

FINAL
10/25/2022

!"#\$%&'()*+,-!+''%
&/01%234%2522%

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"##\$!%&'()*##*+!,#)'-(%.'()*!/0(12#3(1&%24!5+!.'4\$(*'+!%143*6!*%\$.7(26%1!84(.'.9!:'!6.!%*!
-##*)!#!.'%*\$!;(&#)(!%11!#&!5#4!%!.!5#4)!<)(.6\$(*'9!!!

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:!=%*!'#!'-%*>!?)9!,%*25!0)6*>1(!%*\$!'-(!@%24!5!A(*%'(+!7#*.#).!#&!'-6.!(B(*'+!&#)!6*B6'6*8!3(!
'#!\$(16B!)!35!&6&'!A'%'(#!&'!-(!C*6B().6'5!%\$\$)(.9!:'!8)(%15!%77)(26%'(!'-6.#!#77#)'4*6'59!!

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! ! ! ! 6#*7%#89*&:6\$7;\$<\$*''%

%

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6*214\$6*8!(. '%;16.-6*8!<(!) 0 (11*(..!U#%2-(.9!L-(.(!2#%2-(.!)(!477(!)J1(B(1!4*\$()8)%\$4%'(!*\$!

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0 (>15!G2%\$(3 62!G\$B6.#)!3 (('6*8.!#!.-%)(! ; (.!'7)%2'62(.!%*\$!7)#&(.6#*%!\$(B(1#7 3 (*! #77#)'4*6'6(.!'-%'!=611!6 3 7%2!)((' *'6#*9!!

!

:*2)(%.\$!4.%8(!#&'!-(!A'%)&6.-!G\$B6.6*8!.#&'=%)(!'#!%\$B%*2(!.'4\$(*'!.422(..!%*\$!)((' *'6#*!;5! 6 3 7)#B6*8!2# 3 3 4*62%'6#*!; ('=(('!&%24! '5+!%\$B6.#).!%*\$!2% 3 74.!477#)!.'%&&!;5!7)#B6\$6*8!(%)!5! %1()'.!#&!.'4\$(*'!2-%11(*8(.9!

!

] (#)8%*6b%'6#*!#&'!-(!] (' *'6#*!%*\$!A422(..!U# 3 3 6''(('#!6\$(*'6&5!.')%'(86(.!%*\$!6*6%'6B(.!'-%'! ; ('!)!477#)!.'4\$(*'!(*8%8(3 (*'!&#)!&6). 'J5(%)!&)(. - 3 %*+!)%*.&()!%*\$!2#*!6*46*8!.'4\$(*' .9!

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G\$(K4%'(15!.'%&&6*8!<)#h(2!'A422(..!%*\$!<)#5(2'#!<%PF%*(9!

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O4)!8)%\$4%'6#*!)%(' .!%1.#!*(((\$!'#!6 3 7)#B(9!F##>6*8!'!#4)!8)%\$4%'6#*!)%(' .!'-)#48-!%*(K46'5! 1(*.+'!-()(!%)(!21(%)!8%7.9! 0 -61(!=(!%)(!%M6.7%*62JA()B6*8!%*\$!R6*#)6'5!A()B6*8!:*.'6'4'6#*+!=(! %)(!*#*!8)%\$4%'6*8!#4)!D1%2>!%*\$!F%'6*k!. '4\$(*'.'!%'!-(!)%'(!.=(!.-#41\$!; (9!!

!

0 (!3 4.'!\$#!; ('()!+%*\$!=(! =611!\$#!; ('()9!!!

!

0 -(*!=(!8)%\$4%'(!.'4\$(*' .+!=(!>*#='!-(5!2#*!6*4(!#!.422(((\$9!G22#)\$6*8!'#!'-(! 3 #.'!)(2(*'! C9A9! , (= .!%*\$! 0 #)!\$!] (7#)'!SD(.!'U#11(8(.T!74;162%'6#*+! , #)'-(%.')!*!=% .!&6&' -!% 3 #*8!:116*#6.!)(86#*%1!74;162!4*6B().6'6(.!6*!.#26%1! 3 #;616'5!)%*>6*8!%*\$!ge' -!% 3 #*8!%11!R6\$=(.!'!)(86#*%1! .2-##1.+!=-62-!\$(3 #*.')%(' .!'-%'!=- (*!#4)!.'4\$(*' .!8)%\$4%'(+!-(5!3 #B(!47!'-(!.#26#(2#*# 3 62! 1%\$\$()9!O4)!.'4\$(*' .P!.422(..!6 3 7%2'.!'-(6)!&% 3 616(.!# * 7!'-(6)!2# 3 3 4*6'6(.9!

!

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0 (!%)(!.')(*8' - (*6*8!#4)!)(1%'6#* . -67.! =6' -!2# 3 3 4*6'5!8)#47.!%*\$!*##*7)#&6' .!.42-!% .!M#7(!
U-62%8#+= -62-!#&&().!. '4\$(*'.!&)# 3!. (1(2!'74; 162!-68-!.2-##1.!'- (!#77#)'4*6'5!'#!)(2(6B(!&4!1!
'46'6#*!%*\$!-#4.6*8!.2-#1%). -67.!#!%' (*\$! , E:C9!!

!

0 (!%)(!%1.#!6*2)(%.6*8!#4)!(&&#)' .!#!(2)46'!6*'()*%'6#*%1159! 0 (!24))(*'15!-%B(!7%)*'(). -67.! =6' -!
gY!4*6B().6'6(.!%)#4*\$!' - (!=#)l\$9! 0 (!%)(!.6*8!(&&#)' .!#!(I7%*\$!7%)*'(). -67.!6*!A#4' -!
G 3 ()62%!%*\$!%1.#!)(2(*'15!.68*(\$!%R (3 #)%*\$4 3 !#&!C*\$'(). '%*\$6*8! =6' -!' =#!-68-!.2-##1.!6*!
A#4' - !N#)(%!%*\$!' =#!4*6B().6'6(!6*!U#1# 3 ; 6%+!A#4' -!G 3 ()62%!V' - (!:*. '6'426#*!C*6B().6%)6%!
A%1%b%)!5!M())(%)W9!

!

O4)! ? 6B6.6#*!#&!R %)>('6*8!%*\$!U# 3 3 4*62%'6#* .+!4*\$'!)6' .!* (=!EI(24'6B(!?6)(2'#)!U-)6.!
U-6l\$().+!6.! =#)>6*8!3 #)(!2!#.(15! =6' -!E*)#11 3 (*'!' -%*!(B()!; (&#)('!#)#1!#4!'3 %)>('6*8!
2% 3 7%68* .!#!8(*'%)'(!%=%)(*(. .+!(*2#4)%8(!*(=!%77162%'6#* .+!%*\$!%)%2!'!*(=!4*\$'!)8)%\$4%'(+!
8)%\$4%'(!%*\$!%)%*. &()!. '4\$(*'.!#! , E:C9!!L-(!E*)#11 3 (*'!'%*\$!R %)>('6*8!'(% 3 .!%)(!\$(B(1#76*8!
3 #)(!6*'(*'6#*%1!A7%*6. -!1%*84%8(!2# 3 3 4*62%'6#* .!#!; ('')!)(%2-!7)#.7(2'6B(!. '4\$(*'.!&)# 3 !
7)(\$# 3 6*%*'15!A7%*6. -J.7(%>6*8!-#4.(-#l\$.9!A(B()!#&!#4)!6*.')42'#).!6*!' - (!? (7%)' 3 (*'!#&!
0 #)!\$!F%*84%8(.!(*)] ; :297.191- 0 .25 0 687.T67(-)89.92 3 529Tm/TT6lTf(J)TjETQd .24 0 0 0 .2418589.929.92c* 0

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L-)#48-!%2#3 ;6*%'6#*!#&!6*2)(%.(!\$)(16%*2(!#*!#.'!)(B(*4(!8)%*'.!'-)#48-!UO^:?J_`!)(16(&!
&4*\$6*8+!%*!6*2)(%.(!6*!%*'6267%'(\$!6*')(.!6*2#3(+!-68-(J)'-%*J%*'6267%'(\$!#2247%*25!6*!L-(!
,('a=-62-!1(%\$.'!#!%*'6267%'(\$!)\$42'6#*!6*!L-(!,('!#2247%*25!2#*')6;4'6#*+!\$(1%5(\$!
-6)*8!#&!B%2%*'!7#.6'6#*+.!1636'(\$!)(.!)42'4)6*8!#&!#7())%6#*+.!%*\$!.#3(!)\$42'6#*!6*!#*#*J
7()).#**(!!(I7(*.(.+=(!=())(!% ;1(!#!;%1%*2(!'-(!;4\$8('9!!

!

L-(!)(B6.(\$!;4\$8('!=%.!)(B6(=\$!;5!'-(!D#%)\$!#&!L)4.'((.!'*\$!7%..(\$!#*!O2'9!__9!0(!%)(!
-#7(&4!==(=!61!#*#*!*((\$!#!)(B6.6!'!-6.!(I()26.(!6*!'-(!&4'4)(9!

!

:!%3!8)%'(&4!#!^62(!<)(.6\$(*!#&!@6*%*2(!%*\$!G\$36*6.')%'6#*!R%*6.-!N43%)!%*\$!'-(!@6*%*2(!
%*\$!G\$36*6.')%'6#*!'(%3!&#)!-6. !\$6&&6241!'=#)>9!R#B6*8!&#)=(%)\$+!6!6.!)2)6'62%1!'-%'!(B()5#*(!
2#*')6;4'(1%.!=(!*B6.6#*!.')%'(86(.!'#!%\$\$(.!.#4)!.)42'4)%1!\$(&626!'%*\$!637)#B(!(*)#113(*!'%*\$!
)('6#*!'-(;5!637)#B6*8!#4)!&6*%*26%1!7#.6'6#*9!!

!

06'-6*!'-(!*('!&(!=!3#*!'-.+=(!=61!; (86*!'-(!;4\$8('6*8!7)#2(.!.!6*!A7)6*8&6(1\$)G.15#4!>#*#=#+!
#4)!.'%'(1&4*\$6*8!2#*')6;4'(.!%77)#I63%'(15!cd i !#&!#4)!;4\$8('9!:%3!'-%*>&4!&#)!A(*6#)!

EI(24'6B(!?6)(2'#)!#&! "#B() *3(*!](1%'6#*!.!A4!(53%!(<)(b!&#)!-(!)(%\$().-67!%*\$!\$B#2%25!
=#)>!=6'-!;!16*#6.!!(86.1%#).9!:'!6.!)2)6'62%1!'-%'!#4)!!(1(2'(\$!#&&626%1.14*\$\$.)'%*\$!'-(!7#.6'6B(!
637#)%*2(!#&!'-(!.'%!(!\$#11%).'!-%'!637%2!#4)!4*6B().6'5!%*\$!#4)!.'4\$(*.9!

!

!" - # " \$; + 8 % B - + & - + " + \$! %

!

L-(!1%.'!%)(%!:!=61!\$6.24..!6.!.(B()!#&!#4)!.)%'(862!7)6#)6'6(9!G'!'-(!#7!#&!'-(!16.'!6.!.(1(2'6*8!%!
(=!<)#B#.!'!%\$!^62(!<)(.6\$(*!&#)!G2%\$(362!G&&6)9!L-6.16.!.!2)6'62%1!7#.6'6#*!&#)!#4)!

4*6B().6'5+!6.1637#)%*!'!#!-(!#B()!1!.422(.!.#&!#4)!6*.'6'4'6#*!%*\$!'-(!\$(B(1#73(*!'#&!#4)!*(=!
A')%'(862!<1%*9!^<!D4.'(J)06116%3+.!%*\$!'-6.15(%P.!G4\$)(5!](5*#1\$.! ?6.'6*846.-(\$!L(%2-6*8!
G=%)\$)(2676(*'+!?)9!<%3!"(\$\$(.+=61!2#J2-%6)!'-6.!.(%2-9!!

!

A'4\$(*'.a :!-%B(!-(%)\$!5#4!/F%.!15(%)+4*\$\$(!)-(!!(%\$().-67!#&!'-(!A'4\$(*!' "#B() *3(*!
G..#26%'6#*!<)(.6\$(*!E\$=6*!R(\$6*%+!'-(!A"G!-(17(\$!3(!%*\$!'-(!3(3;().!#&!'-(!2%;6*('!
4*\$\$.)'%*\$!&#)3!%!.!4\$(*!7().7(2'6B(+!'-(!\$(.6)(!%*\$!)%6#*%1(!&#)!%&#)3%1!%-1('62.!)7)#8)%3!
;(6*8!)(6*.'%(\$!%!',E:C9!?)9!!R(*%!=61!().B(!%!'!-(!2-%6)!#&!'-(!C*6B().6'5!G'-1('62.!

EI71#)#)5!U#336''(+!6*B(.!68%'6*8!-#=#(!368-'!)(. '%;16.-!%*!'!-1('62.!)7)#8)%3!%*\$!-#=#!
.42-!%!7)#8)%3!2%*!2#*')6;4'(!#!)(2)46'3(*'+!(*)#113(*'+!%*\$!)(('6#*!(&&#)'+!%!.!(11!%!
6*B68#)%'(!4*6B().6'5!16&(16*!'!*(=!%59!

!

G*#-(!.16.!(17%*\$6*8!#4)!(\$42%'6#*%1!7)#8)%3.!'#!3('0.2(*\$!6()0.2()!)0.2(.2(#!3))-0.2(!#&!')0.

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!!

0 (!%)(!%5(%)!6*'#!\$(B(1#76*8!%!(= ! \$ # 2 '#)%1!7)#8)%3 !6*!C);%*!E\$42%'6#*!l(\$!;5!?)9!N%3 %4!
]%. -6\$9!L-(!7)#8)%3 !=611!;(!8(%)(#!#=#)\$!%=6\$(!)*8(!#&!=#)>6*8!7)#&(.6#*%1.!=-#!%63 !'#!
637%2'!'-(!2#3 34*6'6(.!6*!=-62-!'-(5!24))(*!15!=#)>9!:'!=611!;(!%!7)#8)%3 !&#)!(\$42%'#).!%*\$!
2-%*8(3 %>().!%16>(a &)#3 !'-#.(!=-#!=#)>!6*!21%..)##3 .!#!' -#.(!6*!2#3 34*6'5!#)8%*6b%'6#* .+!
34.(43 .!%*\$!16;)%6(.9!L-(!24))624!43 !&#)!' -6.!7)#8)%3 !=611!;(!=)6'(*!' -6.!7)6*89!!

!

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3 #\$() *6b% '6#*!%*\$!)6.>! 3 6'68%'6#*!7)#h(2' .+!6*214\$6*8!* (= !&l##)6*8!*%*\$!&4)*6'4)(!6*!B%)6#4.!
;46l\$6*8. !%*\$!6*2)(% .6*8!)% 3 7!%22(. .6; 6l6'5+!% .! = (1l!% . !% !-# . '#&!7)#h(2' .! '#! . ')(% 3 16*(!M4 3 %*!
] (. #4)2(. !7)%2'62(. +!)(B% 3 7!#4)!6*B(*'#)5!2#*')#l! .5. '(3 !%*\$!478)%\$(!#4)! '(2- *#l#85! .5. '(3 .9!
0 -6l(!' - (!4*6B() .6'5!5(%)!8#'#&&!#%#!; 6'#&!%!)#2>5! . '%)! =6' -! ? YF+!C*6B() .6'5!L(2- *#l#85!