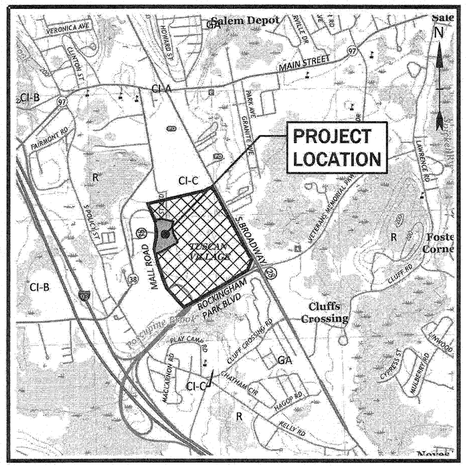
SITE PLAN FOR HANOVER TUSCAN VILLAGE 3 ARTISAN DRIVE SALEM, NH

DRAWING INDEX			
DRAWING DATE	LAST REVISION	DRAWING	DRAWING DESCRIPTION
11/20/2018	06/07/2019	C-0	COVER SHEET
09/26/2018	05/13/2019	2 SHEETS	SUBDIVISION PLAN (PREPARED BY MHF)
09/26/2018	05/13/2019	1 SHEET	TOPOGRAPHIC PLAN (PREPARED BY MHF)
11/20/2018	06/07/2019	N-1	GENERAL NOTES
11/20/2018	06/07/2019	ABB-1	ABBREVIATION AND LEGEND SHEET
11/20/2018	06/07/2019	C-1	OVERALL SITE PLAN
11/20/2018	06/07/2019	C-2	SITE PLAN
11/20/2018	06/07/2019	C-3	GRADING AND DRAINAGE PLAN
01/04/2019	06/07/2019	C-3A	COURTYARD GRADING AND DRAINAGE PLAN
11/20/2018	06/07/2019	C-4	UTILITY PLAN
03/13/2019	06/07/2019	C-4A	SEWER PROFILE
03/13/2019	06/07/2019	C-4B	SEWER PROFILE
11/20/2018	06/07/2019	C-5	EROSION AND SEDIMENT CONTROL PLAN
11/20/2018	06/07/2019	C-6A	FIRE TRUCK TURNING PLAN
11/20/2018	06/07/2019	C-6B	FIRE TRUCK TURNING PLAN
11/29/2018	06/07/2019	C-6C	SU-40 SINGLE UNIT TRUCK TURNING PLAN
11/20/2018	06/07/2019	C-7	EROSION CONTROL DETAILS - I
11/20/2018	06/07/2019	C-8	EROSION CONTROL DETAILS - II
11/20/2018	06/07/2019	C-9	DRAINAGE & UTILITY DETAILS - I
11/20/2018	06/07/2019	C-10	DRAINAGE & UTILITY DETAILS - II
11/20/2018	06/07/2019	C-11	DRAINAGE & UTILITY DETAILS - III
11/20/2018	06/07/2019	C-12	PARKING & TRAFFIC CONTROL DETAILS - I
11/20/2018	06/07/2019	C-13	PARKING & TRAFFIC CONTROL DETAILS - II
11/20/2018	05/23/2019	L1.01	LANDSCAPE SITE PLAN (PREPARED BY GWH)
11/20/2018	06/06/2019	L1.02	COURTYARD LAYOUT PLAN (PREPARED BY GWH)
11/20/2018	03/01/2019	L1.03	COURTYARD DRAINAGE PLAN (PREPARED BY GWH)
11/20/2018	03/01/2019	L3.01	LANDSCAPE LIGHTING PLAN (PREPARED BY GWH)
11/20/2018	03/01/2019	L3.02	PHOTOMETRIC PLAN (PREPARED BY GWH)
11/20/2018	04/24/2019	L4.10	LANDSCAPE DETAILS (PREPARED BY GWH)
11/20/2018	03/01/2019	L4.11	LANDSCAPE DETAILS (PREPARED BY GWH)
11/20/2018	03/01/2019	L4.12	LANDSCAPE DETAILS (PREPARED BY GWH)
11/27/2018	03/01/2019	L4.20	LANDSCAPE DETAILS (PREPARED BY GWH)
11/27/2018	03/01/2019	L4.30	SIGNAGE DETAILS (PREPARED BY GWH)
11/27/2018	03/01/2019	L4.40	LIGHTING DETAILS (PREPARED BY GWH)
11/20/2018	03/01/2019	L4.41	LIGHTING DETAILS II (PREPARED BY GWH)
11/27/2018	05/23/2019	L6.01	LANDSCAPE PLANTING PLAN (PREPARED BY GWH)
11/27/2018	05/23/2019	L6.02	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.03	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.04	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.05	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.06	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.07	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.08	ENLARGED PLANTING PLAN (PREPARED BY GWH)
11/27/2018	03/01/2019	L6.09	ENLARGED PLANTING PLAN (PREPARED BY GWH)



REGIONAL MAP
SCALE: 1"=2,000'

CONSULTANTS:

SURVEY:
MHF DESIGN CONSULTANTS, INC.
103 STILES ROAD
SUITE ONE
SALEM, NH 03079
ATTN: JOEL A. CONNOLLY, LLS
603-893-0720

OFFSITE DRAINAGE/ROADWAY
TIGHE & BOND
177 CORPORATE DRIVE
PORTSMOUTH, NH 03801
ATTN: JOSEPH PERSECHINO, P.E.
603-433-8818

GEOTECH/ENVIRONMENTAL:
WHITESTONE ASSOCIATES, INC
325 TURNPIKE ROAD
SUITE 320
SOUTHBOROUGH, MA 02222
508-485-0255

TRAFFIC:
GPI
61 SPIT BROOK ROAD
SUITE 110
NASHUA, NH 03060
ATTN: HEATHER MONTICUP, P.E.
603-891-2213
603-891-6449(F)

LANDSCAPE ARCHITECT:
GWH LANDSCAPE ARCHITECTS
AN AFFILIATE OF THE HANOVER COMPANY
5847 SAN FELIPE
SUITE 3600
HOUSTON, TX 77057
713-580-1166
ATTN: BRET MONTAGUE

APPLICANT:

HANOVER R.S.
LIMITED PARTNERSHIP
2 SEAPORT LANE
11TH FLOOR
BOSTON, MA 02210
857-400-0682
ATTN: TOM DENNEY

DRAWING INDEX (CONTINUED)			
DRAWING DATE	LAST REVISION	DRAWING	DRAWING DESCRIPTION
11/26/2018	01/30/2019	-	EXTERIOR ELEVATIONS 1 AND 2
11/26/2018	01/30/2019	-	EXTERIOR ELEVATIONS 3 AND 4
11/26/2018	01/30/2019	-	EXTERIOR ELEVATIONS 5 AND 6
11/26/2018	01/30/2019	-	EXTERIOR GARAGE ELEVATION
09/27/2018	01/30/2019	-	MAINTENANCE BUILDING ELEVATION

SALEM PLANNING BOARD

1. ON MARCH 19, 2019, THE SALEM PLANNING BOARD GRANTED THE FOLLOWING CONDITIONAL USE PERMITS:
   - A. 490-501 B & 490-201 USE - RESIDENTIAL USE IS NOT ALLOWED IN THE COMMERCIAL-INDUSTRIAL C DISTRICT
   - B. 490-501 C & 490-202. BUILDING SETBACK - THREE (3) OF THE RESIDENTIAL GARAGES ARE PROPOSED WITHIN 18 FEET OF THE WESTERLY SIDE PROPERTY LINE WHERE A MINIMUM SETBACK OF 20 FEET IS REQUIRED IN THE COMMERCIAL-INDUSTRIAL C DISTRICT AND ONE (1) RESIDENTIAL GARAGE IS PROPOSED 25 FEET FROM THE WESTERLY FRONT PROPERTY LINE (MALL ROAD) WHERE A MINIMUM SETBACK OF 30 FEET IS REQUIRED IN THE COMMERCIAL-INDUSTRIAL C DISTRICT;
   - C. 490-501 C & 490-202. BUILDING HEIGHT - A BUILDING HEIGHT OF 65 FEET, FIVE (5) STORIES IS PROPOSED WHERE A MAXIMUM HEIGHT OF 35 FEET, THREE (3) STORIES IS PERMITTED IN THE COMMERCIAL-INDUSTRIAL C DISTRICT.
   - D. 490-701 C. (d) PARKING SPACE SIZE - A PARKING SPACE SIZE OF 9 FEET BY 18 FEET FOR A PORTION OF THE TOTAL PARKING PROVIDED IS PROPOSED WHERE A MINIMUM PARKING SPACE SIZE OF 9 FEET BY 20 FEET IS REQUIRED. A TOTAL OF 246 SPACES OF THE 451 PROVIDED SPACES (54%) ARE PROPOSED TO BE 9 x 18 WITH THE REMAINING SPACES (46%) AT THE REQUIRED 9 x 20 SPACE SIZE.
   - E. 490-701 E. - NUMBER OF PARKING SPACES - A TOTAL OF 451 PARKING SPACES, 1.61 SPACES PER UNIT, IS PROPOSED WHERE A MINIMUM OF 562 SPACES, 2 SPACES PER UNIT IS REQUIRED.
   - F. 490-702 D (2)(a)4 - SIGN SETBACK - A CORNER OF THE PROPOSED FREESTANDING SIGN HAS A SETBACK FROM THE PROPERTY LINE OF 16 FEET WHERE 20 FEET IS REQUIRED FOR A SIGN WITH 50% OR LESS THAN THE MAXIMUM SIZE ALLOWED.
2. ON MARCH 19, 2019, THE PLANNING BOARD VOTED TO APPROVE THIS SITE PLAN SUBJECT TO THE FOLLOWING CONDITIONS:

   PRIOR TO BUILDING PERMIT:
   1. PAY FOR OUTSIDE INSPECTIONS PER DIRECTION OF THE ENGINEERING DEPT.;
   2. SUBMIT STATE PERMITS (SEWER EXTENSION, AOT) AND APPROVAL FROM NHDOT;
   3. SUBMIT APPROVAL FROM DESIGN REVIEW CONSULTANT;
   4. NOTE CONDITIONAL USE PERMITS ON PLAN;
   5. SUBMIT APPROVAL FROM ENGINEERING DIVISION;
   6. SUBMIT DEVELOPMENT AGREEMENT/MEMORANDUM OF UNDERSTANDING WITH APPROVAL FROM TOWN MANAGER AND BOARD OF SELECTMEN PRIOR TO ANY CONSTRUCTION;
   7. SUBMIT LANDSCAPING PLAN FOR MALL ROAD TO BE APPROVED BY DESIGN REVIEW CONSULTANT;
   8. RECORD SUBDIVISION PLAN

   PRIOR TO OCCUPANCY:
   9. PAY IMPACT FEES - $5,617 PER UNIT ($1,578,377 TOTAL);
   10. CONSTRUCT ALL SITE IMPROVEMENTS (INCLUDING BUILDING LOCATION, DIMENSIONS AND SETBACKS, SITE GRADING, UTILITIES, ROAD WORK, DRAINAGE, LANDSCAPING, LIGHTING, PARKING SPACES, SIGNAGE) IN ACCORDANCE WITH APPROVED PLAN;
   11. PROVIDE CERTIFIED AS-BUILT SITE PLAN
   12. PHASE CONSTRUCTION OF PARKING SPACES SO THAT NO LESS THAN 1.6 SPACES ARE AVAILABLE PER UNIT TO BE OCCUPIED;
   13. COMPLETE ROAD CONNECTION BETWEEN MALL ROAD AND CENTRAL STREET, INCLUDING TRAFFIC SIGNAL AT CENTRAL/TUSCAN BOULEVARD, TRAFFIC SIGNAL TIMING IMPROVEMENTS, AND ANY OTHER IMPROVEMENTS REQUIRED BY NHDOT;

   OTHER
   14. APPLICANT MUST OPERATE PROPERTY SO THAT PARKING LOT CAPACITY IS NOT EXCEEDED;
   15. SUBMIT PARKING MONITORING STUDY 6 MONTHS AFTER FINAL OCCUPANCY PERMIT;
   16. ALL REPRESENTATIONS MADE BY APPLICANT OR AGENTS AND ALL NOTES ON PLANS ARE INCORPORATED AS PART OF APPROVAL

GOVERNMENT/UTILITY CONTACTS

TOWN MANAGER
CHRISTOPHER A. DILLON
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2120

PLANNING DEPARTMENT
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2083
ATTN: ROSS A. MOLDOFF
(PLANNING DIRECTOR)

BUILDING INSPECTOR
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2020
ATTN: MIKE DiBARTOLOMEO

ENGINEERING
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2030
ATTN: DANIEL HUDSON

LIBERTY UTILITIES - ELECTRIC
9 LOWELL ROAD
SALEM, NH 03079
PHONE: (800) 375-7413

PUBLIC WORKS
21 CROSS STREET
SALEM, NH 03079
PHONE: (603) 890-2150
ATTN: DAVID WHOLLEY

CONSERVATION COMMISSION
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2083
ATTN: RUTH TANNER ISAK
(CHAIRMAN)

TOWN CLERK
SALEM TOWN HALL
33 GEREMONTY DRIVE
SALEM, NH 03079
PHONE: (603) 890-2116
ATTN: SUSAN WALL

FIRE DEPARTMENT
SALEM FIRE DEPARTMENT
152 MAIN STREET
SALEM, NH 03079
PHONE: (603) 890-2200
ATTN: LAWRENCE BEST
(CHIEF)

POLICE DEPARTMENT
SALEM POLICE DEPARTMENT
9 VETERANS MEMORIAL PKWY
SALEM, NH 03079
PHONE: (603) 893-1911
ATTN: PAUL T. DONOVAN

FAIRPOINT COMMUNICATION
100 GAY STREET
MANCHESTER, NH 03103
PHONE: (603) 645-2114

UNITIL - GAS
6 LIBERTY LANE W,
HAMPTON, NH 03842
PHONE: (603) 772-0775

PERMITS/APPROVALS

		PERMIT NUMBER	DATE APPROVED
1.	NHDES ALTERATION OF TERRAIN PERMIT	AOT - 1600	05/14/2019
2.	NHDES SEWER DESIGN REVIEW	D2019-0401	04/25/2019
3.	TOWN OF SALEM SITE PLAN REVIEW	MAP 107 LOT 12574	03/19/2019
4.	TOWN OF SALEM CONDITIONAL USE PERMITS	MAP 107 LOT 12574	03/19/2019
5.	TOWN OF SALEM ZONING VARIANCE :	05-2018-00026	08/07/2018

OMJ REALTY, LLC WAS GRANTED A VARIANCE FROM ARTICLE VIII, SECTION 490-814, REQUESTING SAID TERMS OF THE ZONING ORDINANCE BE WAIVED TO ALLOW UP TO 281 MULTIFAMILY APARTMENT UNITS BE BUILT IN ONE-YEAR, WHERE NO MORE THAN 50 UNITS SHALL BE BUILT IN ANY ONE PROJECT PER YEAR IN THE COMMERCIAL-INDUSTRIAL C DISTRICT

WITH THE FOLLOWING STIPULATION:
1. WORK WITH TOWN ENGINEER ON PHASING PLAN PER 08/03/2018 MEMO

No.	REVISIONS	BY	DATE
10.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
9.	ADDED PERMITS AND PLANNING BOARD APPROVAL	BPD	05/23/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/11/2019

COVER SHEET

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal
STATE OF NEW HAMPSHIRE — BRIAN D. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER
6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval
Ross A. Moldoff
Approved 3/19/19
Signed 6/4/19

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-0

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-0 Cover Sheet - Permit.dwg
Jun 13, 2019 - 7:19pm

ABBREVIATIONS

ABAN	ABANDON	L	LENGTH
ACCMP	ASPHALT COATED CORRUGATED METAL PIPE	LB	LEACHING BASIN
ADJ	ADJUST	LP	LIGHT POLE
AD	AREA DRAIN (NYLOPLAST)		
ADMH	AREA DRAIN MANHOLE (NYLOPLAST)	MAT	MATERIAL
AR	ACCESSIBLE RAMP	MAX	MAXIMUM
		MGD	MILLION GALLONS PER DAY
B	BORING	MH	MANHOLE
BC	BOTTOM OF CURB	MIN	MINIMUM
BIT	BITUMINOUS	MISC	MISCELLANEOUS
BIT CONC	BITUMINOUS CONCRETE	MTD	MOUNTED
BLDG	BUILDING	MW	MONITORING WELL
BM	BENCH MARK		
BMA	BITUMINOUS MACADAM	N	NORTH
BOS	BOTTOM OF SLOPE	NIC	NOT IN CONTRACT
BOW	BOTTOM OF WALL	NO	NUMBER
BRK	BRICK	NTS	NOT TO SCALE
BV&B	BUTTERFLY VALVE & BOX		
BVW	BORDERING VEGETATED WETLAND	OC	ON CENTER
BWLL	BROKEN WHITE LANE LINE	OD	OUTSIDE DIAMETER
		OHW	OVERHEAD WIRE
CATV	CABLE TELEVISION	OVHD	OVERHEAD
CB	CATCH BASIN	OW	OBSERVATION WELL
CBCI	CATCH BASIN WITH CURB INLET		
CC	CEMENT CONCRETE	PC	POINT OF CURVATURE
CCM	CEMENT CONCRETE MASONRY	PCC	POINT OF COMPOUND CURVATURE
CD	COMPACTOR DRAIN	PH	PERCOLATION HOLE
CF	CUBIC FEET	PI	POINT OF INTERSECTION
CFS	CUBIC FEET PER SECOND	PKG	PARKING
CI	CAST IRON (PIPE)	PL	PROPERTY LINE
CL	CENTERLINE	PLMB	PLUMBING
CLDI	CEMENT LINED DUCTILE IRON (PIPE)	POC	POINT ON CURVATURE
CM	CONSTRUCTION MANAGER	POT	POINT ON TANGENT
CMP	CORRUGATED METAL PIPE	PRC	POINT OF REVERSE CURVATURE
CO	CLEAN OUT (OR CERTIFICATE OF OCCUPANCY)	PROP	PROPOSED
COMP	COMPACTOR	PROT	PROTECT
CONC	CONCRETE	PT	POINT (OR POINT OF TANGENT)
CONST	CONSTRUCTION	PVC	POLYVINYL CHLORIDE (PIPE)
CONT	CONTRACTOR	PWW	PAVED WATERWAY
CRD	COORDINATE		
CPP	CORRUGATED POLYETHYLENE PIPE	Q	FLOW (CUBIC FEET PER SECOND)
CUL	CULVERT	QTY	QUANTITY
CY	CUBIC YARD		
		R&R	REMOVE & RESET/REPLACE
DB	DISTRIBUTION BOX	R&S	REMOVE & STACK
DBL	DOUBLE	RCP	REINFORCED CONCRETE PIPE
DEM	DEMOLISH	RD	ROOF DRAIN
DET	DETENTION	RED	REDUCER
DI	DUCTILE IRON (PIPE) (OR DROP INLET)	RELOC	RELOCATE
DIA	DIAMETER	REM	REMOVE
DIM	DIMENSION	RML	REMODEL
DMH	DRAIN MANHOLE	RET	RETAIN, RETAINING OR RETENTION
DW	DOMESTIC WATER (OR DRY WELL)	ROW	RIGHT OF WAY
DWG	DRAWING	RR	RAILROAD
DYCL	DOUBLE YELLOW CENTERLINE	RWL	RAIN WATER LEADER
		RWY	ROADWAY
EHH	ELECTRIC HANDHOLE		
EL	ELEVATION	SD	SUBDRAIN
ELEC	ELECTRIC	SF	SQUARE FEET
EMH	ELECTRIC MANHOLE	SGE	SLOPED GRANITE EDGING
EOP	EDGE OF PAVEMENT	SL	SLEEVE
EOR	EDGE OF ROAD	SMH	SEWER MANHOLE
EOW	EDGE OF WETLANDS	SP	STANDPIPE
EXIST	EXISTING	SPEC	SPECIFICATION
EXT	EXTERIOR	ST	SEPTIC TANK
		STA	STATION
FA	FIRE ALARM	STD	STANDARD
FES	FLARED END SECTION	STRTL	STRUCTURAL
FF	FINISH FLOOR	SWEL	SOLID WHITE EDGE LINE
FLNP	FIRE LANE NO PARKING	SWK	SIDEWALK
FPS	FEET PER SECOND	SWLL	SOLID WHITE LANE LINE
FS	FIRE SERVICE	SYCL	SOLID YELLOW CENTERLINE
FT	FOOT/FEET	SYEL	SOLID YELLOW EDGE LINE
FUT	FUTURE		
		TB	TEST BORING
GAL	GALLON	TBA	TIRES, BATTERIES & ACCESSORIES
GC	GENERAL CONTRACTOR	TBO	TIRES, BATTERIES & OIL CHANGE
GEN	GENERAL	TBP	TIRES, BATTERIES & PARTS
GG	GAS GATE	TC	TOP OF CURB
GI	GALVANIZED IRON (PIPE)	TD	TRENCH DRAIN
GPD	GALLONS PER DAY	TEL	TELEPHONE
GPM	GALLONS PER MINUTE	TMA	TIRE MOUNTING AREA
GR	GUIDE RAIL	TMH	TELEPHONE MANHOLE
GRAN	GRANITE	TOS	TOP OF SLOPE
GV	GATE VALVE	TOW	TOP OF WALL
GV&B	GATE VALVE & BOX	TP	TEST PIT
GVL	GRAVEL	TS&V	TAPPING SLEEVE & VALVE
GW	GROUND WATER	TYP	TYPICAL
HDR	HEADER	UL	UNDERWRITERS LABORATORY
HOR	HORIZONTAL	UNEXCAV	UNEXCAVATED
HT	HEIGHT	UNFIN	UNFINISHED
HW	HEADWALL	UP	UTILITY POLE
HWY	HIGHWAY		
HYD	HYDRANT	V	VELOCITY (FEET PER SECOND)
		VCP	VITRIFIED CLAY PIPE
ID	INSIDE DIAMETER	VERT	VERTICAL
ILSF	ISOLATED LAND SUBJECT TO FLOODING		
IN	INCHES	WD	WOOD
INCL	INCLUDE	WG	WATER GATE
INST	INSTALLED	WM	WATER MAIN
INV (OR I)	INVERT	WMH	WATER MANHOLE

TRAFFIC CONTROL SCHEDULE

SIGN NUMBER	SIGN	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT SIZE	REMARKS
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R1-2	YIELD	36"x36"x36" TRIANGLE		WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-1		24"	24"	RED AND BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-2		24"	24"	RED AND BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-7L	LEFT LANE MUST TURN LEFT	30"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-7R	RIGHT LANE MUST TURN RIGHT	30"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R4-7		24"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R4-7A	KEEP RIGHT	24"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R4-7B	KEEP RIGHT	24"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R6-1L	ONE WAY	36"	12"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R6-1R	ONE WAY	36"	12"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-1	NO PARKING FIRE LANE	12"	18"	RED ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN (MODIFIED)
R7-1A	NO PARKING ACCESSIBLE AISLE	12"	18"	RED ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN (MODIFIED)
R7-8	RESERVED PARKING	12"	18"	BLUE AND GREEN ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8A	VAN ACCESSIBLE	12"	6"	GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
RX-2	PENALTY AND FOR OWNER VEHICLES ONLY TOWING	12"	18"	GREEN ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
W1-2L		30"	30"	BLACK ON YELLOW	CHANNEL	7'-0"	REFLECTORIZED SIGN
W1-2R		30"	30"	BLACK ON YELLOW	CHANNEL	7'-0"	REFLECTORIZED SIGN
W11A-2		30"	30"	BLACK ON YELLOW	CHANNEL	8'-6"	REFLECTORIZED SIGN
W11A-2P	PED XING	12"	18"	BLACK ON YELLOW	CHANNEL	7'-0"	REFLECTORIZED SIGN
X-1	VISITOR PARKING	12"	18"	GREEN ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN

EXISTING	PROPOSED	DESCRIPTION
	3:1	SLOPE RATIO
	EMH	ELECTRIC MANHOLE
SMH	SMH	SEWER MANHOLE
	TMH	TELEPHONE MANHOLE
	WMH	WATER MANHOLE
S	S	SEWER LINE
FM	FM	SEWER LINE–FORCE MAIN
W	W	WATER LINE
G	G	GAS LINE
		GAS VALVE
E	E	ELECTRICAL CONDUIT
T	T	TELEPHONE CONDUIT
		PLUG
	W	CURB STOP
		WATER VALVE
	HYD	HYDRANT
		HYDRANT WITH BOLLARDS
	UP	UTILITY POLE
		TEE
		SILTATION FENCE
		INLET PROTECTION
		STORM INLET SEDIMENT TRAP
		TEMPORARY SWALE WITH STONE CHECK DAMS
		STRAW WATTLE
134	134	1' CONTOUR LINE
140	140	5' CONTOUR LINE
136.60 136x60	136.60 136x60	SPOT GRADES
		CATCH BASIN
	CBCI	CATCH BASIN WITH CURB INLET
	DCB	DOUBLE CATCH BASIN
	DMH	DRAINAGE MANHOLE
	NAD	NYOPLAST AREA DRAIN
		TRENCH DRAIN
		DRAIN PIPE
CO	CO	CLEAN OUT
W1 W2		FLAGGED WETLANDS
		FLOW DIRECTION
		HEADWALL
		SPLASH PAD/RIP RAP
		FLARED END SECTION
B.O.S.	B.O.S.	BOTTOM OF SLOPE
T.O.S.	T.O.S.	TOP OF SLOPE
		RETAINING WALL
		STONE WALL
		TREE LINE
		GUARDRAIL
		CHAIN LINK FENCE
		ORNAMENTAL FENCE

EXISTING	PROPOSED	DESCRIPTION
	TB	TEST BORING LOCATION
	TP	TEST PIT LOCATION
	TP,P=	TEST PIT LOCATION WITH PERCOLATION TEST
	P	PERCOLATION TEST
	TC 390.30 BC 389.70	TOP\BOTTOM OF CURB
	TW 410.00	TOP OF WALL
	BW 408.00	BOTTOM OF WALL
T	T	TRANSFORMER PAD
G	G	GENERATOR PAD
		LIGHT POLE
COMP	COMP	COMPACTOR PAD
LOADING	LOADING	LOADING PAD
		LANDSCAPED ISLAND
		STRIPED/PAINTED ISLAND
		STANDARD PARKING STALL
		HANDICAP PARKING STALL
		COMPACT PARKING STALL
		CART CORRAL
		WHEEL STOP
		CURB TYPE
	20	PARKING COUNT
		MOUNTED TRAFFIC SIGN
		DIRECTIONAL ARROWS
		CROSSWALK
STOP	STOP	STOP LINE
		WHEELCHAIR RAMP
BWLL	BWLL	BROKEN WHITE LANE LINE
SWCHL	SWCHL	SOLID WHITE CHANNELIZING LINE
SYCHL	SYCHL	SOLID YELLOW CHANNELIZING LINE
BYCL	BYCL	BROKEN YELLOW CENTERLINE
DYCL	DYCL	DOUBLE YELLOW CENTERLINE
SYCL	SYCL	SOLID YELLOW CENTERLINE
SYEL	SYEL	SOLID YELLOW EDGE LINE
SWEL	SWEL	SOLID WHITE EDGE LINE
SWLL	SWLL	SOLID WHITE LANE LINE

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

ABBREVIATION & LEGEND SHEET

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE - BRIAN P DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MCR/BJM	18071	ABB-1

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_ABB-1 Abbreviation & Legend Sheet.dwg
Jun 06, 2019 - 17:00pm

GENERAL NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" (1-888-344-7233) AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. EXISTING SITE FEATURES AND TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A SURVEY PLAN TITLED "EXISTING CONDITIONS PLAN" BY MHF DESIGN CONSULTANTS, DATED 11/21/2018. PROPOSED SITE PLAN AND UTILITIES BASED UPON TUSCAN VILLAGE ROADWAY PLANS, LAST REVISED 02/01/2019 BY TIGHE AND BOND.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
5. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AS DETERMINED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
6. ALL CONSTRUCTION SHALL MEET OR EXCEED THE TOWN OF SALEM'S ENGINEERING DEPARTMENT SPECIFICATIONS.
7. THE CONTRACTOR SHALL AT HIS EXPENSE SURVEY AND MARK OUT IN THE FIELD THE LIMITS OF CLEARING (I.E. HAYBALE/SILTFENCE LINE) FOR APPROVAL BY THE TOWN PRIOR TO COMMENCEMENT OF CLEARING AND GRUBBING ACTIVITIES.
8. THE CONTRACTOR SHALL NOTIFY THE TOWN'S PLANNING STAFF AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY SITEWORK.
9. THE PROJECT IS LOCATED IN AN AREA OF MINIMUM FLOODING ACCORDING TO THE ROCKINGHAM COUNTY FLOOD INSURANCE RATE MAP DATED MAY 17, 2005 COMMUNITY PANEL NUMBER 33015C0563E. THE PROJECT SITE IS LOCATED IN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

DEMOLITION NOTES

1. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.
2. THE CONTRACTOR SHALL PROTECT AND/OR CAP OFF ALL EXISTING ON-SITE UTILITY SERVICES WHETHER DESIGNATED ON THESE DRAWINGS OR DISCOVERED IN THE FIELD. SERVICES SHALL BE CAPPED OFF WHERE SAME ENTER THE PERIMETER OF THE PROPERTY LINE. ALL CAPPING/REMOVAL SHALL BE IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY/ENTITY STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL EXISTING AND NEW SITE DRAINAGE AND UTILITIES WHICH ARE TO REMAIN AND/OR BE CONSTRUCTED.
4. DEMOLITION ACTIVITY ON SITE SHALL BE DONE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO THE TEMPORARY DRAINAGE SWALES AND SEDIMENT CONTROL FACILITIES.
5. SOIL BORING WERE TAKEN FOR THE PURPOSE OF DESIGN AND SHOW CONDITIONS AT BORING POINTS ONLY. THEY DO NOT NECESSARILY SHOW THE NATURE OF ALL MATERIALS TO BE ENCOUNTERED DURING CONSTRUCTION. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
6. PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION ACTIVITIES THE ON-SITE EROSION CONTROL MEASURES AS SHOWN ON DRAWING C-5 EROSION AND SEDIMENT CONTROL PLAN MUST BE INSTALLED AND APPROVED BY THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

CONSTRUCTION SEQUENCE NOTES

1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY ON-SITE CONSTRUCTION AS SHOWN. ADDITIONAL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICAL.
2. CONSTRUCT TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON DWG. C-5 EROSION AND SEDIMENT CONTROL PLAN.
3. CUT AND STUMP AREAS OF PROPOSED CONSTRUCTION.
4. REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEEDED TO PREVENT EROSION.
5. CONSTRUCT PONDS, SWALES AND LEVEL SPREADERS AND STABILIZE PRIOR TO DIRECTING ANY RUNOFF TO THEM.
6. CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING STRAW WATTLES AND SILTATION FENCE AS REQUIRED TO CONTROL SOIL EROSION. STABILIZE ROADS, PARKING LOTS AND CUT/FILL SLOPES WITHIN 72-HOURS OF ACHIEVING FINISHED GRADES.
7. INSTALL UNDERGROUND UTILITIES AND DRAINAGE SYSTEM.
8. BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED OR MULCHED WITHIN 72-HOURS OF ACHIEVING FINISHED GRADES.
9. DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING. AT A MINIMUM, INSPECT EROSION CONTROLS WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
10. BEGIN EXCAVATION FOR CONSTRUCTION OF BUILDINGS.
11. FINISH PAVING ALL ROADWAYS AND DRIVEWAYS.
12. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
13. AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
14. APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:

LIMESTONE: 138 LBS./1,000 S.F.
FERTILIZER: 13.8 LBS/1,000 S.F.

PERMANENT SEED MIX:

CREEPING RED FESCUE	20 LBS./ACRE
TALL FESCUE	20 LBS./ACRE
REDTOP	2 LBS./ACRE
TOTAL	42 LBS./ACRE

TEMPORARY SEED MIX:

WINTER RYE (AUG. 15-SEPT. 15)	112 LBS./ACRE
OATS (NO LATER THAN MAY 15)	80 LBS./ACRE

15. NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE HAY MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 2 TONS PER ACRE.
16. THE CONTRACTOR AND DEVELOPER MUST MANAGE THE PROJECT TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
17. FUGITIVE DUST MUST BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES WERE SELECTED AND DESIGNED IN ACCORDANCE WITH THE STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE.
2. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED.
3. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.
4. TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.
5. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEEDED FOR TEMPORARY VEGETATIVE COVER. WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE TEMPORARILY BEEN SUSPENDED FOR MORE THAN FOURTEEN DAYS, OR WHEN FINAL GRADES ARE REACHED IN ANY PORTION OF THE SITE, STABILIZATION PRACTICES SHALL BE IMPLEMENTED WITHIN THREE DAYS. AREAS WHICH REMAIN DISTURBED BUT INACTIVE FOR AT LEAST FOURTEEN DAYS SHALL RECEIVE TEMPORARILY SEEDING IN ACCORDANCE WITH NEW HAMPSHIRE DES EROSION AND SEDIMENT CONTROL GUIDELINES. IN ALL CASES, STABILIZATION MEASURES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE.
6. EARTHWORK ACTIVITY ON THE SITE SHALL BE DONE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO THE TEMPORARY DRAINAGE SWALES & SEDIMENT BASINS.
7. THE LOCATION OF TEMPORARY DRAINAGE SWALES AND SEDIMENTATION TRAPS SHALL BE REVISED AS REQUIRED AS CONSTRUCTION PROGRESSES. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. FILTER BAGS SHALL BE PLACED AROUND CATCH BASINS AS REQUIRED DURING CONSTRUCTION.
9. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED OR A WEEKLY BASIS (ONCE EVERY SEVEN CALENDAR DAYS), CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION. IN ADDITION, INSPECTION SHALL TAKE PLACE. THE CONTRACTOR SHALL STRICTLY ADHERE TO THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) DURING CONSTRUCTION OPERATIONS WITHIN 24 HOURS OF 0.5 INCHES OF RAINFALL OR GREATER DURING A 24 HOUR PERIOD..
10. ALL PROPOSED SLOPES WILL BE NO STEEPER THAN 2H:1V. ALL 3H:1V SLOPES WILL BE STABILIZED WITH A CURLEX EROSION CONTROL MATTING BY AMERICAN EXCELSIOR COMPANY (OR ENGINEER APPROVED EQUAL) PRIOR TO HYDROSEEDING AND PROTECTED FROM EROSION.
11. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER AND/OR CONSERVATION COMMISSION AGENT TO MITIGATE ANY EMERGENCY CONDITION.
12. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
13. CATCH BASINS WHICH SERVE AS TEMPORARY SEDIMENT TRAPS MUST BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT. SEDIMENT WILL BE REMOVED FROM EACH BASIN WHEN SEDIMENT HAS ACCUMULATED TO 25% FULL.
14. UPON COMPLETION OF ALL SITE WORK CONSTRUCTION SITE CONTRACTOR SHALL INSPECT ALL ON-SITE CATCH BASINS, DRAINAGE SWALES, FOREBAYS, & THE DETENTION POND AND REMOVE ALL SEDIMENT AND TRASH DEBRIS THAT HAS ACCUMULATED WITHIN EACH STRUCTURE DURING THE COURSE OF CONSTRUCTION.
15. ALL SLOPES EXCEEDING FIFTEEN (15) PERCENT RESULTING FROM THE SITE GRADING SHALL BE EITHER COVERED WITH SIX (6) INCHES OF TOPSOIL AND PLANTED WITH A VEGETATIVE COVER SUFFICIENT TO PREVENT EROSION OR BE STABILIZED BY A RETAINING WALL.
16. DUST CONTROL SHALL BE USED DURING GRADING OPERATIONS IF THE GRADING IS TO OCCUR WITHIN 200 FEET OF AN OCCUPIED RESIDENCE OR PLACE OF BUSINESS. DUST CONTROL METHODS SHALL CONSIST OF DAMPENING THE GROUND WITH WATER.
17. THE CONTRACTOR SHALL ANTICIPATE AND MODIFY EROSION CONTROL MEASURES BASED ON PAST AND CURRENT WEATHER CONDITIONS, SEASON AND EXPECTED FUTURE CONSTRUCTION ACTIVITIES.
18. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED SOIL. EFFORTS SHALL BE MADE TO LIMIT THE TIME OF EXPOSURE OF DISTURBED AREAS.
19. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AT THE SITE, THE CONTRACTOR SHALL ENGAGE AN INDIVIDUAL WITH SPECIFIC PROFESSIONAL TRAINING AND EXPERTISE IN EROSION AND SEDIMENT CONTROL. THE EROSION CONTROL MONITOR SHALL PREPARE A WEEKLY REPORT WHICH SHALL BE KEPT ON SITE AT ALL TIMES AND SHALL BE SHOWN TO LOCAL, STATE AND FEDERAL AGENTS UPON REQUEST. THIS REPORT SHALL INDICATE THE STATUS OF THE EROSION CONTROLS AND ANY MAINTENANCE REQUIRED AND PERFORMED. THIS REPORT SHALL CONFORM TO THE REQUIREMENTS OF THE EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.
20. INLET PROTECTION SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS LOCATED IN FILL AREAS & SUBJECT TO STORMWATER RUN-OFF FROM PROPOSED FILL AREAS DURING CONSTRUCTION, OR AS DIRECTED BY THE OWNER/ENGINEER. NO SEDIMENTS SHALL ENTER THE ON-SITE DRAINAGE SYSTEM AT ANY TIME.
21. THE FOREBAY BASINS SHALL BE USED AS SEDIMENTATION BASINS THROUGHOUT CONSTRUCTION AND SHALL BE PERIODICALLY CLEANED DURING CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION. ALL TEMPORARY SWALES SHALL BE DIRECTED TO THE FOREBAY LOCATION WHEN POSSIBLE.
22. THE LOCATION OF ROCK CHECK DAMS SHALL BE FIELD VERIFIED DURING SITE PREPARATION OPERATIONS BY THE CONTRACTOR.
23. UPON COMPLETION OF ALL SITE WORK CONSTRUCTION SITE CONTRACTOR SHALL INSPECT ALL ON-SITE CATCH BASINS, DRAINAGE SWALES, FOREBAYS, & THE DETENTION POND AND REMOVE ALL SEDIMENT AND TRASH DEBRIS THAT HAS ACCUMULATED WITHIN EACH STRUCTURE DURING THE COURSE OF CONSTRUCTION.
24. WINTER CONSTRUCTION AND STABILIZATION

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15

SEDIMENT BARRIERS: DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

MULCHING: ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1000 SF OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A 1-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH WORKDAY DURING FINAL GRADING ACTIVITIES.

SOIL STOCKPILING: STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND REESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

SEEDING: BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1000 SF. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE RE-VEGETATED IN THE SPRING.

WINTER STABILIZATION OF DITCHES AND CHANNELS: ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH:
INSTALL A SOD LINING IN THE DITCH: A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD ONTO AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS.
INSTALL A STONE LINING IN THE DITCH: A DITCH MUST BE LINED WITH STONE RIP RAP BY NOVEMBER 15. CONTACT REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH.
WINTER STABILIZATION OF DISTURBED SLOPES: ALL STONE-COVERED SLOPES GREATER THAN 15% MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. AND ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE.
TEMPORARY VEGETATION AND EROSION CONTROL MATS: BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1000 SF AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.
SOD: THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
STONE RIP RAP: PLACE A LAYER OF STONE RIP RAP ON THE SLOPE BY NOVEMBER 15. CONTACT THE PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

WINTER STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN:
TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1000 SF, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SF, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST 3 INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR WINTER PROTECTION AS DESCRIBED BELOW.
SOD: STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1000 SF ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

26. ALL ROADWAYS AND PARKING LOTS TO BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.
27. ALL CUT AND FILL SLOPES TO BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.
28. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED, A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED, A MINIMUM OF 3" OF NON-EROSION MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
29. ***WINTER NOTES:***

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS:

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN CONDITIONS; AND AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

WATER NOTES

1. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER AND A MAXIMUM OF 6 FEET OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
2. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS REQUIRED UNDER THE CONTRACT ARE NOTED, SHOWN, OR INDICATED.
3. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.
4. DOMESTIC WATER SERVICE 3" OR SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP WITH APPROVED SADDLE, CURB STOP, AND BOX. DOMESTIC WATER MAIN SHALL BE INSTALLED OVER SEWER MAIN WITH A MINIMUM VERTICAL SEPARATION OF EIGHTEEN INCHES (18") AT THEIR CROSSING.
5. ALL WATER MAINS 4" AND LARGER SHALL BE CEMENT LINED DUCTILE IRON CLASS 52 AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND VALVES.
6. ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF SALEM'S WATER AND SEWER DEPARTMENT STANDARDS.
7. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH THE TOWN OF SALEM'S WATER DEPARTMENT STANDARDS AND REQUIREMENTS. IN THE ABSENCE OF STANDARDS, THEY SHALL CONFORM TO THE REQUIREMENTS SPELLED OUT IN THE SITE PROJECT MANUAL. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE TOWN OF SALEM'S WATER DEPARTMENT. COPIES OF TEST RESULTS WILL BE SUBMITTED TO SALEM WATER DEPARTMENT FOR APPROVAL.
8. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
9. ALL WATER LEADS TO BUILDING WILL END FIVE FEET (5') OUTSIDE BUILDING LIMITS LINE AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH TEMPORARY PLUG AT END.
10. MAINTAIN A MINIMUM SEPARATION OF FIVE FEET (5') BETWEEN GAS AND WATER MAINS (MEASURE FROM CENTER OF PIPE).
11. ALL NEW GATE VALVES INSTALLED FOR THIS PROJECT WILL BE BOLTED TO ANCHOR TEES AND WILL OPEN RIGHT.
12. THE CONTRACTOR SHALL NOTIFY THE SALEM WATER DEPARTMENT (603-890-2156) BEFORE ANY NEW WATER MAIN PORTION IS CONNECTED TO MUNICIPAL WATER MAIN.

SALEM FIRE DEPARTMENT NOTES

1. ALL BUILDINGS SHALL BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION DESIGNED IIN ACCORDANCE WITH NFPA 13, 2002 EDITION AND SALEM F.D. REGULATIONS.
2. ALL UNDERGROUND WATER MAINS SERVING SPRINKLER OR STANDPIPE SYSTEM SHALL BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND SHALL BE WITNESSED BY SALEM FIRE DEPARTMENT PERSONNEL.
3. ALL BUILDING SHALL BE PROVIDED WITH AN AUTOMATIC FIRE ALARM SYSTEM DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72, 2002 EDITION AND SALEM F.D. REGULATIONS.
4. ALL SITE AND CONSTRUCTION PLANS MAY BE REVIEWED BY A THIRD PARTY CONSULTANT OF THE TOWN'S CHOOSING. ALL COST ASSOCIATED WITH THE THIRD PARTY REVIEWS AND INSPECTION SHALL BE PAID BY THE DEVELOPER.
5. ALL BUILDINGS THREE OR MORE STORIES IN HEIGHT ABOVE THE LEVEL OF FIRE DEPARTMENT ACCESS AS DETERMINED BY THE FIRE DEPARTMENT SHALL BE PROVIDED WITH CLASS I STANDPIPES DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 14 2003 EDITION.
6. UNDERGROUND WATER MAINS AND HYDRANTS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE 2000 EDITION, APPENDIX B AND C, AND SALEM WATER DEPARTMENT REGULATIONS. FLOW CALCULATIONS AND BUILDING CONSTRUCTION CLASSIFICATION SHALL BE INCLUDED WITH THE SITE PLAN.
7. PLANS FOR CONSTRUCTION OF BUILDINGS AND FIRE PROTECTION SYSTEMS SHALL BE SUBMITTED TO THE SALEM FIRE DEPARTMENT AND RELEASED FOR CONSTRUCTION PRIOR TO STARTING WORK. ALL CONTRACTORS INSTALLING FIRE PROTECTION SYSTEMS SHALL HOLD A CERTIFICATE OF FITNESS FROM THE SALEM FIRE DEPARTMENT.

SALEM WATER NOTES

STANDARD NOTES AND POLICIES RELATIVE TO PROPOSED DEVELOPMENT

STANDARD NOTES

ALL COMMERCIAL AND MULTI-UNIT RESIDENTIAL BUILDINGS:

1. REQUIRED METERING AND BACKFLOW PREVENTION DEVICES WILL BE INSTALLED ON WATER SERVICES. THESE DEVICES WILL BE LOCATED AT THE POINT SERVICE LINES ENTER THE BUILDING. SERVICE LINES ARE NOT ALLOWED TO RUN THROUGH THE BUILDING, UNDER FLOORS, OVERHEAD OR OTHERWISE.
2. ALL EXISTING WATER AND SEWER SERVICES MUST BE CUT AND CAPPED, BEFORE THE BUILDINGS THEY SERVICE ARE RAZED.

POLICIES:

1. THIS DEPARTMENT REMAINS OPPOSED TO THE CONSTRUCTION OF CUL-DE-SACS AND DEAD ENDED WATER MAINS, WHENEVER THE POSSIBILITY OF THROUGH ROADS AND LOOPED MAINS EXISTS.
2. DOMESTIC WATER SERVICES MAY BE TAPPED OFF FIRE SPRINKLER SERVICES, PROVIDED THE DOMESTIC SERVICE IS TAPPED A MINIMUM OF TEN FEET OUTSIDE THE BUILDING. VALVES ARE REQUIRED ON BOTH SERVICE LINES, WITH A VALVE IN THE FIRE SERVICE DOWNSTREAM OF THE DOMESTIC SERVICE TAP. THESE VALVES SHOULD BE LOCATED A MINIMUM FIVE FEET FROM THE BUILDING.
3. WATER MAINS NOT LOOPING BACK TO THE SYSTEM MUST HAVE A HYDRANT WITHIN TEN FEET OF THE END OF THE LINE PLUG OR VALVE. NO SERVICE TAPS ARE ALLOWED DOWNSTREAM OF THIS "END OF LINE" HYDRANT. THIS INCLUDES "PHASED" SECTIONS OF WATER MAIN.
4. ANY PLANNED IMPROVEMENT TO, OR EXPANSION OF AN EXISTING FIRE PROTECTION SYSTEM, MUST INCLUDE THE INSTALLATION OF AN APPROVED BACKFLOW PREVENTION ASSEMBLY.

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG SAFE" (1-800-344-7233) AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL HORIZONTAL CONTROL POINTS AND ELEVATION BENCH MARKS NECESSARY FOR THE WORK.
3. DUE TO THE SMALL SCALE OF THE SITE WORK DRAWINGS, EXACT LOCATION OF UTILITY STUBS FOR BUILDING CONNECTIONS SHALL BE VERIFIED WITH THE BUILDING DRAWINGS. SERVICE STUBS TO THE BUILDING SHALL BE INSTALLED TO A POINT 5 FEET FROM THE BUILDING LIMITS LINE UNLESS OTHERWISE NOTED OR DETAILED AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
4. GENERAL CONTRACTOR SHALL PROVIDE 2'X2'X6" THICK CONCRETE APRON AT ALL CLEANOUTS, VALVES AND METERS OUTSIDE OF BUILDING.
5. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
6. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
7. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL AND FEDERAL OSHA REGULATIONS.
8. REFER TO FIRE PROTECTION SHEETS FOR LOCATION AND DETAIL OF FIRE LINE LEAD IN.
9. FIRE LINE SHALL BE STUBBED UP TO 1' ABOVE FFE IN SPRINKLER ROOM.
10. REFER TO ARCHITECTURAL MECHANICAL PLANS FOR LOCATION OF SEWER, DOMESTIC, AND IRRIGATION CONNECTIONS.
11. BACKFLOW PREVENTERS AND WATER METER TO BE LOCATED INSIDE BUILDING.
12. SPRINKLER/FIRE ALARM TO BE PROVIDED IN ALL BUILDINGS PER ALL APPLICABLE STATE AND LOCAL BUILDING CODES.
13. DURING THE REDEVELOPMENT OF THE SITE, ALL HYDRANTS SHALL REMAIN IN SERVICE IF AT ALL PRACTICAL.
14. THE SALEM FIRE DEPARTMENT AND WATER DEPARTMENT SHALL BE NOTIFIED IN ADVANCE OF ANY HYDRANT BEING REMOVED FROM SERVICE.
15. GENERAL CONTRACTOR SHALL FURNISH (2) - 4" TELEPHONE CONDUIT(S) AS SHOWN ON PLAN, VERIFY LOCATION OF TIE IN AT TELEPHONE COMPANY'S SERVICE LINE. PROVIDE NYLON PULL CORDS INSIDE CONDUIT.
16. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
17. GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.

GAS

THE PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM WITH THE GAS COMPANY THAT GAS LINE INSTALLATION SHALL BE BY THE LOCAL GAS COMPANY. THE CONTRACTOR SHALL GIVE THE GAS COMPANY ADVANCE NOTICE OF WHEN THE GAS LINE CAN BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, BACKFILL AND COMPACTION OF THE GAS LINE IN ACCORDANCE WITH THE SITE WORK SPECIFICATIONS. CONTRACTOR IS ALSO RESPONSIBLE FOR FURNISHING AND INSTALLING PIPE BOLLARDS AS REQUIRED BY THE GAS COMPANY AND/OR LOCAL INSPECTOR IN ORDER TO PROTECT ABOVE GROUND GAS EQUIPMENT.

SEWER

1. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PIPE (P.V.C.), S.D.R. 35 AND SHALL CONFORM WITH ASTM-D3034 UNLESS NOTED OTHERWISE.
2. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION. AT SEWER/WATER MAIN CROSSINGS SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6' HORIZONTALLY FROM THE WATER MAIN.
3. ALL SEWER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF SALEM'S SEWER DEPARTMENT STANDARDS.
4. SANITARY SEWER LEAD TO BUILDING WILL END FIVE FEET (5') OUTSIDE THE BUILDING LIMITS LINE AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.

BENCHMARK

1. BENCHMARK: RM-15-DISK STAMPED 'F-2' LOCATED IN THE WEST END OF THE NORTH ABUTMENT OF THE BOSTON & MAINE RAILROAD BRIDGE OVER POLICY BROOK, NEAR ROCKINGHAM PARK. ELEVATION = 124.12 (NGVD 1929)

No.	REVISIONS	BY	DATE
11.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
10.	CONFORMANCE PERMIT SET	BPD	05/16/2019
9.	REVISED PER DES COMMENTS	BPD	04/24/2019
8.	CONFORMANCE PERMIT SET	BPD	04/15/2019

GENERAL NOTES NOTES

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal
STATE OF NEW HAMPSHIRE — BRIAN P. DUNDON No. 10460 — LICENSED — PROFESSIONAL ENGINEER
6-7-19

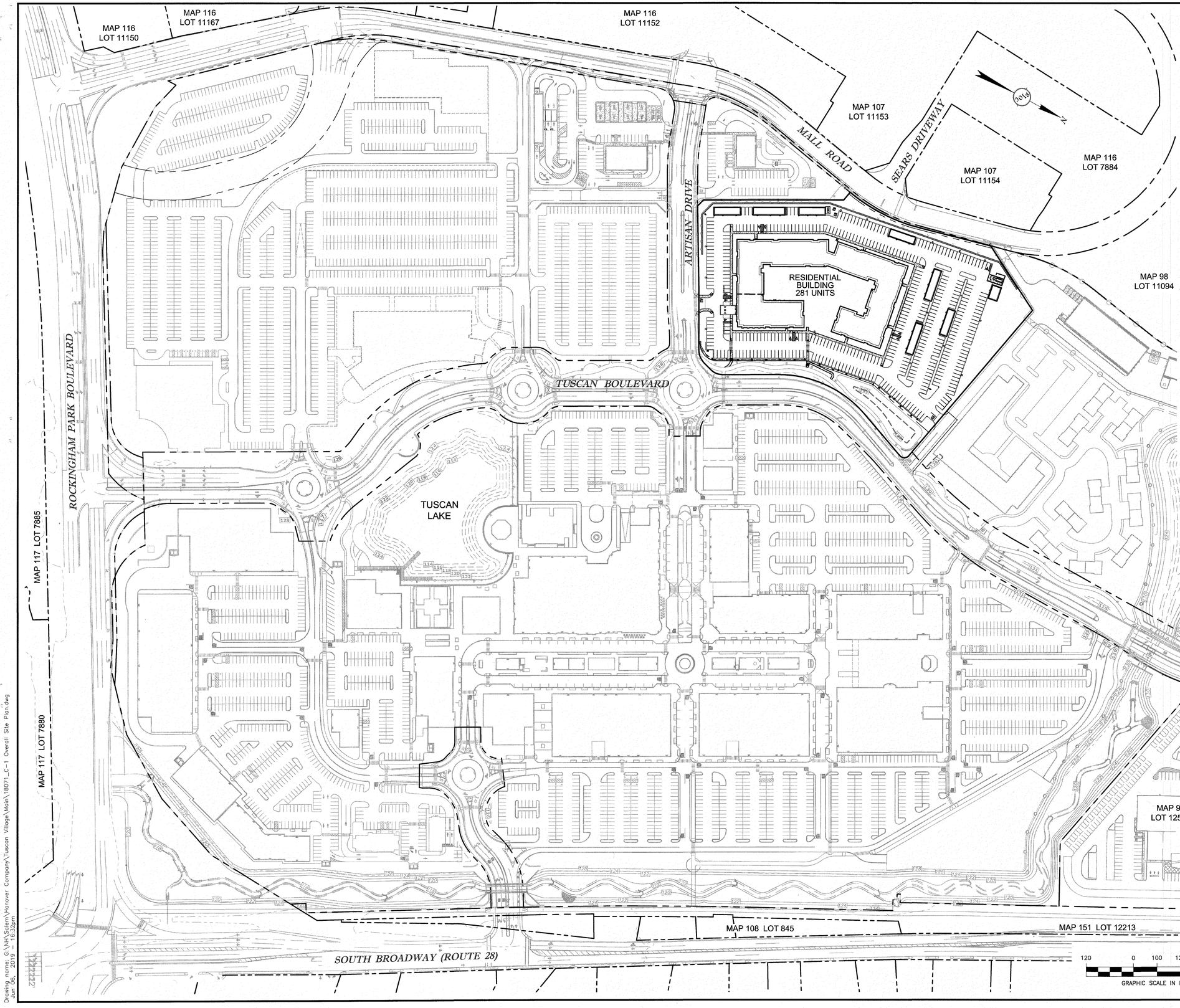
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
AK	MCR/BJM	18071	N-1

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_N-1 General Notes Sheet.dwg
Jun'06, 2019 - 17:48pm



ABUTTERS AND NOTIFICATION LIST

MAP/LOT #	NAME & ADDRESS
98/7887 (OWNER)	ROCK ACQUISITION, LLC C/O TUSCAN MARKET 63 MAIN STREET SALEM, NH 03079
98/12502	DEMOULAS SUPER MARKETS, INC. EAST STREET TEWKSBURY, MA 01876
98/12543	TUSCAN VILLAGE RESIDENTIAL HOLDINGS, LLC 150 PRESIDENTIAL WAY, SUITE 220 WOBURN, MA 01801
98/11094 116/7884 116/11167	ROCKSAL MALL LLC C/O SIMON PROPERTY GROUP P.O. BOX 6120 INDIANAPOLIS, IN 46207
107/11154 107/11153	SERITAGE SRC FINANCE LLC 3333 BEVERLY ROAD HOFFMAN ESTATES, IL 60179
116/11152	JC PENNEY PROPERTIES INC. PROPERTY TAX OFFICE P.O. BOX 10001 DALLAS, TX 75301
116/11150	MAY DEPARTMENT STORES COMPANY PROPERTY TAX DEPARTMENT 7 WEST 7TH STREET CINCINNATI, OH 45202
117/7885	STATE OF NEW HAMPSHIRE P.O. BOX 483 CONCORD, NH 03301
117/7880	ROCKINGHAM 620, INC. C/O KIMCO REALTY CORPORATION 3333 NEW HYDE PARK ROAD # 100 NEW HYDE PARK, NY 11042
99/12507	DILORENZO LAFAYETTE LEDGEWOOD REAL ESTATE, LLC C/O ANTHONY DILORENZO, MANAGER 549 US HIGHWAY 1 BYPASS PORTSMOUTH, NH 03801
108/845	ERICADAM REALTY LLC 72 SOUTH BROADWAY SALEM, NH 03079

MAP/LOT #	NAME & ADDRESS
151/12213	STATE OF NHDOT JOHN O'MORTON BUILDING ONE HAZEN DRIVE CONCORD, NH 03302
APPLICANT	HANOVER COMPANY 5847 SAN FELIPE STREET SUITE 3600 HOUSTON, TX 77057
ENGINEER/SURVEYOR	MHF DESIGN CONSULTANTS, INC. 44 STILES ROAD, SUITE ONE SALEM, NH 03079
CIVIL ENGINEER	RJ O'CONNELL & ASSOCIATES, INC. 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
WETLAND/SOIL SCIENTIST	GOVE ENVIRONMENTAL SERVICES, INC. 8 CONTINENTAL DRIVE, UNIT H, BLD 2 EXETER, NH 03833-7507
CIVIL ENGINEER	TIGHE & BOND 117 CORPORATE DRIVE PORTSMOUTH, NH 03801 TOWN OF WINDHAM 3 NORTH LOWELL ROAD WINDHAM, NH 03087 TOWN OF ATKINSON 21 ACADEMY AVENUE ATKINSON, NH 03811 TOWN OF DERRY 14 MANNING STREET DERRY, NH 03038 TOWN OF PELHAM PLANNING DEPARTMENT 6 VILLAGE GREEN PELHAM, NH 03076 ROCKINGHAM PLANNING COMMISSION 156 WATER STREET EXETER, NH 03833 NASHUA REGIONAL PLANNING COMMISSION 9 EXECUTIVE DRIVE, SUITE 201 MERRIMACK, NH 03054

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

OVERALL SITE PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=120'

Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE — BRIAN P. DUNDON No. 10460 — LICENSED PROFESSIONAL ENGINEER

6-7-19

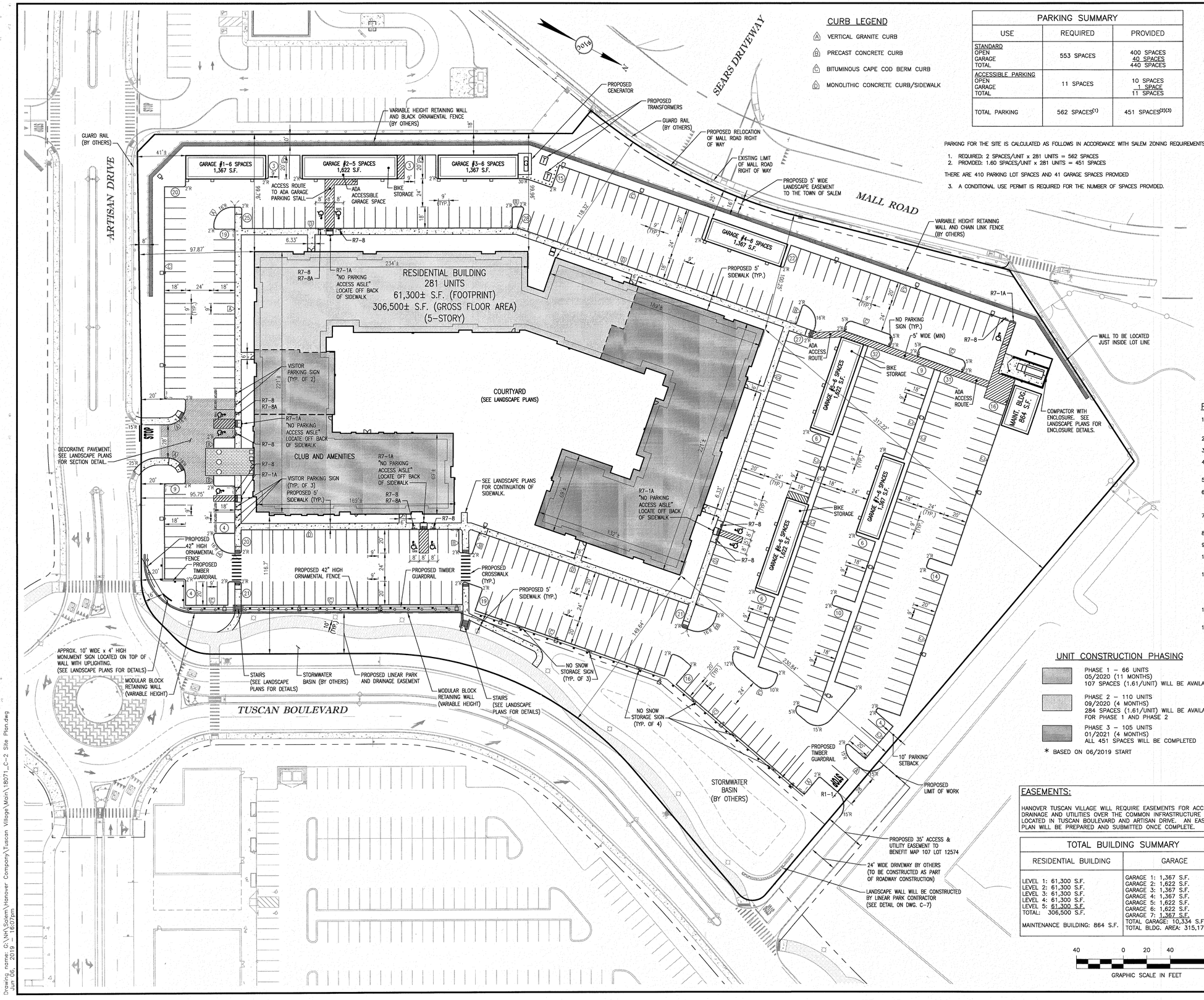
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
AK	MSM/BJM	18071	C-1

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-1 Overall Site Plan.dwg
Jun 06, 2019 - 10:32pm



CURB LEGEND

- (A) VERTICAL GRANITE CURB
- (B) PRECAST CONCRETE CURB
- (C) BITUMINOUS CAPE COD BERM CURB
- (D) MONOLITHIC CONCRETE CURB/SIDEWALK

PARKING SUMMARY

USE	REQUIRED	PROVIDED
STANDARD OPEN GARAGE TOTAL	553 SPACES	400 SPACES 40 SPACES 440 SPACES
ACCESSIBLE PARKING OPEN GARAGE TOTAL	11 SPACES	10 SPACES 1 SPACE 11 SPACES
TOTAL PARKING	562 SPACES(1)	451 SPACES(2)(3)

PARKING FOR THE SITE IS CALCULATED AS FOLLOWS IN ACCORDANCE WITH SALEM ZONING REQUIREMENTS:

1. REQUIRED: 2 SPACES/UNIT x 281 UNITS = 562 SPACES
2. PROVIDED: 1.60 SPACES/UNIT x 281 UNITS = 451 SPACES

THERE ARE 410 PARKING LOT SPACES AND 41 GARAGE SPACES PROVIDED

3. A CONDITIONAL USE PERMIT IS REQUIRED FOR THE NUMBER OF SPACES PROVIDED.

SALEM ZONING TABLE

ZONE DISTRICT: COMMERCIAL – INDUSTRIAL DISTRICT – SUBDISTRICT C (CI–C)
USE: RESIDENTIAL REQUIRES A CONDITIONAL USE PERMIT
281 RESIDENTIAL UNITS PROPOSED

DESCRIPTION	REQUIRED/ALLOWED	PROPOSED
LOT MINIMUM SIZE	N/A	362,015 S.F. (8.31 Ac)
MINIMUM LOT FRONTAGE	N/A	N/A
MINIMUM LOT WIDTH	N/A	N/A
MINIMUM FRONT SETBACK	30 FT.	97± FT. PRINCIPAL BLDG. 25'± FT. GARAGE **
MINIMUM SIDE SETBACK	20 FT.	100± FT. PRINCIPAL BLDG. 18'± FT. GARAGE **
MINIMUM REAR SETBACK	20 FT.	N/A
MAXIMUM BUILDING HEIGHT	3 STORIES/35 FT.	5 STORIES/65 FEET **
MAX LOT COVERAGE (IMPERVIOUS)	70%	67%

** CONDITIONAL USE PERMIT REQUIRED SEE BELOW.

CONDITIONAL USE PERMITS

1. USE – SECTION 490–201. RESIDENTIAL USE IN A COMMERCIAL – INDUSTRIAL DISTRICT – SUBDISTRICT C
2. ZONING DIMENSIONS – SECTION 490–202
   (a) FRONT SETBACK TO GARAGE – 25' FROM MALL ROAD
   (b) SIDE SETBACK TO GARAGE – 18'
   (c) MAXIMUM BUILDING HEIGHT – 65 FEET/5 STORIES
3. PARKING – SECTION 490–701
   (a) PARKING SPACE SIZE – 246 OF THE 452 SPACES (54%) ARE 9'x18' INSTEAD OF 9'x20' REQUIRED
   (b) AMOUNT OF PARKING SPACES – 1.61 SPACES PER UNIT INSTEAD OF 2 SPACES PER UNIT REQUIRED
4. SITE SIGN STANDARDS – TUSCAN VILLAGE – SECTION I (10)(C)
   (a) FREESTANDING SIGN SETBACK IS 16' INSTEAD OF 20'

VARIANCE

OMJ REALTY, LLC WAS GRANTED A VARIANCE FROM ARTICLE VIII, SECTION 490–814, WITH SAID TERMS OF THE ZONING ORDINANCE WAIVED TO ALLOW UP TO 281 MULTIFAMILY APARTMENT UNITS BE BUILT IN ONE–YEAR, WHERE ZONING ALLOWS NO MORE THAN 50 UNITS TO BE BUILT IN ANY ONE PROJECT PER YEAR IN THE COMMERCIAL–INDUSTRIAL C DISTRICT

WITH THE FOLLOWING STIPULATION:
1. WORK WITH TOWN ENGINEER ON PHASING PLAN PER 08/03/2018 MEMO.

PROPOSED DEVELOPMENT, PARKING AND TRAFFIC CONTROL NOTES:

1. ADA ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (A.D.A.) OF JANUARY, 1992.
2. ACCESSIBLE PARKING SPACES DESIGNATED WITH A "VAN" SHALL BE SIGNED AS VAN ACCESSIBLE" PER A.D.A. 4.1.2.5B.
3. ALL LIMITS OF PAVEMENT SHALL BE CURBED UNLESS NOTED OR DETAILED OTHERWISE.
4. STANDARD PARKING SPACES ARE EITHER 9 FEET BY 18 FEET OR 9 FEET BY 20 FEET. SEE SITE PLAN, C–2 FOR PARKING DIMENSIONS.
5. ALL PAVEMENT STRIPING SHALL BE PAINTED WITH 2 COATS OF PAINT.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL/BUILDING PLANS FOR EXACT LOCATIONS, DETAILS AND DIMENSIONS OF CONCRETE SIDEWALKS, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, CONCRETE PADS AND EXACT UTILITY ENTRANCE LOCATIONS.
7. PARKING AND TRAFFIC CONTROL PLANS ARE SCHEMATIC AND FOR LOCATION OF MARKINGS ONLY. SPECIFIC DETAILS FOR INSTALLATION OF PAVEMENT MARKINGS ARE PROVIDED AS PART OF THIS PLAN SET.
8. PARKING LOT PAVEMENT SECTION CAN BE FOUND IN DETAILS SHEET.
9. ALL DIMENSIONS TO FACE OF CURB UNLESS OTHERWISE NOTED.
10. THE APPLICANT WILL MANAGE SNOW IN ORDER TO MINIMIZE ITS IMPACTS ON PARKING SPACES AND, IF NECESSARY, REMOVE SNOW FROM THE SITE.
11. UNIT BREAKDOWN:
    199 – 1 BEDROOM UNITS
    67 – 2 BEDROOM UNITS
    15 – 3 BEDROOM UNITS
    281 TOTAL UNITS
12. ROOFTOP MECHANICAL EQUIPMENT TO BE SCREENED BY ROOF TOP PARAPET. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
13. REFER TO LANDSCAPE PLANS FOR SNOW STORAGE LOCATIONS.

UNIT CONSTRUCTION PHASING

- PHASE 1 – 66 UNITS
  05/2020 (11 MONTHS)
  107 SPACES (1.61/UNIT) WILL BE AVAILABLE
- PHASE 2 – 110 UNITS
  09/2020 (4 MONTHS)
  284 SPACES (1.61/UNIT) WILL BE AVAILABLE FOR PHASE 1 AND PHASE 2
- PHASE 3 – 105 UNITS
  01/2021 (4 MONTHS)
  ALL 451 SPACES WILL BE COMPLETED

* BASED ON 06/2019 START

EASEMENTS:

HANOVER TUSCAN VILLAGE WILL REQUIRE EASEMENTS FOR ACCESS, DRAINAGE AND UTILITIES OVER THE COMMON INFRASTRUCTURE TO BE LOCATED IN TUSCAN BOULEVARD AND ARTISAN DRIVE. AN EASEMENT PLAN WILL BE PREPARED AND SUBMITTED ONCE COMPLETE.

TOTAL BUILDING SUMMARY

RESIDENTIAL BUILDING	GARAGE
LEVEL 1: 61,300 S.F. LEVEL 2: 61,300 S.F. LEVEL 3: 61,300 S.F. LEVEL 4: 61,300 S.F. LEVEL 5: 61,300 S.F. TOTAL: 306,500 S.F. MAINTENANCE BUILDING: 864 S.F.	GARAGE 1: 1,367 S.F. GARAGE 2: 1,622 S.F. GARAGE 3: 1,367 S.F. GARAGE 4: 1,367 S.F. GARAGE 5: 1,622 S.F. GARAGE 6: 1,622 S.F. GARAGE 7: 1,367 S.F. TOTAL GARAGE: 10,334 S.F. TOTAL BLDG. AREA: 315,178 S.F.

40 0 20 40 80
GRAPHIC SCALE IN FEET

No.	REVISIONS	BY	DATE
11.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
10.	ADDED LANDSCAPE STONE WALL	BPD	05/23/2019
9.	CONFORMANCE PERMIT SET	BPD	05/16/2019
8.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019

SITE PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40' Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

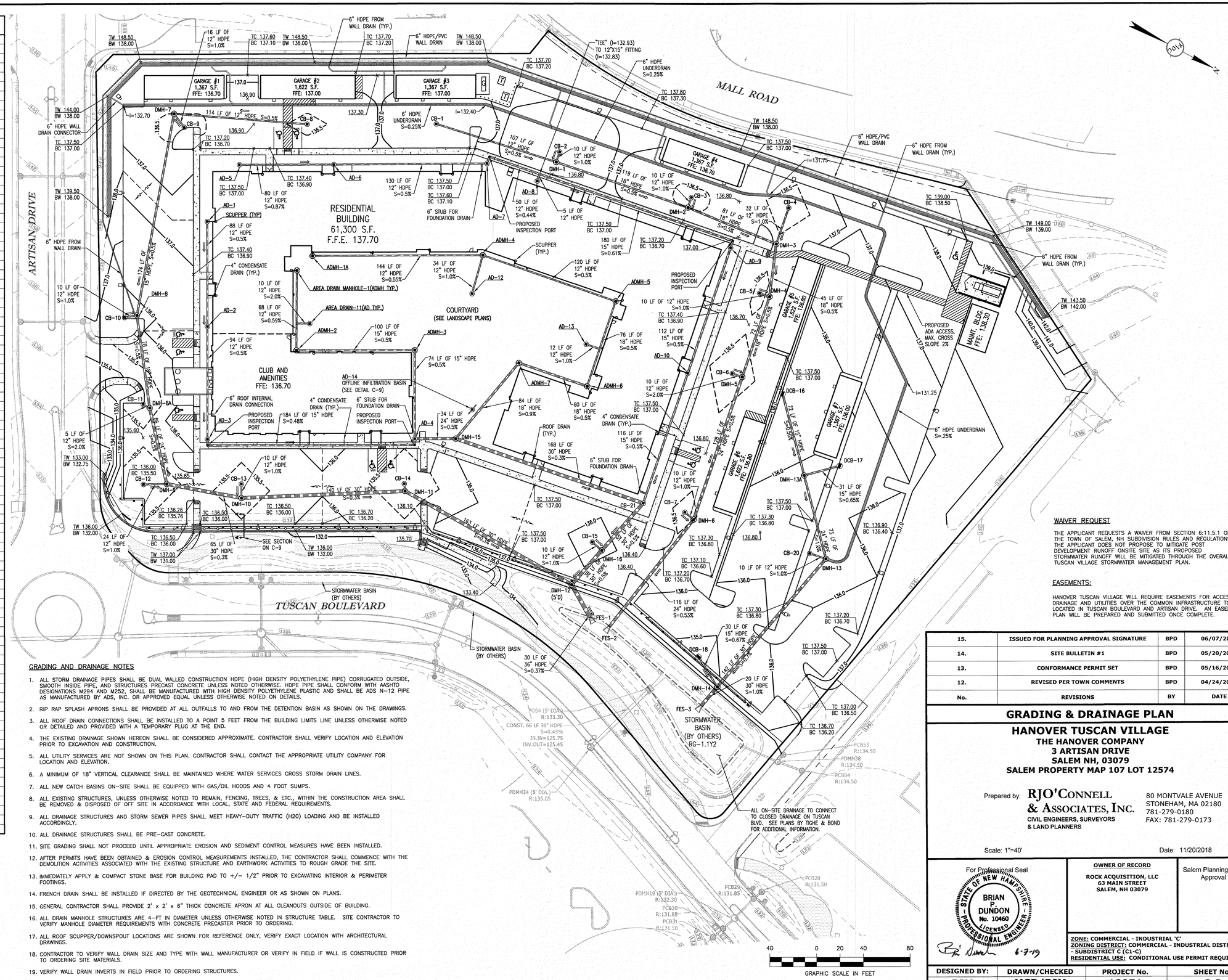
ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MCR/BJM	18071	C-2

Drawing name: G:\MH\Salem\Hanover Company\Tuscan Village\Main\18071_C-2 Site Plan.dwg
Jun 05, 2019 - 16:01pm

STRUCTURE SCHEDULE

STRUCTURE	RIM	INVERT IN	INVERT OUT
CB-1	136.45	–	133.10 (TO DMH-1)
CB-2	136.45	–	133.10 (TO DMH-1)
DMH-1	136.60	132.57 (FROM CB-1)	132.47 (TO DMH-2)
		133.00 (FROM CB-2)	
CB-3	136.30	–	133.00 (TO DMH-2)
DMH-2	136.50	131.88 (FROM DMH-1)	131.78 (TO DMH-3)
		132.90 (FROM CB-3)	
CB-4	136.20	–	132.90 (TO DMH-3)
DMH-3 (5-FT.)	136.60	131.38 (FROM DMH-2)	131.28 (TO DMH-4)
		132.60 (FROM CB-4)	
CB-5	136.40	–	133.10 (TO DMH-4)
DMH-4	136.55	131.06 (FROM DMH-3)	130.97 (TO DMH-5)
		133.00 (FROM CB-5)	
CB-6	136.30	–	133.00 (TO DMH-5)
DMH-5	136.40	130.61 (FROM DMH-4)	130.51 (TO DMH-6)
		132.80 (FROM CB-6)	
CB-7	136.30	–	133.00 (TO DMH-6)
DMH-6	136.50	129.87 (FROM DMH-5)	129.79 (TO FES-2)
		132.90 (FROM CB-7)	
FES-2	–	–	129.17 (TO POND)
CB-8	136.30	–	133.00 (TO DMH-7)
CB-9	136.30	–	133.00 (TO DMH-7)
DMH-7 (5-FT)	136.50	132.43 (FROM CB-8)	132.33 (TO DMH-8)
		132.84 (FROM CB-9)	
CB-10	135.80	–	132.40 (TO DMH-8)
DMH-8 (5-FT)	135.90	131.47 (FROM DMH-7)	131.37 (TO DMH-8A)
		132.30 (FROM CB-10)	
CB-11	135.30	–	131.70 (TO DMH-8A)
DMH-8A	135.40	130.98 (FROM DMH-8)	130.88 (TO DMH-9)
		131.60 (FROM CB-11)	
CB-12	135.20	–	131.60 (TO DMH-9)
DMH-9 (5-FT)	135.40	130.51 (FROM DMH-8A)	130.41 (TO DMH-10)
		131.36 (FROM CB-12)	
CB-13	135.20	–	131.80 (TO DMH-10)
DMH-10	135.30	130.23 (FROM DMH-9)	130.13 (TO DMH-11)
		131.70 (FROM CB-13)	
CB-14	135.10	–	131.70 (TO DMH-11)
DMH-11 (5-FT)	135.20	129.68 (FROM DMH-10)	129.56 (TO DMH-12)
		131.54 (FROM CB-14)	
CB-15	135.70	–	131.40 (TO DMH-16)
AD-1	137.00	–	134.70 (TO AD-2)
AD-2	137.00	134.26 (FROM AD-1)	134.16 (TO AD-3)
AD-3	136.00	133.69 (FROM AD-2)	133.59 (TO AD-4)
ADMH-1	136.00	–	133.70 (TO ADMH-2)
AD-11	136.10	–	133.60 (TO TEE ADMH1 TO ADMH2)
ADMH-2	136.00	133.30 (FROM ADMH-1)	133.20 (TO ADMH-3)
ADMH-3	136.00	132.70 (FROM ADMH-2)	132.60 (TO AD-4)
AD-4	136.00	132.23 (FROM ADMH-3)	132.13 (TO DMH-15)
		132.71 (FROM AD-3)	
ADMH-1A	136.40	–	133.38 (TO ADMH-4)
AD-12	136.50	–	133.34 (TO ADMH-4)
ADMH-4	136.25	133.00 (FROM AD-12)	132.54 (TO ADMH-5)
		132.59 (FROM ADMH-1A)	
AD-13	136.80	–	131.77 (TO TEE ADMH5 TO ADMH6)
ADMH-5	137.00	131.94 (FROM ADMH-4)	131.89 (TO ADMH-6)
ADMH-6	137.00	131.51 (FROM ADMH-5)	131.46 (TO ADMH-7)
ADMH-7	136.10	131.16 (FROM ADMH-6)	131.11 (TO DMH-15)
AD-14	135.50	OFFLINE INFILTRATION	
DMH-15	136.00	131.50 (FROM AD-4)	130.25 (TO CB-21)
		130.35 (FROM ADMH-7)	
AD-5	137.00	–	134.70 (TO AD-6)
AD-6	137.00	134.00 (FROM AD-5)	133.90 (TO AD-7)
AD-7	137.00	133.25 (FROM AD-6)	133.15 (TO AD-8)
AD-8	137.00	132.93 (FROM AD-7)	132.83 (TO AD-9)
AD-9	137.00	131.73 (FROM AD-8)	131.63 (TO AD-10)
AD-10	137.00	131.07 (FROM AD-9)	130.97 (TO CB-21)
CB-21	137.00	130.39 (FROM AD-10)	129.65 (TO DMH-16)
		129.75 (FROM DMH-15)	
DMH-16	135.60	131.30 (FROM CB-15)	129.39 (TO DMH-12)
		129.39 (FROM CB-21)	
DMH-12	135.60	129.11 (FROM DMH-11)	129.11 (TO FES-1)
		129.20 (FROM DMH-16)	
FES-1	–	–	129.00 (TO POND)
DCB-16	135.30	–	131.70 (TO DMH-13A)
DCB-17	135.20	–	131.50 (TO DMH-13A)
DMH-13A	136.20	131.30 (FROM DCB-16)	131.20 (TO DMH-13)
		131.30 (FROM DCB-17)	
CB-20	135.00	–	131.25 (TO DMH-13)
DMH-13 (6-FT)	136.75	131.15 (FROM DMH-13A)	130.28 (TO DMH-14)
		130.50 (FROM UNDER DRAIN)	
DCB-18	134.80		131.40 (TO DMH-14)
DMH-14	136.00	129.28 (FROM DMH-13)	129.20 (TO FES-3)
		131.20 (FROM DCB-18)	
FES-3	–	–	129.00 (TO POND)



GRADING AND DRAINAGE NOTES

1. ALL STORM DRAINAGE PIPES SHALL BE DUAL WALLED CONSTRUCTION HDPE (HIGH DENSITY POLYETHYLENE PIPE) CORRUGATED OUTSIDE, SMOOTH INSIDE PIPE, AND STRUCTURES PRECAST CONCRETE UNLESS NOTED OTHERWISE. HDPE PIPE SHALL CONFORM WITH AASHTO DESIGNATIONS M294 AND M252, SHALL BE MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC AND SHALL BE ADS N-12 PIPE AS MANUFACTURED BY ADS, INC. OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON DETAILS.
2. RIP RAP SPLASH APRONS SHALL BE PROVIDED AT ALL OUTFALLS TO AND FROM THE DETENTION BASIN AS SHOWN ON THE DRAWINGS.
3. ALL ROOF DRAIN CONNECTIONS SHALL BE INSTALLED TO A POINT 5 FEET FROM THE BUILDING LIMITS LINE UNLESS OTHERWISE NOTED OR DETAILED AND PROVIDED WITH A TEMPORARY PLUG AT THE END.
4. THE EXISTING DRAINAGE SHOWN HEREON SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION PRIOR TO EXCAVATION AND CONSTRUCTION.
5. ALL UTILITY SERVICES ARE NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY FOR LOCATION AND ELEVATION.
6. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES.
7. ALL NEW CATCH BASINS ON-SITE SHALL BE EQUIPPED WITH GAS/OIL HOODS AND 4 FOOT SUMPS.
8. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY-DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
10. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST CONCRETE.
11. SITE GRADING SHALL NOT PROCEED UNTIL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
12. AFTER PERMITS HAVE BEEN OBTAINED & EROSION CONTROL MEASUREMENTS INSTALLED, THE CONTRACTOR SHALL COMMENCE WITH THE DEMOLITION ACTIVITIES ASSOCIATED WITH THE EXISTING STRUCTURE AND EARTHWORK ACTIVITIES TO ROUGH GRADE THE SITE.
13. IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.
14. FRENCH DRAIN SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS.
15. GENERAL CONTRACTOR SHALL PROVIDE 2' x 2' x 6" THICK CONCRETE APRON AT ALL CLEANOUTS OUTSIDE OF BUILDING.
16. ALL DRAIN MANHOLE STRUCTURES ARE 4-FT IN DIAMETER UNLESS OTHERWISE NOTED IN STRUCTURE TABLE. SITE CONTRACTOR TO VERIFY MANHOLE DIAMETER REQUIREMENTS WITH CONCRETE PRECASTER PRIOR TO ORDERING.
17. ALL ROOF SCUPPER/DOWNSPOUT LOCATIONS ARE SHOWN FOR REFERENCE ONLY, VERIFY EXACT LOCATION WITH ARCHITECTURAL DRAWINGS.
18. CONTRACTOR TO VERIFY WALL DRAIN SIZE AND TYPE WITH WALL MANUFACTURER OR VERIFY IN FIELD IF WALL IS CONSTRUCTED PRIOR TO ORDERING SITE MATERIALS.
19. VERIFY WALL DRAIN INVERTS IN FIELD PRIOR TO ORDERING STRUCTURES.

WAIVER REQUEST

THE APPLICANT REQUESTS A WAIVER FROM SECTION 6:11.5.1 OF THE TOWN OF SALEM, NH SUBDIVISION RULES AND REGULATIONS. THE APPLICANT DOES NOT PROPOSE TO MITIGATE POST DEVELOPMENT RUNOFF ONSITE SITE AS ITS PROPOSED STORMWATER RUNOFF WILL BE MITIGATED THROUGH THE OVERALL TUSCAN VILLAGE STORMWATER MANAGEMENT PLAN.

EASEMENTS:

HANOVER TUSCAN VILLAGE WILL REQUIRE EASEMENTS FOR ACCESS, DRAINAGE AND UTILITIES OVER THE COMMON INFRASTRUCTURE TO BE LOCATED IN TUSCAN BOULEVARD AND ARTISAN DRIVE. AN EASEMENT PLAN WILL BE PREPARED AND SUBMITTED ONCE COMPLETE.

No.	REVISIONS	BY	DATE
15.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
14.	SITE BULLETIN #1	BPD	05/20/2019
13.	CONFORMANCE PERMIT SET	BPD	05/16/2019
12.	REVISED PER TOWN COMMENTS	BPD	04/24/2019

GRADING & DRAINAGE PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40'

Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER – 6-7-19

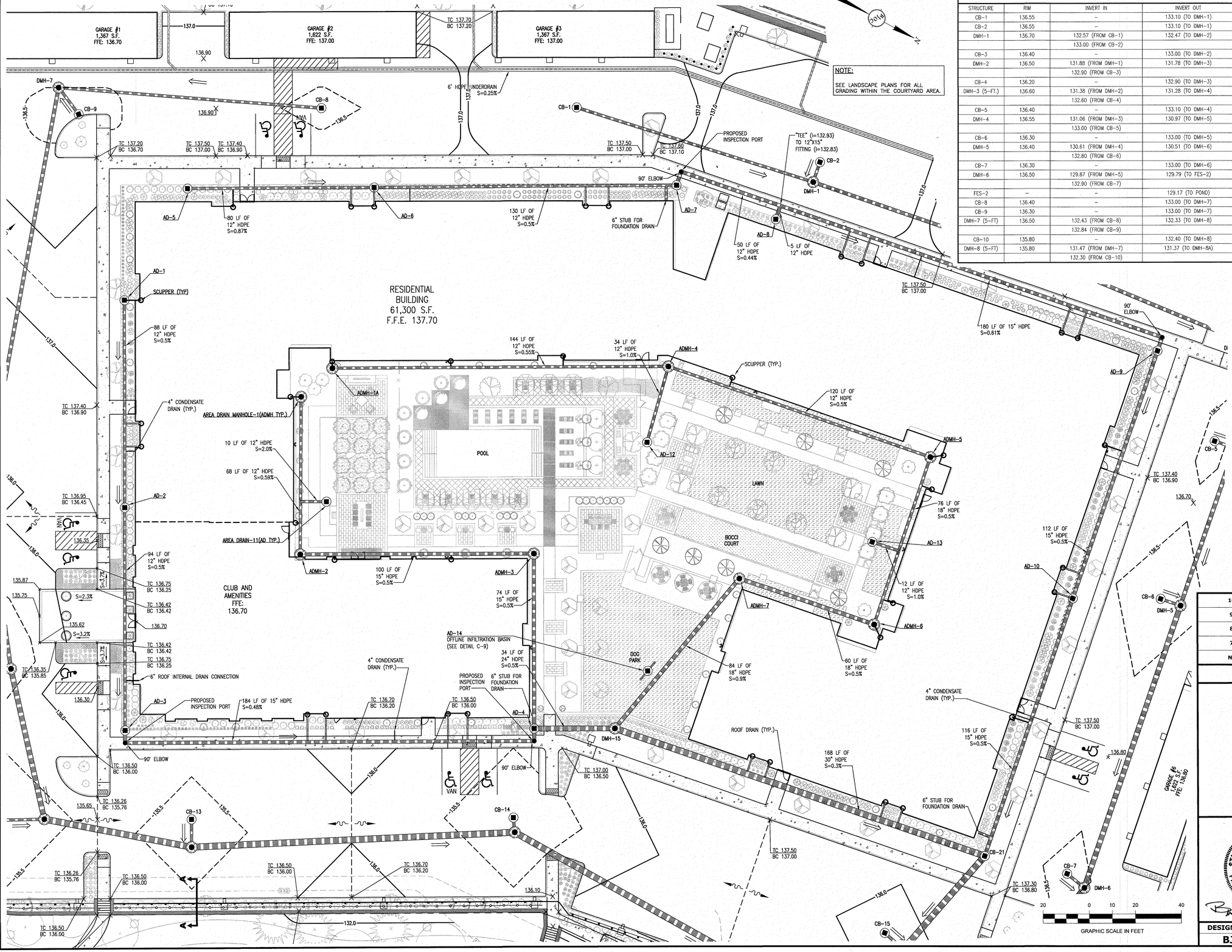
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MCR/BJM	18071	C-3

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-3 Grading & Drainage Plan.dwg
Jun 06, 2019 - 6:50pm



STRUCTURE SCHEDULE

STRUCTURE	RIM	INVERT IN	INVERT OUT
CB-1	136.55	–	133.10 (TO DMH-1)
CB-2	136.55	–	133.10 (TO DMH-1)
DMH-1	136.70	132.57 (FROM CB-1)	132.47 (TO DMH-2)
		133.00 (FROM CB-2)	
CB-3	136.40	–	133.00 (TO DMH-2)
DMH-2	136.50	131.88 (FROM DMH-1)	131.78 (TO DMH-3)
		132.90 (FROM CB-3)	
CB-4	136.20	–	132.90 (TO DMH-3)
DMH-3 (5-FT.)	136.60	131.38 (FROM DMH-2)	131.28 (TO DMH-4)
		132.60 (FROM CB-4)	
CB-5	136.40	–	133.10 (TO DMH-4)
DMH-4	136.55	131.06 (FROM DMH-3)	130.97 (TO DMH-5)
		133.00 (FROM CB-5)	
CB-6	136.30	–	133.00 (TO DMH-5)
DMH-5	136.40	130.61 (FROM DMH-4)	130.51 (TO DMH-6)
		132.80 (FROM CB-6)	
CB-7	136.30	–	133.00 (TO DMH-6)
DMH-6	136.50	129.87 (FROM DMH-5)	129.79 (TO FES-2)
		132.90 (FROM CB-7)	
FES-2	–	–	129.17 (TO POND)
CB-8	136.40	–	133.00 (TO DMH-7)
CB-9	136.30	–	133.00 (TO DMH-7)
DMH-7 (5-FT)	136.50	132.43 (FROM CB-8)	132.33 (TO DMH-8)
		132.84 (FROM CB-9)	
CB-10	135.80	–	132.40 (TO DMH-8)
DMH-8 (5-FT)	135.80	131.47 (FROM DMH-7)	131.37 (TO DMH-8A)
		132.30 (FROM CB-10)	

STRUCTURE	RIM	INVERT IN	INVERT OUT
CB-11	135.30	–	131.70 (TO DMH-8A)
DMH-8A	135.40	130.98 (FROM DMH-8)	130.88 (TO DMH-9)
		131.60 (FROM CB-11)	
CB-12	135.20	–	131.60 (TO DMH-9)
DMH-9 (5-FT)	135.50	130.51 (FROM DMH-8A)	130.41 (TO DMH-10)
		131.36 (FROM CB-12)	
CB-13	135.20	–	131.80 (TO DMH-10)
DMH-10	135.30	130.23 (FROM DMH-9)	130.13 (TO DMH-11)
		131.70 (FROM CB-13)	
CB-14	135.10	–	131.70 (TO DMH-11)
DMH-11 (5-FT)	135.40	129.68 (FROM DMH-10)	129.56 (TO DMH-12)
		131.54 (FROM CB-14)	
CB-15	135.70	–	131.40 (TO DMH-16)
AD-1	137.00	–	134.70 (TO AD-2)
AD-2	137.00	134.26 (FROM AD-1)	134.16 (TO AD-3)
AD-3	136.00	133.69 (FROM AD-2)	133.59 (TO AD-4)
ADMH-1	136.00	–	133.70 (TO ADMH-2)
AD-11	136.10	–	133.60 (TO TEE ADMH1 TO ADMH2)
ADMH-2	136.00	133.30 (FROM ADMH-1)	133.20 (TO ADMH-3)
ADMH-3	136.00	132.70 (FROM ADMH-2)	132.60 (TO AD-4)
AD-4	136.00	132.23 (FROM ADMH-3)	132.13 (TO DMH-15)
		132.71 (FROM AD-3)	
ADMH-1A	136.40	–	133.38 (TO ADMH-4)
AD-12	136.50	–	133.34 (TO ADMH-4)
ADMH-4	136.25	133.00 (FROM AD-12)	132.54 (TO ADMH-5)
		132.59 (FROM ADMH-1A)	
AD-13	136.80	–	131.77 (TO TEE ADMH5 TO ADMH6)
ADMH-5	137.00	131.94 (FROM ADMH-4)	131.89 (TO ADMH-6)
ADMH-6	137.00	131.51 (FROM ADMH-5)	131.46 (TO ADMH-7)
ADMH-7	136.10	131.16 (FROM ADMH-6)	131.11 (TO DMH-15)
AD-14	135.50	OFFLINE INFILTRATION	
DMH-15	136.00	131.96 (FROM AD-4)	130.25 (TO CD-21)
		130.35 (FROM ADMH-7)	
AD-5	137.00	–	134.70 (TO AD-6)
AD-6	137.00	134.00 (FROM AD-5)	133.90 (TO AD-7)
AD-7	137.00	133.25 (FROM AD-6)	133.15 (TO AD-8)
AD-8	137.00	132.93 (FROM AD-7)	132.83 (TO AD-9)
AD-9	137.00	131.73 (FROM AD-8)	131.63 (TO AD-10)
AD-10	137.00	131.07 (FROM AD-9)	130.97 (TO CB-21)
CB-21	137.00	130.39 (FROM AD-10)	129.65 (TO DMH-16)
		129.75 (FROM DMH-15)	
DMH-16	135.60	131.30 (FROM CB-15)	129.39 (TO DMH-12)
		129.39 (FROM CB-21)	
DMH-12	135.60	129.11 (FROM DMH-11)	129.11 (TO FES-1)
		129.20 (FROM DMH-16)	
FES-1		–	129.00 (TO POND)
DCB-16	135.30	–	132.90 (TO DMH-13A)
DCB-17	135.20	–	132.00 (TO DMH-13A)
DMH-13A	136.20	131.30 (FROM DCB-16)	131.20 (TO DMH-13)
		131.30 (FROM DCB-17)	
CB-20	135.00	–	131.25 (TO DMH-13)
DMH-13 (6-FT)	136.75	131.15 (FROM DMH-13A)	130.28 (TO DMH-14)
		130.50 (FROM UNDER DRAIN)	
DCB-18	134.80	–	131.50 (TO DMH-14)
DMH-14	136.00	129.28 (FROM DMH-13)	129.20 (TO FES-3)
		131.20 (FROM DCB-18)	
FES-3		–	129.00 (TO POND)

No.	REVISIONS	BY	DATE
10.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
9.	CONFORMANCE PERMIT SET	BPD	05/16/2019
8.	REVISED PER TOWN COMMENTS	BPD	04/24/2019
7.	CONFORMANCE PERMIT SET	BPD	04/15/2019

COURTYARD GRADING & DRAINAGE PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=20'

Date: 01/04/2019

For Professional Seal

STATE OF NEW HAMPSHIRE
BRIAN P. DUNDON
No. 10460
LICENSED PROFESSIONAL ENGINEER
6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MCR/BJM	18071	C-3A

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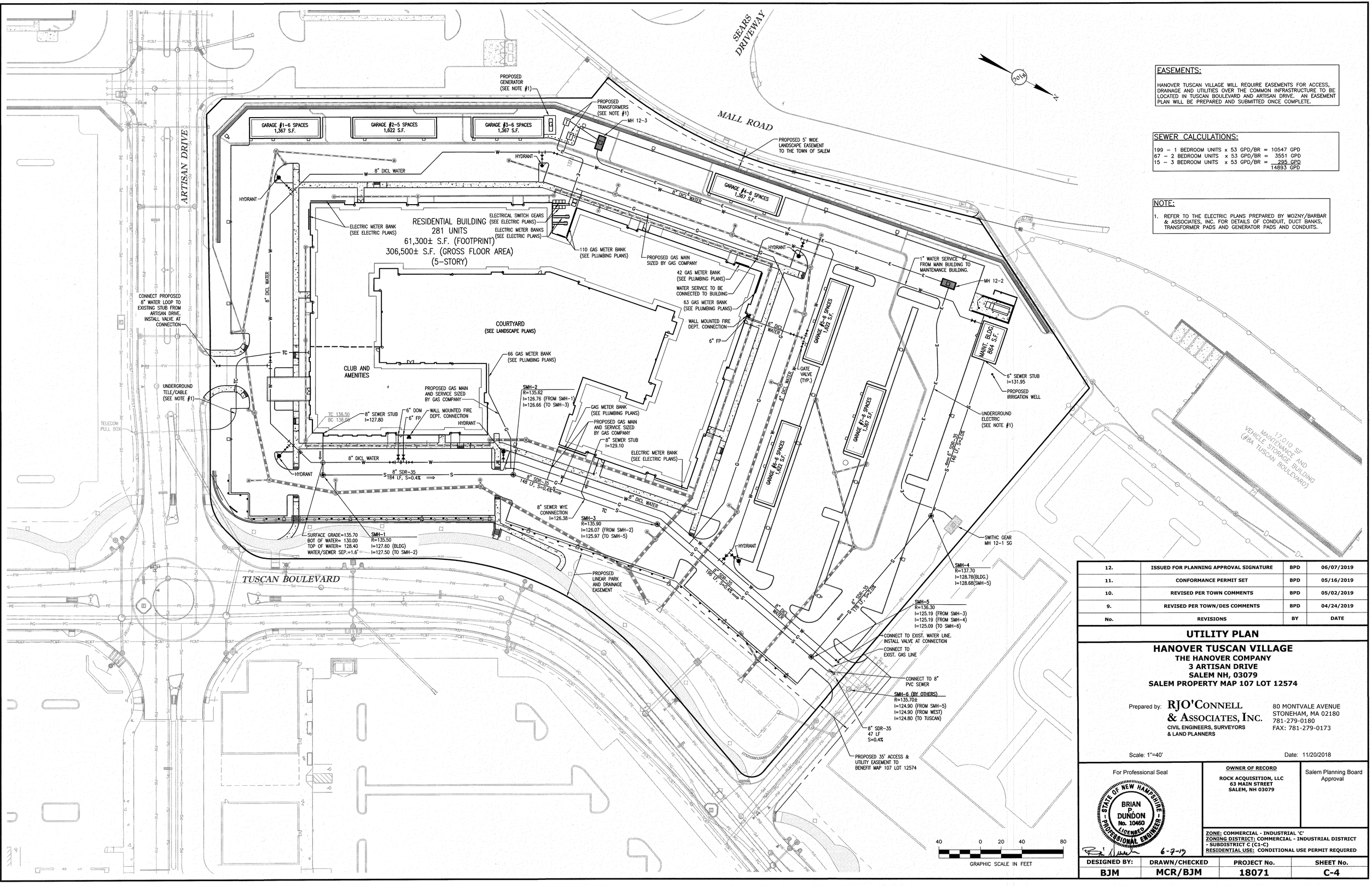

EASEMENTS:

HANOVER TUSCAN VILLAGE WILL REQUIRE EASEMENTS FOR ACCESS, DRAINAGE AND UTILITIES OVER THE COMMON INFRASTRUCTURE TO BE LOCATED IN TUSCAN BOULEVARD AND ARTISAN DRIVE. AN EASEMENT PLAN WILL BE PREPARED AND SUBMITTED ONCE COMPLETE.

SEWER CALCULATIONS:

199 – 1 BEDROOM UNITS	x 53 GPD/BR =	10547 GPD
67 – 2 BEDROOM UNITS	x 53 GPD/BR =	3551 GPD
15 – 3 BEDROOM UNITS	x 53 GPD/BR =	295 GPD
		14893 GPD

NOTE:

1. REFER TO THE ELECTRIC PLANS PREPARED BY WOZNY/BARBAR & ASSOCIATES, INC. FOR DETAILS OF CONDUIT, DUCT BANKS, TRANSFORMER PADS AND GENERATOR PADS AND CONDUITS.

No.	REVISIONS	BY	DATE
12.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
11.	CONFORMANCE PERMIT SET	BPD	05/16/2019
10.	REVISED PER TOWN COMMENTS	BPD	05/02/2019
9.	REVISED PER TOWN/DES COMMENTS	BPD	04/24/2019

UTILITY PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40'

Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MCR/BJM	18071	C-4

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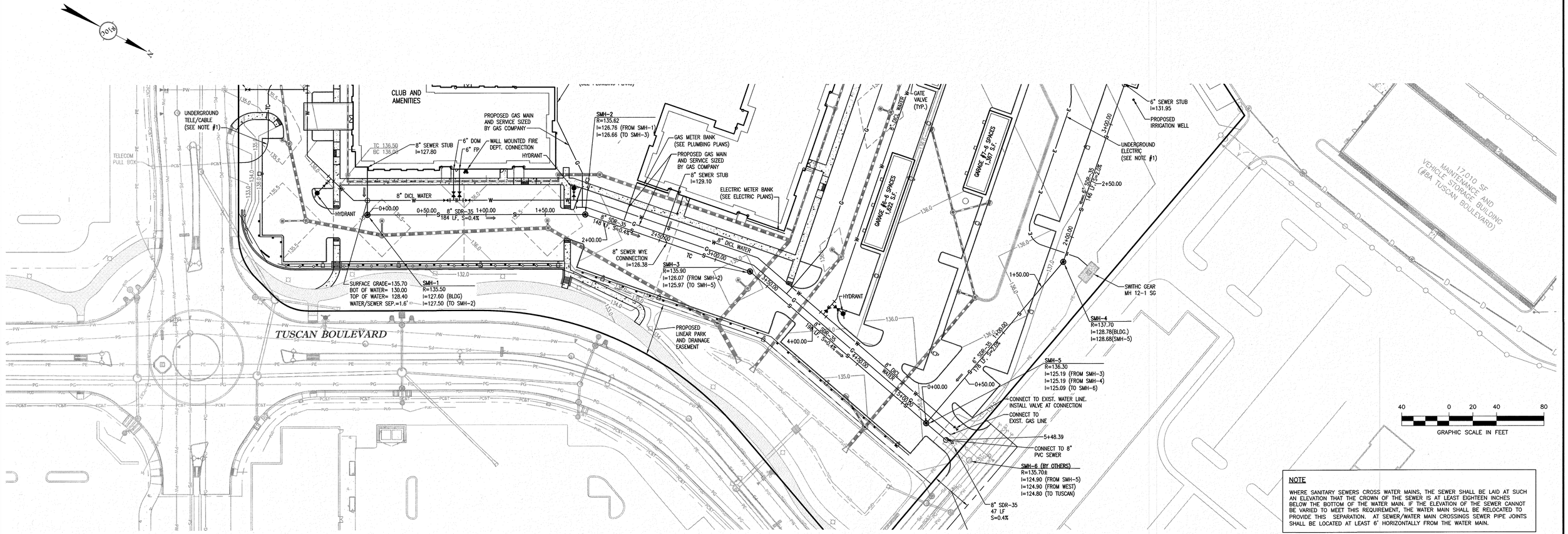
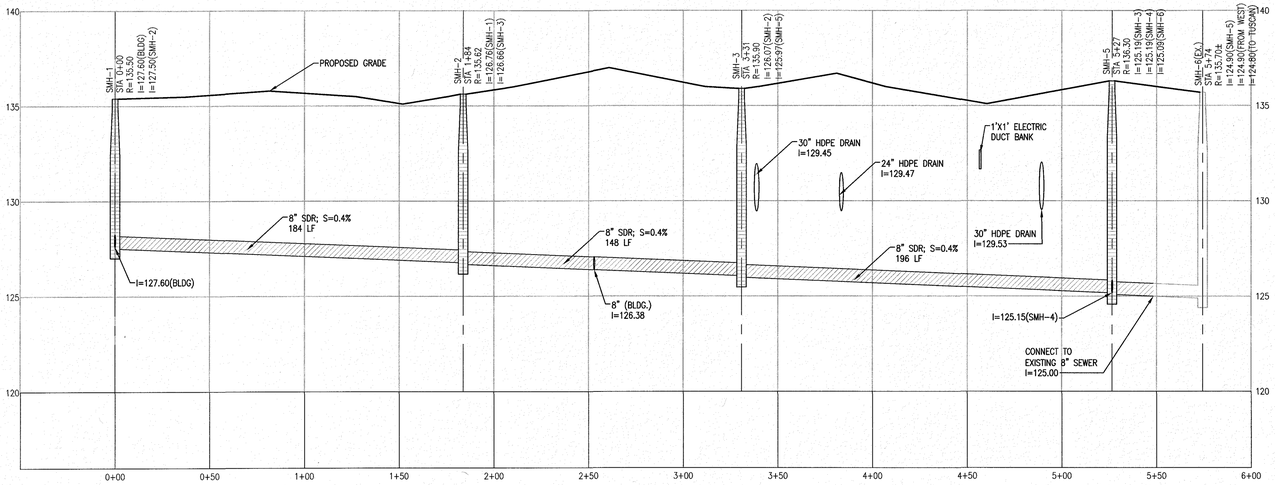


NOTE

WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION. AT SEWER/WATER MAIN CROSSINGS SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6' HORIZONTALLY FROM THE WATER MAIN.

SEE DWG. N-1 FOR ADDITIONAL SEWER RELATED NOTES



SEWER PROFILE
SMH-1 TO SMH-6(EXISTING)
STA 0+00 TO 5+48
SCALE: 1"=40'H 1"=4'V

No.	REVISIONS	BY	DATE
4.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
3.	CONFORMANCE PERMIT SET	BPD	05/16/2019
2.	REVISED PER DES COMMENTS	BPD	04/24/2019
1.	CONFORMANCE PERMIT SET	BPD	04/15/2019

SEWER PROFILE

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
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781-279-0180
FAX: 781-279-0173

Scale: 1"=40' Date: 03/13/2019

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
AK	WJH/BJM	18071	C-4A

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-4 Utility Plan.dwg
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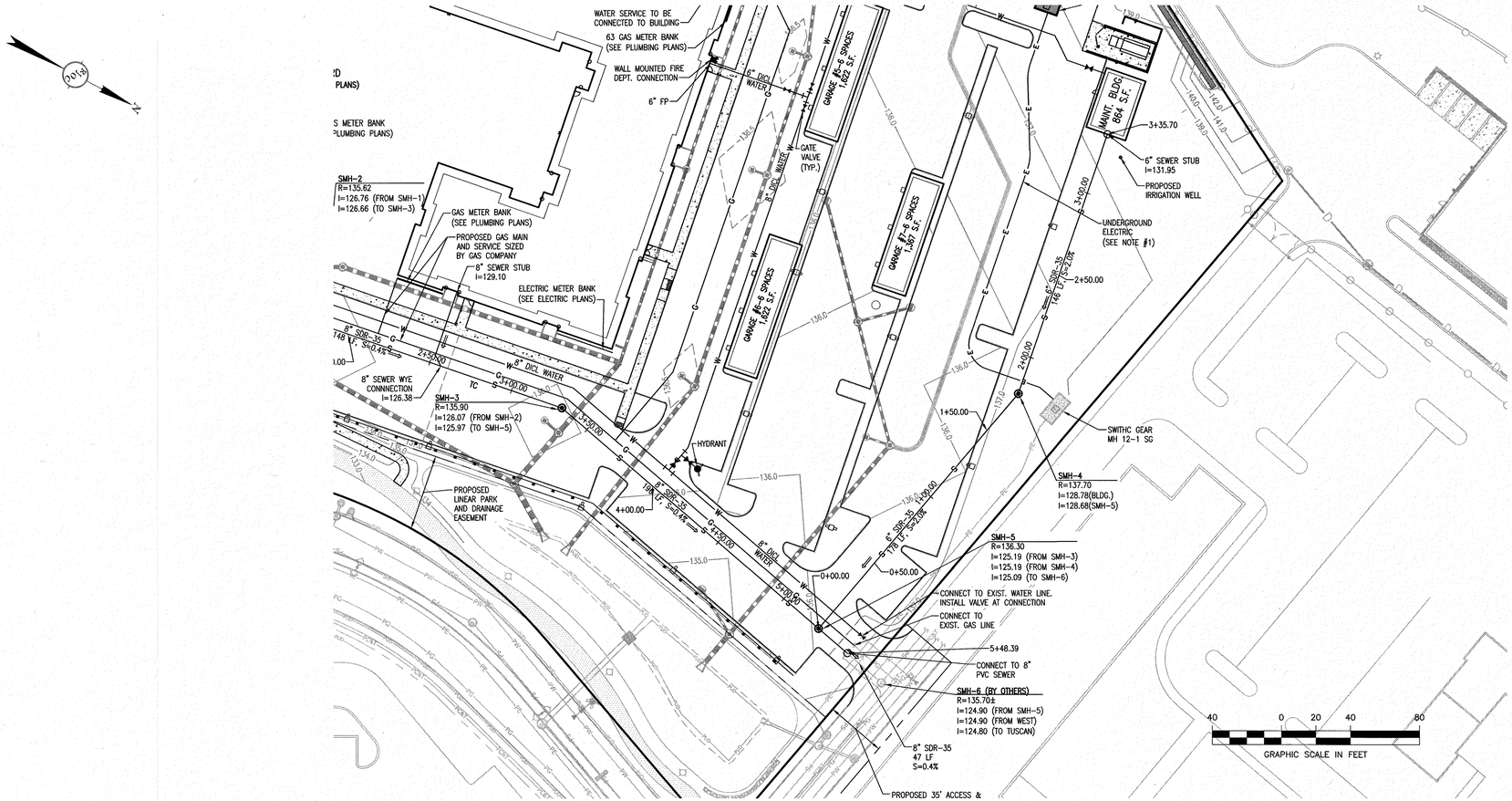

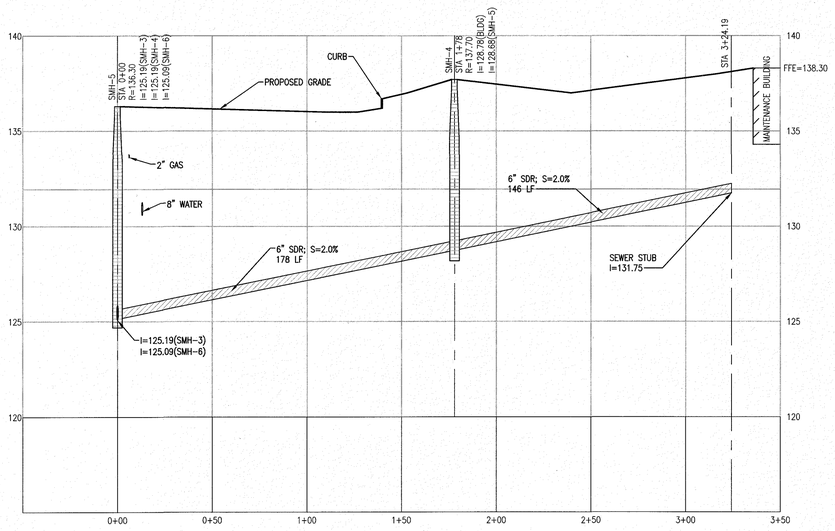

SEWER PROFILE
SMH-5 TO MAINTENANCE BUILDING
STA 0+00 TO 3+36
SCALE: 1"=40'H 1"=4'V

NOTE

WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION. AT SEWER/WATER MAIN CROSSINGS SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6' HORIZONTALLY FROM THE WATER MAIN.

SEE DWG. N-1 FOR ADDITIONAL SEWER RELATED NOTES

No.	REVISIONS	BY	DATE
4.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
3.	CONFORMANCE PERMIT SET	BPD	05/16/2019
2.	REVISED PER DES COMMENTS	BPD	04/24/2019
1.	CONFORMANCE PERMIT SET	BPD	04/15/2019

SEWER PROFILE

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40' Date: 03/13/2019

For Professional Seal
STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER –
6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

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RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
AK	WJH/BJM	18071	C-4B

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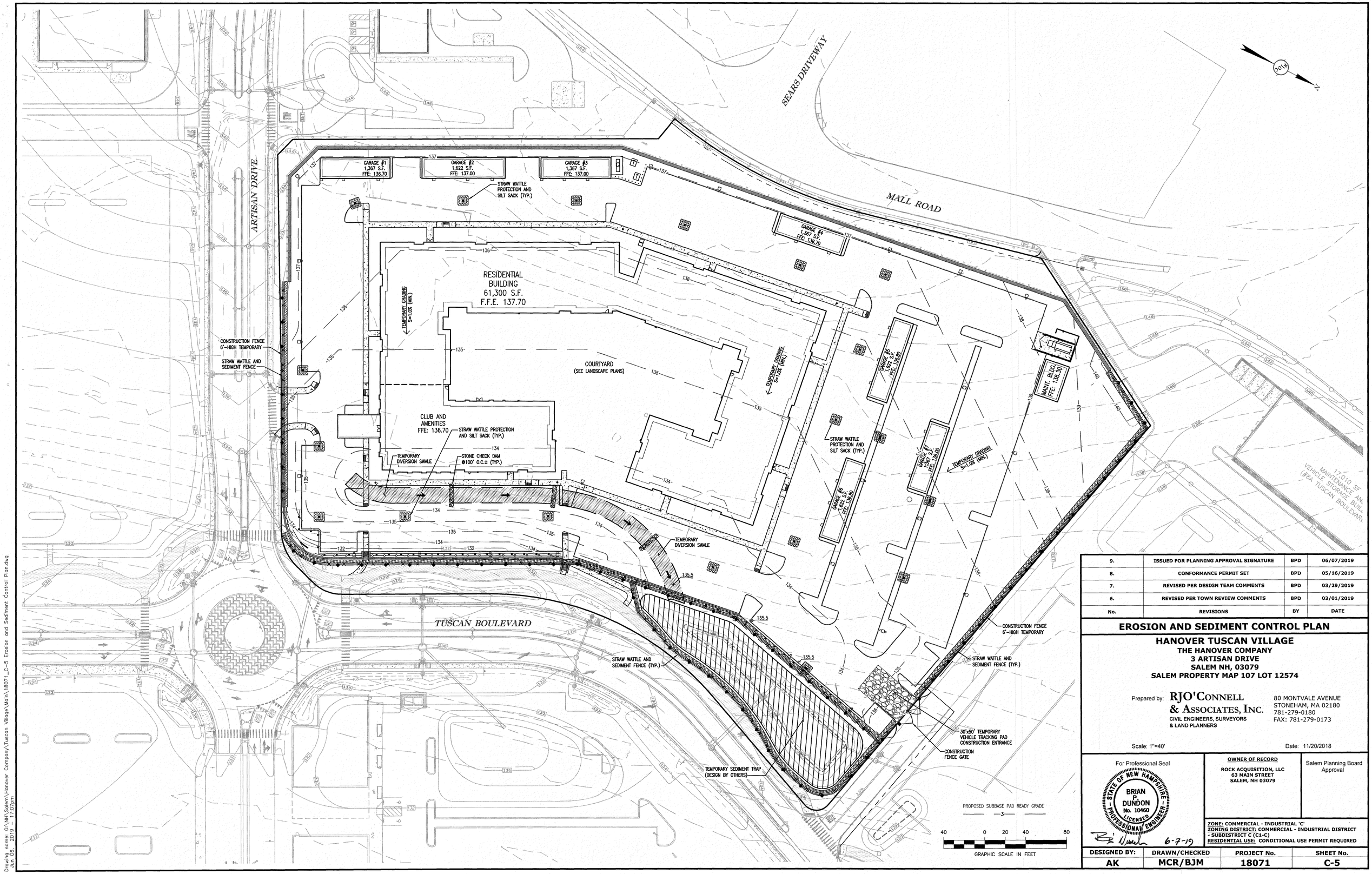

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

EROSION AND SEDIMENT CONTROL PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40' Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
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63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

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DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
AK	MCR/BJM	18071	C-5

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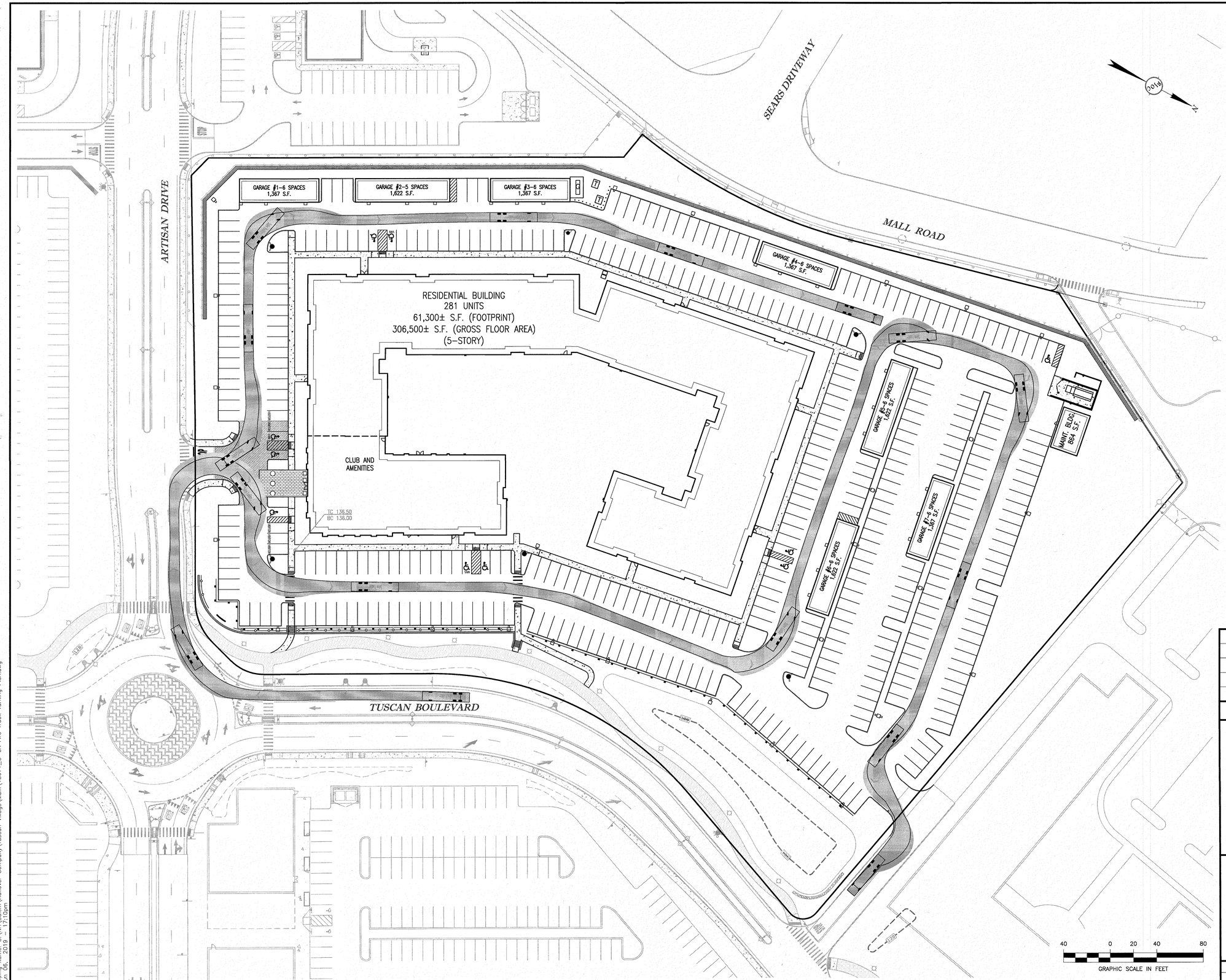
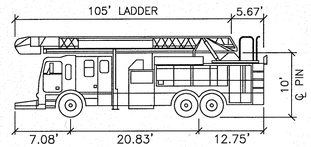


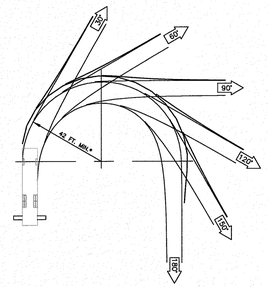


SALEM LADDER (FT.)

Width	: 8.00
Track	: 7.83
Steering Angle	: 32.60

PROFILE

(PROTOTYPICAL, NOT TO SCALE)



No.	REVISIONS	BY	DATE
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7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

FIRE TRUCK TURNING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40'

Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-6A

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-6A Fire Truck Turning Plan.dwg
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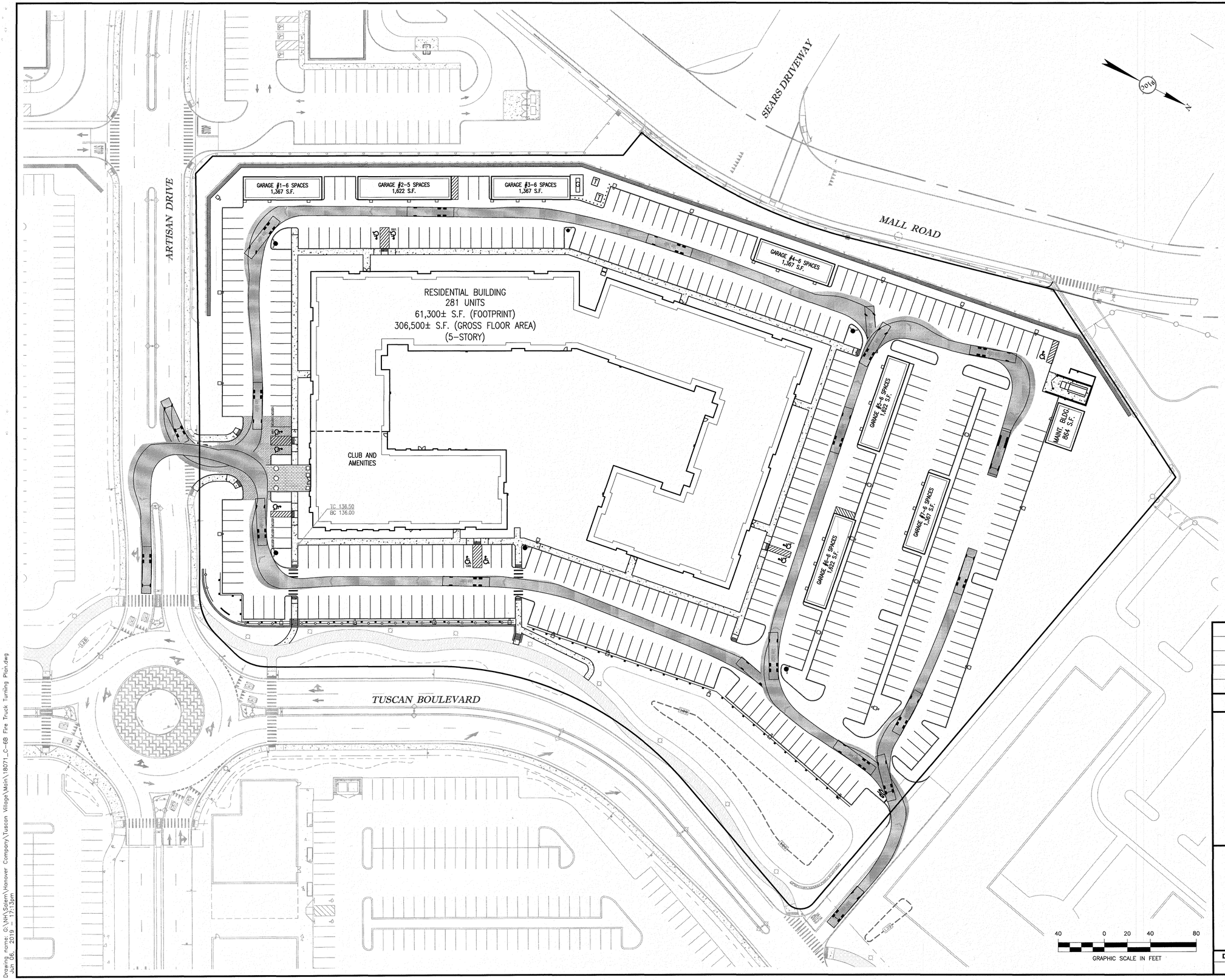
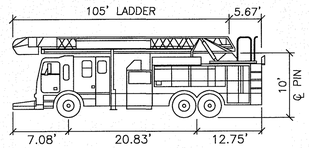


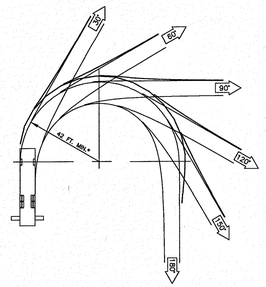


SALEM LADDER (FT.)

Width	: 8.00
Track	: 7.83
Steering Angle	: 32.60

PROFILE

(PROTOTYPICAL, NOT TO SCALE)



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FIRE TRUCK TURNING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
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STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40'

Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE
BRIAN P DUNDON
No. 10460
LICENSED PROFESSIONAL ENGINEER
6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

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RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

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BJM	MSM/BJM	18071	C-6B

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-6B Fire Truck Turning Plan.dwg
Jun 06, 2019 - 17:13pm

ARTISAN DRIVE

SEARS DRIVEWAY

MALL ROAD

TUSCAN BOULEVARD

GARAGE #1–6 SPACES
1,367 S.F.

GARAGE #2–5 SPACES
1,622 S.F.

GARAGE #3–6 SPACES
1,367 S.F.

GARAGE #4–6 SPACES
1,367 S.F.

GARAGE #5–6 SPACES
1,622 S.F.

GARAGE #6–6 SPACES
1,622 S.F.

GARAGE #7–6 SPACES
1,367 S.F.

RESIDENTIAL BUILDING
281 UNITS
61,300± S.F. (FOOTPRINT)
306,500± S.F. (GROSS FLOOR AREA)
(5–STORY)

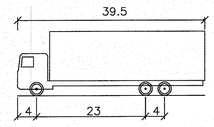
CLUB AND
AMENITIES

MAINT. BLDG.
864 S.F.

STOP

20'

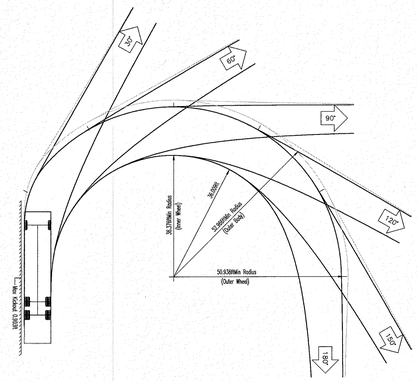
40 0 20 40 80
GRAPHIC SCALE IN FEET



SU–40 – Single Unit Truck

Overall Length	39.500ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock–to–lock time	5.00s
Max Steering Angle (Virtual)	31.80°

SU–40 TYPICAL MOVING TRUCK



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8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

SU–40 SINGLE UNIT TRUCK TURNING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: 1"=40'

Date: 11/29/2018

For Professional Seal

STATE OF NEW HAMPSHIRE
BRIAN P. DUNDON
No. 10460
LICENSED PROFESSIONAL ENGINEER

6-7-19

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63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

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RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-6C

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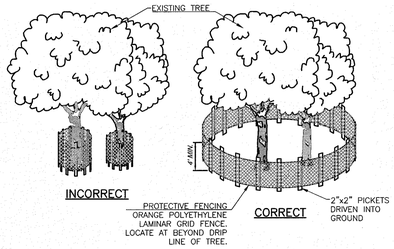
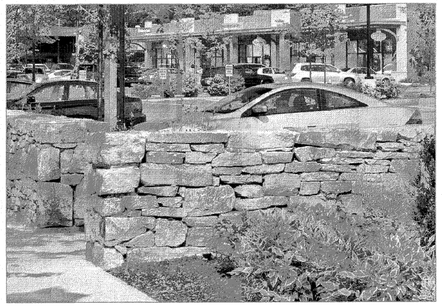
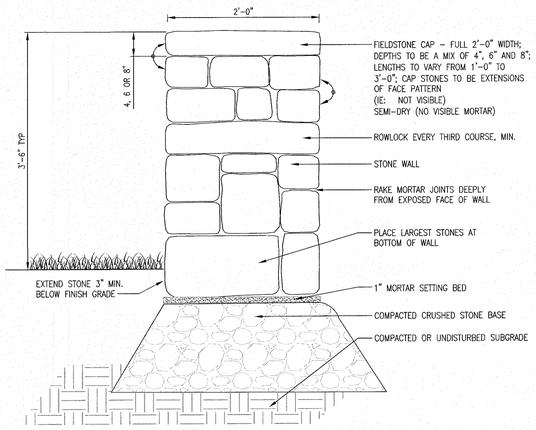


BARRIER TO BE INSTALLED AT DRIP LINE OF TREE BRANCHES. USE HIGHLY VISIBLE "HAZARD" FENCE IN VIBRANT COLOR (YELLOW OR ORANGE).

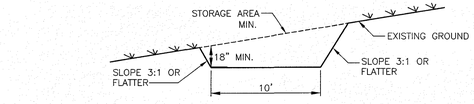
NOTES:
1. TREE PROTECTION BARRIERS MUST BE PLACED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR. TREES TO REMAIN SHALL BE INDICATED ON THE PLANS.
2. TREE PROTECTION BARRIER MUST REMAIN IN PLACE UNTIL GRADING AND CONSTRUCTION ACTIVITY IS COMPLETE OR UNTIL COMMENCEMENT OF FINISH GRADING AND SODDING.
3. BARRIERS SHALL BE PLACED AROUND TREES AT THE DRIPLINE EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE DRIPLINE.
4. THE DRIPLINE OF A TREE IS THE IMAGINARY VERTICAL LINE THAT EXTENDS DOWNWARD FROM THE OUTERMOST TIPS OF THE TREE'S BRANCHES TO THE GROUND.
5. AREAS SURROUNDED BY THE TREE PROTECTION BARRIERS SHALL BE PROTECTED FROM VEGETATION REMOVAL, PLACEMENT OF SOIL, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND.
6. ALL TREE ROOTS WITHIN AREA TO BE GRADED AND ORIGINATING FROM A PROTECTED TREE SHALL BE SEVERED CLEANLY AT THE LIMITS OF THE PROTECTED AREA.
7. ALL TREE PRUNING AND TRIMMING ON ANY TREE TO BE RETAINED SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE AMERICAN SOCIETY OF ARBORICULTURE (ASA).
8. 2'x2' TREE PROTECTION SIGNS SPACED A MINIMUM OF ON SIGN EVERY 300' SHALL CONTAIN THE WORDING "TREE PROTECTION ZONE – KEEP OUT".

TREE PROTECTION BARRIER
SCALE: N.T.S.



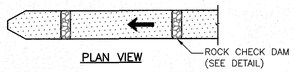


FIELDSTONE WALL
SCALE: N.T.S.



CROSS SECTION

POSITIVE DRAINAGE: 0.5% OR STEEPER DEPENDENT ON TOPOGRAPHY

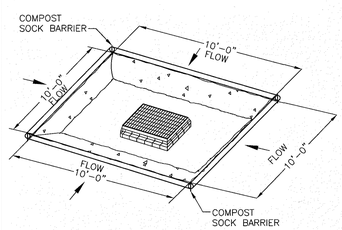


PLAN VIEW

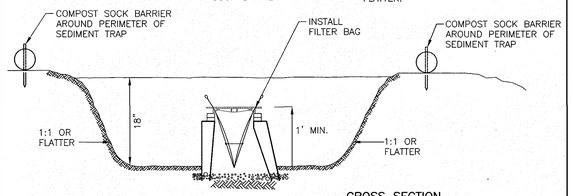
CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE FLOW TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AND UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE FOR SLOPES GREATER THAN 2%.
9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT AND AS REQUIRED BY THE PERMIT.

TEMPORARY SWALE DETAIL
SCALE: N.T.S.

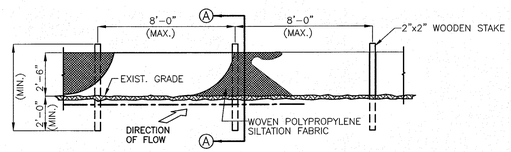


1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
4. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
5. ALL CUTS SLOPES SHALL BE 1:1 OR FLATTER.

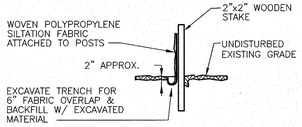


CROSS SECTION

STORM INLET SEDIMENT TRAP
SCALE: N.T.S.



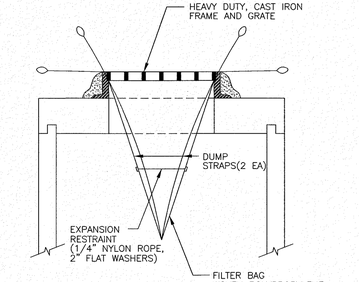
SILT FENCE ELEVATION



SILT FENCE SECTION A–A

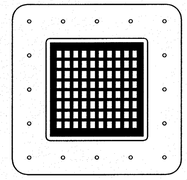
NOTE:
IN AREAS WHERE ANCHOR TRENCH CANNOT BE DUG, FABRIC WILL BE LAID ON SURFACE AND COVERED WITH A MINIMUM OF 6" DEPTH OF SOIL.

SILTATION FENCE DETAIL
SCALE: N.T.S.



NOTES:
1. INSTALL SILT BAG IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS.
2. WHEN EXPANSION RESTRAINT CORD IS NO LONGER VISIBLE, THE SILT BAG IS FULL AND SHOULD BE EMPTIED.
3. REMOVE SILT BAG PER MANUFACTURES INSTRUCTIONS.

TYPICAL FILTER BAG DETAIL
SCALE: N.T.S.



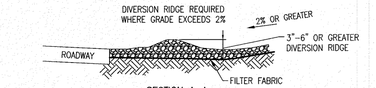
NOTE:
THIS DETAIL IS TO BE USED WHEN PARKING AREAS ARE AT SUBGRADE ELEVATION.

NOTES:
1. COMPOST SOCK SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING THE ADJACENT COMPOST SOCK.

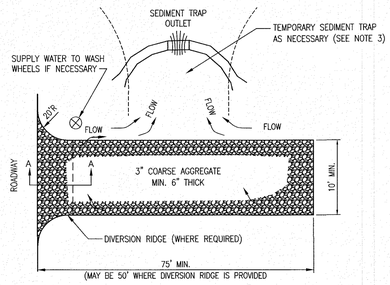
2. COMPOST SOCK SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE COMPOST SOCK.

3. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

TYPICAL COMPOST SOCK INLET PROTECTION DETAIL
SCALE: N.T.S.



SECTION A–A



PLAN

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

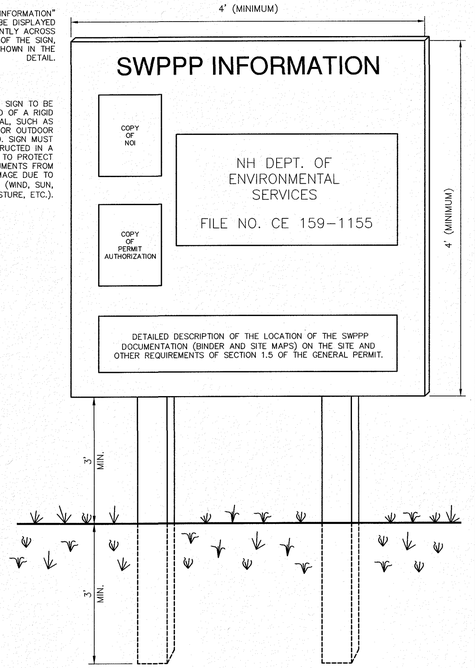
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION EXIT
SCALE: N.T.S.

"SWPPP INFORMATION" MUST BE DISPLAYED PROMINENTLY ACROSS THE TOP OF THE SIGN, AS SHOWN IN THE DETAIL.

SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.).



NOTES:
1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN
SCALE: N.T.S.

No.	REVISIONS	BY	DATE
10.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
9.	ADDED LANDSCAPE STONE WALL	BPD	05/23/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019

EROSION CONTROL DETAILS - I

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER –

6-7-19

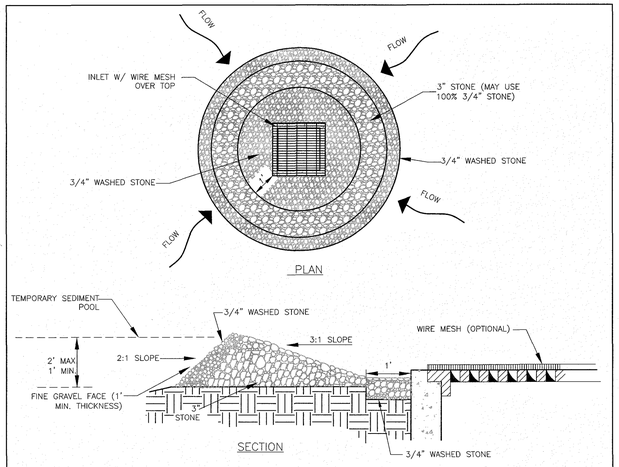
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

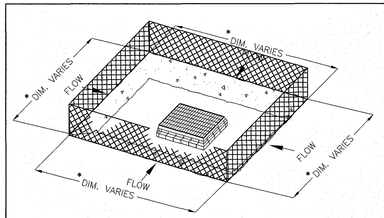
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-7

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18U\1_C-7 Erosion Details-1.dwg
Jun 06, 2019 - 1:17:13pm

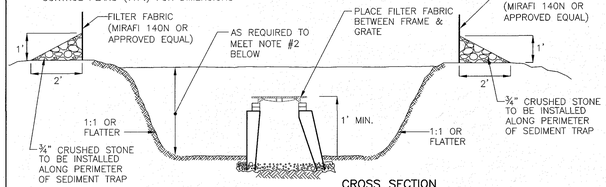


GRAVEL DROP INLET PROTECTION (GRAVEL DONUT)

SCALE: N.T.S.



* SEE SITE DEMOLITION & EROSION CONTROL PLANS (TYP.) FOR DIMENSIONS



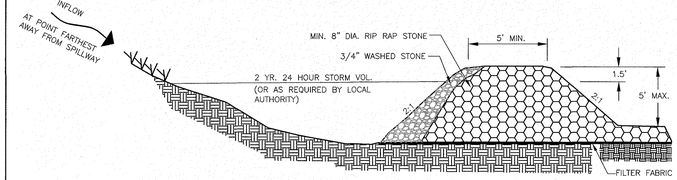
CROSS SECTION

NOTES:

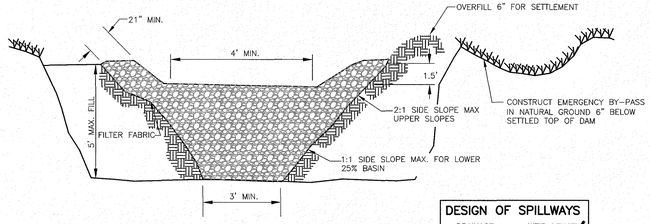
1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
2. THE VOLUME OF SEDIMENT STORAGE SHALL BE 1800 CUBIC FEET PER ACRE OF CONTRIBUTORY DRAINAGE AREA.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE CONSTRUCTED DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. ALL CUTS SLOPES SHALL BE 1:1 OR FLATTER.

STORM INLET SEDIMENT TRAP

SCALE: N.T.S.



CROSS-SECTION



STONE SECTION

DESIGN OF SPILLWAYS	
DRAINAGE AREA (ACRES)	WEIR LENGTH* (FT.)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

*DIMENSIONS SHOWN ARE MINIMUM

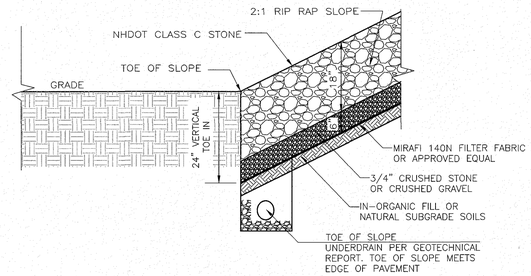
NOTES:

1. USE FOR DRAINAGE AREAS NOT EXCEEDING 5 (FIVE) ACRES.
2. EARTH BERM SHALL BE STABILIZED W/ SEEDING ACCORDING TO SPECIFICATIONS.
3. INSPECT TEMPORARY SEDIMENT TRAPS EVERY 7 CALENDAR DAYS AND AFTER EACH RAINFALL OF 0.5" OR MORE (OR PER REGULATORY AGENCY IF MORE STRINGENT). REMOVE SEDIMENT AND RESTORE TRAP TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 25% OF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN A DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.
4. CHECK THE STRUCTURE FOR DAMAGE FROM EROSION OR PIPING. PERIODICALLY CHECK THE DEPTH OF THE SPILLWAY TO ENSURE IT IS A MINIMUM OF 1.5 FT. BELOW THE LOW POINT OF THE EMBANKMENT. IMMEDIATELY CORRECT ANY SETTLEMENT OF THE EMBANKMENT TO SLIGHTLY ABOVE DESIGN GRADE. ANY RIP RAP DISPLACED FROM THE SPILLWAY MUST BE REPLACED IMMEDIATELY.
5. STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS ABOVE THE SEDIMENT POOL AND DOWNSTREAM FROM THE TRAP IMMEDIATELY AFTER CONSTRUCTION WITH SEEDING.

GRAVEL & RIP RAP SEDIMENT TRAP

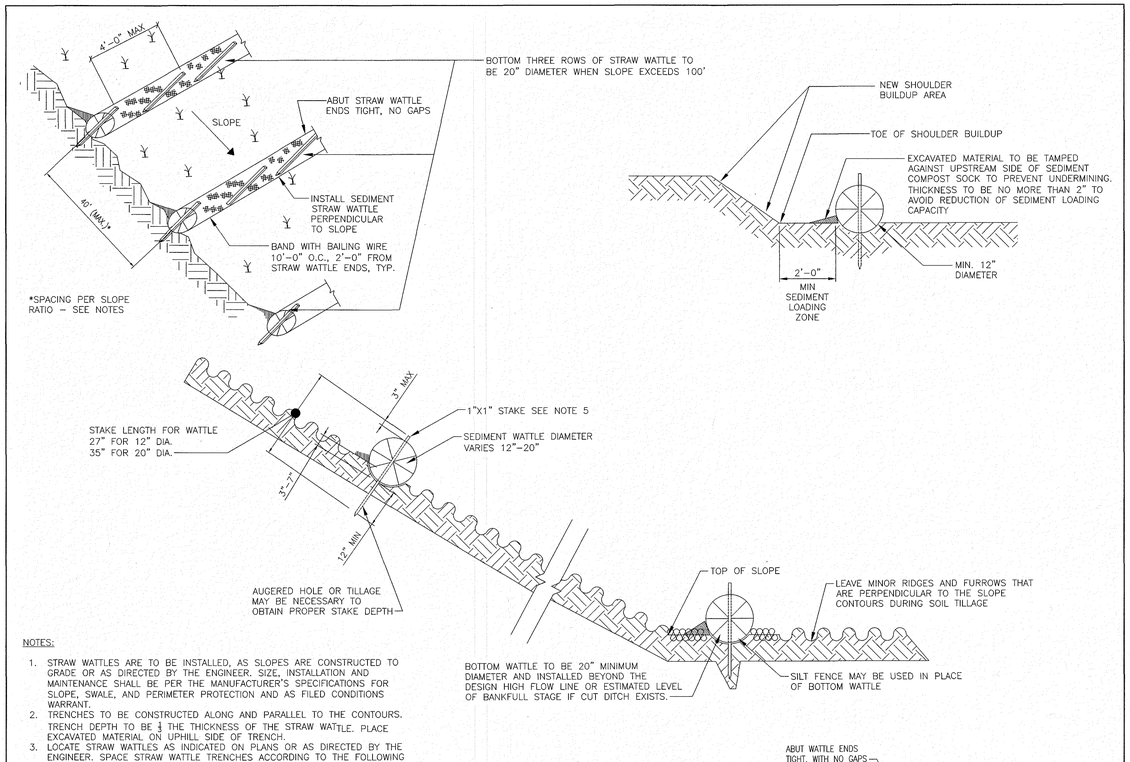
FOR USE IF DETERMINED NECESSARY DURING CONSTRUCTION

SCALE: N.T.S.



CUT SLOPE RIPRAP DETAIL

SCALE: N.T.S.

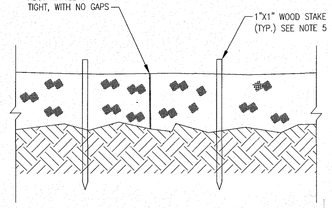


NOTES:

1. STRAW WATTLES ARE TO BE INSTALLED, AS SLOPES ARE CONSTRUCTED TO GRADE OR AS DIRECTED BY THE ENGINEER. SIZE, INSTALLATION AND MAINTENANCE SHALL BE PER THE MANUFACTURER'S SPECIFICATIONS FOR SLOPE, SWALE, AND PERIMETER PROTECTION AND AS FILED CONDITIONS WARRANT.
2. TRENCHES TO BE CONSTRUCTED ALONG AND PARALLEL TO THE CONTOURS. TRENCH DEPTH TO BE ⅓ THE THICKNESS OF THE STRAW WATTLE. PLACE EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
3. LOCATE STRAW WATTLES AS INDICATED ON PLANS OR AS DIRECTED BY THE ENGINEER. SPACE STRAW WATTLE TRENCHES ACCORDING TO THE FOLLOWING SCHEDULE:

SLOPE RATIO	MAX SPACING INTERVALS
1:1 AND STEEPER, APPLY MINIBENCHING OR OTHER SUITABLE BMP'S.	
2:1	10'-0"
3:1	20'-0"
4:1	30'-0"
5:1	40'-0"
6:1	40'-0"

4. STRAW WATTLES TO BE IN CONTINUOUS CONTACT WITH TRENCH BOTTOM AND SIDES. NO DAYLIGHT SHOULD BE SEEN UNDER THE STRAW WATTLE. DO NOT OVERLAP THE ENDS ON TOP OF EACH OTHER.
5. STAKES TO PENETRATE SOIL OF TRENCH BOTTOM 12" MINIMUM. STAKES TO BE EXPOSED 3" MAXIMUM ABOVE THE TOP OF STRAW WATTLE. SPACE STAKES 4'-0" O.C. MAX., 1'-0" MAX. AT STRAW WATTLE ENDS. A 20" DIAMETER STRAW WATTLE MAY NEED TO BE MADE FROM 2–3 ROLLED EXCELSIOR OR STRAW BLANKETS.
6. REPAIR ANY RILLS OR GULLIES PROMPTLY.
7. THE INSTALLATION AND MAINTENANCE OF STRAW WATTLE BMP'S SHALL NOT NEGATIVELY IMPACT TRAFFIC SAFETY.



STRAW WATTLE EROSION AND SILTATION BARRIER

SCALE: N.T.S.

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

EROSION CONTROL DETAILS - II

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE – BRIAN P DUNDON – No. 10460 – LICENSED PROFESSIONAL ENGINEER

6-7-19

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-8

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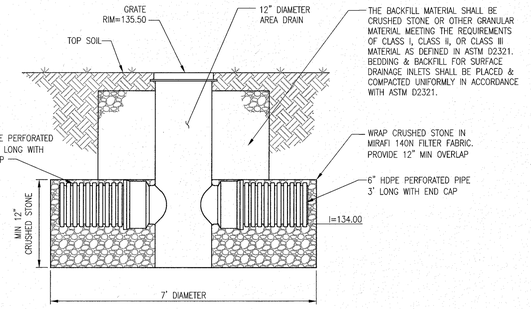
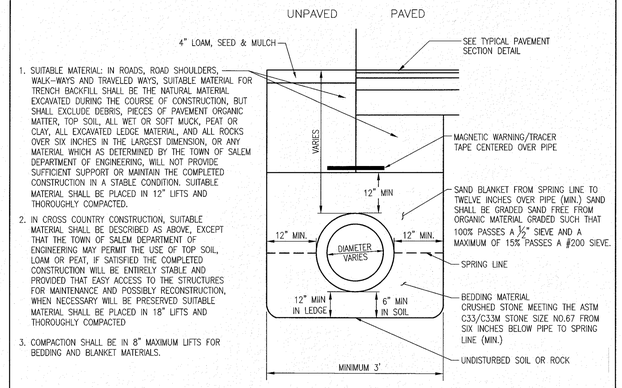


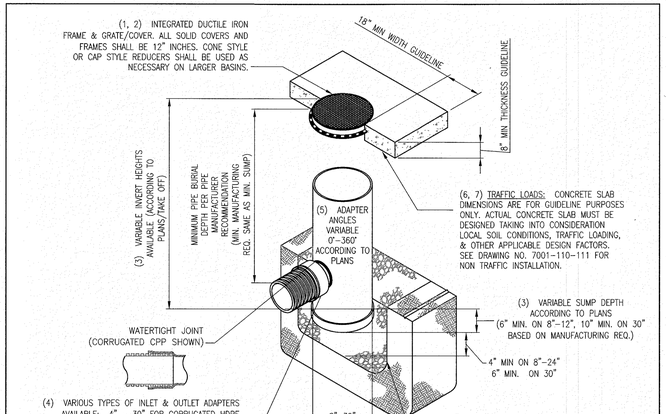
DOG PARK AREA DRAIN (AD-14) AND INFILTRATION BASIN

SCALE: N.T.S.



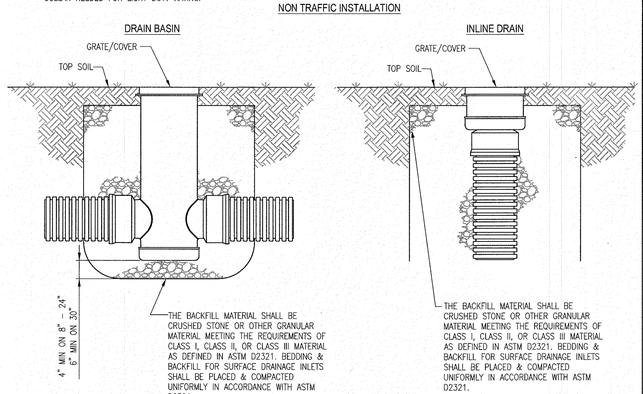
TYPICAL DRAIN AND SEWER TRENCH DETAIL

SCALE: N.T.S.



1. 8" - 30" SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" SOLID COVERS FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3. ALL SOLID COVERS AND FRAMES SHALL BE 12" INCHES. CONE STYLE OR CAP STYLE REDUCERS SHALL BE USED AS NECESSARY ON LARGER BASINS.
4. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
5. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
6. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
7. 12" - 30" SOLID COVERS SHALL MEET H-20 LOAD RATING.
8. 8" & 10" SOLID COVERS ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

NON TRAFFIC INSTALLATION



NYLOPLAST 12" TO 30" AREA DRAIN DETAIL (AD) AND (ADMH)

SCALE: N.T.S.

Section 2721

Engineered Surface Drainage Products

GENERAL

PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS

The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

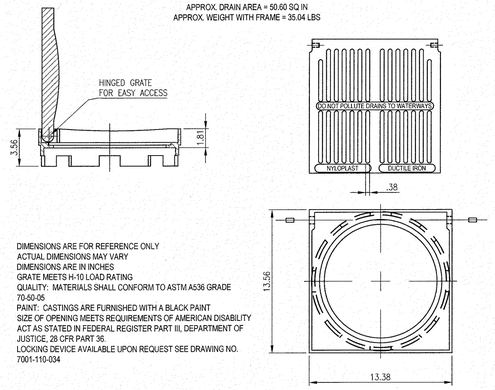
The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION

The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

1299CGP

APPROX. DRAIN AREA = 50.60 SQ IN
APPROX. WEIGHT WITH FRAME = 35.04 LBS



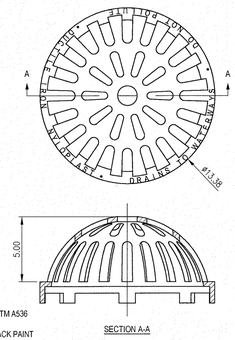
DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-10 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-034

NYLOPLAST 12" INCH PEDESTRIAN GRATE ASSEMBLY

SCALE: N.T.S.

1299CGD

APPROX. DRAIN AREA = 82.87 SQ IN
APPROX. WEIGHT = 18.50 LBS

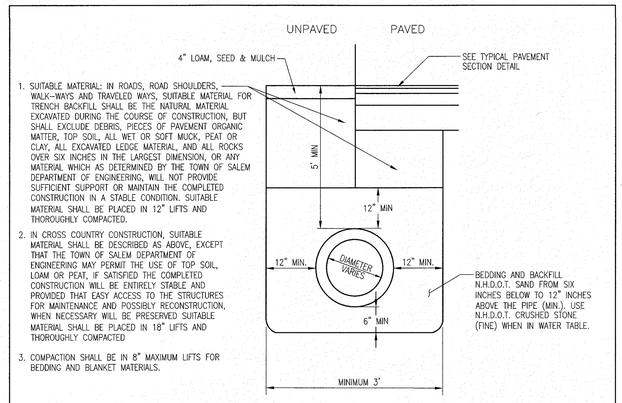


DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

NOTE:
TO BE USED IN PLANTING BED AREAS

NYLOPLAST 12" INCH DOME GRATE

SCALE: N.T.S.

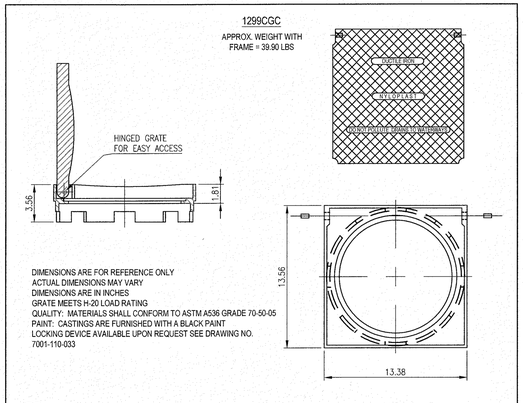


TYPICAL WATER TRENCH DETAIL

SCALE: N.T.S.

1299CGC

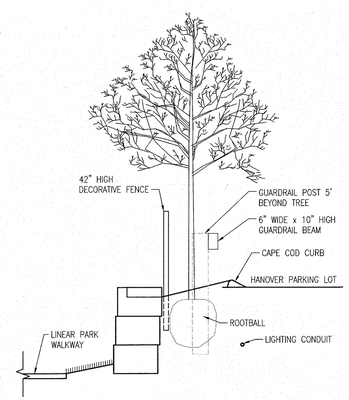
APPROX. WEIGHT WITH FRAME = 39.90 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-033

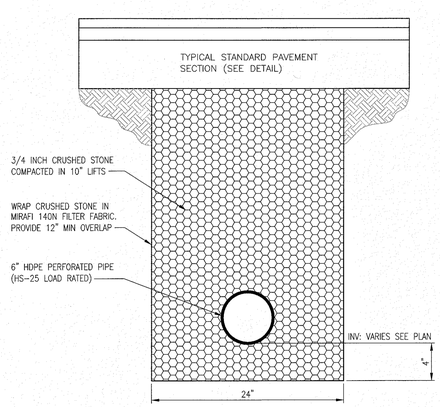
NYLOPLAST 12" INCH SOLID COVER ASSEMBLY

SCALE: N.T.S.



SECTION A-A (SEE DWG. C-3 FOR LOCATION)

SCALE: 1/4"=1'-0"



TYPICAL UNDER DRAIN DETAIL

SCALE: N.T.S.

No.	REVISIONS	BY	DATE
13.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
12.	CONFORMANCE PERMIT SET	BPD	05/16/2019
11.	REVISED PER TOWN/DES COMMENTS	BPD	04/24/2019
10.	CONFORMANCE PERMIT SET	BPD	04/15/2019

DRAINAGE & UTILITY DETAILS - I

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE - BRIAN P DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

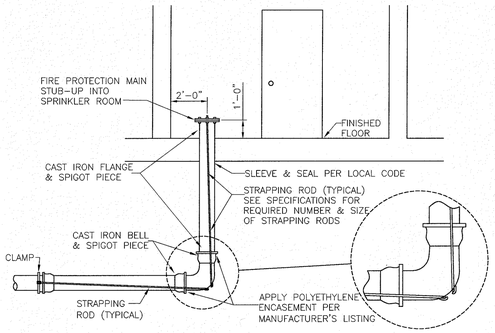
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

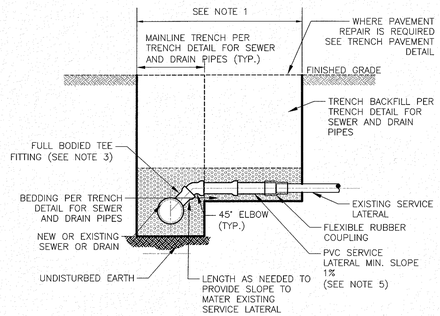
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-9

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\180\1_C-9 Drainage & Utility Details-1.dwg
Jun 06, 2019 - 7:29pm



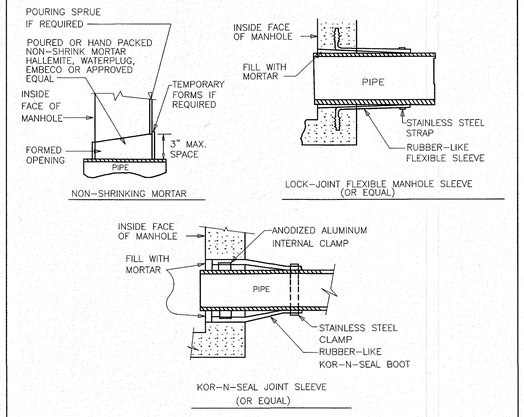
UNDERGROUND RESTRAINT DETAIL

SCALE: N.T.S.



SEWER SERVICE CONNECTION DETAIL

SCALE: N.T.S.



NOTES:

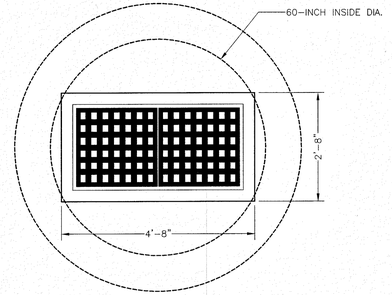
1. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON ELASTOMERIC SEALANT.

2. NON-SHRINKING MORTAR SHALL ONLY BE USED WHERE SPECIFICALLY APPROVED BY THE ENGINEER.

3. MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.

DETAIL 'B' - PIPE CONNECTIONS TO SEWER MANHOLE

SCALE: N.T.S.



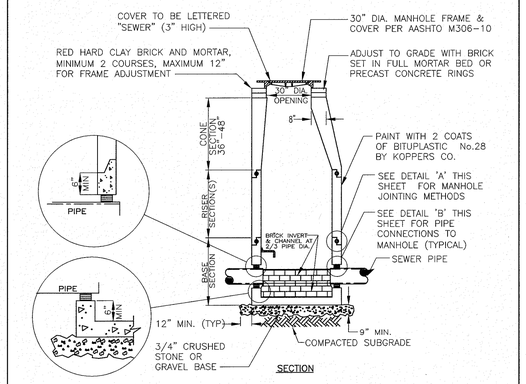
NOTES:

1. CATCH BASIN COVER SLAB TO BE CAST WITH 22" x 48" OPENING TO ACCOMMODATE FRAME AND GRATE.

2. COVER SLAB TO MEET OR EXCEED H-20 LOADING.

TYPICAL DOUBLE CATCH BASIN GRATE DETAIL

SCALE: N.T.S.



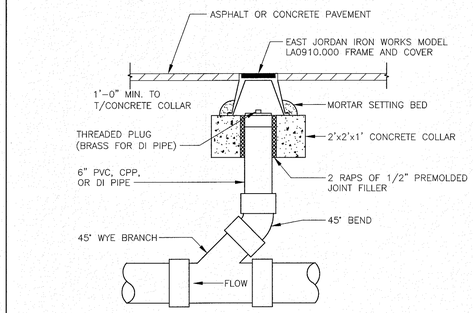
NOTES:

1. THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENT AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND H-20 LOADING WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.

2. MATERIALS, TESTING AND METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S REQUIREMENTS.

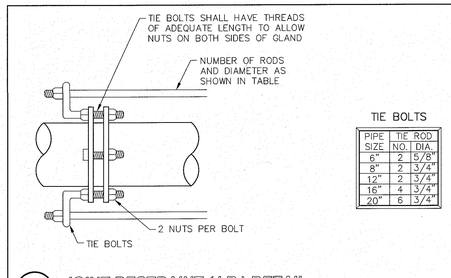
PRECAST CONC. SEWER MANHOLE (SMH)

SCALE: N.T.S.



TYPICAL CLEANOUT DETAIL

SCALE: N.T.S.

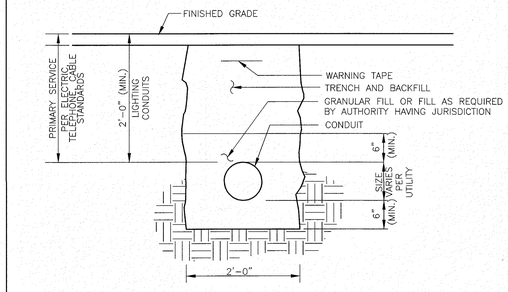


TIE BOLTS

PIPE SIZE	TIE ROD NO.	TIE ROD DIA.
6"	2	5/8"
8"	2	3/4"
12"	2	3/4"
16"	4	3/4"
20"	6	3/4"

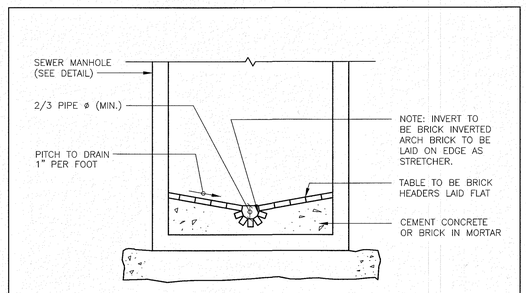
JOINT RESTRAINT (J.R.) DETAIL

SCALE: N.T.S.



TYPICAL CONDUIT BEDDING DETAIL

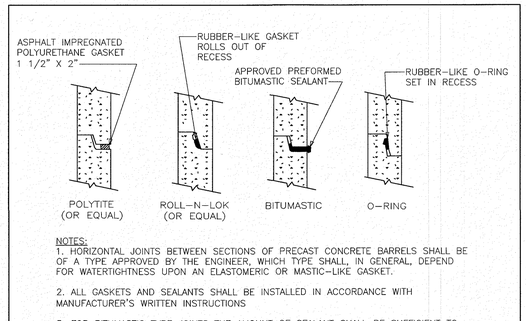
SCALE: N.T.S.



NOTES:
1. MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S SEWER DEPARTMENT SPECIFICATIONS.

TYPICAL CONCRETE ENCASEMENT DETAIL

SCALE: N.T.S.



NOTES:
1. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET.

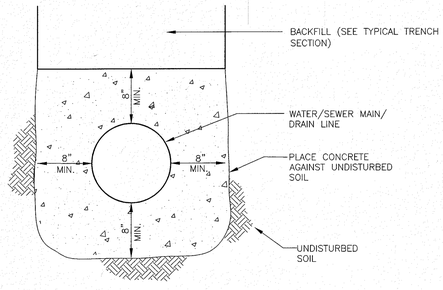
2. ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS

3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.

4. MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO SALEM'S DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.

DETAIL 'A' SEWER MANHOLE JOINTING METHODS

SCALE: N.T.S.



NOTE: CONCRETE SHALL BE 3000 PSI REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

TYPICAL CONCRETE ENCASEMENT DETAIL

SCALE: N.T.S.

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

DRAINAGE & UTILITY DETAILS - II

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE — BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER

6-7-19

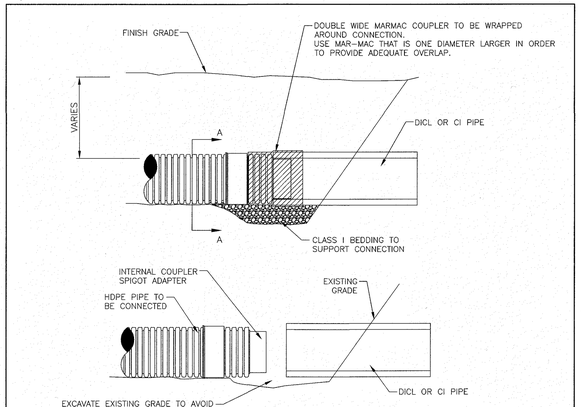
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-10

Drawing name: G:\MT\Salem\Hanover Company\Tuscan Village\Main\160/1_C-10 Drainage & Utility Details-II.dwg
Jun 06, 2019 - 12:47pm

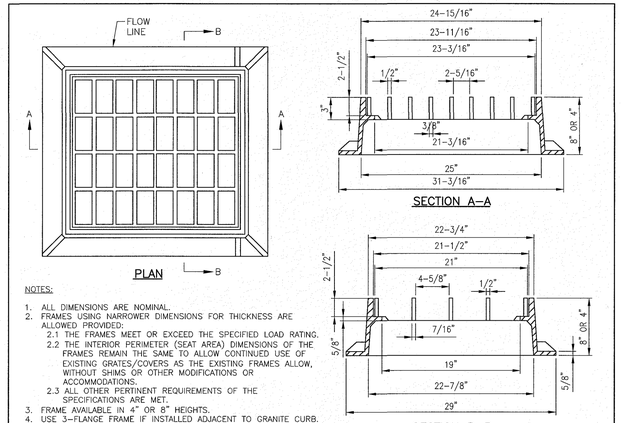


NOTES:

1. CONNECTION AND PIPE TO BE BACKFILLED PER ASTM D2321, LATEST EDITION.
2. IN LIEU OF AN INTERNAL CYLINDER, AN HDPE WATERTIGHT REPAIR COUPLER CAN BE USED.
3. INTERNAL CYLINDER ADAPTER IS NOT RECOMMENDED FOR DOWNSTREAM CONNECTIONS.

HDPE TO DICL/CI CONNECTION (MARMAC) DETAIL

SCALE: N.T.S.

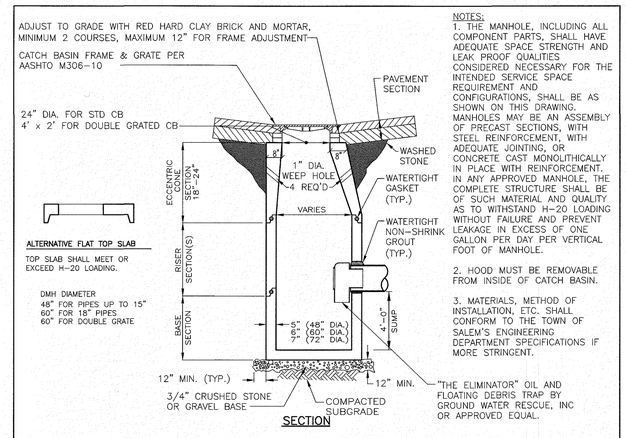


NOTES:

1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   - 2.1 THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   - 2.2 THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   - 2.3 ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. FRAME AVAILABLE IN 4" OR 8" HEIGHTS.
4. USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

CATCH BASIN FRAME AND GRATE (NHDOT - TYPE "B" GRATE

SCALE: N.T.S.

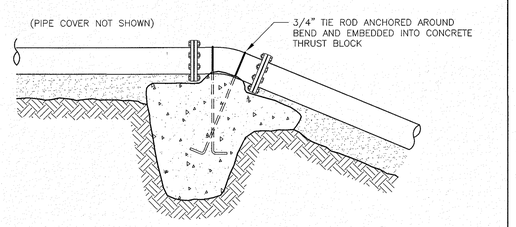


NOTES:

1. THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENT AND CONFIGURATIONS, SHALL BE AS SHOWN ON THIS DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND H-20 LOADING WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.
2. HOOD MUST BE REMOVABLE FROM INSIDE OF CATCH BASIN.
3. MATERIALS, METHOD OF INSTALLATION, ETC. SHALL CONFORM TO THE TOWN OF SALEM'S ENGINEERING DEPARTMENT SPECIFICATIONS IF MORE STRINGENT.

CATCH BASIN WITH CORRUGATED PLASTIC HOOD

SCALE: N.T.S.



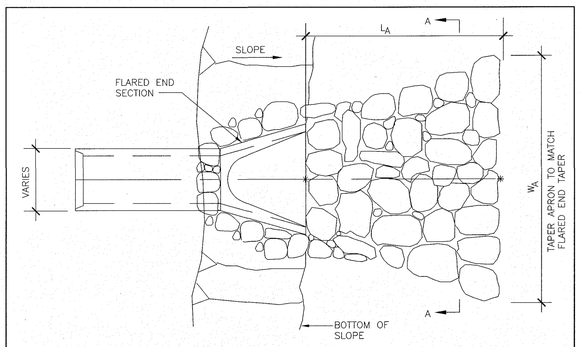
MINIMUM THRUST BLOCK SIZE IN CUBIC YARDS FOR 100 PSI WATER SERVICE			
PIPE DIA.	45° BEND	22.5° BEND	11.25° BEND
4"	0.3	0.2	0.1
6"	0.6	0.3	0.2
8"	1.0	0.5	0.3
10"	1.5	0.8	0.4
12"	2.2	1.2	0.6
16"	3.8	2.0	1.0
20"	6.0	3.1	1.6

NOTES:

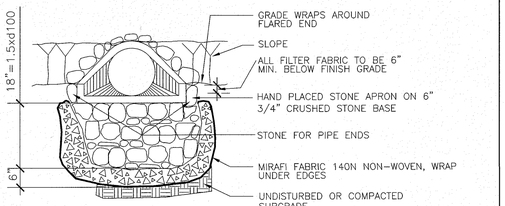
1. MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S WATER DEPARTMENT SPECIFICATIONS.

THRUST BLOCK FOR VERTICAL WATERMAIN BENDS

SCALE: N.T.S.



PLAN VIEW



SECTION A-A

FES NO.	DIA. OUT (IN.)	L_A (FT.)	W_A (FT.)	d_{50}(IN.)	d_{50}(LB)
1	36	30.2	39.2	6	MIN 50 LB
2	24	20.5	26.5	6	MIN 50 LB
3	30	22.5	30	6	MIN 50 LB

W=3Do+La, La=1.8Q/Do(1.5)+7Do (when TW<Do/2)

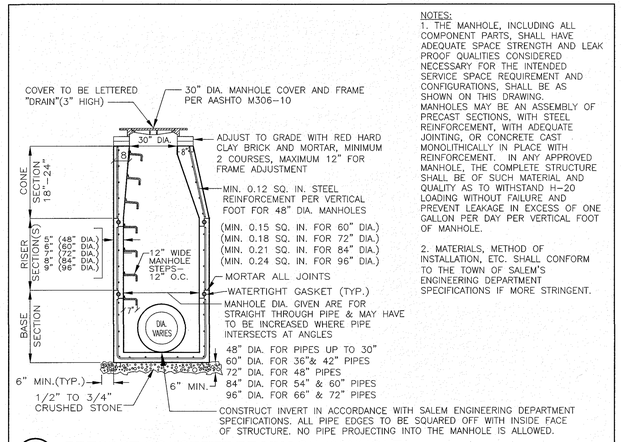
W=3Do+0.4La, La=3Q/Do(1.5)+7Do (when TW>Do/2)

NOTE:

1. FLARED END SECTIONS THAT CANNOT BE LOCATED PER THE SIZE REQUIREMENTS LISTED IN THIS CHART SHALL BE SOUND, DURABLE ROCK WHICH IS ANGULAR IN SHAPE WEIGHING NOT LESS THAN 50 LBS. AND NOT MORE THAN 125 LBS. AND AT LEAST 75% OF THE VOLUME SHALL CONSIST OF STONES WEIGHING NOT LESS THAN 75 LBS. EACH. THE REMAINDER OF THE STONES SHALL BE SO GRADED THAT WHEN PLACED WITH THE LARGE STONES, THE ENTIRE MASS WILL BE COMPACT.
2. d_{50} STONE IS A MIX OF STONE SIZE WITH A MEDIUM SIZE OF 6"

FLARED END SECTION WITH STONE APRON

SCALE: N.T.S.

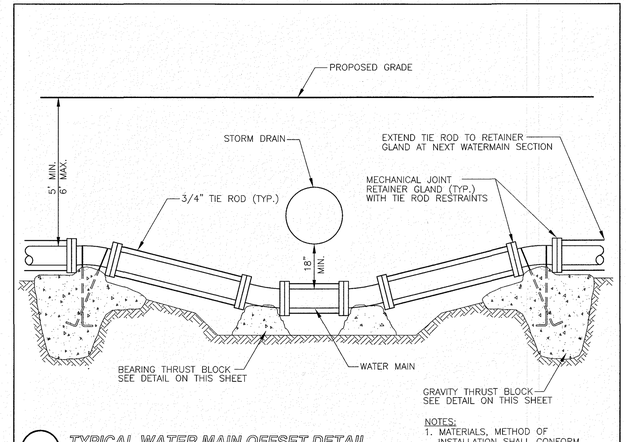


NOTES:

1. THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENT AND CONFIGURATIONS, SHALL BE AS SHOWN ON THIS DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND H-20 LOADING WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.
2. MATERIALS, METHOD OF INSTALLATION, ETC. SHALL CONFORM TO THE TOWN OF SALEM'S ENGINEERING DEPARTMENT SPECIFICATIONS IF MORE STRINGENT.

PRECAST CONCRETE DRAINAGE MANHOLE

SCALE: N.T.S.

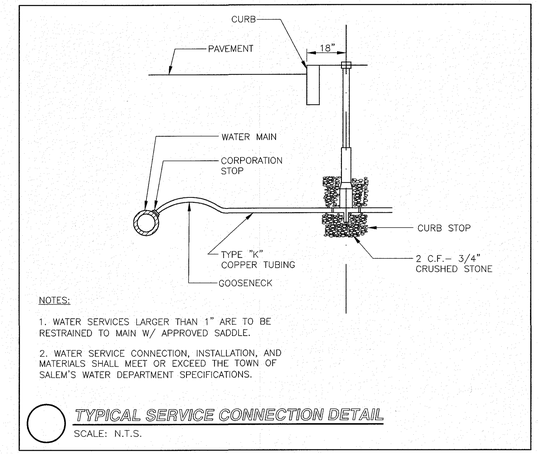


NOTES:

1. MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S WATER DEPARTMENT SPECIFICATIONS.

TYPICAL WATER MAIN OFFSET DETAIL

SCALE: N.T.S.

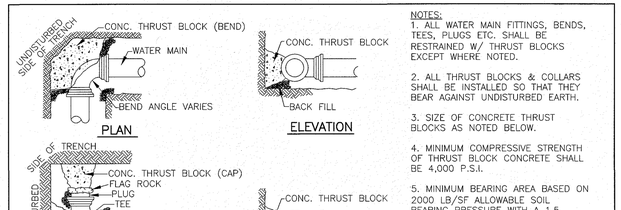


NOTES:

1. WATER SERVICES LARGER THAN 1" ARE TO BE RESTRAINED TO MAIN W/ APPROVED SADDLE.
2. WATER SERVICE CONNECTION, INSTALLATION, AND MATERIALS SHALL MEET OR EXCEED THE TOWN OF SALEM'S WATER DEPARTMENT SPECIFICATIONS.

TYPICAL SERVICE CONNECTION DETAIL

SCALE: N.T.S.



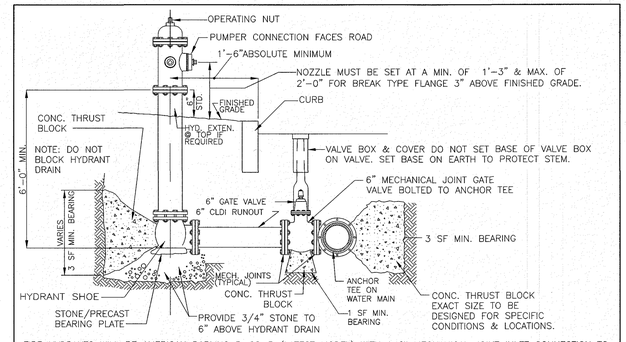
MINIMUM THRUST BLOCKING BEARING AREAS IN SQUARE FEET					
PIPE DIA.	TEES/CAP/HYD	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	2	2	1	1	
6"	3	3	2	1	
8"	4	6	3	2	
10"	6	8	4	2	
12"	9	12	6	3	
14"	12	17	8	4	
16"	15	22	11	6	

NOTES:

1. ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
2. ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
3. SIZE OF CONCRETE THRUST BLOCKS AS NOTED BELOW.
4. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 4,000 P.S.I.
5. MINIMUM BEARING AREA BASED ON 2000 LB/SF ALLOWABLE SOIL BEARING PRESSURE WITH A 1.5 SAFETY FACTOR.
6. A MINIMUM OF 1/3 CUBIC YARD OF CONCRETE MUST BE USED FOR THRUST BLOCKS
7. MATERIALS, METHOD INSTALLATION SHALL CONFORM TO THE TOWN OF SALEM'S WATER DEPARTMENT SPECIFICATIONS.

TYPICAL THRUST BLOCK DETAIL FOR 100 PSI SERVICE

SCALE: N.T.S.



FIRE HYDRANTS WILL BE AMERICAN DARLING B-62-B (LATEST MODEL) WITH A 6" MECHANICAL JOINT INLET CONNECTION TO THE MAIN, TWO 2 ½" NATIONAL STANDARD THREAD HOSE NOZZLES, ONE 4 ½" NATIONAL STANDARD THREAD PUMPER/STEAMER NOZZLE, A MAIN VALVE OPENING OF 5 ¼" AND A STANDPIPE OR BARREL DIAMETER OF 8 ½", WITH DRAINS LEFT UNPLUGGED AND UNOBSTRUCTED TO ALLOW BARREL TO DRAIN.

HYDRANTS WILL OPEN RIGHT (CLOCKWISE) AND BE MARKED WITH AN ARROW AND THE WORD "OPEN" TO INDICATE THE DIRECTION TO TURN THE OPERATING NUT TO OPEN THE HYDRANT.

FIRE HYDRANT TO BE PAINTED RED PER TOWN OF SALEM REQUIREMENTS

TYPICAL FIRE HYDRANT CONNECTION DETAIL

SCALE: N.T.S.

No.	REVISIONS	BY	DATE
12.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
11.	CONFORMANCE PERMIT SET	BPD	05/16/2019
10.	REVISED PER TOWN COMMENTS	BPD	04/24/2019
9.	CONFORMANCE PERMIT SET	BPD	04/15/2019

DRAINAGE & UTILITY DETAILS - III

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE - BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER -

6-7-19

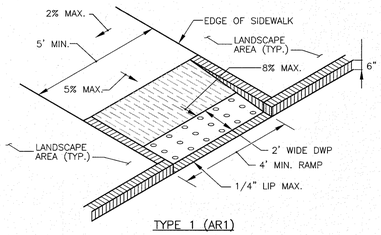
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

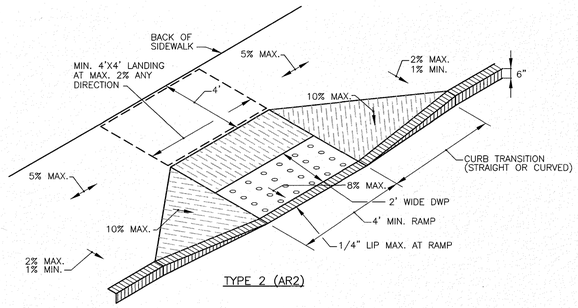
ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-11

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\18071_C-11 Drainage & Utility Details-III.dwg
Jun 06, 2019 - 7:44pm



TYPE 1 (AR1)



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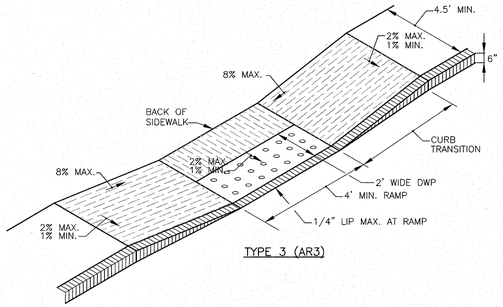

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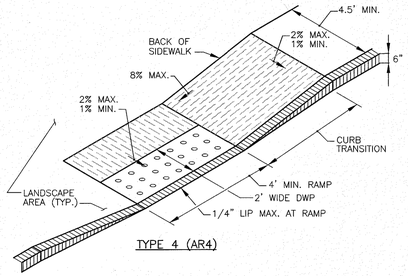
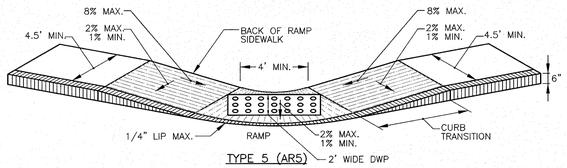
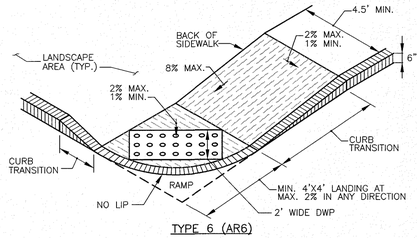


TYPE 4 (AR4)



TYPE 5 (AR5)



TYPE 6 (AR6)

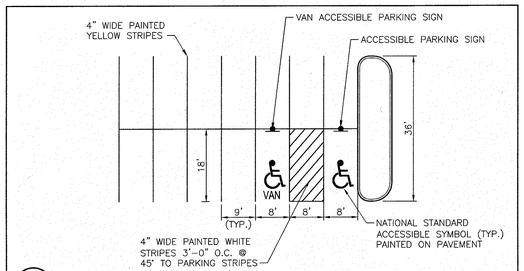
NOTES:

1. SEE PLANS FOR CURB TYPE.
2. CURBS AND WALKS ALONG ACCESSIBLE ROUTES SHALL MEET OR EXCEED THE APPLICABLE MA REGULATIONS AND ADA.
3. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% (1% MIN).
4. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
5. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 8%.
6. MAINTAIN A MINIMUM OF 3 FEET CLEAR AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS ETC.)
7. GRADE BASE OF RAMP TO PREVENT PONDING.
8. RAMP CONSTRUCTION SHALL CONFORM TO TYPICAL SIDEWALK SECTION.
9. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'X5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
10. ALL CURBING AT RAMPS SHALL BE VERTICAL CURBING SET FLUSH WHERE IT ABUTS ROADWAY.
11. ALL RAMPS SHALL BE CEMENT CONCRETE WITH BROOM NON-SLIP SURFACE.
12. ALL RAMPS SHALL HAVE A 24" WIDE DETECTABLE WARNING PANEL EXTENDING THE FULL WIDTH OF THE FLUSH RAMP EDGE.

DETECTABLE WARNING PANEL (DWP)

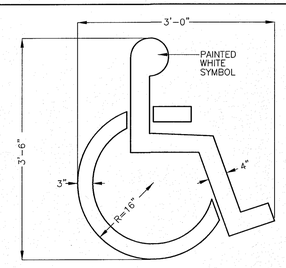
ACCESSIBLE CURB RAMPS (AR)

SCALE: N.T.S.



TYPICAL STANDARD PARKING LOT STRIPING DETAIL

SCALE: N.T.S.



TYPICAL PAINTED ADA SYMBOL DETAIL

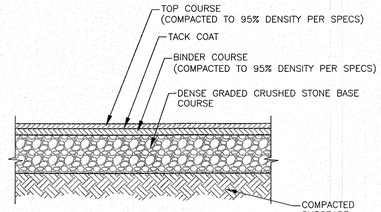
SCALE: N.T.S.

NOTES:

ALL BITUMINOUS CONCRETE SURFACES PER NHDOT STANDARD SPECIFICATIONS, SECTION 401

PAVEMENT LAYER	STANDARD DUTY PAVEMENT
BITUMINOUS WEARING COURSE NHDOT TYPE E, TABLE 2E	1-1/2 INCHES
BITUMINOUS BINDER COURSE NHDOT TYPE B, TABLE 2E	1-1/2 INCHES
CRUSED GRAVEL NHDOT SECTION 304.3	12 INCHES

PAVEMENT SECTION TABLE



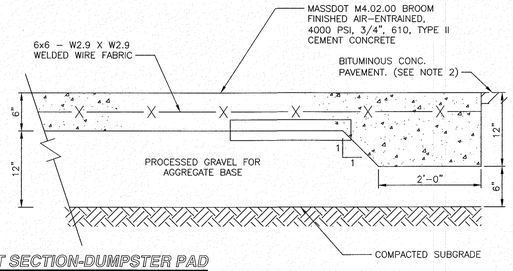
STANDARD DUTY ASPHALT PAVEMENT SECTION

TYPICAL PAVEMENT DETAIL

SCALE: N.T.S.

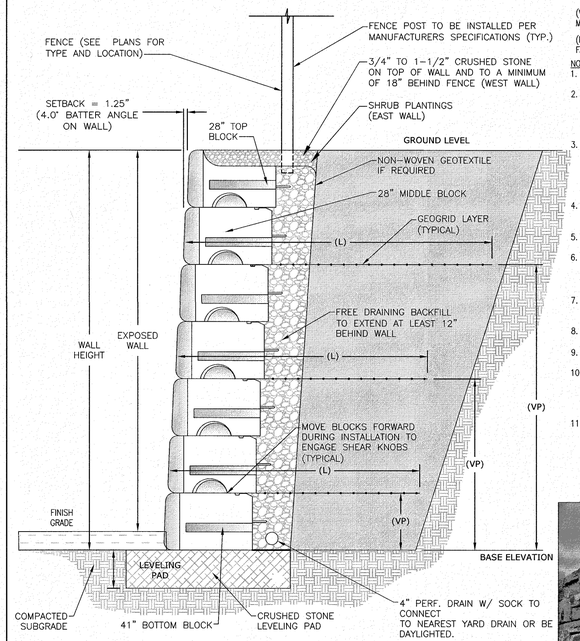
NOTES:

1. CONSTRUCTION AND MATERIALS PER GEOTECHNICAL ANALYSIS.
2. WHERE CONCRETE PAVEMENT ABUTS BITUMINOUS CONCRETE PAVEMENT, INCREASE THE OUTER 2' OF THE CONCRETE PAVEMENT TO 12".



TYPICAL CONCRETE PAVEMENT SECTION-DUMPSTER PAD

SCALE: N.T.S.

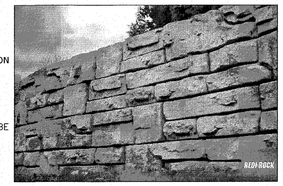


(VP) = VERTICAL PLACEMENT OF GEOGRID LAYERS. MEASUREMENTS ARE FROM THE BASE ELEVATION.

(L) = LENGTH OF GEOGRID. MEASUREMENTS ARE FROM THE FACE OF THE BLOCK.

NOTES:

1. RETAINING WALL SHALL BE BY REDI ROCK LEDGESTONE OR APPROVED EQUAL.
2. THE CONTRACTOR SHALL SUBMIT DESIGN AND CALCULATIONS FOR THE RETAINING WALL THAT SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE. CALCULATIONS SHALL INCLUDE A GLOBAL STABILITY ANALYSIS.
3. MINIMUM DESIGN PARAMETERS:
   - GLOBAL STABILITY FACTOR OF SAFETY = 1.3
   - OVERTURNING FACTOR OF SAFETY = 2.0
   - SLIDING FACTOR OF SAFETY = 1.5
   - GEOGRID PULLOUT FACTOR OF SAFETY = 1.5
   - SEISMIC FACTOR OF SAFETY = 1.1
4. WALL DESIGNS SHALL CONSIDER EFFECTS OF SLOPE, TRAFFIC LOADS, BUILDING LOADS, GUARDRAIL AND/OR FENCING AS REQUIRED.
5. WALL DESIGN ENGINEER SHALL CONSIDER HEIGHT AND SPECIFY SAFETY RAIL WHERE REQUIRED
6. ALL INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION MANUAL AND THE WALL DESIGN ENGINEER'S DESIGN PLANS AND SPECIFICATIONS.
7. THE WALL DESIGN ENGINEER SHALL COMPLETE SUFFICIENT INSPECTIONS DURING CONSTRUCTION TO CERTIFY WORK IS COMPLETED IN ACCORDANCE WITH DESIGN.
8. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS OF WALL WITH WALL DESIGNER'S CERTIFICATION TO OWNER.
9. CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM THE WALL DURING CONSTRUCTION.
10. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT OR OTHER SURFACE TREATMENT SHALL BE INSTALLED IN THE AREA OF THE WALL IMMEDIATELY AFTER THE WALL IS COMPLETE OR OTHER MEASURES SHALL BE TAKEN TO PROTECT THE WALL FROM RUNOFF.
11. CONTRACTOR SHALL SUPPLY SAMPLE TO THE OWNER FOR APPROVAL PRIOR TO WALL CONSTRUCTION.

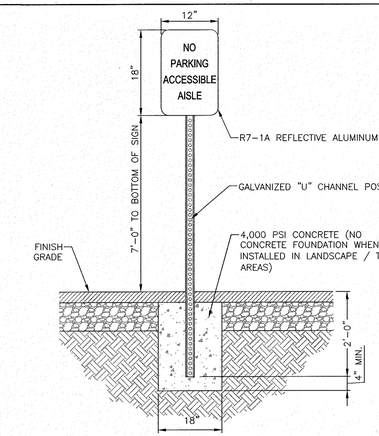


NATURAL STONE
COLOR - GRAY/BROWN

DETAIL PROVIDED FOR REFERENCE ONLY. THIS WALL TYPE TO BE USED FOR RETAINING WALL ALONG LINEAR PARK AT SOUTHEAST CORNER OF SITE AND ALONG WEST SIDE OF SITE.

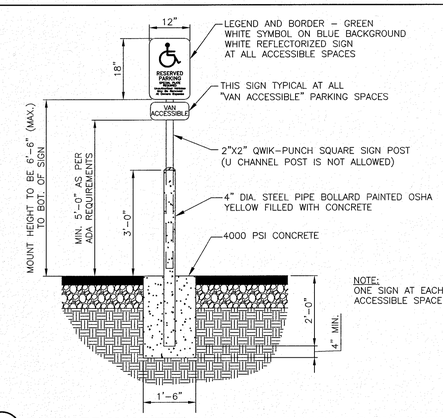
TYPICAL GRAVITY MODULAR BLOCK RETAINING WALL SECTION

SCALE: N.T.S.



NO PARKING - ACCESSIBLE AISLE SIGN

SCALE: N.T.S.



NOTE:
ONE SIGN AT EACH ACCESSIBLE SPACE

BOLLARD MOUNTED ACCESSIBLE PARKING SIGN DETAIL

SCALE: N.T.S.

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

PARKING & TRAFFIC CONTROL DETAILS - I

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE
BRIAN P. DUNDON
No. 10460
LICENSED PROFESSIONAL ENGINEER

6-7-19

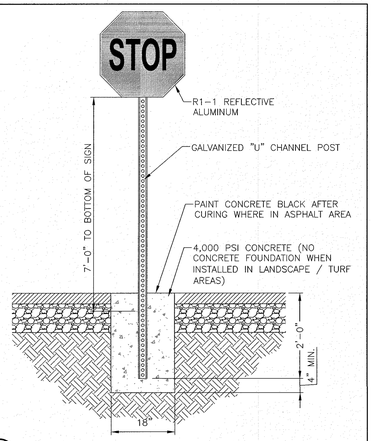
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

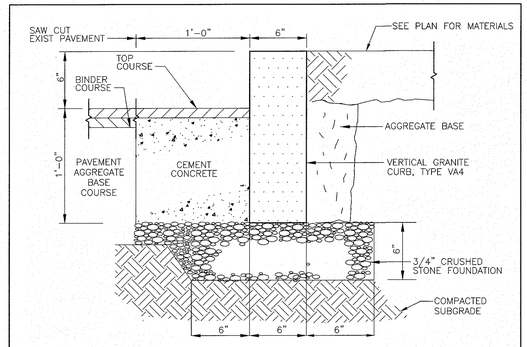
ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-12

Drawing Name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\180\1_C-12 Parking & Traffic Control Details-1.dwg
Jun 06, 2019 - 12:45pm

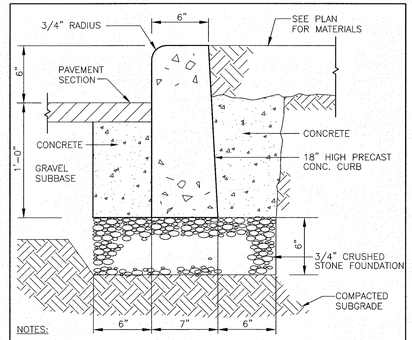


TYPICAL SIGN DETAIL
SCALE: N.T.S.



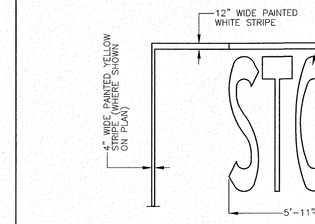
NOTES:
1. JOINTS BETWEEN CURB STONES (BOTH BACK AND FRONT) SHALL BE CAREFULLY FILLED WITH CEMENT MORTAR AND NEATLY POINTED ON THE TOP AND FRONT EXPOSED PORTIONS.
2. AFTER POINTING, CURBSTONES SHALL BE SATISFACTORILY CLEANED OF ALL EXCESS MORTAR THAT MAY HAVE BEEN FORCED OUT OF THE JOINTS.

TYPICAL TYPE A VERTICAL GRANITE CURBING (VGC)
SCALE: N.T.S.

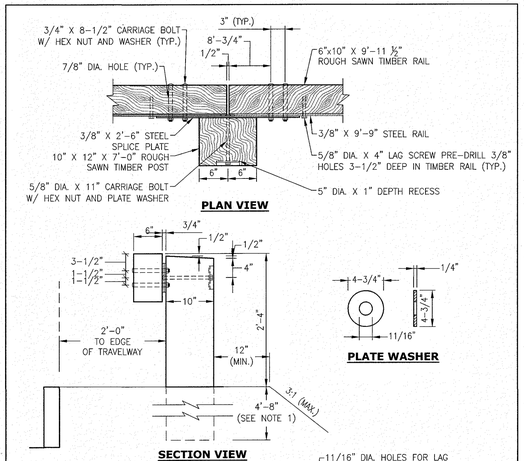


NOTES:
1. PLACE GRAVEL AND CRUSHED STONE AND THOROUGHLY COMPACT SO THAT CURBING IS COMPLETELY SUPPORTED THROUGHOUT ITS LENGTH.
2. CURBING SHALL BE FITTED TOGETHER AS CLOSELY AS POSSIBLE, JOINTS FILLED WITH CEMENT MORTAR AND NEATLY POINTED ON THE TOP AND FRONT EXPOSED PORTIONS. AFTER POINTING, CURBING SHALL BE CLEANED OF ALL EXCESS MORTAR FORCED OUT OF JOINTS.

TYPICAL TYPE B CURB (PRE-CAST CONCRETE) DETAIL
SCALE: N.T.S.

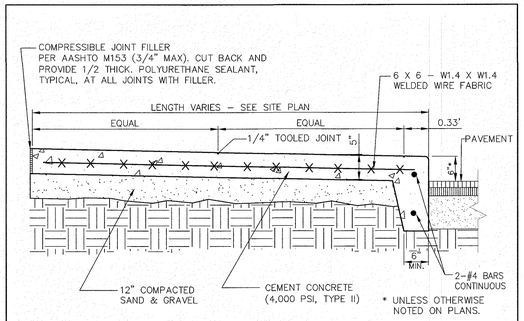


TYPICAL PAINTED 'STOP' DETAIL
SCALE: N.T.S.



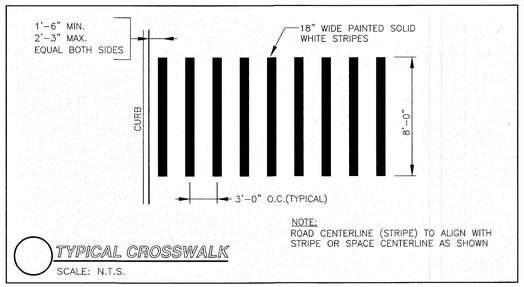
NOTE:
1. BURIED DEPTH OF POST SHALL BE 4'-8" MINIMUM OR AS SPECIFIED BY WALL DESIGNER WHEN LOCATED BEHIND RETAINING WALL.
2. USE WEATHERING STEEL FOR ALL STRUCTURAL STEEL AND FASTENER HARDWARE.

WOOD POST AND BEAM GUARDRAIL
SCALE: N.T.S.



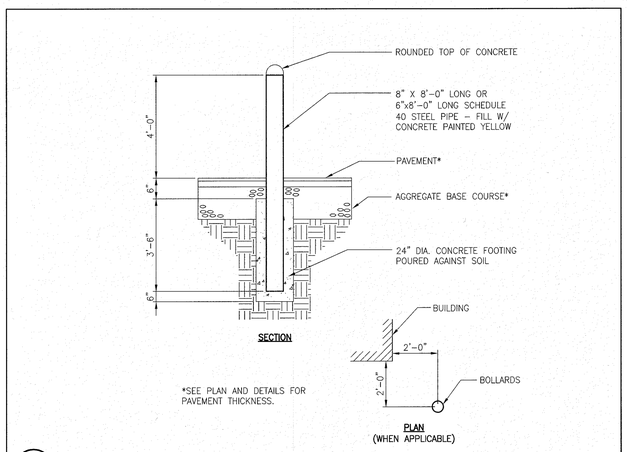
* UNLESS OTHERWISE NOTED ON PLANS.

TYPE D MONOLITHIC CONCRETE CURB/SIDEWALK DETAIL
SCALE: N.T.S.



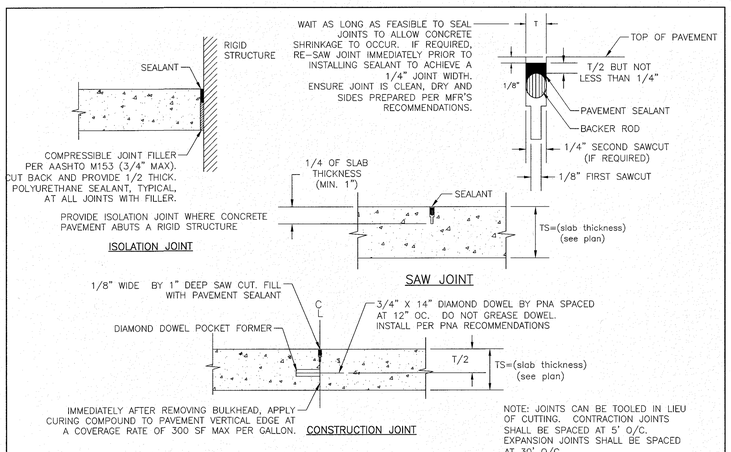
NOTE:
ROAD CENTERLINE (STRIPE) TO ALIGN WITH STRIPE OR SPACE CENTERLINE AS SHOWN

TYPICAL CROSSWALK
SCALE: N.T.S.

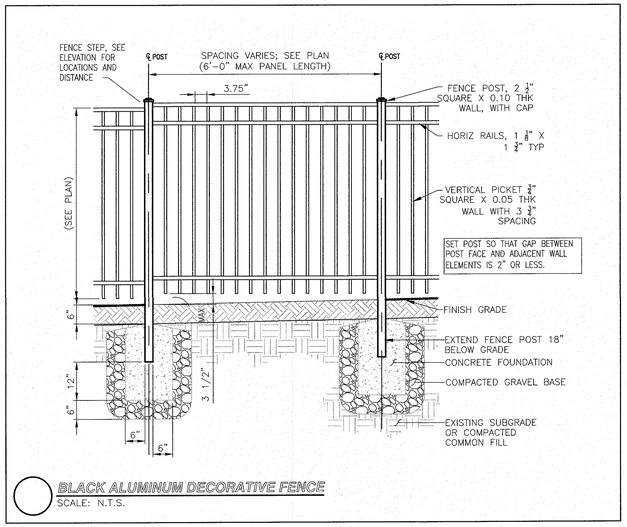


*SEE PLAN AND DETAILS FOR PAVEMENT THICKNESS.

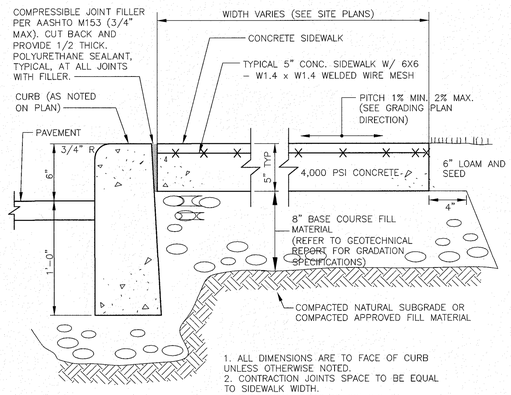
TYP. 6-INCH OR 8-INCH BOLLARD DETAIL
SCALE: N.T.S.



CONCRETE PAVEMENT JOINT DETAIL
SCALE: N.T.S.

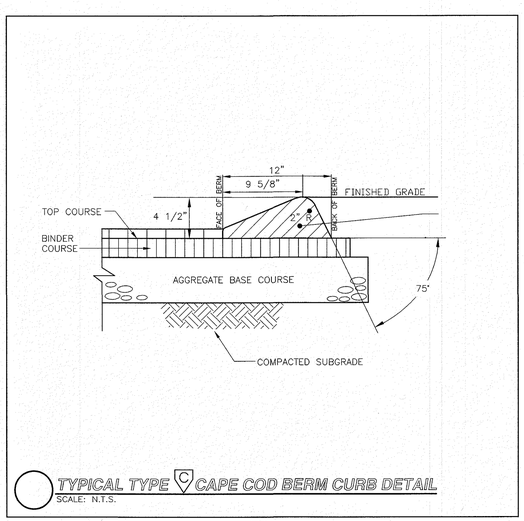


BLACK ALUMINUM DECORATIVE FENCE
SCALE: N.T.S.



1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. EXPANSION JOINTS TO 20' O.C.
4. ALL JOINTS SEALED PER SPEC.

TYPICAL CONCRETE SIDEWALK DETAIL
SCALE: N.T.S.



TYPICAL TYPE C CAPE COD BERM CURB DETAIL
SCALE: N.T.S.

No.	REVISIONS	BY	DATE
9.	ISSUED FOR PLANNING APPROVAL SIGNATURE	BPD	06/07/2019
8.	CONFORMANCE PERMIT SET	BPD	05/16/2019
7.	REVISED PER DESIGN TEAM COMMENTS	BPD	03/29/2019
6.	REVISED PER TOWN REVIEW COMMENTS	BPD	03/01/2019

PARKING & TRAFFIC CONTROL DETAILS - II

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
3 ARTISAN DRIVE
SALEM NH, 03079
SALEM PROPERTY MAP 107 LOT 12574

Prepared by: RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE
STONEHAM, MA 02180
781-279-0180
FAX: 781-279-0173

Scale: N.T.S. Date: 11/20/2018

For Professional Seal

STATE OF NEW HAMPSHIRE — BRIAN P. DUNDON No. 10460 LICENSED PROFESSIONAL ENGINEER
6-7-19

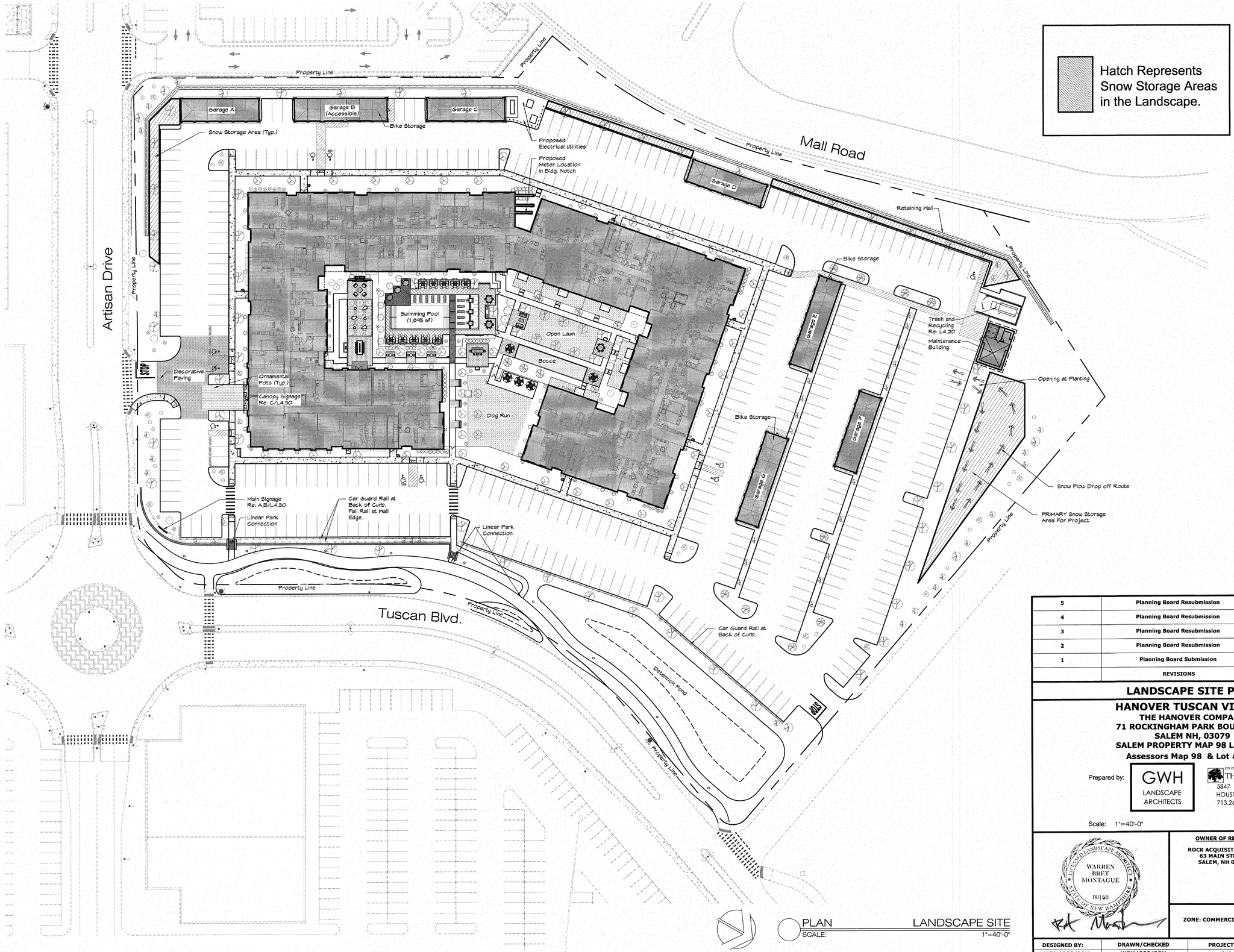
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'
ZONING DISTRICT: COMMERCIAL - INDUSTRIAL DISTRICT - SUBDISTRICT C (C1-C)
RESIDENTIAL USE: CONDITIONAL USE PERMIT REQUIRED

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
BJM	MSM/BJM	18071	C-13

Drawing name: G:\NH\Salem\Hanover Company\Tuscan Village\Main\TSD\1_C-13 Parking & Traffic Control Details-II.dwg
Jun 06, 2019 - 17:47pm



5	Planning Board Resubmission		5-23-19
4	Planning Board Resubmission		4-24-19
3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE SITE PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=40'-0" Date: 3-1-19

LICENSED LANDSCAPE ARCHITECT
WARREN BRET MONTAGUE
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L1.01

Tree Uplights (Typ.)

Fireplace
Re: C/L4.11

Covered Outdoor
Shower
Re: A/L4.12

D.G. Paving

In-Ground Tree Uplights (Typ.)

Swimming Pool
(1,845 sf)

Water Bowl
Feature

Built in Double BBQ Grill
Re: A/L4.11

Polished Stone
Seating Surfaces
Re: B/L4.12

Built in Single BBQ Grill
Re: B/L4.11

Fire Bar Table
Re: D/L4.11

Pool Enclosure
Fence and Gate
Re: D/L4.10

Tile Paving

Tile Paving

Tree Uplights (Typ.)

Post Mounted
Gas Grill
Re: E/L4.11

In-Ground Tree Uplights (Typ.)

Open Lawn

Post Mounted
Gas Grill
Re: E/L4.11

Artificial Turf
Bocce Court

Decorative Pots (Typ.)

66 Gas meters

Natural Stone
Bench (Typ.)
Re: D/L4.12

Dog Run

Natural Stone
Bench (Typ.)
Re: D/L4.12

Electric meters

Access Gate
to Amenity
Courtyard

SITE LIGHTING LEGEND

SYMBOL	LABEL	TOTAL QTY.	DESCRIPTION & SPECIFICATION
	A	5	DOUBLE PARKING LOT LIGHT (2) Philips ECF-S-32L-1A-NW32-AR-3-UNV 20' SSD Pole
	B	20	SINGLE PARKING LOT LIGHT (1) Philips ECF-S-32L-1A-NW32-AR-3-UNV 20' SSD Pole
	G	7	COURTYARD MOONLIGHT (Mount Between Building Level 3 and 4)
	M	20	BUILDING WALLPACK - Type 1 Reylon T630LLED845UNV12407392 Lamping: 34W LED
	E	2	BUILDING WALLPACK - Type 2 (In Trash Compactor Enclosure ONLY) Texas Fluorescents TXF MLU7L14W750L50KBZ Lamping: 14W LED
	F	21	SCONCE (At Garages Only) MAXIM 55571-FNMSH-40K
	C	21	BUILDING SCONCE WAC DS-WD05-S-40-S-FINISH
	H	4	2'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-24-80-C
	J	8	3'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-36-80-C
	U	44	In-Ground Mounted Tree Uplight Kim LTV99FF-SP-12L-4K-UV Mounted Flush with Grade
	K	25	Small Tree Ground Mounted Uplight Kim Lighting KIM EL7/0FS/7L9KUV/DB/AGS71/EP17
	S	6	OUTDOOR SPEAKER TIC Industries, Inc. Green Outdoor Rated Speakers Model: TIC GS-5P

PLAN COURTYARD LAYOUT
SCALE: 1"=10'-0"

4	Revised per Town Engineer Comments		6-6-19
3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

COURTYARD LAYOUT AND LIGHTING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

WARREN BRET MONTAGUE
LICENSED LANDSCAPE ARCHITECT
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L1.02

Storm Structure Re: Civil (Typ.)

Storm Line Re: Civil (Typ.)

Swimming Pool
(1,895 sf)

French Drain, (Typ.)
Re: E/L4.10

4" Landscape Drain
Line Connection (Typ.)

Storm Drain Re: Civil (Typ.)

6" Landscape Drain
Line Connection (Typ.)

12" Landscape Drain (Typ.)
Re: F/L4.10

Open Lawn

French Drain, (Typ.)
Re: E/L4.10

(2) 4" Sleeves Irrigation
(Typ.)

Artificial Turf
Bocce Court

4" Landscape Drain
Line Connection (Typ.)

12" Landscape Drain (Typ.)
Re: F/L4.10

Dog Run

Storm Drain Re: Civil (Typ.)

Storm Line Re: Civil (Typ.)

66 Gas meters

Electric meters

PLAN COURTYARD DRAINAGE
SCALE: 1"=10'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

COURTYARD DRAINAGE PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

WARREN BRET MONTAGUE
LICENSED LANDSCAPE ARCHITECT
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

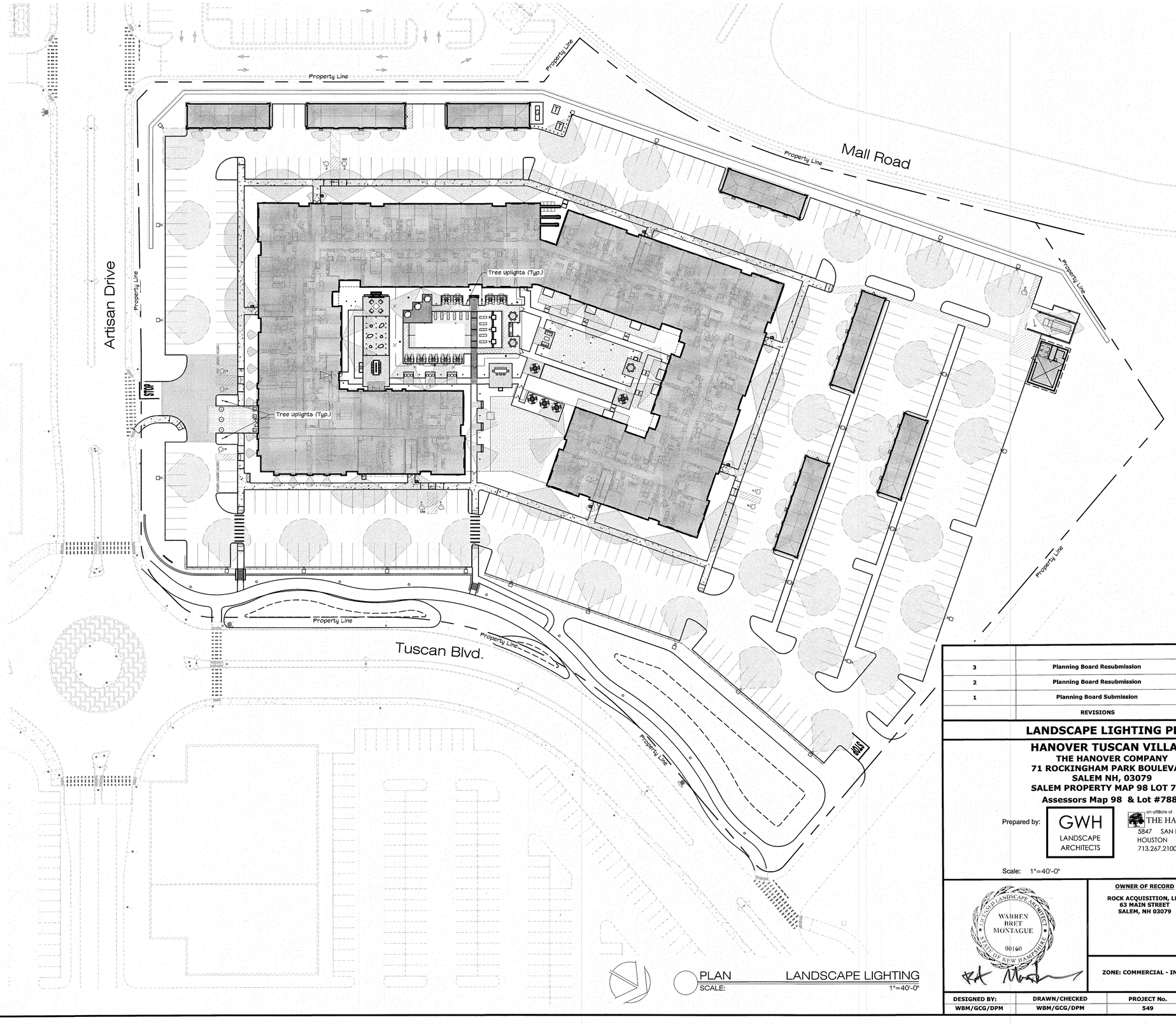
Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L1.03

SITE LIGHTING LEGEND

SYMBOL	LABEL	TOTAL QTY.	DESCRIPTION & SPECIFICATION
	LA	5	DOUBLE PARKING LOT LIGHT (2) Phillips ECF-S-32L-1A-NWQ2-AR-3-UNV 20' SSQ Pole
	LB	20	SINGLE PARKING LOT LIGHT (1) Phillips ECF-S-32L-1A-NWQ2-AR-3-UNV 20' SSQ Pole
	LC	7	COURTYARD MOONLIGHT (Mount Between Building Level 3 and 4)
	LW	20	BUILDING WALLPACK - Type 1 Rayon T630LLEDB45UNV1240T3BZ Lamping: 34W LED
	LE	2	BUILDING WALLPACK - Type 2 (In Trash Compactor Enclosure ONLY) Texas Fluorecents TXF MJJ7L14W750L50KBZ Lamping: 14W LED
	LF	21	SCONCE (At Garages Only) MAXIM 55571-FINISH-40K
	LG	21	BUILDING SCONCE WAC DS-WD05-S-40-S-FINISH
	LH	4	2'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-24-30-C
	LI	8	3'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-36-30-C
	LJ	44	In-Ground Mounted Tree Uplight KIM LTV83FF-SP-12L-4K-UV Mounted Flush with Grade
	LK	25	Small Tree Ground Mounted Uplight Kim Lighting KIM EL700F3/7L5KUV/DB/AGS71/EP17
	PS	6	OUTDOOR SPEAKER TIC Industries, Inc. Green Outdoor Rated Speakers Model: TIC GS-5P



PLAN LANDSCAPE LIGHTING
SCALE: 1"=40'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE LIGHTING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=40'-0" Date: 3-1-19

WARREN BRET MONTAGUE
00160
LICENSED LANDSCAPE ARCHITECT
STATE OF NEW HAMPSHIRE

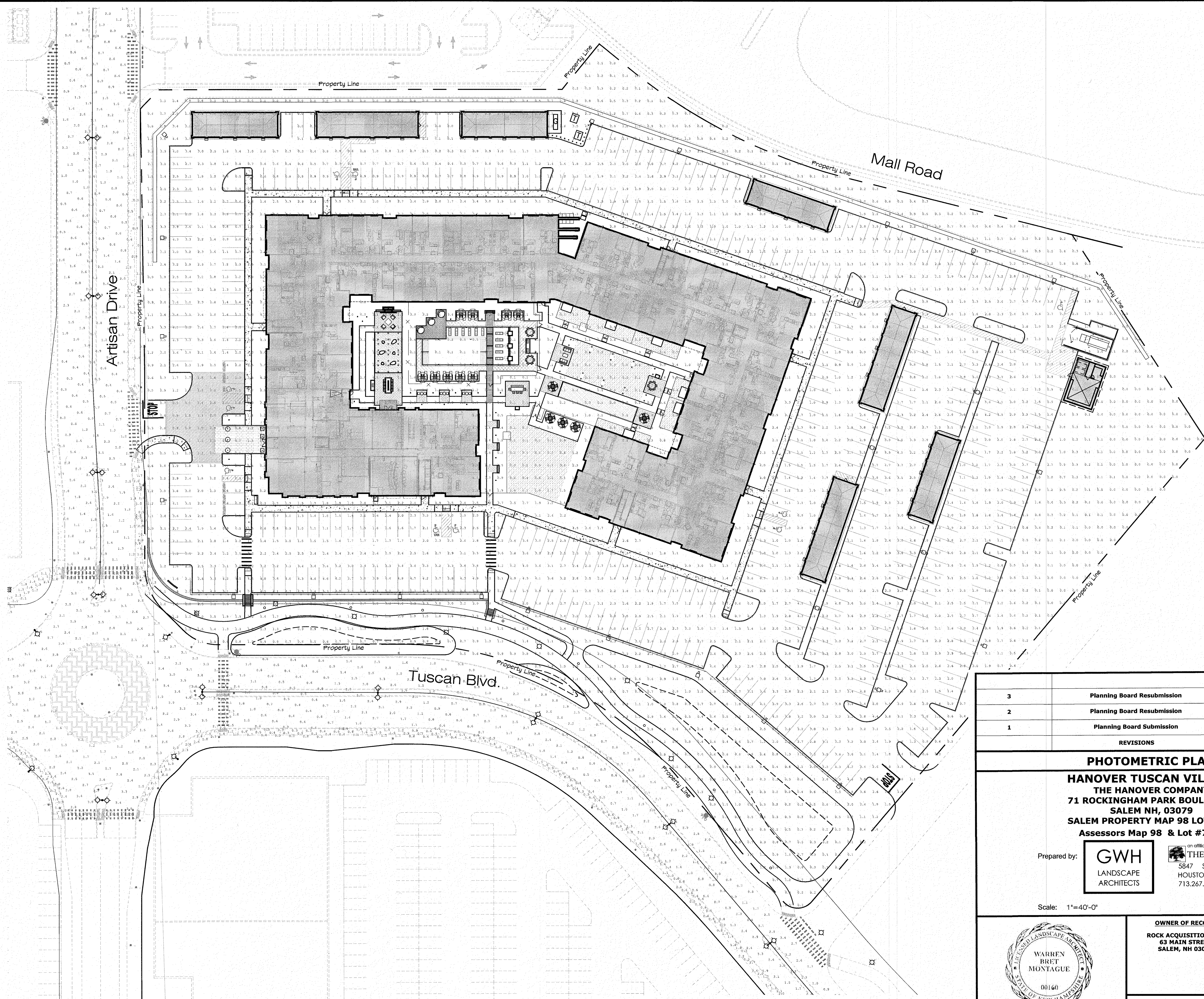
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L3.01

SITE LIGHTING LEGEND			
SYMBOL	LABEL	TOTAL QTY.	DESCRIPTION & SPECIFICATION
	LA	5	DOUBLE PARKING LOT LIGHT (2) Phillips ECF-S-32L-1A-NWG2-AR-3-UNV 20' SSQ Pole
	LB	20	SINGLE PARKING LOT LIGHT (1) Phillips ECF-S-32L-1A-NWG2-AR-3-UNV 20' SSQ Pole
	LC	7	COURTYARD MOONLIGHT (Mount Between Building Level 3 and 4)
	EW	20	BUILDING WALLPACK - Type 1 Rayon T630LLEDB45UNV1240T3BZ Lamping: 34W LED
	LE	2	BUILDING WALLPACK - Type 2 (In Trash Compactor Enclosure ONLY) Texas Fluoercents TXF MJJ7L14W750L50KBZ Lamping: 14W LED
	LF	21	SCONCE (At Garages Only) MAXIM 55571-FINISH-40K
	LG	21	BUILDING SCONCE WAC DS-WD05-S-40-S-FINISH
	LH	4	2'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-24-30-C
	LI	8	3'-0" Long LED Rigid Light Strip Jesco Lighting Group DL-RS-36-30-C
	LJ	44	In-Ground Mounted Tree Uplight KIM LTV83FF-SP-12L-4K-UV Mounted Flush with Grade
	LK	25	Small Tree Ground Mounted Uplight Kim Lighting KIM EL700F3/7L5KUV/DB/AGS71/EP17
	PS	6	OUTDOOR SPEAKER TIC Industries, Inc. Green Outdoor Rated Speakers Model: TIC GS-5P



PLAN — LANDSCAPE LIGHTING
SCALE: 1"=40'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

PHOTOMETRIC PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=40'-0" Date: 3-1-19

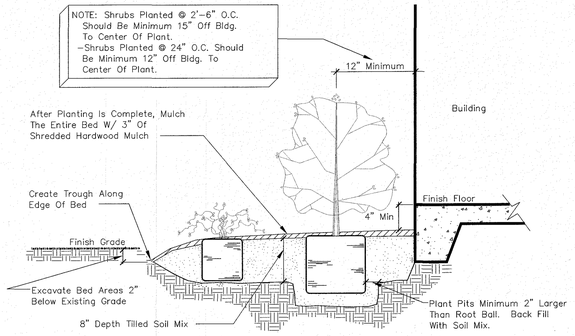
LICENSED LANDSCAPE ARCHITECT — WARREN BRET MONTAGUE — 00160 — STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

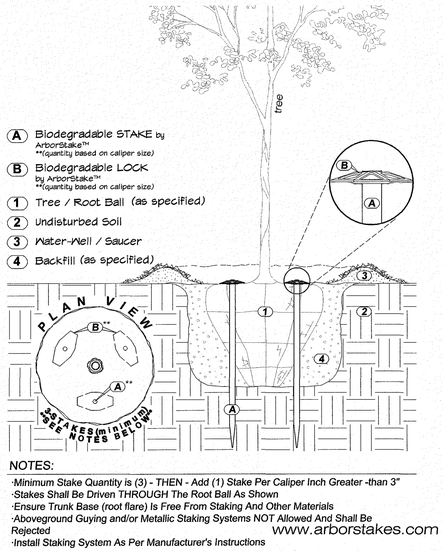
Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L3.02



A SECTION — PLANTING BED
SCALE: N.T.S.

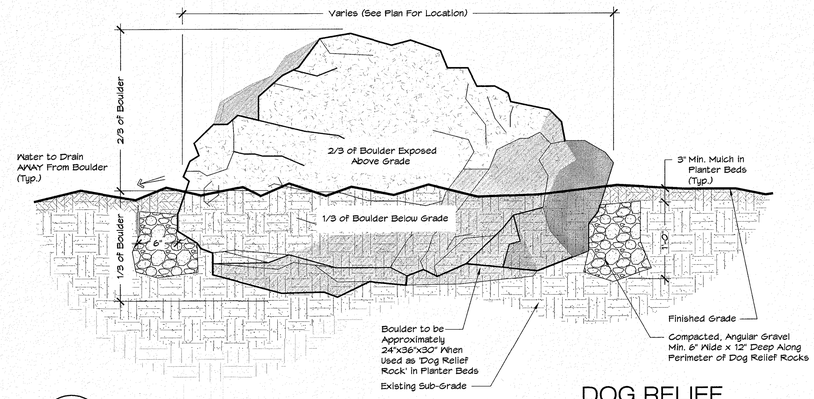


NOTES:

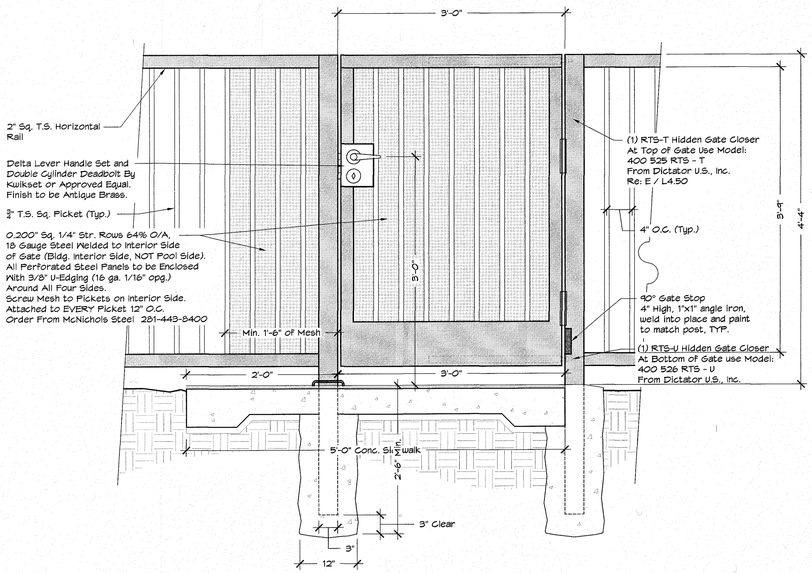
- *Minimum Stake Quantity is (3) - THEN - Add (1) Stake Per Caliper Inch Greater -than 3"*
- *Stakes Shall Be Driven THROUGH The Root Ball As Shown*
- *Ensure Trunk Base (root flare) Is Free From Staking And Other Materials*
- *Aboveground Guying and/or Metallic Staking Systems NOT Allowed And Shall Be Rejected*
- *Install Staking System As Per Manufacturer's Instructions*

www.arborstakes.com

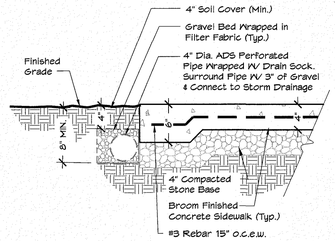
B SECTION — TREE "ARBOR STAKES"
SCALE: N.T.S.



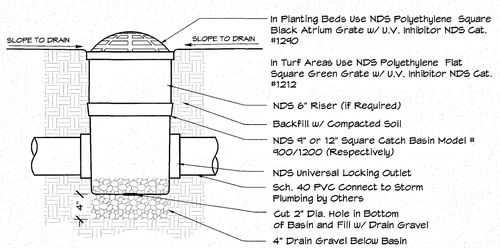
C SECTION — DOG RELIEF BOULDER INSTALLATION
SCALE: N.T.S.



D SECTION/ELEVATION — 4' HT. METAL FENCE & GATE AT POOL ENCLOSURE
SCALE: 1" = 1'-0"



E SECTION — FRENCH DRAIN
SCALE: 1" = 1'-0"



F SECTION — NDS SQUARE CATCH BASIN
SCALE: 1" = 1'-0"

4	Planning Board Resubmission		4-24-19
3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE DETAILS

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: AS SHOWN Date: 3-1-19

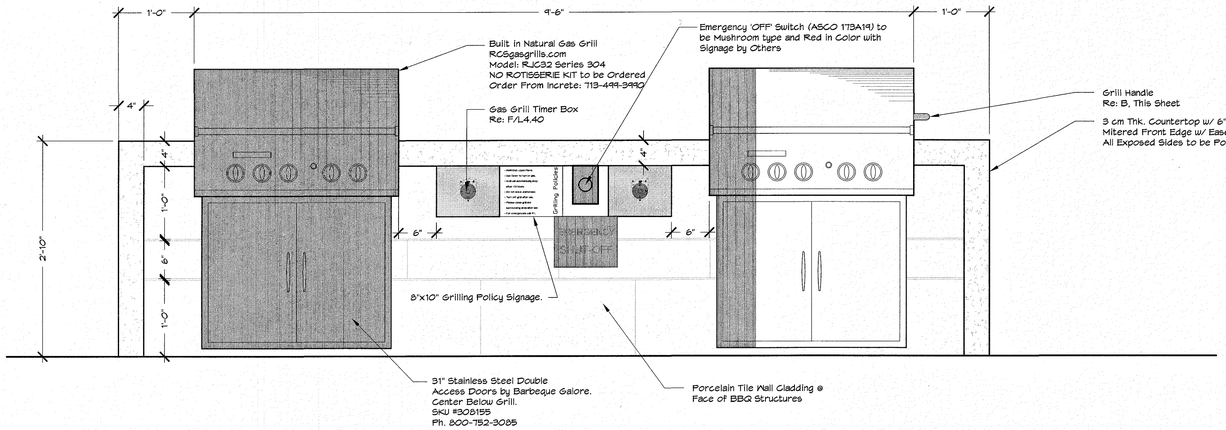
WARREN BRET MONTAGUE 00160 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

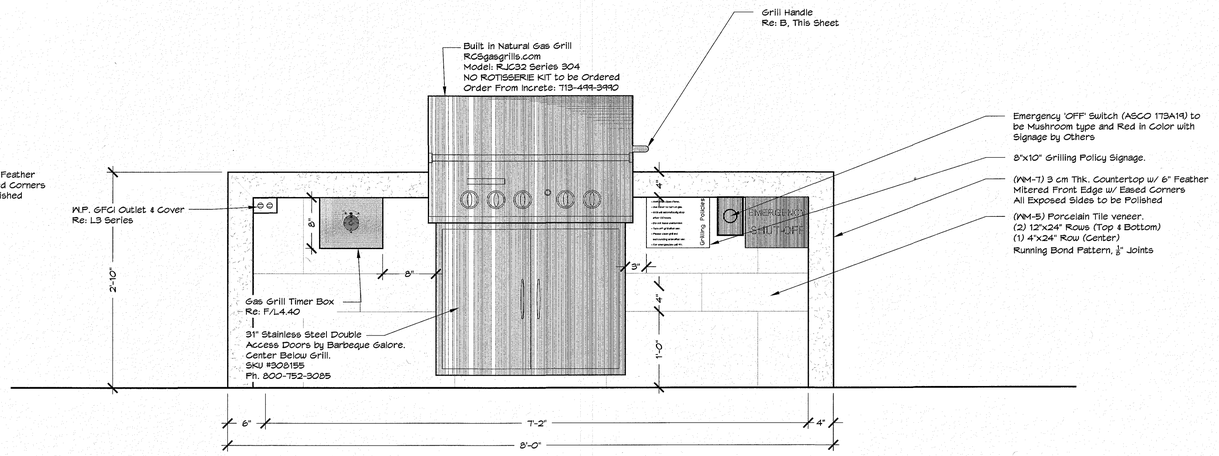
Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

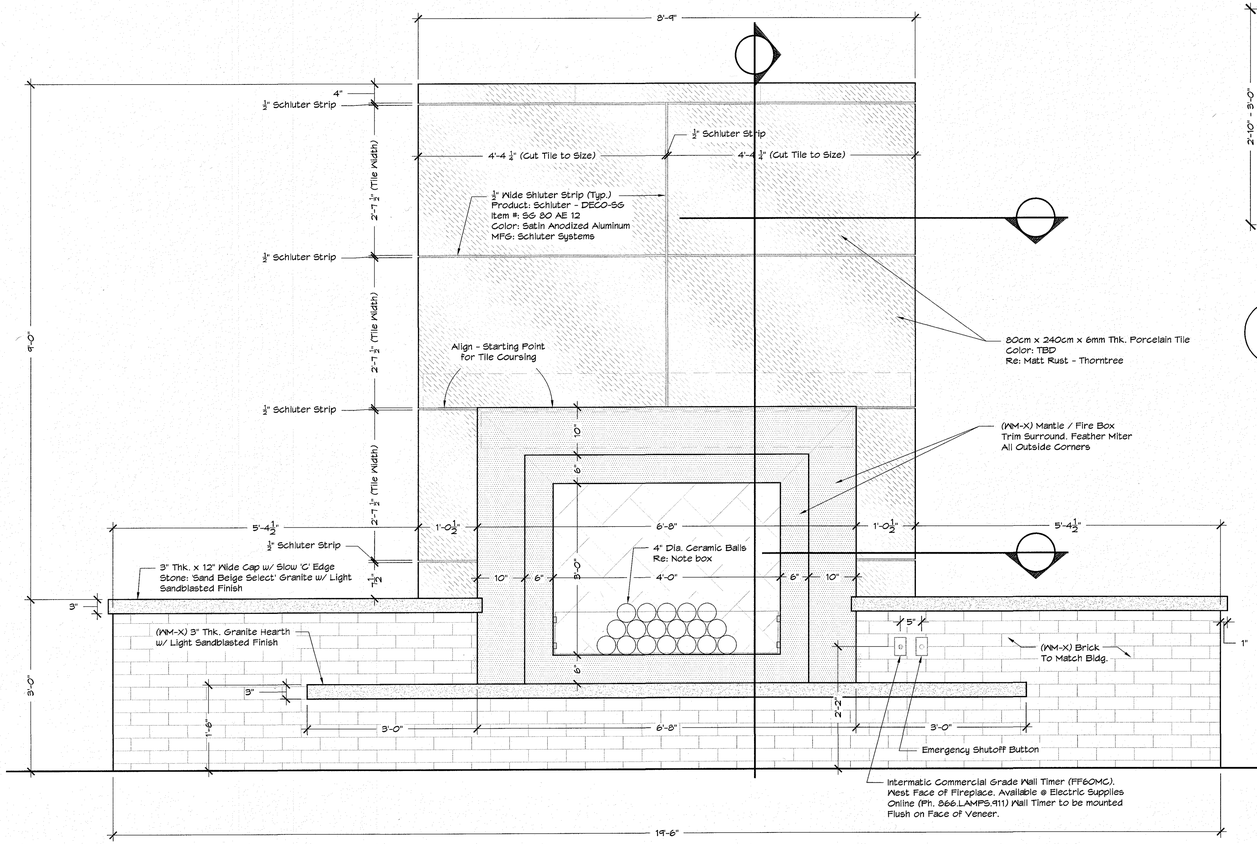
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.10



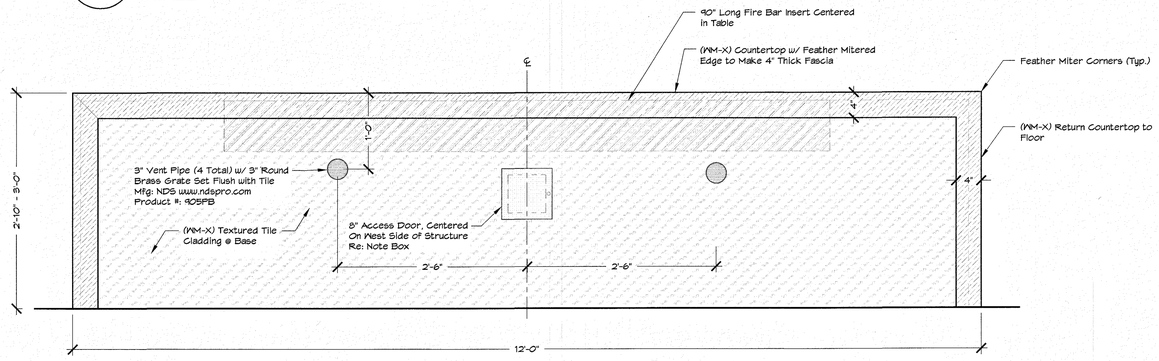
A ELEVATION — DOUBLE GAS BBQ GRILL
SCALE: 1" = 1'-0"



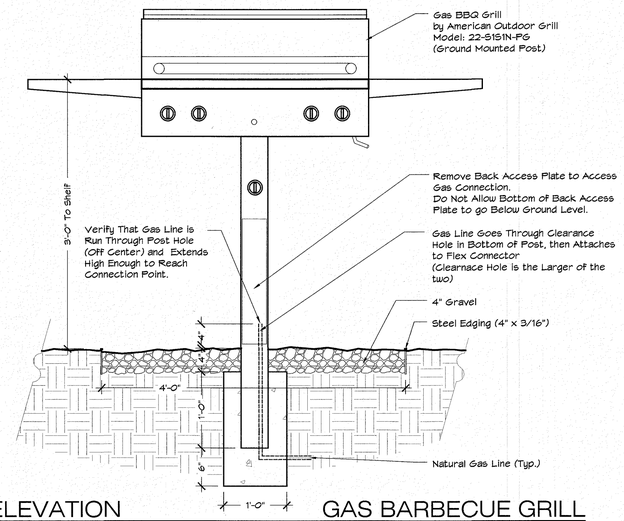
B ELEVATION — GAS BBQ GRILL
SCALE: 1" = 1'-0"



C FRONT ELEVATION — FIREPLACE
SCALE: 3/4" = 1'-0"



D (FRONT) ELEVATION — SERVICE COUNTER TABLE w/ FIRE BAR INSERT
SCALE: 1" = 1'-0"



E ELEVATION — GAS BARBECUE GRILL
SCALE: 1" = 1'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE DETAILS

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

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HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

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LICENSED LANDSCAPE ARCHITECT — WARREN BRET MONTAGUE — 00160 — STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

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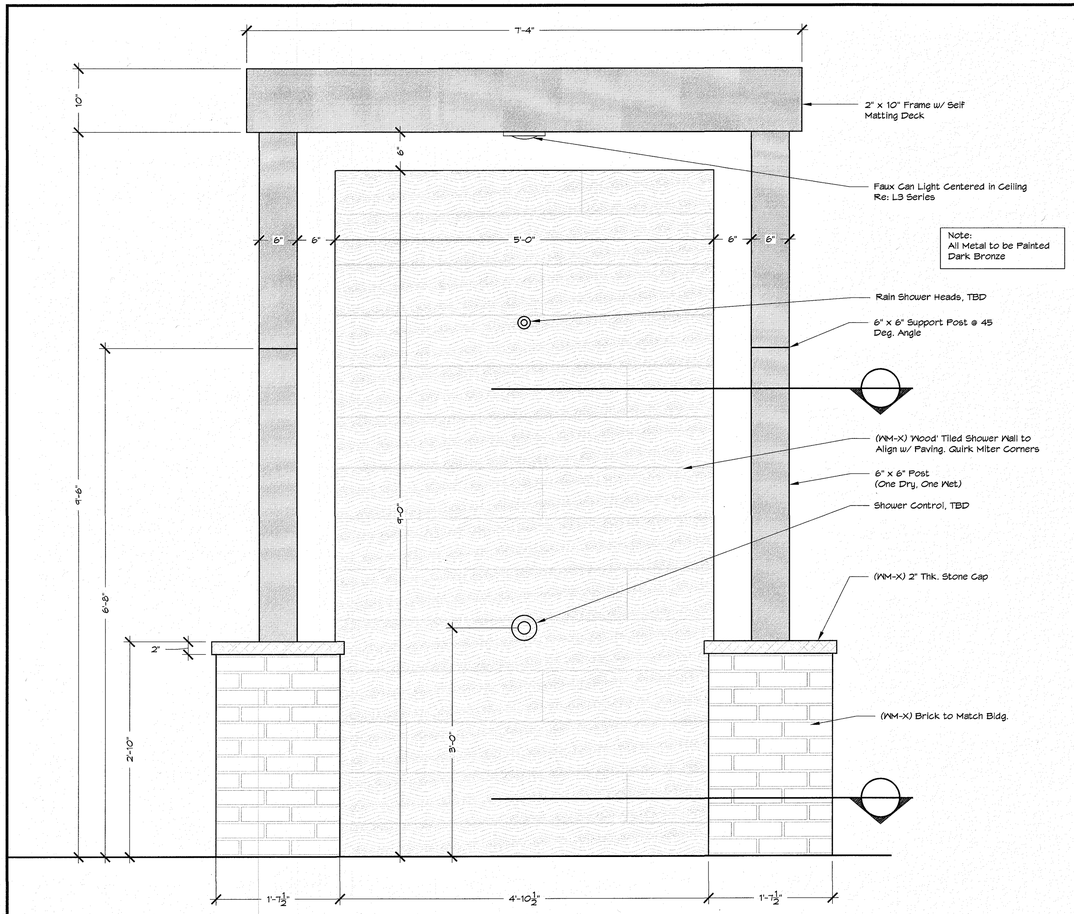
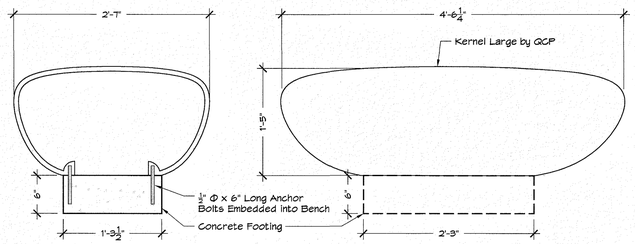
ZONE: COMMERCIAL - INDUSTRIAL 'C'

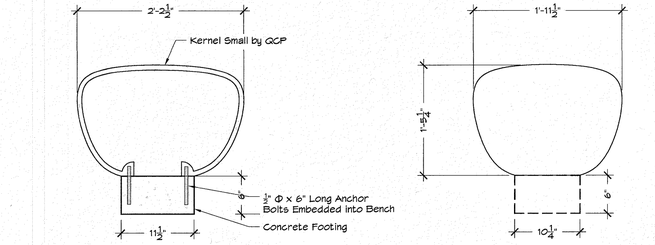
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.11



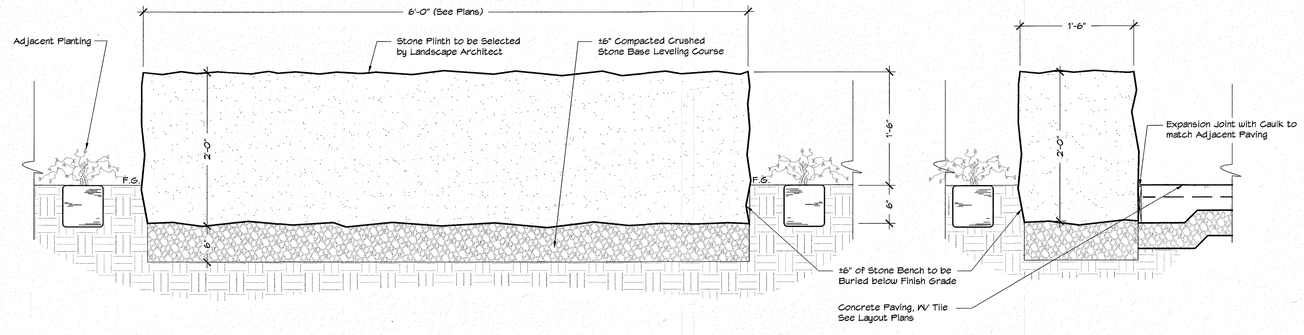
A ELEVATION — COVERED SHOWER TOWER WALL
SCALE: 1" = 1'-0"



B SECTION — LARGE KERNEL BENCH
SCALE: 1" = 1'-0"



C SECTION — SMALL KERNEL BENCH
SCALE: 1" = 1'-0"



D SECTION — STONE BENCH
SCALE: 1" = 1'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE DETAILS

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
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5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: AS SHOWN
Date: 3-1-19

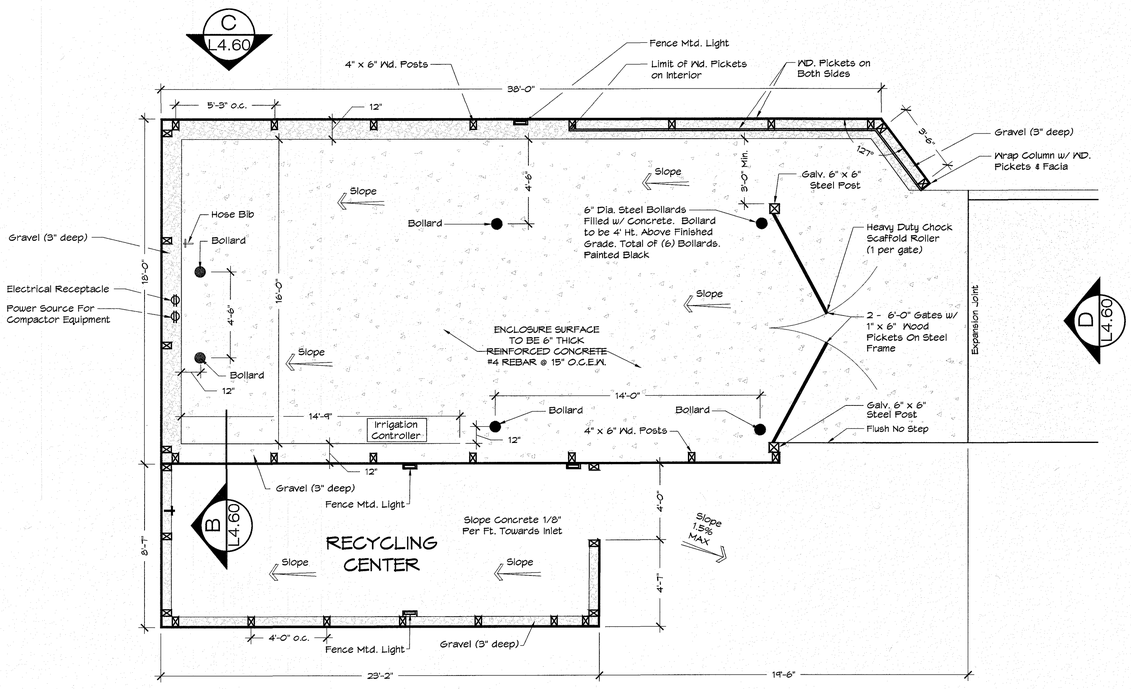
LICENSED LANDSCAPE ARCHITECT · WARREN BRET MONTAGUE · 00160 · STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

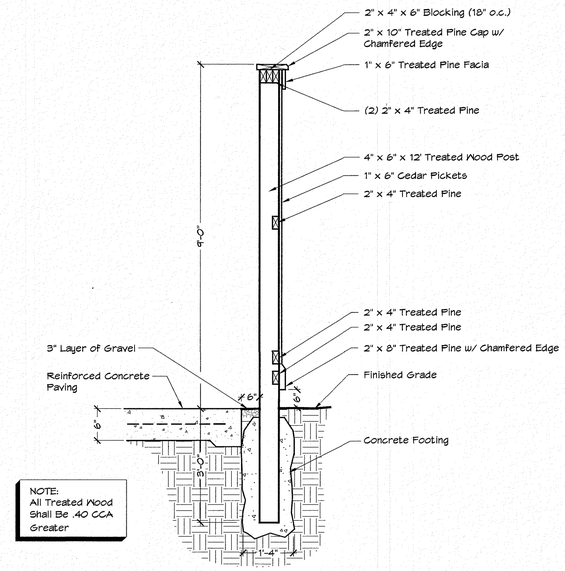
Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

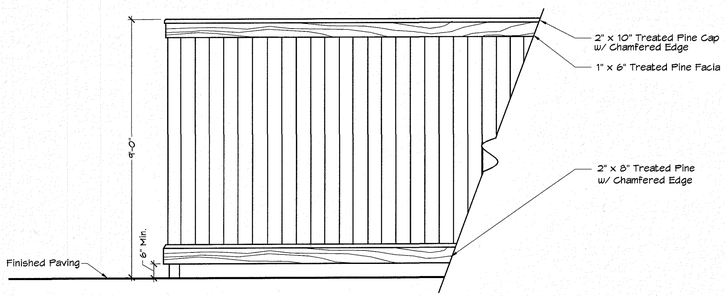
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.12



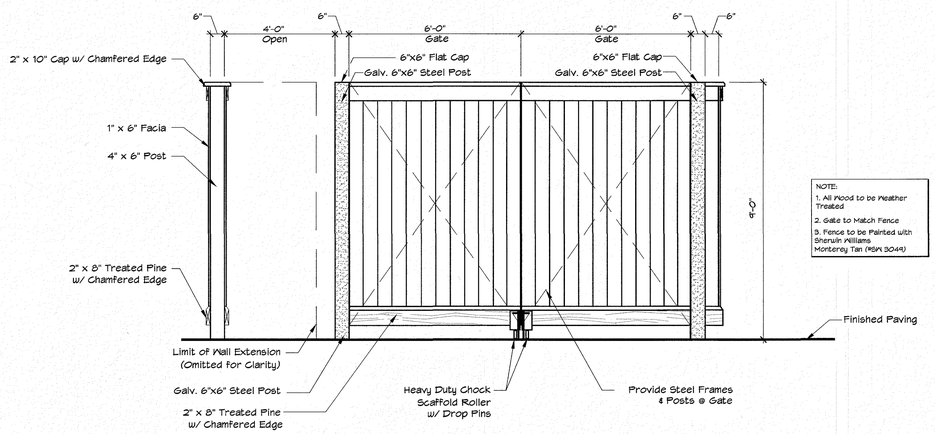
A PLAN — COMPACTOR ENCLOSURE W/ RECYCLING CENTER
SCALE: 1/4" = 1'-0"



B SECTION — COMPACTOR ENCLOSURE & FOOTING
SCALE: 1/2" = 1'-0"



C SIDE ELEVATION — COMPACTOR ENCLOSURE
SCALE: 3/8" = 1'-0"



D ELEVATION — COMPACTOR ENCLOSURE-FRONT
SCALE: 3/8" = 1'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LANDSCAPE DETAILS

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THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
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713.267.2100 FAX 713.267.2145

Scale: AS SHOWN
Date: 3-1-19

WARREN BRET MONTAGUE 00160 — NEW HAMPSHIRE LICENSED LANDSCAPE ARCHITECT — STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

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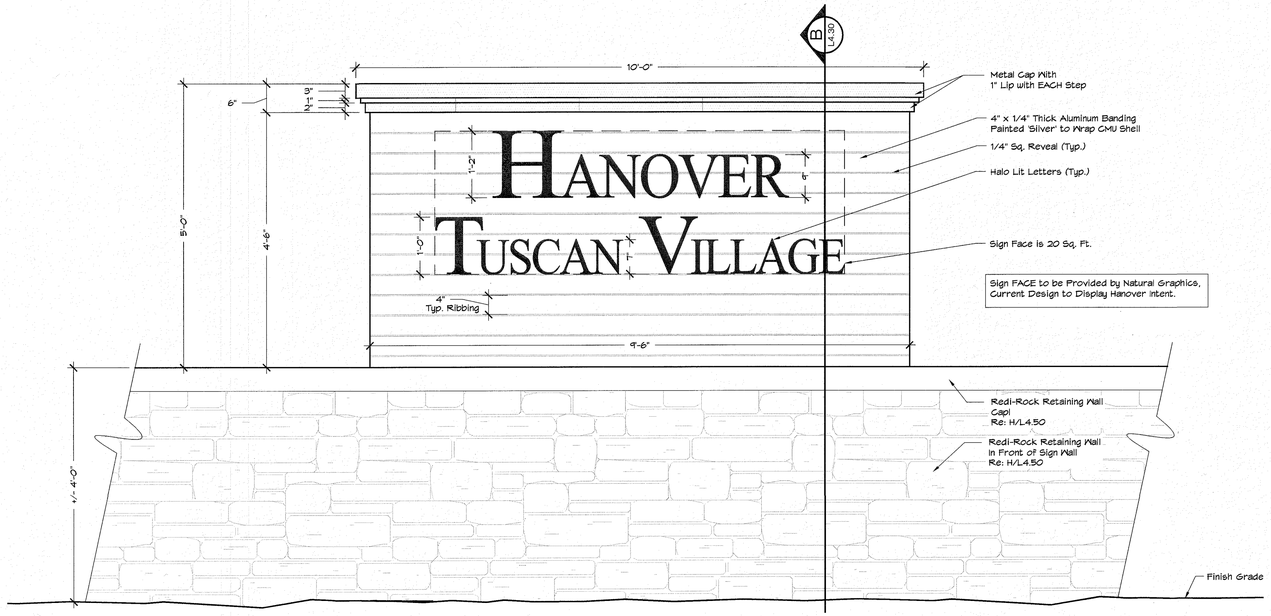
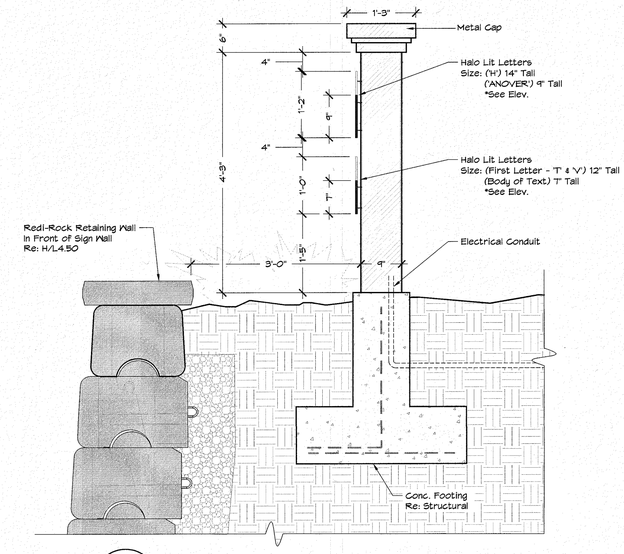
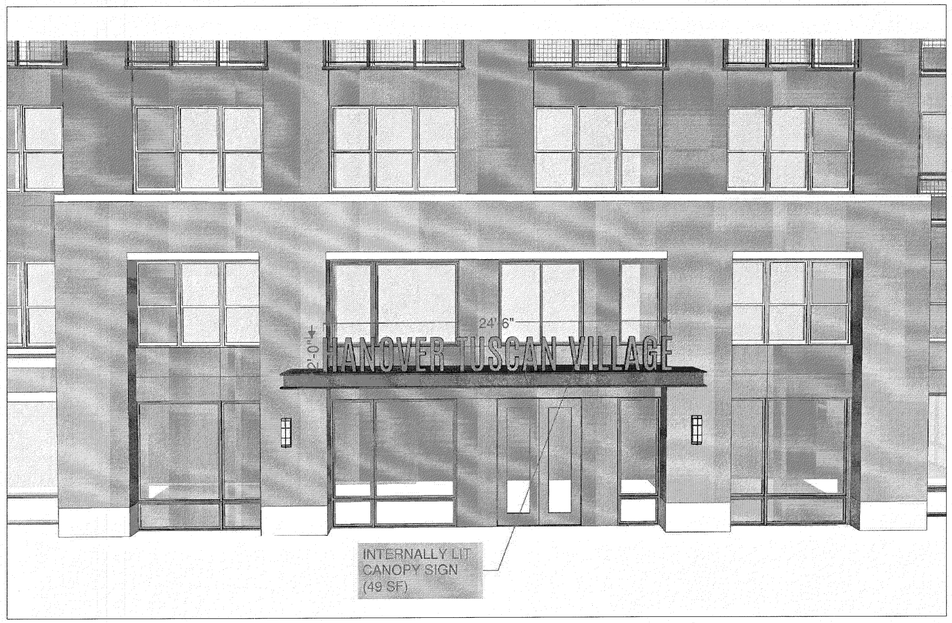
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.20



A ELEVATION — SIGN WALL
SCALE: 3/4" = 1'-0"



B SECTION — SIGN WALL
SCALE: 3/4" = 1'-0"



C RENDERING — CANOPY SIGN
SCALE: N.T.S.

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

SIGNAGE DETAILS

HANOVER TUSCAN VILLAGE
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SALEM NH, 03079
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LICENSED LANDSCAPE ARCHITECT
WARREN BRET MONTAGUE
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.30

TYPE: ED

TUBE ARCHITECTURAL DS-WD05

LED Wall Mounts

WAC LIGHTING
Responsible Lighting®

CDS-WD05-S40S-BRONZE FINISH

Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

The latest energy efficient LED technology in an appealing cylindrical profile delivers accent and wall wash lighting. Comes in various light distribution and beam angle options.

FEATURES

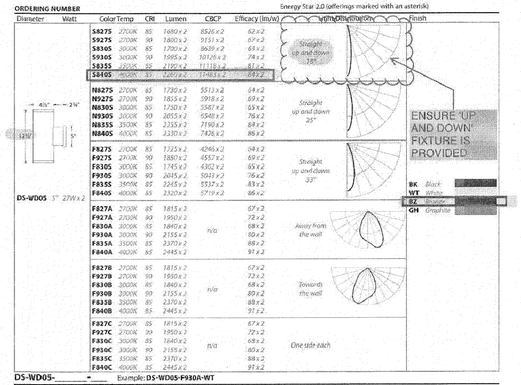
- High performance exterior rated LED wall mount light
- Fixture can install upside down to alter light distribution
- Solid aluminum construction
- 5 year warranty

SPECIFICATIONS

Input: Universal voltage 120V - 277VAC, 50/60Hz
Dimming: Electronic low voltage (ELV) 100% - 10% (120V only)
0-10V 100% - 5% (120-277V)
Light Source: High output 3 Step Mac Adam Ellipse COB
Rated life of 60,000 hours at L70
Finish: Electrostatically powder coated, white, black, bronze and graphite
Standards: IP65-rated, ETL & cETL wet location listed.
Energy Star 2.0 (offerings marked with an asterisk)

ORDERING NUMBER

Diameter	Watt	Color Temp	CRI	Lumen	CBCP	Efficacy (lm/w)	Light Distribution	Finish
		S827S	2700K	85	1690 x 2	8526 x 2	62 x 2	
		S927S	2700K	90	1800 x 2	9131 x 2	67 x 2	
		S830S	3000K	85	1700 x 2	8639 x 2	63 x 2	
		S930S	3000K	90	1985 x 2	10126 x 2	74 x 2	
		S835S	3500K	85	1700 x 2	11111 x 2	81 x 2	
		S840S	4000K	85	1700 x 2	11483 x 2	84 x 2	
		N827S	2700K	85	1730 x 2	5513 x 2	64 x 2	
		N927S	2700K	90	1835 x 2	5918 x 2	69 x 2	
		N830S	3000K	85	1730 x 2	5587 x 2	65 x 2	
		N930S	3000K	90	2055 x 2	6548 x 2	76 x 2	
		N835S	3500K	85	2335 x 2	7190 x 2	84 x 2	
		N840S	4000K	85	2330 x 2	7426 x 2	86 x 2	
		F827S	2700K	85	1725 x 2	4246 x 2	64 x 2	
		F927S	2700K	90	1830 x 2	4557 x 2	69 x 2	
		F830S	3000K	85	1745 x 2	4302 x 2	65 x 2	
		F930S	3000K	90	2045 x 2	5043 x 2	76 x 2	
		F835S	3500K	85	2245 x 2	5537 x 2	83 x 2	
		F840S	4000K	85	2320 x 2	5719 x 2	86 x 2	
		F827A	2700K	85	1815 x 2		67 x 2	
		F927A	2700K	90	1950 x 2		72 x 2	
		F830A	3000K	85	1840 x 2	n/a	68 x 2	
		F930A	3000K	90	2155 x 2		80 x 2	
		F835A	3500K	85	2370 x 2		88 x 2	
		F840A	4000K	85	2445 x 2		91 x 2	
		F827B	2700K	85	1815 x 2		67 x 2	
		F927B	2700K	90	1950 x 2		72 x 2	
		F830B	3000K	85	1840 x 2	n/a	68 x 2	
		F930B	3000K	90	2155 x 2		80 x 2	
		F835B	3500K	85	2370 x 2		88 x 2	
		F840B	4000K	85	2445 x 2		91 x 2	
		F827C	2700K	85	1815 x 2		67 x 2	
		F927C	2700K	90	1950 x 2		72 x 2	
		F830C	3000K	85	1840 x 2	n/a	68 x 2	
		F930C	3000K	90	2155 x 2		80 x 2	
		F835C	3500K	85	2370 x 2		88 x 2	
		F840C	4000K	85	2445 x 2		91 x 2	



DS-WD05- ____ Example: **DS-WD05-F930A-WT**

waclighting.com
Phone: (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. JUL 2018

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A CUTSHEET BUILDING HIGHLIGHT
SCALE: N.T.S.

Submitted by Lights Fantastic | Job Name: DR. PHILLIPS, Building Owner: The Hanover Company (Houston) | Catalog Number: T630LEDB45UNI12V40T3BZ | Notes: | Type: LC

LIGHTS FANTASTIC | LFBD16-8218

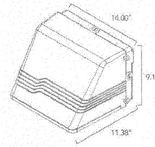
TECH-D
TECHNOLOGY DRIVEN

TYPE:
CATALOG NO:
PROJECT NAME:
COMMENTS:
PREPARED BY:

T630LEDB

T630LEDB
SMALL LED TRAPEZOIDAL
CUT-OFF WALL PACK

DIMENSION



LENGTH: 14.00" | WIDTH: 11.38" | HEIGHT: 9.13"

FEATURES

USE OR PRODUCT
The intended use of this product is for any outdoor commercial or industrial building, accent, pedestrian walkways, public access areas, or recreation areas.

HOUSING
Rugged die cast aluminum housing with hinged front frame, 1/2" coin plugs with O-rings for conduit & photocell.

FINISH
Matt finished, architectural bronze powdercoat over a precoat chromate conversion coating. Available in standard dark polyester bronze or consult factory for made to order architectural finishes.

OPTICS
Specular anodized aluminum reflector with polycarbonate optical lens. Lens is sealed by one-piece silicon gasket prohibits entrance of outside contaminants. Available in either Type 3 standard or Type 5 optical distribution.

LED
High output LEDs offer a minimum estimated operating life of 50,000 hours in 3000K, 3500K, 4000K (standard), or 5000K with CRI>83. LEDs placed on high performance aluminum heatsink for reduced junction temperatures and extended life.

DRIVER:
Durable and long lasting LED driver operates at 120-277V and boasts a 90% power factor at 50 to 60 Hz with 0-10V Dimming Constant Current. Driver protections includes: Output open load, over-current and short-circuit, and over-temperature with auto recovery. -40°C Min Temp. 40°C Max Temp. Step-down transformer may be utilized for 480V or 347V applications.

MOUNTING
Cast-in template for mounting directly over a 4" recessed outlet box or 1/2" surface conduit.

LISTINGS/COMPLIANCE
- UL - Listed for wet locations.
- Dark Sky Compliant
- DLC

ORDERING INFORMATION (DLC APPROVED)

T630LEDB | | UNI12 | | | | | |

SERIES	WATTAGE(1)	VOLTAGE	DRIVER (T.P.)	OPTICS	FINISH	OPTIONS (2)
T-630LED LED	30 - 30W/3400 45 - 45W/5000 70 - 70W/8000	UNI12 - 120V-277V	40° - 4000K MTO	T3 - Type 3 (3) T5 - Type 5	BK - Black MTO* - Made to Order	PC1 - Photocell 120V PC2 - Photocell 277V WG - Wire Guard SDT - Step Down Transformer EM - Emergency Battery Pack(Integral)

1 - Standard color temp.
2 - Standard distribution type.
3 - ETL number required.

RAYON LIGHTING GROUP, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE
1303 MIRASOL ST, LOS ANGELES, 90023 | TEL 323.416.2626 | FAX 323.416.2626 | WWW.RAYONLIGHTING.COM

SMALL LED TRAPEZOIDAL CUT-OFF WALL PACK

T630LEDB

Index Page

B CUTSHEET BUILDING WALL PACK
SCALE: N.T.S.

Submitted by Lights Fantastic | Job Name: DR. PHILLIPS, Building Owner: The Hanover Company (Houston) | Catalog Number: T630LEDB45UNI12V40T3BZ | Notes: | Type: LC

LIGHTS FANTASTIC | LFBD19-9218

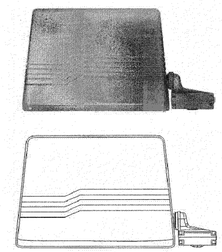
RAYON LIGHTING GROUP

T630LED
SMALL LED TRAPEZOIDAL
CUT-OFF WALL PACK

Project:
Model:
Location:
Contact:

T630LED

OUTDOOR MOTION SENSOR



FIXTURE MOUNT MOTION SENSOR:
360° COVERAGE, LINE VOLTAGE,
IP66 RATED

RAYON LIGHTING GROUP, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE
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C CUTSHEET COMPACTOR WALL PACK
SCALE: N.T.S.

Submitted by Lights Fantastic | Job Name: DR. PHILLIPS, Building Owner: The Hanover Company (Houston) | Catalog Number: 992838WTBZ | Notes: | Type: EA

LIGHTS FANTASTIC | LFBD16-6215

MAXIM

MOON RAY LED 30 INCH OUTDOOR WALL SCONCE

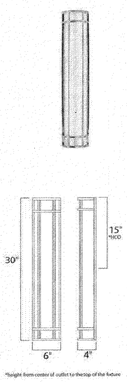
992838WTBZ

Dimensions and Weight
Width: 6.00 in.
Height: 30.00 in.
Extension/Depth: 4.00 in.
Backplate/Canopy Width: 5.25 in.
Backplate/Canopy Length: 29.00 in.
Height from Center of Wall Opening: 15.00 in.
Weight: 6.87 lb.

Design Information
Category: Outdoor Wall Lights
Finish: BRONZE
Glass: White
Material: Stainless Steel+Acrylic

Bulb Information
Bulbs Included: No
Bulb Category: LED
Primary Bulb(s): 1 x 28.00 watts PCB LED
Color Temperature: ~~3000K~~ 4000K J.S. (10-17-2018)
Color Rendering Index: 90.0000
Total Lumens: 2150

Product Rating
Safety Rating: Wet
ADA Approved
Title 24 Approved



*Height from center of outlet to the top of the fixture

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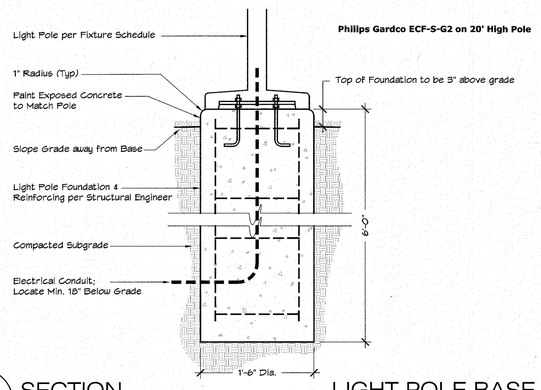
D CUTSHEET BUILDING SCONCE
SCALE: N.T.S.



E SECTION LIGHT POLE BASE
SCALE: 1"=1'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LIGHTING DETAILS I

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: AS SHOWN Date: 3-1-19

LICENSED LANDSCAPE ARCHITECT · WARREN BRET MONTAGUE · 00160 · STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.40

Submitted by Lights Fantastic

LIGHTS FANTASTIC	Job Name: DR. PHILLIPS Building Owner: The Hanover Company (Houston)	Catalog Number: ECFS-NWG2-3120-BZ Notes:	Type: LK

PHILIPS GARDCO

Site & Area

EcoForm

ECF-S small

Project:
Location:
Cat No:
Type:
Qty:
Notes:

The Philips Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire. EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings.

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Controls	Electrical	Luminaire	Finish
ECF-S	32L, 48L, 64L	530, 700, 1A, 1.2A, 900, 2A, 1A	WW-G2, NW-G2, CW-G2	AR, SF, WS, RAM	Type 2, Type 3, Type 4, Type 5, AFR	120, 208, 240, 277, 347, 480, UNV, HVU	DD, DCC, PCB, TLR05, TLR07, TLRPC, CS50, CM50, CE50, DA50, IMRI3, IMRI7, SW, SW-IMRO, LLC2, LLC3, LLC4	TB, F1, F2, FP1, FP2, FP3, SP1, SP2	RPA, HIS	BK, WH, BZ, DGY, MGY, RAL, CC

PLEASE ADVISE

ECF-S_Gen2 08/17 page 1 of 9

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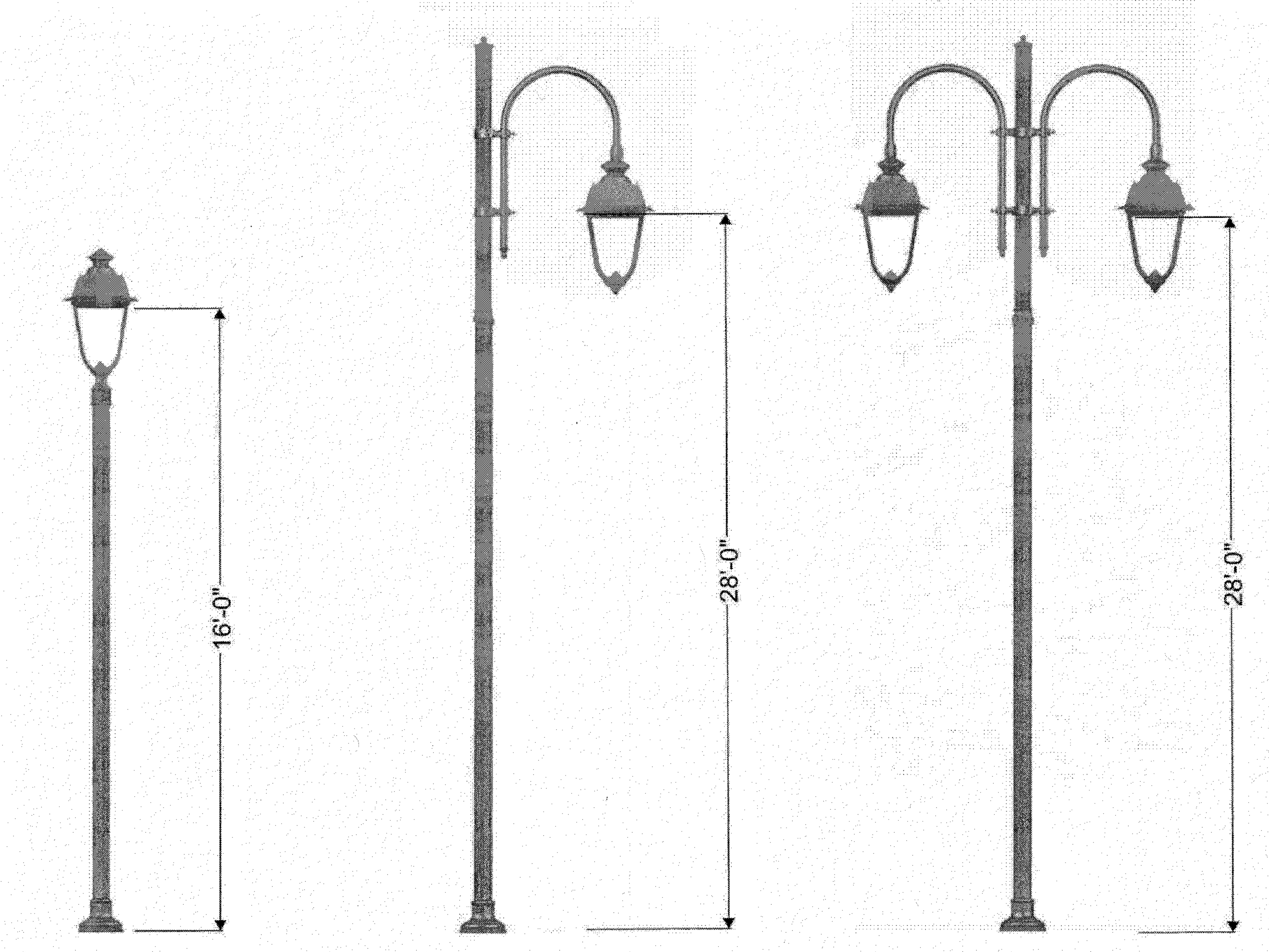
A CUTSHEET — PARKING LOT LIGHT

SCALE: N.T.S.



PT-8
QTY 15
LUMINAIRE SPECIFICATIONS
POLE SPECIFICATIONS
ARM SPECIFICATIONS

PT-6
QTY 40
LUMINAIRE SPECIFICATIONS
POLE SPECIFICATIONS
ARM SPECIFICATIONS

PT-7
QTY 30
LUMINAIRE SPECIFICATIONS
POLE SPECIFICATIONS

B CUTSHEET — DEVELOPMENT STANDARD LIGHTS

SCALE: N.T.S.

KIM LIGHTING

LTV8SS
Lightvault® 8 Stainless Steel kl_ltv8ss_spec.pdf

JOB ____ TYPE ____

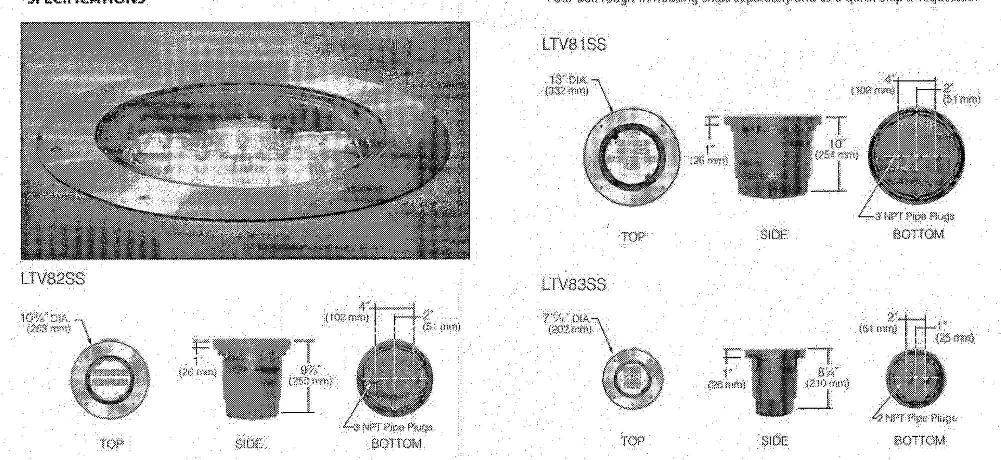
NOTES ____ APPROVALS ____

FEATURES
- Sealed IP68 LED light engine
- Bluetooth connectivity for remote control aiming and dimming
- Free Mobile App for Android and iOS
- Easy to install and pair devices
- Advanced thermal management provides long life in excess of 100,000+ hours
- Runs cool to the touch - less than 40°C

CERTIFICATIONS
cULus LISTED · SASO For LTV82/83 · IK09

SPECIFICATIONS

Pour Box rough-in housing ships separately and as a quick-ship if requested.



DEBRIS SHIELDS: LTV81, LTV82, LTV83

LIGHT DISTRIBUTIONS:
LTV81SS, LTV82SS, LTV83SS
Spot (SP) · Narrow Flood (NF) · Wall Wash (WW)

ORDERING CODE

LTV8xSS

Fixture Size		Distribution*	Source	
LTV81SS	13" Dia.	SP, NF, WW	36L	36 LEDs
LTV82SS	10-3/8" Dia.	SP, NF, WW	18L	18 LEDs
LTV83SS	7-15/16" Dia.	SP, NF, WW	12L	12 LEDs

Electrical Module — Color Temperature: 3K 3000K, 4K 4000K, 5K 5000K; Voltages: UV 120-277V

Lens Options¹ — SR Slip-Resistant Lens; PL Prismatic Lens
¹ All lens options are integral parts of component module and must be installed at factory.

Rebar Cage Anchor — RCA81 for LTV81; RCA82 for LTV82; RCA83 for LTV83

* SP = Spot, NF = Narrow Flood, WW = Wall Wash

Kim Lighting reserves the right to change specifications without notice.

© 2018 KIM LIGHTING | 17760 Rowland Street | City of Industry | CA 91748
P 626.968.5666 | F 626.369.2695 | www.kimlighting.com | Rev. Jul. 12, 2018

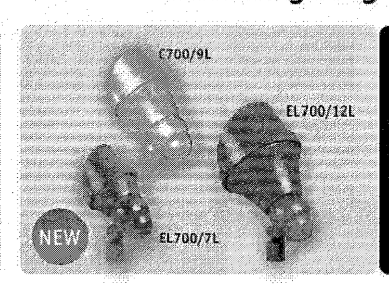
HUBBELL Lighting | 1 |

C CUTSHEET — IN GROUND LIGHT

SCALE: N.T.S.

Scarab™
Accent Lighting

FEATURES
- LED light sources with sealed light engine
- Spot illumination for dramatic lighting, narrow flood distributions for accent lighting
- The Scarab series combines integrated design and application flexibility to produce a landscape accent system that meets the broadest range of illumination needs
- Unique swivel mount provides superior aiming without loosening over time
- Available in aluminum finish for excellent value and rugged service, or brass offering long life and natural weathering that blends into the landscape



ORDERING INFORMATION (Example)

C700S3 · 7L3K · – · VG · AGS73 · JBR-2

BRASS FIXTURE
C700S3 350mA Spot
C700F3 350mA Narrow Flood
ALUMINUM FIXTURE
EL700S3 350mA Spot
EL700F3 350mA Narrow Flood

FIXTURE FINISH
BRASS: NB Natural Brass; VG Verde Green Patina
ALUMINUM: BL Black; DB Dark Bronze; GR Verde Green

FIXTURE OPTIONS
7 LED: AGS72 Adjustable Glare Shield¹·²; FGS72 Full Glare Shield¹·²; DS72 Debris Screen for Full Glare Shield
9 LED: AGS73 Adjustable Glare Shield¹·²; FGS73 Full Glare Shield¹·²; DS73 Debris Screen for Full Glare Shield
12 LED: AGS74 Adjustable Glare Shield¹·²; FGS74 Full Glare Shield¹·²; DS74 Debris Screen for Full Glare Shield

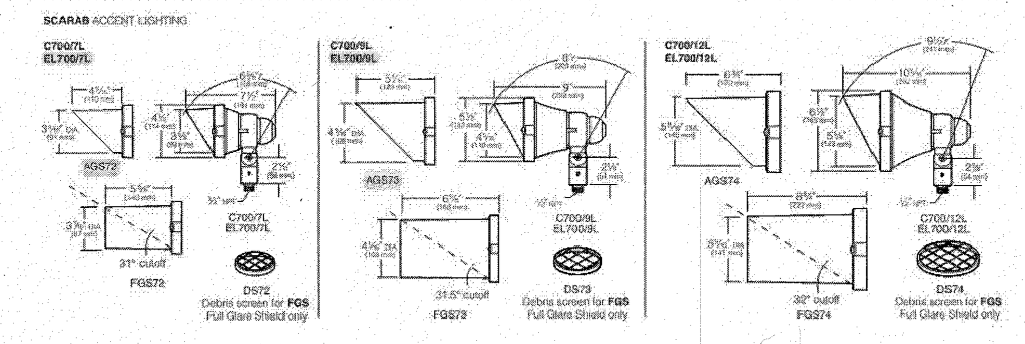
MOUNTING OPTIONS
120 VOLT MOUNTING OPTIONS
EP17 Landscape Light Post Mount
JB1 Architectural J-box²
J-25N Portable Spear Mount²
JBR-2 Brass in-grade J-box (2) ½" NPT in bottom
JBR-3 Brass in-grade J-box (2) ¾" NPT in bottom
JBR-21 Brass in-grade J-box (2) ½" NPT in sides, (2) ½" NPT in bottom
JBR-24 Brass in-grade J-box (4) ½" NPT in sides, (2) ½" NPT in bottom
JBR-30 Brass in-grade staked J-box
JBR-32 Brass in-grade staked J-box with cord
SM18 Stanchion Mount²
J-27N Surface Mount²
JWBR Brass Architectural Wall Mount²

ELECTRICAL MODULE
Source: 7L 7 LEDs, 9W; 9L 9 LEDs, 11W; 12L 12 LEDs, 14W
Color Temperature: 3K 3000K; 4K 4200K; 5K 5100K

VOLTAGE
UV Universal Voltage from 120 to 277V with a ±10% tolerance

¹ Replaces standard lens ring/hood on fixture.
² Finish to match fixture. Specify finish: BL - Black, DB - Dark Bronze, GR - Verde Green.

SCARAB ACCENT LIGHTING



KIM LIGHTING

201

D CUTSHEET — TREE UPLIGHT

SCALE: N.T.S.

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

LIGHTING DETAILS II

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: AS SHOWN — Date: 3-1-19

LICENSED LANDSCAPE ARCHITECT · WARREN BRET MONTAGUE · 00160 · STATE OF NEW HAMPSHIRE

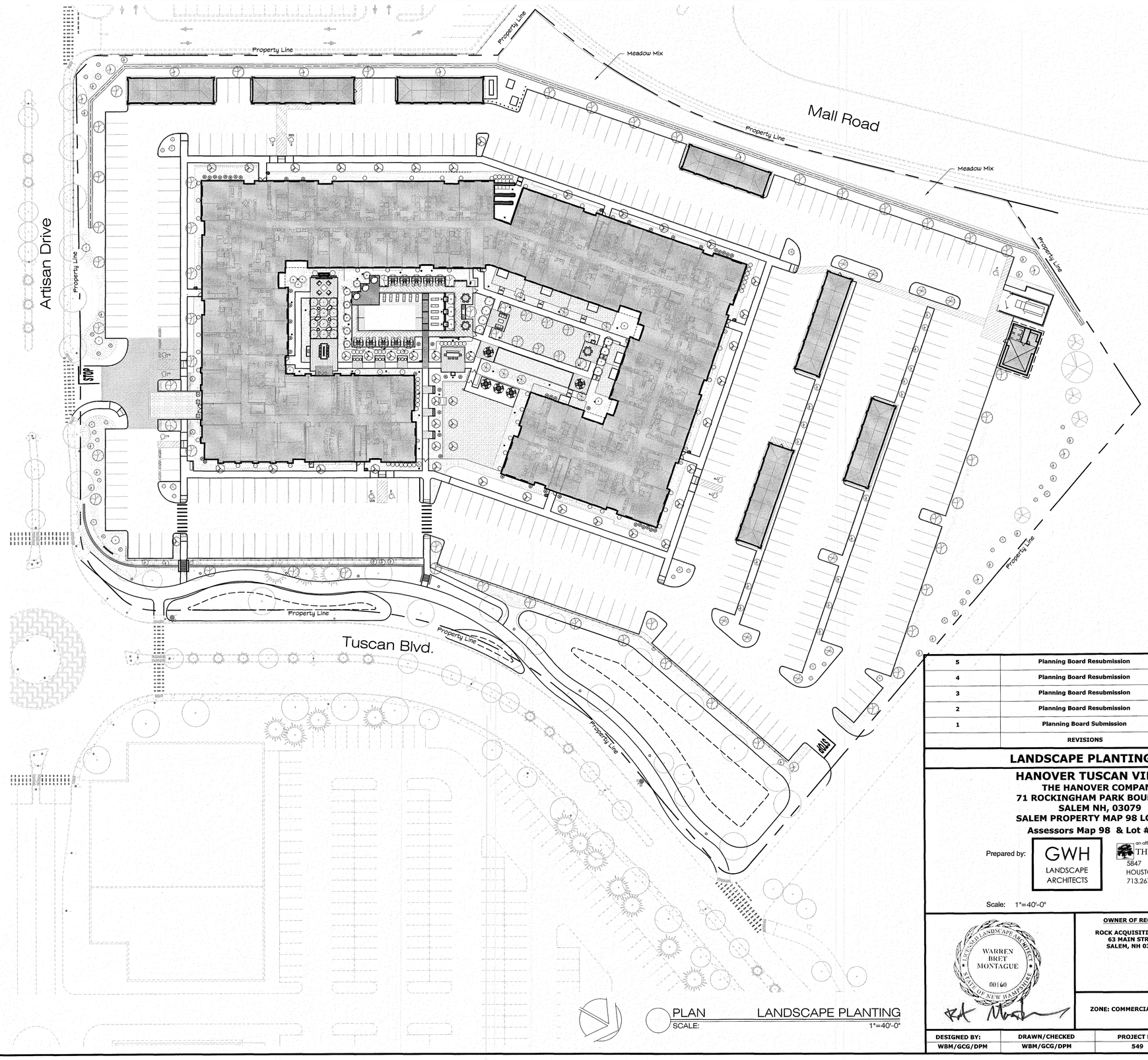
OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L4.41

	ABBREVIATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	CONDITION	REMARKS
			TREES				
	AC	Platnaus occidentalis	American Sycamore	**16**	2.5" - 3" Cal.	B & B	Full Branching, Straight Trunk, **Specimen tree to be tagged by Land. Arch.**
	RO	Quercus borealis rubra	Northern Red Oak	**64**	2.5" - 3" Cal.	B & B	Full Branching, Straight Trunk,
	H(L)	Carpinus betulus 'Fastigata'	Pyramidal European Hornbeam	**3**	3" - 4" Cal.	B & B	Tight, columnar. Full branching, clear central leader, clear trunk 3'-3'6", **Specimen tree to be tagged by Land. Arch.**
	H(S)	Carpinus betulus 'Fastigata'	Pyramidal European Hornbeam	**7**	2.5" - 3" Cal.	B & B	Tight, columnar. Full branching, clear central leader, clear trunk 3'-3'6", **Specimen tree to be tagged by Land. Arch.**
	RM	Acer x freemanii 'Autumn Blaze'	Red Maple	**44**	2.5" - 3" Cal.	B & B	Full Branching, Straight Trunk,
	WP(L)	Pinus Strobus	White Pine	**11**	12' - 14' Ht.	B & B	**Specimen,** 12' - 14' Ht., 7'-8' Sprd., Full, **to be approved by Land Arch. Prior to planting**
	WP(S)	Pinus Strobus	White Pine	**41**	6' - 8' Ht.	B & B	6' - 8' Ht., 3'-4' Sprd., Full branching, **to be approved by Land Arch. Prior to planting**
	BS(L)	Picea pungens 'Fat Albert'	Fat Albert Colorado Spruce	**3**	12' - 14' Ht.	B & B	**Specimen,** 12'-14' Ht., 5'-6' Sprd., Full branching, Straight trunk, **to be approved by Land. Arch. prior to planting**
	BS(S)	Picea pungens 'Fat Albert'	Fat Albert Colorado Spruce	**20**	6' - 8' Ht.	B & B	6'-8' Ht., 2 1/2' - 3' Sprd., Full branching, Straight trunk, **to be approved by Land. Arch. prior to planting**
	WS(L)	Picea glauca	White Spruce	**12**	12' - 14' Ht.	B & B	**Specimen,** 12'-14' Ht., 5'-6' Sprd., Full branching, Straight trunk, **to be approved by Land. Arch. prior to planting**
	WS(S)	Picea glauca	White Spruce	**5**	6' - 8' Ht.	B & B	6'-8' Ht., 2 1/2' - 3' Sprd., Full branching, Straight trunk, **to be approved by Land. Arch. prior to planting**
	RB(L)	Betula nigra	River Birch	**20**	2.5" - 3" Cal.	B & B	Full Branching, Straight Trunk, **Specimen tree to be tagged by Land. Arch.**
	RB(S)	Betula nigra	River Birch	**6**	2.5" - 3" Cal.	B & B	**Specimen,** Multi-Trunk, 3 - 5 Trnks., 1 1/2" per cane, 7'-8' Sprd., Full., **to be approved by Land. Arch. prior to planting**
	JM(1)	Acer palmatum var. atropurpurem 'Bloodgood'	Bloodgood Japanese Maple	**3**	2" - 2.5" Cal.	B & B	**Specimen,** Full, Single Trunk, full branching,**to be approved by Land. Arch. Prior to planting**
	JM(2)	Acer palmatum var. dissectum 'Crimson Queen'	Crimson Queen Japanese Maple	**7**	2" - 2.5" Cal.	B & B	**Specimen,** Full, Single Trunk, full branching, **to be approved by Land. Arch. Prior to planting**
	CSC	Prunus 'Berry'	Cascade Snow Cherry	**0**	2" - 2.5" Cal.	B & B	**Specimen,** Full, Single Trunk, full branching, **to be approved by Land. Arch. Prior to planting**
	HJ	Juniperus chinensis 'Hetzi Columnaris'	Hetzi Juniper	**49**	6' - 8' Ht.	B & B or Container	Full, Straight Trunk, **to be approved by Land. Arch. prior to planting**
	EA	Thuja occidentalis 'Emerald Green'	Emerald Green Arborvitae	**86**	6' - 8' Ht.	B & B or Container	Full, Straight Trunk, **to be approved by Land. Arch. prior to planting**
	GA	Thuja occidentalis 'Berckman Gold'	Berkman Gold Arborvitae	**6**	6' - 8' Ht.	B & B or Container	Full, Straight Trunk, **to be approved by Land. Arch. prior to planting**
	TM	Taxus x media 'Viridis'	Grassgreen Yew	**-**	6' - 8' Ht.	B & B or Container	Full, Straight Trunk, **to be approved by Land. Arch. prior to planting**
			LARGE/MEDIUM SHRUBS				
	NS	Picea abies 'Nidiformis'	Nest Spruce	**6**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	FC	Chamaecyparis obtusa 'Gracilis Compacta'	Compact Hinoki Falsecypress	**25**	54-60" Ht.	B & B or Container	Full branching, 54" - 60" Ht., 3'-4' sprd., **To be matching specimens tagged by Land. Arch.**
	DM	Miscanthus sinensis 'Yaku Jima'	Dwarf Miscanthus	**142**	24-30" Ht.	B & B or Container	24"-30" Ht., 15"-18" Sprd., Full
	HY	Taxus media 'Hicksii'	Hicks Yew	**471**	24-30" Ht.	B & B or Container	24"-30" Ht., 15"-18" Sprd., Full
	OR	Rhododenron catawbiense	Catawba Rhododendron	**227**	24-30" Ht.	B & B or Container	24"-30" Ht. & Sprd., Flowering Var. to be Approved by Land. Arch.
	PJM	Rhododendron PJM	PJM Rhododendron	**234**	24-30" Ht.	B & B or Container	24"-30" Ht. & Sprd., Flowering Var. to be Approved by Land. Arch.
	SJ	Juniperus chinensis 'Sea Green'	Sea Green Juniper	**933**	18" Ht. & Sprd.	B & B or Container	18" Ht. & Sprd.
	JV	Viburnum x juddi	Judd Viburnum	**71**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	OH	Hydrangea quercifolia 'Alison'	Oakleaf Hydrangea	**75**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	RD	Cornus sericea 'Arctic Fire'	Red Twig Dogwood	**150**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	SC	Prunus depressa	Sand Cherry	**44**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	LM	Mahonia japonica 'Beale'	Leatherleaf Mahonia	**26**	30-36" Ht.	B & B or Container	30"-36" Ht.& Sprd., Full
	BXG	Buxus microphylla 'Green Mountain'	Green Mtn. Boxwood	**-**	24-30" Ht.	B & B or Container	24" Ht. & Sprd., Globe shearing, **to be approved by Land. Arch.**
			DWARF SHRUBS, GROUNDCOVERS & VINES				
	DY	Taxus media 'Densiformis'	Dense Yew	**574**	18" Ht. & Sprd.	B & B or Container	Full
	GJ	Juniperus conferta ' All Gold'	Golden Pacific Juniper	**608**	18" Ht. & Sprd.	B & B or Container	Full
	BX	Buxus microphylla 'Winter Gem'	Winter Gem Boxwood	**742**	18" Ht. & Sprd.	B & B or Container	Full
	GOJ	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	**23**	18" Ht. & Sprd.	B & B or Container	Full
	AJ	Juniperus horizontalis 'Plumosa Compacta'	'Andorra' Juniper	**550**	18" Ht. & Sprd.	B & B or Container	Full
	MIX	ERNMIX-155	Meadow Mix	**9000 sf**	Hydroseed	Hydroseed	
	BMH	Hosta 'Big Mama'	Big Mama' Hosta	**76**	3 Gallon	Container	14"-16" Sprd., 12" Ht., Full, Well Rooted
	SC	Seasonal Color (Varies)	per sq. ft. price (8" On Center)	**128 sf**	4" pot / 8" O.C.	Container	**To be approved by Land. Arch. prior to planting**



PLAN LANDSCAPE PLANTING
SCALE: 1"=40'-0"

5	**Planning Board Resubmission**		**5-23-19**
4	**Planning Board Resubmission**		**4-24-19**
3	**Planning Board Resubmission**		**3-1-19**
2	**Planning Board Resubmission**		**1-30-19**
1	**Planning Board Submission**		**11-27-18**
	REVISIONS		

LANDSCAPE PLANTING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=40'-0" Date: 3-1-19

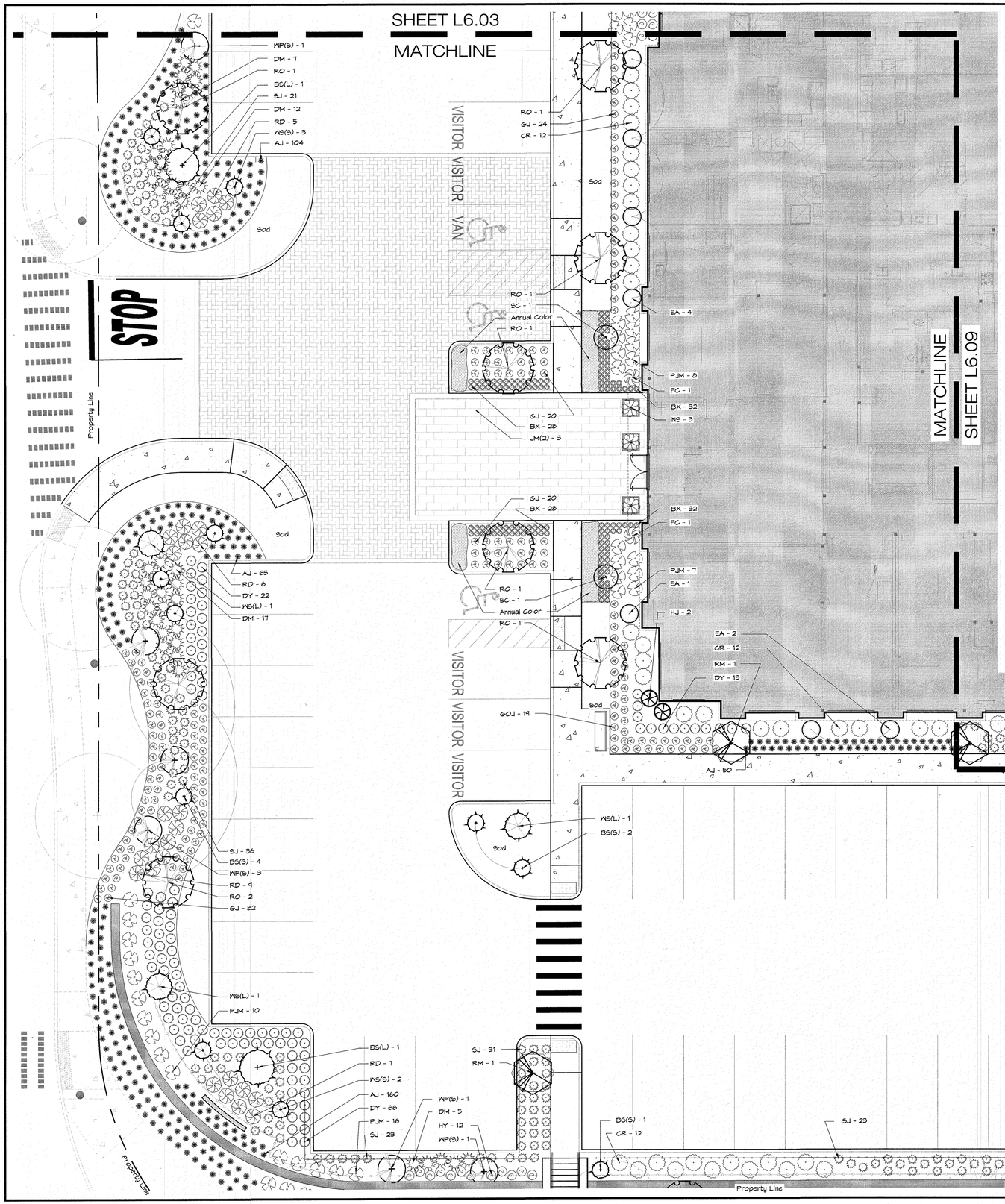
LICENSED LANDSCAPE ARCHITECT · WARREN BRET MONTAGUE · 00160 · STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.01



PLAN ENLARGED
SCALE

5	Planning Board Resubmission		5-23-19
4	Planning Board Resubmission		4-24-19
3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

WARREN BRET MONTAGUE
LICENSED LANDSCAPE ARCHITECT
00140
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.02

Property Line

BS(S) - 2
WS(L) - 1
CR - 13
DY - 24
WP(L) - 2
WP(S) - 3
SOD
WP(L) - 1
HYDROSEED
RO - 1
SJ - 9
WP(L) - 1
HYDROSEED
RO - 1
SJ - 9
MATCHLINE
SHEET L6.04
VAN
BS(S) - 2
WS(L) - 1
SOD
SOD
RM - 4
Dog Relief Boulder
Re: C/L4.10
SOD
Electric Meters
HJ - 8
CR - 17
HY - 26
RD - 3
FG - 1
SJ - 20
JV - 9
HJ - 2
RD - 7
EA - 2
CR - 3
HY - 9
DY - 20
SJ - 3
PJM - 2
RD - 6
HY - 4
PJM - 6
SOD
EA - 5
RO - 3
OH - 10
FG - 2
AJ - 101
Dog Relief Boulder
Re: C/L4.10
AJ - 9
HY - 10
PJM - 6
SOD
MATCHLINE
SHEET L6.09
MATCHLINE
SHEET L6.02
Property Line
SOD
RO - 5
GJ - 11
WS(S) - 1
SOD
PJM - 11
MATCHLINE
SHEET L6.02

PLAN ENLARGE
SCALE:

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

WARREN BRET MONTAGUE 00160 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.03

Property Line

Property Line

Property Line

HYDROSEED

SJ - 9

WP(L) - 1

HY - 23

HYDROSEED

Meadow Mix

HYDROSEED

RO - 4

SJ - 9

HYDROSEED

SHEET L6.03

MATCHLINE

RM - 7

SOD

SJ - 13

PJM - 8

JV - 6

EA - 3

GOJ - 23

GR - 3

HY - 9

DY - 17

RD - 7

EA - 7

Electrical Switch Gear

Electrical Switch Gear

SJ - 15

EA - 3

Electric meters

48 Meters

Electric meters

48 Meters

Electric meters

48 Meters

Electric meters

SOD

23 Gas meters

81 Gas meters

SOD

GJ - 29

RD - 7

PJM - 6

SOD

HY - 9

GA - 2

Dog Relief Boulder
Re: C/L4.10

GJ - 18

PJM - 3

SOD

HJ - 3

JV - 5

AJ - 19

PJM - 4

JV - 1

MATCHLINE
SHEET L6.05

MATCHLINE

SHEET L6.09

PLAN ENLARGED PLANTING
SCALE: 1"=10'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

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HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

WARREN BRET MONTAGUE 00160 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
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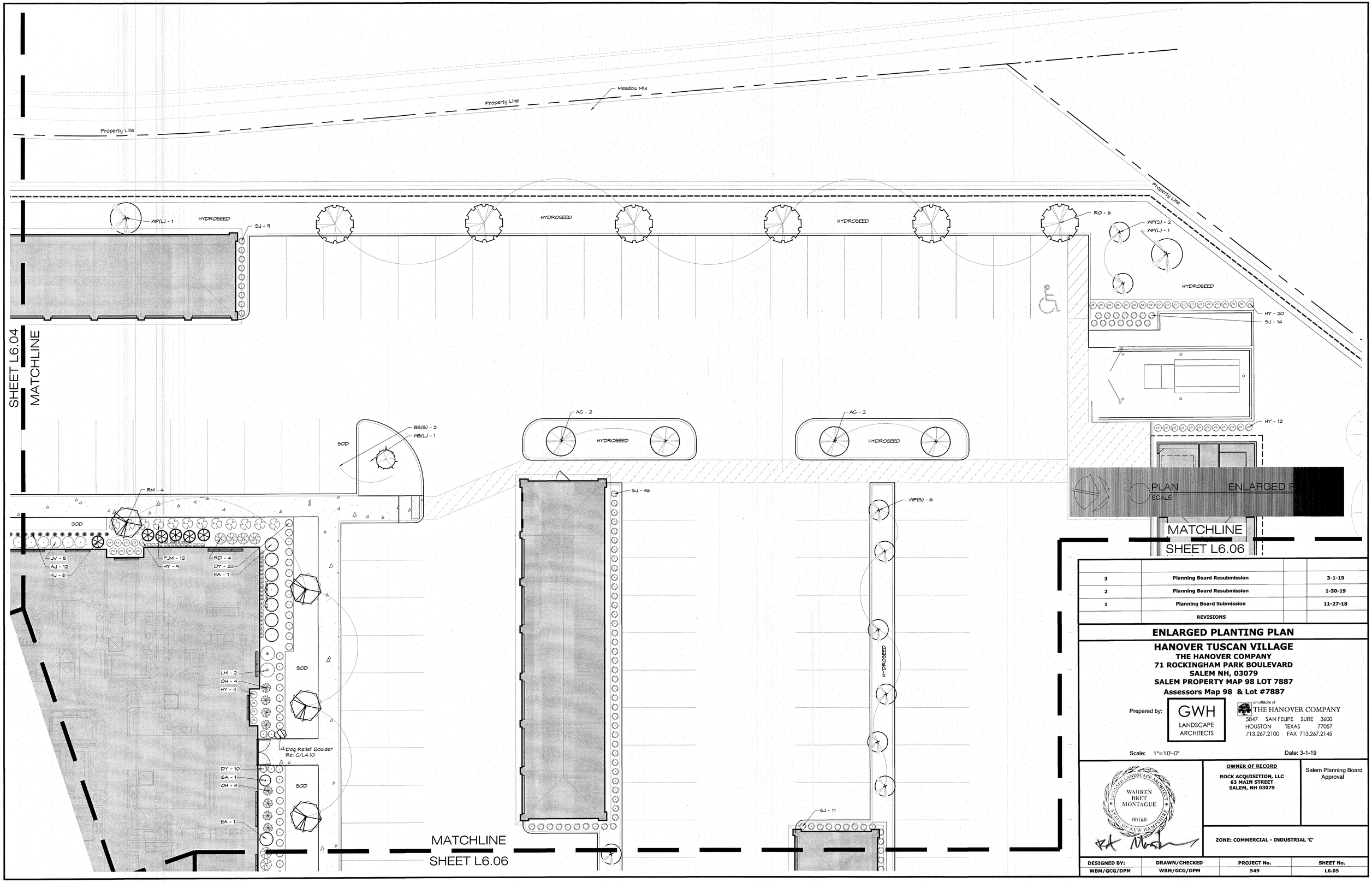

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE

THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by:
GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
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HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0"

Date: 3-1-19

WARREN BRET MONTAGUE 00160 — NEW HAMPSHIRE LANDSCAPE ARCHITECT — STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
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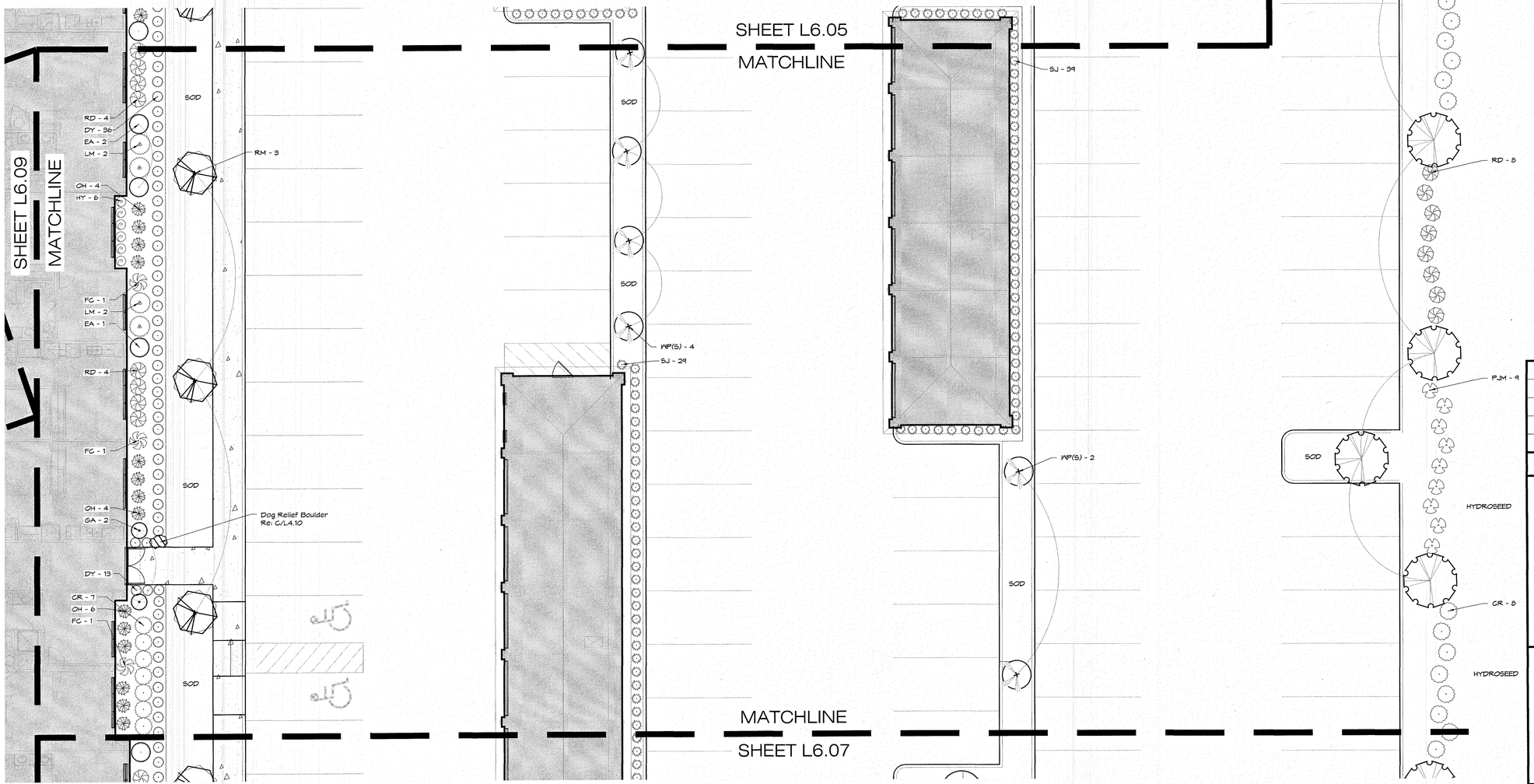

PLAN ENLARGE
SCALE:

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

REGISTERED LANDSCAPE ARCHITECT
WARREN BRET MONTAGUE
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.06

SHEET L6.07
MATCHLINE

SHEET L6.08
MATCHLINE

EA - 3
RD - 6
DY - 16
HJ - 5
Sod
SJ - 20
RM - 3
WS(L) - 1
BS(S) - 2
Sod
SJ - 20
Hydroseed
WP(L) - 3
AC - 4
Hydroseed
AC - 1
Hydroseed
WP(L) - 3
Hydroseed
WS(L) - 1
BS(S) - 2
CR - 2
BS(S) - 1
WP(L) - 4
WS(L) - 1
RD - 8
PJM - 8
Property Line
Hydroseed
WS(L) - 1
CR - 8
RO - 4
PJM - 5
SJ - 29
Hydroseed
Sod
PJM - 4
RO - 5
CR - 22
SJ - 22
SC - 1
PJM - 14
WP(L) - 1
SJ - 38
CR - 6
WP(S) - 1
Hydroseed
STOP

PLAN ENLARGE
SCALE:

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
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5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

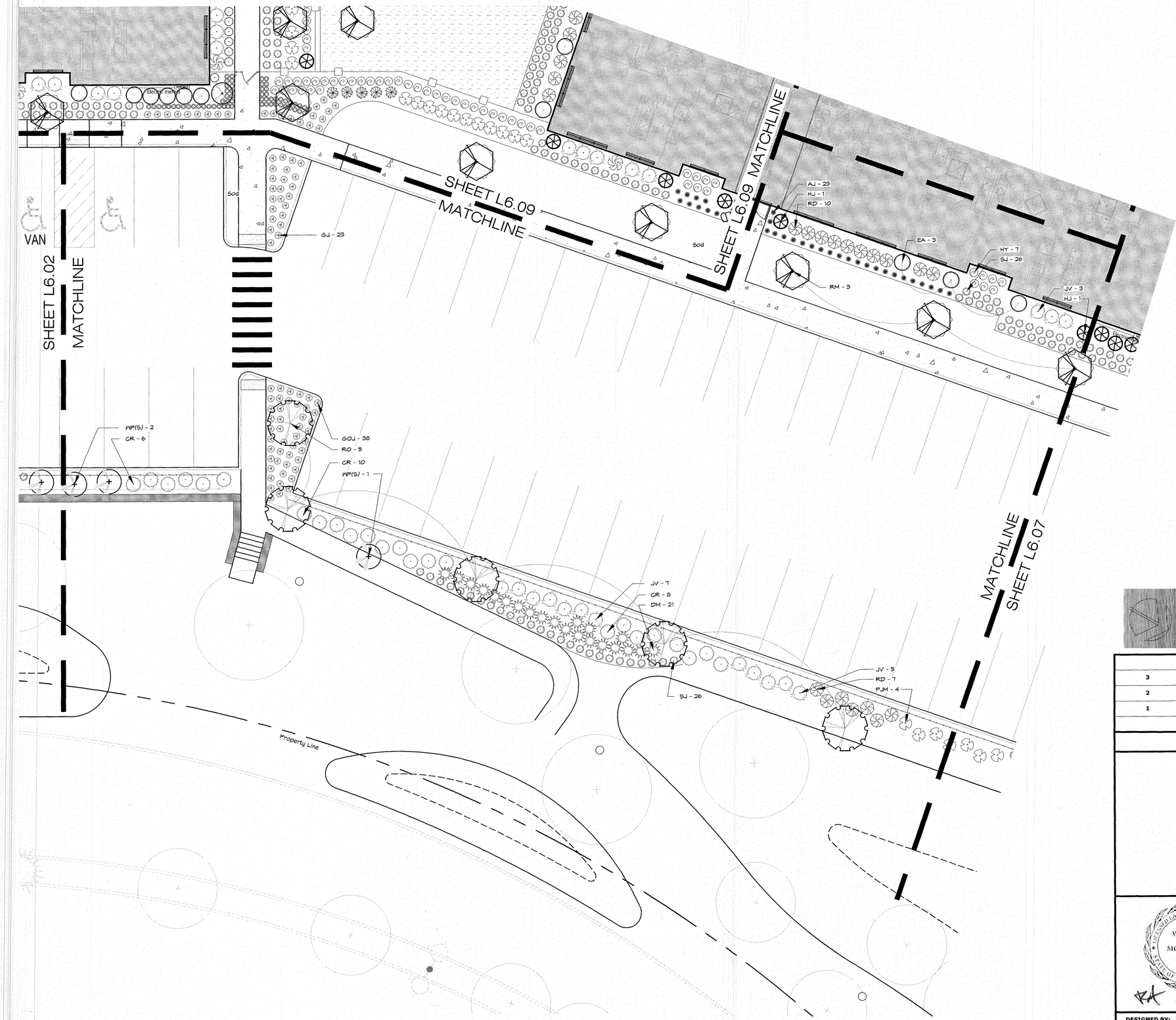
LICENSED LANDSCAPE ARCHITECT · WARREN BRET MONTAGUE · 00140 · STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.07



PLAN ENLARGE

SCALE:

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS

an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

LICENSED LANDSCAPE ARCHITECT
WARREN BRET MONTAGUE
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.08

MATCHLINE SHEET L6.03

MATCHLINE SHEET L6.04

MATCHLINE SHEET L6.05

MATCHLINE SHEET L6.06

SHEET L6.02 MATCHLINE

MATCHLINE SHEET L6.02

MATCHLINE SHEET L6.08

MATCHLINE SHEET L6.08

LM - 7
OH - 11
JM(2) - 2
LM - 3
EA - 1
PJM - 15
CR - 36
EA - 4
OH - 5
HY - 9
FC - 1
DY - 72
LM - 4
FC - 3
BX - 24
SC - 22
BX - 185
HY - 71
SJ - 53
H(S) - 7
DM - 125
GJ - 56
RO - 1
JM(2) - 2
GJ - 22
GJ - 14
RO - 1
HY - 9
RB(S) - 3
BMH - 64
SJ - 5
BX - 15
RB(L) - 12
BX - 58
DY - 16
NS - 3
H(L) - 3
AC - 3
DY - 14
RD - 9
LM - 6
RB(S) - 1
PJM - 9
SC - 12
CR - 5
RO - 1
DM - 14
PJM - 7
HY - 17
DY - 25
RB(L) - 4
DY - 14
HY - 22
DY - 15
SJ - 29
BX - 50
RD - 15
EA - 9
GJ - 33
HJ - 2
EA - 7
JV - 4
SJ - 8
DY - 8
BX - 89
GJ - 94
RB(L) - 4
CR - 17
FC - 2
CR - 10
HJ - 5
DY - 32
RD - 5
DY - 28
BX - 15
RM - 6
SJ - 9
SJ - 6
SJ - 6
SJ - 9
RD - 2
SJ - 8
HY - 60
SJ - 61
RM - 7
DY - 18
RO - 10
SJ - 13
HY - 5
PJM - 15
HJ - 6
OH - 3
HY - 15
BX - 38
BMH - 12
RB(S) - 1
OH - 14
HJ - 1
BX - 81
JM(2) - 3
DM - 45
PJM - 12
EA - 6
SJ - 8T
RD - 11
HJ - 3
AC - 4
FC - 1
HY - 39
RB(S) - 1
JV - 8
HJ - 1
EA - 8
OH - 5
SC - 10
GA - 1
JV - 6
FC - 2
DY - 64
JM(1) - 1
GJ - 9
BX - 31
BX - 29
HY - 35
GJ - 13
OH - 5
PJM - 11
SJ - 15
HJ - 3
JV - 5
FC - 1
HY - 7
AJ - 11
SJ - 62
RM - 6
CR - 4
EA - 1
FC - 4
PJM - 7
SJ - 24
FC - 1
JV - 4
EA - 6
Dog Relief Boulder
Re: C/L4.10
Dog Relief Boulder
Re: C/L4.10
Fire meter

PLAN ENLARGED PLANTING
SCALE: 1"=10'-0"

3	Planning Board Resubmission		3-1-19
2	Planning Board Resubmission		1-30-19
1	Planning Board Submission		11-27-18
	REVISIONS		

ENLARGED PLANTING PLAN

HANOVER TUSCAN VILLAGE
THE HANOVER COMPANY
71 ROCKINGHAM PARK BOULEVARD
SALEM NH, 03079
SALEM PROPERTY MAP 98 LOT 7887
Assessors Map 98 & Lot #7887

Prepared by: GWH LANDSCAPE ARCHITECTS
an affiliate of THE HANOVER COMPANY
5847 SAN FELIPE SUITE 3600
HOUSTON TEXAS 77057
713.267.2100 FAX 713.267.2145

Scale: 1"=10'-0" Date: 3-1-19

LICENSED LANDSCAPE ARCHITECT
WARREN BRET MONTAGUE
00160
STATE OF NEW HAMPSHIRE

OWNER OF RECORD
ROCK ACQUISITION, LLC
63 MAIN STREET
SALEM, NH 03079

Salem Planning Board Approval

ZONE: COMMERCIAL - INDUSTRIAL 'C'

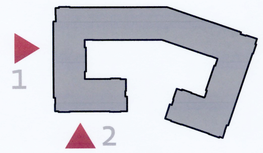
DESIGNED BY:	DRAWN/CHECKED	PROJECT No.	SHEET No.
WBM/GCG/DPM	WBM/GCG/DPM	549	L6.09

Elevation 02

EXTERIOR ELEVATIONS LEGEND:

- FIBER CEMENT LAP SIDING COLOR 1 - GRAY
- FIBER CEMENT LAP SIDING COLOR 2 - WHITE
- FIBER CEMENT LAP SIDING COLOR 3 - TAN
- BRICK COLOR 01 - RED
- BRICK COLOR 02 - LIGHT RED/BROWN
- BRICK COLOR 03 - GRAY

Elevation 01



W PARTNERSHIP
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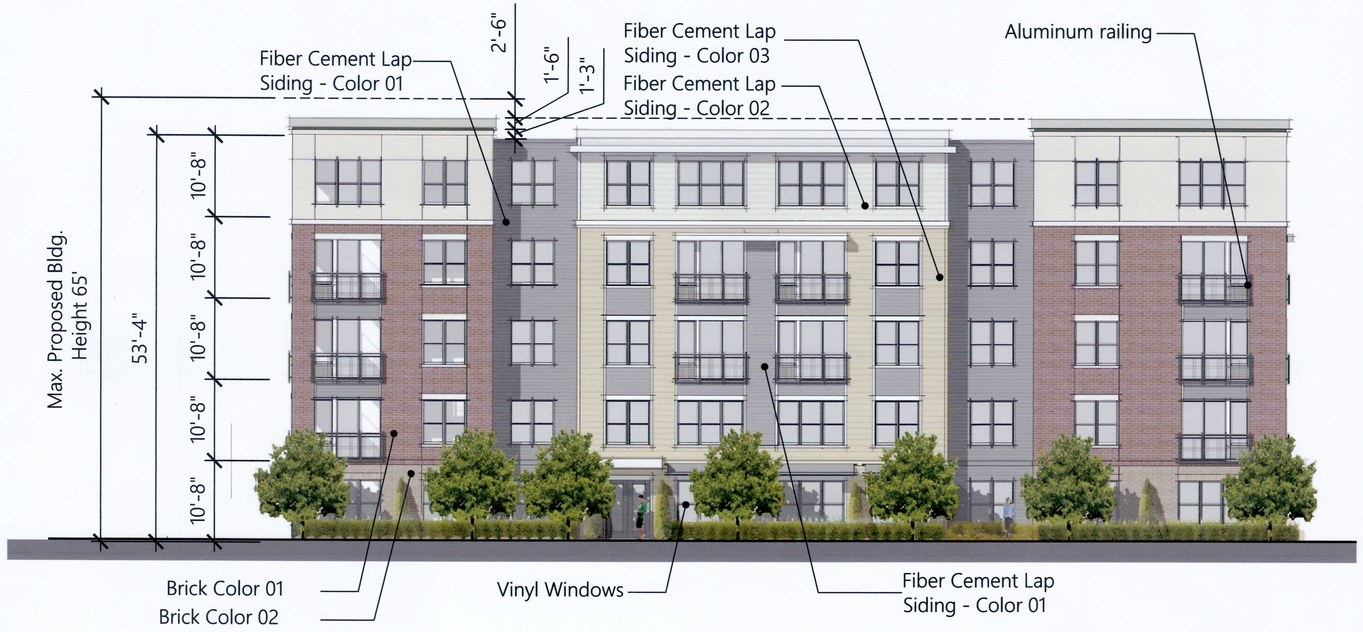
20' 0' 20'
1 inch= 20 feet

Hanover 17-26 | Tuscan Village

Plotted: 11-26-2018

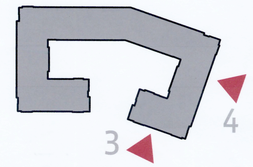
Elevation 04



Elevation 03

EXTERIOR ELEVATIONS LEGEND:

- FIBER CEMENT LAP SIDING COLOR 1 - GRAY
- FIBER CEMENT LAP SIDING COLOR 2 - WHITE
- FIBER CEMENT LAP SIDING COLOR 3 - TAN
- BRICK COLOR 01 - RED
- BRICK COLOR 02 - LIGHT RED/BROWN
- BRICK COLOR 03 - GRAY



20' 0' 20'

1 inch= 20 feet

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Hanover 17-26 | Tuscan Village

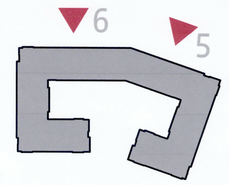
Plotted: 11-26-2018

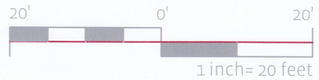
Elevation 06

Elevation 05

EXTERIOR ELEVATIONS LEGEND:

- FIBER CEMENT LAP SIDING COLOR 1 - GRAY
- FIBER CEMENT LAP SIDING COLOR 2 - WHITE
- FIBER CEMENT LAP SIDING COLOR 3 - TAN
- BRICK COLOR 01 - RED
- BRICK COLOR 02 - LIGHT RED/BROWN
- BRICK COLOR 03 - GRAY





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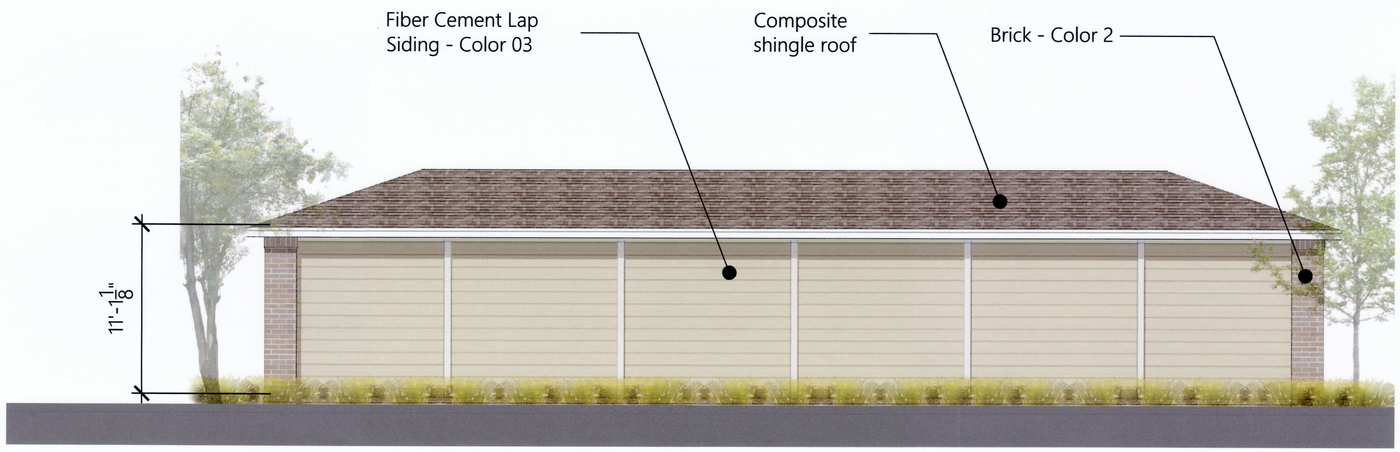
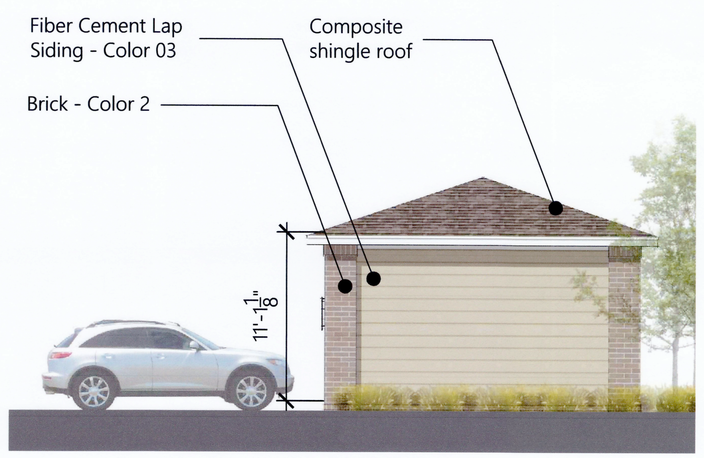
Hanover 17-26 | Tuscan Village

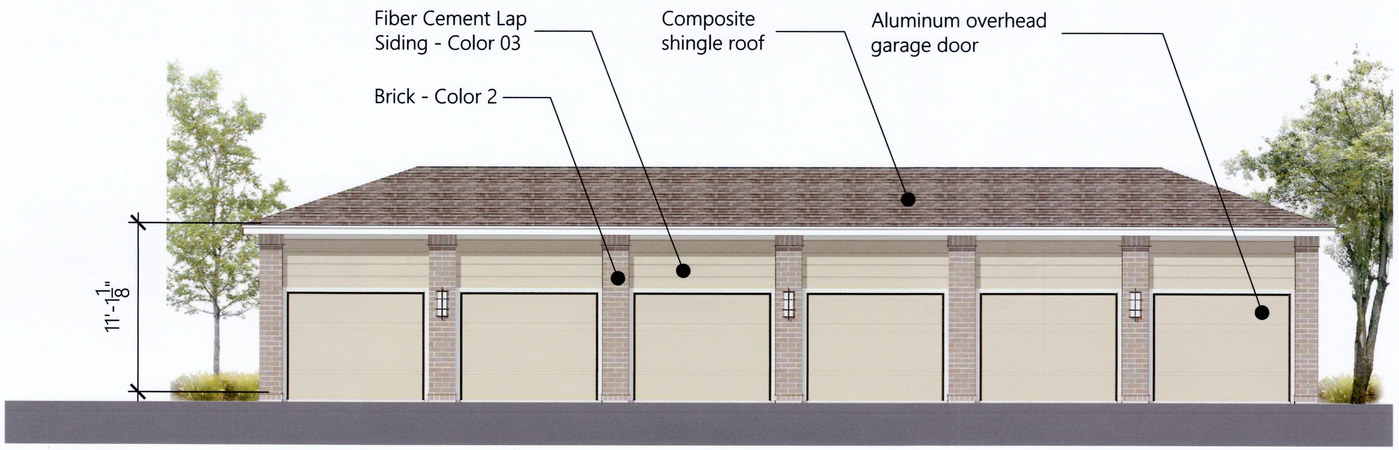
Plotted: 11-26-2018



Elevation 03



Elevation 02



Elevation 01

3
2
1

10' 0' 10'
1 inch= 10 feet

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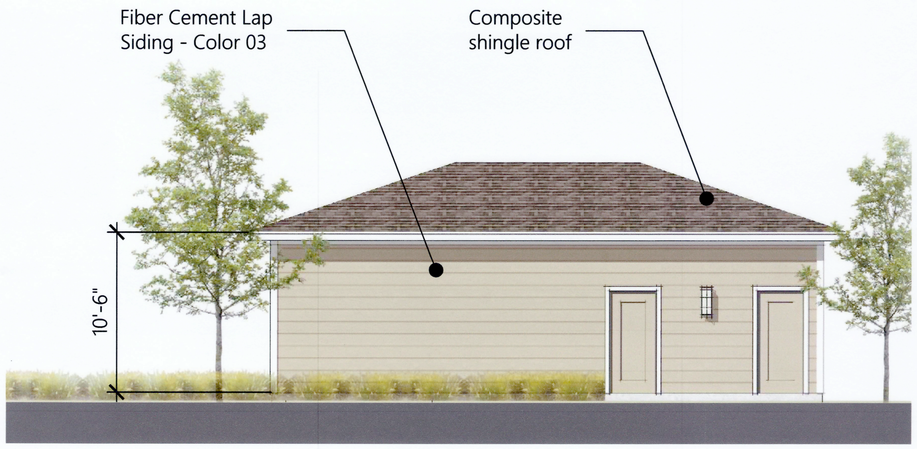
Hanover 17-26 | Tuscan Village

Plotted: 12-17-2018



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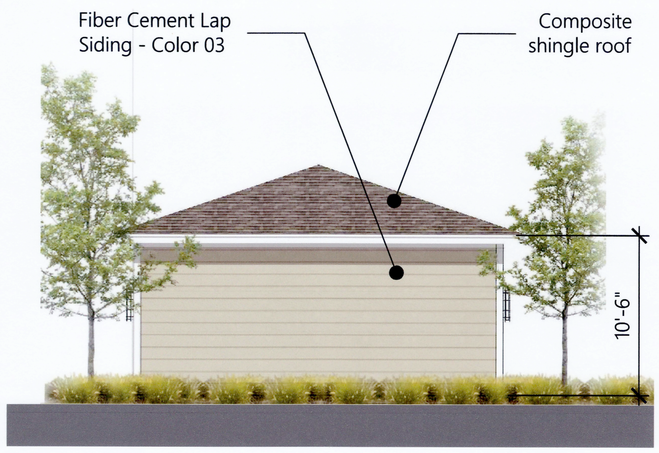
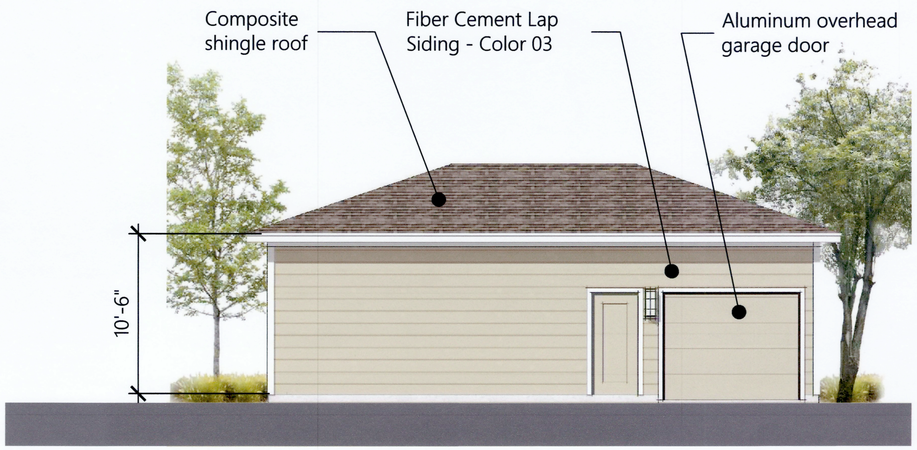


Elevation 02



Elevation 01

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10' 0' 10'
1 inch= 10 feet

3
2
1

Hanover 17-26 | Tuscan Village

Plotted: 12-17-2018