

GENERAL GRADING NOTES

REFER TO BUILDING PLANS FOR SUBGRADE AND UTILITY TRENCHES WITHIN 5' OF THE BUILDING ENVELOPE.

REMOVE TREES, SHRUBS, GRASS, AND OTHER VEGETATION, IMPROVEMENTS OR OBSTRUCTIONS AS REQUIRED TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE TREES AND OTHER VEGETATION, INCLUDING STUMPS AND ROOTS, COMPLETELY IN AREAS REQUIRED FOR SUBSEQUENT SEEDING. CUT OFF TREES AND STUMPS IN AREAS TO RECEIVE FILL MORE THAN THREE FEET IN DEPTH TO WITHIN EIGHT INCHES OF THE ORIGINAL GROUND SURFACE.

BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND OPERATE WARNING LIGHTS AS RECOMMENDED BY AUTHORITIES HAVING JURISDICTION.

EXCAVATION FOR STRUCTURES:

- CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN WITHIN A TOLERANCE OF 0.1'
- PROVIDE TRUE AND STRAIGHT FOOTING EXCAVATIONS WITH UNIFORM AND LEVEL BOTTOMS OF THE WIDTH INDICATED TO ENSURE PROPER PLACEMENT AND COVER OF ALL REINFORCEMENT.
- REMOVE ALL LOOSE MATERIALS FROM THE EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
- FOOTINGS WHICH SUPPORT CONCRETE MASONRY UNITS MAY BE STEPPED PROVIDED THE VERTICAL STEP DOES NOT EXCEED ONE HALF OF THE HORIZONTAL DISTANCE BETWEEN STEPS AND HORIZONTAL DISTANCE BETWEEN STEPS IS NOT LESS THAN TWO FEET.
- IF ROCK IS ENCOUNTERED IN A FOOTING EXCAVATION, UNDERCUT IT A MINIMUM EXCAVATION WITH CONTROLLED FILL.

CUT SURFACE UNDER PAVEMENTS TO COMPLY WITH CROSS SECTIONS, ELEVATIONS, AND GRADES AS INDICATED.

EXCAVATE TRENCHES TO UNIFORM WIDTH CONFORMING TO VDOT STANDARD PB-1 FOR STORM DRAINAGE PIPING.

PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS. CONVEY WATER WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).

PROTECT EXCAVATED BOTTOMS OF ALL FOOTINGS AND TRENCHES AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THEN 35°F (1°C).

BACKFILLING:

- COMPACT THE BACKFILL AROUND THE OUTSIDE OF EACH BUILDING TO A MINIMUM OF 85% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D 698 STANDARD PROCTOR. DO NOT ALLOW HEAVY COMPACTION EQUIPMENT SUCH AS ROLLERS, ETC., CLOSER TO ANY FOOTING THAN THE HORIZONTAL DISTANCE SUBTENDED BY A 45° ANGLE WITH THE TOP EDGE OF THE FOOTINGS AND THE SURFACE OF THE GROUND.
- BACKFILL BEHIND WALLS AFTER PERMANENT CONSTRUCTION WHICH BRACES THE WALL IS IN PLACE OR TEMPORARY BRACING OF THE WALL IS PROPERLY INSTALLED, AND AFTER ACCEPTANCE OF CONSTRUCTION BELOW FINISH GRADE INCLUDING DAMP-PROOFING, REMOVAL OF CONCRETE FORMWORK, AND REMOVAL OF TRASH AND DEBRIS.

FINISH LAWN AREAS TO WITHIN ONE INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATIONS. SHAPE SURFACE UNDER WALKS AND PAVEMENTS TO LINE, GRADE, AND CROSS SECTION, WITH NOT MORE THAN 1/2" ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION.

GRADE SURFACE UNDER BUILDING SLABS SMOOTH AND EVEN, FREE OF VOIDS. PROVIDE FINAL GRADES WITHIN 1/2" OF THOSE INDICATED WHEN TESTED WITH A 10' STRAIGHT EDGE.

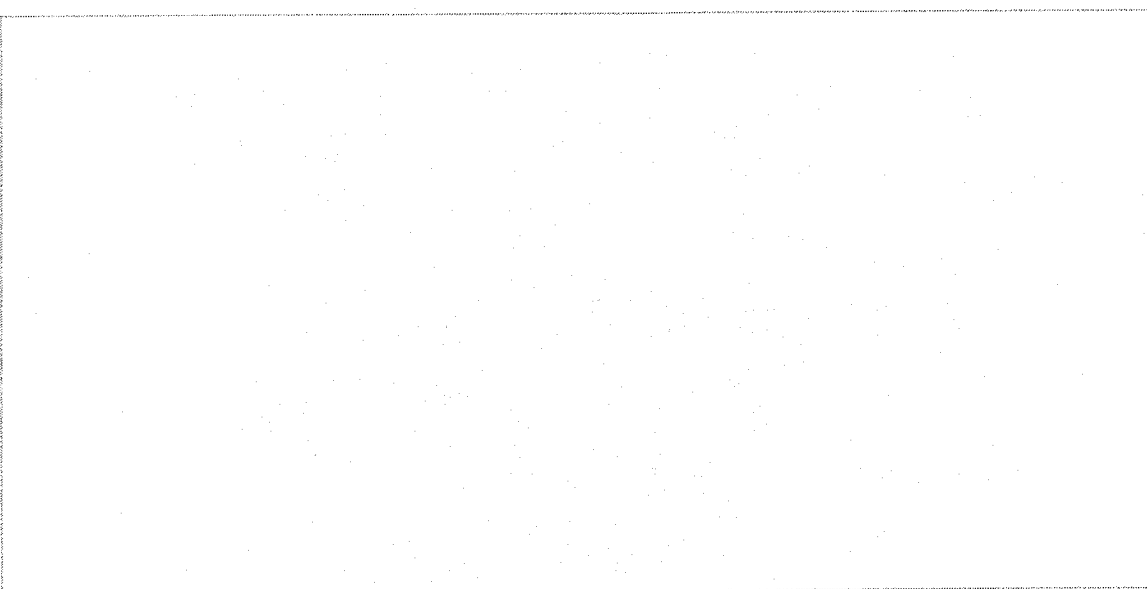
PROTECT GRADED AREAS FROM TRAFFIC AND EROSION. REPAIR AREAS WHICH HAVE SETTLED, ERODED, OR BECOME DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO OWNER.

PLACE ALL FILL AND BACKFILL AS CONTROLLED FILL AS FOLLOWS:

- ESTABLISH SUITABLE SUBGRADE CONDITIONS PRIOR TO PLACING FILL BY PROOFROLLING, UNDERCUTTING AND COMPACTING AS NECESSARY.
- PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" FOR HAND TAMPERS.
- PRIOR TO COMPACTION, PROVIDE MOISTURE CONTENT TO WITHIN 3% OF OPTIMUM BY MOISTENING OR AERATING EACH LAYER. DO NOT PLACE FILL MATERIAL ON SURFACES WHICH ARE MUDDY, FROZEN OR CONTAIN FROST OR ICE.
- COMPACT SOIL TO 95% IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR)

SPREAD TOPSOIL TO A DEPTH OF 4" OVER ALL DISTURBED AREAS NOT RECEIVING WALKS, PAVEMENT, WALLS OR BUILDING, INCLUDING TRENCHES. IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL, DISK THE ENTIRE TOPSOILED AREA AND RAKE FREE OF STONES AND DEBRIS OVER 1/2" IN ANY DIMENSION. PROVIDE A FINISHED SURFACE FREE OF DEPRESSIONS OR HIGH SPOTS. SEED IMMEDIATELY.

OWNER (CONTRACTOR) SHALL UTILIZE REPORT OF SUBSURFACE EXPLORATION AND GEOTECHICAL ENGINEERING EVALUATION PERFORMED BY FROELHUNG & ROERTSON, DATED JANUARY 2019, TO CLARIFY ONSITE CONDITIONS. OWNER (CONTRACTOR) TO NOTIFY LABORATORY PRIOR TO PERFORMING ANY EARTHWORK OPERATIONS ON-SITE.



BOTETOURT COUNTY APPROVAL BLOCK

PROJECT ADAMS

INTERNATIONAL PARKWAY

DALEVILLE, VA 24083

SHEET INDEX

C1	COVER	C9	STORM SEWER PROFILE
C2	EXISTING CONDITIONS & DEMO. PLAN	C10	GENERAL NOTES & SOILS
C3	LAYOUT & UTILITY PLAN	C11	LANDSCAPE PLAN
C4	GRADING PLAN	C12	TRAFFIC CONTROL PLAN
C5	E.S.C. PLAN #1	C13	SITE DETAILS #1
C6	E.S.C. PLAN #2	C14	SITE DETAILS #2
C7	E.S.C. NOTES	C15	WWVA REGIONAL DETAILS
C8	E.S.C. DETAILS	C16	EXTERIOR LIGHTING PLAN

LEGEND

-----348-----	EX. INTRMDT. CONTOUR	-----	PROP. INTRMDT. CONTOUR
-----345-----	EX. INDEX CONTOUR	-----1320-----	PROP. INDEX CONTOUR
+ 35.55	EX. SPOT ELEVATION	35.55	PROP. SPOT ELEVATION
35.05		35.05	
8" WL	EX. WATER LINE	8" WL	PROP. WATER LINE
8" SAN	EX. SANITARY SEWER	8" SAN	PROP. SANITARY SEWER
18" RCP	EX. STORM PIPE		PROP. STORM PIPE
	EX. EDGE OF PAVEMENT		PROP. EDGE OF PAVEMENT
	EX. BUILDING		PROP. BUILDING
	EX. CONCRETE		PROP. CONCRETE
	EX. PAVEMENT		PROP. ASPHALT PAVEMENT (STANDARD/HEAVY DUTY)
	EX. GRAVEL		PROP. GRAVEL
	PAVEMENT REPLACEMENT		PROP. PAVERS
	EX. POWER POLE		PROP. POWER POLE
	EX. SANITARY SEWER MANHOLE		PROP. SANITARY SEWER MANHOLE
	EX. STORM SEWER MANHOLE		SIGN
	CLEANOUT		WATER METER
	EX. LIGHT POLE		PROP. GATE VALVE
	WATER LINE REDUCER		BLOW-OFF VALVE
	EX. TELEPHONE		BENCHMARK
G	EX. GAS LINE	G	PROP. GAS LINE
OHU	EX. OVERHEAD CABLE	OHU	PROP. OVERHEAD CABLE
X	EX. FENCE	P	PROP. UNDERGRND POWER LINE
	EX. TREE LINE	X	PROP. FENCE
	ADJOINING PROPERTY LINE		PROP. TREE LINE
	EXISTING ROAD MONUMENTS		SITE PROPERTY LINE

ABBREVIATIONS

AHFH	ARROW HEAD TOP OF FIRE HYDRANT	EW	ENDWALL	RR	RAILROAD
APPROX	APPROXIMATE	EXIST	EXISTING	RRS	REAR YARD SETBACK
ASPH	ASPHALT	FDN	FOUNDATION	SAN	SANITARY
BC	BOTTOM OF CURB	FF	FINISHED FLOOR	SBL	SOUTH BOUND LANE
BIT	BITUMINOUS	FG	FINISH GRADE	SD	STORM DRAIN
BLDG	BUILDING	GBE	GRADE BREAK ELEVATION	SECT	SECTION
BLK	BLOCK	GBS	GRADE BREAK STATION	SE	SLOPE EASEMENT
BM	BENCHMARK	HOA	HOMEOWNERS ASSOCIATION	SS	SANITARY SEWER
BVCE	BEGIN VERT. CURVE ELEV.	HPT	HIGH POINT	SSD	STOPPING SIGHT DISTANCE
BVCS	BEGIN VERT. CURVE STA.	HSD	HEADLIGHT SIGHT DISTANCE	SSE	SANITARY SEWER EASEMENT
BW	BOTTOM OF WALL	INTX	INTERSECTION	STA	STATION
CB	CINDER BLOCK	INV	INVERT	STD	STANDARD
C&G	CURB & GUTTER	IP	IRON PIN	STO	STORAGE
CMP	CORRUGATED METAL PIPE	LT	LEFT	SYS	SIDE YARD SETBACK
CONC	CONCRETE	LVC	LENGTH OF VERTICAL CURVE	TBM	TEMPORARY BENCHMARK
COR	CORNER	MH	MANHOLE	TBR	TO BE REMOVED
DBL	DOUBLE	MIN	MINIMUM	TC	TOP OF CURB
DEFL	DEFLECTION	MBL	MINIMUM BUILDING LINE	TEL	TELEPHONE
DI	DROP INLET	MON	MONUMENT	TRANS	TRANSFORMER
DIA	DIAMETER	NBL	NORTH BOUND LANE	TW	TOP OF WALL
DE	DRAINAGE EASEMENT	PROP	PROPOSED	TYP	TYPICAL
ELEC	ELECTRIC	PUE	PUBLIC UTILITY EASEMENT	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
ELEV	ELEVATION	PVMT	PAVEMENT	VERT	VERTICAL
ENTR	ENTRANCE	R	RADIUS	WBL	WEST BOUND LANE
EP	EDGE OF PAVEMENT	RT	RIGHT	YD	YARD
EVCE	END VERT. CURVE ELEV.	R.O.W.	RIGHT OF WAY		
EVCS	END VERT. CURVE STA.	REQD	REQUIRED		
		RR	RAILROAD		

SITE INFORMATION

SITE ADDRESS:	60 W. CENTER DRIVE DALEVILLE, VA 24083
OWNER:	PRATT PROPERTIES, LLC 1800-C SARASOTA PARKWAY CONYERS, GA 30013
DEVELOPER:	MILLER-VALENTINE GROUP 9349 WATERSTONE BOULEVARD, SUITE 200 CONCINNATI, OHIO 45249
EXISTING USE:	VACANT SHELL BUILDING
PROPOSED USE:	MANUFACTURING FACILITY
ZONING:	RAM (RESEARCH AND ADVANCED MANUFACTURING)
PARCEL ID:	88-20G
SITE AREA:	19.44 ACRES
DISTURBED AREA:	APPROXIMATELY 16 ACRES
SETBACKS:	FRONT: 40' MINIMUM, NO MAXIMUM SIDE: 20' REAR: 40'
MAXIMUM DENSITY:	MAXIMUM 0.50 FLOOR AREA RATIO MAXIMUM 70% IMPERVIOUS AREA
PROPOSED DENSITY:	±0.19 FLOOR AREA RATIO (±100,000 SF EXISTING / 60,000 SF PROPOSED)
MAXIMUM BUILDING HEIGHT ALLOWED / PROVIDED:	±47% (±9.14 AC) IMPERVIOUS AREA
MINIMUM TREE CANOPY:	60' / 39' FOR BOTH EXISTING AND PROPOSED
PROPOSED TREE CANOPY:	10%
PARKING REQUIREMENTS:	17.1 SPACES PER EMPLOYEE ON LARGEST SHIFT (MAXIMUM 15 EMPLOYEES PER SHIFT) 17 PARKING SPACES REQUIRED
PROPOSED PARKING	89 SPACES INC. (4) HANDICAP SPACES

ENGINEERS NOTES

BALZER AND ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.

ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE DEVELOPER.

BALZER AND ASSOCIATES, INC. WILL NOT BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE PLANS OR WILL NOT BE RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

SOURCE OF TOPOGRAPHIC MAPPING IS FIELD SURVEY BY BALZER & ASSOCIATES, INC DATED 1/23/2019.

GENERAL SITE NOTES:

- G.C. TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- NO CONSTRUCTION/FIELD CHANGES WITHOUT THE APPROVAL OF THE CONSULTING ENGINEERING, VDOT, AND BOTETOURT COUNTY. G.C. SHALL OBTAIN A RIGHT OF WAY PERMIT FROM THE CITY OF ROANOKE PRIOR TO ANY WORK WITHIN THE CITY OF ROANOKE R.O.W.
- ANY PAVEMENT TO REMAIN THAT IS DISTURBED OR DESTROYED DURING THE CONSTRUCTION PROCESS SHALL BE REPAIRED/REPLACED AS NECESSARY TO PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- ELEVATIONS SHOWN AT THE BUILDING, PARKING, AND LOADING DOCK AREAS ARE SHOWN AT SUBGRADE ELEVATION TO ALL FOR FUTURE PAVEMENT AND BUILDING PAD.
- TRANSFORMERS OR SIMILAR ABOVE GROUND EQUIPMENT, DUMPSTERS, RECYCLING EQUIPMENT AND CONTAINERS, COMPACTORS, BAILERS AND OTHER WASTE MANAGEMENT EQUIPMENT AND WASTE CONTAINERS SHALL BE LOCATED ON GRADE AT THE REAR OF THE BUILDING WHENEVER POSSIBLE PER BOTETOURT CENTER AT GREENFIELD PROTECTIVE COVENANTS.
- CUT SLOPES AND FILL SLOPES SHALL HAVE ROUNDED EDGES, AND THE SURFACE SHALL BE VARIED AND MODULATED TO EMULATE THE NATURAL LANDFORMS OR EXISTING TERRAIN, FOR THE PURPOSE OF BLENDING THE SLOPE INTO ITS SURROUNDINGS TO MINIMIZE AN ARTIFICIAL LOOK. TREE PLANTINGS AND OTHER LANDSCAPING SHOULD BE USED TO FURTHER OBSCURE THE VISUAL IMPACT OF SLOPES PER BOTETOURT CENTER AT GREENFIELD PROTECTIVE COVENANTS..
- NO POLE MOUNTED SIGNS SHALL BE PERMITTED, OTHER THAN CUSTOMARY TRAFFIC AND PARKING SIGNAGE PER BOTETOURT CENTER AT GREENFIELD PROTECTIVE COVENANTS.

W.V.W.A. GENERAL NOTES:

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE WESTERN VIRGINIA WATER AUTHORITY (WWVA) AVAILABLE AT WWW.WESTERNVAVATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
- A MINIMUM COVER OF THREE (3) FEET IS REQUIRED ON ALL WWVA WATER AND SEWER LINES.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN IN THEIR EXACT LOCATIONS. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AND SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN THE AREAS OF CONSTRUCTION PRIOR TO STARTING WORK.
- THE LOCATION OF EXISTING UTILITIES ACROSS OR ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO EXTRA COST, LOCATE ALL UNDERGROUND LINES AND STRUCTURES AND POTHOLE AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. ALL DAMAGE INCURRED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- PLAN APPROVAL BY THE WWVA DOES NOT REMOVE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR RELOCATE ANY EXISTING CONFLICTS FOUND DURING CONSTRUCTION.
- ALL PRIVATE UTILITY CONSTRUCTION, I.E. PIPING, VALVES, HYDRANTS, METERS AND BOXES, CLEAN OUTS, SANITARY SEWER MANHOLES, BEDDING, ETC. SHALL COMPLY WITH THE CURRENT VIRGINIA UNIFORM STATEWIDE BUILDING CODE (INCLUDING AMENDMENTS).
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" CLEARANCE VERTICALLY AND TWO (2) FOOT MINIMUM HORIZONTALLY FROM THE OUTSIDE OF PIPE TO OUTSIDE OF PIPE WITH ALL OTHER UNDERGROUND UTILITIES. WHERE THIS CANNOT BE ACHIEVED, ADDITIONAL MEASURES IN ACCORDANCE WITH WWVA STANDARDS SHALL BE ENFORCED.
- UTILITY GRADE ADJUSTMENTS SHALL BE IN ACCORDANCE WITH WWVA STANDARDS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- FIELD CHANGES SHALL BE SUBMITTED BY THE ENGINEER OF RECORD TO THE LOCALITY AND APPROVED BY THE WWVA.

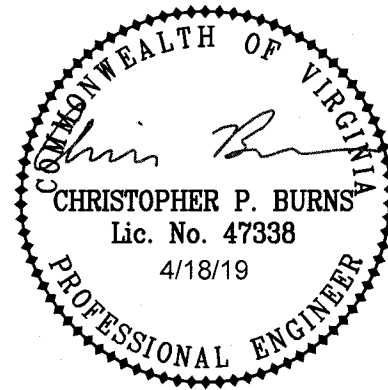


BALZER & ASSOCIATES
PLANNERS / ARCHITECTS
ENGINEERS / SURVEYORS

Roanoke / Richmond
New River Valley / Staunton
Harrisonburg / Lynchburg

www.balzer.cc

1208 Corporate Circle
Roanoke, VA 24018
540.772.9580



PROJECT ADAMS

As-Built

COVER SHEET

DRAWN BY EJP
DESIGNED BY SMH
CHECKED BY CPB
DATE 3/14/2019
SCALE N/A
REVISIONS 4/18/19

Charles Celsus
As-Built
06-14-19

C1
PROJECT NO 04180118.00