#### Heritage Commission Meeting Minutes Londonderry, New Hampshire December 16, 2015

In attendance: Chairman Commissioner Arthur Rugg, Commissioners Tom Bianchi, David Colglazier, Sue Joudrey, Martin Srugis; Alternate Commissioners Janet Cichocki, Roger Fillio and Noreen Villalona; GIS Manager/Planner John Vogl; Town Council Ex-officio Jim Butler; Sexton Kent Allen: and citizens Ann Chiampa, Deb Paul, Kathy Wagner and Steve Young.

Absent: Vice-Chairman Commissioner Pauline Caron.

Chairman Arthur Rugg called the meeting to order at 7:00 PM in the Sunnycrest meeting room of the Town Hall. This is a postponed meeting from November 19<sup>th</sup>.

Chairman Rugg appointed Alternate Cichocki to vote for Vice-Chair Caron.

Commissioners Srugis moved and Bianchi seconded a motion to approve the minutes for the September 24<sup>th</sup> meeting as corrected. The motion carried: 7-0-0.

A presentation was made by Mark Fougere, Fougere Planning & Development, Inc., Milford, NH; Dennis Mires, The Architects, Manchester, NH and Jeffrey Merritt, Project Manager, Keach-Nordstrom Associates, Inc., Bedford, NH for the project known as The Residences at MacGregor Cut, located at 30 Stonehenge Road and 113 Hardy Road, map 12, lots 120 & 131.

Mr. Fougere described the development as being 12, 24 unit buildings on 63 acres. The units will be built in three phases. They will spread down the hillside on their site. The land drops 35 feet from top to bottom, so some buildings will have more than three floors due to the slope. All will have elevator access and ADA units in each structure. There will be a mixture of one and two bedroom styles. The units will sit back more than 50 feet from the road and property edges. Mr. Fougere said that there would be 80% open space on the property.

Dennis Mires said that each structure will have vinyl clapboards at the bottom levels. Further up the sides, there will be vinyl shingles. Some shingles will be used for decorative bands to breakup the sides. Trim boards will be Azek. The windows are two over one lights. Entrance doors have a small pitched roof portico over each one. The doors have glass in them and there are glass surrounds. Decks have fixed rails, even at ground level. Their surface is a synthetic deck material. The siding will be of two complimenting shades. There will be three sets of paired colors. Each cluster of four structures will have the same color group.

There will be a uniform slate color architectural roof shingles. There is some variation in the thickness and shading of the shingles to provide some depth in a small area. This is called a Harvard mix for this particular style. Mr. Mires displayed samples of the roof shingles and color swatches for the siding types. He also had siding samples.

The Common Building will have a cultured stone base with clapboards above and a cap of vinyl shingles. The roof materials will be the same as the rest of the complex.

Alternate Commissioner Fillio asked about the stone walls near some buildings. Mr. Merritt said that these were structural landscape walls.

Commissioner Joudrey asked about the wall content. Mr. Merritt said that these were new walls and would not use the stone wall materials from the site.

Ms. Joudrey asked about the sign. Mr. Merritt said that the sign was going to have a pole light nearby to shine on it.

Ms. Joudrey said that she liked the idea of there just being one color scheme. Chairman Rugg said that people could express their preference.

Commissioner Srugis said that he liked the mix of colors so that it would not look so massive. He said that he was concerned about the traffic pattern with the single entrance on Stonehenge and the mix of school children and adults going to work at about the same time. Chairman Rugg said that the traffic situation would be dealt with by Design Review and Planning Board. Mr. Srugis said that he liked the rest of it with the roof lines and the colors.

Deb Paul asked about the landscaping not being on the elevation plans. Mr. Fougere said that there is a separate landscaping plan. She asked about putting shutters on the building.

Ms. Paul said that there were concerns on her part about the traffic at the entrance and in the development. She was concerned about large vehicles in the development. Mr. Merritt said that the entrance is 28 feet wide. Also, they run vehicles through the plans to make sure that there are turning spots and that they can travel freely. Chairman Rugg said that the traffic concerns were being discussed as part of the Design Review work done with the Town staff. Ms. Paul said that she understood that, but wanted to make sure that her concerns were known.

Ms. Paul was concerned about the lighting. Mr. Merritt explained the location and type of fixtures that will be used.

Commissioner Bianchi asked about the stone walls on the property to be removed. Mr. Merritt said that there was about 1,100 feet of wall to be removed. Mr. Merritt said that the new walls would be purpose built and not use old stonewall materials.

Mr. Bianchi asked about the ADA parking spots. Chairman Rugg said that the spots on the drawings were not final and that they would ask for them to be put near building entrances.

Mr. Bianchi asked about the inclusion of purple lilacs. Mr. Merritt said that there were a number of them in the landscape plan. He noted where they were located on the plan.

Deb Paul asked about the trash dumpster. Mr. Merritt said that there was a trash compactor at the rear of the parcel. People would have keys to dump their trash in the compactor.

Alternate Commissioner Villalona asked about shutters on the windows to make it look less institutional. Mr. Mires said that he does not recommend shutters and/or window boxes as they become maintenance issues. He said that there are different window sizes and shutters would not look well because in many cases they would not be large enough to be functional.

Councilor Butler suggested that they look into a possible recycling building to take care of the trash situation. He did not want to see trash out of control and scattered on the grounds.

Mr. Butler though that it looks a little institutional and that some changes to roof lines could be made to make it look more like a village. Chairman Rugg suggested that the applicant could look at the Londonderry Look Book for ideas.

Planner Vogl asked about the small structure by the entrance. He was told that it is a school bus depot for students.

Commissioner Colglazier said that with 1,100 feet of stone walls to be removed, some of it could be used by buildings 7 & 8. There are several long runs that could be established near those structures and that the walls would provide some scenic value for the residents.

Ann Chiampa thanked the developer for correcting the name to MacGregor Cut. She asked about having 4 over 1 windows to have more of a colonial look. They said that they would consider that. Ms. Chiampa also asked about lowering the color separation on the 4 floor sides. They said that they would consider that.

Councilor Butler asked about satellite dishes. Mr. Merrit said that they were not allowed. Mr. Butler asked about where school children would wait. Mr. Merrit said that there was a small building by the entrance. Mr. Butler asked about the type of fence arrangement at the back of the property where the rip-rap slope is. Mr. Merritt said that there is a guard rail at the pavement edge and then a 6-

foot-high chain-link fence to keep people from going down the embankment.

Mr. Butler asked about storage for the units. Mr. Mires said that there was a small storage area in each building next to the elevator. This is a rental space for tenants. Mr. Butler stressed the need to consider storage, otherwise he said that the extra stuff will be left outside.

Chairman Rugg asked about the extent of the vegetation that will remain from the original site landscape. Mr. Merritt said that the original plant materials will be left in large areas. Mr. Fougere said that the plan was for 80% open space. Mr. Fougere said that a large area of the original landscape would remain.

Commissioner Srugis asked about the building at the bus stop. Mr. Merritt said that the building is about 10 by 15 feet. Mr. Srugis said that there should be plenty of space for school children to stand that would not block or impinge upon traffic flow.

Mr. Fougere said that they would consider the information provided and come back next month.

A presentation was made by Raymond Shea, Project Manager, Sanford Surveying and Engineering, Bedford, NH. The application is for Planeview Drive Self-Storage, Planeview Road, map 4, lot 13-4. The lot is about 9 acres and the applicant wants to install three rows of double sided self storage units for a total of 21,000 square feet. About 5 acres of the land can be used for the storage facilities. The rest of the land is used for wetlands mitigation. The buildings are 30 feet wide and in three lengths of 220 feet and over to make the 21,000 square foot total.

Commissioner Colglazier asked about the lighting. Mr. Shea brought out a lighting plan drawing to show the light levels.

Mr. Shea said that there are two parking areas that will have pole lighting. There will be additional lighting fixtures on each building.

Councilor Butler asked about security. Mr. Shea said that there would be some cameras. There will be fencing all around the perimeter. There will be an office that is open from early morning to about 4:30 PM. There will be a secure gate with owner access by some security device.

Alternate Commissioner Villalona asked about the type of lighting with regards to how they are turned on and off. Mr. Shea did not know the answer at this time. He suspected that they would not be on all the time.

Commissioner Bianchi asked about the color. Mr. Shea said that the sides were light gray and the doors were green.

Commissioner Srugis liked the plans.

Commissioner Joudrey asked about the signage. Mr. Shea said that there was one sign that was 4 x 8 feet on posts, but he did not have all the details.

Alternate Commissioner Fillio asked about the relationship to the rail trail. Mr. Shea said that it was about ten feet above the trail elevation. Mr. Shea said that there would be some screening along that side, even though the trail was lower.

Chairman Rugg said that the signage and finished lighting plans can be transmitted to John Vogl for distribution to the Commission.

A presentation was made by Eric Brown, Principal/Partner, Prelwitz Chilinski Associates, Cambridge, MA. Mr. Brown provided some drawings of the facades and lighting plans for the Market Basket expansion project.

Mr. Brown said that the roof line and façade for Annie's was changed at the request of the owners – Jackie & Bill Bannister, who are present – to emphasize a brand that they have. The roof edge is now arched at the front. Mr. Brown endorsed this change since it now gives them a peaked roof, arched and then a flat roof along the several store fronts.

The Commission liked the new look.

Councilor Butler asked about the details for materials on the façade surfaces. Mr. Brown explained what they were and why they liked them. Mostly it was a matter of durability with exposure to water at the building bases and the prevention of damage from snow shoveling and removal.

Mr. Brown passed out drawings of the lighting plans and the associated facades. He also, had cut sheets for the types of fixtures. There are mostly LED (light emitting diode) down lights for the various types of walls, canopies and entrances. The Olympia store does have a LED strip to illuminate part of the building cornice. Otherwise, there are just six different fixture styles for all of the buildings' exterior surfaces and walkways.

Commissioner Colglazier asked about light spilling out from the upward facing fixtures at the liquor store. Mr. Brown said that the fixtures were placed close enough to the decorative beams that the light is directed upward only.

Alternate Commissioner Villalona asked about the signs for the liquor store. Mr. Brown said that the signs were only illustrative and that the signs would be brought to the Commission for specific approval by others.

Commissioner Bianchi asked about the lights for the Olympia store. Mr. Brown said that the cornice lights were very small and imbedded to illuminate the cornice only.

Alternate Commissioner Fillio asked if the lights were there to illuminate the individual stores as opposed to lighting the whole complex. Mr. Brown agreed, that the lights were to bring out the individuality of each store.

The Commission approved of the lighting and façade plans.

Chairman Rugg said that there was a warrant article for \$300,000 for work on the Common. He said that this was just a placeholder. It was not clear what amount might actually be available. Mr. Rugg was looking for input about some suggestion that were made for granite curbing, sidewalks, period lighting, electrical system and drainage. Mr. Rugg did not think that the curbing, sidewalks or period lighting would work for a warrant article. Anyway, he would like to have input from the Commission about their thoughts for the future of the Common.

Alternate Commissioner Fillio said that he did not see using granite curbing when there is plenty of stone available to keep people from driving onto grassed areas. He also thought that the electrical system should work properly. If you have something it should work well before expanding into other areas.

Commissioner Srugis suggested that the Master Plan had an emphasis on this area being the center of town. Mr. Srugis thought that it should be dressed up to look nice by having granite curbing, and sidewalks. He did not see a need for drainage since he did not see flooding that often.

Commissioner Bianchi was concerned about the puddle that sometimes happens in front of the band stand. He wants to upgrade the electricity and improve the looks with curbing and sidewalks.

Kathy Wagner said that she would like to see the Common remain as a simple Common. The electricity and the lighting could could be improved. She would rather like to see a sidewalk extended down Pillsbury. Ms Wagner would like to see the drainage improved and have better large scale lighting for the whole area. She would also like to see improvements in the bandstand. Generally, she would like to see basic services and facilities improved before adding curbing and sidewalks.

Steve Young said that he would like to se improved drainage in the bandstand area. It has been a long term problem. Some events have been cancelled because the ground is so poorly drained.

Ann Chiampa was curious about documenting the trees on the Common and where there may be elms.

Alternate Commissioner Villalona suggested that they might be able to put down some plastic textile used for water drainage in lieu of a larger project for drainage. She also wanted to improve the

landscaping on the Common. Ms Villalona thought that the current landscaping is rather uninspiring.

Councilor Butler was not in total favor with the Master Plan with regards to its treatment for this area. He suggested that some re-grading of the road could improve the corner for traffic. Mr. Butler is in favor of improved drainage, better electrical system and better landscaping. He also thought that a skating rink area could be put in the new area behind the stone wall. At that location it could be re-installed every year and would not be in the way versus as a location on the center of the Common.

Commissioner Colglazier suggested that it would be a good idea to document what you have at the Common location. This would include knowing elevations and earth types with dimensions. This could be done by a surveyor. They would measure the property to create a site plan and draw in the elevations taken from a grid of locations that they measure. Soil type and depths could be appended to a drawing. That document then becomes the planning aid for a landscape architect to deal with the moisture retention in some important areas.

Mr. Colglazier also said that lighting fixtures can be put in trees to illuminate the grounds for the safe passage of citizens as they attend evening functions. If that did not work out, then general site lighting could be done with utility or basic poles to hold large efficient fixtures fore general ground lighting.

Sexton Allen suggested that there should be some better documentation of the facilities to help with planning. He said that many years ago he suggested covering the common with gravel, install a number of French drains and then add eight inches of loam.

Deb Paul said that she was not in favor of the Master Plan for the Common. She said that there needs to be some crosswalks on the Mammoth Road and Pillsbury Road sides to have better formal access to the Common. Ms Paul said that the small pond could be enlarged to perhaps become a natural skating rink.

The Commission engaged in several simultaneous and different conservations about plans for the Common.

Chairman Rugg said that the warrant article should focus on lighting, drainage and electrical system at the Common.

Sexton Allen said that he has cleaned the forest some. He has created about six good sized piles of brush in the woods near the pond and the the Trailways trail. He suggested that any conversations should use terms other than "park" to portray a wood land and not a grassed, formal area.

The Commission engaged in several simultaneous and different conservations about plans for the town woodlot or forest.

Chairman Rugg introduced the issue of electronic signs. He said that a recent Supreme Court Case of Reed v. Town of Gilbert said that you can not regulate the message of the sign because that is freedom of speech. Signs can be regulated, but a particular type can not be differentiated from another in the same group. Mr. Rugg said the for electronic signs the content can be regulated if its flashing character is distracting and thusly a safety issue. Mr. Rugg said that the Municipal Association is keeping track of these cases. They expect more to come up in the future.

Chairman announced that Commissioner Colglazier had received an Excellence Award from the New England Museum Association at their annual meeting.

Chairman Rugg said that the Town's sign regulations will be changing as the Planning Board revises the zoning by-laws.

Commissioner Colglazier said that for several years from at least 2003 to 2010, the Town Manager had provided some small gifts to volunteers as a recognition for their efforts. Mr. Colglazier said that he was instituting the practice again. He handed out packets of lollypops to the Commission members. These Sees Company lollypops are in latte, butterscotch, chocolate and vanilla flavors. Mr.

Colglazier said thanks for your efforts.

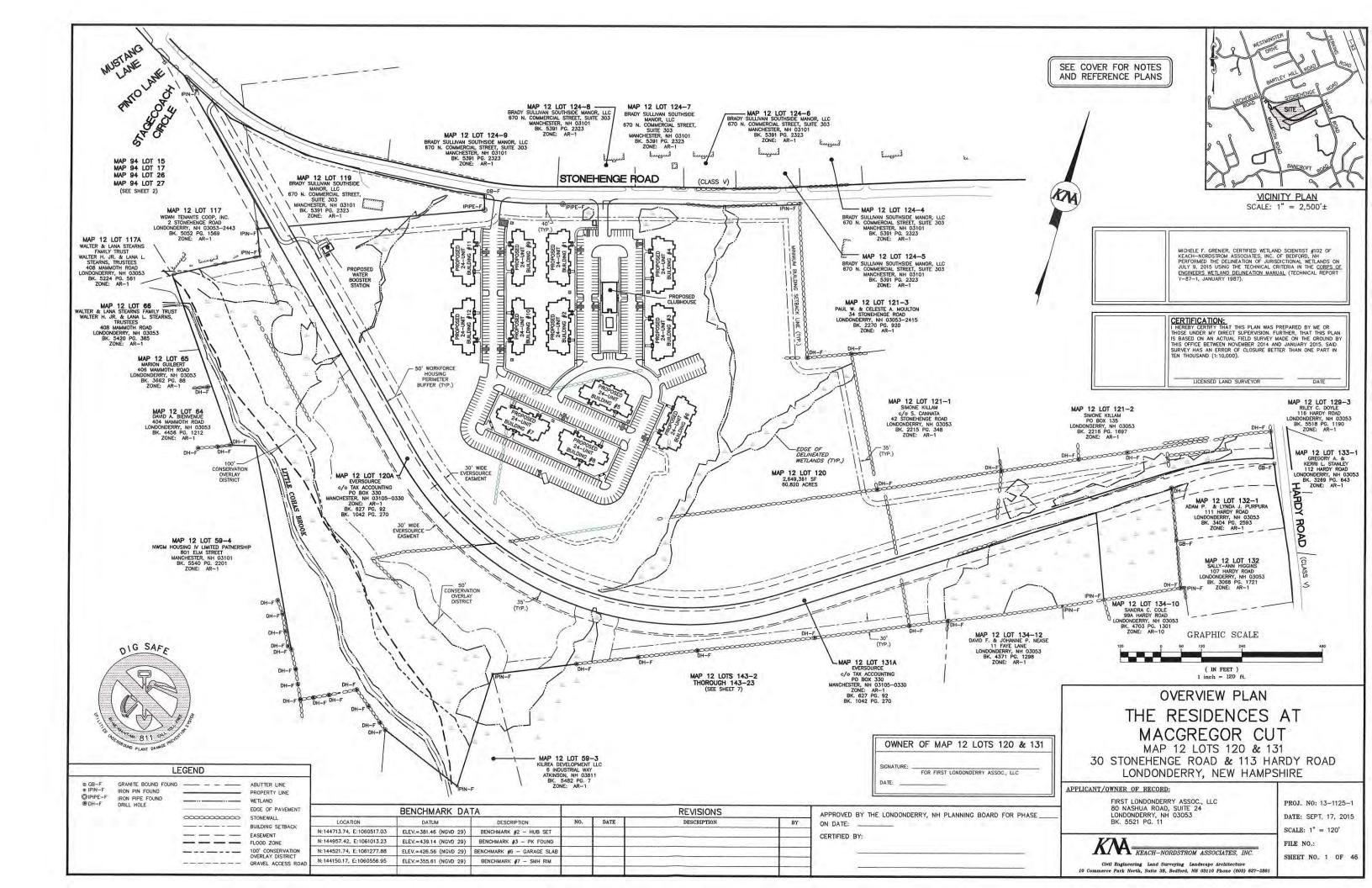
Chairman Rugg said that they need to take a quick look at a stonewall situation on Quentin Road. Planner Vogl displayed a drawing of the site plan for this lot at the corner of Quentin and High Range Roads. After a brief description it was deemed that the stone wall materials could be spread out in a wall near the entrance to the property.

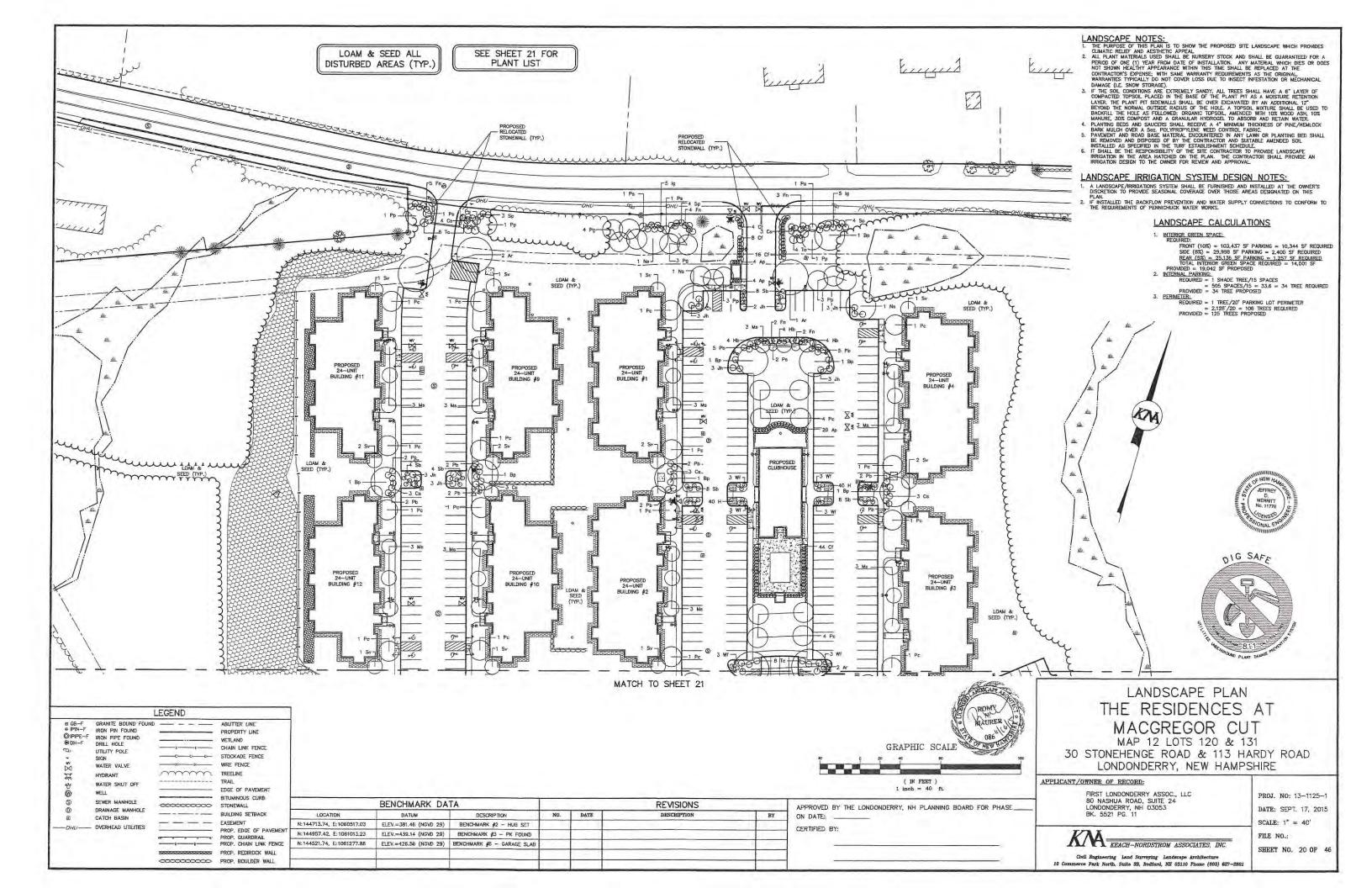
Commissioners Joudrey moved and Bianchi seconded a motion to adjourn. The motion passed 7-0-0 at 9:58 PM

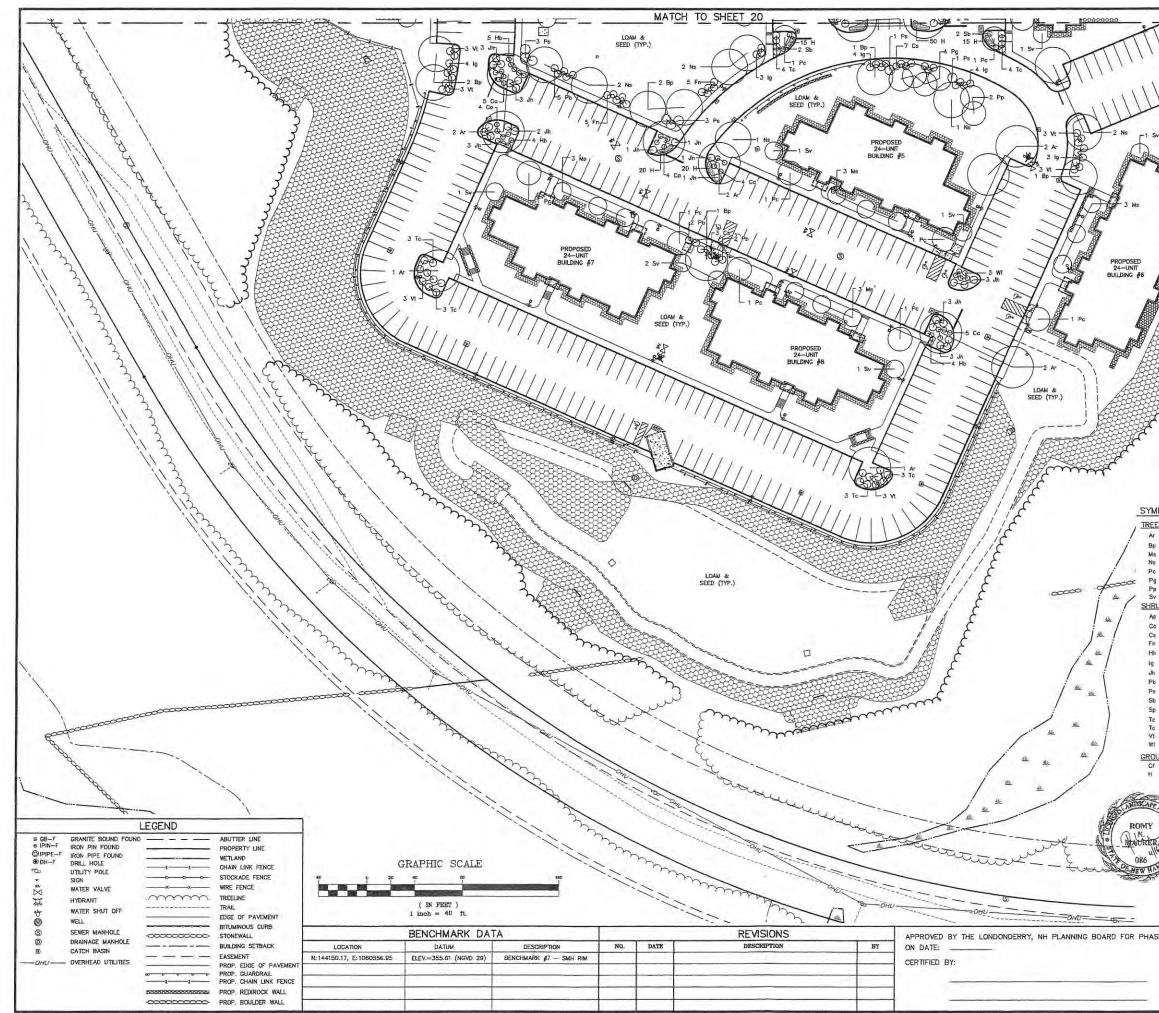
David Lee Colglazier, Secretary



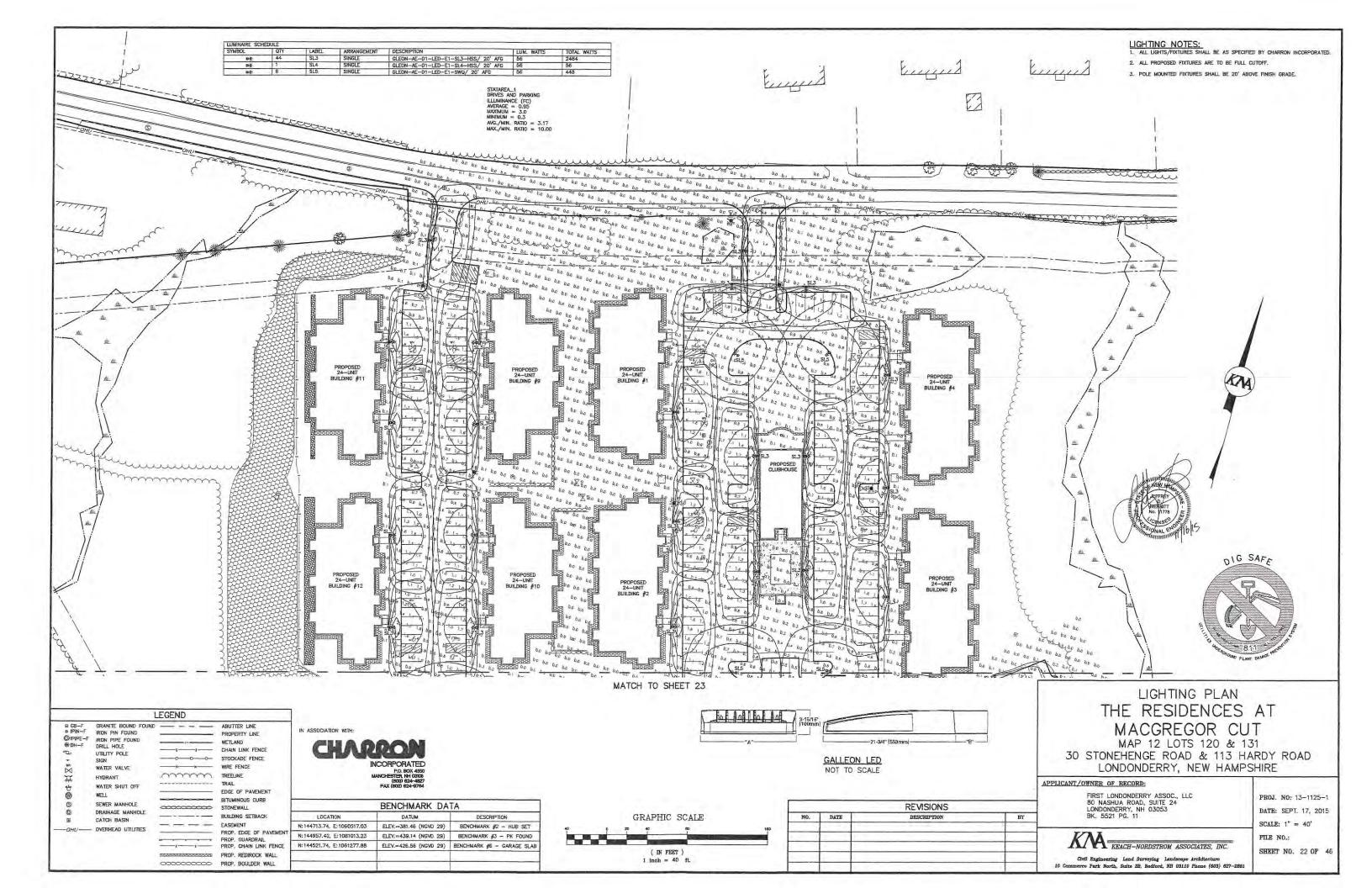
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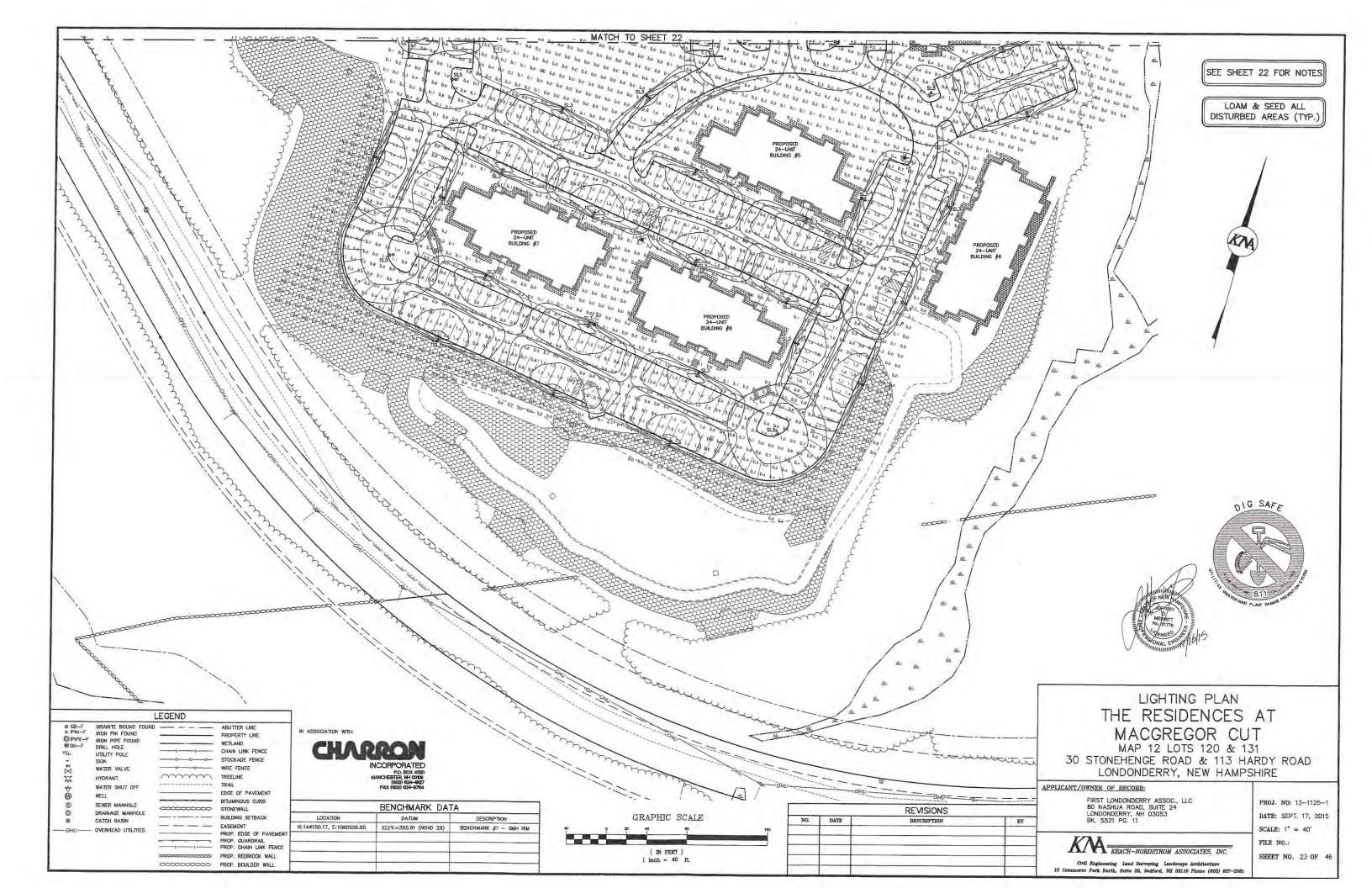






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**Building Type A Front Elevation** 1 SCALE: 1/8



Building Type A Side Elevation 2

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GENERAL NOTES:	
ALL MATERIALS SPECIFIED ARE ALL EXTERIOR FASTENERS SH	
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PANEL & TRIM SIDING : ALL TRIM BY ARCHITECT. CORNER BO	
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RAILING SYSTEM: DECK RAILING	

REFER TO WALL SECTIONS FOR DETAILED INFORMATION ON ALL MATERIALS

# **BUILDING TYPE A TYPICAL FOR BUILDING NUMBERS 1, 2, 3, 4 & 6** SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# ERIOR FINISH SCHEDULE

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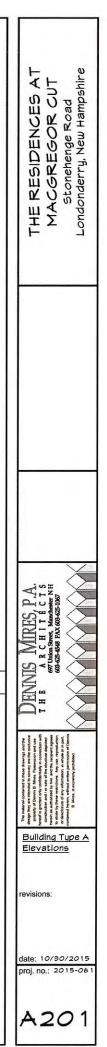
HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

C. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT. COLOR ORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

/ CONCEALED STAINLESS FASTENERS. CROSS TIMBER 'CLASSIC' BY GAF MATERIALS. JOISTS. PROVIDE 1x P.T. RIM JOIST AS BACKER @ ALL DECKS.

AILING SYSTEM: DECK RAILING TO SYSTEM TO BE GAF DURALIFE RAILWAYS UNIVERSAL RAILING COLLECTION. 42" RAIL HEIGHT. LENGTH TO SUIT. PROVIDE CENTER POST AS REQUIRED WHERE RAILING IS OVER 6-0" LONG. COLOR & STYLE BY ARCHITECT.

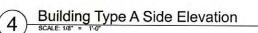
SEE WINDOW SCHEDULE FOR DETAILED INFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. WINDOW TRIM TO BE BY PARADIGM. TO BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.





- ARCHITECT

- REFER TO WALL SECTIONS FOR DETAILED INFORMATION ON ALL MATERIALS



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## **BUILDING TYPE A TYPICAL FOR BUILDING NUMBERS 1, 2, 3, 4 & 6** SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# **EXTERIOR FINISH SCHEDULE**

SHINGLED ROOF: TYPICAL ARCHITECTURAL STYLE SHINGLES SHALL BE ELK RAISED PROFILE OR IKO CAMBRIDGE 30, STRAIGHT CUT, FIBERGLASS ASPHALT SHINGLE WITH 30 YEAR WARRANTY.

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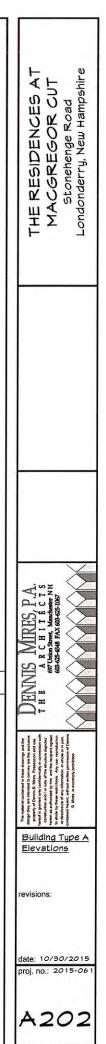
CLAPBOARD SIDING: PRE-FINISHED VINYL HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY ARCHITECT

PANEL & TRIM SIDING : ALL TRIM TO BE PVC. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT. COLOR BY ARCHITECT. CORNER BOARDS & HORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

DECKING: COMPOSITE 5/4 X 6 DECKING W/ CONCEALED STAINLESS FASTENERS. CROSS TIMBER 'CLASSIC' BY GAF MATERIALS. MATCHING 1x FASCIA TO COVER DECK JOISTS. PROVIDE 1x P.T. RIM JOIST AS BACKER @ ALL DECKS.

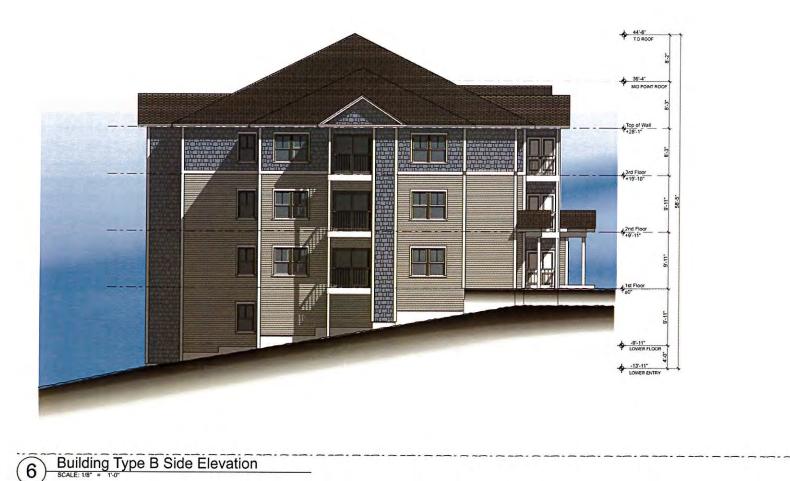
RAILING SYSTEM: DECK RAILING TO SYSTEM TO BE GAF DURALIFE RAILWAYS UNIVERSAL RAILING COLLECTION. 42" RAIL HEIGHT. LENGTH TO SUIT. PROVIDE CENTER POST AS REQUIRED WHERE RAILING IS OVER 6-0" LONG. COLOR & STYLE BY ARCHITECT.

SEE WINDOW SCHEDULE FOR DETAILED INFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. WINDOW TRIM TO BE BY PARADIGM. TO BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.





Building Type B Front Elevation 5



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GENERAL NOTES:
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CLAPBOARD SIDING: PRE-FINISHED VINY ARCHITECT
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SEE WINDOW SCHEDULE FOR DETAILED WINDOW TRIM TO BE BY PARADIGM. 1
REFER TO WALL SECTIONS FOR DETAILE

#### **BUILDING TYPE B TYPICAL FOR BUILDING NUMBERS 7 & 8** SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# **TERIOR FINISH SCHEDULE**

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JRAL STYLE SHINGLES SHALL BE ELK RAISED PROFILE OR IKO CAMBRIDGE 30, STRAIGHT E WITH 30 YEAR WARRANTY.

CEDAR IMPRESSION SHINGLE SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

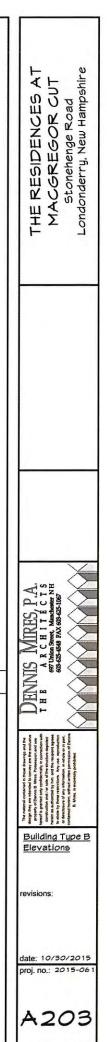
YL HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

PVC. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT. COLOR HORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

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EXT
GENERAL NOTES:
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TYPICAL EXTERIOR MATERIALS:
SHINGLED ROOF: TYPICAL ARCHITECTUR CUT, FIBERGLASS ASPHALT SHINGLE
SHINGLE SIDING: PRE-FINISHED VINYL CE ARCHITECT.
CLAPBOARD SIDING: PRE-FINISHED VINYI ARCHITECT
PANEL & TRIM SIDING : ALL TRIM TO BE PARCHITECT. CORNER BOARDS & H
DECKING: COMPOSITE 5/4 X 6 DECKING W MATCHING 1x FASCIA TO COVER DECK
RAILING SYSTEM: DECK RAILING TO SYST HEIGHT. LENGTH TO SUIT. PROVIDE C ARCHITECT.
SEE WINDOW SCHEDULE FOR DETAILED I WINDOW TRIM TO BE BY PARADIGM. T
REFER TO WALL SECTIONS FOR DETAILED

## **BUILDING TYPE B TYPICAL FOR BUILDING NUMBERS 7 & 8** SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# **TERIOR FINISH SCHEDULE**

PROVED EQUAL" UNLESS OTHERWISE NOTED. TAINLESS STEEL UNLESS OTHERWISE NOTED.

IRAL STYLE SHINGLES SHALL BE ELK RAISED PROFILE OR IKO CAMBRIDGE 30, STRAIGHT WITH 30 YEAR WARRANTY.

EDAR IMPRESSION SHINGLE SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

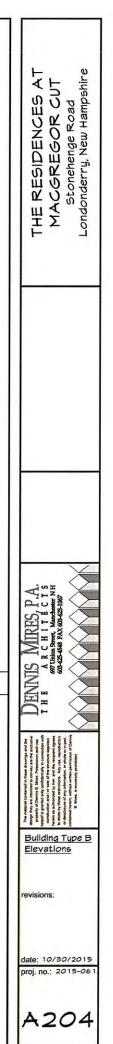
YL HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

PVC. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT, COLOR HORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

W/ CONCEALED STAINLESS FASTENERS. CROSS TIMBER 'CLASSIC' BY GAF MATERIALS. :K JOISTS. PROVIDE 1x P.T. RIM JOIST AS BACKER @ ALL DECKS.

STEM TO BE GAF DURALIFE RAILWAYS UNIVERSAL RAILING COLLECTION. 42" RAIL CENTER POST AS REQUIRED WHERE RAILING IS OVER 6"-0" LONG. COLOR & STYLE BY

) INFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. TO BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.







EXT
GENERAL NOTES:
-ALL MATERIALS SPECIFIED ARE "OR APP -ALL EXTERIOR FASTENERS SHALL BE ST
TYPICAL EXTERIOR MATERIALS:
SHINGLED ROOF: TYPICAL ARCHITECTUR CUT, FIBERGLASS ASPHALT SHINGLE
SHINGLE SIDING: PRE-FINISHED VINYL CI ARCHITECT.
CLAPBOARD SIDING: PRE-FINISHED VINY ARCHITECT
PANEL & TRIM SIDING : ALL TRIM TO BE P BY ARCHITECT. CORNER BOARDS & H
DECKING: COMPOSITE 5/4 X 6 DECKING V MATCHING 1x FASCIA TO COVER DECK
RAILING SYSTEM: DECK RAILING TO SYST HEIGHT. LENGTH TO SUIT. PROVIDE ( ARCHITECT.
SEE WINDOW SCHEDULE FOR DETAILED WINDOW TRIM TO BE BY PARADIGM. 1
REFER TO WALL SECTIONS FOR DETAILED

#### **BUILDING TYPE C TYPICAL FOR** BUILDING NUMBERS 5, 9, 10, 11 & 12 SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# **FERIOR FINISH SCHEDULE**

PPROVED EQUAL" UNLESS OTHERWISE NOTED. STAINLESS STEEL UNLESS OTHERWISE NOTED.

URAL STYLE SHINGLES SHALL BE ELK RAISED PROFILE OR IKO CAMBRIDGE 30, STRAIGHT E WITH 30 YEAR WARRANTY.

CEDAR IMPRESSION SHINGLE SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

YL HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

PVC. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT. COLOR HORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

W/ CONCEALED STAINLESS FASTENERS, CROSS TIMBER 'CLASSIC' BY GAF MATERIALS. CK JOISTS, PROVIDE 1x P.T. RIM JOIST AS BACKER @ ALL DECKS.

STEM TO BE GAF DURALIFE RAILWAYS UNIVERSAL RAILING COLLECTION. 42" RAIL E CENTER POST AS REQUIRED WHERE RAILING IS OVER 6'-0" LONG. COLOR & STYLE BY

D INFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. TO BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.

		ACORTOON OU	Stonehenge Road	Londonderry, New Hampshire
DENNIS MIRES, P.A.	HE ARCHITECTS	09-625	~~~~~~~~	
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The manual and the ma		D to have by here municion Any use reproduction 600-625-1548 FAX 603-625	Fyp 15	



Building Type C Back Elevation (11



	EXT
G	ENERAL NOTES:
	ALL MATERIALS SPECIFIED ARE "OR APP ALL EXTERIOR FASTENERS SHALL BE ST
T	YPICAL EXTERIOR MATERIALS:
s	HINGLED ROOF: TYPICAL ARCHITECTUR CUT, FIBERGLASS ASPHALT SHINGLE
s	HINGLE SIDING: PRE-FINISHED VINYL CE ARCHITECT.
c	LAPBOARD SIDING: PRE-FINISHED VINYI ARCHITECT
P	ANEL & TRIM SIDING : ALL TRIM TO BE PA BY ARCHITECT. CORNER BOARDS & H
D	ECKING: COMPOSITE 5/4 X 6 DECKING W MATCHING 1x FASCIA TO COVER DECK
R	AILING SYSTEM: DECK RAILING TO SYST HEIGHT. LENGTH TO SUIT. PROVIDE C ARCHITECT.
S	EE WINDOW SCHEDULE FOR DETAILED I WINDOW TRIM TO BE BY PARADIGM. 1
R	EFER TO WALL SECTIONS FOR DETAILED

## **BUILDING TYPE C TYPICAL FOR** BUILDING NUMBERS 5, 9, 10, 11 & 12 SEE CIVIL DRAWINGS FOR BUILDING **LOCATIONS & GRADING**

# **ERIOR FINISH SCHEDULE**

PROVED EQUAL" UNLESS OTHERWISE NOTED. TAINLESS STEEL UNLESS OTHERWISE NOTED.

IRAL STYLE SHINGLES SHALL BE ELK RAISED PROFILE OR IKO CAMBRIDGE 30, STRAIGHT : WITH 30 YEAR WARRANTY.

EDAR IMPRESSION SHINGLE SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

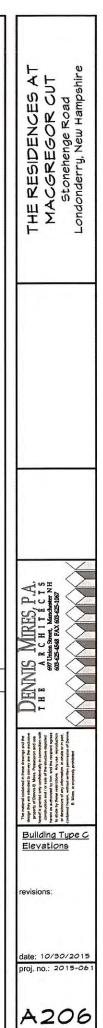
L HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

VC. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT, COLOR HORIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

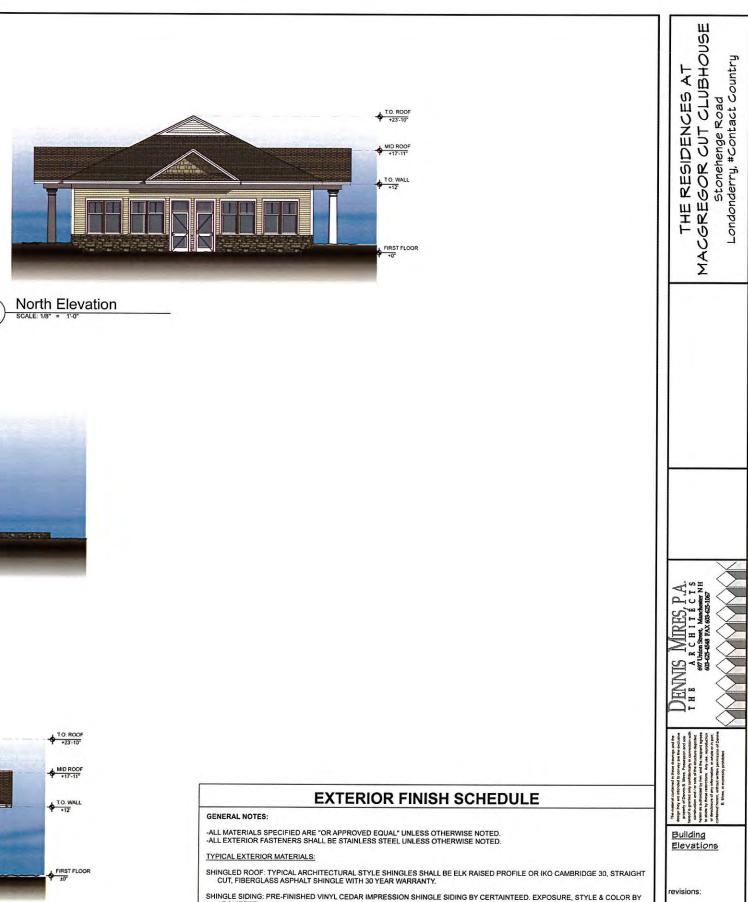
W/ CONCEALED STAINLESS FASTENERS. CROSS TIMBER 'CLASSIC' BY GAF MATERIALS. CK JOISTS. PROVIDE 1x P.T. RIM JOIST AS BACKER @ ALL DECKS.

STEM TO BE GAF DURALIFE RAILWAYS UNIVERSAL RAILING COLLECTION. 42" RAIL CENTER POST AS REQUIRED WHERE RAILING IS OVER 6'-0" LONG. COLOR & STYLE BY

DINFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. TO BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.













			E)	TE
GENE	RAL NOTES	S:		
	ATERIALS			
TYPIC.	ALEXTERIO	OR MATER	IALS:	
	LED ROOF			
	LE SIDING: CHITECT.	PRE-FINIS	SHED VIN	YL CEDA
	BOARD SIDI	NG: PRE-F	INISHED	VINYL H
	& TRIM SIL			
STONE	E: CULTURE	D STONE,	STYLE &	COLOR
	INDOW SC			
DEEED	TOWALL	COTIONS		

HORIZONTAL CLAPBOARD SIDING BY CERTAINTEED. EXPOSURE, STYLE & COLOR BY

C. ALL PVC TRIM TO BE RECEIVE 1 COAT PRIMER AND 2 COATS FINISH PAINT. COLOR DRIZONTAL TRIM BOARDS TO BE 1X6 TYPICAL UNLESS OTHERWISE NOTED.

date: 10/30/2015

proj. no.: 2015-06

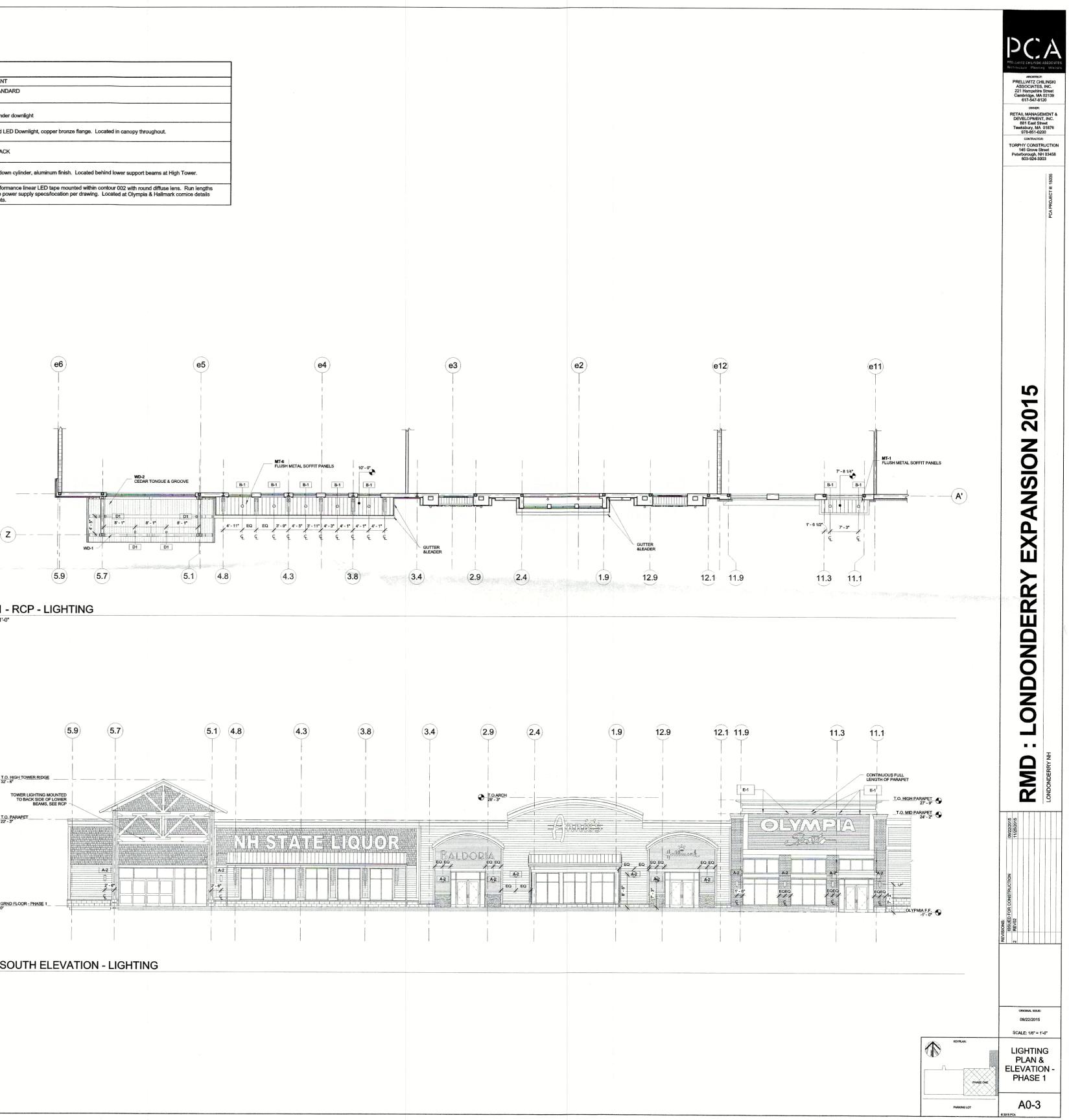
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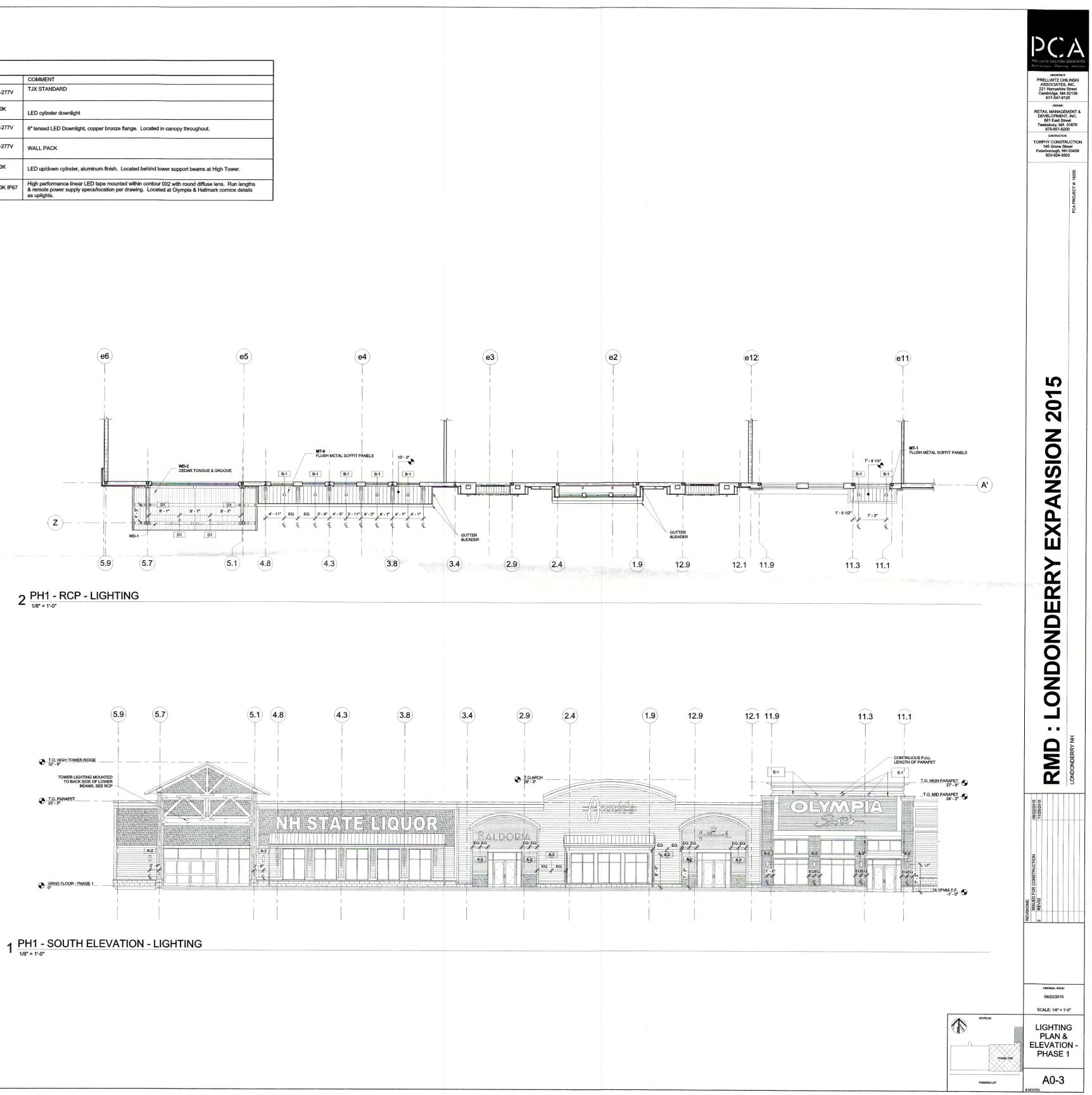
IFORMATION. ALL WINDOWS TO BE VINYL, BY PARADIGM UNLESS OTHERWISE NOTED. D BE 1x6 WINDOW HEAD TRIM & 1x4 JAMB TRIM.

REFER TO WALL SECTIONS FOR DETAILED INFORMATION ON ALL MATERIALS

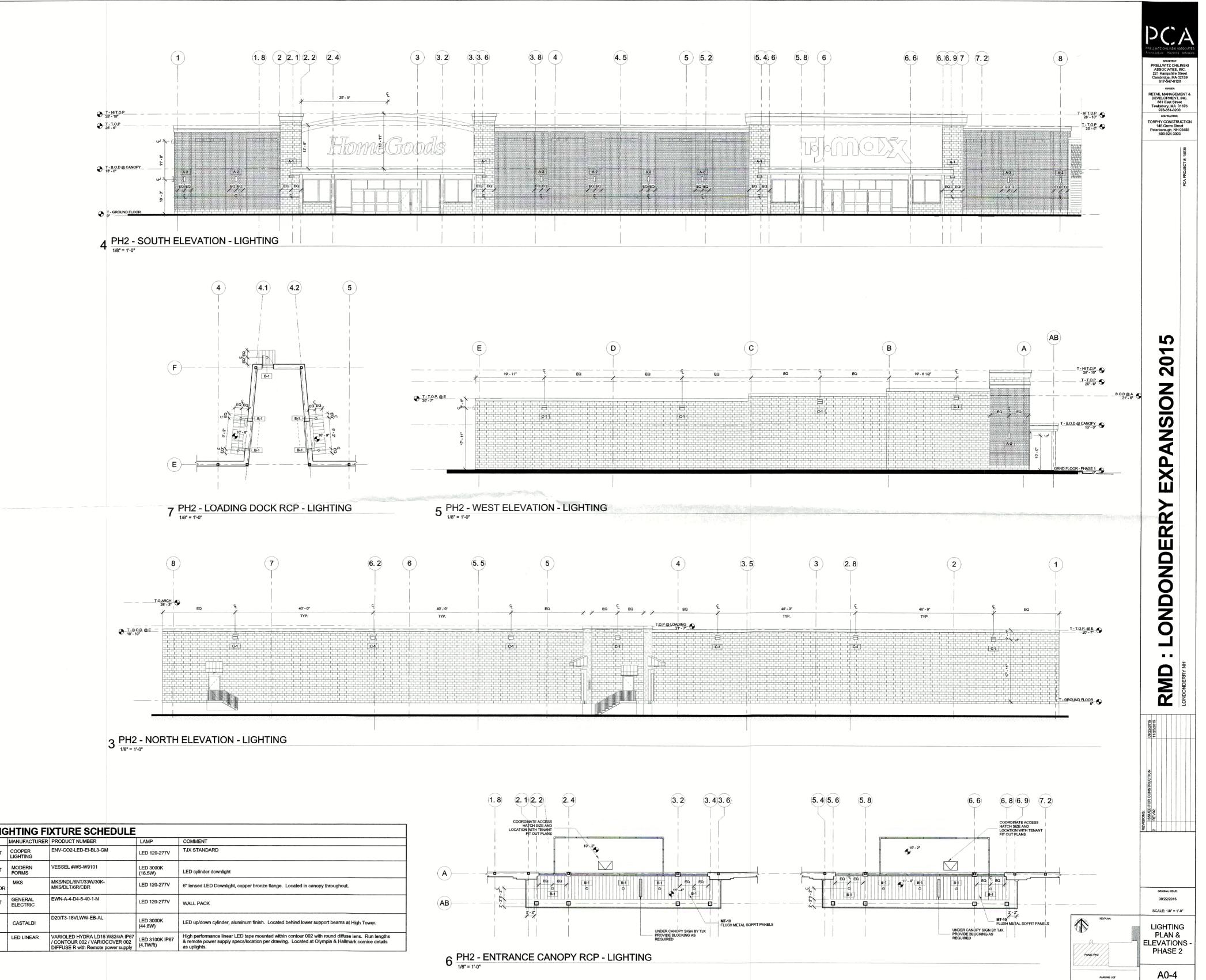
E	XTE	<b>RIOR LIG</b>	HTING FI	<b>XTURE SCHEDULE</b>		
SYMBOL		TYPE	MANUFACTURER	PRODUCT NUMBER	LAMP	COMMENT
1991	A-1	WALL MOUNT	COOPER LIGHTING	ENV-CO2-LED-EI-BL3-GM	LED 120-277V	TJX STANDARD
0	A-2	WALL MOUNT	MODERN FORMS	VESSEL #WS-W9101	LED 3000K (16.5W)	LED cylinder downlight
0	B-1	RECESSED CAN EXTERIOR	MKS	MKS/NDL/6NT/33W/30K- MKS/DLT/6R/CBR	LED 120-277V	6" lensed LED Downlight, copper bronze flange. Located in canopy throughout.
8	C-1	WALL MOUNT	GENERAL ELECTRIC	EWN-A-4-D4-5-40-1-N	LED 120-277V	WALL PACK
0 %	D-1	SURFACE	CASTALDI	D20/T3-18VLWW-EB-AL	LED 3000K (44.8W)	LED up/down cylinder, aluminum finish. Located behind lower support beams at High Tower.
	E-1	SURFACE	LED LINEAR	VARIOLED HYDRA LD15 W824/A IP67 / CONTOUR 002 / VARIOCOVER 002 DIFFUSE R with Remote power supply	LED 3100K IP67 (4.7W/ft)	High performance linear LED tape mounted within contour 002 with round diffuse lens. Run lengths & remote power supply specs/location per drawing. Located at Olympia & Hallmark cornice details as uplights.



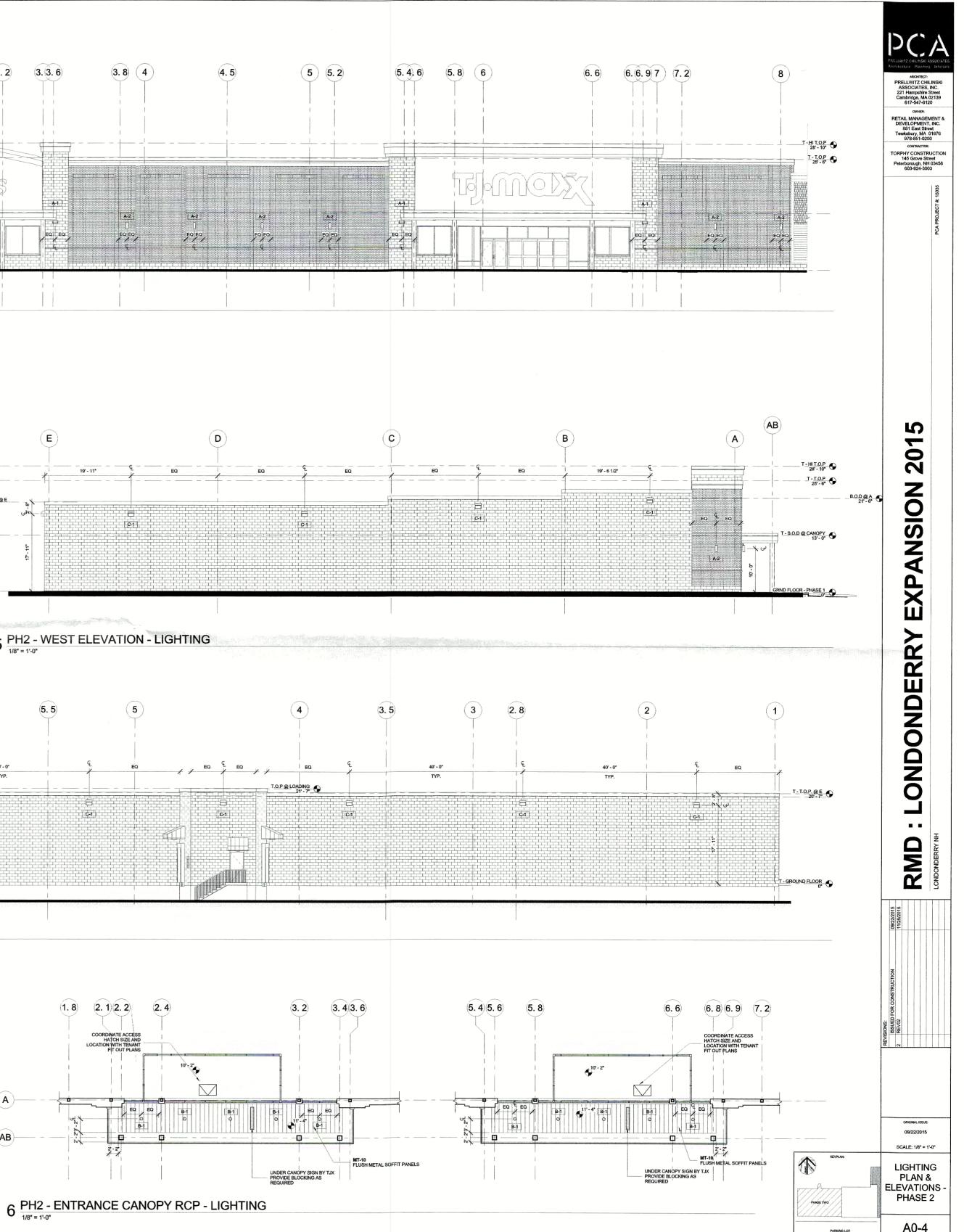








E	ХΤ	ERIOR LIG	<b>HTING FI</b>	<b>XTURE SCHEDULE</b>		
SYMBOL		TYPE	MANUFACTURER	PRODUCT NUMBER	LAMP	COMMENT
8	A-1	WALL MOUNT	COOPER LIGHTING	ENV-CO2-LED-EI-BL3-GM	LED 120-277V	TJX STANDARD
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#### DESCRIPTION

The Entri LED luminaire features a classic and stylish design with the added benefits of solid state lighting technology, offering outstanding uniformity and energy savings. Using Eaton's proprietary LED LightBAR™ technology and AccuLED Optics™ system, the Entri LED luminaire offers designers vast versatility in system design, function and performance. Use Entri LED for wall mount architectural lighting applications and egress lighting requirements. UL/cUL listed for use in wet locations.

#### SPECIFICATION FEATURES

#### Construction

HOUSING: Heavy wall, one-piece, die-cast aluminum construction for precise tolerance control and repeatability in manufacturing. Integral extruded aluminum heat sink provides superior thermal heat transfer in +40°C ambient environments. FACEPLATE / DOOR: One-piece, die-cast aluminum construction. Captive, side hinged faceplate swings open via release of one flush mount die-cast aluminum latch on housing side panel. GASKET: One-piece molded silicone gasket mates perfectly between the door and housing for repeatable seal. LENS: Uplight lens is impact-resistant, 5/32" thick tempered frosted glass sealed to housing with continuous bead silicone gasket. Downlight lens is LED board integrated acrylic overoptics, each individually sealed for IP66 rating. HARDWARE: Stainless steel mounting screws and latch hardware allow access to electrical components for installation and servicing.

#### Optics

DIMENSIONS

Choice of six patented, highefficiency AccuLED Optic distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optic technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in

4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT.

#### Electrical

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

#### Mounting

JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box. LightBARs mount facing downward. Fixture slides over mounting plate and is secured with two stainless steel fasteners. Mounting plate features a onepiece EPDM gasket on back side of plate to firmly seal fixture to

Catalog #	Туре
Project	
Comments	Date
Prepared by	

wall surface, forbidding entry of moisture and particulates. Optional mounting arrangements utilize a die-cast mounting adaptor box to allow for LED battery pack, surface conduit and through branch wiring. The Entri LED luminaire is approved for mounting on combustible surfaces.

#### Finish

Housing is finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.

Warranty Five-year warranty.



Invue





# ENC/ENT/ENV ENTRI LED

1 - 2 LightBARs Solid State LED

ARCHITECTURAL WALL LUMINAIRE



CERTIFICATION DATA **UL/cUL** Listed ISO 9001 **IP66 LightBARs** LM79 / LM80 Compliant DesignLights Consortium® Qualified\*

#### ENERGY DATA

Electronic LED Driver >0.9 Power Factor <20% Total Harmonic Distortion 120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz -30°C Minimum Temperature 40°C Ambient Temperature Rating

SHIPPING DATA Approximate Net Weight: 16 lbs. (7.3 kgs.)



\*www.designlights.org

#### TD514003EN 2015-06-03 10:00:53

ENC (Round Clean) ENT (Triangle Reveals) 8-1/8" -[206mm] - 15-3/4" -[400mm] 15-3/4" -[400mm] - 8-1/8" -7-3/4" [196mm] 7-3/4" [196mm] ENV (Round Reveals) **CONDUIT MOUNT / BATTERY BACK BOX** – 15-3/4" – [400mm] 8-1/8" 7-3/4" [196mm] [206mm] 11" [279mm]



#### POWER AND LUMENS BY BAR COUNT

		E01	E02	F01	F02	
Number o	of LightBARs	21 LED 1	LightBAR	7 LED LightBAR		
Drive Cun	ent	350	)mA	1.2.3	A	
Power (Watts)	120-277V	25W	47W	26W	50W	
Current	120V	0.22	0.40	0.22	0.42	
(A)	277V	0.10	0.18	0.10	0.19	
Power (Watts)	347V or 480V	31W	52W	32W	55W	
Current	347V	0.11	0.16	0.11	0.17	
(A)	480V	0.16	0.18	0.16	0.18	
Optics						
	Lumens	2,738	5,476	2,260	4,521	
BL2	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	
BL3	Lumens	2,702	5,405	2,231	4,462	
BL3	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1	
BL4	Lumens	2,613	5,225	2,157	4,313	
BL4	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G1	
	Lumens	2,785	5,570	2,299	4,598	
GZW	Bug Rating	B2-U0-G2	B3-U0-G3	B1-U0-G1	B2-U0-G2	
	Lumens	2,435	4,869	2,010	4,020	
SLR/SLL	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G1	B1-U0-G2	

#### LUMEN MAINTENACE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	100,000 Hours	Theoretical L70 (Hours)
25 C	> 99%	> 97%	> 96%	> 93%	> 450,000
40 C	> 98%	> 97%	> 96%	> 92%	> 425,000
50 C	> 97%	> 96%	> 95%	> 91%	> 400,000

Lumen Maintenance (Percent)

101 100 99 98 97 96 95 94 93 92 91 90 40 60 70 80 90 100 10 20 30 50 0 25°C - 40°C -Hours (Thousands) 50°C -

#### ORDERING INFORMATION

Product Family 1	Number of LightBARs <sup>2</sup>	Lamp Type	Voltage	Distribution	Color 4
ENC=Entri Round Clean ENT=Entri Triangle Reveals ENV=Entri Round Reveals	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs F01=(1) 7 LED LightBAR F02=(2) 7 LED LightBARs	LED=Solid State Light Emitting Diodes	E1=Electronic (120-277V) 347=347V 480=480V <sup>3</sup>	BL2=Type II w/Back Light Control BL3=Type III w/Back Light Control BL4=Type IV w/Back Light Control GZW=Wall Grazer Wide SLL=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)			Accessories (Order Separat	ely) <sup>s</sup>	
ULG=Uplight Glow (For Uplight Only) PC=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) WG=Wire Guard TP=Tamper Resistant Hardware LCF=LightBAR Cover Plate Matches Housing Finish 7030=70 CRI / 5000K CCT <sup>5</sup> 7050=70 CRI / 5000K CCT <sup>5</sup> 8030=80 CRI / 5000K CCT <sup>5</sup> 8030=80 CRI / 3000K CCT <sup>5</sup> 8030=80 CRI / 3000K CCT <sup>5</sup> 0SB=Occupancy Sensor with Back Box (Specify 120V or 277V) <sup>8</sup> BBB=Battery Pack with Back Box (Specify 120V or 277V) <sup>9</sup> CWB=Cold Weather Battery Pack with Back Box (Specify 120V or 277V) <sup>9</sup> DIM=0-10V Dimming Driver			VA2001-XX=Thru-Way Con VA6172=Wire Guard VA6173=Tamper-Resistant MA1253=10kV Circuit Modu	Driver Bit	

NUTES: 1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 2. Standard 4000K CCT and greater than 70 CRI. LightBARs for downlight use only. 3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems) 4. Constant and BAL solar matching a weighted was request.

Delta and Three Phase Corner Grounded Delta systems) 4. Custom and RAL color matching available upon request. Consult your lighting representative at Eaton for more information. 5. Extended lead times apply. 6. Available with EO2 or FO2, only one bar on street side will be wired to sensor. Time delay factory setting 15-minutes. When ordered with PC option, both bars are connected to photocontrol as primary switching means. Standard sensor lens covers 8' mounting height, 360° coverage, maximum 48' diameter. Not available in all configurations or with BBB or CWB options. 7. Specify 120V or 277V. LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory. 8. Specify 120V or 277V. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates one bar for 90-minutes. Not available in all configurations or with OSB option. Consult factory. 9. Replace XX with color suffix.



#### ENC/ENT/ENV ENTRI LED

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10 C	1.02
15 C	1.01
25 C	1.00
40 C	0.99

# **VESSEL**- model: WS-W91 LED Outdoor

MODERN FORMS



#### PRODUCT DESCRIPTION

Precise engineering using the latest energy efficient LED technology with a built-in reflector for superior optics; An appealing cylindrical profile perfect for accent and wall wash lighting.

#### FEATURES

- CEC Title 24 Compliant
- Energy Star<sup>®</sup> rated for FM-W9100
- Universal driver (120V-220V-277V)
- · Color Temp: 3000K 2700K and 4000K available special order
- CRI: 90

Fixture Type:	
Catalog Number:	
Project:	

SPECIFICATIONS

Construction: Die cast aluminium construction with silk-screened glass

Light Source: High output LED.

Location:

Dimming: Dims to 10% with an electronic low voltage (ELV) dimmer.

Mounting: Mounts directly to junction box.

Finish: Brushed Aluminum (AL), Black (BK), Bronze (BZ), Graphite (GH), White (WT)

Standards: ETL & cETL Wet location listed. IP-66 rated ADA compliant. CEC Title 24 Compliant Energy Star<sup>®</sup> rated for FM-W9100.

	Туре	Model	Wattage	LED Lumens	Delivered Lumens	Rated Life	Photometric	Fínish		
A	Dark Sky Friendly	WS-W9101	16.5W	1167	860	60,000 hr	)			
							)	AL BK BZ GH	Brushed Aluminum Black Bronze Graphite	
	Up & Down Lighr	WS-W9102	29W	2334	1613	60,000 hi	}	WT	White	

Example: WS-W9101-AL

For 2700K add "-27"; 4000K add "-40" before the finish: WS-W9202-27-WT

modernforms.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. SEP 2015



Catalog # 89079 MKS/NDL/6NT/33W/30K

**B1** 

# 6" LED Recessed Downlight New Construction

33W 3000K 120-277V

# **DESCRIPTION:**

The MKS Advanced LED Series is an Energy Star rated family of high performance LED downlights with rugged craftsmanship and superior performance. Our glare free technology allows for the minimization of blinding light without having to sacrifice high lumen output. The MKS LED downlights are IC rated in both New Construction and Remodel applications, are fully dimmable and carry the E.T.L Certification.

All MKS Advanced LED downlights offer a 5 Year warranty.

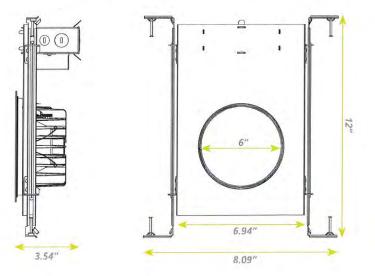


# FEATURES:

- Rugged Die Cast
- Glare Free technology
- Low Profile, IC rated housing for both New Construction and Remodel Downlights
- Multivoltage driver 120-277V
- 0-10V Dimming

Triac Dimming available upon request

# **DIMENSIONS:**



104 Halleck Street, Brooklyn, NY 11231 | Tel: 212.590.0131

MKSLED.com



# **SPECIFICATIONS:**

Lamp Life Hours **Bulb Finish** Material Life (based on 3hr/day) **Estimated Energy Cost** Watts Volts LED Chip Manufacturer **Brightness** Color Accuracy (CRI) Light Appearance **Color Temperature Beam Angle** Diameter Item Dimensions (in) Package Dimensions (in) 50000 Hours White Powder Die Cast Aluminum 45.7 Years \$2.89 per Year 33 120-277 Nichia 2000 Lumens >80 Warm White 3000K 100° 6" (W) 9.2 x (H) 3.6 x (D) 12 (W) 12.5 x (H) 2.5 x (D) 14.3

# Catalog # 89079 MKS/NDL/6NT/33W/30K

# ACCESSORIES:

Catalog # 88543 MKS/DLT/6R/BNR 6" Round Decorative Trim - Brushed Nickel

Catalog # 88546-SU MKS/DLT/6R/CBR 6" Round Decorative Trim - Copper Bronze



*Catalog # 88540 MKS/DLT/6R/WR* 6" Round Decorative Trim - White

Catalog # 88553-SU MKS/DLT/6S/BNR 6" Square Decorative Trim - Brushed Nickel



Catalog # 88556-SU MKS/DLT/6S/CBR 6" Square Decorative Trim - Copper Bronze

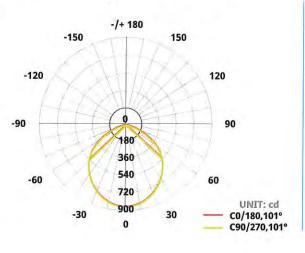
Catalog # **88550-SU** MKS/DLT/6S/WR 6" Square Decorative Trim - White

# **PHOTOMETRICS:**

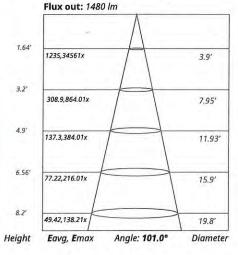
Intensity (Candlepower) Summary at 25°C - Candelas

C(DEG)	0	23	45	68	90
0	864	863	863	863	864
5	855	854	853	853	855
10	836	833	832	833	835
15	808	804	803	803	806
20	770	766	764	765	768
25	726	721	718	719	723
30	675	669	666	668	672
35	620	614	611	613	617
40	560	554	550	551	556
45	492	485	482	483	488
50	420	413	409	410	415
55	346	338	335	335	340
60	270	262	259	259	263
65	196	188	184	183	187
70	124	117	113	112	115
75	62.4	56.2	52.3	51.2	52.9
80	22.7	19.9	18.6	18.3	18.8
85	8.73	7.65	6.94	6.70	6.93
90	1.09	0.03	0.02	0.02	0.02

Average Beam Angle (50%) : 101°



Illuminance Cone of Light Mount Height: 2,5 m / 6.5'



104 Halleck Street, Brooklyn, NY 11231 | Tel: 212.590.0131

MKSLED.com





# Evolve<sup>™</sup> LED Wall Pack

N Series (EWNA)





# **Product Features**

The next generation of the GE Evolve™ LED Wall Pack is designed to efficiently illuminate walkways, area, and general lighting applications. The EWNA features an advanced LED optical system that provides high uniformity, excellent vertical light distribution, reduced on-site glare and effective security light levels. The EWNA Wall Pack offers identical photometrics to the EANA Area Light, which allows lighting designers to capitalize on the same features without compromising site layouts. In keeping with a sleek design strategy, this product offers a modern look, balancing the need for photometric scalability with reliable workhorse performance.

# Applications

 Wall mounted, site, area and general lighting utilizing an advanced LED optical system providing uniformity, vertical light distribution, reduced on-site glare and effective security light levels.

#### Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates an integral heat sink and light engine, ensuring maximum heat transfer, long LED life, and a reduced Effective Projected Area (EPA).
- Meets 1G vibration level per ANSI C136.31-2001. For 2G rating contact manufacturer.

# LED & Optical Assembly

- Structured LED array for optimized area light and wall pack photometric distribution.
- Evolve™ LED light engine utilizes reflective technology to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K & 5000K typical.

#### Lumen Maintenance

 System rating is L85 at 50,000 hours. Contact manufacturer for Lxx rating (Lumen Depreciation) beyond 50,000 hours.

# Ratings

- (1)/((1)) listed, suitable for wet locations. (For cUL availability contact manufacturer)
- IP66 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 50°C.
- Upward Light Output Ratio (ULOR) = 0
- Title 24 compliant with "H" motion sensor option.
- Compliant with the material restriction requirements of RoHS.
- DLC Listed

#### Mounting

• Flush wall mount with convenient tab and slot mounting for easy "J" box installation. 1/2" conduit holes are included for non-"J" box installation.

#### Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Black and Dark Bronze.
- RAL & custom colors available.

#### Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%.
- Photo electric sensors (PE) available for all voltages.
- GE dimmable PE socket is available making the unit "adaptive controls ready." Contact manufacturer for details.
- Dimming:
  - Wired 0-10V continuous dimming with "D" option code
  - Stand-alone motion sensor based dimming using "H" option code
- Surge Protection Options: For 120-277VAC and 347-480VAC per IEEE/ANSI C136.2-2014.
  - 6kV/3kA "Basic" surge protection, standard.
  - 10kV/5kA "Enhanced" surge protection available with "R" option code.

# Ordering Number Logic Evolve LED Wall Pack N Series (EWNA)



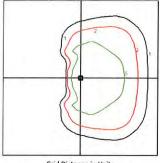
EWN	<u>A</u>	_	44	5	1221		4	2222	- 1212 3
PROD. ID	PHOTOMETRIC	VOLTAGE	OPTICAL CODE	DRIVE CURRENT	LED COLOR TEMP	PE FUNCTION	MOUNTING ARM	COLOR	OPTIONS
E = Evolve W = Wall Pack N = Housing Series	A = Photometric Series "A"	0 = 120-277 1 = 120* 2 = 208* 3 = 240* 4 = 277* 5 = 480* H = 347-480V D = 347* * Specify singly voltage only if fuse option selected.		<b>5</b> = 525mA	<b>40</b> = 4000K <b>50</b> = 5000K	<ul> <li>1 = None</li> <li>2 = PE Rec.</li> <li>3 = Internal PE (Button F</li> <li>4 = PE Rec. with Shortinn</li> <li>5 = PE Rec. with Control</li> <li>A = ANSI C136.41 7-pin Receptacle †#</li> <li>D = ANSI C136.41 7-pin Receptacle with Shot</li> <li>* Only available with o voltages. Not availad voltage options D, H</li> <li>** PE control not availa 480V. Must be o disc (347V or 480V).</li> <li>† When ordering PE fu socket A or D, a dimumust also be ordere "OPTIONS" column.</li> <li># Order Dimming/Con a separate item.</li> </ul>	g cap ** PE Pring Cap † # discrete ble with or 5. ble for 347- rete voltage unction ming driver d under the	BLCK = Black DKBZ = Dark Bronze GRAY = Gray WHTE = White Contact monufacturer for other colors.	<ul> <li>D = Dimming [0-10 Volt Input] †</li> <li>F = Fusing</li> <li>R = 10kV Enhanced Surge Protection *</li> <li>H = Motion Sensor #</li> <li>† Dimming leads will be provided through the back of the arm, unles specified with A or D PE Function.</li> <li>* R &amp; H options can not be purchased togethe</li> <li># Dimming is standard with H option code. Do not also select D option Not compatible with PE options A, or D.</li> </ul>

	OPTICAL	ТҮРЕ		L INITIAL IENS		SYSTEM TAGE	BUG RATINGS*		IES FILE	NUMBER
	CODE		4000K	5000K	120-277V	347-480V	4000K	5000K	4000K	5000K
	A4	Asymmetric Forward	3,730	3,750	46	46	1-0-1	1-0-1	EWNA_A4540IES	EWNA_A4550IES
	B4	Asymmetric Forward	5,510	5,540	65	65	1-0-2	1-0-2	EWNA_B4540IES	EWNA_B4550IES
2	C4	Asymmetric Forward	7,180	7,210	85	85	1-0-2	1-0-2	EWNA_C4540IES	EWNA_C4550IES
	D4	Asymmetric Forward	8,810	8,850	104	104	1-0-2	1-0-2	EWNA_D4540IES	EWNA_D4550IES
	E4	Asymmetric Forward	10,370	10,410	123	123	2-0-2	2-0-2	EWNA_E4540IES	EWNA_E4550IES
	F4	Asymmetric Forward	12,320	12,380	148	148	2-0-3	2-0-3	EWNA_F4540IES	EWNA_F4550IES
	A3	Asymmetric Wide	4,070	4,090	46	46	1-0-1	1-0-1	EWNA_A3540IES	EWNA_A3550IES
	83	Asymmetric Wide	6,010	6,040	65	65	1-0-1	1-0-1	EWNA_B3540IES	EWNA_B3550IES
	C3	Asymmetric Wide	7,830	7,860	85	85	1-0-2	1-0-2	EWNA_C3540IES	EWNA_C3550IES
	D3	Asymmetric Wide	9,620	9,650	104	104	2-0-2	2-0-2	EWNA_D3540IES	EWNA_D3550IES
	E3	Asymmetric Wide	11,320	11,360	123	123	2-0-2	2-0-2	EWNA_E3540IES	EWNA_E3550IES
	F3	Asymmetric Wide	13,450	13,500	148	148	2-0-2	2-0-2	EWNA_F3540IES	EWNA_F3550IES
1	A2	Asymmetric Narrow	3,940	3,960	46	46	1-0-1	1-0-1	EWNA_A2540IES	EWNA_A2550IES
	B2	Asymmetric Narrow	5,820	5,850	65	65	1-0-1	1-0-1	EWNA_B2540IES	EWNA_B2550IES
	C2	Asymmetric Narrow	7,580	7,620	85	85	2-0-2	2-0-2	EWNA_C2540IES	EWNA_C2550IES
	D2	Asymmetric Narrow	9,310	9,350	104	104	2-0-2	2-0-2	EWNA_D2540IES	EWNA_D2550,IES
	E2	Asymmetric Narrow	10,960	11,010	123	123	2-0-2	2-0-2	EWNA_E2540IES	EWNA_E2550IES
	F2	Asymmetric Narrow	13,020	13,080	148	148	2-0-2	2-0-2	EWNA_F2540IES	EWNA_F2550IES

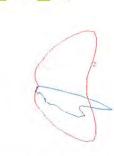
\*Rating values for B and G are based on rated lumens and may vary due to flux tolerances.

# **Photometrics**

#### EWNA Type IV - Asymmetric Forward (F4) 12,380 Lumens, 5000K (EWNA\_F4550\_.IES)

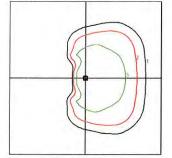


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

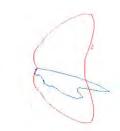


 Vertical plane through horizontal angle of maximum candlepower at 45°
 Vertical plane through horizontal angle of 72.5°

#### EWNA Type IV - Asymmetric Forward (A4) 3,750 Lumens, 5000K (EWNA\_A4550\_-120-277V.IES)

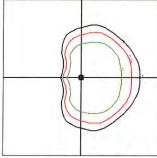


Grid Distance in Units of Mounting Height at 15' Initial Footcandle Values at Grade

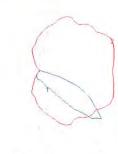


 Vertical plane through horizontal angle of maximum candlepower at 45°
 Vertical plane through horizontal angle of 72.5°

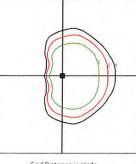
#### EWNA Type III - Asymmetric Wide (F3) 13,500 Lumens, 5000K (EWNA\_F3550\_.IES)



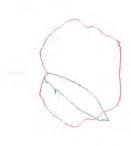
Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade



 Vertical plane through horizontal angle of maximum candlepower at 20°
 Vertical plane through horizontal angle of 52.5°

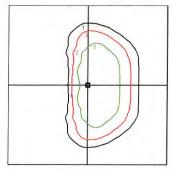


Grid Distance in Units of Mounting Height at 15' Initial Footcandle Values at Grade

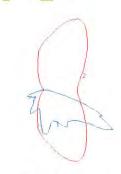


 Vertical plane through harizontal angle of maximum candlepower at 20°
 Vertical plane through horizontal angle of 52.5

#### EWNA Type II - Asymmetric Narrow (F2) 13,080 Lumens, 5000K (EWNA F2550 .IES)

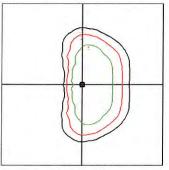


Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

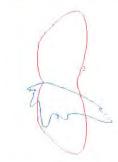


 Vertical plane through horizontal angle of maximum candlepower at 65°
 Vertical plane through horizontal angle of 60°

#### EWNA Type II - Asymmetric Narrow (A2) 3,960 Lumens, 5000K (EWNA\_A2550\_-120-277V.IES)



Grid Distance in Units of Mounting Height at 15' Initial Footcandle Values at Grade

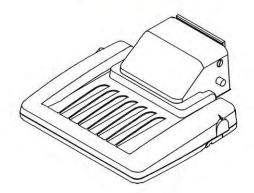


 Vertical plane through horizontal angle of maximum candlepower at 65°
 Vertical plane through horizontal angle of 60°

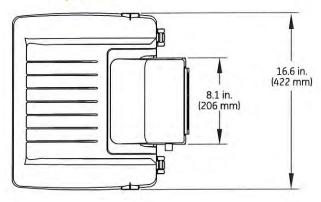
#### EWNA Type III - Asymmetric Wide (A3) 4,090 Lumens, 5000K (EWNA\_A3550\_-120-277V.IES)

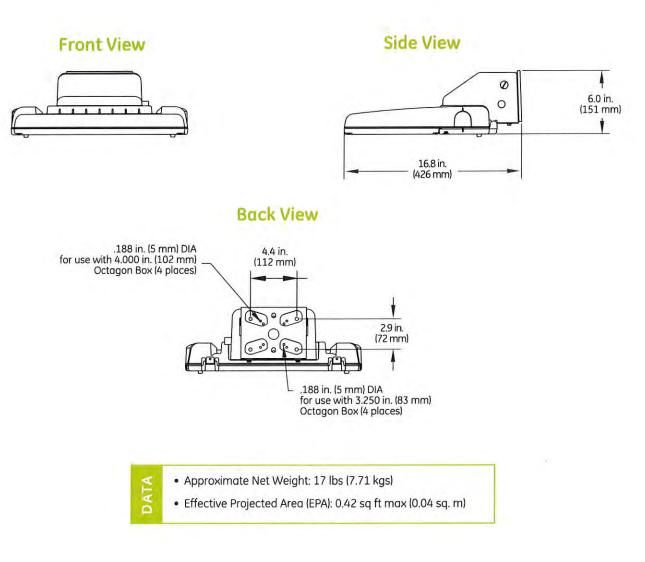
# **Product Dimensions**

# **Isometric View**



# **Top View**

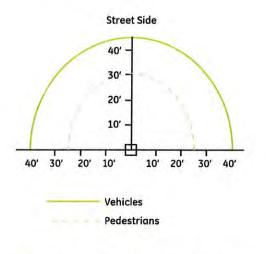




# **H-Motion Sensing Option:**

- Intended for mounting applications between 8-25ft.
- Provides a coverage area radius for walking motion of 15-20ft (4.57-6.10m).
- Provides 180° of coverage (~180° is blocked by the wall).
- Delivered factory setting of 50% dimmed light output with no occupancy.
- May be reprogrammed using additional remote programmer. Remote Programmer part number: WS FSIR-100 PROGRAMMER (197634).
- Photoelectric control is integrated through the motion sensor, and is offered as standard.

# Sensor Pattern:



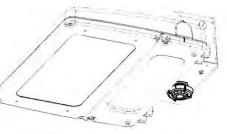
Sensing Pattern Wall Pack Fixture 8 – 25 ft.



#### www.gelighting.com

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OLP3079 (Rev 09/28/15)









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#### Products CASTALDI D20 duetto D20 duetto/T3 D20/T3-18VLWW-EB-AL

#### D20 duetto D20/T3-18VLWW-EB-AL

#### **TECHNICAL DATA**

GEN	<b>IERAL</b>
-----	--------------

Item code
<b>Place installation</b>
Name
Note
Standard colour
Environments

D20/T3-18VLWW-BB-AL outdoor D20 duetto/T3 / D20/T3-18VLWW-BB-AL wall mounted Patented orbital aiming system VOLVENDO. AL - aluminium grey urban landscape, street lighting, façades and architectural works, places of worship



Data sheet

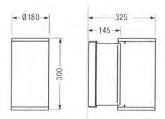
CASTALDI

#### PHYSICAL

Installation type	wall mounted	
Mounting type	wall surface, wall bracket	$\left(\frac{1}{2}\right)$ IP66 IK08
Painting	Polyester powder coating, with a pluri-processed	(]0.5m
	against corrosion (passed the exposure of over 1500	
	hours in a saline mist environment).	
Screws	AISI 304 stainless steel screws.	L
Seals	Silicone Rubber.	00
Body	Control gear box in die-cast, corrosion resistant,	
	aluminium. Extruded aluminium cylinder.	

#### DIMENSIONS

H: Total height device (mm) D: Total diameter device (mm) Weight (kg) Volume piece packed (m3) 300 180 6,2 0,024



#### **OPTICAL SYSTEMS**

Emission Opening beam Adjustable Tilt Optical System direct/indirect elliptical Yes ±15° VOLVENDO Safety tempered glass diffusers.



ALLON A



# Data sheet

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#### **ENERGY SAVING**

This luminaire contains built-in LED lamps The lamps cannot be changed in the luminaire



#### SOURCES

Source Type	Source Power	System Power	Source	Lamp Socket	Sources Temperature Colour	Nominal Flux	Output Flux	Source description
LED		44,8W		÷	3000K	-	2480 lm	

#### ELECTRICAL

Ballast type	Electronic
Mounting ballast type	Integral
Line input	Cable entry with gland for H07RN-F (EN 60598-1) wire
	with diameter between 7,5 and 12 mm.
Voltage	220-240V
Frequency	50-60Hz

#### NORMS / DIRECTIVES

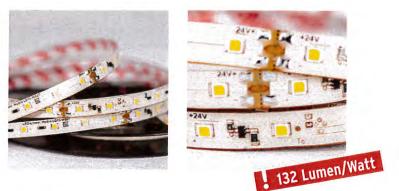
Norms

EN 60598-2-5

ALLAN .

200

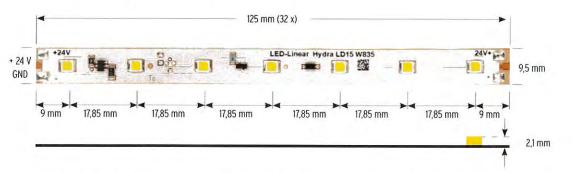
# VarioLED™ Flex HYDRA LD15



#### 2.000 K 2.000 K 2.000 K 3.000 K 3.000 K 2.000 K 2.000 K 2.000 K 2.000 K 2.000 K

15,36 Watt/meter
2.034 lumen/meter (lm/m)
One Bin Only: 3 MacAdam
Ra/CRI 85

# Aufbau & Maße Assembly & measurement



# Elektrische & Optische Betriebsdaten Electrical & optical data

Abmessungen Dimensions	4.000 mm x 9,5 mm x 2,1 mm		
Teilungsmaβ Step length	125 mm/7 LED		
Leistung Power	61,4 W/15,36 Watt/meter		
Effizienz Efficacy	bis zu/up to 132 lumen/Watt		
Anzahl LED Number LED	224 LED, 17,85 mm LED pitch		
Spannung Voltage (V)	24 Volt (23 V <sub>min</sub> , 25 V <sub>max</sub> )		
Strom Current	2,56 A/80 mA per step		
Temperatur Temperature	tc <sub>min</sub> = -25°C, tc <sub>max</sub> = +80°C		
Lagertemp. Storage temp.	t <sub>min</sub> = -30°C, t <sub>max</sub> = +85°C		
Außentemperatur Ambient temp.	$ta_{min} = -25^{\circ}C, ta_{max} = +45^{\circ}C$		
the second s	nin nox		

VarioLED™ Flex HYDRA LD15	Art. #	Lumen/meter (Im/m)	Ra CRI	R9	Farbtemperatur Color temperature (K)
W820 NEW	10405	1.135	85	30	2.000
W824	10376	1.230	85	30	2.400
W827	10325	1.683	85	20	2.700
W830	10324	1.797	85	20	3.000
W835	10323	1.892	85	20	3.500
W840	10322	1.937	83	20	4.000
W850	10321	2.034	83	10	5.000

# Tj Away®

Keine zusätzliche Kühlung über Al-Profil notwendig.

No need for additional heat sinking on Al profile.



180

Lebensdauer Lifetime

LM 79 konform LM 79 compliant

LM 80 konform LM 80 compliant

Nähere Erläuterungen zu Änderungen, Grenzwerten und Schwankungen im Herstellungsprozess finden Sie im LED Linear™ Systemkatalog, Seite 532.

For more details regarding catalogue changes, min and max data sheet values and production toler-ances see the LED Linear  $^{\rm TM}$  system catalogue, page 533.

# Ausschreibungstext Specification text



#### VarioLED™ Flex HYDRA LD15

24 V, flexibles LED Modulband (Stepmaβ = 125 mm/4,91") mit reflektierender, weißer Oberfläche und selbstklebenden 3M Klebeband auf der Rückseite. Japanische LED höchster Qualität. Mit 2.034 lm/m bei 15,36 W/m ergibt sich eine Effizienz von 132 lm/W. 120° Abstrahlwinkel.

Sehr gute Farbwiedergabe mit Ra 85. "One Bin Only" garantiert konstante Farbtemperatur und höchste Lichtqualität bei einer Lebensdauer von >37.000 h (L80).

Einlagiges, flexibles Leiterplattenmaterial (FPC) mit LED Linear™ Tj Away® Technology für ein optimales Wärmemanagement. Konstanter Lichtstrom und verlängerte Lebensdauer durch auf der Leiterplatte integrierte Konstantstromquelle. Geschützt gegen elektrostatische Entladung +/- 2.000 V. Made in Germany.

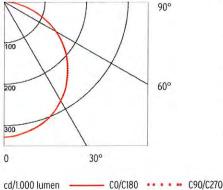
#### VarioLED<sup>™</sup> Flex HYDRA LD15

24 V, flexible LED strip (step measurement = 125 mm/ 4.91") with reflective, white surface and 3M adhesive tape on the back. Japanese LEDs of the highest quality. 2,034 lm/m at 15.36 W/m result in an efficiency of 132 lm/W. 120° beam angle.

Very good color reproduction with CRI 85. "One Bin Only" within 3 MacAdam guarantees constant color temperature and high light quality at a lifetime of > 37,000 hours (L80).

Single-layer, flexible circuit board material (FPC) with LED Linear<sup>™</sup> Tj Away<sup>®</sup> Technology for optimal heat management. Constant light output and extended lifetime thanks to an integrated constant current source on the circuit board. Protected against electrostatic discharge +/- 2,000 V. Made in Germany.

# VarioLED™ Flex HYDRA LD15



Binning

# Jook 2000 2000 2000 CONTROL OF CO

# Zubehör Accessories

#### erforderlich required

241	Konverter Power
DC	supply unit

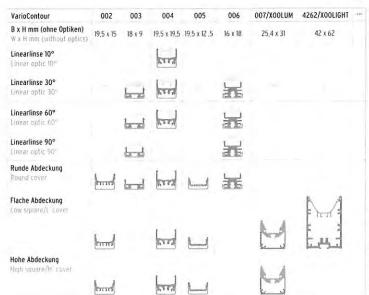
Seite 519 ff page 519 ff



Seite 460 ff page 460 tf



#### Optiken/Abdeckungen Optics / Cover



Details siehe Seite 474 ff. Details on bage

Seite 506 ff page 506 ff Al-Profil AL-Profil AL-Profile



Cover Opal

- 40 % Lumen

Seite 474 ff page 474 fi

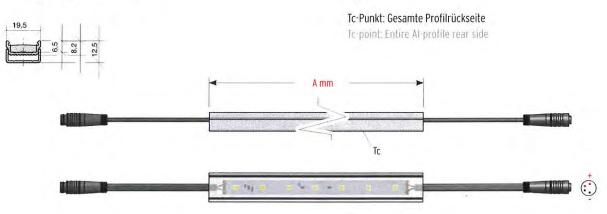
# VarioLED™ HYDRA LD15 IP67



Wasser- und UV-geschützte Linearleuchte im Aluminiumprofil in bis zu 2 m Länge im Polyurethanverguss mit 110 mm IP67 Steckverbinder an beiden Enden.

Up to 2 m length, water & UV resistant LED Luminaire with polyurethane encapsulation in Al profile and 110 mm IP67 plug in connectors on both ends.

# Abmessungen & Längen Dimensions & available length.



 $A = N \times 125 + 19$ ;  $N = 1 \dots 15$ ;  $A_{min} = 1 \times 125 + 19 = 144$ ;  $A_{max} = 15 \times 125 + 19 = 1.894$ 

Übersicht VarioContour IP67 ab Seite 474. Overview VarioContour IP67 from page 474.

# Bestellnummer Order Code: VarioLED HYDRA LD15 Wxxx/A IP67

# Elektrische & Optische Betriebsdaten Electrical & optical data

VarioLED™ HYDRA LD15 IP67	lumen/meter (Im/m)	Farbtemperatur* Color temperature* (K)
W820 NEW	762	2.600
W824	818	3.100
W827	1.120	3.600
W830	1.195	4.000
W835	1.258	4.600
W840	1.288	6.300
W850	1.352	10.000

\* Bei IP67 Produkten können Toleranzen bei der Farbtemperatur auftreten. Nähere Erläuterung dazu finden Sie auf S. 584.

to rase of IPCF products, tolerances in the color temperature can occur. For further explanation, please see page 584

# Zubehör Accessories

erforderlich required



optional optional



Es gelten die selben Daten wie für VarioLED™ Flex HYDRA LD15 mit folgenden Ausnahmen: 30% Lichtverlust und Farbverschiebung im Vergleich zum nicht vergossenen LED Strip.

Nähere Erläuterung zu den technischen Daten des PU-Schutzes im LED Linear™ Systemkatalog, Seite 584.

Same data as for VarioLED<sup>1</sup>" Flex HYDRA LDI5 apply, except: 30% light loss and color shift compared to non-encapsulated LED strip.

More details regarding the PU-protection in the LED Linear's system catalogue page 584

#### Bitte sprechen Sie uns an für kundenspezifische Anpassungen, wie z. B. Kabellängen und Stecker.

Please ask for custom specific adaptions like cable length and pluga

· · ·