987 C_PBNDY_02102987 C_XBASE_02102987

LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.







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10/14/21
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROAD PLAN & PROFILE SW HAVERFORD ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_RPP04_02102987
date: 08.25.2021

SHEET
C116

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_RPP04_02102987.dwg
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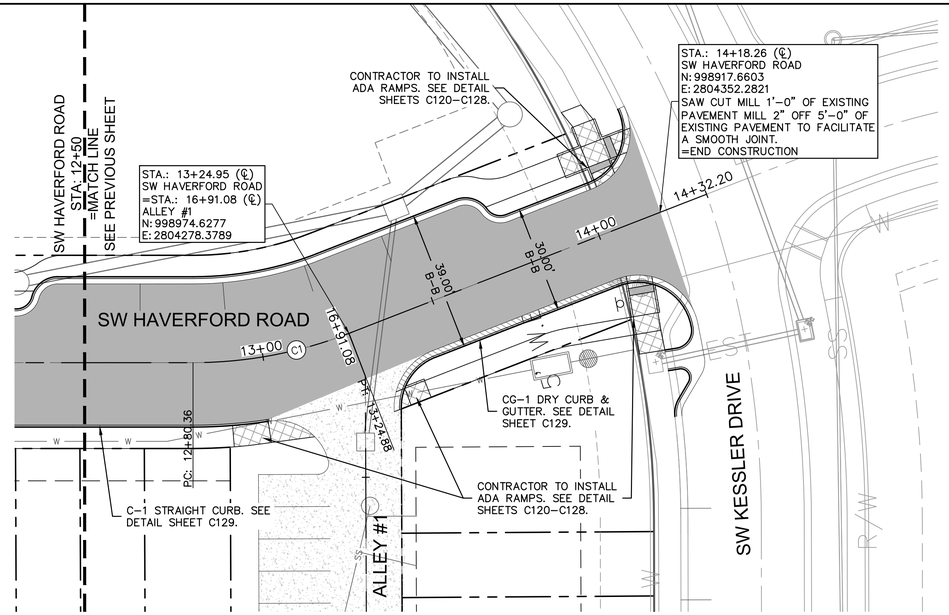
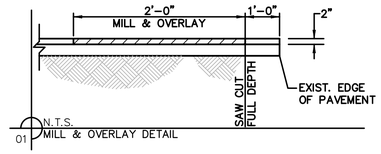
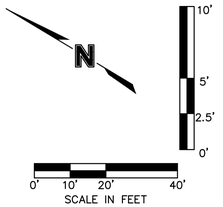
USER: qlowrey

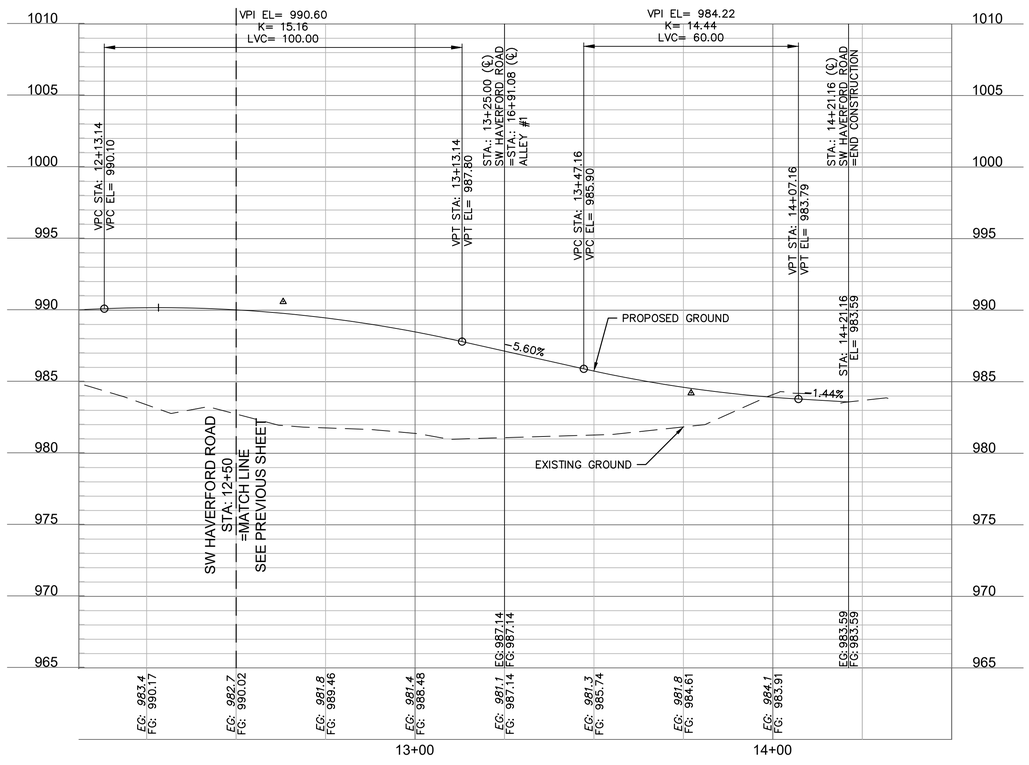
LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT. SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.







ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	12+80.36 13+24.88	N: 999007.70 E: 2804248.85	N: 998974.67 E: 2804278.32	120.00	44.52	021°15'22"	S41°44'45"E	44.26



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NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

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ROAD PLAN & PROFILE SW HAVERFORD ROAD

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_RPP04_02102987
date: 08.25.2021

SHEET
C117

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_RPP04_02102987.dwg
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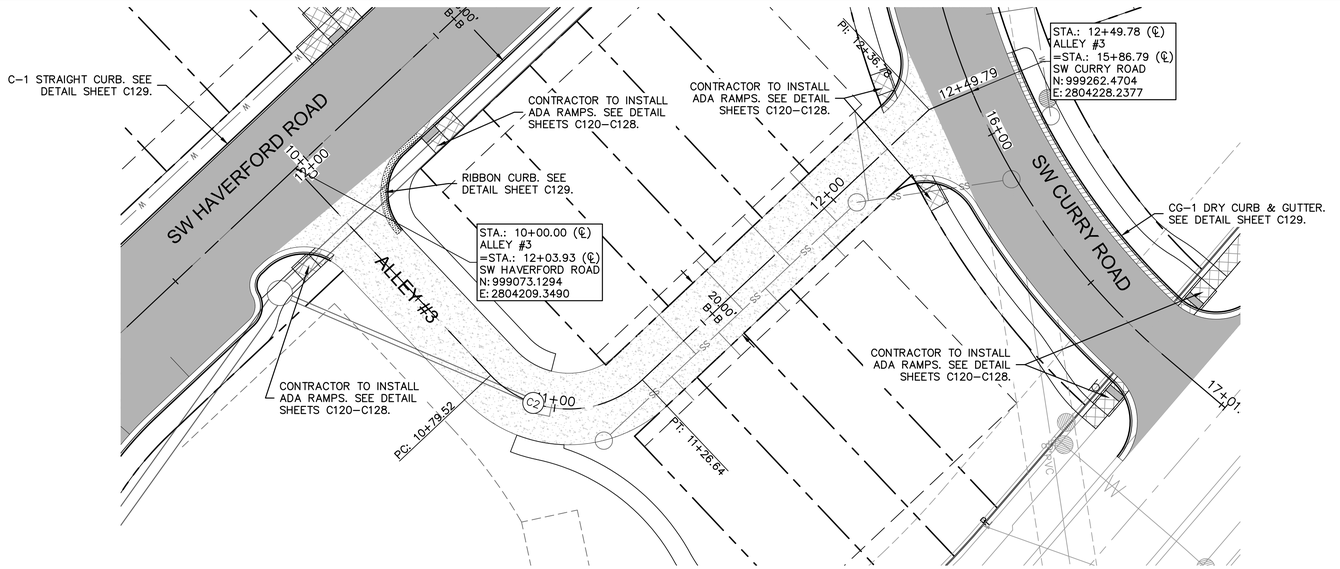
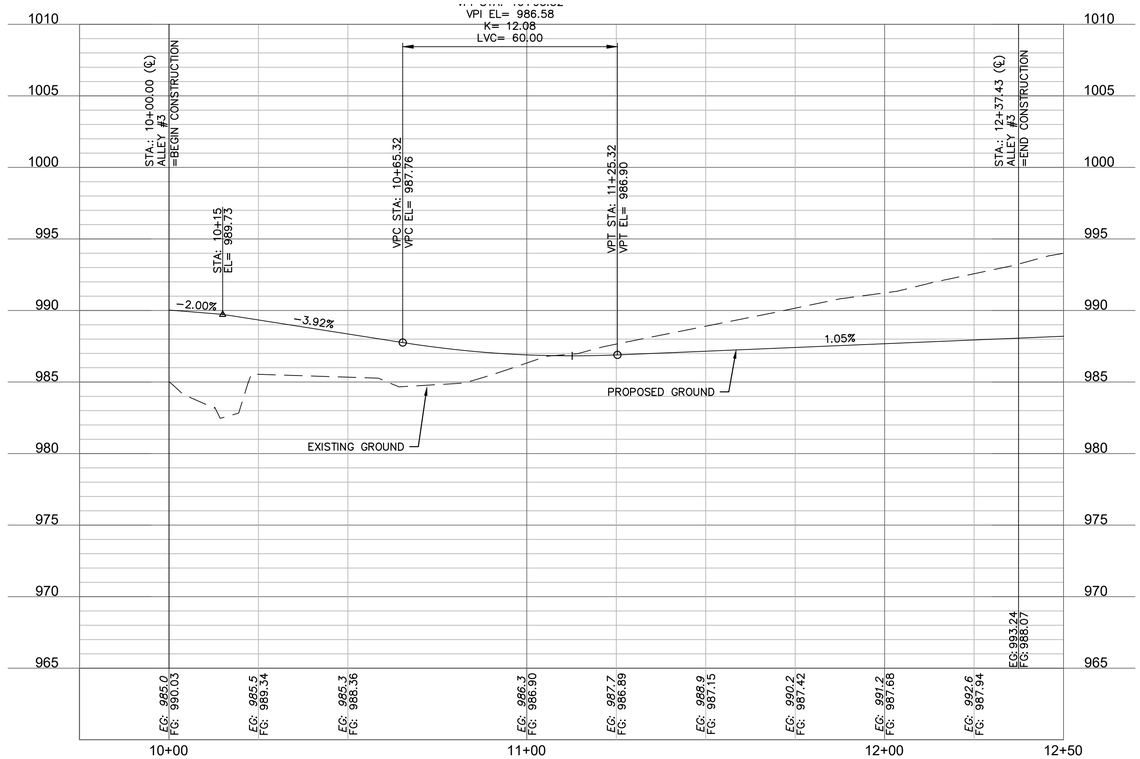
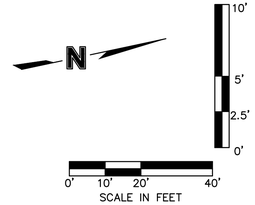
USER: qlowrey

LEGEND	
	ADA SIDEWALK RAMP
	CONCRETE PAVEMENT. SEE DETAIL SHEET C129.
	ASPHALT PAVEMENT SEE DETAIL SHEET C129.
	CG-1 CURB & GUTTER SEE DETAIL SHEET C129.
	CG-1 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	CG-2 DRY CURB & GUTTER SEE DETAIL SHEET C129.
	C-1 STRAIGHT CURB SEE DETAIL SHEET C129.
	RIBBON CURB SEE DETAIL SHEET C129.



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C2	10+79.52 11+26.64	N: 999114.23 E: 2804277.43	N: 999155.41 E: 2804287.60	30.00	47.12	090°00'00"	N13°52'55"E	42.43





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ROAD PLAN & PROFILE ALLEY #3

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_RPP04_02102987
date: 08.25.2021

SHEET
C118

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_RPP04_02102987.dwg USER: glowrey
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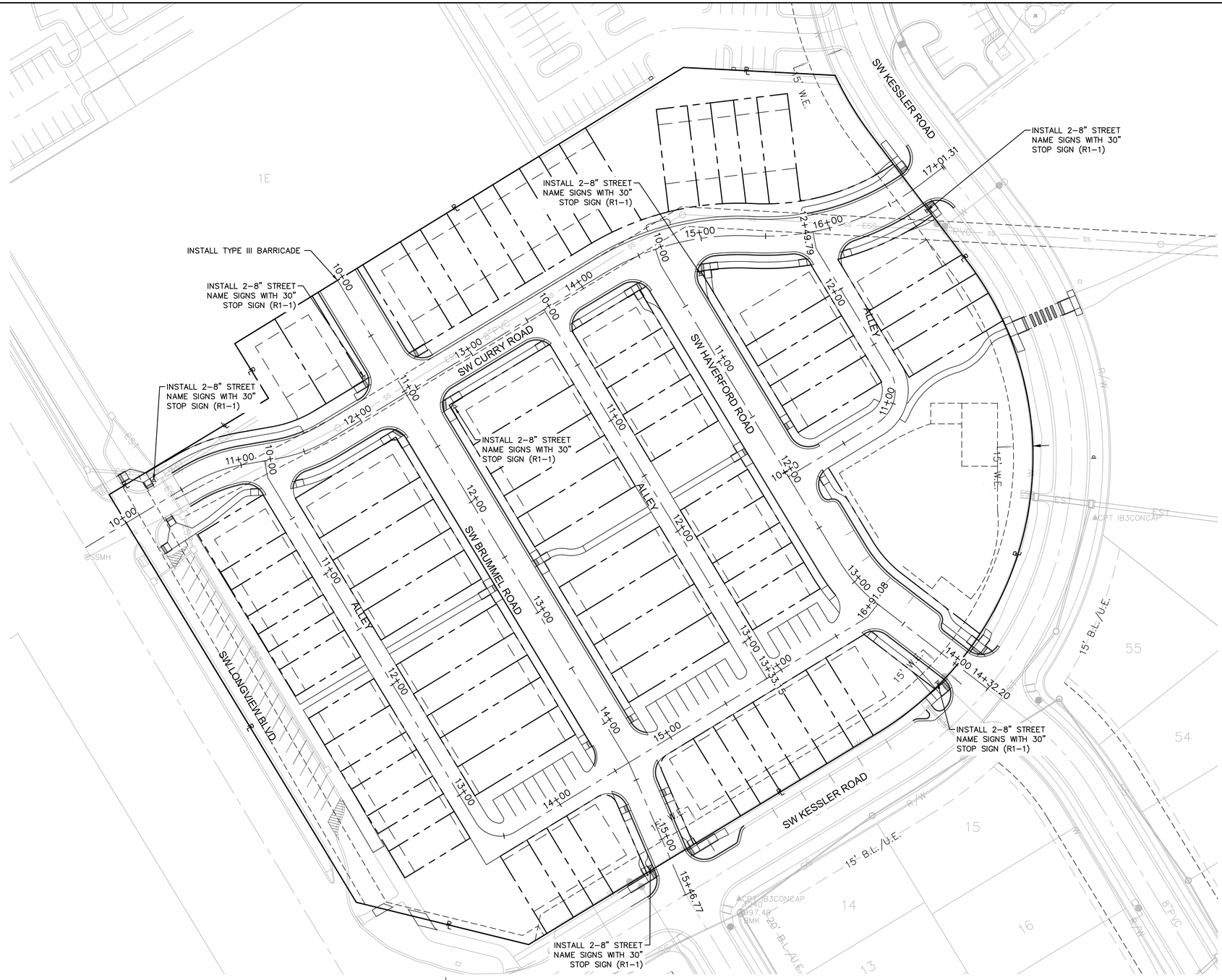
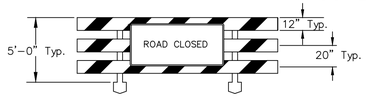
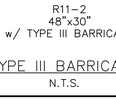


GENERAL NOTES:

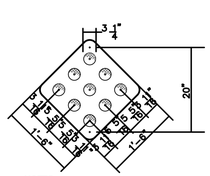
1. DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
3. FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, SIGNS SHALL BE COVERED AND STEEL PLATE PROVIDED OVER ROADWAY OPENING.
4. 1–LANE OF TRAFFIC OPERATION SHALL BE MAINTAINED AT ALL TIMES WHILE UNDER FLAGGER CONTROL. FLAGGER CONTROL SHALL FROM MUTCD DETAIL TA–10 FOR TRAFFIC CONTROL.



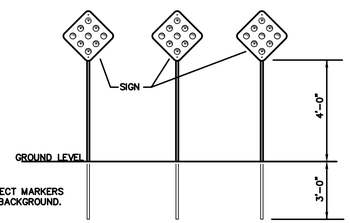


R11–2
48"x30"
w/ TYPE III BARRICADE

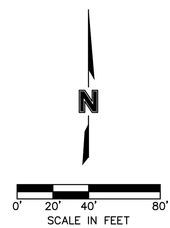
TYPE III BARRICADE
N.T.S.



NOTES:
THICKNESS OF FLAT SHEET FOR TYPE IV OBJECT MARKERS SHALL BE 0.063" RED REFLECTORS ON RED BACKGROUND. THREE REQUIRED AT 12' SPACING.



TYPE IV OBJECT MARKERS
N.T.S.



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JULIE ELAINE SELLERS
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10/14/21
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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

TRAFFIC CONTROL PLAN

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_TCP01_02102987
date:	08.25.2021

SHEET
C119

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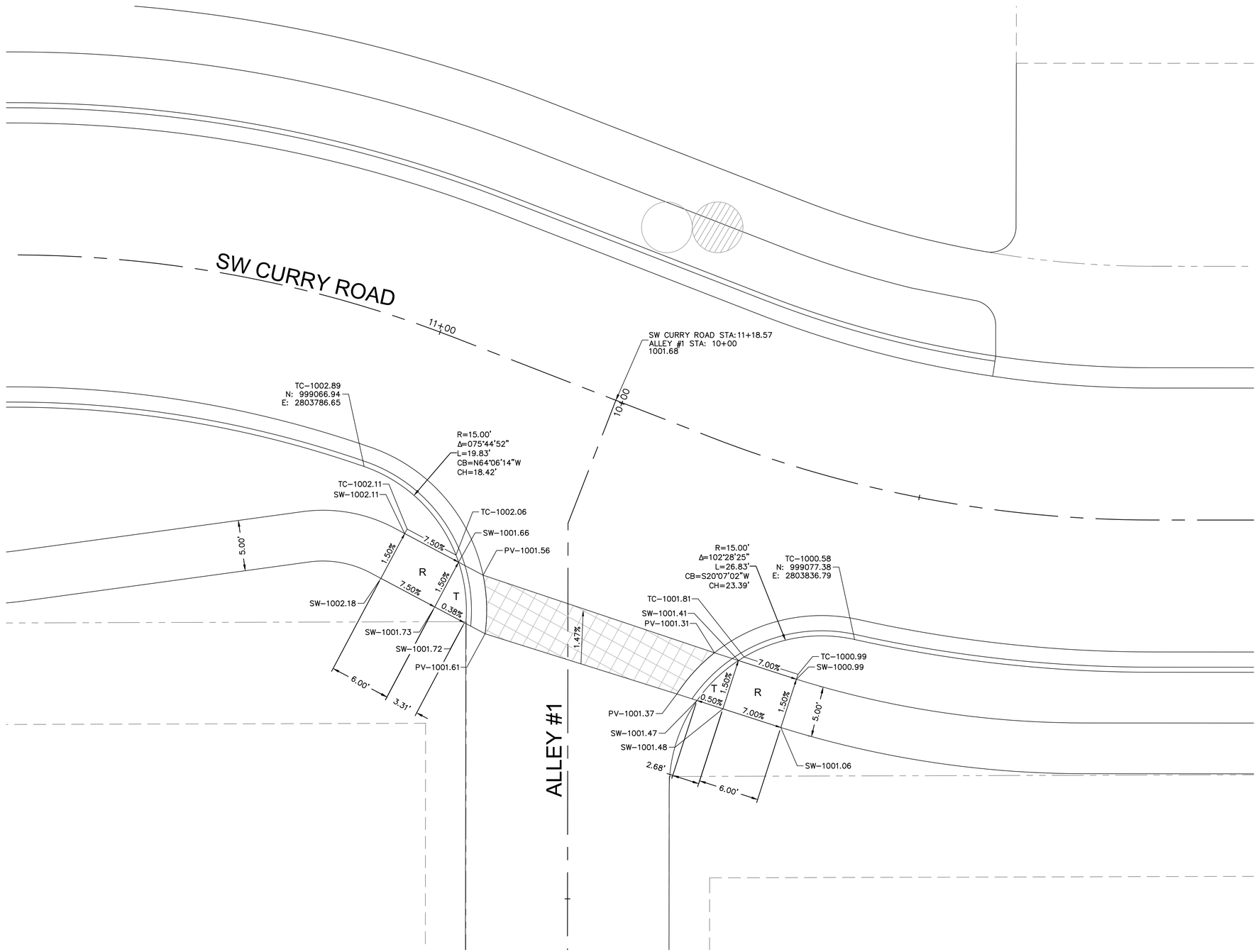
USER: qlowrey



SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWALK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

SPOT ELEVATIONS DETAIL 01

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

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10/14/21
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REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 01
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD
LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C120

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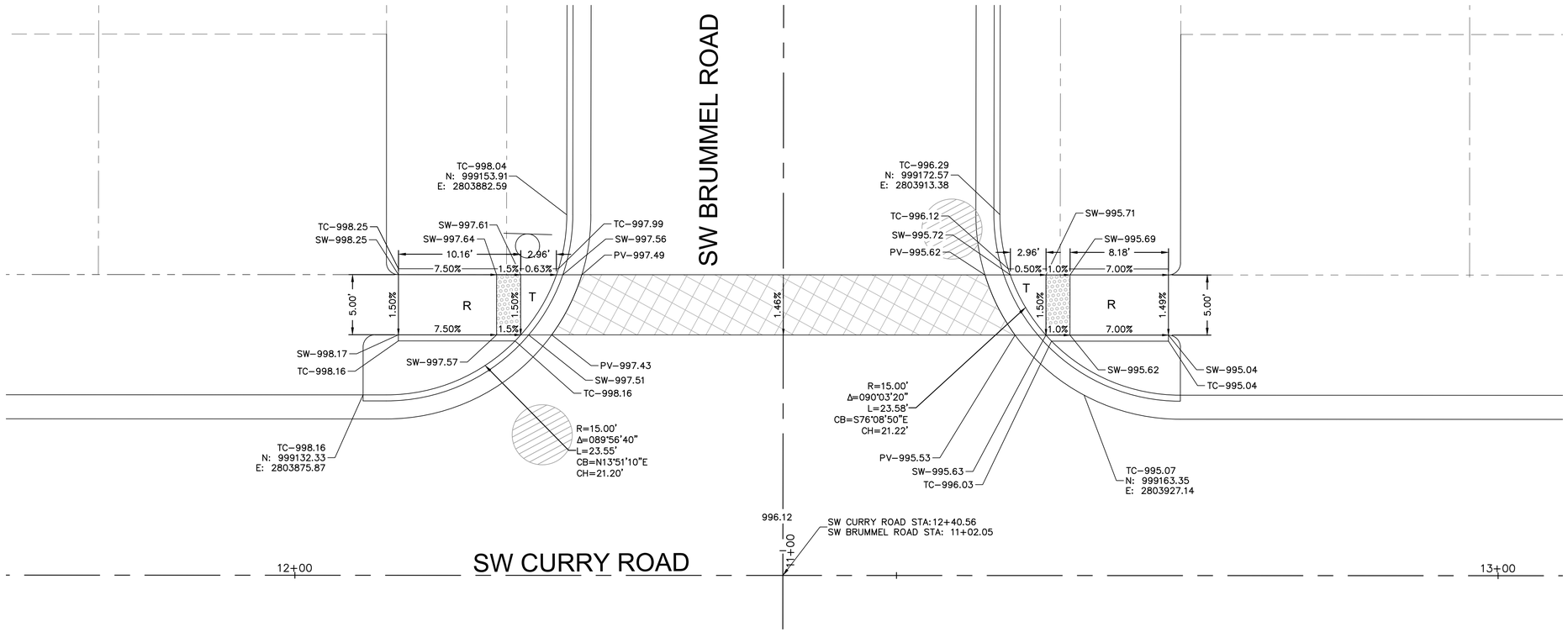

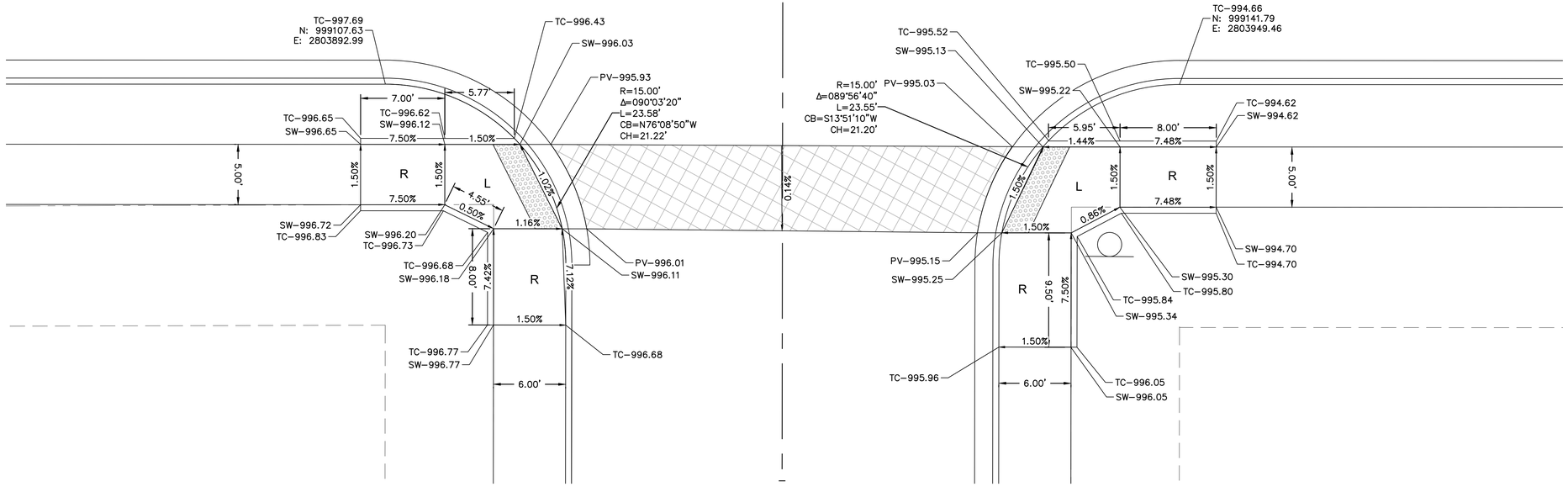

SPOT ELEVATIONS DETAIL 02

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

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STATE OF MISSOURI
JULIE ELAINE SELLERS
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REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 02
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
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QA/QC by:	JES
project no.:	021-02987
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date:	08.25.2021

SHEET
C121

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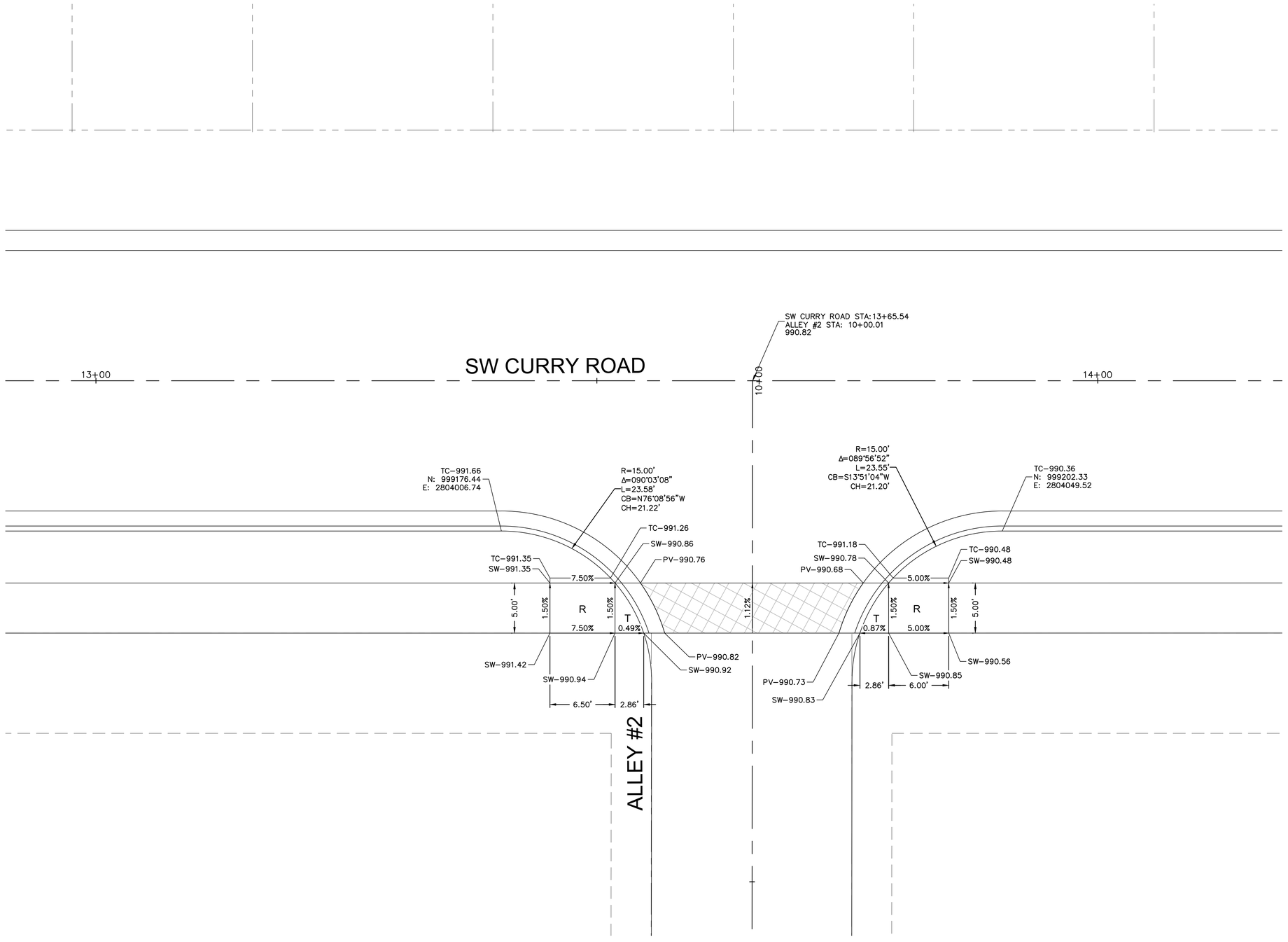

SPOT ELEVATIONS DETAIL 03

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
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SIDEWALK RAMP & CROSSWALK DETAIL 03
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
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date:	08.25.2021

SHEET
C122

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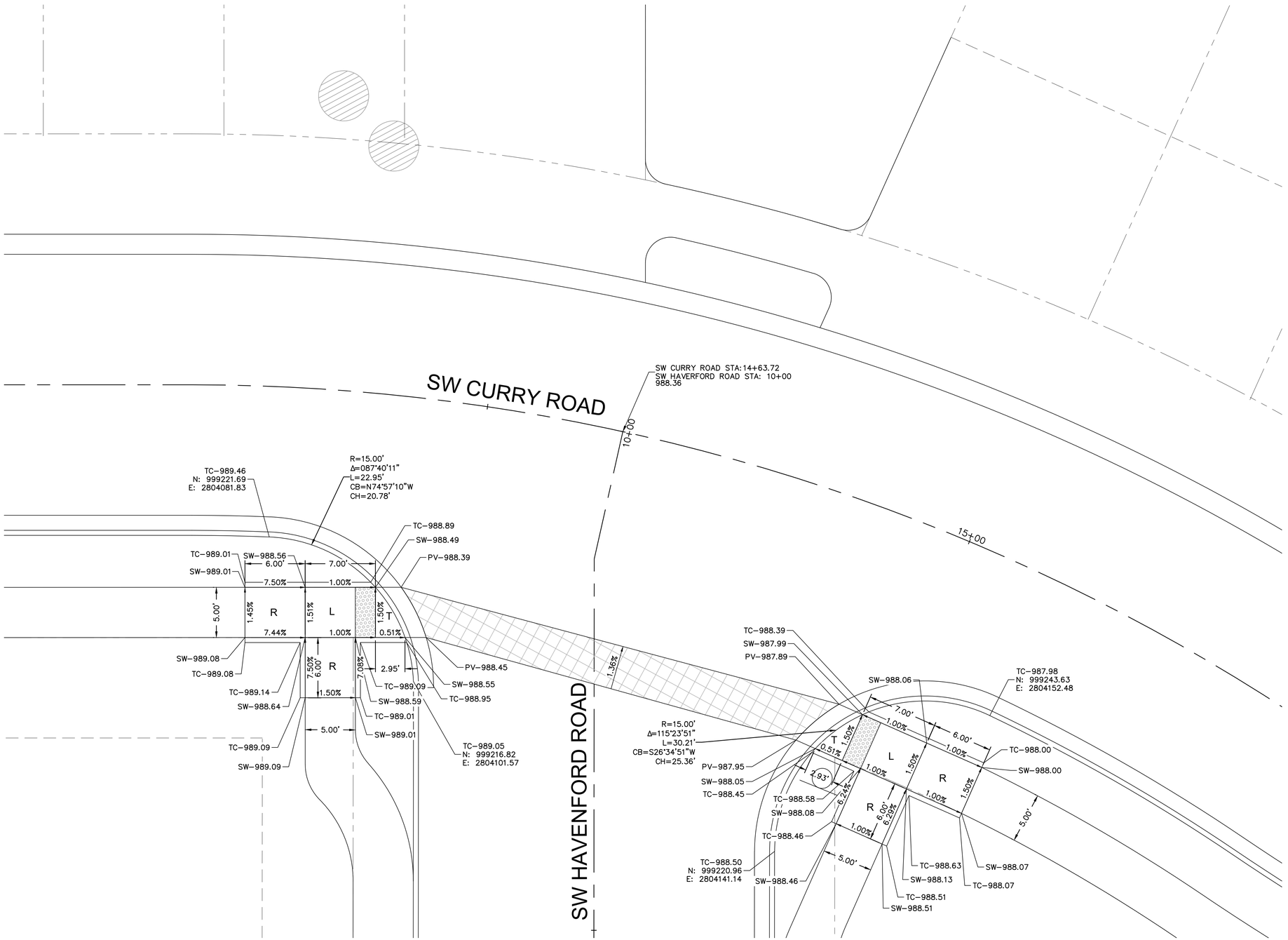

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

SPOT ELEVATIONS DETAIL 04

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

0' 2.5' 5' 10'
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SIDEWALK RAMP & CROSSWALK DETAIL 04
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.:
date: 08.25.2021

SHEET
C123

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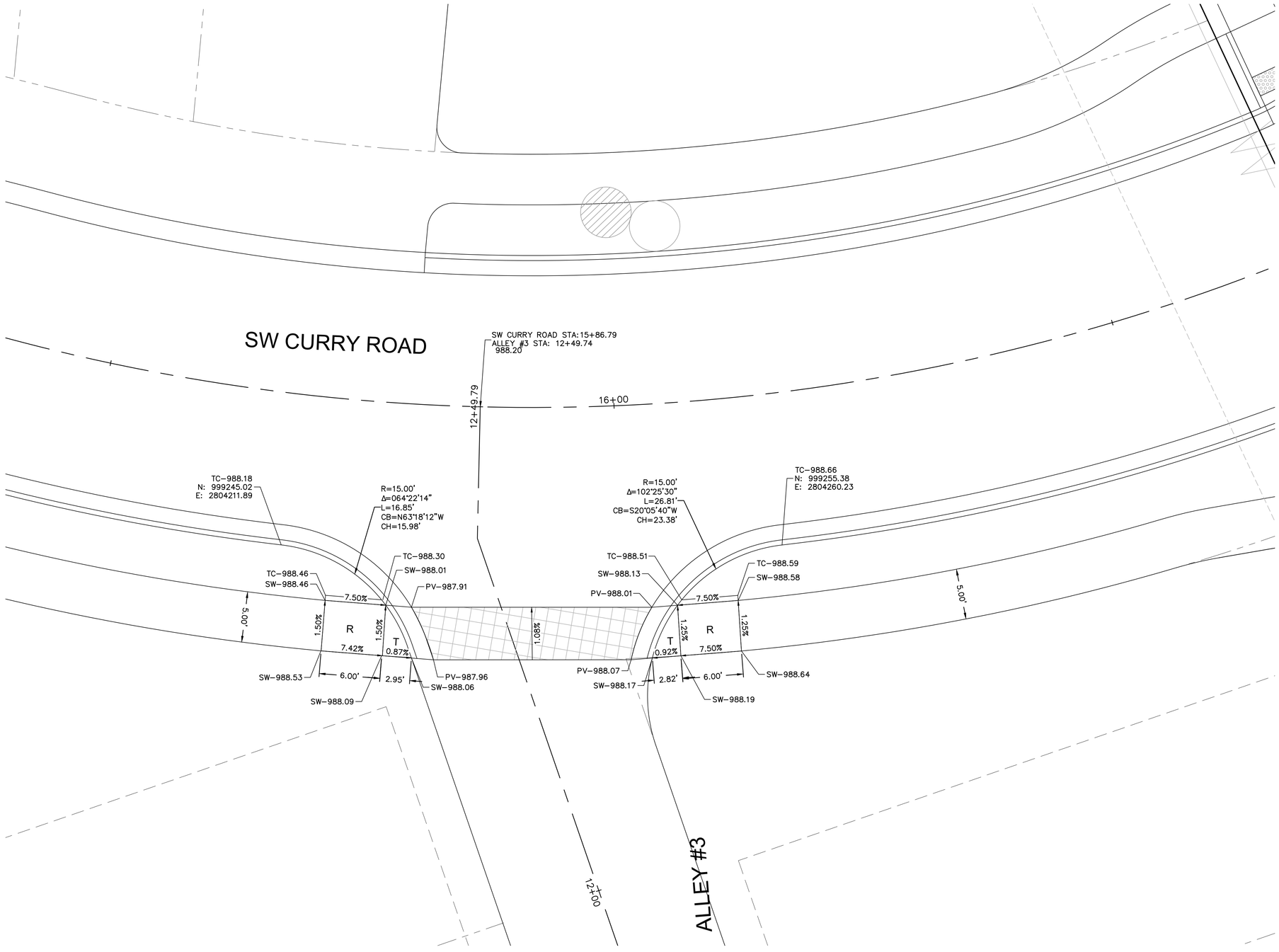
USER: qlowrey



SPOT ELEVATIONS DETAIL 05

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
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Mid-America Regional Authority #
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JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

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REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 05
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C124

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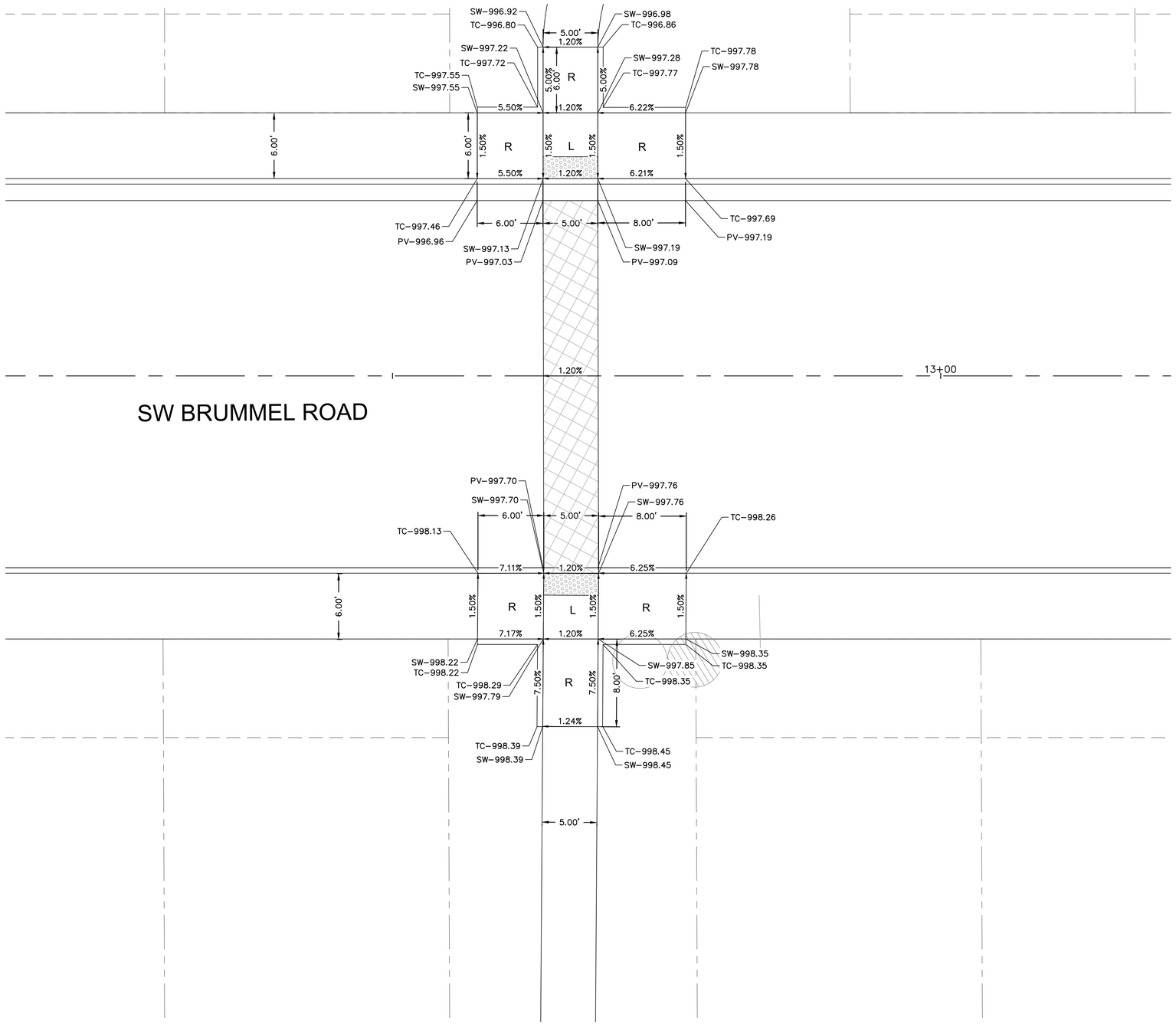

SPOT ELEVATIONS DETAIL 06

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

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North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 06
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C125

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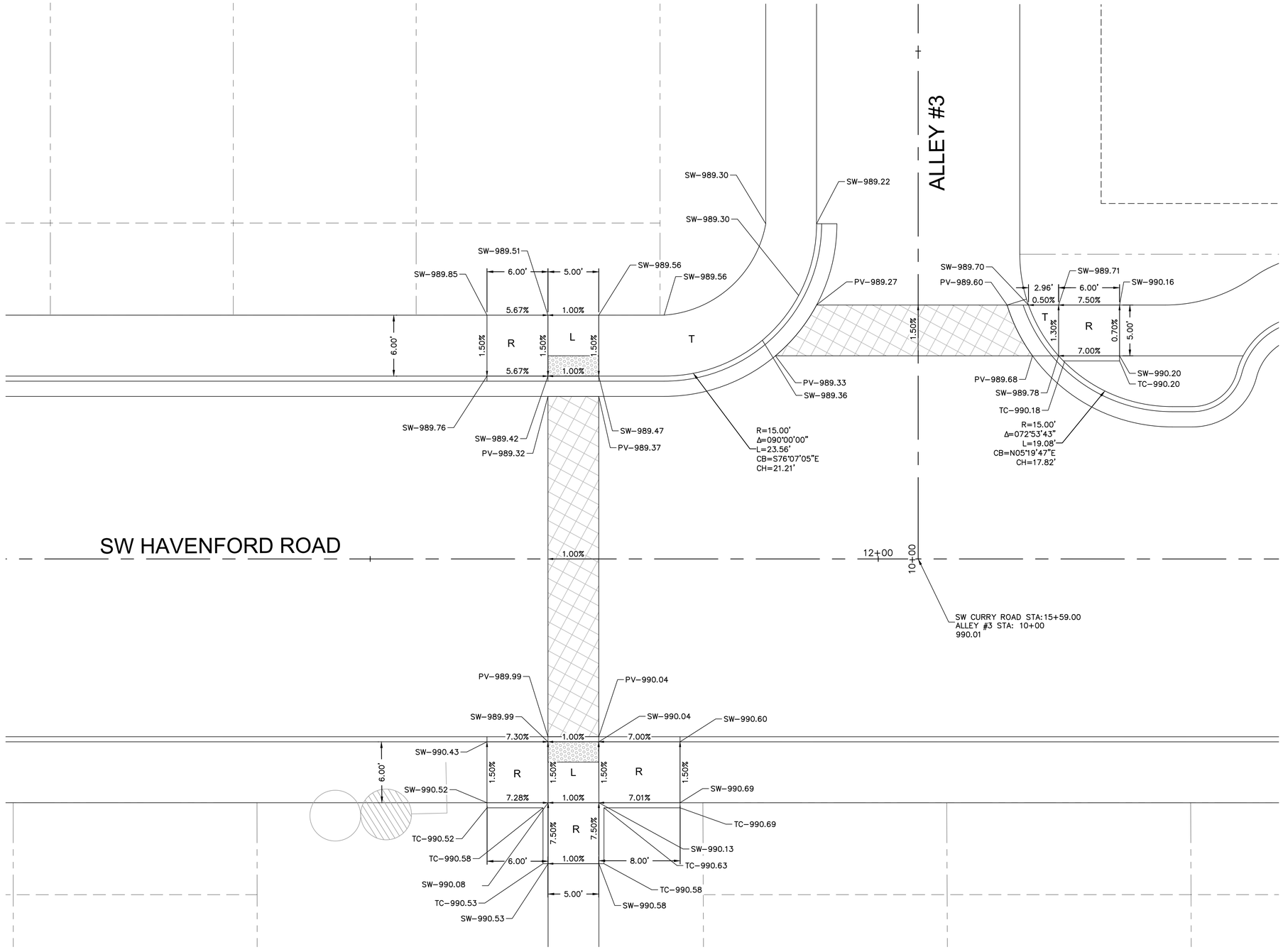
USER: glowrey



SPOT ELEVATIONS DETAIL 07

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 07
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C126

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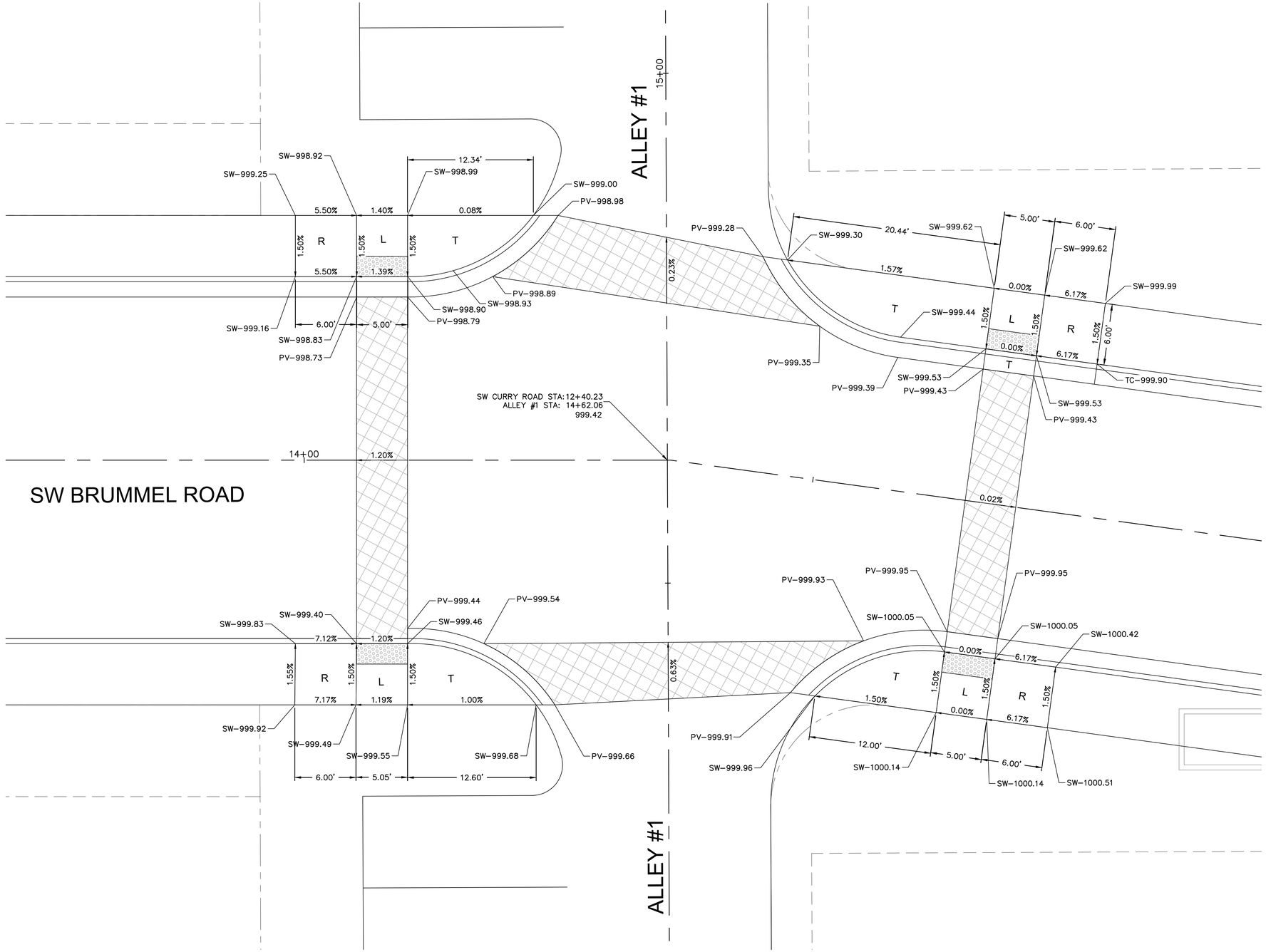

SPOT ELEVATIONS DETAIL 8

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
2. Curb ramp flares shall not be steeper than 1:10 max slope.
3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_SPT01_02102987.dwg
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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

SIDEWALK RAMP & CROSSWALK DETAIL 08
GNCV

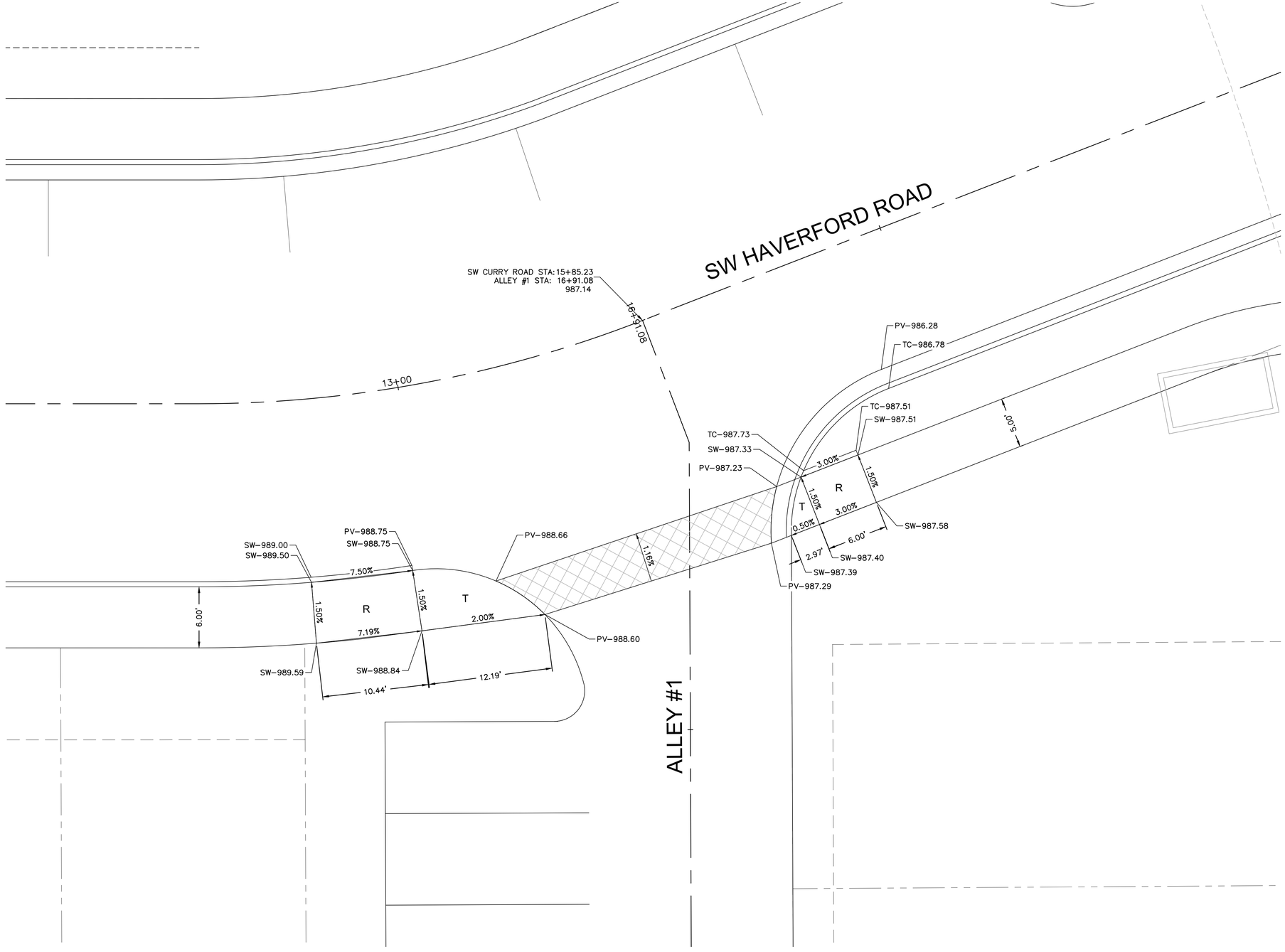
NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C127



SPOT ELEVATIONS DETAIL 9

SPOT ELEVATION LEGEND

HP–HIGH POINT
LP–LOW POINT
PV–PAVEMENT
TC–TOP OF CURB AT BACK
SW–SIDEWLAK
ME–MATCH EXISTING
L–LANDING
T–TRANSITION
R–RAMP

NOTES:
1. All ADA curb ramps shall be built per current municipality adopted ADA standards.
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3. A turning space is required at all directional changes, which shall not have a slope greater than 2%.
4. Curve data is for back of curbs.

N

0' 2.5' 5' 10'
SCALE IN FEET

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STATE OF MISSOURI
JULIE ELAINE SELLERS
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10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SIDEWALK RAMP & CROSSWALK DETAIL 09
GNCV

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C128

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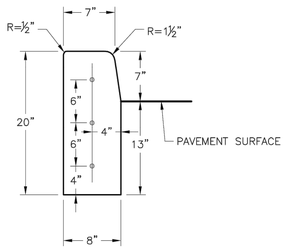
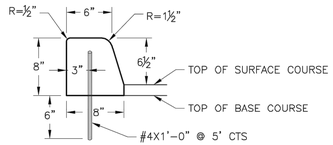
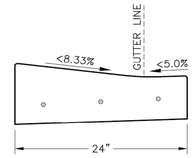


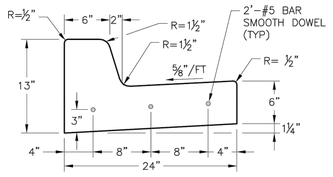
STRAIGHT CURB
(TYPE C-1)



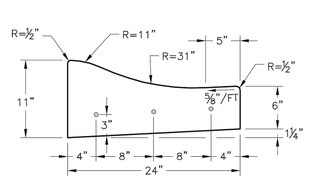
DOWELLED CURB
(TYPE DC)



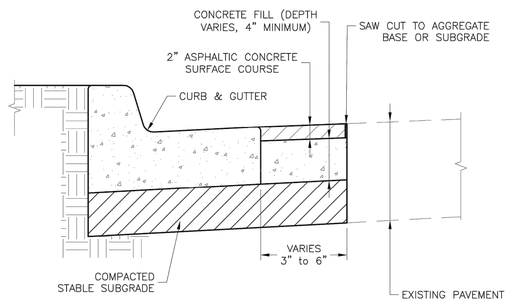
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



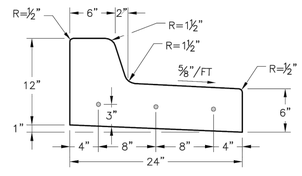
STRAIGHT BACK CURB &
GUTTER
(TYPE CG-1)



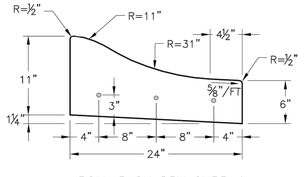
ROLL BACK CURB &
GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB &
GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB &
GUTTER
(TYPE CG-2 DRY)

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

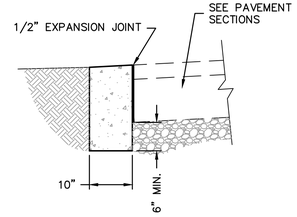
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:

Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

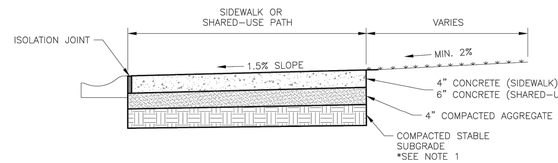
GEN-4



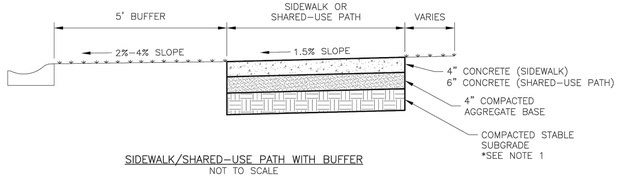
CONCRETE "RIBBON" CURB
NOT TO SCALE

GENERAL NOTES:

1. 3/4" ISOLATION JOINTS WITH 5/8" DIA. X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 1" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. FIX DOWEL BARS WITH BAR SUPPORTS.
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROGH HANDICAP ACCESSRAMP.



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED-USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

SIDEWALK/SHARED-USE PATH DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

GEN-2

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV/ NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

CONSTRUCTION DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01_02102987
date: 08.25.2021

SHEET
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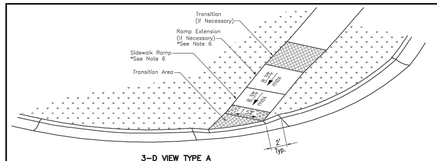
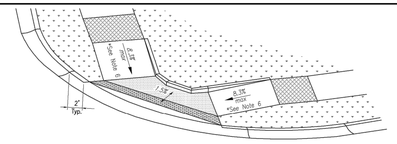


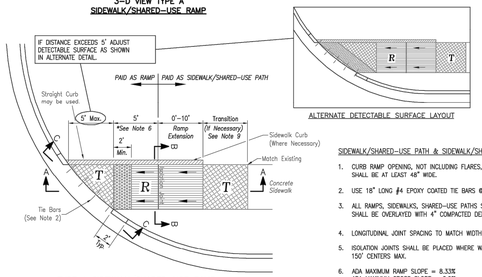
3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP

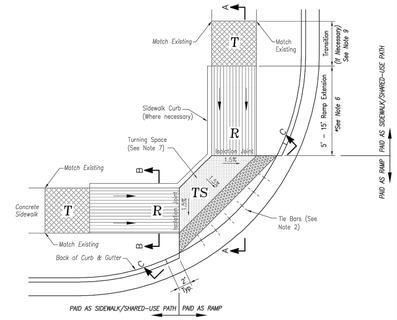


TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale

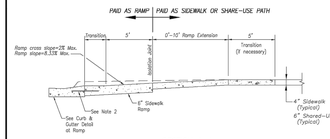
ALTERNATE DETECTABLE SURFACE LAYOUT

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

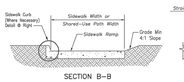
1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



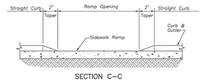
TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale



SECTION A-A

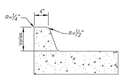


SECTION B-B

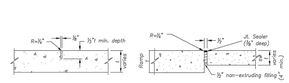


SECTION C-C

TYPE A & B SIDEWALK RAMP
Not to Scale

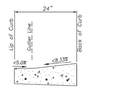


SIDEWALK CURB DETAIL
Not to Scale



CONTRACTION JOINT ISOLATION JOINT

JOINT DETAILS
Not to Scale



CURB & GUTTER DETAIL AT RAMP
Not to Scale

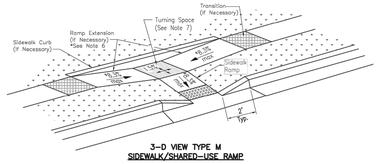
LS LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

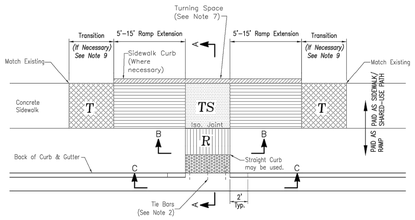
Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3A



3-D VIEW TYPE M
SIDEWALK/SHARED-USE RAMP



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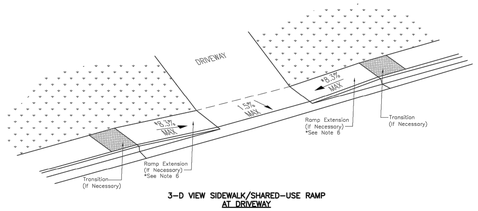
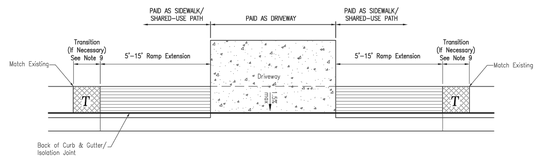
Not to Scale



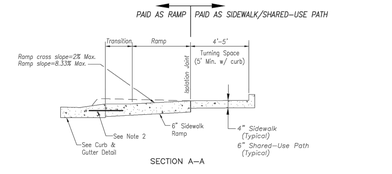
3-D VIEW SIDEWALK/SHARED-USE RAMP AT DRIVEWAY



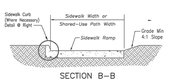
SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



SECTION A-A



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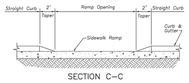
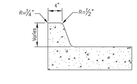


SECTION C-C

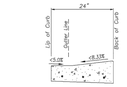
TYPE M SIDEWALK RAMP
Not to Scale



SIDEWALK CURB DETAIL
Not to Scale

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION



CURB & GUTTER DETAIL AT RAMP
Not to Scale

LS LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
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GEN-3B

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV/NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

CONSTRUCTION DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL01_02102987
date: 08.25.2021

SHEET
C130

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_DTL01_02102987.dwg USER: qlowrey
DATE: Sep 07, 2021 11:02am XREFS: C_PTTBLK_02102987

STORM SEWER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEES SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE BOX DURING INSTALLATION.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.
5. STORM SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
6. STRUCTURE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE STRUCTURE.
7. PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.

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10/14/21
PROFESSIONAL ENGINEER

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REVISIONS

STORM SEWER GENERAL LAYOUT

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C131

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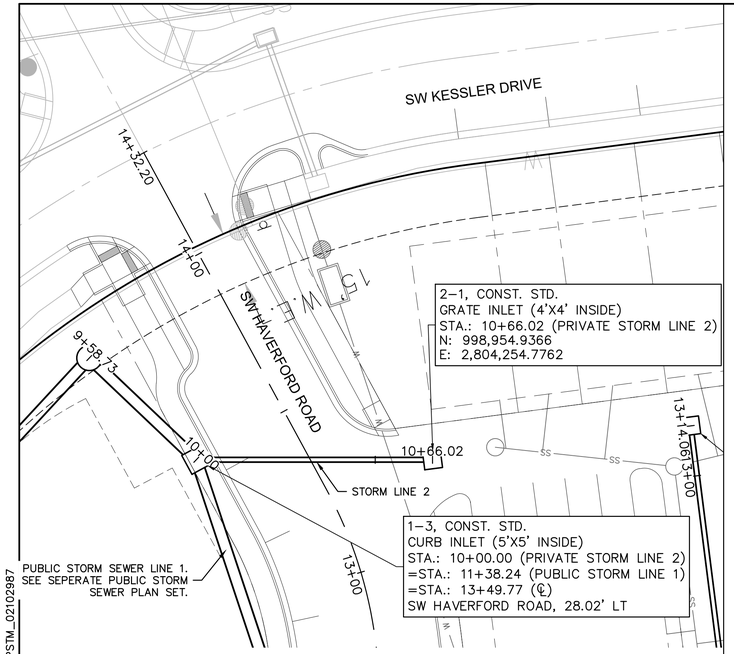
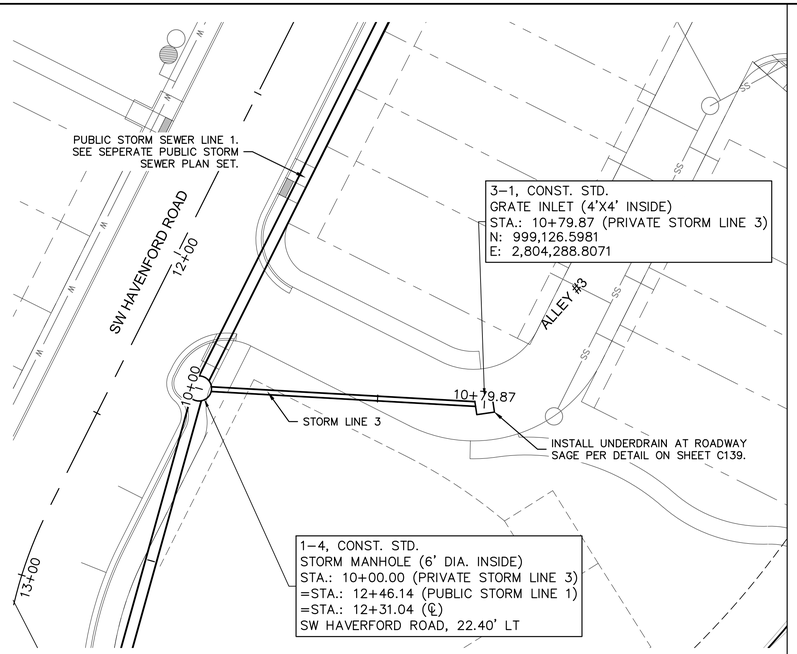
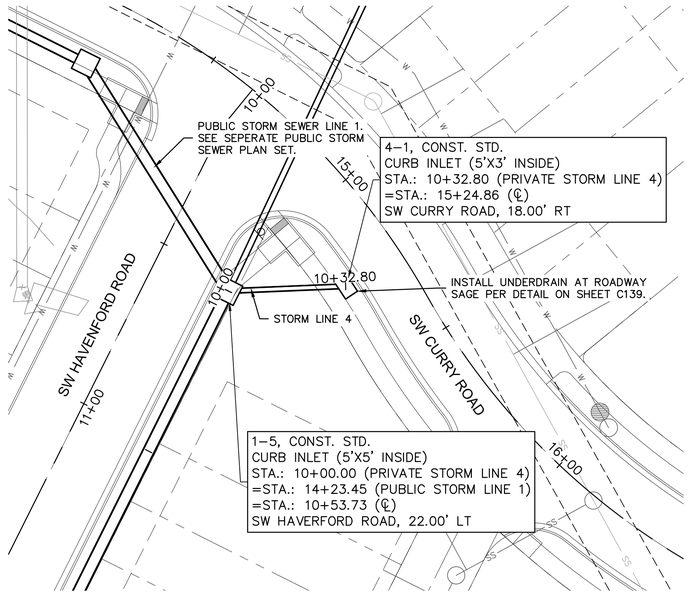
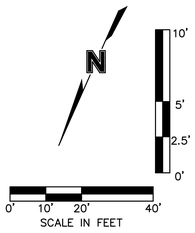
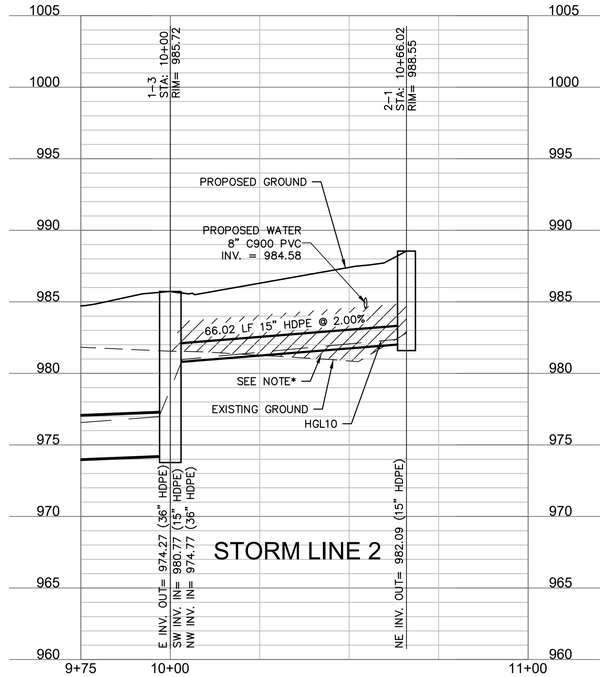


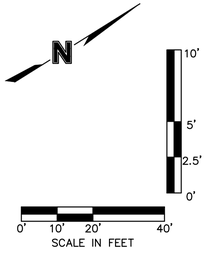


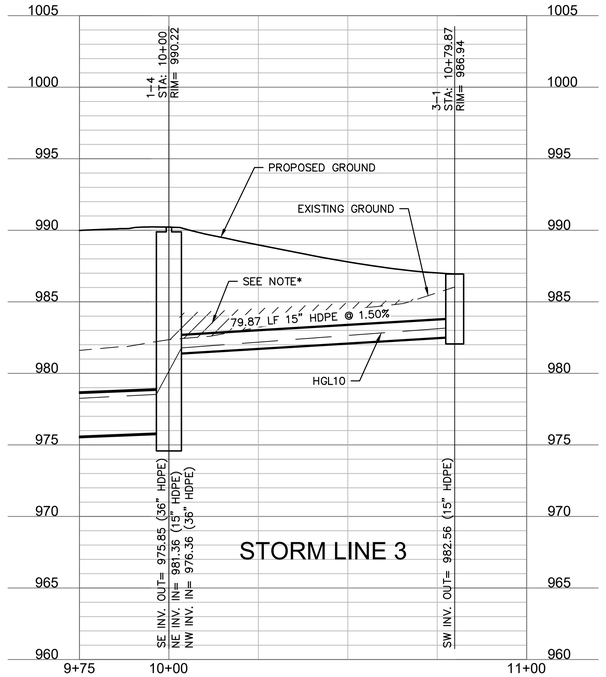


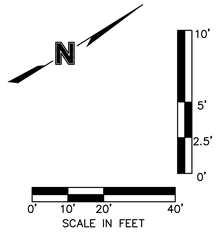


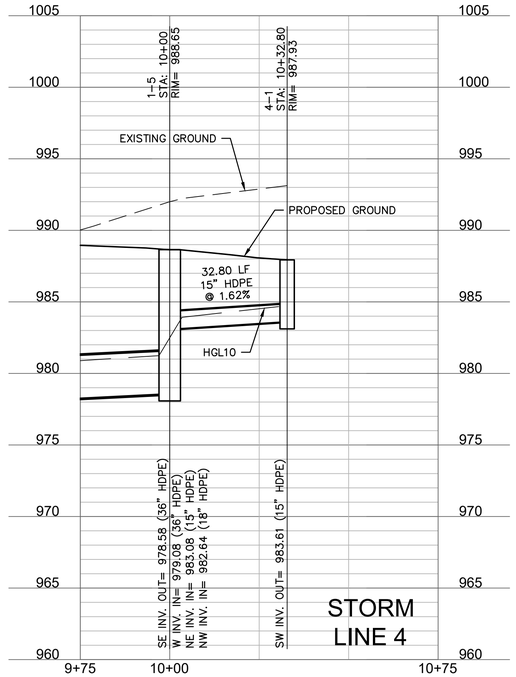
*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.











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JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STORM SEWER PLAN & PROFILE LINES 2, 3, & 4

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C132

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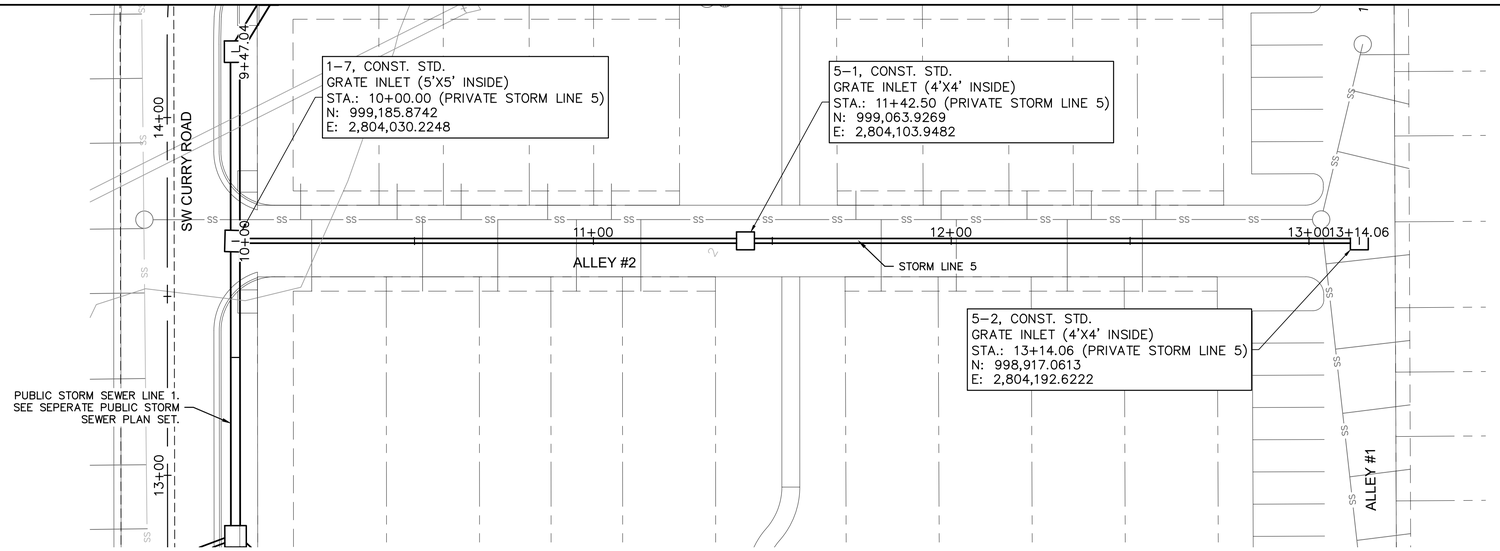

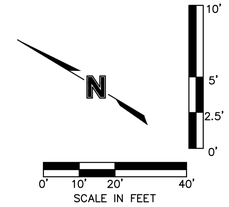

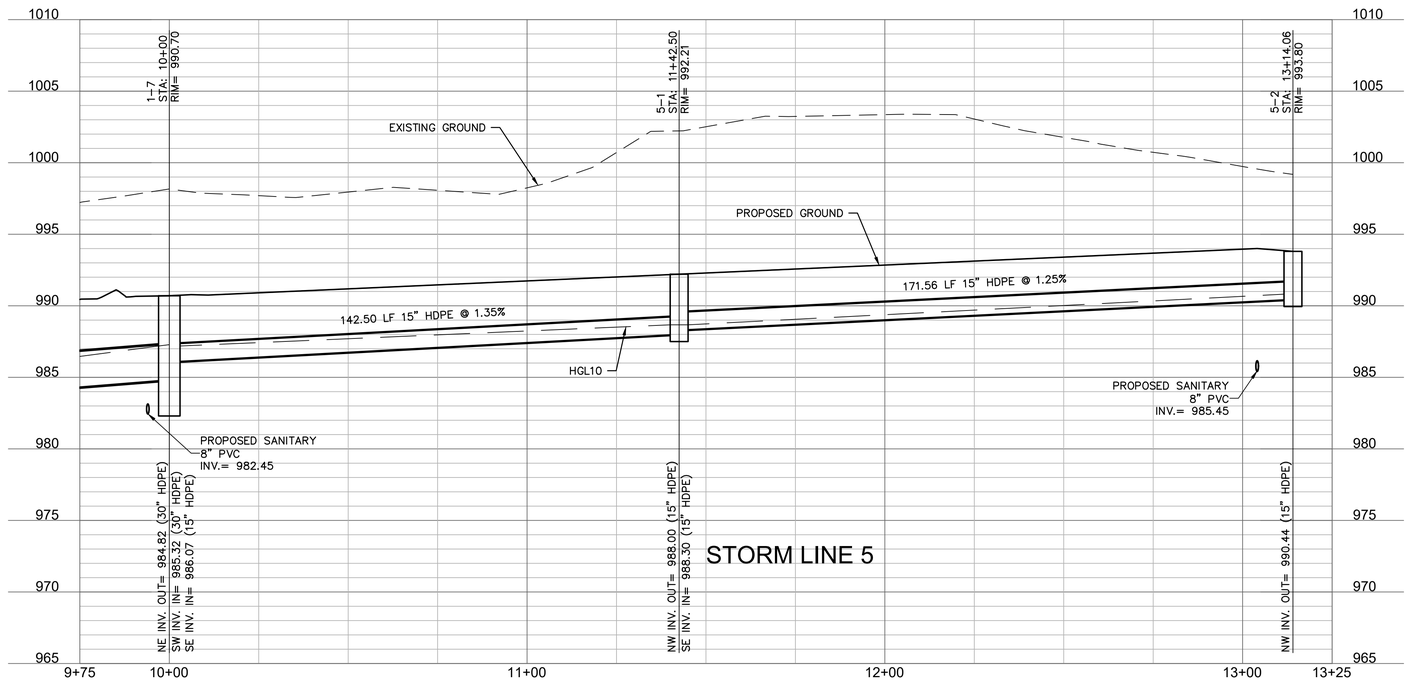

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STORM SEWER PLAN & PROFILE LINE 5

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

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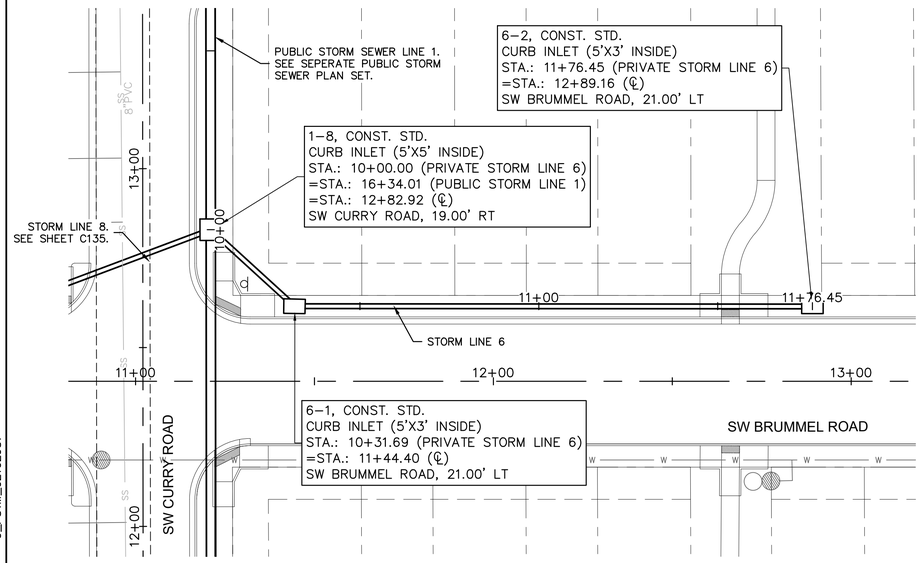

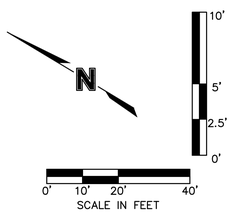

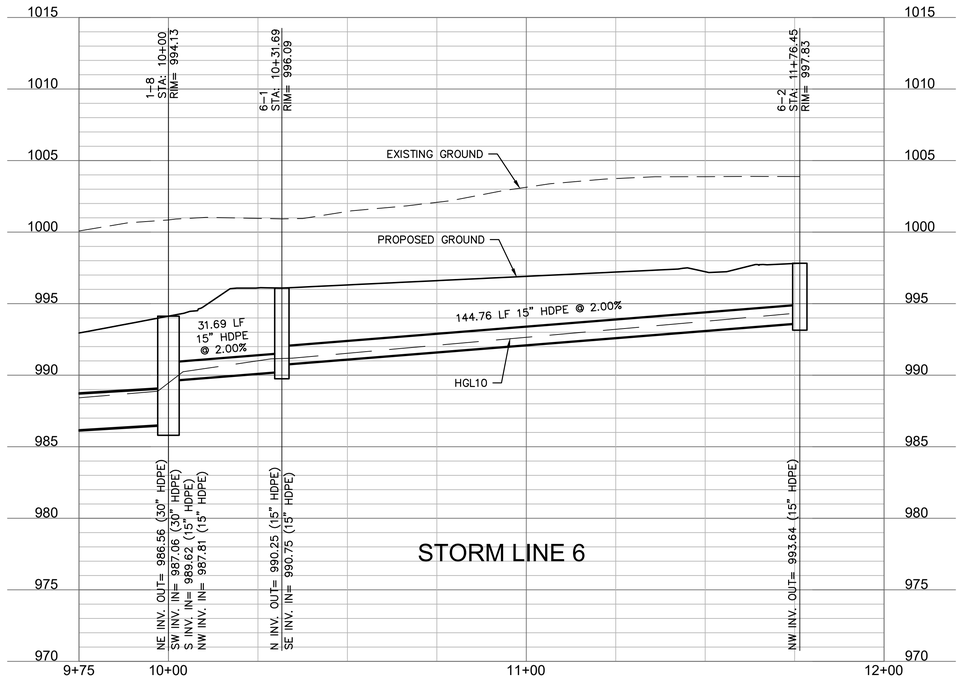

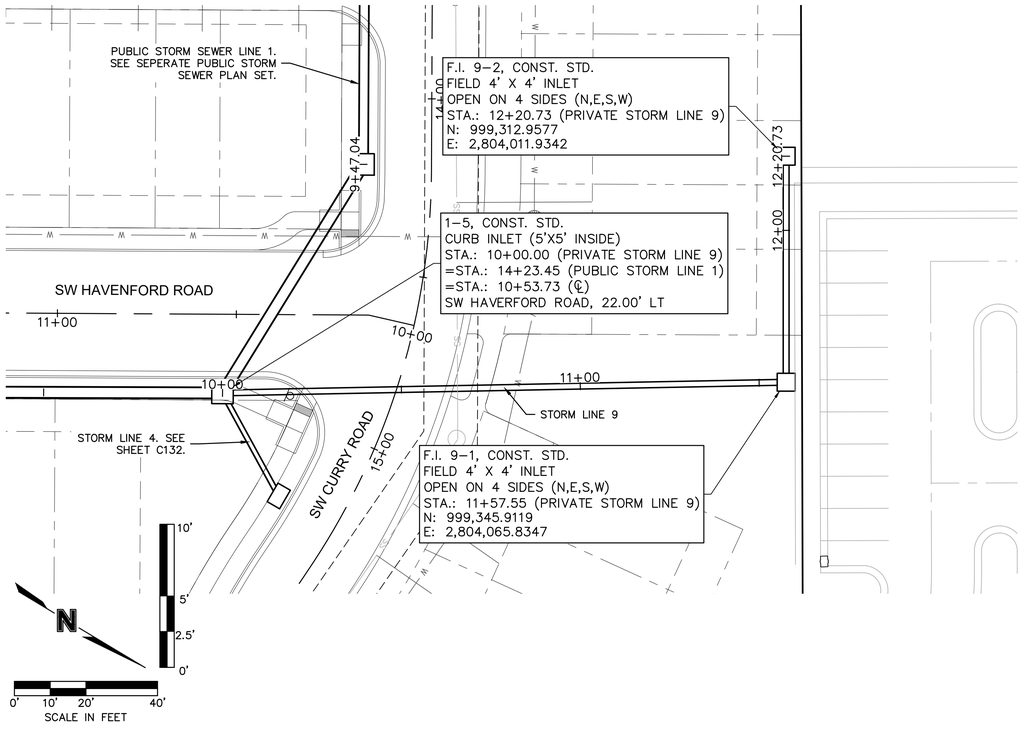

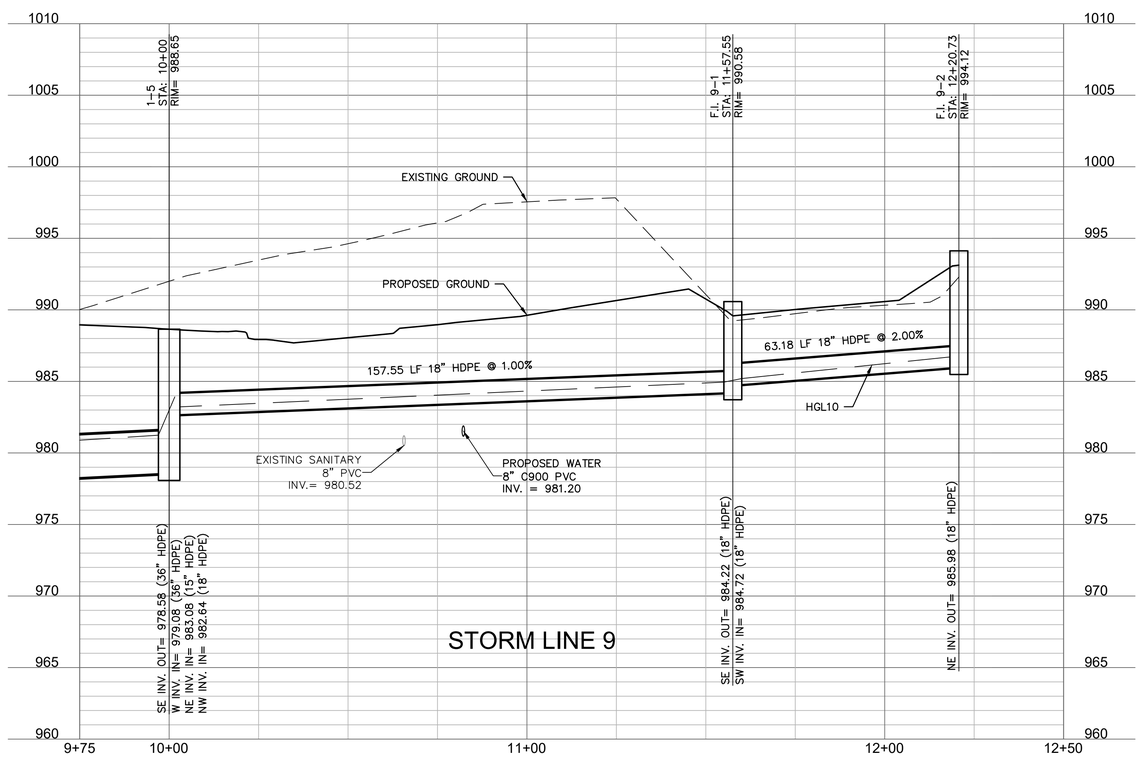

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10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STORM SEWER PLAN & PROFILE LINE 6 & 9

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
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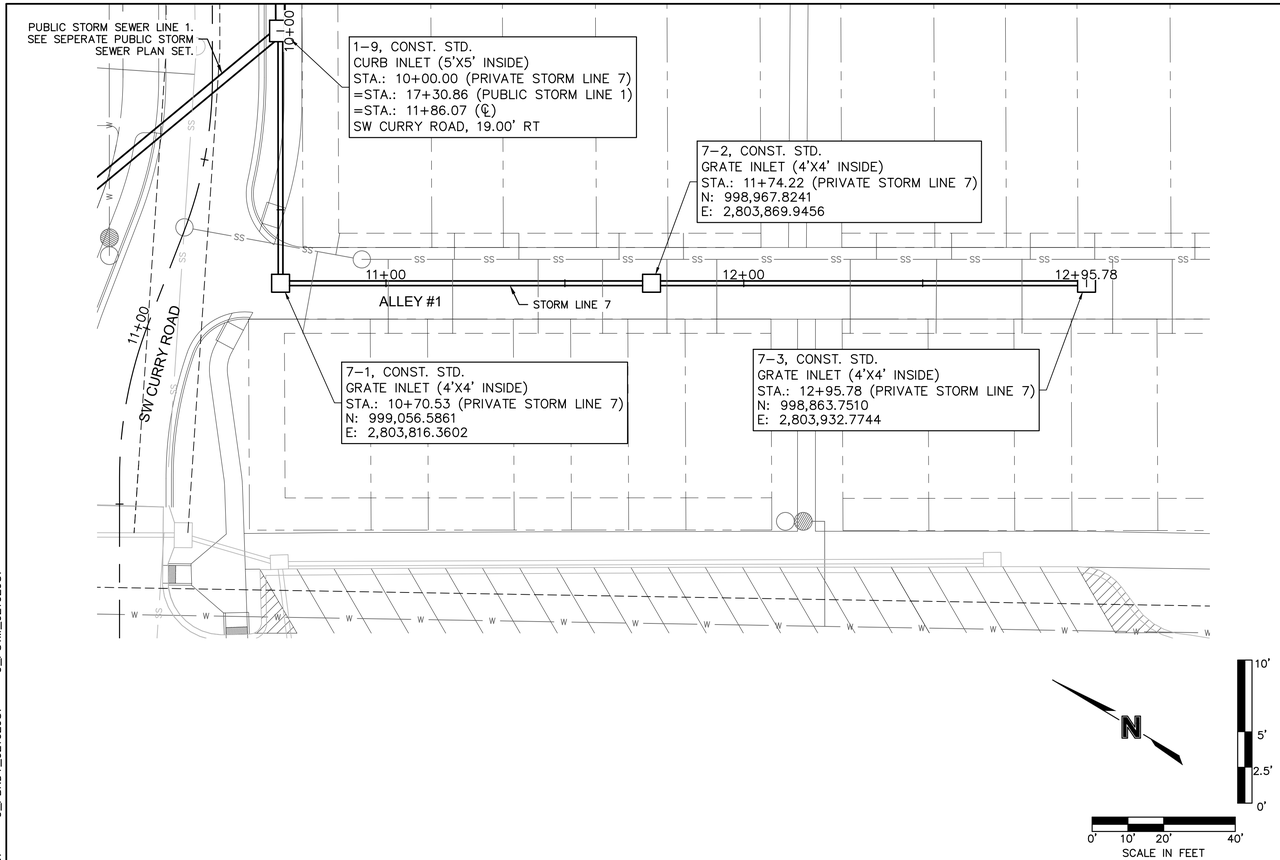

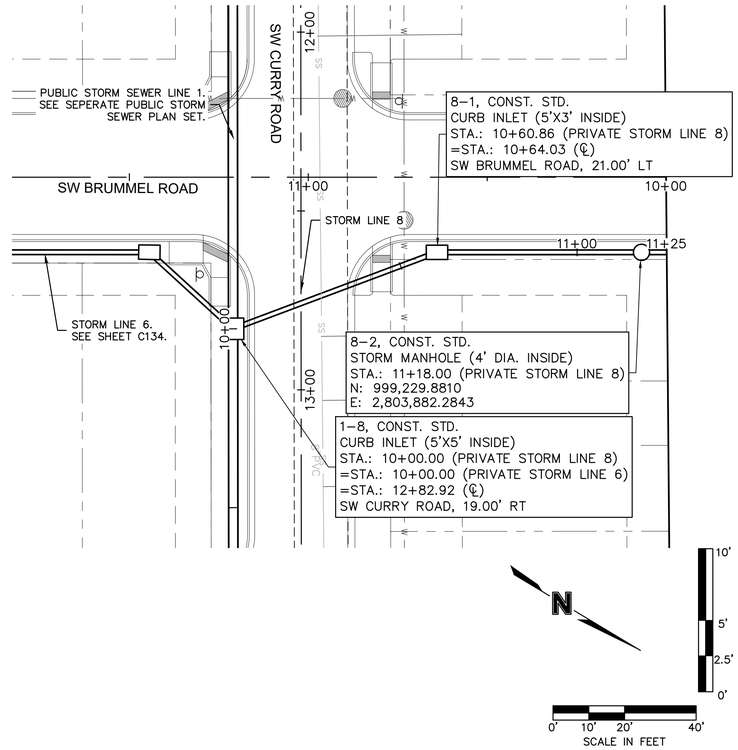

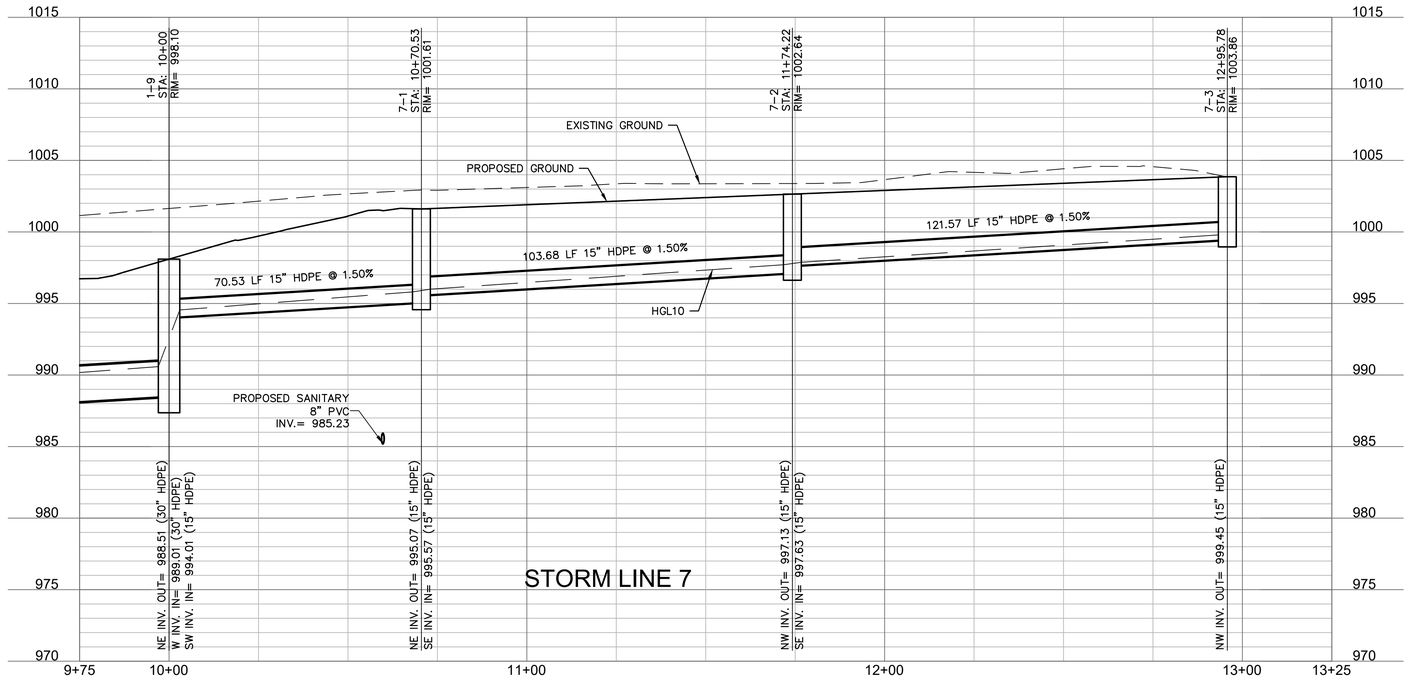

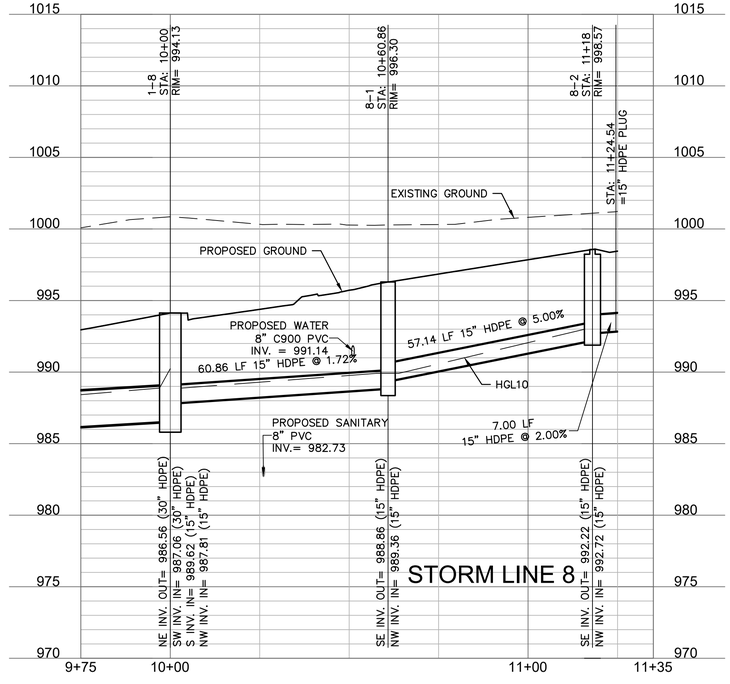

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REVISIONS

STORM SEWER PLAN & PROFILE LINES 7 & 8

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
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10/14/21
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DRAINAGE MAP

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C136

Storm Sewer Design Calculation Table													
10 Year Return Frequency													
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)	Upstream Top Elev. (ft)
1-1	EX A-3	15.69	971.88	971.50	2.44	42	0.012	73.27	9.30	170.33	2.67	974.56	982.50
1-2	1-1	96.97	973.35	972.38	1.00	36	0.012	73.27	11.29	72.26	2.50	976.05	984.59
1-3	1-2	41.27	974.27	973.85	1.02	36	0.012	73.27	11.35	72.89	2.47	976.97	987.63
1-4	1-3	106.28	975.83	974.77	1.00	36	0.012	72.16	11.23	72.25	2.46	978.52	990.45
1-5	1-4	179.95	978.58	976.33	1.25	36	0.012	70.06	11.64	80.79	2.19	981.24	988.64
1-6	1-5	72.52	980.17	979.08	1.50	36	0.012	60.82	10.40	88.58	2.16	982.68	989.74
1-7	1-6	62.88	984.97	983.71	2.00	30	0.012	56.66	13.14	62.89	1.86	987.34	990.95
1-8	1-7	82.00	986.70	985.47	1.50	30	0.012	51.93	11.77	54.42	1.95	989.02	994.57
1-9	1-8	87.46	988.51	987.20	1.50	30	0.012	38.01	9.31	54.38	1.82	990.59	998.31
1-10	1-9	80.57	991.83	989.01	3.50	30	0.012	33.64	9.19	83.12	1.58	993.80	1002.63
EX 1-11	1-10	89.37	993.17	992.33	0.94	30	0.013	33.64	8.59	39.76	1.76	995.14	1004.65
2-1	1-3	66.02	982.09	980.77	2.00	15	0.012	0.61	3.55	9.89	0.21	982.39	990.08
3-1	1-4	83.32	982.58	981.33	1.50	15	0.012	2.10	4.78	8.57	0.42	983.16	987.01
4-1	1-5	35.46	983.61	983.08	1.49	15	0.012	7.15	7.10	8.55	0.87	984.68	987.93
5-1	1-7	142.5	988	986.22	1.25	15	0.012	2.76	3.27	7.82	1.12	988.67 j	993.18
5-2	5-1	171.681	990.44	988.3	1.25	15	0.012	0.83	2.82	7.81	0.37	990.80 j	994.69
6-1	1-8	27.584	990.25	989.7	1.99	15	0.012	4.79	6.56	9.88	0.61	991.14	996.34
6-2	6-1	144.716	993.64	990.75	2	15	0.012	2.72	5.5	9.89	0.45	994.3	998.13
7-1	1-9	70.532	995.07	994.01	1.5	15	0.012	3.36	5.51	8.58	0.54	995.81	1001.6
7-2	7-1	103.683	997.13	995.57	1.5	15	0.012	2.15	4.81	8.58	0.43	997.71	1002.64
7-3	7-2	121.568	999.45	997.63	1.5	15	0.012	0.77	3.57	8.56	0.25	999.79	1003.86
8-1	1-8	60.396	988.86	987.95	1.51	15	0.012	6.82	6.15	8.59	1.07	989.91 j	997.31
8-2	8-1	57.14	992.22	989.36	5.01	15	0.012	3.63	5.8	15.65	0.55	992.99	998.65
EX A-2	EX A-1	110.061	967.18	959.93	6.59	42	0.012	85.6	17.82	279.74	1.33	970.06	981.94
EX A-3	EX A-2	42.5	971.38	969.72	3.91	42	0.012	79.65	15.2	215.41	1.47	974.17	981.86
EX B-1	EX A-2	102.23	973.4	971.69	1.67	15	0.012	4	5.95	9.05	0.58	974.21	983.13
EX B-2	EX B-1	112.97	975.51	973.9	1.43	15	0.012	4	5.75	8.35	0.61	976.32	984.99
EX B-3	EX B-2	42.332	979.05	978.33	1.7	15	0.012	3.18	5.56	9.12	0.51	979.77	985.07

Inlet Design Table													
10 Year Return Frequency													
Inlet ID	Inlet Location	Peak Flow (cfs)	Upstream Bypass (cfs)	Total Flow (cfs)	Clogging Factor	Inlet Capacity (cfs)	Sag Inlet Capacity (Note 1) (cfs)	Captured Flow (cfs)	Bypass Flow (cfs)	Inlet Efficiency (Note 2) (%)	Gutter Depth (ft)	Gutter Spread (ft)	Ponding Depth (ft)
1-3	GRADE	0.50	0.00	0.50	1.00	0.50	0.50	0.50	0.00	99.89%	0.08	3.54	...
1-5	GRADE	2.15	0.00	2.15	1.00	2.09	2.09	2.09	0.06	97.22%	0.18	8.45	...
1-6	GRADE	1.32	4.37	5.69	1.00	4.16	4.16	4.16	1.52	73.20%	0.22	10.18	...
1-7	GRADE	4.65	1.69	6.34	1.00	1.97	1.97	1.97	4.37	31.09%	...	...	0.14
1-8	GRADE	2.58	0.20	2.79	1.00	2.31	2.31	2.31	0.47	82.99%	0.15	6.95	...
1-9	GRADE	1.05	0.00	1.05	1.00	1.01	1.01	1.01	0.03	96.76%	0.10	4.82	...
EX 1-11	SAG	33.64	0.00	33.64	0.80	...	...	33.64	0.00	100.00%	...	...	...
2-1	GRADE	0.61	0.00	0.61	1.00	1.97	1.97	0.61	0.00	100.00%	...	...	0.14
3-1	SAG	2.10	0.00	2.10	0.80	19.26	15.41	2.10	0.00	100.00%	...	...	0.14
4-1(L)	SAG	0.72	0.00	0.72	0.80	19.40	15.52	0.72	0.00	100.00%	0.00	0.00	...
4-1(R)	SAG	0.55	1.58	2.14	0.80	19.40	15.52	2.14	0.00	100.00%	0.16	7.34	...
4-1(B)	SAG	4.30	0.00	4.30	0.80	19.40	15.52	4.30	0.00	100.00%	0.00	0.00	...
4-1	SAG	5.57	1.58	7.15	0.80	19.40	15.52	7.15	0.00	100.00%	...	...	...
5-1	GRADE	1.93	0.00	1.93	1.00	1.97	1.97	1.93	0.00	100.00%	...	...	0.14
5-2	GRADE	0.83	0.00	0.83	1.00	1.97	1.97	0.83	0.00	100.00%	...	...	0.14
6-1	GRADE	2.04	0.20	2.24	1.00	2.07	2.07	2.07	0.17	92.38%	0.16	7.28	...
6-2	GRADE	2.92	0.00	2.92	1.00	2.72	2.72	2.72	0.20	93.14%	0.20	9.09	...
7-1	GRADE	1.21	0.00	1.21	1.00	1.97	1.97	1.21	0.00	100.00%	...	...	0.14
7-2	GRADE	1.38	0.00	1.38	1.00	1.97	1.97	1.38	0.00	100.00%	...	...	0.14
7-3	GRADE	0.77	0.00	0.77	1.00	1.97	1.97	0.77	0.00	100.00%	...	...	0.14
8-1	GRADE	4.41	0.00	4.41	1.00	3.19	3.19	3.19	1.22	72.40%	0.18	8.31	...
8-2	SAG	3.63	0.00	3.63	0.80	194.02	155.21	3.63	0.00	100.00%	0.00	0.00	...
EX A-2(L)	SAG	1.13	0.00	1.13	0.80	19.40	15.52	1.13	0.00	100.00%	0.13	6.14	...
EX A-2(R)	SAG	0.34	0.00	0.34	0.80	19.40	15.52	0.34	0.00	100.00%	0.00	0.00	...
EX A-2(B)	SAG	0.49	0.00	0.49	0.80	19.40	15.52	0.49	0.00	100.00%	...	...	...
EX A-2	SAG	1.95	0.00	1.95	0.80	19.40	15.52	1.95	0.00	100.00%	...	...	...
EX A-3(L)	SAG	1.50	0.61	2.11	0.80	19.40	15.52	2.11	0.00	100.00%	0.00	0.00	...
EX A-3(R)	SAG	1.99	0.00	1.99	0.80	19.40	15.52	1.99	0.00	100.00%	0.16	7.61	...
EX A-3(B)	SAG	2.28	0.00	2.28	0.80	19.40	15.52	2.28	0.00	100.00%	...	...	...
EX A-3	SAG	5.78	0.61	6.38	0.80	19.40	15.52	6.38	0.00	100.00%	...	...	...
EX B-2	GRADE	0.83	0.00	0.83	1.00	0.82	0.82	0.82	0.00	99.93%	0.12	5.75	...
EX B-3	GRADE	3.79	0.00	3.79	1.00	3.18	3.18	3.18	0.61	83.92%	0.19	8.90	...

Notes:
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing theoretical capacity to 80% capacity, as required per APWA Section 5600.
   Both theoretical capacity and reduced capacity are shown.
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual percentage of flow captured after the capacity has been reduced to 80% of theoretical capacity.

Drainage Area Design Table						
10 Year Return Frequency						
Inlet ID	Drainage Area (ac)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
1-3	0.09	0.75	5.00	7.35	1.00	0.50
1-5	0.39	0.75	5.00	7.35	1.00	2.15
1-6	0.24	0.75	5.00	7.35	1.00	1.32
1-7	0.81	0.78	5.00	7.35	1.00	4.65
1-8	0.45	0.78	5.00	7.35	1.00	2.58
1-9	0.19	0.75	5.00	7.35	1.00	1.05
EX 1-11	6.58	0.81	6.67	6.93	1.00	33.64
2-1	0.11	0.75	5.00	7.35	1.00	0.61
3-1	0.38	0.75	5.00	7.35	1.00	2.10
4-1(L)	0.13	0.75	5.00	7.35	1.00	0.72
4-1(R)	0.10	0.75	5.00	7.35	1.00	0.55
4-1(B)	0.78	0.75	5.00	7.35	1.00	4.30
4-1	1.01	0.75	5.00	7.35	1.00	5.57
5-1	0.35	0.75	5.00	7.35	1.00	1.93
5-2	0.15	0.75	5.00	7.35	1.00	0.83
6-1	0.37	0.75	5.00	7.35	1.00	2.04
6-2	0.53	0.75	5.00	7.35	1.00	2.92
7-1	0.22	0.75	5.00	7.35	1.00	1.21
7-2	0.25	0.75	5.00	7.35	1.00	1.38
7-3	0.14	0.75	5.00	7.35	1.00	0.77
8-1	0.74	0.81	5.00	7.35	1.00	4.41
8-2	0.61	0.81	5.00	7.35	1.00	3.63
EX A-2(L)	0.30	0.51	5.00	7.35	1.00	1.13
EX A-2(R)	0.09	0.51	5.00	7.35	1.00	0.34
EX A-2(B)	0.13	0.51	5.00	7.35	1.00	0.49
EX A-2	0.52	0.51	5.00	7.35	1.00	1.95
EX A-3(L)	0.31	0.66	5.00	7.35	1.00	1.50
EX A-3(R)	0.41	0.66	5.00	7.35	1.00	1.99
EX A-3(B)	0.47	0.66	5.00	7.35	1.00	2.28
EX A-3	1.19	0.66	5.00	7.35	1.00	5.78
EX B-2	0.22	0.51	5.00	7.35	1.00	0.83
EX B-3	0.78	0.66	5.00	7.35	1.00	3.79

Storm Sewer Design Calculation Table													
100 Year Return Frequency													
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)	Upstream Top Elev. (ft)
1-1	EX A-3	15.69	971.88	971.50	2.44	42	0.012	127.97	13.70	170.33	3.23	975.18	982.50
1-2	1-1	96.97	973.35	972.38	1.00	36	0.012	127.97	18.11	72.26	3.00	978.42	984.59
1-3	1-2	41.27	974.27	973.85	1.02	36	0.012	127.97	18.11	72.89	3.00	981.76	987.63
1-4	1-3	106.28	975.83	974.77	1.00	36	0.012	126.06	17.84	72.25	3.00	987.04	990.45
1-5	1-4	179.95	978.58	976.33	1.25	36	0.012	119.00	16.84	80.79	3.00	993.90	988.64
1-6	1-5	72.52	980.17	979.08	1.50	36	0.012	100.04	14.15	88.58	3.00	997.05	989.74
1-7	1-6	62.88	984.97	983.71	2.00	30	0.012	93.51	19.05	62.89	2.50	1001.09	990.95
1-8	1-7	82.00	986.70	985.47	1.50	30	0.012	88.12	17.95	54.42	2.50	1006.57	994.57
1-9	1-8	87.46	988.51	987.20	1.50	30	0.012	66.00	13.45	54.38	2.50	1010.51	998.31
1-10	1-9	80.57	991.83	989.01	3.50	30	0.012	58.62	11.94	83.12	2.50	1013.04	1002.63
EX 1-11	1-10	89.37	993.17	992.33	0.94	30	0.013	58.62	11.94	39.76	2.50	1015.75	1004.65
2-1	1-3	66.02	982.09	980.77	2.00	15	0.012	1.06	0.86	9.89	1.25	983.81	990.08
3-1	1-4	83.32	982.58	981.33	1.50	15	0.012	7.06	5.75	8.57	1.25	989.86	987.01
4-1	1-5	35.46	983.61	983.08	1.49	15	0.012	15.52	12.65	8.55	1.25	997.41	987.93
5-1	1-7	142.5	988	986.22	1.25	15	0.012	3.42	2.79	7.82	1.25	1003.68	993.18
5-2	5-1	171.681	990.44	988.3	1.25	15	0.012	1.45	1.18	7.81	1.25	1003.81	994.69
6-1	1-8	27.584	990.25	989.7	1.99	15	0.012	7.86	6.41	9.88	1.25	1008.92	996.34
6-2	6-1	144.716	993.64	990.75	2	15	0.012	4.32	3.52	9.89	1.25	1009.73	998.13
7-1	1-9	70.532	995.07	994.01	1.5	15	0.012	5.29	4.31	8.58	1.25	1012.04	1001.6
7-2	7-1	103.683	997.13	995.57	1.5	15	0.012	3.32	2.71	8.58	1.25	1012.38	1002.64
7-3	7-2	121.568	999.45	997.63	1.5	15	0.012	1.35	1.1	8.56	1.25	1012.48	1003.86
8-1	1-8	60.396	988.86	987.95	1.51	15	0.012	10.57	8.61	8.59	1.25	1009.96	997.31
8-2	8-1	57.14	992.22	989.36	5.01	15	0.012	6.3	5.13	15.65	1.25	1010.88	998.65
EX A-2	EX A-1	110.061	967.18	959.93	6.59	42	0.012	149.61	22.63	279.74	1.82	970.57	981.94
EX A-3	EX A-2	42.5	971.38	969.72	3.91	42	0.012	140.09	19.3	215.41	2.06	974.73	981.86
EX B-1	EX A-2	102.23	973.4	971.69	1.67	15	0.012	6.1	6.86	9.05	0.75	974.4	983.13
EX B-2	EX B-1	112.97	975.51	973.9	1.43	15	0.012	6.1	6.62	8.35	0.79	976.51	984.99
EX B-3	EX B-2	42.332	979.05	978.33	1.7	15	0.012	4.67	6.28	9.12	0.63	979.93	985.07

Inlet Design Table													
100 Year Return Frequency													
Inlet ID	Inlet Location	Peak Flow (cfs)	Upstream Bypass (cfs)	Total Flow (cfs)	Clogging Factor	Inlet Capacity (cfs)	Sag Inlet Capacity (Note 1) (cfs)	Captured Flow (cfs)	Bypass Flow (cfs)	Inlet Efficiency (Note 2) (%)	Gutter Depth (ft)	Gutter Spread (ft)	Ponding Depth (ft)
1-3	GRADE	0.87	0.00	0.87	1.00	0.85	0.85	0.85	0.02	97.59%	0.09	4.37	...
1-5	GRADE	3.77	0.00	3.77	1.00	3.44	3.44	3.44	0.33	91.24%	0.23	10.44	...
1-6	GRADE	2.32	13.01	15.33	1.00	6.53	6.53	6.53	8.80	42.61%	0.32	14.76	...
1-7	GRADE	8.15	6.83	14.98	1.00	1.97	1.97	1.97	13.01	13.15%	...	...	0.14
1-8	GRADE	4.53	1.21	5.74	1.00	3.69	3.69	3.69	2.04	64.37%	0.20	9.12	...
1-9	GRADE	1.84	0.61	2.45	1.00	2.09	2.09	2.09	0.35	85.56%	0.14	6.62	...
EX 1-11	SAG	58.62	0.00	58.62	0.80	...	...	58.62	0.00	100.00%	...	...	...
2-1	GRADE	1.06	0.00	1.06	1.00	1.97	1.97	1.06	0.00	100.00%	...	...	0.14
3-1	SAG	3.68	3.38	7.06	0.80	19.26	15.41	7.06	0.00	100.00%	...	...	0.14
4-1(L)	SAG	1.26	0.00	1.26	0.80	19.40	15.52	1.26	0.00	100.00%	0.00	0.00	...
4-1(R)	SAG	0.97	9.13	10.10	0.80	19.40	15.52	10.10	0.00	100.00%	0.28	13.14	...
4-1(B)	SAG	7.55	0.00	7.55	0.80	19.40	15.52	7.55	0.00	100.00%	0.00	0.00	...
4-1	SAG	9.77	9.13	18.91	0.80	19.40	15.52	15.52	3.38	82.10%	...	...	...
5-1	GRADE	3.39	0.00	3.39	1.00	1.97	1.97	1.97	1.42	58.16%	...	...	0.14
5-2	GRADE	1.45	0.00	1.45	1.00	1.97	1.97	1.45	0.00	100.00%	...	...	0.14
6-1	GRADE	3.58	0.81	4.39	1.00	3.54	3.54	3.54	0.86	80.53%	0.20	9.38	...
6-2	GRADE	5.13	0.00	5.13	1.00	4.32	4.32	4.32	0.81	84.16%	0.24	11.23	...
7-1	GRADE	2.13	0.45	2.58	1.00	1.97	1.97	1.97	0.61	76.40%	...	...	0.14
7-2	GRADE	2.42	0.00	2.42	1.00	1.97	1.97	1.97	0.45	81.43%	...	...	0.14
7-3	GRADE	1.35	0.00	1.35	1.00	1.97	1.97	1.35	0.00	100.00%	...	...	0.14
8-1	GRADE	7.64	0.00	7.64	1.00	4.27	4.27	4.27	3.37	55.90%	0.22	10.21	...
8-2	SAG	6.30	0.00	6.30	0.80	194.02	155.21	6.30	0.00	100.00%	0.00	0.00	...
EX A-2(L)	SAG	1.97	0.00	1.97	0.80	19.40	15.52	1.97	0.00	100.00%	0.16	7.59	...
EX A-2(R)	SAG	0.59	0.00	0.59	0.80	19.40	15.52	0.59	0.00	100.00%	0.00	0.00	...
EX A-2(B)	SAG	0.86	0.00	0.86	0.80	19.40	15.52	0.86	0.00	100.00%	...	...	...
EX A-2	SAG	3.42	0.00	3.42	0.80	19.40	15.52	3.42	0.00	100.00%	...	...	...
EX A-3(L)	SAG	2.64	1.99	4.63	0.80	19.40	15.52	4.63	0.00	100.00%	0.00	0.00	...
EX A-3(R)	SAG	3.49	0.00	3.49	0.80	19.40	15.52	3.49	0.00	100.00%	0.20	9.39	...
EX A-3(B)	SAG	4.00	0.00	4.00	0.80	19.40	15.52	4.00	0.00	100.00%	...	...	...
EX A-3	SAG	10.13	1.99	12.12	0.80	19.40	15.52	12.12	0.00	100.00%	...	...	...
EX B-2	GRADE	1.45	0.00	1.45	1.00	1.43	1.43	1.43	0.01	99.10%	0.15	7.10	...
EX B-3	GRADE	6.64	0.00	6.64	1.00	4.67	4.67	4.67	1.97	70.35%	0.24	10.99	...

Notes:
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing theoretical capacity to 80% capacity, as required per APWA Section 5600.
   Both theoretical capacity and reduced capacity are shown.
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual percentage of flow captured after the capacity has been reduced to 80% of theoretical capacity.

Drainage Area Design Table						
100 Year Return Frequency						
Inlet ID	Drainage Area (ac)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
1-3	0.09	0.75	5.00	10.32	1.25	0.87
1-5	0.39	0.75	5.00	10.32	1.25	3.77
1-6	0.24	0.75	5.00	10.32	1.25	2.32
1-7	0.81	0.78	5.00	10.32	1.25	8.15
1-8	0.45	0.78	5.00	10.32	1.25	4.53
1-9	0.19	0.75	5.00	10.32	1.25	1.84
EX 1-11	6.58	0.81	6.67	9.75	1.25	58.62
2-1	0.11	0.75	5.00	10.32	1.25	1.06
3-1	0.38	0.75	5.00	10.32	1.25	3.68
4-1(L)	0.13	0.75	5.00	10.32	1.25	1.26
4-1(R)	0.10	0.75	5.00	10.32	1.25	0.97
4-1(B)	0.78	0.75	5.00	10.32	1.25	7.55
4-1	1.01	0.75	5.00	10.32	1.25	9.77
5-1	0.35	0.75	5.00	10.32	1.25	3.39
5-2	0.15	0.75	5.00	10.32	1.25	1.45
6-1	0.37	0.75	5.00	10.32	1.25	3.58
6-2	0.53	0.75	5.00	10.32	1.25	5.13
7-1	0.22	0.75	5.00	10.32	1.25	2.13
7-2	0.25	0.75	5.00	10.32	1.25	2.42
7-3	0.14	0.75	5.00	10.32	1.25	1.35
8-1	0.74	0.81	5.00	10.32	1.25	7.64
8-2	0.61	0.81	5.00	10.32	1.25	6.30
EX A-2(L)	0.30	0.51	5.00	10.32	1.25	1.97
EX A-2(R)	0.09	0.51	5.00	10.32	1.25	0.59
EX A-2(B)	0.13	0.51	5.00	10.32	1.25	0.86
EX A-2	0.52	0.51	5.00	10.32	1.25	3.42
EX A-3(L)	0.31	0.66	5.00	10.32	1.25	2.64
EX A-3(R)	0.41	0.66	5.00	10.32	1.25	3.49
EX A-3(B)	0.47	0.66	5.00	10.32	1.25	4.00
EX A-3	1.19	0.66	5.00	10.32	1.25	10.13
EX B-2	0.22	0.51	5.00	10.32	1.25	1.45
EX B-3	0.78	0.66	5.00	10.32	1.25	6.64

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JULIE ELAINE SELLERS
NUMBER PE-2017000367
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PROFESSIONAL ENGINEER

REVISIONS			
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

DRAINAGE TABLES

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.:
date: 08.25.2021

SHEET
C137

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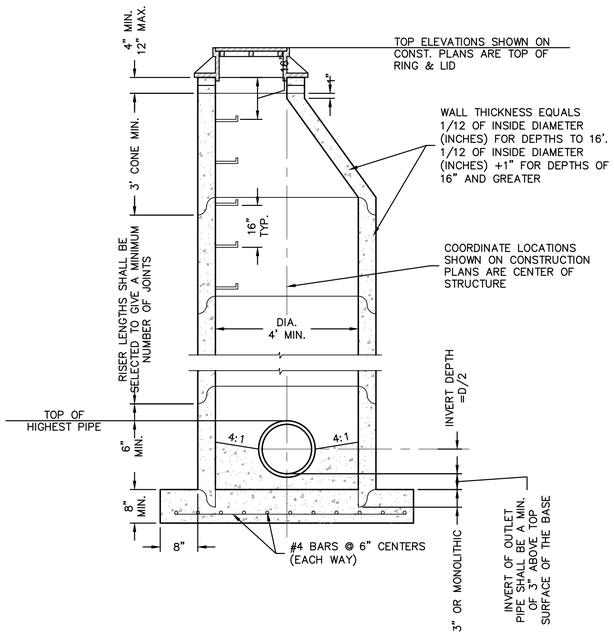
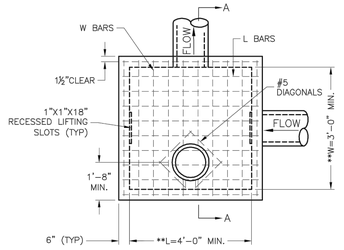


STORM MANHOLE NOTES

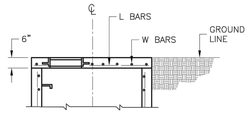
1. ALL MANHOLES ARE TO BE PRECAST CONCRETE AND OF ECCENTRIC CONE TYPE UNLESS OTHERWISE SPECIFIED.
2. MANHOLE TOP ADJUSTMENTS SHALL BE ACCOMPLISHED BY THE USE OF CONCRETE ADJUSTMENT RINGS.
3. TOP OF MANHOLE CASTING SHALL BE SET FLUSH AND ON SAME SLOPE AS FINISHED SURFACE OR AS DIRECTED BY THE ENGINEER.
4. REINFORCEMENT IN ALL SECTIONS SHALL EQUAL OR EXCEED A.S.T.M. C-478 SPECIFICATIONS.
5. THE ENGINEER SHALL DESIGNATE MODIFICATIONS FOR MANHOLES WITH SPECIAL DESIGNS.
6. THE INSIDE DIAMETER OF THE MANHOLE SHALL BE 4'-0" FOR PIPE DIAMETERS FROM 12" THRU 24", 5'-0" FOR PIPE DIAMETERS FROM 27" THRU 36", AND 6'-0" FOR PIPE DIAMETERS 42" THRU 48".
7. CLEARANCE TOLERANCE OF PIPE OPENINGS: THE MAXIMUM ALLOWABLE PIPE OPENING ON A HORIZONTAL AXIS SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 12". THE MAXIMUM ALLOWABLE PIPE OPENING ON VERTICAL AXIS SHALL BE THE OUTSIDE DIAMETER PLUS 8". THE MAXIMUM CLEARANCE BETWEEN THE OUTSIDE SURFACE OF AN INSTALLED PIPE AND THE CONCRETE OF THE MANHOLE SHALL BE 2".
8. INSTALLATION OF PIPE OPENINGS: ALL REQUIRED PIPE OPENINGS SHALL BE PLANT CAST IN MANHOLE UNITS. FIELD ALTERATIONS OF OPENINGS WILL BE PERMITTED PROVIDED WALLS ARE SCORED WITH A MASONRY SAW TO A DEPTH SUFFICIENT TO SEVER REINFOECING STEEL. A CHIPPING HAMMER MAY THEN BE USED TO REMOVE THE CONCRETE. MINIMUM DISTANCE BETWEEN ANY TWO ADJACENT PIPES SHALL BE 2".
9. NO DIRECT PAYMENT FOR SHAPING FLOOR OR CONNECTING PIPES AS SHOWN ON PLANS.
10. RING AND COVER TO BE NEENAH R-1736, CLAY & BAILEY #2008, DEETER # 1316, OR APPROVED EQUAL. (CASTING MAY VARY BY MUNICIPALITY, REFER TO PLANS & CONTRACT DOCUMENTS.)

STANDARD PRECAST STORM SEWER MANHOLE

NOT TO SCALE



PLAN

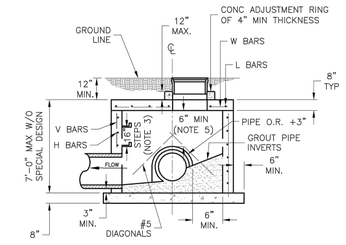


SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)

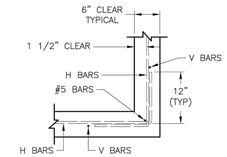
** INCREASE IN MULTIPLES OF 6" (7'-0") MAX WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6



SECTION A-A



WALL CORNER DETAIL

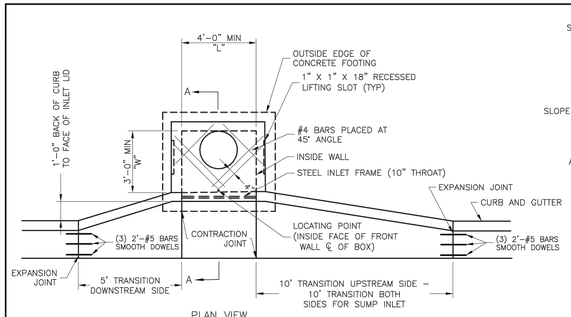
GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
2. USE ¾" CHAMFER STRIP OR ½" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

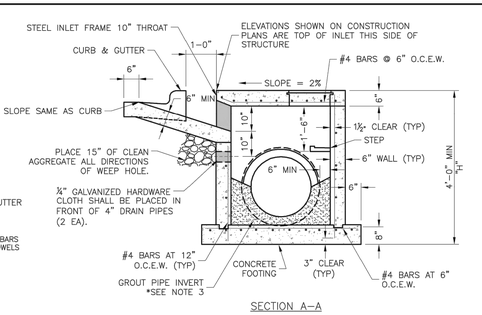
Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: JUNCTION BOX DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-3



PLAN VIEW



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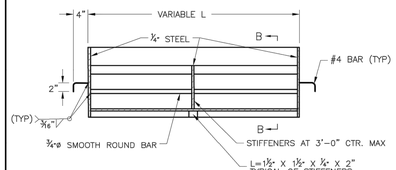
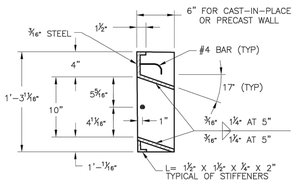


FRONT ELEVATION



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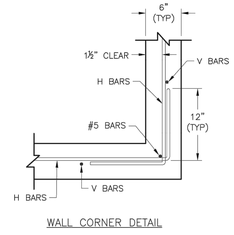
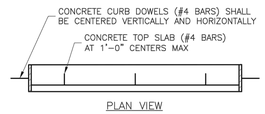


WALL CORNER DETAIL



PLAN VIEW

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM-PRIME #37H-78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STORM SEWER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_DTL01_02102987
date:	08.25.2021

SHEET
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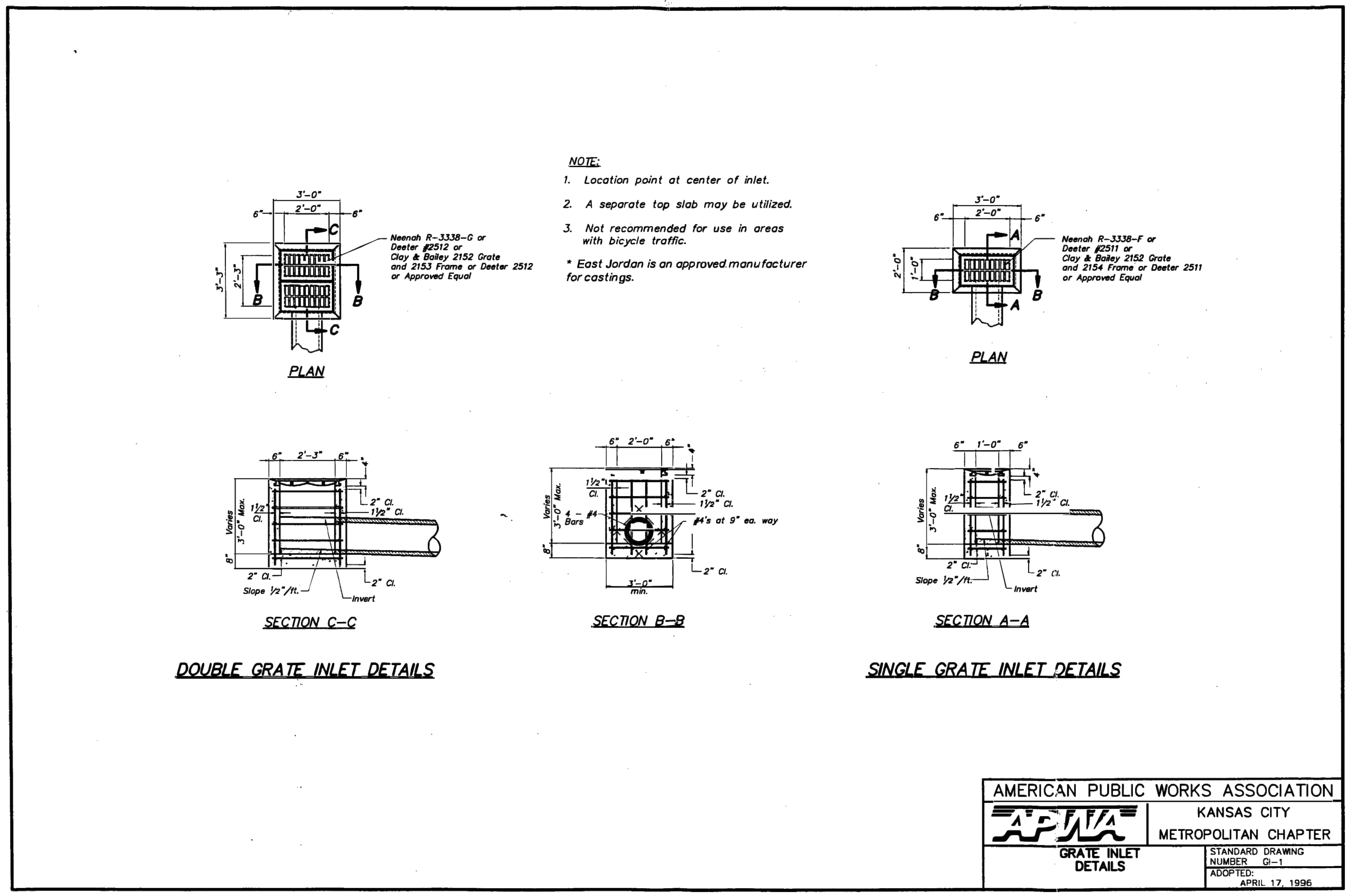

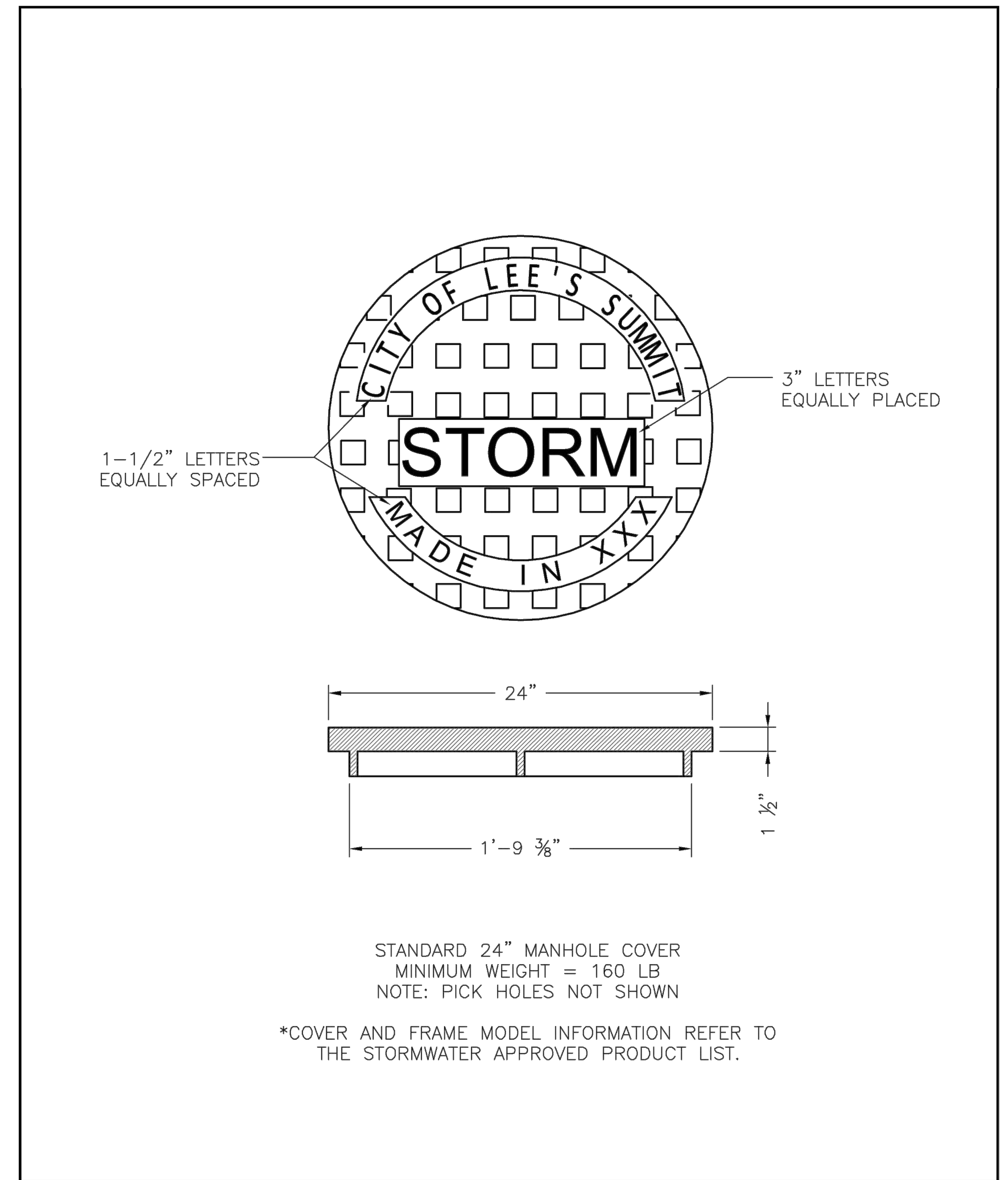

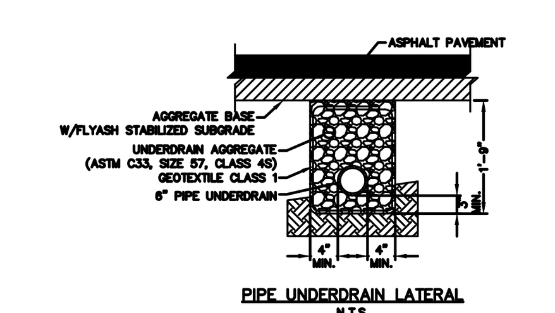

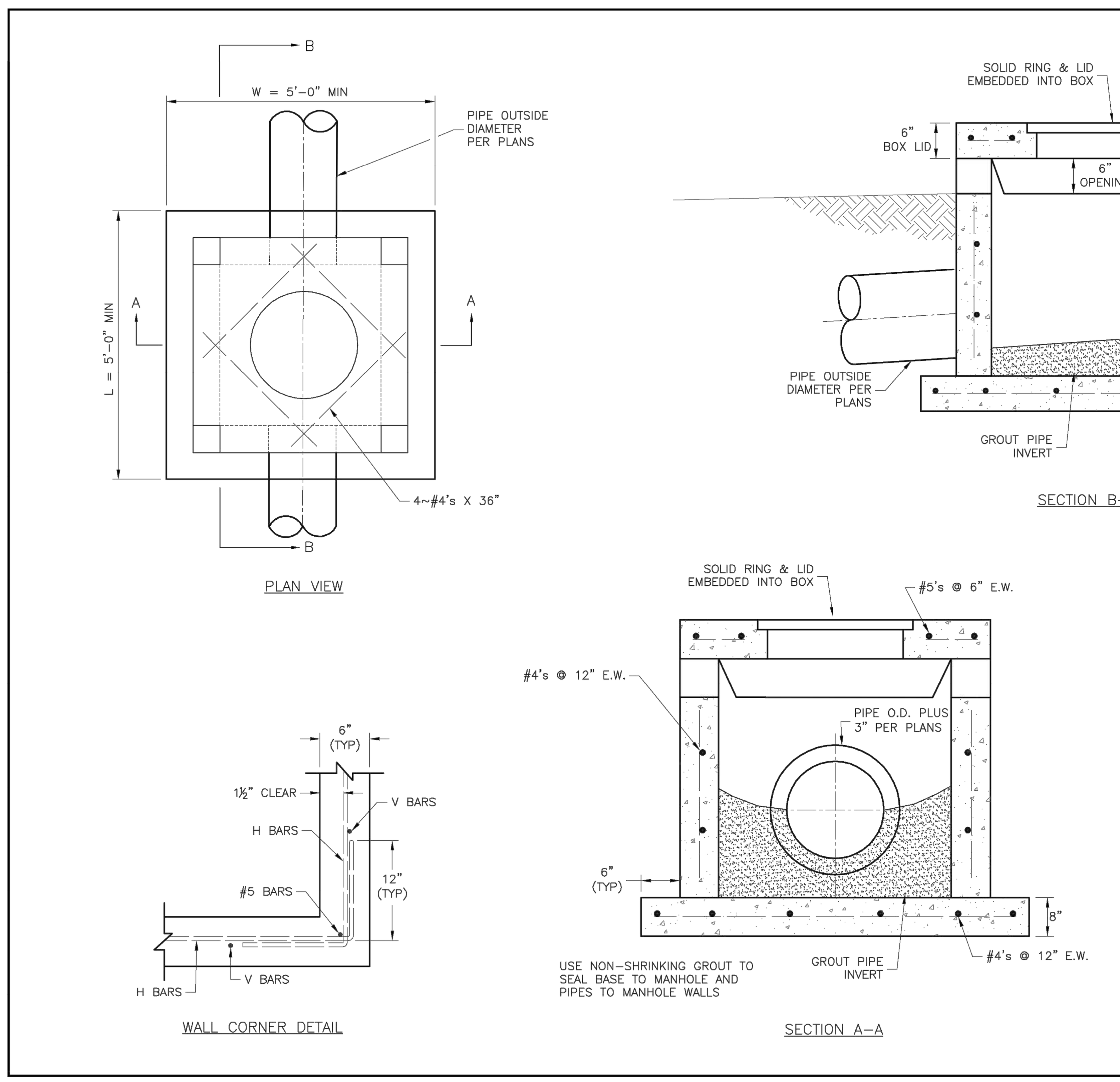

GENERAL NOTES:

1. LOCATE RING AND COVER OVER OUTLET ON BLANK WALL.
2. USE ¾" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 3' ON BLANK WALL IF POSSIBLE.
5. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE.
6. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
7. SHOW FIELD INLET ORIENTATION ON PLANS PLUS NUMBER AND SIDE OF OPENINGS.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
FIELD INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17

STM-2

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STORM SEWER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD
LEE'S SUMMIT, MO

2021

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SANITARY SEWER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEES SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE LID DURING INSTALLATION.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF SANITARY SEWER.
5. SANITARY SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
6. MANHOLE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE MANHOLE.
7. PIPE PENETRATIONS SHALL BE USE GASKETS TO ENSURE WATERTIGHT SEALS.
8. TRACING TAPE SHALL BE INSTALLED ALONG ALL NON–METALLIC SURFACES OR AS DIRECTED BY LOCAL CODES AND ORDINANCES.
9. SEWER LINE INSPECTIONS AND TESTING MUST BE SCHEDULED A MINIMUM OF TWO FULL BUSINESS DAYS IN ADVANCE. CONTRACTOR SHALL FURNISH ALL TESTING EQUIPMENT. TESTING SHALL INCLUDE
   A. MANDREL TEST OF ALL GRAVITY SEWERS. IF THE MANDREL TEST FAILS ON ANY SECTION OF PIPE, THAT SECTION SHALL BE UNCOVERED AND REPLACED.
   B. AIR PRESSURE TEST OF ALL GRAVITY SEWERS.
   C. VACUUM TEST OF ALL MANHOLES.
10. GRAVITY SANITARY SEWER AND WATER LINES SHALL BE SEPARATED BY A MINIMUM OF 10'HORIZONTALLY WHEN PARALLEL AND 2'VERTICALLY WHEN CROSSING. WATER LINES SHALL CROSS ABOVE SANITARY SEWERS.

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SANITARY SEWER GENERAL LAYOUT

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
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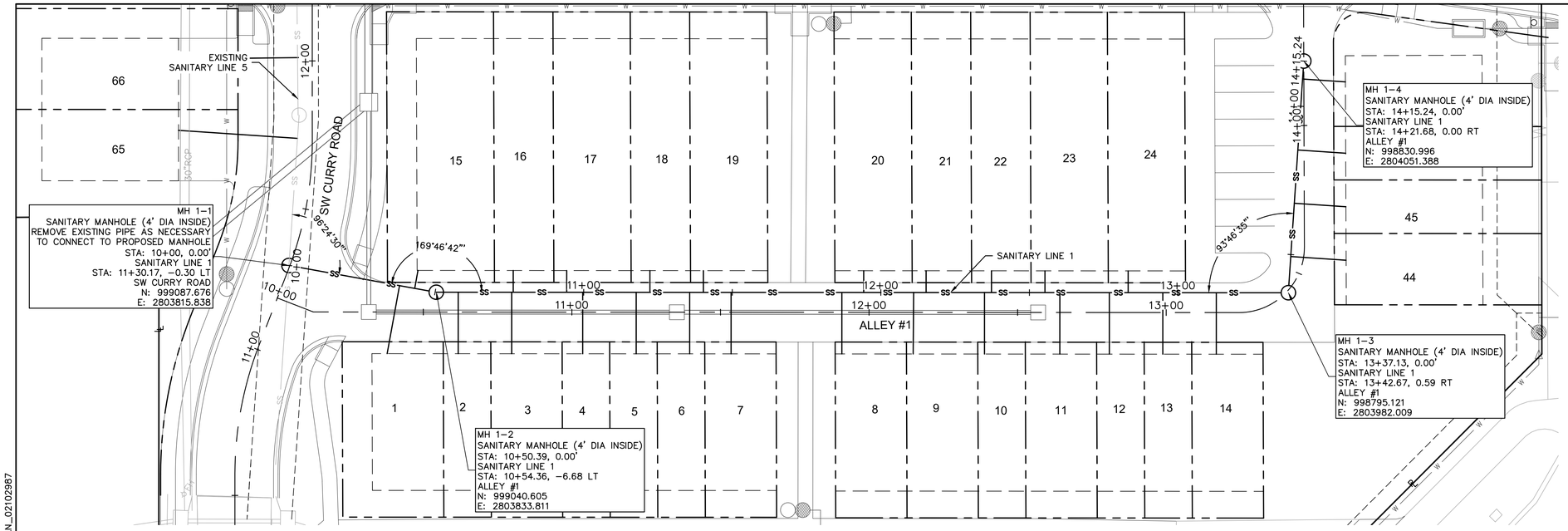
USER: glowrey
C_PBNDY_02102987



NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

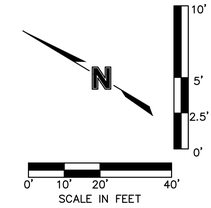
REFER TO SHEET C147 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.

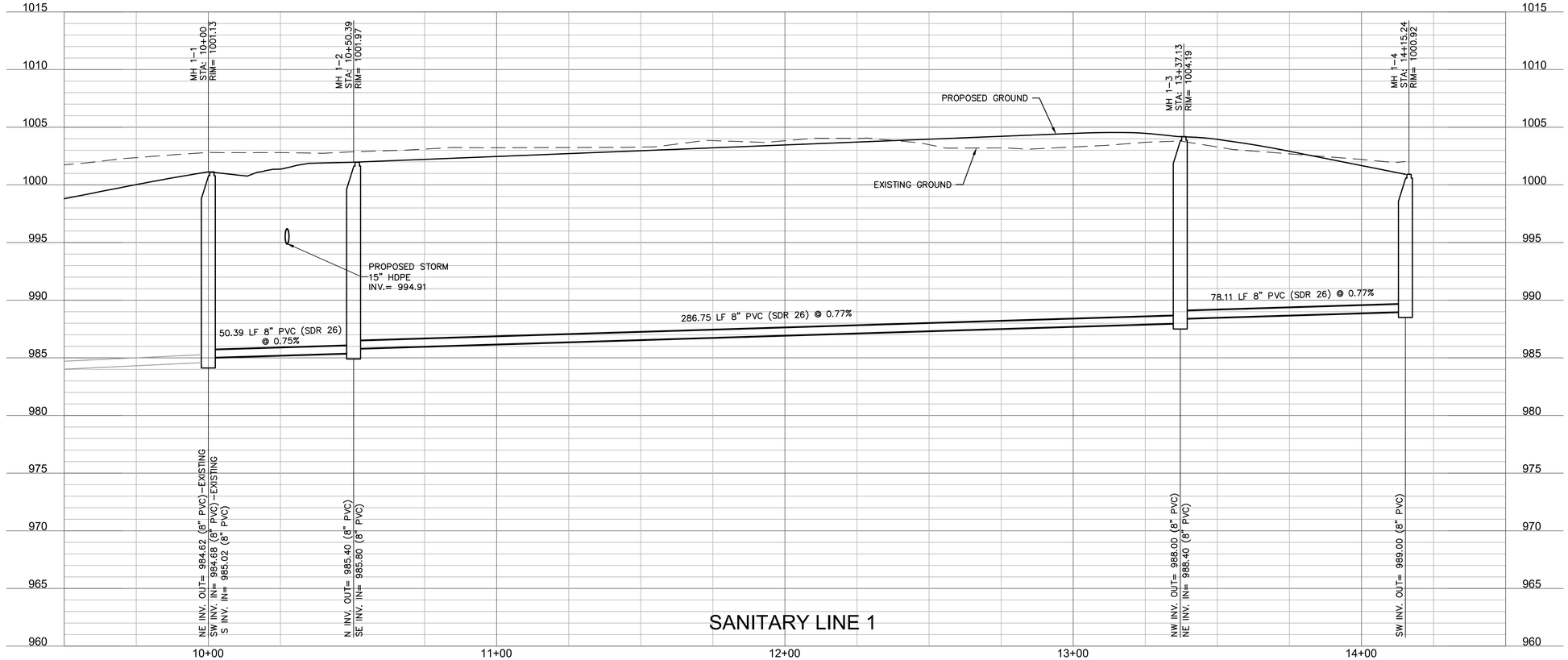
MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C147) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.





SANITARY LINE 1

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JULIE ELAINE SELLERS
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PROFESSIONAL ENGINEER

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REVISIONS

SANITARY SEWER LINE 1 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

2021

LEE'S SUMMIT, MO

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C141

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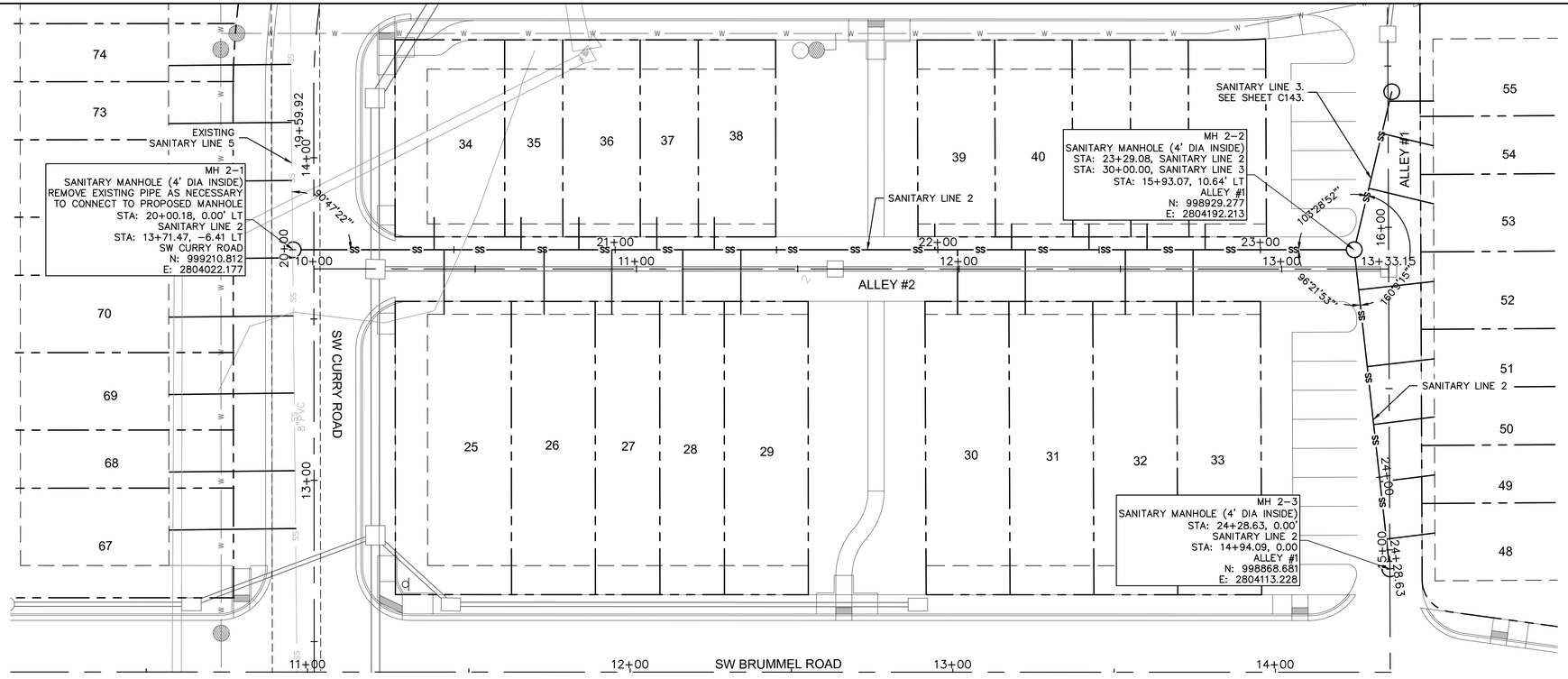


NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4"PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

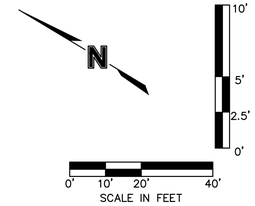
REFER TO SHEET C147 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C147) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.



SANITARY LINE 2

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SANITARY SEWER LINE 2 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
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SHEET
C142

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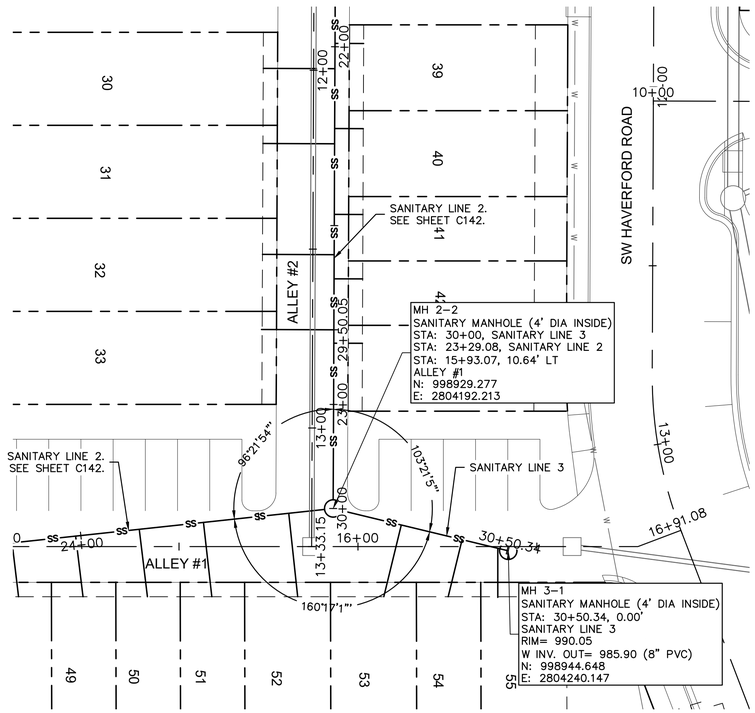

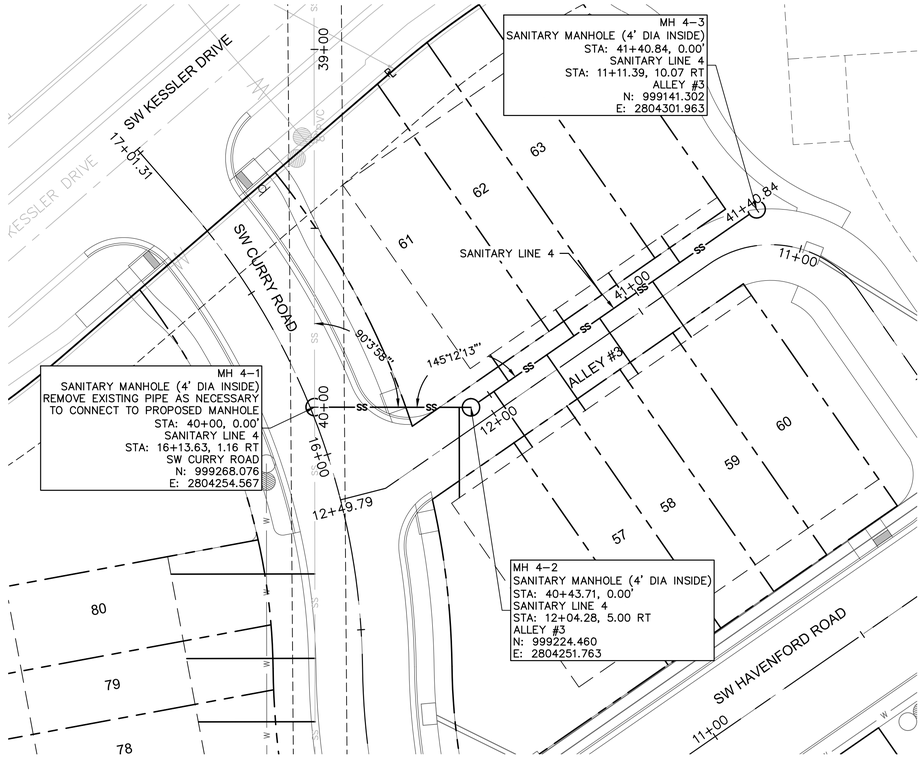

NOTES:
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NOTES:
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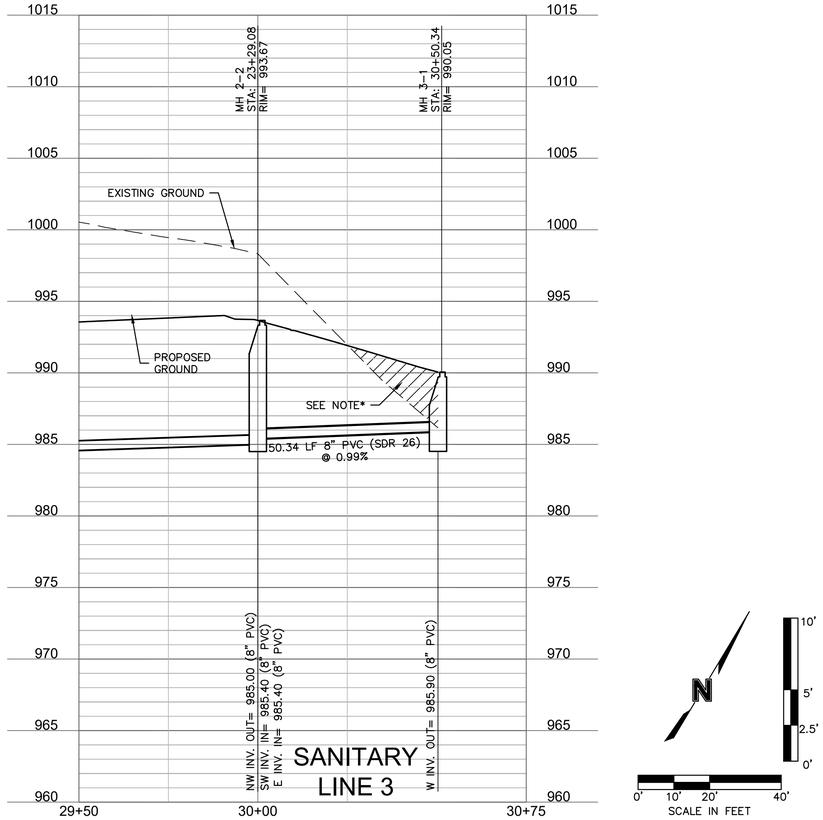

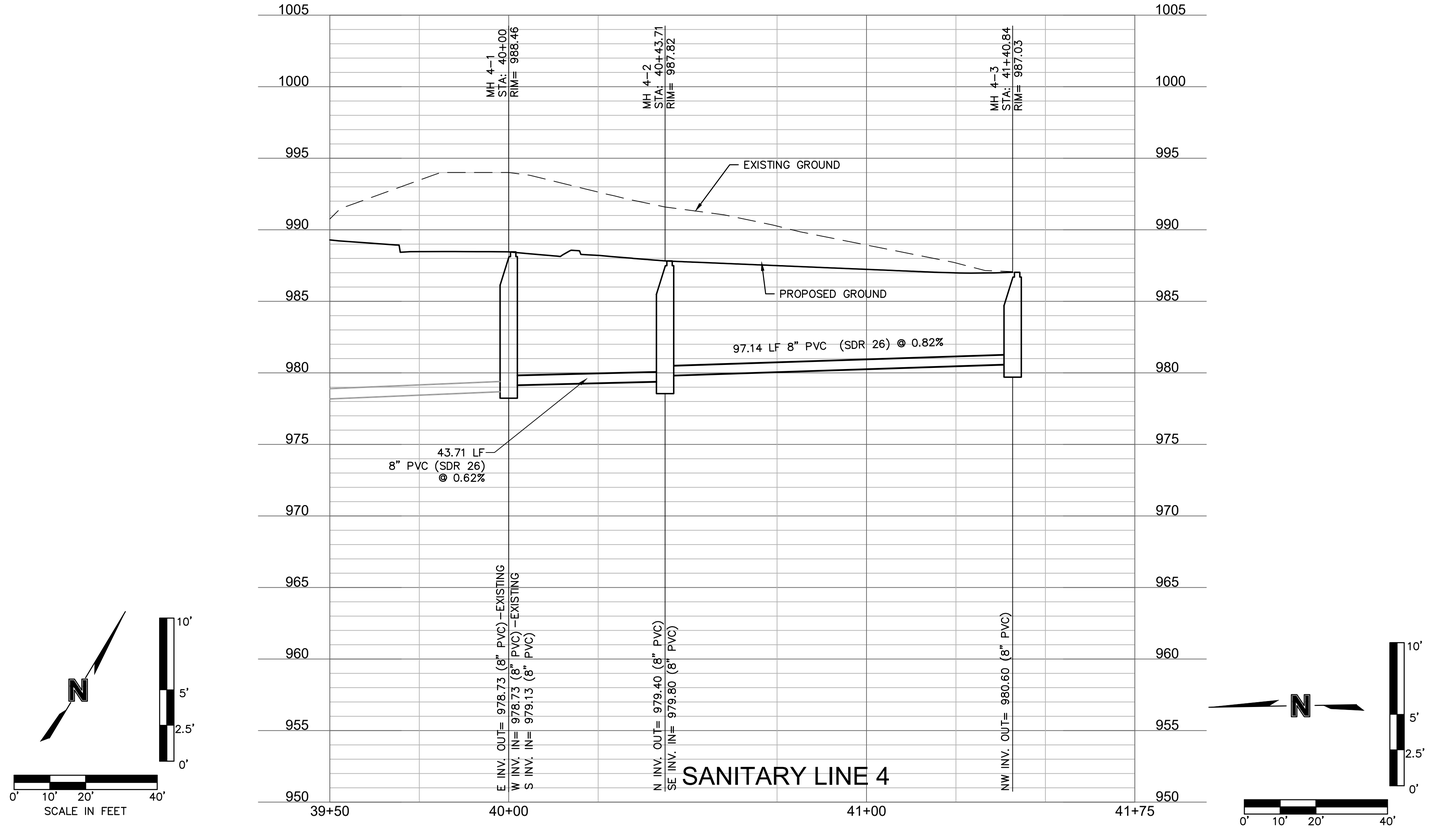

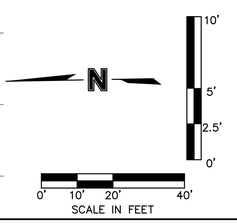

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10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SANITARY SEWER LINE 3 & 4 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD
LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
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SHEET
C143

USER: qlowrey
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C_PBNDY_02102987
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C_PUTIL_02102987
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NOTES:
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NOTES:
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EX-1
EXISTING SANITARY MANHOLE
RIM= 986.37
W INV. IN= 976.17 (8" PVC)
E INV. OUT= 975.72 (8" PVC)
N: 999252.763
E: 2804497.120

SANITARY LINE 4.
SEE SHEET C143.

MH 4-1
SANITARY MANHOLE (4' DIA INSIDE)
REMOVE EXISTING PIPE AS NECESSARY TO CONNECT TO PROPOSED MANHOLE
STA: 40+00, 0.00'
SANITARY LINE 4
STA: 16+13.63, 1.16 RT
SW CURRY ROAD
N: 999268.076
E: 2804254.567

EX-2
EXISTING SANITARY MANHOLE
ADJUST AS NECESSARY TO MATCH PROPOSED GRADE.
STA: 3+70.50, 0.00'
EX SANITARY LINE 5
STA: 14+89.56, -20.71 LT
SW CURRY ROAD
N: 999275.929
E: 2804127.404

SANITARY LINE 5
STA: 4+00
=MATCH LINE
SEE NEXT SHEET

SW HAVENFORD ROAD
SW CURRY ROAD
SW KESSLER DRIVE
ALLEY #3
89°55'54"
90°4'6"
144°47'42"
12+19.79
17+61.31
DOC. NO. 2005100513931
℄ 15' U.E.
DOC. #2016E0048524

EXISTING SANITARY - LINE 5

EX-1
STA: 0+00.06
RIM= 986.37
W INV. IN= 976.17 (8" PVC)-EXISTING
E INV. OUT= 975.72 (8" PVC)-EXISTING

MH 4-1
STA: 2+43.10
RIM= 988.46
W INV. IN= 978.73 (8" PVC) -EXISTING
S INV. IN= 979.13 (8" PVC) -PROPOSED
E INV. OUT= 978.73 (8" PVC) -EXISTING

EX-2
STA: 3+70.50
PR RIM= 988.65
EX RIM=995.90
SW INV. IN= 980.35 (8" PVC) -EXISTING
E INV. OUT= 979.95 (8" PVC)-EXISTING

PROPOSED GROUND
EXISTING GROUND
243.04 LF EXISTING 8" PVC @ 1.05%
127.41 LF EXISTING 8" PVC @ 0.96%
123.75 LF EXISTING 8" PVC @

SCALE IN FEET

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SANITARY SEWER LINE 5 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
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SHEET
C144

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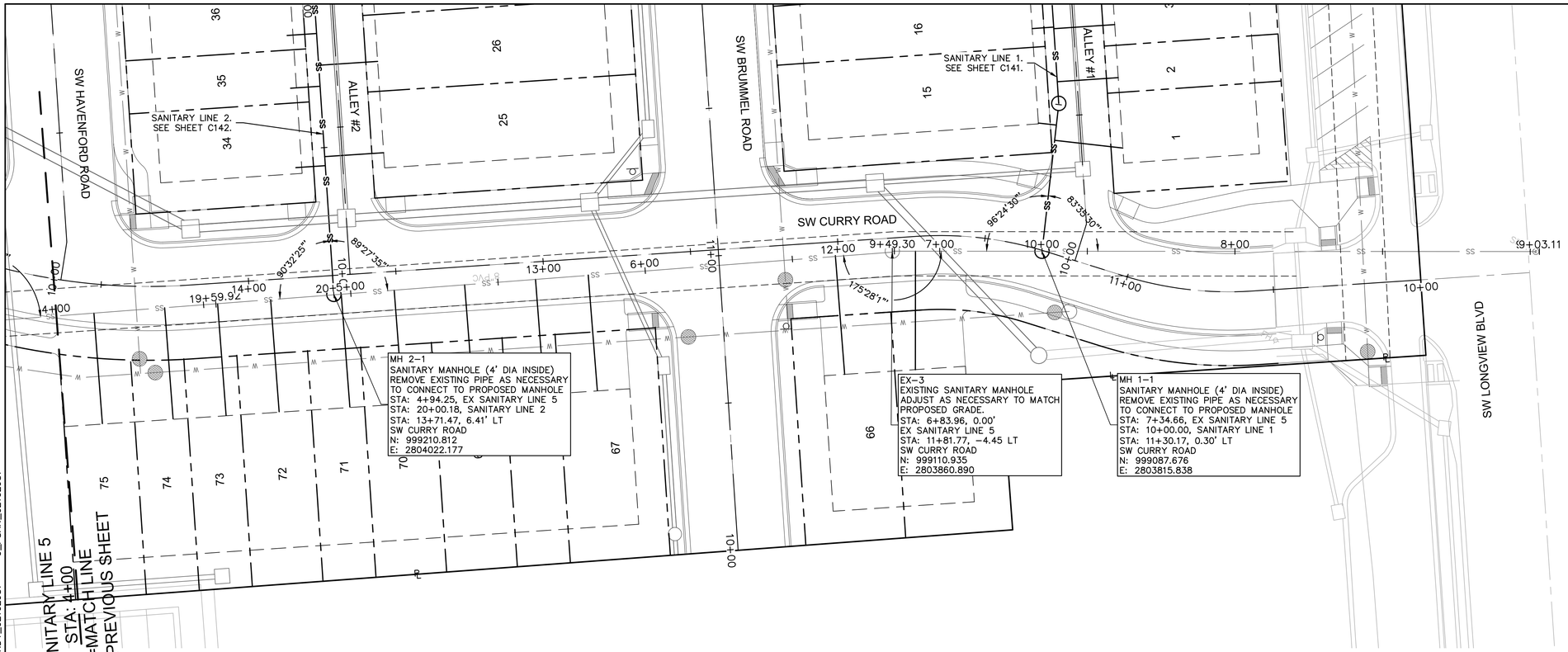

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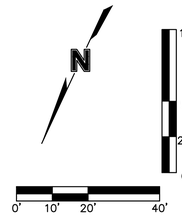

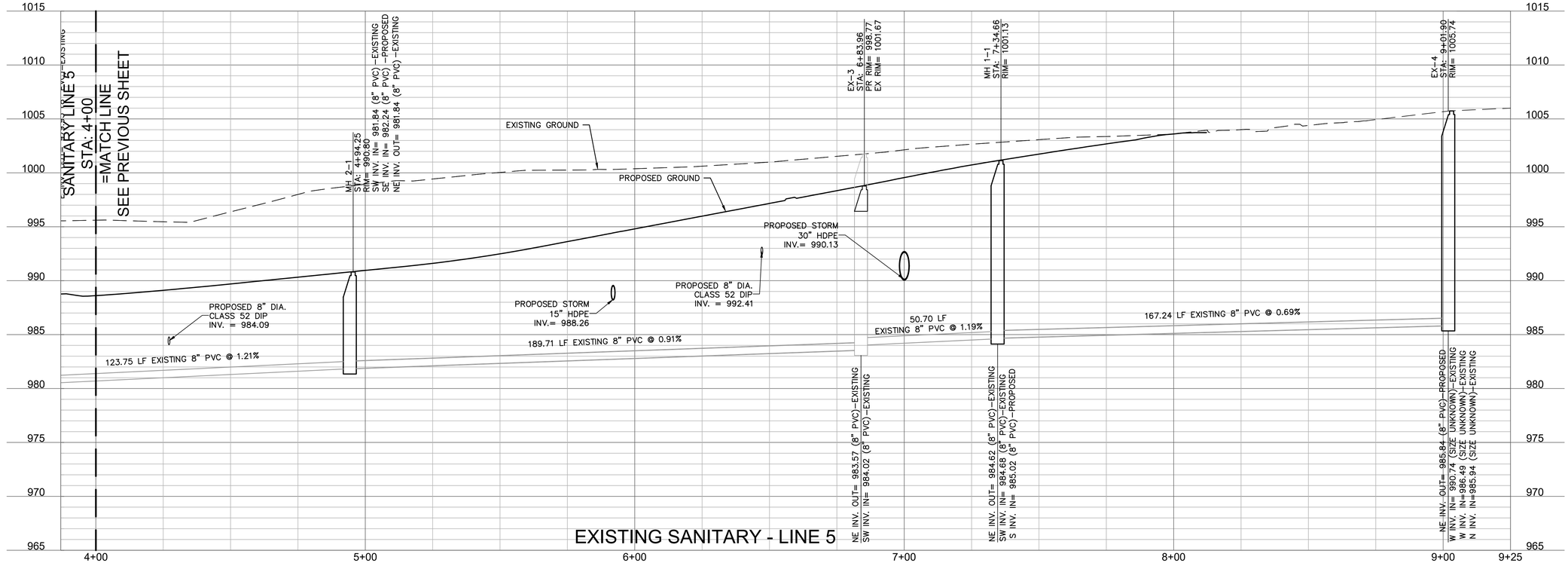

EXISTING SANITARY - LINE 5

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451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

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Sanitary Sewer Laterals						
Lot Number	Lateral Station	Lateral Length	Riser	Flowline at Main	Flowline at End of Lateral	Minimum Servicable Floor Elevation
		(ft)	(ft)	(ft)	(ft)	(ft)
1	10+37.82	23.30	2.0	985.3	988.7	991.53
2	10+57.77	20.70	2.0	985.9	989.2	992.03
3	10+75.77	20.70	2.0	986.0	989.4	992.17
4	10+99.67	20.70	2.0	986.2	989.6	992.36
5	11+17.67	20.70	2.0	986.3	989.7	992.50
6	11+35.67	20.70	2.0	986.5	989.8	992.64
7	11+49.59	20.70	2.0	986.6	989.9	992.75
8	11+86.89	20.70	2.0	986.9	990.2	993.04
9	12+11.05	20.70	2.0	987.1	990.4	993.23
10	12+34.89	20.70	2.0	987.2	990.6	993.41
11	12+60.24	20.70	2.0	987.4	990.8	993.61
12	12+83.22	20.70	2.0	987.6	991.0	993.79
13	13+01.22	20.70	2.0	987.8	991.1	993.93
14	13+12.89	20.70	2.0	987.8	991.2	994.02
15	10+43.01	14.00	2.0	980.5	982.8	985.28
16	10+76.29	10.00	2.0	986.0	989.2	991.96
17	10+94.29	10.00	2.0	986.1	989.3	992.10
18	11+22.29	10.00	2.0	986.4	989.5	992.32
19	11+40.29	10.00	2.0	986.5	989.7	992.46
20	11+94.23	10.00	2.0	986.9	990.1	992.88
21	12+15.23	10.00	2.0	987.1	990.2	993.05
22	12+37.23	10.00	2.0	987.3	990.4	993.22
23	12+55.23	10.00	2.0	987.4	990.6	993.36
24	12+83.23	10.00	2.0	987.6	990.8	993.58
25	20+46.94	10.00	0.0	982.6	983.8	986.63
26	20+77.94	20.00	0.0	982.9	984.3	987.09
27	20+98.94	20.00	0.0	983.1	984.5	987.27
28	21+20.94	20.00	0.0	983.3	984.7	987.46
29	21+38.94	20.00	0.0	983.4	984.8	987.61
30	22+06.13	20.00	0.0	984.0	985.4	988.17
31	22+27.13	20.00	0.0	984.1	985.5	988.35
32	22+58.13	20.00	0.0	984.4	985.8	988.61
33	22+79.12	20.00	0.0	984.6	986.0	988.78
34	20+43.87	10.00	0.0	982.6	983.8	986.61
35	20+70.82	10.00	0.0	982.8	984.0	986.83
36	20+88.73	10.00	0.0	983.0	984.2	986.99
37	21+12.89	10.00	0.0	983.2	984.4	987.19
38	21+30.73	10.00	0.0	983.3	984.5	987.34
39	21+99.05	10.00	0.0	983.9	985.1	987.91
40	22+22.86	10.00	0.0	984.1	985.3	988.11
41	22+46.86	10.00	0.0	984.3	985.5	988.31
42	22+64.86	10.00	0.0	984.5	985.7	988.46
43	22+82.86	10.00	0.0	984.6	985.8	988.62
44	13+49.34	18.70	1.0	988.5	990.9	993.68
45	13+67.30	17.40	0.0	988.7	990.0	992.81
46	13+85.26	16.10	0.0	988.8	990.1	992.92
47	14+09.19	14.50	0.0	989.0	990.3	993.07
48	24+19.32	15.30	0.0	986.2	987.5	990.28
49	24+01.46	17.20	0.0	986.0	987.4	990.16
50	23+83.59	19.20	0.0	985.9	987.3	990.05
51	23+65.53	21.10	0.0	985.7	987.1	989.94
52	23+41.47	23.60	0.0	985.5	987.0	989.78
53	30+19.59	20.80	0.0	985.6	987.0	989.81
54	30+37.07	16.50	0.0	985.8	987.1	989.90
55	30+47.34	10.00	0.0	985.9	987.1	989.87
56	40+40.41	25.30	0.0	979.4	980.9	983.69
57	40+51.48	18.90	0.0	979.9	981.2	984.04
58	40+69.48	18.90	0.0	980.0	981.4	984.19
59	40+87.45	18.90	0.0	980.2	981.5	984.34
60	41+05.48	18.90	0.0	980.3	981.7	984.49
61	40+56.48	10.00	0.0	979.9	981.1	983.91
62	40+78.72	10.00	0.0	980.1	981.3	984.09
63	40+96.72	10.00	0.0	980.2	981.4	984.24
64	41+14.72	10.00	0.0	980.4	981.6	984.38
65	6+91.79	40.20	4.0	981.0	986.7	989.48
66	6+64.60	40.40	0.0	983.4	985.2	988.00
67	5+80.66	39.40	0.0	982.6	984.4	987.21
68	5+62.75	39.10	0.0	982.5	984.2	987.05
69	5+38.66	38.90	0.0	982.2	984.0	986.82
70	5+14.74	38.60	0.0	982.0	983.8	986.60
71	4+96.75	38.50	0.0	981.9	983.6	986.43
72	4+72.76	38.20	12.0	963.4	977.0	979.76
73	4+54.75	38.10	12.0	963.2	976.7	979.54
74	4+36.76	37.90	12.0	963.0	976.5	979.32
75	4+12.75	37.70	12.0	962.7	976.2	979.03
76	3+66.43	26.20	0.0	979.9	981.4	984.23
77	3+48.72	29.40	0.0	979.7	981.3	984.13
78	3+31.02	32.70	0.0	979.6	981.2	984.02
79	3+13.31	35.90	0.0	979.4	981.1	983.92
80	2+89.71	40.20	0.0	979.2	981.0	983.78

Sanitary Sewer Design Information										
Upstream Manhole	Downstream Pipe Slope	Downstream Pipe Diameter	Proposed Cumulative Area	Future Cumulative Area	Minimum Hourly Peak Design Flow	Proposed Cumulative Peak Flows	Future Cumulative Peak Flows	Downstream Pipe Mannings N	Downstream Pipe Capacity	Downstream Pipe Full Flow Velocity
	(%)	(in)	(Ac.)	(Ac.)	(cfs/ac)	(cfs)	(cfs)		(cfs)	(fps)
MH 1-1	1.19%	8	1.28	0.00	0.02	0.026	0.026	0.013	1.32	3.78
MH 1-2	0.75%	8	1.13	0.00	0.02	0.023	0.023	0.013	1.05	3.00
MH 1-3	0.78%	8	1.05	0.00	0.02	0.021	0.021	0.013	1.07	3.06
MH 1-4	0.76%	8	0.12	0.00	0.02	0.002	0.002	0.013	1.05	3.02
MH 2-1	1.21%	8	1.22	0.00	0.02	0.024	0.024	0.013	1.33	3.80
MH 2-2	0.84%	8	0.98	0.00	0.02	0.020	0.020	0.013	1.11	3.17
MH 2-3	0.85%	8	0.12	0.00	0.02	0.002	0.002	0.013	1.11	3.19
MH 2-2	0.84%	8	0.98	0.00	0.02	0.020	0.020	0.013	1.11	3.17
MH 3-1	0.99%	8	0.08	0.00	0.02	0.002	0.002	0.013	1.20	3.44
MH 4-1	1.05%	8	0.43	0.00	0.02	0.009	0.009	0.013	1.24	3.55
MH 4-2	0.62%	8	0.23	0.00	0.02	0.005	0.005	0.013	0.95	2.73
MH 4-3	0.82%	8	0.23	0.00	0.02	0.005	0.005	0.013	1.09	3.13

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North Kansas City, MO 64116
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SANITARY SEWER CALCULATIONS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

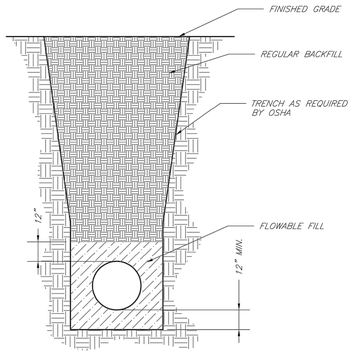
LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.:
date: 08.25.2021

SHEET
C146

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_SAN01_02102987.dwg USER: glowrey
DATE: Sep 07, 2021 11:07am XREFS: C_PBASE_02102987 C_PTTBLK_02102987 C_PUTIL_02102987 C_XBASE_02102987 C_PBNDY_02102987



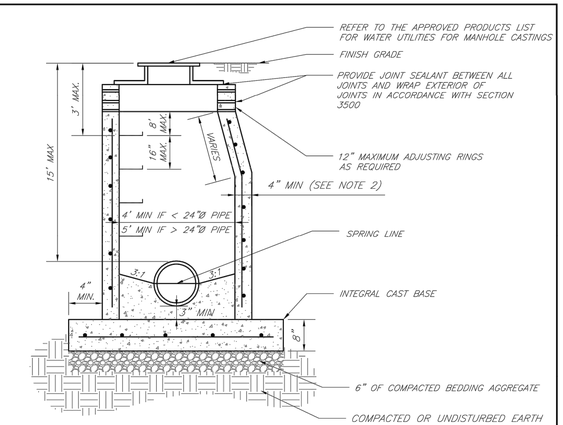
NOT TO SCALE

NOTES:
1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

TRENCH CHECK

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-6
Rev: 1/14
Rev:



NOTES:
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
2. A WALL THICKNESS NOT LESS THAN ONE-TWELFTH ($\frac{1}{12}$) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THEN 15'.
3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING.
4. ONLY ECCENTRIC MANHOLE CONES WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
6. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR APPROVED MANHOLE GASKET MODELS.
7. REFER TO THE APPROVED PRODUCTS LIST FOR APPROVED STEPS.

LEE'S SUMMIT
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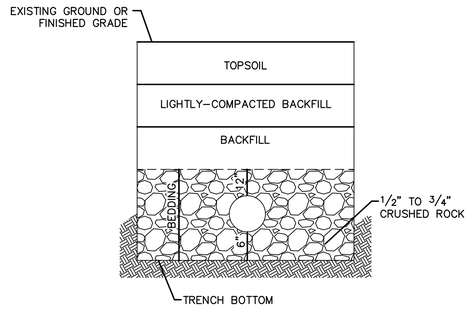
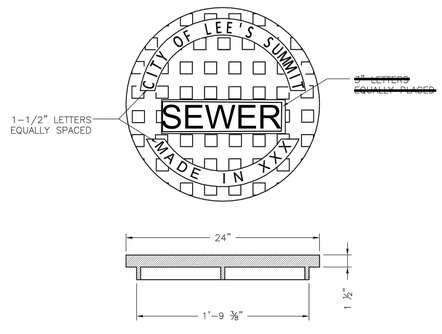
STANDARD PRECAST MANHOLE – SANITARY SEWER

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: SAN-2
Rev: 1/14
Rev:



UNDERGROUND PIPE INSTALLATION FOR SANITARY SEWER

NOTES:
1. A MINIMUM OF 36 INCHES OF COVER SHALL BE OVER THE TOP OF THE PIPE. THIS MINIMUM OF COVER SHALL BE FROM THE TOP OF PIPE TO THE FINISHED GRADE.
2. BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL 6 INCHES ABOVE THE TOP OF THE PIPE.
3. TRENCH BACKFILL IN PAVED AREAS WITHIN STREET OR ALLEY RIGHT OF WAYS
   a. NARROW TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES 24 INCHES OR LESS IN WIDTH AND SHALL BE TYPE A FLOWABLE FILL.
   b. STANDARD TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES BETWEEN 24 TO 48 INCHES WIDE SHALL BE EITHER TYPE A FLOWABLE FILL OR DENSE, WELL GRADED AGGREGATE BASE MATERIAL. AGGREGATE BASE MATERIAL SHALL MEET THE REQUIREMENTS FOR KDOT AB-3; MODOT TYPES 1 OR 5; OR APWA 2202.2.
   c. WIDE TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES GREATER THAN 48 INCHES WIDE SHALL BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C.
4. SUITABLE BACKFILL MATERIAL OUTSIDE OF PAVED AREAS WITHIN RIGHT OF WAY, AND ALL AREAS OUTSIDE RIGHT OF WAY, MAY BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C. SUITABLE BACKFILL MATERIAL MAY ALSO BE OTHER TRENCH BACKFILL MATERIAL (FLOWABLE FILL OR AGGREGATE BASE) DEPENDING ON SITE CONDITIONS, TRENCH WIDTHS OR AT THE DIRECTION OF THE CITY'S ON SITE INSPECTOR.



STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT
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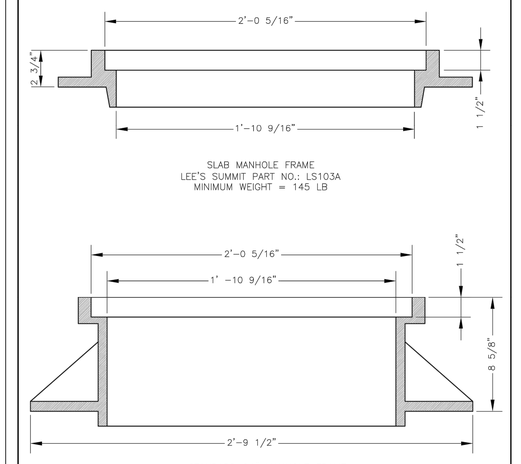
STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL
STM-6



SLAB MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS103A
MINIMUM WEIGHT = 145 LB

STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

LEE'S SUMMIT
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STORM MANHOLE FRAME DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL
STM-7

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

SANITARY SEWER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL02_02102987
date: 08.25.2021

SHEET
C147

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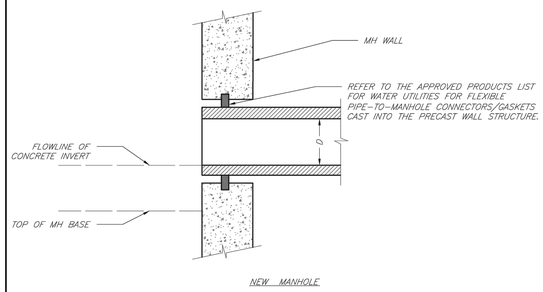
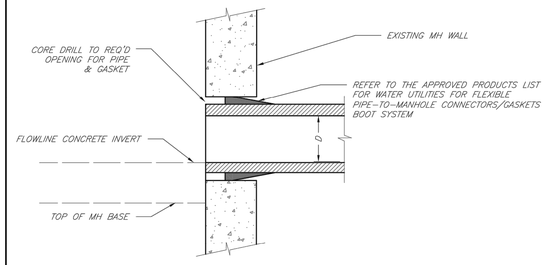


NEW MANHOLE



EXISTING MANHOLE

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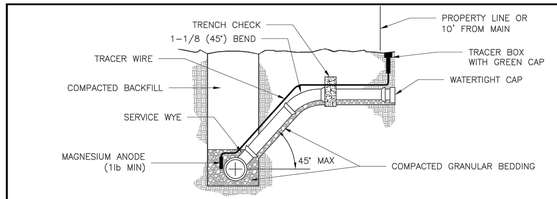
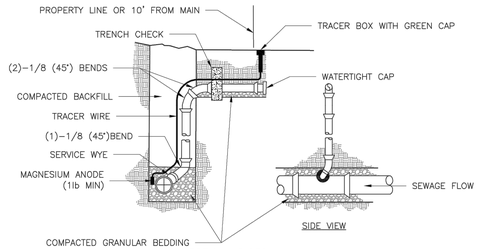
MANHOLE WALL CONNECTIONS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	SAN-5
Rev:	1/14
Rev:	



STANDARD INSTALLATION
NOT TO SCALE



VERTICAL RISER
NOT TO SCALE

NOTES:
1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
2. ALL NEW CONSTRUCTION OFF SEWER STUBS SHALL BE TEMPORARILY MARKED WITH A MARKING STAKE, 36" ABOVE GROUND AND PAINTED GREEN.
3. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
4. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
5. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
6. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
7. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
8. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
9. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

BUILDING SEWER STUB AND RISER

Date:	04/17
Drawn By:	MJF
Checked By:	DL

SAN-1

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SANITARY SEWER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL02_02102987
date: 08.25.2021

SHEET
C148

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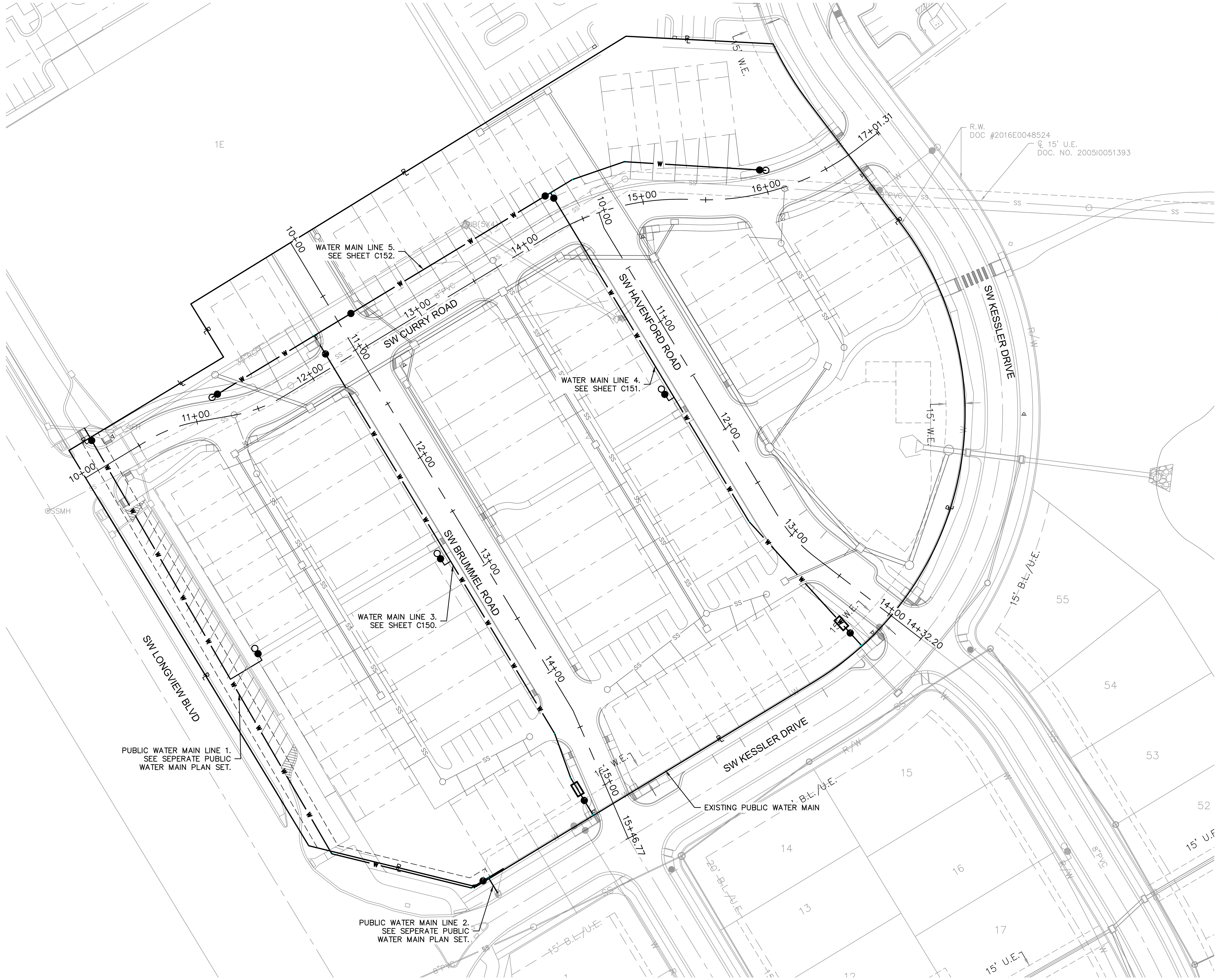
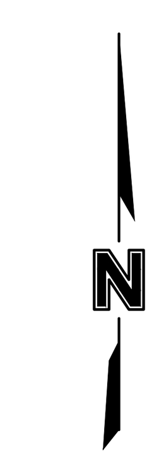
DATE: Sep 07, 2021 11:08am XREFS: C_PBASE_02102987 C_PTTBLK_02102987 C_PUTIL_02102987 C_XBASE_02102987 C_PBNDY_02102987





0' 20' 40' 80'
SCALE IN FEET

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STATE OF MISSOURI
JULIE ELAINE SELLERS
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10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

PRIVATE WATER PLAN (GENERAL LAYOUT)

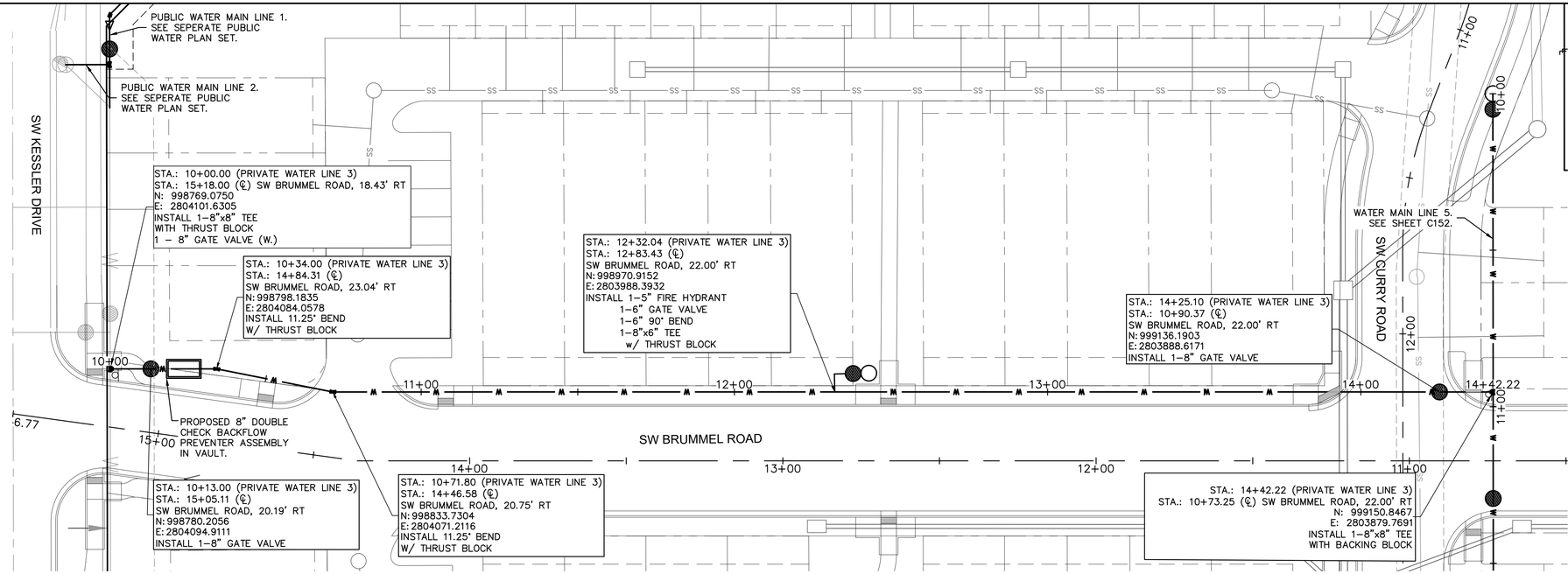
NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

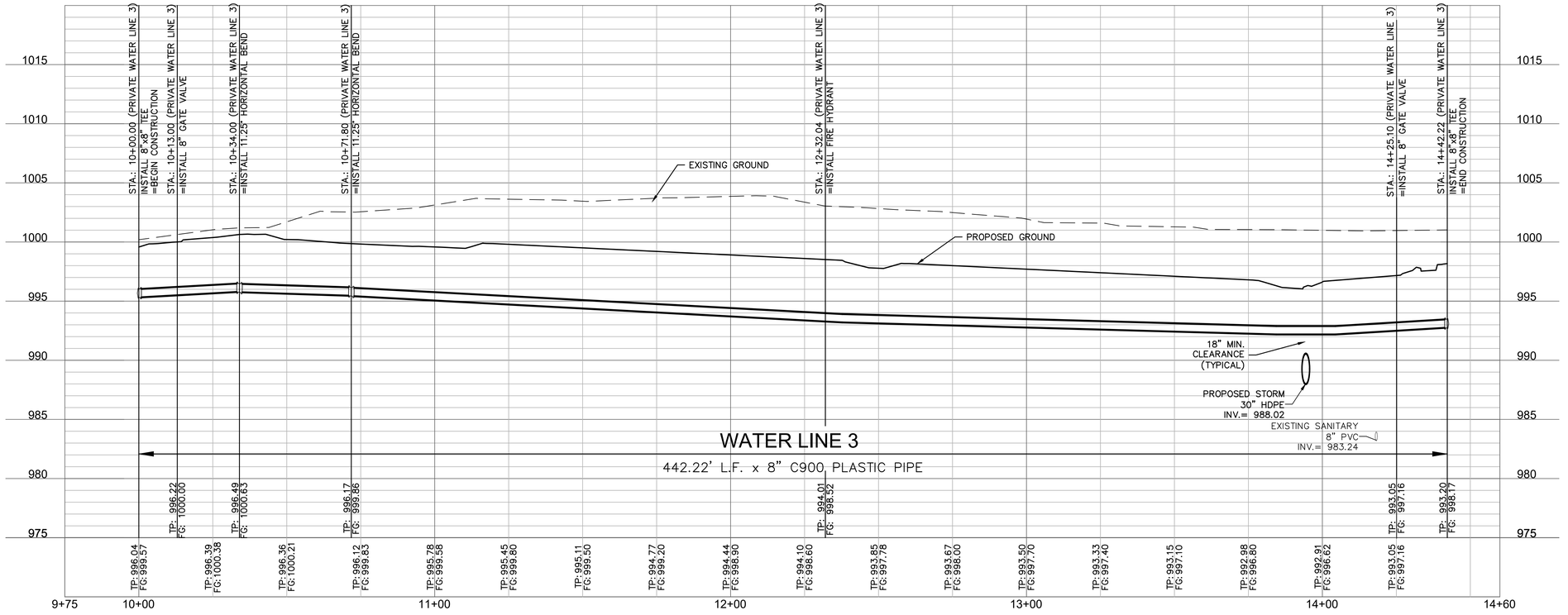
2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
C149



*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.



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10/14/21
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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WATER MAIN 3 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
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drawing no.:	
date:	08.25.2021

SHEET
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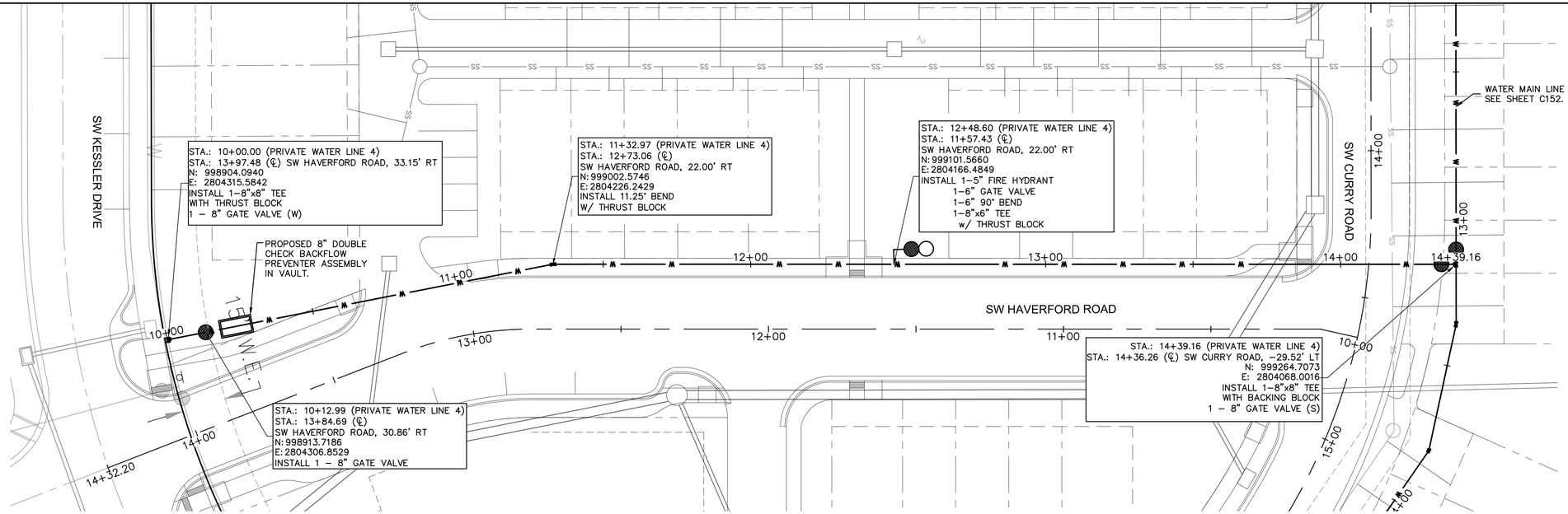
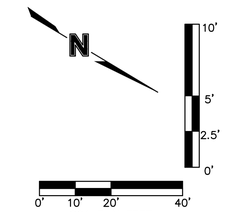
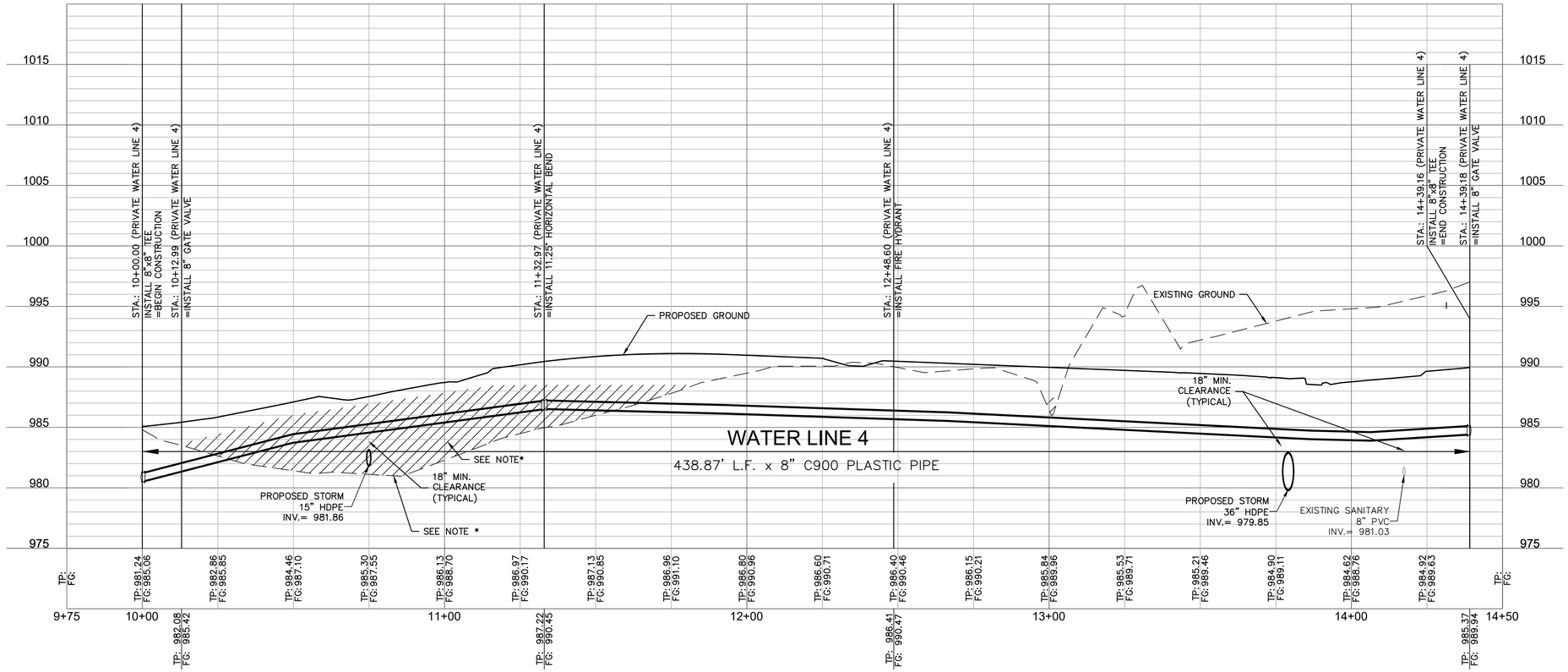




*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.



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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

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REVISIONS

WATER MAIN 4 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	
date:	08.25.2021

SHEET
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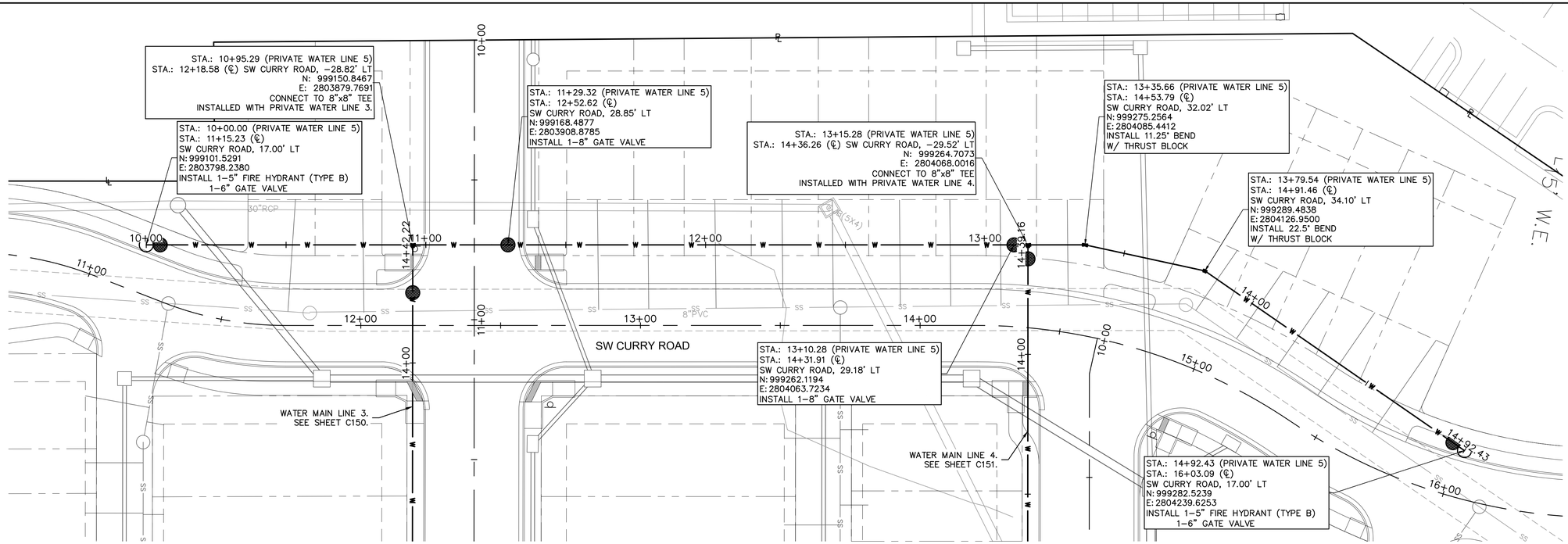

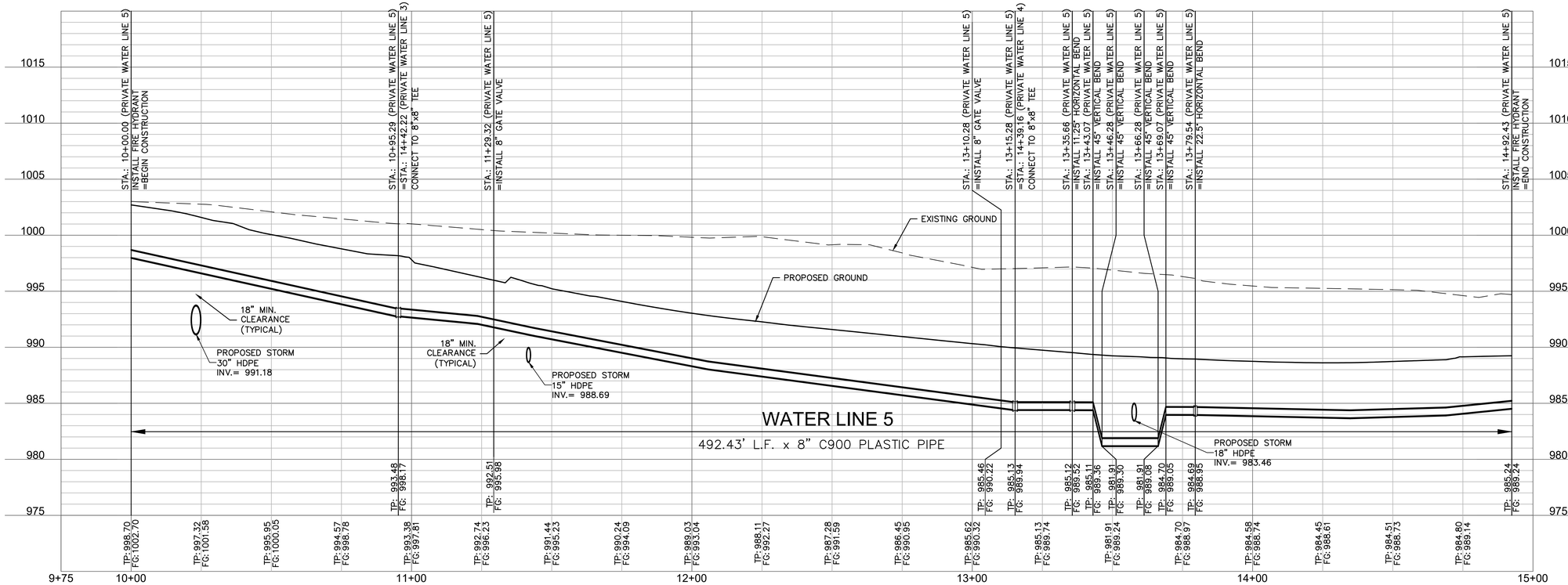

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WATER MAIN 5 PLAN & PROFILE

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
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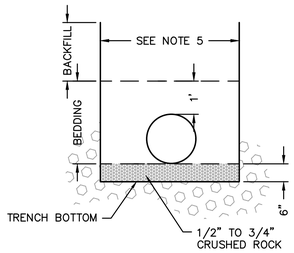


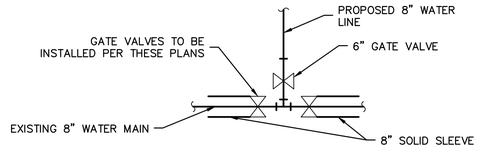
TYPICAL TRENCH SECTION

NOTES:

1. BELL HOLES SHALL BE DUG SO THAT NO PART OF THE BELL SHALL BE IN CONTACT WITH THE TRENCH BOTTOM.
2. BEDDING:
   A. BEDDING FOR PIPE LESS THAN 12" IN DIAMETER SHALL BE JOB EXCAVATED MATERIAL FREE FROM DEBRIS AND STONES; COMPACTED TO 95 % OF PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. BEDDING SHALL BE COMPACTED IN 6" LIFTS.
   B. BEDDING MATERIAL FOR PIPE 12" IN DIAMETER AND GREATER SHALL BE 1/2" TO 3/4" CRUSHED ROCK. SIX (6) INCHES OF BEDDING SHALL BE PROVIDED BENEATH THE PIPE.
3. BACKFILL SHALL BE JOB EXCAVATED MATERIAL FREE OF DEBRIS AND STONES, COMPACTED TO 90% PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. FOR BACK-FILL UNDER PAVEMENT (EXISTING OR PROPOSED), SEE SD-9 AND SD-11.
4. TRENCHING SHALL BE IN ACCORDANCE WITH CURRENT OSHA REGULATIONS. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.
5. MINIMUM AND MAXIMUM TRENCH WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.

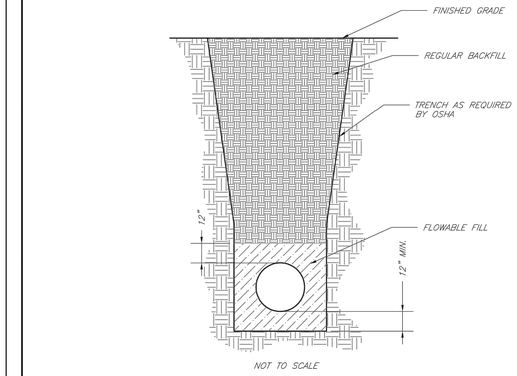
UNDERGROUND PIPE INSTALLATION FOR WATER PIPING

NOT TO SCALE



CONNECTION DETAIL 1

NOT TO SCALE



NOT TO SCALE

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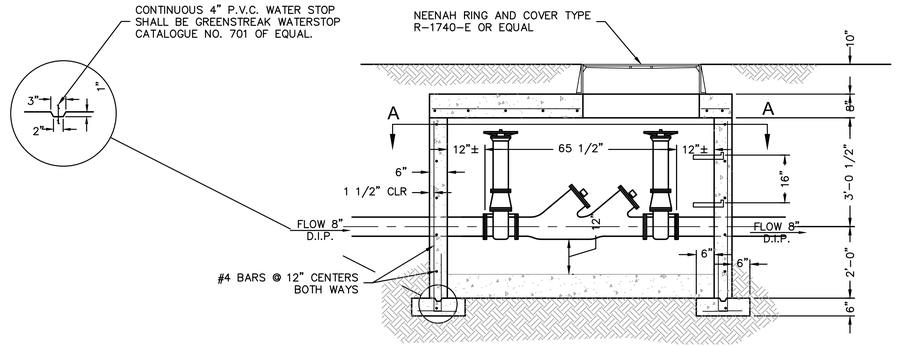
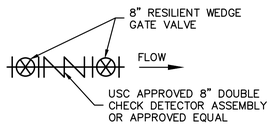
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".

LS	**LEE'S SUMMIT** MISSOURI PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063	Date: 02/13 Drawn By: JN Checked By: DL FILE: WAT-6 Rev: 1/14 Rev:
	TRENCH CHECK	



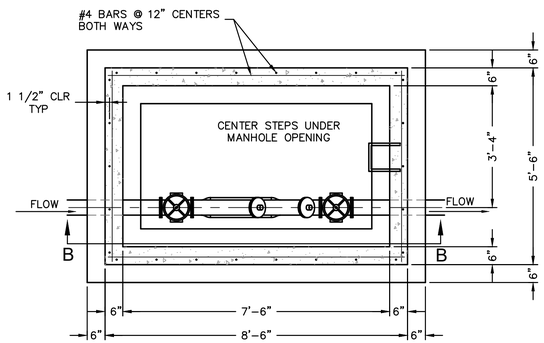


SCHEMATIC

NOT TO SCALE

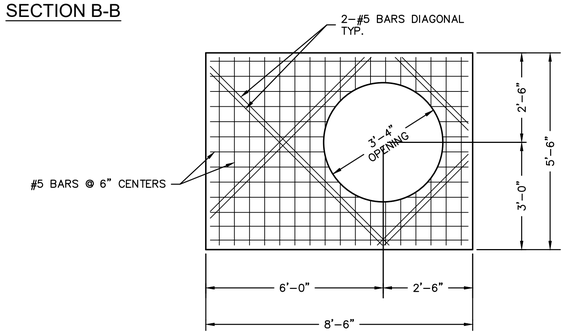
NOTES:

1. POUR FOOTING ON FIRM UNDISTURBED EARTH.
2. ALL PIPING IN METER PIT SHALL BE D.I.P.
3. WALLS TO BE DOUBLE FORMED.
4. ALL REBARS TO HAVE 1 1/2" CLEARENCE.
5. CONCRETE SHALL BE M.C.I.B. A543-1-4.
6. LADDER SHALL BE CONSTRUCTED WITH 2"x2"x1/4" STEEL VERTICAL SIDE STRAPS DRILLED AT 16" CENTERS AND 3/4" REBAR STEPS INSERTED AND WELDED IN PLACE. INSIDE STEP WIDTH TO BE 12". LADDER SHALL BE FASTENED TO 2"x2"x1/8" ANGLE IRON. ANCHOR PLATES SHALL BE FASTENED TO TOP SLAB AND BOTTOM ANCHOR SLAB. LADDER SHALL BE GALVANIZED AFTER FABRICATION.



SECTION A-A

SECTION B-B



SLAB TOP

DOUBLE CHECK VALVE BACKFLOW PREVENTOR

NOT TO SCALE

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #
1301 Burlington Street
North Kansas City, MO 64116

TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

BY	DATE	REV. NO.	REVISIONS DESCRIPTION

REVISIONS

WATER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

LEE'S SUMMIT, MO

2021

drawn by: QL/CM
checked by: JES
approved by: JES
QA/QC by: JES
project no.: 021-02987
drawing no.: C_DTL02_02102987
date: 08.25.2021

SHEET
C153

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_DTL02_02102987.dwg
DATE: Sep 07, 2021 11:09am
USER: qlowrey
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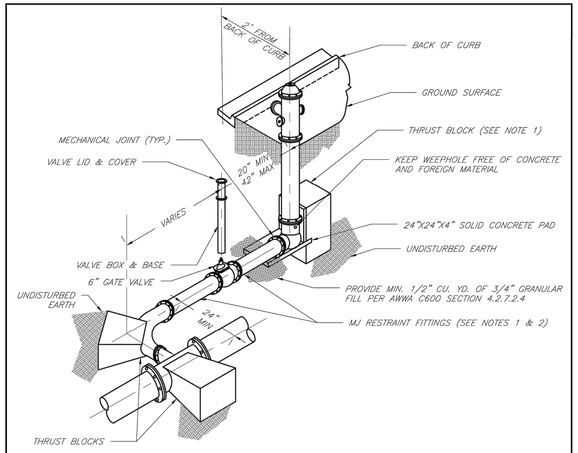


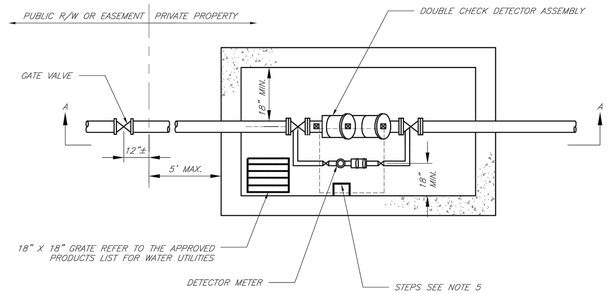
NOTES:

1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

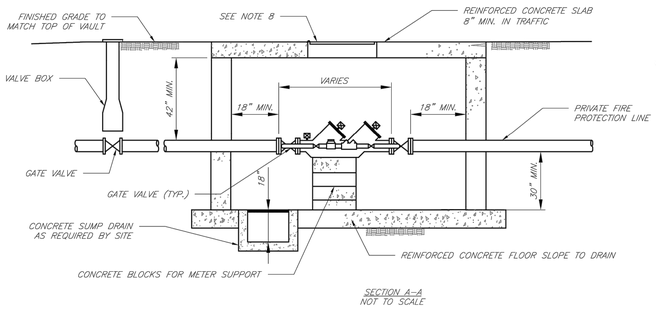
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HYDRANT WITH 90 DEGREE BEND

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-8
Rev:	1/14
Rev:	



PLAN VIEW
NOT TO SCALE



SECTION A–A
NOT TO SCALE

GENERAL NOTES:

1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER.
2. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. PROVIDE CONCRETE SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT.
3. ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
4. ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
5. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
6. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR ASSEMBLY BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT WATER UTILITIES AT 816-969-1900.
7. ALL VALVES SHALL HAVE RISING STEMS.
8. MANHOLE COVER SHALL BE A BILCO K-1 MODEL UNLESS IN A VEHICLE TRAFFIC AREA. SEE THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR TRAFFIC CONDITIONS. THE COVER SHALL HAVE A 1-3/4" ø HOLE DRILLED FOR A TOUCH/READ DEVICE.
9. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
10. CONTACT PUBLIC WORKS ENGINEERING FOR VAULTS THAT INCLUDE A FIRE DEPARTMENT CONNECTION OR A 3" OR LARGER METER.

CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063

Project: STANDARD DRAWINGS
Sheet Name: VAULT FOR DOUBLE CHECK DETECTOR CHECK

Drawn By:	AS
Checked By:	DL
Date:	1/14
Rev:	1/14

or

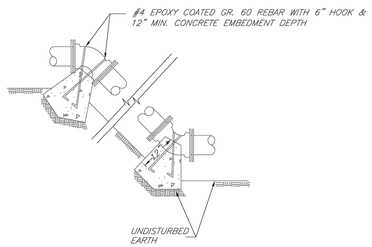
WAT-12

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.1	54.7	27.5
12	202.0	REST. JT.	154.6	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4

NOTES:

1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

VERTICAL THRUST BLOCKS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-2
Rev:	1/14
Rev:	

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	180 TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

NOTES:

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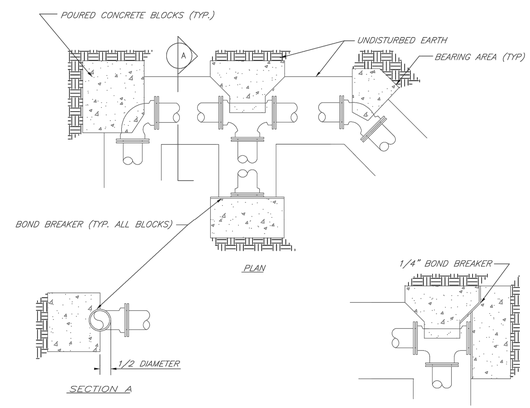
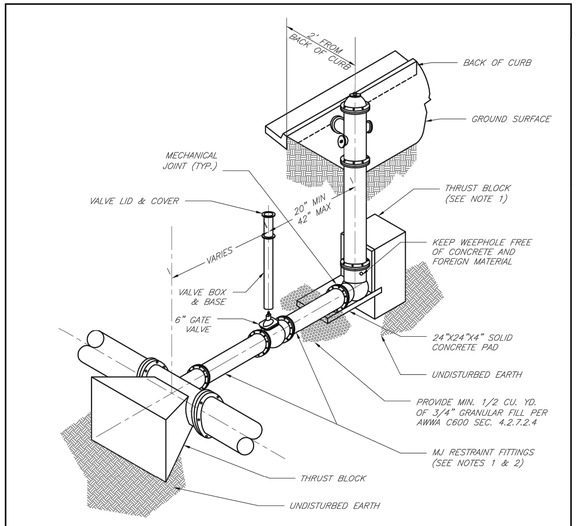
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HORIZONTAL THRUST BLOCKS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-1
Rev:	1/14
Rev:	



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LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

HYDRANT INSTALLATION – STRAIGHT SET

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	WAT-7
Rev:	1/14
Rev:	

olsson
Olsson - Civil Engineering
Missouri Certificate of Authority #
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/14/21
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

WATER DETAILS

NEW LONGVIEW TOWNHOMES
451 SW LONGVIEW BLVD

2021

LEE'S SUMMIT, MO

drawn by:	QL/CM
checked by:	JES
approved by:	JES
QA/QC by:	JES
project no.:	021-02987
drawing no.:	C_DTL02_02102987
date:	08.25.2021

SHEET
C154

DWG: F:\2021\02501-03000\021-02987\40-Design\AutoCAD\Final Plans\Sheets\GNCV\FINAL DEVELOPMENT PLANS\C_DTL02_02102987.dwg
DATE: Sep 07, 2021 11:09am
USER: qlowrey
XREFS: C_PTTBLK_02102987

1 SITE LIGHTING PHOTOMETRICS PLAN

SCALE: 1" = 30'-0"

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHTECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St.
Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI — TIM DANNER — NUMBER PE-2019031265 — PROFESSIONAL ENGINEER — 10-14-21

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE LIGHTING PHOTOMETRICS PLAN

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

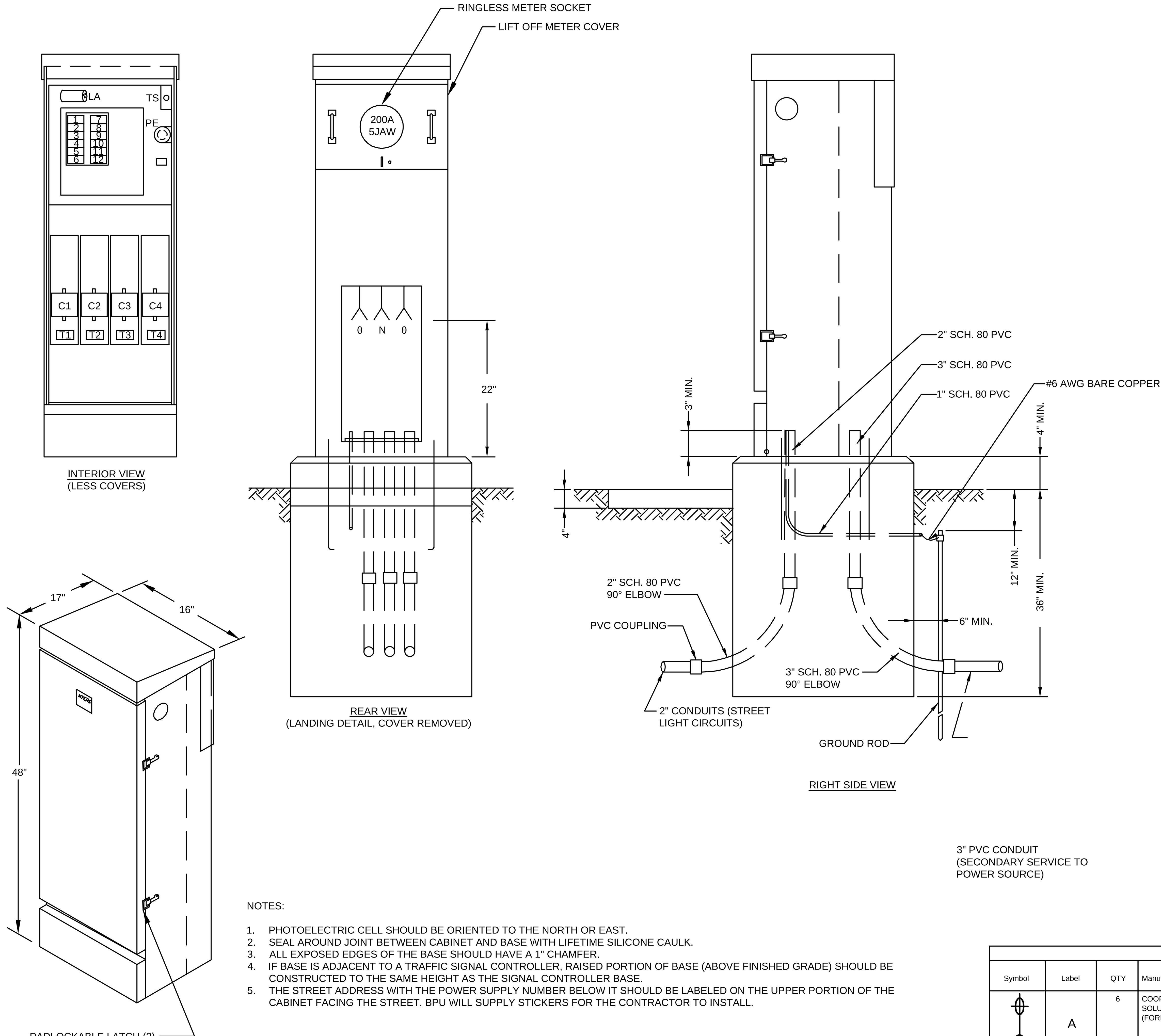
LEE'S SUMMIT, MO

2021

drawn by: SH
checked by: TD
approved by: SH
QA/QC by: TD
project no.: 021-02987
drawing no.: E_SIT01_02102987
date: 10.14.2021

SHEET
E100

DWG: \\oa.ad.oaconsulting.com\ite-ns\projects-direct\2021\02501-03000\021-02987\40-design\AutoCAD\final plans\Sheets\MECH\E_SIT01_02102987.dwg USER: shostert
DATE: Oct 13, 2021 5:16pm XREFS: C_PBASE_02102987 E_TTBLK_02102987 C_XBASE_02102987 E_PHOTO_02102987 (NEW) L_PLBASE_02102987 E_PBASE_02102987 L_PBASE_02102987



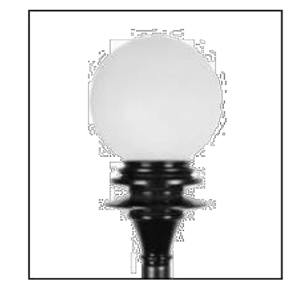
3" PVC CONDUIT
(SECONDARY SERVICE TO
POWER SOURCE)

NOTES:

1. PHOTOELECTRIC CELL SHOULD BE ORIENTED TO THE NORTH OR EAST.
2. SEAL AROUND JOINT BETWEEN CABINET AND BASE WITH LIFETIME SILICONE CAULK.
3. ALL EXPOSED EDGES OF THE BASE SHOULD HAVE A 1" CHAMFER.
4. IF BASE IS ADJACENT TO A TRAFFIC SIGNAL CONTROLLER, RAISED PORTION OF BASE (ABOVE FINISHED GRADE) SHOULD BE CONSTRUCTED TO THE SAME HEIGHT AS THE SIGNAL CONTROLLER BASE.
5. THE STREET ADDRESS WITH THE POWER SUPPLY NUMBER BELOW IT SHOULD BE LABELED ON THE UPPER PORTION OF THE CABINET FACING THE STREET. BPU WILL SUPPLY STICKERS FOR THE CONTRACTOR TO INSTALL.

3 PEDESTAL DETAILS

SCALE: NOT TO SCALE



BUILD A PART NUMBER

ORDERING EXAMPLE: PT-G18LED-5P-VCOB-4L40TS-MDL03-WA-PEC-FHD/4214FP4-188/BKT

Mounting Config.	Fixture	Fitter	LED	CCT	Type	Driver	Lens	Option Control Receptacle	Option Control	Option Hangstraight	Option GFI	Option Terminal Block	Option Vinyl Lettering	Arm See Arm Spec Sheets	Pole See Pole Spec Sheets	Finish

Mounting Configuration
(Click here to link to mounting configuration specification page)
• 1W • 2A • 3A90 • 1AM • CH44[1,2]
• PT • 2A90 • 3APT • 2AM • CAT[2]
• 1A • 2APT • 4A • 450PB
• 1APT • 3A • 4APT • SH44[1,2]

W = Wall Mount **PT** = Post Top **A** = Arm Mount **AM** = Arm Mid-Mount **PB** = Pier Base **SH** = Stem Hung **CH** = Chain Hung **CAT** = Catenary

[1] Include overall drop length in inches after designation for Stem/Chain application (IE: CH44-48").
[2] Only with 5P fitter.

Fixture
• G16LED • G18LED • G20LED • G22LED
• G24LED • G16LEDH • G18LEDH • G20LEDH
• G22LEDH • G24LEDH
(H) = Hanging version

Fitter
• 5P[3] • 991[3] • 995[3] • OL3
• 73 • 992[3] • BD4 • OL4
• 74 • 993[3] • BD5 • 588
• 990[3] • 994[3] • BD7 • C2097[3,4]

[3] Add "T" after fitter designation for optional "Twist-lock" fitter.
[4] Consult factory for use on concrete poles.

LED
• VCOB-4L

CCT - Color Temperature (K)
• 27(00) • 30(00) • 35(00) • 40(00) • 50(00)

Type
• **TS** (Symmetric)

Driver
• **MDL016** (120V-277V, 160mA)
• **MDH016** (347V-480V, 160mA)
• **MDL02** (120V-277V, 250mA)
• **MDH02** (347V-480V, 250mA)
• **MDL03** (120V-277V, 350mA)
• **MDH03** (347V-480V, 350mA)
• **MDL05** (120V-277V, 500mA)
• **MDH05** (347V-480V, 500mA)

Lens
• **WA** (White Acrylic) • **RA** (Red Acrylic)
• **BA** (Blue Acrylic) • **FA** (Frosted Acrylic)

Options (Click here to view accessories sheet)
• **R7**[5] 7-Pin control receptacle only
• **PE**[6] Twist-Lock Photocontrol (120V-277V)
• **PE4**[6] Twist-Lock Photocontrol (347V-480V)
• **SC**[6] Shorting Cap
• **PEC** Electronic Button Photocontrol (120V-277V)
• **PEC4** Electronic Button Photocontrol (480V)
• **HSHS**[7] Standard Horizontal Hangstraight, Spike Finial
• **HSHN**[7] Standard Horizontal Hangstraight, No Finial
• **HSHB**[7] Standard Horizontal Hangstraight, Ball Finial
• **EZ**[7] Vertical Hangstraight, Large, "EZ" Mount
• **GFI**[5] 15A Duplex GFI for Utility Fitter
• **TB**[5] Terminal Block
• **VL**[8] Vinyl Lettering

[5] For '900' series utility fitter, or 'HSH_' hangstraight
[6] Requires control receptacle
[7] For use with hanging (H) units only
[8] Specify exact wording in MEMO section

Arm (Click here to link to arm specification page)
See Arms & Wall Brackets specification sheets.
• 50 • 70 • 480 • 6236 • TA • BA
• 478 • 80 • 55 • 579 • TASCR

Pole (Click here to link to pole specification page)
See Pole specification sheets.

Finish (Click here to view paint finish sheet)
Standard Finishes[9]
• **BKT** Black Textured
• **WHT** White Textured
• **PGT** Park Green Textured
• **ABZT** Architectural Medium Bronze Textured
• **DBT** Dark Bronze Textured

[9] Smooth finishes are available upon request

Custom Finishes[10]
• **OI** Old Iron
• **RT** Rust
• **WBR** Weathered Brown
• **CD** Cedar
• **WBK** Weathered Black
• **TT** Two Tone

[10] Custom colors require upcharge.

Sternberg Select Finishes
• **VG** Verde Green
• **SI** Swedish Iron
• **OWGT** Old World Gray Textured

Specifications

Fixture
The globe shall be 16"-24" in diameter with an 8" aluminum neck. It will be made dent resistant acrylic. Globes shall be available in the following colors: frosted, white, red or blue. The Luminaire shall be UL listed in US and Canada.

Fitter - Standard
The fitter shall be heavy wall cast aluminum, 356 alloy for high tensile strength. It shall have an 8-1/2" inside diameter opening to attach to the 8" neck of the acorn globe. When ordered with a Sternberg aluminum pole, the fitter shall be welded to the pole top or tenon for safety and to ensure the fixture will be plumb, secure and level over the life of the installation. The fitter shall have a one-piece ring bug gasket to resist insect penetration into lamp assembly.

900 Series Utility Fitter Option
The fitter shall be heavy wall cast aluminum, 360 die cast alloy for high tensile strength. It shall have a 9-1/4" inside diameter opening to attach to the 8" neck of the acorn globe. It shall have a hinged, tool-less entry door that provides open access to all of the components. The 900 series shall have an optional terminal block for ease of wiring, an optional Twist-Lock Photocontrol receptacle, an optional single GFCI outlet for auxiliary power needs. The top mounted driver mounting plate shall be cast aluminum and provide tool-less removal from the housing using 2 finger latches. The fitter shall have a one-piece ring gasket to resist insect penetration into globe assembly. When supplied with GFCI receptacle a hole will be provided for cord and plug installation with the access door closed. When cord and plug is not in use a filler plug will be provided and shall be tethered to the fitter for easy recovery and installation.

See next page

SternbergLighting
ESTABLISHED 1923 / EMPLOYEE OWNED

800-621-3376
555 Lawrence Ave., Roselle, IL 60172
contact@sternberglighting.com
www.sternberglighting.com

DESCRIPTION

The RL LED luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Patented modular LightBAR™ technology delivers uniform and energy-conscious illumination to walkways, parking lots, and roadways. UL/cUL listed for wet locations.

Lumark

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction
Heavy-duty cast aluminum housing and removable door. 3G vibration rated to ensure strength of construction and longevity in application. Die-cast aluminum door frame features integral hinges for tool-less maintenance access.

Optics
Choice of twelve patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature an IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Mounting
Two-bolt/one-bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1-1/4" or 2" mounting arms.

Finish
Components finished in a standard grey, five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors including black and bronze. RAL and custom color matches available.

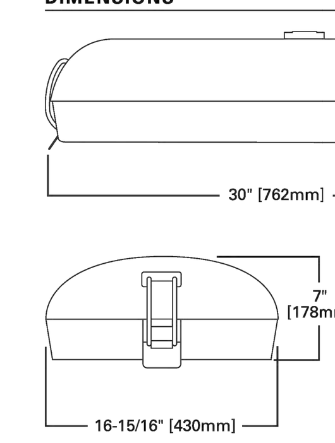
Warranty
Five-year warranty.

RL
LED ROADWAY
LARGE
COBRAHEAD

1 - 6 LightBARs
LED

ROADWAY LUMINAIRE

DIMENSIONS



COOPER
Lighting Solutions

CERTIFICATION DATA
UL/cUL Listed
LM79 / LM80 Compliant
ISO 9001
IP66 LightBARs
3G Vibration Rated

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating
50°C [Optional] Ambient Temperature Rating

EPA
Effective Projected Area: (Sq. Ft.)
0.87

SHIPPING DATA
Approximate Net Weight:
35 lbs. (15.91 kgs.)

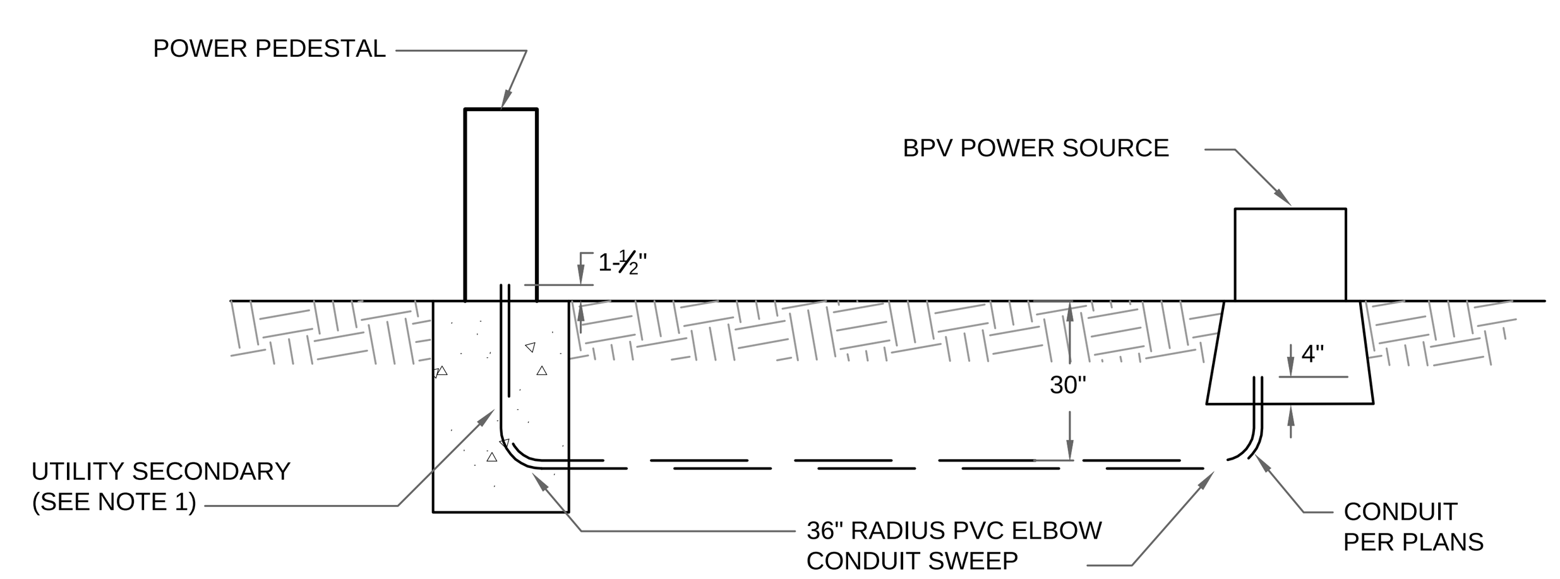
TD500012EN
April 20, 2020 3:16 PM

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage
	A	6	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	LDRL-SL2-E06-E	RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE (6) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL	(126) 4000K CCT, 70 CRI LEDs	LDRL-SL2-E06-E.ies	139	0.9	150.5
	EX	2	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	LDRL-SL2-E06-E	RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE (6) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL	(126) 4000K CCT, 70 CRI LEDs	LDRL-SL2-E06-E.ies	139	0.9	150.5
	PA	12	Sternberg Lighting	B740-VCOB-4L40TA-MDL03	B740-VCOB, Avenue Series Acorn, Vertical COB tower, LEDil optic, TA	Citizen COB	B740-VCOB-4L40TA-MDL03.IES	5828	0.9	54.9

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ROAD	+	1.2 fc	3.5 fc	0.0 fc	N/A	N/A

1. INSTALL SCHEDULE 40 PVC (GRAY) CONDUIT (SIZED AS SHOWN ON PLANS). THE CONDUIT SHALL BE INSTALLED 30" DEEP WITH A 36" RADIUS 90 PVC ELBOW TO WITHIN 7" FROM THE BASE OF THE POWER SOURCE AND AT THE CONTROLLER CABINET.
2. THE END OF THE CONDUIT SHALL BE LEFT TEMPORARILY EXPOSED UNTIL UTILITY COMPLETES THE SERVICE HOOK-UP. A LIGHTED BARRICADE OR ORANGE CONSTRUCTION SAFETY FENCING SHALL BE PLACED AT THE EXCAVATION.
3. INSTALL SERVICE POWER CABLE FROM CONTROLLER TO THE UTILITY POWER SOURCE. CONNECT CABLE TO THE METER LUGS AND COIL ENOUGH SLACK AT THE POWER SOURCE TO EXTEND TO CONNECT IN THE POWER PEDESTAL.

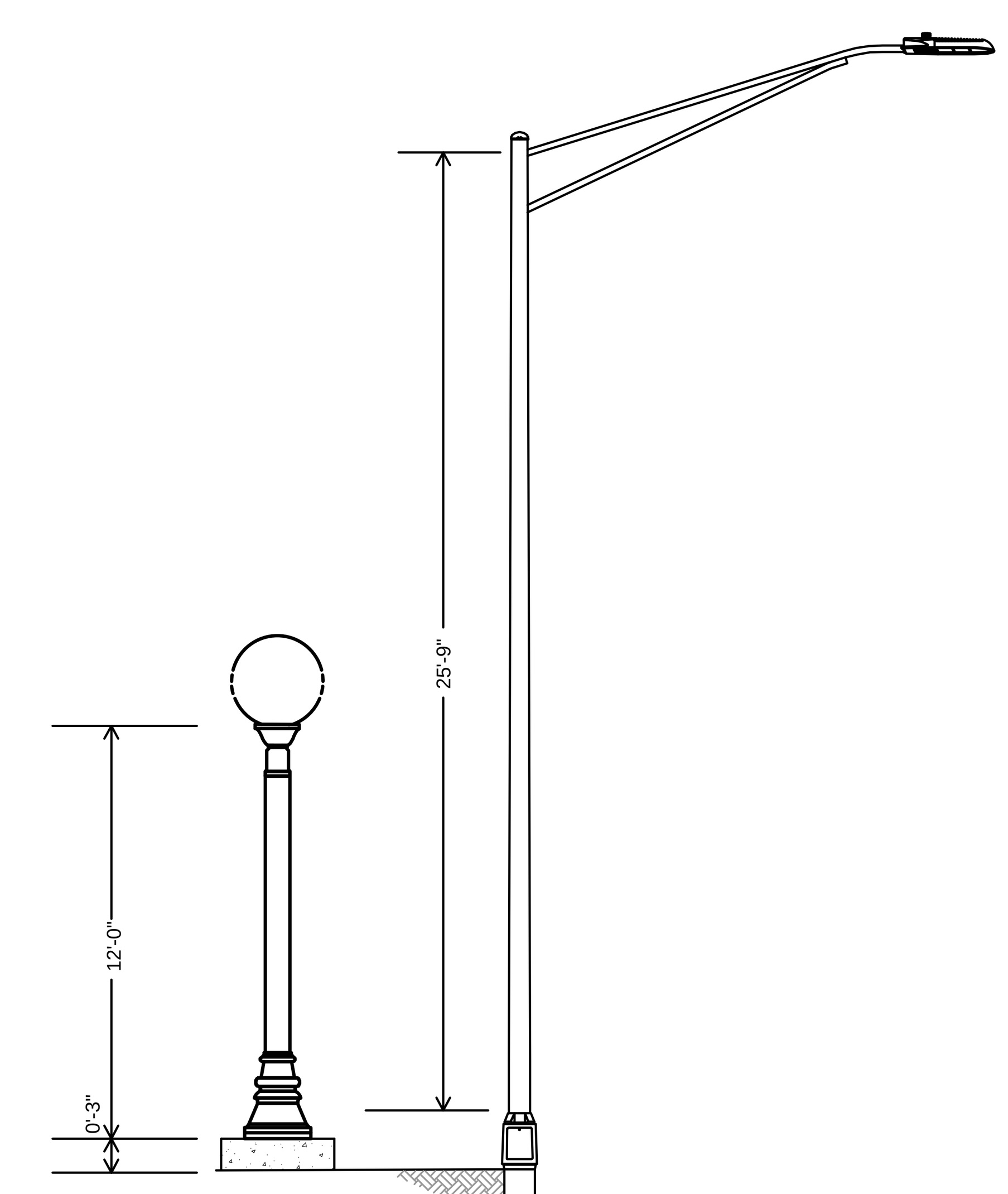


2 POWER PEDESTAL CONNECTION DETAIL

SCALE: NOT TO SCALE

CIRCUIT DIRECTORY - "P1"

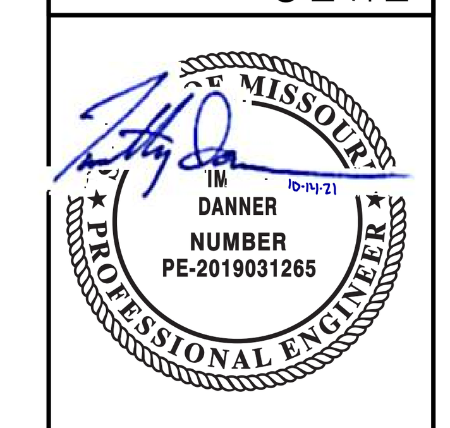
NO.	DESCRIPTION	QTY	AMP	POLE
1,3	MAIN	1	100	2
2,4	STREET LIGHTING	1	20	2
5,7	SPACE	1	-	2
6	PHOTOCELL	1	15	1
9,11	SPARE	1	20	2
8,10	SPARE	1	20	2
12	PATH LIGHTING	1	20	1



1 LIGHT POLE DETAILS

SCALE: NOT TO SCALE

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St.
Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE LIGHTING PHOTOMETRICS DETAILS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: SH
checked by: TD
approved by: SH
QA/QC by: TD
project no.: 021-02987
drawing no.: E_SIT01_02102987
date: 10.14.2021

SHEET
E101

DWG: \\oa.od.oaconsulting.com\te-nsf\projects-direct\2021\02501-03000\021-02987\40-design\AutoCAD\final plans\Sheets\MECH\E_SIT01_02102987.dwg USER: shostert
DATE: Oct 13, 2021 5:17pm XREFS: C_PBASE_02102987 E_TTBLK_02102987 C_XBASE_02102987 E_PHOTO_02102987 (NEW) L_PLBASE_02102987 E_PBASE_02102987 L_PBASE_02102987

GENERAL NOTES

A. TO FEDERAL, STATE, AND LOCAL STATUTES, NOTIFY MISSOURI ONE-CALL SYSTEM, INC. AT LEAST 48 HOURS PRIOR TO ANY DIGGING, TRENCHING, EXCAVATION, ETC.

B. INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATION OF TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

C. FIELD VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING WORK. ANY INTERFERENCE SHALL BE BROUGHT TO ATTENTION OF THE ARCHITECT AND ENGINEER FOR DIRECTION.

D. PROVIDE EQUIPMENT GROUNDING CONDUCTOR THROUGHOUT EACH BRANCH CIRCUIT. CONDUCTOR MAY NOT BE INDICATED GRAPHICALLY.

E. ALL EXTERIOR LIGHTING CIRCUITS TO BE ROUTED THRU LOW VOLTAGE FULLY PROGRAMMABLE LIGHTING RELAY.

F. WHEN INSTALLED BEHIND THE CURB, POLE BASES SHALL HAVE 3-FT CLEARANCE TO ROADWAYS AND CAR PARKING AND 12-FT CLEARANCE TO TRAILER PARKING. IN GENERAL, LIGHT POLES SHALL BE ALIGNED WITH PARKING STRIPES WHEN INSTALLED ADJACENT TO PARKING ARES.

⎔ SHEET KEYNOTES

1. APPROXIMATE LOCATION OF PAD MOUNTED 120/240V POWER PEDESTAL CONTROLLER. REFER TO POWER PEDESTAL DETAILS FOR ADDITIONAL INFORMATION.
2. IN GRADE JUNCTION BOX FOR ROUTING LIGHTING CIRCUITS. DETERMINE EXACT QUANTITY AND LOCATION. REFER TO JUNCTION BOX DETAILS FOR ADDITIONAL INFORMATION.
3. ROUTE LIGHTING CIRCUIT TO 20/1P CIRCUIT BREAKER IN POWER PEDESTAL THROUGH CONTACTOR. LIGHTING CIRCUIT TO BE CONTROLLED BY PHOTOCELL. REFER TO POWER PEDESTAL DETAILS FOR ADDITIONAL INFORMATION.

○ FEEDER SCHEDULE

1. (2)-#10 AND (1)-#10 GROUND IN 1" CONDUIT.
2. (2)-#8 AND (2)-#10 GROUND IN 1" CONDUIT.
3. REFER TO ONE-LINE DIAGRAM.

1 SITE LIGHTING POWER
SCALE: 1" = 30'-0"

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St. Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
JEFFREY D. DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SITE LIGHTING POWER

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

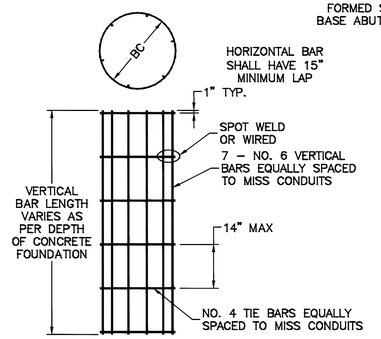
2021

drawn by: SH
checked by: TD
approved by: SH
QA/QC by: TD
project no.: 021-02987
drawing no.: E_SIT01_02102987
date: 10.14.2021

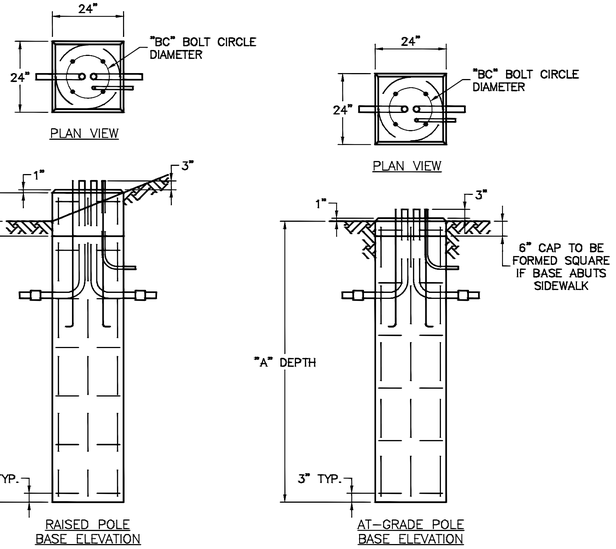
SHEET
E102

DWG: \\oa.dd.oaconsulting.com\lte-ns1\projects-direct\2021\02501-03000\021-02987\40-design\AutoCAD\final plans\Sheets\MECH\E_SIT01_02102987.dwg USER: shastert
DATE: Oct 13, 2021 5:17pm XREFS: C_PBASE_02102987 E_TTBLK_02102987 C_XBASE_02102987 E_PHOTO_02102987 E_PBASE_02102987 L_PLBASE_02102987 L_PBASE_02102987

POLE TYPE	BRACKET ARM	DEPTH (A)	BOLT CIRCLE (BC)
P12	---	48"	9.5"
P14	---	48"	9.5"
P30S OR P30D	SINGLE OR DUAL	72"	11.0"
P40S	SINGLE	94"	11.5"
P40D	DUAL	94"	14.5"

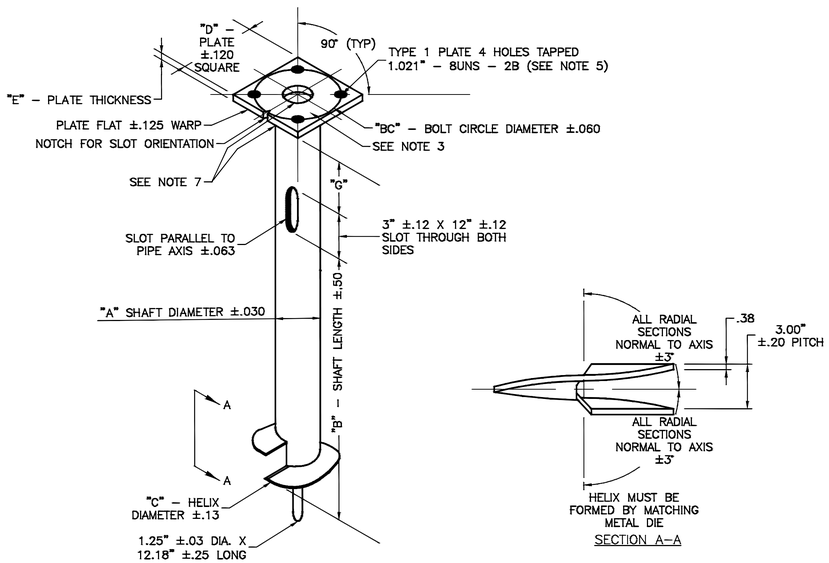


REBAR CAGE DETAIL



CONCRETE BASE DETAILS

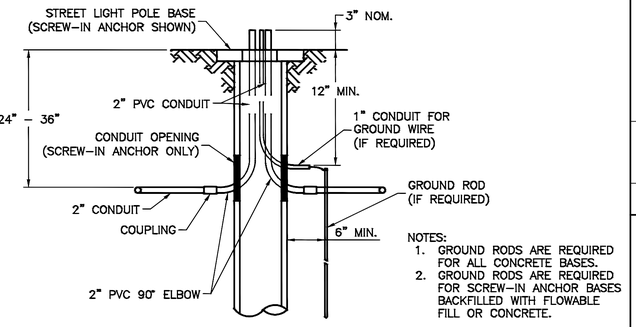
BASE TYPE	POLE TYPE	MINIMUM TORQUE RATING (LBS. FT.)	MAXIMUM TORQUE RATING (LBS. FT.)	SHAFT DIA. (A)	SHAFT LENGTH (B)	HELIX DIA. (C)	PLATE SIZE (D)	PLATE THICKNESS (E)	BOLT CIRCLE (BC)	SLOT LOCATION (G)
B12	P12	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B14	P14	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B30	P30S & P30D	2,000	15,000	6"	60"	12"	12"	1.0"	11.0"	18"
B40S	P40S	2,000	20,000	8"	60"	14"	12"	1.0"	11.5"	18"
B40D	P40D	2,000	20,000	8"	60"	14"	15"	1.25"	14.5"	18"



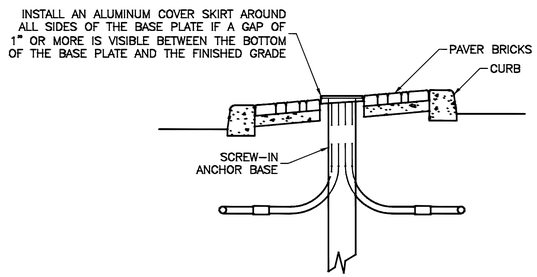
SCREW-IN ANCHOR BASE DETAILS

NOTES:

1. FINISH: HOT DIP GALVANIZE PER ASTM–A153 (LATEST REVISION).
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (±1°) AND HOLE AND CONCENTRIC (±.188 I.D. FIM) TO SHAFT AXIS.
3. ALL BASES SHALL BE IDENTIFIED BY THE MANUFACTURER'S INITIALS AND THE ANCHOR TYPE (1 OR 2) PERMANENTLY STAMPED INTO THE TOP PLATE WITH 1/2" LETTERS., THE JULIAN DATE OF MANUFACTURE SHALL BE PERMANENTLY STAMPED IN 1/4" NUMERALS.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (±.125 FIM) AND IN LINE (±2').
5. TAP 1" HOLES ON THE SPECIFIED BOLT CIRCLE PERPENDICULAR TO THE BASEPLATE. CLEAN AND CHASE THE THREADS AFTER HOT–DIP GALVANIZING SO THAT A BOLT MAY BE INSTALLED.
6. PREHEAT (ROOM TEMPERATURE 70°F), TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND CORE ON ALL WELD AREAS.
7. FLAME CUT IRREGULARITIES PERMISSIBLE:
   (1) VALLEYS NOT TO EXCEED 3/32 IN. BELOW NOMINAL SURFACE LEVEL.
   (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:
   BASEPLATE: ASTM A36–(LATEST REVISION) HOT ROLLED STEEL PLATE (CONFORM TO AASHTO TECHNICAL BUL. #270).
   SHAFT: STEEL PIPE PILES, SEEMLESS OR STRAIGHT WELDED, GRADE 2 PER ASTM A252. ALTERNATE MATERIAL: PIPE TYPE E OR S, GRADE B PER ASTM A53.
   HELIX: ASTM A635–(LATEST REVISION) HOT ROLLED STEEL PLATE
   PILOT POINT: ASTM A575–(LATEST REVISION) HOT ROLLED STEEL
   BOLT: ASTM A325 OR GRADE 5 SAE J429 – 1" DIAMETER HOT DIP GALVANIZED HEX HEAD BOLT. BOLT SHALL INCLUDE ONE EACH LOCK AND FLAT WASHER.
10. THE DESIGN AND PERFORMANCE INTEGRITY OF THE FOUNDATION SHALL BE VERIFIED BY FULL–SCALE TESTS BY QUALIFIED ENGINEERS INDEPENDENT OF THE MANUFACTURER. CERTIFIED TEST REPORTS SHALL BE PROVIDED UPON REQUEST.
11. FLAME CUT NOTCH OR PROJECTION WILL BE ON THE BASE PLATE TO INDICATE SLOT ORIENTATION.



CONDUIT ENTRANCE AND GROUNDING



COVERSKIRT REQUIREMENTS

1 STREET LIGHTING DETAILS
SCALE: NOT TO SCALE

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St. Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
IN
DANNER
NUMBER
PE-2019031265
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ELECTRICAL DETAILS
NEW LONGVIEW
FINAL DEVELOPMENT PLANS
LEE'S SUMMIT, MO
2021

drawn by: SH
checked by: TD
approved by: SH
QA/QC by: TD
project no.: 021-02987
drawing no.: E_SIT01_02102987
date: 10.14.2021

SHEET
E103

DWG: \\oa.ad.oaconsulting.com\te-ns1\projects-direct\2021\02501-03000\021-02987\40-design\AutoCAD\final plans\Sheets\MECH\E_SIT01_02102987.dwg USER: shastert
DATE: Oct 13, 2021 5:12pm XREFS: C_PBASE_02102987 E_TTBLK_02102987 C_XBASE_02102987 E_PHOTO_02102987 (NEW) L_PLBASE_02102987 E_PBASE_02102987 L_PBASE_02102987

STREET LIGHT POLE, BRACKET ARM, AND BREAK–AWAY BASE

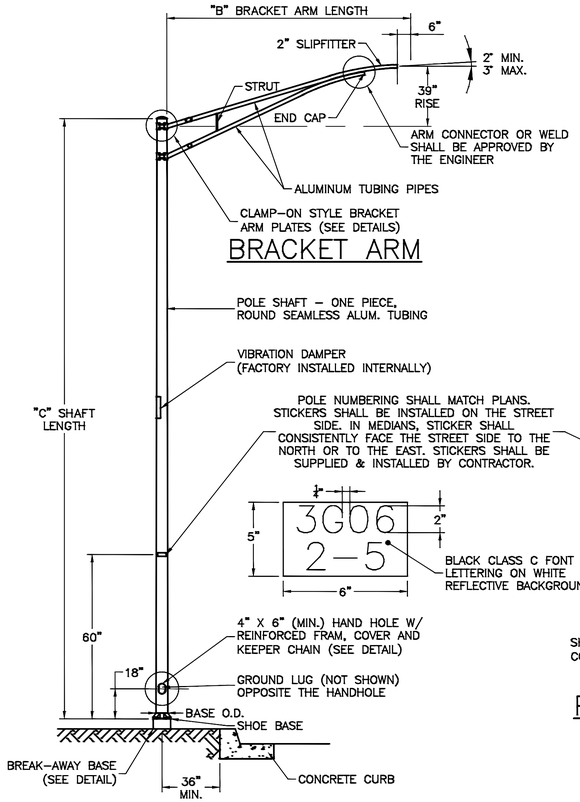
POLE TYPE	MOUNTING HEIGHT (A)	BRACKET ARMS		POLE SHAFT				SHOE BASE	ANCHOR BOLTS		
		LENGTH (B)		BASE O.D.	TOP O.D.	MIN. WALL THICKNESS	SHAFT LENGTH (C)	BOLT CIRCLE (BC)	DIAMETER	LENGTH	HOOK
		ARM 1	ARM 2								
P12	12'	–	–	6"	3"	0.156"	12'–0"	9.5"	0.75" 10NC	25"	3"
P14	14'	–	–	6"	3"	0.156"	14'–0"	9.5"	0.75" 10NC	25"	3"
P30S	30'	6' or 10'	–	8"	6"	0.188"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P30D	30'	6' or 10'	6' or 10'	8"	6"	0.219"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P40S	40'	6', 10' or 15'	–	8"	6"	0.219"	36'–6" ±2"	11.5"	1.00" 8NC	36"	4"
P40D	40'	6', 10' or 15'	6', 10' or 15'	10"	6"	0.219"	36'–6" ±2"	14.5"	1.00" 8NC	48"	4"

NOTES:

1. ALL POLES, ARMS, AND MISCELLANEOUS EQUIPMENT SHALL CONFORM TO THESE DETAILS AND AS SPECIFIED BY THE LATEST CITY STANDARD SPECIFICATIONS.
2. POLE SHAFT SHALL HAVE A SATIN GROUND FINISH.
3. ALL HARDWARE (BOLTS, NUTS, WASHERS BUT NOT INCLUDING ANCHOR BOLTS) NOT OTHERWISE SPECIFICALLY DESIGNATED IN THE SPECIFICATIONS OR DETAILS SHALL BE 300–SERIES STAINLESS STEEL CONFORMING TO ASTM A193 OR A194.
4. ANCHOR BOLTS SHALL BE USED WITH CONCRETE BASES. ANCHOR BOLTS SHALL BE STEEL WITH 50,000 PSI MINIMUM YIELD; TOP 10" MIN. GALVANIZED; INCLUDING 8 NUTS AND 8 FLAT WASHERS GALVANIZED TO ASTM A153 STANDARDS. GALVANIZED HEX HEAD BOLTS (SEE POLE FOUNDATION SHEET) SHALL BE USED WITH SCREW–IN ANCHOR BASES. 4 BOLTS, 4 NUTS AND 8 FLAT WASHERS TO PROVIDED WITH EACH ANCHOR.
5. ALL WELDING IS TO BE DONE WITH 4043 WELD WIRE. ALL ARMS AND SHAFTS ARE TO BE HEAT–TREATED TO T6 TEMPER AFTER WELDING.
6. ANCHOR BOLTS SHALL PROJECT ABOVE THE CONCRETE BASE AS PER MANUFACTURER'S RECOMMENDED PRACTICES, 2½" TO 3".
7. THE ALUMINUM STREET LIGHT POLE ASSEMBLY, INCLUDING ANCHORAGE AND LUMINAIRE, SHALL COMPLY WITH THE LATEST CITY STANDARD SPECIFICATIONS AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD WIND LOADING.
8. ALL POLES AND ARMS SHALL BE CLEARLY IDENTIFIED BY THE MANUFACTURER'S NAME, ABBREVIATION, OR SYMBOL ENGRAVED ON THE SHAFT, SHOE BASE, HAND HOLE, OR OTHER MEANS SUCH AS TO BE READILY VISIBLE AFTER INSTALLATION.

MATERIAL DATA

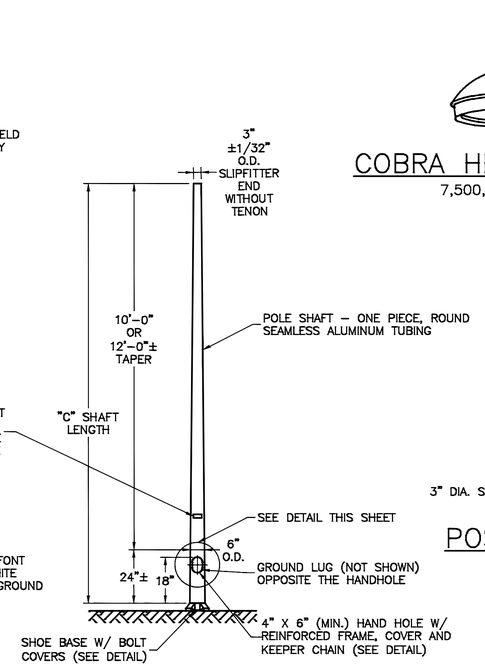
COMPONENT	ALUMINUM ALLOY DESIGNATION	SPECIFICATION
SHOE BASE	356–T6, CAST	ASTM B26 OR B108
BREAKAWAY BASE	356–T6, CAST	ASTM B108
BOLT COVERS	356 OR 360, CAST	ASTM B26 OR B108
POLE SHAFT	6063–T6, EXTRUDED	ASTM B221 OR B241
GROUND LUG	6061–T5 OR 6063–T6, PLATE	ASTM B221
REINFORCED HANDHOLE FRAME	356–T6 OR 6061–T6	ASTM B26, B108 OR B221
HANDHOLE COVER	6063–T6	ASTM B209, B221 OR B241
BRACKET ARM & TUBING PIPES	6063–T6	ASTM B221, B241 OR B249
BRACKET ARM MOUNTING PLATES	6061–T6 OR 6063–T6 EXTRUDED	ASTM B221
BRACKET ARM STRUT & ARM CONNECTOR	AU6061–T6 OR 6063–T6 EXTRUDED	ASTM B221, B241 OR B249
POLE CAP	356, CAST	ASTM B26 OR B108
ANCHOR BOLTS	N/A	GALVANIZED PER ASTM A153



BRACKET ARM

POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)

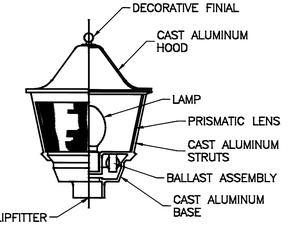


PEDESTAL POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)

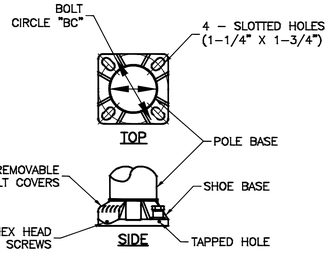
COBRA HEAD STYLE LUMINAIRE

7,500, 12,500, 24,500 LUMEN LED

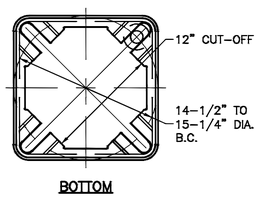


POST TOP LUMINAIRE

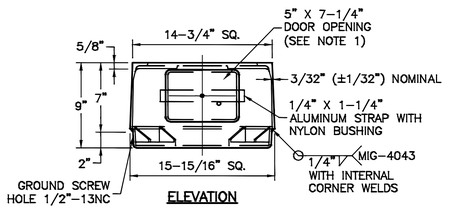
10,000 LUMEN LED



SHOE BASE

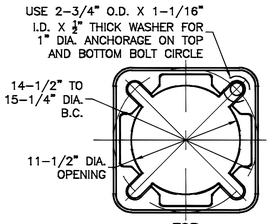


BOTTOM



ELEVATION

15" BREAK-AWAY BASE



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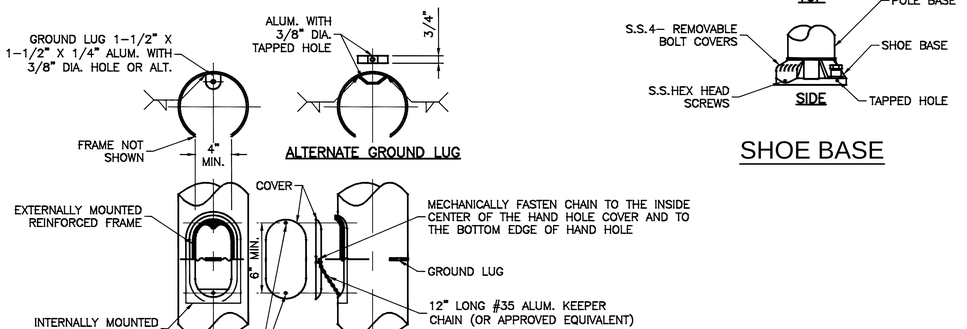
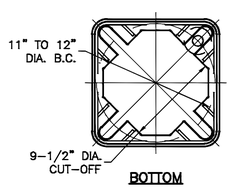


HAND HOLE

NOTES:

1. DOOR SHALL BE ON THE SAME SIDE OF THE POLE AS THE HAND HOLE.
2. BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1994).



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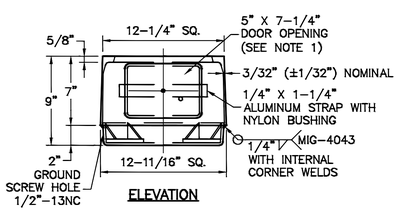
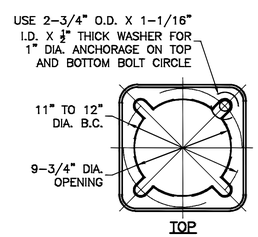


ELEVATION

11" BREAK-AWAY BASE



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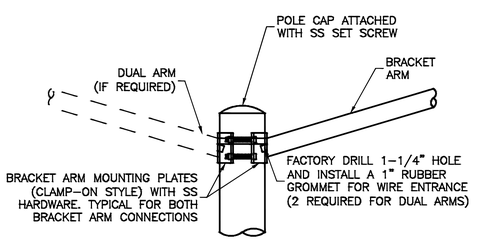
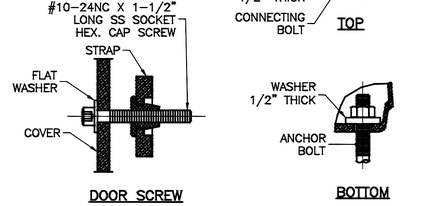


BRACKET ARM MOUNTING

CONNECTING HARDWARE
(4) 1"–8NC X 4" LONG GALV. HEX HEAD BOLT SAE GR. 5
(8) 1/2" GALV. WASHER 2–3/4" O.D.
(4) 1" GALV. HEX. NUT
(4) 1" GALV. FLAT WASHER
(4) 1" LOCK WASHER



BREAK-AWAY BASE ANCHORAGE

ochsner hare + hare
the olsson studio
OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St. Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
TIMOTHY D. DANNER
NUMBER PE-2010031265
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ELECTRICAL DETAILS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: SH
checked by: TD
approved by: SH
QA/QC by: TD
project no.: 021-02987
drawing no.: E_SIT01_02102987
date: 10.14.2021

SHEET
E104

DWG: \\oa.ad.oaconsulting.com\te-ns1\projects-direct\2021\02501-03000\021-02987\40-design\AutoCAD\final plans\Sheets\MECH\E_SIT01_02102987.dwg USER: shastert
DATE: Oct 13, 2021 5:12pm XREFS: C_PBASE_02102987 E_PBASE_02102987 L_PBASE_02102987
E_TTBLK_02102987 C_XBASE_02102987 E_PHOTO_02102987 (NEW) L_PBASE_02102987

SECTION 260000 ELECTRICAL

1. GENERAL CONDITIONS:

   A. THIS CONTRACTOR SHALL INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.

   B. THIS CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMANENT AND TEMPORARY PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION OTHER THAN THOSE DEPOSITS OR FEES WHICH ARE FULLY REFUNDABLE TO THE OWNER.

   C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. WHERE LOCAL CONDITIONS NECESSITATE A REARRANGEMENT, THE CONTRACTOR SHALL PREPARE, AND SUBMIT FOR APPROVAL, DRAWINGS OF THE PROPOSED REARRANGEMENT. THIS CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING ALL OF HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, FURNISHING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.

   D. THIS CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.

   E. SPECIFICATIONS AND DRAWINGS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.

   F. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED AS SHOWN ON THE DRAWINGS AND SPECIFIED IN DIVISION 15.

   G. ALL WORK SHALL BE COMPLETE AND SHALL BE LEFT IN OPERATING CONDITION.

   H. INCLUDE ALL PARTS AND LABOR WHICH ARE INCIDENTAL AND NECESSARY FOR A COMPLETE AND OPERABLE INSTALLATION EVEN THOUGH NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS. .

   I. REQUEST INSPECTIONS AS REQUIRED BY REGULATING AGENCIES AND/OR REGULATIONS. PAY ALL CHARGES FOR INSPECTIONS BY REGULATING AGENCIES OF INSTALLATIONS OF PLANS SPECIFICATIONS.

   J. PROVIDE THE OWNER WITH A CERTIFICATE OF FINAL INSPECTION AND APPROVAL BY ENFORCEMENT AUTHORITIES.

   K. FURNISH: TO OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOB SITE IN NEW CONDITION READY FOR INSTALLATION, UNLOAD AND UNPACK, AND GUARANTEE.

   L. INSTALL: TO RECEIVE AT THE JOB SITE, STORE, ASSEMBLE, ERECT, SET IN PLACE, ANCHOR, APPLY, FINISH, PROTECT, CLEAN, TEST, START-UP, AND MAKE READY FOR OWNER'S USE.

   M. PROVIDE: TO FURNISH AND INSTALL.

   N. PROVIDE NEW MATERIAL AND EQUIPMENT, UNLESS NOTED OTHERWISE. PROTECT EQUIPMENT AND MATERIAL FROM DAMAGE, DIRT AND THE WEATHER.

   O. THE ENGINEER RESERVES THE RIGHT TO REJECT MATERIAL OR WORKMANSHIP NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, BEFORE OR AFTER INSTALLATION, AT NO ADDITIONAL COST TO THE OWNER.

   P. REFINISH ALL ELECTRICAL EQUIPMENT DAMAGED DURING SHIPPING, INSTALLATION AND/OR PRIOR TO FINAL ACCEPTANCE TO ITS ORIGINAL CONDITION. REMOVE ALL RUST; PRIME, AND PAINT PER MANUFACTURER'S RECOMMENDATIONS FOR FINISH EQUAL TO ORIGINAL.

   Q. PROTECT OPENINGS AND EQUIPMENT FROM OBSTRUCTION, BREAKAGE, MISUSE, DAMAGE OR BLEMISHES. PROTECT MATERIALS AND EQUIPMENT IMMEDIATELY UPON RECEIPT AT THE JOB SITE OR IMMEDIATELY AFTER THEY HAVE BEEN REMOVED FROM THEIR SHIPPING CONTAINERS. UNLESS NOTED OTHERWISE, KEEP THEM CLEAN AND UNDAMAGED UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER. WHEN A PORTION OF THE BUILDING IS OCCUPIED BY THE OWNER BEFORE SUBSTANTIAL COMPLETION OF THE ENTIRE PROJECT, MAKE ARRANGEMENTS TO TRANSFER RESPONSIBILITY FOR PROTECTION AND HOUSEKEEPING FOR THE OCCUPIED PORTION.

   R. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ELECTRICAL EQUIPMENT, MATERIALS OR WORK UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER.

   S. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH, CAUSED BY HIS EMPLOYEES OR WORK, AT ALL TIMES. REMOVE RUBBISH, TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS FROM AND ABOUT THE BUILDING, AND LEAVE WORK AREAS "BROOM CLEAN" OR ITS EQUIVALENT DAILY. CLEAN ELECTRICAL EQUIPMENT AND REMOVE TEMPORARY IDENTIFICATION.

   T. OPERATE EQUIPMENT AND SYSTEMS IN ALL THEIR OPERATING MODES, TO VERIFY PROPER OPERATION, PRIOR TO FINAL FIELD OBSERVATION AND OWNER INSTRUCTIONS. PREPARE A PRE-INSPECTION REPORT AND SUBMIT TO THE ENGINEER AND OWNER FOR REVIEW.

   U. TEST ALL INSTALLED ELECTRICAL EQUIPMENT AND CABLES REQUIRED BY CONSTRUCTION DOCUMENTS ACCORDING TO THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE INTERNATIONAL ELECTRICAL TESTING ASSOCIATION, INC. (NETA). IF ACCEPTABLE PERFORMANCE OF ANY TEST IS NOT ACHIEVED, MAKE THE NECESSARY CORRECTIONS AND THE TEST SHALL BE REPEATED UNTIL ACCEPTABLE PERFORMANCE IS ACHIEVED. PROVIDE WRITTEN REPORTS OF ALL TESTS, WITH FAILURES IDENTIFIED, TO ENGINEER.

   V. FULLY INSTRUCT THE OWNER'S DESIGNATED PERSONNEL IN THE OPERATION OF EACH ELECTRICAL SYSTEM AT THE TIME IT IS PUT INTO SERVICE. PROVIDE INSTRUCTION USING COMPETENT INSTRUCTORS AND FACTORY TRAINED PERSONNEL.

   W. CONTRACTOR SHALL INSTALL ALL MATERIALS AND EQUIPMENT AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND/OR RECOMMENDATIONS.

   X. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT INDICATED AND/OR REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. A FORM INDICATING ALL SHOP DRAWINGS TO BE PROVIDED AS PART OF THE PROJECT SHALL BE SUBMITTED FOR REVIEW BY THE ENGINEER PRIOR TO ANY SHOP DRAWING SUBMITTAL REVIEW.

   Y. THIS SPECIFICATION SHALL INCORPORATE ALL PROJECT REQUIREMENTS AND RESPONSIBILITIES INDICATED WITHIN THE FRONT-END OF THE PROJECT MANUAL.

2. LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

   A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION CODES, THE NATIONAL ELECTRICAL SAFETY CODE, LOCAL BUILDING CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. SHOULD ANY WORK SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN BE OF LOWER STANDARD, THE CONTRACTOR SHALL REFER THE POINTS IN QUESTION TO THE ENGINEER FOR APPROVAL.

3. SCOPE OF WORK:

   A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL AND ASSOCIATED SERVICES REQUIRED TO COMPLETELY CONSTRUCT AND LEAVE ALL SYSTEMS OPERATIONAL AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED.

   B. ALL WORK PERFORMED UNDER THIS SECTION SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.

4. MATERIALS AND EQUIPMENT REVIEW:

   A. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT, THIS CONTRACTOR SHALL SUBMIT FOR REVIEW SHOP DRAWINGS FOR ALL EQUIPMENT TO BE FURNISHED FOR THIS PROJECT. SUBMITTALS SHALL HIGHLIGHT THE MANUFACTURER'S NAME, MODEL NUMBER, DESCRIPTIVE ENGINEERING DATA AND ALL NECESSARY INFORMATION AS TO FINISH, MATERIAL GAUGES AND ACCESSORIES.

   B. ALL PORTIONS OF THE SHOP DRAWINGS THAT ARE INTENDED TO BE REVIEWED SHALL BE HIGHLIGHTED. ANY PORTION NOT CALLED OUT SHALL BE ASSUMED TO BE EXCLUDED FROM THE JOB.

5. GUARANTEE:

   A. THIS CONTRACTOR SHALL GUARANTEE COMPLETE SYSTEM OPERATION AND THAT THE APPARATUS FURNISHED AND INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND WILL GIVE SATISFACTORY SERVICE. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE INSTALLATION WHICH PROVES OR BECOMES DEFECTIVE WITHIN ONE YEAR AFTER THE SYSTEM IS ACCEPTED.

6. COORDINATION:

   A. THIS CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL, MECHANICAL, STRUCTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT, AND IT SHALL BE HIS RESPONSIBILITY TO COORDINATE THE ELECTRICAL WORK WITH OTHER TRADES.

7. AS-BUILT DRAWINGS:

   A. THIS CONTRACTOR SHALL PREPARE COMPLETE AS-BUILT DRAWINGS OF ALL ELECTRICAL SYSTEMS AND TURN OVER TO THE ENGINEER REVISED ELECTRONIC CAD FILES.

   B. THIS CONTRACTOR SHALL PREPARE AND SUBMIT TO THE OWNER'S REPRESENTATIVE FIVE BOUND SETS OF MANUFACTURER'S LITERATURE FOR ALL EQUIPMENT TO BE INSTALLED ON THIS PROJECT SHOWING ALL DETAILS OF EQUIPMENT, REPLACEMENT PART DATA AND MAINTENANCE INSTRUCTIONS.

8. EXCAVATION:

   A. ALL EXCAVATION AND BACKFILL REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR.

   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LAYOUT AND THE ESTABLISHMENT OF ALL LINES AND LEVELS REQUIRED FOR THE EXECUTION OF THE WORK.

   C. WHEN SERVICES ARE TO BE RUN SIDE-BY- SIDE, A COMMON TRENCH MAY BE USED PROVIDING THE REQUIRED VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE VARIOUS SERVICES ARE MAINTAINED AND PROVIDING THE METHODS OF BEDDING AND BACKFILL MEET THE APPROVAL OF THE ENGINEER. CONTRACTORS INVOLVED SHALL MAKE THEIR OWN AGREEMENT AS TO THE SHARING OF THE COST OF THE COMMON TRENCHING AND BACKFILL WORK.

   D. LOCATE EXISTING UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK. SHOULD UNCHARTED, OR INCORRECTLY CHARTED, PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING EXCAVATION, CONSULT UTILITY ENGINEER IMMEDIATELY FOR DIRECTIONS. COOPERATE WITH OWNER AND UTILITY COMPANIES IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO SATISFACTION OF UTILITY OWNER.

9. EXTERIOR AND FOUNDATION WALLS:

   A. ALL PIPING THROUGH EXTERIOR OR FOUNDATION WALLS SHALL PASS THROUGH SCHEDULE 40 GALVANIZED STEEL SLEEVES WHICH SHALL BE LARGE ENOUGH TO ALLOW FOR CAULKING MATERIAL. NO SLEEVES ARE PERMITTED THROUGH CONCRETE STRUCTURAL MEMBERS. ALL SLEEVES SHALL BE COORDINATED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

10. FLOORS:

   A. ALL PIPING THROUGH FLOORS SHALL BE PROVIDED WITH SCHEDULE 40 GALVANIZED STEEL PIPE SLEEVES, EXTENDING 2 INCHES ABOVE FLOOR.

11. CUTTING:

   A. ALL CUTTING OF EXISTING CONCRETE FLOORS/SLABS ON GRADE IN THE INTERIOR OF THE BUILDING SHALL BE PERFORMED BY "SAW CUTTING".

12. PATCHING:

   A. ON CONCRETE, PATCH THE OPENING WITH CONCRETE, FINISHED SMOOTH WITH ADJACENT SURFACES.

13. IDENTIFICATION OF SWITCHES AND APPARATUS:

   A. ALL CABINETS, SAFETY SWITCHES, AND OTHER APPARATUS USED FOR OPERATION AND CONTROL OF CIRCUITS, APPLIANCES, AND EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY IDENTIFIED BY MEANS OF ENGRAVED PLASTIC PLATES BLACK WITH WHITE LETTERS.

14. GROUNDING:

   A. ALL FEEDERS AND BRANCH CIRCUITS SHALL CONTAIN GROUND WIRES.

   B. ALL CONDUCTORS, MOTOR FRAMES, RACEWAYS, CABINETS, ETC., THAT REQUIRE GROUNDING SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, THOSE OF THE SERVING UTILITY AND LOCAL AUTHORITIES HAVING JURISDICTION.

15. CONDUIT:

   A. ALL ELECTRICAL POWER WIRING, INCLUDING LOW VOLTAGE WIRING, SHALL BE INSTALLED IN CONDUIT AS HEREIN SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH NOMINAL SIZE SHALL BE USED.

   B. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 AS MANUFACTURED BY CARLON OR APPROVED EQUAL. ALL CONDUITS SHALL BE INSTALLED WITH MINIMUM 36" INCH COVER.

   C. CONDUIT INSTALLED ABOVE GROUND EXTERIOR SHALL BE GALVANIZED RIGID STEEL AS MANUFACTURED BY THE ALLIED TUBE AND CONDUIT CORPORATION OR APPROVED EQUAL. CONDUIT SHALL BE SHERARDIZED OR HOT-DIP GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.

   D. WHEN PVC CONDUITS PENETRATE CONCRETE FLOOR CONSTRUCTION, CONTRACTOR SHALL USE RIGID STEEL ELBOWS AND EXTENSION. PVC CONDUIT/FITTINGS SHALL NOT BE PERMITTED TO BE EXPOSED ABOVE THE FLOOR.

   E. THIN WALL TUBING SHALL BE REPUBLIC "ELECTRUNITE E.M.T." OR APPROVED EQUAL. SHALL BE INSTALLED INDOORS.

   F. ALL FITTINGS SHALL BE OF THE COMPRESSION TYPE AND SHALL BE WATERTIGHT.

   G. CONDUIT FOR INTERIOR WIRING, IN GENERAL, SHALL BE THINWALL TUBING UNLESS OTHERWISE NOTED.

   H. RACEWAYS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FITTING TO FITTING. A RUN OF CONDUIT BETWEEN OUTLETS OR FITTINGS SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER-BENDS INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE OUTLET OR FITTING. THE RADIUS OF BENDS SHALL NEVER BE SHORTER THAN THAT OF THE CORRESPONDING TRADE ELBOW. THE SYS- TEM SHALL BE COMPLETE WITH OUTLETS, DISTRIBUTION BOXES, ETC., SMOOTH INSIDE AND MECHANICALLY SECURE IN PLACE. APPROVED STRAPS, HANGERS, OR SUPPORTS SHALL BE USED TO SECURE CONDUITS IN PLACE. CONDUITS SHALL, IN GENERAL, BE SUPPORTED AT INTERVALS NOT EXCEEDING 10'-0" AND WITHIN 3'-0" OF EACH OUTLET BOX, JUNCTION BOX, CABINET OR FITTING.

   I. CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION; PLUG AND KEEP CLEAN AND DRY. CONDUIT ENDS SHALL BE BUTTED IN CENTERS OF COUPLINGS. NO CRACKS OR FLATTENED SECTIONS WILL BE PERMITTED AT BENDS OR ELSEWHERE. ALL ENDS OF CONDUIT SHALL BE REAMED TO REMOVE ROUGH EDGES. RUNNING THREADS WILL NOT BE PERMITTED.

   J. CONDUITS SHALL BE CONCEALED WITHIN THE WALLS, CEILINGS, AND FLOORS WHERE POSSIBLE AND UNLESS OTHERWISE NOTED. EXPOSED CONDUIT SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE BUILD- ING LINES.

18. WIRE AND CABLE:

   A. WIRE AND CABLE SHALL BE AMERICAN INSULATED WIRE CORP., GENERAL CABLE CORP., SENATOR WIRE AND CABLE CORP. SOUTHWIRE OR APPROVED EQUAL, OF SIZES AS SHOWN ON THE DRAWINGS OR HEREIN SPECIFIED.

   B. ALL CONDUCTORS SHALL BE COPPER.

   C. NO. 10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID WITH INSULATION AND NO. 8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED WITH TYPE THHN/THWN INSULATION EXCEPT THAT CONDUCTORS WITHIN 3 INCHES OF LIGHT FIXTURE BALLASTS SHALL HAVE RHH, THHN, OR EQUAL INSULATION RATED FOR 90 DEGREES C. APPLICATION.

ochsner hare + hare
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OLSSON - LANDSCAPE ARCHITECTURE
MISSOURI CERTIFICATE OF AUTHORITY #:2005000285
1814 Main St. Kansas City, MO 64108 TEL 816.842.8844 www.olsson.com

STATE OF MISSOURI
TIMOTHY D. DANNER
NUMBER PE-2010031265
PROFESSIONAL ENGINEER
10-14-21

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ELECTRICAL SPECIFICATIONS

NEW LONGVIEW
FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, MO

2021

drawn by: SH
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date: 10.14.2021

SHEET
E105

NOTE:
LOT AS LISTED IN SITE PLAN IS THE SAME AS THE UNIT TYPE.
EXAMPLE: "LOT A" = UNIT A... ETC.

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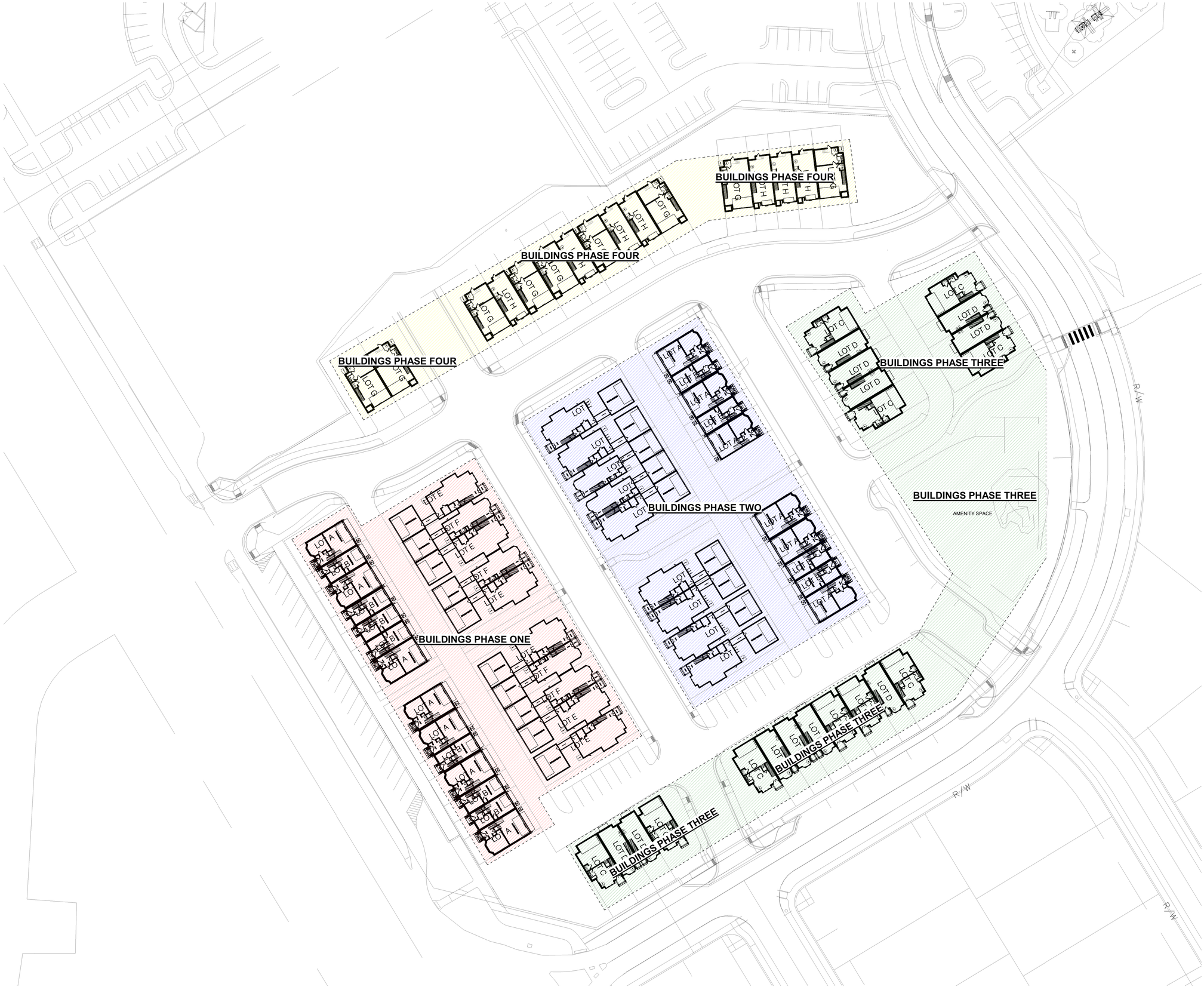
1" = 30'-0"

A00

SITE PLAN

11/05/2021



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LOT AS LISTED IN SITE PLAN IS THE SAME AS THE UNIT TYPE.
EXAMPLE: "LOT A" = UNIT A... ETC.

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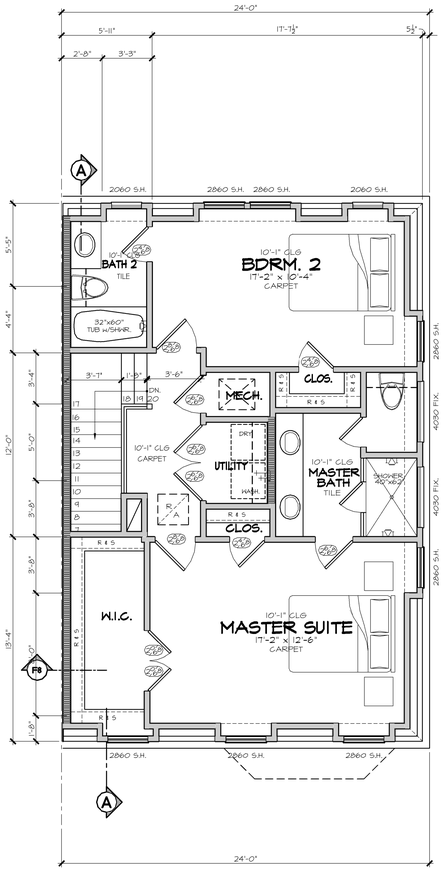
1" = 30'-0"

A01

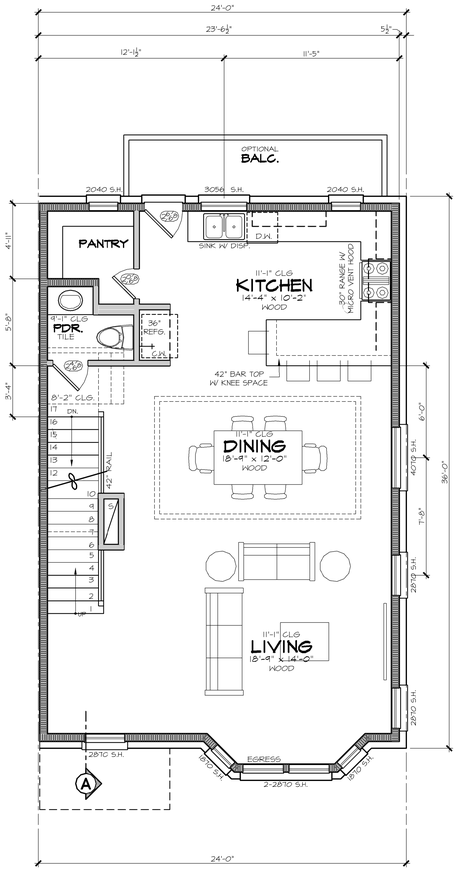
PHASING PLAN

11/30/21



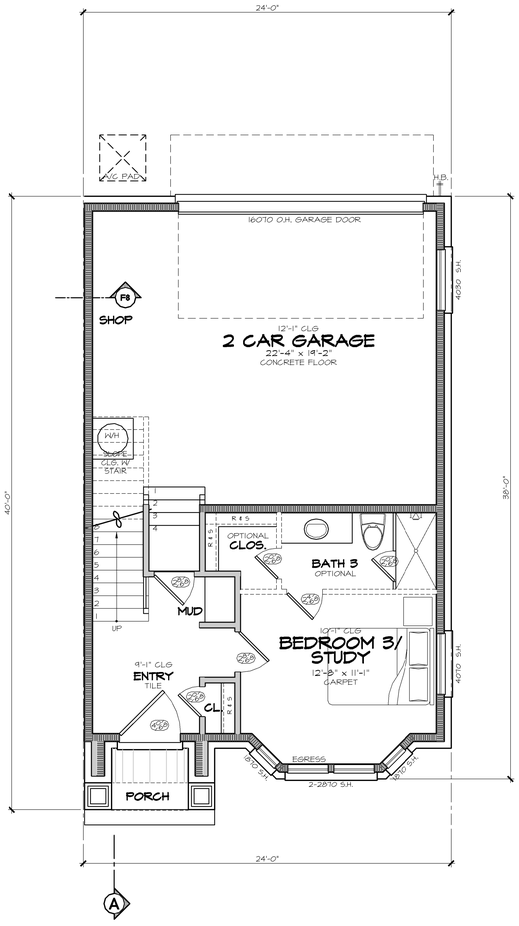
THIRD FLOOR PLAN

10'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: CARPET
SUGGESTED FLOOR SYSTEM: 16" TRUSSES



SECOND FLOOR PLAN

11'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: HARDWOOD FLOOR
SUGGESTED FLOOR SYSTEM: 16" TRUSSES
PROVIDE METAL PAN W/2" DRAIN
TO OUTSIDE IN UTILITY AREA



FIRST FLOOR PLAN

10'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: CARPET FLOOR U.N.O.,

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

PW+A

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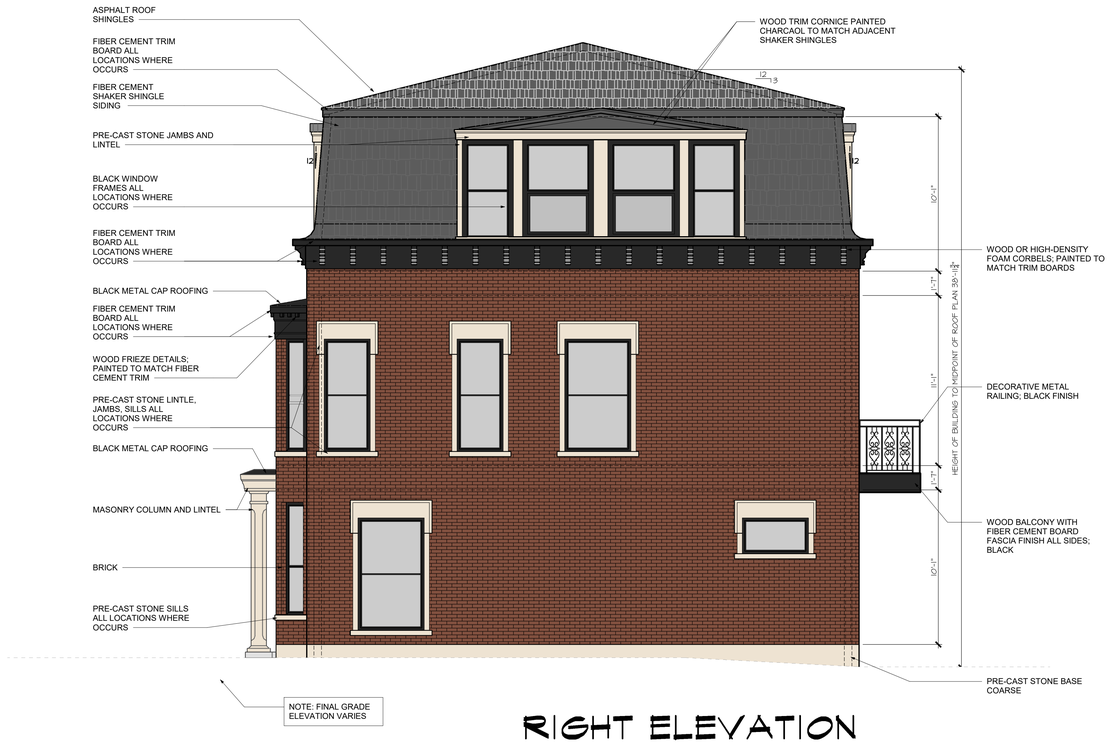
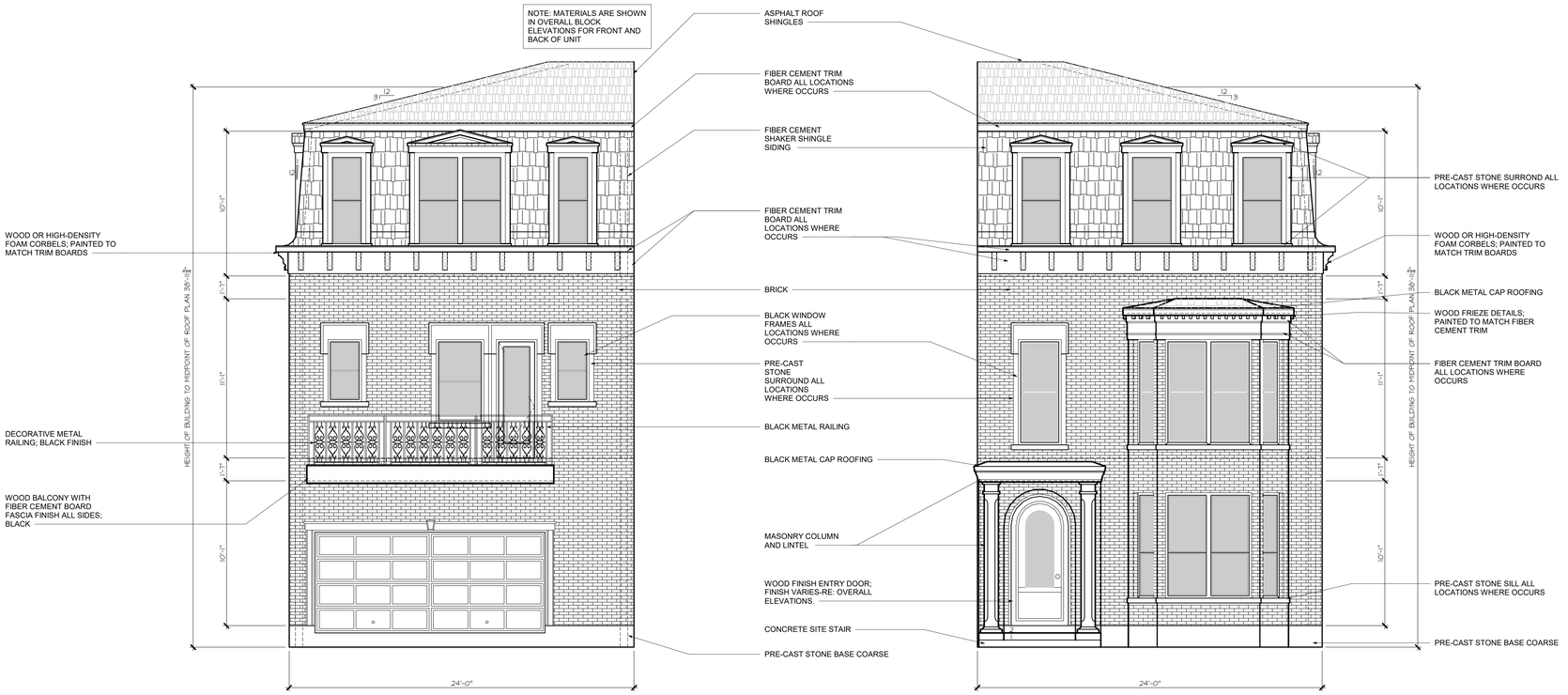
1/4" = 1'-0"
A02
UNIT A - FLOOR PLAN
11/05/2021

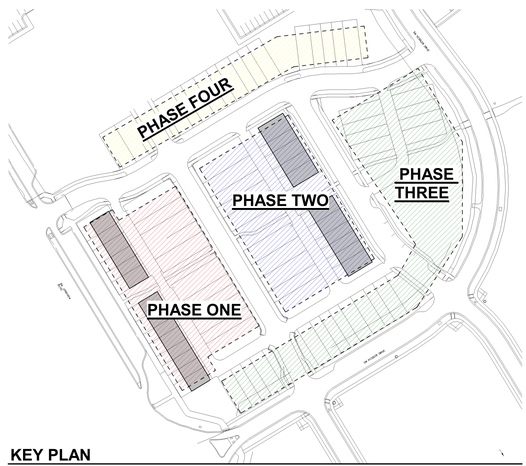


RIGHT ELEVATION



REAR ELEVATION

FRONT ELEVATION



KEY PLAN

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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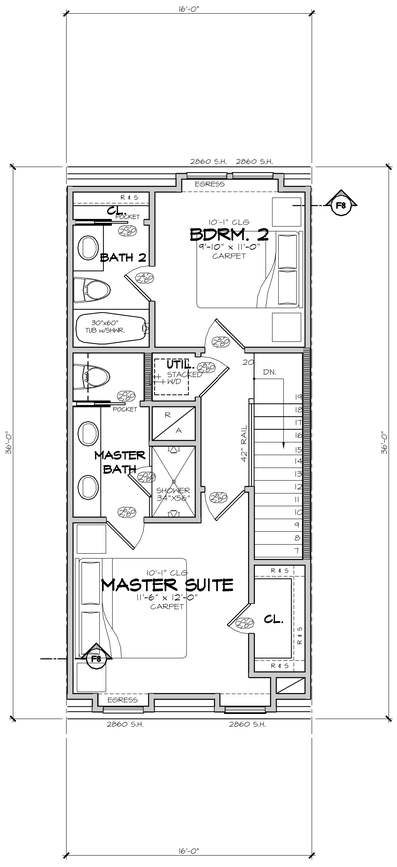
LEES SUMMIT, MO 64081

As indicated

A03

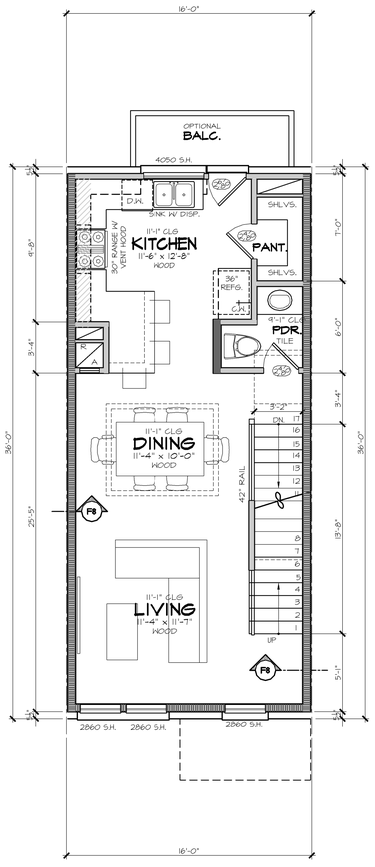
UNIT A - ELEVATIONS

11/05/2021



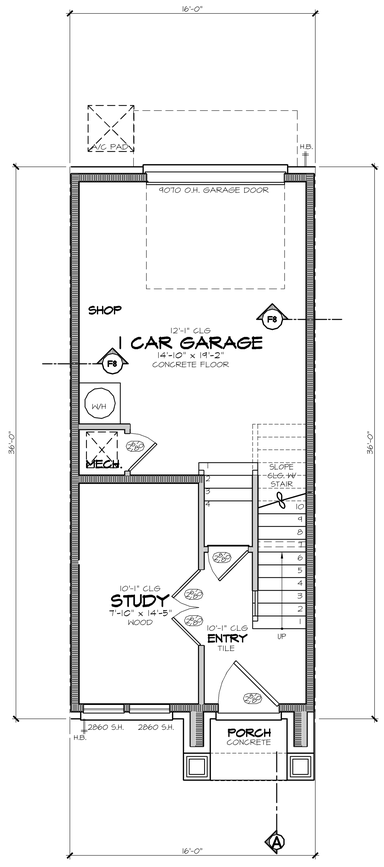
THIRD FLOOR PLAN

10'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: CARPET
SUGGESTED FLOOR SYSTEM: 16" TRUSSES



SECOND FLOOR PLAN

11'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: HARDWOOD
SUGGESTED FLOOR SYSTEM: 16" TRUSSES
PROVIDE METAL PAN W/2" DRAIN
TO OUTSIDE IN UTILITY AREA



FIRST FLOOR PLAN

10'-1" CEILINGS U.N.O.
PRIMARY FLOOR COVERING: CONCRETE

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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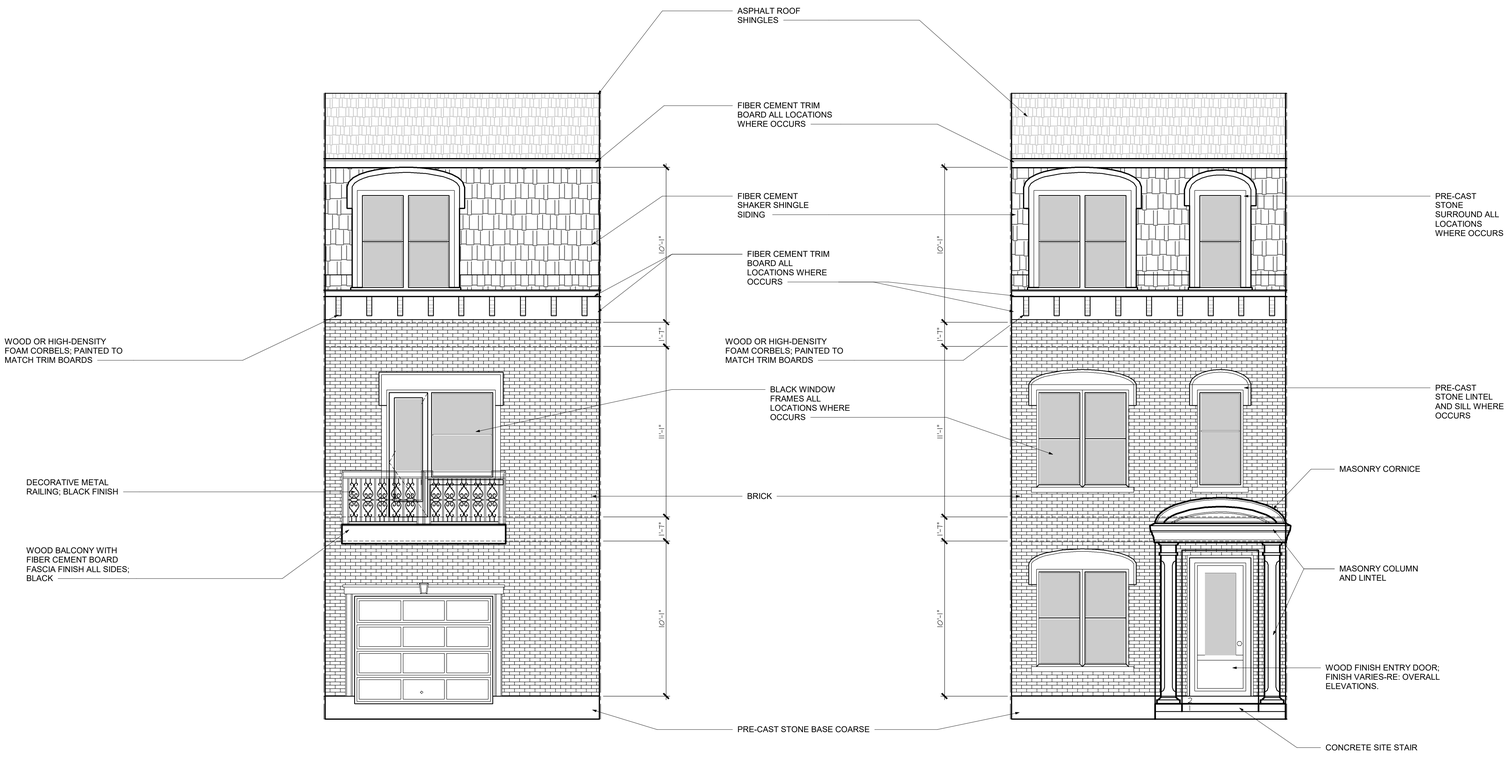
1/4" = 1'-0"
A04
UNIT B - FLOOR PLAN
11/05/2021

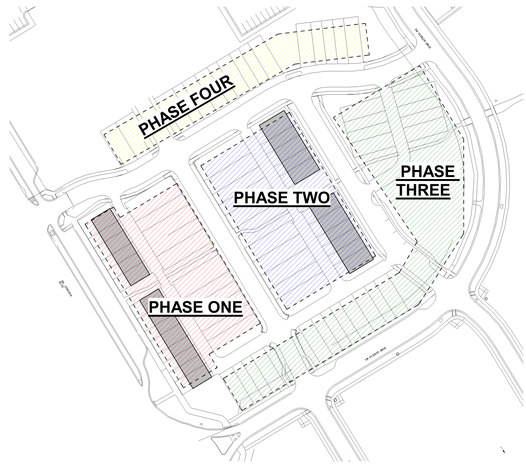


REAR ELEVATION

FRONT ELEVATION

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

PW+A



KEY PLAN

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As indicated

A05

UNIT B - ELEVATIONS

11/05/2021

NOTE: REFER TO A03 AND A05 FOR MATERIAL NOTES FOR ALL UNITS

NOTE: 'R' OR 'L' REFERS TO THE ORIENTATION OF THE TYPICAL UNIT PLAN. DETERMINED IF THE ENTRY DOOR IS LOCATED ON THE "RIGHT" OR "LEFT".

BUILDING A-R BUILDING B-L BUILDING A-L BUILDING B-L BUILDING B-L BUILDING B-L BUILDING A-L

BUILDING 1 - FRONT ELEVATION

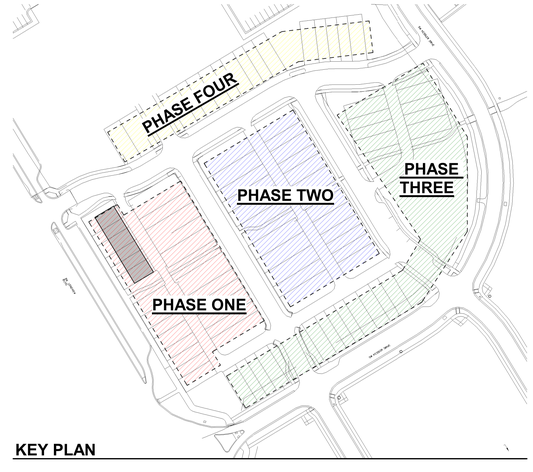
NOTE: REFER TO A03 AND A05 FOR MATERIAL NOTES FOR ALL UNITS

BUILDING A-R BUILDING B-L BUILDING A-L BUILDING B-L BUILDING B-L BUILDING B-L BUILDING A-L

BUILDING 1 - REAR ELEVATION

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 3/16" = 1'-0"



KEY PLAN

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A06

A + B - BLOCK 1 ELEV.

11/05/2021

NOTE: REFER TO A03 AND A05 FOR MATERIAL NOTES FOR ALL UNITS

BUILDING A-R | BUILDING A-R | BUILDING B-R | BUILDING A-R | BUILDING B-L | BUILDING B-L | BUILDING A-L

NOTE: 'R' OR 'L' REFERS TO THE ORIENTATION OF THE TYPICAL UNIT PLAN. DETERMINED IF THE ENTRY DOOR IS LOCATED ON THE "RIGHT" OR "LEFT".

BUILDING 2 - FRONT ELEVATION

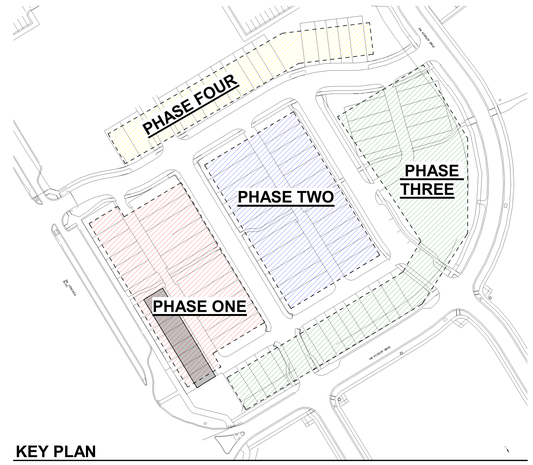
NOTE: REFER TO A03 AND A05 FOR MATERIAL NOTES FOR ALL UNITS

BUILDING A-R | BUILDING A-R | BUILDING B-R | BUILDING A-R | BUILDING B-L | BUILDING B-L | BUILDING A-L

BUILDING 2 - REAR ELEVATION

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 3/16" = 1'-0"



KEY PLAN

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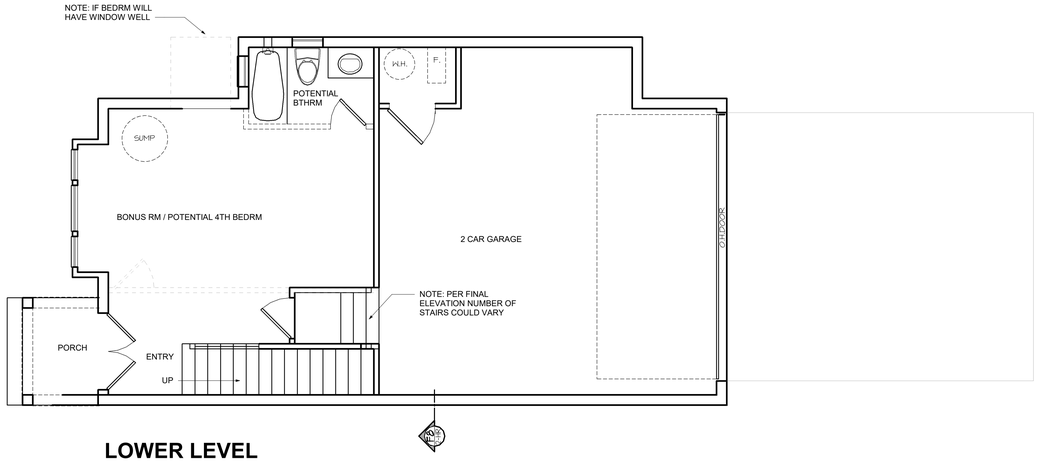
As indicated

A07

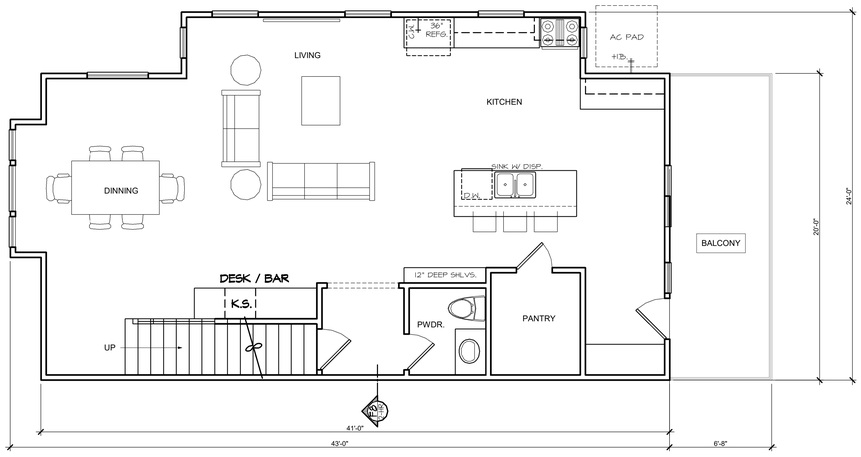
A + B - BLOCK 2 ELEV.

11/05/2021



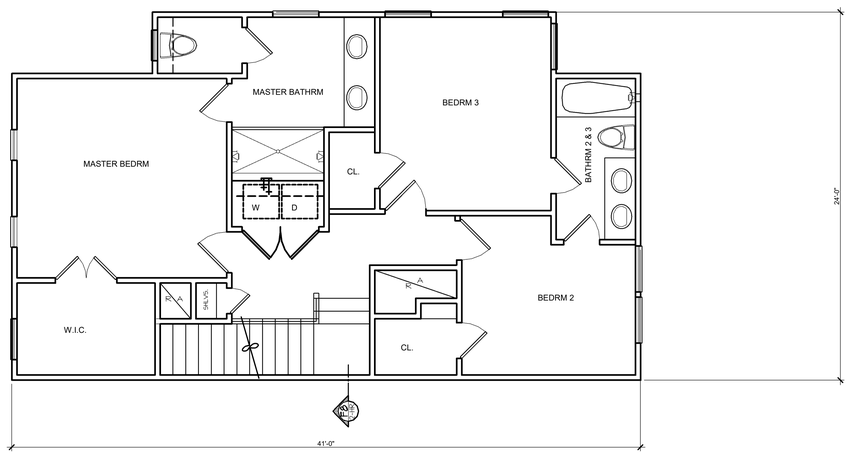
LOWER LEVEL

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



FIRST FLOOR

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



SECOND FLOOR

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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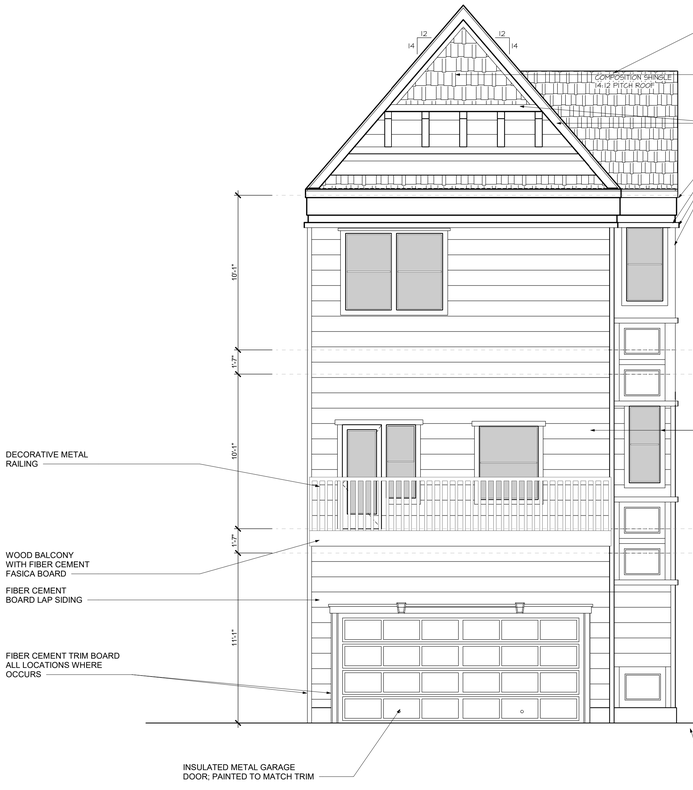
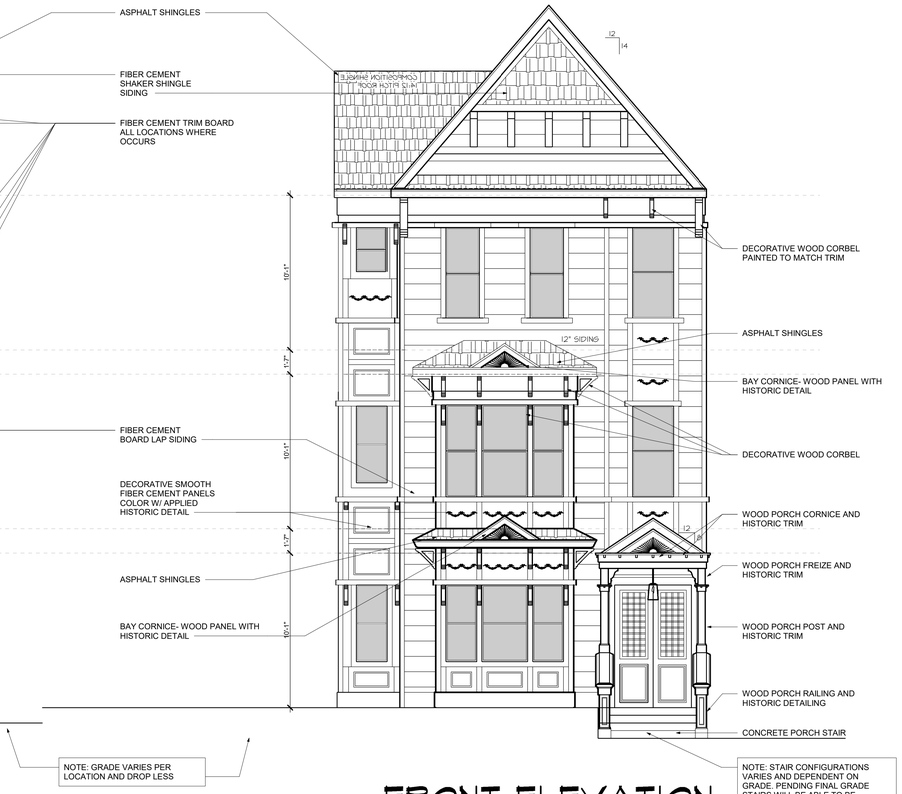
1/4" = 1'-0"
A08
UNIT C - FLOOR PLAN
11/05/2021

LEFT ELEVATION

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.



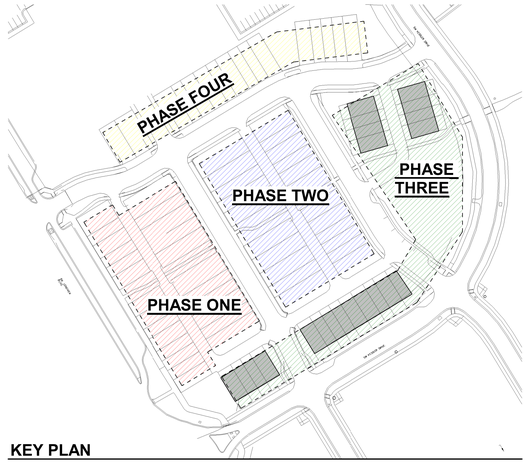
REAR ELEVATION



FRONT ELEVATION

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"



KEY PLAN

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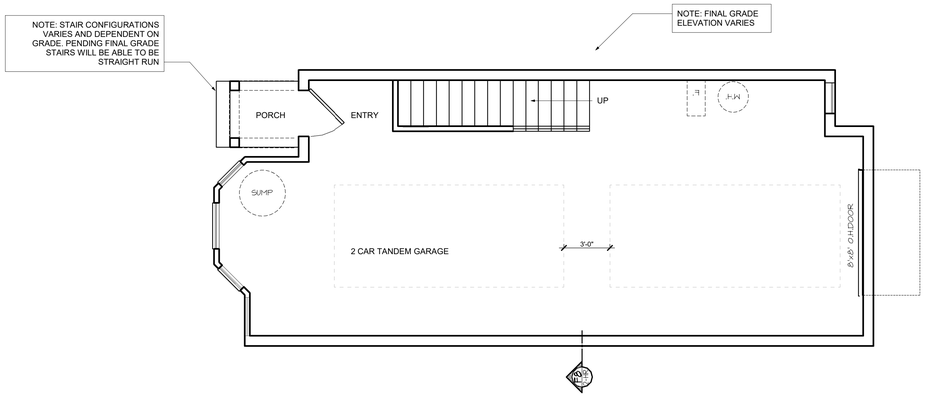
As indicated

A09

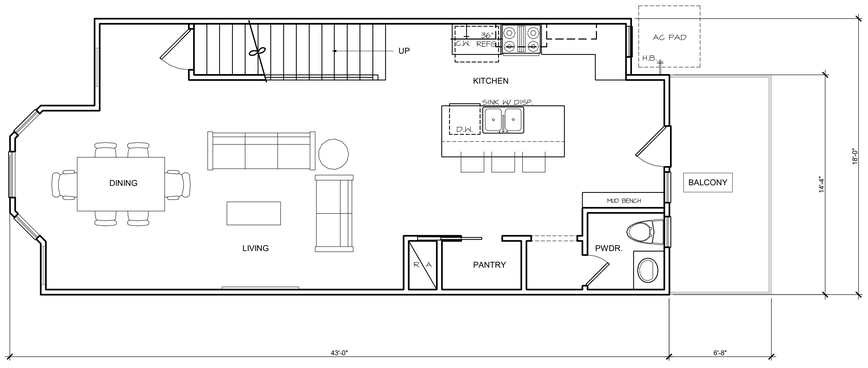
UNIT C - ELEVATIONS

11/05/2021



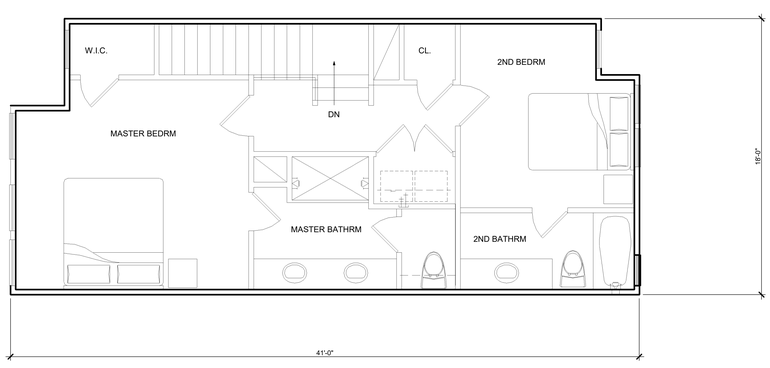
LOWER LEVEL

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



FIRST FLOOR

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



SECOND FLOOR

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.

SUGGESTED FLOOR SYSTEM:

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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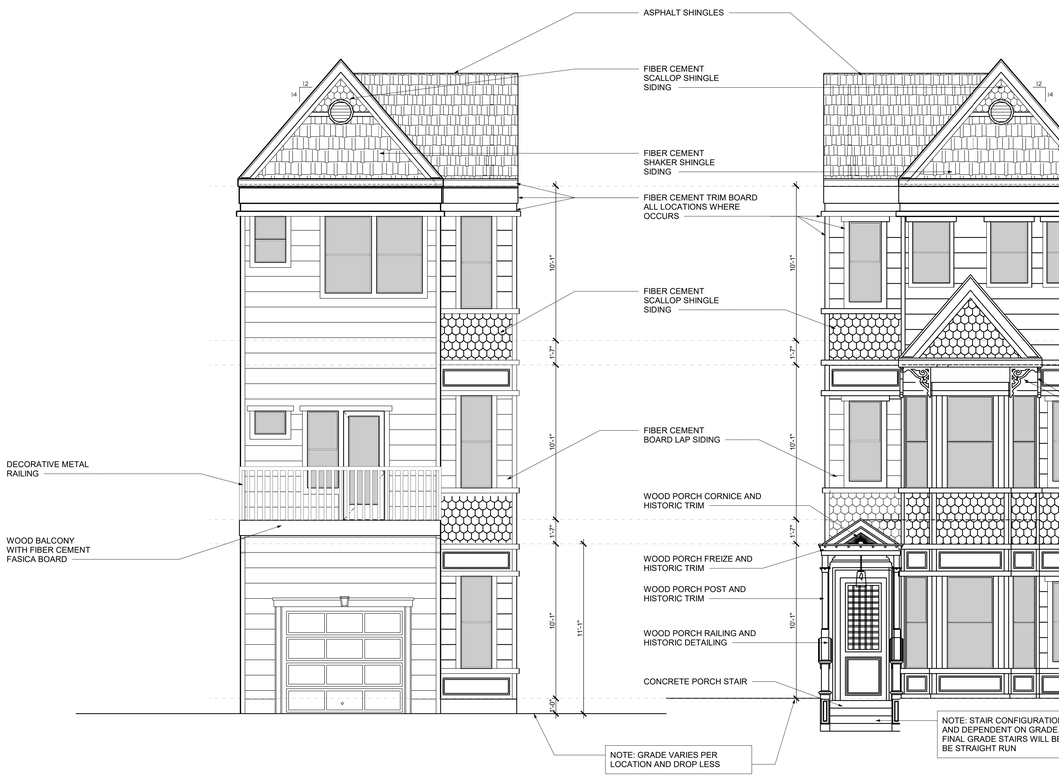
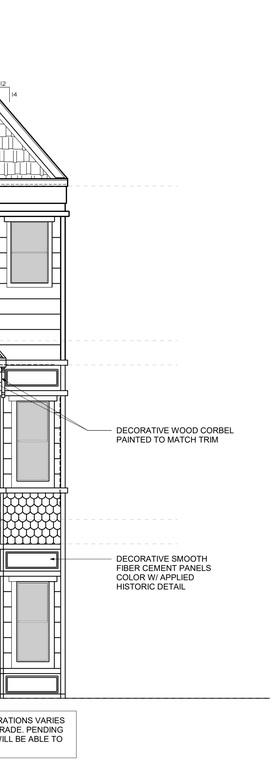
1/4" = 1'-0"

A10

UNIT D - FLOOR PLAN
11/05/2021



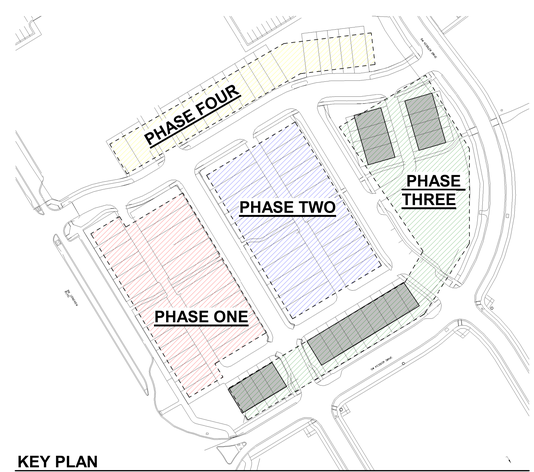
REAR ELEVATION



FRONT ELEVATION

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"



KEY PLAN

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As indicated

A11

UNIT D- ELEVATIONS

11/05/2021

BLOCK 1 - FRONT

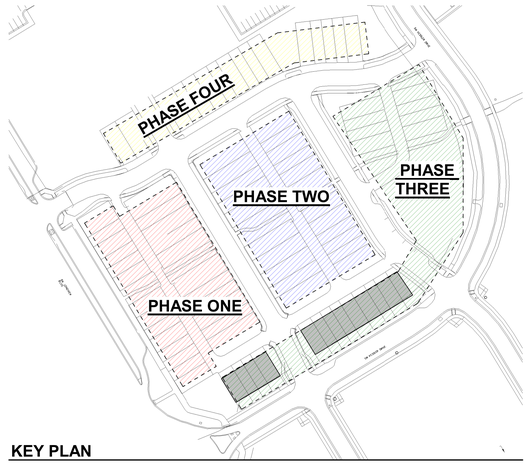
BLOCK 2 - FRONT

BLOCK 1 - REAR

BLOCK 2 - REAR

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/8" = 1'-0"

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.



KEY PLAN

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As Indicated

A12

C + D - BLOCK ELEV.

11/05/2021

BLOCK 3 - FRONT

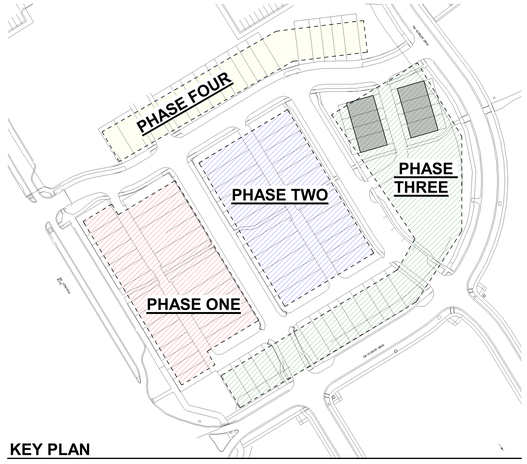
BLOCK 3 - REAR

BLOCK 4 - FRONT

BLOCK 4 - REAR

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/8" = 1'-0"

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.



KEY PLAN

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As Indicated

A13

C + D- BLOCK ELEV.

11/05/2021

NOTE: ALL COLORS ARE TAKEN FROM THE PERGOLA PARK SINGLE FAMILY HOME COLOR SELECTION OPTIONS/STANDARDS. SEE ADDITIONAL PDF.

ALL COLOR SCHEMES

Simply White
2143-70
SW-7021
TRIM COLOR

Simply White
2143-70
SW-7021
ACCENT CORBELS

Simply White
2143-70
SW-7021
PORCH HANDRAILS/ ACCENTS

COLOR SCHEME 1

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Gallery Green
SW 0015
MAIN FIELD COLOR

Curio Gray
SW-0024
SHAKER SHINGLE COLOR

Clary Sage
SW-6178
ACCENT TRIM COLOR

Red Barn
SW-7591
FRONT DOOR COLOR

COLOR SCHEME 2

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Downing Sand
SW-2822
MAIN FIELD COLOR

Rookwood Amber
SW-2817
FIBER CEMENT SHAKER SHINGLE COLOR

Rookwood Blue
SW-6186
FIBER CEMENT SCALLOP SHINGLE COLOR

Downing Straw
SW-2813
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

Bunglehouse Blue
SW-0048
FRONT DOOR COLOR

COLOR SCHEME 3

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Burnished Brandy
SW-7523
MAIN FIELD COLOR

Mount Etna
SW-7625
FIBER CEMENT SHAKER SHINGLE COLOR

Curio Gray
SW-0024
ACCENT TRIM COLOR

Black Swan
SW-6279
FRONT DOOR COLOR

COLOR SCHEME 4

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Tradewind
SW-6218
MAIN FIELD COLOR

Bunglehouse Blue
SW-0048
FIBER CEMENT SHAKER SHINGLE COLOR

Oceanside
SW-6496
ACCENT LAP FIBER CEMENT PANELING COLOR

Blue Horizon
SW-6497
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

Limon Fresco
SW-9030
FRONT DOOR COLOR

COLOR SCHEME 5

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Roycroft Pewter
SW-2848
MAIN FIELD COLOR

Sommelier
SW-7595
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

Wool Skein
SW-6148
FRONT DOOR COLOR

COLOR SCHEME 6

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Red Barn
SW-7591
MAIN FIELD COLOR

Black Fox
SW-7020
FIBER CEMENT SHAKER SHINGLE COLOR

Downing Straw
SW-2813
ACCENT TRIM COLOR

Bunglehouse Blue
SW-0048
FRONT DOOR COLOR

COLOR SCHEME 7

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Raging Sea
SW-6474
MAIN FIELD COLOR

Moscow Midnight
SW-9142
ACCENT LAP FIBER CEMENT PANELING COLOR

Tinsmith
SW-7657
FRONT DOOR COLOR

COLOR SCHEME 8

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Mount Etna
SW-7625
MAIN FIELD COLOR

Curio Gray
SW-0024
FIBER CEMENT SHAKER SHINGLE COLOR

Dark Night
SW-6237
FIBER CEMENT SCALLOP SHINGLE COLOR

Snowfall
SW-6000
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

Deep Sea Dive
SW-7618
FRONT DOOR COLOR

COLOR SCHEME 9

NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Tradewind
SW-6218
MAIN FIELD COLOR

Ebbtide
SW-6493
FIBER CEMENT SHAKER SHINGLE COLOR

Powder Blue
SW-2863
ACCENT LAP FIBER CEMENT PANELING COLOR

Calico
SW-0017
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

Wool Skein
SW-6148
FRONT DOOR COLOR

COLOR SCHEME 10

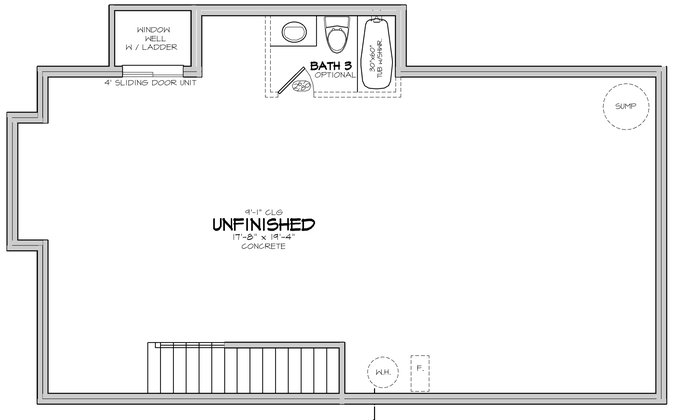
NOTE: ALL TRIM, CORBEL, PORCH SIMPLY WHITE

Pearl Gray
SW-0052
MAIN FIELD COLOR

Dark Night
SW-6237
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

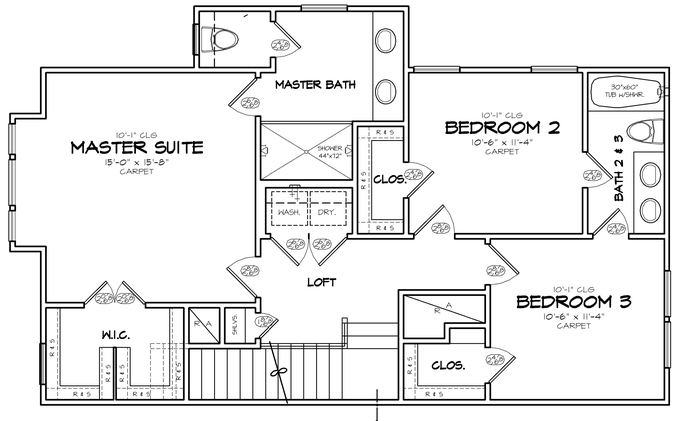
Chinese Red
SW-0057
FRONT DOOR COLOR

Unit Types E + F Color Schemes - PHASE ONE



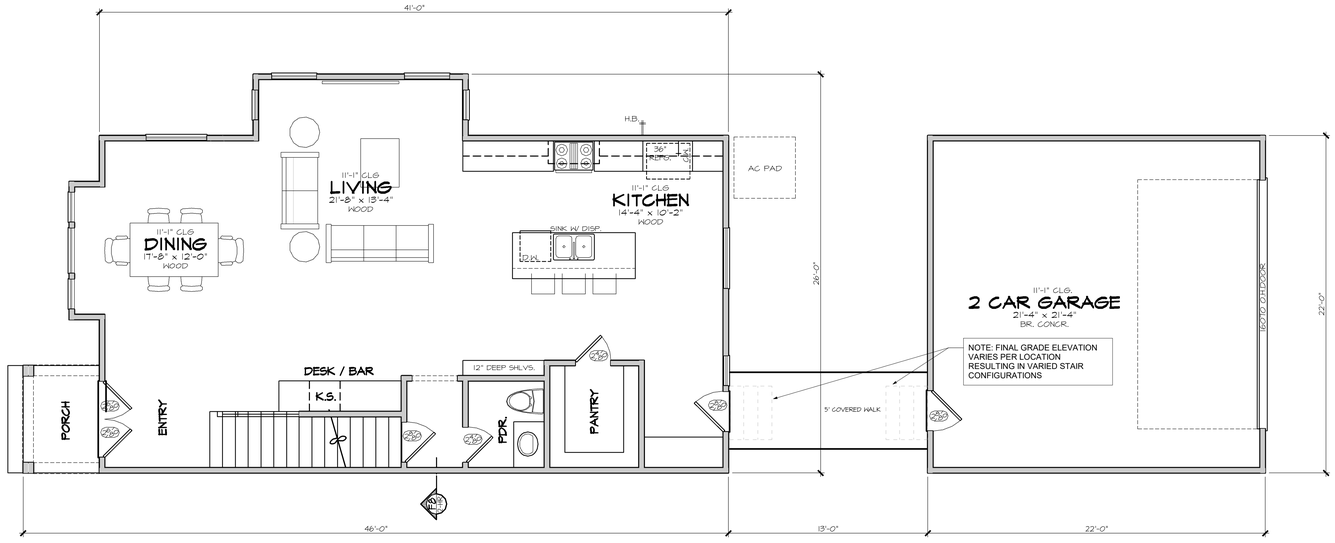
BASEMENT

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



SECOND FLOOR PLAN

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.
SUGGESTED FLOOR SYSTEM:



FIRST FLOOR PLAN

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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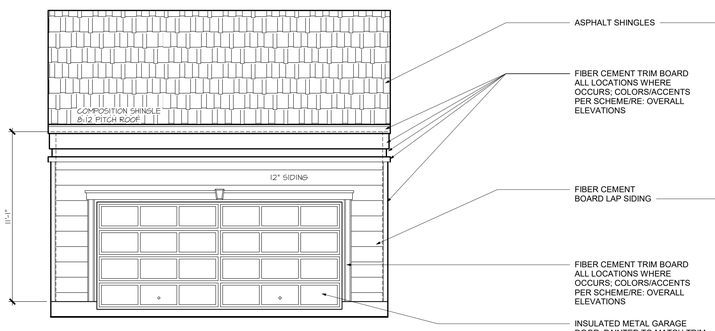
1/4" = 1'-0"

A15

UNIT E - FLOOR PLAN

11/05/2021



ASPHALT SHINGLES

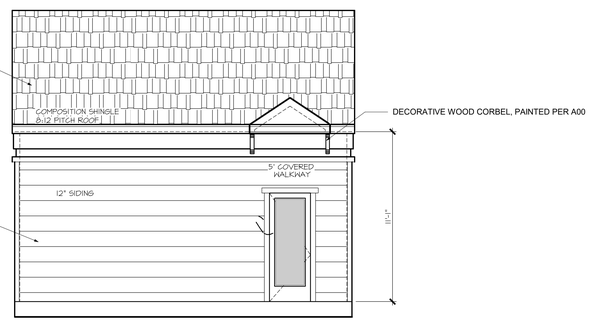
FIBER CEMENT TRIM BOARD ALL LOCATIONS WHERE OCCURS; COLORS/ACCENTS PER SCHEME/RE: OVERALL ELEVATIONS

FIBER CEMENT BOARD LAP SIDING

FIBER CEMENT TRIM BOARD ALL LOCATIONS WHERE OCCURS; COLORS/ACCENTS PER SCHEME/RE: OVERALL ELEVATIONS

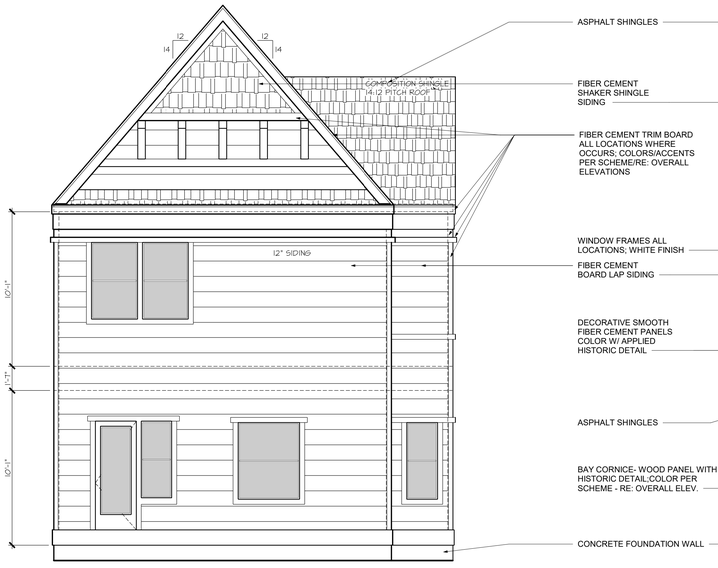
INSULATED METAL GARAGE DOOR; PAINTED TO MATCH TRIM

REAR GARAGE ELEVATION



DECORATIVE WOOD CORBEL, PAINTED PER A00

FRONT GARAGE ELEVATION



ASPHALT SHINGLES

FIBER CEMENT SHAKER SHINGLE SIDING

FIBER CEMENT TRIM BOARD ALL LOCATIONS WHERE OCCURS; COLORS/ACCENTS PER SCHEME/RE: OVERALL ELEVATIONS

WINDOW FRAMES ALL LOCATIONS; WHITE FINISH

FIBER CEMENT BOARD LAP SIDING

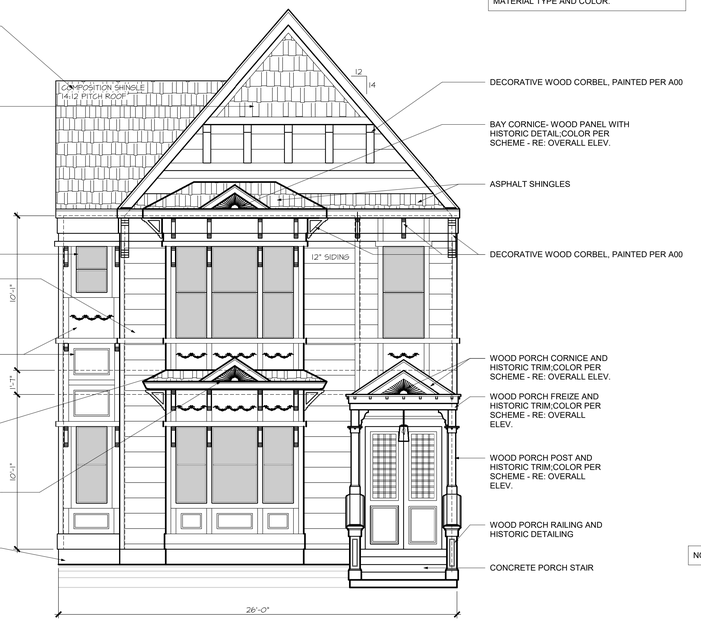
DECORATIVE SMOOTH FIBER CEMENT PANELS COLOR W/ APPLIED HISTORIC DETAIL

ASPHALT SHINGLES

BAY CORNICE- WOOD PANEL WITH HISTORIC DETAIL;COLOR PER SCHEME - RE: OVERALL ELEV.

CONCRETE FOUNDATION WALL

REAR ELEVATION



NOTE: SOME ACCENT DETAILS VARY PER UNIT. RE: OVERALL ELEVATIONS FOR LOCATIONS AND TYPES. RE: A00 FOR MATERIAL TYPE AND COLOR.

DECORATIVE WOOD CORBEL, PAINTED PER A00

BAY CORNICE- WOOD PANEL WITH HISTORIC DETAIL;COLOR PER SCHEME - RE: OVERALL ELEV.

ASPHALT SHINGLES

DECORATIVE WOOD CORBEL, PAINTED PER A00

WOOD PORCH CORNICE AND HISTORIC TRIM;COLOR PER SCHEME - RE: OVERALL ELEV.

WOOD PORCH FREIZE AND HISTORIC TRIM;COLOR PER SCHEME - RE: OVERALL ELEV.

WOOD PORCH POST AND HISTORIC TRIM;COLOR PER SCHEME - RE: OVERALL ELEV.

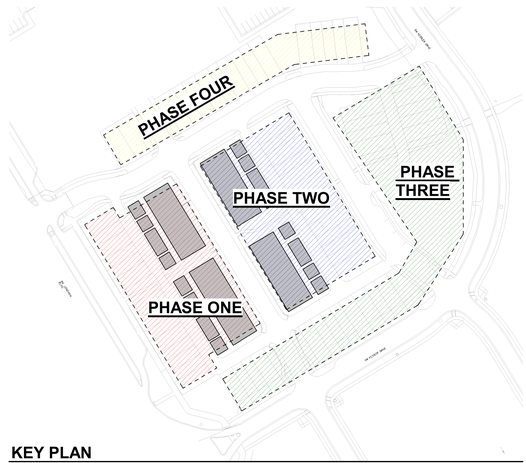
WOOD PORCH RAILING AND HISTORIC DETAILING

CONCRETE PORCH STAIR

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

FRONT ELEVATION

PW+A



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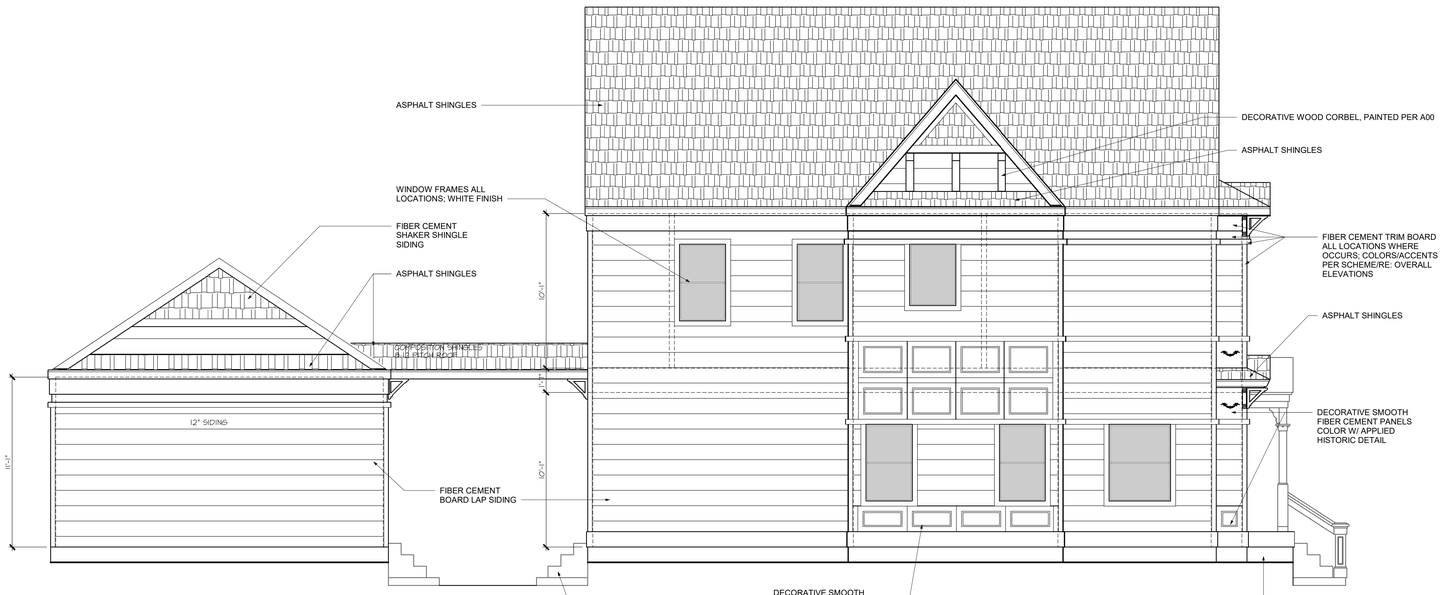
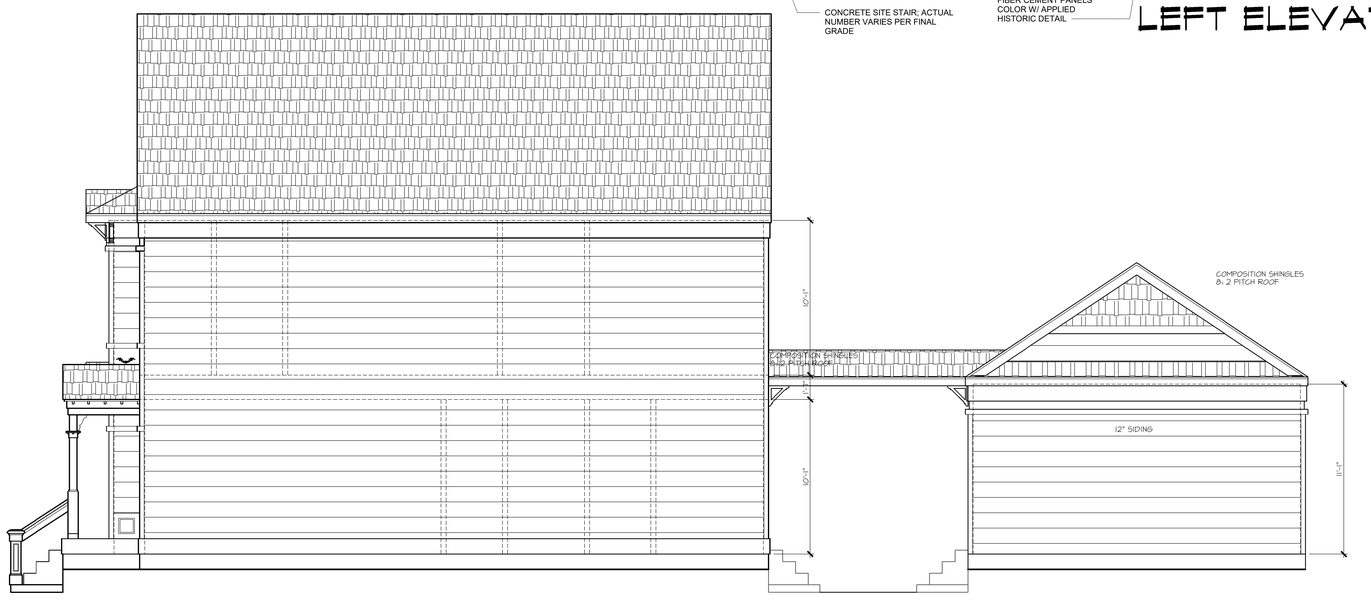
A16

UNIT E - ELEVATIONS

11/05/2021



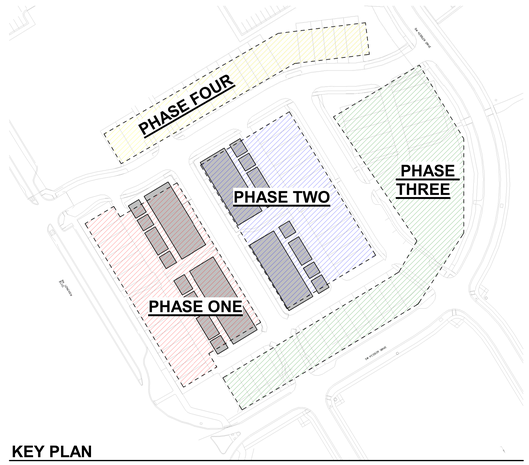
LEFT ELEVATION



NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

NOTE: COLORS TO MATCH FRONTS OF BUILDINGS PER LOCATION. RE: A19 +A20

PW+A



KEY PLAN

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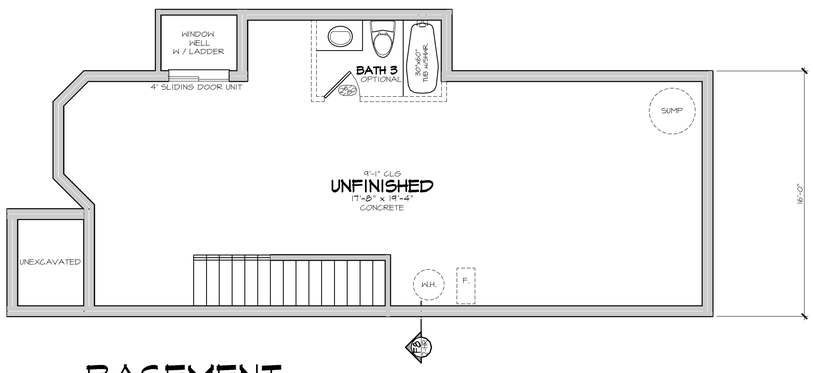
As indicated

A17

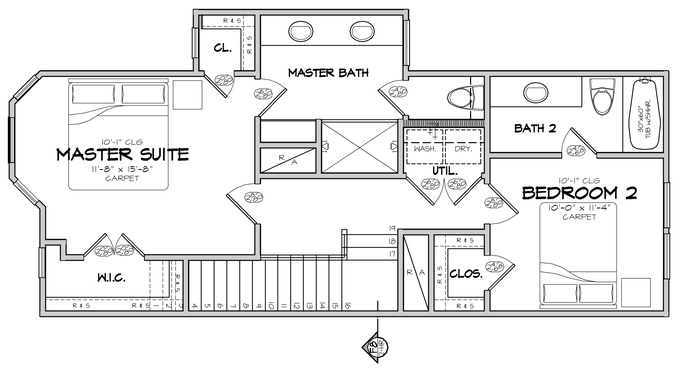
UNIT E - ELEVATION SIDE

11/05/2021



BASEMENT

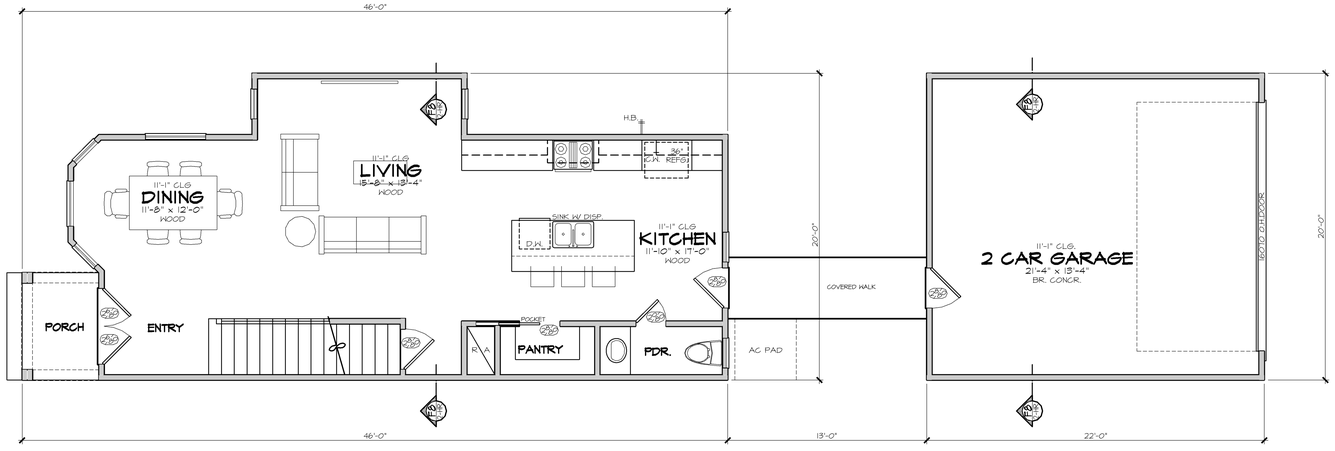
10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL, U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O



SECOND FLOOR PLAN

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL, U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.

SUGGESTED FLOOR SYSTEM:



FIRST FLOOR PLAN

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL, U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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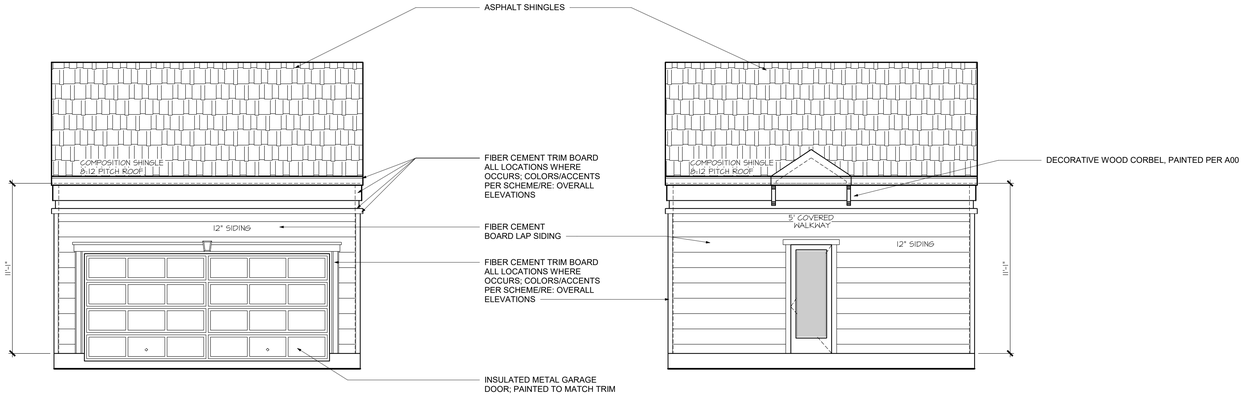
1/4" = 1'-0"

A18

UNIT F - FLOOR PLAN
11/05/2021

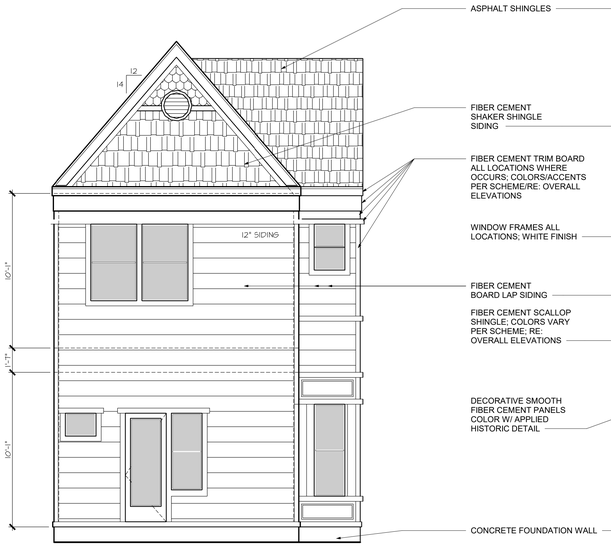


REAR GARAGE ELEVATION

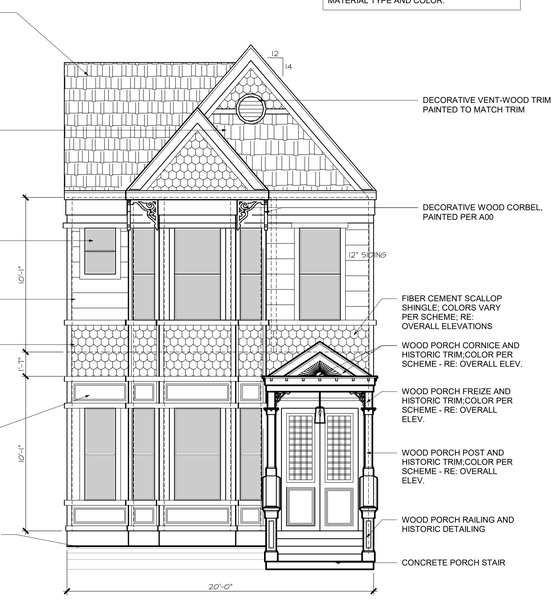
FRONT GARAGE ELEVATION

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

NOTE: SOME ACCENT DETAILS VARY PER UNIT. RE: OVERALL ELEVATIONS FOR LOCATIONS AND TYPES. RE: A00 FOR MATERIAL TYPE AND COLOR.

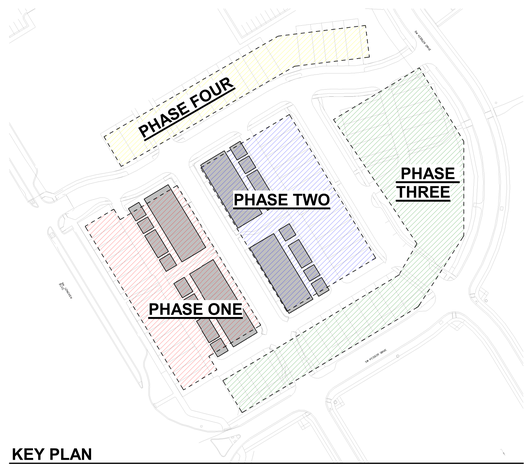


REAR ELEVATION



FRONT ELEVATION

PW+A



KEY PLAN

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A19

UNIT F - ELEVATIONS

11/05/2021

RE: A00 - COLOR SCHEME 1

BUILDING E-R

RE: A00 - COLOR SCHEME 2

BUILDING F-R

RE: A00 - COLOR SCHEME 3

BUILDING E-R

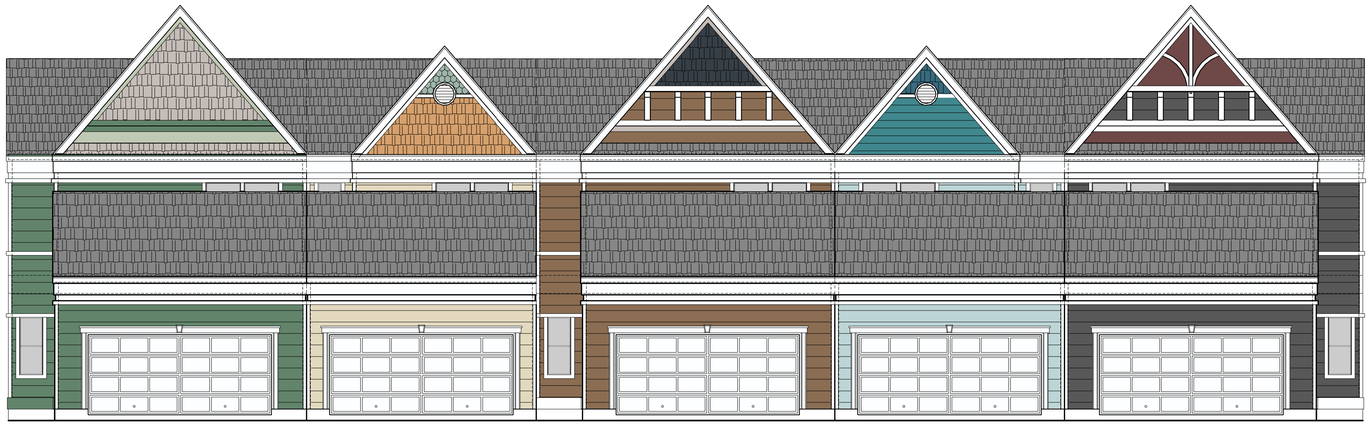
RE: A00 - COLOR SCHEME 4

BUILDING F-L

RE: A00 - COLOR SCHEME 5

BUILDING E-L

BUILDING 3 - FRONT ELEVATION



BUILDING E-R

BUILDING F-R

BUILDING E-R

BUILDING F-L

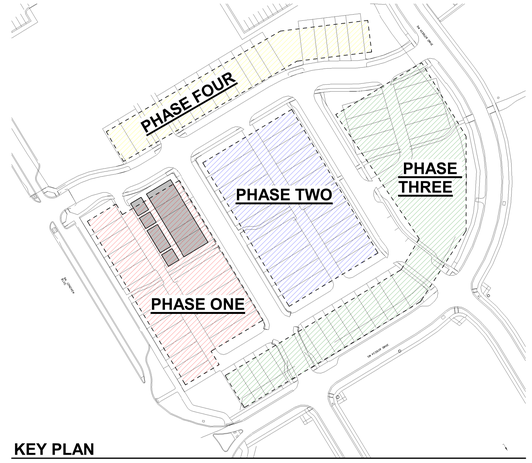
BUILDING E-L

BUILDING 3 - REAR ELEVATION

NOTE: 'R' OR 'L' REFERS TO THE ORIENTATION OF THE TYPICAL UNIT PLAN. DETERMINED IF THE ENTRY DOOR IS LOCATED ON THE "RIGHT" OR "LEFT".

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 3/16" = 1'-0"



KEY PLAN

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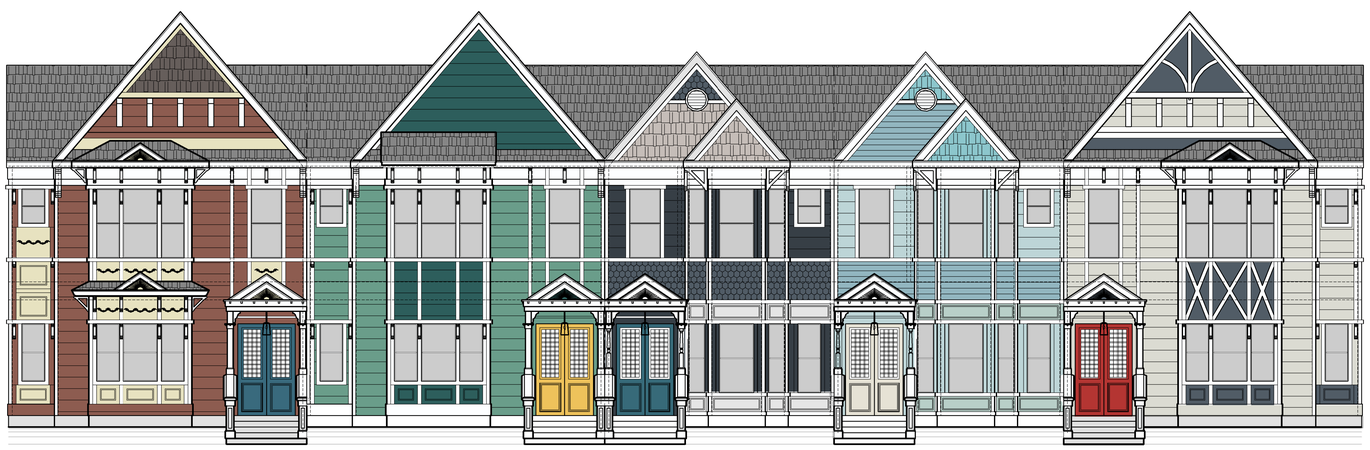
A20

E + F - BLOCK 3 ELEV.

11/05/2021



RE: A00 - COLOR SCHEME 6 | RE: A00 - COLOR SCHEME 7 | RE: A00 - COLOR SCHEME 8 | RE: A00 - COLOR SCHEME 9 | RE: A00 - COLOR SCHEME 10

BUILDING E-R | BUILDING E-R | BUILDING F-L | BUILDING F-L | BUILDING E-L

BUILDING 4 - FRONT ELEVATION

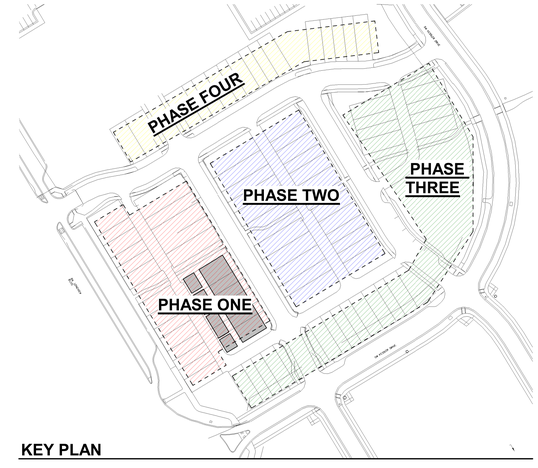
BUILDING E-R | BUILDING E-R | BUILDING F-L | BUILDING F-L | BUILDING E-L

BUILDING 4 - REAR ELEVATION

NOTE: 'R' OR 'L' REFERS TO THE ORIENTATION OF THE TYPICAL UNIT PLAN. DETERMINED IF THE ENTRY DOOR IS LOCATED ON THE "RIGHT" OR "LEFT".

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 3/16" = 1'-0"



KEY PLAN

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A21

E + F - BLOCK 4 ELEV.

11/05/2021

BUILDING E-R BUILDING E-L BUILDING E-L BUILDING E-L

BUILDING 6 - FRONT ELEVATION

BUILDING E-L BUILDING E-L BUILDING E-L BUILDING E-R

BUILDING 6 - REAR ELEVATION

NOTE: UNITS COME IN FUTURE PHASES- NOT PHASE ONE. FINAL COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

BUILDING E-R BUILDING E-R BUILDING F-R BUILDING F-R BUILDING E-L

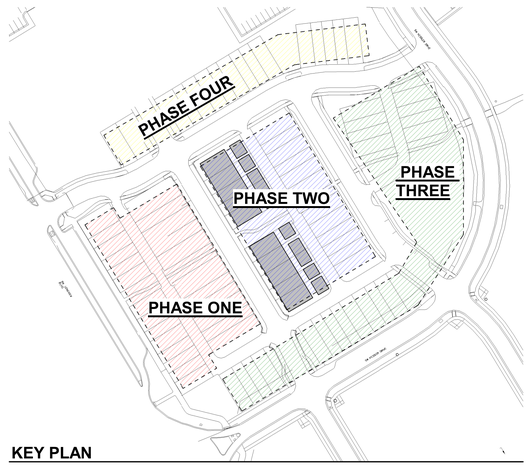
BUILDING 5 - FRONT ELEVATION

BUILDING E-L BUILDING F-R BUILDING F-R BUILDING E-R BUILDING E-R

BUILDING 5 - REAR ELEVATION

PW+A

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/8" = 1'-0"



KEY PLAN

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As indicated

A22

E + F - BLOCKS 5+6 ELEV.

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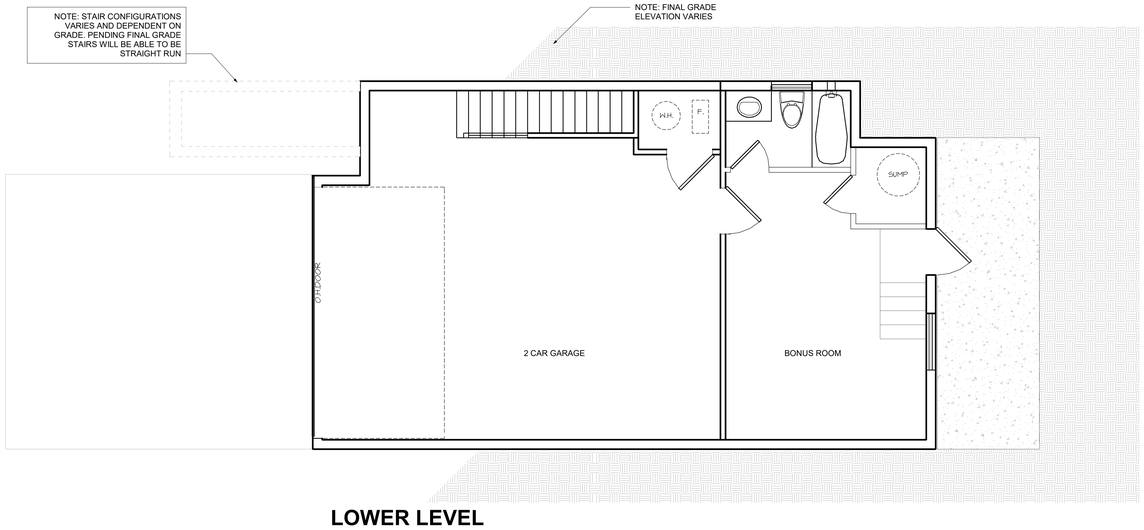
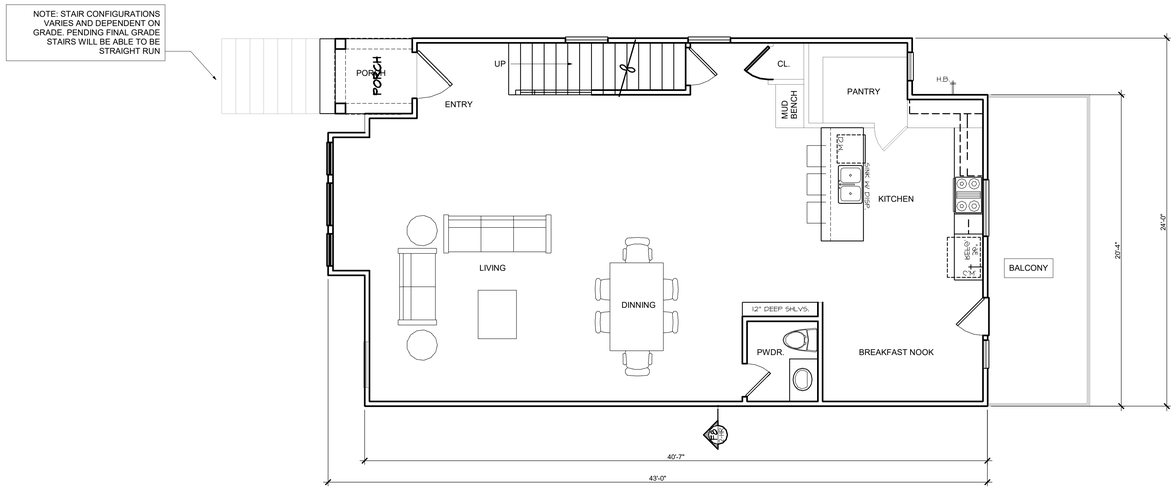


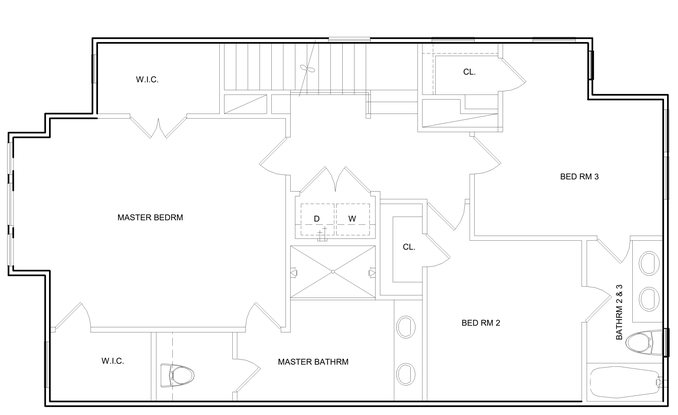
LOWER LEVEL

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING: ? U.N.O.



FIRST FLOOR

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING:



SECOND FLOOR

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)
PRIMARY FLOOR COVERING:
SUGGESTED FLOOR SYSTEM:

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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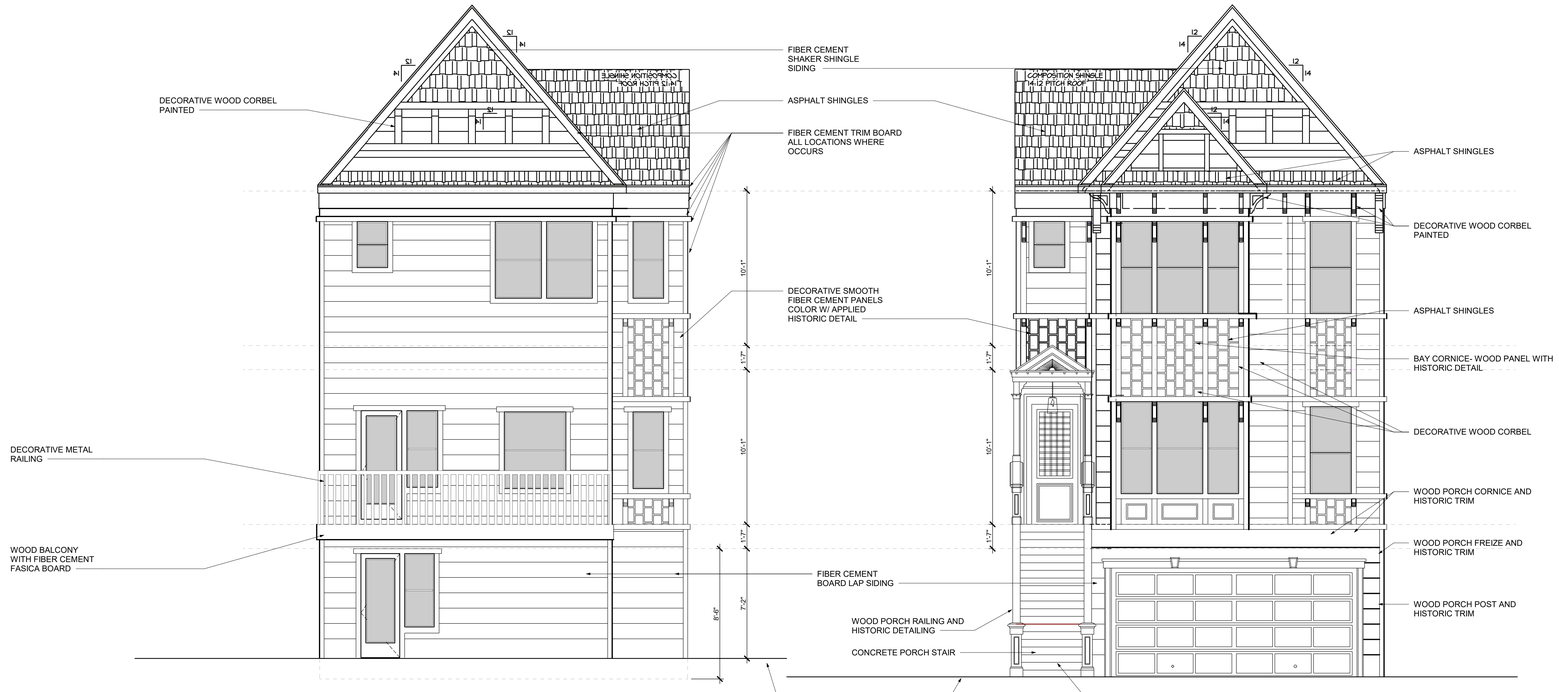
1/4" = 1'-0"

A23

UNIT G - FLOOR PLAN

11/05/2021

LEFT ELEVATION

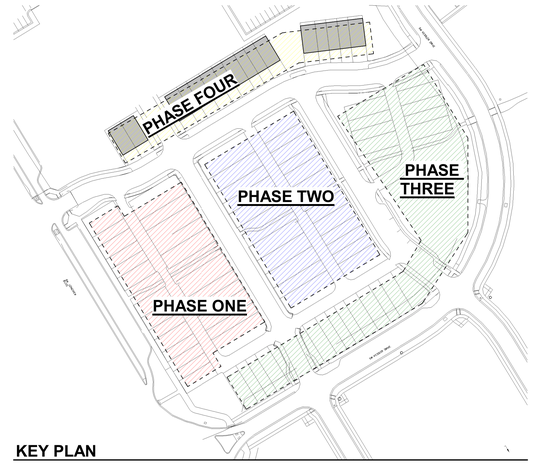


REAR ELEVATION

FRONT ELEVATION

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"



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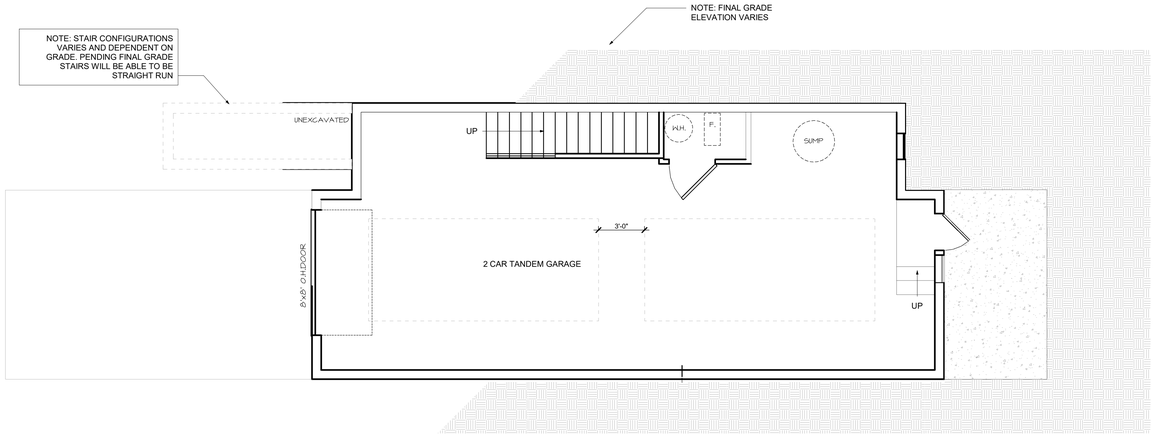
A24

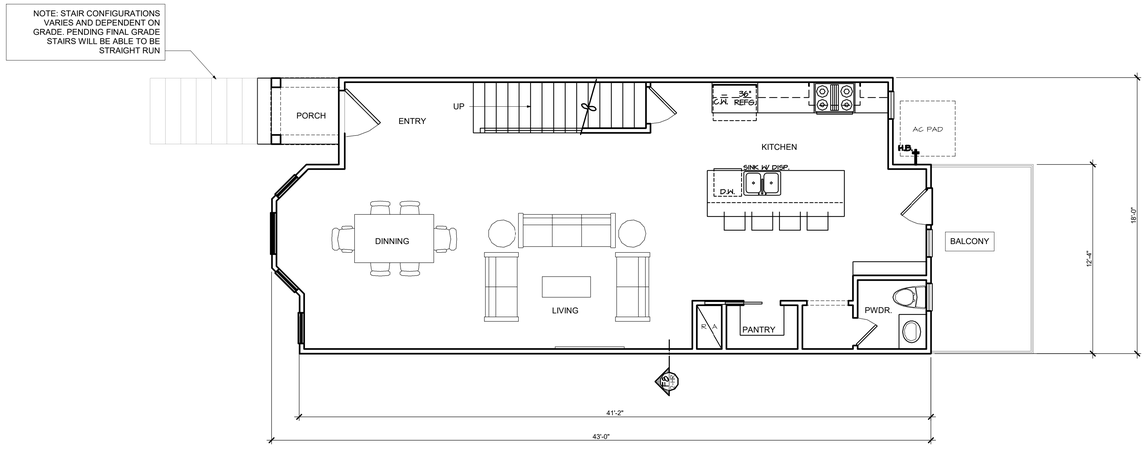
UNIT G - ELEVATIONS

11/05/2021



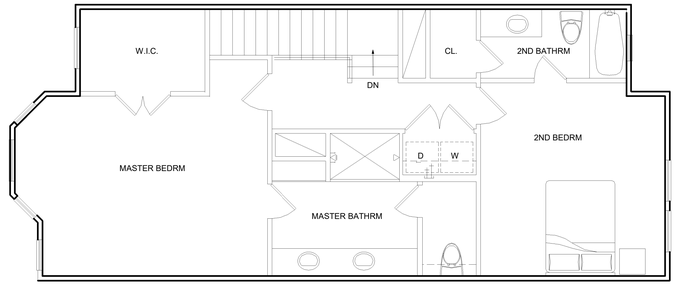
LOWER LEVEL

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)



FIRST FLOOR

10' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)



SECOND FLOOR

9' STUD HT. WITH 2 X 4'S @ 16" O.C. TYPICAL. U.N.O. (UNLESS NOTED OTHERWISE.)

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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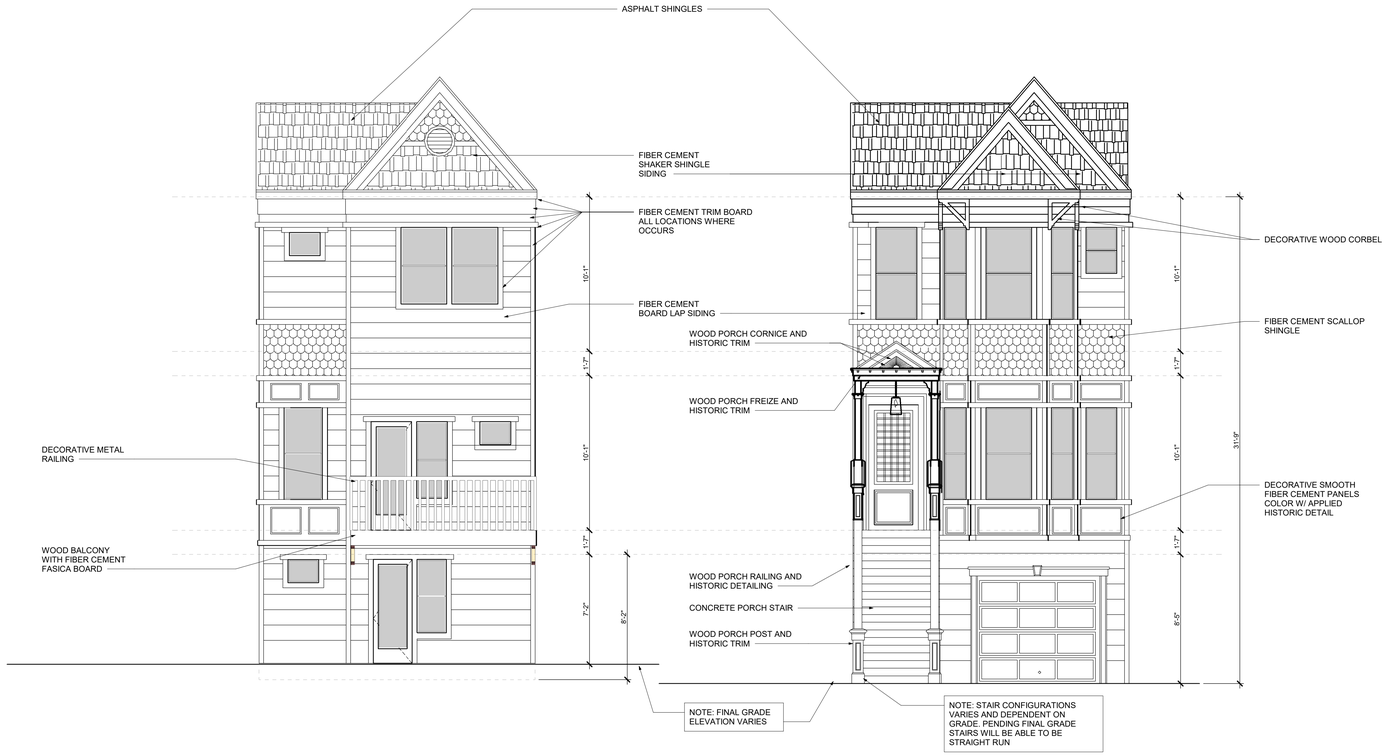
1/4" = 1'-0"

A25

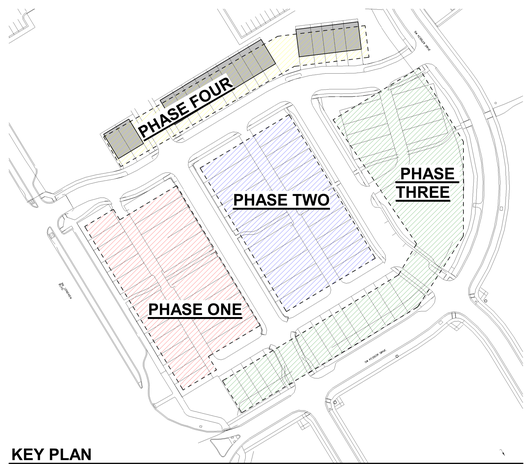
UNIT H - FLOOR PLAN

11/05/2021



REAR ELEVATION

FRONT ELEVATION



KEY PLAN

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/4" = 1'-0"

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A26

UNIT H - ELEVATIONS

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BLOCK 1 - FRONT

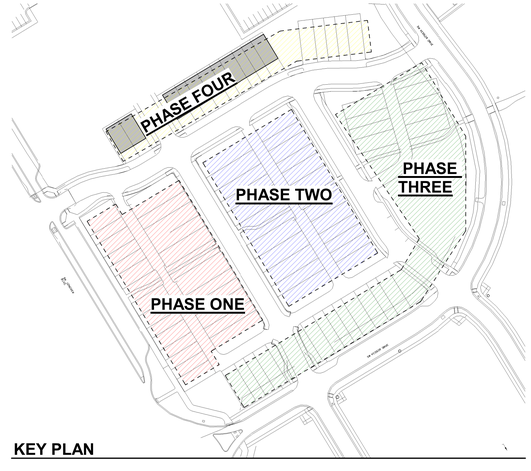
BLOCK 1 - REAR

BLOCK 2 - FRONT

BLOCK 2 - REAR

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE. ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTON OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/8" = 1'-0"



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A27

G+ H - BLOCK ELEV.

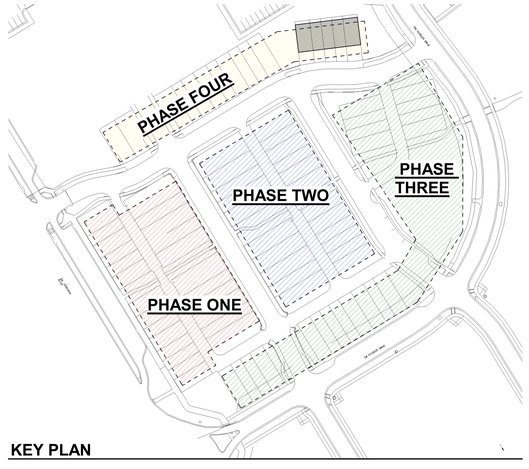
11/05/2021

BLOCK 3 - FRONT

BLOCK 3 - REAR

NOTE: UNIT COMES IN FUTURE PHASES- NOT PHASE ONE, ELEVATIONS ARE DESIGN INTENT TO INDICATE OVERALL ARCHITECTURE AND BUILT ELEMENTS, SUCH AS MATERIALS, WINDOWS, BAYS, ETC. FINAL DETAILING AND COLOR SELECTION OF EACH UNIT TO COME DURING FUTURE PERMITTING PROCESS.

NOTE: ALL DRAWINGS ON SHEET AT SCALE 1/8" = 1'-0"



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A28

G + H - BLOCK ELEV.

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