

SECTION 2 0110 # RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

GENERAL

1.1 RELATED DOCUMENTS

A. D&'()\*+, '\*- +.\*.&' / 0&12),)1\*, 13 45. C1\*4&'647 )\*6/8-)\*+ \$.\*.&' / '\*- S800/.9.\*4'&:  
C1\*-4)1\*, '\*- D)2),)1\* 01 SO.6)3)6'4)1\* S.64)1\*,7 '00/: 41 45), S.64)1\*%

B. N1&45 (. ,4.&\* IT/IS S4 '\*- '&- , 31&&'6. ( ':, '\*- 6'; / . 4&' : , 31& T./ .619 98\*)6'4)1\*, 6'; /)\*+%

1.2 SUMMARY

A. S.64)1\* I\*6/8-., :

- 1% M.4' / 61\*-8)4,7 48;)\*+7 '\*- 3)44)\*+,%
- 2% N1\*9 .4' //)6 61\*-8)4,7 48;)\*+7 '\*- 3)44)\*+,%
- "% M.4' / ()&. ( ':, '\*- '8<)/)'&: +844.&,%
- =% S8&3'6. &'6. ( ':,%
- !% P1>. T5&8 A,, .9 ;/).,%
- % B1<.,7 3/11& ;1<.,7 . \*6/1,8&.,7 '\*- 6';)\*.4,%

B. R./'4.- R.?8)&.9 . \*4, :

- 1% D)2),)1\* 2 S.64)1\* @U\*- .&+&18\*- D864, '\*- R'6. ( ':, 31& E/.64&6'/S: ,4.9 ,@ 31& .<4.&)1&  
-864; '\*>,7 9 '\*51/.,7 '\*- 8\*- .&+&18\*- 84)/4: 61\*,4&864)1\*%
- 2% N1&45 (. ,4.&\* U\*)2.&,4): IT/IS S4 '\*- '&- , 31& 0'45 ( ':, 31& E/.64&1\*)6 S'3.4:7  
C19 98\*)6'4)1\*, '\*- S.68&)4: S: ,4.9 ,%

1." 12.2601 ( ) ] .3567\*, '501 ( ) -1786.39 ( T)-16.7162 ( S)-9.00205 ( ) ] TJU14.4229 -23.52 T dU [ ( A)2.58095 ( %  
4' / 618-8)\*%

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E% EMT: C190/: ( )45 ANSI C80% " ' \* - UL EJE%

F% FMC: C190/: ( )45 UL 1K A)\*6#61 ' 4. - ,4. ./%

\$% LFMC: F/.<);/. ,4. ./ 61\*-8)4 ( )45 PVC F' 6>.4 ' \*- 6190/(:)\*+ ( )45 UL " 0%

H% M8/4)#61\*-8641& C ' ;/. 4:0. MC ' \*- AC: U, . 13 MC 1& AC 6' ;/. ), \*14 0.&9)44. - 8\*- .& ' \* :

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1% F'641&:#3';&)6'4.- '\*- # (&.- ',,. 9 ;/: 13 ;./1 (#3/11& f8\*64)1\* ;1< ()45 98/4)#65' \*\* ./ .-7  
45&18+5#3/11& &'6. ( ':/3)&.,410 8\*)4 ' \* - -. 4'65' ;/. 9 '465)\*+ 3/11& ,.&2)6. 184/. 4 ' , ,. 9 ;/:%  
2% S4. ./ , .&2)6. 5. ' - '\*- f8\*64)1\* ;1<%  
"% P1> .#45&8 ;1< 3)44)\*+ , 5'// 9')\*4')\* ' 9)\*\989 4(1#518& 3)&. &'4)\*+%

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C% M)\*)989 R'6. ( ' : S)A.: "/=#)\*65 4&' - . ,)A. 31& ;&' \*65 6)&68)4,7 one-inch embedded in slabs7 '\* - five-inch for primary services% M' <)989 3)// 31& ;&' \*65 6)&68)4 61\*-8)4,: "0S% M' <)989 3)// 31& 3. . - .& 61\*-8)4,: 0.& 61- .%

D% M)<)\*+ -)33.&.\*44:0., 13 61\*-8)4, )\*-),6&9)\*'4./: )\* 45. , '9. , : ,4.9 ), 0&15);)4. -%

E% R'6. ( ' : F)44)\*+, : C190'4);/. ( )45 &'6. ( ' : , '\*- ,8)4' ;/. 31& 8, . '\*- /16'4)1\*%

1% R)+)- '\*- 1\*4.&9 -.)'4. S4. ./ C1\*-8)4: U, . 45&. ' - - &)+)- ,4. ./ 61\*-8)4 3)44)\*+, 8\*/. , , 145.& ( , . )\*-)-6'4. -% C190/: ( )45 NEMA FB 2%10%

2% EMT: U, . ( '4.&4)+54 6190&., ,)1\* 4:0. ,4. ./ 3)44)\*+, ( )45 )\*,8/'4. - 45&1'4% C190/: ( )45 NEMA FB 2%10%

"% F/.<);/. C1\*-8)4: U, . 1\*/: 3)44)\*+, /),4. - 31& 8, . ( )45 3/.<);/. 61\*-8)4% C190/: ( )45 NEMA FB 2%20%

F% I\*,4'// ,8&3'6. &'6. ( ' : , 1\*/: ( 5.&. )\*-)-6'4. - 1\* D&' ( )\*+,%

\$% D1 \*14)\*,4'// \*1\*9 .4'//)6 61\*-8)4 ( 5.&. '9;). \*44. 90.&'48&. .<6. . - , 120 - . + F G=J - . + CH%

"%2 INSTALLATION

A% C190/: ( )45 NECA 1 '\*- NECA 101 31&)\*,4'//')4)1\* &.?8)&. 9.\*4, .<6.04 ( 5.&. &. ?8)&. 9.\*4, 1\* D&' ( )\*+, 1& )\* 45), '&4)6/. ' &. ,4&64.&& C190/: ( )45 NFPA E0 /)9)4'4)1\*, 31& 4:0., 13 &'6. ( ' : , '/1 ( -84.16666 ( &)-4. 9 9834 ( ' )020.3334 ( ' )020.3334-4. 9 9834 ( %)-11. 07 ( 0)0.43 ( ( )9 .7207 ( 4)0.356603 ( ' )0.7' \*\* . 100

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L% A// ,8,0.\*,)1\* ,:,4.9, 98,4 ;. 58\*+ )\*- .0.\*-.\*4/: 3&19 ,4&8648&.K MO)++:; '6>N ,8,0.\*,)1\* ,:,4.9, 31&&'6. (':, '&. 0&15);)4.-%

M% PVC R'6. (':, B./1 ( S/';,:

1% R8\* 61\*-8)4 /'&+. & 45' \* 1#)\*65 G2E#9 9H 4&'-. ,)A.7 0'&'//. / 1& '4 &)+54 '\*+/. , 41 9')\* &.)\*31&6. 9.\*4% W5.&. '4 &)+54 '\*+/. , 41 &.)\*31&6. 9.\*47 0/'6. 61\*-8)4 6/1, . 41 ,/'; ,8001&4% S.68&. &'6. (':, 41 &.)\*31&6. 9.\*4 '4 9' <)98910#3114 G"#9H)\*4. &2' /,%

2% A&&'\*+. &'6. (':, 41 6&1, , ;8)/-)\*+ .<0'\*, )1\* F1)\*4, '4 &)+54 '\*+/. , ( )45 .<0'\*, )1\* 3)44)\*+,% "% A&&'\*+. &'6. (':, 41 >. .0 ' 9)\* )989 13 " )\*65. , GE! 9 9H 13 61\*6&.4. . \*6', .9 . \*4)\* ' // -)&.64)1\* ,%

=% D1 \*14 .9 ;.- 45&. ' -/., , 3)44)\*+ , )\* 61\*6&.4. 8\*/., , ,0.6)3)6'//: '00&12.- ;: 45. C5).3 E/.64&6)' \* 31& . '65 ,0.6)3)6 /16'4)1\*% F)44)\*+ , ,5'// ;. 61\*6&.4. 4)+54%

N% PVC L'&+. D)' 9.4.& R'6. (':, B.\*-)\*+ R'-)8,:

1% F18&#)\*65 61\*-8)4: " !N 9)\* )989%

2% F)2.#)\*65: !ON 9)\* )989%

"% S)<#)\*65: 1N 9)\* )989%

O% S48;#80, 41 A;12. R.6. , , - C.))\*+ ,:

1% U, . EMT 31&&'6. (':, %

2% U, . ' 61\*-8)4 ;8,5)\*+ 1&)\* ,8/'4.- 3)44)\*+ 41 4.&9)\* '4. ,48;#80, \*14 4.&9)\* '4.- )\* 58; , 1& )\* ' \* . \*6/1,8&.%

P% T5&. ' - . - C1\*-8)4 J1)\*4,7 E<01, . - 41 W.47 D' 907 C



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B% J8\*64)1\* ;1<., 13 -)33.&. \*4 ,:,4. 9 , ,5'// ;. )-. \*4)3).- ;: 61/1&, )\*-)6'4. - ;./1 (% B1< '\* - 612.& ,5'// ;. 0')\*4. - 0&)1& 41 '44'65)\*+ )-. \*4)3)6'4)1\* /' ;./,%

C% P&12)- . 0.&9 '\* . \*4 \*' 9.0/'4. , 31& '// 08// '\* - F8\*64)1\* ;1<., )-. \*4)3:)\*+ 6)&68)4,7 21/4'+.7 '\* - ,18&6.%

D% W5.&. 61\*-8)4) , .<01, . - ) \* 08;/)6 1& 3)\*),5. - '&.' ,7 45. 61\*-8)4, ,5'// ;. 0')\*4. - 41 9 '465 45. '-F'6. \*4 ('// 1& 6.)/\*+ 61/1&% A, ,16)'4.- F8\*64)1\* ;1<., '\* - 612.&, ,5'// ;. 0')\*4.- )\*,)-. 41 9 '465 N1&45 ( . ,4.&\* ,4' \* - '&- 61\*-8)4 61/1& 61-. ;./1 (%

E% R'6. ( ': , '\* - 6180/.&, 13 -)33.&. \*4 ,:,4. 9 , ,5'// ;. )-. \*4)3).- ;: 61/1&% R'6. ( ': , 80 41 =N ,5'// 5'2. ) ## ! "%

1% R'6. ( ': , 80 41 =N ,5'// 5'2. ,1/- 61/1& ( )45)\* ./64&)6' / &119 , '\* - 2'8/4,%

2% R'6. ( ': , /' &+. & 45' \* =N ,5'// ;. )-. \*4)3).- ;: 0.&9 '\* . \*4 , \*' 0#1\* 61/1& ; '\* - , )\*,4'//.-

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