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PREFACE

The Faculty Handbook is intended to be a guide for faculty at Lamar University. It is not meant to be a comprehensive, self-contained policy document; however, it does provide a wide range of up-to-date information on significant university policies, procedures, and activities.

Approved departmental, college, and university policies or *Rules and Regulations* of the Board of Regents, Texas State University System, govern in the event of conflict with the provisions of this handbook. All Lamar instructional faculty as well as any university committee and standing body such, the Faculty Senate are advised to familiarize themselves with the *Rules and Regulations*.

This handbook is one source of information about university faculty policies, but is not a contract.

Faculty may review, offer suggestions, or make recommendations to the Board of Regents.



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&?8?:!%BCD7:@CAE!CZZ!B;A!JC@Q:C8CB?A7! ?L?CB@A! ?BE!78VZ;E77!;!!V7ZCQ?BA!<;!78VZ;E87BA!97
;<!: ?Q75! Q;Z;:5! :7CB5! @7>K?Z! ;:C7BA?AC;B5! L7BJ7:! CJ7BACAE! ?BJ! 7>V75@J@?9CZCAE5!
B?AC;B?Z!;:CLCB5!D7A7:?B!@A?AK@5!@7>K?Z!;:C7BA?AC;B!;:L7BJ7:!CJ7BACAE5!Q;B@C@A7BA! \CA=!A=
;<!\$;8VZC?BQ7! \CA=!A=7! CAZ7!211!;<!A=7!\$CDCZ!0CL=A@!#QA!;<!FGARKFFORQA@DC@ @K7J!
?BJ! ?87BJ7Jk! CAZ7! 16!;<!A=7!3JKQ?AC;B!#87BJ87BA@!;<!FGHO5! ?@! ?87BJ7Jk!47QAC;B!TPR!;<!A=7!
07=?9CZCA?AC;B!#QA!;<!FGH?!!%BCD7:@CAE!C@! Q:88CAA7J!A;! ?V;ZC@H@?B@CB?AC;B! ?BJ!
7YK?Z!;VV;:AKBCAE!<;! ?ZZ!V7:@;B@! :7L?<JZQ@5Q;Z;:5! :7ZCLC;B5!@7>K?Z!;:C7BA?AC;B5!L7BJ7:!
CJ7BACAE! ?BJ!7>V:7@75B6!@?9CZCAE5!B?AC;B?Z!;:CLCB5!D7A7:?B!@A?AK@5!@7>K?Z!;:C7BA?AC;B!;
CJ7BACAE! ?BJ!7JkQ?AC;B@? ?Q?J78CQ;:L: ?8@5!@AKJ7BAACDCAB7@BCD7:@CAE!@C;B@[

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3/U&-/(3*!-"!U304-*4!g1')!+14#;1&1'134 [!!&?8?:!%BCD7:@CAE!@=?ZZ!J8CBC@A7! ?ZZ!V;ZCQC7
?BJ!V:?QACQ7@!CB! ?QQ;:J?BQ7! \CA=!<7J7:?Z! ?BJ!@A?A7!Z?@! \CA=;KA!JC@Q:C8CB?AC;B! ?L?CB@A! ?BE
CBJCDCJK?Z! \CA@?9CZCAE5! CBQZKJCL! <?QKZAE5! ;A=7! 78VZ;E77@5! Q?BJCJ?A7@! <;!78VZ;E87BA
@AKJ7BA@!!&?8?:!@=?ZZ!V;:DCJ7!7?@;B?9Z7! ?QQ;88;J?AC;B!A;!YK?ZC<C7!CBJCDCJK?Z@! \CA=!J;QK87

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?B!C@@K7!7Z?A7J!A;!A7BK:75!V::8;AC;B5!\?L7@5!:=;K:@!;<!78VZ;E87BA5!Q;BJC!A;C;B;Bd]
:7B7?Z!;A7:8CB?AC;B!;<!A=7!<?QKZAE!87897:_@!78VZ;787BA!7BJ!;<! =C@!;:=7!78VZ;E87BA!
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CBQZKJ7!A7?Q=CBL5!7@7?:Q=5!J8CBC@A:?AC;B5!;A=7!V7:<;8?BQ7!;<V;C@7@C;B?Z!@ZZ!B;A!
CBQZKJ7!?!V7:@;B!\=;! =;ZJ@!<?QKZAE!87897!B]5!9KA!@V7BJ@!A=7!8?^;CAE!;<! =C@!;:=7!AC87!7BL?L7J!
8?B?L7:C?Z!;!@KV7:DC@;E!QACDCAC7@5!CBQZKJCB!?!V:7@CJ7BA5!V;D;@A5!DCQ7!V:7@CJ7BA5
?@@C@A?BA!DCQ7!V:7@CJ7BA5!J7?B5!B@!@C@C@A?BA!J7?B[

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U0-\$3+%03[!!!";!L:C7D?BQ7!V;Q7@ @7@!B;A!;A=7:\C@7!@V7QC<C7J!CB!A=C@! =?BJ9;];5!A=7!V;Q7JK:7!
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b0132#*\$3! U0-\$344 [! '=7! V:7@CJ7BA! @=?ZZ! J7@CLB?A7! ?! 87897! ! ;<! =C@! ;! =7!
?J8CBC@A:?A@B?=-7?:CBL!;<<CQ7!A;IQ;B@CJ7!L:C7D?BQ7@[

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*;!Z?A7!A=?B!A=C;AE!e`Pf!9K@CB7@ @!J?E@!?!<A7!A=7!L:C7D?BA!Z7?:B@!e;!CB!A=7!7>7:QC

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a[F! *3U-'14/ [! '=7!?VV;CBA87BA!;<!?B!78VZ;E77!?A!&?8?:!%BCD7:@CAE5!\=7A=7:qB!?!<KZZ

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97!8?J7!9E! '=7!'7>?@!4A?A7!%BCD7:@CAE! ,;?:J!;<!07L7BA@5!@K9^7QA!A;!Z7L?@!K7A;C7A7J!
CBA=':+\$0%&P0&U&!A=7J\$3'%&2)"4+,-(&A-)\$ [!!=7!V:7@CJ7BA!@=?ZZ!7Q;887BJ!A;!A=7! ,;?:J!
;<!07L7BA@!A=7!78VZ;E87BA! ;78VZ;E87BA!;<!<?QKZAE!87897:@!A;!97! ?\?:J7J!A7:8! ;! ?BBK?Z!
?VV;CBA7BA@5!\=;5!CB!A=7!@CJ7BA!@!;VCBA;BZZ!@!@7:D7!A=7!CBA7:7@A@!;<!A=7!KBCD7:@CAE[!!#ZZ!
B;8CB?AC;B@!<;!78VZ;E87BA!;78VZ;E87BA!8K@A!97!CB! :CACBL! ?BJ!@A?A7!A=7!B?875!A7BK:7!@A?AK@
?BJ! ?Q?J78CQ! ?QQ;8VZC@=87BA@! ;<! A=7! B;8CB77[! ! '=7! V:7@CJ7BA! ;<! A=7! KBCD7:@CAE! @=?ZZ!
J7@CLB?A7J!9E!A=7! ,;?:J!07L7BA@!9;A=!A;! ;<<7:78VZ;E87BA! ?BJ!A;! ?QQ7VA! :7@CLB?AC;B!;<!<?QKZAE!
?BJ!@A?<<5!@K9^7QA!A;!9;?:J! ?VV;D?Z[!!#KA=;:CAE!@=?ZZ!97!D7@A7J!CB!A=7!V:7@CJ7BA!A;!J7@CLB?
ACAZ7@! ?BJ!@?Z?:C7@!;<!A=;@7! ?VV;CBA7J!87897:@!5!@K9^7QA!A;! ?QKZAE;?:J! ?VZ!

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YK?:A7:ZB77ACBL! ;<! A=7! 9;?:J! ;! ?A! A=7! 7?:ZC7@A! V:?QACQ?9Z7! 877ACBL! <;ZZ;\CBL! A=7! L;D7:B;:!@!
?VV;:D?Z!;<!A=7!4A?A7!@

! :7?VV;CBA87BA!?!@!?!87897:!!;<!A=7!L:?JK?A7!<?QKZAE[
G[T 4U3\$1#&!b0#+%#3!"#\$%&'(!/3/,304)1U4[!! !
! QT[F %V;B!:7Q;887BJ?AC;B!9E!?!<?QKZAE!87897: @!Q=?C:!?BJ!Q;ZZ7L7!J7?B7AC87!:7YK7@A@!
! <;!L:?JK?A7!<?QKZAE!87897: @!Q=?C:!?BJ!Q;ZZ7L7!J7?B7AC87!:7YK7@A@!
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#A! A=7! AC87! ;<! CBCAC?Z! 78VZ;E87BA5! A=7! V;;D;@AZ@-ZAE7@A; Q:7JCA?9Z7! <?QKZAE!
7>V7:C7B07BI?QQ;:J?BQ7!\CA=!4%#%\$&'!&!*"#'+,-(%&e\$=[!25!o!R\O`!!'=7!?8;KBA!@=?ZZ!97!
@A?A7J!CB!A=7!CBCAC?Z!Z7AA7:;!<!?VV;CBA87BA!?BJ!:7Q;:J7J!CB!A=7!V7:@;BB7Z!<CZ7!;<!A=7!<?QKZA
\$:7JCA?9Z7!@7:DCQZ7@7!Q;B@7:7J!<;!V;;8;AC;BI?BJ!A7BK:7YKC:787BA@7!7@A?9ZC@=87BA!
;<!Q:7JCA?9Z7!@7:DCQ7!@=?ZZ!97!9?@7J!;BI!A=7!7Q;887BJ?AC;BI;<!A=7!J7V?:A87BA!Q=?C!?!BJ!Q?J78C
J7?BI?QQ;:JBL!A;!A=7!LKCJ7ZCB7@!97Z;\

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:7V:7@7B@C8K8Z7D7Z@?Q?J78CQ=C7D787BA!B7Q7@ @?:E!A;!97!Q;B@CJ7:7J!<::!V::;8;AC;B!A;!

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'=7!<;ZZ;\CBL!?:7!7>?8VZ7@!;<!CB<;:8?AC;B!\=CQ=!Q?BJCJ?A7@!A;C;B!8;CL=A!V;;DCJ7!
?@! ?VV;;V:C?A7! 7DCJ7BQ7! ?BJ!87;K?AC;B! !-?Q?J78CQ?QQ;8VZC@=87BA@[! \$Z7?;!
JC@ACBQAC;B@!8K@A!97!8?J7!<;!?!Q=C7D787BA@!?!A!A=7!CBA7:B?AC;B?Z5!B?AC;B?Z5!:7LC;B?

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4'%+3*!03&#'1-*4)1U4!#4!321+3*\$3+!,(W W
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?QACDQAC7@
9f! 3DCJ7BQ7!;<!=CL=!YK?ZCAE!;<!?Q?J78CQ!?JDC@CBL

?Q=C7D787BA! Q;B@CJ7:7J! CB! A=7! V;;8;AC;B! :7DC7! V;;Q7@@! 8K@A! 9! QZ7?:ZE! J;QK87BA7J! ?BJ!
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7D?ZK?A7J!<;!V:;8;AC;B!A;!A=7!<;ZZ;\CBL!?:B]@!CBLA7:8@!<!A=7!<;ZZ;\CBL!8CBC8K8!Q:CA7:C?]

F`[F[F[F!!-!#4414#*!U0-"344-0[!";:!V:;8;AC;B!A;!A=7!:?B]!;<!?@@@C@A?BA!V:;<7@@@;5!
A=7!8CBC8!:7YKC:787BA@!?:7!?!L:?JK?A7!J7L:77!CB!ZC9:?:E!@QC7BQ7!<;8! ?B! #87:CQ?B!
&C9:?:E!#@ @;QC7A7JCA7J!CB@ACAKAC;B!e;:! ?VV:;V:C?A7!L:?JK?A7!J7L:77! ?@!J7<CB7J!9E!
A=7!V;@CAC;Bf! ?B]! ?! @7Q;B]!L:?JK?A7!J7L:77k!A=:77!E7?:@!;<!V:;<7@@@C;B?Z!7>V7:C7BQ7! ?A
&?8?:! %BCD7:@CAEk!J78;B@A: ?A7J!Q;8V7A7BQ7!CB!^;9!V7:<;8?BQ7!CB! ?QQ;:J?BQ7!\CA=!A=7!
\$:CA7:C? !<;! '7BK:7! ?B]! U:;8;AC;B! e97Z;\fk! 7DCJ7BQ7! ;<! V:;<7@@@C;B?Z! J7D7Z;V87BAk! ?B]!
Q;BA:C9KAC;B@!CBL?A!Z7?@A!;B7!;<!A=7!<;ZZ!\CBL!?:7?@W

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!!!!!!!!!!!!!!!!!!!!!! Of!V:;<7@@@C;B?Z!@7:DCQ75! ?BJm::

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A=7!:?B]!;<!?@@@;QC?A7!V:;<7@@@;8CBC8K8!:7YKC:787BA@!?:7!?!L:?JK?A7!J7L:77!CB!ZC9:?:E!
@QC7BQ7!<;8! ?B! #87:CQ?B! &C9:?:E!#@ @;QC7A7JCA7J!CB@ACAKAC;B!e;:! ?VV:;V:C?A7!
L:?JK?A7!J7L:77! ?@!J7<CB7J!9E!A=7!V;@CAC;Bf! ?B]! ?! @7Q;B]!L:?JK?A7!J7L:77k!@C>!E7?:@!;<!
V:;<7@@@C;B?Z!7>V7:C7BQ7! ?A &?8?:! %BCD7:@CAE!eCBQZKJCB!Q:7JCA!<;!V:C;:! @7:DCQ7!L:?BA7J!
AC87!;<!CBCAC?Z! =C:7fk!<;K;!E7?:@! ?A!A=7! ?@ @C@A?BA!V:;<7@@@;: !?B]k!J78;B@A: ?A7J!V:;<CQ
^;9! V7:<;8?BQ7! CB! ?QQ;:J?BQ7! \CA=! A=7! \$:CA7:C? !<;! '7BK:7! ?B]! U:;8;AC;B! e97Z;\fk!
@CLBC<CQ?BAIC

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<;K:!!Q?A7L;:C7!@W

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Ff!V;:<7@ @C;B?Z!ZC9:?:E!7>V7!C7BQ75
Of!V:7W;:<7@ @C;B?Z!ZC9:?:E!7>V7!C7BQ75
`f!B;B dZC9:?:E!V;:<7@ @C;B?Z!7>V7:C7BQ75! ?BJ!
Rf!V?:AC87!7>V7:C7BQ7[

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'=7!ZC9:?:E_@!V7:@;BB7Z!Q;88CAA77!@=?ZZ!^KJL7!A=7!7YKCD?Z7BQ7!;<!V:7DC;K@!\;:]!7>V7:C7BQ
1B! B;:8?Z! QC:QK8@A?BQ7@5! ?! 8?>C8K8! ;<! A;! E7?:@! Q:7JCA! A;\?:J! V;:8;AC;B! @=?ZZ! 97!
?\?:J7J!<;! ?ZZ!\;:]!7>V7:C7BQ7!;KA@CJ7!;<!&?8?:!%BCAE@C

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?JD?BQ7! A=7! 8C@ @C;B! ;<! A=7! &C9:?:E! ?BJ! A=7! %BCD7:@CAE! 9E! CBD;ZD787BA! CB! Q;88K
;:L?BCc?AC;B@! ?BJ! ?QACDCAC7@[

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Q:7?ACD7! Q;BA:C9KAC;B@! CBQZKJCB! V?:ACQCV@KBBJ! CB@B?BQ=! ?BJ!
@Q=;Z?:@=CVmQ:7?ACBL! ?QACDCAE5!\;:]!A;\?:J!;!Q;8VZ7AC;B!;<! ?B! ?JJCAC;B?Z! :7Z7D?BA! ?JD?B
J7L:775!Q:7?ACD7!7JCACBL!;!DCJ7;L:?V=E!;<!V;:L: ?8 @5!7B@C!LB5!Q:7?AC;B! ?BJ!7JCACBL!
;<! ZC9:?:E! ?BJ! ;A=7:! V;:<7@ @C;B?Z!\79! V?L7@CB@CBVK9ZCQ?AC;B@! !'=7! V;:8;AC;B!
Q;88CAA77!@=?ZZ!7D?ZK?A7! ?QACDCAC7@!<;!YK?ZCAE5!YK?BACAE5! ?BJ!V!;<7@ @C;B?Z!@CL

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7>V7:C7BQ7!CB!?!V;:<7@@C;B?Z!V;@CAC;B!?!<A7:!7?:BCBL!A=7!8?@A7:;!@!J7L:77!CB!ZC9:?:E!@C
'=7!Q?BJCJ?A7!8?E!7Q7CD7!;B7!E7?:!;<!Q:7JCA!<;;!7?Q=!E7?:!;<!7>V7:C7BQ7[

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KBCD7:@CAE!Q;88KBCAE[

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F`O[F`[R!+78;B@A:?A7@;BV7A7BQ7!CB!V7:@;BB7Z!J8CBC@A:?AC;B!9E!A=7!<;ZZ;\CBLW

Q[U::DCJ7@!?!Q;BL7BC?Z!\;]CBL!7BDC::B87BA!<;!Q;ZZ7?LK7@!?!BJ!@A?<<[!!!!!!
CC[4KVV::A@!?!BJ!7BQ;K:?L7@!Q;ZZ7LC?Z!V?:AQQCV?AC;B[
CCC[3<<7QACD7ZE! V::8;A7@! A=7! C8?L7! ;<! ZC9?:?C?B@! \CA=CB@CAE! KBCD7:
Q;88KBCAE[
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F`[O[F[T[!!+7@CLB@!7<<7QACD7!?!BJ!7<<CQC7BA!87?B@!;<!7D?ZK?ACBLIZC9:?!E!@E@A7V:;DCJ7@!?!V;V:;V:C?A7!?!B?ZE@C@!;<!@KQ=!7D?ZK?AC;B!]

F`[O[F[T[R!!+78;B@A:?A7@!7<<7QACD7B7@!@!CBIKBJ7:A?]CBI@B7@50!7B?ZCBL!@V7QC<CQ?AC;B@! ?BJ! ?@@C@ACBL! CBI A=7! J7@CLB5! A7@ACBL5! ?BJ! C8VZ7877B=?BQ787BA@! A;! A=7! &C9:?!E_@! ?KA;8?A7J! @E@A78@! \CA=CBI LCD7B! 7Q;B;8CZC8CA?AC;B@[

F`[O[F[T[T!!3<<7QACD7ZE! Q;88KBCQ?A7@!]B;\Z7JL7! ;<! ZC9:?!E! ?KA;8?A7J! @E@A78@! ?QA@A;@!@A?<<!CBI!A=7!&C9:?!E!?!BJ!A;!;A=7!?!V;V:;V:C?A7!J7V?:A87BA@!?!BJ!CBJCDCJK? \CA=CBI!A=7!%BCD7:@CAE[

F`[O[F[T[a! /?CBA?CB@! V;@CACD7! \;:]CBL! :7Z?AC;B@=CV@! \CA=! 1B<;:8?AC;B! 4E@A78V7:@;BB7Z!?!@!\7ZZ!?!@!\CA=!@A?<<!CBI!;A=7!ZC9:?!E!KBCA@[

F`[O[F[T[H!!\$;;;JCB?A7@!?!BJ!V?:ACQCV?A7@!CBI!A=7!CB@A:KQAC;B!;<!ZC9:?!E!@A?<<!;!K@7:@!CBI?KA;8?A7J!@E@A78@!?!QACDCAC7@!?!BJ!V:;Q7JK:7@[

F`[O[F[a!,1,&1-b0#U)1\$!-0b#*1r#*1-!#*+!\$-*0-&[!

F`[O[F[a[F! +78;B@A:?A7@! Q;8V7A7BQ7! CBI 7@A?9ZC@=CBL! ?BJ! 8?CBA?CBCBL9C9ZC;L 8.4[8.46!CBCF`[@[Tc 42 0 8.4 (!) 0 5C

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F`[O[F[H`!!+78;B@A:?A7@!]B;\Z7JL7!;<!@K9^7QA!8?AA7:!A?KL=A[

F`[O[F[H[R#7D7Z;V@!@EZZ?9C! ?BJ!;A=7:!CB@A:KQAC;B?Z!8?A7:C?Z@!:7Z7D?BA!A;!A=7!Q;
97CBL!A?KL=A[

F`[O[F[H[T!!+7@CLB@! ?BJ!V;;JKQ7@!CB@A:KQAC;B?Z! ?KJC;DC@K?Z!V;;L:?8@!A=?A!@KV
?BJm;;!@KVVZ787BA!A=7!7JKQ?AC;B?Z!V;;L:?8@!;<!A=7!%BCD7:@CAE

F`[O[F[M!!\$-&&3\$'1-!*+323&-U/3*[!

F`[O[F[M[F! ! +78;B@A:?A7@! L;;J! ^KJL87BA! ?BJ! Q;8V7A7BQ7! CB! @7Z7QACBL! ?BJ!
:7Q;887BJCBL!VK:Q=?@7!;<!ZC9:?:E! ?BJ!87JC?!8?A7:C?Z@!CB!@KVV;;A!;<!A=7!QK::7BA!
B77J@! ?BJ!Z;BL! ?BL7!L;?Z@!;<!A=7!&C9:?:E[

F`[O[F[M][O!!#78;B@A:?A7@!Q;8V7BQ7!CB!@7Z7QACBL! ?BJ!\77JCBL!8?A7:C?Z@5!9;A=!
CB! ?VV;;V:C?A7!@K9^7QA!?:?@! ?BJ!<;!A=7!:7<7:7BQ7!Q;ZZ7QAC;B[

F`[O[F[M][!!+78;B@A:?A7@!]B;\Z7JL7!;<!A=7!QK::CQKZK85!7@7?:Q=5! ?BJ!;A=7!:ZC9:?:E!
:7Z?A7J! ?QACDCAC7@!;<!A=7!%BCD7:@CAE!J7V?:A87BA@CB! ?BJ! ?CBA?C?K?ZI@!
?Q?J78CQ!@K9^7QA!?!7?@[

F`[O[F[M][R!/?CBA?CB@!V;@CACD7!\;:]CBL!7Z?AC;B@=CV@!\CA=!V7:@;BB7Z!CB! ?Q?J7
J7V636 Tm / (C) 7.7 42 0 07 (@K) 8 7.636 Tm /T636 T(8) -0.3-7.7 (@K 8.4 (B)C) 7.7 42 -127 (A)

F`O[F[FP!!+103\$!03"303*\$3!43021\$34[!

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F`O[F[FP[F!!+78;B@A:?A7@!Q;8V7A7BQ7! ?BJ! L;;J! ^KJL87BA! CB! ?@@C@ACBL! ZC9:?:E!
K@7:@!A;!Z;Q?A7!CB<;:8?AC;B[

F`O[F[FP[O!!\$;:7QAZE!JC@Q7:B@!?BJ!CBA7:V:7A@!K@7!:7YK7@A@!?BJ!YK7@AC;B@[

F`O[F[FP[!+78;B @A:?A7@!Q;8V7A7BQ7! CB! K@CBL! :7<7:7BQ7! 8?A7:C?Z@! ?BJ! ;A=7:!
:7@;K:Q7@[

F`O[F[FP[R!!+78;B@A:?A7@! ?!\CZZCBLB7@@! A;! ?@@C@A! K@7:@! ?BJ! A;! V7:@C@A! 9
Q;BD7BAC;B?Z!@;K:Q7@!A;!V;;DCJ7!J7@C:7J!CB<;:8?AC;B[

F`O[F[FP[T! +78;B@A:?A7@! KBJ7:@A?BJCBL! ;<! ?QYKC@CAC;B@

!!!!!!! ! F[O[

F`[O[O[FM!!U:7@7BA?AC;B@!;<!Q:7?ACD7!7>=C9CA@!;:;!V;@A7:!!@7@@@C;B@!?!A!877ACBL@5!Q;B;
::\;]@=;V@[!

F`[O[O[FG! U?:ACQCV?AC;B! ?@! 8;J7:?A;:;! ;! V?B7ZC@A! ?A! Z;Q?Z! 877ACBL@5! Q;B<7:7BQ7@5
\;]@=;V@[!

F`[O[O[OP!!\$;BA:C9KACBL!7BA:C7@!CB!?!VK9ZC@=7J!;7k7:7BQ7!\;:]

F`[O[O[OF!!UK9ZCQ?AC;B!;<!7DC7\@!;!79@A:?QA@[

F`[O[O[OO!!3JCACBL!;:;!Q;BA:C9KACBL@Z7AA7:@5!L:?E!ZCA7:?AK:75!7AQ!e7;@C7
VK9ZCQ?AC;B@f

F`[O[O[O`!!U?:ACQCV?AC;B!CB!;7@7?:Q=!?BJ!@Q=;Z?:ZEmQ:7?ACD7!?QACDQAE!;KA@CJ7!A=7!ZC

F`[O[O[OR!!g;:]A;\?:J!;!Q;8VZ7AC;B!;<!?B!?JJCAC;B?Z!;7Z7D?BA!?JD?BQ7J!J7L:77[

F`[O[O[O!U:7@7BA?AC;B@!?!A!&C9:?E!;:;!%BCD7:@CAE!Q;ZZ;YKC?]

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F`[O`[M! U;; <7@@C;B?Z! :7Q;LBCAC;B@! ?BJ! ;KA@A?BJCBL! ?Q=C7D787BA@! e?\?:J@5! =;B;
@;QC7AC7@5!7AQ[f]

F`[O[R &1,0#0(!#*+!%*123041'(!#"#104[!

F`[O[R[F!!U:7@7BA?AC;B@!;! @78CB?:@!A;5!;!Q;B@KZA?AC;B@!CA=5!<?QKZAE!?BJ! @AKJ7BA!
\CA=CB!A=7!%BCD7:@CAE!:7Z?AC@C@BYZ!87@A7:@[

F`[O[T! 4'%+3*!03&#-'1-*4)1U4[!

F`[O[T[F!!47:DCQ7!?@!?!B!?JDC@;:!A;!@AKJ7BA!L;KV@!:7Q;LBCc7J!9E!A=7!%BCD7:@CAE[

F`[O[a!

U;ZCQEW8CB?Z!+7L:77@
\$=?VA7:W!115!U;ZCQC7@!X!U;;Q7JK:7@
47QAC;BFF
&?@A!#VV::D7SMBK?:E!OPFG!!!

FR! U-&1\$(!-!*'30/1*#&!+3b0334!"-0!"#\$%&'(!!!

#B!7?:B7J!J; QA:;?Z!J7L:77!<;8!?:7LC;B?Z7EQ:7JCA7J!CB@ACA!K!C!B!;7JKQ?AC;B!@=?ZZ!97!A=7!
7JKQ?AC;B?Z!@A?B!?!V;;8;AC;B!;:! CBCA7Z!CBA87BA!97E;B!A=7!?:B!];<!CB@A:KQA:;5!7>Q7VA!CB!
A=;@7!JC@QCVZCB7@!A=?A!Z?Q7D7ZAA?ZCBCB! !: !7Q;LBCc7!;A=7!7DCJ7BQ7!<! ?Q?J78CQ! ;!
V;;<7@ @C;B?Z!Q=C7D787BA!CB!ZC7K!;<!A=7!J;QA:;?A7!!=7!+7?B@_!\$;KBQCZ@A?77@?A?@!;<!
A=7?QQ:7JCA77L:77@!CB!A=7@7!?:7?@!

FR[F! aP0-%0!/#4'30_4!+3b033[!!1B!JC@QCVZCB7@!\=#0A78CQ!\$;KBQCZ!;<!+7?B@7:8CB7@!
A=7! aE;K;! 8?@A7!@! J7L:775! ;! CA@! 7YKCD?Z7BA5! A;! 97! ?B! 7>Q7VAC;B!A;?Z! J7L:77!
:7YKC:787BA5! @KQ=! ?!8?@A7!@!J7L:77!8?E!97!QQ7VA?9Z7!<;! ?VV;CBA87BA! ?B!V;;8;AC;B!A;!A=7!
:?B]@!;<! ?@C@A?BA! ?B! ?@ @;QC?A7! V;;<7@ @;5! 9KA! B!A=7!77@?Z7BA! ;<! A=7!A!R!
8?@A7!@!@!@=?ZZ!97RT;K:;8?@A7!@!5!?B!J!;88K8!;<! P!L: ?JK?A7!JCA! =;K: @!CB!A=7!A7?Q=CBL!
<C7ZJ! ! '=?! J7?B! ?B! J7V?:A87BA! Q=?C: ! @=?ZZ! J7A7:8CB7! A=7! :7Z7D?BQ7! ;<! ?JJCAC;B?Z!
J7L:77@m7YKCD?Z7BA@!!'=?! Q?BJCJ?A7!<;! V;;8;AC;B! 8K@A! =?D7! A;! E7A?B!;K6DZ: @CAE!
A7?Q=CBL! 7>V7:C7BQ7! 97E;B! !A=7YKC:7J! ;<! <?QKZAE! \CA=! J;QA:;?Z! J7L:77@! <;!
?VV;CBA87BAmV;;8;AC;B!A;!A=7!;B@ @;QC?A77@ @!e8CBC8K8!;<!@C>!E7! !:f

'=?! +7?B@_! \$;KBQCZ! :7Q;LBCc7@! A=7! <;Z;\CBL! J7L:77@! ?@! 7>Q7VAC;B@! A;! A=7! J;QA:;?Z! J7L:77!
:7YKC:787BA!CB! ?VV;CBA87BA! ?B!V;C!B!Q:CA7:C?W!! @AKJC;!?:A5!/[!#[!eaP! =;K: @fk!A=7?A7:5!/[!#[!
eaP! =;K: @fk!@;QC?Z!\;;5!/[4g!eaP! =;K: @fk!ZC9: ?E! @QC7BQ75!/[644K!@5! ?B! ?B! ?JJCAC;B?Z!
8?@A7:_@B! ?! :7Z7D?BA! ??:? !; ! A=7! 7YKCD?Z7BA! CB! ?VV;;D7J! ?JD?BQ7J!A7!C88Z! ?B!
Q;B@K87: !@QC788A7:C: !J7@CLB5!/?@A7: !;<!# :Q=CA7QAK:7! ?B!/?@A7: !;<!1BA7:C: !#7@C
'a! =;K: @! ?B! ?B! ?JJCAC;B?Z! P!L: ?JK?A7! =;K: @

FR[0 `P dRT!)-%0!/#4'30_4!+3b0334 [!1B!JC@QCVZCB7@!\=7:7!A=7!+7?B@J7\$KBQBZ@!A=?A!A=7!
`P dRT! =;K:;8?@A7!@!J7L:77!@=?ZZ!97! ?B! 7>Q7VAC;B!A;!A=7!J;QA:;?Z!J7L:77!7YKC:787BA5!A=7!Q?BJCJ?A7
8?E!97!Q;B@CJ7:7J!<;!V;;8;AC;B!A;! ?@ @C@A?BA!V;9K@B!A! ?@ @;QC?A7!V;;<7@ @;:; !V;;k7@ @;f
?<A7: !@C>!E7?:@!A88Z!A7?Q=CBL7:C7BQ77!\$;KBQCZ!:7Q;LBCc7@!A=7!<;Z;\CBL! =PK!
8?@A7!@!J7L:77@! ?! ?! 7>Q7VAC;B@!A;!A=7!J;QA:;?Z!J7L:77!7YKC:787BA!<;!V;;8;AC;B!W!Q;88KBCQ?AC;B
JC@;:J7:@! eQZCBCQ?Z! @KV7:DC@;: @f5!/?@A7:_@! CB! \$;88KBCQ?AC;B! +C@;:J7:@k! @AKJC;!?:A5!/[!
A=7?A7!/[!#[! !!

FR[! &#g!+3b0334 [!!'=?! SK:C@! +;QA:;?A7! eS+[f5] ,?Q=7Z:;! ;<! &7L?Z! &7AA7:@! e&[&,[f5] ?B! 8?@A7:_@!
J7L:77@! CB! Z? ! ??:7Q;LBCc7J! ?@! 7>Q7VAC;B@! A;! A=7! J;QA:;?Z! J7L:77! CB! A7?Q=CBL! <C7ZJ@!\=7:
CB@A:KQAC;B!CB!A=7!Z7V;C@7A?B!7>V7QA7U!

FR[R U30"-0/#*\$3! 4#*+ #0+4! "-0! 36\$3U'1-*4! '-! '30/1*#&! +3b0334 [! ! #ZZ! <?QKZAE!
Q?BJCJ?A7@! \=;! V:7@7BA! J7L:77@! ?@! 7>Q7VAC;B@! A;! A=7! A7:8CB?Z! J7L:77! V;ZCQE! 8K@A! 877A! A
<;Z;\C! J;QK87BA7J! V7:<;8?BQ7! @A?BJ?:J@W! ! @KV7:C: ! A7?Q=CBL! 7<<7QACD7B7@ @k! :7Q;LBC
@Q=;Z?:ZE! V;;JKQAC;B5! :7@??:Q=! ?B! V;;<7@ @C;B?Z! ?Q=C7D787BAK! ?B! V;C@C@A?@?B! CB!
Q;ZZ7L7! ?B! KBCD7: @CAE! ?<<?C: @!! 4KQ=! Q?BJCJ?A7@! @=?ZZ! =?D7! ?A?V78B@7A;9ZC! ?AC;B!
@KV7:C: !V7:<;8?BQ7!CB!@Q=;Z?:ZE! ?B!m; !Q:7?ACD7!V;;JKQAC;B]

FT[a U0-2-4!4!03213g!#*+!0 3\$-//3*+#'1-*[!!*7>A5!?ZZ!<CZ7@!?BJ !:7Q;887BJ?AC;B@!@=?ZZ!97!
@AKJC7J!?BJ!Q;B@CJ7:7J!9E!A;@A5!\=;!@=?ZZ!:7Q;887B+!&:0-7-+;!;!(--+&+&:0-7-+\$7?Q=!

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?BJm;:;!CBCAC?Z!Q;BA:?QA!J7A?CZCBL!A=780,090277BQZKJ7J!=7:7[!

*,A7 W!"?QKZAE!?VVZECBL!7?:ZE!<A;B;A;!A=7!:?B!;!V;:<7@@;:!8K@A!
JC@QZ;@7! A=?A! <?QA! ?BJ! CBQZKJ7! CB! A=7! 7@@?E! ?! ^K@ACkCQ?AC;B! 9?@
B?AC;B?ZmCBA7:B?AC;B?Z!@A?AK:7!CB!A=7!JC@QCVZCB7[

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2-&%/3!1W!43\$'1-*! ,! @=?Z;B@C@A!;<!7D?ZK?ACD7!Z7AA7:@!::CLCB?ACBL!?
A=7!D?:C;K@!Z7D7Z@

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FT[G[O[R 2-&%/3!11W!43\$1-*! +!d

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Fa[! \$-/U-41'1-*!-"!U 304-**3&! \$-//1"334 !
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Fa[F U

?@! ?B! ?VV7ZZ?A7!9;JE!<;!V:;8;AC;B!J7QC@C;B@!8?J7!9E!A=7!V:;D;@A!
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Fa[T! \$)#104! -"! U 304-**3&! \$-//1"334 [! ,E! 8?^;:CAE! D;A75! 87897:@! ;<! 7?QV7:@;BB7Z!
Q;88CAA77!@=?ZZ!7Z7QA!?!QZ!C=?C!C@!;!7@V;B@C9Z7!<;!;L?BCcCBL!877ACBL@5!JC@A:C9KACBL!<
Q;8VZ7ACBLm@CLBCBL!A=7!80[B97=?Z<!;A=7!Q;88CAA775!<;\?:JCBL!A=7!V;V;V:C?A7!8?A7:C?Z@!
A;IA=7!B7>A!Z7D7Z5! ?BJ!B;AC<ECBL!7?Q=! ?VVZCQ?BA!;<!A=7!Q;88CAA77_@_!J7QC@C;B!
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Fa[a! 2-1*b!U-&1\$([!!1B!B;!CB@A?BQ7!@=?ZZ!?!87897;!;<7?QV7Z;88CAA77!;! ?BE! ?J8CBC@A:?A;!
CB! ?B!7D?ZK?ACD7!;Z7!D;A7;!;7?Q;887BJ?AC;B!;B! ?!Q?BJCJ?A7_@!V:;8;AC;B!A;! ?B! ?Q?J78CQ!
 :?B]! =CL=7;!A=?B! =C@!; ! =7;! ;\B[
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FM[)-*0#0(!"#\$\$%&'(!'1'&34 !

FM[F %*123041'(!U0-"344-0!#*+!%*123041'(!/301'!#g#0+ [!!'=7!ACAZ7!\$0%,+1&<0-9\$%%-0
@=?ZZ! 97! Q;B<7::7J! 9E! A=7! V:7@CJ7BA! ?BJ! CBJCQ?A7! A=?A! A=7! <?QKZAE! :7QCVC7BA! =?@! :7Q7
KBCD7:@CAE!@-@-@!8;@A!V:7@ACLC;K@!Q?J78CQ!?\?:J!!'=C@!?\?:J!@=?ZZ!97!Q;B<7::7J!?BBK?ZZE!A;
@7Z7QA7J5A687187897:@!;<!A=7!<?QKZAE!<;!JC@ACBLKC@=7J!Q?J78CQ!V7;<;8?BQ7[!!#@@;QC?A7!
<KZZ!V;;<7@ @;;@! @=?ZZ!97!7ZCLC9Z7! <;!A=C@!?\?:J!!'=7!:7QCV7BA@AZZ;QZC<7[!!'=7!

Z,%+>(*",%=\$)& 27\$0,+!%@A?AK@! @=?ZZ! 97! 8?J7! A;! A=7! V:7@CJ7BA! 9E! A=7! V:;D:@A! ?<A7:!
Q;B@KZA?AC;B!\CA=!A=7!?VV:;V7?A77BA?Z!<?QKZAE!?BJ!J7?B@[!!1B!7>Q7VAC;B?Z!Q?@7@5!
A=7V:7@CJ7BAE!\?CD7!A=7!8CBC8K8!Z7BLA=!;<!@7:DCQ7!:7YKC:787BA[

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U7:@;B@!\=;!:=;ZJ!?B!787:CAK@!ACAZ7!?A!;A=7!CB@ACAKAC;B@!B:;8?ZZE!@=?ZZ!B;A!97!7ZCLC9
787:CAK@!ACAZ7!?A!&?8?:!%BCD7!@CAKZAE!87897:7B^;ECBL!787:CAK@!@A?AK@!C@!:7Q?ZZ7J!
A;!@7:DCQ7!CB!A=7!CBA7:7@A!;<!A=7!KBCD7:@CAE!?<A7:!?B!CBA7:D7BCBL!V7:C;J5!787:CAK@!@
B;A!97!?!<<7QA7J[

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);ZJ7:@!;<!A=7!ACAZ7!(*",%=\$)&<0-9\$%%-0&27\$0;+!Z%+(*",%=\$)&6%%-4,'+\$&<0-9\$9&
27\$0, ET 0 42 15-E(\$) (,%)]J ET Q q 0.24 0 0 0.24 12 589.92 cm BT 42 0 0 42 990 466 716 TT5 1 Tf [(

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FG[#\$\$+ 3/1\$!"033+/-5!034U-*41,1&1'(!#*+'!3*%03 !

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FG[F #\$\$+3/1\$!"033+/- [!!1B@ACAKAC;B@!;<!=CL=7:!7JKQ?AC;B!@7:D7!A=7!Q;88;B!L;;J[!'=7!Q;88;B!
L;;J!J7V7BJ@!KV;B!?!<:77!@7?:Q=!<;!A:KA=!(B!@!<:77!7>V:7@ @C;B[!!)7BQ75!CA!C@!7@ @7BAC?Z!A=?A!<?<
87897:@!97!<:77!A;!VK:@K7!@Q=;Z?:ZE!CBYKC:E!CA=;KA!KBJK7!:7@A:CQAC;B5!?BJ!A;!D;CQ7!?BJ!VK9

FG[[F +3"1*1'1-*!-'! '3*%03 [!'=7! A7:8! +\$("0\$! @=?ZZ! J7B;A7! ?B! 7BACAZ787BA! A;! Q;BACBK7J!
78VZ;E87BA! ?@!?!87897:;! <A=7!&?8?;! %BCD7: @CAE!<?QKZAE!!#!A7BK87JQ?QZEA
7>V7QA! A;! Q;BACBK7! =C@! ;! =7:! <?QKZAE! V; @CAC;B5! KBZ7@ @! ?J7YK?A7! Q?K@7! <;! JC@8

FG['[F! ' 3#)\$1*b! U0-"1\$13*\$ (m%U301-0!'3#)\$1*b! 3""3\$'123*344!
#4!321+3*\$3+!,(W
?f!!! \$?BJCJ?A7_@!]B;\Z7JL7! ?BJ! ?9CZCAE! A;! ? :ACQKZ?A7! CA! eV7:@;B?Z
@A?A78A5! Z7AA7:@! <;8! Q;ZZ7?LK7@5! @AKJ7BA@m<;:87! @AKJ7BA@
?J8CBC@A:?A;:@f
! ! ! ! 9f!!! \$:7?AC;B!;<!CB@A:KQAC;B?Z!8?A7:C?Z@
! ! ! ! Qf!!! \$;K:@7!?BJ!QK::CQKZK8!J7D7Z;V87BA
Jf!!! \$;K:@7!7D?ZK?AC;B@5!@AKJ7BA!?QQ;8VZC@=87BA@5!A7?Q=CBL!?\?:J@
?BJ!;A=7:J;QK87BA7J!:7Q;LBCAC
7f! +C:7QAC;B!;<!A=7@7@!eKBJ7:L:?JK?A75!L:?JK?A7f! ?BJ!JC@@@7:A?AC;B@
e\=7:7!?VVZCQ?9Z7f

FG['[O! 4\$)-�&(!U0-+>%\$ ' 1*!#*+m-0!0343#0\$)#4!321+3*\$3+!,(W
?f! UK9ZCQ?AC;B@!;<!9;;]@5!Q=?VA7:@5!?:ACQZCQ?7BV!Q7@ @C;B?Z!
\;]@! e7[L[5! V::JKQAC;B! ;<! @=;\@5! :7QCA7Z@6BL@5! 8K@CQ?Z!
Q;8V:@CAC;B@5!V7:<;:8?BQ7@5!@7AmQ;@AK87!J7@CLBf
9f!!! 3DCJ7BQ7!;<!A=7!YK?ZCAE!;<!7@7?:Q=mQ:7?ACD7!?QACDCAE
Qf!!! 4Q=;Z?:Z0 0 0V7:UK9ZCK@5

Jf!! 4V;B@;:@=CV! ;<! @AKJ7BA! ;:L?BCc?AC;B@5! \CA=! 78V=?@C@! ;B!
! ?Q?J78CQ!L.;KV!
FG[][a! +

Jf! #B!?@@C@A?BA!V;:<7@@;!\=;!?VVZC7@!<;!A7BK:7!97<;7!A=7!<KZ<CZZ87BA!;<!A=7!:7YK
V;;9?AC;B?:E!V7:C;J!eC[7[5!s7?:ZEtf!8K@A!Z@;!?VVZE!<;!s7?:ZEt!V;;8;AC;B!A;!?@@;QC?A7
V;;<7@@;[!!U:C;!\:CAA7B!?VV;;D?Z!A;!?VVZE!7?:ZE!8K@A!97!L:?BA!7!9!E!A#7!
V;;D;@A5BJ!@KQ=!?VV;;D?Z!J;7@!B;A!9CBJ!A=7!J7?B!;!V;;D;@A!A;!?!<?D;:9Z7!
:7Q;887BJ?AC;B[!!B!?JJCAC;B5!?B!7?:ZE!7?VVZCQ?AC;B!8K@A!97!JC@QZ;@7J!CB!\:CACBL
A=7!7?VVZCQ?BA[

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7f! \$:7JCA! <;! V:C;:! @7:DC7! E7?;! ;<! :7DC7!\@=?ZZ! 97! CBJCQ?A7J! ;B!7QZAE!
87897:_@!CBCACAZ7!;!<!7?VV;CBA\$7BA

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! FG[H /

J7D7Z;V87BA! ?BJ! <77J9?Q! ;B! V::L:7@ @B;A! 7>V:7@ @! ;! C8VZ7BK:7! ;KAQ;8@! <;!
V::9?AC;B?:E!<?QKZAE!878@7:

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FG[[FR#UU-1*/3*!-!#+/1*14 '0#123!-"1\$3 [!!#VV;CBA87BA!A;!?B! ?J8CBC@A:?ACD7!;<<CQ75!
:: !A=7!Z;@ @!;<!A=7! @?875! @=?ZZ!6D7!A=7! ?VV;CBA77!;<!A7B@:7JCA!A;\?:J!7?:BCBL!
A7BK:7! CB! A=7! =CL=7@A! CB@A:KQAC;B?Z! :?B! =7ZJ! V:C;:! A;! ;! JK:CBL! ?VV;CBA87BA! A;! @
?J8CBC@A:?ACD7!;<<CQ7[

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FG[[FOU0-\$3+%034 !"-0!b0#*1*b!3*%03 [!

FG[[FO[F U7:@;BB7Z! \$;88CAA77 @3?Q=! J7V?:A87BA! ?BJQ;ZZ7L7mZC9?:?E! @=?ZZ!
7@A?9ZC@V7?@;BB7Z!88CAA77! ;<! A7BK:7J! <?QKZAE! @=?ZZ! 7D?ZK?A7!
A7BK:7!Q?BJCJ?A7@ 897:@! @=?ZZ!97!7Z7QA7J!9E! ?BJ! <;!8!A=7!A7BK:7J!
<?QKZAE! ;<! A=7! :7@V7QACD7! J7V?:A87BA! ;! Q;ZZ7L7mZC9?E@CAE!
V7:@;BB7Z!Q;88CAA77! @=?ZZ! ?Z@;!97!7@A?9ZC@=7J!e@

:7Q;887BJ?A C;B! @K98CAA7J!9E! A=7! J7V?:A87BA! Q=?C:! A;! A=7! J7?B[! ! 1<! A=7!
J7V?:A87BA! Q=?C:! C@!?! Q?BJCJ?A7! <;! A7BK:75! A=7! Q=?C;! ;<! A=7! J7V?:A87BA?Z!
A7BK:7! Q;88CAA77! @=?ZZ5! ?<A7:! Q;B@KZA?AC;B!\CA=! A=7;! A=7:! 87897:@! ;<! A=7!
J7V?:A87BA?Z!

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OF['30/1*#1-! -!' '3*%03+! "#\$%&'(! /3/,304 5 #*+! -!' #&&! -')30!
"#\$%&'(!/3/,304!,3"-03!')3!36U10#1-!-!')3!4'#3+!U301-+!
-!')310!#UU-1*/3*5!36\$3U',(!0341b*#1-!-0!03'103/3*' !

OF[F '30/1*#1-!-0! T88Z&A6.;2 [!!'7:8CB? AC;B!;<!A=7!78VZ;E87BA!;<!?!<?QKZAE!87897:!\=;!
=?@!977B!L:~BA7J!A7BK:7!~BJ!;<!~ZZ!;A=7:~!<?QKZAE!87897: @!97<;:7!A=7!7>VC:~?AC;B!;<!A=7!@A?A7J!V7:C;
;<!A=7C:~!~V;CBA87BA5!7>Q7VA!9E!;7 @CLB?AC;B!;:~!7AC:787BA5!;BZE!@=7Z!97<;;B[!!T--)&
4""%\$!CBZKJ7@5!9KA!C@!B;A!ZC8CA7J!A;!A=7!<;ZZ;\CBLW

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OF[F[F " #1&%03!-!g-0!3""1\$13*&(!-0!3""3\$'123&([!

OF[F[0 1*4%,-0+1*#1-* [!

OF[F[! -')30! 4301-%4! U0-"3441-~#&! -0! U304-~#&! /14\$-~+%\$'5! 36#/U&34! -!"
g)1\$)!#03W! !

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! ?f! \$;88C@ @C;B!;<!?!8C@J787?B;~!CBD;ZDCBZBAK:VCAKJ75!;~!?!<7Z;BE
9f! "?CZK:7! A;! @7QK:7! ?BJ! 8?CBA?CB! "7J7:~Z5! 4A?A75! ;:~! Z;Q?Z! V7:8CA@! :7YKC:7J! CB! A=
JC@Q=?;L7!;<!A7?Q=CBL5!;7@7?:Q=5!;:~!;A=7:~!V:;<7 @@C;B?Z!JKAC7@5!CBQZKJCBL!<?C;
8?CBA?CB!~V;V;V:C?A7!J;QK87BA?AC;Bk
Qf gCZZ<KZ! J7@A:KQA@BCD?~@CAE! V:~V7:AE! ;:~! DC;Z7BA! JC@:KVAC;B! ;<! A=7! ;:~J7:ZE
;V7:~?AC;B!;<!A=7!Q?8VK@
Jf! #

=?BJ9;]!;:!C@!?!VK9ZC@=7J!V;ZCQE!;?A#7KBCD7:@CAE!
8f ! 2C;Z?ACBL!&?8?:_@!V;ZCQE!;7Z?ACBL!A;!7Z7QA;:BCQ!B7A;:]!<?QCZCAC7@!@KQ=!?@!Z
B7A\;:]@5!78?C?BJA=7!CBA7:7A[

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OF[F[R #&&!+% '134! #!<?QKZAE!87897:!\=;!C@K@V7BJ7J!;!JC@Q=?L7J!<;8!?!V?:ACQKZ?:!JKAE!;!
^;9!?!A!A=7!KBCD7:@CAE!8?E!97!@K@V7BJ7J!;!JC@Q=?L7J!<;8!?!ZZ!;A=7!JKAC7@!;!^;9@!CB!A
KBCD7:@CAE!<;!A=7!@?87!;:;A84!"%\$ [!!1B!7?Q=Q?@75!A=7!C@@K7!@=?ZZ!97!J7A7:8CB7J!
9E!?!B!7YKCA?9Z7!V;:Q7JK75;:JCBL!V;:A7QAC;B!A;!A=7!CL=A@!;<!A=7!<?QKZAE!87897:?!?BJ!A;!
A=7!CBA7:7@A@!;<!A=7!KBCD7:@CAE!?!BJ!4E@A78[!!

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#!@A7B;L:?V=CQ!;!7Z7Q**Q**!B**Q**;:J!;<!A=7!

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OO[03#UU-1*/3*!-"!*-*

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U;ZCQEW;B d7BK:7J!"?QKZAE5!*;D7?VV;CBA87BA!07?@;B@

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O`[! 03#4-*4!b123*!"-0!*-* d3#UU-1*/3*!"!*-* d3*%03+!"#\$%&' (!

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*;B dA7BK:7J!<?QKZAE!87897:@!\=;!?:7!V::V7:ZE!B;AC<C7J!A=?A!A=7E!\CZZ!B;A!97!:7?VV;CBA7J!;!B;AC<C7
A=?A!A=7!@K9@7YK7BA!Q?J78CQ!E7?:\CZZ!97!A=7!A7:8CB?Z!E7?:!;<!?VV;CBA787BA@Z7Z!B;A!9
?!@A?A787BA!;<!A=7!:7?@;B@!KV;B!\=CQ=!A=7!J7QC@C;B!<;!@KQ=!?QAC;B!C@!9?@7J5!7>Q7VA!?!@!J7
CB!47QACCB!R;<!A=C@!Q=?VA7:[!!!

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OT['30/1*#'1-*! -"! "#\$%&'(! 3/U&-(/3 *! %*+30! 4U3\$1#&!
\$10\$/4'#*\$34 !!
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OH[3/U &-(/3*!4#'%4!#*+!\$-*'0#\$'4 !

OH[F 3/U&-(/3*! *-1\$3! #*+! U#(/3*! -U'1-*4 [! ! ! '=7! V:7@CJ7BA! @=?ZZ! :7Q;887BJ! A=7!
78VZ;E87BA!;!:7d78VZ;E87BA!;<!<?QKZAE!A;!A=7! ;?:J!;<!07A7@!!'=7! ;?:J! @=?ZZ! ?VV;CBA! ?BJ!
78VZ;E!<?QKZAE! ?A! CA@! ?BBK?Z! 877ACBL! ;! ?A! A=7! 7?:ZC7@A! V: ?QACQ?Z! 877ACBL! <;ZZ;\CBL! A=7! L;
?VV;;D?Z!;<!A=7!4A?A7I@!b7B7:?Z!#VV;;V:C?AC;B@!#QA!

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4?Z?:C7@! ? @ @;QC?A7J! \C@;B@CB7;V;CBA87BA@E! 97! V?CJ! ;D7:! FO! 8;BA=@5! ?A! A=7!
;VAC;B!;<!A=7!<?QKZAE!87897:[!!-BQ7!?!V?E87BA!;VAC;B!C@!Q=;@7B5!A=?A!87A=;J!@=?ZZ!78?CB!CB!7<<
KBACZ!?!:CAA7B!7YK7@A!A;!Q=?BL75!7<<7QACD7!A=7!B7>A!<C@Q?Z!E7?:5!C@!@K98CAA7J!A;! ?BJ! ?VV
-<<CQ7! ;<!)K8?B!07@;K:Q7@[!!!B7!<?QKZAE!87897:@5!C<!B;!87A=;J!C@!Q=;@7B5!A;B7!BCB7
Q;BA: ?Q@ ?Z?! @=?ZZ!97!V?CJ! ;D7:! FO! 8;BA=@[!!'=7!V?E87BA!87A=;J! @=?ZZ!97!QZ7!JK:CBL! ?!

U;ZCQEW+7V?:A87BA! \$=?C:!?BJ! U;;L:?8! +C:7QA;!
#VV;CBA87BA@
\$=?VA7:W!115!U;ZCQC7@!X!U;;Q7JK:7@
47QAC;B!OM
&?@A!#VV;;D7\$7BK?:E!OPFG

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OM[+3U#0/3*!\$)#10! #*+!U0-b0#/#+103\$'-0! #UU-1*/3*4 !!!

OM[F #UU-1*/3*!#! #<A7!:7Q7CDCBL!CBVKA!<;8QKZAE!?!BJ!<A7!:IQ;B@KZA?AC;B!CA=!A=7!V;;D;@A5!A=7!
J7?B! @=?ZZ! ?VV;CBA! ;<! J7V?:A87BA! Q=?C:@! ?BJ! V;;L:?8! JC:7QA;@!V;CBA87BA@! 8K@A! 97!
?VV;;D7J!9E!A=7!V:7@CJ7BA!?!BJ!A=7!;;?J!;<!07L7BA@!#!

OM[D 43021\$3!#*+!4' 1U3*+#! +7V?:A87BA!Q=?C@!V;;L:?8!JC:7QA;;@@:7D7!A!A=7!VZ7?@K:7!;<!A=7!
?Q?J78CQ! J7?B! #BE! ?J8CBC@A:?ACD7! @ACV7BJ! ?@ @;QC?A7J!\CA=! A=7@7! V;@CAC;B@!:78?CB@!
V;@CAC;B!\=7B!A=7!;QQKV?BA@?D7

OM[! #+/1*14'0#123!#*+!1*4'0%\$'1-#&!#UU-1*/3*!-\$)#104!#!+7V?:A87BA!Q =?C:@=?ZZ!
:7Q7CD7!=?AC87! ?J8CBC@A! ?AVD7BA87BA@P!T3! ?BJ!=?Z<dAC87!CB@A:KQAC;B?Z! ?VV;CBA87BA@!
e[TP! ""3f! JK:CBL! A=7! "?ZZ! ?BJ! 4V:CBL! @787@A7:@5! ?B!C87ZePT ""3f! ?J8CBC@A:?ACD7!
?VV;CBA87BA@!JK:CBL!7?Q=;!<!A=7!@K887!A7K887!47@ @C;B@!1!X!1B! ?J8CBC@A:?ACD7!
:7Q7CD7!?!=2XC87!ePT"3f!CB@A:KQAC;B?Z! ?VV;CBA87BA!JK:CBL!;B7!;<!A=7!A;!@K887!A7:8@! ?BJ5!C<!
@K887!<KBJ@!V7:8CA5!@=?ZZ!97!CB! ?BE!J7V?:A87BA?Z!;A?AC;B!<;! ?B!@K87!CB@A:KQAC;B?Z!
?VV;CBA87BA! P!T3! <;!A=7!;A=7 !@K887!A7:8!! \$=?C:@!8?E!B;A! :7Q7CD7!9;A! ?J8CBC@A:?ACD7!
?VV;CBA87BA@! P!T3! ;!9;A=!CB@A:KQAC;B?Z! ?VV;CBA87BA@! ;!<!A=7!@K887!A7:8@!#!

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U;ZCQIEW;AC<CQ?AC;B! ;<! 07@CLB?AC;B! X! 07Z7?@
! 38VZ;E87BA!\$;BA:?QA
\$=?VA7:W!115!U;ZCQC7@!X!U;;Q7JK:7@
47QAC;B!
&?@A!#VV;;D7S?BK?:E!OPFG

!`P[! *-!1"1\$#1-!-! 0341b*#1-! #*+! 03&3#43! "0-! 3/U&-(/3*!
\$-*0#\$' !

! /;9CZCAE!;<!<?QKZAE!87897:@!78;BL!Q;ZZ7L7@!?!B!J!KBCD7:@CAC7@!C@!;!CL=AZE!:7Q;LBCc7J!?!@!J7@
#87:CQ?B!CL=7:!7JKQ?AC;B![(7A5!A=7!J7V?:AK:7!;<!?!<?QKZAE!87897:?!Z!E@!;!7YKC:7@!Q=?BL7@!\CA=C
?!J7V?:A87BA!?!B!J!8?E!7BA?CZ!8?^;?!J^K@A87BA@!;!B!A=7!V?:A!;<!A=7!<?QKZAE!87897:?!@!Q;ZZ7?LK7@5!A
?J8CBC@A:?AC;B5!?!B!J!@AKJ7BA@!CB!A=7!<?QKZAE!87897:?!@!Q;ZZ7?LK7@5!A?J8CBC@A!;!7L?:JCBL!
A=7!:7@CLB?AC;B!;<!<?QKZAE!87897:@!?!7!A;!97!k;ZZ;\7J]

!`P[F! *-!1"1\$#1-!-!0341b*#1-* [!!!#!<?QKZAE!87897:!!@=;KZJ!B;A!:7@CLB!Z?A7:!A=7B!?!E!
A=C;AE!J?E@!?!<A7:!:7Q7CD?CB!B?A!B!;<!A=7!A7:8@!;<!Q;BACBK7J!78VZ;E87BA!<;!A=7!<;ZZ;\CBL!E7?:5!
\=CQ=7D7:!!J?A7!;QQK:@!Z?A7:[!!!#!<?QKZAE!87897:!!\=;!C@=7@!A!;!7@CLB!@=;KZJ!LCD7!B;ACQ75!CB!;!CA
A;!A=7!V:7@CJ7BA!A=;;KL=!A=7!J7V?:A87BA!Q=8?B!UV?B;@A[

!`P[O! 03&3#43!"0-/13 /U&-(/3*!\$-*0#\$' [!!#<A7:?!<?QKZAE!87897:!!=?@!@CLB7J!?!Q;BA:?QA!<;!
A=7!@K9@7YK7BA!E7?:5!V;;<7@@C;B?Z!7A=CQ@!;!7YKC:7!A=?A!A=7!<?QKZAE!87897:!!@=;KZJ!B;A!@;ZC
V;@CAC;B!7Z@7!A=7:7!<;!A=7!V7:C;J!A=7!<?QKZAE!87897:!!9ZCL?A7J!A;!A7?Q=IKBJ7!A=7!A7:8@!;<!A=7!
@CLB7J!Q;BA:?QA!;!7D7:5!@=;KZJ!B!KB@;ZCQCA7J!;<<7:!!Q;87!A;!A=7!<?QKZAE!87897:5!\=CQ=IA=7!<?QK
87897:!!J7@C:7@!A;!?QQ7VA5!?!7YK7@A!<;!7Z7?@7!<;!8!A=7!Q;BZ970A!@7BZKZZ!Q;B@CJ7:?AC;B!
'=7!<?QKZAE!87897:!!@=?ZZ!@K98CA!?!7YK7@A!A;!A=7!J7V?:A87BA!Q=?C!;!@=?ZZ!<;\?:J!CA5!A;L7A=
\CA=!7Q;887BJ?AC;B@5!A=;;KL=!?VV;;V:C?A7!Q=?BB7Z@!A;!A=7!V:7@CJ7BA5!;!@=?ZZ!B;AC<E!A=7!<?Q
87897:!!C<!A=7!7Z7?@7!C@!A;!97!L:?BA7J]

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`F[! 03'103/3*!U-&1\$134!#*+!43021\$3!"-&&-g1*b!03'103/3* !

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`F[F! 03'103/3*!#b3 [!!%BJ7:!7>?@!Z?!\&?8?!%BCD7:@CAEB;A!C8V;@7?!?8?BJ?A;;E!7AC:787BA!
?L7!<;!A7BK:7!<?QKZAE[!!

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`F[O! 1*4'0%\$1-*#&!43021\$3!"-&&-g1*b!03'103/3* [!!&?8?!@=?ZZ!V;;DCJ7!?B!;VV;;AKBCAE!<;!
YK?ZC<C7J! <?QKZAE! A;! Q;BACBK7! CB! @;87! CB@A:KQAC;B?Z! @7:DCQ7!A779@C@!B!A7#?Z<
:7AC787BA[!!%BJ7:! A=7! CB@A:KQAC;B?Z! @7:DCQ7! <;ZZ;\CBL!:7AC:787BA!V;;L:?85! <?QKZAE! 8?E! ?VVZE
:7AC:787BA!A=;;KL=!B;;8?Z! ?J8CBC@A:?ACD7!Q=?BB7Z@! ?BJ!97!:7LC@A7:7J!<;!V;@A

\7ZZ[

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`F[T[a! 3""3\$!-"!\$)#*b3!1*!4#'%4[!#!<?QKZAE!87897:_@!/?QQ7VA?BQ7!;<!2/3!@A?AK@!=?@!A=7!
<;ZZ;\CBL!7<<7QA@W

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?f! #!<?QKZAE!87897!;!@?7!?VVZCQ?AC;B!C@!?!?VV;;D7J!8K@A!<;8?ZZE!:7AC:75!:7ZCUBYKC@
=C@! ;! =7:! <KZ87! @A?AK@5! ?KA;8?ACQ?ZZE! :7ZCUBYKC@=! A7BK:7! ?@! ;<! A=7! J?A7
?VVZCQ?AC;B!C@!?!?VV;;D7J!8K@A!<;8?ZZE!:7AC:75!:7ZCUBYKC@=! A7BK:7! ?@! ;<! A=7! J?A7
;<!A=7!2/3!A7:8[!

9f! '=7!<?QKZAE!87

A78CB?A7!?BE!8;JC<C7J!78VZ;E87BA!L:?BA7J!KBJ7:!A=C@!V;ZCQE!?BJ!7Z7QA!<KZZ!AC87!:7AC
@A?AK@!9E!LCDCBL!V:C;!\CAA7B!B;A007!@A7B;A!Z7@ @!A=?B! @C>AE!J?E@!V:C;!\A;!A=7!
97LCBBCBL!;<!?!LCD7B!@787@A7:[

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`F[T[F`!+%0# '1-! -"! 2-&%*#0(! /-+1"\$# 1-! -"! 3 /U&-/(3*! U0-b0#/(! '=7!
KBCD7:@CAE58?A! CA@! @;Z7! JC@Q:7AC;B5!;Q!B@CBACBK77! 2/3! U;L:78! ?@!
J7@Q:C97J!=7:7CB

U;ZCQEW07@CLB?AC;B!X!7:8CB?AC;B!U;;Q7JK:7@
\$=?VA7:W!115!U;ZCQC7@!X!U;;Q7JK:7@
47QAC;E0!
&?@A!#VV;;D78?BK?:E!OPFG

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O[! 0341b*#1-!#*+!30/1*#1-!U0-\$3+%034 !!!

1B!A=7!7D7BA!;<!?:7@CLB?AC;B!CB!A=7!Q;K:@7!;<!?W07857@078@0A87!CB@A:KQA;:!@=;KZJ!
LCD7!78VZ7!B;ACQ7!A;!A=7!Q=?C!;<!A=7!J7V?:A87BA!A;!?@ @K:7!A=7!KBCBA7::KVA7J!J7ZCD7:E!;<!CB@A
1B!7ZZ!Q?@7@!;<!78VZ;E87BA!A7:8CB?AC?B0!Z?:E!Q=7Q]@!@=?ZZ!97!:7Z7?@7J!A;!A=7!<?QKZAE!87897:
?A!A=7!B7>A! :7LKZ?;!J?A7!;<!V?E87BA5! ?<A7!!\:CAA7B! QZ7?:?BQ7! eQ;8VZ7AC;B! ?BJ! ?VV;;D?Z! ;<! A=
27:#-17\$(+& 23,+& A=\$4D& W!%2@! 977B! LCD7B!9E! A=7!J7?B! ;<!A=7!Q;ZZ7L7!;:!A=7!V;;D;@A[!]=7!
QZ7?:?BQ7!@Z!Q7:AC<E!A=?AW

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?f! ?ZZ!B7Q7@ @?:E!:7Q;;J@5!CBQZKJCBL!L:?J7!:7Q;;J@5!=?D7!977B!Q;8VZ7A7J! ?BJ!A:?B@<7::7J!A
A=7!J7V?:A87BA!Q=?C:k
9f! ?ZZ!9KCZJCBL! ?BJ!;;8!J7E @!=?D7!977B! :7AK:B7J!A;!A=7!J7V?:A87BA!Q=?C:k
Qf ?ZZ!V?:]CBL!V7:8CA@5!Q;8VKA7!?!QQ7 @ @5! ?BJ!ZCZ@E!BJK?C]@!=?D7!977B! :7AK:B7J!
A;!A=7!V;;V7:!KBCD7: @CAE!;<kCQC?Z@k
Jf! ?B!7>CA!CBA7:DC7!!=?@!977B!Q;8VZ7A7J!CA=!A=7!-<<CQ7!;<!K8?B!07@;K:Q7@k
Yf! ?ZZ!;<<CQ7! ?BJ!Z?9;?A;:E!<?QCZCAC7@!=?D7!977B!D?Q?A7J!CB!V;;V7!:;J7:k! ?BJ
<f ?!<;\?:JCBL! ?JJ:7@ @!=?@!977B!<CZ7A#A=7!-<<CQ7!;<!K8?B!07@;K:Q7@! ?BJ!V7:@;BB7Z!
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#! :0+l+,7\$&9'4"#+1&7\$7>\$@=?ZZ!97!;B7!\=;@7!AQ#CBL! ? @ @CLB87BA! ?BJ! ?VV;CBA87BA!\CA=!A=7!

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#9?BJ;B7J! ?BJ! KBQZ?C87J! V7:@;B?Z! V;;V7:AE! ;<! D?ZK75! CBQZKJCBL! SC97A! B;AQZVKA7:@5!
A?9Z7A@5!Q7ZZKZ?;!V=;B7@! ?BJ!;A=7:!A7Q=B;Z;LC7@!Q?V?9Z7!;<! @A;;CBL!JCLCACc7J!J?A?5! @A?A7!
CJ7BAC<CQ?AC;B5!\?ZZ7A@5!VK:@7@5!Q:7JCA!Q?:J@5!\?AQ=7@5!^7VZ:E5!Q?87:??@5!A7>A9;;]@5!;;9
JC@Q;D7:7J!B!&?8?:_@!Q?8VK@!@=C8797?A7ZE!AK:B7J!;D7;!A;!Q?8VK@!V;ZCQ7!<;!@?<7]77VCBL!
?BJ!@A?BJ?:JCc7J!=?BJZCBL[!!!-A=7!?:ACQZ7@!;<!V;;V7:AE!A=?A!J;!B;A!877A!A=7!J7<CB7J!D?ZK7!@=?ZZ
<;\?:J7J! A;! A=7! ;<<CQ7! ;<! V;;V7:AE! 8?B?L787BA! eWMPf! <;! @A;;?L7[! U;;V7:AE! @=?ZZ! 97!
Q;B@CJ7:7?9?BJ;B7J! C<! CA! ?VV7?:@! <;!8! A=7! QC:QK8@A?BQ7@! KBJ7;! \=CQ=! ! &?8?:! Q;87@! CBA;!
V;@ @7@ @C;B!;<!A=7!V;;V7:AE!A=?A!A=7!\B7!=? @!A=;;\B!CA!?\?E!;!=? @!D;ZKBA?:CZE!!Z7<A!;;!Z;@A!CA!\C
?BE!CBA7BA!;;!7>V7QA?AC;B!A;!7L?CB!CA[

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#9?BJ;B7J! ?BJ! KBQZ?C87J! V7:@;B?Z! V;;V7:AE! ?QYKC:7J!9E!Q?8VK@!V;ZCQ7!;;!V;;V7:AE!8?B?L787BA!
@=?ZZ!97!=7ZJ!<;!?!8CBC8K8!;<!;B7!=KBJ:7J! ?BJ!A\7BAE!eFOPf!J?E @!<;!8!A=7!AC87!Q?8VK@!V;ZCQ7!;;!
V;;V7:AE!8?B?L787BA! ?QYKC:7 @!A=7!V;;V7:AE!!!1<!A=7!V;;V7:AE!C@!7QZ?C87J!JK:CBL!A=?A!AC875!&?8
8?E! Q=?L7! A=7! ;B7:! ?! :7?@;B?9Z7! @A;;?L7! <77! \$?8VK@! V;ZCQ7! @=?ZZ! J7D7Z;V! ?VV;;V:C?A7!
V;;Q7JK:7@!A;! ? @K:7!A=7!7AK:B5!C<!V; @ @C9Z75!;<!KBQZ?C87J!V7:@;B?Z!V;;V7:AE!;<!D?ZK7!A;!A=7!V
;B7:@[!4KQ=!V;;Q7JK:7@! @=?ZZ!97!VK9ZC@=7J!CB! ?ZZ! ?VV;;V:C?A7?B?9?BJ;B7J!@L@! ?BJ! @=?ZZ!
CBQZKJ7! Q;BA?QACBL! A=7! V;;V7: ! ;B7:! A=;;KL=! Q?8VK@! Q;BA?QA! :7Q;;J@! eA7Z7V=;B75! 8?CZCBL! ?B
7Z7QA;;BCQ! ?JJ:7@ @7@f!

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#<A7;!;B7!=KBJ:7J! ?BJ!A\7BAE!eFOPf!J?E @5! ?BJ! ?<A7! ?VV;;V:C?A7!V;;V7:AE!Q=7Q]@!\=CQ=! :7<Z7QA!A=
D?ZK7!;<!A=7!V;;V7:

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`a[! "#\$%&'(!-,&1b#1-*4!#*+! g-0.&-#+4 !!
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`a[F! "#\$%&'(!g-0.!&-#+4 [!!3?Q=!<?QKZAEI87897:!V?CJd<KZZ

CBA7:7@A@!;<!A=7!@AKJ7BA@!\CA=!7L?:J!A;!Q;K:@7!;<<7:CBL@!V?:?8;KBA[!!1A!C@!:7Q;LBCc7J!A=?A!O
J7V?:A87BA@!A=7!OF!@787@A?@ @CLB87BA!8?E!A?]7!?!<;8!;A=7!A=?B!@7D7B!A=:77!@787@A7:!
=;K:!Q;K:@7@[!!

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'=7!V:C8?:E!VK:V;@7!;<!A=C@!:7?@ @CLB7J!AC87!C@!A;!?<<;J!V:;9?AC;B?:E!<?QKZAE!A=7!;VV:;AKBCA
@V7BJ!8;;7!AC87!;B!A=7!@Q=;Z?:@=CV5!:7@7?:Q=5!?BJm;:!Q:7?ACD7!@ACDCAE!B!CBL!A7BK:7!
?BJ!V:;8;AC;B!A;!A=7!?!?B]!;<!?@@@;QC?A7!V:;<7@@@;[!!)7BQ75!JK:CBL!A=7!AC87!<?QKZAE!87897:@!?!?7!
LCD7B!A=C@!:7?@ @CLB7J!AC875!A=7E!8?E!B;A!A7?Q=;!D7:Z;?J@!e7>QZKJCBL!Q;K:@7@!A?KL=A!JK:C
@787@A7:@!?!?BJ!@K887!@f[!

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#ZZ!B7!A7BK@A:~?Q]!<?QKZAE!CZZ!97!V:;DCJ7J!A=C@!:7?@ @CLB7J!AC87!~?KA;8?ACQ?ZZE!KBACZ!A=7!Q;
;<!A=7!47Q;BJ!(7?:!U77:~!07DC7[!!1<!A=7!:7DC7!Q;88CAA77!=@!Q;BQ7:B@!?!?9;KA!A=7!Q?BJCJ?A7_@!
V:;L:7@@@!CB!A=7!?!?7?;!<!@Q=;Z?:@=CV5!:7@7?:Q=5!?BJm;:~!Q:7?ACD7!@ACDCAE!B!CBL!A7BK:7!
A7?Q=CBL!~@ @CLB87BA!\CZZ!Q;BACBK7!A=;;KL=!A=7!<C<A=!E7?:[!!];\7D7:5!C<!A=7!:7@KZA@!;<!A=?A!:7!
V;@CACD75!~?BJ!V77:@!?!?7!@?AC@<C7J!\CA=!A=7!Q?BJCJ?A7_@!V:;L:7@@@!CB!A=7!?!?7?;!<!@Q=;Z?:@=CV
?BJm;:~!Q:7?ACD7!~?QACDCAE!B!CBL!A7BK:7!CZZ!97!LCD7B!A=7!;VAC;B!A;!A7?Q=!B;A!8:;7!A=?B!OF!@787@A7:!
=;K:@!JK:CBL!7?Q=@K9@7YK7BA!~?Q?J78CQ!E7?:!eC[7[5!<?ZZ!~?BJ!@V:CBL!@787@A7:@f!A=;;KL=!A=7!
;<!A=7!<C<A=!E7?:;!<!KZZ!AC87!@7:DCQ7[!!]=C@85Z797J76C@C;B5!~?BJ!7?Q=1B7BK:7:~?Q!
<?QKZAE!87897:~!CZZ!97!V:;DCJ7J!A=C@!:7?@ @CLB7J!AC87!;BZE!KV;B!\CAA7B!;7YK7@A!A;!A=7!J7V?:A
Q=?C!e\CA=IQ;VE!A;!A=7!J7?B!~?BJ!V:;D;@Af!B;Iz?A7!A=?B!"79:K?:EIFT!;<!7?Q=!E7?:!<;!A=7!@K9@7YK7BA!
~?Q?J78CQ!E7?:[!!#L?CB5!A=7!9CZCAE!A;@7Z77Q@ @CLB7J!AC87!;VAC;B!A7:8CB?A7@!?!A!A=7!7BJ!;<!A=7!
<C<A=!E7?:;!<!V:;9?AC;B?:E88ZZ8VZ;E87BA!eA;ICBQZKJ7!~?BE!Q:7JCA!~?J7J!<;!V:C;~!@7:DCQ7f[

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3>Q7VAC;B@!A;!A=C@!V;ZCQE!\CZZ!97!Q;B@CJ7:7J!;B!?!Q?@7!9E!Q?@7!9?@C@5!?

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"?QKZAE! 87897:@! @±~~BZA~~! 97! JC@Q;K:?L7J! <:;8! ?QQ7VACBL! ?VV;:V:C?A7! ?VV;CBA87BA@! ;<! ?!

CBA7@A@!;<!&?8?:!%BCD7: @CAE[
Lf! 07Q7CD7!?BE!Q;8V7B@?AC;B!<;! @7:DCQ7@!?!@?!4A?A7!78VZ;E77!<;;8!?BE! @;K:Q7!;A=7:!A=?B!
A=7!4A?A7!;<!7>? @5!7>Q7VA!?!@!;A=7:\C@7!V;;DCJ7J!9E!Z?]
=f! \$;88CA!?BE!?QA!;<!<:?KJ5!JC@=;B7@AE5!;!CZZ7L?ZC@BZK;BCQ?E!\?E!;<!7>Z8V
?BJ!B;A!ZC8CA?AC;Bf!@!@7@A?A?CB!V7:@;B?Z!;!<CB?BQC?Z!97B7<CA@!A;!#CQ=!A=7E!?:7
B;A!7BACAZ7J!9E!Z?!\;!\V;ZCQEK!<;LCBL!;!?ZA7:CBL!Q=7Q!@5?B!;A=7;!J;QK87BA@5!
(7) 8.4 (;) 80.3 (!) -4 (\) .4 (!) -0.3 (!) -4 (B) 80.3 (7) 80.3 (7) 8.7 (B) 8.4 (C) 7.4 (!) -6.10(:) 23.5 (!)Tc 42

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RP[U-&1\$(!-*!436%#&! /14\$-*+%\$!e433!#UU3*+16!Uf !
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&?8?:!%BCD7:@C8E88CAA7JIA;!Q:7?ACBL!?B08A?CBCBL!?B!7JKQ?AC;B?Z!Q;88KBCAE!CB!\=CQ=!7?Q=!

! RF[U-&1\$(! -!* U0-)1,1'1-*! -"!)#0#44/3*! !,#43+! -!* 0#\$35! \$-&-05!
03&1b1-*5! 4365! #b35! +14#,1&1'(5! *#1- *#&! -01b1*5! 23'30#*! 4'#%45!
436%#&! -013*#1-*5! -0!b3*+30!1+3*1'(!#*+!36U03441-* !!

&?8?! %BCD7:@CAE! @=#DZZ7M7YK?Z! 7JKQ?AC;B?Z! ;VV;:AKBCAC7@! <;! ?ZZ! @AKJ7BA@! ?BJ! 7YK?
78VZ;E87BA!;VV;:AKBCAC7@!<;! ?ZZ! ?VVZCQ?BA@! ?BJ! 78VZ;E77@5! ?BJ! ;A=7:\C@7!<; @A7: !?B! 7BDC; ;B8
<:77! ;<! CBAC8CJ?AC;B5! =K8CZC?AC;B5! ?BJ! =?;? @CB7B5! ?@! J7<CB7J! =7:7CB5! @=?ZZ! 97!
7>V:7@ @ZE!V;:=C9CA7J[

! RF[F +3"1*1'1-*! -"!)#0#44/3*! [!]'0%%7\$(+ ! @=?ZZ! 97! J7<CB7J! ?@! >A:787! ;! ;KA: ?L7;K@! ?QA@! ;!
Q;88KBCQ?AC;B@! A=?A! ? :7! CBA7BJ7J! A;! =?;? @ @5! CBAC8CJ?A75! ;! ;=K8CZC?A7! @AKJ7BA@5! <?QKZ
DC@CA; @! ;B! ?QQ;KBA75! Q;Z; ;5! :7ZCL@B55! ?L75! JC@ ?9CZCAE5! B?AC;B?Z! ;CLCB5! D7A7: ?B! @A?AK@5! @
;C7BA?AC;B! ;! ;L7BJ7: !CJ7BA7A! =?A! :?@;B?9ZE! Q?K@7! A=78! A;! @K<<7: !@7D7:7! 178;AC;B?Z! JC@A:7@ @
1A! @=?ZZ! 97! ?! DC;Z?AC;B! ;<! KBCD7: @CAE! V;ZCQE! <;! ?BE! @AKJ7BA78VZCQZAE5! ?L7! CB!
@KQ=?;? @ @87BA! ;<! ?BE! V7: @;B! ;B! A=7! Q?8VK@! ;! ;CB! Q;BB7QAC;B! CBA75! @CAE! @; ;7J! ?QACDCAE!
e@77! ?Z@; !#VV7BJC>! Uf[!]

! RF[0 21--*4[! 1A! @=?ZZ! 97! ?! DC;Z?AC;B! ;<! KBCD7: @CAE! V;ZCQE! <;! ?BE! @AKJ7BA5! <?QKZAE5! ;! @A?<<! V
K@7! ?KA=; ;CA7A7J! 9E! @A?A7! Z? \5! 9E! 4E@A78! ;KZ75! ;! 9E! KBCD7: @CAE! V;ZCQE! A; !J7V: CD7! ?BE! V7: @;B
=C@! ;! ;=7! ;! QCDCZ! ;CL=A@! ;B! Q?8VK@! ;! ;CB! Q;BB7QAC;B! CA75! ;K8CZC?A7! @CAE! [! 1<! ?! DC;Z?AC;B!
;<! KBCD7: @CAE! V;ZCQE! C@! Q;88CAA7J! ;B! Q?8VK@! ?B! Jm; ;! CBA75! BB7QAC;B@ @; ;7J!
?QACDCAE! 97Q?K@7! ;?Q75:Q;Z; ;5! :7ZCLC;B5! @7>5! ?L75! JC@ ?9CZCAE5! B?AC;B?Z! ;CLCB5! D7A7: ?B! @
@7>K?Z! ;C7BA?AC;B! ;! ;L7BJ7: !CJ7BA7A: 7@ @C;B! ?BE! V7: @;B! JC:7QAZE! =?;87J! 9E! @KQ=
DC;Z?AC;B5! A=7! DC;Z?A; ;! @! ;A@QV78V@7! @=?ZZ! 97! A:7?A7J! ?@! ?B! ?LL: ?D?ACBL! <?QA; ;<;! A=7!
VK;V;@7! ;<! J7A7:8CBCBL! A=7! ?VV; ;V: C?A7! M7B?ZAE[

! RF[! +14\$1U&1*#0(! 0%&34[! ! 4AKJ7BA5! <?QKZAE5! ?BJ! @A?<<! 78VZ;E77! ;<<7BJ7: @! @=?ZZ! 97! @K9^7QA!
JC@QCVZCB?:E! ?QAC;B! ?@! ?! VV; ;V: C?A7! KB87@A7B7CQK; !DC;Z?AC;B! ;<! A=C@! V;ZCQE!

! RF[R U0-\$3+%034!"-0!03+03441*b!)#0#44/3*! \$-/U*4 [! !U; ;Q7JK:7@! <;! ;! 7J:7@ @CBL!
=?;? @ @87BA! Q;8VZ?CBA@! ;<! @AKJ7BA@5! <?QKZAE5! @A?<<! ; ;CB@CA; ;@B@7+VZL=9A=7!
V; ;Q7JK:7@! ZC@A7J! CB! #VV7BJC>! 1! ;B! ;Q! @! !)

-BQ7! ?! JC@QCVZCB?:E! V7B?ZAE! C@! C8V; @7J5! A=7! ?QK@7J5! \=7A=7: ! ?! @AKJ7BA! ;! ?! <?QKZAE!
78VZ;E775! @=?ZZ! =?D7! =C@! ;! ;=7: !<KZZ! ;CL=A! A; !CB! D;]7! ?VVZCQ?9Z7! ?VV7?Z! VCB7JK;7@! ?QQ;
7>C@ACBL! KBCD7: @CAE! V;ZCQC7@[

RO[O[ba w);?>! 9;895w! 87?BCBL! ?! J7DCQ7! A=?AW! ?f! :7?@;B?9ZE! ?WV77!@B! 7>VZ;@CD7! ;!
CBQ7BJC?:E!J7DCQ7k!;!5!9f!9E!CA@!J7@CLBIQ?K@7@!Z?:8!;!7?QAC;B!;<!BE!AEV7!9E!V;ZCQE5
@?<7AE5! ;!;A=7:?! J8CBC@A:?A;:;! ?A! ?! @E@A78! Q;8V;B7BA5!\=;! ?7! Q=?L7J!\CA=! ?@ @K:CBL
Q?8VK@!@?<7AEk

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RO[O[H w\$=78CQ?Z! JC@V7B@CBL! J87DCQ7w?! J7DCQ7! e;A=7:! A=?B! ?! Q=78CQ?Z! JC@V7B@7:! @;ZJ!
Q;887:QC?ZZE! <;!V7:@;B?Z!V;;A7QAC;Bf!A=?A!C@!J7@CLB7J5!8?J75!;! ?J?VA7J!<;!A=7!VK:V;@7
;<!JC@V7B@CBL!?!@K9@A?BQ7!Q?V?9Z7!;<!Q?K@CBL!JD7:@7!V@EQ=;Z;LCQ?Z!;!IV=E@C;Z;LCC
;B!?!=K8?B!97CBL[

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RQ ! \$-*\$3#&3+!\$#00(!-!)#*+b%*4 [!&?8?:!%BCD7:@CAE!C@!Q;88CAA7J!A;!8?CBA?CBCBL!?\7ZQ;8CBL!

RO[O[G

'7>?@!#Q?J78E!;<!&7?J7:@=CV!CB!A=7!)K8?BCAC7@W!!#:7@CJ7BAC?Z! =;B;:@!

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RO^[T[O 1BJCDCJK?Z@! eCBQZKJCBL! @AKJ7BA@5! 78VZ;E77@5! ;! DC@CA;;@f! 8!
:7<7::7J!A;!Z?!7B<;:Q787BA!<;!?:7@A!BJIV;;@7QKAC;B[
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RO^[T[! 4AKJ7BA@! 8?E! 97! @K9^7QA! A;! JC@QCVZCB7! KV! A;! ?BJ! CBQZKJCE
7>VKZ@C!B!
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RO^[T[R 38VZ;E77@! 8?E! 97! @K9^7QA! A;! JC@QCVZCB7! KV! A;! ?BJ! CBQZKJCB
A7:8CB?AC;B!
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RO^[a #/3*+/3*4 W' =7! V:7@CJ7BA! 8?E! ?87BJ! A=7! V;;DC@C;B@C;@! V;ZCQE! ?@!
B7Q7@@?:E!<;!Q?8VK@!@?<7AE[!!4KQ=!?87BJ87BA!@=?ZZ!97!@K9^7QA!A;!7DC7!9E!A=
;?:J!<!07L7BA@!CB!?QQ;;J?BQ7!CA=!A=7!7>?@!4A?A7!%BCD7:@CAE!4E@A78!0KZ7@!?!BJ
07LKZ?AC;B@[
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R`! "#\$%&'(!4#*+#0+4!-"!\$-*+%\$!
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R\FP!

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(5! U-4' d3*%03!03213g !#+!

Q;;JCB?A;:!9E!47VA7897;!F!;<!7?Q=IE7?:[

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RR[0

U330!03213g!U0-\$344 [!! , ?@7J!KV;B!A=7!FGGH!QAC;B!;<!A=7!'7>?@!&77C@ZAA7!V;@A!
A7BK:7!:7DC7!V;;Q7@@!J7D7Z;V7J!9E!A=7!<?QKZAE!;<!&?8?;!%BCD7:@CAE5!A=7!V7:<;8?BQ7!;<!7?Q
A7BK:7J!<?QKZAE!87897;!eA;!CBQZKJ7M+?B!@m7QA;: @8K@A!97!:7DC7!79E!V77:@!?!BBK?ZZE
;!?A!Z7?@A!;BQ7!7D7:E!@C>!E7?:@!?!<A7!:A=7!J?A7!A=7!<?QKZAE!87897;! \?@!L:?BA7J!A7BK:7!;!7Q7CD7
?B! ?Q?J78CQ! V;;8;AC;B! !'=7! <?QKZAE! ;<! ??Q=! J7V?:A87BA5! CB! Q;ZZ?9;: ?AC;B! \CA=@A=?ZQ=?C:5!
J7D7Z;V! ?B! ?VV;;V:C?A75! \CAA7B! V;;Q7@@Q;8VZC@=! A=C@!A=?@!C@5! 7CA=7;! A;! Q;BJKQA! ?!
Q;8V:7=7B@CD7! V7:<;8?BQ7! 7D?ZK?AC;B! ?BBK?ZZE! ;<! ?ZZ! A7BK:7J! <?QKZAE! ;! A;! Q;BJKQA! ?!
Q;8V:7=7B@CD7! V7:<;8?BQ7! 7D?ZK?AC;B! ;<! ??Q=! A7BK:7J! <?QKZAE! 87897;CBL! 7D7:E! @C>
E7?;! V7:C;J5?BJ! \=CQ=! :7@KZS@!?! :?ACBL! ;<! s@?AC@<?QA;:E! V7:<;8?BQ7! ;! ;sKB@?AC@<?QA;:E
V7:<;8?BQ7!t!!'=7!V::Q7@@!8K@A!CBQZKJ7!A=7!CJ7BAC<CQ?AC;B!;<!?!<?QKZAE!87897;!A;!A?ZZE!D;A7@
CB!A=7!Q?@7!;<!?!8?^;:CAE!D;A7!;<!sKB@?AC@<?QA;:E!Q;B7@?@A=!A=7!Q;ZZ7?LK7@7!<!A=
<?QKZAE!87897;!@;!7D?ZK?A7J!?BJ!V;;DCJ7!=C8m=7;!CA=!?!9:C7<5!\:CAA7B!@K88?;E!;<!A=7!?:AC;B?Z7!<
A=7! D;A7! ! !'=7! Q=?C: ! ;<! A=7! J7V?:A87BA7?D;BB7?;88CAA77@=?ZK?ZZE! A=7! D;A7@! ;B! A=7!
V7:<;8?BQ7!;<!A=7!Q=?C:;! ?8!JC:7QA;: @!\=;!8K@A!97!7D?ZK?A7E! ?ZZ!A7BK:7J!<?QKZAE!CB!A=7!
J7V?:A87BA[! !'=7! V;;Q7@@!8K@A!97! ?VV;;D7J! CBCAC?ZZE!9E! A=7! J7?B! ?BBJMV:7D@7A5!
V7:C;JCQ?ZZE[!@;B?B?A: ?Q]!<?QKZAE!\CZZ!B;A!B7Q7@@?:CZE!97!@K9^7QAI!A;A=7!V77!:7DC7!V;;Q7@ @
?!V?:A!;<!A=7C:?!BBK?Z!7D?ZK?A7C?A5!A=;KL=!A=7C: !V;;JKQACDCAE!@=?ZZ!97!7D?ZK?A7J! ?BBK?ZZE!9E!
Z7?@A!A=7!J7V?:A87BA!Q=?C:[

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RR[[F #BBK?ZZE!97A\77B!/?Q=! ?BJ!47VA7897:5!7?Q=!J7V?:A87BA!Q;?E!CZCJCB?A;: !@=?ZZ!
:7DC7!Q;ZZ7L7mZC9: ?E! ?B!K?B@CA=!A=7!<KZZ!AC87!<?QKZAE! ?@!?!L;KV[!!'=7!@V7QC<CQ!J?A
@=?ZZ!97!J7A7:8CB7J!9E!A=7!B77J@!;<!A=7!KBCA[

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RR[[O 1B!"79:K?:E!;<!7?Q=IE7?:5!7D7:E!<?QKZAE!87897;! @=?ZZ!Q;8VZ7A7!A=7! ?BBK?ZZE!A!e"
A=?A!@7A@!<;A=! \=?A! =7! ;! @=7! =? @!Q;BA: C9KA7JJK: CBL!A=7!V:7DC;K@!Q?Z7BJ?;!E7?:!A;\?:J!A=

JC@A:C9KAC;B!<;!A=7BQK7?;!e477!47QAC;B!12!;<!A=7!"O[PMf[!!1A!C@!Z7<A!A;!A=7!<?QKZAE!?B
Q=?C;!;<!7?Q=!J7V?:A87BA5!@K9^7QA!A;!A=7!V7V;;D?Z!;<!A=7!J7?B5!A;!J7A7:8CB7!\=7A=7;!A=7!
JC@A:C9KAC;B!V7:Q7BA?L7@!?:7!A;!97!A=7!@?87!<;!7D7:E;B7!;!\CZZ!D?:E!<;8!CBJCDCJK?Z!A
CBJCCK?Z[!!#@!@A?A7J!CB!#VV7BJC>!12!e\$;887BA@!?BJ!1B@A:KQAC;B@f!<;!A=7!"O[PM5!VZ?B
V?L7@!8?E!97!:7DC@7J!A!?BE!AC87!JK:CBL!A=7!7D?ZK?AC;B!V7:C;J!9E!@C8VZ7!?L:7787BA!eC
\:CACBL5!@K9^5 cm BT -.7 (B) -6 Tm /TT.7 (!) -;!

47QAC;B! RR[O! <;! ?! J7@Q:CVAC;B! ;<! A=7! V;;Q7@@! ?BJ! J7V?:A87BA?Zm<?QKZAE! :7@V;B@C9CZC
sA:CLL7:7Jt! ?VV;;?Q=IJ7@Q:C97J! ?9;D7!J;7@!B;A! ?VVZE[!!0?A=7:5!A=7!:7@KZA!;<QKZAE!<?
CBCAC?A7@!A=7!J7@Q:7DC7!V;;Q7@@!J7@Q:C97J!CB!A=7!:78?CBJ7!;!<A=7!@!@7QAC;B[

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1A!C@!A=7!:7@V;B@C9CZCAE!;<!A=7!J7V?:A87BA!Q=?C:mZC9?:?E!Q;;JCB?A;:!A;!B;AC<E5!CB!\:CACBL
87897!;!<!A=7!@CAK?AC;B! ?BJ!;<!A=7!A;!;<;ZZ;\CB!B;@!e1<!A=7!V7:@;B!A;!97!B;AC<C7J!C@!A=7!Q=?C:m
V;;L:?8!JC:7QA;;@!CA!\CZZ!97!A=7!J7?B!\=;!J;7@!@;[f!!'=7!<?QKZAE!87897:!8K@A!7CA=7:!CBCAC?A7!?!
V;;<7@@C;B?Z!J7D7Z;V87BA!VZ?B!;;! :7YK7@A!A=?A!A=7!%BCD7:@CAE!U7:<;8?BQ7!3D?ZK?AC;B!#VV
\$;88CAA77!7DC7!7!7D?ZK?AC;B@!LCD7B!9E!A=7!J7V?:A87BA!Q=?C:mZC9?:?E!Q;;JCB?A;;! ?BJ!J7?B[!!'=7!
J7QC@C;B!8K@A!97!LCD7B!9E!A=7!<?QKZAE!87897:5!CB!\:CACBL5!A;A=7!J7V?:A87BA!Q=?C:mZC9?:?E!Q;;;
\CA=CB!A7B!\;;]CBL!J?E@!;!<!B;AC<CQ?AC;B[!!'=7!%BCD7:@CAE!U7:<?8CB!7V3D?ZK!\$;88CAA77!
@=?ZZ!Q;B@C@A! ;<! ;B7!A7BK:7J!<?QKZAE!87897:!7Z7QA7J!<;8!7?Q=!Q;ZZ7L7! ?BJ!A=7!ZC9?:?E[!!'=7!
Q;88CAA77!@=?ZZ!Q;B@CJ7:!A=7!KB@?AC@<?QA;;E!7D?ZK?AC;B@5!@A?A787BA@!<;8!A=7!<?QKZAE!8
;A=7!:7Z7D?BA!8?A7:C?Z@! ?BJ!J7A7:8CB!7D?ZK?AC;B@!\7:7!8?J7!CB! ?B! ?9CA?:?E!;;!Q?V:CQC;K@!
8?BB7:[!!gCA=CB!OP!\;;]CBL!J?E@!;!<!A=7!7Q7CVA!;<!A=7! ?VV7?Z5!A=7!Q;88CAA77!@=?ZZ!@K98CA!CA@!<
A;!A=7!V;;D;@A[!!'=7!V;;D;@A!@=?ZZ!B;AC<E!A=7!<?QKZAE!87897:5!J7V?:A87BA!Q=?C:mZC9?:?E!Q;;JCB?

@=?ZZ! :7Q;887BJ! ?! @V7QC<CQ! J7D7Z;V87BA! VZ?B! \CA=CB! @C>AE! J?E@! ;<! A
<QKZAE! 87897: _@! CBCAC?AC!B!;Q7@-@! ?@! J7@Q:C97J! ?9;B7!
J7D7Z;V87BA!VZ?B! @=?ZZ! @V7QC<E!A=7!J7<CQC7BQC7@!A=?A!?:7!97CBL! ?JJ:7@
?BJ! \=?A! Q:CA7:C?! 8K@A! 97! @?AC@<C7J! 9E! A=7! <?QKZAE! 87897: ! CB! ;J7: ! A!
:787JE !V7:<;8?BQ7!J7<CQC7BQC7@7@7! '=7!V7:C;J!Q;D7:7J!9E!A=7!
J7D7Z;V87BA! VZ?B! @=;KZJ! L7B7:??ZZE! 97! B;! 8;;7! A=?B! A\;! E7?:@!!
3>Q7VAC;B@!A;!A=C@!8?>C8K8!AC87!V7:C;J!8K@A!97!V7V;;D7J!9E!A=7!<?QKZAE!
87897:5!J7V?:A87BA!Q=?C:mZC9:?:E!Q;;JCB?A;5!J7?B5! ?BJ!V;;D;@A!

! RR[R[F[R! 1<!A=7!J7D7Z;V87BA!B!Z? @!977B!J7@CLB7J!9E!?!+7D7Z;V87BA!\$;88CAA775!
CA! @=?ZZ!97! @7BA!A;!A=7!J7V?:A87BA!Q=?C:mZC9:?:E!Q;;JCB?A;:!<;! =C@!;! =7
:7Q;887BJ?AC;B@! ?BJ! ?VV;;D?Z!! =7!J7V?:A87BA!Q=?C:mZC9:?:E!Q;;JCB?A;!
@=?ZZ! 877A! \CA=! A=7! <?QKZAE! 87897: !<;! <CB?Z! :7DC7!D?ZJ! ?NA=7!
VZ?B!!1<!A=7!VZ?B!C@! ?VV;;D7J!9E!e; !=?@!977B!J7@CLB7J!9E!f!A=7!J7V?:A87BA!
Q=?C:mZC9:?:E!Q;;JCB?A; ! ?BJ! A=7! <?QKZAE! 87897:5!9;A=7!V?:AC7@!8K@A! @CL
A=7! VZ?B! ?BJ! ?! Q;VE! @=?ZZ! 97! @7BA! A;! A=7! J7?B!! ! 1<! A=7! J7V?:A87BA!
Q=?C:mZC9:?:E!Q;;JCB?A; ! ?BJ! A=7! <?QKZAE! 87897: !J;!B;A! ?L:775!A=7B!A=7!J7?B!
@=?ZZ! 877A! \CA=! A=7! J7V?:A87BA! Q=?C:mZC9:?:E! Q;;JCB?A; ! ?BJ! <?QKZAE
87897: !A;! :7DC7!A=7!J7D7Z;V87BA!VZ?B! ?BJ!8? !7! :7Q;887BJ?AC;B@!!1<!<
A=7!<?QKZAE!87897: !J;7@!B;A! ?L:77!CA=!A=7! :7Q;887BJ?AC;B@!;!A=7!J7?B5!
A=7!A=7!J7D7Z;V87BA!VZ?B!C@! !<;! ?J7J!A;!A=7!V7V;;D;@A!<;! ?!<CB?Z! =7?:CBL!
?BJ!J7QC@C;B!! =7!<CB?Z!J7D7Z;V87BA!VZ?B! @=;KZJ! @77!A;!97B7<CA!9;A=7!A=7!
<?QKZAE!87897: ! ?BJ!A=7!KBCD7: @CAE!

! RR[R[F[T!! '=7! <?QKZAE! 87897: ! @=?ZZ! B;A! 97! 7ZCLC9Z7! <;! 87:CA! V?E! CBQ:7?@7@
V;;8;AC;B! JK:CBL! A=7! V7:C;J! Q;D7:7J! 9E! A=7! J7D7Z;V87BA! VZ?B!! ! '=7!
V7:<;8?BQ7!7D?ZK?AC;B!V;;Q7@ @!V:7@Q:C97J!CB!\$=?VA7: !115!@7QAC;B!RR!;<!A=
&?8?:!%BCD7: @CAKZAE! ?BJ9;; ! @=?ZZ! @K@V7B7J!JK:CBL!A=7!V7:C;J!
Q;D7:7J!9E!A=7!V;;<7@ @C;B?Z!J7D7Z;V87BA!

! RR[R[F[d! #ZZ! V;;<7@ @C;B?Z!J7D7Z;V87BA! VZ?B@! @=?ZZ!97! <;87J!A;! ?JJ:7@ @! @V7QC<
@CAK?AC;B@! ?BJ! @=;KZJ! 97! CBJCDCJK?ZCc7J!! !)\7D7:5! ??Q=! V;;<7@ @C;B?
J7D7Z;V87BA!VZ?B! @=;KZJ!CBQZKJ7!A=7!<ZZ;CBLW!

! ?f! @V7QC<CQ!J7<CQC7BQC7@!A;!97! ?JJ:7@ @7Jk!
! 9f!!! @V7QC<CQ!;9^7QACD7@!B77J7J!A;! :787JE!A=7!J7kCQC7BQC7@k!
! Q! ?! ZC@A! ;<! ?QACDCAC7@! A;! 97! Q?::C7J! ;KA! A;! ?Q=C7D7! A=7! :7YKC:
;KAQ;87@!;<!A=7!V;;<7@ @C;B?Z!J7D7Z;V87BA!VZ?Bk
! Jf!!! ?!@Q=7JKZ7!<;!Q;8VZ7ACBL!A=7! ?QACDCAC7@k!
! 7f!!! Q:CA7:C?!A=?A! @=?ZZ!97!K@ @!V;;L:7@ @k! ?BJ
! 4!!! ?!VZ?B!<;!V7:C;JCQ!J;QK87BA7J! ? @ @7@ @87BA!A;!97!Q;BJKQA7J! ?A!
Z7?@A!7D7:E!@787@A7:!

! RR[R[F[H!! # @ @7@ @87BA! J;QK87BA?AC;B! <;! A=7! J7D7Z;V87BA! VZ?B! 8K@A! CBQZKJ7! ?!
@A?A787BA!;<IV;;L:7@ @!V:7V?:7J!9E!A=7!<?QKZAE!87897: ! ?BJ! ?A;87Z! :C
:7@V;B@7!9E!A=7!J7V?:A87BA!Q=?C:mZC9:?:E!Q;;JCB?A; !;!A=7!+7D7Z;V87BA!
\$;88CAA77!

! RR[R[F[M!! '=7! <?QKZAE! 87897: ! 8?E! :7YK7@A! A=?A! A=7! J7V?:A87BA! Q=?C:mZC9:?:E!
Q;;JCB?A; ! ;! A=7! +7D7Z;V87BA! \$;88CAA77! 7>A7BJ! A=7! @Q=7JKZ7! <;!
Q;8VZ7ACBL!A=7!J7D7Z;V87BA!JK:CBL! ?BE!;<!A=7!V7:C;JCQ! ? @ @7@ @87BA @!!
'=7! BK897: ! ;<! @KQ=! :7YK7@A@! @=?ZZ! 97! ZC8CA7J! A;! ;B75! KBZ7@ @! A=7!

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?8;KBAmV7:Q7BA?L7!<;;!7?Q=!87:CA!;;!@=? :7!L;;KV5!?BJ!A=7!JC@A:C9KAC;B!;<!<?QKZAE!eBK897:

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! ?f! U77:~V7:<~;8?BQ7!~BJ!@~?Z?:EIJ?A?!?@!Q;8V?:7J!A;!CB@ACAKAC;B!~BJ!@~?Z?:EIJ?A?!~CZZ
 97!Q;B@CJ7:7J!CB!J7A7:8CBCBLI8?:]7A!V?E!~?JD?BQ7@~[
 9f! ~;!97!Q;B@CJ7:7J<~;~!?!8?:]7A!~?JD?BQ75!?!<~?QKZAE!87897:~!8K@A!~=?D7!Q;8VZ7A7J!
 Q:7J7BAC?Z@!~?VV~;V:C?A7!<~;~!A=7!JC@QCVZCB7!~?BJ!97!A7BK:7A!~?CB!A7BK:7
 8CBC8K8!;<!A=~77!E7?~!@~[
 Qf ~;!97!Q;B@CJ7:7J!<~;~!?!8?:]7A!~?JD?BQ75!?!<~?QKZAE!87897:~!8K@A!97!V7:<~;~8CBL!~?A!
 A=7!~CL87:CA!Z7D7Z!;B!"O[PM!<~;~!A=7!Z?@A!A=~77!E7?~:~@~[
 Jf! ~;!97!Q;B@CJ7:7J!<~;~!?!8?:]7A!~?JD?BQ75!?!<~?QKZAE!87897:~_@!~?Z?:E!CB!~7Z?AC;B!A;!?!
 <~?QKZAE!87897:~_@!~?B]!8K@A!97!;KA!;<!~?ZCLB87BA!~CA!~V77:~!CB@ACAKAC;B!@~?Z?:C7
 <~?QKZAE!~?A!~@C8CZ?:ZE!~@CAK?A7@~!KBCD7J@C7A87BA@!~\CA!~@C8CZ?:!
 ?QQ;8VZC@~87BA@~!CB!A=7!@~?87!JC@QCVZCB75!~CA!~Q;8V?:~9Z7!~?B]!~?BJ!AC87!;<!@7:D

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! ?f! 1BA7:B?Z!/C@~?ZCLB87BAV?:C@~;B!;<!@~?Z?:C7@CZ7Z!V7:<~;~8CBL!78VZ;E77@!
 CBB7_@~!KBC!J7V?:A87BA!~CA=CB!A=7!@~?87!^;9!QZ?@~@C<CQ?AC;B!~?A!&~8?:!%BCD7:@C
 9f! /?:]7A!/C@~?ZCLB87BA!~7B!A=7!~?D7:~?L7!8?:]7A!V?E<~;~!?!Q;8V?:~9Z7!^;9!~CA!
 V77:~!CB@ACAKAC;B@~!C@!~@CLBC<CQ?BAZE!~CL=7:~!@~?B?A~TUZB7ZQ~E7!Y7@~!CB!
 8CBJ5!~?@AKJE!;<!J!A7BQ=8?:]7J!<~;~!A=7!~VVZCQ?9Z;~8?:]7A!~CZZ!97!B77J7J!
 A;!97!Q;BJKQA7J!A;!@KVV;~A!A=C@!~?AC;B?Z7[!
 Qf 4V7QC<CQ!3>V?B@C;B!;<!07@V;B@C9CZCAC7@~!IB;A!?!i7QZA@CBC2CQ?AC;BN!
 QZ?@~@C<CQ?AC;B5!~?BE!~@CLBC<CQ?BA!Q=?BL7@~!CB!~7@~V@C@C9CZCAC7@~!B5;A!~7YK
 ^;9!ACAZ7[!g;~!QZ;@7ZE!~CA!~K8?B!~7@~;K:Q7@~!A;!J7A7:8CB7!~7A=7!~A=7!^;9!Q=?BL7@
 \?::~?BA!?!~7QZ?@~@C<CQ?AC;B!!!
 Jf! 4?Z?:E!\$;KBA7:;<<7i!!C!?!@~?Z?:E!~?J^K@A87BA!C@~!97CBL!8?J7!9?@7J!KV;B!?!
 Q;KBA7:;<<77Q7CD7J!9E!~?B!78VZ;E775!&~8?:!@~;KZJ

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+3U#0/3*! \$)#1045! +3#*45! #44-\$1#3m#4414#*! +3#*45! #*+!
#4414#*m #44-\$1# '3! 21\$3! U0341+3*4 mU0-2-4'4 [! ! #ZZ! J7V?:A87BA! Q=?C:@5! J7?B@5!
?@@;QC?A7m?@@;QC?A7! J7?@C?B?A?@C?A7! DCQ7! V:7@C;J?B?@C=?ZZ! 97! 7D?ZK?A7J!
?BBK?ZZE#A=7C7@V7QACD7! @KV7:DC@; @[!! +7V?A87BA@=?ZZ! 97! 7D?ZK?A7J! ?@! V?:A! ;<! A=7!
?BBK?Z!<?QKZAE!7D?ZK?AC;B!V;:Q7@ @!eK@CBLIA=7!"O[PMQ!<;8!<;!Q=?C:@f[!!+7V?@C;J?B?@C=?ZZ! 97! 7D?ZK?A7J! ?@! V?:A! ;<! A=7!

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078?CBCBL! QK::7BA! CB! ;B7I@! JC@QCVZCB7! @=?ZZ! 97! ?B! C8V;;A?BA! KBCD7:@CAE! ;9^7QACD7! ?B.
Q;B@CJ7:7J!?!]7E!(K) 8.4 C7@V;B

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&?8?:!%BCD7:@CAE!7Q;LBCc7@!CA@!;9ZCL?AC;B!A;!8?CBA?CB!?!<?QKZAE!A=?A!C@!V!;<7@@C;B?ZZ
V;;JKQACD7[!!'=C@!JC87B@C;B!C@!C8V;;A?BA!B;A?ZAE!CB@A:KQAC;B5!9KA!Z@;!A;!A=7!7?ZCc?AC;B!
A=7!KBCD7:@CAE!@!L;!Z!?!@?!@QC7BA!C?B!QKZAE!CB@A:KQAC;B5!9KA!Z@;!A;!A=7!7?ZCc?AC;B!
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V!;<7@@C;B?ZIL;A=!A=;;KL=!7@7?:Q=!?BJ!Q:7?ACD7!QACDCAC7@!;KA@CJ7!A=7!QZ?@ @;;8[

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?BJ!7@;]@ 5!^;K:B?Z@5!8CQ; ;<;8@5!8?V@5!8K @CQ!@Q;:7@5!@A?A;7!7B87B!7!V!K9ZCQ?AC;B@5!
@;<A!?:75! ?BJ! ?KJC;DC@K?Z!8?A7!E7ZZ@9 :? :E!V;:DCJ7@!JCLCA?Z! ?QQ7@ @!A;!?:ACQZ7@!<;8!RG5PP!
@Q=:Z?:ZE!^;K:B?Z@! ?BJ!;A=7!V7:C;JCQ?Z@!A=:;KL=!@K9@Q:CVAC;B@!A;!?:LL:7L?A7J!J?A?9?@7@! ?@!
A=:;KL=!J;QK87BA!J7ZCD7:E!A :?A@?B@!AKJ7BA @5!<?QKZAE5! ?BJ!@A?<<!;<!&?8?!%BCD7: @CAE!Q?B!KAC
Q;8VKA7: @CBK@7!;! :78;A7ZE!A;!Z;Q?A7!V:CBA! ?BJ!7Z7QA; ;BCQ!9;]@!CB!A=7!;BZCB7!Q?A?Z;L!['=7E!Q?B!
?Z@;! ?QQ7@ @!JCLCA?Z!QCA?AC;B!CBJ7>7@! ?BJ!A7?A9?@B7?5!ACQZ7@5! ?BJ!CB7LKCJ7@!
A?CZ;:7J!A;!@V7QC<CQ!@K9^7QA!<C7ZJ@! ;!@AKJE5!@AEZ7! ?BJ!<;8?AACBL!=7ZV!<;! :7@7?:Q=!V?V7: @
?BJ!JC@A?BQ7!7JKQ?AC;B!@KVV;:A!#!@7BACQZC9 :? :E!@A?<<!V;:DCJ7@! ?@ @C@A?BQ7!CB!A=7!K@7
:7<7:7BQ7!8?A7:C?Z@5!L;D7:B87BA87;BA@5! @V7QC?Z!Q;ZZ7QAC;B@! ?BJ! ? :Q=CD?Z!8?A7:C?Z@5! :7@7
8?A7:C?Z@5! ?BJ!CB@A:KQAC;B?Z!87JC? !['=7!\$?:JCB?Z! -B7!\$?:J! @7:D7@! ?@! ?!V?A;BI@!ZC9 :? :E!Q? :J!
9; ;;CBL! VK:V;@7@! ! &?8? :! 3Z7QA; ;BCQ! #QQ7@ @! e&3#! Q:7J7BAC?Z@! ?7! KACZCc7J! A;! ?QQ7@ @!
J?A?9?@7@?A=7!:7Z7QA; ;BCQ! :7@;K:Q7@ !['=7!ZC9 :? :E!V;:DCJ7@! ;;8@!<;!L;KV!@AKJE5! ?BJ!A=7!<C<A=
<Z; ;;C@! ?!J7@CLB?A7J!YKC7A!@AKJE5?Z? ! \$7CQ;VE!8?Q=CB7@!<;!9;A=!V:CBA! ?BJ!8CQ; ;8
? :7! ?D?CZ?9Z7;8VKA7: @? :7!;V7BZE! ?QQ7@ @C9Z7!A;! ?ZZ!@AKJCB@C7BZ!9@!Z;Q?A7J!;BIA=7!
<C: @A! ?BJ! @7D7BA=5kZ@ @7QACD7ZE! !#B! ?JJCAC;B?Z!Q;8VKA7: @! ? :7! ?D?CZ?9Z7!<;!QZ? @ @7@!
?BJ!@V7QC?Z!V;^7QA@!CB! ?Z?D7B@? :E!QZ? @ @; ;8! !?CB7@A?<<!V;:DCJ7! ?@ @C@A?BQ7!CB!A=7!
K@7!<!Q;8VKA7: @5!V:CBA?BJ!@;<A? :7!['=7:7!?:7CL=@7V?:?A7ZE!J8CBC@A7:7J!?:? ?@!CB!A=7!b :?E!
&C9 :? :E!%BCD7: @CAE! g:CACBL! \$7BA7k!AKJ7BA! 'KA; ;CBL! ?BJ! 07A7BA@7BDC7@KA; ;C?Z!
\$7BA7:k!<<CQ7! UZ?BBCBL! ?BJ! # @ @7@ @87BA7!<;! ?7?Q=CB ?BJ! &7?:BCBL! 3B=?BQ787BAK
-<<CQ7! ;<! 07@7?:Q=! ?BJ! 4V;B@;U;L: ?8@! #J8CBC@A: ?AC;BA7:DCQ7@!)7ZV! +7@]k! /7JC?!
47:DCQ7@J8CBC@A7:7J!9E! ?BJ!%BCD7: @CAE!7BA7:[

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,7E;BJZ;Q?ZZE!V;:DCJ7J! :7@;K:Q7@5!A=7!b :?E!&C9 :? :E!Q?B!@KVVZE!V?A; ;B@!CA=!;A=7!ZC9 :? :C7@_!9;
?BJ! :ACQZ7@!A=:;KL=! ?B!7<<CQC7BA!CBA7:ZC9 :? :E!Z; ?B!9; ;;CBL!@E@A78! !&?8?!%BCD7: @CAE!@AKJ7

:7YKC:CBL!CBA7B@CD7!87JCQ?Z!Q?:7\CZZ!97!:7<7::7J!A;!?:7?!=;@VCA?Z!787:L7BQE!<?QCZCAC7@(!)7?
@7:DCQ7@!@=?ZZ!B;A!97!::KACB7ZE!?D?CZ?9Z7!A;!<?QKZAE!?BJ!@A?<<[!]"?QKZAE!?BJ!@A?<<!\=;!=
\;] d7Z?A7J!CB^K:C7@!8?E!97!A:7?A7J!A!A=7!7?A7J!A!A=7!7?A7J!A!A=7!7?A7J!A!A=7!7?A7J!A!A=7!7?A7J!A!A=7!

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aT[! 1*"0/#'1-'*!'3\$)*-&-b(! %43! U-&1\$1345! 3d#1& 5! #*+! 3&3\$'0-*1\$!
#\$\$-%*4 !
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aT[F 1*"0/#'1-'*!'3\$)*-&- b(! \$-/U%'30!%43!U-&1\$134!#*+!3 d#1&1\$-/%'1\$#1-'*!!
"?QKZAE!87897: @! ? : 7! 7>V7QA7J!A;!Q;8VZE!\CA=!A=7!V;;DC@C;B@!;!<!&?8?:!%BCD7: @CAE!
'7Q=B;Z;LE!U;ZCQC7@!?!BJ!4A?BJ?:J@!\=CQ=!?:7!D?CZ?9Z7!?!A!!
=AAV@Wmm\Z?8?:[7d@nOCQ7Bd@KVV:AmV:ZCQC7@mCfJb;-ACZAC;B5!V;ZCQC7@!V7:A?CBCBL!
A;!A=7;:ZJ!gCJ7!g79 mCBA7!B7A!97!<;KBJ!CB!#VV7BJC!#!
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aT[O 3d#1&1\$-/%'1\$#1-'*! -<<CQC?Z! &?8?:! %BCD7: @CAE! Q;88KBCQ?B@! 8?E! 97! JC@A:C9KA7J! A;!
<?QKZAE5!@A?<<!?BJ!@AKJ7BA@!DCNMBZD7B@CAEJJ:7@ @7@!!1A!C@!7>V7QA7J!A=?A!ZZ!<?QKZAE
@A?BJ!@AKJ7BA@!\CZZ! :?J!KBCD7?ZAC7BA!A;!A=7C:!Q?8VK@! ?JJ:7@ @! ?A!Z??@A!;BQ7!7D7:E!
\77]5! ?BJ!A=?A!Q?8VK@!?!Q?8V?E!97!9?@7J!;B!A=C@!7>V7QA?AC;B!!!=C@!V;ZCQE!VZC7@!A;!@AKJ7B
JK:CBL! ?BE!@787@A7:m@7@ @C;BmA7:8!A=7!@AKJ7BA!C@!7B;;ZZ7J! ?BJ!A;!<?QKZAE! ?BJ!@A?<<!JK:CB
Q;BA: ?QA7J!78VZ;E87BA5!7>Q7VA!;<<CQC?Z! =;ZCJ?E@!;!;!A=7!V7:C;J@!\=7B!A=7@?7!Q?8VK@!C@!QZ;
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aT[! -"1\$1#&13 d#1 &#++0344!#*+!\$-/%'1\$#1-'*!!#&?8?:!%BCD7: @CAE !7d?CZ! ?JJ:7@ @! @=?ZZ!
97!V;;DCJ7J!A;! ?ZZ!<?QKZAE5!BJ!@AKJ7BA@!!-<<CQC?Z!KBCD7: @CAE! ?BB;KBQ787BA@! @=?ZZ!97!@7
A=C@J:7@ @! ?BJ!CA!C@!7>V7QA7J!A=?A! ?ZZ!<?QKZAE5!BA@!@L@B?Z!A=7C! ?JJ:7@ @7@!<;!
87@ @?L7@A! Z??@A! ;BQ7! 7D7:E! V77]A=7: ?BB;KBQ787BA@! @=?ZZ! ?VV7?;! ;B! A=7! KBCD7: @CAE_@!
=;87V?L7! e\Z?8?:[7JKf! !1B!787:L7BQC7@5! Q?8VK@! CB<;8@AC?Z! 7Z7QA;;BCQ?ZZE! @7BA!
A=;;KL=&?8?:_@ \$-**3\$' cB+!@E@A7!
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aT[R 3&3\$'0-*1\$!#\$\$-%*4! &?8?:_@Z7QA;;BCQ!#QQ;KBA!e&3#f!C@! ?QACD7! ?@!Z;BL! ?@!E;K! ? : 7!<?QKZAE
87897: ! ?A!&?8?:!%BCD7: @CAE!!&3#! ?QQ;KBA@!V;;DCJ7! ?QQ7@ @!A;!A=7!<;ZZ;CB7CZ!DCQ7@W!&%
,Z?Q]9;?J !e&?8?:_@!&??:BCBL! ?B?L787BA!4E@A78f5!BZCB@S3D?ZK?AC;B@?8?:_@!@AKJ7BA!
7D?ZK?AC;B!<ICB@A:KQAC;B!@E@BQ7B8?8?:_@!@AKJ7BA!QZK9! ?BJ! ;L?BCc?AC;B!8VKA@5!Q
Q8VKA7: @8E4Q=;Z?: @=C5!@8VK@V:CBA@B!BJA=7!C:7Z7 @A;] [!!!
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aT[T] &##01+! &?8?:1+!e;<A7B!A7:87W&"7>\$0 f!V;;DCJ@! ?QQ7@ @7Z747:DCQ7! ;?BB7:57: @;B?Z!
CB<;8?AC;B?Z? @! :7Q;;J@5!L: ?CBK57BA!7Q;;J@5!V?E87BA5! ?BJ!<CB?BQC?Z! ?CJ!CB<;8?AC;B!!
&?8?:1+!Q;B@C@A?Q?VCA?Z!&! ?BJ!7CL=A!BK87C@C!C;!!@7QK:CAE5!A=7!&?8?:1+!7YKC:7@! ?!V?@ @!
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aa[F! +3"1*1'1-* [!":77J;8!;<!CBYKC:E! ?BJJJC@QK@ @C;BIC@!9?@CQ! ?BJCBA@Z7B@AKZ!J7D7Z;V87BA5!
V;;DCJ7J! @KQ=!<:77J;8@! ? :7!7>7:QC@ 780BB7:!A=?A!J;7@!B;A!CZZ7L?ZZE!J7::L?A7!A=7!:CL=A@!;<!
;A=7:@!;!CBA7:<7CA=!A=7! ?Q?J78CQ!V;;L: ?8@! ?BJ! ?J8CBC@A: ?ACD7!V;; 878@?7@CD7: @CAE
'=7!L;;KBJ@!;<!&?8?:! ? :7! ZC8CA7J!VK9ZCQ!<!@K@?5QA!A;! @KQ=! :7?@;B?9Z7!AC875!VZ?Q75! ?BJ!
8?BB7:! :7@A:CQAC;B@! ?@:7@CJ7BA!E!C8V;@7!e@77!4K9V?:?L:?V=@!! ?BJ! aa[T!;<!A=C@!
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aa[Q - "" d\$/U%4! 4U3# .304! 1*! &##/0! "#\$1&1'134 [! '=7! <:77J;8@!;<! @V77Q=! ?BJ! ?@ @789ZE!
LK?:?BA77J!9E!A=7!"C:@A! ?BJ!";K:A7787BA@!A;!A=7!%BCA7J!4A?A7@!\$;B@ACAKAC;B! @=?ZZ!97!
7B^;E7J!9E!A=7@AKJ7BA@5!<?QKZAE5! ?B&78A?%BCD7: @CAE=! :7@V7QA!A;!A=7!;VV;:AKBCAE!A;!
=7?:!;<@Q?8VK@!;!KA@CJ7!@V7?]T:@[

aa[QF! 1<! ?! :7LC@A7:7J! Q?8VK@! ;:L?BCc?AC;B! C@! @V;B@;:CBL!@VQ?78K@A! =?@! A=7!
:7@V;B@C9CZCAE! ;<! 8?]CBL! QZ??QA!A=7A7! ;:L?BCc?AC;B5! B;A8?;! %BCD7: @CAE!
7>A7BJCBL! A=7! CBDCA?@Q?B? ! ?BJ! A=?A! ?BE! DC7@!A=7! @V7?]7! :8?E!7>V:7@ @! ? :7!A=7
@V7?]7!l@!;!B! ?BJ!B;A!B7Q7@ @?:CZE!A&@?7!;%BCD7: @CAE!

aa[O! 4AKJ7BA@5!<?QKZAE5!@A?<<5! ?BJ!:7LC@AC;BQ18BC17BCBL!<;!VK9ZCQ!;<<CQ7!;B!97=?Z<!
;<!Q?BJCJ?A7@!<;!VK9ZCQ7!8K@A! ?9CJ7!9E!A=7!V;;DC@C;B@!;<!A#C@!47QAC;B[

aa[Q` ! 4V7?]7: @!A;!97!V?CJ!<;!8!@A?A7!<KBJ@!A;! @V7?]7?BJ!Q?8VK@!@=?ZZ!@V7?]!CB!?!<?QCZCAE!
A=?A!C@!;V7B!A;!A=7!VK9ZCQ?@C?@AC;B!J;7@!B;A! ?VVZE!A;!QZ? @ @7@5!@78CB?:@5!@E8V;@C
?BJ!Q;B<7:7BQ7@!CBA7BJ7J!<;!A=7!K@7! ?BJ!97B7<CA!;<! @AKJ7BA@5!&?B&78A?%BCA7J!
LK7@A@![*;!V7:@;B!8?E!;9@A:KQA!;!Z7@?B7V7BA=7!;VV;:AKBCAE!<;!A=7! ?KJC7BQ7!A;!
@77! ?B;B@7;

DC;Z?AC;B!;<! ?BE! <7J7:?Z5! @A?A75!;;!Z;Q?Z!Z? \[! &CA7:?AK:7!8?E!B;A!97! JC@A:C9KA7J! \|=7:7!A
8?BB7:! ;! <;:8! ;<! @?CJ! JC@A:C9KAC;B! Q;B@ACAKA7!@;B!Q;A7!Z!C@:KVA@! QZ?@ @::;8!
JC@QK@@@C;B5!C8V7!8?BA7B?BQ7!;<!VK9ZCQ!;;J7:5!;;!Q;B@ACAKA7!@;A7: @;A7: @;B!
JC@A:C9KACBL!;;!JC@@78CB?ACBL!A=7!8?A7:C?Z!;;!A;B;EDC;KV?Z[

aa[a[Q "; :! V;ZCQE! VK:V; @7?D;Q?QE! 87?B@! ?JJ:7@ @CBLL;;KV! <;:! C88CB7BA! ?QAC;B! ?BJ!
@A77ZCBL5!9;Z@A7!CBL5!;;

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aH! U-&1\$(!-*!U-&1\$134 !

#BE!87897;!;<!A=7!<?QKZAE!;!@A?<<!;!BE!@AKJ7BA5!CBJCDCJK?ZZB!EQ/ZZ70A0DCZAE5B!
V;ZCQE!V;;V;@?Z! ?JJ:7@ @CBL! ?B! ?Q?J78CQ! C@ @K7! ;! Q;BQ7:B! <;! Q;B@CJ0:7@CB79A_A@7!
3>7QKACD\$7KBQCZ! '=7! V:7@CJ7BA! ;! =C@m=7:! J7@CLB77

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aM[4%,4#*123!\$)#*b3!U-&1\$(W!4#\$4\$-\$!*-1"1\$#1-* !!
#BE!87897!;!<!A=7!<?QKZAE!;!@A?<<!;!BE!@AKJ7BA5!CBJCDCJK?Z?B?E!VZ7Q7C7D7ZAA7B!
V;V;@?Z! ?JJ:7@CBL! ?Q?J78CQ!L:78@mQ;K:@7@m@K9@A?BACD7! Q=?BL7@! e@77! 97Z;!f!
Q;B@CJ7:?AC;B! 9E! A77!;V:C?A7! J7V?:A87BA?Z5! Q;ZZ7L75! ?BJ! KBCD7:@CAE! QK::CQKZK8! :7DC7
Q;88CAA77@!?!BJ!Q?J78CQ!J8CBC@A:?A;:@[!!

aM[F U%0U-43[!!&?8?!%BCD7:@CAE!VZQ;87@!A=7!7>V?B@C?BU78CQ!;VV;:AKBCAC7@!A=;KL=!A=7!
J7D7Z;V87BA! ?BJ! C8VZ787BA?AC;B!;<!B7!V;L:78@! ?BJm;:!Q;K:@7@[!&?8?!%BCD7:@CAE!C@! ?Z@!
Q;88CAA7J!A;! ?J=7:CBL!A;!A=7!V;ZCQC7@! ?BJ! :7YKC:787BA@! ;<!CA@! :7LC;B?Z! ?QQ:7JCACBL!9;JE
4;KA=7:B! #@@@;QC?AC;B! ;<! \$;ZZ7L7@! ?B;Z@Q\$;88C@@C;B! ;B! \$;ZZ7L7@! e4#\$4\$-\$f! 1B!
?QQ;:J?BQ7! \CA=! @KQ=! V;ZCQE5! &?8?!%BCD7:@CAE! \CZZ! B;AC<E! 4#\$4\$-\$! ;<! V:A7BAC?Z! ;! ?QA
@K9@A?BACD7!Q=?BL7!A;ICA@!;Z7!?!BJ!@Q;V7!CB!?!AC87ZE!8?BB7:5!?!BJ!CB!@;87!Q?@7@5!\CZZ!@77!
<:;!Q=?BL7!97<;7!A=7!CBA7C7!C@!C8VZ787BA7J[

4#\$4\$-\$!C@! :7Q;LBCc7J!9E!A=7!%BCA7J!4A?A7@!+7V?:A87BA!;<!3JKQ?AC;B! ?@! ?B! ?L7BQE! \=; @7!
?QQ:7JCA?AC;B!7B?9Z7@!ICA@!87897: @!A;!@77]!7ZCLC9CZCAE!A;V?:ACQCV?A7!CB!CAZ7!12!V;L:78@[!!
C@! :7@V;B@C9Z7!<;:7DC7CBL! ?ZZ! @K9@A?BACD7!Q=?BL7!A;ICA@!;Z7!?!BJ!@Q;V7!CB!?!AC87ZE!8?BB7:5!?!BJ!CB!@;87!Q?@7@5!\CZZ!@77!
:7DC7@!A;!J7A7:8CB7!\=7A=7:;!B;A!A=7!Q=?BL7!=?@!?!<<7QA7J!A=7!YK?ZCAE!;<!A=7!A;A?Z!CB@ACAKAC
A;! ?@ @K:7!A=7!VK9ZCQ!A=?A! ?ZZ! ?@V7QA@! ;<!A=7!CB@ACAKAC;B!Q;BACBK7!A;!877A!J7<CB7J!@A?BJ?:
&?8?!%BCD7:@CAE!C@! ?Z@;! Q;88CAA7J!A;! 7@A?9ZC@=CBL! V;Q7JK:7@!A;! 7B@K:7! Q;8VZC?BQ7!
V;DCJCB! LKCJ?BQ7! ?BJ! 7>V7QA?AC;B@! :7L?:JCB! A=;@7! QK::CQKZ?;! ?BJ! ;L?BCc?AC;B?Z! Q=?B!
:7YKC:CBL!B;AC<CQ?AC;B! ?BJm;: !?VV;:D?Z[

aM[O +3"1*1'-4[!!4K9@A?BACD7!Q=?BL7!C@!?! @CLBC<CQ?BA!8;JC<CQ?AC;B! ;!7>V?B@C;B!CB!A=7!B?AK:7! ?
@Q;V7!;<! ?B! ?QQ:7JCA7J! CB@ACAKAC;B! 3>?8VZ7@! ;<! V;A7BAC?Z! @K9@A?BACD7! Q=?BL7! CBQZK
Q;K:@7@! ;! V;L:78@! A=?A! :7V:7@7BA! ?! @CLBC<CQ?BA! J7V?:AK:7! <;8! A=;@7! QK::7BAZE! ?VV;:D7
7@A?9ZC@=CBL! ?B! ?JJCAC;B?Z! Z;Q?AC;B! L7;L:V=CQ?ZZE! ?V?:A! <;8! A=7! 8?CB! Q?8VK@! ?A! \=CQ=! ?
CB@ACAKAC;B! ;<<7: @! ?A! Z7?@A! TPv! ;<! ?V;L:785!CBCAC?ACBL!^;CBA!J7L:77@!\CA=! ?B;A=7!CB@ACAK
?!V;L:785! ?BJ!Q=?BLCBL!A=7!7@A?9ZC@=7J!8C@ @C;B! ;<!A#7!1B@ACAKAC;B
! =7:7! ?7!A=77!JC<<7:7BA!AEV7@! ;<! @K9@A?BACD7!Q=?BL75!CBQZKJCB!eFf! @K9@A?BACD7!Q=?BL7
B;AC<CQ?AC;B! ?BJ! ?VV;:D?Z!V:C;: !A;!C8VZ787BA?AC;B5!eOf! @K9@A?BACD7!Q=?BL7! :7YKC:CBL!BZE!B;A
V:C;: !A;!C8VZ787BA?AC;B5! ?BJ!e f! :7DC7! ?BJ! ?VV;:D?Z! ?K!A!VZ?B@! \=7B!QZ; @CBL! ?!V;L:78! ;!
CB@ACAKAC;B?Z! @CA7! !07V;:ACBL!4K9@A?BACD7!\$=?BL7@!W7B#\$4\$-\$! ;DCJ7@!7>?8VZ7@!
;<!JC<<7:7BA!AEV7@! ;<! @K9@A?BACD7!Q=?BL7! ?BJ!A=7!V;Q7JK:7@!K@7J!CB!877ACBL!B;AC<CQ?AC
?VV;:D?Z! :7YKC:787BA@[

aM[! 0-&34[! !
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V=A;L:?V=@5! V:CBA@! ?BJ! ?A! :7V;:JKQAC;B@5! 8?V@5! LZ;97@5! Q=?A@5! JC?L:?8@5! 8;JZ@5!
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VCQA;;C?Z5!L:?V=CQ5!;!@QKZVAK:?Z!<7?B!97@J7BACQ7J!@7V?:?A7ZE!<;85!?!BJ!?!7!Q?V?9Z7!
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VK9ZCQ! JC@VZ?E5! VK9ZCQ! V7:<;8?BQ7! ;! Q:7?AC;B! ;<! J7:CD?ACD7!\;:]@5!\CA=;KA! A=7! Q;B@7BA! ;<
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FPGf5!A=7!<?C:!K@7!7>Q7VAC;B!eFH!%BCA7J!4A?A7@!\$;J75!47QAC;B!FFP!%BCA7J!4A?A7@!\$;J75!47QAC;B!
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ZCQ7B@7!'EV7@!;<! ?L:7787BA@!CBQZKJ7!'7:8@!;<!%@75!\$?:7?ACD7!\$;88;B@!&Q7B@75!QZC
A=;KL=! ?L:7787BA@5! ?BJ! KBCD7@ZAE:L:7787BA@! \CA=! V;;DCJ7:@! ;<! 7Z7QA::BCQ!
:7@;K:Q7@!E!ZC9:?:E!7@7?:Q=!J?A?9?@7@5!C87!@<A\?:7!ZCQ7B@7@5!7AQ[f!g=7B!
K@CBL!8?A7:C?Z@!ZCQ7B@7J!9E!&?8?:!%BCD7:@CAE5!e7[L!5!ZCQ7B@7J! @;<A\?:75! @A:7?8C

FF[F! 0%&34! !=7! :7Q;:JCBL! ;! V7:<;8?BQ7! ;<! 8K@CQ! Q;KZJ! :7YKC:7! V7:8C@@C;B! <;! ?! VK9ZCQ!
V7:<;8?BQ7!ZCQ7B!@V7QC<CQ?ZZE5

Ff! A=7!J;QA:CB7!;<!w<?C:IK@75w!?!@!J7A?CZ7J!?!V7C7Z@A!8K@CQ?Z!V7:<;8?BQ7@k!?!BJ

O! A=7!3#)\$#QA!V;:DCJ7@!@V7QC<CQ!7>78VAC;B@!<;!Q7A?CBA@!K@CQ?Z!g;:]@!

FO[&123!U30"-0/#*\$34 !

FO[F! \$-U(01b)!#*+!&123!U30"-0/#*\$3 4[!!!=7!Q;VE:CL=A!Z?!?VVZC7@!A;!ZCD7!V7:<;8?BQ7@!
9E!8K@CQC?B@5!?!@!\7ZZ!?!@!A;!DCJ7;!;?!KJC;!7Q;:JCBL@!7L?:JZ7@ @!;<!87JC?5!\CA=!A=7!7>Q7V
;<!A=7!CA78@!ZC@A7J!97Z;\W

Ff! V:CD?A7!V7:<;8?BQ7@k!?!BJ

G! ;V7:?ACBL!?!B!;:JCB?:E!?!JC;!;:!A7Z7DC@C;B!CB!VK9ZCQ[

FO[O! #b033/3*4!g1')!&1\$3*41*b!#b3*\$134[!

@=;KZJ!97!7V::A7J!A;!A=7!4%4!-<<CQ7!;<!b7B7:?Z!\$;KB@JZDCJK?Z@!\=;!97ZC7D7!A=7C:!\B!
Q;VE:CL=A@!=?D7!977B!CB<:CBL7J!@=;KZJ!@77!Z7L?Z!Q;KB@7Z[

FR[! U3*#&'134[!! 1BJCDCJK?Z@!\=;!KACZCc7!A=7!%BCD7:@CAE_@!B7A\;]!;!A=7:!CB<::8?AC;B!7@;K:Q
A;! CB<:CBL7! A=7! Q;VE:CL=A@! ;<! ;A=7:@! :C@]! A=7! Z;@ @! ;<! B7ACDC207@007V7?A!
;<<7BJ7:@! ?7! @K9^7QA! A;! ?JJCAC;B?Z! JC@QCVZCB?E! ?QAC;B! KV! A;! ?BJ! CBQZKJCBL! 7>VK
JC@Q=?L7[!%B?KA=;:Cc7J!@=?CBL!<!Q;VE:CL=A7J!JCLCA?Z!8?A7:C?Z@B7V7!CZZL?Z!V77:
@=?CBL!DC;Z?A7@!A=7!+CLCA?Z!/CZZ7BB@K80A!E!\$##?BJ!7>V;@7@!A=7!V7:V7A:?A;!

FHFO U#3*!/#*#b3/3" [! '=7!V:7@CJ7BA!;<!7?Q:8QB7BA5!;! ?BE!V7:@;B!J7@CLB?A7J!9E!
=C85!C@! ?KA=;:Cc7J!A;!B7L;AC?A7!CA=!7VKA?9Z7! ?L7B@!A;!@7QK:7!<;!7?8A7BA!
?::?BL787BA@4;!A=7!8?B?L787BA!;<! CBD7BA@;B!J!JC@Q;D7:C7@!CBI\=CC8V!B7B@
J7QCJ7@!A;! ?@7:A! ?BJ!7>VZ;CA!CA@!;B7:@±CV!CBA7:7@A!]

FHFOF!4KQ=!8?B?L787BA!8?E!CBQZKJ75!9KA!C@!B;A!ZC8CA7J!A;5!Q;8V7A7BA!7D?ZK?AC;B!;<! CBD7BA
?BJ!JC@Q;D7:E!JC@QZ;@K:7@5K@V7CZ@B!;<! ?VVZCQ?AC;B@!<;!V?A7BA@5! ?BJ!ZCQ7B@CBL
?J8CBC@A: ?AC;B!;<!V?A7BA@]

FHFOF#! Q8V;B7BA! C@! ?KA=;:Cc7J! A;! ?J8CBC@A7:! CA@! ;\B! V?A7BA! 8?B?L787BA! ?BJ! ZCQ7B@CBL
V;;L: ?8! \CA=;KA! A=7! K@7! ;<! ?! V?A7BA! 8?B?L787BA! ?L7BA5! C<! CA! J7A7:8CB7@! A=?A! @KQ:
?::?BL787BA8?E!97AA7:!@7:D78Q;B7BA! ?BJ!VK9ZCQ!CBA7!7@A@]

FHF! &1\$3* 434 [! '=7!V:7@CJ7BA!;<!7?Q:8QB7BA!8?E!L: ?BA!ZCQ7B@7@!<;!A=7!K@7!;<! CBD7BAC;B@!
?BJ!JC@Q;D7:C7@!CBA7;8V;B7BA!=?@! ?B!;B7:@=CV!CBA7:7@A!]

FHF [F!1A!C@!:7Q;LBCc7J!KBJ7: !@;87K@A?BQ7@!A=7!L: ?BACBL!;<! ?B!7>QZK@CD7!ZCQ7B@7!8?E!97
?VV;;V:C?A7!97Q?K@7!CB!A=7! ?9@7BQ7!;<! @KQ=! ?!Q;BJCAC;B! @;8! CBD7BAC;B@!;;!JC@Q;D7
8?E!B;A! ?7?Q=!A=7!8?;J7A!VZ?Q7!<;!A=7!VK9ZCQ!97B7<CA]

FHF [Q*;8?ZZE5! ?B! 7>QZK@CD7! ZCQ7B@7! 8?E! 97! L: ?BA77J;B;A! A;A; 7Q77J! <CD7! E7?: @5!
?ZA=;KL=!A=7!7@CJ7BA!8?E!L: ?BA! ?!Z;BL7: !V7:C;J!;<!7>QZK@CD7!ZCQ7B@7! \=7B! =7!J778@!CA!
?JDC@?9Z7]

FHFR 0-(&'134 [!

FHFRF!1B!Q;B@CJ7: ?AC;B!;<!A=7!JC@QZ;@K:7! ?BJ! ?@ @CLB87BA!;<! CBD7BAC;B! :CL=A@5!A=7!CBD7BA
CBD7BA@! =7C: @5! @KQ7 @ @; @5! ?BJ! ?@ @CLB@5!B;:8?ZZE! @=?ZZ! :7Q7CD7!<C<AE!V7:Q7BA!e
B7A!;;E?ZAC7@!;;!A=7!B7A!CBQ;87!?:C@CBL!<;8! ?B!CBD7BAC;B!;;!JC@Q;D7:E5! ?<A7! !?J7JKQA
<;! ?J8CBC@A: ?ACD7! ?BJ!V?A7BA!8?B?L787BA!Q; @A@! !#J8CBC@A: ?ACD7!7B7B/A7BA!8?B
Q; @A@!CBQZKJ75!9KA! ?7!B;A!ZC8CA7J!A;5!A=7!Q; @A@! ? @ @;QC?A7J! \CA=!A=7!V?A7BACBL5!ZC
V;;A7QAC;B!;<!V?A7BA! :CL=A@! [! '=7! :78?CBCBL!<C<AE!V7:Q7BA!eTPvf!;<!B7A!;;E?ZAC7@! @=?ZZ!
A;!A7!Q8V;B7BA! :7@V;B@C9Z7!<;!A=7!CBD7BAC;B!;;!JC@Q;D7: ?Q@Q?E!<?QA@!Q;BQ7:BCBL! ?B!
CBD7BAC;B!;;!JC@Q;D7:E!8?E! ? ?BA! ?!JC<<7:7BA!JC@A: C9KAC;B!;<;!E?ZAC7@]

FHFRQ#L:7787BA@! \CA=! :7@V7QA!A!;;E?ZAC7@! @=?ZZ!97!CBI\ :CACBL! ?BJ! @CLB7J!9A77! CBD7BA; ! ?
V:7@CJ7BA=A=7!8V;B7BA!]

FHFR [!#BE! ?L:7787BA! \=C=L: ?BA@!A=7!CBD7BA; !8;7!A=?B!<C<AE!V7:Q7BA!eTPvf!;<!A=7!B7A!;;E?ZAC7@
@=?ZZ! :7YKC:7! ?VV;;D?Z!;<!A=7! ;?;J!;<!07L7BA@]

FHFT! +14U-41'1-*!-"!1*\$-/3 [!1B!A=7!JC@V;@CA7B!B7A!CBQ;87! ?QQ:KCBL! ;8V;B7BA!
<;8!V?A7BA@5!<C: @AIQ;B@CJ7: ?AC;B! \CZZ!97!LC

Q8V;B7BA!V7:@;BB7Z! ?BJ!@AKJ7BA@!8K@A!9:CBL!A=7!V;;V;@7J! ?L:7787BA!A;!A=7! ?AA7BAC;B!;<!
A=7! ?VW:C?A7! ?J8CBC@A:?A;;@!;<8V;B7BA! ?BJ!7CA=7!;!9A?CB?CD7!;!;<!Q8V;B7BA!
:CL=A@! ;! ;A=7:\C@7! 8;JC<E! A=7! Q;B@KZACBL! ?L:7787BA!A!CA;BA=C@ZCQE5! ?@! C@!
J7A7:8CB7J!9E!A=78V;B7BA!CB!CA@!JC@Q:7AC;B[

FH[FH 3h%1'(!1*3034'4 [!

FH[FH! -B7J! 9E! A=7! \$;8V;B7BA! 1B! ?L:7787BA@!\CA=! 9K@CB7@ @! 7BACAC7@! :7Z?ACBL! A;! :CL=A@
CBD7BA@! ?BJ! JC@Q;D7:C7@! ;\B7J! 9E! ?! Q;8V;B7BA5! ;8V;B7BA! 8?E! : 7Q7CD7! 7YKCAE!
CBA7:7@A@! ?@!V?:AC?Z! ;!A;A?Z!Q;8V7B@?AC;B!<;!A=7! :CL=A@!Q;BD7E7J[

FH[FH[O! -B7J! 9E! ?B!38VZ;E77[!1B! ?QQ;;J?BQ7!\CA=! '7>?@!3JKQ?AC;B!\$;J75!47QAC;B!TF[GO5! ?BJ!
@K9^7QA! :7DC7! ?BJ! ?VV;;D?Z! 9E! A=7! V:7@CJ7BA! ;8V;B7BA5! 78VZ;E77@! ;<! ?!
Q8V;

7f! U7:Q7BA?L7!;<!3<<A7! ?8;KBA! ;<!7<<;A! Q;88CAA7J!9E!A=7!CBD7@ACL?A;:!A;!A=7!V;:^7QA!
@=;KZJ!97!Q;B@C@A7BA!\CA=!;A=7;!JKAC7@!!
<f)K8?B!4K9^7QA@<!A=7!V;V;@7J!7@7?:Q=;!V;^7QA!CBD;ZD7@!A=7!K@7!;<!=K8?B!@K9^7QA@5
J;7@!A=7!:7@7?:Q=!V;A;Q;Z!Q;8VZE!\CA=!L;D7:B87BA?Z!:7YKC:787BA@!?!BJ!\CA=!?@@K:?BQ7@!

; <!07@7?:Q=!?BJ!4V;B@;:7J!U;:L:?8@

-BQ7! A=7! <;:8?Z! V;:V@?Z! C@! @K98CAA7J5! A=7! A7:8@! ?BJ! Q;BJCAC;B@! L;D7:BCBL! \;:]! ??:7!
7@A?9ZC@=7J!CB!B7L;AC?AC;B@!97A\77B!A=7!@V;B@;:CBL!77B@;77J!A77CDBCJK?Z@!
CB!A=77CD7:@CAE[!!'=7!:7@V;B@C9Z7!?J8CBC@A:?ACD7!;<<CQ7:!\CZZ!A?]?7!A=7!CBCAC?ACD7!C
A=7! @B@;:! A;!8;JC<E!V;:DC@C;B@!A;! ?QQ;88;J?A7!V;ZCQE!B77J@!;<! A=7! CB@ACAKAC;B5! ?L?
Q;:JCB?ACBL5!\=7B!?VV;:V:C?A75!\CA=!A=7!V7:@;B!;7@V;B@C9Z7!<;:Q;BJKQA!;<!A=7!V;:^7QA!?B.
\CA=!A=7!;A=7;!;<<ZCC;?A=77CD7:@CAE[

#ZZ! @?Z?:C7@! ?BJ!\?L7@!;<! :7@7?:QB77ZCZZ! Q;:7@V;BJ! A;! A=7!7>C@ZACB!B@!
\?L7!V;ZCQC7@!;<!A77B7:@CAE[!#BEVAQB@!8K@A!97!V;:D7J!9E!A=7!J7V?:A87B5!Q
J7?B5!?BJ!A=7!V;:V:C?A77@CJ7BA!CB!A=7!;:KL=!J:?!<A!V;:V;@?Z!\:CACBL!@A?L7@[!!1<5!<;:!
7>?8VZ75!A=7!V;CBQCBDZ@ACL?A;:!V;:V;@7J!A;!J7D;A7?Z7!AC87!A;!?!V;:^7QA!?BJ!A=7!
J7V?:A87BA!Q=?C;!?B77B!Q;BQK;!A=?A!A=7!7@7?:Q=!V;:^7QA!\CZZ!:77KZZ!B787!<;:!
;B7!E7?:5!A=7!V;CBQCQV?Z!CBD7@ACL?A;:!88E7ZC@W;77E7?:ZE!@?Z?:E!?!?A7!CB!A=7!L:~?BA!
?VVZ77AC;B!!1<!A=7!L:~?BA!~VVZCQ?AC;B!C@!<;:8;7!A=?B!;B7!E7?:5!;:;D7:Z?V@!?!Q?Z7BJ?;!E7?:5

A=7! "7J7:??! 8CBC8K8! \?L7[! ! *;ACQ7! ;<! ?BE! CBQ:??@7! :7YKC:7J! 9E! Z?! \CZZ! 97!
V:;DCJ7J]

O[R]O 07V;:A@[

O[R]O[FU;:L:7 @ @! 07V;:A@[\7ZD7! Q;VC7@! ;<! ?!\:CAA7B! V;:L:7 @ @! :7V;:A! \CZZ! 97!
@K98CAA7J!9E!S?BK?:E!FT! ?BJ!#V:CZ!OP!9E?C?7BA!;<!?!:7@7?:Q=L:?BA!
<;!7D?ZK?AC;B!9E!A=7!07@7?:Q=!\$;KBQCZ[!!'=C@! :7V;:A!8?E!97!?!9:C7<!9KA!
Q;8V:7=7B@CD7! \:CAA7B! J7@Q:CVAC;B! ;<! A=7! @A?AK@! ;<! A=7! V;:^7QA[! ! *;
@A?BJ?:J! <;:8! C@! :7YKC:7J[! ! '=C@! :7V;:A5! A;L7A=7! \CA=! ;A=7! :7Z7D?BA!
8?A7:C?Z@5!97Q@?!V?:A!;<!A=7!V7:8?B7BA! :7Q;:J!;<!A=7!V;:^7QA[

O[R]O[CB?Z!07V;:A!!\7ZD7!Q;VC7@! ;<!?!<;:8?Z!A7:8CB?Z! :7V;:A!?:7! :7YKC:7J! ;<!
7?Q=! " ?QKZAE!07@7?:Q=!b:?BA! :7QCVC7BA[! !'=C@!C@!?! \:CAA7B! ?QQ;KBA! \=CQ
Q;BA?CB@!?! @K88?:E! ;<!A=7!V;:^7QA5!CA@!<CBA@!C@5ZK@C;B[! ! \!
Q;VC7@! ;<! ?B! KBVK9ZC@=7J! 8?BK@Q:CVA5! :7@KZACBL! <;:8! A=7! @KVV;:A7
:7@7?:Q=5! \CZZ! @?AC@<E! A=C@! :7YKC:787BA[! !#! V;:V;@?Z! <;:?! ?B7!!! V;:^7QA
@K98CAA7J!9E!?!<;:87! :7QCVC7BA! \CZZ!B;A!97!Q;B@CJ7:7JKA@Z!A=7!#
=?@!?!VV;:D7J!A=7!<CBVZA!;<!A=7!V:C;:V;:^7QA[

O[R]! U?A7BA5! \$;VE:CL=A5! ?BJ! 0;E?ZAE! #L:7787BZ@[\@V7QC<CQ!8?AA7: @! V7:A?CBCBL! A;!
V?A7BA@5! Q;VE:CL=A@5! ?BJ! ;E?ZAC7@! 8K@A! 97! CB! ?QQ;:J! \CA=! QK::7BA! V;ZCQ
?VV;:D7J! 9E! A=7! ;?;J! ;<! 07L7BA@[! ! 477#VV7BJC>! +\$;VE:CL=A5! ABZZ7QAK?Z!
U;:V7:AE5! ?BJ!U?A7BA!U;Z@EC[!]--D [!

O[R]R UK9ZCQ?AC;B@[\QCVC7BA@! ;<!<?QKZAE! :7@7?:Q=!L:?BA@! ?!7! 7BQ;K?:L7J! A;! @K98CA!
?:ACQZ7@! :7@KZACBL!<;:8!A=7C:!:7@7?:Q=IV;:^7QA@!A;V;:<7@@C;B?Z!^:K:B?Z@[! !1A!C@
A=?A! ?Q]B;\Z7JL87BA! ;<7A! <?QA! A=?A! V;:^7QA! @KVV;:A! \?@! Q;BJKQA7J! A=;:KL=! ?!
&?8?:!%BCD7:@CAE!-:L?BCc7J!07@7?:Q=!b:?BA!97!LCD7B!CB!A=7!?:ACQZ7[

O[R]T 07AK:B! ;<!3YKCV87BA!8YKCV87BA!VK:Q=?@7J!\CA=! :7@7?:Q=!<KBJ@!C@!A=7!V;:V7:AE!
;<!&?8?:!%BCD7:@CAE! ?BJ! \CZZ!97! ;B!A=7!CBD7BAK@?7BA!A!A=7!^K:C@JCQAC;B! ;<!
A=7!-<<CQ7D?@7?:Q=! ?BJ!4V;B@;:7J!U;:L:78@!g=7B! ?B!CBJCDCJK?Z!Q;8VZ7A7@!
A=7!K@7! ;<!?!VC7Q7! ;<!7YKCV87BA!8U@4U# @=;KZJ!97!B;AC<C7J[! !3YKCV87BA! ;B!
CBD7BA;:E!A;!A=7!-<<CQ7D?@7?:Q=! ?BJ!4V;B@;:7J!U;:L:78@? ?BJ! ?@ @B7J!A;! ?!
<?QKZAE!87897! :C@!A;!97!8?CBA?CB7J! ;KA! ;<! =C@! ;! =7! :7@7?:Q=9KJL7A! JK:CBL! A=7!
V7:C;J! A=7! :7@7?:Q=!C@! :97CBL!Q;BJKQA7J! ?BJ! @K9@7YK7BAZE!9E!A=7!J7V?:A87BA!C
\=CQ=!A=7!7YKCV87BA!8?E!97!VZ?Q7J!9E!2A@4U [!

O[T "14\$#&!/#"3045!03U-0'1*b!03h%103/3*" 4!#*+!4#†[!

O[T]F 3>V7BJCAK:7@[\CZZ!<KBJ@! :7Q7CD7J!<;:?!?Q;BA:?QA! ;L?ZBA97@J7V;@CA7J!CB!?!
@V7QC?C@7:@CAE! ?QQ;KBA!J7@CLB?A7J!<;:!A=7!VK:V;@7!9E!A=7!"CB?BQ7!-<<CQ7! ?E
7?Q=! :7YKC@CAC;B!<;:!7>V7BJCAK:7! ;<!A=7@7!<KBJ@! @=?ZZ!97UCC?Q@?C@!A=
#L7BA[! !3?Q=! :7YKC@CAC;B!4 (!) -7-7.7 ((L) 8.4(L) 8.7.7 (C) 7.7 (B) 8.4 (?) 8.4 (8.4 (B) ET Q

V:7@CJ7BA[!07?@ @CLB7J!AC87!:7Z?A7J!A;!7@7?:Q=IV;:L:?8@!@=;KZJ!97!B7L;AC?A7J!?!A
Z7?@A!A;!8;BA=@!V:C;:!A;!A=7!97LCBBCBL!;<!A=7!@787@A7!;!A7:8!CB!V=CQ=!A=7!
:7@7?:Q=!@=?ZZ!97LCB[

'=7!Q;8V7B@?AC;B!?:A7!<;! \;];B!@V7QC?Z!V;:^7QA@!CA7U?BJ!9?@7J!;B!A=7!
<?QKZAE!87897: @!BCB7!8;BA=@!@?Z?:E[!1A!8?E!B;A!7>Q77J!A=7!V;V;:AC;B?A7!@=?7!;<!
A=7!9?@7! @?Z?:E! <;! ?BE! LCD7B! V7:C;J! ! \$;8V7B@?AC;B! <;! @7:DCQ7@! V7:<;87J!
;KA@CJ7!;<!A=7!8;BA=@!Q?J78CQ!E7?:!C@!V7:8CAA7J!e7[L!5!ZZ!;V?A!;<!?!@K887!
A7:8f5! \CA=! A=7! :?A7! ;<! V?E! 9?@7J! ;B! A=7! :7LKZ?8;BA7@?Z?:E! :?A7! " ;!
7>?8VZ75! ? @ @K87! ?! <?QKZAE! 87897: !=? @! 8;BA7@?7! ;<! nRT5PPP! enT5PPP!
V7: ! 8;BA=f! ?BJ! =?@! OTv! "3! :7?@ @CLB7J!AC87! JK:CBL! A=7! "?ZZ! ?BJ! 4V:CBL!
@787@A7: @! VZK@! A=:77! 8;BA=@! ;<! FPPv! "3! @K887: ! 78VZ;E87BA! A=:;KL= ! ?!
@V;B@;:7J! V;^7QA! ! ! 1B! A=C@! 7>?8VZ75! 8;BA7@?Z?:E! \;KZJ! :78?CB! ?A!
nRT5PPP! ?BJ! ?B! ?JJCAC;B?Z! nFT5PPP! \;KZJ! 97! V?CJ! <;! !A=7! @K887: !e! 8;BA=@! ?A! A=7!
nT5PPPm8;BA=!9?@7f[

1A!C@!A=7!V;ZCQE!;<!&?8?!%BCD7: @CAE!B;A!A!;V;:DCJ7! ?JJCAC;B?Z!Q;8V7B@?AC;B! ?
FPPv! "3! A;! <?QKZAE! ?BJ! V;:<7@ @C;B?Zm?J8CBC@A: ?ACD7! 78VZ;E77@! CB! @V;B@;:7
V;^7QA@! 7>Q7VA! CB! KBK@K?Z! QC:QK8@A?BQ7@! ! " ;! A=; @7! 7BL?L7J! CB! @V;B@;:
V;^7QA@5! ?JJCAC;B?Z!Q;8V7B@?AC;B! CB! 7>Q7@ @! ;<! FPPv! "3! 8?E! 97! L: ?BA7J! ;BZE!
\CA=! 3D?BQ7J! ?VV;:D?Z! <;! 8! 9;A=! A=7! V; @A! ?BJ! A=7! @V;B@;: CBL! ?L7BQE5! ?BJ!
A=7B! ;BZE! \=7B! CA! Q?B! 97! QZ7?:ZE! J78;B@A: ?A7J! A=?A5! 97Q?K@7! ;<! ?B! CBJCDCJK?Z!
@V7QC?ZCc7J!]B;Z7JL7! ;! 7>V7@75! =7m@=7! C@! A=7! 8; @A! ?VV;:V:C?A7! CBJCDCJK?Z! A
V;:DCJ7! A=7! @7:DCQ7@! ! "K:A=7: ! CA! 8K@A! 97! QZ7?:! A=?A! A=7! @7:DCQ7@! ! ?7! ;KA@CJ
@Q;V7! ;<! B;:8?Z! ^;9! :7@V;B@C9CZCAC7@! ?BJ! Q;: @ @IQ;ZZ7L7! ;! J7V?:A87BA?Z! ZCB7@! ?B
;QQK: ! ?A! ?! @7V?:?A7! ;! :78;A7! @CA7[

! 4CB@CBA7KBCD7: @CAE! Q;B@KZACBL! C@! ? @ @K87J! A;! 97! KBJ7:A?]7B! ?@! ?! %BCD7:
;9ZCL?AC;B! :7YKC:CBL! B;! Q;8V7B@?AC;B! CB! ?JJCAC;B?Z! Q;8V7B@?AC;B! ?Z?:E5! <?QKZAE!
87897: @! \=; <KBQAC;B! ?@! Q;B@KZA?BA@! ;! ;! A=7: \C@7! Q;BA:C9KA7! A;! ?! @V;B@;:7J!
V;^7QA! Q;BJKQA7J! 9E! A7! ! <?QKZAE! 87897: ;<! A=7! @?87! CB@ACAKAC;B! @=;KZJ! :7Q7CD7!
B;! <CB?BQC?Z! Q;8V7B@?AC;B! A=:;KL= ! A=7! @V;B@;:7J! V;^7QA! KBZ7@ @! A=7! V;^7Q
9KJL7A@! <;! A=7C: ! :7?@ @CLB7J! AC87! ! "K:A=7:5! ?@! B;A7J! ?9;D75! A=C@! ?JJCAC;B
Q;8V7B@?AC;B! @=;KZJ! 97! 9?@7J! ;B! A=7! B;:8;BA7@?V?E! :?A7! ?BJ! A=7! "3!
@=;KZJ! B;A! 7>Q77J! FPPv! 7>Q7VA! CB! KBK@K?Z! QC:QK8@A?BQ7@ [

1B! ?QQ;:J?BQ7! \CA7J?Z! ?BJ! @A?A7! A?>! Z? @ 5BCD7! @CAE! J7JKQA@! <;! 8! 7?Q=!
V?EQ=7Q! A=7! ?VV;:V:C?A7! \CA=;ZJCBL! A?>[! # @?ZJCDC8 @A?BQ7@! :7YKC:75! A=7!
KBCD@CAE! \CZZ! 8?]7! V?E;:ZZ! J7JKQAC;B@! <;! @;QC?Z! @7QK:CAE! A?>5! ?BBKCAE! V:78
87JCQ?Z! CB@K: ?BQ75! ?BJ! ;A=7: ! @KQ=! J7JKQAC;B@! ? @! 8?E! 97! :7YKC:7J[

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=095C;"248>0?5<3":5GB?7"034"1:5@0>,"0>?

"E=2:10 F'

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?AA7BJ?BQ7!?BJ!A=7!Z?@A!7JKQ?AC;B?Z! ?L7BQE!;! CB@ACAKAC;B! ?AA7BJ7J[!];\7D7:5! @Q=;;Z@!8K@A!A7ZZ!
?9;KA!JC:7QA;;E!CB<;8?AC;B! ?BJ! ?ZZ;! @AKJ7BA@!?!?7?@;B?9Z7!?8;KBA!;<!AC87!A;! :7YK7@A!A=?A!A=7! @Q=;;Z!
JC@QZ;@7! JC:7QA;;E! CB<;8?AC;B! ?9;KA!A=7!8K@A! B;AC<E! @AKJ7BA@! ?BBK?ZZE! ;! A=7C:! :CL=A@! KB.

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835@275?;"1:<>248:27"5

3":2=2:23>2"?<"7?8423?"0>04295>"

G:52@03>27 "

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';! V::DCJ7! <:;! A=7! :7@;ZKAC;B! ;<! ?ZZ7L7J! ?Q?J78CQ! L:C7D?BQ7@! CB! ?! V::8VA5!KCA:9ZBJ7Q7@ @!
A=;:KL=;KA!A=7BCD7: @QAE8!A87BA @ZZ7L7 @! ?BJ! ;A#?Q?J78CQ! CDC@C;B@! ;KCD7: @CAE! @=?ZZ!<;ZZ;!
A=7!L:C7D?BQ7! ?BJ! ?VV7?Z@JK;Q@! ?@!VK9ZC@=7J! CB!A7EJ @! !'=7:7! @=?ZZ!97!CB! QZ7L7! ?!
4AKJ7BA?QKZAE!07Z?AC;B@\$;88CAA77[!!1A! @=?ZZ!97!Q;8V:C@7J! ;<!<;K: !<?QKZAE!87897: @5!AY!KBJ7:L: ?JK?
@AKJ7BA@5! ?BJ! ;B7!L: ?JK?A7! @AKJ7BA[!!+7V#A87BA8?E!B;A! @7:D7! ?@! ?!87897: ! ;<!A=C@!Q;88CAA77[!!
'=7!87897: @! ;<!A=7!Q;88CAA77! @=?ZZ!97!Q=; @7B!9EIV;;Q7JK: 7@!7@A?9ZC @ZZ!97!A=7!Q=?C: ! ;<!A=7!

3?Q=!:7DC7\!Q;88CAA77!@=?ZZ!?A!A=7!Q;BQZK@C;B!;<!CA

01123456"R! "

9E!A=7!KCD7:@CAE5!@=?ZZI:7V:7@7BA5!CB!\:CACBL5!A=?A!@KQ=!?!V7:@;B!=?@!B;A!:7A?CB7J!?

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97!J7@CLB7J!A;!7ZCQCA!<?QKZAE!DC7@!V7:ACB7BA!A;! ?B!7D?ZK?AC;B!;<!Q;ZZ7L7!Z7?J
?BJ!V;;L: ?8@[!
F[O] '=7!@KV7:DC@;: ! @=?ZZ!V!;DCJ?J8CBC@A:?A;:!97CBL!7D?ZK?A7J! ?B!;VV;:AKBCAE!A;!
:7DC7!A=7!V;;V;@7J!CB@A:K87BA! ?BJ!8?]7! @KLL7@AC;B@!Q;BQ7:BCBL!A=7!J7Z7AC;B5
?JJCAC;B5!;: !7DC@C;B!;<!CA78@[!]
F[] '!=7! ?J8CBC@A:?A;:!97CBL!7D?ZK?A7J!8?E!V;;DCJ7!<?QKZAE!CA=! ?! :CAA7BZC@A!;<!7Z7D
?QQ;8VZC@=87BA@5! ?Q=C7D787BA@! ?BJ! ?QACDCAC7@[!
F[R] '=7!V ;:D;@A!@=?ZZ!8?CBA?CB! ?J?A? ?9?B]!;<!V:7DC;K@ZK: D7E!CA78@!A;!97!8?J7!
?D?CZ?9Z7!A;!@K9@7YK7BA!#0\$@! ?@!A=7E!Q:7?A7!B7!@K:D7E!CB@A:K87BA@[
F[R] '=7!#0\$!@=?ZZ! ?J8CBC@A7;!A=7! ?VV;;D7J!CB@A:K87BA! ?Z!<?QKZAE!CA=! ?A!Z7?@A!;B7!
E7?;!;<!@7:DCQB!A=7!\$;ZZ7L7!;: !KBCA!JC:7QAZE! ?<<7QA7J!9E!A=7! ?J8CBC@A:?AC;B!;<!A=7!V7:
97CBL!7D?ZK?A7J5!7>Q7VA!<?QKZAE!;B!Z7?D7! \=;! ? :7!B;A!CB! :7@CJ7BQ7[! !1B!;J7;!A;! ?<<C:8! ?ID?Z
V;;Q7@ @5!A=7!\$;88CAA77!KZJ!A?]7!@KQ=!@A7V@! ?@! ?! :7! ? ?@;B?9Z7!A;!7B@K:7!A=?A!;BZE!A=;@7
<?QKZAE!87897: @! \=;! @=;KZJ!V;;DCJ7!CBVKA!J;! @;!e7[L!5!;BZE!7ZCLC9Z7!<?QKZAE!<;8! ?!J7?B_
Q;ZZ7L7!@=;KZJ!Q;8VZ7A7! ?BJ! :7AK:B!A=7!7D?ZK?AC;B!CB@A:K87BAf! ?BJ!A=?A!B;!<?QKZAE!8789
@K98CA@78A=?B!;B7!7D?ZK?AC;B!CB@A:K87BA[!]
F[T] '=7! #0\$! @=?ZZ! Q;ZZ7QA! ?BJ! A?9KZ?A7! A=7! :7@V;B@7@! ?BJ! V;;JKQ7! <;: ! A=7! ?VV;;V:C?A7!
@KV7:DC@;: ! ?!@A?AC@ACQ?Z!@K88?;E!;<!A=7!J?A? [! !1B! ?JJCAC;B5!A=7!\$;88CAA77!@=?ZZ!Q;8V
<;\?:J!A=7!\:CAA7B! :7@V;B@7@!A;!@V78@Q=7! ?\;;!V:C8?;E!J?A? !L?A=7:7J!9E!A=7!
\$;88CAA77! \CZZ! 97! Q;B@CJ7:7J! @A:CQAZE! Q;B<CJ7BAC?Z5! \CZZ! B;A! 97! 8?J7! ?D?CZ?9Z7! A
?J8CBC@A:?A;:!97CBL! :7DC77J5! ?BJ! \CZZ!97! :7AK:B7J!A;!A=7!@KV7:DC@;:[
F[a] '=7! ?QACDCAC7@!ZC@A7J!97Z;!@=?ZZ!97!V7:7.7 (B) 8!5 (!)!4-269.6 (B/TT3 1 -7.7 (!)! -55.3 (L) -0.3

\CZZ! 97! V;;DCJ7J! \CA=! @KCA?9Z7! @K88?:E! CB<;8?AC;B! ;B! A=7! ;KAQ;87! ;<! A=7!
7D?ZK?AC;B!V;;Q7!@ @[

F[a[H +;QK87BA@!L7B7:?A7J!?!V?:A!;<!A=C@!Q;8V:7=7B@CD7!:7DC7!V;;Q7@ @!@=?ZZ!97!]7V!
?@!?!B<CJ7BAC?Z!<CZ7!9E!A@7!]=7@7!J;QK87BA@!@=?ZZ!97!8?J7!?D?CZ?9Z7!A;!
@K9@7YK7BA! #0\$@! \=7B! A=7! ?J8CBC@A:?A;:! CB! YK7@AC;B! ?L?CB! :7Q7CD7@!
Q;8V:7=7B@CD7!:7DG7[

O! 03\$-//3*+3+!'1/3#,&3[!

O[F '=7!#0\$!@=;KZJ!97!<;87J!9E!#V:CZ!F!;<!A=7!@787@A7!:V:7D?ZK?AC;B[

O[0 '=7!@K:D7E!CB@A:K87BAe@f!@#KZJ!97!?!BJ!J7ZCD7:7J!A;!A=7Dy@A!9E!47VA7897:!
FT!;<!A=7!<;8?Z!7D?ZK?AC;B!E7?:[

O[! #J8CBC@A:?AC;B!;<!A=7!@K:D7E!CB@A:K87BA!@=;KZJ!97!Q;8VZ7A7J!9E!-QA;97:!FT!;<!A=7!<;8?
7D?ZK?AC;B!E7?:[

O[R #JJCAC;B?Z!CBVKA!<;8!@A?<<5!@AKJ7BA@5!?!BJ!;A=7:@!@=;KZJ!97!Q;ZZ7QA7J!9E!*;D7897:!F!;<
<;8?Z!7D?ZK?AC;B!E7?:[

O[T '=7!@K88?:E! J;QK87BA! ?BJ! ?@ @;QC?A7J! :7Q;887BJ?AC;B@! @=;KZJ! 97! Q;8VZ7A7J! 9E!
+7Q7897:!F!;<!A=7!<;8?Z!7D?ZK?AC;B!E7?:[

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1*'0-+>%\$'1-*[! !1A!C@!A=7!:7@V;B@C9CZCAE!;<!A=7!J7?B!;<!7?Q=!Q;ZZ7L7!A;!Q;8VZ7A7!A=7!7D?ZK?
;<!J7V?:A87BA!Q=?C:@!CB!A=7C:!KBCA!CB!?!AC87ZE!8?BB7:[!1B!A=7!7D?Z7!A;B;B5A?Q=!J7?B!
@=?ZZ!J:?!K!V;B!A=7!:7@KZA@!;<!?!KBCD7:@CAE!?!V;D7J!@K:D7E!CB@A:K87BA!?!J8CBC@A7:7J!?!@!J7?
CB!A=7@7!V;:Q7JK:7@5!"Q!FM\$A@!<;8!A=7!:7DC7!V7:C;J5!?!BJ!;A=7!:J;QK87BA7J!@;K:Q7@!;<!
CB<;8?AC;B!?!@!J7787J!?!V;V:C?A7!9E!A?B!J7?@ @C@A!CB!A=7!:7DC7!V;:Q7 @ @5!A=7!J7?B!CZZ!\;:]!
\CA=!A=:77!<?QKZAE!87897:@!Q=;@7B!?!@!J7@Q:C97J!97Z;\!

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b3*30#&!U0-\$3+%034 [!!

O[F! '=7!J7?B!@=?ZZ!CB<;8!A=7!J7V?:A87BA!Q=?C:IV:C;A;!CBCAC?ACBL!A=7!<;8?Z!:7DC7\!

O[Q! '=7!J7?B!@=?ZZ!Q;BJKQA!?!B?A?B!?!8;BL!A=7!A7BK:7J!<?QKZAE!CA=CB!A=7!J7V?:A87BA!A;!
@7Z7QA!A=7!<C:@A!<?QKZAE!87897:!A;!?!@ @C@A!CB!A=7!:7DC7\!|=7!J7?B5!?!<A7!Q;B@KZA?AC;
7Z7QA7J!<?QKZAE!87897:?!?BJ!A=7!J7V?:A87BA!Q=?C:5!\CZ!?!YU!CBA;B?Z!A7BK:7J!
<?QKZAE!87897:@!?!@ @C@A!CB!A=7!:7DC7\!-B7!;<!A=78!\CZZ!97!<;8!A=7!J7V?:A87BA5!?!BJ!A=7!

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U%0U-43[!! '=7!VK:V;@7!;<!A=C@!V;ZCQE!C@!A;!7BQ;K:?L7!A=7!?AA:?QAC;B!;<!Q;8V7ACACD7!7>A7:E
<KBJCBL!<;!7@7?:Q=5!@Q=;Z?:@=CV5!?BJm;:!Q:7?ACD7!ACDC!E!92-002!bE!C!CD Q q 0.24 0 0 0.AEC

<?QKZAE!87897:!?BJ!V;D7J!9E!A=7!Q;ZZ7L7!Q;88CAA77!?!B;@A!|=7:7!\CZZ!97!
B;! :7JKQAC;B!CB!A7?Q=CBL! ? @ @CLB87BA! ?@!V?:A! ;<! @KQ=! ?B! ?L:7787BA5! 7>Q7VA!
@ACVKZ?A7J! 9E! A=7! <KBJCB! ?=7B! ?! V;:AC;B! ;<! A=7! @?Z?:E! C@! V?CJ! DC?!
L:?BAmQ;BA:?QA[

O[O[O!!!=7!9?@7!@?Z?:E!;<!?!<?QKZAE!87897:!\=;!C@!@7Z7C@7Q=!?B!?@ @CLB87BA!\CZZ!
97! J7A7:8CB7J! A=;:KL=! ?B! ?ZL;:CA=8! CBQZKJCBL! A=7! <;ZZ;\CBL! Q;8V;B7BA@W!
7@A?9ZC@=87BA?B! ?L:77JKV;B!V7:Q7BA?L7!;<! :7@7?:Q=!7<<;:A5!Q?ZQKZ?AC;B!;<!?!
:7JKQAC;B!CB!4A?A7! <KBJCBL! 9?@7J! KV;B! A=7! V7:Q7BA?L75! CBQ:7?@7! CB! @?Z?:E!
9?@7J!KV;B!V;A7BAC?Z!L! ?BAkKBJ@5! ?BJ! ?!@KVVZ787BA?Z! ?ZZ;Q?AC;B!9?@7J!KV;B!
A=7!V7:Q7BA?L7!;<! :7@7?:Q=!7<<! :A!A!A=7! =;87! J7V?:A87BA! <;! K@7! CB!
7B=?BQCBL!:7@7?Q#;:!7>?8VZ7W

?f! U;:<[!S;B7@5!?!F[PI"3!<?QKZAE!87897:!\=;!7?:B@!nTP5PPP!V7:!?Q?J78CQ!
E7?:5!C@! ?QQ7VA7J!CBA;!A=C@!V;:L:?8[

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#ZZ!A=7!<;ZZ;\CB!;8 @?:7!?D?CZ?9Z7M AAVWmm<?QKZAE@A?<<[Z?8?:[7Kk?Q@78C@ @mCBJ7>[=A8Z

' 3*%03!#*+!U0-/'1-* !
! "O[FF!<;!7BK:7!X!U::8;AC;B! !
! ";:8!\CA=! 1B@A:KQAC;B@!e
! ";:8?A!<;!7BK:7!?BJ!U::8;AC;B! "CZ7@!e" f !
! '7BK:7!?BJ!U::8;AC;B!U::Q7@ @!\CA=!2;ZK87!1!U;@!BZCB7!e" f !
! ";KBJ?AC;B?Z!bKcJ7ZCB7@!B!K!A+XU!U::Q7@ @!,7LCBBCBL!"?ZZF!e" f!
! #JJ7BJK8!A;!";KBJ?AC;B?Z!#L:7787BA@!;B!XU!<;!?"Z!P!F!e"U+" f!
!
\$ %001\$%&%/!\$-%*\$1&!"-0/4 !
! \$:K:@7#JJCAC;B!e" f !
!! %@7!\=7B!?JJCBL!?!B7!\Q;K:@7!Tc 42 0 0 -33 Tm /TTJZ! 8 (J) 81041 8;B!

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F[F! 1B@ACAKAC;B?Z! 2?ZK7@[!' =?! '7>?@! 4A?A7! %BCD7:@CAE! 4E@A7B!KBCD7CZAC7@5
eQ;ZZ7QACD7ZE! :7<7::7J! A;! ?@! w4E@A7B!KBCD7CZAC7@5
=7:7CBf!?:7!Q;88CAA7J!A;

CBD7@ACL?A7[!#JJCAC;B?Z

O[TFa Q;B@7BA! A;! 7BL?L7! CB! @7>K?Z! ?QACDCAE! \CA=! ;7@B;@B VZE!
Q;B@7BA!A;!7BL?L7!CB!@7>K?Z!?QACDCAE! \CA=
O[TFH Q;7:QC;B5!<;:Q75!;!A=:7?A!CBD?ZCJ?A7@!Q;B!@7BAk!?BJ5
O[TFM 97CBL!CBA;>CQ?A7J!;!KBJ7;!A=7!CB<ZK7BQ7!;!KZ@5;Z?BE!;A=7:!
@K9@A?BQ7!C@!B7D7QK@7!;!7BL?LCBL!CB!@7>8C@Q;BJKQA[

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O[FR! QK@A;JC?Z!@A?<<!\=;!?:7!B;A!@ @CLB@A?J8CBC!JKAC7@k
O[FRR! L;KBJ@]77V7:!!@A?<<!\=;!?:7!B;A!@ @CLB7J!J8CBC@A:?ACD7!JKAC7@k
O[FRT!! 8?CBA7B?BQ7!@A?<<!\=;!?:7!B;A!@ @CLB7J!J8CBC@A!ACD7!JKAC7@k
O[FRa! :?BQ=m?L:CQKZAK?:Z!@A?<<!\=;!?:7!B;A!@ @CLB7J!J8CBC@A!ACD7
O[FRH! @A?<<!\=;!?:7!B;A!@ @CLB7J!J8CBC@A!ACD7!JKAC7@k
O[FT! 07A?ZC?AC;B!87?B@!BE!JD7: @7!QAC;B!A=:7?A7B7J!;!A?]7B7L@CB@7Q?K@7!:=7!;!
@=7!=?@!<CZ7J5!@KVV;:A7J5!;!V;:DCJ7J!CB@BQAB?QAC;B!CA=!?!\$;8VZ?CBA!;<147>K?Z!
/C@Q;BJKA! CBQZKJCB!B9KAZC8CA7J! A;! JC:7QA! ?BJ! CBJC:7QA! CBAC8CJ?AC;B5! A=:7?A@5!
=??:?@ @87BA[
O[Fa! 47>K?Z! #@@?KZA! 87?B@! ?BE! <;8! ;<CB@7B@K?Z! @7>K?Z! ?QACD@7BACBL! ?!
Q;BACBKK8! ;<!Q;BJKQA! <;8! <;:QC9Z7! :?V7! A;! B;BV+E@CQ;ZV:7 @ @K:7! J7 @7L@!
Q;8V7Z!CBJCDK?Z@!A;!7BB!@7>K?Z!QACDCAE!L?CB@A!A=7C:!\CZZ!e'7>?@!U7B?Z!\$;J7!47QA
OO[PFff]=AAV@Wmm@A?AKA7@[Q?VCA;Z[A7>?@[L;Dm+;Q@mU3m=A8mU3[OO]=A8
O[FaF 3>?8VZ7@!< @7>K?Z! ?@ @?KZA! CBQZKJ75! 9KA! ??:7! B;AAZ@8CZ;VCB!5 B;B
Q;B@7B@K?Z!@7>K?Z!QACDCAEW
O[FaFf @7>K?Z!CBA7;Q;K:@7!eD?LCB?Z!;!B?Zfk
O[FaF0;:Z!@7>k
O[FaF`!;!V7!;!AA78VA7J!?!V7k
O[FaFRM7B7A:?AC;B!;<!B!;C<CQ7!e?B?Z5!D?LCB?Z5!;!Z7BC@5A=C7BL7:!!;A=7!
;9^7QAK
O[FaFT!KB\?BA7J!A;KQ=CBL!;<!?!@7>K?Z!B?AK:7k
O[FaFa!K@7!;<!Q;7:QC;B5!8?BCVKZ?AC;B!;!<;:Q7!A!@?7;B7!7Z@7!7BL?L7!CB!
@7>K?Z! A;KQ=CBL5! CBQZKJ@CBL! ;<! 9:7?@A@5! Q=7@A5! 9KAA;Q!@! ?BJ!
L7BCA?ZC?k

A=?A!V7:@;BI@!;:L;KVI@!@795@7J!;B!L7BJ7:!@A7:7;AEV7@5!@7D7:7!;:V7:D?@CD75!?BJ!
|=7:7!CA877A@!7CA=7:;!<!A=7!<;ZZ;\CB7LQWA
O[FMF 4K98C@@C;B5! Q;B@7BA5! ;! :7^7QAC;B! ;<! A=7! 97=?DC;! C@! 97C7D7J

[=AAV@Wmm@A?AKA7@\[Q?VCA:ZIA7>?@\[L;Dm+;Q@!mU3m=A8mU3\[RO\]=A8](#)

- O[O! 4AKJ7BA!:7<7:@!A;!?BE!V7:@;B!\=;!=?@!977B!?QQ7VA7J!<;!J8C@-@C@5QK::7BAZE!;! \?@!V:7DC;K@ZE!7B::ZZ7J!CB@=77B A!;B7CA=7:!!?<KZB7!;:!!V?:AC87!9?@C@[
- O[OR '=C:J!V?:AE!:7<7:@!A;!?BE!V7:@;B!\=;!C@!B;A!?!QK::7BA!@KZB7!;:<!A=7!QV;B7BA5! CBQZKJCBL!9KA!B;A!ZC8CA7J!A;!D7B!C@A7J!?!BJ!KBCBDCA7J!DC@CA;:@[
- O[OT '=C:JdJ?:AE!07V::ACBL!:7<7:@!A;!K98C@ @C;B!;<!?!Q;8VZ?C@A;K?Z!8C@Q;BJKQA!9E!?! V7:@;B!;B!97=?Z<!;<!?B;A=7:V7:@!B]
- O[Oa 'CAZ7! 16! \$;:;JCB?A;:! C@! A=7! V7:@;B! \=;! =?@! 977B! J7@CLB?A7J!!987;B7BA! A;!

`[RQ! CBJCDCJK?Z@!\=;@7!@Q;V7!;<!78VZ;E87BA!CBQZKJ7!Q;B7Ck!CB787BZ@AKBJ7:!
'7>?@!Z?\!
`[R!! 3?Q=!Q8V;B7BA!\CZZ!CJ7BAC<E! ?BJ!V;;DCJ7!Q;8VZ7A7!!CBA8QAC;B!;<!@KQ
CBJCDCJK?Z@! CB! D?:C;K@! Z;Q?AC;B@KACBQZZ088A7J! A;! A87;B7BAI@!
\79@CA7k!A=7!@AK!7BAI@;k!A=7!+7?B!;<!4AKJ7BAI@!-<<CQ7k! ?BJ!\$?8VK@!U;ZCQ7!
;: !47QK:CAE[
`[RR!! '=7@7!CBJCDCJK?Z@!\CZZ!8?CBA?CB!Q;B<CJ7BAC?ZCBA!CB+7C7;B3BQ7C:!
V;;<7@@C;B?Z! :KZ7@! ;<! Q;BJKQA! !+7@CZZ@A! CB! ?! Q:C@@C@! @CAK?AC;B! ?BJ! V;;DC
CB<;:8?AC;B! ?9;KA/;@@C9Z7! :7@;K:Q7@5! @;87! ;<! \=CQ=! 8?E! CBQZKJ7! Z?\
7B<;:Q787BA5! 87JCQ?Z! ?@C@A?BQ75! V@EQ=;Z;LCQ?D!CQ;K8@7ZD8D3QE!
?@C@A?BQ75!ZL@Z?@C75!\$;8V;B7BA@QCVZCB?:E! ?QAC;B5!C88CL: ?AC;B!@7:DCQ7@
?BJQ:C8CBVZ@7QKAC;B!!=7E!\CZ!B7D7?Z!A=7CQAC8!@!CJ7BABA\CA=;KA!
A=7!CQAC8!@!V7:8C@@C;B!7>Q7VA!K880A7.E7>Q7VAC;B@C@7?E!C887JC?A7!
A=:7?A!A;!A=7CQAC8;A=7:@!C@!V:7@7BA5!;:!CQAC8DC@!?!8CB;:f!2CQACB@!B77J
B;A!7D7?Z!A=7C!B?87@!C<!Q?ZZCBL!A=7@7!C88D8JACZ8!<:;

[TM!!

\$4#!CB!D?:C;K@Q?AC;B@5!CBQZKACB;A!ZC8CA7J!A;!A=7!\$;8V;B7BAI@?Z7k!
A=7! @AKJ7BAI@! =?BJ9;;]k! A=7! ?BBK?Z! @7QK:CAE!!A=7A?7?B! <!4AKJ7BAI@!
-<<CQ7[

R[FH!)K8?B! 07@;K:Q7@[! #! Q;8VZ?CBA! ;<! @7>K?Z! 8C@Q;BJKQA!9;K!-9! A; A=7!
)K8?B!07@;K:Q7@!+7V?:A87BA5!\=CQ=\C;ZVAZE!CB<;!8!A=7!'CAZ7!16!\$;;JCB?A;!
;<!A=7!Q;8VZ?CBA[

R[FM! 07@V;B@C9Z7!38VZ;E77[!#B!CBJCDCJK?Z!8?E!:7V;A@ZZKZ7C@Q;BJKQA!A;!?!
:7@V;B@C9Z7VZ;E775! ?@! A=?A! A7:8JG@B7J! CB! O[FR! ?9;D7! #! <?QKZAE! ;! @A?<<!
87897:\CA=?BE]B;\Z7JL7! eCBQZKJCB! @A=?BJ! ;9@7:D?AC;Bf! ?9;KA! ?!]B;B! ;
@K@V7QA7J!CBQCJ7BA!;<!@7>K?Z!8C@Q;BJKQA!e;A@B;J@B;K?Z@7CJ7BAC<C7J!CB!
@7QAC;B! [R! ?9;D7f!8K@A! :7V;A@B;CJ7BA!A;!A@7!B7BA!V;ZCQ7!;!@7QK:CAE!;!
A=7Q8V;B7BAI@!'CAZ7!16!\$;;JCB?A;[!*;!78VZ;E77@KA=;Cc7J!A;!CBD7@ACL?A7!;!
:7@;ZD7! ;8VZ?CBA@! \CA=;KA! @B;D;ZD787BA! ;<! A=7B7BAI@! 'CAZ7! 16!
\$;;JCB?A;[!!

R[FG! 1BJCDCJK?Z@!8?E! ?Z@;!<CZ7! ?B;BE8;K@!:7V;A@;B7BA! @=?ZZ! V;DCJ7!A=7!
V;B7!BK897;!?BJ!\79! ?JJ:7 @ @?D?CZ?9Z7!<;! ?B;BE8;K@! :A @!1BJCDCJK?Z@!\=;!
Q=;; @7!A!<CZ7! ?B;BE8;K@!:7V;A@! ?7! ?JDC@7J!A=?A! CA!8?E!97!D7-E!A@Z<CQKZA
Q8V;B7BA! A;! <;ZZ;\! KV! ?Bj;:! A?]7! ?QAC;B! ;B;BE8;K@! :7V;A@5! \=7:7!
Q;;;9;?ACBL!CB<;8?AC;B;C8CA7B;BE8;K@!:7V;A@!8?E!97!K@7J!<;!\$Z7:Q!A!

:7Z?ACBL!A;! @7>K?ZI8C@Q;BJKQA!8?E!97!Q;B@CJ7:7J!D@ZVAC?BT;<!A=C@!U;ZCQE!?BJ!8?E!
:7@KZA!CB!JC@QCVZCB?:E!@?BQAC;B!@!97C7D7@!A=?A!@=7!;!7!=?@!977B!@K9^7QA7J!A;!
:7A?ZC?AC;B!@K87JC?A7ZE!;7V;A@!Q;BQ7:B!A;!A=7C:!'CAZ7!16!\$;;JCB?A;[

!

a[! 1//%*1'(!!!
'=7! Q

?QAC;B!A;!CBA7:D7B7k
M[OFd! V::Q7JK:7@!<:!:7V::ACBL5!CBD7@ACL?ACBL5!?BJV?@@@?@?@?BQAC;B@!
<:!:@7>K?Z!8C@Q;BJKQA!?!@!J7@Q!@9C?@?Ek
M[OFH! ;VAC;B@!<:!:7V::ACBL! @7>K?Z!8C@Q;BJKQA?BJO?BAC?ZCAE!A=?A!8?E!
?AA?Q=!A;!@KQ=!7V::ACBLk
M[OFM!Q?8VK@! ?BJ! Q;88KBCAE! :7@;K:Q7@! ?D?CZ?9Z?BVZ?CB?BA@! ;!
:7@V;BJ7BA!@k
M[OFG!CBA7:0@?AE!87?@K:7@!?!D?CZ?9Z?BVZ?CB?BA@!k5
M[OFeFP

FP[FF! #@ @CLB87BA[!=7!'CAZ7!16!\$;,:JCB?A;!\CZZI:7DC78WZ?CBA! ?BJ!CBD7@ACL?A7!A=7!
8?AA7:[! #ZA7:B?ACD7ZE5! A=7!'CAZ7CB?A; !8?E! ? @ @CLB! A=7! CBD7@ACL?AC;B! A; ! ?!
+7VKAE\$;,:JCB?A; !; ! CBD7@ACL?A; ! ?BJ! ?JDC@ 78WZ7CB?BA! ;<! AB787! ?BJ!
Q;BA?QA! CB<;:8?AC;B! ;<! A=7! CBJCDCJK?Z!! 469@CLB7BA! :7BQ7@! A;!
BD7@ACL?A; ! CB! A=C@! @7QAC! B=7! CBJCDCJK?Z! CBD7@ACL?ACBL! A=7! Q;8VZ?CBA
\=7A=7!?!'CAZ7!16!\$;,:J CB?A; ;5!+7VKAE!\$;,:JCB?A; ;5BD7@ACL?A; ;[
FP[FO! 1BCAC?Z!/77ACBL!\CA=!\$;8VZ?CB?BA[!# @! @; ;B! ?@! C @A=7! CBD7@ACL?A; ; ! @ = ?ZZ!
Q;BA

:7?@;B?9Z7!7<<:A!A;!7B@K:7!A=?A!A=?! CBD7@BUC7@ZKA;B!;<!8VZ?CBA!
;QQK:@!CB!?!@!7<<CQC7BA!?!81B@7@0QZ75!\CA=!?B!7>V7QA?AC;BVAQ7@A@7!
e7>QZK@CD7!;1?V@?Z!V;:Q7JK:7@f!\CZZ!L7B7:??ZZE!97!Q;8VZ7A7J!\CA@B!@C>AE
Q?Z7BJ?;!J?E@!;<!A=8VZ?CBA5! ?9@7BA!7>A7B!C@CB8@A?BQ7@!!=7!CAZ7!16!
\$;;;JCB?A;:!8?E!8;JC<E!A=C@!1?BE!;A=7!J7?JZCB7@!Q;BA?CB7J!CB!A=C@!U;ZCQE!?!@!
B7Q7@?E!A!?!Q;8VZC@=!A=7!VK:V;@7@!@A?A7J!?!BJ!<;!L;;J!Q?K@759BQZKJCL5
B;A!ZC8CA7J!A;5!A=7!Q;8VZ7>CAE!;<!A=7!CBD7@A@CB7@A@B!?!B?@!@]

FP[OO *;ACQ7! ;<! #ZZ7L?AC;B@! A;! 07@V;BJ7BA! #A! A=7! ;KA@CB7@?AC;B5! A=7
1BD7@ACL?A;!\CZZ!V;:DCJ7@A@BJ7BA;:8VA!B;ACQ7!;<!A=7!ZZ7L?AC;B@!?!L?CB@A!
=C8!;!=7!CB!\CACB!L7A=7!CA=!?!Q;VE!;<!A=C@!U;ZCQE!g:CAA7B7Z7@C;B@!
\CZZ!97!V;:DCJ7J!A;A=8VZ?CB?BA!Q;BQK::7B@ZE!7@V;BJ7BA]

FP[O`! 3YKCA?9Z7!?!7?A87BA]

FP[O`H 1BD7@ACL!VZ! :78?CB!B7KA?Z!A=;:KL=;K@CB7@ACL?AC;B! ?BJ!V;:DCJ7!
9;A=!A=7!QVZ?CB?BA! ?BJ@V;BJ7BA!;VV;:AKBCAC7@!A;!7@V;BJ!CB!V7:@;B!
?BJ!CB7>K?Z!/C@Q;BJKQA!U;ZCQE!\CACBL5!A;! @K98CA! :7Z7D?BA!J;QK87BA@
?BJ!A;!V;:JKQ7:7Z7D?BA!CAB7@ @7@]

FP[O`O '=7! Q;8VZ?CB?BA! ?BJ!@V;BJ7BA!\CZZ! :7Q7CB7CB8K8!;<!<;AZCL=A!
=;K:@!!B;ACQ7!;<!?BE!@?B@7@BBL5!JK7!V;:Q7@ @!!=7?:CBL5!;!?VV7ZZ?A7!
877ACBL5!BE]

FP[O`! ;A=! Q;8VZ?CB?BA! ?BJ!@V;BJ7BA!8?E!=?D7!;B7V:7@7BA?ACD7! ?BJm;!
;B7!JDC@;:!V:7@7BA! ?87Z@BL@!?!V?:AE!=?@!\CA=IA=7!1BD7@ACL?A;:5!CAZ7!
1d \$;;;JCB?A;:5! +7VKA! \$;;;JCB?A;:;! ;! ;A=7! Q8V;B7BA! ?J8CBC@A?A;!
:7Z?A7J!A;!?!Q;8VZ?CBA!!=7!7V:7@7BA?ACD7@;:8?E!V;:DCJ7!@KVV;A5!
LKCJ?BQ7! ;! ?JDCQ7! A=7! Q;8VZ?CB?BA! ?@V;BJ7BA5! 9KA! 8?E! B;A!
;A=7:C@7C:7QAZE!V?:ACQCV?A7!CB!A=7!877ACBL@]

FP[O`R '=7!Q;8VZ?CB?BA@V;BJ7BA5! ?BJ! ?VV;:V:C?A7!;<<CZ7Z7@!Z7?@A!<;:AE
7CL=A;K:@!!CB! ?JD?BQ75!97!V;:DCJ7@ @!A;! ?BE!CB<;:8?AC;BIA=?A!\CZZ!97!
K@7J! ?<A7!A@BD7@ACL?AC;B!9KA!JK:CBL!J@7@A@7@B?;

FP[OR 1BD7@ACL?AC;B! #QACDCAC7@! 1BD7@ACL?A;!\CZZ! !CB=8?A@B! :ZD7
Q8VZ?CB?BA5@V;BJ7BA5! ?BJ!CAB7@ @7@BD7@ACL?A;!\CZZ! @=?ZZ! Q;BJKQA! @CA7!
CB@V7QAC;B5!C<IB7Q7@!@A@B?A@7!CB<;:8?AC;B!<;:8!@;K:Q7@!?!@!?!V;:V:C?A7!
LCDB!A=7B?AK:7!;<!A=7!Q;8VZ?CBA]

FP[OT 07V;:A! ;<! 1BD7@ACL?AC;B!B@7@ACL?A;!\CZZ! Q;8VZ7CA7B! 1BD7@ACL?ACD7!
07V;:A! A=?A! CBQZKJ7@! @K88? :CB7@DC7@! Q;BJKQA7Jk! V=;A;L:?V=@5! C<! ?BE!
J;QK87BA@! ?B8?A7:C?Z@! :7Q7CD7Jk!J7@Q:CVAC;B@!;<CZ7B@7@K8B? :C7@!
;<! :7Z7D?BA!7Z7QA;:BCQ! :7Q;:J@k! ?BJ!?!J7A?CZ7JAZ7!7D7BA@?AZJ!A;A=7!
CBQCJ7BA!g=7B! A@7@ACL?A;B@A=7!CAZ7!16! \$;;;JCB?A;:!A=7!1BD7@ACL?ACD7!
07V;:A!\CZZ!9@K98CAA7J!A;A=7!CAZ7!16! \$;;;JCB?A;:!<;:7DC7! ?BJ!KCBJC

!

FF[! 4'#*+#0+!-!03213g!#*+!"1*+1*b !

FF[F 07DC7! !=7! 'CAZ7! 16! \$;;;JCB?A;!\CZZ! :7DC7! A=7! 07V;:A! 1BD7@ACL?AC;B! KBJ7! A=7!
wV:7V;BJ7?BQ7!;<!A=7!7DCJ7BQ7w!@A?BJ7?CB7J!CB!47QAC;B!O!FO!;<!A=C@!U;ZCQE!
! !

FF[O "CBJCBL! !=7!CAZ7!16! \$;;;JCB?A;!\CZZ!8?7!?! \CAA7B!<CBJCBL! ?@!A;

A=7!#2U!;<!K8?B!:7@;K:Q7@!;:!A=7C:!7YKCD?Z7BA!V:C;:!A;!C@@KCB!@?BQAC;B
FO[OFD+K7!U;:Q7@ @!)7?:CBL!;!\$;8VZ?CB?BA!A!K@7BA7@V;BJ7BA!8?E!7Z7QA!A;!
JC@VKA7!A=7!"CBJCBL! ?BJh@?B?AC;B!A=;:KL=! ?!JK7!V;:Q7@ @!=7?:CBL!
U;:Q7JK:7@! <! A=7! =7?:CBL! ?;7! ;KAZCB7J! CB! A=7! 4E@A78! 0KZ7@! ?BJ
07LKZ?AC;B@5! \$=?VA7:! 21oo! d!GH ?BJ! A=7Q8 V;B7BAI@! 4AKJ7BA!
+C@QCVZCB7!U;:Q7JK:7@50ZAC;B@!?!@!<;ZZ;\@W ! !
FO[OFQF '=7!Q;8V ;B7BA!7V:7@7BA?ACD7!<;! @AK7BA;Q7@ @!
=7?:CBL@! :7Z?A7J! A;! 47!K@Q;BJKQA! @=?ZZ! 97! A=7!
Q8V;B7BAI@!'CAZ7!\$;JCB?A;:;!:=C@!;!:=7!:J7@CLB77k
FO[OFOO! '=7! ;Z 7! ;<! A=7! =7?:CBL! ?J^KJCQ?A;:e@f!007A!A=7!
CBD7@ACL?AC;B! ?BVA=7:C?A7B7@ @!;<!A=7! @?BQAC;B!<;!
@CLBC<007BAK?Z!7::; @!;!;8C@@C;B@k
FO[OFO!! U?:AC7@!8?E!YK7@AC;B!A=7C:;!;B!\CAB7@A@7@59KAZ!
B;A! ?@]! YK7@AC;B@! ;<! 7?Q=! ;A=7#7!;A=7:! V?:AEI@!
\CAB7@@7@k
FO[OFOR! 3?Q=!V?:AE! @=?ZZ!:7Q7CD7!B;ACQ7!;<!A=7B-7?00L!
:CL=A! A;! 97! V:7@7BAk! =;\7D7:5! B7QA=7E! @=?ZZ! 97!
Q;8V7ZZ7J!A;!?AA7BJ! ?B? :CBLk! ?BJ
FO[OFOT! g=7B!?!<CBJCBL!;<!@7>K?Z!8C@Q;B!K@7Z05@?BQAC;B@!
ZC@A7J!CB

?VV::V:C?A7B7@@! ;<! A=7! @?BQAC;B
@CLBC<CQ?BA! V::Q7JK:?Z! 7::;!@! ::
;8C@@C;B@K!!?BJ

FO[OFR`O! \$;8VZ?CB?BA! @=?ZZ! :7Q7CD7! B;ACQ7!;<
=??:CBL! ?BJ! =?@! ?! :CL=A! A;V97@7BA[!
\$;8VZ?CB?BA! @=?ZZ! B7Q7A;8V7ZZ7J!
A;!?AA7BJ! ?BE!=7?:CB! B7!YK7@AC;B7J!
9E!A=77@V;BJ7BA[

FO[OFT1B! ?BE! @CAK?AC;B!\=7:7! A=7! :7@V;B@C9Z7! ?J8CBC@A;BAZCQ7! A=7!
78VZ;E77!B7>A!CB!ZCB7!CB! ?KA=!CAE@CZ?BQAC;B@[

!

F[! #UU3#&!-"!1*+1*b!-0!4#*\$'1-*4 !

F[F! 0CL=A! A;!#VV7?Z[!1<!7CA=7!:Q;8VZ?CB?BA!@V;B77BA!C@C@?AC@<C7J!\CA=!A=7!'CAZ7!16!
\$;;JCB?A;:I@!"CBJCB!5!@?BQAC;B5J7B78CB?AC;B!;<!?JK7!V::;Q7@C@CBL5!7CA=7:IV?:AE!
8?E! ?VV7?Z! A;! A#?VV::V:C?A7! \$;8V;B7BA! #VV7ZZ?A7! #KA=;:CAE! ?@! CBJCQ?A7J! 97Z;\[
07<7:7BQ7@!A;!wV?:AC7@w!CB!A=C@! @7QAC;B! ?BJ!CB!A=7!4B7@KZ8K@K?@!@k7BA!;
A=7!:7@V;BJ7BA5!Q;8V;B7BAV::7@7BA?ACD7!B6KZ7JCB?A;:;! :J7@CLB77f5!Q;8V;B7BA!
?J8CBC@A:?A;:!\=;!C8V;@?BQAC;B@5!B7Z?CB?BA[

F[O! b;;KBJ@!<;!#VV7?Z[! =7!L;;KBJ@!<;! ?BE! ?VV7?Z! ?7!ZC8CA7J!A;Z7ACBLW

F[OF! V:7DC;K@ZE!KB?D?CZ?9Z7!:7Z7D?BA!7DCJ7BQ7k

F[OO! @K9@A?BACD7!V::;Q7JK:?Z!7::;:CB!A=C@C@;B@A=7?:CBLK!;

F[O`!! @?BQAC;B!C@!@K9@A?BAC?ZZE!JC@V::;V::AC;B?A7!A;!A=7!"CBJCB!K

F[OR! A=7!<CBJCB! \?@!B;A!@KVV::;A7J!9E!A=7!7DCJ7BQ7[

F[!! U::Q7JK:7!<;!#VV7?Z[

F[F! ! #B! ?J8CBC@A:?A;: !7Q7CDCBL!B;ACQ7!;<! ?VV7?Z!\CZZ!V!;BQ77BQ;CB7!A=7!
V?:AC7@!Q;BQK::7BAZE!CA=!!7Q7CVA[

F[O!! 4AKJ7BA@!#BE! ?VV7?Z!;<!A=7!<CBJCB!5! @?BQAC;B!;:J7A7808?KCB @ @!
=7?:CBL! C@! L;D7:B7J! 9E! A=7! V::;Q7JK:7@! ;KAZB77! 4AKJ7BA! \$;BJKQA! ?BJ!

=C@m=7:!Q;BA:?QA!V7:C;J5!A=7!<?QKZAE!87897!8?E!
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F[R`!#ZZ!;A=7!V7?Z@!<!A=7!<CBJCBL!;!@?BQAC;B;B@B@C@?<?QKZAE!
87897:!C@!L;D7:B7J!9E!A+V;Q7JK:7@!;KAZCB7J!CB!A=7!4E@A78!0KZ7@!BJ
07LKZ?A@5! \$2VA7:! 25! o! O[FT! ?BJ! A=78@B7BA!@ @A?<<m78VZ;E77!
L:C7D?BQ7!Q7JK:7@!;!CA@KCD?Z7BA[

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F[TF!

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#<A7:! QK::CQKZ?;! ?BJ! V;;L:?88?ACQ! Q=?BL7@! =?D7! 977B! ?VV;;D7J! 9E! &?8?;! %BCD7:@CAE5! !=7!
'7>?@!4A?A7!%BCD7:@CAE!4E@A785! ?BJ!C<! ?VV;;V:C?A75!A=7!'7>?@!)CL\$;7JCBKACBC;B!
,;?:J5! A=7! 4;KA=7:B! #@@;QC?AC;B! ;<! \$;ZZ7L7@! ?BJ! 4Q=;;Z@d\$;88C@@@C;B! ;B! \$;ZZ7L7@!
e4#\$4\$-\$!8K@A!97!B;AC<C7J5! ?BJ!CB!@;87!Q?@75!L:?BA! ?VV;;D?Z[!!!

3>?8VZ7@!;<!JC<<7:7BA!AEV7@!;<! @K9@A?BACD7!Q=?BL75!A=7! @V7QC<CQ!V;;Q7JK:7!A;!97!K@7J!
A=7C!:7@V7QACD7! ?VV;;D?ZmB;AC<CQ?AC;B! :7YKC:787BA@5! ?BJ!A=7C!:7V;;ACBL!AC87!ZCB7@!?:?
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A=:77!V;;Q7JK:7@!CBQZKJ7W!

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:'UPKJ/' ! | ?KO'="J.O' "
MNJ
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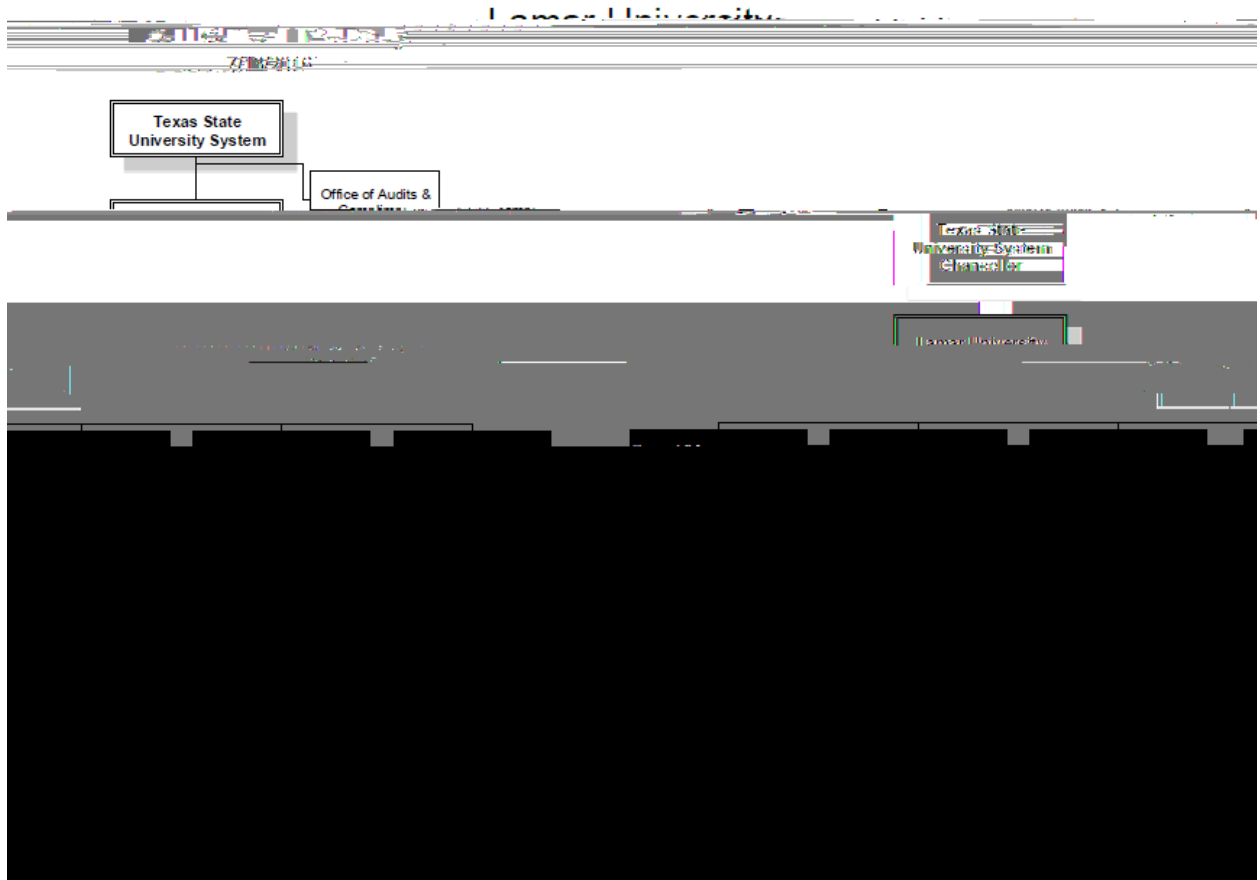
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3N%KMK,.%K† MNJ
:UPKJ/ !

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| ?SQ('N!&.*L' ! | 1JN,/PJ' ! | 1JKN'J
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| \$Z;@CB!V;:L:?85 !?VV;:D7J!;<Q?8VK@!@CA7BQ+Q?8VK@;5!CB@ACA!KAC;B | | | | | |
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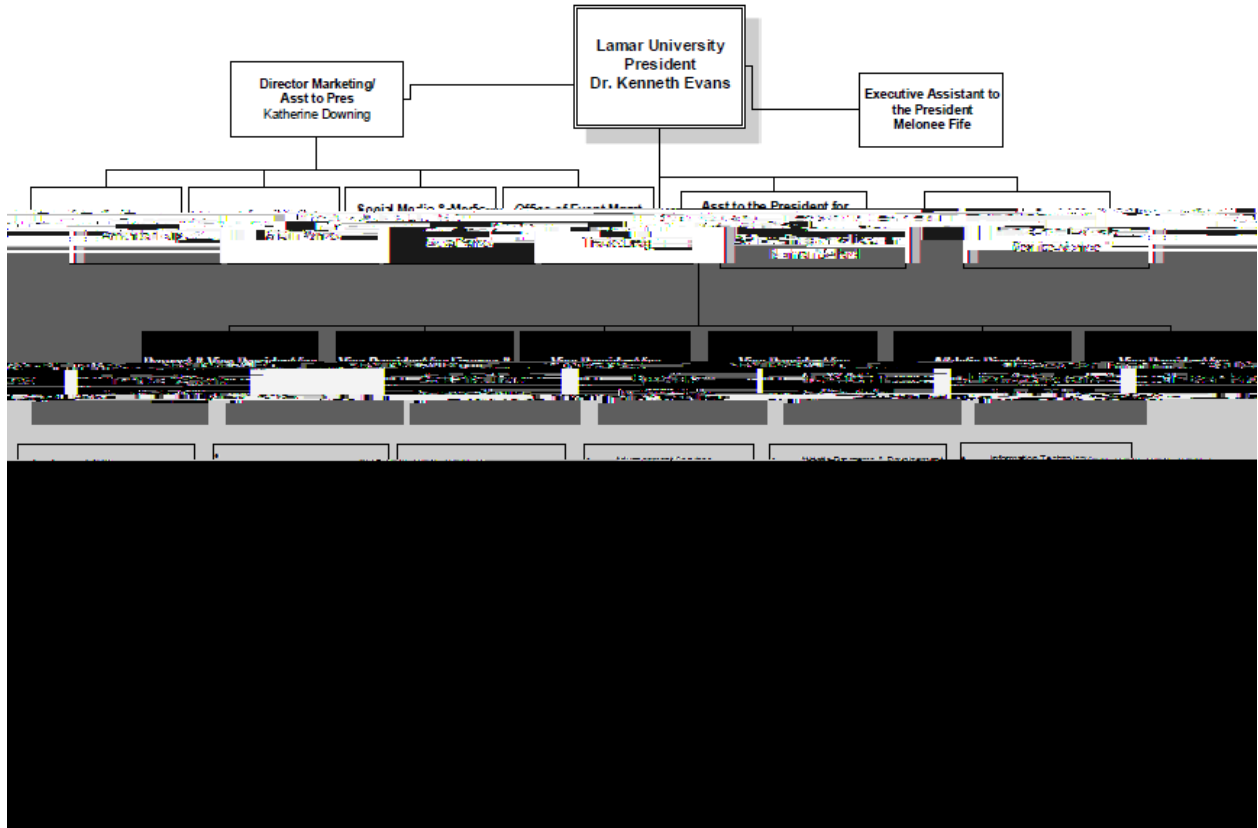
APPENDIX R.
LAMAR UNIVERSITY ORGANIZATIONAL CHARTS
TEXAS STATE UNIVERSITY SYSTEM AND LAMAR



OFFICE OF THE PRESIDENT

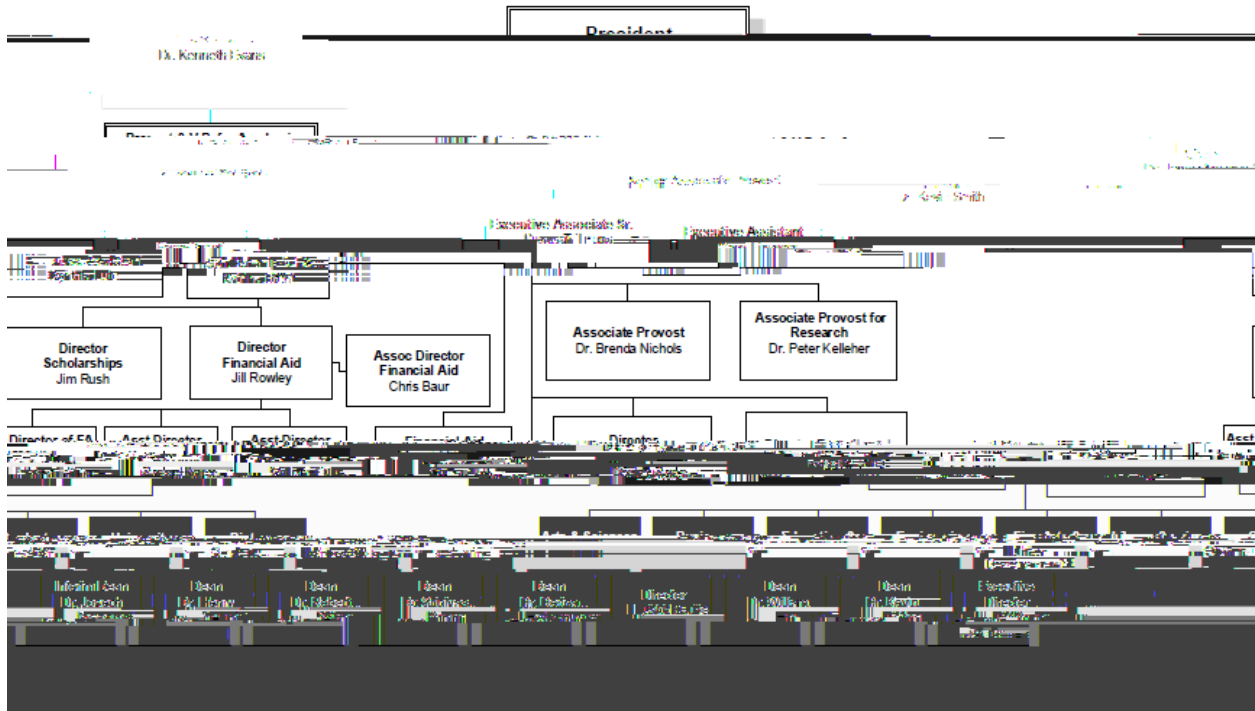
Lamar University

7/13/2016



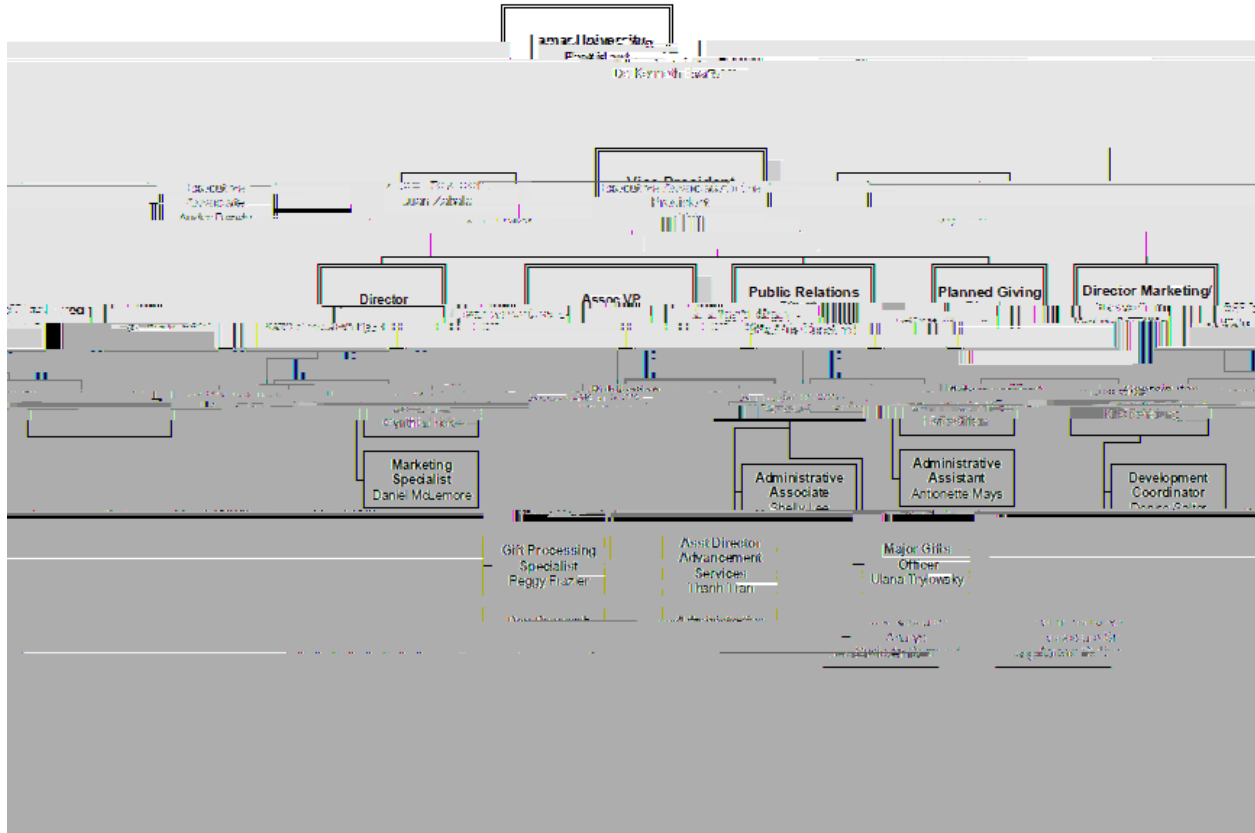
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Office of the Provost & Vice President For Academic Affairs 7/13/2016

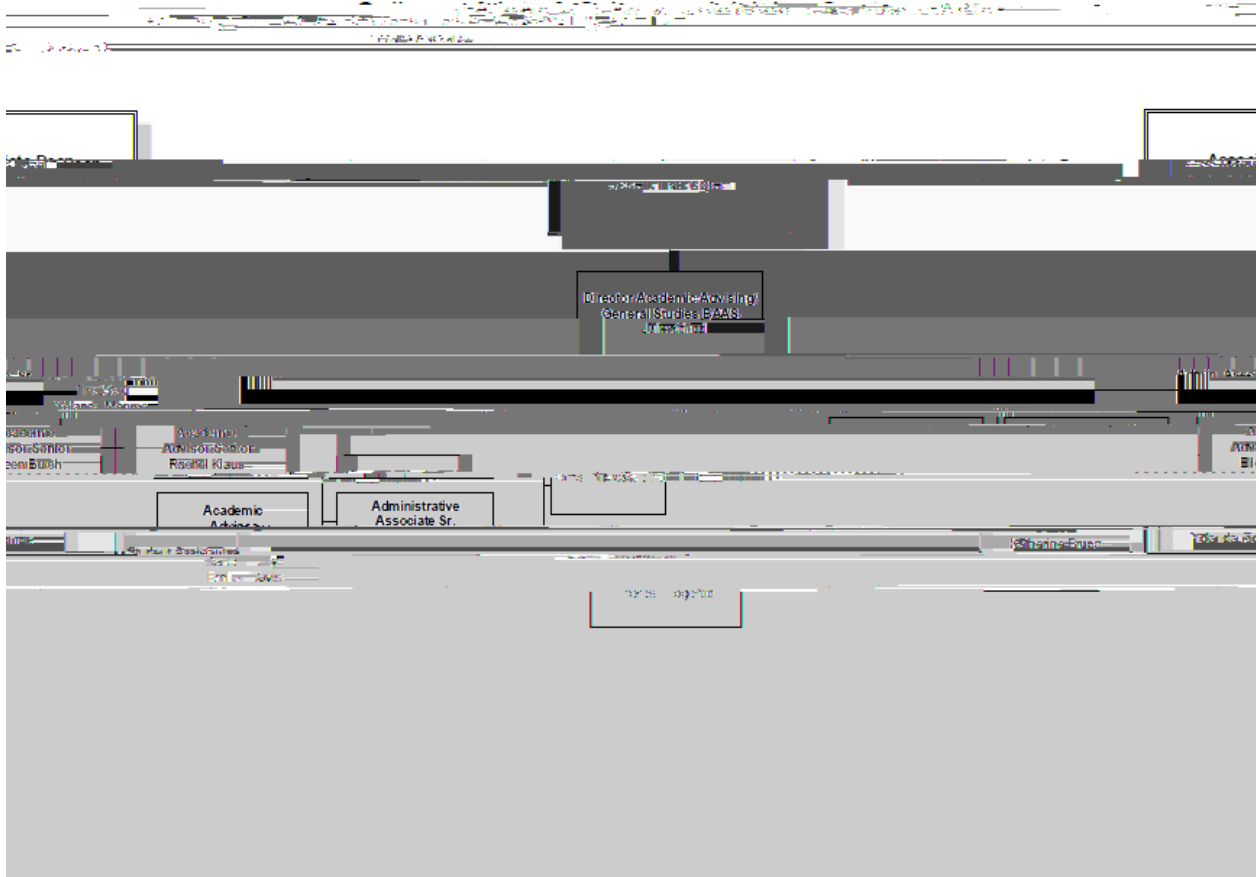


DIVISION OF UNIVERSITY ADVANCEMENT

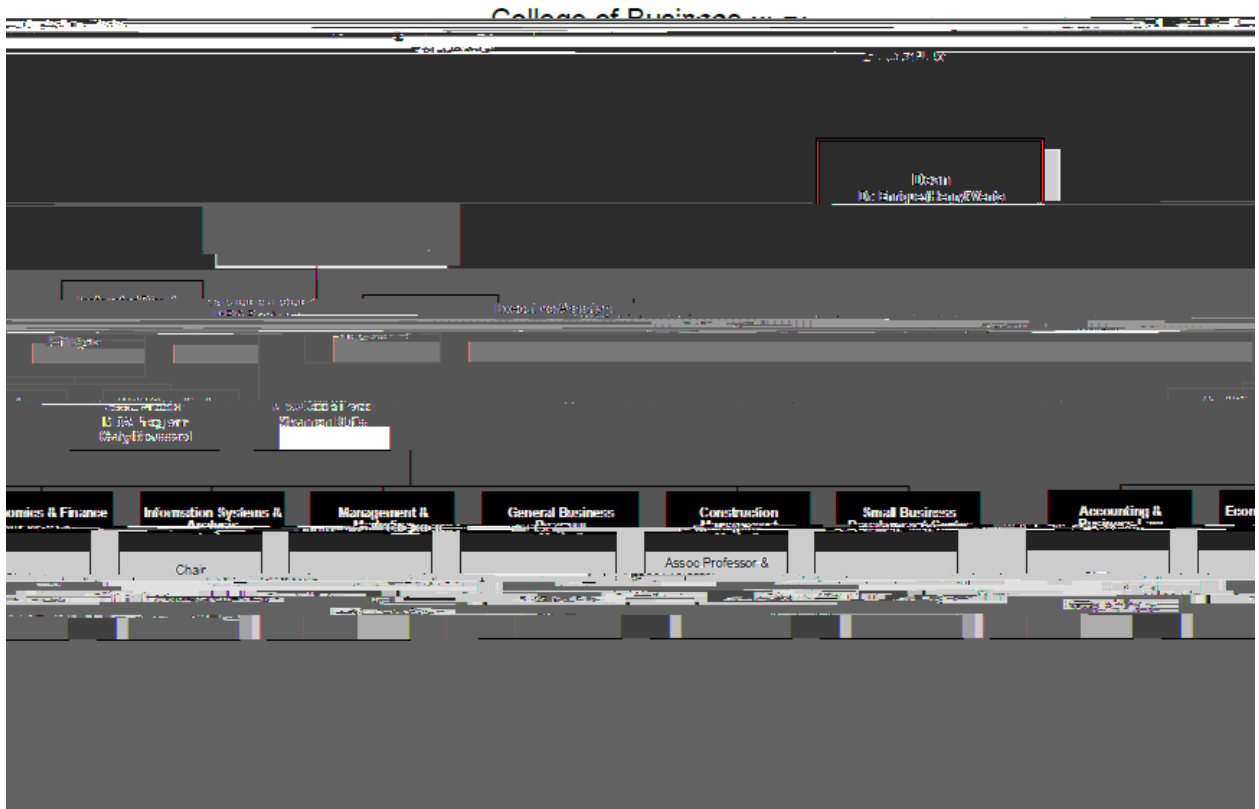
University Advancement
7/13/2016



ARTS AND SCIENCES ADVISING CENTER

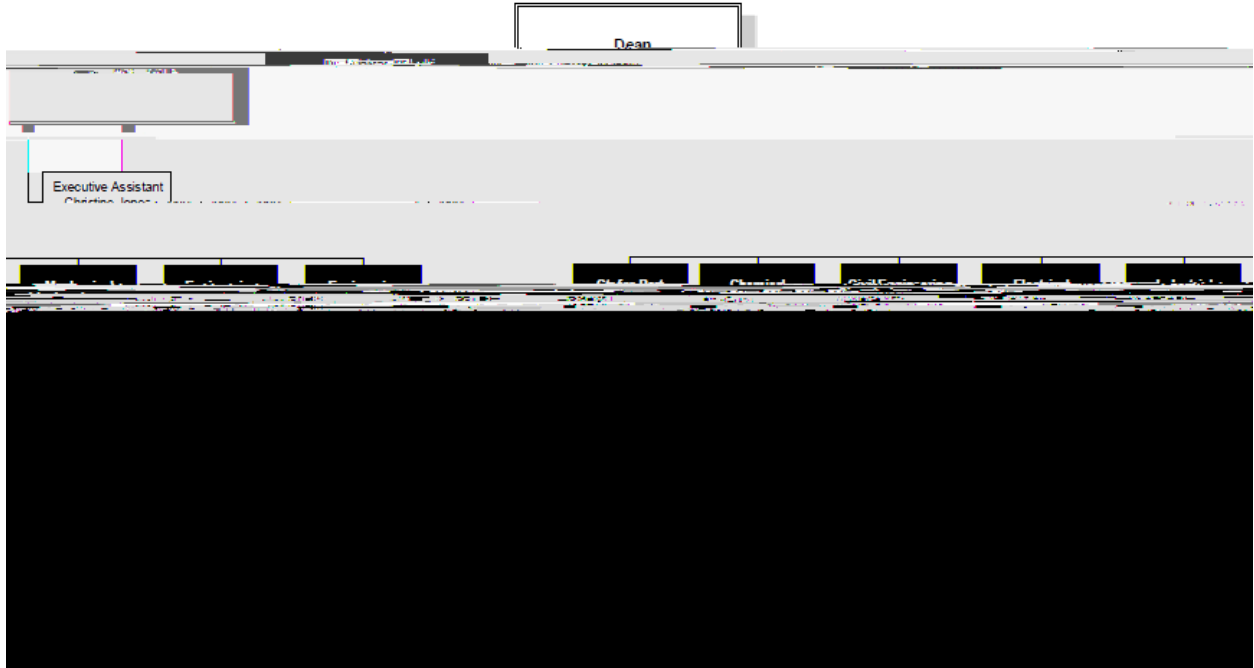


COLLEGE OF BUSINESS

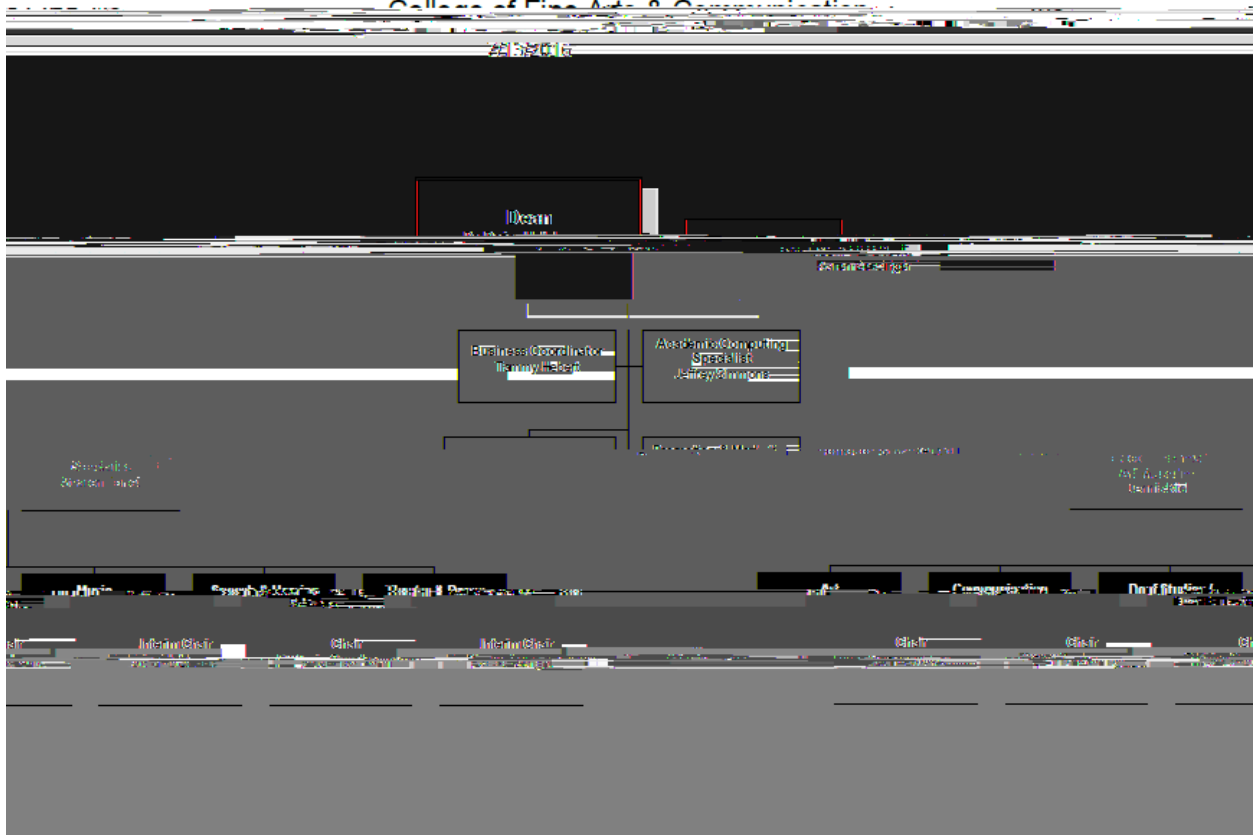


COLLEGE OF ENGINEERING

College of Engineering
7/13/2016



COLLEGE OF FINE ARTS AND COMMUNICATION



DIVISION OF FINANCE AND OPERATIONS

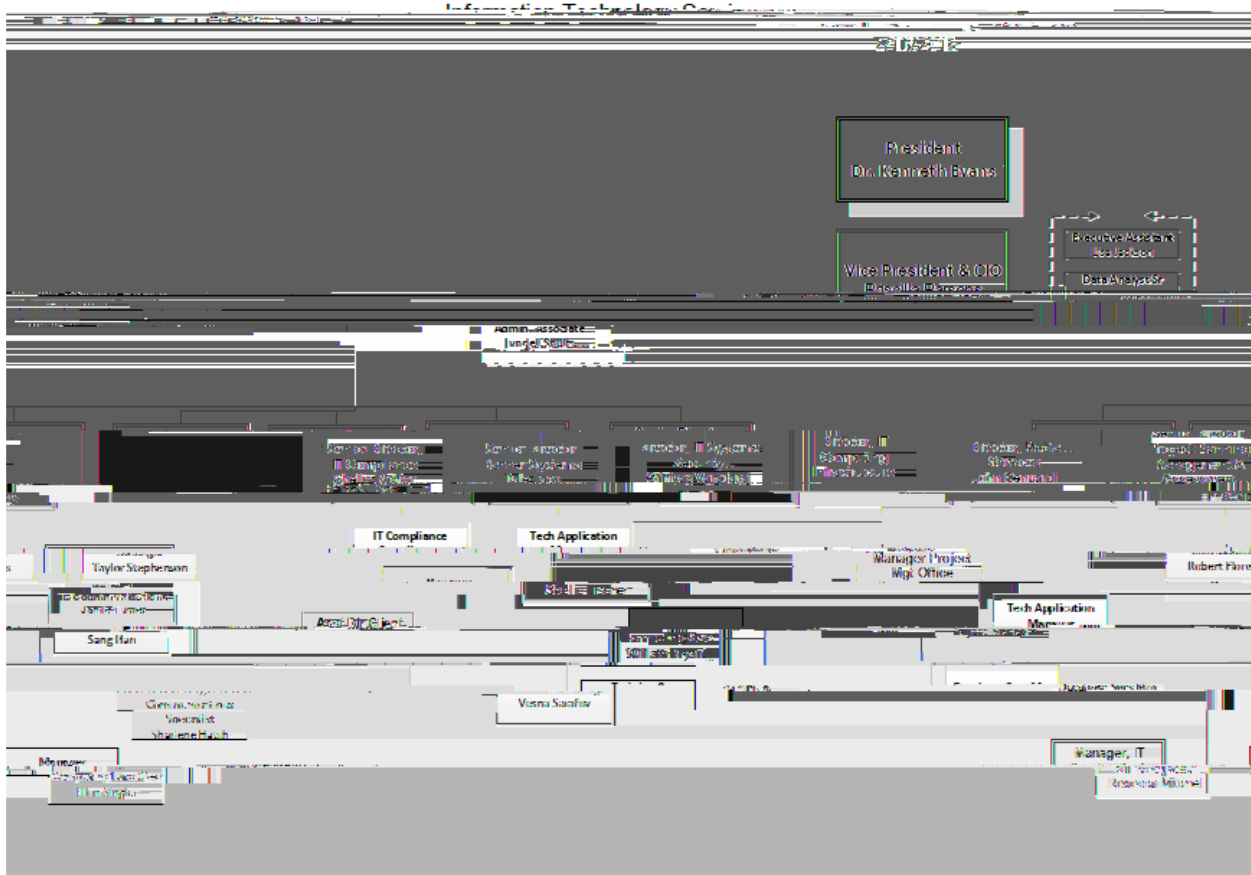
VP, Finance and Operations

E. Craig Ness
Vice President

Twila Baker, Ex Dir.

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| Richard, AVP
Personnel | Katherine Miller, AVP
Planning & Construction | Jamie Larson, Acting
AVP, Financial Services | Alicen Hosi
Director of Sustainability | Michael Ruland, AVP
Facilities | Diane Thibodeaux, AVP
Administrative Services | Gathy Blair
Human Resources |
|---------------------------|--|---|---|-----------------------------------|--|--------------------------------|

DIVISION OF INFORMATION TECHNOLOGY



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