

;
ÔÙ Þ ÔÛ Ò Ñ Ò Á Ñ Ò Û Š Ò Û Ò
HQT VJ "GFKVKQP



Tech Center

5 Vci hñ Y7 D'HYW '7 Ybhñf

Vj g'o kuukqp'qh'ij g'P cñkqpcñEqpetgvg'Rcxgo gpv'
Vgej pqmij { 'Egpgvt*'ER'Vgej 'Egpgvt+'cñkqy c'Ucvg'
Wpñkgtukñ { 'ku'q'wñkq'ngñ { 'tçpur qtçvñkq'ñcngñ qñf gtñ'
ctqwpñ { 'ij g'egpñtññ qññ'qh'çf xcpeñpi 'eqpetgvg'r cxgo gpv'
vgej pqmij { 'ij tqwi j 'tguçtej . 'vgej pqmij { 'tçpuñgt. 'çpf "
vgej pqmij { 'lo r ngo gpvçvñkq0

BçñjW

Vj ku'f qewo gpv'ku'f kuugo kpcvgñ 'wñf gt'ij g'ur qpñutñj kr "
qh'ij g'WUOF gr ctvo gpv'qh'Vtçpur qtçvñkq'lp'ij g'
kpvgtguv'qh'kphqto çvñkq'gzej cpi g'wñf gt'Egqr gtcvñkq'
Ci tggo gpv8; 51L53; 72226.'Cf xcpeñpi 'Eqpetgvg'
Rcxgo gpv'Vgej pqmij { 'Uññwñkqu0Vj g'WUOI qxgtpo gpv'
cuwwo gu'pñ'ñcñkñkñ { 'hqt'ij g'wug'qh'ij g'kphqto çvñkq'
eqpvçkpgñf 'lp'ij ku'f qewo gpv0

Vj g'WUOI qxgtpo gpv'f qgu'pñv'gñf qtug'r tqf wewñ'
qt'o cñwñcñwtgtu0Vtçf go ctññ'qt'o cñwñcñwtgtu0'
pco gu'çr r gct'lp'ij ku'o cñgtkññ'qññ { 'dgecwug'ij g { 'ctg'
eqpuñf gt gñf 'guugpvñkñ'q'ij g'qdlgevñkq'qh'ij g'f qewo gpv0
Vj g { 'ctg'kpenñf gñf 'hqt'kphqto çvñkqpcññ wñr qugu'qññ { 'çpf "
ctg'pñv'kpvpgñf gñf 'q'tghñev'c'r tghgtgpeg. 'çr r tqxcñ'qt "
gñf qtugo gpv'qh'çp { 'qpg'r tqf wew'qt'gñvñkñ { 0

BçbVjñXjñj '7 çbhñbñg

Vj g'eqpvpgñv'qh'ij ku'f qewo gpv'f q'pñv'ij cxg'ij g'hqteg"
çpf "ghñgev'qh'ñcy "çpf "ctg'pñv'0 gcpv'q'dkpf 'ij g'r wññk"
lp'çp { 'y c { 0Vj ku'f qewo gpv'ku'kpvpgñf gñf 'qññ { 'q'r tqxñf g"
erñtkñ { 'q'ij g'r wññk'tgi ctf kpi 'gzñkñpi 'tgs wñkgo gpñu"
wñf gt'ij g'ñcy "qt'ci gñe { 'r qññkñu0J qy gñgt. "eqo r ñkpeg"
y kñj "çr r ñkcdñg'ñcñwñgu'qt'tgi wñvñkqu'eñkñf 'lp'ij ku"
f qewo gpv'ku'tgs wñkgt 0

E i U]ññ5 ggi fUñW'Gñññ Ybh

Vj g'Hgñf gñcññJ ki j y c { 'Cf o kñkñtçvñkq*'ññ Y C+'r tqxñf gu"
j ki j /s wñkñ { 'kphqto çvñkq'q'ugtxg'I qxgtpo gpv'lpñf wññt { . "
çpf "ij g'r wññk'lp'c'o cppgt'ij çv'r tqo qñgu'r wññk"
wñf gtñvçpf kpi 0Uççpf ctf u'çpf 'r qññkñu'ctg'wugñf 'q"
gñuwtg'çpf "o cñkz k g'ij g's wñkñ { . 'qdlgevñkñ { . 'wñkñ { . 'çpf "
kpvgi tkñ { 'qh'ku'kphqto çvñkq0ññ Y C' r gñkñf kccññ { 'tñxñgy u"
s wñkñ { 'kuuñgu'çpf "çf l wññu'ku'r tqi tco u'çpf 'r tqegñgu'q"
gñuwtg'eqpvkpvqñu's wñkñ { 'lo r tqxgo gpñv0

çk U'Gñññ' bñj Yfñjññ

BçbXjñWjñ jñUñjçb'Gñññ Ybh

Kqy c'Ucvg'Wpñkgtukñ { 'f qgu'pñv'ñ kñtlo kpcvg'qp'ij g'dcuku"
qh'ñceg. "eqññt. 'ci g. 'gñj pñkñ { . 'tññki kqñ. 'pçvñkqpcññ'qt ki lp. "
r tgi pçpe { . 'ñgz wññ'qñt kpgvçvñkq. 'i gñf gt'ñf gñvñkñ { . 'i gpgñv"
kphqto çvñkq. 'ñgz. "o cñkñññ'ñcñwñu. 'f kñcñkñkñ { . 'qt'ñcñwñu'cu"
c'WU'xgvgñtçp0Kps wñkñu'tgi ctf kpi 'pñpf kñtlo kpcvñkq"
r qññkñu'o c { 'dg'f kgevñf 'q'ij g'Qññkñeg'qh'Gñ wññ'
Qñ r qt wñkñ { . '5632'Dgñtñf uñj gñt'J cñm'737'O qñtñkñTqçf. "
Co gu. 'Kqy c'72233.'ñgñr j qpg<737/4; 6/9834.'ij qñvñkq<
737/4; 6/3444. "go cñkñ"[eqñññkñegB kñcñvçf uñj 0](#)

5 Vci hñ jg'; i jXY

Vj g'I wñf g'iq'Eqpet gvg'Qxgtñ { u'ku'c'r tqf wew'qh'ij g'P çvñkqpcñ'
Eqpetgvg'Rcxgo gpv'Vgej pqmij { 'Egpgvt*'ER'Vgej 'Egpgvt+'
cñkqy c'Ucvg'Wpñkgtukñ { . 'y kñj 'ñwñf kpi 'ñtqo 'ij g'Hgñf gñcññ'
J ki j y c { 'Cf o kñkñtçvñkq*'ññ Y C+0Vj ku'f wñf g'r tguugñu"
ij g'dcuku' r tñkñr ngñ'pñgñf gñf 'q'f gñki p'çpf "eqpuñt wewñ"
eqpetgvg'qxgtñ { u'qñ'gzñkñpi "çur j cññ'eqo r quñkñ. 'çpf "
eqpetgvg'r cxgo gpñu0K'ku'ij g'hqñt ij "gñf kñkq'qh'ij g'I wñf g'iq"
Eqpet gvg'Qxgtñ { u'ñkñpeg'42290Eqo r ngo gpñt { 'r wññkçvñkqu"
f gñgñqñr gñf 'd { 'ij g'ER'Vgej 'Egpgvt'kpenñf g'I wñf g"
Ur gñkñkçvñkqu'ñt'Eqpet gvg'Qxgtñ { u'*4238+.'I wñf g'ñt'ij g"
F gñgñqñr o gpñv'qññEqpet gvg'Qxgtñ { 'Eqpuñt wewñkq'f qewo gpñu'
*423; +."Eqpet gvg'Rcxgo gpñv'Rt gñgt xcñkq'f wñf g'pñgy "gñf kñkq"
hqt ij eqo kpi +."çpf "J kñqñt { 'qh'Eqpet gvg'Qxgtñ { u'lp'ij g"
Wpñkñf 'Ucñgu'pñgy "gñf kñkq'hqt ij eqo kpi +0Vj gñg'çpf "qñj gt"
r wññkçvñkqu'ñt gñvñf "q'eqpetgvg'qxgtñ { u'ctg'çxçkñcdñg'qp"
ij g'ER'Vgej 'Egpgvt'ñy gñduñkñ. "[j wñu'ñkñr vgej egpgvt qñti 0](#)

F YZñf YbW'çbZñfa Uñjçb'Zñf'ñ jg'; i jXY

Hñem'I 0'ñññ tquu.'O 0'D0Uñ { f gt. 'F 0J cñtñkpi qñp. "
ññT qgñgt. "çpf "V0Eccñmgt042430ñ wñf g'iq'Eqpet gvg"
Qxgtñ { u'06 ij 'Gñf kñkq0P çvñkqpcñEqpetgvg'Rcxgo gpñv'
Vgej pqmij { 'Egpgvt. 'Kqy c'Ucvg'Wpñkgtukñ { . 'Co gu. 'K0

: çf'AcñfY'çbZñfa Uñjçb

P çvñkqpcñEqpetgvg'Rcxgo gpñv'Vgej pqmij { 'Egpgvt"
Kqy c'Ucvg'Wpñkgtukñ { 'T gñgtçej 'Rcñññ'
4933'UñNqñr 'F tñkñg. 'Uñkñg'6922
Co gu. 'K'72232/: 886"
737/4; 6/79; : "
[j wñu'ñkñr vgej egpgvt qñti 1](#)

7 çj Yñ'ç U Y7 fYXjñg

Vqñf'ñc'Vqñt gññc. 'CERC. 'O QññMU'ej çr vgt. "wugñf 'y kñj 'r gto kuukqp

Vgej plecn'T gr qt v'F qewo gpwvkqp'Rci g

30Tgr qt vP q0		40I qxgt po gpv/Ceegukqp 'P q0		50Tgekr lgpvafEcw nqi 'P q0	
60Vlkg' tpf 'Uwdvlkg I wkf g'iq'Eqpet gvg'Qxgtnc/u' *Hqwtvj 'Gf kkkp+				70Tgr qt vF cvg P qxgo dgt'4243	
				80Rgt hqto lpi 'Qti cplk cklqp'E qf g	
90Cwj qt *u+ I ct{ 'Hem' lgtqf 'I tquu.'O ctniD0Up{ f gt.'F cng'J cttkpi vqp.'Lghgt{ 'T qgungt..' cpf 'Vqo 'Ecemgt				: 0Rgt hqto lpi 'Qti cplk cklqp'Tgr qt vP q0	
; 0Rgt hqto lpi 'Qti cplk cklqp'P co g' tpf 'Cf f tguu P cklqpcnEqpetgvg'Rcxgo gpv'Vgej pqnqi { 'Egpvg Kqy c'Ucvg'Wpklxgtukf{ 4933'Uqwj 'Nqqr 'F tkxg.'Uwkg'6922 Co gu.'K'72232/: 886		320Y qt mWpks'P q0			
				330Eqpvtcev'lt 'I tcv'P q0 Rctv'qhEqqr gtcvkg'Ci tgggo gpv8; 51L53; 72226." Cf xcpekp 'Eqpetgvg'Rcxgo gpv'Vgej pqnqi { 'Uqnwklqpu	
340Urqpuqt lpi 'Qti cplk cklqp'P co g' tpf 'Cf f tguu Hgf gtcnJ ki j y c{ 'Cf o kpmccklp 3422'P gy 'Lgtug{ 'C xgpwg.'UG Y cuj lpi vqp.'F E'427; 2		350V{ r g'qhTgr qt v tpf 'Rgt kqf 'E qxgt gf I wkf g			
		360Urqpuqt lpi 'Ci gpe{ 'E qf g			
370Uwrrngo gpvct{ 'P qvgu Xkuk'j w u< lkr veej egpvg'Qti' hqt'eqnqt'r f hu'qh'vj ku'cpf 'qvj gt'tgugctej 'r wdrkecvkpu0					
380Cduutcev Vj ku'i wkf g'r tguvpw'vj g'dcule'r tlpelr ngu'vj cvc'r cxgo gpv'gpi kpggt'poggf u'vq'T guki p'c'pf "eqpumwvEqpetgvg'qxgtnc{ u'qp'gzkukpi " cur j cnw'eqo r quksg.'cpf 'eqpetgvg'r cxgo gpw0 Vj g'lpvgpv'qh'vj ku'i wkf g'ku'v'lpetgcug'vj g'vgej plectnr tqhlekpe{ 'qh'gzr gtkepegf "gpi kpggtu'lp'vj g'wug'qh'Eqpetgvg'qxgtnc{ u'r tqxkf g" ngu'gzr gtkepegf "vugtu'vj kj 'vj g'guugpvkcnhpqy ngf i g'v'cf f tguu'vj g'poggf u'qh'xctkqu'v'ru'gu'qh'Eqpetgvg'qxgtnc{ 'r tqlgewu.'cpf 'j gr " cm'vugtu'tgeqi pl g'vj g'xgtucvklkf 'qh'Eqpetgvg'qxgtnc{ u.'y j gvj gt'qp'mj /xqmw g'tqcf u.'ekf 'uvggwu.'r tko ct{ 'tqcf y c{ u.'qt'kpgtuncv" j ki j y c{ u0Tcvj gt'vj cp'cu'c'uvgr /d{/ uvgr 'o cpwcn'qt'ugtgu'qh'r tguetkr vkg'hqto wv'g.'vj g'o cvgtkcnlp'vj ku'i wkf g'ku'r tguvgvf 'lp'vj g" hqto 'qh'gzr gtv'i wkf cpeg'o gcpv'v'uwrrngo gpv'vj g'r tqhguukpccr'gzr gtkepeg'qh'vj g'tgcf gt0 Vj ku'iqwtvj 'gf kkkp'qh'vj g'i wkf g'j cu'dggp'wr f cvgf 'y kj 'ewt'gvp'lpqhto cklqp'qp'eqpvpwqum' 't'gphqtegf "eqpetgvg'r cxgo gpv" qxgtnc{ u.'i gqvz'vkg'uvgr ctcvklp'nc{ gtu.'hldgt' 't'gphqtego gpv'eqpetgvg'qxgtnc{ 'T guki p'r tqegf wgu.'cpf 'nguqpu'ngctpgf 'htqo 'vj g" gzr gtkepegu'qh'pwo gtqwu'uncv'j ki j y c{ 'ci gpe{ 'gpi kpggtu0					
390Mgl 'Y qt f u eqpetgvg'qxgtnc{ u0 r cxgo gpw0 r cxgo gpv'r tgugtxcvklp0 r cxgo gpv' tgj cdkkcvklp0 tguwthclpi			3: 0F km kdwklp'Ucvgo gpv P q'tgumlevkpu0		
3; 0Ugewt kqf 'En udkkcvklp" *qh'vj ku'r gr qt v+ Wpencuukhgf 0		420Ugewt kqf 'En udkkcvklp" *qh'vj ku'r ci g+ Wpencuukhgf 0		430P q0qh'Rci gu 374	
				440Rt leg P C	

; i]XY'hc'7 c bWYhY'Cj Yf`Uhg
Q[~ !c@Aãã } D

Bcj Ya VYf`&\$&%

5 i h c f g

I ct{ 'Hem'Vj g'Vtcpuqe'I tqwr . 'Kpe0

Igtqf'I tquu.'RG.'NGGF'CR.'Up{f gt'('Cuuqekcvgu.'Kpe0

O ctniD0Up{f gt.'Rj F.'RG.'Rcxgo gpv'Gpi kpggtlpi 'cpf'Tgugctej 'Eqpuwncpwu.'NNE

Fcrq'J cttlpi vqp.'RG.'J cttlpi vqp'Ekkrl'Gpi kpggtlpi 'Ugtxlegu

Lghgt{ 'Tqgungt.'Rj F.'RG.'Wplxgtuk{ 'qh'Kkpqlu'cv'Wdcpc/Ej co r cli p

Vqo 'Ecemgt.'RG.'Y qqf rcpf 'Eqpuwnlpi . 'Kpe0

Dfc ^WwA UbUj Yf

Ugxgp'N0Vtkuej . 'RG.'P cvkqpcnEqpetgvg'Rcxgo gpv'Vgej pqmji { 'Egpygt.'Kqy c'Ucvg'Wplxgtuk{

T æ æ ä * Åãã !

Qmucpc'I kgugo cp

Òãã !

Rvggt'J wpulpi gt

Ö!æ @BÁ^•ã } ÆSæ [~ ãæ åÁ! [ä &ã }

Cnlelc'J qgto cpp

C'i wkf g'hqo

P cvkqpcnEqpetgvg'Rcxgo gpv'Vgej pqmji { 'Egpygt

Kqy c'Ucvg'Wplxgtuk{

4933'Uqwj 'Nqqr 'F tkg.'Uwkg'6922

Co gu.'K'72232/: 886

Rj qpg<737/4; 6/79; : 'THcz<737/4; 6/2689

[i wr ucler vgej egpygt0ti](#)

5 W_bck`YX[a YbHg

Vj g'ER'Vgej 'Egpgvt'i tcvghwn{ 'cempqy rgi i gu'vj g'i gpgtqwu'hkpcpeknur r qtv'qh'vj g'HJ Y C'hqt'vj g'f gxgnr o gpv'qh'vj g' hqwtvj 'gf kskp'qh'vj ku'i wkf g'OVj g'ER'Vgej 'Egpgvt'cpf 'vj g'cwj qtu'cnu'y kuj 'vq'vj cpn'vj g'hqmy kpi 'npqy rgi gedrg." gzer gtkepegf. 'cpf 'f gf kecvgf 'eqpetgvg'r cxgo gpv'gzer gtu'y j q'ugtxgf "qp'vj g'Vgej plecn' Cf xluqt { 'Ego o kxgg'cpf " eqp'kdwgf "vq'vj g'f gxgnr o gpv'qh'vj ku'i wkf g<

- Cpf { 'Dgppgw.'O lej ki cp'F gr ctvo gpv'qh'Vtcur qtvckqp
- O kng'D{ gtu.'RG.'Co gtkecp'Eqpetgvg'Rcxgo gpv' Cuuqekckqp.'Kpf kpc'Ej cr vgt
- F cp'F gI tech.'RG.'O lej ki cp'Eqpetgvg'Cuuqekckqp
- Cpi gr'Hqmgucf.'RG.'Co gtkecp'Eqpetgvg'Rcxgo gpv' Cuuqekckqp.'Eqmtcf qIY { qo kpi 'Ej cr vgt
- Vqf f'J cpupp.'RG.'Kqy c'F gr ctvo gpv'qh'Vtcur qtvckqp
- O kng'Rtcwn.'RG.'Hgf gtcn'J ki j y c{ 'Cf o kpkmtckqp
- Uco 'V{ uqp.'RG.'Hgf gtcn'J ki j y c{ 'Cf o kpkmtckqp

- É' Ighh'Wj mo g{ gt.'RG.'S wcrk{ 'Gpi kpggtkpi 'Uqnwkqpu
- É' Ngkh'Y cyj pg.'RG.'Co gtkecp'Eqpetgvg'Rcxgo gpv' Cuuqekckqp
- É' O cw\ gmg.'RG.'Eqpetgvg'Rcxkpi 'Cuuqekckqp'qh' O kppguqc
- É' I qtf qp'Uo kj.'RG.'P ckqpcn'Eqpetgvg'Rcxgo gpv' Vgej pqm{ { 'Egpgvt
- É' Iqj p'Cf co.'RG.'P ckqpcn'Eqpetgvg'Rcxgo gpv' Vgej pqm{ { 'Egpgvt

5 VvfYj jUjcbg

5F	vj tgg/fko gpukqpcn
CCUJ VQ	Co gtkecp'Cuuqekckqp'qh'U'cyg J ki j y c{ 'cpf 'Vtcur qtvckqp'Qh'hekn
CEK	Co gtkecp'Eqpetgvg'Kpukwng
CERC	Co gtkecp'Eqpetgvg'Rcxgo gpv' Cuuqekckqp
CUT	cmerk'uklec'tgcevkxk{
CUVO	Co gtkecp'Uqekgv{ 'hqt'Vgukpi 'cpf " O cvgtkcn
EQC6D	eqpetgvg'qp'cur j cn6dqp f gf
EQC6W	eqpetgvg'qp'cur j cn6wpdqp f gf
EQE6D	eqpetgvg'qp'eqpetgvg6dqp f gf
EQE6W	eqpetgvg'qp'eqpetgvg6wpdqp f gf
ER'Vgej 'Egpgvt	P ckqpcn'Eqpetgvg'Rcxgo gpv Vgej pqm{ { 'Egpgvt
ETER	eqpv'pwqwn{ 't'gkphqtegf "eqpetgvg" r cxgo gpv
EVG	eqg'h'ekgpv'qh'vj gto cn'g'zr cpukqp
GUCN	gs wkcngpv'ukpi ng'czng'hqcf
HGC	Hpkwg'grgo gpv'cpcn{ uku
HJ Y C	Hgf gtcn'J ki j y c{ 'Cf o kpkmtckqp
HTE	hdgt/tgkphqtegf "eqpetgvg
HTR	hdgt/tgkphqtegf "r qn{ o gt
J O C	j qv o kz "cur j cnv
KOER	Kpvgi tcvgf 'O cvgtkcn'cpf " Eqp'utwckqp'Rtcewlegu
K'K	Kpvgtpckqpcn'Tqwi j pguu'Kpf gz

LRER	lqkpvgf 'r rclp'eqpetgvg'r cxgo gpv
LTER	lqkpvgf 't'gkphqtegf "eqpetgvg'r cxgo gpv
NEEC	rkkg/e{ eng'equv'cpcn{ uku
NKCT	rkj v'f ggevkqp'cpf 'tcpi kpi
NVRR	Nqpi /Vgto 'Rcxgo gpv'Rgthqto cpeg
OGRFI	O gej cpknke/Go r k'kecn'Rcxgo gpv" F guki p'I wkf g
OQT	o qf wnu'qh't'w wtg
OTF	o cvgtkcn/tgrvgf 'f kntguu
PEJTR	P ckqpcn'Eqqr gtcvkxg'J ki j y c{ Tgugctej 'Rtqi tco
PRX	pgv'r tgu'gpv'xcnwg
PTOEC	P ckqpcn'Tgcf { /O kz gf 'Eqpetgvg" Cuuqekckqp
RGO	r gthqto cpeg/gpi kpggtgf "o kz wtg
UCO	Uwr gt'Ck'O gvgf
RCOU	r qn{ 'cnr j c/o gvj { nv{ tpgg
RCUTE	r gto gedrg'cur j cn'wcdkik{ gf "untguu" t'gkgh'eqwtug
REC	Rqt'wcpf 'Ego gpv'Cuuqekckqp
REE	r qt'wcpf "ego gpv'eqpetgvg
UEO	uwr r ngo gpvt { "ego gpv'kqwu"o cvgtkcn
UJC	uncvg'j ki j y c{ 'ci gpe{
ULRER	uj qtv'lqkpvgf 'r rclp'eqpetgvg'r cxgo gpv
y ko 'tcvkj	y cvgt/q/ego gpv'kqwu"o cvgtkcn'tcvkj

7 cbhYbhg

Ô@ç'Á

bfcbXi Wjcb	3
Rwtr qug"cpf "Ueqr g"	4
J qy "q"Wug"Vj ki'I wkf g"	4
Dpgghku"cpf "J kvtlecnRgthqto cpeg"qh'Eqpetgvg Qxgtr{u".....	4
Cuugv'O cpci go gpv'j tqwi j "j g"Wug"qh'Eqpetgvg Qxgtr{u".....	5
Eqpetgvg"Qxgtr{ "Qr vkpu"	6
Eqputwewkqp"cpf "S wcrk\ "Cuwtcpeg"qh'Eqpetgvg Qxgtr{u".....	7

Ô@ç'Á

**9j Ui Ujcb'cZ9I jghjbl 'DUJ Ya Ybhg'UbX
GYWjcb'cZ7 cbWYH'Cj Yf'UmCdhjcbg'9**

F gvgto klpki "j g'Hgcukdkrk\ "qh'c'Eqpetgvg"Qxgtr{ "cpf
Ugrgkpi "j g'Crrtqr tkvg"F guki p"

Ugr "30F gvgto kpg"j g'Gzkukpi "Rcxgo gpvV{r g'cpf
Eqpf kkp"

Ugr "40O cng'c"Rtgrko kpct{ "F gvgto kpcvkqp"qh'j g
Gzkukpi "V{r lecnUgevkqp"Nc{gtu'cpf "Vj kengguu":

Ugr "50Eqpf wev'cp"Qp/UkgTgxkgy "cpf "Gxcnecvkqp"33

Ó[⇔b\⇔^&ÁŞá{ æ↑æ^ \Á⇔b\ãæbbæbÁ

Æãá⇔^á&æÁO~^ã⇔⇔^bÁ

U| **~ã \ÁO~^ã⇔⇔^bÁ

Ûæã\⇔^á→ÁO~^b\ãá⇔^bÁ

Ó[⇔b\⇔^&ÁUã~|→ãæãbÁá^ãÁÛ⇔ææ^æãÁUæ\⇔^bÁ4

Ugr "60F gvgto kpg"j g'P ggf"ht"O knkpi "cpf
Ceeqo o qfcvkpi "Cflwuo gpw'qh'j g'RtqlhgT tcf g"34

R⇔⇔^&Á

P~áã} á] Áá^ãÁP~ããb⇔ææÁO~^b\ãá⇔^bÁ~^ÁÛæã\⇔^á→ÁOáã^ææ
⇔^ÁŞá~ã⇔ææÖãããæ

Ugr "70Xgtkh{ "j g'Gzkukpi "Rcxgo gpvEqpf kkp<
Eqtkpi "cpf "O cvgtkenVgukpi "

Ugr "80F gvgto kpg"j g'Hgcukdkrk\ "qh'c'Eqpetgvg
Qxgtr{ "cpf "j g'Crrtqr tkvg"Qxgtr{ " Qr vkqp".....

P gzvUgr u".....

Ô@ç'Á

Cj Yfj JYk 'cZ7 cbWYH'Cj Yf'Um8 Ygl[b'

Eqpetgvg"Qxgtr{ "Vj kengguu"F guki p"

V{r lecnVj kengguu"F guki p"lpr wu"cpf "Eqpukf gtcvkpu"38

Qxgtxkgy "qh'Ego o qp"Eqpetgvg"Qxgtr{ "F guki p
Rtqegf wgu".....

Mg{ "F guki p"Eqpukf gtcvkpu"

F guki p"Eqpukf gtcvkpu"ht" "CniEqpetgvg"Qxgtr{ u"39

SææãÁá~ãÁÛ⇔^ã~ã↑ÁU| *.~ã\Á

ÛbæÁ~ãÁRá'ã~ã⇔ææãbÁ

Ö⇔^ \ÁN' \⇔{ á\⇔^Á

F guki p"Eqpukf gtcvkpu"ht"Eqpetgvg"qp"Eqpetgvgó
Wpdqpf gf "Qxgtr{ u"

ŞãæË~{ æã→á] ÁPæ*á⇔æbÁ

Şá^æ→Á⇔↑æ^b⇔^bÁá^ãÁÖ⇔^ \ÁQá]~| \Á

Úãá^b{ æãbæÁÖ⇔^ \bÍÁ⇔~} æ→ÁÑããbÊÁRá'ã~ã⇔ææãbÊÁá^ã
Uá} ' | \bÁ

Q~^&⇔| ã⇔^á→ÁÖ⇔^ \bÍÁQ~^á\⇔^ \Áá^ãÁUá}~| \bÁ:

Ö⇔^ \ÁÖ⇔⇔^&Áá^ãÁUæ⇔^&Á

U*æ' ⇔á→ÁO~^b⇔ææãá\⇔^bÁá~ãÁO~^ \⇔^ |~| b→] ÁPæ⇔^ã~ã'
O~^' ãæ\æÁŞá{ æ↑æ^ \ÁŞ{ æã→á] bÁ

F guki p"Eqpukf gtcvkpu"ht"Eqpetgvg"qp"Cur j cnó
Wpdqpf gf "Qxgtr{ u"

ŞãæË~{ æã→á] ÁPæ*á⇔æbÁ

Şá^æ→Á⇔↑æ^b⇔^bÊÁÖ⇔^ \ÁQá]~| \Áá^ãÁæb&^ÊÁá^ãÁÖ~
Uæá⇔^&Á

U*æ' ⇔á→ÁO~^b⇔ææãá\⇔^bÁá~ãÁO~^ \⇔^ |~| b→] ÁPæ⇔^ã~ã'
O~^' ãæ\æÁŞá{ æ↑æ^ \ÁŞ{ æã→á] bÁ

F guki p"Eqpukf gtcvkpu"ht"Eqpetgvg"qp"Cur j cnó
Dqpf gf "Qxgtr{ u"

Öæ^æãá→Áæb&^ÁO~^b⇔ææãá\⇔^bÁ

U*æ' ⇔á→ÁO~^b⇔ææãá\⇔^bÁá~ãÁO~^ \⇔^ |~| b→] ÁPæ⇔^ã~ã'
O~^' ãæ\æÁŞá{ æ↑æ^ \ÁŞ{ æã→á] bÁ

F guki p"Eqpukf gtcvkpu"ht"Eqpetgvg"qp"Eqpetgvgó
Dqpf gf "Qxgtr{ u"

Öæ^æãá→Áæb&^ÁO~^b⇔ææãá\⇔^bÁ

U*æ' ⇔á→ÁO~^b⇔ææãá\⇔^bÁá~ãÁO~^ \⇔^ |~| b→] ÁPæ⇔^ã~ã'
O~^' ãæ\æÁŞá{ æ↑æ^ \ÁŞ{ æã→á] bÁ

Cf f kkpccniF guki p"Eqpukf gtcvkpu"q" Cf f tguu"Kó r ceu"
qh'Rtqlhg"cpf "T tcf g'Ej cpi gu"

Qxgtj gcf "Ergetcpeg"

Uj qwrf gt"Eqpukf gtcvkpu"

Dcttltgu"cpf "Tcku"

Hqtgunqr gu."Dcemunqr gu."cpf "Cetquu/Tqcf "F tckpci g
Utwewt gu".....

Y kf gplpi "cpf 'Ncpg'Cff kkpqu"	43
Kp/Rrcpg'Utwewtgu"	45
Ewd'cpf 'I wwgt 'F gvcnu"	45
Vtcpu kkpqu"	45

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7 cbWYh'Y' Cj Yf`Uhg'cb'5 gd\ UHGi fZWX

Duj Ya Ybly	47
Eqpetgvg'qp'Curj cnóWpdqpf gf "Qxgtr{ u"	48
Crr rlecwqp"cpf "Wugu"	49
Rgthqto cpeg"	49
Mg{ u'q "Uweeguu"	49
Şá { æ↑æ^ \ Áó { á→ á\↔↗^Á	49
Š { æã→á] ÁÆab↔&^Á	4:
o~^b\ã ´\↔↗^Á	4:
O clpvgpcpeg"cpf "Tgr cku"	4;
Eqpetgvg'qp'Curj cnóDqpf gf "Qxgtr{ u"	4;
Crr rlecwqp"cpf "Wugu"	52
Rgthqto cpeg"	52
Mg{ u'q "Uweeguu"	52
Şá { æ↑æ^ \ Áó { á→ á\↔↗^Á	52
Š { æã→á] ÁÆab↔&^Á	53
o~^b\ã ´\↔↗^Á	53
O clpvgpcpeg"cpf "Tgr cku"	55

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7 cbWYh'Y' Cj Yf`Uhg'cb'7 cbWYh'Y' DUj Ya Ybly 57

Eqpetgvg'qp'EqpetgvgóWpdqpf gf "Qxgtr{ u"	58
Crr rlecwqp"cpf "Wugu"	58
Rgthqto cpeg"	59
Mg{ u'q "Uweeguu"	59
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Š { æã→á] ÁÆab↔&^Á	5:
o~^b\ã ´\↔↗^Á	5;
O clpvgpcpeg"cpf "Tgr cku"	63
Eqpetgvg'qp'EqpetgvgóDqpf gf "Qxgtr{ u"	63

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Ego gpvklqwu'O cvgtknu"	66
Ci i tgi cygu"	66

Y cvgt"	66
Cf o k z wtgu"	66
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Utgpi yj "	67
Y qtnrckly{ "	67
Uj tlpnei g"	67
Eqrf 'Y gcvj gt 'Tgukncpeg"	67

Y cvgt/vq/Ego gpvklqwu'O cvgtknu'Tcvkq"	68
Qr gpkipi 'Etkgtk'hqt 'Eqpetgvg'Qxgtr{ u"	68
Qvj gt 'Qxgtr{ 'O cvgtknu"	69

O cetqhkdtu'hqt 'Eqpetgvg'Qxgtr{ u"	69
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Ewtlpi 'Eqo r qwpf "	73
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LqlpvHngtu'cpf "Ugcrcpw"	73
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D'Ub'8 Yj Ycda Ybhi

Eqputwvkwq'F tcy kpi u"	76
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Vkrg'Uj ggv"	77
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V{ r lecnUgevkwpu"	77
--------------------	----

Guko cvgf 'S wcpvklgu"	78
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Rrp'cpf 'Rtqlkg"	78
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Uwxg{ 'Eqptqr'Kphto cvkwq"	79
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O clpvgpcpeg'qh'Vtchle"	79
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V{ r lecnEqputwvkwq'F gvcnu"	82
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Ö~↔~^ \ ↔&Á	82
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Şã~ä↔æÁÛää^b↔↔~^bÁ	83
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Ur geknEqpukf gtcvkpu'hqt'Eqpvpwqwu' 'Tgphqtegf Eqpetgvg'Rcxgo gpv'Qxgtnc{ u"	87
Eqputwekqp'Ur gekhecvkpu"	87
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7 cbgfi Wjcb'cZ7 cbWYH'Cj Yf'Ung'	89
Rtg/qxgtnc{ "Tgr cku".....	8:
O knkpi "hqt'Gzknkpi 'Cur j cn/Uwthcegf 'Rcxgo gpw"8: ...	
Uwdi tcf gJUddcug'Tgr cku"	8;
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Ô →ËÆæ*\áÁæ*á↔→bÁ~ääÓ[↔b\↔^&ÁNb*áá→\Ášá{æ↑æ^Á8; šá{æ↑æ^Ææ↔&^æää~ä&Á.....	4
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Ugr ctcvkqp'Nc{ gt "hqt'Eqpetgvg"qp'Eqpetgvgó Wpdqpf gf 'Qxgtnc{ u"	92
Cur j cnv'Ugr ctcvkqp'Nc{ gt"	92
P qpy qxgp'I gqvzkg'Ugr ctcvkqp'Nc{ gt"	93
Qvj gt'Eqpukf gtcvkpu'hqt'Ugr ctcvkqp'Nc{ gtu"	94
Eqpetgvg'Qxgtnc{ "Rrcego gpv"	94
Eqputwekqp'Ucnkpi 'cpf 'O cej kpg'Eqptqn'	94
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Eqpetgvg'Qxgtnc{ "Lqkpu"	96
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Ugcnkpi 'Lqkpu".....	97
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F gvgto kplkpi 'Qr gplkpi 'Vlo g"	97
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Tgr cku'qh'Eqpetgvg'Qxgtnc{ u"	97
Tgr cku'qh'Wpdqpf gf 'Eqpetgvg'Qxgtnc{ u'9'lp0Vj leni' qt'I tgcvgt".....	98
Tgr cku'qh'Dqpf gf 'qt'Wpdqpf gf 'Eqpetgvg'Qxgtnc{ u Nguu'vj cp'8'lp0Vj leni'	98
Ur geknEqputwekqp'Eqpukf gtcvkpu'hqt'Eqpetgvg'qp EqpetgvgóDqpf gf 'Qxgtnc{ u"	99

Œj | ^} áæÁÆ

: i bXUa YbHJg'cZ7 cbWYH'Cj Yf'Um8 Ygll b'9;	
Qxgtxlgy "qh'Eqpetgvg'Qxgtnc{ 'F guki p"	2
Eqpetgvg'Qxgtnc{ "Vj lenpguu'F guki p"	2
V{r lecn'Vj lenpguu'F guki p'kpr wu'cpf Eqpukf gtcvkpu"	2
Ugngcvkqp'qh'c'Vj lenpguu'F guki p'Rtqegf wtg"	2
Ô↑*↔→á↔→á→Á{æáb bÁRæ'áá↔→b\↔~ËÓ↑*↔→á↔→á→ÁÆæ↔&^ šā~'æā äæbÁ.....	2
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Qxgtxlgy "qh'Ego o qp'Eqpetgvg'Qxgtnc{ 'F guki p Rtqegf wtgu".....	4
NNUÖÜŠÜáääÁšá{æ↑æ^ÁRÓÁÆæ↔&^Á.....	4
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Ů^↔{æáb↔\]Á~ääš→\bâ ä&âðbÁŃOŠNĚRÓÁ.....	5
Ů^↔{æáb↔\]Á~ääš→\bâ ä&âðbÁŮŠŠQÁÆæ↔&^Á{FĚĚÁ5	
Mg{ 'F guki p'Eqpukf gtcvkpu"	6
F guki p'Eqpukf gtcvkpu'hqt' 'CniEqpetgvg'Qxgtnc{ u': 7 ..	
SæääÁā~ääŮ^↔→á~ā↑ÁU *~ā\Á.....	7
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F guki p'Eqpukf gtcvkpu'hqt'Eqpetgvg'qp'Eqpetgvgó Wpdqpf gf 'Qxgtnc{ u"	7
šāæĚ~{æā→á]Áæ*á↔→bÁ.....	7
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Ō~↔→^ÁŌ↔→↔→^&Áá^ääUæā↔→^&Á.....	:
U*æ'↔→á→ÁO~^b↔→äæää\↔→^bÁā~ääŌ~^↔→^ ~ b→]Áæ↔→ā~ā'æ O~^'äæ\æÁšá{æ↑æ^Áš{æā→á]bÁ.....	:
F guki p'Eqpukf gtcvkpu'hqt'Eqpetgvg'qp'Cur j cnó Wpdqpf gf 'Qxgtnc{ u"	:
šāæĚ~{æā→á]Áæ*á↔→bÁ.....	:
Uæ*áää\↔→^ÁQá]æääUæ→æ'\↔→^ÁO~^b↔→äæää\↔→^bÁ;	
šá'æ→ÁÆ↔→↑æ^b↔→^bĚÁŌ~↔→^ÁQá]~ ~\Áá~ääÆæ↔→&^ĚÁá^ääŌ~ Uæā↔→^&Á.....	:
U*æ'↔→á→ÁO~^b↔→äæää\↔→^bÁā~ääŌ~^↔→^ ~ b→]Áæ↔→ā~ā'æ O~^'äæ\æÁšá{æ↑æ^Áš{æā→á]bÁ.....	2

F guki p'Eqpukf gtcvkpu'hqt'Eqpetgvg'qp'Cur j cnó"	
Dqpf gf 'Qxgtr{ u"	2
Ô~ ^ää\↔~^ÁU *~ã\ÁOääää´\æã↔~ã\↔~^Á.....	2
ŞääË~{æã→á]ÁÁæ*á↔ãbÁ.....	3
Ş{æã→á]ÁÁá\æã→á→ÁUæ↔æ´\↔~^Á.....	3
N´â↔æ{æ↑æ^Áá^ääÁÁ↔~\æ^á^´æÁ~ääÁÁÑ~^ää;3	
Rá[↔↑ ↑ÁŞ{æã→á]ÁUá↔~^æbbÁ.....	3
Şá^æ→Á↔↔↑æ^b↔~^bÁá^ääÔ↔~^ÁQá]~ ~\Á.....	3
Æ~}æ→ÁÑáábÊÁÚ↔æÁÑáábÊÁá^ääÚbæÁ~ääÔ↔âæääËæ↔~â~ã´æÑ~^ääääÔÞOŞÁŞ{æã→á]bÁ~^ÁO~^´ää\æÁŞá{æ↑æ^bÁ327	
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U*æ´↔á→ÁO~^b↔âæää\↔~^bÁâ~ääO~^↔~ ~ b→]ÁÞæ↔~â~ã´æä	
O~^´ääæ\æÁŞá{æ↑æ^ÁŞ{æã→á]bÁ.....	5
F guki p'Eqpukf gtcvkpu'hqt'Eqpetgvg'qp'Eqpetgvgó	
Dqpf gf 'Qxgtr{ u"	5
ŞääË~{æã→á]ÁÞæ*á↔ãbÁ.....	6
Ş{æã→á]ÁÁá\æã→á→bÁ.....	6
N´â↔æ{æ↑æ^Áá^ääÁÁ↔~\æ^á^´æÁ~ääÁÁÑ~^ää;6	
Ô↔~^↔~^æŞää´\↔~^æbÁ.....	6
Æ~}æ→bÁá^ääÚ↔æÁÑáábÊÁ.....	7
Ô↔~^ÁÔ↔↔~^æÁ.....	7
U*æ´↔á→ÁO~^b↔âæää\↔~^bÁâ~ääO~^↔~ ~ b→]ÁÞæ↔~â~ã´æä	
O~^´ääæ\æÁŞá{æ↑æ^ÁŞ{æã→á]bÁ.....	7
CffkkpcnF guki p'Eqpukf gtcvkpu'q'Cffftguu'Kó r ceu"	
qh'Rtqlkg'cpf 'I tcf g'Ej cpi gu"	7
Qxgtj gcf 'Ergctpeg"	8
Uj qwf gt'Eqpukf gtcvkpu"	8
Dettlgtu'cpf 'Tcku"	8
Hqgunqr gu.'Dcemunqr gu.'cpf 'Cetquu/Tqcf 'F tclpci g	
Utwewtgu"	8
Uchgv{ 'Gf i g"	8
Y kf gplpi "cpf 'Ncpg'Cffkkpu"	9
Kp/Rrcg'Utwewtgu"	:
Ewd'cpf 'I wwgt 'F gvcku"	:
Vtcpuukpu"	:

Œ] ^} äæÁ	
7cbhjb i ci g'mF YjbZfWX'7cbWYH'DUJ Ya Ybh	
Cj Yf'Ung'.....	:
Cr r rkecvkpu'cpf 'Rgthto cpeg"	322
Eqpvkpwqun{ 'T gkphqtegf 'Eqpetgvg'Rcxgo gpv	
Qxgtr{ u'qh'Cur j cn/Uwthcegf 'Rcxgo gpv"	323
Eqpvkpwqun{ 'T gkphqtegf 'Eqpetgvg'Rcxgo gpv	
Qxgtr{ u'qp'Eqpetgvg'Rcxgo gpv"	324
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Eqpetgvg'O kzwtgu"	328
T gkphqtekp i 'Uggn'	328
Ugr ctcvkp 'Nc{ gt' "hqt 'Wpdqpf gf 'Qxgtr{ u+"	328
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Rtg/qxgtr{ 'T gr cktu"	329
Vgto kpcn'qt 'Gpf 'Vtgcvo gpv/Lqkpu"	329
Nkg/E{ erg'Equv/Cpcn{uku'qh'Eqpvkpwqun{ 'T gkphqtegf	
Eqpetgvg'Rcxgo gpv/Qxgtr{ u"	32:
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7cbWYH'cb'7cbWYH'Ë6cbXYX'Cj Yf'Ung'335.....	
Mg{ 'Hgcwtgu'cpf 'Cr r rkecvkpu"	336
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Uwthceg'Engcpkpi "	33:
Eqpetgvg'Rrcego gpv"	33:
Ewtkpi "	33;
LqkpVUcy kpi "	33;
LqkpVUgcrkpi "	33;
Qr gpkpi "Ut gpi yj "	33;
Ecug'Uwf lgu'qhEqpetgvg"qp'Eqpetgvg6Dqpf gf	
Qxgtnc{ u"	342
Ecug'Uwf { "3<Vj kp"5"lp0'Dqpf gf "Qxgtnc{ "qp"Kjy c"5	
Gcu'qh'J co r vqp."Kjy c"	342
Ecug'Uwf { "4<Vj kp"5"lp0'Dqpf gf "Qxgtnc{ "qp"37y	
Utggv'lp'F grlEk{ ."Qmcj qo c"	343

Qj] ^} aãÄÖ

GHU[]b['GYei YbWw'8JU[fUa g'Zf'J Uf]ci gÁ	
HfUZQW7 cbHfc`GWbUf]cg`	345
Vy q/Ncpq'Tqcf y c{ 'y kj 'Rcxgf 'Uj qwf gtu"	
*EqpxgpvkpcrRcxgt+"	346
Vy q/Ncpq'Tqcf y c{ 'y kj 'I tcpwrt'Uj qwf gtu"	
*EqpxgpvkpcrRcxgt+"	348
Vy q/Ncpq'Tqcf y c{ 'y kj 'O loko wo 'I tcpwrt	
Uj qwf gtu" gtu/Erctcpeg'Rcxgt+"	34:
Vy q/Ncpq'Tqcf y c{ 'Y kf gpgf "q"Vj tgg'Ncpgu'y kj	
Rcxgf 'Uj qwf gtu"EqpxgpvkpcrRcxgt+"	352
Hqwt/Ncpq'Tqcf y c{ 'y kj 'Rcxgf 'Uj qwf gtu"	
*EqpxgpvkpcrRcxgt+"	354

FYZfYbWw:.....357

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Hki wtg'300Wpdqpf gf "eqpetgvg"qxgtnc{ 'y kj 'i gqvzvkrg"
 lpxgtnc{ gt"qp'O kuqwtK'qwg'F "qqr . 'lp'4229'dghqtg"
 qxgtnc{ "eqputwexqp=dqvwqo . 'lp'4242'chgt"34" { gctu'qh"
 ugtxleg=".....4

Hki wtg'3040Eqpetgvg"qxgtnc{ u'lp'68'ucvqu"xqgtnc{ u"
 eqputwexgf "3; 2363; ; ; lqxtnc{ u'eqputwexgf "42226"
 4239+".....5

Hki wtg'300V{ r lecnldqpf gf "cpf "wpdqpf gf "eqpetgvg"
 qxgtnc{ "lqnwkpucv'xctkqu'unci gu'qh'r cxgo gpv'ugtyleg"
 rhtg".....6

Hki wtg'3060Hqwt'o clp'v{ r gu'qh'eqpetgvg"qxgtnc{ u'7

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Hki wtg'400' Gzco r ngu'qh'f gvgto lkpki "gzknkpi 'r cxgo gpv"
 v{ r g"cpf "eqpf kkp"

Hki wtg'4040' I gpgtcn' wlf cpeg'hqt'tcvkpi "yj g'eqpf kkp"
 qh'eqpetgvg'r cxgo gpv"

Hki wtg'4050' I gpgtcn' wlf cpeg'hqt'tcvkpi "yj g'eqpf kkp"
 qh'cur j cn/cpf "eqo r quks'r cxgo gpv"

Hki wtg'4060' Drgpf kpi "uchgv' "unr gu'q"gzknkpi "eqpf kkp"35

Hki wtg'4070' Tgi tcf kpi "uchgv' "unr gu'cpf "gzvfp kpi "
 f tclpci g'utvewtu"

Hki wtg'4080' F gvgto lkpki "yj g'cr r tqr tlcvg'f guki p'utvci { "
 hqt'c'i kxgp'r tqlgev"

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Hki wtg'500Dgj cxkqt "qh'cpf "hgzwtcn'utgu'f kntkdwkq"
 yj tqwi j "yj g'nc{ gtu'qh'dqpf gf "cpf "wpdqpf gf "qxgtnc{ "
 u{ urgo u".....39

Hki wtg'5040Eqpetgvg"qxgtnc{ "qp"eqo r quks'r cxgo gpv"
 r j qvci tcr j gf "lp'4234'chgt"35" { gctu'lp'ugtyleg."y kj "yj g"
 qxgtnc{ "gzj kdkpi "lpxgtlqt'eqtpgt'f gvgtkqtcvqp'f wg'q"
 nupi kwf lpcrllqpw'lp'yj g'y j ggn'r cvj u"

Hki wtg'5050Eqpetgvg"qxgtnc{ 'y kf gpkpi "qp'Krkplu"
 Tqwg'75'y kj "pq'nupi kwf lpcrllqpw'qt'tgkphqtelkpi "
 qxgt"gzknkpi 'r cxgo gpv'gf i g"qqr ="eqpetgvg"qxgtnc{ "
 y kf gpkpi "qp'O lppguq'vJ "434'y kj "nupi kwf lpcr"
 lqpw'cpf "tgkphqtelkpi "qxgt"gzknkpi 'r cxgo gpv'gf i g'lp"
 uqo g'hqecvqpu"egvgt+"cpf "qpn{ 'tgkphqtelkpi "lp'qy gt"
 nqecvqpu"dqvwqo +".....44

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Hli wtg'600Dqpf gf "cpf'wddqpf gf "qxtre{ u'qh'gzknkpi "	cur j cn'cpf "eqo r qukg'r cxgo gpw"	48
Hli wtg'6040EQC6W'qxtre{ u'qp'gzknkpi "cur j cn'ghw"	cpf "eqo r qukg"*tki j w'r cxgo gpw"	48
Hli wtg'600Wddqpf gf "qp'cur j cn"		49
Hli wtg'600Wddqpf gf "qp'eqo r qukg"		49
Hli wtg'6070EQC6D'qxtre{ u'qp'gzknkpi "cur j cn'ghw"	cpf "eqo r qukg"*tki j w'r cxgo gpw"	4;
Hli wtg'600Dqpf gf "qp'cur j cn"		52
Hli wtg'600Dqpf gf "qp'eqo r qukg"		52
Hli wtg'60 0Rreco gpv'qh'tgkhtekpi "uggn'qxtg'c'etcmi'	kp'cp'gzknkpi "cur j cn'uwthceg' r cxgo gpv"	54

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Hli wtg'700Dqpf gf "cpf'wddqpf gf "qxtre{ u'qh'gzknkpi "	eqpetgvg'r cxgo gpw"	58
Hli wtg'7040EQE6W'qxtre{ "		58
Hli wtg'700Tqwg'F'gzknkpi "eqpetgvg'lp'f gvgtktcvgf "	eqpf kkp'lp'4229*qv =7'lp0wddqpf gf "qxtre{ "	
eqputwvgf "qp'Tqwg'F'lp'422: "dqwqo . 'r j qv'cnegp"	lp'4242+".....	59
Hli wtg'700EQE6D'qxtre{ "		63

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Hli wtg'800Tghgevxg'etcmkpi 'lp'cp'qxtgtr{ 'y kj qww' hldgtu**qr +cpf 'lp'cp'qxtgtr{ 'eqpvclpki 'o cetqhldgtu' *dqwqo +"	6:
Hli wtg'8040V{r gu'qh'o cetqhldgtu<*/e-!etko r gf." go dquugf . 'qt'dk'vr gtgf 'u{pvj gve=*f +vy kvgf 'u{pvj gve= *g/h'wtckj j vhdtkrvgf 'u{pvj gve=cpf *i /j +j qqngf "gpf " cpf 'etko r gf 'uvgrf	6:
Hli wtg'8050U{pvj gve"o cetqhldgtu"	6:
Hli wtg'8060' Uwthceg'vgzwtg'qh'eqpetgvg'qxtgtr{ 'y kj " u{pvj gve"o cetqhldgtu"	6:
Hli wtg'8070' Rquv'etcmkpi 'dgj cxlqt'qh'c'pqvej gf 'HTE" dgco 'ur geko gp'eqpvclpki 'u{pvj gve"o cetqhldgtu'6;	
Hli wtg'8080' Fctm'eqmgtgf 'pqpy qxgp'i gqvgz vkg" ugr ctcvqp'rc{gt"	72
Hli wtg'8090' Nli j v'eqmgtgf 'pqpy qxgp'i gqvgz vkg" ugr ctcvqp'rc{gt"	72

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Hli wtg'900Vkn'uj ggv"		77
Hli wtg'9040Wddqpf gf "eqpetgvg'qxtre{ "qp'eqpetgvg"	y kj "y kf gplpi "r cxgf "uj qwf gtu+"	78
Hli wtg'900Gurko cvgf "s wcpvkgu'uj ggv"		79

Hli wtg'9060Uwtxg{ "eqpcklphqto cvkp'uj ggv"		7:
Hli wtg'9070' Uj ggv'qwnkplpi "tchle"eqpcklcpf "uci kpi "	pqvgu".....	7;
Hli wtg'9080' Rrcp'xkgy "lqkv'rc{ qw'f gvckl'ht"cp"	wddqpf gf "qxtre{ "y kj "y kf gplpi "	82
Hli wtg'9090' EQE6D'lqkv'f gvckl'uj qy kpi "y g'y kf yj u'qh	yj g'qxtre{ "lqkv'ucy eww'cpf "wpg gtn{ kpi "etcmi'83	
Hli wtg'90 0' Y kf gplpi "f gvckl'ht"EQE6D'cpf "EQC6D"	qxtre{ u".....	84
Hli wtg'90 0' Y kf gplpi "f gvckl'ht"EQE6W'cpf "EQC6W"	qxtre{ u".....	84
Hli wtg'9020' O kn'cpf "hkn'r tqhkg'tcpukkkpu'ht"dqpf gf "	eqpetgvg'qxtre{ u'qp'gpf "t'cpukkkp"	85
Hli wtg'9030Vt'cpukkkp'ht"EQC6D'qxtre{ "		85
Hli wtg'9040Vgo r qtct{ "t'cpukkkpu"		85
Hli wtg'9050Vt'cpukkkp'ht"EQC6W'qxtre{ "		85
Hli wtg'9060Vj tgg'qr vqp'u'ht"ewd'cpf "i wwtg'f gvckl'85		
Hli wtg'9070Wkkl{ "ceegu'f gvckl"		86
Hli wtg'9080Uchgv{ "gf i g'f gvckl"		86
Hli wtg'9090Uw'gtgngxcvkv'f gvckl"		86

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Hli wtg': 000 knkpi "q'tgo qxg'ugxgtg'twklpi "	8:
Hli wtg': 040' Eqtg'uj qy kpi "r cxgo gpv'y cv'ecp'dg'o knkf " q'tgo qxg'utkr r gf lpuqwpf "o cvgtkn'y kj "6'lp0qh J O C'tgo clpki "lp'i qqf "eqpf kkp"	8:
Hli wtg': 050' Cur j cn'uwthceg'o knkf "q'gpj cpeg'dqpf kpi " y kj "c'eqpetgvg'qxgtrc{ "	8;
Hli wtg': 060' Ctgc'y j gtg'yj g'o knkpi "cpf "eqpetgvg'qxgtrc{ " f gr yj u'ctg'q'dg'cf lwvgf "q'cfftgu'luqrvgf "h'ecv'kpu" y j gtg'yj g'tgo clpki "r cxgo gpv'f gr yj "ku'p'cf gs wcv'8;	
Hli wtg': 070' Fvgtkqtcvgf "lqkv'lp'gzknkpi "eqpetgvg" r cxgo gpv'engcpgf "cpf "knkf "y kj "h'qy cdrg'o qt'ct'92	
Hli wtg': 080' Qxgtrr r kpi "ugev'kpu'qh'p'qpy qxgp" i gqvgz vkg'o cvgtkn'	93
Hli wtg': 090' Wug'qh'cf j gukxg'q'ugewtg'i gqvgz vkg'hcdtle" q'cp'gzknkpi "r cxgo gpv'	93
Hli wtg': 0 0' Utlpi ngu'r cxlpi . "y kj "rcv'ctn'engctcpeg" r tko ctkn "c'hwpev'kpu'qh'r cxgt't'cmi'y kf yj "	94
Hli wtg': 0 0' Fqy gr'cdungv'c'peg qt'pckn'r n'ceg'qp'yj g" f qy putgco "uk'g'qh'yj g'dcungv't'g'v'xg'q'yj g'f'k'ge'v'kpu" qh'r cxlpi "	95
Hli wtg': 0200 cpwcn'xgt'h'ecv'kpu'qh'f qy gr'r n'ceg'gpv'95 ...	
Hli wtg': 030Eqo r ctkuqp'qh'ucy eww'kpi "pggf gf "ht" qxgtrc{ u'qh'f h'gtgpv'yj k'eng'gu'v'cpf "urcd'uk'gu"	96
Hli wtg': 040Tgo qxcn'qh'qxgtrc{ "r cpgn"	98

Hki wtg": 050' Hkpj kpi "cpf "ewkpi "qh'c"eqpetgv"qxtnc{" tgr ckt"	98
Hki wtg": 060' V{r lecn'eqpetgv"r cxgo gpv'o kkpki " qr gtcvkp"kp"r tqi tguu"	98
Hki wtg": 070' Tguwu"qh'c"V{r lecn'eqpetgv"r cxgo gpv" o kkpki "qr gtcvkp"	99

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Hki wŋg'C080Dgŋ cŋkqt'qh'cƒf'hnzwtcŋlwtguu'fkwtkdwtkqp"
y j tqw j 'y j g'ŋc{gtu'qh'dqpf gf'cƒf'wƒdqpf gf'qŋgtŋc{"
u{uvgu u".....: 3

Hki wŋg'C040Vlg'dctu'cpej qt gf'vq'cƒ'gzknkpi 'r cŋgo gpv'
uwtŋcŋg'cetquu'c'ŋupi kwf kƒcŋf'g' g'lqkpv'y j gtg'c'eŋpetgvg"
qŋgtŋc{"y knldg'wugf'ŋqt'c'y kƒ gplki 'uŋewkp": 8

Hki wŋg'C050Eŋpetgvg'qŋgtŋc{"qp'eqo r qukg'r cŋgo gpv'
r j qvqi tcr j gf'lp'4234'cŋgt'35"{'gtu'lp'ugtŋleg'y kj 'y j g'
qŋgtŋc{"gzj kdkkpi 'lpvgtkt'eqtpgt'f gvgtkqtcvqp'f wŋ'vq"
ŋupi kwf kƒcŋf'lqkpw'lp'y j g'y j gŋŋt cŋj u": 9

Hki wŋg'C060Kŋ r cŋvqh'r cƒpŋŋk'g'qp'y j gto cŋcƒf"
uj tƒpŋŋi g'tgwtcƒpv'wtguu": 3

Hki wŋg'C070EQC6D'qŋgtŋc{"y kj 'wŋf'ŋpg'lqkpw'cƒf"
wƒwŋf'o kƒ/ŋpg'ŋupi kwf kƒcŋf'lqkpv'cŋgt'gk j v{'gtu'qh'
ugtŋleg".....: 4

Hki wŋg'C080Uŋ go cŋk'qh'c'ucy ew'ŋqt'c'EQE6D"
qŋgtŋc{".....: 6

Hki wŋg'C090F qwdŋg/etcŋŋt guwŋkpi 'ŋt qo 'ŋcŋwtg'vq"
o cŋj 'y j g'ucy ew'y kj 'y j g'wƒf gŋŋ lpi 'lqkpv'ŋecvqp'lp"
c'EQE6D'qŋgtŋc{".....: 6

Hki wŋg'C00EQE6D'qŋgtŋc{"qp'WU'33; 'lp'Rgppu{ŋcƒpŋc"
y kj '346'ŋwŋupi 'r cƒpŋŋ'eqpuwtwŋf'lp'4236'qp'ITER"
y kj '8307'ŋwŋupi 'r cƒpŋŋ'r tqŋgeŋ'qŋgtŋkŋg'ŋqr'cƒf"
gzr qug'ŋupi kwf kƒcŋf'lqkpv'cŋlpgto gf kŋg'ŋcƒpuxgtug"
lqkpv'ŋdqwo + ".....: 7

Hki wŋg'C0' ; 0Eŋpetgvg'qŋgtŋc{"y kƒ gplki 'qp'Kŋlqklu"
Tqwg'75'y kj 'pq'ŋupi kwf kƒcŋf'lqkpv'ŋt'ŋgphqteki "
qŋgt'gzknkpi 'r cŋgo gpv'gf i g'ŋqr'ŋŋŋpetgvg'qŋgtŋc{"
y kƒ gplki 'qp'O lppguŋw'VJ '434'y kj 'ŋupi kwf kƒcŋf'
lqkpw'cƒf'ŋgphqteki 'qŋgt'gzknkpi 'r cŋgo gpv'gf i g'lp"
uqo g'ŋecvqp'u'ŋgpgvt'cƒf'qpn'ŋgphqteki 'lp'qŋj gt"
ŋecvqp'u'ŋdqwo + ".....: 9

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Hki wtg'D0' 30ETER'qxgtrc{ 'u'dglpi 'r'ncgf "qp'K92'lp"
4224*~qr +~cpf "qp'K79 lK86'lp'4235*~dqwo +~322
Hki wtg'D0' 40Vtcpuklqp'urcd'f'gcknu'hqt'cp'gpf'tgcvco gpv'
qh'c'ETER'qxgtrc{ 'cv'c'dtlf i g'329
Hki wtg'D0' 50Vtcpuklqp'urcd'f'gcknu'hqt'cp'gpf'tgcvco gpv'
qh'c'ETER'qxgtrc{ 'cv'c'LRER"32:
Hki wtg'D0' 60Vtcpuklqp'urcd'f'gcknu'hqt'j'g'gpf'tgcvco gpv'
cpf'tgto kpcnlqkpw'qh'c'ETER'qxgtrc{ "32;

Hki wtg'DO' 70P gv'r tguḡpv'xcnwg'qh'ETER'cpf 'LREr'
qxgtrc{'f guki pu'hqt'xctkquw'f lueqwp'vcgw"333

Hki wtg'DO' 80P gv'r tguḡpv'xcnwg'qh'ETER'cpf 'LREr'
qxgtrc{'f guki pu'hqt'c'f lueqwp'vcgw'qh'SØ' "cpf'xctkquw"
uḡgnr' tlegu".....333

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Hki wtg'E0' 30Vj kp'qdpf gf "qxgtrc{"qh'utwewtcm{"uqwpf"
eqpetgvg'r cxgo gpv'336

Hki wtg'E0' 40F gvgtkqtvgf "npi kwf kpcrletcemlp'c
EQE6D'qxgtrc{"336

Hki wtg'E0' 50Gzknkpi "eqpetgvg'r cxgo gpv'y kj "o kqqt"
uwthceg'f kntguugu'uj qy p'y kj "c'r tqr qugf 'EQE6D'
qxgtrc{"337

Hki wtg'E0' 60Rtqegu'ht'f gvgto klpki "cp'crr tqr tkcg"
qxgtrc{"uqnwkp"338

Hki wtg'E00Etqu'ugevkqp'qh'c'wcpuxgtug'ucy "lqkpv'lp'c"
EQE6D'qxgtrc{"339

Hki wtg'E00Uj qwdrcnkpi "qh'c"eqpetgvg'uwthceg"33:

Hki wtg'E00Wug'qh'eqo r tguugf "ckt'q'engcp'gzknkpi "
eqpetgvg'lp'htqpv'qh'yj g'r cxgt"33:

Hki wtg'E0 0Rneco gpv'qh'c'yj kp'EQE6D'qxgtrc{"33:33:

Hki wtg'E0 0' Gzknkpi "eqpetgvg' r cxgo gpv' lp' 3; ; 6' r tkqt "q"
qxgtrc{" r neco gpv' y kj " c" uj qwdrcugt" lp' qr gtcvkqp" cpf "
uqo g'ur qv'ur cnkpi "gxkf gpv'cv'yj g'egpvgtrkpg'lqkpv'34233:

Hki wtg'E020T gkphqtego gpv'qxgt'wcpuxgtug'etcemu"
lp'yj g'gzknkpi "eqpetgvg'r cxgo gpv'r tkqt'q'qxgtrc{" "
r neco gpv'3; ; 6"342

Hki wtg'E030Gcu'gpf "qh'yj g'EQE6D'qxgtrc{"qp'kqy c"
5'lp'Cwi wuv'4243. 'uj qy kpi 'r cxgo gpv'lp'htk'q'iqf "
eqpf kkpq"342

Hki wtg'E040Y guv'gpf "qh'yj g'EQE6D'qxgtrc{"qp'kqy c'5"
lp'Cwi wuv'4243"342

Hki wtg'E050Gzknkpi "5'lp0yj kemicur j cn'qxgtrc{"qp"
37yj "Utgvgv'r tkqt'q'o knkpi "343

Hki wtg'E060Gzknkpi "eqpetgvg'qp'37yj "Utgvgv'chgt"
o knkpi "yj g'5'lp0yj kemicur j cn'qxgtrc{"343

Hki wtg'E070Wuj cr gf "P q07'wgf "dctu'hcungpf "qxgt"
npi kwf kpcrletcemlp' "yj g'gzknkpi "eqpetgvg"343

Hki wtg'E080E qpf kkpq'qh'37yj "Utgvgv'lp'Ugr vgo dgt"
4242"343

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Vcdng"4080Gzco r ng"uwo o ct{ "qh"r cxgo gpv"rc { gt"cpf " vj lenpgu"fcv"lqt"ç"eqo r qukg"r cxgo gpv": 4;

Vcdng"4040Uwi i gungf "eqtkpi "cpf "o cvgtkcn\gukpi "lqt" gxcnxcvpi "gzkukpi "r cxgo gpv"eqpf kklqp"35

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Vcdng"6080Rquukdng"r tg/qxgtrc{ "tgr cktu"qp"gzkukpi " cur j cn/uwthçegf "r cxgo gpv"lp"r tgr ctevkqp"lqt"çp" wpdqpf gf "qxgtrc{ "4;

Vcdng"6040Rquukdng"r tg/qxgtrc{ "tgr cktu"qp"gzkukpi " cur j cn/uwthçegf "r cxgo gpv"lp"r tgr ctevkqp"lqt"ç" dqpfgf "qxgtrc{ "54

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Vcdng"7080Rquukdng"r tg/qxgtrc{ "tgr cktu"qp"gzkukpi " eqpetgvg"r cxgo gpv"lp"r tgr ctevkqp"lqt"çp"wpdqpf gf " qxgtrc{ "62

Qj] ^} åãÁ

Vcdng"C080Uwo o ct{ "qh"ng{ "f guki p"r ctco gvgtu": 6

Qj] ^} åãÁ

Vcdng"D080I mdcn'gZR gtlgpeg"y kj "ETER"qxgtrc{ u"322.....

Vcdng"D040WU"gzr gtlgpeg"y kj "ETER"qxgtrc{ u"323.....

Vcdng"D050Rgthqto cpeg"fcv"lqt"ETER"qxgtrc{ u"qp" cur j cn/uwthçegf "r cxgo gpv"lp"Qtgi qp"324

Vcdng"D060Gzco r ngu"qh"wpdqpf gf "ETER"qxgtrc{ u"qp" eqpetgvg"r cxgo gpv"lp"y g"WU"325

Vcdng"D070" Rgthqto cpeg"fcv"lqt"wpdqpf gf "ETER" qxgtrc{ u"qp"eqpetgvg"r cxgo gpv"lp"Kklpqku"327

Vcdng"D080" ETER"cpf "LIER"qxgtrc{ "f guki pu"fcv"gnqr gf " lp"CCUJ VQY ctg"Rcxgo gpv"O GF guki p"32;

Vcdng"D090ETER"qxgtrc{ "r tgugetxcvqp"uej gf wng"332.....

Vcdng"D0 0LIER"qxgtrc{ "r tgugetxcvqp"uej gf wng"332.....

Ô@ç c^!Æ bhf cXi Wjcb

Di fdcgY'UbX'GWtdY'	&
<ck'hc'l gY'H jg'; i jXY'	&
6 YbYZjhg'UbX'<jghcfjWU'DYfZfa UbW'cZ7 cbWYh'Cj Yf'Uhg'	&
5 ggYhA UbU[Ya Ybhih fci [\ 'h Y'l gY'cZ7 cbWYh'Cj Yf'Uhg'	'
7 cbWYh'Cj Yf'UmCdjhcbg'	(
7 cbgffi Wjcb'UbX'Ei U]hm5 ggi fUbW'cZ7 cbWYh'Cj Yf'Uhg')

Di fdcgY'UbX'GWēdY

Vj g'I wlf g'q'Eqpet gvg'Qxgtrc/u'r tguwpw'dcule'r tlpkr ngu" pggf gf "d{'r cxgo gpv'gpi kpggtu'hqt'vj g'f guki p'cpf " eqputwekqp'qh'eqpet gvg'qxgtrc{u'qp'gzkukpi "cur j cnm" eqo r quks. "cpf "eqpet gvg'r cxgo gpw0Vj g'lpvvpv'ku" vq'lpetgcug'vj g'vgej plecnr tqhlekpe{ "qh'gzzr gtlkpegf " gpi kpggtu'y j krg'r tqxkf kpi "rguu'gzzr gtlkpegf "wugtu'y kj " vj g'dcule'npqy ngf i g'q'uweeguuhwm{ "cfff tguu'vj g'pggf u'qh" xctlkquw{r gu'qh'eqpet gvg'qxgtrc{ "r tqlgvu0Cff kklpccm{. " vj ku'i wlf g'ku'lpvvpf gf "vq'j gr "wugtu'dwgt'tgeqi pk g'vj g" xgtucvkr{ "qh'eqpet gvg'qxgtrc{u'y j g'vj gt "hqt'cr r nlecvkqp" qp'hqy /xqnwo g'tqcf u'ekw{ "utggvu. r tko ct{ "tqcf y c{u'qt" kpvgtuncv'j ki j y c{u0

Vj g'o cvgtkcnlp'vj ku'i wlf g'cngu'wugtu'y tqwi j "ko r qtcvpv" eqputf gtcvqpu'lp'f guki plpi "cpf "eqputwekpi "eqpet gvg" qxgtrc{u'utcvkpi "y kj "j ki j /rgxgrlueqr kpi "s wgnkqpu. " uvej "cu'vj g'v{r g'cpf "eqpf kklqp'qh'vj g'gzkukpi "r cxgo gpv. " vj tqwi j "f gvcnkf "gpi kpggtkpi "eqputf gtcvqpu. uvej "cu" wtgcvo gpv'qh'vj g'lpkvkpi "u'ungo 0

Vj ku'ku'vj g'hqwtvj "gf kklqp'qh'vj g'I wlf g'q'Eqpet gvg" Qxgtrc/u'y kj "r tgxkquw'gf kklqpu'r wdrkuj gf "lp'4229." 422: . "cpf "42360Vj ku'xgtukp'j cu'dggp'wr f cvgf "y kj " ewtgpv'kphqto cvkqp'qp'eqpvkpwawu{ "tgkphqtegf "eqpet gvg" r cxgo gpv*ETER+qxgtrc{u'i gqvgz vkr'ugr ctcvqpu'rc{gtu. " hldgt'tgkphqtego gpv'f guki p'r tqegf wtgu. "cpf "rguuqpu" ngctpgf "h'qo "vj g'gzzr gtlkpegu'qh'pwo gtqwu'uncv'j ki j y c{ " ci gpe{ "U C+gpi kpggtu0

<ck'hc'l gY'H jg'; i jXY

Vj g'I wlf g'q'Eqpet gvg'Qxgtrc/u'lpqqr qtcvgu'pwo gtqwu" rlpmu'q'tguwteg'f qewo gpw'vj cv'r tqxkf g'cf f kklpccn' kphqto cvkqp'cdqwo cp{ "qh'vj g'qr leu'r tguwpvgf "lp'vj ku" i wlf g0Wugtu'ctg'gpeqwtci gf "q'eqpuwn'vj gug'tguwtegu" hqt'f gvcnkf "kphqto cvkqp'qp'uvej "qr leu'cu'eqpet gvg" qxgtrc{ "r rppkpi . "eqputwekqp. "cpf "tgr ckt0

Kp'cff kklqp'q'vj ku'i wlf g. "vj g'P cvkqpcnEqpet gvg'Rcxgo gpv" Vgej pqrqi { "Egpvg't*ER'Vgej "Egpvg't+j cu'f gxgnr gf " c'ugv'qh'tguwteg'o cvgtkcn0 kpenmf kpi "y gdlpctu. "vgej " dtkghu. "cpf "o cpwcn'cpf "i wlf gu0 vq'vclp'cpf "gf wecvg" wugtu'qp'vj g'cr r nlecvkqp'cpf "dgpghku'qh'eqpet gvg'qxgtrc{ " vgej pqrqi { 0T guqwtugu'vj cv'gur gekm{ "eqo r ngo gpv'vj g" kphqto cvkqp'lp'vj ku'i wlf g'kpenmf g'vj g'hqnyj kpi <

E' [I wlf g'hqt'vj g'F gxgnr o gpv'qh'Eqpet gvg'Qxgtrc/](#) " [Eqputwekqp'F qewo gpu](#)"*I tqun'cpf "J cttkpi vqp'423: +

E' [V{r kcnQxgtrc/ "Eqputwekqp'Rrcpu](#)"*423: +

E' [I wlf g'Ur gekhccvkapu'hqt'Eqpet gvg'Qxgtrc/u](#)"*Hemlcpf " J cttkpi vqp'4238+

Vj gug'cpf "q'vj gt "eqpet gvg'qxgtrc{ "tguwtegu'f gxgnr gf "d{ " vj g'ER'Vgej "Egpvg't'cpf "ku'r ctvpgtu'ctg'cxckrdng'hqt'htgg" f qy pmcf "cv' [vr u4ler vgej egpvg'tQiti eqpet gvg'qxgtrc/ u0](#)

6 YbYZjhg'UbX' < jghcf jWUÁ DYfZefa UbW'cZ7 cbWYH'Cj Yf'UngÁ

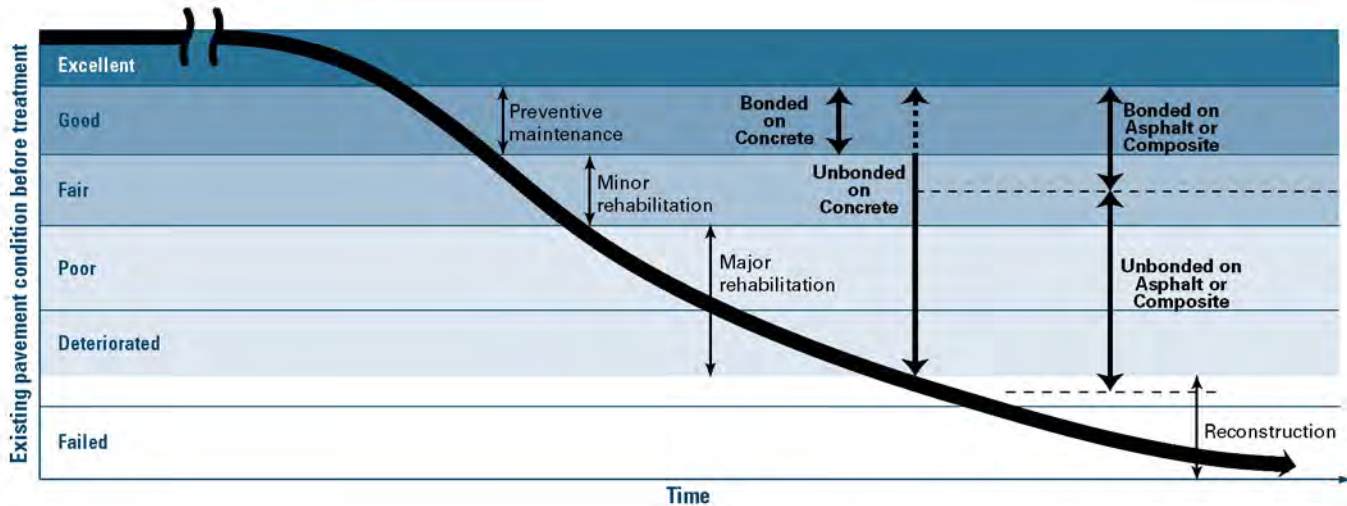
Eqpet gvg'qxgtrc{u'q'hgt'r wdrle"ci gpekgu'cp"geqpqo lecn" rpi /rcukpi "uqnwkqp'hqt'gzvpgf kpi "vj g'rhg'qh'cp'gzkukpi " cur j cnm"eqo r quks. "qt "eqpet gvg'r cxgo gpv'cpf "eqpvtkdwg" o gcplpi hwm{ "q'cp'ci gpe{au'qxgtrc'cuugv'o cpci go gpv' r tqi tco 0T gnvkgn{ "hgy /o clpvpcpeg'ugt xleg'hxgu'qh'42" { gctu'j cxg'dggp'tgr qtvf. "y kj "o cp{ "qxgtrc{u'r tqxkf kpi " 52"q'62" { gctu'qh'ugt xleg*"O eI j gg'3; ; 6+0

Eqpet gvg'qxgtrc{u'ctg'cf cr vdrng'q'c'dtqcf 'tcpi g" qh'r cxgo gpv'eqpf kklqpu'cpf "r tqlgv'pggf u. "cpf " vj gk "gzegngpv'j kngtkcnr gthqto cpeg'o cngu'vj go " cp'cwtcevkxg'qr vqp'hqt'cf f tguukpi "gxgp'vj g'o quv" ej cnepi kpi "r cxgo gpv'r tguetxcvqpu'cpf "tgj cdkkcvkqp" ekewo uncpegu. "cu'uj qy p'lp'Hki wtg'300



V[aa&w[!a||a&u00&tr U&u0A0& q'f&•^aA& a&w[(a•q)

: j[i fY%/%! bVcbXYX'WēbWYH'c j Yf'Unik jH [YchM H'YÁ jbhY'UnYf'cb'A jggci f j'Fci H'8 'ftcdZ]b'&\$+\$+VYZ:fYc j Yf'UnÁ Wēbghfi Wjcb/ VcHca Z]b'&\$&\$'L&Yf'Y&nYUg'c ZgYf j JWZ



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: j[i fY% "HndJWU'VcbXYX'UbX'i bVcbXYX'WcbWYH'c j Yf`Umigc'i hcbg'Uhj Uf]ci g'ghUj Yg'cZdUj Ya YbhgYfj JW'jZY

gpj cpego gpv'qh'c'r cxgo gpv'yj cv'r tqf wegu'c'uwducpv'ken'
gzv'gukqp'lp'ugtxleg'hkgOCu'uj qy p'lp'Hki wtg'3G."eqpetgvg"
qxxgtrc{ u'ecp'dg'wugf "y tqwi j qww'yj g'hkg'qh'c'r cxgo gpv'vq"
cf f tguu'r tguetxcv'kp'cpf "t'gj cdkkxcv'kp'pggf u0

Cu'cp'ci gpe{ "f'gh'p'gu'yj g'qdl'ge'v'x'gu'qh'ku'cu'guv'
o cpci go gpv'ut'cv'gi { . "cp'lo r q'v'cp'v'f'ge'k'uk'qp'ku'j qy "
v'q'cf f tguu'yj g'uw'v'cl'p'cd'k'k'x' "qh'ku'r cxgo gpv'ej q'legu"
y j kg'cnuq'o cni'pi "ku'r cxgo gpw'u't'guk'k'p'v'v'q' "g'gz'v'tgo g"
y gc'vj gt'gx'gpw'u'yj cv'ctg'd'ge'qo l'pi "o q'tg'e'qo o qp0'
Eqpetgvg'qxxgtrc{ u'r tqx'kf g'uli p'h'le'cp'v'x'c'v'g'hqt'd'qy "
uw'v'cl'p'cd'k'k'x' "cpf "t'guk'k'p'eg0

Vj g'Hgf g'ten'J ki j y c{ "C'fo l'p'k'ut'cv'kp' "HJ Y C+ "y tqwi j "
ku'U'uw'v'cl'p'cd'ng'Rcxgo gpv'R'qi tco . "j cu'd'ggp'ce'v'x'gn{ "
y qtn'k'pi "y kj "U Cu'cp'f "lp'f wut{ "q'r tqx'kf g'r t'ce'v'ec'n'
i w'kf c'peg'qp'j qy "q'o cng'r'cxgo gpw'u'o q'tg'uw'v'cl'p'cd'ng'0'
Eqpetgvg'qxxgtrc{ u'ecp'dg'wugf "xgt{ "g'h'ge'v'x'gn{ "q'o g'gv'
ci gpe{ "uw'v'cl'p'cd'k'k'x' "i q'cnu'd{ "r t'gu'et'x'k'pi "y j g'gs w'kf "
lp'x'guo gpv'lp'g'z'k'uk'pi "r cxgo gpw'u'cpf "d{ "r tqx'kf l'pi "
m'pi /r'h'g'r t'gu'et'xcv'kp'qt't'gj cdk'k'xcv'kp' "u'q'nw'k'p'u0'hqt"
o q'tg'lp'h'qto cv'kp'qp'r cxgo gpv'uw'v'cl'p'cd'k'k'x' "t'gh'gt "q"
y j g'HJ Y C'r w'd'le'cv'kp' "Vqy ctf u'U'uw'v'cl'p'cd'ng'Rcxgo gpv'
U'ungo u'<C'T'el'gt'ep'eg'F'q'ewo gpv' "Xcp'F co "g'v'cr04237+0

Vj g't'guk'k'p'eg{ "qh'r cxgo gpv'u'ungo u'ku'cnuq'et'k'le'c'n'hqt"
cf f t'gu'k'pi "y j g'cr r ct'gp'v't'gpf "qy ctf u'o q'tg'gz'v'tgo g"
y gc'vj gt't'gr'v'gf "gx'gpw'u'gur g'ek'cm{ "lp'h'c'ut'w'ew'wt'g"
h'q'q'f l'pi 0Eqpetgvg'qxxgtrc{ u'ecp'uli p'h'le'cp'v' "eq'p't'ld'w'g"
v'q't'guk'k'p'eg{ "d{ "o'j ctf g'p'k'pi o'r cxgo gpv'u'ungo u'ht'qo "
u'q'to "f'co ci g'cp'f "r tqx'kf l'pi "hqt'yj g't'cr k'f "t'gu'q't'cv'kp'p"
qh'v'cl'h'le'y kj q'w'e'qo r tqo k'k'pi "c'r cxgo gpw'u'up'i /v'gto "
r g't'h'qto c'peg0Vj g'N'q'w'uk'p'c'p'V't'c'p'ur q't'cv'kp'p'T'gu'et'ej "
E'gp'v'gt't'gr q'tv' "K'o r'ce'v'q'h'J'w't'le'c'p'eg'M'c'y'k'p'c' "q'p'T'q'c'f'y'c'f'u'
lp'v'i g'P'gy' "O't'g'c'p'u' "C't'g'c' "I cur ctf "g'v'cr04229+eq'p'ew'f'gf "

yj cv'eqpetgvg'r cxgo gpv'gz'r g't'k'p'eg'f "h'kw'g't'g'r'v'x'g'h'quu"
qh'ut'gpi yj "f'v'g'v'q'd'g'k'pi "lp'c'h'q'q'f'gf "eq'p'f'k'k'q'p'y j gp"
u'ko k'ct'uw'do g'ti gf "cp'f "p'q'p'uw'do g'ti gf "eq'p'et'g'v'g't'q'c'f'y'c{ u'
y g't'g'e'qo r ct'gf 0Eq'p'x'gt'ug'n{ . "y j g't'gr q't'v'eq'p'ew'f'gf "y j cv'
uw'do g'ti gf "cur j c'n'r cxgo gpv'gz'r g't'k'p'eg'f "c'ut'g'pi yj "h'quu"
gs w'cn'v'q'4'lp0'lp'yj k'ep'ng'u'u' "t'gu'w'k'pi "lp'yj g'p'ggf "hqt'872"
o k'k'q'p'v'q't'gj cdk'k'xcv'g'yj g'q'x'gt'422"o k'q'h'uw'do g'ti gf "
cur j c'n'r cxgo gpw0

7 cbWYH'Cj Yf`UmCdhcbg

Eqpetgvg'qxxgtrc{ u'ecp'dg'r'ceg'f "qp'g'z'k'uk'pi "cur j c'n'r "
eqo r q'uk'g' "l'q'k'p'v'gf "r'cl'p'eq'p'et'g'v'g'r cxgo gpv' "LTER+ "cpf "
l'q'k'p'v'gf "t'g'k'p'h'q't'eg'f "eq'p'et'g'v'g'r cxgo gpv' "LTER+ "cpf "
ETER"cpf "ecp'dg'wugf "g'h'ge'v'x'gn{ "qp'g'z'k'uk'pi "r cxgo gpw'
lp'c'x'ct'k'v' "qh'eq'p'f'k'k'q'p'u0Vj g'ur g'ek'h'le'f'g'c'k'u'lt'gi ctf l'pi "
y j g'v' "r g'q'h'q'x'g't'rc{ "d'q'p'f'gf "q't'w'p'd'q'p'f'gf + "y j k'ep'ng'u'u' "
l'q'k'p'v'r cv'g't'p' "h'q'cf "t'c'p'uh'gt'f'g'x'le'gu' "h'c'p{ + "cpf "
t'g'k'p'h'q't'ego gpv' "h'q't' "h'ld'gt' /t'g'k'p'h'q't'eg'f "eq'p'et'g'v'g' "HTE_ "cpf "
ETER'qxxgtrc{ u+f'gr g'p'f "w'r qp'yj g'h'q'm'y l'pi <

E' Eq'p'f'k'k'q'p'qh'yj g'g'z'k'uk'pi "r cxgo gpv

E' V't'cl'h'le' "h'q'cf l'pi

E' I g'qo g'v'le' "eq'p'ut'c'k'p'u' "u'we'j "cu'e'w't'd' "cpf "i w'w'gt "
u'ge'v'k'p'u' "i w'ct'f' t'ck'u' "uj q'w'f'gt' "y k'f'y u' "cpf "x'gt'le'c'n'
eng'ct'c'p'eg-u

E' F'g'uk'gf "f'g'uk'p' "i'h'g

Vj g'ug'f'g'ek'uk'p'u'ct'g'ut'ck'i j v'h'q't'y ctf . "cpf "y j ku'f'w'kf g'y k'n'
cu'k'k'v'yj g'w'ug't'lp'f'g'v'to k'p'k'pi "j qy "q'f'g'x'g'g'ur "c'eq'p'et'g'v'g'
qxxgtrc{ "u'q'nw'k'p'v'q'o g'gv'yj g'p'ggf u'q'h'c'ur g'ek'h'le' "r t'q'l'ge'v0

Ô@ c^!ÁG

9j Uí Uh]cb`cZ9I]gh]b[`DUj Ya YbHgÁ
UbX`GY`YW]cb`cZ7 cbWYhY
Cj Yf`UmCdh]cbg

8 Yhfa]b]b[`h Y: YUg]V`]micZU7 cbWYh`Cj Yf`UmUbX`GY`YW]b[`h Y5 ddfcdf]Uh`8 Yg][b` ,
GHd`%"8 Yhfa]bY`h Y9I]gh]b[`DUj Ya YbHmdY`UbX`7 cbX]h]cb` ,
GHd`&"AU_Y`UDfY]a]bUfm8 Yhfa]bUh]cb`cZ`h Y9I]gh]b[`Hmd]WU`GYW]cb`@UmYfg`UbX`h]W_bYggYg` ,
GHd`"7 cbXi WUb`Cb!G]hY`FYj]Yk `UbX`9j Uí Uh]cb` %%
GHd`("8 Yhfa]bY`h Y`BYYX`Z`f`A`]b[`UbX`5 W`a a cXUh]b[`5 X1 gla YbHg`cZ`h Y`DfcZ`Y`; fUXY`%&
GHd`) "J Yf]Zmh Y9I]gh]b[`DUj Ya YbH7 cbX]h]cb.`7 cf]b[`UbX`A UhYf]U`HYgh]b[` %
GHd`* "8 Yhfa]bY`h Y: YUg]V`]micZU7 cbWYh`Cj Yf`UmUbX`h Y5 ddfcdf]Uh`Cj Yf`UmCdh]cb` %
BYI hGHYdg` %

Uweeguhndqxtnc{ 'r gthqto cpeg'dgi kpu'y kj "ugnevqpp"qh" yj g'crrrtqr tlcvg'qxgtnc{ 'f guki p'hqt'c'i kxgp'r tqldge'OCp" gxcnvcvqpp'qh'yj g'gzknkpi 'r cxgo gpv'j gr u'f gvgto kpg" y j g'j gt'c'eqpetgvg'qxgtnc{ 'ku'cp'crrrtqr tlcvg'qr vqpp'hqt" r tdxgpcvkg'g'o clpvgpcpeg'qt'tgj cdkkscvqpp'cpf . 'h'uq. " yj g'crrrtqr tlcvg'qxgtnc{ 'f guki p'OVj g'gxcnvcvqpp'qh'yj g' g'gzknkpi 'r cxgo gpv'ku'c'o wnkungr 'r tqegu'u'yj cv'o wuv'dg" crrrtqcej gf 'ectghwn' OKO r tqr gt'gxcnvcvqpp'qh'yj g'gzknkpi " r cxgo gpv'eqpf kkkp'ecp'tguwn'lp'cp'qxgtnc{ 'f guki p'yj cv' ku'kpcf gs wcv'ht'cpf kqt'kpego r cwkdr'g'y kj "yj g'pggf u'qh' yj g'ukwcvqpp. 'rgcf lpi 'v'q'r qqt'qxgtnc{ 'r gthqto cpegO

Vj g'gxcnvcvqpp'cnuq'kf gpv'khu'f kungu'lp'yj g'gzknkpi " r cxgo gpv'v'q'f gvgto kpg'yj g'crrrtqr tlcvg'qxgtnc{ 'v'r g'hqt" yj g'eqpf kkkpu'cpf "yj g'tgr cktu'pggf gf "dghqg'cp'qxgtnc{ " ecp'dg'r'negf OKO'i gpgtcn'r tg/qxgtnc{ 'tgr cktu'uj qwf "dg" rko kxgf "v'q'qpn' "yj qug'pgeguuct{ "v'q'fckkscv'g'yj g'crrrtqr tlcvg" qxgtnc{ 'f guki p. "y j g'j gt'v'p'dqpf gf "qt'dqpf gf OGzeguukg" r tg/qxgtnc{ 'tgr cktu'ctg'equu' "cpf "o c{ 'lpf kcv'g'yj cv'yj g" y tqpi "v'r g'qh'qxgtnc{ 'ku'dgkpi "eqpukf gtgf "qt'yj g'r cxgo gpv' ku'pqv'c'i qqf "ecpf kf cv'ht'cp'qxgtnc{ O

Vj ku'ej cr vgt'r tqxkf gu'c'uvgr /d{/uvgr 'r tqegu'u'ht'gxcnvcvqpp " yj g'gzknkpi "r cxgo gpv'cpf 'f gvgto kpkpi "y j g'j gt'c" eqpetgvg'qxgtnc{ 'ku'cp'crrrtqr tlcvg'tgj cdkkscvqpp'qr vqpp'O Vj g'hqmqy lpi 'uvgr u'uj qwf "dg'hqmqy gf 'lp'gxgt{ 'ecug<

30' F gvgto kpg'yj g'gzknkpi 'r cxgo gpv'v'f r g'cpf 'eqpf kkkp

40' O cng'c'r tgrko kpc{ 'f gvgto kpcvqpp'qh'yj g'gzknkpi " v'r kecn'ugevqpp'rc{ gtu'cpf "yj kempguugu

50' Eqp'f vev'cp'qp/ukg'tgxkgy "cpf "gxcnvcvqpp

60' F gvgto kpg'yj g'pggf "ht'o knkpi "cpf "ceeqo o qf cvkpi " cflwuxo gpv'u'qh'yj g'r tqh'kg'i tcf g

70' Xgtkh{ 'y j g'gzknkpi 'r cxgo gpv'eqpf kkkp'<eqt'kpi "cpf " o cvgtkcn'gunkpi

80' F gvgto kpg'yj g'gucukdkk' "qh'c'eqpetgvg'qxgtnc{ 'cpf " yj g'crrrtqr tlcvg'qxgtnc{ 'qr vqpp

8 Yh'fa]b]b['H Y': YUg]V']hmicZUÁ
7 cbWYH'Cj Yf`UmUbX`GY`YW]b[Á
H Y'5 ddfcdf]UH`8 Yg][b

GHyd`%'8 Yh'fa]bY`H Y'9I]gh]b[Á
DUj Ya YbhHndY`UbX`7 cbX]h'cb

Tgxkgy "cu/dwkn'r rpu'cpf "r cxgo gpv'o cpci go gpv' u{u'go "tgeqtf u'v'q'f gvgto kpg'yj g'gzknkpi "r cxgo gpv' v'r g'ORtgrko kpc{ 'gzco kpcvqpp'ecp'dg'r gthqto gf " xktwcm' "wukpi "f ki kcn'f cv'uwj "cu'ewtgpv'ko ci gu'htgo " c'r cxgo gpv'o cpci go gpv'u{u'go "qt'I qqi ng'Gct'yj O

Vj ku'kphqto cvkpp'ecp'dg'wugf "v'cuuki p'c'r tgrko kpc{ " eqpf kkkp'tcvkpi "Hki wtg'4B+O

Y j gp'ugnevqppi "cp'crrrtqr tlcvg'eqpetgvg'qxgtnc{ 'f guki p. " cuuki plpi "c'r cxgo gpv'eqpf kkkp'tcvkpi "H qqf . 'h'kt. 'r qqt. " qt'f gvgtkqtcvgf +ku'c'uwldge'vkg'r tqegu'OGpi kpggtkpi " lwf i o gpv'uj qwf "dg'wugf "dgecvug'vki i gt'xcnvgu'ht" htgs wgep{ "cpf kqt'ugxgtk{ "qh'f kungu'f q'pqv'gzkn'OVj g" kwnu'cvkpu'cpf "eqo o gpwt{ 'lp'Hki wtg'4O'cpf "4B'ecp" dg'wugf "cu'i gpgtcn' w'f cpeg'lp'cuugukpi "cpf "cuuki plpi " r cxgo gpv'eqpf kkkp'tcvkpi uO

GHyd`&"AU_Y`UDfY]a]bUf`nÁ
8 Yh'fa]bU]cb`cZH Y'9I]gh]b[`Hnd]WUÁ
GYW]cb`@Ym'f`UbX`H]W_bYggYg

Tgxkgy "j kungtkcn'f qewo gpv'u'q'ej ctcevgtk'g'yj g'hwn' r cxgo gpv'uwewwtg'OVj ku'uvgr "ecp'dg'r gthqto gf " eqpewtgpv' "y kj "Ugr "30H'qo "c'tgxkgy "qh'cu/dwkn'r rpu. " o clpvgpcpeg'tgeqtf u. "cpf "r cxgo gpv'o cpci go gpv'u{u'go " f cvc. "cv'c'o kpk'o wo "yj g'hqmqy lpi "uj qwf "dg'f gvgto kpgf <

E' Rcxgo gpv'v' {gt'v'r gu'cpf "yj kempguugu. "d{ '{ gct'qh" eqputwcvqpp

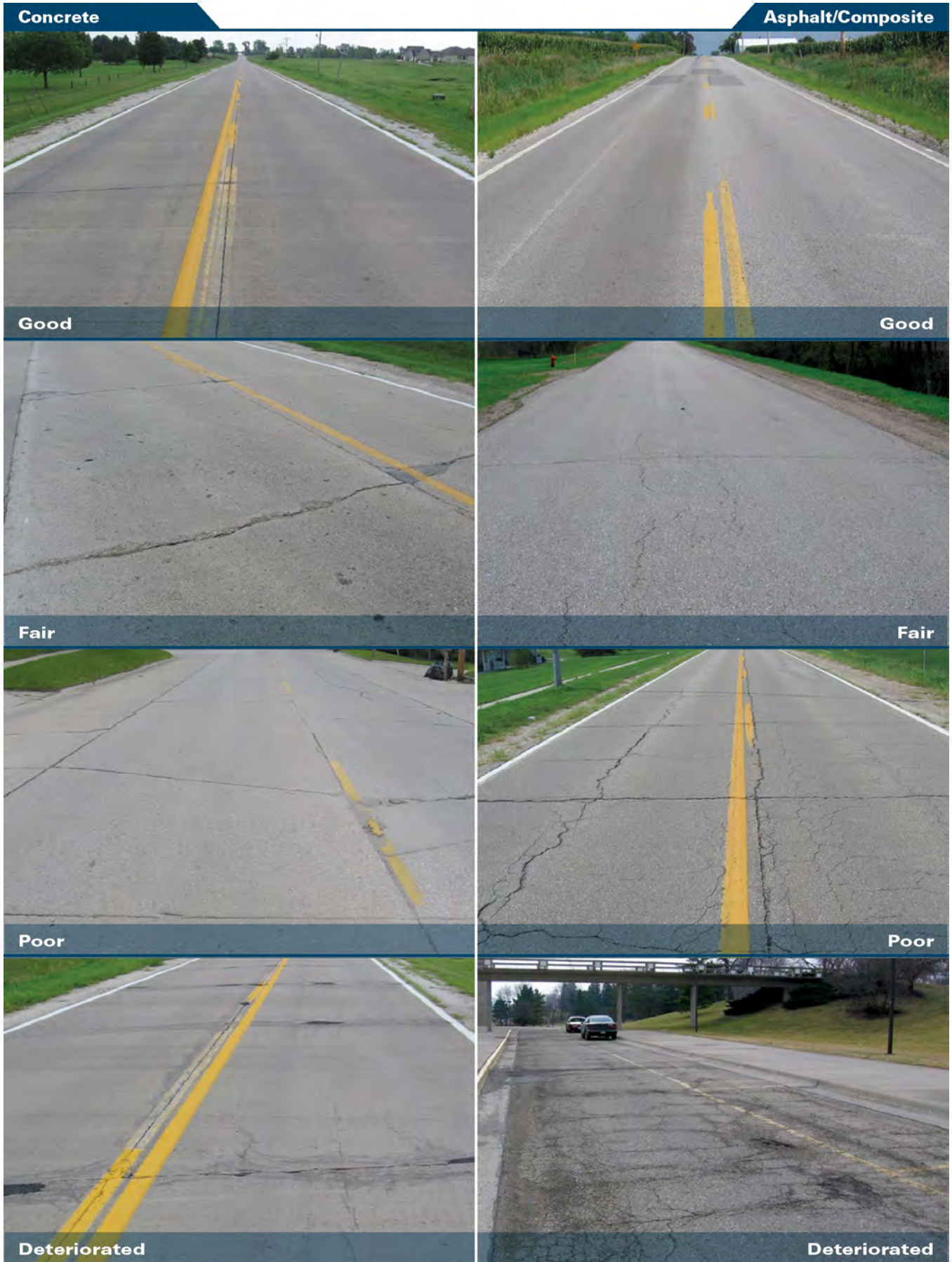
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E' Uwdi tcf g'ukn'v'r g

K'k'gcf kq' "cxckndrg. "o kzw'g'f guki p'kphqto cvkpp" cpf "eqputwcvqpp"s wcnk' "eqpvtqnf cv'uj qwf "cnuq" dg'eqmgevgf "ht'hwmtg'tghgtgpeg'lp'yj g'cuuguu gpv' r tqegu'OCp'gzco r ng'qh'yj g'kphqto cvkpp'eqmgevgf "cpf " uwo o ct'k'gf "f wtkpi "yj ku'uvgr "ku'uj qy p'lp'Vcdrg'4BO

HU`Y`&`%'9I Ua d`Ygi a a UfmicZdUj Ya Ybh`UmYf`UbX`H]W_bYggÁ
XUH]Z:f`UWta dcg]h`dUj Ya Ybh

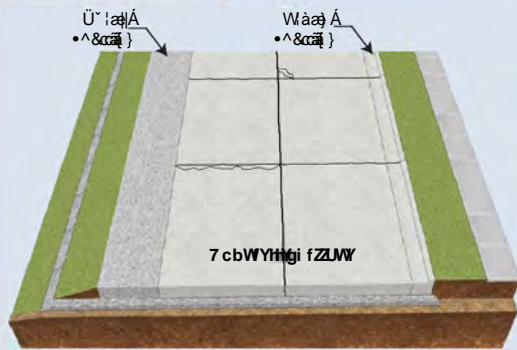
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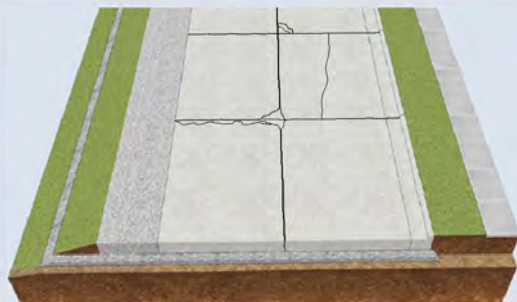
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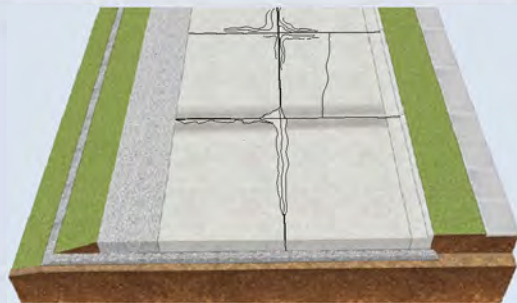
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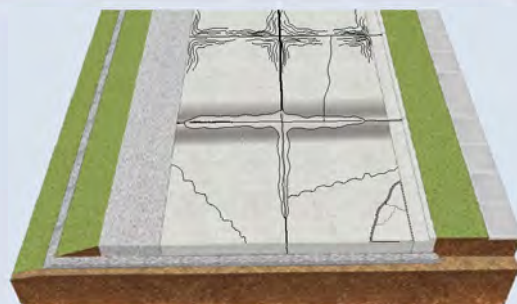
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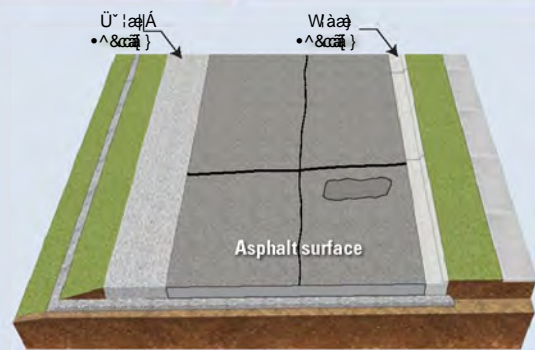
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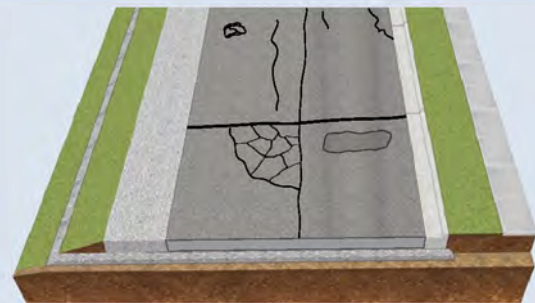
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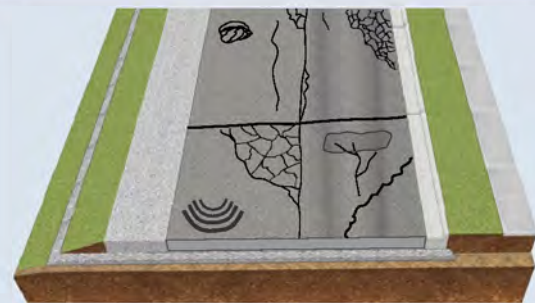
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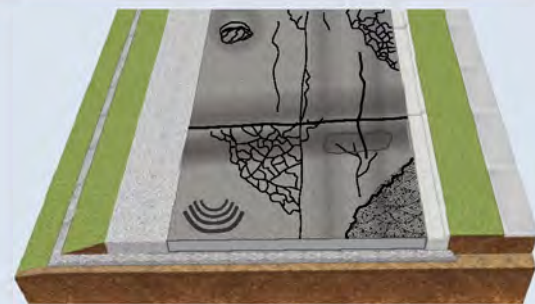
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f guki p'qr vkp0C'v'j ku'r qkp'lp'j g'gxcnwcvkp'r tqegu."
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kphqto cvkp'qp'f gxtgr kpi "c'r tgrko kpct{ "j kempgu"
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j cu'o cp{ 'r qvgp'kcn' gqo gtle'cpf "equ'lo r cew'qp"
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cpf "uq'qp0V'j g'gunko cvgf "qxgtr{ "j kempgu'pggf "pq'vdg"
gzceve04'lp0ku'v' r lecm' "utwhekp'v'q'i cwi g'y g'ko r cew"
qh'tckulpi "j g'r tqhkg'i tcf g0

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O knkpi "j g'gzknkpi "r cxgo gpv'ku'c'y c{ "q'o kki cvg'j g"
cf lwxo gpv'q'j g'r tqhkg'i tcf g'y j gp'eqpūwēvkpi "
c"eqpetgvg'qxgtr{ 0Hqt'gzknkpi "cur j cn'utwhegf "
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É' Tgo qxgu'utwhegf'f ghgeu'uwej "cu'r ct'kcn'f gr vj "qr /
f qy p'etcentkpi . 'r qvj qrgu.'twkpi . "cpf "uj qxkpi

É' Eqpvtqu'j g'xqno g'qh'eqpetgvg'pgeguuct{ 'hqt'j'g"
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É' Gpj cpegu'j g'dqpf kpi "r qvgp'kcn'hqt'EQC6D'f guki pu

F gvgto kkpki "y j gvj gt'o knkpi "ku'pgeguuct{ "cpf "q'y j cv"
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cu'o qtg'kphqto cvkp'ku'hqpy p'cdq'w'j g'j kempguu'cpf "
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o knkpi "f gr vj "o c{ 'pggf "q'dg'tg'xkugf 0

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o kki cvkp'o gcuwtgu<

É' Dtkf i g'utwewtgu'tgs wktg'c'tcpukkp'h'qo "j g'qxgtr{ "
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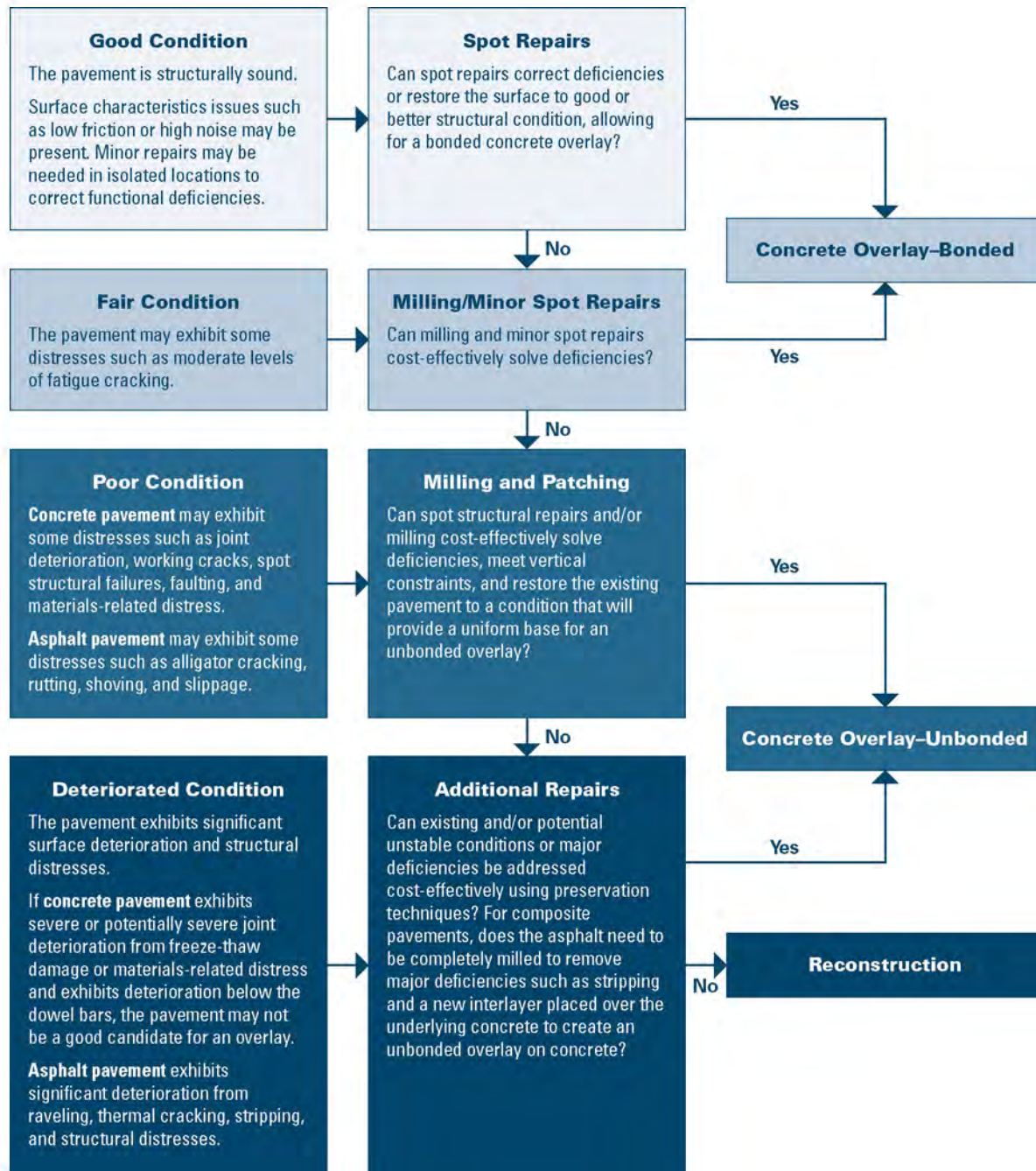
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É' Y j gp'r quukdng.'pgy "uchgv' "unqr gu'uj qwf "dg'dngpf gf "
q'j g'gzknkpi "f kej "hkp' *Hki wt g'406-0K'i'uchgv' "etkgtk"
ecppqv'dg'o gv'd{ "dngpf kpi "j g'unqr gu. 'j g'f kej "
uj qwf "dg'tgi tcf gf "cpf "j g'uchgv' "unqr g'hcw'gpgf "
*Hki wt g'407+0

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É' I wctf tckm.'r cter gv'y cmu."ecdng'dcttktgu.'cpf "o gf kcp"
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ceeqo o qf cvg'c'ej cpi g'lp'r tqhkg'i tcf g0

É' Y j gp'r quukdng.'j g'j gli j v'qh'gzknkpi "ewtd'cpf "
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j kempgu0Q'j gty kug. 'j g'gzknkpi "ewtd'cpf 'i wwt"
ugevkp'ecp'dg'tgo qxgf "cpf "tgr ncegf "cv'yj g'pgy "
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Rcxgo gpu

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E' Ej cr vgt "80O cvgtkcu'cpf 'O kzwtgu

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Cj Yf`Um8 Yg][b

%

Eqpetgvg'qxgtrc{ 'f guki p'r tqegf wgu'i gpgtcm{ 'eqpukf gt" wugt'lp'r wu'uwej 'cu'cpwlekr cvgf 'tcthle. 'erko cvg. " uwr r qtvrc{ gtu. 'o cvgtkcn'r tqr gtvku. 'urcd'i gqo gvt{ . 'cpf " r gthqto cpeg'etkgtlc'v'f gxmqr 'c'tgeqo o gpf gf 'qxgtrc{ " vj lenpguu0Vj g'f guki pgf 'qxgtrc{ 'vj lenpguu'ku'c'o clqt " ftkgt'qh'qxgtrc{ 'equw'cpf 'ku. 'vj gtghgtg'c'o clqt'hcevt'lp" y j gvj gt'c'eqpetgvg'qxgtrc{ 'ku'ugrgev'f'ht'c'i kxgp'r tqlgev0

O qxlpi 'dg{ qpf 'vj lenpguu'f guki p. 'j qy gxtg. 'vj g" eqo r tgi gpukxg'f guki p'qh'eqpetgvg'qxgtrc{ 'u{ ugo u" lpenmf gu'o cp{ 'cf f kklqpcn'eqo r qpgpw<

É' F gvgto kpcvkqp'qh'vj g'v'f r g'cpf 'gzvgpv'qh'r tg/qxgtrc{ " tgr cktu

É' Ugrgev'qp'qh'eqpwtwvkqp'o cvgtkcn'y kj 'vj g" cr r tqr tlcvg'r tqr gtvku

É' Cuuwo r vkqp'qh'dqpf lpi 'qt'tgumclpv'cv'vj g'lpvgthceg" dgvy ggp'vj g'qxgtrc{ 'cpf 'vj g'gzknkpi 'r cxgo gpv'kq0" y j gvj gt'vj g'qxgtrc{ 'ku'dqpf gf 'qt'vpdqpf gf +

É' F guki p'qh'gf i g'uwr r qtv'g0 0'ht'j k'gp'f 'hpgu'qt'v'gf " eqpetgvg'vj qwf gtu+. 'h'cp{ 'ku'p'ggf gf

É' F gvgto kpcvkqp'qh'qxgtrc{ 'r cpgr'f ko gpukpu'cpf " lqkp'rc{ qww

É' Ugrgev'qp'qh'lqkv'f guki p'f gvcnu'g0 0'rqcf 'tcpuhtg" cpf 'ugrcpv'r tqxkukpu+. 'h'ur gekn'eqpukf gtcvkpu'ctg" tgs vktgf

Uqo g'qh'vj gug'eqo r qpgpw. 'uwej "cu'lqkp'rc{ qw'cpf " eqpwtwvkqp'o cvgtkcn'r tqr gtvku. 'ecp'uki plhcepvw{ " ko r cev'eqpetgvg'qxgtrc{ 'r gthqto cpeg0Qvj gt'lp'r wu. " uwej 'cu'r cpgr'f ko gpukpu. 'lqkp'f gvcnu. 'gf i g'uwr r qtv. " cpf "dqpf 'eqpf kklq. 'f'kgevn{ 'ko r cev'qxgtrc{ 'vj lenpguu" cpf 'o wu'dg'ugrgev'f'eqpewtgpw{ 'y kj. "cpf 'cu'c'r ctv'qh" vj g'vj lenpguu'f guki p0Vj g'i qcn'qh'c'uweguhwn'eqpetgvg" qxgtrc{ 'f guki p'uj qwf 'dg'v'cf f tguu'cm'qxgtrc{ 'u{ ugo " f guki p'eqo r qpgpw'lp'c'o cpgt'vj cv'dcpcgu'equ'y kj " f guktgf 'r gthqto cpeg'lp'vgto u'qh's wcrk{ 'cpf 'f wtcvkqp'qh' ugtxleg'hkg0

7 cbWYh' Cj Yf`UmH JW_bYggÁ 8 Yg][b

F guki plpi 'c'eqpetgvg'qxgtrc{ 'ku'c'r tqeguu'vj cv'dgi kpu" y kj 'ej ctcevtk' lpi 'vj g'gzknkpi 'r cxgo gpv'cu'qwkpgf " lp'Éj cr vgt'4+ 'f ghplpi 'etkcecn'f guki p'xctkcdngu. 'cpf " vj gp'ecrcwrcvpi 'vj g'tgs vktgf 'qxgtrc{ 'vj lenpguu0Hjt " o qtg'f gvcn'f 'lp'hqto cvkqp'qp'vj lenpguu'f guki p. 'ugg" Crr gpf kz' C0

HmdJWU`H JW_bYgg'8 Yg][b`bdi hg`UbXÁ 7 cbgJXYfUjcbg

Vj g'hjmy lpi 'ej gemku'kpenmf gu'o cp{ 'qh'vj g'wpls wg" hcevtu'cpf 'f guki p'lp'r wu'vj cv'uj qwf 'dg'eqpukf gtgf 'lp" qxgtrc{ 'vj lenpguu'f guki p<

É' Gzvgpv'qh'r tg/qxgtrc{ 'tgr cktu'tgs vktgf

É' P gpf 'ht'tghgevkxg'etcem'eqpwtqn

É' Qxgtrc{ 'r cpgr'f ko

É' Rtugpeg'qh'tgkphqtego gpv'lp'vj g'qxgtrc{ 'urcd

É' Cuuwo gf "dqpf 'qt'ugr ctcvkqp'dgvy ggp'vj g'qxgtrc{ 'cpf " vj g'gzknkpi 'r cxgo gpv

É' Ugr ctcvkqp'rc{ gt'ej ctcevtkneku'k'c'ugr ctcvkqp'rc{ gt " ku'wugf +

Ugxgtrc'r tqegf wgu'ctg'cxckrcdng'ht'f guki plpi 'xctkquw" v'f r gu'qh'eqpetgvg'qxgtrc{ u0C"o clqt'hcevt'lp'ugrgev'pi "c" vj lenpguu'f guki p'r tqegf wgu'ku'vj g'cuuwo r vkqp'qh'c'dqpf " *qt'rcen'vj gtgqh'cv'vj g'lpvgthceg'dgvy ggp'vj g'qxgtrc{ 'cpf " vj g'gzknkpi 'r cxgo gpv0

Vj g'f gi tgg'qh'dqpf lpi . 'o gej cplecn'lpvgtnem'qt" h'lekvpcn'f gukrcpeg'j gtgchgt'uko r n{ 'tghettgf 'v'cu" òdqpf ò+dgy ggp'c'eqpetgvg'qxgtrc{ 'cpf 'vj g'utwewtcrn' rc{ gt'ko o gf kcvgn{ 'dgmy 'r rc{ u'c'o clqt'tqng'lp'vj g" dgj cxkqt'qh'cpf 'utguu'f kntkdwkqp'vj tqwi j 'cn'rc{ gtu'lp" vj g'qxgtrc'f 'r cxgo gpv'u{ ugo 0

Y j gp'vj g'qxgtrc{ 'cpf 'gzknkpi 'r cxgo gpv'rc{ gtu'ctg" dqpf gf. 'vj g{ 'cev'qi gvj gt'cu'c'ulpi ng'rc{ gt'y kj "cp" gh'gevkxg'vj lenpguu'f tgcvt'vj cp'vj cv'qh'gk'j gt'vj g'qxgtrc{ " qt'vj g'gzknkpi 'r cxgo gpv'cpf 'j cxg'c'ulpi ng'pgwtcn'czku" y kj 'tgr gev'v'q'dgpf lpi "Hki wtg'508. 'hghw0Y j gp'pq" dqpf 'gzknu'dgy ggp'vj g'qxgtrc{ 'cpf 'gzknkpi 'r cxgo gpv' rc{ gtu. 'vj g'y q'rc{ gtu'dgpf 'ugr ctcvgn{ . 'y kj "gcej 'rc{ gt" j cxkpi 'ku'qy p'pgwtcn'czku'cpf "gcej 'rc{ gt'gzzr gtlgepki " dqj 'vgpukqp'cpf 'eqo r tguukqp"Hki wtg'508. 'tki j v0

Hqt'f guki p'r wtr qugu. 'vj g'qxgtrc{ au'dqpf 'y kj "qt'ugr ctcvkqp" htqo +vj g'gzknkpi 'r cxgo gpv'ku'cp'cuuwo gf 'eqpf kklq" vj cv'o wu'dg'ugrgev'f'ectghwn{ 'v'cxqkf 'r tgo cwtg'qxgtrc{ " f kntguu0Vj g'utwewtcrn'ko r cev'qh'vj g'qxgtrc{ 'dqpf 'f gr gpf u" qp'vj g's wcrk{ 'cpf 'lpvgi tk{ 'qh'dqj 'vj g'qxgtrc{ 'cpf 'vj g" gzknkpi 'r cxgo gpv'cu'y gni'cu'vj g'vj lenpguu'qh'vj g'gzknkpi " r cxgo gpv0C'dqpf gf 'qxgtrc{ 'uj qwf 'pqv'dg'ugrgev'f'wprguu" vj g's wcrk{ 'qh'vj g'gzknkpi 'r cxgo gpv'qt'vj g'r qtvkqp'qh'vj cv" r cxgo gpv'vj cv'y kn'tgo clp+'ku'qh'uw'hlelcpw{ 'j ki j 's wcrk{ " cpf 'cf gs wcv'vj lenpguu0



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:][i fY" "8"7 cbWYH'c] Yf'Unicb'Vea dclg]H'dUJ Ya YbHÁ
d\ clc[fUd\ YX'jb'8\$%&UZh'f' % 'nYUfg'jb'gYfj]WZk]h 'H YÁ
c] Yf'UmYI\]V]Hb[']bHf'cf'VefbYf'XYHf'cfU]cb'Xi Y'hcÁ
'cb[]h X]bU'c']bH'jb'Y'k\ Y'Y'dUH g

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Vj g'r tko ct{ 'wug'hqt'lqkv'hknp' 'cpf'ugcnpi 'ku'v'q'rtgxgpv'
y cvgt'cpf' uqkf' u'ltqo 'i gwkpi 'lpv'q'lqkvu0lqkv'hknp' "
ulo r n\ 'tgs wktgu'hknp' 'c'ucy ew'y kj 'lqkv'hkngt'o cvgtkcn'
chgt'r tqr gt'r tgr ctcvkqp0Gzr gtlgpeg'j cu'uj qy p'y cv'
lqkv'hknp' 'ku'y g'tgeqo o gpf gf 'r tcevkglp'ctgcu'y j gtg"
f glegtucpf kqt'cdtcukxgu'ctg'crr nkgf 'q'r cxgo gpvuo'
lqkv'ugcnpi 'lpqxqkgu'yj g'wug'qh'c'dcengt'tqf "cpf "
o qtg'tki qtqwu'r tgr ctcvkqp'qh'c'ugcnpv'tgugxqkt'y cp"
lqkv'hknp' 0Vj g'wug'qh'c'p'qr gp/egn'dcengt'tqf 'ku'pqv'
tgeqo o gpf gf 'lp'ctgcu'y j gtg'f gkelpi 'ej go kcnr'ctg'wugf 0

Vj g'CERC"*423: +r tqxkf'gu'tgeqo o gpf cvkqu'yj cv'tg"
xcnkf'hqt'EQEóW'qxgtr{ u'eqpegtkpi 'y j g'pggf'hqt"*cpf "
r qvgpvkcn'dgpgku'qh+hknp' "cpf kqt'ugcnpi 'eqpetgvg"
r cxgo gpv'lqkv'cu'c'hwpevkqp'qh'enko cvg"*y j gjv gt"
f glegtucpf kqt'cdtcukxgu'ctg'wugf + 'tchfke. 'r quvgf'ur ggf "
nko kx'cpf'r cpngituk g0

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Wpdqpf gf 'ETER'qxgtr{ u'qp'eqpetgvg'r cxgo gpv'j cxg"
dggp"*cpf'eqpvlpvg'v'q'dg+eqpwtwvgf 'lp'y j g'WU'y kj "
Vgzcu'cpf'Kkpkqu'j cxkpi 'y j g'o quv'gzr gtlgpeg'y kj 'y ku'
qxgtr{ 'v'r g0F gvcku'qp'yj g'f guki p'cpf'eqpwtwvkqp'qh'
ETER'qxgtr{ u'ctg'r tqxkf gf 'lp'Cr r gpf kz'D0

Vj kempgu'f guki p'hqt'wpdqpf gf 'ETER'qxgtr{ u'uj qwrf "
dg'r gthqto gf 'wukpi 'CCUJ VQY ctg'Rcxgo gpv'0 G"
F guki p0Cur j cn'ugr ctcvkqp'rc{ gtu'ctg'v'f r lecm{ 'wugf "
v'q'gpwtg'tgkcdng'etccenlur celpi 'f gxgnr o gpv'lp'y j g"
qxgtr{ 0Vj g'qpn{ 'qxgtr{ 'lqkv'v'j cv'tg'tgs wktgf "
ctg'tcpxgtug'eqpwtwvkqp'lqkv'cpf' hqpi kwf lpcn'
eqpwtwvkqp'cpf'eqpwtcevkqp'lqkv'ucy ew'f gr yj u'cpf "
y kf yj u'hqt'hqpi kwf lpcn'eqpwtcevkqp'lqkv'lp'wpdqpf gf "
ETER'qxgtr{ u'ctg'kf gpv'kcn'v'q'y qug'f guetkdgf "
r tgxlqwu'n{ 'hqt'EQEóW'qxgtr{ u0Uggr gt'urdu'ctg"
r tghgtgf'qxgt'hw u'cpf'y kf g/hrcpi g'dgco u'hqt'v'eto lpcn'
lqkv'cpf'v'cpxkqp'urdu0

8 Yg][b'7 cbg]XYfU]cbg'Zf'7 cbWYH'cbÁ 5 gd\ UHÆ bVcbXYX'Cj Yf'Ung

EQCóW'qxgtr{ u'kpenmf g'wpdqpf gf 'eqpetgvg'qxgtr{ u'
qp'dqj 'cur j cn'cpf'eqo r quksgr'cxgo gpvuo

Gzknkpi 'cur j cn'cpf'eqo r quksgr'cxgo gpv'ctg'v'f r lecm{ "
v'gcvgf'cu'eqo r quksgr'hqwpf cvkqu'hqt'EQCóW'qxgtr{ u."
cpf'y j g'qxgtr{ 'y j kempgu'ku'wucm{ 'f guki pgf'ceeqtf kpi "
v'q'yj g'o gjv qf 'wugf'hqt'c'pgy 'r cxgo gpv'qp'c'xgt{ 'unh'h'
hqwpf cvkqp"*y j lej 'hqt'EQCóW'qxgtr{ u'ku'yj g'gzknkpi "
r cxgo gpv'utwewt g+0

EQCóW'qxgtr{ u'ctg'v'f r lecm{ 'f guki pgf'y kj qw'c"
ugr ctcvkqp'rc{ gt'dgecwug"*3+ 'y j g'ku'wucm{ 'pq'pggf'v'q"
kuqrvg'yj g'eqpetgvg'qxgtr{ 'ltqo 'y j g'cur j cn'v'q'rtgxgpv'
tghngev'xg'f kntgu'cpf' *4+ 'c' r wtg'wpdqpf gf 'lpv'gthceg "
eqpf kkp'ku'c'eqpugt'xcv'xg'f guki p'cuwo r vkp'dw"
pqv'c'pgeguuct{ 'eqpwtwvkqp'eqpf kkp'hqt'EQCóW'
qxgtr{ u0Vj g'uco g'ku'pqv'tw'g'hqt'EQEóW'qxgtr{ u'hqt "
y j lej 'c'ugr ctcvkqp'rc{ gt'ku'v'f r lecm{ 'tgs wktgf'v'q'rtgxgpv'
tghngev'xg'f kntgu0

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EQCóW'qxgtr{ u'y j gjv gt'r nceg'qp'cur j cn'qt "
eqo r quksgr'cxgo gpv'tctgn{ 'tgs wktg'gzvgpukxg'rtg/qxgtr{ "
tgr ckt'dgecwug"*3+ 'y j g'qxgtr{ 'wucm{ 'dtkf i gu'lpvce'
ctgcu'qh'tcxgnkpi. 'h'vki wg'etccenki. 'cpf'uko knt'v'f r gu'qh"
gzknkpi 'cur j cn'qt'eqo r quksgr'cxgo gpv'f kntgu'cpf' *4+ "
y j g'qxgtr{ 'y j kempgu'f guki p'ku'wpkngn'v'q'ej cpi g'cu'c "
tguwn'qh'yj g'tgr cktu0K'ku'qpn{ 'pgeguuct{ 'y j cv'j g'gzknkpi "
r cxgo gpv'rtqxkf g'tgcuqpcdn{ 'wpkqto 'uwr r qtv'v'q'yj g "
qxgtr{ 'rc{ gt.y kj 'pq'tqenki 'r cpngn'qt'r cpngitci o' gpv"
cpf'pq'rtci g'ctgcu'qh'uki p'hkcpv{ 'f hgtgpv'utwewt cn'
eqo r qukskp0Vj g'gzknkpi 'r cxgo gpv'uj qwrf 'dg'htg'qh "
y kf g'lqkv'cpf'etccenlur'wptgr cktgf'r qvj qngu'cpf'qvj gt "
hgcvwtgu'yj cv'y qwrf'r gto kv'yj g'qxgtr{ 'v'q'lpv'gtnenlqt "
öng{ ö'y kj 'y j g'cxgo gpv0

Gxgp'y j gp'pq'rtg/qxgtrc{'tgr cktu'ctg'tgs wktgf .k'w'o c{'dg"
f guktcdng"q"o kn'ij g'r cxgo gpv'lwthceg"q"grko kpcw'f ggr "
tww'qt'wpucdng'cur j cn'hc {gtu'qt"q"t'gf weg'r tqhkg'i tcf g"
ej cpi gu'ij cv'hy gt'qxgtr cuu'engctcepu'qt'etgcw'q'ij gt"
uchgv{'cpf 'i ggo gw'ke'r tqdngo u.'uwej 'cu'ij g'pggf "q"tckug"
i wctf tcku'qt'cf lwu'f kej 'unqr gu0

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Vj g'i wlf cpeg eqpegtkpki 'r cpgn'f ko gpubkpu. 'lqkp'v'rc [qww' cpf 'f guki p.'cpf 'lqkp'v'ugcrkpi 'hq' EQC6Wqxxgtrc 'u'ku' guugp'v'cnf 'kf gp'v'ecr'v'q'vj g'i wlf cpeg'r tqxf gf 'r t'g'x'kwunf " hq' EQE6Wqxxgtrc 'u0J qy gxgt. 'vj g'r t'gu'peg'qh'cur j cn' uwth'eg't'wkpki 'qt'vj g'p'ggf 'hq't'ej cpi gu'lp'r cxgo gpv' etqu'u'ge'v'kp' "g'f 0'v'q'lp'et'g'cug'et'qu'u'ur'g. 'o cng'i tcf g" eqtt'ge'v'kpu. 'qt'ej cpi g'uw'r gt'g'x'c'v'kp' "ecp'lp'v'qf weg" cf f k'k'q'c'p'v'f guki p'cpf 'ur g'ek'h'ec'v'kp'eq'p'v'f g't'c'v'kpu0

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Ugxgtcrlwpdqpf gf 'ETER'qxgtrc {u"qp"cur j cn/wnhceg"i
r cxgo gpvly gtg'eqpwtwevgf "lp"vj g"WU"lp"vj g"3; 82u"
cpf "3; 92u."cpf 'r gthqtō cpegj' cu'dggp'tgr qtvvf "q'dg"
ucwuhcevt {0Hgy 'c f f k l k p c n l w p d q p f g f 'E T E R' q x g t r c { u "
qp"cur j cn/wnhceg"i r cxgo gpvj cxg'dggp'dwknlp"vj g"
WU"lp'tgegpvf gecf gu."gzegr vhtq"ūqo g"vj lp"cpf 'wmtc/
vj lp'ETER'qxgtrc {u"qp"hrzklng'r cxgo gpw'lp'tcpuklqp"
ctgeu'lp'Vgzcu"Ej gp'gv'cn04238+0C f f k l k p c n l f g c k n l"
eqpegtplpi "vj g't g u k i p"cpf "eqpwtwevqp"qh'vj gug'qxgtrc {u"
ctg'r t g u g p v f " l p " C r r g p f z l " D O

8 Yg[b`7 cbg]XYfUjcbg`Zc`7 cbWYhY`cbÁ
5 gd\ UHĖ6 cbXYX`Cj Yf`Ung

EQC6D'qxgtr{u'lpnmf g'dqpf gf "eqpetgvg'qxgtr{u'qp"
dqj 'cur j cn'cpf "eqo r qukg'r cxgo gpvu0

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C"EQC6D"xqgtr{ "uj qwr{ "qpn{ "dg"eqpukf gt gf "hqt"cp"
gzkwp{ "cur j cn/umthceg f r xgo gp/vj cv/k'lp"⁸qt"ecp"
equiv/gf hge vkgn{ "dg t guqt gf "q f i q qf "ut wewt cn'eqpf kkp0/
EQC6D"xqgtr{ u'ctg v r lecm{ "j kppgt "j cp"EQC6W"
xqgtr{ u'dgecwug'qh'j g'kpet gcuf "ut wewt cn'ecr cek{ "
chqt gf "d{ "dqp kpi "j g'eqpetgvg'cpf "cur j cn/rc{ gtu0

Vj g'f gxgnr o gpv'cpf "o clpvgcpeg'qhi'cp'cf gs wcvg"
 dqp'f "dgy ggp'yj g'eqpetgv'qxgtrc{ 'cpf "yj g'gzknpi "
 curj cn'r cxgo gpv'ku'teklecn'q'j g'r gthqto cpeg'qhi'c"
 EQC6D'qxgtrc{ 0Nqu'qhi'yj g'dqp'f "q't'lcwv'q'q'f gxgnr "
 cp'cf gs wcvg'dqp'f +y kn'ceegngtcw'j g'f gxgnr o gpv'qhi'
 r cxgo gpv'f kmtgu'cpf "t'f wcv'j g'qxgtrc{ 0u'gtxleg'kdg."
 gur gekm' 'ht'j lppgt'qxgtrc{ u'0Gzknpi "f guki p'r tqegv wtgu"
 ht'EQC6D'qxgtrc{ u'f q'pqv'ur geklecm' "cf f tgu'yj g'

tgs wktgf 'lmt gpi yj 'qh'f'g'q'xgtrc{' 'dqp'f'dw'tcy gt'tgcv'k'
i tlo ctok' 'cu'c'eqpurtwewkp'kuwg'dgecwug'dqp'f/tg'rcv'f'
h'k'nt'gu'tct'gn' 'qee'w'y j gp'r tqr gt'eqpurtwewkp'cpf'
ewt'kpi 'g'ej pls wgu'ct'g'wug'OT'ghet'q'Ej cr'vgt' 'hqt'
lphqto c'wkp'qp'eqpurtwewkp'cpf'ewt'kpi 'r tce'w'egu

Vj g'hqmqy kpi 'kgo u'lj qwrf "dg'wugf "q'i wkf g'f gekukppu"
eqpegtplpi "vj g'f guli p'cpf "ur gekhecwqp"qhEQC6D"
qxgtr{u<

É Hqwpf cwp"uwr r qtv'eqpf kkpup

É Tgs wktgf 'r tg/qxgtnc{ 'tgr cktu

É Qxgtnc{ "o cvgtkcu

É Oczko wo "qXgtrc{ "j kempguu

É Rcpgn'f ko gpukqpu"cpf "lqkp'nc { qww"cpf "f guki p

É' Wug"qh'f qy gn'dctu."vg"dictu."cpf"o cetqhdgtu

É' Tkum'qh'tghrgevkg'etcempi

É lqpv^hnkpi "cpf "ugcnkpi "pggf u

É Cej kxgo gpv'cpf 'o ckpgpcpeg'qh'j g'r cxgo gpv'
qxtgtr{ "dqpf

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Vj g'qpn' 'gxf' gpeg'qhi'dqpf gf 'ETER'qxgtrc{ u'qp'cur j cm/
uwtcegf 'r cxgo gpw'lp' y' g'WU'ku'rtgugpvgf 'd' 'Ej gp'gv'cnf'
*4238+ 'y j q'f guetldg' uqo g' y' lp' c'p'f 'wmtc/ y' lp' ETER"
qxgtrc{ u'qp' hrgzldng' r cxgo gpw'lp' t'cpuklqp' t'gcu'lp' Vgzcu0

8 Yg][b'7 cbg]XYfU_hcbg'Zcf'7 cbWYh_r'cbÁ
7 cbWYh_rË6 cbXYX'Cj Yf'Ung

Ö^ ^|æ|Ö^•ǣ } Á[] •ǣ^|æǣ } •

Vj k^h d q p f g f " e q p e t g v g " q x g t r { u " c t g " t c t g n { " e q p u t w e v g f " q p " g z k u k p i " e q p e t g v g " r c x g o g p w " h q t " j g " h q m j y k p i " t g c u a p u <

É' Uweegunhwequmtwekq' qh'c'EQEóD'qxgtrc{ 'tgs wktgu'
 y' cv'y' g'gz'k'k'p' 'r'cxgo g'p'dg'lp' i' qqf' 'q'g'zegm'p'v'
 eqpf'k'k'q'p'.'cpf' 'uwej' 'r'cxgo g'p'u't'g't'ctgn' 'r'tqi tco o' g'f'
 h'q't'g'j' cdk'x'c'k'q'p'qt' 'r't'g'ug'x'c'k'q'p'w'p'ngu'o' clqt"
 k'p'et'g'c'ugu'lp' 't'ch'le' 'x'q'no' g'q't' 'h'q'cf' 'd'g' { q'p'f' 'y' g'q't'ki' k'p'cn'
 f' g'uki' p' 'h'x'g'u'+'ct'g' 'cp'v'el'x' cv'gf'0

É C'i qqf "däpf "dgw ggp'yj g"xgtrc {"cpf "yj g'gzkmp " r cxgo gp'ecp "dg'cej lxxgf "dwl'tgs wkt gu'j gki j vepgf " cwgpwäpf "q"eqpwt wäpf "r tcewgu "eqpetvgw"xgtrc {" o cwtlcn {"cpf "y gc'y gt'f wtkpi "eqpwt wäpf0

E' Ká'v'j g'dqpf 'ku'huq' 'gxgp' 'hqeem' 'c'v'ured' 'eqtpgtu' "
etceem'pi 'ku'cm quv'egt'clp' 'v'f'gxgnr' 's'wem' (O'
Tgo g'f'clv'qp' o' c' { 'tgs' wkt'g' 'gzr' gpuk'g. 'ko' g'eqpuwo' kpi' "
hwm'f'gr' v'j' 'ter' cku0

8&\$° Õ˘ æ^Á ÁÔ[} &'^cÁÚç^!|æ•

Vj g'f gxnqr o gpv'cpf "o clpvgpcpeg"qh'cp'cf gs wcv'g'dqpf "dgy ggp'y g'qxgtrc{"cpf"y g'gzknkpi "r cxgo gpv'ku'etklecl'vq'y g'r gthqto cpeg'qh'E QEóD'qxgtrc{u."gur gekm' "hqt" yj kp'qxgtrc{u'y cv'r tqxkf g'hwng'utwewt g'qh'y gk'qy p'hqt" ectt{ kpi "ugt xleg'hqcf u0

Rtqr gtn' "f guki pgf "cpf "eqputwv'gf "EQEóD'qxgtrc{u" ecp'tgcuqpcdn' "dg"gzr gev'f "q"r tqxkf g'c'o kpo wo " ugt xleg'hq'qh'37" { gctu'dghq'g'o clpvgpcpeg'ku'ts wkt gf 0 Ugg'Cr r gpf k'z "E "hqt'hw'j gt "f gcku'qp'yj g'f guki p'cpf " eqputwv'kqp'qh'y ku'v' r g'qh'qxgtrc{0

Üj ^8~~æ~~ÄÖ[} • Ä^|æ~~ä~~ } • Ä | ÄÖ[} ä ~ [~ • | Ä Ü~~ä~~ - | &^äÄÖ[} &^Ä Ä~~æ~~^ | ^ } ÄÜ~~ä~~^|æ •

Gxgp'ngu'e'qo o qp'yj cp' "lqkpv'gf "EQEóD'qxgtrc{u." dqpf gf "ETER"qxgtrc{u'qp'eqpetg'v' r cxgo gpv'ctg" wuwm' "geqpqo lecm' "xkcdrg'qpn' "y j gp'xgt { "hwng'r t g/ qxgtrc{ "tgr ckt'ku'ts wkt gf 00 qu'v'gegpv'gzco r ngu'qh'y ku' qxgtrc{ "v' r g'y gtg'eqputwv'gf "kp"Vgzcu'kp'yj g'3; : 2u" cpf "j cxg" { kgrf gf "ceegr vdr'g'r gthqto cpeg0Cf f kkpqcn' kphqto cvkqp'qp'yj g'f guki p'cpf "eqputwv'kqp'qh'ETER" qxgtrc{u'ku'r tqxkf gf "kp"Cr r gpf k'z "D0

Vj lenpguu'f guki p'hqt "dqpf gf "ETER"qxgtrc{u'qp'eqpetg'v' r cxgo gpv'uj qwf "dg'r gthqto gf "wukpi "CCUJ VQY ctg" Rcxgo gpv'O GF guki p0Vj g'qpn' "lqkpv'yj cv'ctg'tgs wkt gf " kp'yj ku'qxgtrc{ "v' r g'ctg'tcpuxgtug'eqputwv'kqp'lqkvu." o cvej gf "tgr ckt' "lqkvu."cpf "hpi kwf kpcn'eqputwv'kqp" cpf "eqputcevkqp'lqkvu=ücy ew'f gr yj u'cpf "y k'f y u'uj qwf " o cvej "yj qug'wugf "hqt'eqpxgpvkqpcn'E QEóD'qxgtrc{u0

5 XX]hcbU`8 Yg][b`7 cbg]XYfU]cbgÁ hc`5 XXfYgg`a dUWg`cZDfcZ`Y`UbXÁ ; fUXY`7\ Ub[Yg

Ej cpi gu'vq'yj g'r cxgo gpv'r tqh'g."etquu'ugevkqp"*g0 0" f w'g'vq'ncpg'y k'f gpkpi + "cpf "etquu'unqr g"*g0 0" f w'g'vq" ko r tqxgo gpw'vq'utw'ceg'f tclpci g'cpf "uwr gtg'gxcvkqp+" yj cv'tguw'htqo "cp'qxgtrc{ "qh'cp{ "v' r g'ecp'tki i gt'egtckp" qxgtrc{ "f guki p'o qf k'kecvkpu'cpf "tqcf y c{ "f guki p'ej cpi gu0

Tgh'et"vq'Cr r gpf k'z "C "hqt'o qtg'f g'ck'g'f "kphqto cvkqp'qp" yj g'f guki p'eqpuk' g'cvkqp'u'r tugp'v'gf "kp'yj ku'ugevkqp0

Cj Yf\ YUX`7`YUfUbW

Vj g'r t'gugpeg'qh'qxgtj gcf "utwewtgu."r qy gt'h'p'gu."cpf " q'y gt'hcw'w'gu."eqo d'k'p'gf "y kj "t'gi w'cvkpu'hqt'o k'po wo " qxgtj gcf "engtcpeg."o c{ "pggf "vq'dg'cf f tguugf "kp'yj g" qxgtrc{ "f guki p0

G ci `XYf`7 cbg]XYfU]cbg

Ncpg'y k'f gpkpi "cpf "ncpg'cf f k'k'qpu'qh'g'p't'guw'v'kp'yj g" r n'ceg' gpv'qh'eqpetg'v'qxgtrc{u'qp'cv'gcu'v'c'r qt'v'kqp'qh' yj g'gzknkpi "uj qwf gt."y j k'ej "o c{ "r tqxkf g'c'f k'htg'gpv' r'gx'g'qh'lw'r r qt'v'yj cp'yj g'v'cxg'g'ncpgu'yj cv'w'p'f g'v'k'g'o quv' qh'yj g'qxgtrc{."gur gekm' "h'yj g'uj qwf gt'ku'w'p' r cxgf 0 Vj ku'f k'htg'gpeg'kp'lw'r r qt'v'o wu'v'dg'r tqr gtn' "cf f tguugf " kp'f guki p'cpf "eqputwv'kqp'vq'cxqkf "hpi kwf kpcn' etcenkpi "kp'yj g'qxgtrc{ "qxgt'yj g'gzknkpi "r cxgo gpw'u" ncpg'uj qwf gt' "lqkv0

6 Uff]Yfg`UbX`F U]g

Uch'v' "dctt'ktu."i wctf tcku."cpf "ecdrg'dctt'ktu'o c{ "pggf "vq" dg'cf l'wugf "qt't'geqputwv'gf ."f gr gpf kpi "qp'yj g'ej cpi g" kp'r tqh'g'f tcf g'cpf "yj g'j qt'k' qp'v'nf k'ncpeg'dgy ggp'yj g" gf i g'qh'yj g'r cxgo gpv'cpf "yj g'uch'v' "h'cgw'g0

: cfYg`cdYgZ6 UW`g`cdYgZUbX`5 Wcgg!Á FcUX`8 fU]bU`Y`Gfi Wi fYg

Qxgtrc{ kpi "cp'gzknkpi "r cxgo gpv'yj kj "gk'j gt'cur'j cn' " qt'eqpetg'v'v' r lecm' "t'guw'u'kp'ej cpi gu'kp'yj g'g'g'xcvkqp" qh'yj g'r cxgo gpv'gf i g'w'p'gu'yj g'gzknkpi "r cxgo gpv'ku" o k'grf "vq'cm'y "r n'ceg' gpv'qh'cp'k'p'nc{ "yj cv'o clp'cvkpu'yj g" gzknkpi "r cxgo gpw'u'r tqh'g'cpf "etquu'ugevkqp0

F guki pgtu'uj qwf "cf f tguu'r cxgo gpv'r tqh'g'ej cpi gu'kp" y c{ u'yj cv'o k'po k' g'yj g'lo r cew'vq'f k'ej "h'p'gu."f k'ej " unqr gu."f tclpci g'utwewtgu."cpf "cxk'cdrg't'ki j v'qh" y c{ 0Uwej "lo r cew'ecp'dg'o k'po k' gf "qt'g'ko k'p'cv'gf +" d{ "lo r ngo gpv'ki "yj g'h'm'y kpi "f guki p'q'r v'kpu'cu" cr r tqr t'cv'g'<3+ k'p'nc{ "cm'qt'c'r qt'v'kqp'qh'yj g'p'gy " utw'ceg'nc{ gt."4+o czko k' g'yj g'r cxgo gpw'u'etquu'unqr g" y kj kp'cm'y cdrg'ko ku."cpf l'qt'5+o czko k' g'yj g'etquu" unqr gu'qh'yj g'r cxgo gpv'cpf "w'p' r cxgf "uj qwf gt'y kj kp" cm'y cdrg'ko ku0

K]XYb]b[`UbX`@UbY`5 XX]hcbg

Eqpetg'v'qxgtrc{ "r tq'g'ew'r tqxkf g'qr r qt'w'p'k'gu" hqt'y k'f gpkpi "r cxgo gpw'0Rtqr gtn' "f guki pgf "cpf " eqputwv'gf "y k'f gpkpi "ugevkpu't'gf w'eg'r cxgo gpv'gf i g" ut'guugu."eqtpgt'ut'guugu."cpf "f gh'g'cvkpu."yj wu't'gf w'ekpi " r c'p'gn'etcenkpi "cpf "lqkv'v'hw'kpi "4Q0'yj g'f k'htg'gpeg'kp" g'g'xcvkqp'dgy ggp'yj g'qr r q'ulpi "uk' gu'qh'c' "lqkv'v'qt'etcent]0 k'grt'cpf "Dgm'ki gt'4236_+y j k'g'ko r tqxkpi "tk'f g" s'w'ck'f "cpf "uch'v'0

Y kf gplpi "c'tcxgnlwthceg'wukpi "c'eqpetvg'q'xgtrc{ " tgs wkgu'cp'gxcnecvkqp'qh'cp{ "ej cpi gu'kp'hqwpf cvkqp" uwr r qtv'cr r tqr tlcvg'wug'qh'tgkphqtekp "uvgn'cpf 'r tqr gt" npi kwf kpcnllqkpw'r ncego gpv0Vj ku'ku'gur gekcm{ "tvg" hqt'y kf gplpi "q'xgtrc{ u'r ncegf "q'xgt'gzkukpi "eqpetvg" r cxgo gpw'y kj "wpdqwpf "uj qwf gt"o cvgtlcu'dgecwug" qh'y g'kpetgcugf "t'kniq'h'npi kwf kpcnllctcenkpi "cnpi "y g" gfi g'qh'y g'gzkukpi "r cxgo gpv0Hki wtg'50+0

Uqo g'i gpgtcltgeqo o gpf cvkqpu'hqt'r cxgo gpv'y kf gplpi " wukpi "eqpetvg'q'xgtrc{ u'kpenwf g'y g'hqny kpi <

E' Megr "npi kwf kpcnllqkpw'q'w'qh'y j ggnr cvj u'y j gpgxgt" r quukdg. "gur gekcm{ "hqt'EQC6D'q'xgtrc{ u0

E' Hqt'wpdqpf gf "q'xgtrc{ u'qh'cur j cu'qt'eqpetvg'r cxgo gpv." o cvej "y g'npi kwf kpcnllqkpw'qh'y g'q'xgtrc{ "y kj "y g" npi kwf kpcnllgf i g'lqkpw'qh'y g'gzkukpi "r cxgo gpv'cpf " cf f "vkgf "y kf gplpi "wpku'y j gp'r quukdg'wrguu'y ku'tguwnu" kp'lqkpw'y kj kp'y j ggnr cvj u'qh'y g'q'xgtrc{ 0

E' Y j gp'y g'q'xgtrc{ "ku'r ncegf "y kf gt'cp'y g'gzkukpi " r cxgo gpv'cxqkf "hcecvkpi "y g'gf i g'lqkpw'qh'y g'q'xgtrc{ " o qtg'y cp'34"vq'3: "kp0dg{ qpf "y g'gzkukpi "r cxgo gpvau" ncp'gf i gu'wrguu'y g'gzkukpi "uj qwf gt"j cu'c'utwewt" y cv'r tqxf gu'uwr r qtv'uko kct"vq'y cv'qh'y g'gzkukpi " r cxgo gpv'nepg0Kv'ku'ecppqv'dg'f qpg. "hqmny "y g" i vkf cpeg'qh'y g'r tgxkqwu'dwng0

E' Vkg'y kf gplpi "wpku'vq'gkij gt'y g'q'xgtrc{ "qt"vq'y g" gzkukpi "r cxgo gpv'wukpi "f ghqt o gf "dctu"ugg'y g" y kf gplpi "f gcku'lp"y g'gzco r ng'eqputwv'kp'f tcy kpi u" r wdrkij gf "d{ "y g'ER"Vgej "Egpgt+0

" Hqt'eqpetvg'q'xgtrc{ u'7"kp0y keniqt"o qtg. "hcecvg'y g" vkg'dctu'lp'y g'q'xgtrc{ "cv'o kf /f gr y 0T ghgt "vq'y g" f kuewukp"qp'r cxgo gpv'y kf gplpi "f gcku'lp'Ej cr vgt'90

" Hqt'eqpetvg'q'xgtrc{ u'nguu'y cp'7"kp0y lem'ugewt'g'y g" vkg'dctu'vq'y g'lwthceg'qh'y g'gzkukpi "r cxgo gpv'cnkpi " ectg'pqv'vq'cnny "tchle"vq'iqqug'y g'ugewt'gf "vkg'dctu0

Pqv'gxgt{ "f gcku'y kn'cr r n' "vq'gxgt{ "r tqlgev'dw'y g" tgeqo o gpf cvkqpu'hkuf "cdq'xg'ecp'qh'ngp'dg'cr r nkgf "vq" cff tguu'r tqlgev'ur gekhke'kuwgu0

Cff kpi "pgy "npgu'qt'uj qwf gtu'ecp'cnny"r tgu'p'kuwgu" wpls wg'vq'eqpetvg'q'xgtrc{ "r cxgo gpv'f guki p. "gur gekcm{ " kh'y gtg'ku'xctcvkqp"kp'y g'wpf gtn{ kpi "uwr r qtv'qh'y g" q'xgtrc{ "qt'kh'y g'q'xgtrc{ "ku'vq'cdw'c'hmuf gr yj "eqpetvg" r cxgo gpv0Lqkpw'hqf "t'cuphgt'u' ugo u'ctg'h'gs wgpv" wugf "kp'uwj "ecugu'y j gp'y g'q'xgtrc{ "u' ugo "ku'wpdqpf gf 0' Nqpi kwf kpcnllqkpw'vkg'dctu'ctg'wugf "vq'gputw'g'y cv'gf i g" uwr r qtv'ku'r tqxf gf "d{ "ci i tgi cvg'kpvgt'nen0Vj g'f guki p" uj qwf "cf f tguu'y g'r quukdg'k'qh'f khtg'p'v'kcl'ugwgo gpv' cpf "y cvgt'kphkmtcvkqp'cv'y g'ug'hqecv'kpu0



CE(^) Ate a @j aag Ee ^aa aag A{ (a-a) Ag] DA amoz^j^B0() &^cAaag ^A CE- [&aa) A-A a) ^a [aa ^aa aag A{ (a-a) Ag) c^/aag aA[af (D

:][i fY' " "7 cbWYh'c j Yf Unik [XYb]b['cb=]bc]g'Fci h')' 'k]k A bc~cb[]hi X]bU'c]bhcf'fY]bzfV]b['c j Yf Yl]gh]b['dUj Ya YbtA YX[Yftcd'VebWYh'c j Yf Unik [XYb]b['cb'A]bbYgcU'HC' &Z&A k]k ~cb[]hi X]bU'c]bhg'UbX'fY]bzfV]b['c j Yf Yl]gh]b['dUj Ya YbtA YX[Y]b'gca Y'cVU]cbg'fWbHf'U'X'cb'mfY]bzfV]b['jb'c'h YfA 'cVU]cbg'fV'chta L

Vq'r t g x g p v'et cen k p i "t g n v g f "q" f h h g t g p v k n i g z r c p u k q p "c p f " e q p v t c e v k q p "d g y g g p "c" e q p e t g v g "q x g t r c { "c p f "c" h w m f g r v j " e q p e t g v g "r c p g "c f f k k q p . "w u g "c p "l u q r v k q p "l q k p v "k g 0 "c "d w w " l q k p v y k j "p q "k g "d c t u "h i v j g "q x g t r c { "k u "h g u u "v j c p "7" l p 0 v j k e n 0

⚡D`UW`Gfi Wi fYg

Gz k n k p i "l p v c n g u "c p f "w k k m { "u n t w e w t g u "o w u n 'd g 't c k u g f " v q "o c v e j "v j g "p g y "r c x g o g p v g n g x c v k p 0 V { r l e c n f g v c k n u " h q t "c f l w u k p i "o c p j q r g u "c t g "l j q y p "l p "c p "g z c o r r e " e q p u x v e v k q p "f g v c k n i "r w d r k u j g f "d { "v j g "E R "V g e j "E g p v g t 0

7 i fV`UbX'; i HfY`8 YHJ`g

Gz k n k p i "e w t d "c p f "i w w g t "u g e v k q p u "o c { "r q u g "q x g t r c { " f g u k i p "e j c n g p i g u "t g n v g f "q" v j g "o c k p v g p c p e g "q h i u w t h c e g " f t c k p c i g . "q x g t r c { "r t q h k g "g n g x c v k p . "c p f "u q "q p 0 F g u k i p " q r v k q p u "c p f "u n t c v g i k g u "h q t "e w t d "c p f "i w w g t "u g e v k q p u "c t g " r t g u g p v g f "l p "E j c r v g t "90

Hf Ubglhcbg

E q p e t g v g "q x g t r c { "f g u k i p u "w u w c m { "t g s w k t g "f g v c k n u " e q p e g t p k p i "v j g "v t c p u k k q p "u g e v k q p u "h k p n k p i "v j g "e q p e t g v g " q x g t r c { "y k j "c f l c e g p v r c x g o g p v u g e v k q p u . "c f l c e g p v " u n t w e w t g u . "c p f "f t k x g y c { "g p v t c p e g u l g z k u 0 V t c p u k k q p " u g e v k q p u "q h n g p "h g c w t g "l u q r v g f "q t "q v j g t y k u g "w p u w r q t v g f " v t c p u x g t u g "g p f "l q k p u "c p f "j c x g "v j g "r q v g p v k n i "q " g z r g t k g p e g "l o r c e v i n q c f k p i "c u "x g j l e n g u "e t q u u "v j g "g p f " l q k p 0 V j g u g "e q p f k k q p u "t g u w n l p "j k i j g t "u n t g u u g u l p "o c p { " v t c p u k k q p "c t g c u . "p g e g u u k c v k p i "v j g "w u g "q h i v j l e n g t "e q p e t g v g " u g e v k q p u "c p f "e q p x g p v k q p c n i f g h q t o g f "u r e d "t g k p h q t e g o g p v " y k t g "o g u j "t g k p h q t e g o g p v "c p f k q t "o c e t q h d g t u 0 V t c p u k k q p " n g p i v j u "c t g "w u w c m { "d c u g f "q p "v j g "f g u k i p "u r g g f "h q t "v j g " u g e v k p 0 C f f k k q p c n i f g v c k n u "c p f "g z c o r r g u "t g i c t f k p i " v t c p u k k q p "u g e v k q p u "c t g "r t q x k f g f "l p "E j c r v g t "90

Ô@æ ç!Á

7 cbWYhY`Cj Yf`Ung`cb`5 gd\ UH
Gi fZWX`DUj Ya Ybhg

7 cbWYhY`cb`5 gd\ UHĖ bVcbXYX`Cj Yf`Ung`

&*

5 dd`jWUjcb`UbX`l gYg`

&+

DYfZ:fa UbW`

&+

? Yng`lc`Gi WYgg`

&+

A UjbhYbUbWY`UbX`F YdUjfg`

&-

7 cbWYhY`cb`5 gd\ UHĖ6 cbXYX`Cj Yf`Ung`

&-

5 dd`jWUjcb`UbX`l gYg`

' \$

DYfZ:fa UbW`

' \$

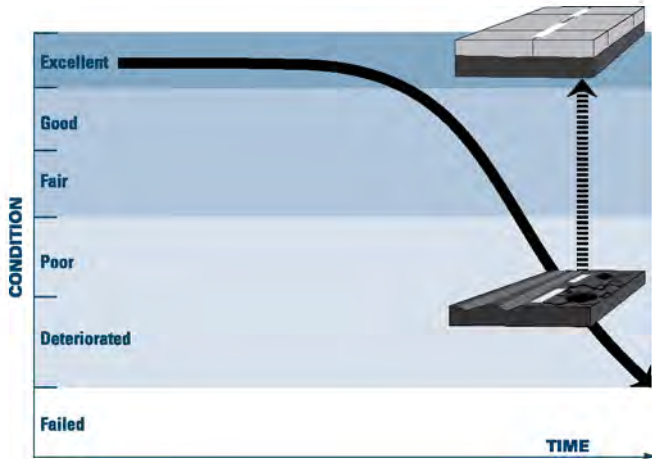
? Yng`lc`Gi WYgg`

' \$

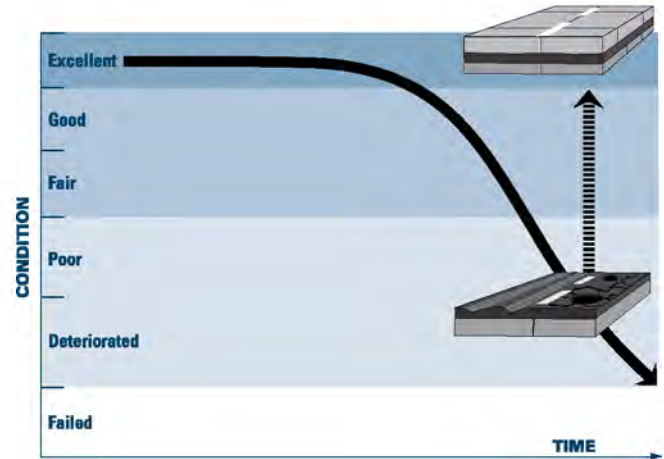
A UjbhYbUbWY`UbX`F YdUjfg`

' '

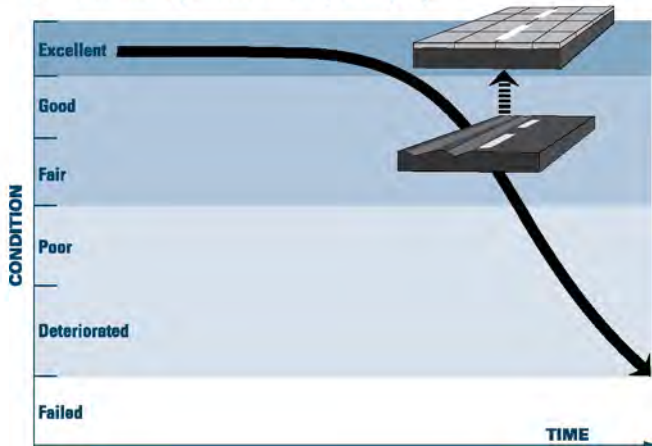
7 cbWYH'cb'5 gd\ UHb bVcbXYX'fZ ~XYdH L



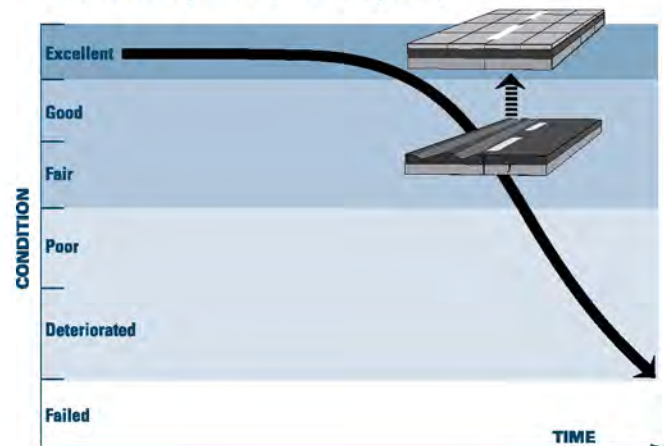
7 cbWYH'cb'5 gd\ UHb bVcbXYX'fWta dCgJHt



Concrete on Asphalt-Bonded (full depth)



Concrete on Asphalt-Bonded (composite)



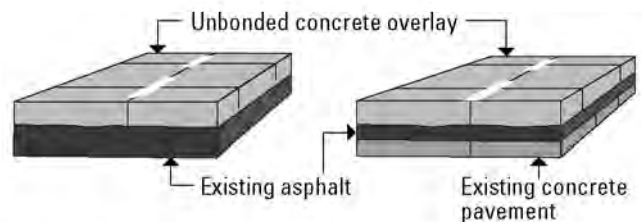
0UAA&@0^} 0!

: [[i fY("%6 cbXYX'UbX'i bVcbXYX'cj Yf`Uhg'cZYI]gh]b[`Ugd\ UHbUbX'Wta dCg]H'fduJ Ya YbHg

Eqpetgvg'qxgtrc{ u'qp'gzknkpi "cur j cn/wmthcegf " r cxgo gpw'gpeqo r cuu'IRER'qt'ETER'qxgtrc{ u'qp" dqvj "cur j cn/r cxgo gpw'cpf "eqo r qukg'r cxgo gpw" *eqpetgvg"vj cvj cu'dggp'r t gxlqwu('t gumthcegf "y kj " cur j cn#0Vj gug'qxgtrc{ u'ecp'dg'gkj gt'dqpf gf "qt" wpdqpf gf 0*Ugg'Crr gpf kz'C'hqt "c'wuo o ct { "qh'vj g" qxgtrc{ "qr vqpu'qp"cur j cn/wmthcegf "r cxgo gpw0" Cur j cn/wmthcegf "r cxgo gpw'y kj "uki plhecpv" utwewtcnlf gvgtkqtcvkqp. "kpcf gs wcvg"dcuglwddcug" uw r qtv. "qt'wtk r lpi "qh'cur j cn/r c{ gtu'f vg"q" kpcf gs wcvg'f tckpci g'ctg'pqvi qqf "ecpf kf cvgu'hqt "c" dqpf gf "qxgtrc{ =lp'uwej "ecugu. "cp'wpdqpf gf "qxgtrc{ " uj qwf "dg'eqpukf gtgf "Hki wtg'608-0

7 cbWYH'cb'5 gd\ UHb bVcbXYXÁ Cj Yf`Uhg

Hki wtg'60# "uj qy u'c'uej go cve'xkgy "qh'wy q'EQC6W" qxgtrc{ u'qpg'qp'cp'gzknkpi "cur j cn/r cxgo gpv'cpf "qpg" qp"cp"gzknkpi "eqo r qukg'r cxgo gpw0



CP Tech Center

: [[i fY("&7 C5 Bb 'cj Yf`Uhg'cb'YI]gh]b[`Ugd\ UHbYzL'UbXÁ Wta dCg]H'ff[[\ H'dUJ Ya YbHg

5 dd`jWUhc b`UbX`l gYg

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ej ctcevgtknku'cpf "wugu<

É' Ecp'dg'crr'rtqr tlcvg'hq't'cur'j cn'cpf'eqo r quksg"
 r cxgo gpw'u'y kj 'uki pht'ecpv'j qv'o k'z'cur'j cn'*/ J C+ "
 f gvg'tk'q'v'q'p.'uwej 'cu'ugx'g't'w'w'k'p'i.'r'q'j q'ngu."
 c'mk' cvqt'et'c'c'm'p'i.'u'wdi t'cf g'lu'wdd'c'ug'ku'w'gu.'uj' q'x'k'p'i.' "
 c'p'f'r'w'o'r'k'p'i

É' Ecp"dg"cr r r dgf "q"eqo r qukg'r cxgo gpvu'y kj "unqy /"
tgcevp'i 'O TF"cpf lqt"uki pklhecpv'etcentpi

E' Ct g'f guki pgr "cu'c'eqpetgvg'r'e [gt'qp'qr'qh'y'g'gzkukpi "
r cxgo gpv'r'e [gt'u+cuuwo lpi "cp'wpdqpf gf "eqpf ksqp"
dgy ggp'y'g'pgy "cpf'gzkukpi "r'e [gtu.'cpf'ctg'w'r lecm'"
pqv'f guki pgr "q'lpenwf g'c'ugr ctc'kqp'r'e [gt

É Ctg'i gpgtcm{ '8'kp0y kmiqt'o qtg'ht'ÉTER'qxgtr{u'qt"
9'kp0y kmiqt'o qtg'ht'ETER'qxgtr{u

É' Cf f "utwewtcr'ecr cek\{ "vq"y g'tqcf y c\{

É' G'ko k'pɔv'uw'hceg'f'ghɛvu'uwej 'cu'cu'j cn'twɔkpi ."
uj qɔkpi . "cpf 'r qɔj qɔgu

É' F q'p qv'tgs wkt'g'gz vgpuk'g'r t'g/qx gtr{ 't'gr cktu'dw'
o c{ 't'gs wkt'g'ur qv't'gr cktu'qh'egt vclp'ct gcu'iq' b' k'p'o k' g'
mecn'k' gf 'h'clnwt'gu

É F q'p'q'v't'g'n' 'q'p'd'q'p'f'p'i . 'y' q'w' i 'u'o g'r'c't'v'k'n'
d'q'p'f'p'i 'd'g'y g'g'p' 'y' g'x'q'g't'n' 'c'p'f' 'g'z'k'w'k'p'i 'c'ur'j' c'n'
r'c'x'g'o g'p'v'o c'f' 'q'ee'w' 'c'p'f' 'e'c'p' 'k'o r' t'q'x'g' 'y' g'
r'g't'h'q't'o c'p'eg' 'q'h' 'y' g'r' c'x'g'o g'p'v'

Ugg' Ej cr vt "4 hqt" kphqto cwkq "cdqwkf gpkh(kpi "
 f kwtguugu'kp "gz kunkpi 'r cxgo gpvu "cpf 'ugg' Crr gpf kz "C'hqt"
 kphqto cwkq "qp "wpdqpf gf "qxetn: { 'f guki p0

DYfZcfa UbWY

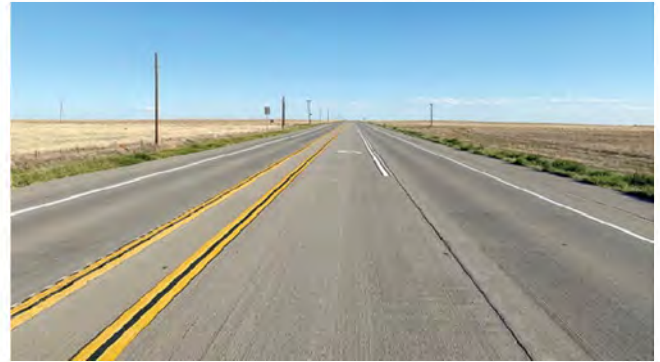
Wpdqpf gf "qxgtr{ u'qh'cur j cn/wthcegf "r exgo gpw'j c'xg"
dggp "wugf "uweegunm{ "lp'o cp{ "ucvgu'y kj "o qtg'y cp'52"
{ gctu'qh'i qqf "q"gzegmpvr gthqto cpeg"*cu'knwucv'gf "lp"
Hk wgu'66"cpf "66-0Vq"hgcp'o qtg'cdq'w'j g'r gthqto cpeg"
j knqt { "qh'EQC6W'qxgtr{ u.'tghg' "v'j g'hqmy lpi "ecug"
j knqt'gu'lp'j g'g'ej "uwo o ct { "J knqt { "qh'E^qpet gvg'Q'xgtr{ u'
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[illegible]

: J[i fY((" l bVcbXYX'cb`Wta dcbg]hY

? Ymg'hc 'Gi WWYgg

$$\dot{U} \in \{ \wedge \} \quad \dot{O} \in \{ \wedge \}$$

Cp'gxcnɛvqɔp'qh'ij g'gzknpi 'rɛxgo gpv'f guetldgf "
kɔ'Ej cr vgt'4.'ku'pgeguuct {'q'gpwɛt'g'y cɔ/k'u'c'i qqr "
ecpf k'f cvg'hqt'cp'wpdqpf gf 'qxgtnc {0Ugo g'qh'ij g'ng {"
eqpenwukpu'htqo 'y g'rɛxgo gpv'gxcnɛvqɔp'uj qwf "
kpɛnf g'y g'hmqy kpi <

É Utwewtncn'eqpfkkp"cpf "guko cvgf "uwr r qtv'xcnngu

É Y j g v j g t " o k n k p i " k u ' t g s w k t g f " c p f . " k h ' u q . " v q ' y j c v f g r v j * u +

É Hq'teqo r qukg' r cxgo gpw'ur gekhecm (.'rt gupeg'qh'
O TF. 'gctn' 'uci gu'qh'dwenti 'f w'g'v' f gi tcf cwpk"
cpf' b qxgo gpv'cv'y g' lqkw'lp'y g' wpf gtn' lpi "
eqpetg'g' r cxgo gpv' 'cpf' 'urdu'y cv' b qxg' qt' tgeni wpf gt "
xchle' mcf lpi

É' S wcpwhecvkp"qh"pggf gf "r tg/qxgtnc{"tgrcktu

Curj cn/r cxgo gpw'ct'g' qqf "ecpf kf cxvu'hqt'wpdqpf gf"
 qxgtrc { u'h'y' g'gzkwkpi "curj cn/r { gt'w'ep'r tqxkf g."
 qt'ecp'dg'equvghgexgn { tgr cktgf "q'r tqxkf g."c"
 wcdng'r rchqto "hqt'y' g'qxgtrc { 0UggCrr gpf k'z'C'hqt"
 kphqto ckwq'qp'wpdqpf gf "qxgtrc { f'guki p0

Eqpukf gtcvqpp"uj qwf "dg'i kxgp"v"j g"eqpf kkkp"qh'dqj " r{gtu"tqt"eqo r qukg'r cxgo gpw+:xctkcdkx{ "lp"j g" gzknkpi "r tqhkg"i tcf g"r quukdng"gxkf gpeg"qh'cevxg'r cpgrl o qxgo gpw+:cpf"j g"eqo r qukg'mlxcmg"qh'cm'gzknkpi " r cxgo gpv'r{gtu0

Uç^i|æ Å^•ã }

Ko r qtcpv'f guki p"grgo gpw'hqt'EQCóW'qxgtr{ u'lpemf g" vj g"wg"qh'j g"gzknkpi "r cxgo gpv'cu'c'dcug."qxgtr{ " vj lenpguu."o kzwg"t guki p."lqkpu."cpf "f tclpci g0T ghgt"v"q" Crr gpf kz"C"hqt"cf f kkkpcn'lphto cvkqp"qp"vj g"t guki p" f gcku'pqvgf "lp"j ku'ugevqp"cpf Ej cr vgt"4"hqt"lphto cvkqp" qp"gxcmcvkpi "vj g"eqpf kkkp"qh'j g"gzknkpi "r cxgo gpv0

Wig'qh'j g'Gzknkpi 'Rcxgo gpv'tu'c'Dcug0k'cp"
wpdqpf gf "qxgtr{ "f guki p."j g"gzknkpi "o wnktr{gtgf " r cxgo gpv'ku'tgcvgf "cu'c'uw'r qt'v'u{ ugo "vj cv'ecp'dg" ej ctcevgtk gf "cu'c'ukpi ng'r{gt'qh'eqo r qukg'o cvgtkcn' Vj g'utwewtcl'f guki p'cuuwo gu'cp'wpdqpf gf "eqpf kkkp" dgw ggp"vj g'pgy "qxgtr{ "cpf "vj g"gzknkpi "cur j cn'uw'hceg." cpf "EQCóW'qxgtr{ u'ctg'v'r lecm' "pqv'f guki pgf "v"q" lpenwf g'c'ugr ctcvkqp"r{gt0Vj g"gzknkpi "cur j cn'uj qwf " dg"gxcmcvgf "hqt"ku'cdkx{ "v"r tqxkf g'c'ucdng'uwdcug"hqt" vj g'wpdqpf gf "qxgtr{ "cpf "t guku'hwat'g'utkr r lpi 0

Tgi ctf ngu"qh'y j gj gt"vj g"cur j cn'y knldg'o knmf " qt'tgo clp'lp'ku'gzknkpi "eqpf kkkp."vj g'o lpko wo " vj lenpguu'qh'tgo clp'lp' "cur j cn'v"dg'qxgtrkf "o wuv" dg'cf gs wcvg"v"r tqxkf g'c'ucdng'y qtnkpi "r nv'hto " ecr cdr'qh'y kuj ucpf lpi "cn'c'pvek cvgf "eqputwvqpp" vchle"ur geklecm'."v wenu'hcgf gf "y kj "eqpetgvg="v ku'ku" v'r lecm' "cv'ngcu'5"v"6"lp0qh'uqvpf "cur j cn0

Hqt"c"eqo r qukg'r cxgo gpv."h'j g"gzknkpi "cur j cn'ku" f gvgto kpgf "v"dg'wpukscdr'cu'c'dcug"hqt"cp'wpdqpf gf " qxgtr{."k'ecp'dg'o knmf "qh'h'v"gzr qug"vj g'wpf gtn' lpi " eqpetgvg'r cxgo gpv'cpf "ecp'dg'tgcvgf "cu'cp'wpdqpf gf " qxgtr{ "qh'gzknkpi "eqpetgvg'wnktr lpi "c'pgy "ugr ctcvkqp" r{gt0T ghgt"v"q" Ej cr vgt"7"hqt"lphto cvkqp"qp"EQEóW" qxgtr{u0

Qxgtr{ 'Vj lenpgu0Wpdqpf gf "qxgtr{ "vj lenpguuu"
v'r lecm' "tapi g'htqo "8"v"34"lp0Vj g'tgs wktgf "qxgtr{ " vj lenpguu'ku'chgevgf "d ("vj g'qxgtr{ au'f guktgf "hcf / ectt { lpi "ecr cek{ "cpf "ugt'xleg"rkg."cu'y gm'cu'v'j g'eqpf kkkp" qh'j g'wpf gtn' lpi "r cxgo gpv0Rqt'vqpu'qh'c'r tqlgev'y kj " uki pkklecpv' "f kktgtp'gzknkpi "r cxgo gpv'cpf "uwdcug" eqpf kkkpu'o c{ "dg'dtqngp'lp'v'ugr ctcvg'ugevqpu'vj cv'ctg" f guki pgf "v"ur geklecm' "cf f tguu'v' qug'eqpf kkkpu0

O kzwg'g'F guki p0Eqpxgpv'kpcn'eqpetgvg'o kzwg'gu'ctg" v'r lecm' "wugf "hqt"wpdqpf gf "qxgtr{ u'qh'cur j cn'uw'hceg" "

r cxgo gpw0Y j gp'ceegngtcvgf "qr gplpi "v"tchle"ku" f guktgf ."eqpxgpv'kpcn'eqpetgvg'o kzwg'gu'v'j qwf "dg" r tqr qt'vqpgf "hqt"tcr kf "utgpi vj "i clp'y kj qw'lpetgcu" vj tlpnci g0Hqt'wpdqpf gf "qxgtr{ u'iguu'v' cp'8"lp0v'j kem" j ki j /o qf wnu'utwewtcl'hdgtu'ctg'qh'gvp"wgf "v"ko r tqxg" vj g'htcewtg'v'wi j pguu'cpf "r quvetcenkpi "dgj cxkqt"qh'j g" eqpetgvg0T ghgt"v"q" Ej cr vgt"8"hqt"lphto cvkqp"qp"qr gplpi " qxgtr{ u'v"tchle"cpf Ej cr vgt"8"hqt"lphto cvkqp"qp"vj g" wug'qh'hdgtu'lp'eqpetgvg'qxgtr{ u0

Lqpv'F guki p0Nqcf "tcpuht"t guki p"hqt"eqpetgvg'qxgtr{ u" ku'v' g'uco g'cu'v' cv'wugf "hqt"pgy "eqpetgvg'r cxgo gpw0 F qy gngf "lqkpu'ctg'wugf "hqt"wpdqpf gf "qxgtr{ u'qh" r cxgo gpw'v' cv'y kn'gzr g'kgepg"uki pkklecpv'utwem'vchle" *uwej "qxgtr{ u'ctg'v'r lecm' "9"lp0qt'o qtg'lp"vj lenpguu+0

F tclpci g0F vtlpi "vj g'gxcmcvkqp"cpf "f guki p'uci gu" qh'cp'wpdqpf gf "eqpetgvg'qxgtr{ "r tqlgev"vj g'gzknkpi " uwdi tcf g'f tclpci g'uj qwf "dg"gxcmcvgf 0Utkr r lpi "qh'j g" gzknkpi "cur j cn'ecp'ngcf "v"ugeqpf ct{ "equukf cvkqp"qh" vj g'utkr r gf "r{gt."t guwnkpi "lp'etcenkpi "qh'j g'wpdqpf gf " qxgtr{ "f wv"v"pqpwpkhto "uw'r qt'v0Ugr u'uj qwf "dg" wngp"v"gpwutg'cf gs wcvg"tclpci g'*g0 0'tgvtqhk'vpi "gf i g" f tclpu'cpf "wukpi "tgg/f tclp'lp' "uj qwf gt'o cvgtkcn'cpf " i gqvgz'wgu+0Y j gp'wpf gtf tclpu'ctg'r tgu'p'v'j g{ "uj qwf " dg'lpur gevgf "y kj "xkf gq'eco gtcu."engcpgf ."cpf "tgr cktgf " cu'pgeguuct { 0

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Ko r qtcpv'eqputwvqpp"grgo gpw'hqt'EQCóW'qxgtr{ u" lpenwf g"wg"qh'f k'gevt' rnego gpv' r t g/qxgtr{ "tgr cktu" o knkpi ."r cvej "r tgr ctcvkqp."uw'hceg'engcpkpi ."eqpetgvg" r rnego gpv'ewt'lp' ."cpf "lqpv'ucy lpi 0T ghgt"v"q" Ej cr vgt"7 "hqt"cf f kkkpcn'lphto cvkqp"qp"vj g'eqputwvqpp"cpf " o clpv'pcpeg'cevxkkgu'pqvgf "lp"j ku'ugevqp"cpf Ej cr vgt"4 "hqt"lphto cvkqp"qp"gxcmcvkpi "vj g'eqpf kkkp"qh'j g" gzknkpi "r cxgo gpv0

Wig'qh'f k'gevt'Rnego gpv0F k'gevt' rnego gpv'y kj qw"
o knkpi "ku'c'xkcdng'qr vqp'y j gp'twukpi "lp"vj g'gzknkpi " cur j cn'r cxgo gpv'f qgu'pqv'gzeggf "4"lp0cpf "vj gtg'ku" pq'uki pkklecpv'uw'hceg"t gvg'ktcvkqp"qt'utkr r lpi "qh'j g" cur j cn'r{gtu0Cp{ "gzknkpi "r cxgo gpv'tw'ctg'kn'gf "y kj " eqpetgvg."t guwnkpi "lp"v'j lengt"qxgtr{ "cdqxg'v'j g'twuu0

Rt g/qxgtr{ "Tgr cktu0Wpdqpf gf "qxgtr{ u'i gpgtcm' "
tgs wktg'o lpko cn'r t g/qxgtr{ "tgr cktu'qh'j g'gzknkpi " r cxgo gpv0K'uki pkklecpv' "f kn'guugf "ctgcu'ctg'pqv'uj knkpi " qt'o qxkpi "cpf "vj g'uwdi tcf g'uwddcug'ku'ucdng."equv' " tgr cktu'v'r lecm' "ctg'pqv'pggf gf "u'gg"Vcdng'608+0

Existing pavement condition	Possible repairs to consider
Area of subgrade/subbase failure	Remove and replace with stable material (i.e., select borrow, granular subbase, etc.); correct water problems
Severe distress that results in variation in strength of asphalt	Remove and replace with asphalt material or concrete patch with slurry seal or geotextile separation layer; correct water problems
Reflective faulting or panel tenting	Full-depth repair with concrete and use asphalt or geotextile separation layer as bond breaker
Potholes	Fill with asphalt
Shoving	Mill
Rutting ≥2 in.	Mill
Rutting <2 in.	None or mill
Crack width ≥ maximum coarse aggregate size used in the overlying mixture	Fill with suitable crack fill material or cementitious grout to prevent overlay "keying" or interlock

O knkpi 0Kilwhtceg f kvqt vkpu'lp 'vj g'gzknkpi 'r cxgo gpv' ctg'4'lp0qt'i tgcvtg.'o knkpi 'ku'tgeqo o gpf gf 'r tkqt 'vq' r rcekpi 'cp'wpdqpf gf 'q'xgtrc { 00 knkpi 'ecp'*3+'gko kpcvg' j ki j 'ur quv'q'j gr 'gpuwtg'c'o loko wo 'q'xgtrc { 'f gr vj . '*4+' r tqxkf g'c'o qtg'wphqto 'q'xgtrc { 'vj kempguv'q'o loko k g' s wcpvkw { 'q'xgttwpu.'cpf '*5+'tgo q'xg'f co ci gf 'cur j cn' o cvgtkcn'vj cv'ku'pqv'uwkcdng'lp'c'uwrr qtv're { gt0

Uwhtceg'Egpcplpi 0Dghqtg eqpetgvg'r rcego gpv'vj g' uwhtceg'vq'dg'q'xgtrc'f 'uj q'wrf 'dg'vj qtqwi j n' 'uy gr v' vq'cej kxg'wphqto 'eqp'cev'cpf 'ht'ekvp'dgvy ggp'vj g' eqpetgvg'q'xgtrc { 'cpf 'vj g'gzknkpi 'cur j cn'uwhtceg0

Eqpetgvg'Rcego gpv0Dguv'r tceveg ku'vq'r cxg'qp'c'f co r " uwhtceg0Y j gp'vj g'cur j cn'r cxgo gpv'uwhtceg'ku'cv'qt" cdq'xg'342'ÅH*6; ÅE+. 'y gwklpi 'ecp'cnuq'tgf weg'vj g'uwhtceg' vgo r gtcwtg'cpf 'hgy gt'vj g'tkun'qh'gctn' /ci g'etcentkpi 0' Vj g'r cxgo gpv'uwhtceg'uj q'wrf 'dg'htgg'qh'ucpf lpi 'y cvgt' cv'vj g'wlo g'qh'q'xgtrc { 'r rcego gpv0

Eqpxgvp'kpcn'eqpetgvg'r cxkpi 'r tceveg'cpf 'r tqegf wgu' hqt'r rcekpi . 'ur tgc'f lpi . 'eqpuq'nf cvkpi . 'cpf 'h'p'kuj lpi 'vj g' eqpetgvg'q'xgtrc { 'ctg'hqmqy gf 0Dgecwug'qh'xctk'cvkpu'lp'vj g' uwhtceg'qh'vj g'gzknkpi 'r cxgo gpv'vj g'eqpetgvg'o cvgtkcn' uj q'wrf 'dg'dkf 'qp'c'xq'no g'evdle" { ctf +'dcuku0Uqo g' ucvgu'cnuq'kpen'f g'c'dkf 'kgo 'hqt'r rcego gpv'o gcuwtg' " qp'c'us wctg' { ctf 'dcuku0Ugg'Ej cr vgt'9'hqt'cf f k'kqpcn' lphqto cvkqp'qp'gu'ko cvkpi 'cpf 'dkf f lpi "s wcpvksku0

Ewtlpi 0I qqf 'ewtlpi 'r tceveg'ctg'guugpv'kcn'hqt'q'xgtrc { u' gur gekm { 'hqt'vj lp'wpdqpf gf 'q'xgtrc { u'dgecwug'qh' vj g'lt'j ki j 'uwhtceg'ctg'c/q'xq'no g'tcvkq0I qqf 'ewtlpi " ku'ceeqo r nkuj gf 'd { 'cr r n' lpi 'c'j ki j /s wcrk { 'ewtlpi " eqo r qwpf '*cu'f guetldgf 'lp'Ej cr vgt'8+'cv'vj g'ur gek'k'gf " tcv'g'lo o gf kcvgn { 'chgt'uwhtceg'v'gzwtlpi 'cpf 'r tkqt 'vq'

vj g'qeewtgpeg'qh'uki p'htcepv'uwhtceg'g'xcr qtcvkp0'Hqt' f g'ck'kf 'lphqto cvkqp'qp'ewtlpi . 'ugg'[Ewtlpi 'Eqpetgvg'](#)]Vc { nqt'4235_0'Vj g'ewt gf 'uwhtceg'cpf 'xgt'v'ecnh'cegu' qh'vj g'q'xgtrc { 'uj q'wrf 'dg'htgg'htqo 'uwgcmu'cpf 'cr r gct' wphqto n' 'y j kg'h'ng'c'uj ggv'qh'r cr gt0

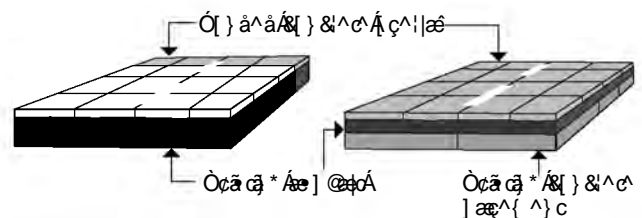
Lq'lpv'Ucy lpi 0Vko gn' lq'lpv'ucy lpi 'ku'pgegu'ct { 'vq' r t'g'xgvp'tcpf qo 'etcentkpi 0Vt'cpuxgtug'cpf 'h'qpi kwf lpcn' ucy ew'qr gtcvkpu'uj q'wrf 'dg'r gthqto gf 'dghqtg'cp { " wpeqpvtqngf 'etcentkpi 'qeewtu0

A Uj b h Y b Ub W W' Ub X' F Y d U J f g

Vj g'tgeqo o gpf gf 'tgr ck'qr vkpu'hqt'wpdqpf gf 'q'xgtrc { u' ctg'vj g'uco g'cu'vj qug'hqt'ucpf ctf 'eqpetgvg'r cxgo gpv0

7 cb W Y H Y' cb' 5 gd\ U H E 6 cb X Y X A C j Y f`U ng

Hk wtg'60'uj qy u'c'bej go cvk'x'kgy 'qh'vy q'EQC6D" q'xgtrc { u'q'pg'qp'cp'gzknkpi 'cur j cn'r cxgo gpv'cpf 'q'pg' qp'cp'gzknkpi 'eqo r quks'g'r cxgo gpv0



ÓÚÁ^&@Á^} c:

:] [i f Y (') " 7 C 5 E 6 `c j Y f`U ng`cb`YI]gh]b[`Ugd\ U H i f Y Z k U b X A W c a d c g h Y f f] [\ H d U j Ya Y b] g

5 dd`jWu]cb`UbX`l gYg

EQCód"qxgtr{u'i gpgtcm{ 'j cxg'yj g'hqmy kpi "
ej ctcevgtku"cpf" wugu<

É Ecp'dg'errngf'q'curj cn/qt'eqo r qusk'tqcf u.'utggv."
cpf'lpvguge'vqup'lp'hcl'qt'dgvg'utvewtcrleqpf klqp"
y kj'Vr kecnf'kutguu'wej'cu'twklpi.'lj qxlpi.'.o kqqt"
cnki cvqt'etcenkpi.'.cpf'vj gto cr'etcenkpi

É' Ctg'v{ r kcm{ '8'kp0vj kem'qt 'ngu

É' T gɲ("qɲ'ɲ g'gɲkɲɲi 'cɹ j cɲ/uɲtɲegf 'r cɲgo ɡɲv'ɲ"
 r tɲxɲf g'cf f kɲqɲcɲɲcf/ectt{ ɲɲi 'ecr cɲkɲ{. 'ɲ kɲ 'ɲ g'
 f ɡɲkɲ p'cuuwo ɲɲi 'c'dɲpf 'dɡw ɡɡp'ɲ g'qɲɡɲɲ{ 'cpf "
 ɲ g'gɲkɲɲi 'cɹ j cɲ/uɲtɲegf'ɲ'ɲto 'c'bɔ ɲɲqɲkɲ le"
 uɲwɲwɲcɲɲɲɲɲɲ. 'ɲ ɡt ɡd{ 'tɲf wɲɲɲi 'uɲɡuɲ'cpf "
 f ɡɲɲɲɲɲɲɲ⁸Uɡg'Cɹr ɡɲf kɲ'C'ɲt'ɲɲɲto cɲɲɲ'ɲɲ"
 dɲɲf ɡf 'qɲɡɲɲ{ 'T ɡɲkɲ p0-

É Cff "utwewtcrñecr cek\ 'y j gtg"tchle"mcf u'j cxcg"
kpetgcugf "qt'ctg"cpvkr cvgf "q'kpetgcug

É' Gŋo kɔcɔ'uwthɛg'f ghɛw'uwej 'cu'twɔkpi 'ɕpɸ'uɟ qɔkpi

DYfZcfa UbWY

Dqpf gf "eqpetgvg"qxgtrc{u"q'h'cur j cn/wlthceg'f'r cxgo gpw"}
j cxg'dggp'wugf 'uweeguuhwn{ 'lp'o cp{ 'lwc'gu'q'o clp'cklp"
cpf 't'gj cdkkxcg'cur j cn/r cxgo gpw'ij kj 'lwthceg'f'ghgew"
*cu'kmuwxcvgf 'lp'**Hi** wgu'68'cpf '609-0P wo gtqwu"
uwf'kgu'*uwej 'cu'[PEJ TR/Rt qlgev'3/83-2Gxcmw:vkp'ql'](#)
[Dqpf gf 'Eqpetgvg'Oxgtrc{u'q'p'Cur j cn/Rcxgo gpw'}](#)Rlkteg."
hqt'ij eqo kpi _"cpf '[Eqpetgvg'Oxgtrc{ 'Rt'ht'o cpeg'qp'Ky'ca'}](#)"
[Nqy'Xqmw g'Tqcf y cf u'](#)"I tquu'gv'cn04239 _"f' cxg'ij qy p"
dqpf gf "eqpetgvg"qxgtrc{u'q'f'grkxg't'c'f wtdng'lwthceg"
eqwtug. 'r tqxkf gf 'ij cv'*3+c'lwthlkgpvdqpf 'gzkku'dgw ggp"
ij g'cur j cn/wlthceg'cpf "eqpetgvg"qxgtrc{ "h'gg'C'r gpf k'z'C"
hqt'lp'ht'o c'vkp'qp'f'gxgr'ij kpi 'cp'qxgtrc{ "dqpf +_ '*4-ij g"
gzkukpi 'cur j cn/r cxgo gpv'r tqxkf gu'cf gs w'cg'lw'wewt'cn'
uwr r qtv'cpf '*5-+r cpgn'luk' gu'ctg'ugrgevgf 'q't'gf weg'urcd"
utguugu'cpf 'o k'lo k'g'gctn/ ci g'f'gdqpf kpi 0

Vq'hgctp'o qtg'cdqw'w'j g'r gthqto cpeg'j kwtq { 'qhEQC6D"
 qxgtrc { u.'tghg't'v'j g'hqmqy kpi 'ecug'j kwtqkgu'kp'j'j'g'gej "
 uwo o ct { "J kwtq { 'qhE'qpet gwg'Qxgtrc { u'kp'j'j'g'Wpkgf'Uc'vgu' "
 *I tquu.'hqt'v'j eqo kpi <

É' Ecug'J kɪqt{ 'ʔɔ́WU/8; 'k'ɹkɪudwɪ 'Eqwɪv{."
 Qmɛj qo c

É' Ecug'J kxqt { "%4óUT/38"p'F cy uqp'Egwpv{.'O qpvcpc

É' Ecug"J kuxqt { '%óWU/: ; 'kp'Rtqxq."Wcj

É' Ecug"J kinqt{"%8óUJ /35"pqtÿj "qh'O cpej guvgt."Kqy c



CE * ^ | a e R e s ^ . Á q | ^ . c a e Ê Ô Ú Ê Ô U E Y Ä Ö @ c e ! Ê . ^ a Á a c Á ^ { ä • ä }

:][i fY("6 cbXYX'cb'Ugd\ Uh



Öä Ásá * ÉÜ. æÖ } & ^ c Áúacá * ÁÜ • [& ää } ÉÜ • ^ áÁ äÜ Á ^ { ä • ä } Á

:][i fY("+ "6 cbXYX'cb`Wta dcg]hY

? Yng'hc 'Gi WWWgg

$$\dot{U} \in \{ \wedge \} \quad \text{and} \quad \dot{O} \in \{ \text{æ} \}$$

Cp'gxcnɛwɛkp qh'ij g'gzɛkɛpi 'rɛxgo gpv'f guetɛɟf 'ɛp"
Ej cr vɛt "4. 'kɛp'geguet { 'v'f gvgto kɔp'y j gɔj gt'c'dɔpf g'f"
 qxgɛɛ { 'ku'c r tqr tɛw'ɛ'ɛt'c'f kɛgp'r tɛɟɛx0Ugo g'qh'ij g"
 nɟ { "eqpɛnɛwɛkp'uɛtqo 'ij g'rɛxgo gpv'gxcnɛwɛkp'uj qwɛf"
 kɛnɛf g'ij g'hɛmɛy kɛi <

É' Gzkwpi "utwe wcn'eqpf kwq "cpf "guko cvgf "uwr r qtv"
xcwgu

É' Y j g v j g t "o k n k p i "k u ' t g s v k t g f "c p f . ' k h ' u q . " v q ' y j c v ' f g r v j * u +

É Y j g j g t " c " o k p o w o " q h ' 5 " k p 0 q h ' u q w p f " c u r j c n "
 t g o c k p u " c h e t " c p { " o k n k p i

É S wcpvhecvkp"qh'r tg/qxgtnc{ "tgr cktu

[illegible]

LqkpVUcy kpi 0VtcpuXgtug"cpf "hpi kwf kperUcy ew"
 qr gtcvqpu'uj qwf "dg'r gthqto gf "kp"e"ko gn{ "o cppgt"
 dghqtg'cp{ "wpeqptqmgf "etcenlpi "qeewu0LqkpVUcy kpi "
 uj qwf "eqo o gpeg"cu'uqpp"cu'yj g"eqpetgv"j cu'f gxgnr gf "
 uwHlekpVutgpi yj "hqt "lqkpw"q"dg"ew'y kj qwWtki pKhecpv"
 tcxgnkpi 0Nki j vy gli j v'gctn{/gpvt{ "ucy u'o c{ "dg"wgf "
 vq"cmqy "yj g"ucy kpi "etgy "vq'i gv'qpVq"yj g'r cxgo gpv'cu"
 uqqp"cu'r quukdn0Y kj "c"v{r kecnlqkpVur celkpi "qh'5"q'8"
 hX"gzvte"ucy u'y knihngn{ "dg"pggf gf "vq"cxqkf "wpr nppgf "
 etcem0Vj g'f gr yj "qh'yj g"ucy ewlqkpw'uj qwf "hmqy "yj g"
 tgeqo o gpf cvkpu'r tqxkf gf "kp"Cr r gpf kZ "C0

LqkpVUgcrlpi 0Ky gvhtgg| g'enko cvgu "eqpvtceVqp"
 cpf "eqpvtweVqp'lqkpw'uj qwf "dg'hngf "y kj "c'j qv"
 r qwtgf "lqkpVugcncpv"yg"wg"qh'c"dcengt"tqf "ku'pqv"
 tgeqo o gpf gf -0*Ugg"Cr r gpf kZ "C'hqt "lphqto cvkqp"qp"
 lqkpVugcrlpi "qr vqpu'cpf "r tqegf wtgu0"Kp"qyj gt'enko cvgu."
 lqkpw'o c{ "tgo ckp"vphngf "h'yj g'tkumqh'lphkmpi "y kj "
 kpeqo r tguukdn0'ku'hqy 0

A UjbhYbUbW'UbX'F YdUJfg

Lqkpw'kp"EQC6D"qxgtnc{ u'uj qwf "dg'o ckpvckpgf "vq"
 r txxgpV'yj g'kpi tguu'qh'o qkwwg"cpf "kpeqo r tguukdn0'
 Ugg"Cr r gpf kZ "C'hqt "lphqto cvkqp"qp"yj g'dgpgkhu'qh"
 lqkpVugcrlpi 0

EQC6D"qxgtnc{ u'o c{ "dg'tgr cktgf "wukpi "hwm'r cpgn"
 tgr nrego gpv"cu'f guetkdgf "kp"Ej cr vgt": +qt"d{ "o knkpi "
 cpf "kprc{ kpi "y kj "eqpetgv0F ghgeu'uj qwf "pqv'dg"
 r cvej gf "y kj "cur j cn'dgecwug"cf lcegpveqpetgv'r cpgnu"
 y knlo qxg'cpf "dtgcnlyj g'dqpf "dgw ggp"yj g'qxgtnc{ "cpf "
 yj g'cur j cn'r cvej 0Kc'r cpgrku'etcengf "dw'r cxgo gpv"
 tkf g's wcnk{ "ku'pqveqo r tqo kugf . "yj g'r cpgrlyj qwf "dg'ghv"
 kp'r neg0Kc'tkf g's wcnk{ "r tqdn0 "f gxgnr u. "yj g'r cpgr"
 uj qwf "dg'tgr negf "dghqtg'cp{ "r lgegu'qh'eqpetgv"eqo g"
 mqqug'htqo "yj g'qxgtnc{ 0

Ô@ç c^!Á

7 cbWYhY`Cj Yf`Ung`cb

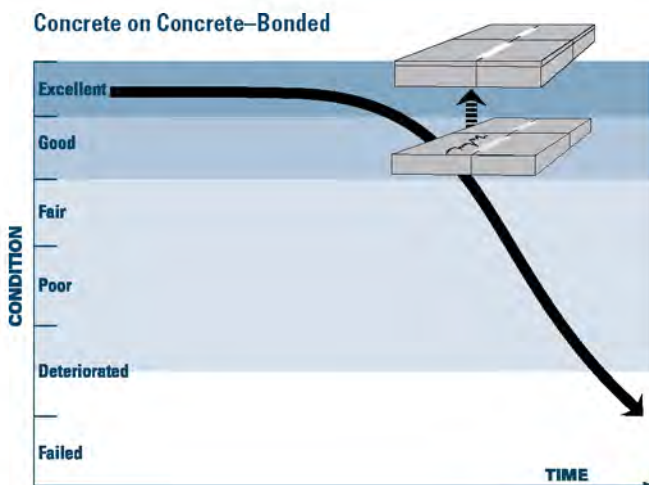
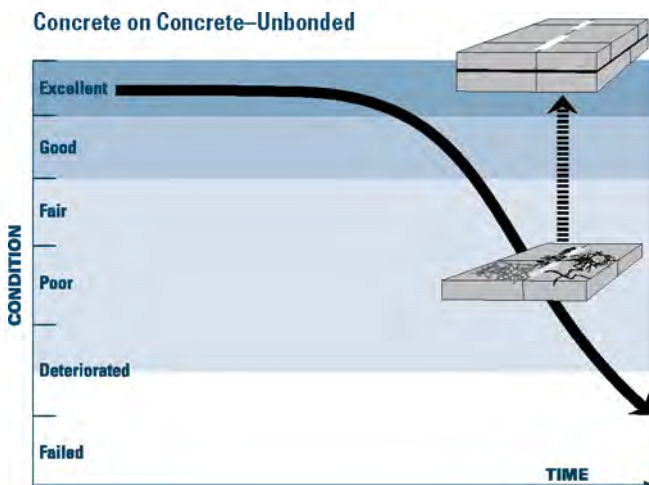
7 cbWYhY`DUj Ya YbHg

7 cbWYhY`cb`7 cbWYhY`bVcbXYXCj Yf`Ung`	' *
5 dd`]WUjcb`UbX`l gYg`	' *
DYfZ:fa UbW`	' +
? Yng`tc`Gi WWgg`	' +
A UjbhYbUbWY`UbX`F YdUjfg`	(%
7 cbWYhY`cb`7 cbWYhY`E6 cbXYX`Cj Yf`Ung`	(%

Y j gp "c"eqpetgvgr cxgo gpvutvewtg "cr r tqcej gu'yj g"gpf " qh'ku'lpvgpf gf "ugt xleg" hkg "qt" gzt gt lgepgu'cp "wpceegr vcdng" rxxgr qh'f gvgtkqtcvkqp. "tctgnl "f qgu'tgeqpuwvkvqp'tguwn" kp'cp'geqpgo lecn'luqnvkvqp0Eqpetgvgr qxgtrc{ u'yj cv'ctg"4" vq'6'lp0vj lenlqt"vj cv'ctg"8'lp0vj lenlqt"o qtg'ctg'uqvpf " r tgu'xcvkqp'cpf "t'gj cdkkcvkvqp'utcvgi kgu. "t'gur gevkgnl. " hqt'gzknkpi "eqpetgvgr cxgo gpw0Y kj "vj g'r rcego gpv" qh'cp'qxgtrc{. "vj g'gzknkpi "r cxgo gpv'ku'tguvqtf "ltqo " f ghelgpv'eqpf kkvpu'cpf "i clpu'ugt xleg" hkg "Hki wtg'708-0" Eqpetgvgr qxgtrc{ u'qp'gzknkpi "eqpetgvgr cxgo gpw" kpenw'g'dqvj "LREr"cpf "ETEr"qxgtrc{ u0

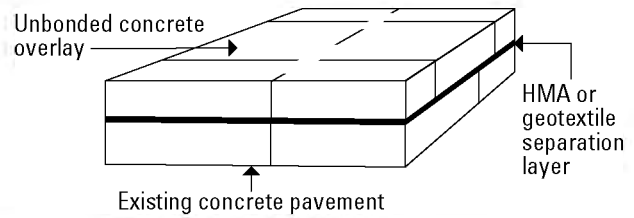
7 cbWYH'cb'7 cbWYH'È bVcbXYXÁ Cj Yf`Ung

EQEóWqxgtrc{ u'ecp'dg'hqwpf "qp'cmh'wpevkqpcr" ercu'k'ecvkqp'qh'tqcf y c{ u0D{ "f gh'pkkvqp. "EQEóW" qxgtrc{ u'eqpukv'qh'c'pgy "r qtv'v'p'f "ego gpv'eqpetgvgr" uwt'ceg'r rcegf "qxgt"cp'gzknkpi "eqpetgvgr cxgo gpv0



ÓÚÁ^&@0^} 0:

: J[i fY) "6%6 cbXYX'UbX'i bVcbXYX'cj Yf`Ung'cZYI]gh]b[Á VcbWYH'dUj Ya Ybtrg



ÓÚÁ^&@0^} 0:

: J[i fY) "8"7 C7 È 'cj Yf`Um

Vj g'vy q'eqpetgvgr{ gt'u'ctg'ugr ctcvgf "d{ "cp'cur j cn'qt" i gqvz'w'ugr ctcvkqp'rc{ gt'f guki pgf "vq'r tqxkf g'kuqrvkvqp." dgf f kpi. "cpf kqt'f tclpci g0Hki wtg'704'uj qy u'c'uej go cve" xkgy "qh'cp'wpdqpf gf "qxgtrc{ "qxgt"eqpetgvgr cxgo gpv0

EQEóWqxgtrc{ u'ctg'c"equv'gh'gevkg'r cxgo gpv" t'gj cdkkcvkvqp"gej pls w'v'f r kcmf "r rcegf "qp'gzknkpi " eqpetgvgr cxgo gpw'lp'r qqt'qt'f gvgtkqtcvgf "eqpf kkvqp0 Gxgp'r cxgo gpw'gzt gt kgepki "O TF "ecp'uvkn'r tqxkf g" ucdng'cpf "vplkqto "uwr r qtv'hqt'c"uueguuhwiEQEóW" qxgtrc{ "t'gj cdkkcvkvqp0EQEóWqxgtrc{ u'cmqy "cp'ci gpe{ " vq'o czko k g'ku'tgwtp"qp'kpxguo gpv'd{ "t'cgrk' kpi "cu" o wej "hkg'cu'r quukng'ltqo "vj g'lpkkn'r cxgo gpv'cuugv0 Wpdqpf gf "eqpetgvgr qxgtrc{ u'qxgt "eqpetgvgr cxgo gpw" j cxg'dggp'uueguuhwi "wugf "vj tqvj j qw'vj g'WU'ht "qxgt" 62" f gctu0

5 dd`JWUjcb'UbX'I gYg

EQEóWqxgtrc{ u'i gpgtcmf "j cxg'yj g'hqmqy kpi " ej ctcvgtkvku'u'cpf "wugu<

É' Ctg'f guki pgf "guugpvkcmf "cu'c'pgy "eqpetgvgr cxgo gpv" qp'c'ucdng'dcug'eqwtug

É' Tguvqtg'qt"gpj cpeg'vj g'r cxgo gpv'utvewtcr'ecr cekv

É' Kó r tqxg'utw'ceg'ht'ekvqp. "pqkug. "uo qqvj pguu

É' J cxg'c'r cxgo gpv'hkg'eqo r ctcdng'vq'yj cv'qh'c'pgy "hwn/ f gr vj "r cxgo gpv

É' F q'pq'v'gzt gt kgepg't'gh'gevkg'et'cempki "f w'vq'vj g'wug" qh'cp'cur j cn'qt"i gqvz'w'ugr ctcvkqp'rc{ gt. "cuwo kpi " vplkqto "uwr r qtv'eqpf kkvpu'r tqxkf gf "d{ "vj g'gzknkpi " r cxgo gpv

DYfZfa UbW

EQE6Wqxtnc{u'qhg'tzegmgpvr'qvgpvcn'ht'uweguihwi'
npi /ygo 'r gthqto cpeg.'gxgp'y j gp'yj g'wpf gtn' lpi "
r cxgo gpv'ku'lp'tgrv'xgn' 'r qqt'eqpf'klqp0C'422: "
r tqlgv'qpp'Tqwg'F'y kj lp'yj g'Mcpuc'Ek'.'O kuqwk"
o gtdqr'qkscp'ctgc'knwutcvu'yj ku'r qvgpvcn'0'kp'4229."
Tqwg'F'y cu'c'44/{gct/qrf.'. 'lp0'yj keniLRE'yj cv'j cf "
uwxpvcn'F/etcentpi 'lp'yj g'tcpuxgtug'cpf 'npi kwf kpcn'
lqkpw'Hi wtg'75.'vqr +0Vj g'wpucwpf 'o cvgtkcn'lp'yj g"
f gvgtkctcvf 'lqkpw'y cu'tgo qxgf.'cpf 'y j g'lqkpw'y gtg"
erpcpgf 'cpf 'hmgf 'y kj '4.222'r uk'ego gpv'kqwu'tgr ckt "
o cvgtkcn'y kj qwtggucdn'kpi 'ucy kpi 'qxgt+'y j "
gzknkpi 't'cpuxgtug+'lqkpw0

Vj g'gzknkpi 'r cxgo gpv'y cu'qxtnc'f'y kj '7'lp0qhl'r n'lp "
*k0'yj kj qw'wngn'qt'hdgtu'wpdqp'gf 'eqpetgvg'y kj "c"
i gqvg'v'kg'hcdtke'ugtxkpi 'cu'yj g'ugr ctcv'kp'rc {gt 'Hi wtg'
75.'dqvqo +0Vj g'ukpi ng'ew'lqkpw'ucy gf 'lp'yj g'8'h'd { "
8'h'r cpgn'y gtg'hgn'wpugcngf 0Vj g'7'lp0'yj keni'wpdqp'gf "
eqpetgvg'qxgtnc { 'uqnwkp'grko kpcvgf 'y j g'pggf 'hqt "
eqpf wv'kpi 'equv' 'hwn'f gr yj 'tgr cktu'cpf 'tguwngf 'lp'c "
o qtg'hpi /n'unkpi 'tguw'hcelpi 0Tqwg'F'y cu'eqp'v'p'wgf "
v'q'r tqxkf g'zegmgp'v'ugtxk'eg'ht'qxgt'34'/{gct'ucpf 'ku'unkn'
qr gtcv'kpcn'v'qf c {0



Vj aaAab[!|]aBxU00Etr UBSU00@ q: Bk *AA aBb ^|{ a•q }

:][i fY) " "Fci H'8 'Yi]gh]b['VebWYH'j'b'XYHf]cfUHX'VebX]hcbA
j'b'\$\$\$+ f'ncdL') j'b'i bVcbXYX'c'j Yf UmVebgHf WYX'cb'Fci H'8 'j'bA
\$\$\$, f'ncHca z'd ctc'HU_y'b' \$\$\$&L

Et'k'k'c'n'f'c'v'qtu'yj cv'ch'ge'v'yj g'r gthqto cpeg'qh'wpdqp'gf "
qxgtnc { u'lp'cn'f'g'wp'k'htqto 'uwr r qtv'tqo 'y j g'gzknkpi "
r cxgo gpv'yj g'v'r g'qh'ugr ctcv'kp'rc {gt 'wugf.'qxgtnc { "
y j kempguu.'lqkpw'ur celpi 'rc {qww'iqcf 't'cpuhgt'F'guki p.'cpf "
y j g'v'r g'qh'ego gpv'kqwu'lqkpw'tgr ckt 'o cvgtkcn'wugf 0

Vq'ngctp'o qtg'cdqww'yj g'r gthqto cpeg'yj knqt { 'qh'
EQE6Wqxtnc{u.'t'ghgt'v'q'yj g'hqmqy kpi 'ecug'yj knqtkgu"
lp'yj g'gej 'uwo o ct { 'J knqt / 'qh'E'q'pet gvg'Qxgtnc { u'lp'yj g"
Wp'kgf 'Uc'v'gu'f tquu.'hqt'y eqo kpi +<

E' Ecug'J knqt { '%36WU/353'lp'Cmgi cp'E'qwpv'.'O lej ki cp

E' Ecug'J knqt { '%36K: 7'lp'T t'cp'x'kng'E'qwpv'.'P qt'y "
Ectqkpc

E' Ecug'J knqt { '%36K62'lp'P qt'y 'Nkwg'Tqem'Ctn'puc

?Yng'rc'Gi WYgg

Vj g'hqmqy kpi 'cev'kpu'y knij gr 'gpuwt'g'c'uweguihwi'r tqlgv<

E' F'guki p'yj g'qxgtnc { 'cu'guugp'v'kcm' 'c'pgy 'eqpetgvg'
r cxgo gpv'q'p'c'uncdng'dcug'rc {gt 'y j g'gzknkpi 'eqpetgvg'
r cxgo gpv'0

E' Eqpuk'gt'hwn'f gr yj 'tgr cktu'qpn' 'y j gtg'unt'wewtcn'
lp'v'gi t'k'v' 'pggf u'v'q'dg't'guv'q'gf 'v'q'r tqxkf g'wp'k'htqto "
uwr r qtv't'v'q'grko kpcvg't'qen'kpi 'qt'o qxkpi 'un'cdu0

E' Cp'cur j cn'ugr ctcv'kp'rc {gt 'y kj 'c'o lp'lo wo 'y j kempguu'
qh'3'lp0qt'c'i gqvg'v'kg'hcdtke'ugr ctcv'kp'rc {gt 'ku'
tgs v'kt'gf 'v'q'kuq'rc'v'g'yj g'qxgtnc { 'htqo 'y j g'gzknkpi "
eqpetgvg'cpf 'r t'gxgpv't'gh'ge'v'xg'etcentpi 0

E' Rtq'xkf g'c'unt'kr kpi /t'guk'v'p'v'f'gpug/i tcf gf 'cur j cn'
rc {gt 'qt'c'f't'cl'p'cdng'cur j cn'ugr ctcv'kp'rc {gt 'v'q'r t'gxgp'
ugr ctcv'kp'rc {gt 'unt'kr kpi 0Hqt'c'i gqvg'v'kg'hcdtke"
ugr ctcv'kp'rc {gt.'f'c {n'j v'yj g'hcdtke'v'q'yj g'hqt'gun'r g'qt"
v'q'c'f't'cl'pci g'eqpf v'k'0

E' F'wt'kpi 'y j g'g'x'cn'v'k'q'qh'yj g'gzknkpi 'eqpetgvg'
r cxgo gpv'eqpuk'gt'lqkpw'o knkpi li t'lpf kpi 'H'c"
i gqvg'v'kg'hcdtke'ugr ctcv'kp'rc {gt 'y knidg'wugf 'cpf "
h'wn'kpi 'gzeggf u' "lp0qt'h'c'p'cur j cn'ugr ctcv'kp'rc {gt "
y knidg'wugf 'cpf 'h'wn'kpi 'gzeggf u' "lp0

E' F'vgto kpg'y j g'yj gt'yj g'gzknkpi 'eqpetgvg'r cxgo gpv'
r tqxkf gu'wp'k'htqto "cpf 'eqp'v'p'v'qwu'uwr r qtv0

E' Ucy ew'lqkpw'lp'yj kppgt'wpdqp'gf 'qxgtnc { u'cu'uqpp'cu'
r quikdng.'dgecwug'yj g'ucy kpi 'y j kpf qy 'o c { 'dg'hj qtvgt "
y j cp'k'v'r k'ecm' 'ku'hqt'hwn'f gr yj 'un'cdu0Vj kppgt "
wpdqp'gf 'qxgtnc { u'j cxg'c'v'r k'ecm' 'h'j qtvgt'ucy kpi "
y j kpf qy 'dgecwug'yj g'unt'he'g'ctgc/q/xqmw g't'cv'k'ku'
n'ti gt'yj cp'yj cv'qh'eqp'x'gp'v'k'p'cn'hn'f gr yj 'eqpetgvg'
r cxgo gpv.'t'guwn'kpi 'lp'o qtg't'cr k'f'eqq'kpi 'cpf "
f t { kpi 'eqp't'cev'k'p'0

É' Uj qtvgt'iqpw'ur cekpi 'kp'cp'wpdqpf gf 'qxtgr{ " eqo r ctgf "vq'c'hwmf gr y' r cxgo gpv'y knltgf weg'ewtkpi " cpf 'y ctr kpi 'utguugu0

É' O cvej kpi 'vj g'tcpuxgtug'iqpw'lp'vj g'gzknkpi 'r cxgo gpv' ku'pqv'pgeguuct { 'hqt'wpdqpf gf 'qxtgr{ u'gzeqr v'ht 'vj g' gzknkpi 'r cxgo gpv'ku'g'zr cpukqp'qt'kuqrcvqp'iqpw'0Hqt" wpdqpf gf 'qxtgr{ u' 'vj g'g'zr cpukqp'cpf 'kuqrcvqp'iqpw' lp'vj g'gzknkpi 'r cxgo gpv'uj qwf 'dg'tgr tqf wegf 'lp'vj g' qxtgr{ . 'y kj 'vj g'qxtgr{ au'iqpw'iqecvqp'u'o cvej gf "vq" vj qug'qh'vj g'wpf gtn'kpi 'r cxgo gpv0

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Qpg'qh'vj g'htuv'ugr u'lp'f gvgto kpkpi 'y j gvj gt "c" r cxgo gpv'ku'c'i qqf 'ecpf kf cvg'ht "c'E QE óW'qxtgr{ 'ku" vq'gxcnvcg'vj g'eqpf kkp'qh'vj g'gzknkpi 'r cxgo gpv'cpf " ku'r gthqto cpeg'kuwgu'cpf 'vj g't'ecwugu. 'cu'f guetldgf 'lp" Ej cr vgt'40Vj ku'kphqto cvkp'cnuq'lpf lecvgu'vj g'gzv'p' qh'vj g'ur qv'tgr cktu'tgs wktgf "dghq'g'cp'qxtgr{ "ecp'dg" eqpwtwevgf 0V { r lecm{ . 'o kpo cñtgr cktu'ctg'pggf gf 'hqt" wpdqpf gf 'eqpetgvg'qxtgr{ u' 'o cnkpi 'vj go "c'equv'gh'ecvkg" uqnvkqp0Vy q'ng{ 'ej ctcevgtkku'qh'vj g'gzknkpi 'r cxgo gpv' uj qwf 'dg'pqvgf 'f wtkpi 'vj g'r cxgo gpv'gxcnvcvqp' wplkqto k{ 'qh'ur r qtv'cpf 'r t'gugpeg'qh'hwkpi 0

Wplkqto o k{ 'qh'ur r qt v0Hqt 'cp'wpdqpf gf 'qxtgr{ . 'k' ku'pgeguuct { 'vq'f gvgto kpg'y j gvj gt 'vj g'gzknkpi 'eqpetgvg' r cxgo gpv'cpf 'ku'uwddcug'ecp'r tqxkf g'tgcuqpcdn' 'wplkqto " ur r qtv'cpf 'y j gvj gt 'cp{ 'eqttgecvkg'cevkpu'ctg'pggf gf 0' Vj g'gxcnvcvqp'qh'ur r qtv'eqpf kkp'u'cnuq'f gvgto kpgu'vj g' gzknkpi 'r cxgo gpv'ur'utwewtcn'eqp'kdwkqp'cu'c'uncdrg" ur r qtv'rc { gt 'y kj qw'uki p'khecpv'f'khtg'pvcn'io qxgo gpv" f tckpci g'kuwgu. 'gtqukqp. 'qt'uwdi tcf g'uncd'k'kuwgu0' F khtg'pvcn'io qxgo gpv'cetquu'vj g'tcpuxgtug'iqpw'qh' vj g'gzknkpi 'eqpetgvg'r cxgo gpv'o wuv'dg'gxcnvcvqf "vq" f gvgto kpg'vj cv'k'y kn'pqv'lgwu'lp'f khtg'pvcn'io qxgo gpv' qh'vj g'eqpetgvg'qxtgr{ "cpf 'hgcf "vq'qxtgr{ "etcen'kpi 0

Rt guppeg'qh'hwkpi 0Rcxgo gpv'hwkpi 'ecp'wuwcm{ " dg'cwtdwgf "vq'c'eqo d'kpcvqp'qh'tgf wegf 'hqc'f 'tcpuhtg" dgwy ggp'ur'cu'cpf 't'gf wegf 'uwdi tcf g'uwddcug'ur r qtv'0 Y j gp'vj g'uwdi tcf g'uwddcug'ku'uncdrg. 'vj g'kpetgcu'lp" mcf /ectt { kpi 'ecr cek{ 'r tqxkf gf 'd{ 'cp'wpdqpf gf 'qxtgr{ " j cu'r tqxgp'vq'dg'cf gs wcvq'v' r t'gxp'v'iqpw'hwkpi 0Vj g" o czko wo 'hwkpi 'fgr vj 'ku'tgeqo o gpf gf "vq'dg'pq'o qtg" vj cp" "lp0y j gp'c'3'lp0'vj lenic'ur j cn'ugr ctevkp'rc { gt 'ku" wugf 'cpf 'pq'o qtg'vj cp" "lp0y j gp'c'i gqvg'v'ugr ctevkp' rc { gt 'ku'wugf 0Vj g'tgeqo o gpf gf 'rko ku'ctg'kp'v'p'gf gf "vq" r t'gxp'v'ng { kpi 'qh'hwngf 'iqpw'vj tqwi j "vj g'ugr ctevkp" rc { gt 'cpf 'kp'v'vj g'eqpetgvg'qxtgr{ 0Y j gp'vj g'ug'f gr vj u" ctg'gzeggf gf. 'eqttgecvkg'o gcuwtgu'uwj 'cu'uwthceg'i t'lpf kpi " qt. 'lp'vj g'ecug'qh'cp'cur j cn'ugr ctevkp'rc { gt. 'kpetgculpi " vj g'ugr ctevkp'rc { gt 'vj kempgu'ctg'pgeguuct { 0

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Wpdqpf gf 'qxtgr{ u'ctg'f guki p'gf 'uko k'ctn{ 'vq'pgy " eqpetgvg'r cxgo gpv'lp'vj cv'vj g'vj kempgu'cpf 'unk'p'guu" qh'vj g'ur r qtv'rc { gt u'ku'eqpuk'gtgf 'cpf 'c'ugr ctevkp" eqpf kkp' "wpdqpf gf 'urk' +dgwy ggp'vj g'qxtgr{ "cpf 'vj g" gzknkpi 'r cxgo gpv'ku'cuwo gf 0Et'k'kecn'f guki p'hwvqtu" vj cv'eqpvtq'iqxtgr{ 'r gthqto cpeg'ctg'wug'qh'vj g'gzknkpi " r cxgo gpv'cu'c'dcug. 'qxtgr{ "vj kempgu. 'wug'qh'HT E. " wug'qh'c'ugr ctevkp'rc { gt. 'ugr ctevkp'rc { gt 'o cvgtkcn" eqpetgvg'o k'zwg'f guki p. 'iqpw'f guki p. 'iqpw'cevkcvqp. " cpf 'f tckpci g'0T ght'vq' Crr gpf lz 'C' hqt 'cf f kkp'pci' kphqto cvkp'qp'vj g'f guki p'f g'v'ku'pqvgf 'lp'vj ku'ugevkp0

Wig'qh'vj g'Gzknkpi 'Rcxgo gpv'cu'c' **Dcug0k'cp** " wpdqpf gf 'qxtgr{ 'f guki p. 'vj g'gzknkpi 'o w'krc { gt gf " r cxgo gpv'ku'v'gcvqf 'cu'c'ur r qtv'uf vgo 'vj cv'ecp'dg" ej ctcevgtk'gf 'cu'c'ukpi ng'rc { gt 'qh'eqo r qukv'o cvgtkcn'0 Vj g'utwewtcn'f guki p'cuwo gu'cp'wpdqpf gf 'eqpf kkp" dgwy ggp'vj g'pgy "qxtgr{ "cpf 'gzknkpi 'eqpetgvg'uwthceg0' Vj g'gzknkpi 'eqpetgvg'uj qwf 'dg'gxcnvcvqf 'hqt'ku'cd'k'k' " vq'r tqxkf g'c'uncdrg'uwddcug'hqt'vj g'wpdqpf gf 'qxtgr{ " cpf 'vq't'gukuv'hwgt'f gvgtk'q'cvkp0

Tgi ctf nguu'qh'y j gvj gt 'vj g'eqpetgvg'r cxgo gpv'y kn' dg'o kn'gf "qt'tgo c'kp'ku'gzknkpi 'eqpf kkp. 'vj g" o kpo wo "vj kempgu'qh'eqpetgvg'vq'dg'qxtgr'k'f 'o wuv" dg'cf gs wcvq'v' r tqxkf g'c'uncdrg'y qtnkpi 'r'nv'qto " ecr c'ndrg'qh'y kj ucpf kpi 'cn'ic'p'v'ekr cvqf 'eqpwtwevkp" v'ch'ke "ur gek'kecm{ . 'twenu'iqcf gf 'y kj 'eqpetgvg'0Vj ku'ku" v'f r lecm{ 'c'o kpo wo 'qh'6'lp0'qh'eqpetgvg0

Qxtgr{ 'Vj kempgu0Vj g'tgs wktgf 'qxtgr{ 'vj kempgu'ku" ch'gcvqf 'd{ 'vj g'f guktgf 'hqc'f /ectt { kpi 'ecr cek{ 'cpf 'ugt'xleg" nk'g'qh'vj g'qxtgr{ . 'cu'y gni'cu'd{ 'vj g'eqpf kkp'qh'vj g" gzknkpi 'eqpetgvg'r cxgo gpv0

Wig'qh'hdgt/Tg'p'ht'egf 'Eqpetgvg0HTE 'v'gej p'q'ni { 'hqt" eqpetgvg'r cxgo gpv'y cu'lp'v'qf wegf 'ugxgtcn'f gecf gu'ci q. " cpf 'lp'vj g'ur'v'37" { gctv'vj g'wug'qh'u'p'vj g'v'c'o cetq'hdgt" t'g'p'ht'ego gpv'lp'eqpetgvg'qxtgr{ u'j cu'lp'etgcu'f 0C " uwf { "qh'eqpetgvg'qxtgr{ u'lp'k'kp'ku'v'gr qtv'gf 'vj cv' HTE'qxtgr{ u'r gthqto gf 'dgwgt'vj cp'uko k'ct'v'rc'lp" eqpetgvg'qxtgr{ u' "f g'engn'icpf 'Y k'gtp'cpm'423: +0Vj g" npqy p'd'g'p'gh'ku'qh'HT E' hqt'eqpetgvg'qxtgr{ u'lp'ew'f g" k'petgculpi 'hqc'f /ectt { kpi 'ecr cek{ . 'f getgculpi 'etcen' y k'f vj u' o c'kp'v'k'p'kpi 'hqc'f 't'cpuhtg'g'h'le'gpe { 'cetquu'iqpw" qt'etcenu'cpf 'gzv'p'f kpi 'r cxgo gpv'ugt'xleg'rk'g'vj tqwi j " t'gf wegf 'etcen'f gvgtk'q'cvkp00 cetq'hdgtu'j cxg'tgr'nc'egf " v'g'dctu'cetquu'eqp'v'cevkp'iqpw'lp'vj k'p'p'gt'qxtgr{ u' "6" vq'7'lp0'vj k'ew'y kj 'uj qtv'r cp'gn'uk' gu. 'vj qwi j 'pqv'cetquu" eqpwtwevkp'iqpw'0D'gecvug'HT E'j cu'd'ggp'uj qy p'vq" f getgcu'g'etcen'f gvgtk'q'cvkp'cpf 'vj wu'lo r tqxg'ng'pi /vgo " f wtd'k'k'k' { 'cv'c't'gcuqpcdn'equv. 'k'ku'tgeqo o gpf gf 'vj cv

6"vq'8'lp0vj lenlwpdqpf gf "qxtnc{ u'wug'HE0Hqt'o qtg"
lphqto cwkq'cdqmw'HE'lp'eqpetgvg'qxtnc{ u.'ugg"Hkdt/
Tgkplqtegf'Eqpetgvg'qjt'Rcxgo gpv'Oxgtrc/u'Vej pkecn'
Oxgtxkgy."*Tqgungt'gv'cn0423; +0

Wug'qht'Ugr ctevkqp'Nc{ gt 0Kp'wpdqpf gf "qxtnc{ u."
c'ugr ctevkqp'nc{ gt'ku'r ncegf "dgy ggp'vj g'gzknkpi "
rcxgo gpv'cpf "vj g'qxtnc{ "qj' gr "grko kpcvg'tghgevkxg"
etcenkpi "cpf "ku'qpg'qh'vj g'r tko ct{ "hcevtu'lp'hnwgepki "
vj g'r gthqto cpeg'qh'EQE0W'qxtnc{ u'0Vj g'ugr ctevkqp"
nc{ gt'r tqxkf gu'c'uj gct'r ncp'vj cvj gr u'r txxgpv'gzknkpi "
rcxgo gpv'etcenu'htqo "tghgevkpi "lpv'vj g'pgy "qxtnc{ 0

Ugr ctevkqp'Nc{ gt 'O cvgt kn0Vj g'wug'qh'papy qxgp"
i gqvgz'kng'cu'c'ugr ctevkqp'nc{ gt'j' cu'kpetgcugf "uwxucpvcnmf "
qxgt'vj g'rcu'32"({ gctu0Vj g'qy gt "eqo o qpn{ "wugf "
ugr ctevkqp'nc{ gt'ku'c'3'lp0f tclpcedng'J O C.'y j lej "
rtqxf gu'cf gs wcvge'eqxgtci g'qxgt'ktgi wrt'kkgu'lp'vj g"
gzknkpi "rcxgo gpv'0Kp'cp'ghqt'v'q'tgf weg'cur j cn'
eqpuqrkf cwkqp'cpf "r qtg'r tguwgt'lp'J O C'ugr ctevkqp"
nc{ gtu.'v'f r lecn'cur j cn'o kzwatgu'ctg'o qf kkgf "lp'uqo g"
uvcgu'v'q'o cng'vj g'cur j cn'o qtg'r qtqwu0Vj g'O lppguqvc"
F gr ctvo gpv'qh'Vtcur qt cwkqp'*O pF QV+'j cu'f guki pgf "
cp'cur j cn'o kzwatg'*tghgtgf "v'cu'c'r gto gcedng'cur j cn/'
uocdkkf gf "utguu'tgrgh'eqwtug'"]RCUUTE +y kj "c"
o qf kkgf "ci i tgi cvg'i tcf cwkqp'v'cf f tguu'utlr r lpi "cpf "
eqpuqrkf cwkqp'eqpetgtpu'lp'cur j cn'ugr ctevkqp'nc{ gtu0Vj g"
O lej ki cp'F gr ctvo gpv'qh'Vtcur qt cwkqp'*O F QV+"
j cu'cnq'cf qr vgf "c'f gpug/i tcf gf "cur j cn'o kzwatg'ht"
ugr ctevkqp'nc{ gtu0Hqt'o qtg'lp'htto cwkqp'qp'vj g'o cvgtkcnu"
wugf "lp'ugr ctevkqp'nc{ gtu.'ugg'Ej cr vgt'80

Eqpetgvg'O kzwatg'F guki p0Eqpxgpvkpcn'eqpetgvg"
rcxkpi "o kzwatgu'ctg'i gpgtcnmf "wugf "hqt'wpdqpf gf "
qxtnc{ u.'y kj "vj g'gzegr vkqp'qh'o kzwatgu'vj cv'
lpeqtr qtcvg'o cetqhdgtu'qt'o kzwatgu'f guki pgf "vq"
ceeao o qf cvg'cp'ceegrtcvgf "eqpustwvkqp'y lpf qy 0'
Y j gp'ceegrtcvgf "qr gpkpi "vq'tchhe'ku'f guktgf. "
eqpxgpvkpcn'eqpetgvg'o kzwatgu'uj qwf "dg'r tqr qt vkp'gf "
hqt'tcr kf "utgpi vj "f clp0Hqt'o qtg'lp'htto cwkqp'qp"
eqpetgvg'o cvgtkcnu'cpf "r gthqto cpeg/gpi lpggtgf "o kzwatg"
r tqr gt vgu.'ugg'Ej cr vgt'80

Lqlpv'F guki p0Vj g'hqcf "tcpuht'f guki p'f gvcku'ht"
wpdqpf gf "qxtnc{ u'ctg'uko kct'v'q'ug'ht'pgy "eqpetgvg"
rcxgo gpwu.'y kj "vj g'wpf gtucpf lpi "vj cv'wpdqpf gf "
qxtnc{ u'r tqxkf g'hqy gt "lqlpv'f ghgevkpu'dgecwug'qh"
vj g'utqpi "uwr r qtv'r tqxkf gf "d{ "vj g'gzknkpi "eqpetgvg"
rcxgo gpv'0Kp'qxtnc{ u'9'lp0vj lenlqt'o qtg.'f qy gr'dctu'ctg"
wuwcnf "y ctcpvgf "v'ceeao o qf cvg'j gcx{ "tvenl'tchhe0'
Kpuwcn'vkqp'qh'f qy gnu'lp'vj lppgt'EQE0W'qxtnc{ u'ecp"
dg'f khhewn'dgecwug'qh'vj g'o lplo cn'eqpetgvg'eqxgt'cpf "
vj g'r quukdkkf "vj cv'kpcf gs wcvgnf "cpej qtgf "f qy gr'dcungw"

o c{ "o qxg'f wtkpi "rcxkpi "qr gtcvkpu0Vj g'ukf g.'nc{ qww."
cpf "eqcwkpi "qh'vj g'f qy gr'dctu'uj qwf "dg'ugrevgf "hqt'vj g"
ur gekhle'r tqlgevu'hecvkqp'cpf "tchhe'rgxgnu0

Vj g'f guki p'qh'vkg'dct'u{ ugo u'ht'wpdqpf gf "qxtnc{ u"
uj qwf "hqmjy "vj g'eqpxgpvkpcn'wug'ht'eqpetgvg"
rcxgo gpwu'7'lp0vj lenlqt'o qtg0O cetqhdgtu'j cxg"
tgr ncegf "vkg'dctu'cetquu'eqpustwvkqp'lqlpv'lp'vj lppgt"
wpdqpf gf "qxtnc{ u'*6'vq'7'lp0vj lenl'y kj "uj qtvr'cpgrn'
ukf gu."dw'pqv'cetquu'eqpustwvkqp'lqlpv0

Lqlpv'Cevkxcvkqp0Kp'vj kp'eqpetgvg'qxtnc{ u'*6'vq'8"
lp0vj lenl:'hgrf "qdugtxcvkpu'j cxg'uj qy p'vj cv'uqo g"
eqpustwvkqp'lqlpv'o c{ "pqv'lp'kckmf "cevkvxvg'cpf. "lp"
uqo g'ecugu."f q'pqv'cevkvxvg'wpv'k'o cp{ "{ gctu'chgt "
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o c{ "hgrf "vq'vpy cpvgf "f qo kpcpv'lqlpv'u'kq0'lqlpv'vj cv'
ctg'o vej "y kf gt'vj cp'vj g'utwtqwpf lpi "lqlpvu: "kpetgcugf "
lqlpv'o clpvgpcpeg'cpf "tgr ck'equu.'cpf "pgi cvkxg"
ko r ceu'qp'eqpetgvg'qxtnc{ "r gthqto cpeg0Hqt'o qtg"
lphqto cwkqp'qp'lqlpv'ur celpi "utcvgi kgu'v'q'cej kxxg'lqlpv'
cevkvxvkqp."ugg"Orvko k'gf'Lqlpv'Urcelki'qjt'Eqpetgvg'
Oxgtrc(u'y kj'cpf'y kj qw'Ut wewt cu'Hkdt'Tgkplqtego gpv'
*1 tquu'gv'cn0423; +0

F tclpci g0F wtkpi "vj g'gxcnvcwkqp'cpf "f guki p'urci gu'qht'c"
EQE0W'qxtnc{. "vj g'gzknkpi "uwdi tcf g'f tclpci g'uj qwf "
dg'gxcnvcvgf 0K'vj g'eqpetgvg'qxtnc{ "ku'gzr qugf "vq'j ki j "
co dlepv'go r gtcwtgu'cpf "c'uwf f gp'lpetgcug'lp'o qluwtg"
rgxgnu'*htqo. "hqt'gzco r ng.'c's wlenitclp'uj qy gt+.'vj g"
rcxgo gpv'o c{ "gzr gtlgpeg'uwf f gp'gzr cpukqp'cpf "r quukdng"
dwemkpi "cv'vj g'lqlpvu0F wtkpi "htgg/ g'vj cy "eqpf kklpu'lp"
y gv'y gcvj gt'ctgcu."vj g'gpv'crr g'f "o qluwtg'ecp'cnq'hgcf "
vq'f wcdkklkf "r tqdngo u'lp'vj g'ci i tgi cvg0Qxgtcm'gzegukxg"
o qluwtg'ecp'eqo r tqo kug'vj g'eqpetgvg'r cxgo gpwu"
utwewtcln'kpgi tkf. "tkf gcdklkf. "cpf "hqc/ectt{ lpi "
ecr cels{ 0C'f f kklpccmf. "gzegukxg'uwdi tcf g'o qluwtg'ecp"
uq'hnpg'vj g'uwdi tcf g'cpf "tguwn'lp'f kktgtpv'kcn'o qxgo gpv"
qh'vj g'eqpetgvg'r cxgo gpv.'hgcf lpi "vq'f kntguu'etcenkpi "lp"
vj g'wpdqpf gf "qxtnc{ 0U'gr u'uj qwf "dg'v'cngp'vq'gpuwtg"
cf gs wcvge'f tclpci g.'uwej "cu'tgtqhkwpki "gf i g'f tclpu.'wukpi "
htgg/f tclpki "uj qwf gt'o cvgtkcnu.'cpf "f c'iki j vkpi "vj g"
ugr ctevkqp'nc{ gt'qp'vj g'uj qwf gt0Y j gp'wpf gtf tclpu'ctg"
r tgu'p'vj g'f "uj qwf "dg'ergcp'gf "cpf "o clp'clp'gf 0

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Ko r qv'cpv'eqpustwvkqp'grgo gpwu'ht'wpdqpf gf "qxtnc{ u"
qp'eqpetgvg'r cxgo gpwu'lp'cnw'f r tg/qxtnc{ "tgr cktu."
ugr ctevkqp'nc{ gt'r ncego gpv'eqpetgvg'r ncego gpv.'ewlpi. "
lqlpv'ucy lpi. "lqlpv'ugcrkpi. "cpf "qr gpkpi "vq'tchhe0U'gg"
Ej cr vgt. "hqt'o qtg'f gvcku'qp'vj g'eqpustwvkqp'cpf "
o clpvgpcpeg'vcumu'pqvgf "lp'vj ku'ugevkp0

LqlpvHknp 0LqlpvHknp "qh'v kppgt "6"q'8'lp0" wpdqpf gf "qxtgtr{ u'ku'gpeqwtci gf "lp'y gv/y gc'v gt "ucvgu" vj'j gr "rtgxgpv'gctn/ ci g'dwemkpi 0

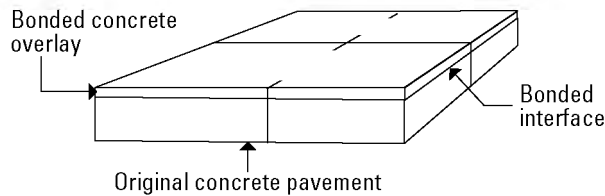
Qrgplpi " vq" Vtchle0' Tgeqo o gpf cvkpu" qp" f gvgto klpki " vj g" utgpi vj " tgs wktgf " hqt" qr gplpi " vq" vtchle" ecp" dg" hqwpf " lp' Ej cr vgt'80

A UjbhYbUbW'UbX'F YdUJfg

Tgeqo o gpf gf "tgr ckt"qr vku'p'ht "vpdqpf gf "qxtgtr{ u'ctg" vj g'uco g'cu'v qug'ht "ucpf ctf "eqpetgvg'r cxgo gpw0

7 cbWYh'cb'7 cbWYh'Ë6 cbXYXÁ Cj Yf`Ung

Dgecwug'vj g'wug'qh'E QEóD"qxtgtr{ u'ku'tgutlevgf "vq" r cxgo gpv'lp'i qqf "eqpf kklp. "vj ku'v{ r g'qh'qxtgtr{ 'ku'qpn{ " eqpukf gt gf "lp'ur gekn'ektewo ucpegu'cpf "ku'pqv'pgctn{ " cu'eqo o qp'cu'qvj gt "v{ r gu'qh'eqpetgvg"qxtgtr{ u0Y j krg" tctg'cpf "vpls wg. "dqpf gf "eqpetgvg"qxtgtr{ u'qh'eqpetgvg" r cxgo gpw'ctg'pgxgtvj gnguu'xkcdng0Hki wtg'706'uj qy u'c" uej go c'le"xkgy "qh'c'E QEóD"qxtgtr{ 0



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EQEóD"qxtgtr{ u'ctg'tgrv'xgn{ "vj lp'v{ r lecm{ "4"q'8'lp0" eqpetgvg'r{ gtu'dqpf gf "vq'cp'gzknpki "eqpetgvg'r cxgo gpv' uwtcheg. "y j lej "o wuv'dg'lp'i qqf "eqpf kklp"qt'dg'cdng"vq" dg'equv'ghge'v'xgn{ "ko r tqxgf "vq'i qqf "eqpf kklp. "vq'etgcvg" c'r cxkpi "rc{ gt "vj cv'cew'o qpqnkj lecm{ "Hki wtg'706+0' Vj g'f gxgrq o gpv'qh'c'dqpf "dgy ggp'vj g'vy q'rc{ gtu'ku" f kgeu{ "eqpukf gt gf "lp'vj g'qxtgtr{ "vj lenpguu'f guki p'cpf " ku'vj gt ghtg. "guugpv'kcn'vq'vj g'r gthqto cpeg'qh'vj g'u{ ugo 0

Dqpf gf "qxtgtr{ u'j cxg'dggp"dwkn'cpf "wugf "qp'gxgt{ "v{ r g" qh'j ki j y c{ "u{ ugo . "Itqo "Kpvtucv'gu'vq'iqecn'tqcf u'ugg" vj g'CERCau' PcvkqpcnEqpetgvg'Qxtgtr{ "Gzr mjtgt"JCERC" 4243_+0Y j gp'f guki pgf "cpf "eqputwvgf "eqttgeu{ . " vj ku'qxtgtr{ "v{ r g'r tqxkf gu'c"o gcpu'qh'ko r tqxkpi "vj g" utvewwcn'ecr cek{ "qh'cp'gzknpki "eqpetgvg'r cxgo gpv. " r ct'lewn'ctn{ "y j gp'lpetgcugf "vtchle"ku'cp'v'ekr cvgf 0Dqpf gf " qxtgtr{ u'ecp'cnuq'eqxgt "uwtcheg"t ghgeu'uwej "cu'r rcu'le" uj tlpn'ci g'etcemu'cpf "ko r tqxg'ej ctcevgtku'leu'uwej "cu" h'le'v'qp. "pqkug. "cpf "uo qqv'pguu0

Dgecwug'E QEóD"qxtgtr{ u'ctg'eqpukf gt gf "c'ur geknm{ " kgo . "cf f kklqpcn'f gvckn'cpf "ecug'uwf kgu'ctg'r t gupv'gf "lp" Cr r gpf kz'E0

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A Uñf]Ug'UbX'A]l hi fYg

7 cbWYñ'A Uñf]U'7 cbgh]hi Ybñg'	((
7 Ya Ybñ]ñci g'A Uñf]Ug'	((
5 [[fY[Uñg'	((
K Uñf'	((
5 Xa]l hi fYg'	((
DYfZ:fa UbW!9b[]bYñfYX'A]l hi fY'DfcdYñ]Yg'Z:f'Cj Yf'Ung'	()
GñfYb[ð '	()
K cf_UV]]lmi	()
G\ f]b_U[Y'	()
7 c`X'K YUH Yf'FYg]ghUbW'	()
K Uñf!ñc!7 Ya Ybñ]ñci g'A Uñf]Ug'F Uñc'	(*
CdYb]b['7 f]ñf]U'Z:f'7 cbWYñ'Cj Yf'Ung'	(*
CH Yf'Cj Yf'UmA Uñf]Ug'	(+
A UWcZVYfg'Z:f'7 cbWYñ'Cj Yf'Ung'	(+
GYdUfUñcb'@Uñf')\$
8 ck Y'6 Ufg'UbX'H]Y'6 Ufg')%
7 i f]b['7 ca dci bX')%
>c]bñ:]`Yfg'UbX'GYUUbñg')%

Cu'y kj "eqpxgpxkpcr'eqpetgvg'r c'xgo gpvu "cp'gh'gex'g"
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eqpetgvg'qxgtr { 0Gcej "eqo r qpgpv'qh'y g'eqpetgvg"
o kzwtg'uj qwr'dg'ectghw'ugr'egvf "uq'y cv'y g"
tguw'kpi "eqo r qukg'o kzwtg'y knr tqxf g'eqpukvgpv"
ht'gij "r'qr gt'v'g'ht'eqpuxw'kq. "f'gxgtr "ur g'ek'kf"
j ctf gpgf "r'qr gt'v'g'cpf "t'guk'gpxk'qpo gpcr'h'c'v'q'u"
cpf "f'gr'gvt'k'v'ej go k'c'n'g'c'v'k'p'u'q'x'g't'ku'g't'x'g'k'k'g'
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Ej cr'v't'9'qh'y g'KO ER'o c'pwr'o

Ceegngtcvqtu"ctg"uqo gvk gu'cf f gf "f wtkpi "eqqny gcvj gt"
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vko g'ku'cxckrdng"ht"r nckpi "cpf "hpkuj kpi 0Hqt"o qtg"
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Ugvtgctf kpi "cf o kzwatgu"ctg"qecukqpcn{ "wkrk{ gf "f wtkpi "
j qv'y gcvj gt"vq"umy "vj g'tcvg"qh{j { ftcvkp0Vj g{ "uj qwrf "
dg"vugf "y kj "ecwkwq"ht"vj kpi"qxgtrc{u."y j kej "eqwrf "
f gxgtrc "uj tlpnci g"cpf "tcf qo "etcenu" f wtkpi "y cto "cpf "
y kpf { "y gcvj gt"y j gp"ewtkpi "ku" f gtrc{ gf 0

DYfZfa UbW!9b[JbYYfYX'A]I h fYÁ DfcdYfhYg'Zf'Cj Yf'Ung

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vj g'r tko ct { "hupi /vgt0 "qdlgevwg"qh"vj g'o kzwatg" f guki p"
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uj tlpnci g."cpf "hmkf "tcepu qt0Vj g"hw"RG0 "r tqr gt vku"
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GhYb[h

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cpf "o qkuwtg"uj tlpnci g."cpf "f gdpkf kpi "qh"vj g"qxgtrc{ "
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Kcf_UV']hm

Vj g'y qtnedkks{ "qh"c"eqpetgvg"qxgtrc{ "o kzwatg"uj qwrf "
dg"uko krt "vq"vj cv'qh"c"eqpxgpvkpcn'r eqpetgvg"r cxlpi "
o kzwatg0Y qtnedkks{ "ku"lphnwpegf "d{ "ci i tgi cvg"
i tcf cvkqp."o kzwatg"r tqr qt vklpki . "cpf "r nceg gpv"
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vq"gpwutg"cf gs wcvg"hdgt "f kur gtukqp"cpf "vq"heekckcvg"
hpkuj kpi "cpf "vgzwatki 0Y cvgt/tgf wtkpi "cf o kzwatgu"ecp"
r tqxkf g"cp"lpetgcug"lp"vj g'y qtnedkks{ "qh"vj g'o kzwatg"
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vuvj cu'dggp"j kvqtkcm{ "vugf "vq"cuuguu"y qtnedkks{ ."
vj g'xkdtcvkpi "Mgm{ "dcm"XMMgm{ "+"cpf "Dqz"Vguu"ctg"
pgy gt"vgnkpi "r tqegf wtu"vj cv'lpf kecvg"j qy "c"o kzwatg"
tgur qp f u"vq"xkdtcvkqp0Uqo g"ci gpekgu"j cxg"hwpf "vj gug"
y qtnedkks{ "vguu"vq"dg"dgpgheklcn" f wtkpi "vj g'o kzwatg"
f guki p"r j cug"dw"pqv'cr r tqr tlcvg"ht"ceeg wcepg"vgnkpi "
f wtkpi "r cxlpi 0O qtg"lphqto cvkqp"qp"RG0 "vgnkpi "ht"
y qtnedkks{ "ecp"dg"hwpf "cv"j wu'cler vgej cpgvgt0qti "
r gthqto cpeg/gpi kpggtgf /o kzwatgu/r go 0

G fjb_U Y

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uj tlpnci g"vj cp"eqpxgpvkpcn'r cxgo gpw'dgecwug"qh"vj g"
j ki j gt"uwthceg/vq/xqno g'tcvk"cpf "vj g'uqo gvk gu"j ki j "
ngxgnqh'dqpf "qt"htcvkqp"cv'vj g'urcd/uwr r qtv'lpvgtthceg0'
Eqpetgvg"uj tlpnci g'ecp"ngcf "vq" f gdpkf kpi "cv'vj g"
urcd/uwr r qtv'lpvgtthceg."cp"lpetgcug"lp"vj g'o ci pkwf g"
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vj g'ego gpvklquw"o cvgtkcn"eqpvgpv"cpf "cf qr vki "cp"
qr vko k{ gf "ci i tgi cvg" f tcf cvkqp0Uweeguuhw'o kzwatg"ecp"dg"
cej lxxg" f y kj "c"r cug"xqno g'qh"47" "qt"rgu0Hqt"o qtg"
lphqto cvkqp"qp"cej lxxkpi "cp"qr vko cn'r cug"eqpvgpv."tghgt"
vq" Ej cr vgt"9"qh"vj g"IO ER"o cpgvclhqt" c" f kuewukqp"qh"
vj g"xqkf "tcvk"o gjv qf "cpf "cdunwug"xqno g'tcvk0

7 c`X`K YUA Yf`F YgJghUbW

Rtqr gtrn{ "f guki pgf "cpf "eqpwtwevgf "eqpetgvg"qxgtrc{ u"vj cv"
j cxg"cf gs wcvg"ck"eqpvgpv"cpf "r tqr gt"ck" f tkwkdwkqp."
ny "r gto gcdkks{ ."cpf "vj g'tgeqo o gpf gf "tapi g"qh"
UEO u"ecp"o kpo k{ g'vj g'tkumqh"lqkv'ur cnkpi "lp"eqrf "
y gcvj gt"gpvktqpo gpw0Uqo g'ci gpekgu"j cxg"vugf "vj g"
Uwr gt"Ck"O gvgt "UCO "+"vq" f gvgt0 kpg"vj g'r tqr gt"ck"
xqkf "f tkwkdwkqp"d{ "eqttgrcvkpi "vj g"UCO "pwo dgt"y kj "
vj g'ck"xqkf "ur cekpi "hcevt0Vj g"Co gtlecp"Eqpetgvg"
Kpukwug"CEK f wkf g"vq" f wcdng"Eqpetgvg"CEK
Eqo o kvvg"423"4238+"uwi i guu"vj cv'c"ur cekpi "hcevt"qh"
2022: "lp0cpf "c"ur gekhe"uwthceg"qh"822"lp04 lp05"dg"vugf "
vq" f gvgt0 kpg"y j gjv gt" c"eqpetgvg"ku"htquv"uwuegr vdnr0'
lphqto cvkqp"qp"RG0 "vgnkpi "o gjv qf u"ht"eqrf "y gcvj gt"
tguvcepeg"ecp"dg"hwpf "cv"j wu'cler vgej cpgvgt0qti "
r gthqto cpeg/gpi kpggtgf /o kzwatgu/r go 0

Vj g"wg"qh"UEO u"lp"eqpetgvg"o kzwtgu"ecp"tgf weg"y j g" tkun"qh"lqkpv"fgvtkqtcvkqp"cpf"ur cnkpi "ecwugf" d{"ecrekwo " qz{ej ntkf gu"vj cvhqt o "y j gp"egt vclp" fglekpi "ucnu"ctg" err rkgf 0Vj g"tgf wevkqp"lp"ecrekwo "j {ftqz kf g"eqpvgpv" cej lxxgf "y tqwi j "y j g"cf fklqp"qh"UEO u"tguwnu" fktgevn{ " kp" c"tgf wevkqp"lp" y j g" hqt o cvkqp"qh"ecrekwo "qz{ej ntkf g" *Y gkuu"gv"cn0423: +0

K Uñf!hc!7 Ya Ybhj]ci gÁ A Uñf]Ug'F Uñc

Cu'y kj "eqpxgpkvpcrñeqpetgvg"o kzwtgu. "y j g"y leo "tcvkq" ku" c"ng{ "r ctco gvg" chhgévki "y j g"y qtnedkks{. "utgpi j. " r gto gcdkks{. "cpf" f wtdkks{ "qh"eqpetgvg"qxgtr{ u0Vj g" y leo "tcvkq"uj qwf "v{r lecm{ "dg"dgw ggp"2062"cpf"2067" hqt"eqpetgvg"r cxkpi "o kzwtgu. "f gr gpf kpi "qp"y j g"mqcn" erko cvg"cpf" o cvgtkcn0Vj g" hqmqy kpi "ctg"ugxgtrcn{ c{u"vq" cej lxxg" c"o qf gtcvgn{ "mqy "y leo "tcvkq"y j kng" o clpvcvkpi " ucukhcevqt{ "y qtnedkks{ <

É' Wukpi "UEO u"lp"err r tqr tkvg" f quci gu

É' Wukpi "c"eqo dlpvcvkp"qh"ci i tgi cvg"uk gu"vj cv'cej lxxgu" c"y gmi tcf gf "u{ ugo. "y j lej "tgf weg"v{y j g"r cug"xqmo g" hqt"y j g"uco g"r xgn"qh"y qtnedkks{

É' Wukpi "y cvgt/tgf wekpi "cf o kzwtgu

É' Eqptqnkpi "eqpetgvg"vgo r gtcwtgu0J ki j "vgo r gtcwtgu" ecp"lpf ktgevn{ "hgcf "vq" j ki j g"t"y leo "tcvkq"u" h"y cvgt "ku" cf f gf "y kj "y j g"lpvgpvkqp"qh"lpetgculpi "y qtnedkks{ 0' kp"eqrf "vgo r gtcwtgu. "UEO u"ecp"tgf weg"ugv"vko g." dw/k"ku"lo r qtvcpv"vq"nggr "UEO u"lp"y j g"o kzwtg0C" tgr nrego gpv"qh"42" "vq"62" "qh"ego gpv"y kj "UEO u"ku" tgeqo o gpf gf "hqt"o kzwtg"vgo r gtcwtgu"lp"y j g"tapi g" qh"87Á"vq"97ÁÁ

CdYb]b['7 f]hYf]Užf'7 cbWYñYÁ Cj Yf`Ung

Y j gp"cp"qy pgt"qt"ci gpe{ "ku" f gekf kpi "y j gp"vq"qr gp" c" r cxgo gpv"vq"tchle. "ku"ku"lo r qtvcpv"vq"wpf gtucpf "y j g" o kpo wo "utgpi j "cpf" co qwpv"qh"vko g"tgs vktgf "vq" tgej "y j g"qr gpkpi "i qcn"y j kng"u"knicej lxxkpi "y j g"qxgtr{ u" mpi /vgo "f guki p"utgpi j "cpf" f wtdkks{ 0

Vq"qr gp"r cxgo gpw"gtcnrt"vq"tchle. "RGO u"ctg"ewtgpw{ " dgkpi "f guki pgf "y j cv'ecp"tgej "f guki p"utgpi j "u"lp" c" vko gn{ "o cpggt0J qy gxgt. "qr gpkpi "vq"tchle" f qgu"pqv" tgs vktgf tgej kpi "y j g" f guki p"utgpi j 0Y j kng"qr gpkpi " eqo r tguukxg"utgpi j u"lp"y j g"tapi g"qh"5.222"vq"6.222"r uk" j cxg"dgpp"eqo o qp"j kuqtkecm{. "tugctej "j cu"uj qy p"v{y cv" y j ku"o ci pkwf g"qh"utgpi j "ku"pqv"tgs vktgf "hqt"qr gpkpi " vq"eqputwevkqp"tchle"qt"pqto cnqr gtcvkpu"dgecwug"y j g"

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Hqt"gzco r ng. "y j g"Kkpqku"Ucvg"VqmJ ki j y c{ "Cwj qtkv{ " j cu"wnk{ gf "cp"qr gpkpi "eqo r tguukxg"utgpi j "qh" err r tqzko cvgn{ "4.222"r uk"v{r lecm{ "hqt"y j keng"u"rdu"32" kp00Hqt"eqpetgvg"qxgtr{ u. "y j ku"eqo r tguukxg"utgpi j " xcnvg"o c{ "dg"err r tqr tkvg" h"v{y j g"uwr r qtv"utwewt g" ku"uwhlekp"0Kp" c"o qtg"gzvgo g"gzco r ng. "c"uwf { " eqpf wevgf "cv0 pTQCF. "VRH/7*563+. "Gxcmevkqp" qh"Napi /Vgto "K rcevu"qh"Gctr{ "Qr gpkpi "qh"Eqpetgvg" Rcxgo gpw. "f qewo gpvgf "cp"wpmqcf gf "upqy r mqy "tven{ f tkxkpi "qp" c"r cxgo gpv"cv'err r tqzko cvgn{ "95"r uk"ngzwtcn{ utgpi j "y kj "pq"xkudng"uki pu"qh" f kuuguo0Hqt"o qtg" kphqto cvkqp"qp"y j ku"uwf { . lugg"y j g"423; "f tch"tgr qtv" ____ *Mj c| cpqxlej "cpf" NK423; +0

Qr gpkpi "utgpi j u"cpf"qr gpkpi "vko gu" hqt"eqpetgvg" qxgtr{ u" f gr gpf "qp" c"pwo dgt"qh"xctkcdngu. "y kj "qxgtr{ " y j kengui"cpf" uwr r qtv"utwewt g"dgkpi "o quv"ko r qtvcpv0 Hqt"gzco r ng. "c"y j keng"qxgtr{ "ecp"dg"qr gpgf "cv'c"mqy gt" eqpetgvg"utgpi j 0Qy j gt"uki p hiecpv"hecvqtu"chhgévki " y j g"qr gpkpi "utgpi j "cpf" vko g"ctg"y j g"v{r g"cpf" xqmo g" qh"tchle. "y j g" f ko gpukpu"qh"y j g"u"rdu. "y j g"mqcvkpu" qh"y j g"mqf u"tgrv"vq"vq"y j g"gf i gu"qh"y j g"u"rdu. "cpf" y j g" r ctvewrt"ego gpv'ej go kvt{ "cpf" utgpi j "i clp"r tqr gtvku" qh"y j g"o kzwtg0D{ "eqpukf gkpi "y j g"cewcn"xctkcdngu"ht qo " y j g"r tqlgcv. "c"mqy gt"qr gpkpi "utgpi j "ecp"dg"ur gchle" y j kj qw"ucetkhelepi "qxgtr{ "r gthqt o cpeg"qt"cf f kpi " gzeguukxg"co qwpw"qh"ego gpv"vq"tgej "y j g" f guki p"utgpi j " cv'cp" gctr{ "ci go

Gctr{ "tchle"mqcf kpi "j cu"dgpp"uj qy p"vq"cuukw"y kj "lqkpv" cevkcvkqp"lp"eqpetgvg"qxgtr{ u0Y kj qw"gtcn{ "tchle" mqcf kpi. "egt vclp"lqkpv"cevkcvg"gtcnrt"y j cp"vq"y j gt"lqkpv0 Vj g"lqkpv"y j cv'cevkcvg"htu"vq"r gp"y kf gt"y j cp"lqkpv"y j cv' cevkcvg"r vgt "cpf" ctg"uqo g vko gu"ecmgf "of qo kpcpv0 lqkpv+ "etgcvkpi "i tgcvtg"o qxgo gpv'cv'y j g"lqkpv"y j cv' cevkcvg"htu0Gctr{ "cevkcvkqp"qh" c"i tgcvtg"pwo dgt"qh" lqkpv"tgcf u"vq" c"uo cmgt"co qwpv"qh"o qxgo gpv'cpf " eqpv"kdwgu"vq"dgwgt"mqpi /vgo "ci i tgi cvg"lpvgtmqen{cpf " lqkpv"cnki po gpv00 kppguqv" cu"uweeguuhwm{ "gzt r gto gpvgf " y kj "gctr{ "lqkpv"cevkcvkqp" d{ "f tkxkpi "mqcf gf "tvenu"qxgt" y j g"r cxgo gpv'cv'34"j qwtu"vq"cevkcvg"y j g"lqkpv0

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Rcxgo gpv'gpi kpggtu'uj qwf "dg'cy ctg'y cv'ceegntcvgf" qt'tcr k'j' ctf gplpi "o kzwatgu'o c{"wfp gti q'o qtg" uj tlpnci g'cpf "o qtg'tcr k'j' gcv'i gpgtcvqp"y cp" eqpxgpv'kqpcr'o kzwatgu."y j lej "eqwf "hgc'f"v'cf xgtug" ghgcu0Hqt"gzco r ng."EQC6D'qxgtrc{"u'o c{"g'zr gtlgpeg" uqo g'f gdpf kpi "y j gp'ceegntcvgf"qt'tcr k'j' ctf gplpi " o kzwatgu'ctg'wugf 0Dgu'r tcewlegu'hqt"y g'r tqr gt" r nrego gpv'qh'ceegntcvgf "o kzwatgu'lpenwf g'wulpi "uo cnrt" r cpnu'cpf "j' cxkpi "c'uwthekgpv'pwo dgt'qh'g'zr gtlgpegf" rcdqtgtu'qp"j' cpf "cpf"c'uwthekgpv'co qwpv'qh'hkpij kpi " gs wkr o gpv.'ewtkpi "ci gpv.'cpf "ucy kpi "gs wkr o gpv'v'q" ceeqo o qf cvg'yj g'lcu'v'g'zr gcvf "ugv'kpi "ko g0

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CH Yf'Cj Yf`UmA UHf]Ug

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A UWcZVYfg'Zf'7 cbWYH'Cj Yf`Ung

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E' Tgf we'kqp'lp'et'cem'y k'f yj u

E' O clp'v'gpcpeg'qh'lqkp'v'qt'et'cem'iqcf "tcpuht'g'gh'elgpe{"

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E' O k'pko cn'r cp'gr'o ki tcv'kqp

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T æ[-æ^!Á æ^!æ^Á] ^•

Vj g'y q'r tko ct {"v'f r gu'qh'o cetqhdgtu'wugf "hqt'eqpetgvg" r cxgo gpv'cpf "qxgtrc{"u'ct'g'u'p'yj g'v'le'cpf "ungn'y kj "yj g" hqto gt'dgkpi "o qt'g'eqo o qp0l' gpgtcm'."o cetqhdgtu" ct'g'30'v'q'40'lp0kp'ngpi yj "y kj "cp'cur gev'tcv'k'q'qh'52" v'q'3220Hki wt'g'80'uj qy u'ugxgt'cn'f r gu'qh'u'p'yj g'v'le'cpf " u'ngn'o cetqhdgtu0

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Ô-Λ&ο Α Α Α [-α^!•Α } Α@ΑΔΛ• @α αΑ
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Vtknldcej gu'ctg"cnr c u'tgeqo o gpf gf "vq"eqphko " y j g'eattge'v'ugs wpeg"qh'hdgt"cf f kklqp"fr wtkpi "vj g" dcej lpi "r tqegu"cpf "vq"gpwv"vj cv'vj g'HT E"o kzwatg" ecp"o gg'cnl'ht guj "r tqr gt v"ur gekhcevkpu0Eqpetgvg" y qtnedkkl {"qpq"uwej "ht guj "r tqr gt v"o c {"f getgcug"y kj " y j g'cf f kklqp"qh'o cetqhdgtu0T gpgtcm {"y j g'cf f kklqp"qh" y cvgt/tgf veklpi "cf o kzwatgu"ecp"lo r tqxg'y qtnedkkl {" eqpuqrk cklqp."cpf "hpkuj lpi ".y qwi j "qecukqpcm {" cf f kklqpcn'r cuvg"o c {"dg'tgs wktgf 0Vj g'ckt"eqpvwv"qh"vj g" o kzwatg."cpqj gt "ht guj "r tqr gt v"o c {"cnq"dg"chgevgf" lpl ktgevn {"d {"y j g'cf f kklqp"qh'hdgtu0Vj g'ckt"eqpvwv" ecp"dg"cf lwvgf "vj tqwi j "ej cpi gu"lp"vj g'ckt/gpvtcklpi " cf o kzwatg"fr wtkpi "vj g'tkcnldcej gu0

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: [I i fY*") "DcghWUW]b[VΛ Uj Jcf'cZUbcHW YX': F7 VYUa Ä gdYVJa Yb'VcbUj]b['gnbh YHJa UWcZVYfg

GYdUfUjcb`@mYf

C'ugr ctevkqp'rc { gt'ku'cp'lo r qtcv'eqo r qpgpv'qhi' wpdqpf gf "eqpetgvg'qxgtrc { u'qh'gzknkpi "eqpetgvg" r cxgo gpw0Vj g'ugr ctevkqp'rc { gt'ku'rc'gu'gzeuukxg" o qxgo gpv'lp'yj g'y q'eqpetgvg'rc { gt'u'cpf "r tqxkf gu'c" utguu'tgrgh'rc { gt'yj cv'f kuuk cvgu'j qtk qpvcn'cpf "xgt'kecni' f ghqto cvkqu'lp'yj g'gzknkpi "eqpetgvg'r cxgo gpv'u' ugo " dghqg'yj g' { "ctg'tghgevgf "lpv'q'yj g'eqpetgvg'qxgtrc { "cpf " r tqf weg'r tgo cwtg'f kvtguugu0Vy q'v' r gu'qhi'ugr ctevkqp" rc { gt'ctg'eqo o qpn' "wugf <cur j cn'cpf "papy qxgp" i gqvgz'vkg0

OE] @pA^] æææ } Åæ^!

C'eqo o qp'cpf "uweeguuhw'ugr ctevkqp'rc { gt'wugf "lp'yj g" WUj' cu'dggp "eqpxgvp'kpcn'cur j cn'eqpetgvg0V { r kecm' . " c'pqo kpcn' "3"vq'4"lp0yj lemi'rc { gt'r tqxkf gu'cf gs wcvg" eqxgtci g'qxgt "ktgi wctkku'lp'yj g'gzknkpi "r cxgo gpw0 Vj g'yj lempguu'qhi' g'cur j cn'ugr ctevkqp'rc { gt'uj qwf "dg" o kpo k gf "vq'cej kxg'r tqr gt'f gpuk' "cpf "f getgcug'yj g" tkun'qhi'cf f kkpnc'eqpu'kf cvkqp0f'eqttgevn' "f guki pgf " J O C'ugr ctevkqp'rc { gt'u'j cxg'gzj kdkgf "utkr r kpi "cpf " gzeuukxg'r gto cpgpv'f ghqto cvkqp'wpf gt'tgr gcvgf " vchle'hqcf kpi "Ecemgt "4239-0Rcu'kuu'gu'y kj "cur j cn' ugr ctevkqp'rc { gt'u'j cxg'dggp'itp'ngf "vq'lo r tqr gt'cur j cn' o kzwg'f guki p. "r qqt "f tclpci g. "cpf "cp'qxgtutgu'gf " cur j cn'o kzwg'tgrv'kxg'vq'yj g'gzr gevgf "vchle0

Kp'cp'ghqhtv'vq'tgf weg'utkr r kpi "qhi'yj g'cur j cn'ugr ctevkqp" rc { gt. "yj g'cur j cn'o kzwg'ku'o qf kkgf "lp'uqo g'uv'vgu" vq'o cng'k'o qtg'r qtqwu0Vj g'r qtqwu'qt "qr gp/i tcf gf " J O C'o kzwg'ku'f guki pgf "vq'f tclp'yj cvgt's wlem' "htqo " yj g'lpv'gthceg'dgwy ggp'yj g'eqpetgvg'qxgtrc { "cpf "yj g" wpf gtn' kpi "r cxgo gpw0Vj ku'o cvgtkcn'f guki p'tgf wegu" yj g'r qtg'yj cvgt'r tguu'w'g'i gpgtcvgf "lp'yj g'cur j cn'wpf gt" o qxkpi "vchle'hqcf u'cpf "lpetgcugu'yj g'hupi /vgo " ucdk'k' { "qhi'yj g'ugr ctevkqp'rc { gt. "dw'k'tgs vktgu'c'rcvgtcn' eqpxg { cpeg'u' ugo "hqt'yj g'y cvgt0Rgto gedng'cur j cn' " ucdk'k' gf "utguu'tgrgh'eqwtugu"RCUUTEu+ j cxg'dggp'wugf " kp'O kppgu'vc'cpf "O lej ki cp<O pF QVj' cu'c'ur gekh'ecv'kqp" hqt'RCUUTE. "cpf "O F QVj' cu'wugf "c'ur gekn'r tqxkukqpcn' ur gekh'ecv'kqp'hqt'cp'J O C'ugr ctevkqp'rc { gt0

P[}, [ç^} ÅÖ^ [ççç^Å^] æææ } Åæ^!

P qpy qxgp'i gqvgz'vkg'ugr ctevkqp'rc { gt'u'j cxg'dggp'wugf " uweeguuhw' "lp'wpd'qpf gf "eqpetgvg'qxgtrc { "cr r rkecv'kqu" lp'yj g'Wpk'gf "Ucv'gu'ukpeg"422: 0Ceeqt'f kpi "vq'Ng { n'v'h" cpf "Dko cpp"4228+: "i gqvgz'vkg'u'r tqxkf g'wp'kqto . " grv'uke'uw'r r qtv'vq'yj g'eqpetgvg'ur'cu'lp'yj g'qxgtrc { . " tgf velkpi "yj g'utguu'g'yj cv'f gxgnr "f vq'vgo r gtcwtg" cpf "o qukw'g'i tcf kpvu0I gqvgz'vkg'u'cn'q'tgf weg'r wo r kpi " cpf "o kpo k g'yj g'lp'k'ecv'kqp'qhi'tghgevgf "etcenu'htqo "yj g" wpf gtn' kpi "r cxgo gpw0Hqt'cp'qxgt'xkgy "qhi'papy qxgp"

i gqvgz'vkg'ugr ctevkqp'rc { gt.u.'tghgt "vq'Rgt'htto cpeg" Cuuguo gpy'qhi'P qpy qxgp'I gqvgz'vkg'O cvgtkcn'Wugf "cu" c'Ugr ctevkqp'Nc { gt'ht' Wpdqpf gf "Eqpetgvg'Oxgtrc / " qhi'Gzknkpi "Eqpetgvg'Rcxgo gpy'Crr rkecv'kqu'lp'yj g'WU" *Ecemgt "4239-0Hki wtu'808"cpf "80"uj qy "xctkqu'v' r gu" qhi'papy qxgp'i gqvgz'vkg'ugr ctevkqp'rc { gt'o cvgtkcn0

O qtg'f gcv'k'gf "o cvgtkcn'ur gekh'ecv'kqu'ht'c'i gqvgz'vkg" wugf "cu'c'ugr ctevkqp'rc { gt'ht' wpdqpf gf "qxgtrc { u'ctg" r'k'gf "lp'I w'f g'U gekh'ecv'kqu'ht'Eqpetgvg'Oxgtrc / u" *Hlen' cpf "J ctt'kpi vq"4238+: "dw'c' uwo o ct { "ku'r tqxkf gf " j gtg0Vj g'y gli j v'r gt'us wctg" { ctf "cpf "yj lempguu'uj qwf " dg'i kxgp'yj j gp'ur gekh' kpi "c'i gqvgz'vkg'ugr ctevkqp'rc { gt0 V { r kecm' . "yj g'hqmqy kpi "o cvgtkcn'ur gekh'ecv'kqu'ctg'wugf " dcugf "qp'eqpetgvg'qxgtrc { "yj lempguu<

>7"lp0qxgtrc { ô 350"q| l { f 4 "B "352"o ku

×7"lp0qxgtrc { ô 37"q| l { f 4 "B "392"o ku



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: [i fY* " "8 Uf !Wæ'cfYX'bcbk c j Yb [YchM h'YgYdUfUjcb`UmYf



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: [i fY* " " @ [\ HWæ'cfYX'bcbk c j Yb [YchM h'YgYdUfUjcb`UmYf

Dghqtg'vj g'eqpetgvg'qxgtnc{ 'ku'r ncegf. 'vj g'uwthceg' " vgo r gtcwtg'qh'vj g'i gqvgz'krg'ugr ctcv'kqp'rc{ gt'uj qwrf " pqv'gzeggf "342'ÄD'Y c{ u'vq'eqqn'vj g'uwthceg'kpen'f g' ur tlpmlpi 'y kj 'y cvgt'qt'wulpi 'c'hki j vgt'eqmrtgf " papy qxgp'i gqvgz'krg'ugr ctcv'kqp'rc{ gt'vq'j gr 'tghngev' uqnt'gpgti { "f ctngt'hcdtle'uj qwrf 'pqv'dg'y j kgy cuj gf -0' I gqvgz'krg'vj cv'ku'eqqrgf 'y kj 'y cvgt'uj qwrf "dg" f co r gpgf "cpf 'pqv'ucwtcv'gf 0C'uko r ng'g'uv'ku'vq" vqwej 'vj g'hcdtle=ppq'y cvgt'uj qwrf 'uj qy 'qp'vj g'hkpi gtu0' Cff kklqpcmf . 'pq'ucpf kpi 'y cvgt'uj qwrf 'tgo ckp'qp'vj g' uwthceg'qh'vj g'i gqvgz'krg'cv'vj g'vko g'vj g'qxgtnc{ 'ku'r ncegf 0

8ck Y`6 Ufg'UbX'HjY6 Ufg

Y j gp'c'eqpetgvg'qxgtnc{ 'tgrgu'qp'f qy gr'ndctu'hqt 'lqlpv' mcf 'tcpuhtg. 'vj g'f qy gr'ndctu'uj qwrf 'eqphqto 'vq'CUVO " C329: 0Vj g'uk' g. 'rc{ qww'cpf 'eqcvkpi 'qh'vj g'f qy gr'ndctu' uj qwrf 'dg'ugrgevgf 'hqt'vj g'ur gekhe'r tqlgv'neqv'kqp' cpf 'tchhe'rgxgn0'Hqt'o qtg'kphqto 'cvkqp'qp'vj g'wug'qh' f qy gr'ndctu'hqt 'hqt' 'tcpuhtg. 'ugg'[I wkf g'vq'F qy gr'Nqcf "](#) [Vicpyhgi 'Uungo u'hqt 'lqlpv'f 'Eqpet gvg' Tqcf y c' 'Rcxgo gvu' "](#)]Up{ f gt'4233_0'f'k'uo g'qxgtnc{ 'r tqlgew. 'f qy gr'ndct' uk' gu'o c{ 'dg'tgf wegf 'qt'f qy gr'ndctu'o c{ 'pqv'dg'wugf 'cv' cm'dgecvug'vj g'gz'kukpi 'r cxgo gpv'r tqxkf gu'c'uw'hhekgpv' co qwpv'qh'uwr r qt'0Cff kklqpcmf. 'cnj qvi j 'uqo g' ci gpekgu'j cxg'wugf 'f qy gr'ndctu'lp'8'lp0vj kemeqpetgvg' qxgtnc{ u'vj g' 'ctg'v'f r kccmf 'pqv'wugf 'kp'eqpetgvg'qxgtnc{ u' rguu'vj cp'9'lp0vj keno

Y j gp'wugf 'kp'eqpetgvg'qxgtnc{ u'vkg'dctu'ctg'v'f r kccmf " I tcf g'82'dknrg'v'uggn'dctu'o ggvkpi 'CUVO 'C837'qt" CCUI VQ'O "53'ur gekhecvkpu0P q06'f ghqto gf 'dctu' ctg'tgeqo o gpf gf 'kp'o quv'ukwcvkpu'vj cv'tgs wktg'vkg" dctu.'y j krg'P q07'dctu'ctg'pqv'tgeqo o gpf gf 'wrguu' vj g'qxgtnc{ 'vj kempgu'ku'32'lp0qt'o qtg'0Vkg'dctu'ctg'pqv' tgeqo o gpf gf 'hqt'wug'kp'eqpetgvg'qxgtnc{ u'rguu'vj cp'7" lp0vj kenoVkg'dctu'ctg'v'f r kccmf 'ur cegf '52'lp0cr ctv'dw' i tgcvg't'ur cekpi 'o c{ 'dg'wugf 'kp'uo g'ecugu0Hqt'r cxgf " uj qwrf gtu'qt'y k' gpgf 'eqpetgvg'qxgtnc{ u'vkg'dctu'ctg'wugf " cv'vj g'rupi kwf kpcn'lqlpw'cv'vj g'gf i gu'qh'vj g'gz'kukpi " r cxgo gpv'0T ghg't 'vq'[Crr gpf k' C' hqt](#) 'o qtg'kphqto 'cvkqp' qp'vj g'wug'qh'vkg'dctu'hqt'y k' gplkpi 'cpf 'rcpg'cf f kklqpu0

O cetqhdgtu'ecp'dg'wugf 'kp'vj kp'eqpetgvg'qxgtnc{ u' *6'vq'8'lp0'kp'hkgw'qh'vkg'dctu'cv'eqpv'cev'kqp'lqlpw0' Eqo r qukg'j ki j /utgpi vj 'uvggn'y kj 'utgpi vj u'qh' wr 'vq'322'muk'cpf 'hkgdgt/gkphqtegf 'r qn'o gt'*HTR+ " dctu'j cxg'cnuq'dggp'wugf 'hqt'vkg'dctu'cpf 'qy gt'uncd' tglphqteki *g0 0'lp'ETER+0J qy gxgt. 'crr tqrtkcvg' f guki p'o qf kkecvkpu'o wu'dg'o cf g'vq'ceeqwpv'hqt'vj g' f khtgtpv'r tqrtkcv'qh'vj gug'o cvgtkenu0

7 i f]b['7 ca dci bX

Cf gs wcvg'ewtkpi 'ku'guugpv'kcn'hqt'eqpetgvg'qxgtnc{ u'cpf " dgeqo gu'o qtg'etk'kccn'cu'vj g'uncd'vj kempgu'f getgcugu0' Y j krg'r ki o gpgf 'hsvkf 'o go dtepg/hqto kpi 'ewtkpi " eqo r qwpf u'eqphqto kpi 'vq'CUVO 'E52; . 'CUVO " E3537'qt'CCUI VQ'O "36: +ctg'tgeqo o gpf gf 'hqt' crr r'kecvkqp'vq'vj g'uwthceg'cpf 'gzr qugf 'xgt'kccn'gf i gu'qh' vj g'r cxgo gpv'kqp'chgt'vj g'eqpetgvg'j cu'dggp'r ncegf " cpf 'vkgwtgf 0Vj g'y j krg'r ki o gpgf 'eqo r qwpf 'uj qwrf " dg'crr r'kegf 'vq'vj g'r cxgo gpv'kp'uwej 'c'y c{ 'vj cv'vj g' eqxgtci g'ku'wpkhqto n' 'y j krg'hkng'c'uj ggv'qh'r cr gt0

Uqo g'ci gpekgu'j cxg'ko r ngo gpgf 'vj g'wug'qh'ewtkpi " eqo r qwpf u'eqpv'kcpkpi 'r qn' 'crr j c/o gvj { nu'f tggp'g' *RCO U+tgulp0Vj g'wug'qh'vj ku'v'f r g'qh'ewtkpi 'eqo r qwpf " j cu'dggp'dcugf 'qp'uwf kgu'uj qy kpi 'uwr gtlqt'o qkuwtg' tgv'p'kqp'r tqrtkcv'0Crr r'kecvkqp'o gvj qf u'cpf 'eqxgtci g' tcvu'ctg'uko kct'vq'vj qug'hqt'pqto cn'y j krg'r ki o gpgf " ewtkpi 'eqo r qwpf u'0C'[v'f r kccn'o cvgtkcn'ur gekhecvkqp'hqt "](#) [RCO U'ewtkpi 'eqo r qwpf 'ku'cxckcdng'htqo 'O pF QV0](#)

>c]bhi: J`Yfg'UbX'GYU Ubhg

Vj g'f gekukp'y j gvj gt'vq'crr n' 'lqlpv'hkng't'qt'lqlpv'ugcncpv' f gr gpf u'qp'vj g'erko cvg'kp'y j kej 'vj g'qxgtnc{ 'ku'dwkn. " vj g'ucvg'ci gpe{ 'qxgtugglkpi 'vj g'r tqlgv'cpf 'vj g'qxgtnc{ ða' uncd'i gqo gt{ 0Vj g'pggf 'hqt'lqlpv'o cvgtkcn'f gr gpf u'qp' y j gvj gt'vj g'f guki p'cmny u'hqt'y cvgt'gpvgtkpi 'vj g'lqlpv' vq'hecxg'vj g'r cxgo gpv'0Lqlpv'hknpki 'ku'vj g'r tgf qo kpcpv' cev'kqp'hqt'uj qtv'lqlpv'f 'qxgtnc{ u0

Y j gp'lqlpv'hkngtu'qt'ugcncpv'ctg'crr r'kegf. 'vj g'hqny kpi " qr v'kpu'ctg'cxckcdng-<wug'qh'j qv'r qwtgf 'twdgtk' gf " o cvgtkcn'eqphqto kpi 'vq'CUVO 'F88; 2'qt'CCUI VQ" O "523. 'wug'qh'ukkeqpg'o cvgtkcn'eqphqto kpi 'vq' c'i qxgtplkpi 'ucvg'ur gekhecvkqp. 'wug'qh'r tghqto gf " eqo r tguukp'ugcn'eqphqto kpi 'vq'CUVO 'F484: " qt'CCUI VQ'O "442. 'qt'vj g'o gvj qf u'qt'o cvgtkcn' r tguetkdgf 'd{ 'c'i qxgtplkpi 'ucvg'ur gekhecvkqp0

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D`Ub`8 Yj Y`cda Ybh

7 cbglfi Wjcb`8fUk]b[g`) (
HjhY`G\ YYh))
Hnd]WU`GYWjcbg`))
9ghja UHYX`Ei Ubh]hYg`) *
D`Ub`UbX`DfcZ`Y`) *
Gi fj Ymi7 cbhfc`-bZfa Uhcb`) +
A UjbhYbUbWV`cZHfUZZW) +
Hnd]WU`7 cbglfi Wjcb`8 YhU]`g`	* \$
8 YhU]`g`Zf`Cj Yf`Ung`]b`l fVUb`5fYUg`	* '
A]gWV`UbYci g`8 YhU]`g`	* (
GdYV]U`7 cbglXYfUhcbg`Zf`7 cbh]bi ci g`mF Y]bZfWVX`7 cbWYh`DUj Ya YbhCj Yf`Ung`	*)
7 cbglfi Wjcb`GdYV]ZVU]cbg`	*)

7 c b g f i W j c b ' 8 f U k] b [g

Eqputwekqp" f tcy kpi u' hqt "eqpetgvg" qxgtrc { u' f q' p q v' pggf "vq" dg' eqo r ngz 0 Vj g' hqecwkp. "i gqo g' tle' hgcw' gu. " c p f " o c k p v g p c p e g " q h' t c h l e " t g s w k t g o g p u' q h' c' i k x g p " q x g t r c { " r t q l g e v' u j q w f " f l e v c v g' v j g' i g x g n' q h' f g u k i p " f g v c k n' v j c v' k u' t g s w k t g f " k p' v j g' r r e p u 0 U g g' C r r g p f k z " C' h q t " o q t g " k p h q t o c v k q p " c d q w' v j g' e q p u k f g t c v k q p u' l p x q n x g f " k p " e q p e t g v g " q x g t r c { " f g u k i p 0

Cur j c n' q x g t r c { " r t q l g e w' q p " t w c n l t q c f u' j c x g' j k n q t l e c m { " d g g p " u w e e g u u h w m { " f g u k i p g f " c p f " e q p u t w e v g f " h t q o " c' u g v' q h' f t c y k p i u' e q p u k u k p i " q h' c' i k o k g f " p w o d g t " q h' u j g g u 0 V j k u' l u c o g' c r r t q c e j " k u' c e e g r v c d g' h q t " e q p e t g v g " q x g t r c { u' k p' t w c n l h q e c w k p u 0 k p' w d c p " q t " u w d w d c p " h q e c w k p u. " j q y g x g t. " g u r g e k c m { " y j g t g' x g t l e c n l c p f " j q t k q p v c n l e q p u t c k p u' c t g' r t g u g p v. " v j g' r r e p u' o w u v' l p e n w f g' v j g' r g x g n' q h' f g v c k n l c p f " c o q w p v' q h' l p h q t o c v k q p " p g g f g f " v q " e q o o w p l e c v g' j q y " v j g' e q p e t g v g " q x g t r c { " y k n i c f f t g u u " v j g u g' e q p u t c k p u 0 T g h e t " v q " C r r g p f k z " C' h q t " o q t g " k p h q t o c v k q p " c d q w' v j g' l o r q t v c p e g " q h' x g t l e c n l c p f " j q t k q p v c n l e q p u t c k p u' l p' e q p e t g v g " q x g t r c { " f g u k i p 0

Dgecwug" eqpetgvg" qxgtrc { " f g u k i p " l p x q n x g u' c p " q x g t r c { " q h' c p " g z k u k p i " r c x g o g p v. " c' r t q r q u g f " r t q h k g " o c { " p q v' p g g f " v q " d g' l p e n w f g f " l p' v j g' f t c y k p i " u g v. " g z e g r v' y j g p " o k p q t " e t q u u' u g e v k q p " q t " f g u k i p " r t q h k g " c f l w u o g p u' c t g " p g g f g f " l p' u r q v' h q e c w k p u 0 V j f g v t o l p g' y j g v j g t " u w e j " c f l w u o g p u' c t g " p g g f g f. " v j g' r c x g o g p v f g u k i p " r t q e g u u " u j q w f " l p e n w f g' c' t g x l g y " q h' v j g' g z k u k p i " r t q h k g " c p f " e t q u u' u g e v k q p " l p h q t o c v k q p " v q " f g v t o l p g' y j g' g h' g e w' u' q h' t c k u k p i " v j g' i t c f g' q p " q x g t j g c f " e r g e t c p e g u. " u j q w f g t u. " u k f g' u n q r g u. " l p v g t u g e v k q p u. " f t c k p c i g' u t w e w t g u. " c p f " q v j g t " i g q o g' t l e' h g c w t g u 0

K' l u' q p n l " p g e g u u c t { " v q' e q p f w e v' c' p g y " u w t x g { " q h' v j g " g z k u k p i " r c x g o g p v' y j g p " c' e j c p i g' l p' v j g' r t q h k g " k u' p g g f g f 0' k p' u w e j " e c u g u. " c' f g v c k n g f " u w t x g { " v j c v' l p e n w f g u' e t q u u " u g e v k q p u' c v' o w n k r n g' h k p g u' c u' y g n i' c u' h k i j v' f g v g e v k q p " c p f " t c p i k p i " * N K F C T + u e c p p k p i " e c p " j g r r " o k p l o k g' e q p e t g v g " s w c p v k f " q x g t t w p u 0 P q v g' v j c v' y j g p " w k r k k p i " N K F C T " u e c p p k p i. " k' l u' g u u g p v c n l' v j c v' s w c r k f " e j g e m i' c t g' r g t h q t o g f 0

Y j g p " u t k p i n g u u' r c x g t u' c t g' w u g f " h q t " q x g t r c { " e q p u t w e v k q p. " c f f k k q p c n l p h q t o c v k q p " k u' p g g f g f " l p' v j g' h q t o " q h' v j t g g / f l o g p u k q p c n * 5 F + o q f g n u' q t " g r g e v t q p l e " f g u k i p " h k g u 0 C u " y k j " N K F C T " u e c p p k p i " v e j e p q n q i { . " c' s w c r k f " e j g e n i' q h' v j g " o q f g n u' u j q w f " d g' r g t h q t o g f " w u k p i " e q p x g p v k q p c n l u w t x g { " o g v j q f u' v q' g p u w t g' v j g' e q t t g e v' r t q h k g " c p f " c n k i p o g p v 0

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50' G u r k o c v g f " s w c p v k k g u

60' R r e p " c p f " r t q h k g

70' U w t x g { " e q p u t q n l p h q t o c v k q p

80' O c k p v g p c p e g " q h' t c h l e. " l p e n w f k p i " e q p u k f g t c v k q p " q h' c e e g n t c v g f " e q p u t w e v k q p " c p f " u w c i k p i " w p f g t " t c h l e

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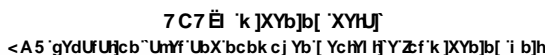
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ESTIMATED QUANTITIES AND REFERENCE INFORMATION

ESTIMATED PROJECT QUANTITIES

ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES		
			Division 1	Division 2	TOTAL
1	EMBANKMENT-IN-PLACE	CY	1,121.0	123.0	1,244.0
2	TOPSOIL, FURNISH AND SPREAD	CY	483	0	483
3	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	343.0	311.0	654.0
4	GRANULAR SHOULDER	TON	6,892.0	7,630.0	14,522.0
5	PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN.	STA	1,423.5	5.10	1,428.6
6	SHOULDER CONSTRUCTION, EARTH	STA	16.0	32.0	48.0
7	PATCHES, FULL-DEPTH REPAIR	EACH	2	4	6
8	PATCHES BY COUNT (REPAIR)	ST	58,259.0	25,259.0	83,518.0
9	BRIDGE APPROACH	ST	188.9		188.9
10	SEPARATION LAYER - 188"	ST	15,100.00		15,100.00
11	SEPARATION LAYER - GEOTEXTILE	ST	10,100.00		10,100.00
12	AGGREGATE, COVER - SAND	TON	1.0	0.3	1.3
13	BINDER BITUMEN, CRS-2	SGAL	0.2		25.8
14	PORTLAND CEMENT CONCRETE OVERLAY, FURNISH ONLY	CY	19,494.0	7,233.0	26,727.0
15	PORTLAND CEMENT CONCRETE OVERLAY, PLACEMENT ONLY	TON	81,180.0	37,450.0	118,630.0
16	SUBBASE, DRIVEWAY, CROSSED STONE	TON	26.0	22.0	48.0
17	SUBBASE, LONGITUDINAL, (CHOLEDOIR) 4 IN. DIA.	LF	24,725.0	9,415.0	34,140.0
18	SUBBASE, DRIVEWAY, CROSSED STONE	TON	26.0	22.0	48.0
19	REMOVAL OF STEEL BEAM GUARDRAIL	LF	825.0		825.0
20	STEEL BEAM GUARDRAIL	LF	1,725.7	404.0	2,129.7
21	SAFETY CLOSURE	EACH	3	6	9
22	FIELD OFFICE	EACH	1		1
23	CONSTRUCTION SURVEY	LS	0.74	0.26	1
24	PAINTED PAYMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	1,254.45	454.48	1,708.93
25	PAYMENT MARKING REMOVED	STA	1		1.0
26	TRAFFIC CONTROL	LS	0.74	0.26	1
27	FLAGGERS	EACH	20.0		20.0
28	PILOT CARS	EACH	10.0		10.0
29	MOBILIZATION	LS	0.74	0.26	1
30	MOBILIZATION, EROSION CONTROL	EACH	1		1

ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
1	EMBANKMENT-IN-PLACE This includes 579 cu. yds. for the culvert repairs, 388 cu. yds. for the guardrail grading, and 277 cu. yds. for the right turn lane. Material used for this bid item shall be obtained by the contractor and free of debris. No payment for overhaul will be allowed.
2	TOPSOIL, FURNISH AND SPREAD Quantity based on right turn lane work area.
3	TOPSOIL, STRIP, SALVAGE AND SPREAD Quantity based on right turn lane work area.
4	GRANULAR SHOULDER This includes 1500 tons for shoulders on sheet B.9, 807 tons for the right turn lanes, refer to sheet B.1. Quantity increased 10% for shoulder irregularities.
5	PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN. This includes 255.5 sq. yds. for shoulders as per sheet B.9.
6	SHOULDER CONSTRUCTION, EARTH This includes 12.9 stations for the right turn lanes, refer to typicals on sheet B.9.
7	PATCHES, FULL-DEPTH REPAIR Refer to tabulation on sheet C.1.
8	PATCHES BY COUNT (REPAIR) Refer to tabulation on sheet C.1.
9	PAYMENT WILLING Refer to typical on sheet B.1. For locations and details. For unbonded or bonded overlays on asphalt or concrete pavement.
10	BRIDGE APPROACH Refer to typical on sheet B.1.
11	SEPARATION LAYER - 188" Choose a separation layer type for PCC unbonded overlay over concrete.
12	SEPARATION LAYER - GEOTEXTILE NOTE: CONSIDER GEOTEXTILE IN LIEU OF SAND
13	AGGREGATE, COVER - SAND The item quantity is for 2 applications and is based on 128 sq. yds. at a rate of 18 pounds per square yard per application. Place on existing PCC patches for unbonded overlay.
14	BINDER BITUMEN, CRS-2 NOTE: CONSIDER GEOTEXTILE IN LIEU OF BINDER The item quantity is for 2 applications and is based on 128 sq. yds. at a rate of 828 gallons per square yard per application. Place on existing PCC patches for unbonded overlay.
15	PORTLAND CEMENT CONCRETE OVERLAY, FURNISH ONLY Quantity increase 10% for irregularities. Refer to typicals on sheet B.2. Measurement shall be the quantity shown in the contract documents. The basis of payment will be as indicated in specifications.
16	PORTLAND CEMENT CONCRETE OVERLAY, PLACEMENT ONLY Refer to typicals on sheets B.2,B.3 and the Specifications.
17	SUBBASE, DRIVEWAY, CROSSED STONE Refer to tabulation on sheet B.1.
18	SUBBASE, LONGITUDINAL, (CHOLEDOIR) 4 IN. DIA. Refer to tabulation on sheet C.1. Approximately 2738 cu. yds. of trench material from the subbase installation shall be disposed of by the contractor as per the Specifications.
19	REMOVAL OF STEEL BEAM GUARDRAIL Refer to tabulation on sheet B.9.
20	STEEL BEAM GUARDRAIL Refer to tabulation on sheet C.1. The contractor to dispose of removed pavement as per the standard Specifications.
21	REMOVAL OF PAVEMENT Refer to tabulation on sheet C.1.
22	SAFETY CLOSURE Refer to tabulation on sheet C.1.
23	FIELD OFFICE This item does not include existing monument or centerline point preservation work which was done previously by others.
24	CONSTRUCTION SURVEY This item does not include existing monument or centerline point preservation work which was done previously by others.
25	PAINTED PAYMENT MARKING Refer to tabulation on sheet C.1.
26	PAYMENT MARKING REMOVED Refer to tabulation on sheet C.1.
27	TRAFFIC CONTROL Refer to the Traffic Control Plan, Tabulation sheet C.1.
28	FLAGGERS - (use when project is constructed open to traffic)
29	PILOT CARS - (use when project is constructed open to traffic)
30	MOBILIZATION
31	MOBILIZATION, EROSION CONTROL

This sheet lists the estimated quantities for the project. Reference is made to the tabulations, specific details, or other sheets where necessary.

Projects are sometimes separated into divisions to track quantities and payment. For example, Division 1 is funded separately than Division 2 on this sample project.

The existing longitudinal subdrains shall remain functional at all times. Any damage to these tile lines or outlets due to the carelessness of the contractor, will be replaced at their expense with no cost to the Owner.

Some items may be eliminated based on the specifics of the project.

The contractor to note that a profile grade is not being provided and that he/she will be required to cross section the roadway and design a profile grade as stated in the Standard Specifications.

ENGLISH | 2024 DOT | DESIGN TEAM

COUNTY | PROJECT NUMBER

SHEET NUMBER | A-3

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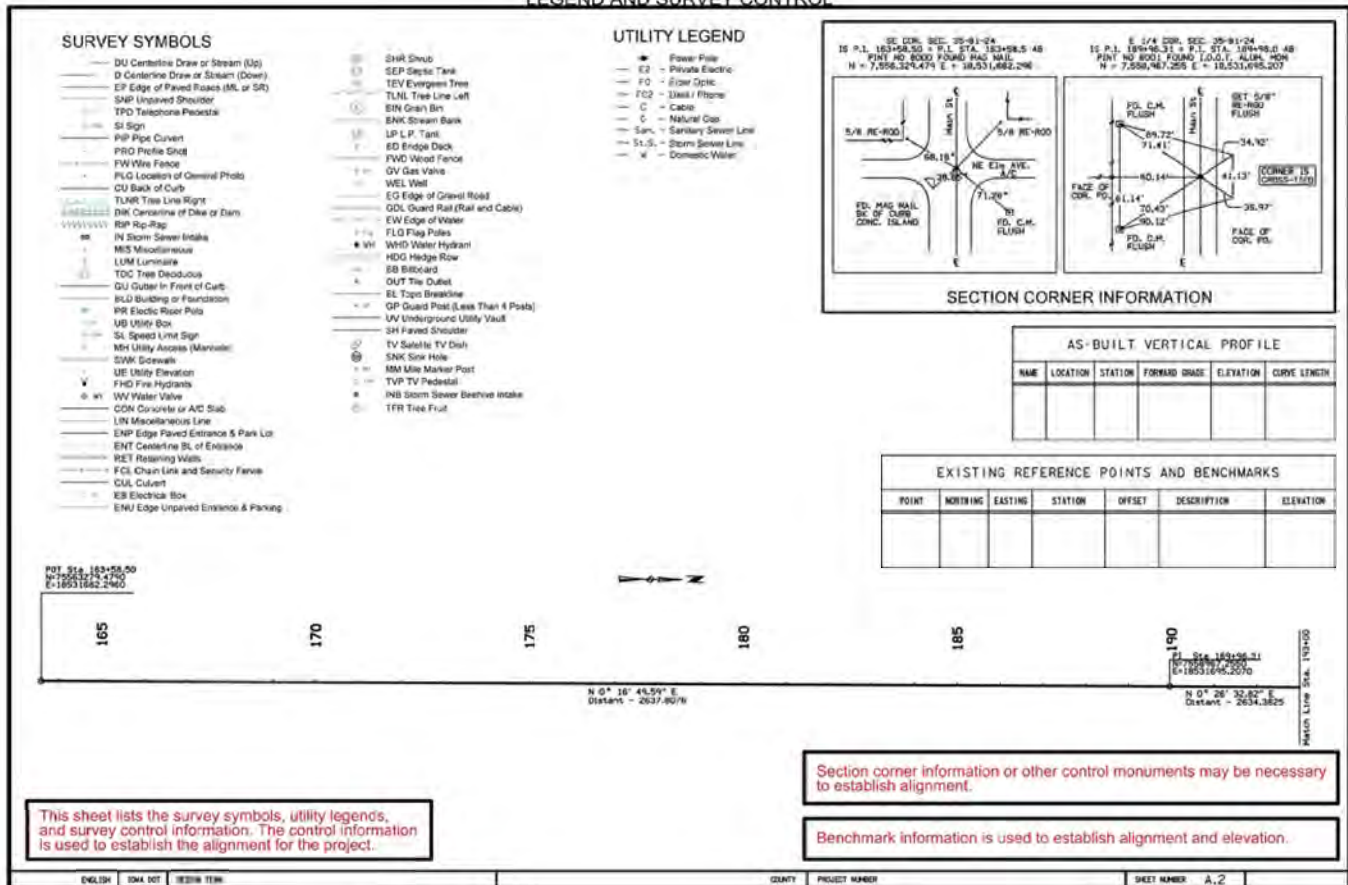
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LEGEND AND SURVEY CONTROL



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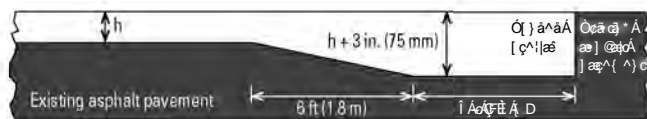
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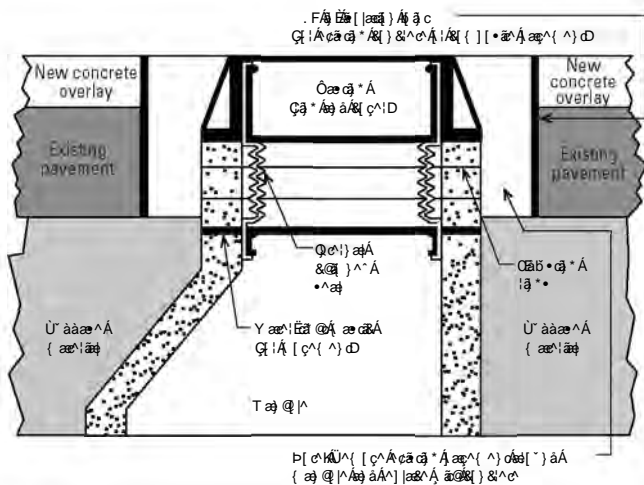
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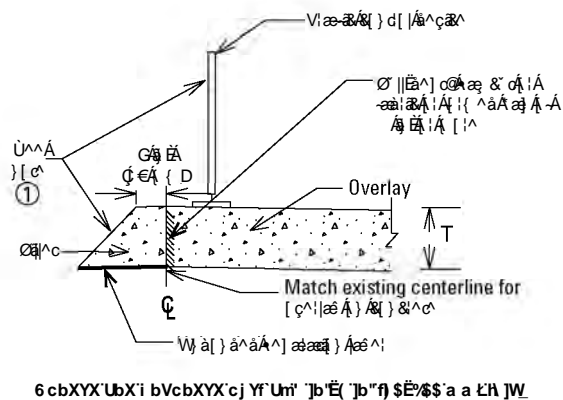
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 utvewtgu. 'k'ku'lo r qt'vcp'vj cv'r tqr gt'ugr ctcv'kp'ku"
 r tqxlf gf 'dgy ggp'vj g'utvewtgu'cpf 'vj g'eqpetgv'
 qxgtrc{ 0Hi wtg'9087'lj qy u'cp'gzco r ng'wkrk' 'ceeguu"
 f gckrlkmwutcv'kp' 'vj g'hqecv'kp'qh'kuqrcv'kp'lq'p'u"
 ctqwpf 'c'utvewtgu. 'y kj 'c' hwn'uk' g'xgtukp'cxckrdng'qp"
[Uj.gv'D07'lp](#)'vj g'v'r lccrl'eqpetgv'qxgtrc{ 'eqputwcv'kp'
 r rcpu'r wdrkj gf 'd{ 'vj g'ER'Vgej 'Egpgt0

A]gWY`UbYci g'8 YHJ`g

Vj g'hqmqy kpi 'f'gcku'o c{'dg'tgs wktgf'y j gp'cp"
qxgtr{'kpenf'gu'c'uchgv{'gf i g'qt'kpxqkngu'c'ej cpi g'kp"
uwr g'gpxc'kqp0



① V|æ-ā/ŋ| d| |Áē āĀ|| ^Ā -Āā'ōā^ ^| ā•Ā| Ā|ā āāā| æĀ^~ ā^ ^| ē

Ü^&^æ^âÁ[{ Á} ^â^!ÁÁE•[&æ^•ÊQ&Ë•^âÁ ã@^!{ ã•ã }

:] [i f Y + ' 0 / % " G U Z Y h m i Y X [Y ' X Y h U]

Ùæ^c Âõ* ^Ä^ca

Vj g'uchgv\ 'gf i g'ku'c'dgxgrf 'r cxgo gpv'gf i g'vj cvj gr u'
 nguup'vj g'ugxgk\ 'qh'tqcf y c\ 'f gr ctwtgu'Vj g'v' r lecn'
 dgxgrf 'cpi rg'ku'52'0C'uchgv\ 'gf i g'f gckn'*Hk wtg'9'88+
 o c\ 'dg'pgeguet\ 'y j gp'vj g'qxxgrn\ 'ku'qr gpgf 'vq'tchile'
 r tkqt'vq'eqo r rnvqp'qh'vj g'cf lcegpv'qxxgrn\ 'rpgp'*y j gp'
 eqpwtwvki 'vpf gt'vchile'+qt'r tkqt'vq'eqo r rnvqp'qh'
 yj g'uj qwrf gt0Cff klqpcmf. 'uqo g'ci gpeku'tgs wkg'c"
 r gto cpgpv'uchgv\ 'gf i g'cv'vj g'eqpetgvg'uj qwrf gt0

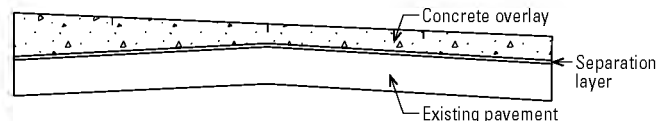
$$\dot{U} \left[\wedge | \wedge | \wedge \zeta \alpha \alpha \right] \} \dot{A} \ddot{O} \wedge \alpha \alpha \bullet$$

kʰeqpetgʷqʰxtɪr | uʻr mɛgʷ | qʰtʰqcf y c | uʻij cvʰtʰgs wʰtʰgʷy " |
 ctgcuʰqʰlʷr gtgrɛxcvʰqʰ | qʰtʰkʰetgcuʷ | lʷr gtgrɛxcvʰqʰ. | uʻr gekrɪ |
 f gcvkuʰij qʰwʷ | dʰgʷeqpukʷgtgf | qʰij qʰy | jʷ gʷf gr vj | qʰhʰo cvʰgtkrɪ |
 pʰgʷgf | qʰʰo gʷvʷij gʷhʰkʰrɪr tqhʰrɛ *Up | f grʷ 4233-0 | kʰo | ctgcuʰqʰlʷ |
 vj lɛmpʰgʷf | ʰcxgo gʷvʷij | gʷhʰqʰmʷy kʰo | uʻij qʰwʷ | dʰgʷeqpukʷgtgf <

30' Vj g'ucy ewf'gr vj u'o wu'dg'cf lwugf 'hqt'vj g"
eqp'tce'w'p'lp'w'ly kj lp'vj g'vj keng't'r cxgo gpv'ctgcu0

40 F qy gr̥idctu'uj qwɾ "dg'r̥ mɛgɾ "uq'j cv'c'o k̥p̥lo wo "
eqpetgɾ'eqxgt'qh'4'k̥p̥lo'u'o cl̥p̥vcl̥pgf'ctqwpf'j g"
f qy gr̥idcto "

Hki wtg'9089"uj qy u'cp"gzco r ng'uwr gtgngxcvkqp'f gvckf0

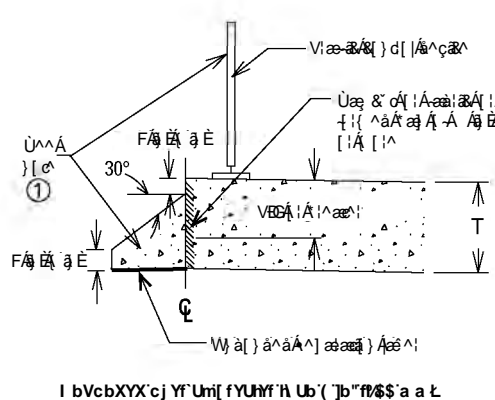


Note:

- Ensure adequate sawing depth in thicker super-elevated pavement areas.
- Maintain a minimum 2 in. cover if dowel bars are used.

Ü^&^æ^âÁ[{ Ä} ^â^!ÁÁE•[&æ•ËQ&Ë•^âÁ äQ^!{ ä•ä }

:][i fY+'%&"Gi dYfY'Yj Uh]cb`XYhUj`



I bVcbXYX'cj Yf`Um[fYUhf'H Ub'('b"fl/\$\$'a a L

* ($\tilde{O}^{\vee} \tilde{a}^{\wedge} \tilde{A} \{ \tilde{A} \tilde{O} [\} \&'^{\wedge} c^{\wedge} \tilde{A} \zeta^{\wedge} i / | \tilde{a} \tilde{e} \bullet$

GdYWU'7 cbgJXYfUjcbg'ZfÁ 7 cbhJbi ci g'mF YJbZfWX'7 cbWYhYÁ DUj Ya YbhCj Yf`Ung

Cff kkpccnleqpukf gtcwqpu'ctg'pggf gf 'y j gp'f gxgnr kpi " eqputwekqp'f tcy kpi u'hqt'ETER'qxgtrc{ u0Tghgt"q"
Crr gpfkz'D'hqi'kphqto cwkqp'qp'yj g'hcwgu'qh'ETER'
qxgtrc{ u0

Hqt'wpdqpf gf 'ETER'qxgtrc{ u'ur gekhccm{ . 'y g'hqmjy kpi " uj qwf "dg'eqpukf gtgf <

É' Cp'wpdqpf gf 'ETER'qxgtrc{ 'tgs wktgu'yj g'crr rkecwqp " qh'c'ugr ctcwqp'rc{ gt'uko krt'vq'yj cv'wugf 'hqt'c" eqpxgpwkpccnEQEóWqxgtrc{ 0

É' Vj g'qxgtrc{ 'tgs wktgu'c'xctkcdng'co qwpv'qh'tgkphqteki " uggcn'crr tqzko cvgn{ '20' 0

É' Vj g'yj lempgu'qh'yj g'qxgtrc{ 'ku'f gycto kpgf "dcugf "qp" yj g'utwewtcdff guki p'r tqegu0

Cff kkpccnlephqto cwkqp'qp'ETERu'lp'i gpgtccnlecp'dg" hqwpf 'lp'yj g"[Eqpwpwqwf'Tgkphqtegi'Eqpetgvg'Rxgo.gpv'](#)
[Ocpwcn'](#)*Tqgungt'gv'crr04238+0

7 cbghfi Wjcb'GdYWU'7WUjcbg

Nkng'eqputwekqp'f tcy kpi u'hqt'eqpetgvg'qxgtrc{ u. " ur gekhccwqpu'hqt'eqpetgvg'qxgtrc{ u'f q'pqv'pggf "q" dg'qxgtrc{ 'eqo r rgz0k'p'o cp{ 'ci gpekgu."ur gekhccwqpu" hqt'eqpxgpwkpccnleqpctg'ghgtgpegf 'hqt'eqpetgvg' qxgtrc{ 'r tqlgew0

[I wkf'g'Ur gekhccwqpu'hqt'Eqpetgvg'Oxgtrc{u'](#)*Hlenicpf " J cttkpi wqp"4238+r tqxkf gu'i wkf cpeg'hqt'f gxgnr kpi " vgej plecn'ur gekhccwqpu'hqt'eqpetgvg'qxgtrc{ u0

Tgeqi pk kpi 'yj cv'ucpf ctf "ur gekhccwqpu'xct{ 'y kf gnf " cetquu'yj g'WU'lp'vgt0 u'qh'uw'rg."qtg'gt'qh'kgo u."cpf " qyj gt'hcwgtgu.'yj g'i wkf cpeg'r tqxkf gf 'lp'yj ku'f qewo gpv' ku'cf xkuqt{ 'lp'pcwtg'cpf 'ku'pqv'pgeguuctkq{ 'uwkcdng'hqt" wug'cu'ur gekhccwqp'rcpi wci g0Wugtu'uj qwf "o qf kh{ 'yj g" i wkf cpeg'cu'pggf gf 'hqt'yj gk'ucpf ctf "ur gekhccwqpu'yj kng" r tguetxkpi 'yj g'lpvcpv'qh'yj g'tgeqo o gpf cwqpu'r tqxkf gf 0

Vj g'i wkf g'ur gekhccwqpu'ctg'cttcepi gf 'lp'c'yj tgg/r cttv' hqt0 cv<

30' I gpgtccn'Vj ku'ugewqp'f guetkdu'yj g'v'f r gu'qh'eqpetgvg" qxgtrc{ . 'v'f r gu'qh'uwdo kxcni'kpenwf kpi "o kzwatg" f guki p."o cvgtkcu."cpf "gs wkr o gpv:'s wcrk{ 'eqpctqn" uej gf wkpi . 'f gkxgt{ . 'o gcuwatgo gpv.'cpf 'r c{ o gpv0

40' Rt qf wewu'Vj g'r tqf wewu'ugewqp'hkuu'o cvgtkcu'cpf " eqpetgvg'o kzwatgu'yj cv'ctg'cmjy gf 'lp'eqpetgvg" qxgtrc{ u0CCU VQ'cpf "CUVO 'tghgtgpegu'ctg'wugf " y j gtg'pgeguuct{ 00 quv'qh'yj ku'ugewqp'tghgtgpegu'yj g" eqpctcev'f qewo gpv.'y j lej "kpenwf g'yj g'ci gpe{ w" ucpcf ctf "o cvgtkcu'wugf 'lp'yj g'eqpetgvg'o kzwatg" f guki p0Vj g'ugewqp'cnuq'kpenwf gu'c'cdng'qp" tgeqo o gpf gf "i gqvz'wkg'o cvgtkcn'tgs wktgo gpv0

50' Gzgewkqp0Vj g'gzgewkqp'ugewqp'kpenwf gu'yj g" eqputwekqp'tgs wktgo gpv'hqt'yj g'r tqlgew0Vj g{ " kpenwf g'tgs wktgo gpv'hqt'gs wkr o gpv.'r cxgo gpv" eqputwekqp."uwthceg'r tgr ctcwqp.'r cxkpi "qr gtcwqpu." hkpki kpi . 'ewtkpi . 'cpf "lqkpwkpi 0

Ô@ c^!Â

7 cbgfi Wjcb'cZ7 cbWYh'Cj Yf`Ung

DfY!cj Yf`UmFYdUjfg`	*,
Aj`]b['fZ:f'9I]gh]b['5gd\ UHGf fZMWX'DUj Ya Ybhl'	*,
Gi V[fUXY#Gi VVUgYFYdUjfg`	*_
FYdUjfg'cZH Yfa U'7fUW_]b['b'9I]gh]b['5gd\ UhiDUj Ya Ybhi	+\$
FYdUjfg'cZ8 Yhfg]cfUhx'>c]bfg]b'9I]gh]b['7cbWYh'DUj Ya Ybhi	+\$
GYdUfUjcb`@mYf'fZ:f'7cbWYh'cb'7cbWYh'E bVcbXYX'Cj Yf`UngL	+\$
5gd\ UhiGYdUfUjcb`@mYf`	+\$
Bcbk c j Yb'; YchM h]YGYdUfUjcb`@mYf`	+%
Ch Yf'7cbg]XYfUjcbg'Z:f'GYdUfUjcb`@mYfg`	+&
7cbWYh'Cj Yf`UmD`UWYa Ybhi	+&
7cbgfi Wjcb'GH_]b['UbX'AUW]bY7cbf'c`	+&
:]bU'Gi fZMW'DfYdUfUjcb`	+&
D`UW]b['8ck Y'6 Ug_Yhg`	+'
7cbWYh'Cj Yf`Um7 i f]b[`	+'
7cbWYh'Cj Yf`Um>c]bfg`	+(
GUk]b['>c]bfg`	+(
GYU]b['>c]bfg`	+
CdYb]b['h YCj Yf`Umhc`HfUZZW	+)
8 YhYfa]b]b['CdYb]b['H]a Y`	+)
A]b]a]n]b['9Uf`mi@UX]b[': Uh] i Y8 Ua U[Y`	+)
FYdUjfg'cZ7 cbWYh'Cj Yf`Ung`	+)
FYdUjfg'cZl bVcbXYX'7cbWYh'Cj Yf`Ung'+]b"H jW`cf`; fYUhyf`	+*
FYdUjfg'cZ6 cbXYX'cf'l bVcbXYX'7cbWYh'Cj Yf`Ung`@gg'h Ub`*]b"H jW`	+*
GdYW]U'7cbgfi Wjcb'7cbg]XYfUjcbg'Z:f'7cbWYh'cb'7cbWYh'E6 cbXYX'Cj Yf`Ung`	++

Vj g"qvcn'eqputwvqp"ko g'tgs wktgf "hqt" c"eqpetgvg" qxgtrc{ "r tqlgev'ku'uki plhcepvw{ "uj qtvg{ "j cp"j cv'tgs wktgf " hqt" c"tqcf y c{ "tgeqputwvqp"r tqlgev'dgecvw'ho ksgf " s wcpvklgu'qh'getvj y qtnlcpf "dcug"o cvgtkcm'ctg"pggf gf "qt" ctg"uqo gvk gu'pqv'pggf gf "cv'cm"cpf "eqpetgvg"r rcego gpv" pqtto cm{ "r tqeggf u'cv'c"o wej "huvgt"r cegOCf fklqpcmf{ " y gcvj gt"j cu'hgy gt"r qv'pvcn'ko r cev'qp"eqputwvqp" uej gf wguOCu'c'tguwn'tguwthceg' uwtggv'cpf "j ki j y c{ u" ecp'dg'qr gpgf "vq"tclhle"y kj lp" c"uj qtv'r gtlkf "qh'ko g" y kj "cf gs wcv'g"r rcpplpi "xgd O'wulpi "j g'o clpvgcpeg" qh'tclhle"tgego o gpf cvkqu'qwnkpgf "lp"Cr r gpf kz'F+ "

ggr gf ksgf "uwi lpi ."cpf "ghhlegpv'qr gtcvkuu0

Vj cv'luckf . "eqpetgvg"qxgtrc{ u'ctg. "hqt"j g'o quv'r ctv" eqputwvqf "wulpi "eqpxgvpkpcn'gs wkr o gpv'cpf " r tqegf wguOP wo gtqwu'tguwtegu'ctg"cxckrdng" f qewo gpv'kpi "dguv'r tcevegu'hqt"j g'eqputwvqp"qh" r qtwcpf "ego gpv'eqpetgvg"r cxgo gpv'Uvj g"ER"Vgej " Epgvgtar"IO ER"o cpwn"Vc{ rqt"gv'cn0423; . "ugg"sur gekcm{ " [Ej cr vgt](#) " : +ku'j g'o quv'ewtgpv'cpf "y kf gm{ "tgeqi pl' gf O' Cff kklqpcn'tguwtegu'qp"eqputwvqp"r tcevegu'ctg" cxckrdng"hqt"r wtej cug'ltqo "j g'CERC " [Eqpet gvg](#) " [Rcxgo gpv'Hkqf "Telgt gpeg6Rcxkpi "IGD45: "](#)]CERC"4232 _+ " cpf "hqt"tgg'ltqo "j g'HJ Y C" [Hkqf "Telgt gpeg"Ocpw'rlht](#) " [S wcrkl "Eqpet gvg"Rcxgo gpv](#) "]Hem'gv'cn04234 _0

Vj ku'ej cr vgt "hjewugu"qp"i wkf cpeg"cpf "tgego o gpf cvkqu" yj cv'tg"ur gekhle"vq"j g'eqputwvqp"qh'eqpetgvg"qxgtrc{ u" cpf "j cv'f khtgt"ltqo "eqpxgvpkpcn'eqpetgvg"r cxgo gpv" eqputwvqp0

DfY!cj Yf`UmF YdUJfg

Hqt"vpdqpf gf "qxgtrc{ u."r tg/qxgtrc{ "tgr cktu"uj qwf "dg" rko ksgf "vq"ctgeu'qh'vj g'gzknkpi "r cxgo gpv'vj cv'gzj kdk" utwewtcrf kntguugu'vj cv'o ki j v'tghnev'wry ctf "cpf "ngcf " vq"r kntguugu'lp"j g'qxgtrc{ O'Dqpf gf "qxgtrc{ u'qh'gzknkpi " cur j cn'cpf "eqo r qukg"r cxgo gpv'o c{ "tgs wktg'o qtg" gzv'puksg"r tg/qxgtrc{ "tgr cktu"vq"tguvqtg"vj g'gzknkpi " r cxgo gpv'vq"tcl'qt"i qqf "eqpf kklqp"r tlqt"vq"qxgtrc{ " eqputwvqp0Hqt"lphqto cvkqp"qp"kf gpv'kh{ lpi "j g" f kntguugu'f kuewugf "lp"j ku'ugevqp"r wtkpi "j g'gxcn'cvkqp" qh'vj g'gzknkpi "r cxgo gpv'tghgt"vq" [Ej cr vgt](#) "40

AJ`]b['fZ:f'9I]gh]b['5gd\ UHGf fZWXÁ DUj Ya Ybhgk

O knkpi "cp"gzknkpi "cur j cn'lwthceg"ku'pqv'o cpf cvqt{ = " dqvj "wpdqpf gf "cpf "dqpf gf "qxgtrc{ u'ecp'dg'r rcegf "qp" cp"wp0 knkf "lwthceg0Vj gtg'ctg."j qy gxgt."pwo gtqwu" tgecu'pu'hqt"o knkpi "cp"gzknkpi "cur j cn'lwthceg"r tlqt"vq" r rcklpi "c"eqpetgvg"qxgtrc{ <

É' Vq'tgo qxg"bpqputwewtcrf lwthceg"r kntguugu'uwej "cu" uj cmqy "r qvj qngu."dmem'etcentkpi ."tcpf qo "etcentkpi ." cpf "vj gto cn'etcentkpi

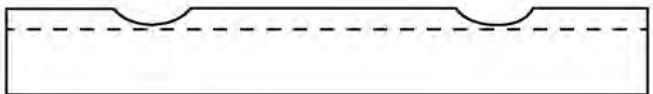
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É' Vq'tgo qxg" c"utkr r gf "cur j cn'lwthceg"cpf lqt" lpxto gf kcv'rc{ gt"vq"gzr qug'utwewtcm{ "uqwpf "cur j cn" Hki wtg": 0+ "

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É' Vq"eqttgevr'tqhkng"cpf "etquu/unqr g'xctkcdkks{ "qhkgp" tghgttgf "vq"cu'r tqhkg"o knkpi "+wulpi "5F"o cej kpg" eqputqr0Y j gp"vj g'gzknkpi "cur j cn'ku'vj keni'gpqi j ." vj ku'ku'cp"ghhlegv'g"y c{ "vq"eqputqr'vj g'xqnxo g'qh" eqpetgvg'tgs wktgf "vq"eqputwv'c"eqpetgvg"qxgtrc{ 0



00Á^&@0^} 0:

:] [i fY, "% A J`] b [' h c' fYa c j Y gYj YfYfi H] b [



T} 0UV&^aaÁ 000^i{ 0^0 }

:] [i fY, "&" 7 cfY'gl ck] b [' dUj Ya YbhH UhiVub'VYa J`YXÁ h c' fYa c j Y'gHf'ddYX# bgci bX'a UHfYU'Zk] h ('] b" cZ< A5 Á fYa U] b] b ['] b [c cX'W' bX] h] cb



αδύαδ·^άά άά^ι(ά·ά)

:][i fY', " "5 gd\ U hgi fZMW'a J`YX'rc`Yb\ UbWV'VcbX]b['k]H` UÁ WbWYH'c j Yf`Um

Dguv'r tcevegu'hqt'o krikpi 'cur j cn\uj qwr'f dg'hqmy gf O' Uedu'cpf 'hqug'cur j cn\uj qwr'f dg'tgo qxgf.'cpf 'y j g' o krikpi 'f gr y j 'uj qwr'f dg'eqpvtqngf'd{ 'utkpi nkg.'unk'qt" 5F'bo cej kpg'eqpvtqngf'g'pwtg'yj cv'v'ngcu'yj g'r'xppgf" o kpo wo 'y j kempgu'qh'cur j cn'tgo clpu'chgt'o krikpi O

Qp'qecukqp.'y j g'o krikpi 'qr gtcvkqp'o c{ 'gzr qug'y j g' wpf gtn'kpi 'dcug'eqwtug'qt'uwdi tcf g'f'wg'v'q'xctkcvkpu'kp" y j g'cur j cn'uj kempgu'qt'xctkcvkpu'kp'y j g'o krikpi 'f gr y j O' Y j gp'y j ku'qeewu.'y j g'eqo o qp'err tqcej 'ku'q'o kn' qt'vto 'y j g'ctgc'ctqwpf 'y j g'gzr quwtg'v'q'cp'cf f kkpqr' f gr y j 'qh'4'v'q'5'kp0cpf 'uko r n' 'lpetgcug'y j g'y kempgu' qh'y j g'eqpetgvg'qxgtr'f' 'd{ 'y j g'uco g'co qwp'y j tqwi j " y j ku'ugevkqp'f'hi wtg': 06-0K'y j ku'err tqcej 'ku'cngp.'y j g' ej cpi g'kp'eqpetgvg'r cxgo gpv'y j kempgu'o wuv'dg'engctn' " eqo o wplecvf 'v'q'y j g'ucy kpi 'etgy 'uq'y j cv'y j g'ucy eww' mecvkpu'cpf 'f gr y j u'ecp'dg'cf l'wngf 'ceeqt f kpi n' O



0UÁ^&@0^} α:

:][i fY', ("5 fYUk\ YfYH Y'a J`]b['UbX'WbWYH'c j Yf`UmÁ XYdH g'UfY'rc`VY'UX'f ghYX'rc`UXX'f Ygg'jgc`UH'X`cWU'jcbg'k\ YfYÁ H YfY'a U]b]b['dUj Ya YbhXYdH 'jg'jbuX'Yei UH

Gi V[fUXY#Gi VVUgY'F YdUJfg

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F tckpci g'f ghkegpekgu'o wuv'dg'tguqrgf 'cv'y j g'tqqv' ecwug'qt'y j g{ 'y kn' gtukn0Wpf gtewkp' 'cpf 'hwm'f gr y j " r cvej kpi 'y kn'pqv'tguqrg'f tckpci g'kuuug'0Tcvj gt." f tckpci g'kuuug'o c{ 'pggf 'v'q'dg'eqttge'v'f'd{ 'tgi tcf kpi " f ke j gu.'kpucn'kpi 'w'pf gtf tckp'u'vgo u.'qt'f' guki p'kpi " o qtg'gncdqtcvg'uq'v'wkp'pu0

Hckrgf'uwdi tcf g'cpf lqt'uwdcug'ctgcu'uj qwr'f dg'w'pf gtew' cpf 'tgr ncegf 'y kj 'u'w'kcdng'o cvgtkcn'cpf 'y j gp'ecr r gf" y kj 'c'u'w'kcdng'hwm'f gr y j 'r cvej .cu'f' guetldgf'dg'ny O

Ø][EÖ^] αU^] αá·Á -Äöä ä * ÄÖ[} &^αÁ Úæ{ ^} c

Etcengf'urdu'yj cv'ctg'pqv'o qxkpi 'f gh'g'v'kpi .tqen'kpi . " gve0'w'pf gt'v'chle'pggf 'pqv'dg'tgo qxgf 'cpf 'tgr ncegf O' Urd'u'yj cv'ctg'utwewtcm' 'w'puqwpf 'cpf 'o qxkpi 'w'pf gt" v'chle'uj qwr'f dg'tgo qxgf 'cpf 'tgr ncegf .y kj 'uwdi tcf g' tgr cku'o cf g'dghqtg'tgr ncego gpv0Eqp'xg'v'kpcn'tgo qxcn' cpf 'tgr ncego gpv'r tqegf w'gu'ht'eqpetgvg'r cxgo gpw' ecp'dg'wugf .cu'f' guetldgf 'kp'y j g'[Eqpetgw'Rcxgo gpi](#) [Rt gugt'xv'kqp'I w'f g](#)Uo kj 'gv'cn'04236-0Vj g'eqpetgvg" o kzw'tg'wugf 'hqt'y j g'tgr ncego gpv'uj qwr'f dg'f guki pgf " hqt'c'eqo r tgu'k'g'utgpi y j 'qh'5.222'r uk'cv4: 'f c{ u0 Nqcf 't'cpu'ht'uj qwr'f dg'f guki pgf 'cpf 'v'g'dctu'uj qwr'f " dg'kpucn'g'f'v'q'o cvej 'y j g'f guki p'qh'y j g'w'utqwpf kpi " gzkrikpi 'r cxgo gpv0

Ø][EÖ^] αU^] αá·Á -Äöä ä * ÄÖ[} &^αÁ Úæ{ ^} α

Ctgc'u'yj cv'j cxg'hckrgf'utwewtcm' 'uj qwr'f dg'r cvej gf'd{ " tgo qxcn'cpf 'tgr ncego gpv'y kj 'uwdi tcf g'tgr cku'o cf g' dghqtg'y j g'r cvej gu'ctg'hckrgf O

Hqt'w'pdqpf gf 'EQC6W'f'qxgtr'f' u.'hckrgf'ctgcu'ecp" dg'tgr cktgf 'y kj 'pgy 'cur j cn'o cvgtkcn'r tqrgtn' " eqo r cvegf 'v'q'ur gek'h'ecv'kqp'+qt'eqpetgvg'0K'eqpetgvg" ku'wugf .y j g'r cvej gf 'ctgc'uj qwr'f dg'eqxgtgf 'y kj "c" i gqvgz'v'g'hcdtle'v'q'r t'gxgpv'dqpf kpi 'dgw'ggp'y j g' qxgtr'f' 'cpf 'y j g'r cvej 0Hqt'dqpf gf 'EQC6D'f'qxgtr'f' u." y j g'hckrgf'ctgc'uj qwr'f dg'hckrgf 'y kj 'pgy 'cur j cn' o cvgtkcn'r tqrgtn' 'eqo r cvegf 'v'q'ur gek'h'ecv'kqp'cpf " uect'hckrgf 'y kj "c'o kn'v'q'gpj cpeg'dqpf kpi O

Ø ||EÖ^] cQÜ^] æ•Á -Äcä q * ÄÖ[{] [•æ^Á
Üæ^ { ^} c

Utwewtcm{ 'hknf 'r cxgo gpv'lj qwf "dg'r cvej gf "d{ "
tgo qxcrfcpf "tgr nrego gpv."y kj "uwi tcf g'tgr cku'o cf g"
dghqtg'y g'r cvej 'ku'hknf ÖP qto cnlr cxgo gpv'tgo qxcrf
r tqegf wtu'ecp"dg'wugf 0

Hqt"dqpf gf "EQCöD+qxgtr{ u."y q'utcvgi kgu'ecp"dg'wugf <

É' Y j gtg" y g" f lo gpukpu" qh' y j g" hknf "ctgc" ctg" ngu" y cp"
8" h" d{ "8" h" y j g" hknf "ctgc" ecp" dg" tgr cktgf "y kj "pgy "
cur j cn" o cvgtkn" r tqr gtn" eqo r cvegf " vq" ur gekhccvqp"
cpf "uectkhgf "y kj "c" o kn'vq'gpj cpeg"dqpf kpi 0

É' Hqt"rti gt"ctgcu."c" y q/n{ gt"r cvej "uj qwf "dg"r nregf." "
y kj "eqpetvg" o cvej kpi " y j g" gzkvpi "ny gt" n{ gt" vqr r gf" "
d{ "cur j cn" o cvgtkn" r tqr gtn" eqo r cvegf " vq" ur gekhccvqp"
cpf "uectkhgf "y kj "c" o kn'vq'gpj cpeg"dqpf kpi 0

Hqt'vpdqpf gf "EQCöW+qxgtr{ u."y g'uko r ngu'err tqcej "
ku'c'hm/f gr y j "eqpetvg'r cvej "y kj "c'i gqvzvkgr{n{ gt" "
eqxgtkpi "y j g'utwheg'qh'y g'r cvej "vq'r txxgpv'dqpf kpi 0

F YdUjf'cZH Yfa U'7 fUW]b['jb'9I]gh]b[Ä 5 gd\ U'hDUj Ya Ybh

Etcem'y cv'tg'y kf gt"y cp'y j g'o czko wo "eqctug"
ci i tgi cvg'uk g'wugf "lp" y j g'eqpetvg'qxgtr{ "o kzwtg"
uj qwf "dg'hknf "vq'r txxgpv'y j g'qxgtr{ "tqo "ng{ kpi "kpq"
y j g'wpf gtn{ kpi "r cxgo gpv'Vj gug'etcem'ecp"dg'hknf "
y kj "lqkv'hknf" o cvgtkn" hny cdng" o qtvt" o kzwtg" c"
eqo dkpcvqp"qh'r qtwpf "ego gpv'ucpf. "cpf "y cvgt+."
ucpf. "qt'hkpu'r tqf wegf "d{ "y j g'o knkpi "qr gtcvqp0"
P cttqy gt'etcem'f q"pqv'tgs vktg'tgcvo gpv0

F YdUjf'cZ8 YHf]cfUHYX'>c]bhg]jbÄ 9I]gh]b['7 cbWYH'YDUj Ya Ybh

Hqt'vpdqpf gf "EQEöW+qxgtr{ u."dcf n{ "f gvtlqtcvgf "
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dghqtg'y j g'ugr ctcvqp"n{ gt"ku'r nregf ÖCm'hqug" o cvgtkn"
lp'y j g'lqkvu'lj qwf "dg'tgo qxgf "d{ "c'eqo dkpcvqp"qh"
o cpwcd'o gjv qf u'cpf "eqo r tguugf "ckt" crr tqzko cvgn "
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r cxgo gpv'utwheg'wulpi "c'hny cdng" o qtvt" o kzwtg"
*Hk wtg": Ö/ÖUqo g'ci gpegu'j cxg'cnuq'wugf "cur j cn"
o knkpi "hkpu'qt" J Ö C"vq'hkn'y j g'lqkvu0



Vf aa/æw[i/||æÖÜÖÖÖf UBSÜÖÖÖf ö/æ•^äÄ æÖ/Ä/ { ä•ä }

:]I i fY,) "8 YHf]cfUHYX'c]bhg]jb'YI]gh]b['WcbWYH'YDUj Ya YbÄ
WYubYX'UbX'Z'YX'k]H 'Zck UY'Ya cfHf

GYdUFU]cb' @JHf'fæf'7 cbWYH'cbÄ 7 cbWYH'Ä bVcbXYX'Cj Yf'Ungk

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y j g'qxgtr{ "ku'r nregf 0

P qvg'y cv'dgecvug'EQCöW'qxgtr{ u'ctg'v{ r kcm{ "
f guki pgf "y kj qw'c'ugr ctcvqp"n{ gt."cu'gzr nckpgf "kp"
Ej cr vgt'S."y ku'f kuewukqp"qh'ugr ctcvqp"n{ gt'u'ku'qpn{ "
crr ncedng"vq'EQEöW'qxgtr{ u0

5 gd\ U'hGYdUFU]cb' @JHf

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n{ gt'u'ctg'tghgpgpf "lp" Ej cr vgt'S0

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eqputwvvgf"qh'cur j cn'r cxgo gpw'ctg'crr tqr tlcvg'hqt"
r nckpi "cur j cn'ugr ctcvqp"n{ gt'uÖC"ng{ "r ctco gvgf'hqt"
f gpug/i tcf gf "cur j cn'o kzwtg'ku'lp/r nreg'ckt"xqkf uÖCtgcu"
qh'hny "f gpuk{ "y kj "c'j ki j "co qwpv'qh'lp/r nreg'ckt"xqkf u"
ecp'rcf "vq'ugwgo gpv'qh'y j g'eqpetvg'qxgtr{ "f vg"vq"
ugeqpf ct{ "eqpuqkf cvkqp."xqnwo g'ej cpi g."cpf "kpetgcugf "
tkm'h'utkr r kpi ÖTgi ctf ngu'qh'y j g'v{ r g'qh'cur j cn"
ugr ctcvqp"n{ gt"wugf."dgu'r tceveg'u'ht"cur j cn'o kzwtg"
f guki p"cpf "eqputwvvgf"uj qwf "dg'hqny gf "vq'r tqxkf g'cp"
cf gs wvg'hqwpf cvkqp'hqt"y j g'eqpetvg'qxgtr{ "y cvt'guknu"
utkr r kpi "cpf "f grkxgtu'hqpi /vgto "uwr r qt v'cpf "uvedkrk{ 0

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E' Tgo qxg"cpf "tgr nceg"t co ci gf "cpf "qtp"tcdtle0

E' Tgf weg"vj g"tcxgnur ggf "qh"eqputwekqp"tchhle0

CH Yf`7 cbgJXYfUjcbg`Zf`GYdUfUjcbA @hvfq

Y j gp"o"pqo kpcn"vj kempgu"qh"cur j cn"qt"i gqvgzvkrg"ku" ur gekhgf. "vj g'ugr ctcvkqp"rc{ gt "guugpvkcm{ "o ktqtu"vj g" r tqhkrq"qh"vj g'gzknkpi "r cxgo gpv"Y j krg"uqo g'dwo ru" cpf "t'kr u'y knidg"uo qqvj gf "qwd{ "cp"cur j cn"rc{ gt." vj g"o clqtk{ "qh"vj g'gzknkpi "r tqhkrq"xctkcdkks{ "y knidg" eqttgevgf "d{ "vj g"xctkcdng"t gr vj "lp"vj g'eqpetvgv"qxgtrc{ O' Vj ku"cr r tqcej "ku"eqo o qp"cpf "t'v'kccm{ "tguwnu"lp"vj g" mny guv'equv"vq"vj g"ci gpe{ "y j gp"vj g'eqpetvgv"qxgtrc{ "ku" o gcuwtgf "cpf "r ckf "hqt"wkpi "gkxj gt "c"us wctg{ "ctf "r c{ "kgo " hqt"r nceg" gpv"cpf "c"ewdle{ "ctf "r c{ "kgo "hqt"o cvgtkcn"qt"o" ulpi ng"ewdle{ "ctf "r c{ "kgo. "cu"pqvgf "lp"t'ej cr vgt'90

7 cbWYHf`Cj Yf`UmD`UWwA Ybh

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Vj g"o gcpu"vq"o gg"vj gug"qdlgevkxu"ctg"lp"eqphkex."uq" vj g'hkpcn"qxgtrc{ "r tqhkrq"o wuv'dg"qr vko k gf "vq"o gg"vcm" vj tgg"OC"t'gvckrgf "uwtxg{ "qh"vj g'gzknkpi "r cxgo gpv"vj cv"

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: jbu`Gi fZWW`DfYdUfUjcb

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Chgt"uy ggr kpi. "vj g'uwthceg"lj qwrf "dg"nrg v't co r. " y kj "cp{ "t'gg"y cvgt"tgo qxgf "t'kgevn{ "cj gcf "qh"vj g" r cxgtO'Y j gp"r cxkpi "qp"o"i gqvgzvkrg"ugr ctcvkqp"rc{ gt." vj g'qdlgevkxg"lj qwrf "dg"o"uuki j vq{ "t co r "uwthcegO'v'Ugg" t'ej cr vgt'8"ht"o qtg"lphqto cvkqp"qp"vj g'cr r tqr tlcvg" co qwpv"qh"vj cvgt "hqt"i gqvgzvkrg"ugr ctcvkqp"rc{ gtuO'K'vj g" i gqvgzvkrg"ku"qxgty cvgtgf. "k'ecp"dgeqo g'ucwvcvgf "cpf " ecwug"drggf "y cvgt "vq"tkug"vj tqvi j "vj g'eqpetvgv"qxgtrc{ " vq"vj g'uwthcegO'Vj ku"ku"gur gekm{ "cp"kuwv"cv"vj g'dqvwqo " qh'xgtv'ecn'ewt'xgu"i gqvgzvkrg"ku"o"i qqf "t'ckpci g'eqpf vkw" cpf "gzeguu"y cvgt"ceewo wrcvgu"cv'hty "r qlpvu0



Uj`a^t'BAU`•{ Baa••BQ BBA`••aA` BBA`^t{ a`••j

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D`UWb['8 ck Y`6 Ug_ Yhg

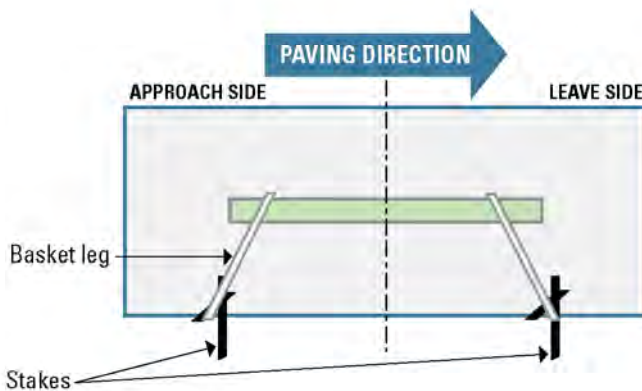
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lphqto`cwkq.`'ugg`'y`g`'HJ`Y`C`'gej`'dtlgh`[F`qy`gndcungu`](#)
[Cpej`qtkpi`'O`wi`qf`u`<Dgw`Rtcewgu`lqt`'Lqpwgf`'E`qpetgw`](#)
[Rexgo`gpw`](#)]Xqli`v`cpf`'Hgttdgg`4238_0`Cpej`qtkpi`"
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E`P`cku`'o`c`'dg`'lpw`h`le`gpw`'cpej`qt`gf`'lp`'cur`j`cn`
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E`I`g`q`v`z`w`g`'h`cdt`le`'cpf`'pgy`n`'r`r`ceg`f`'h`pg`'i`tcf`gf`'cur`j`cn`
o`k`z`wt`gu`'r`txkf`g`'h`gu`'h`le`v`qp`'y`cp`'c`'o`k`ngf`'u`w`h`ceg`'qt`"
gz`kukpi`'eqpetgw`0`T`gf`weg`'h`le`v`qp`'ecp`'ecwug`'y`g`'f`qy`gn`
dcungu`'v`'o`qxg`'cu`'y`g`'eqpetgw`'j`gcf`'lp`'h`qp`v`qh`'y`g`
r`cxgt`'ukf`gu`'cn`qpi`'y`g`'u`w`h`ceg`'qh`'y`g`'ugr`ctc`v`qp`'r`c`{`gt`"
lpugcf`'qh`'t`qm`pi`'cu`'y`g`'r`cxgt`'o`qxgu`'h`q`ty`ctf`0

E`Cp`'gzegu`uxg`'eqpetgw`'j`gcf`'ecp`'ecwug`'y`g`'eqpetgw`'lp`
h`qp`v`qh`'y`g`'r`cxgt`'v`'dg`'r`wuj`gf`'t`cv`'gt`'y`cp`'t`qmgf`'."
y`j`k`ej`'ecp`'o`qxg`'y`g`'f`qy`grndcungu`0



Adapted from ACPA, used with permission

:`J`[`i`f`Y`,`"-`"8`ck`Y`"VUg`_`YhUbW`cf`b`U`j`g`d`UW`X`'cb`'H`Y`X`ck`bgf`YUa`A`
g`j`XY`c`Zh`Y`VUg`_`Yhif`Y`U`hj`Y`h`c`'H`Y`X`j`f`Y`W`j`cb`'c`Zd`U`j`J`b`[`

Uj`kr`r`kpi`'y`k`gu`'uj`qwf`'dg`'h`h`lpw`ce`v`0`V`j`ku`'ku`'t`wg`'gxgp`"
y`j`gp`'cp`'O`K`/UECP`'f`gxleg`'ku`'wugf`'v`q`'xgt`kh`'f`qy`gn`
r`nego`gpv`p`qpf`gust`wex`gn`'0`V`j`g`'uj`kr`r`kpi`'y`k`g`'ch`geu`
y`j`g`'O`K`/UECP`'qwr`w`d`w`y`kri`p`q`v`t`gp`f`gt`'k`'wpw`udng`
hqt`'f`g`vto`l`p`kpi`'f`qy`grh`qec`v`kpu`0`Hqt`'l`phqto`cwkq`'qp`'y`g`
wug`'qh`'y`g`'O`K`/UECP`'f`gxleg`'ugg`'E`q`mtcf`q`'Rt`qegf`w`g`"
[*ER+9`:/42`."Ucpf`ctf`'Rtcew`g`'lqt`'Gxcmw`kpi`'O`K`/UECP`](#)
[K`o`ci`gu`'lqt`'Wpew`f`qy`gndcungu`](#)]EF`QV`4243_0

Rgtkqf`lecm`'f`qy`gn`r`nego`gpv`uj`qwf`'dg`'o`cpwcm`' "
xgt`k`h`gf`'ch`gt`'y`g`'r`cxgt`'j`cu`'r`cu`gf`'qxgt`'y`g`'dcungu`
*Hki`wtg`':`02`-0`Uwur`gp`f`'r`cxkpi`'qr`gtc`v`kpu`'h`'y`g`'dcungu`
ctg`'h`q`wpf`'v`q`'dg`'o`qxkpi`'wp`v`k`c`'r`ncp`'h`qt`'ugewt`gn`"
cpej`qtkpi`'y`g`'dcungu`'ku`'cr`r`txxgf`0`P`wo`gt`qwu`'o`gy`qf`u`
ctg`'cx`ck`rdng`'hqt`'ej`genkpi`'y`g`'r`nego`gpv`qh`f`qy`gn`
ppeg`'y`g`'eqpetgw`'j`cu`'j`ctf`gp`gf`'u`we`j`'cu`'O`K`/UECP`'."
O`K`/UECP`/V4`.'i`tqwpf`'r`gpgt`c`v`kpi`'tcf`ct`.'cpf`'eqtkpi`'0`
Cnj`qwi`j`'y`g`'r`t`gekuk`qp`'qh`'y`g`'gug`'o`gy`qf`u`xct`lgu`'k`'ku`
tgeqo`o`gp`gf`'y`cv`f`qy`gn`r`nego`gpv`dg`'xgt`k`h`gf`'y`tqwi`j`"
uqo`g`'o`gcpu`0

7`cbW`Y`h`C`j`Y`f`U`ni`7`i`f`j`b`[`

Y`j`k`g`'ewt`kpi`'ku`'et`k`le`cni`*`{`gv`q`h`g`p`'qxgtr`m`q`ngf`+'hqt`'cni`
eqpetgw`'r`cxgo`gpw`'k`'ts`wkt`gu`'r`ct`v`ewt`'c`v`gpv`qp`'hqt`"
qxgtrc`{`u`'hgu`'y`cp`':`'lp`0`y`len`0`Hqt`'o`qtg`'l`phqto`cwkq`"
qp`'ewt`kpi`'ugg`'y`g`'TO`ER`'o`cpwcr`]Vc`{`nqt`'g`v`cn`0423`;"
cpf`["Ewt`kpi`'E`qpetgw`](#)]Vc`{`nqt`'4235_0`Dgecwug`'y`g`'t`cv`kq`
qh`u`w`h`ceg`'ctgc`'v`'x`q`nwo`g`'ku`'i`tgc`vgt`'hqt`'y`l`ppgt`'qxgtrc`{`u`
y`cp`'hqt`'v`r`le`cni`eqpetgw`'r`cxgo`gpw`'y`g`'u`co`g`'t`cv`g`
qh`g`xcr`qtc`v`kpi`'y`kri`j`cxg`'i`tgc`vgt`'f`g`tko`gpw`cni`gh`geu`
qp`'y`l`ppgt`'qxgtrc`{`u`'y`cv`ctg`'p`q`v`r`tqr`gt`n`'ewt`gf`0`Hqt`
gzco`r`ng`'gzegu`uxg`'f`t`{`kpi`'uj`t`l`p`mci`g`'ecwugf`'d`{`'r`xg`'cpf`'f`
qt`'l`pcf`gs`w`cv`g`'ewt`kpi`'ecp`'t`gf`weg`'d`qpf`'u`w`gpi`'y`u`f`w`g`'v`q`
o`q`k`u`w`g`'tgr`v`gf`'y`ctr`kpi`'y`k`j`lp`'y`g`'eqpetgw`'qxgtrc`{`0



S`^`c`a`A`r`et`st`~`|`r`|`e`v`a`x`|`+`a`A`0`|`|`&`^`c`A`U`e`^`^`^`o`U`e`+`|`&`a`a`|`e`v`a`|`|`&`+`a`|`

:`J`[`i`f`Y`,`"%`"A`Ubi`U`'j`Y`f`j`W`U`j`cb`'c`ZX`ck`Y`'d`UW`a`Y`bh`

Ucy ewf gr vj u'lj qwf "dg'enugn"o qpkqtf 'lp'vj g'hgrf " vq'gpwug'vj cv'vj g' 'o ggv'vj g'ur gekhgf "o kpo wo "f gr vj O' Cffklqpcmf . 'dgecwug'etcentpi "v' r lecm' 'lpklcvgu'cv' vj g'urcd'gf i g. 'vj g'r tqr gt'ucy ewf gr vj 'lj qwf "gzvpgf " vj tqw j 'vj g'gf i g'qh'vj g'r cxgo gpvOY j gtg'xctkdng/f gr vj " r cxgo gpv'ku'r negf "v'cf lwn'vj g'etqu'urgr g. 'vj g'ucy ewf " f gr vj u'o wu'dg'cf lwn'vj "v'etgcv'c'r tqr gt'y gcnpgf " r ncp'vj cv'y knr tqo qvg'eqpvtqmgf "etcentpi O'Hjt'o qtg" kphqto cvkp'qp'lqpv'ucy kpi . 'ugg'Cr r gpf k'z'CO-

[JRGTRCX](#) "Vj g'Vtcpu'ge'I tqwr "4243+."c'ulhy ctg'vqnl' vj cv'r tgf k'w'utguugu'lp'eqpetvg' .ku'gur gekm' "wugwrlht" swcpvkh'kpi "vj g'tkml'qh'gctn' /ci g'etcentpi "cpf "r ncpplpi " vj g'ucy kpi "ecr cels' "pggf gf "hqt"c'r tqlge'vOJ [RGTRCX](#) "ku' c'r tqxgp'vqnl'ht"dqj "ucpf ctf "eqpetvg'r cxgo gpv'cpf " eqpetvg'qxgtr' { "eqpwtvckp0

GYU]b['>c]bthg

F guki p'eqpukf gtcvku'p'ht'f gvgto kplpi "vj g'pggf "v'ugcn' lqkpw'lp'c'eqpetvg'qxgtr' { "kpnmf g. "dw'ctg'pqv'iko k'gf " vq. "v' r g'qh'qxgtr' { "cpf "enlo cvg' "tghgt "v'Cr r gpf k'z'COVj g" r tqegui'ht'ugcn'pi "lqkpw'ku'vj g'uco g'ht"dqj "eqpetvg" qxgtr' { u'cpf "pqto cneqpetvg'r cxgo gpwODgu'r tceveg" ht'ugcn'pi "lqkpw'ctg'hm' "f guetldgf "kp"[Ej cr vgt](#) ". "qh'vj g" [IO ER'O cpwcr](#) "Vc { nqt "gv'cn0423; + "cpf "ctg'wuo o ctk gf " kp'vj g'CERC "gej "dtlgh"[Eqpetvg'Rcxgo gpv'Lqkv'Uckrpi /](#) [Hknkpi](#) "CERC"423; -0

CdYb]b['H Y' Cj Yf`Umhc`HfUZZW

8 YHfa]b]b['CdYb]b['HJa Y

Kp'o quv'ecugu. "vj g'ucv'gt' "tqecn'ci gpe { au'ucpf ctf " ur gekh'ecvku'p'ht'qr gplpi "v' 'tchle'ecp'dg'wugf "v" f gvgto kpg'y j gp'v'q'qr gp'cp'qxgtr' { "v' 'tchleOY j gp" ceegrtcv'gf "qr gplpi "v'eqpwtvckp'cpf k'rt'vdrle "tchle" ku'f guk'gf . "c'r tqlge'v'ur gekh'le"o kpo wo "qr gplpi "utgpi vj " ecp'dg'ecr'wv'gf "dcugf "qp'vj g'i wkf cpeg'r tqxkf gf "kp" [Eqpetvg'Ut gpi vj 'Tgs wkt gf 'vq'Or gp'vq'Vt chle](#) "Htggugo cp" gv'cn04238+0O cwtk' { "vgnkpi "ecp'cnq'dg'wugf "kp" eqplwpevku'p'y kj "vj ku'cr r tqcej . "cu'f go qpwtcv'gf "kp'vj g" qpi qkpi "r tqlge'v"[Gxcmvckp'qliNapi /Vgto "Kor cew'qliGctrf](#) " [Or gplpi "qliEqpetvg'Rcxgo gpw'cv'OpTOCF0](#)

A]b]a]n]b['9U`m@UX]b[': Uh] i YÁ 8Ua U`Y

Vj g'hvki wg'hkg'qh'c'eqpetvg'r cxgo gpv'ku'ugpukxg'vq" gctn' "tchle'iqcf kpi OF getgcugu'lp'hvki wg'hkg'ecwugf " d { "vj g'gctn' "cr r n'ecvku'p'qh'j gcx { "iqcf kpi u' "dghqtg'vj g" eqpetvg'j cu'tgcej gf "vj g'ur gekhgf "utgpi vj + "ecp'dg" cxqkf gf "d { "hggr kpi "y j ggri'qcf u'3 "v'4'hv'qo "vj g'htgg" gf i gu'qh'vj g'r cxgo gpvO'Utwe'wcr'cpcn' ugu'lj qy "vj cv" j ki j "h'xgn'qh'r cxgo gpv'ur r q'tv'cnq'tgf weg'gctn' / " ci g'iqcf / tgrcv'gf "utguOY kj "eqpetvg'qxgtr' { u. "vj g" wpf gtn' kpi "r cxgo gpv'r tqxkf gu'c'j ki j gt'h'xgn'qh'ur r q'tv' vj cp'ku'r tgu'gpv'kp'o quv'eqpxgpv'kpcn' c'xkpi 0

FYdU]f g'cZ7 cbWYH`Cj Yf`Ung

Eqpetvg'qxgtr' { u'ecp'dg'zr gev'gf "v'r tqxkf g'zegm'gpv" r gthqto cpeg'cpf "hpi "hkg. "cu'f qewo gpv'gf "kp'vj g'gej " uwo o ct { "J k'at { "qh'E'qpetvg'Qxgtr' { u'lp'vj g'Wp'k'gf " Ucv'gu" "tquu. "ht'vj eqo kpi +0N'ng'cm'r cxgo gpv'u' ugo u. " j qy g'xgt. "uqo g'tgr cktu'o c { "dg'p'gegu'ct { "f wtkpi "cp" qxgtr' { au'ugtxleg'hkgO'ht"gzco r ng. "uqo g'ku'rcv'gf "f kntguugu" o c { "qee'w'f wg'v'q'uwduw'he'g'eqpf k'kpu'vj cv'y gtg'pqv' f k'eqxgtgf "f wtkpi "vj g'f guki p'cpf "eqpwtvckp'r j cugu" qt'f wg'v'q'f gh'ekgpv'o cvgtkcn'cpf "eqpwtvckp'r tceveg" O' Tgi ctf nguu'qh'vj g'ecwugu. "qxgtr' { "tgr cktu'ctg'tgrv'xgn' " utcki j vhty ctf "cpf . "kp'o cp { "ecugu. "gcukgt "v'r gthqto " vj cp'tgr cktu'qh'eqpxgpv'kpcn'eqpetvg'r cxgo gpw0

Vy q'r tko ct { "tguwtegu'r tqxkf g'f g'ck'gf "kphqto cvkp'qp" vj g'o clp'vgpcpeg'cpf "tgr ckt'qh'eqpetvg'qxgtr' { u<

[É' I wkf g'ht'Eqpetvg'Rcxgo gpv'F knt gu'Cu'gu'uo gpw'cpf "](#) [Uqnv'kpu'<'K' gpv'h'ecvku'p. 'Ecwugu. 'Rt g'xgpv'k'p. 'cpf 'Tgr ckt "](#) *J ctklpi qp'gv'cn0423; + "ugg'gur gekm' "Ej cr vgtu'[37](#) . " [39](#) . "cpf [3](#) .

[É' Eqpetvg'Rcxgo gpv'Rt g'ugtxcv'k'p I wkf g "](#)*Uo kj "gv'cn04236+



Öä / Ö^Ö! æEÄ &@ æ / Ö[} &^c / ÖE • [&ææ } EÄ • ^âÄ æ / Ä ^! { ä • ä }

: [i fY, 'o% "F Ygi `hg' cZU hnd]WU`Wc bWYhY'dUj Ya YbhA
a]``b[`cdYfU]cb

O kɪpi 'c'eqpetgɔ'qɔgɪn { 'ku'uko kɪt 'q'o kɪpi 'cp'cur j cn/
ɪ {gt 'k'j g'hɪmɪj kɪ 'y c {u<

É Vj g'o kkpí 'f gr y "ecp"dg'hgc y gtgf "kpq"cf lcegpv
r cxgo gpw0

É O kkpí "ecp"dg"eqo r ngvgf "qp"ur gekkhe"ugngevgf "ugevkqu0

É Vj g'eqctugpguu'qh'v'j g'lwthceg'chgt'o knpi "cpf'v'j g"
 hpgpguu'qh'v'j g'o knpi u'ecp'xct{'dcugf'qp'v'j g'v' r'g'cpf"
 ur celpi "qh'v'j g'vggy'qp'v'j g'o knpi 'f two 0

Vj g'r tqf wexkx{ 'qh'eqpetvgv'o kŋkpi 'f gr gpf u'ŋp"
 yj g'j ctf pgw/qh'yj g'ci i tgi cvg'lp'yj g'eqpetvgv. 'yj g'dk/
 eqphki wcvqap/qh'yj g'o kŋkpi 'o kej lpg. 'cpf 'yj g'tgo qxcn'
 f gr yj 0Hqt'gzco r rg. 'k'j cu'dggp'qduxtgf 'yj cv'c'4'lp0'
 f ggr 'eqpetvgv'qxgtr{ 'ecp'dg'tgo qxgf 'cv'cr r tqzko cvgn'
 : .222'h4 lj qwt'cpf 'c'6'lp0f ggr 'qxxgtr{ 'ecp'dg'tgo qxgf"
 cv'cr r tqzko cvgn' '4.922'h4 lj qwt0

GdYU 7 cbgfi WjcbÁ
7 cbg]XYfUjcbgZcf 7 cbWYhY`cbÁ
7 cbWYhYË6 cbXYX`Cj Yf`Ung

EQEóD'qxgtrc{u'ctg'crrncedrg'lp'xgt{ 'hlo kgf"
ekewo ucpegu0F guki p'cpf'eqputwekqp'i wkf cpeg'hqt"
EQEóD'qxgtrc{u'ecp'dg'hqwpf'lp'Crpgpfkz'E0

OE] ^} åãÁ

: i bXUa YbH'g'cZ7 cbWYhY
Cj Yf`Um8 Yg][b

Cj Yfj jYk`cZ7 cbWYhY`Cj Yf`Um8 Yg][b`	, \$
7 cbWYhY`Cj Yf`UmH jW_bYgg`8 Yg][b`	, \$
HndjWU`H jW_bYgg`8 Yg][b`bdi hg`UbX`7 cbg]XYfUjcbg`	, \$
GY`Wjcb`cZUH jW_bYgg`8 Yg][b`DfcW`Xi fY`	, \$
Cj Yfj jYk`cZ7 ca a cb`7 cbWYhY`Cj Yf`Um8 Yg][b`DfcW`Xi fYg`	, &
? Ym8 Yg][b`7 cbg]XYfUjcbg`	, (
8 Yg][b`7 cbg]XYfUjcbg`Z:f`5`7 cbWYhY`Cj Yf`Ung`	,)
8 Yg][b`7 cbg]XYfUjcbg`Z:f`7 cbWYhY`cb`7 cbWYhY`E bVcbXYX`Cj Yf`Ung`	,)
8 Yg][b`7 cbg]XYfUjcbg`Z:f`7 cbWYhY`cb`5 gd\ UfE bVcbXYX`Cj Yf`Ung`	, -
8 Yg][b`7 cbg]XYfUjcbg`Z:f`7 cbWYhY`cb`5 gd\ UfE6 cbXYX`Cj Yf`Ung`	- \$
8 Yg][b`7 cbg]XYfUjcbg`Z:f`7 cbWYhY`cb`7 cbWYhY`E6 cbXYX`Cj Yf`Ung`	- '
5 XX]hcbU`8 Yg][b`7 cbg]XYfUjcbg`hc`5 XXfYgg`a dUW`g`cZDfcZ`Y`UbX`; fUXY7\ Ub[Yg`	-)
Cj Yf\ YUX`7`YUfUbW`	- *
G\ ci`XYf`7 cbg]XYfUjcbg`	- *
6 UfjYfg`UbX`F U]g`	- *
: cfYg`cdYgZ6 UW_g`cdYgZ UbX`5 Wcgg!FcUX`8 fUjbu\ Y`Gfi Wfi fYg`	- *
GUZYmi9 X[Y`	- *
K jXYb]b[`UbX`@UbY5 XX]hcbg`	- +
b!D`UW`Gfi Wfi fYg`	- ,
7 i fV`UbX`; i Hf`8 YHj`g`	- ,
HfUbg]hcbg`	- ,

Cj Yfj JYk `cZ7 cbWYh'Cj Yf`UmÁ 8 Yg][b

Eqpetgv'q'xgtr{ 'f guki p'r tqegf wgu'f gpgtcm' 'eqpukf gt' wugt' lpr wu'uwej 'cu'cpv'ekr cvg'f 'tchle. 'erko cvg. " uwr r qtv'rc { gtu. "o cvgtkcn'r tqr gtv'gu. "urcd'f ggo gvt { . " cpf 'r gthqto cpeg'etkgtk'q'f' g'xgnr 'c'tgeqo o gpf gf " q'xgtr{ 'y' lempguu'Vj g'f guki pgf 'q'xgtr{ 'y' lempguu'ku'c " o clqt'f tkg'g'q'h'q'xgtr{ 'equ'v'cpf 'ku. 'y' g'g'htg'g. "c'o clqt " h'cevt'kp'y j g'v'gt 'c'eqpetgv'q'xgtr{ 'ku'ugr'gevgf 'hqt'c " i kxgp'r tq'gevo

O q'xkpi 'dg{ qpf 'y' lempguu'f guki p. "j qy g'xgt. "y' g" eqo r t'g'j g'puk'g'f' guki p'q'h'eqpetgv'q'xgtr{ 'u'ungo u' k'pen'f'gu'o cp{ 'cf'f'k'k'p'cn'leqo r q'p'g'p'w<

É' F g'v'gto k'p'cv'k'p'q'h'y'j g'v'f'g'cpf 'g'z'v'p'v'q'h'r t'g/q'xgtr{ " t'gr cktu

É' Ugr'ge'v'k'p'q'h'eqp'ut'w'v'k'p'o cvgtkcn'y kj "y' g" cr r t'qr t'k'v'g'r t'qr gtv'gu

É' Cuuwo r v'k'p'q'h'd'q'p'f' kpi "qt't'g'v'c'k'p'v'c'v'y' g'k'p'v'g't'ce'g" dg'v' g'p'v'j' g'q'xgtr{ 'cpf 'y' g'g'z'k'v'k'p' 'r'cxgo g'p'v'k'g'o " y j g'v'gt 'y' g'q'xgtr{ 'ku'd'q'p'f'gf "qt'w'p'd'q'p'f'gf +

É' F guki p'q'h'gf i g'uwr r q'tv'g'g'o 0'hqt'y' k'f'g'p'g'f 'h'p'g'u'qt'v'k'f " eqpetgv'uj q'w'f'gtu+. 'h'c'p{ 'ku'p'g'g'f'gf

É' F g'v'gto k'p'cv'k'p'q'h'q'xgtr{ 'r'cp'gn'f'ko g'puk'p'u'cpf " l'q'p'v'rc { q'w

É' Ugr'ge'v'k'p'q'h'l'q'p'v'f' guki p'f' g'v'c'ku'g'o 0'rc'f "t'c'p'uh't " cpf 'u'g'c'p'v'r t'q'x'k'k'p'u+. 'h'c'p{ 'ur'g'ek'n'leq'p'uk'f'g't'c'v'k'p'u " ct'g't'gs v'k'gf

Uqo g'q'h'y' g'ug'eqo r q'p'g'p'w. 'uwej "cu'l'q'p'v'rc { q'w'cpf " eqp'ut'w'v'k'p'o cvgtkcn'r t'qr gtv'gu. 'ecp'uki p'h'ec'p'v' " ko r'cev'q'xgtr{ 'r'g'th'qto c'peg'0'Vj g't' l'pr wu. 'uwej "cu" r'cp'gn'f'ko g'puk'p'u. 'l'q'p'v'f' g'v'c'ku. "gf i g'uwr r q'tv. "cpf " d'q'p'f' 'eq'p'f' k'k'p'. 'f'k'g'ev' "ko r'cev'y' lempguu'f guki p'cpf " y' g't'g'ht'g'o w'u'd'g'ugr'ge'v'f' 'eq'p'ew't'g'p'v' "y' kj. "cpf "cu'c " r'ctv'q'h' 'y' g'y' lempguu'f guki p'0'Vj g'i q'cn'q'h'c' 'u'we'g'u'w'w'w' eqpetgv'q'xgtr{ 'f' guki p'uj q'w'f' "dg'v'q'cf'f' t'gu'c'm'f'f' guki p " eqo r q'p'g'p'w'q'h'y' g'q'xgtr{ 'u'ungo "kp"c'o c'p'p'g't' 'y' cv' d'c'r'p'eg'u'eq'u'y' kj "f' guk'f'g'f' r'g'th'qto c'peg'kp'v'gto u'q'h' s'w'c'k'v{ 'cpf "f' w'c'v'k'p'q'h'ug't'x'k'g'f' r'k'g'o

7 cbWYh'Cj Yf`UmH JW_bYgg'8 Yg][b

F guki p'kpi "c'eqpetgv'q'xgtr{ 'ku'c'r' t'q'eg'u'v'y' c'v'd'gi k'p'u " y' kj "ej' ct'ce'v'g't'k' kpi "y' g'g'z'k'v'k'p' 'r'cxgo g'p'v'cu'q'w'v'k'p'g'f' "kp" Ej'cr'v'g't'4'q'h'y' ku'f' w'k'f'g+ "f' g'h'p'kpi "et'k'k'ec'n'f' guki p'x'ct'k'd'rgu. " cpf 'y' g'p'ec'r'ew'v'k'p' 'y' g't'gs v'k'gf' 'q'xgtr{ 'y' lempguu'o

k'p'ugr'ge'v'k'p' 'y' g'h'p'cn'y' lempguu'f guki p. 'k'ku'ko r q't'v'cp'v' hqt'y' g'g'p' k'p'g'g't'v'q'c'p'v'ekr cvg'y' j cv'y' g'eq'p'f'k'k'q'p'q'h'y' g" g'z'k'v'k'p' 'u'g'ev'k'p'y' k'm'd'g'c'v'y' g'v'ko g'q'h'ce'w'c'n'leq'p'ut'w'v'k'p' q'h'y' g'p'gy "eqpetgv'w'w'w'ce'g'0'k'leq'p'ut'w'v'k'p'y' k'm'p'q'v' d'gi k'p'hqt'y' q'q't'y' t'g'g' "g'ct'u. "uqo g'f' g'g' t'c'f'c'v'k'p'q'h'y' g" g'z'k'v'k'p' 'u'w'ew'w'g'uj q'w'f' "dg'c'p'v'ekr cvg'f' 'cpf "eqpuk'f'g't'g'f " k'p'y' g'c'p'c'n'f' uku'o

HndJWU`H JW_bYgg'8 Yg][b`bdi hg`UbXÁ 7 cbgJXyfUhcbg

Vj g'p'wo d'gtu'cpf "v'f' r'gu'q'h'k'p'r wu'v'q'd'g'eqpuk'f'g't'g'f " f'w'k'p' 'q'xgtr{ 'y' lempguu'f guki p'x'ct{ 'i' t'g'c'v' "0'Vj g" h'q'm'y' kpi "ej' g'em'ku'v'k'p'en'f'gu'o cp{ 'q'h'y' g'w'p'ls'w'g'h'ce'v'qtu" cpf "f' guki p'k'p'r wu'v'y' c'v'uj q'w'f' "dg'eqpuk'f'g't'g'f' 'kp'q'xgtr{ " y' lempguu'f guki p<

É' G'z'v'p'v'q'h'r t'g/q'xgtr{ 't'gr cktu'p'g'g'f'gf

É' P g'g'f' hqt't'g'h'g'ev'k'g'et'c'c'ne'eq'p'v'q'n

É' Q'xgtr{ 'r'cp'gn'f'k' g

É' R't'g'ug'p'eg'q'h't'g'k'p'h'q't'ego g'p'v'k'p'y' g'q'xgtr{ 'urcd

É' Cuuwo g'f' "d'q'p'f' "qt'ugr'ct'c'v'k'p' "dg'v' g'p'v'j' g'q'xgtr{ 'cpf " y' g'g'z'k'v'k'p' 'r'cxgo g'p'v

É' Ugr'ct'c'v'k'p'rc { g't'ej' ct'ce'v'g't'k'v'k'p' "h'c' "ugr'ct'c'v'k'p'rc { g't " ku'w'ug'f' +

GY`Wfjcb`cZUH JW_bYgg'8 Yg][bÁ DfcWfXi fY

U'g'x'g't'c'n'r' t'q'eg'f' w'g'u'c't'g'c'x'c'k'r'd'ng'hqt'f' guki p'kpi "x'ct'k'q'w " v'f' r'gu'q'h'leq'petgv'q'xgtr{ u'0'V'y' q'o clqt' h'ce'v'qtu'kp'ugr'ge'v'k'p' " c'y' lempguu'f guki p'r' t'q'eg'f' w'g'k'p'en'f'g'y' g'd'c'uku'hqt' 'y' g" f' guki p'k'g'o "go r'k'le'cn'x'g't'u'w'o g'ej' c'p'k'v'k'le/go r'k'le'cn " cpf 'y' g'cuuwo r'v'k'p'q'h'c' "d'q'p'f' "qt'w'c'n'y' g't'g'q'h'c'v'y' g" k'p'v'g't'ce'g'd'g'v' g'p'v'j' g'q'xgtr{ 'cpf 'y' g'g'z'k'v'k'p' 'r'cxgo g'p'v'o

Ö(] äääÄ^!~•Ä^&@ä ääÖ(] äääÄ Ö^•ä } ÁÚ[&ä~!^•

R'cxgo g'p'v'f' guki p'r' t'q'eg'f' w'g'u't'g'n'f' "q'p'o q'f' g'u'y' c'v'ec'p " i' g'p'g't'c'm'f' "dg'erc'u'k'h'g'f' "cu'g'k'j' g't'go r'k'le'cn'q't' "o g'ej' c'p'k'v'k'le'o " Go r'k'le'cn'f' guki p'r' t'q'eg'f' w'g'u't'g'n'f' "r't'ko c't'k'n'f' "q'p'go r'k'le'cn' " o q'f' g'u' "y' j' k'g'o g'ej' c'p'k'v'k'le/go r'k'le'cn'f' guki p'r' t'q'eg'f' w'g'u' " eq'p'v'k'p' "g'ng'o g'p'w'q'h'd'q'y' "v'f' r'gu'q'h'o q'f' g'u'o

Go r'k'le'cn'o q'f' g'u'c't'g'd'cu'g'f' "q'p'q'd'ug't'x'c'v'k'p'u'q'h'r' cu'v' " dg'j' c'x'k'q't' "cpf "r'g'th'qto c'peg'0'Vj g'd'g'u'v'p'q'y' p'go r'k'le'cn' " r'cxgo g'p'v'f' guki p'o q'f' g'u'c't'g'y' q'ug'w'ug'f' "kp'y' g'f' guki p " r' t'q'eg'f' w'g'u'r' w'd'k'uj' g'f' "dg'v' g'p'v' "3; 82'cpf "3; ; 5'd{ " y' g'Co g't'le'cp' "Cu'q'ek'v'k'p'q'h'U'c'v'g'J' k'i j y c{ "Q'h'le'k'c'n' " *CCUJ' Q+cpf 'y' g'Co g't'le'cp' "Cu'q'ek'v'k'p'q'h'U'c'v'g' " J' k'i j y c{ "cpf "V't'c'p'ur'q't'c'v'k'p' "Q'h'le'k'c'n' "CCUJ' VQ+0

Vj gug'o qf gnu'r tgf lev'hwmtg'r cxgo gpv'ugt xlegcdkxv{ " *kf g's wcrkx{ +cu'c'hwpevkqp'qh'r cxgo gpv'ut wewtg" cpf "ewo wcrkxg'er r nkgf "hpcf u'dcugf "qp'f guki p'cpf " r gthqto cpeg'f cve'eqmgev'f'f wtkpi "vj g'CCUJ Q'Tqcf " Vguv'lp'vj g'rcvg'3; 72u0

O gej cplkne'o qf gnu'wug'r tklpekr ngu'qh'ut wewtcr'ncpf " o cvgtkcr'lo gej cpleu'v'q'r tgf lev'vj g'tgur qpugu'x00" utguugu.'utckpu.'f ghgevkpu.'cpf "uq'qp'+qh'c'ej ctcevgtk gf " r cxgo gpv'ut wewtg'x00'y kj "hnpqy p'rc{ gt'vj lenpguugu" cpf "o cvgtkcr'nt qtr gtvku'+v'q'er r nkgf "hpcf u'cpf "enlo cvg" eqpf kskpu0Hpkpg'nggo gpv'cpcn' uku'xHGC'+uqhvy ctg'xqt" c'pgwtcr'p'gy qtnidcugf "qp'vj g'tguwnu'qh'j wpf tgf u'qt" vj qwucpf u'qh'HGC' uqhvy ctg'twpu'+ku'wucm' "wugf "lp'vj g" o gej cplkne'o qf gnpi "qh'eqpetgvg'r cxgo gpv'0

Ö^•ā } ā * Ä ! / Ö { } ā ā Ä^! • • Ä^ ā [} ā ā Ä Qc! -æÄ / Ö [} ā ā ä } •

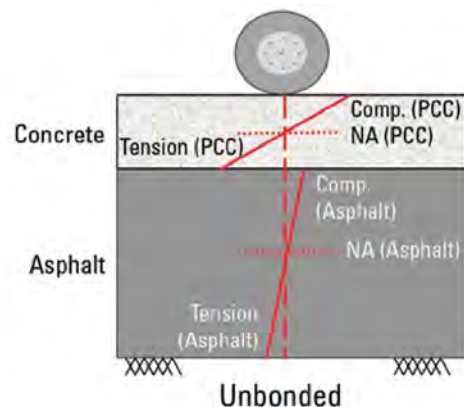
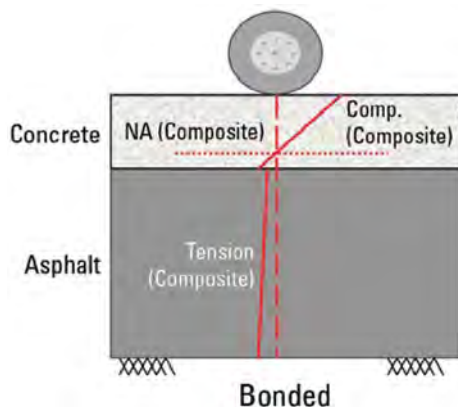
Vj g'f gi tgg'qh'dqpf lpi . 'o gej cplecn'lpvgt'rqem"qt" h'levkpcn'tgukucpeg'xj gtgchgt'uko r n' tghgtgf "v'cu" ðdqpf ð'+dgvy ggp'c'eqpetgvg'qxgtrc{ "cpf "vj g'utwewtcr' rc{ gt'lo o gf kvgn' "dgnvy "r rc{ u'c'o clqt'tqrg'lp'vj g" dgj cxlqt'qh'cpf "utguu'f kntkdwkqp'vj tqwi j "cnlrc{ gtu'lp" vj g'qxgtrc'f "r cxgo gpv'u{ ungo 0

Y j gp'vj g'qxgtrc{ "cpf "gzkukpi "r cxgo gpv'rc{ gtu'ctg" dqpf gf . 'vj g{ "cev'vqi gjt g'cu'c'ulpi ng'rc{ gt'y kj "cp'ghgevkxg" vj lenpguu'i tgcvt'vj cp'vj cv'qh'gkj gt'vj g'qxgtrc{ "qt'vj g" gzkukpi "r cxgo gpv'0Vj g'eqo dlpgf "u{ ungo "j cu'c'ulpi ng" pgwtcr'nczku'y kj "tgur gev'v'q'dgpf lpi . 'cpf "cu'c'tguwn'vj g" r gcn'lhgz wcr'nt utguugu'lp'c"dqpf gf "qxgtrc{ "ctg'ny gt'vj cp" vj qug'lp'cp'wpdqpf gf "qxgtrc{ "xHki wtg'COB.'tghw0Dqpf gf " qxgtrc{ u'cnuq'tgf weg'r cxgo gpv'f ghgevkpu'v'q'c'i tgcvtg" gzv'p'vj cp'wpdqpf gf "qxgtrc{ u'dgecvug'qh'vj g'i tgcvtg" u'k'hp'guu'r tqxkf gf "d{ "vj g'eqo dlpgf "u{ ungo "eqo r tkugf "qh" vj g'dqpf gf "qxgtrc{ "cpf "vj g'gzkukpi "r cxgo gpv'0

Y j gp'pq'dqpf "gzkuk'dgvy ggp'vj g'qxgtrc{ "cpf "gzkukpi " r cxgo gpv'rc{ gtu.'vj g'vy q'rc{ gtu'dgpf "ugr ctcvgn' . 'y kj " gcej "rc{ gt'j cxlpi "ku'qy p'pgwtcr'nczku'cpf "gcej "rc{ gt" g'zr gtlgpekp' "dqj "vgpukp'cpf "eqo r tguukp'xHki wtg'COB." tki j v0Vj g'o ci pkwf g'qh'lhgz wcr'nt utguugu'lp'gcej "rc{ gt" f gr gpf u'qp'vj g'tgr'vkxg'ut'k'hp'guugu'qh'vj g'rc{ gtu.'y j lej " f gr gpf "qp'vj g'eqo dlpgf "ghgevu'qh'vj g'vj lenpguu'cpf " g'rcv'lo qf wnu'qh'gcej "rc{ gt0

Hqt'f guki p'r wtr qugu.'vj g'qxgtrc{ x0'dqpf "y kj "xqt" ugr ctcvkn'ltqo +v'j g'gzkukpi "r cxgo gpv'ku'cp'cuuwo gf " eqpf kskp'vj cv'lo wuv'dg'uggev'f'ectghwn' "v'cxqkf " r tgo cwtg'qxgtrc{ "f kntguu0Y j krg'uko g'f gi tgg'qh" dqpf lpi "ku'cny c{ u'r tgu'p'v'dgvy ggp'cp'qxgtrc{ "cpf "cp" gzkukpi "r cxgo gpv'vj g'f gi tgg'qh'dqpf lpi "vj cv'f gxgnr u" f gr gpf u'qp'vj g'gh'qtu'w'o cf g'v'q'dqpf "qt'ugr ctcv'vj g" vy q'rc{ gtu0

Hqt'gzco r ng. 'h'cp'qxgtrc{ "ku'f guki pgf "cu'dqpf gf "dw" cf gs wcv'cf j gukxg'dqpf lpi "qt'o gej cplecn'lpvgt'rqem' ku'pqv'cej lxxgf "f wtkpi "eqput wewkqp. "vj g'vgpukg" utguugu'lp'vj g'qxgtrc{ "y knt'kngn' "dg'o vej "j ki j gt'vj cp" cuuwo gf "lp'f guki p. 'cpf "r tgo cwtg'r cpgn'etcent'pi "ku" r'kngn' 0E qpxgtugn' . 'vj g'f guki p'qh'cp'wpdqpf gf "qxgtrc{ " cuuwo gu'pq'cf j gukxg'dqpf "dgvy ggp'vj g'qxgtrc{ "cpf " gzkukpi "r cxgo gpv'rc{ gtu.'cpf "h'cp{ "dqpf "h'qto u'cp" lo r tqxgo gpv'lp'r gthqto cpeg'o c{ "dg'tgcr'kf gf "qxgt" f guki p'g'zr gev'v'qpu0J qy gxgt. 'h'c'j ki j "f gi tgg'qh" dqpf lpi "ku'lpel' gpvcn' "f gxgnr gf "f wtkpi "eqput wewkqp." etcenu'cpf "qj gt "f kntguugu'lp'vj g'gzkukpi "r cxgo gpv" o c{ "s wknm' "tghge'vj tqwi j "vj g'qxgtrc{ 0Uwe'j "r tqdngo u" ctg'o quv'kngn' "v'q'qewt'y kj "tgr'v'kxgn' "vj lp'wpdqpf gf " qxgtrc{ u'qh'f kntguugf "gzkukpi "eqpetgvg'qt'vj lenic'ur j cn' r cxgo gpv.'dw'vj ku'uegpctk'k'wntcvgu'vj g'pggf "v" ectt{ "dqpf / tgr'v'f "f guki p'cuuwo r v'qpu'vj tqwi j "vj g" eqput wewkqp'r tqegu0



ÖÜÄ^•æÖ^} c'!

:][i fY'5 %6 Y Uj jcf'cZUbX'ZYi i fU'gIfYggX]gIf]Vi h'cb'h fci [\ 'h Y'U'nf'g'cZVcbXYX'UbX'i bVcbXYX'c] Yf'Umigngh'a g

Öj] ^) ää / Ö { } ää ^) ää Ä ! / Ö { } & ^ c' Ä / c' / æ / Ö ^ • ä }

, %

Vj g'utwewtcrnko rcev'qh'j g'q'xgtrc{ "dqpf "f gr gpf u'qp"
y j g's wcrk{ "cpf "lpvgi tk{ "qh'dq'j "j g'q'xgtrc{ "cpf "j g"
gzknkpi "r cxgo gpw'cu'y gni'cu'j g'j lempguu'qh'j g'gzknkpi "
r cxgo gpw'OC "dqpf g'f "q'xgtrc{ "uj qwr{ "pqv'dg'ugrgev'f "
wprguu'j g'gzknkpi "r cxgo gpv'qt "j g'r qt vqp "qh'j cv"
r cxgo gpv'j cv'y knitgo ckp+ku'qh'uwhtlekpvn{ "j ki j "s wcrk{ "
cpf "cf gs wcv'j lempguu0

Hqt "gzco r ng. "5 "lp0"pqo kpcn'j lempguu+qh'uqwpf "cur j cn"
r cxgo gpv'ku'wuwcn{ "eqpukf gtgf "j g'o lpko wo "ceegr wdrng"
j lempguu'hqt "eqputwv'kpi "c"eqpetgvg'qp "cur j cn0dqpf gf "
*EQC0D+q'xgtrc{ 0Vj g'r tko ct { "tgcup'ht "j ku'o lpko wo "
j lempguu'ku'j cv'cur j cn'j cu'c'o wej "h'qy gt'o qf wauu"
*ctqwpf "622.222 "r uke+ "j cp'r qtwrpf "ego gpv'eqpetgvg"
*ctqwpf "6.222.222 "r uke: "uq "j gt'g'ku'hwrg'utwewtcrn'xcmg"
v'g'dg'i cklpgf "d{ "dqpf lpi "v'nguu'j cp "5 "lp0qh'o cvgtkcr0"
Y j gp'j g'gzknkpi "cur j cn'r cxgo gpv'ku'j ku'j lp. "k"
ku'qh'ngp'dgwtg'v'f guki p'j g'eqpetgvg'rc { gt "cu'c'pgy "
r cxgo gpv'qp'cp "cur j cn'dcug'c'v'gt "j cp'cu'c'EQC0D"
q'xgtrc{ =lp"uwej "ecugu. "j g'j lempguu'qh'j g'eqpetgvg'rc { gt "
y knidg'urki j w{ "i tgcvtg'j cp'j cv'qh'j g'eqpetgvg'rc { gt "hqt "
c'EQC0D'q'xgtrc{ 0Kp "cf f kklqp. "c'o lpko wo "j lempguu'qh"
cur j cn'ku'pgeguuct { "v'ku'wr r qt v'eqputwv'kqp "tchle "cpf "
r cxkpi "qr gtcv'kpu0

Kp'lw0 o ct { . "j g'lpvgt'heg'eqpf kklqp'dgwy ggp'j g'q'xgtrc{ "
cpf "j g'gzknkpi "r cxgo gpv'ku'cp "ko r qtwcpv'eqpukf gtcv'kqp"
f wtkpi "f guki p0F guki pgtu'o wuv'ugrgev'j g'f guki p'lpvgt'heg "
eqpf kklqp'dcugf. "lp'r ctv'qp'j g'j lempguu'cpf "eqpf kklqp"
qh'j g'gzknkpi "r cxgo gpw'Vj g'f gekukqp'y j g'v'gt "v"
cuuwo g'c'dqpf gf "qt "wpdqpf gf "eqpf kklqp"j cu'o clqt "
ko r rncv'kpu'hqt "j g'ugrgev'kqp "qh'cp'q'xgtrc{ "j lempguu"
f guki p'r tqegf wtg. "j g'q'xgtrc{ "eqputwv'kqp "gej pls wgu"
wugf. "j g'f g'xgnr o gpv'qh'hwmtg'f knitguu'lp'j g'q'xgtrc{ . "
npi /vgt0 "r cxgo gpv'r gthqto cpeg. "cpf "j g'g'zr gev'f "
ugtxleg'rhg'qh'j g'q'xgtrc{ "cpf "r cxgo gpv0

Cj Yfj JYk 'cZ7 ca a cb'7 cbWYH'Cj Yf'UmA 8 Yg][b'DfcWXi fYg

O cp{ "r tqegf wtu"y kj "cuuqekv'f "uqhy ctg'cr r rncv'kpu+ "
ctg'cxckrdng'hqt "f guki plpi "eqpetgvg'q'xgtrc{ u0Vj ku'ugev'kqp "
uwo o ct k' gu'j g'f guki p'dcugu. "utgpi y u. "cpf "hko kcv'kpu "
qh'y q'qh'j g'o quv'eqo o qpn{ "wugf "r tqegf wtu'lp'j g "
WU'cpf "y q'pgy gt "dw'r tqo kulpi "r tqegf wtu0Vj g "
hqmjy lpi "hqt "r tqegf wtu'ctg'f kuewuugf <

E' CCUI VQY ctg'Rcxgo gpv'O G'F guki p

E' [Rcxgo gpv'F guki pgt0qti](#)

E' Wp'kxgtuk{ "qh'Rkwudwti j ai'DEQC/O G

E' Wp'kxgtuk{ "qh'Rkwudwti j ai'WP QN'F guki p"x302

000P VUY æ^Áæ^ { ^} 0Á 0Á0^• ð }

CCUI VQY ctg'Rcxgo gpv'O G'F guki p'ku'c'r tqr tlgvt { "
ko r ngo gpv'kqp "qh'CCUI VQa'ewtgpv'o gej cplkve/ "
go r klcenr cxgo gpv'f guki p'r tqegf wtu'cpf "ku'tgeqi pl gf "
d{ "j g'eqpetgvg'r cxgo gpv'lpf wut { "cu'j g'dguv'vqni "
hqt "j ki j y c{ u'cpf "qy gt "hgf gtcn'cpf "uvcw'tqcf y c{ u0 "
K'eqo dlpgu'c'o gej cplkve "cr r tqcej "v'q'r cxgo gpv "
utwewtcrn'cpcn{ uku'*vulpi "wugt "lpr wu'hqt "h'qcf u. "erko cvg. "
cpf "r cxgo gpv'utwewtcrn'f cv'v'q'eqo r wgt'etklcenr "
r cxgo gpv'utwugu. "ut'clpu. "cpf "f gh'gev'kpu+y kj "
go r klcenr gthqto cpeg'o qf gnu'f g'xgnr gf "htgo "c'rc'ti g "
f cvdcug'qh'h'grf "o gcuwtgo gpw'i cv'j gtgf "htgo "r tq'lgew "
cm'lxgt "j g'Wp'kxgf "Ucv'gu0Vj ku'cr r tqcej "cmjy u'wugtu'vq "
f guki p'cpf "g'xcmv'g'r cxgo gpv'u'ugo u'eqo r tkulpi "pgy "
cpf "lppqxcv'kxg'hgcwtgu'cpf "o cvgtkcn'y kj "c'j ki j "f gi tgg "
qh'eqphf gpeg0Nlegpulpi "cpf "hgg'utwewt'g'lp'hqto c'v'kqp "
ecp'dg'hqwpf "cv'j [wr u-10. g/f guki p'eqo 10. GF guki p0](#)

Hqt "eqpetgvg'q'xgtrc{ u. "j g'f guki pu'r tqf wegf "d{ "
CCUI VQY ctg'Rcxgo gpv'O G'F guki p'tgh'gev'j g "
lpvgtcev'kpu'dgwy ggp'r cxgo gpv'i gqo gt { "g0 0'r cpgn'uk g "
cpf "j lempguu. "y k'f gpgf "rcpgu+ "utwewtcrn'eqpukf gtcv'kpu "
*g0 0'wug'qh'f qy gnu'cpf "v'g'dctu. "uj qwr gt "v'f r g. "wug'qh "
uggn'lgphqtego gpv+ "h'qecr'enko c'v'e'hc'vqtu. "cpf "eqpetgvg "
o cvgtkcn'cpf "uwr r qtv'r { gt "r tqr gt v'gu0

CCUI VQY ctg'Rcxgo gpv'O G'F guki p'kpenf gu'f guki p "
o qf wgu'hqt "cm'v{ r gu'qh'eqpetgvg'q'xgtrc{ u. "kpenf lpi "c "
tgegpvn{ "cf f gf "o qf wgt'ht "f guki plpi "uj qtv'lg'kxgf "r rclp "
eqpetgvg'r cxgo gpv'*ULRER+ "q'xgt "cur j cn'r cxgo gpv'*K0 "
EQC0D+ "q'xgtrc{ u0Vj g'ULRER'f guki p'o qf wgt'ku'dcugf "
qp'j g'Wp'kxgtuk{ "qh'Rkwudwti j ai'DEQC/O G'f guki p "
r tqegf wtg'cpf "uqhy ctg'dw'xct'kgu'lp "o cp { "uki pl'k'ecpv "
y c{ u'*Dj cvcej ct { c'g'v'cr04239. "Cm'p'f "g'v'cr0423: +. "
kpenf lpi "hko kcv'kpu'qp'r cpgn'uk g'*07 "vq: "h+ "cpf "
j lempguu'*6 "vq: "lp00

CCUI VQY ctg'Rcxgo gpv'O G'F guki p'r tq'xkf gu "
r tgf kcv'kpu'qh'r cxgo gpv'r gthqto cpeg'lpf kcv'qtu'q'xgt "
j g'f guki p'rhg'qh'c'r cxgo gpv'0Hqt "lq'kxgf "eqpetgvg "
q'xgtrc{ u'*qy gt "j cp'ULRER+ "j g'r gthqto cpeg'lpf kcv'qtu "
ctg'Kp'vgtcev'kpcn'Tqwi j pgui'Kp'f gz "K'K: "t'cpuxgtug "
etcenlpi. "cpf "o gcp'lg'kpv'hcwnlpi =hqt "ULRER'q'xgt "
cur j cn: "j g'r gthqto cpeg'lpf kcv'qtu'ctg'K'Kcpf "
npi kwf kpcn'etcenlpi =hqt "eqp'kpv'wun{ "t'g'phqtegf "
eqpetgvg'r cxgo gpv'*ETER+ "q'xgtrc{ u. "j g'r gthqto cpeg "
lpf kcv'qtu'ctg'K'Kcpf "r wpej qwu0

[illegible]

WP QN^F guki p'ɛp'j cpf rŋ'eqpetgŋ'qɣxtɾ{u'y kj 'r cpŋl'
f lo gpukpu'qh'gkj gt '8'h'd' '8'h'qt'ɾp/gy kf vj 'qɣxtɾ{u'
y kj 'r cpŋl'ŋpi vj u'qh'34'q'38'h'n'cpf 'c'vj lɛmpgu'qh

HUV`Y5 "%Gi a a UfmcZ_YmXYg][b'dUfUa YhYfg

6'v'q'34'kp0Vj g' uq'hy ctg'ecp'r'gthqto 'y q'v'r gu'qh'
cpcn' ugu-z' gthqto cpeg'r' tgf lew'qp'cpf 't'gnckdkx{0K'v'j g"
r'gthqto cpeg'r' tgf lew'qp'qr wqp 'ku'ugengevf. 'y g'r tqi tco "
r' tgf lew'v'j g'r gtegpai g'qh'etcentf "uradu'cpf 'o gcp 'lqlpv'
h'wnkpi 'cv'v'j g'gpf 'qh'v'j g'f guki p'h'g'h'qt' 'c'i kxgp'qxgxnc " "
y' lempguu'0K'v'j g't'gnckdkx{ 'cpcn' uku'qr wqp 'ku'ugengevf. 'y g"
r' tqi tco "h'pf u'v'j g'qxgxnc " 'y' lempguu'v'j cv'o ggu'ur gek'h'gf "
etcentpi 'cpf 't'gnckdkx{ 'etkgtk'cpf 'r' tgf lew'lqlpv'
h'wnkpi 'h'qt'v'j g'ur gek'h'gf h'wnkpi 't'gnckdkx{ 'n'x'x'g'f

? Ym8 Yg][b'7 cbg]XYfUh]cbg

Mg{"f guki p"eqpukf gtcvkpu"ht"eqpetgv"qxgtr{"u"hpw f g"
i gpgtcl"eqpukf gtcvkpu"ht"cm\ f r gu"qh"qxgtr{"u"cpf "
eqpukf gtcvkpu"r ge hke"q"vj g"xctkqu"qxgtr{" f r gu0

VcɔŋgˈCʰBˈr tɕuɣpɯˈcˈuwo o ct{ ˈqhˈŋg{ ˈfɕuki pˈr ctco ɣvɕtuˈ
 hɕtˈxctɭɯwˈfɾ guˈqhˈeqpetɣvɕˈqɕɣtɾ{ uʋʀctco ɣvɕtuˈjˈcˈvˈ
 xct{ ˈd{ ˈqɕɣtɾ{ ˈfɾ gˈlɐnɤf gˈfɾ lɛcɔnˈgʒr ɣevɕˈuɕtɕlɛgˈ
 rɭɕ. ˈgʒkɯkpi ˈr cɕxgo ɣpˈvɛqpf kɭkɕˈtɕs wɭtgo ɣpɯ. ˈuɾcˈdˈ
 jˈkɛnpɕu. ˈr cɣɔnɭf kɔ ɣpɭkɕpu ˈwugˈqhˈf qɕ ɣnˈcɕf ˈkɕˈdctuˈ
 uɯkɕɔɾɕˈfɕuki pˈr tqɛɕf wɭgu. cɕf ˈwugˈqhˈo cɛtɕhɭɕtuʋ

Cj Yf UmrÁ HndY	HndJWUÁ Yl dYWNrXÁ gYfj JWUÁ JZY	HndJWUÁ Yl gghb[Á dUj Ya YbhÁ V6bXJhcb	HndJWUÁ V6bWYHrÁ g UvÁ H JW.bYgg	HndJWUÁ a U j i a Á dUbYrÁ Xja Ybgjcb	8 ck Yg jBÁ HUbgi YfgYÁ tjbtg3	tHYXÁ cb[jH XjbUÁ tjbtg3	F YW6a a YbXYXÁ XYgll b dfcWXi fYg	A UW6ZVYfg XJfYWNÁ V6bgXYfYX jBÁ XYgll b dfcWXi fY3
7cbWYHrÁ cb'5gd UHÉÁ 6cbXYXÁ f7C5É6tÁ Cj Yf UmrÁ	Wj Át ÁHÉÁ ^~æ*	ææÁt ÁO[[á	I..i HÉ	Áæ ÁÁ , ææÁ ÁÁ ~}*æ	ÿÁ•Át ÁOÁ Á i HÉ	ÿÁ•Á @ ÁOÁ Á á ææÁt ææÁ Á t Át }*æ áá æÁ & dææÁ) Á t á æÁ { ææ[æÁ•ÁæÁ ææÁ) Á••Á•É	ææÁPVUY æÁ ÚæÁ{ ^) á ÁOÁ•á) Á ÚRÚÚÚÚÚÚÚÚÚÚ	ÿÁ•Át ÁOÚÚÚÚÚÚÚÚÚÚ T[áæÁ&) &^áÁ •d^)*ææ] *æÁ Á [æÁ Át &á^ Á•É
7cbWYHrÁ 7cbWYHrÁ 6cbXYXÁ f7C7É6tÁ Cj Yf UmrÁ	Wj Át ÁHÉÁ ^~æ*	ææÁt ÁO[[á	G. i HÉ	T ææÁ ^ææÁ *Á t á æÁ &ææÁ•	p[æÁ [çÁ æ	p[æÁ çÁ æ	ææÁPVUY æÁ Á ÚæÁ{ ^) á ÁOÁ•á) Á ÚæÁ{ ^) á ÁOÁ•á) Át Át *	ÿÁ•Át Á ÚæÁ{ ^) á ÁOÁ•á) Át Át * T[áæÁ&) &^áÁ •d^)*ææ] *æÁ Á [æÁ Át &á^ Á•É
7cbWYHrÁ cb'5gd UHÉÁ l bVcbXYXÁ f7C5É6tÁ Cj Yf UmrÁ	Úæ ÁÁ æÁÁ•, Á ÚæÁ{ ^) á ÖÁ•á}	ÖÁÁt ÁæÁÁÁ t ÁO[[á	I..i HÉ t Át) É QÁ••æÁ i. FGÁ t Á QÁ••æÁ	FÉ ÁÁ ÁÁ t ÁÁ•ÁÁ æÁ) Á••Á á HÉ &æÁ Fí ÁÁ æ	ÿÁ•Át ÁOÁ Á i HÉ	ÿÁ•	ææÁPVUY æÁ Á ÚæÁ{ ^) á ÁOÁ•á) Á ÚæÁ{ ^) á ÁOÁ•á) Át Át *	ÿÁ•Át Á ÚæÁ{ ^) á ÁOÁ•á) Át Át * T[áæÁ&) &^áÁ •d^)*ææ] *æÁ Á [æÁ Át &á^ Á•É
7cbWYHrÁ 7cbWYHrÁ l bVcbXYXÁ f7C7É6tÁ Cj Yf UmrÁ	Úæ ÁÁ æÁÁ•, Á ÚæÁ{ ^) á ÖÁ•á}	ÖÁÁt ÁæÁÁÁ t ÁO[[á	I..i HÉ t Át) É QÁ••æÁ i. FGÁ t Á QÁ••æÁ	FÉ ÁÁ ÁÁ t ÁÁ•ÁÁ æÁ) Á••Á á HÉ &æÁ Fí ÁÁ æ	ÿÁ•Át ÁOÁ Á i HÉ	ÿÁ•	ææÁPVUY æÁ Á ÚæÁ{ ^) á ÁOÁ•á) Á WpUŠÖÁ•á}	ÿÁ•Át ÁWpUŠÖÁ•á) Á T[áæÁ&) &^áÁ •d^)*ææ] *æÁ Á [æÁ Át &á^ Á•É
l bVcbXYXÁ G cffH>c bHrÁ 7cbWYHrÁ Cj Yf UmrÁ f7C5É6tÁ UbX'7C7É Cj Yf UmrÁ k jH 'Ga U'Á DUbY'GjYgZ	Úæ ÁÁ æÁÁ•, Á ÚæÁ{ ^) á ÖÁ•á}	ÖÁÁt ÁæÁÁÁ t ÁO[[á	I..i HÉ	Áæ ÁÁ , ææÁ ÁÁ ~}*æ	p[ÿÁ•Át ÁOÁ Á t Át)*æ áá æÁ & dææÁ) Á t á æÁ { ææ[æÁ•ÁÉ	WpUŠÖÁ•á) Á t Át ÁOÚ. WÁ [ÁOÚPVUY æÁ Á ÚæÁ{ ^) á ÁOÁ•á) Á	ÿÁ•

EÜ^Á@Á^&ç}•Á}Á@`|á^!•Äg áÁ äñ^ã *Äg áÄg ^Ääãää}•Ä Á@Äg]^} äãÁ'Á [!'Ä {-!{ äää }Á}Ää áÁ'} *ä ää äÄä ä •

, ($\tilde{O}^{\vee} \tilde{a}^{\wedge} \acute{A} [\acute{A} \tilde{O} [\} \& ^{\wedge} c^{\wedge} \acute{A} \acute{U} \zeta^{\wedge} i | \acute{a} \acute{e} \bullet$

8 Yg][b'7 cbg]XYfUjcbg'Zf'5''Á 7 cbWYH'Cj Yf'Ung

Ð^âÄ|ÁÄ|Ä|{ Ä~ }][|c

Hqt"eqpetgvg"qxgtrc{u."cu'hqt"eqpetgvg"r cxgo gpw'lp"
i gpgtcn'wplhqt o kx' qh'uwr r qtv'ku'ht'o' qtg'ko r qtvcpv"
vj cp'utgpi vj "qh'uwr r qtv'Vj kempguu'f guki p'ecp'cf f tguu"
vj g'r tgupeg"qh'c'utqpi "qt'y gcn'hw'pf cvkqp'dw'ecppqv"
gpw'g'i qqf "r cxgo gpv'r gthqto cpeg'h'i'vj g'hw'pf cvkqp"
kpen'f gu'ctgcu'y kj "cdtw v'ej cpi gu'lp'uwr r qtv'qt'ku'ncvgf"
rti g'ctgcu'qh'u'k'ht'g'qt'u'k'ht'g'o' cvgt'k'c'Vj gug'ukw'cvkpu"
ecp'ctkug'lp'qxgtrc{ "f guki p. 'hqt'gzco r ng.'y j gp'vj g"
qxgtrc{ "y knlpetgcug'ncpg'y kf vj u'd{ "gzv'pf lpi "qxgt" c"
r qtv'kqp'qh'c'y gcn'gt'uj qw'f gt'ugev'kqp'OCpq'vj gt'gzco r ng"
ku'y j gp'r tqh'ng'o' knlpi "qh'c'p'gzkunkpi "cur j cn'u'w'ht'ceg"
hqt'c'EQCóD'qxgtrc{ "tguw'u'lp'hw'ecr'kf gf "ctgcu'y kj "c"
xgt{ "vj kp'qt'p'qpgz'k'ng'p'cur j cn'nc{ gt'W'p'k'ht'o' "uwr r qtv"
o wu'd'g'tgu'qt'gf "lp'uwej "ecugu'y kj "rtg'qxgtrc{ "tgr'cku"
uwej "cu'hw'ecr'kf gf "h'm'f gr vj "cur j cn'r cxgo gpv'tgr'cku'qt"
tgeqputw'ekqp'cpf "uj qw'f gt'ko r tqxgo gpw

Dtcpf'cpf "Tqgungt"%4236+"cpf "Tqgungt'g'v'c'0%4238+"
f guet'kd'g'r tqegf w'gu'ht'c'pcn| lpi "eqpetgvg'r cxgo gpw"
w'pf gt'xct'k'wu'p'q'w'p'k'ht'o' "uwr r qtv'eqpf k'k'p'u0
C'f'f'k'k'q'pcn'l'p'ht'o' cvkqp'qp'r tg'qxgtrc{ "r cxgo gpv"
gxcn'cvkqp'ku'r tgu'p'vgf "lp'Ej cr vgt'4'qh'vj ku'i w'kf g0

W^âÄ|Ä|Ä|{ Ä~|•

O cet'q'hd'gtu'ctg'ht'gs w'p'v' "wugf "lp'eqpetgvg"qxgtrc{ u"
*gur gekm' "hqt'qxgtrc{ u'8'lp'0qt'ngu'lp'vj kempguu'v'q"
r tqx'kf g'ko r tqx'gf "t'gukncpeg"v'q'et'cen'kpi . "gpj cpeg'vj g"
lqkp'v'ncf "t'cp'uh'gt'r tqx'kf gf "d{ "ci i tgi cv'g'lp'v'gt'm'em"
tgu'w'ckp'lqkp'v'qr gp'kpi u."cpf 'j gr "t'g'ckp'ur'd'ht'ci o gpw"
lp'r nc'eg'y j gp'et'cen'f'q'f'g'x'g'nr'OVj g'ut'w'w'c'n'd'g'p'g'h'ku"
qh'u'w'kpi "h'kd'g'tg'k'p'ht'egf "eqpetgvg"%HTE+"ctg'v'r l'ecm' "
eqpuk'f gt'gf "lp'ewt'gp'v'f guki p'r tqegf w'gu'd{ "o qf k'h'kpi "
*l'pet'g'cukpi +vj g'f guki p'lp'r w'xcn'wg'hqt'vj g'w'p't'g'k'p'ht'egf"
eqpetgvg'h'gz'w'c'n'l'ut'gpi vj "q'to' o qf w'u'w'q'h't'w'w'g"
JO QT_+ "h'q'OCp'g'h'g'v'x'g'h'gz'w'c'n'l'ut'gpi vj "h'gh+ku'w'ugf "lp"
n'g'w'q'h'ht'q'v'q'ce'q'w'p'v'ht'q'vj g'g'h'g'v'u'q'h'w'kpi "o cet'q'hd'gtu"
lp'vj g'eqpetgvg'o' k'z'w'g'0K'ku'gunko cv'gf "cu'hw'ng'y u<

h_{gh}:"O QT"- h₃₇₂

y j gt'g'h₃₇₂ "ku'vj g't'guk'f w'c'n'l'ut'gpi vj "qh'vj g'eqpetgvg'ch'gt"
et'cen'kpi OVj ku'xcn'wg'ecp'dg'gunko cv'gf "wukpi "vj g'T'guk'f w'c'n'l'
Ut'gpi vj "Gunko cv'gt'q'q'n'f'g'x'g'nr'gf "lp'423; "d{ "vj g"
P'cv'k'p'cn'E'qpetgvg'R'cxgo gpv'V'gej p'q'ngi { "E'gp'vgt"%ER"
V'gej "E'gp'vgt'423; +OVj g't'guk'f w'c'n'l'ut'gpi vj "xcn'wg'xct'k'gu"
y kj "vj g'eqpetgvg'o' k'z'w'g'f guki p'w'ugf "cpf "vj g'h'kd'g"
v'r g'cpf "eqp'v'p'dw'ku'v'r l'ecm' "dgw'ggp'322'cpf "
422'r u'0U'f g'ek'h'gf "xcn'wg'u'ht'q'vj g't'guk'f w'c'n'l'ut'gpi vj "qh"
HTE'q'hw'g'xct{ "y kj "t'ch'k'k'eqo r qu'k'k'p'cpf "x'q'w'o g."

eqpf k'k'k'p'q'h'vj g'gz'kunkpi "r cxgo gpv'q'x'g'nr{ "f guki p'h'hg."
ur'd'i g'qo g't{ ".ur'd'vj kempguu'eqp'w'ck'p'u."cpf "t'gs w'k'gf "
et'cen'f'kf vj "eqp'v'q'n0

R Ä|Ä|Ä|Ä|{ Ä~|

Lqkp'v'cv'k'cv'kqp"%cn'q'ec'ngf "lqkp'v'f gr ng{ o gpw'v'ht'g'htu'v'q"
vj g'f'g'x'g'nr o gpv'q'h'c'et'cen'f'c'y qtn'kpi "lqkp'v'd'g'ng'y "vj g"
ucy ew'o cf g'cv'c'eqp'v'c'cv'kqp'lqkp'v'0K'c'et'cen'f'q'gu'p'q'v"
h'qto "d'g'p'g'c'vj "vj g'ucy ew'vj g'lqkp'v' cu'p'q'v'cv'k'cv'g'f "
qt'f'gr ng{ gf . 'cpf "vj g'g'h'g'v'x'g'r'cp'g'n'g'pi vj "ku'lp'et'gcugf "
ht'qo "vj g'p'qo k'p'cn'r'cp'g'n'f'ko gpuk'p'v'q'vj g'f'k'w'c'peg"
dgw'ggp'vj g'v'q'p'g'c't'g'u'v'cv'k'cv'g'f "lqkp'u0

Y j k'ng'eqp'ut'w'ekqp'r t'ce'v'g'u'ecp'r tqo q'v'g'lqkp'v'cv'k'cv'kqp."
u'qo g'r cxgo gpv'f guki p'r c'tco g'v'g'tu'c'nu'q'f'k'x'g'vj g'cv'k'cv'kqp"
o ge'j c'p'k'uo u'0C't'g'eg'p'v't'gug't'ej "r tq'l'g'v'lp'K'y c"%f t'quu'g'v'
c'n'0423; +q'p'eqpetgvg'qxgtrc{ "r g'ht'o c'peg'h'q'w'f "vj cv'
lqkp'v'ur'cel'pi "y cu'vj g'r t'g'f'qo k'p'cp'v'h'c'v'q't'ch'g'v'kpi "lqkp'v'
cv'k'cv'kqp."y kj "i t'g'c'v'g't'lqkp'v'ur'cel'pi "h'g'c'f'kpi "q'o q'tg"
t'c'r'k'f "cpf "j ki j gt't'c'v'g'u'q'h'cv'k'cv'kqp'0Q'x'g'nr{ "vj kempguu'y cu"
cn'q'c'h'c'v'q't."y kj "vj g'lqkp'u'lp'vj k'p'p'gt'qxgtrc{ u'cv'k'cv'kpi "
ngu'u't'g'k'c'd'n' "vj cp'lp'vj k'eng't'qxgtrc{ u0

K'ku'h'ng'n' "vj cv'vj g'v'f'r g'q'h'ug'r'ct'cv'kqp'r'c{ gt'c'nu'q'r'nc{ u"
c't'q'ng'lp'lqkp'v'cv'k'cv'kqp'hqt'EQEóW'qxgtrc{ u."y kj "
vj g'ng'y gt'h'k'v'k'p'c'n'l't'guk'nc'peg'q'h'i'g'q'v'g'w'g'h'c'd't'k'e"
eqp'v'k'd'w'kpi "q'ng'y gt'cv'k'cv'kqp't'c'v'g'u'vj cp'y j gp'cp"
cur j cn'ug'r'ct'cv'kqp'r'c{ gt'ku'w'ug'f 0

8 Yg][b'7 cbg]XYfUjcbg'Zf'7 cbWYH'cbÁ 7 cbWYH'Ä| bVcbXYX'Cj Yf'Ung

Ü|Ä|Ä|Ä|{ Ä~|Ä|Ä|Ä|{ Ä~|

Gz'kunkpi "eqpetgvg'r cxgo gpv'r tqx'kf gu'x'gt{ "ut'qpi "uwr r qtv'
v'q'v'p'd'q'p'gf "eqpetgvg'qxgtrc{ u."cpf "eqpetgvg'qxgtrc{ u"
v'r l'ecm' "ö'd't'k'f i gö'qx'gt'gz'kunkpi "o k'p'qt'r cxgo gpv'f'g'h'g'v'u"
uwej "cu'et'cen'u."ur'c'mu.'h'c'w'kpi . "cpf "lqkp'v'tgr'cku'y kj qw"
g'z'r g't'k'p'el'pi "t'gf w'egf "ug't'x'k'g'h'hg'OVj g't'g'ht'g'f "ku'p'q'v"
w'u'w'c'n' "eqv'g'h'g'v'x'g'v'q'r g't'g'ht'o' "gz'v'p'uk'x'g'r tg'qxgtrc{ "
tgr'cku'd'g'ht'g'r'nc'el'pi "EQEóW'qxgtrc{ u0J qy g'x'gt."
f guki p'g'tu'uj qw'f "gpw'g'vj cv'vj g'gz'kunkpi "r cxgo gpv"
r tqx'kf gu't'g'cu'p'c'd'n' "w'p'k'ht'o' "uwr r qtv'v'q'vj g'qxgtrc{ "r{ gt."
y kj "p'q't'q'cn'kpi "r'cp'g'n'q't'r'cp'g'n'l'it'ci o gpw'cpf "p'q'rt'ci g"
ct'gcu'q'h'k'k'p'k'h'c'ep'v' "f'k'ht'g'p'v'ut'w'w'c'n'l'eqo r qu'k'k'p."
y j k'ej "ecp't'g'u'w'v'ht'qo "nc'p'g'y kf gp'kpi "cpf "rt'ci g'h'm'
f gr vj "cur j cn'tgr'cku0

Y j gp'c'EQEóW'qxgtrc{ "ku'r'nc'egf "qx'gt'cp'gz'kunkpi "
ETER'vj cv'j cu'd'g'g'p't'gr'ck'g'f "y kj "h'm'f gr vj "cur j cn'
r'c'v'ej gu."eqpuk'f g't'cv'kqp'uj qw'f "dg'i k'x'g'v'q't'gr'nc'el'pi "vj g"
cur j cn'r'c'v'ej gu'y kj "eqpetgvg'v'q'o k'p'ko k'g'vj g'r'q'v'p'k'cn'
h'q'to' q'x'go gpw'lp'vj g'gz'kunkpi "r cxgo gpv'vj cv'eqw'f "
r tq'f w'eg'd'w'cn'kpi "qt'eqo r t'g'u'k'p'f'c'k'w'g'u'lp'vj g'qxgtrc{ 0

Rcpgn'cpf 'r cpgnltci o gpu'ij cv'cr r gct'vq'dg'wpuwng" qt'ij cv'g'zr gtlpepg'xkukng'o qxgo gpv'wpf gt'vchke'ij qwf " dg'tgr ncegf'y kj 'hwnf gr'y 'eqpetgvg'tgr cktu'kpenw lpi " hqwpf cvkp'tgr cktu'cpf 'ij g'wug'qhlf qy gni'cpf 'vkg'dctu." y j gtg'pgeguuct {'+q'g'puxw'g'rupi /vgo "ucndkkr{OUko krtkf." rpi kwf lpcn'etcem'cf lcegpv'vq'ugwngf'ctcg'u'ij qwf " dg'tgr cktgf'y kj 'cr r tqr tlcvg'gej pls wgu'uwej 'cu'hwnf f gr'y 'tgr cktu'qt'etquw/unkej lpi 'cpf'urcd'ucndkkr cvkp-" vq'r tqxf g'ucndng."wplktto "uwr r qtv'ht'ij g'qxgtrc{OKp" uqo g'ecugu.'ij g'qxgtrc {'ij kempgu'cpf 'lqlpv'r cwgtp'ecp" dg'o qf kktgf'vq'r t'g'xgpv'wpeqpwngf' r cpgn'etcentkpi 'cv' nqecv'kpu'q'hnpqy p'ej cpi g'lp'uwr r qtv'ht'g'zco r ng.'d{' " r nceki 'c'vkg'rupi kwf lpcn'lqlpv'lp'ij g'qxgtrc {'cdqxg'ij g' rpi kwf lpcn'gf i g'lqlpv'lp'c'y kf gplki 'ugev'kp.'cu'ij qy p" lp'Hki wtg'C04-0

[illegible]

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CmEQEóWqxgtr{u'ò wu'dg'ugr ctcvgf 'h'qo 'y'g"
gzkwpi 'eqpetggr'cxgo gpv'wupi 'c'rc {gt'qh'ò cvgtkrc'y'cv"
ugt'xgu'qpg'qt'ò qtg'qh'y'g'hmqy'kpi 'r'wtr'qugu<

É' Kqrcvgu'y g'qxgrnc "h'qo 'y g'gzkvpki 'rcxgo gpv'd {"
r t'gxgpvpki 'cfj gukg'dqpf kpi 'qt'lp'grtqmqm'q'h'y g'y q"
rc {gtu'Vj ku'j gr u'r t'gxgpv'etcem'cpf 'lqkpw'lp'y g"
gzkvpki 'rcxgo gpv'htqo 't'ghrgevpki 'y tqwi j 'y g'q'xgrnc {0

É F telpu'utheg'y c'gt 'y cvlphkmcv'u'y g'q'xgtr: { 'xlc"
c'f telpcdr'ugr ctecvkp"r: { gt'y cvl'hto u'c'eqpf wlx:"
tgf welpi 'y g'r qvqplcn'ht'gtqulqp'q'h'y g'ugr ctecvkp"
r: { gt'cpf "eqpetg'g'cv'y g'lpvgthceg0

É' Rtqxkf gu'c'f gi tgg'qh'eqo r nkpegt'qt'ewuj kqppi "
dgwy ggp'yj g'w'y q'tki kf'nc'gtu.'yj gtgd'f'gf welpi 'ewtrkpi "
y ctr kpi 'utguugu'lp'yj g'qxgtrnc{0

O cp1 'Vr gu'qh'ugr ctevkp'rc { gt'bo cvgtknfj cxg'dggp"
wugf. 'dw'gzr gtlgpegj' cu'rgf "xq'vj g'ewtgpvr tcevkag'qh"
wukpi 'gkij gt'c'vj kp'rc { gt'*3'xq'4'kp0'qh'f gpug/i tcf gf "
qt'f tclpcdng'*r gto gcdng+'curj cn/qt'c'papy qxgp"
i gqgzv krg'fcdtk0



$\bar{O}\bar{O}\bar{U}\bar{O}\bar{E}\bar{A} \cdot ^\wedge \hat{a}\acute{A} \tilde{a}\grave{A}^\wedge | \{ \tilde{a} \cdot \tilde{a} \}$

: [i fY5 "&"H]YVuf'g UbW cfYX'hc Ub'Yl [g]h[b] 'dUj Ya Ybhgi fZUWÁ
UWcgg'U'cb[j] [h X]bU'YX[Y'c]bhik\ YfY'UWc'bWYh'c[j Yf'Um[k] j'Á
VY'i gYX'Zf'Uk [XYb]b[gYVh]cb

Curj cn/Eqpet gvg UCurj cn/eqpet gvg'ku'j kuqtkcmf. 'ij g"
o quv'eqo o qp'ugr ctcv'qp'nc {gt'o cvgt kcn'ht'EQEōW"
qxgtrc {uōVj g'curj cn/nc {gt'o wu'dg'ij kcn'gpqi j "q'eqxg"
cnfktgt wrctkgu'lp'ij g'gzku'p' r'cxgo gp'v'p'cnw'kp' l'qkp'
hcw'kp' + 'cu'f guctd'f 'lp'Ei c'vgt'8'gh'ij ku'j w'f gō

I gqvgzwg'Hcdtle0P qpy qxgp'i gqvgzwg'hcdtle'ku'cp"
 kpetgculpi n' "r qr wrt'ej qleg'hqt'vj g'ugr ctcvkqp'nc {gt"
 o cvgtkcnlp'EQEóW'qxgtrnc {u'dgecwug'*3+'vj g'wug'qh'
 hcdtle'ku'qhgp'nguu'gzr gpukx'g'y cp'vj g'eqputwewkqp'qh'
 cp'cur j cnu'ugr ctcvkqp'nc {gt. '*4+'hcdtle'r tqxkf gu'xgt { 'hkwrg"
 htlevkqp'qt'lpvgtnenidgwy ggp'vj g'vy q'eqpetgvg'nc {gtu."
 tguwnkpi 'kp'j ki j n' {ghgexxg'kuqrwvkqp'qh'vj g'qxgtrnc { 'htqo "
 vj g'gzkukpi 'r cxgo gpv.'cpf '*5+'vj g'wug'qh'hcdtle'qhgp"
 tgf wegu'qxgtrnc { 'eqputwewkqp'wko g'd { 'grko kpcvkpi 'vj g'
 pggf 'vq'uej gf wrng'c'wmdqputcvegf 'cevwkxk' (0Ugr ctcvkqp'
 nc {gt'hcdtle'ku'vj r kccm' 'ur gethkf 'd { 'y gki j v.'j kempguu."
 cpf 'eqmqt.'cu'f guetldgf 'kp'Ej cr vet'8'qh'vj ku'i wkf g0

Úæ ^|ÄÖā ^} • ā } • Äæ åÄŕ ā cŠæ[ˇ c

Czegęmpvī wk cpeg"eqpegtplpi "lqkpvr{ qw/hqt"
eqpxgpvkpcrleqpetgvg'r cxgo gpvku'r tqxkf gf "lp"
[Hl Y C"Vgej plecr/Cf xluqt / "V7262052"](#)^{*Hl} Y C"423; +0'
Vj g'cf xluqt / 'pqvu'y cv/lqkv'ur celpi 'tgs wkt go gpw'
ōf gr gpf "qp'o cp / 'hcevtu.'kpenwf lpi 'urcd'y lenpguu."
eqpetgvg'ej ctcevgtknleu^{*gf} O'o qluwmt'cpf 'vgo r gtewtg"
tgur qpug.'lutgpi y .'.cpf'grunkelk{+ 'hqwpf cvkqp'uwr r qtv.'
cpf'gpxktapo gpwrlēqpf kkpūo^{*Hl} Y C"423; -0K'
tgeqo o gpf u'y cv'y g'tcvkq'qh'r cpgnlgpi y 'q'y kf y "
uj qwf 'pqv'gzegg /'30'"cpf'pqvu'y cv'o czko wo 'r cpgn'
ngpi y 'r tcevegu'j cxg'ēqpxgti gf 'ctqwfp'c'ngpi y 'qh'37'hv'
hqt'wptglphqtēg' eqpetgvgO Nqecrn'g'zr gtlēpeg." o cvetknu."
enko cvg'ghgewu.'cpf'lu'qp'o c / 'tguwn'lp'f gxlcvkpu'ltqo "
y gug'tgeqo o gpf cvkqpūo

Qpg"eqo o qp"eqpegt. "j qy gxgt. 'ku'j cv'j g'xctkcdng"
 qxgtnc { 'j lempguu'tguwu'lp'j g'pggf "hqt'xctkcdng/f gr j " "
 ucy ewu'cv'wcpuxgtug'lgkpw'q' r' t g x g p v'wpeqptqmgf "
 etcenkpi 0Dgecwug'r cxgo gpv'etcenkpi "cpf "lgkpw'cewxcvqwp"
 i gpgtcmf "uactv'cv'j g'g'zr qugf "gf i gu'qh'j g'qxgtnc { "y j gtg"
 uj tlpnei g'ku'v' r lecm' "i tgcvgu'w'cpf "r tqr ci cvg'cetquu'j g"
 r cxgo gpv. 'ku'ku'wprkng' "j cv'wpeqptqmgf "etcenkpi "y kn'
 f g x g n r "lp"eqpetgvg'qxgtnc { u'qh'twugf "r cxgo gpv'kh'j g"
 ucy ew'ku'V15'cv'j g'r cxgo gpv'gf i g0

J qy gxgt. 'kh'j g'j lempguu'qh'j g'qxgtnc { "ugevqwp'ku"
 xctkcdng'f w'g'v'c'etquu'w'gr g'eqttgevkwp'uwej "j cv'j g"
 f guki p'j lempguu'ku'cej kxg'f "cv'j g'r cxgo gpv'etqy p"
 cpf "j g'j lempguu'kpetgcugu'v'qy ctf "j g'r cxgo gpv'gf i g."
 j g'ucy ew'f gr j "cv'j g'gf i g'uj qwf "dg'cf lwugf "v"
 eqo r gpucv'g'ht'j "g'cf f g'f "ugevqwp'j lempguu'cv'j ku"
 mecvqwp'p'p' uwej "ukwcvkpu. 'ku'o c { "dg'pgeguuct { "v'cf lwu'
 j g'ucy ew'f gr j "y kj "j g'qxgtnc { "j lempguu'cetquu'j g"
 ugevkwp'v'cxqkf "eww'kpi "qt'f co ci kpi "cp { "go dgf f g"
 f qy gndctu0Cngtpcvkxgn. "f qy gndctu'ecp'dg'r megf "cv"
 c' i tgcvg'f gr j "y j kg'ukn'o clpvc'kpi "cv'gcu'4'lp0qh"
 dqwqo "eqxgt+0

C'hw'j g'eqpukf g'cvkwp'lp'f g x g n r k p i "dkf "f qewo gpw'ht"
 EQC6W'qxgtnc { u'qp'twugf "cur j cn'uwthcegf "r cxgo gpv'
 ku'j cv'tw'f gr j "ecp'xct { "i tgcw' "cmppi "j g'gpi j "
 qh'c' r tqlgev'0kp' uwej "ecugu. "eqpetgvg'qxgtnc { "xqno gu"
 y kn'cnuq'xct { . "tguwnkpi "lp' r qv'p'kno' cvgtkcn's wcpv'k { "
 qxgtt'wpu'cpf "eqp'wcevt'equ'wpegt'w'p'v' "y j gp'dkf u'ctg"
 f g x g n r g f "uqng' "qp'j g'dcu'ku'qh'v'q'cn'equ'v' r g't'w'p'k'ctgc"
 *g0 0'f qmctu'r g't'us wctg" { ctf +0Vj g'r qv'p'kcn'ht' "lp'ncv'g'f "
 dkf "r tlekp' "ecp'dg'cxqkf g'f "d { "lpemf kpi "r tqx'kukpu'lp"
 j g'eqp'wcevt'f qewo gpw'v'q' r c { "hqt'o cvgtkcn' "r ck' "lp"
 f qmctu'r g't'ewdle" { ctf +ugr ctcv'gn' "ht'qo "r ncego gpv' "r ck' "
 lp'f qmctu'r g't'us wctg" { ctf +0J qy gxgt. "j ku'cr r tqcej "ecp"
 tguwn'lp'cm't'kuni'ht'j "j g'r tqlgev'kcnkpi "qp'j g'qy pgt "ki"
 o cvgtkcn'xqno g's wcp'v'k'gu'ctg'p'q'v'ceewtcv'gn' "gu'ko cvgf "
 cpf "ecr r g'f 0Winko cvgn' . "j g'f ge'kukp'v'q'wug'qpg' r c { "
 kgo "f qmctu'r g't'us wctg" { ctf "qp'n' +qt' "y q'f qmctu'r g't"
 us wctg" { ctf "cpf "f qmctu'r g't'ewdle" { ctf +dku'f qy p'v'q'cp"
 cu'gu'uo gpv'qh't'kuni'cmecv'kwp' "eqp'wcevt'xgtu'w'qy pgt +"
 cpf "j g'kngn' "lo r cev'qp'qxgtcm'r tqlgev'r tlekp' 0

K'uj qwf "dg'pqvgf "j cv'j g'wug'qh'j tgg'f ko gpukpcn'
 tqcf y c { "uwtxg { "f'cvc'j cv'ctg'eqmgevgf "v'q'lp'ht'o "j g"
 f g x g n r o gpv'qh'r'ncpu'cpf "ur gek'kecvkpu'ecp'cnuq'dg'wugf "
 v'q'tgf w'eg'wpgzr g'egf "qxgtt'wpu'qh'eqpetgvg's wcp'v'k'gu."
 j gtdg { "t'gf w'ekpi "j g't'kuni'v'j g'qy pgt "lp'j g'v'q' "
 dkf /kgo "cr r tqcej 0Vj tgg'f ko gpukpcn'uwtxg { "f'cvc"
 ctg'dgego kpi "o qtg't'q'w'kpgn' "cx'kcdng'cu'eqp'wcevtu"
 cf q'r v'j g'wug'qh'w'kpi ngu'r cxkpi "u'f u'vgo u0Vj ku'v'q'r k'ku"
 f k'uewugf "hw'j g't'lp' "Ej cr v'g'9'qh'j ku'i w'k'f g0

Üj ^8aaÁ[} •ää^:ää } •Á:Á[} ä ~ [~ • | Á
 Ü^ä - | & ^ ä Á[} & ^ e Á Áä ^ ^ } á Ú Ç ^ | ä • Á

Uxgtcn'wpdqpf gf "ETER"qxgtnc { u'qp'cur j cn'uwthcegf "
 r cxgo gpv'j g't'g'eqp'wcevgf "lp'j g'WU'lp'j g'3; 82u"
 cpf "3; 92u. "cpf "r g'ht'o cpeg'j cu'dggp'tgr q'v'g' "v'q'dg"
 uc'w'kevt { 0Hgy "cf f k'k'qpcn'wpdqpf gf "ETER"qxgtnc { u'
 qp'cur j cn'uwthcegf "r cxgo gpv'j cxg'dggp'dw'ku'lp'j g"
 WU'lp't'gegp'f g'ecf gu. "gzegr v'ht' "u'qo g'v'j k'p'cpf "wmt/
 j k'p'ETER"qxgtnc { u'qp'hz'kcdng'r cxgo gpw'lp'w'cpuk'kwp"
 ctgcu'lp'Vgzcu" *Ej gp'g'v'cn04238+0Cf f k'k'qpcn'f g'v'knu"
 eqpegtkpi "j g'g'qxgtnc { u'ctg'r t'gug'p'v'g' "lp'Cr r g'p'f k'z'D"
 qh'j ku'i w'k'f g0

8 Yg][b'7 cbg]XYfUjcbg'Z:f'7 cbWYh'cbÁ 5 gd\ UH6 cbXYX'Cj Yf'Umg

EQC6D'qxgtnc { u'lpemf g'dqpf gf "eqpetgvg'qxgtnc { u'qp"
 dqj "cur j cn'cpf "eqo r qukg'r cxgo gpw0

C'EQC6D'qxgtnc { "uj qwf "qp'n' "dg'eqpukf g'gf "hqt'cp"
 gz'k'kpi "cur j cn'uwthcegf "r cxgo gpv'j cv'ku'lp' "q't'ecp"
 equv'gh'gevkxgn' "dg't'guv'g'f "v'q'+i q'q'f "qt'dg'w'g't'w'w'w'cn'
 eqpf k'k'q'p0EQC6D'qxgtnc { u'ctg'v' r lecm' "j k'p'pgt'j cp"
 EQC6W'qxgtnc { u'dgecwug'qh'j g'k'p'etgcugf "w'w'w'cn'
 ecr cek' { "ch'ht'f g'f "d { "dqpf kpi "j g'eqpetgvg'cpf "cur j cn'
 rc { gtu0

Vj g'h'm'j kpi "ugev'kpu'r tqx'kf g'i w'k'f cpeg'qp'j g'f guki p"
 cpf "ur gek'kecvkwp'qh'EQC6D'qxgtnc { u. "lpemf kpi "
 h'q'w'p'cvkwp'ej ctcevg't'k'cvkwp. "r t'g'qxgtnc { "t'g'ck'u. "o cvgtkcn'
 u'ng'ev'kwp. "cej k'xgo gpv'cpf "o clp'v'p'cpeg'qh'c'dqpf. "lgkpw"
 rc { qw'w'cpf "f guki p. "cpf "o qtg0

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Qpg'ej cmgpi kpi "cur gev'qh'EQC6D'qxgtnc { "f guki p'ku"
 j g'ej ctcevg't'k'cvkwp'qh'j g'o q'f w'w'u'qh'h'q'w'p'f cvkwp"
 uwr r q'tv. "m'ht'j "j g'eqo r qukg'r cxgo gpv'w'w'w'g0
 Dgecwug'j g'cur j cn'rc { g't'ku'eqpukf g'gf "r ctv'qh'j g'p'gy "
 o qp'q'k'j k'le'r cxgo gpv'w'w'w'w'g. "j g'm'x'cnw'g'uj qwf "
 t'gr t'gug'p'v'j g'eqo d'lp'gf "gh'gev'qh'cm'r { gtu'ko o g'f k'cv'gn' "
 dg'ny "j g'cur j cn'0Hqt'eqo r qukg'r cxgo gpw. "j ku"
 y qwf "dg'j g'gh'gevkxg'm'x'cnw'g'qh'j g'o cvgtkcn'dg'ny "j g"
 gz'k'kpi "cur j cn'rc { gtu'Uqo g'r tqegf w'g'u'ht' "gu'ko cvkpi "
 j g'gh'gevkxg'm'x'cnw'g'j cxg'p'q'w'r g't'iko k'v'g'x'gp"
 j qwi j "f k'ht'g'p'egu'lp' "m'x'cnw'g'u'qxgt'3.222'r uk'lp'0ctg"
 o g'c'p'kpi ngu'lp'eqpetgvg'r cxgo gpv'f guki p="j g't'g'ht'g. "ku'ku"
 t'gego o g'p'f gf "j cv'j g'gh'gevkxg'm'x'cnw'g'qh'j g'o cvgtkcn'
 dg'ny "j g'cur j cn'dg'iko k'g'f "v'q'3.222'r uk'lp'0Vj ku'iko k"
 y qwf "i gpgtcm' "dg'cr r n'kg'f "y j g'p'g'x'g't'c'dqpf gf "eqpetgvg"
 qxgtnc { "ku'r megf "qp'cp'gz'k'kpi "eqo r qukg' "cur j cn'"
 qxgtnc'f "eqpetgvg+r cxgo gpw0

- %

Vj g'lpuxm~~v~~q~~p~~"q~~h~~"g~~e~~"d~~e~~u~~t~~"p~~v~~"j g'p~~i~~ k~~w~~f k~~p~~c~~n~~l~~q~~l~~p~~w~~u~~"
 q~~h~~"EQC6D"q~~x~~g~~t~~r~~c~~{ u~~e~~c~~p~~"d~~g~~"r~~t~~q~~d~~ng~~o~~ c~~v~~le."g~~u~~r g~~e~~k~~e~~m~~f~~ "h~~q~~t"
 v~~j~~ p~~'~~E~~Q~~C6D"q~~x~~g~~t~~r~~c~~{ "f~~g~~u~~k~~i p~~u~~OC"o q~~f~~ k~~h~~g~~f~~ "v~~g~~"d~~e~~t~~'~~f~~g~~u~~k~~i p~~'~~
 h~~g~~c~~w~~t~~l~~p~~i~~ "y~~q~~"u~~o~~ c~~m~~*P q05"q~~t~~"P q06+"f~~g~~h~~q~~t~~o~~ g~~f~~ "d~~e~~u~~t~~"
 c~~p~~e~~j~~ q~~t~~g~~f~~ "v~~q~~"j g~~'~~g~~z~~k~~u~~k~~p~~i "r~~c~~x~~g~~o g~~p~~v~~u~~t~~h~~c~~e~~g~~'~~t~~c~~v~~j~~ g~~t~~"j c~~p~~"
 k~~p~~u~~g~~t~~v~~g~~f~~ "c~~v~~o k~~f~~/f~~g~~r~~v~~j ".j c~~u~~'d~~g~~g~~p~~"w~~u~~g~~f~~ "u~~w~~e~~e~~g~~u~~h~~w~~m~~f~~ "v~~q~~"
 h~~c~~e~~k~~k~~x~~c~~v~~g~~'~~e~~q~~p~~u~~t~~w~~e~~v~~q~~p~~"c~~p~~f "r~~t~~g~~x~~g~~p~~v~~'~~j g'p~~i~~ k~~w~~f k~~p~~c~~n~~l~~'~~
 l~~q~~l~~p~~w~~'~~"p~~'~~j g'q~~x~~g~~t~~r~~c~~{ "h~~t~~q~~o~~ "q~~r~~ g~~p~~k~~p~~i 0Dg~~e~~c~~w~~u~~g~~"v~~j~~ g'q~~x~~g~~t~~r~~c~~{ "
 k~~u~~'f~~g~~u~~k~~i p~~g~~f "v~~q~~"d~~g~~"h~~w~~m~~f~~ "d~~q~~p~~f~~ g~~f~~ "v~~q~~"j g'c~~u~~r~~j~~ c~~m~~"v~~j~~ g~~t~~g"
 u~~j~~ q~~w~~f "d~~g~~"p~~q~~"o q~~x~~g~~o~~ g~~p~~v~~'~~q~~h~~"j g'g~~e~~p~~e~~t~~g~~v~~g~~"t~~g~~r~~e~~v~~x~~g~~'~~v~~q~~"v~~j~~ g"
 c~~u~~r~~j~~ c~~m~~"c~~p~~f "v~~j~~ g'v~~g~~"d~~e~~u~~t~~u~~g~~t~~x~~g~~'~~o c~~k~~p~~n~~l "v~~q~~"j q~~r~~f "v~~j~~ g'l~~q~~l~~p~~w~~'~~
 v~~k~~i j v~~c~~p~~f~~ "r~~t~~g~~x~~g~~p~~v~~'~~r~~t~~q~~r~~ c~~i~~ c~~v~~l~~q~~p~~'~~"q~~h~~"v~~j~~ g'l~~q~~l~~p~~w~~'~~"v~~j~~ t~~q~~w~~i~~ j "v~~j~~ g"
 c~~u~~r~~j~~ c~~n~~0E~~c~~t~~g~~"o w~~u~~v~~'~~d~~g~~"c~~n~~g~~p~~"v~~q~~"c~~x~~q~~k~~f "q~~x~~g~~t~~/t~~g~~k~~p~~h~~q~~t~~e~~k~~p~~i "
 v~~j~~ g'l~~q~~l~~p~~v~~'~~y k~~j~~ "v~~q~~q~~'~~o w~~e~~j "u~~v~~g~~g~~n~~'~~y j k~~e~~j "o c{ "r~~t~~g~~x~~g~~p~~v~~'~~j g"
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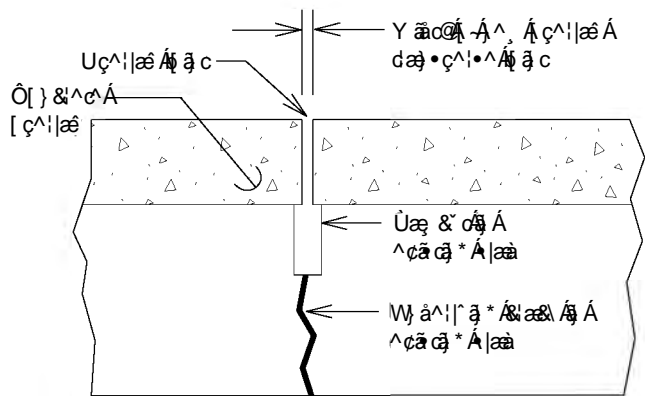
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Vj g" f g x g n u r o g p v c p f " o c l p v g p e g " q h " c p " c f g s w c v g " d q p f " d g w g g p " y j g " q x g t r { " c p f " y j g " g z k n p i " r c x g o g p v k u " e t k l e c n i " v q " y j g " r g t h q t o c p e g " q h " E Q E ó D " q x g t r { u " g u r g e k m { " h q t " y j k p " e q p e t g v g " q x g t r { u " y j c v r t q x k f g " h k v g " u t w e w t g " q h " y j g k t " q y p " h q t " e c t t { k p i " u g t x l e g " h q c f u 0 C z k n p i " f g u k i p " r t q e g f w t g u " h q t " d q p f g f " q x g t r { u " f q " p q v l u r g e k h e c m { " c f f t g u u " d q p f " u t g p i y j " d w l t c v j g t " t g c v k r t t k o c t k n { " c u " c " e q p u t v e k q p " k u w g " d g e c w u g " d q p f / t g n v g f " h c k n w g u " t c t g n { " q e e w " y j j g p " r t q r g t " e q p u t v e k q p " c p f " e w t k p i " g e j p l s w g u " c t g " w u g f 0 C r r g p f k z " E " q h " y k u " i w k f g " r t g u g p u i " w k f c p e g " q p " u w h c e g " r t g r c t c v k p " g e j p l s w g u . " k p e n f k p i " l j q v d r u k p i " c p f " y c v g t " d r u k p i . " y j c v e c p " j g r " y j g " g z k n p i " r c x g o g p v "

u w h c e g " c e j k g x g " c " i q q f " d q p f " y k j " y j g " q x g t r { 0 U r g e k h g f " d q p f " u t g p i y j " x c n g u " v { r l e c m { " t c p i g " h q o " 322 " v q " 422 " r u k " c p f " o c { " x c t { " y k j " y j g " v g u v o q f g " w u g f " v q " f g v g t o k p g " d q p f " u t g p i y j " * K 0 " f k g e v l j g c t " q t " r w m / q h h g p u k p p " v g u k p i + 0

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Qxgtrc{ "lqlpw"ew"qt"htqto gf "qxtg"pqpy qtnlpi . "vkgf" "lqlpw"pggf "qprn" "dg"ew"vq"qpg/j crh"vj g"qxtgtrc{ "vj lenpguu" *VH+"vq"gpuwtg"etcemleqpvtqr0Vj g"lqlpv"pggf "qprn" "dg"cu"y kf g"cu"e"ulpi ng"ucy ew"dnrf g"dw"o wuv"dg"y kf g" gpqwi j "vq"cmqy "vj g"lqlpv"vq"dg"ugcrgf "qt"hnrgf "5 B8"kp0' o kpo wo "y kf yj "r gt"CERC"J423: _0

EQE6D'qxtgtrc{ u"qh"nupi "eqpetgvg"r cpgnu. "uwej" "cu"vj qug" wugf "lp"lqlpv"vq"t gkphqtegf "eqpetgvg"r cxgo gpv"ETER+:" ctg"uqo g"vko gu'r megf "y kj "c f f k k q p c n l p v g t o g f k c v g "l q l p w u " *Hk wtg"CO +vq"t gf weg"ewrnp l y ctr lpi "cpf"uj tlpnci g" utguugu"vj cv'o ki j v"hgcf "vq"nqu"qh"dqpf lpi 0Vj gug" kpvgto gf kcvg"lqlpw"uj qwr "cnuq"dg"ew"vq"VH"cpf "ugcrgf" "qt"hnrgf "y kj "vj g"err tqr tlcvg"o cvgtknu0



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: J\ i fY5", "7C7E6'cj YfUmich'l G%% 'jb'DYbbgmj UbJUr J\ "a%" A Zi'cb\ 'dUbYg'Wtbgfhi WYX'jb'&\$%'cb'>F7D'k J\ (*%) 'Zi'cb\ Á dUbYg. 'dfc'YVwicj Yfj Yk 'ftcdLUbX'Yl dcyYX'cb\ J\ i XjbU'c\jbhÁ Uh\jbhfa YXJUH'fUbgj YfgY'c\jbhif\chta L

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F qy gni'ctg'pdxgt'r megf "lp"EQE6D'qxtgtrc{ u'dgecwug"*3+" EQE6D'qxtgtrc{ u'ctg'wuwcm\ "nguu"vj cp'8"lp0vj lem"y j lej " y qwr "tguwn/lp"vj kp"eqpetgvg"eqxgt. "cpf" "4+f qy grlj gct" nqcf u'y qwr "r megf" ki j "vgpukr"utguugu"qp"vj g"lpvgtceg" dqpf. "hgcf lpi "vq"o qtg'tcr kf "nqu"qh"vj g"dqpf "cpf" "hcnwtg" qh"vj g"qxtgtrc{ 0Qxgtrc{ "vkg"dtu'ctg"pqvf guktcdng"ht"vj g" uco g'tgcupr"cpf "uj qwr "pqv'dg"pgeguuct{ "h"vj g"vkg"dtu"lp" vj g"gzknkpi "r cxgo gpv'ctg'unknhwpvklpki "r tqr gtn\ 0Kc" lqlpv"pggf u"vkg"dtu"*g\ 0"dgecwug"vj g"qtki lpcn"vkg"dtu"j cxg" hcnrgf "qt"vj g"gzknkpi "r cxgo gpv'kf "pqv'j cxg"vkg"dtu+:" vj g\ "uj qwr "dg"t g t q h k w g f "l p v q " v j g " g z k n k p i " r c x g o g p v " w u k p i " e t q u u / u n k e j l p i " q t " u r q v / u n k e j l p i " g e j p l s w e u . c u " f g u e t k d g f " l p " v j g " E q p e t g v g " R c x g o g p v " R t g u g t x c v k q p " I w k f g " *Uo kj "gv'cr04236+:"r tkt"vq"qxtgtrc{ "r mego gpv0

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Lqlpv"hnkpi "ku'tgeqo o gpf gf "hqt"EQE6D'qxtgtrc{ u" gur gekm\ "lp"ctgcu"y kj "hgg\ lpi "vgo r gtcwtgu. "vq"r t g x g p v " y c v g t " c p f " l e g " h q t o c v k q p " h q o " e c w u k p i " f g r o l p c v k q p " c v " v j g " q x g t r c { / r c x g o g p v " d q p f " l p v g t h c e g 0 T g h e t " v q " E j c r w e t " 8 " q h " v j k u " i w k f g " h q t " l p h q t o c v k q p " q p " l q l p v " h n g t u " c p f " u g c n p u o

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Gxgp"nguu"eqo o qp"vj cp"lqlpv"vq"EQE6D'qxtgtrc{ u" dqpf gf "ETER"qxtgtrc{ u"qp"eqpetgvg"r cxgo gpv'ctg'wuwcm\ " geqpqo lecm\ "xkcdng"qprn\ "y j gp"xgt{ "hkwg"r tg/qxtgtrc{ " tgr ckt"ku'tgs wktgf 0O quv'tgegpv'qxtgtrc{ u"qh"vj ku'v\ r g'y gtg" eqputwvvgf "lp"Vgzcu"lp"vj g'3: ; 2u'cpf "j cxg" \ kgrf gf " ceegr vcdng"r gthqto cpeg0Cf f k k q p c n l p h q t o c v k q p " q p " E T E R " q x g t r c { u " k u ' r t q x k f g f " l p " C r r g p f l z " D " q h " v j k u " i w k f g 0

Vj lenpguu" f guki p"ht"dqpf gf "ETER"qxtgtrc{ u"qp"eqpetgvg" r cxgo gpv'uj qwr "dg"r gthqto gf "wukpi "CCUJ VQY ctg" Rcxgo gpv'O GF guki p0Vj g"qprn\ "lqlpw"vj cv'ctg'tgs wktgf " lp"vj ku'qxtgtrc{ "v\ r g'ctg"t c p u x g t u g " e q p u t w e k q p " l q l p w . " o c w e j g f " t g r c k t " l q l p w . " c p f " n u p i k w f l p c n l e q p u t w e k q p " c p f " e q p u t c e v k q p " l q l p w = u c y e w " f g r v j u " c p f " y k f y u " u j q w r " o c w e j " v j q u g " w u g f " h q t " e q p x g p v k p c n l E Q E 6 D ' q x t g t r c { u 0

5 XXJhcbU'8 YgJ[b'7 cbgJXYfUhcbgÁ
hc'5 XXfYgg' a dUWg'cZDfcZ'Y'UbXÁ
; fUXY7\ Ub[Yg

Ej cpi gu"vq"vj g'r cxgo gpv'r tqhrg. "etquu"ugevqp"*g\ 0" f vg"vq"mpg"y kf gplpi + "cpf "etquu"unqr g"*g\ 0" f vg"vq" ko r tqxgo gpw"vq"uwthceg" f telcpi g"cpf "uwr gtgrgxvklp+" vj cv'tguwn/hqo "cp"qxtgtrc{ "qh"cp{ "v\ r g'ecp"vki i gt" egtwklp"qxtgtrc{ "f guki p'o qf hkecvkpu"cpf "tqcf y c{ " f guki p'ej cpi gu0

K [XYb]b['UbX' @UbY'5 XX]hcbg

Eqpetgvg'qxgtrc{ 'r tqlgeu'r tqxkf g'qr r qtwpkkgu'hqt"
y kf gplpi 'r cxgo gpw'eqpustwv'f'y kj 'pcttqy 'tchle"
rpgu0Rtqr gtn' 'f guki pgf 'cpf 'eqpustwv'f'y kf gplpi "
ugevqpu'tgf wvg'r cxgo gpv'gf i g'utguugu.'eqtpgt'utguugu."
cpf 'f ghgevkpu.'y wu'tgf vekpi 'r cpgn'etcentpi 'cpf 'lqkv'
hcvnkpi "kQ0'yj g'f khtg'peg'lp'gngxcvkp'dgvy ggp'yj g'vy q"
ukf gu'qh'c'lqkv'qt'etcem'y j kg'lo r tqxkpi 'hpi /vgo 'tk'g"
s wvks{ 'cpf 'uchgv{0

Y kf gplpi 'c'tcxgn'uwthceg'wulpi 'c'eqpetgvg'qxgtrc{ "
tgs wktgu'cp'gxcn'wvkp'qh'cp{ 'ej cpi gu'kp'hqwpf cvkqp"
uwr r qtv.'cr r tqr tlc'v'wug'qh'tgkphqtekipi 'uvggn'cpf 'r tqr gt"
npi kwf kpcn'lqkv'r mego gpv0Vj ku'ku'gur gekm' 'tvg"
hqt'y kf gplpi 'qxgtrc{ u'r megf 'qxgt'gzknkpi 'eqpetgvg"
r cxgo gpw'y kj 'wpdqwpf 'uj qwf gt'o cvgtknu'dgecvug"
qh'yj g'kpetgcugf 'tkun'qh'hpi kwf kpcn'etcentpi 'cnpi 'yj g"
gf i g'qh'yj g'gzknkpi 'r cxgo gpv0Hki wtg'CQ +0

Uqo g'i gpgtcn'tgeqo o gpf cvkpu'hqt'r cxgo gpv'y kf gplpi "
wulpi 'eqpetgvg'qxgtrc{ u'kpenf g'yj g'hqmjy kpi <

É' Megr 'hpi kwf kpcn'lqkv'u'qww'qh'y j ggn'r cvj u'y j gpgxgt"
r quukdg.'gur gekm' 'hqt'EQCóD'qxgtrc{ u0

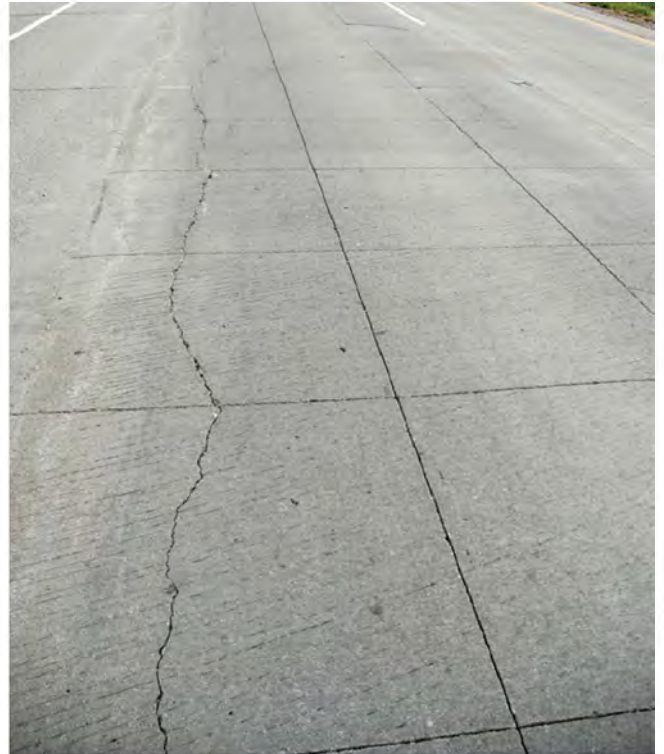
É' Hqt'wpdqpf gf 'qxgtrc{ u'qh'cur j cn'qt'eqpetgvg"
r cxgo gpv'o cvej 'yj g'hpi kwf kpcn'lqkv'u'qh'yj g'qxgtrc{ "
y kj 'yj g'hpi kwf kpcn'gf i g'lqkv'u'qh'yj g'gzknkpi "
r cxgo gpv'cpf 'cf f 'vkgf 'y kf gplpi 'vpku'y j gp'r quukdg"
wpguu'yj ku'tguwmu'lp'lqkv'u'y kj kp'yj g'y j ggn'r cvj u'qh'
yj g'qxgtrc{0

É' Y j gp'yj g'qxgtrc{ 'ku'r megf 'y kf gt'yj cp'yj g'gzknkpi "
r cxgo gpv.'cxqkf 'hgecvpi 'yj g'gf i g'lqkv'u'qh'yj g'qxgtrc{ "
o qtg'yj cp'34'v'3: 'kp0dg{ qpf 'yj g'gzknkpi 'r cxgo gpv'u"
rpg'gf i gu'wpguu'yj g'gzknkpi 'uj qwf gt'j cu'c'utwewt'g"
yj cv'r tqxkf gu'uw'r qtv'uko kct'v'q'yj cv'qh'yj g'gzknkpi "
r cxgo gpv'rpg0K'yj ku'ecppqv'dg'f'qpg.'hqmjy 'yj g"
i wkf cpeg'qh'yj g'r tgxkqu'dwngv0

É' Vlg'y kf gplpi 'vpku'v'gkj gt'yj g'qxgtrc{ 'qt'v'yj g"
gzknkpi 'r cxgo gpv'wulpi 'f ghqto gf 'dctu'hgg'yj g"
[y kf gplpi 'f gvcku'lp](#)'yj g'gzco r ng'eqpustwvkp'f'cy kpi u"
r wdnkj gf 'd{ 'yj g'ER'Vgej 'Egpgt+0

" Hqt'eqpetgvg'qxgtrc{ u'7'kp0yj kem'lt'o qtg.'hgecv"
yj g'vkg'dctu'lp'yj g'qxgtrc{ 'cv'o kf /f gr yj 0Tghet'v"
yj g'f'kuewukqp'qp'r cxgo gpv'y kf gplpi 'f gvcku'lp"
[Ej cr vgt'9'qh'yj ku'i wkf g0](#)

" Hqt'eqpetgvg'qxgtrc{ u'ngu'yj cp'7'kp0yj kem'ugewt'g"
yj g'vkg'dctu'v'yj g'uwthceg'qh'yj g'gzknkpi 'r cxgo gpv."
cnkpi 'ectg'pqv'v'cmjy 'tchle'v'q'hqugp'yj g'ugewt'gf "
vkg'dctu0



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: [I i fY5 " -7 cbWYh'c j Yf'Unik [XYb]b['cb'≡]bc]g'Fci hY)' 'k jh Á
bc~cb[]h X]bU'c]bhcf'fY]bZfV]b['c j Yf'YI]gh]b['dUj Ya YbtÁ
YX[Y'ftcdZ'WbWYh'c j Yf'Unik [XYb]b['cb'Á]bbYgcHTh< %ZÁ
k jh ~cb[]h X]bU'c]bhg'UbX'fY]bZfV]b['c j Yf'YI]gh]b['dUj Ya YbtÁ
YX[Y]b gca Y'cVU]hcbg'fWbHfL'UbX'cb'nifY]bZfV]b['j b'cH YfÁ
'cVU]hcbg'fVchta L

P qv'gxgt { 'f gvcrlly kn'cr r n' "vq'gxgt { 'r tqlgcv"dw'v'j g"
tgeqo o gpf c'v'kpu'k'w'f'cdqxg'ecp'q'hw'p'dg'cr r'ngf "vq"
c f f t guu' r t q l g e v' u r g e k h e' k u u w g u

C f f l p i " p g y " h p g p' q t " u j q w f g t u' e c p' c n u q' r t g u g p v' k u u w g u "
w p l s w g' v q' e q p e t g v g' q x g t r c { ' r c x g o g p v' f' g u k i p. " g u r g e k m f' "
k h' v j g t g' k u' x c t k v k p p' l p' v j g' w p f g t n f' l p i " u w r r q t v' q h' v j g' "
q x g t r c { ' q t' k h' v j g' q x g t r c { ' k u' v q' d g' c' h w m' f g r v j " e q p e t g v g' "
r c x g o g p v' 0 l q k p v' h q c f " v t c p u h g t' u { u n g o u' c t g' h t g s w g p n f' "
w u g f' l p' u w e j' e c u g u' y j g p' v j g' q x g t r c { ' u { u n g o' k u' v p d q p f g f 0 "
N q p i k w f' l p c n i l q k p v' w g' d e t u' c t g' w u g f' v q' g p u w t g' v j c v' "
g f i g' u w r r q t v' k u' r t q x k f g f' d { ' c i i t g i c v g' l p v g t m q e n 0 v j g' "
f g u k i p' u j q w f' c f f t g u u' f' h h g t g p v k n i u g w g o g p v' c p f' y c v g t' "
l p h k m t c v k p p' c v' v j g u g' h q e c v k p u

V q' r t g x g p v' e t c e n k p i " t g r c v g f' v q' f' h h g t g p v k n i g z r c p u k q p' c p f' "
e q p t c e v k p p' d g y g g p' c' e q p e t g v g' q x g t r c { ' c p f' c p' c f l c e g p v' "
h w m' f g r v j " e q p e t g v g' h p g' c f f k k q p. " w u g' c p' k u q r c v k p p' l q k p v' "
* k g 0' c' d w w l q k p v' y k j " p q' w g' d e t u' h h' v j g' q x g t r c { ' k u' h g u u' "
v j c p' 7' l p 0 v j l e n 0

•b!D`UW`Gfi Wi fYg

G z k u k p i " l p v c n g u' c p f' w k k f' { ' u t w e w t g u' o w u v' d g' t c k u g f' v q' "
o c v e j' v j g' p g y " r c x g o g p v' g r x c v k p p' 0 v { ' r l e c n f' g v c k u' h q t' "
c f l w k p i " o c p j q r g u' c t g' u j q y p' l p' E j c r v g t' 9' q h' v j k u' i w k f' g' "
c p f' v j g' g z c o r r g' e q p u t w e v k p p' f t c y l p i u' r w d r k u j g f' d { ' v j g' "
E R' V g e j' ' E g p v g t 0

7 i fV`UbX'; i Hw'8 YHJ`g

G z k u k p i " e w t d' c p f' i' w w g t' u g e v k p u' o c { ' r q u g' q x g t r c { " "
f g u k i p' e j c n g p i g u' t g r c v g f' v q' v j g' o c k p v g p c p e g' q h' u w t h e g' "
f t c l p c i g' q x g t r c { ' r t q l k r g' g r x c v k p p. " c p f' u q' q p 0 Q r v k p u' "
l p e n f' g' * 3 + h g c x l p i " v j g' g z k u k p i " e w t d' c p f' i' w w g t' u { u n g o " "
l p' r n e g' y j k r g' o c v e j' l p i " v j g' h p c n i q x g t r c { ' r c x g o g p v' "
g r x c v k p p' v q' v j g' g z k u k p i " u { u n g o . " * 4 + t g o q x l p i " c p f' " "
t g r n e k p i " v j g' g z k u k p i " e w t d' c p f' i' w w g t' u g e v k p p. " q t' * 5 + "
g p e c u k p i " v j g' g z k u k p i " e w t d' c p f' i' w w g t' u { u n g o " y k j l p' "
c' p g y " u { u n g o 0 T g h g t' v q' v j g' e w t d' c p f' i' w w g t' f' g v c k u' l p' "
E j c r v g t' 9' q h' v j k u' i w k f' g' c p f' v j g' g z c o r r g' e q p u t w e v k p p' "
f t c y l p i u' r w d r k u j g f' d { ' v j g' E R' V g e j' ' E g p v g t 0

H c e v q t u' v q' d g' e q p u k f' g t g f' l p' f' g v g t o l p k p i " j q y " d g u v' v q' "
v t g c v' e w t d' c p f' i' w w g t' k u u w g u' l p e n f' g' v j g' e q p f' k k q p' q h' v j g' "
g z k u k p i " e w t d' c p f' i' w w g t' u g e v k p p' c p f' v j g' r t q z k o k f' { ' q h' "
w k k f' { ' r q r g u' c p f' v q' v j g' t' q d l g e u' v q' v j g' d c e n i q h' v j g' e w t d' "
* y j k e j' " e q w f' r t q j k d k' v j g' w u g' q h' u n k' h q t o' r c x l p i " c p f' "
p g e g u k s c v g' v j g' w u g' q h' j c p f' r' n e g o g p v' w u k p i " h z g f' h q t o u 0

V j g' h q e c v k p u' q h' v t c p u x g t u g' l q k p u' l p' v j g' q x g t r c { ' u j q w f' "
d g' o c v e j' g f' y k j " v j g' h q e c v k p u' q h' l q k p u' l p' v j g' e w t d' "
c p f' i' w w g t' u g e v k p p. " g u r g e k m f' { ' k h' v j g' e w t d' c p f' i' w w g t' "
u g e v k p p' k u' w g f' v q' v j g' q x g t r c { 0 k' k u' c n u q' r q u k d r g' v q' l p e n f' g' "
c p' l p v g i t c n i e w t d' c p f' i' w w g t' u { u n g o " f' w t k p i " q x g t r c { " "
r n e g o g p v' d w' v j g' r' q v g p v k n i d g p g h k u' q h' v j k u' q r v k p p' "
o w u v' d g' d c r p e g f' c i c k p u v' v j g' e q u v' q h' e q p u t w e v k p i " v j g' "
l p v g i t c n i e w t d' c p f' i' w w g t' u { u n g o " c p f' v j g' c x c k r e d k k f' q h' "
v j g' s g w k r o g p v' p g g f' g f' h q t' k u' e q p u t w e v k p p' 0 v j g' u g r g e v k p p' "
q h' u n c p f' c t f' x g t u u' l p v g i t c n i e w t d' c p f' i' w w g t' f' g u k i p' u j q w f' "
i g p g t c m f' d g' c p' q r v k p p' h g h' v q' v j g' e q p t c e v q t' v q' g p u w t g' "
e q o r g v k k x g' d k f f l p i 0

Hf Ubglh'c b g

E q p e t g v g' q x g t r c { ' f g u k i p u' w u w c m f' t g s w k t g' f g v c k u' "
e q p e g t p k p i " v j g' v t c p u k k p p' u g e v k p u' h p n k p i " v j g' e q p e t g v g' "
q x g t r c { ' y k j " c f l c e g p v' r c x g o g p v' u g e v k p p u. " c f l c e g p v' "
u t w e w t g u' c p f' f t k x g y c { " g p v t c p e g u l g z k u' 0 v t c p u k k p p' "
u g e v k p u' q h' g p p' h g c w t g' k u q r c v g f' q t' q v j g t y k u g' v p u w r r q t v g f' "
v t c p u x g t u g' g p f' l q k p u' c p f' j c x g' v j g' r' q v g p v k n i v q' "
g z r g t k e p e g' k o r c e v' h q c f' l p i " c u' x g j l e n g u' e t q u u' v j g' g p f' "
l q k p 0 v j g u g' e q p f' k k q p u' t g u w n' l p' j k i j g t' u t g u u g u' l p' o c p { " "
v t c p u k k p p' c t g c u. " p g e g u k s c v k p i " v j g' w u g' q h' v j l e n g t' e q p e t g v g' "
u g e v k p u' c p f' " e q p x g p v k p p c n i f' g h q t o g f' u n d' t g l p h q t e g o g p v. " "
y k t g' o g u j " t g l p h q t e g o g p v. " c p f' k t' o c e t q h k d g t u 0 "
V t c p u k k p p' h g p i v j u' c t g' w u w c m f' d c u g f' q p' v j g' f' g u k i p' "
u r g g f' h q t' v j g' u g e v k p p 0 C f f k k q p c n i f' g v c k u' c p f' " g z c o r r g u' "
t g i c t f l p i " v t c p u k k p p' u g e v k p u' c t g' r t q x k f g f' l p' E j c r v g t' 9' "
q h' v j k u' i w k f' g 0

0E] ^} åãÁ

7 cbh]bi ci g`mF Y]bZcfWX

7 cbWYhY`DUj Ya YbhCj Yf`Ung

5 dd`JWUjcbg`UbX`DYfZfa UbW`	%%\$
7 cbh]bi ci g`mF Y]bZcfWX`7 cbWYhY`DUj Ya YbhCj Yf`Ung`cZ5 gd\ UHGf fZUWXDUj Ya Ybhg`%	%%\$
7 cbh]bi ci g`mF Y]bZcfWX`7 cbWYhY`DUj Ya YbhCj Yf`Ung`cb7 cbWYhYDUj Ya Ybhg`	%%\$&
9 j Ui Uhcb`cZk Y`9I]gh]b[`DUj Ya YbhGfi Wi fY`	%%\$)
8 Yg][b`	%%\$*
A UhYf]Ug`UbX`7 cbWYhY`A]I hi fYg`	%%\$*
7 cbWYhY`A]I hi fYg`	%%\$*
F Y]bZcfW]b[`GhY`	%%\$*
GYdUfUhcb`@UhYf`fZcf`I bVcbXYX`Cj Yf`UngL`	%%\$*
7 cbgfi W]cb`	%%\$*
DfY!cj Yf`UmFYdU]fg`	%%\$+
HYfa]bU`cf`9bX`HfYUha Ybh>c]bhg`	%%\$+
@Z!7 mWY`7 cgh5 bUng]g`cZ7 cbh]bi ci g`mF Y]bZcfWX`7 cbWYhYDUj Ya YbhCj Yf`Ung`	%%\$,
GWbUf]c`	%%\$,
Df]bV]d`Yg`UbX`DUfUa YhYfg`	%%/\$
F Ygi `hg`	%%/\$%

5 dd`jWUhc bg`UbX`DYfZcfa UbWYÁ

Eppwkwunwun 't'gphqtegf "eqpetgwg'r cxgo gpv*ETER-"
j cu'dggp 'lp'wug'ht'c'v'gcu'82'/{ gctu'cu'cp'qxgtr { "qr vkp"
qp'gzknkpi "cur j cn/uwthcegf "cpf "eqpetgwg'r cxgo gpvu."
kpenwf kpi "lqkpvf 'r nclp"eqpetgwg'r cxgo gpv*IRER+."
lqkpvf 't'gphqtegf "eqpetgwg'r cxgo gpv*ETER+."cpf "
ETEROTgegpvgzco r ngu'qh'ETER'qxgtr { u."eqpwtwvfg "
kp'4224'cpf'4235.'ctg'uj qy p'lp'Hki wtg'D080



Óðal·Á a) |æ| Æ·^áÁ æð |{ ā·ā } /æ| DÁR·~·^·Ü| ^·|·| Æ·^áÁ æð
|{ ā·ā } /æ| æ { D

: [i f Y 6 ' % " 7 F 7 D ' c j Y f ` U n g ` V Y] b [` d ` U W X ` c b ` = + \$ `] b ` & \$ \$ & f t c d L A
U b X ` c b ` =) + # * (`] b ` & \$ % ` f l V c h t a L

Vj g'htuvtgr qtv'f 'ETER'qxgtrc{ 'lp'yj g'WU'y cu"
eqputwex'f 'lp'Vgzcu'lp'3; 7; 0Upeg'y gp. 'hxqtcdrng"
r g'htqto cpeg'j cu'dggp'tgr qtv'f 'hqt'ETER'qxgtrc{ u"
eqputwex'f 'lp'c'pwo dgt'qh'ucv'cu'y gni'cu'lp'yj g"
Wpkx'f 'Mpi f qo. 'Dgn kwo. 'Ur clp. 'Htcepg. 'Uqwj "
Mqtgc. 'cpf 'Uqwj 'Chlec'*ugg'Vcdng'D0B+0Cp'gctn' 'tgr qtv"
*ETUK3; :: +hwpf 'yj cv'cv'ngcu'822'b K'qh'ETER"
qxgtrc{ u'j cf 'dggp'r'ceg'f 'lp'yj g'WU'htqo "3; 7; 'xq'3; : 2."
y kj 'yj lempuugut'cpi kpi 'htqo '8'xq'; 'lp'0Vcdng'D0t"
uwo o ct'k gu'yj g'xct'kqu'ucv'gu'yj cv'j cxg'f'guk' pgf 'cpf"
eqputwex'f 'ETER'qxgtrc{ u'qxgt'gz'kmp' "eqpet'gvg'qt"
cur j cn'r cxgo gpw0

Tgrxkg'q'IRER'qxxgtr{ u'ETER'qxxgtr{ u'r tqxf g"
npi gt'ugtxleg'hxgu'y kj 'o kpk crio klpvpcpeg'"ETUK
3; : +:cpf' o klpvclp'c'eqpuxcpv'cpf 'hy 'Kpytpcvkqpcn"
Tqwi j pgul'Kpf gz "KFK'xcnmg'qxxg'klo g0Ht' 'y kuf'gcuq."
tqcf y c{ u'y kj 'j ki j gt' tchle'xqmo gu.'uwej 'cu'cp'cppwcn'
cxgtci g'f ckl' 'twni'tchle'"CCF VV+qh'55.222.'ctg"
kf gcnlecpf kf cvgu'ht' ETER'qxxgtr{ u'cpf 'ctg'v' r lecm' "
y j gtg'v j g{ 'j cxg'dggp'eqpuxwvfg '"REC'3; 98+0Vj g'Dgp"
Uej qgo cp'Higgy c{ 'kp'Uqwj 'Chlec.'ht'gzco r'rg.'ecp"
gzr gtlgpeg'cppwcnlcxgtci g'f ckl' 'tchle'"CCF V+ xqmo gu"
cu'j ki j 'cu'372.222'cpf 'lpwnf gu'ETER'qxxgtr{ 'uge'kpu"
v j cvj cxg'f go qpuxwvfg 'i qaf 'r gthqto cpeg'gxgp'chgt'42"
{ gctu'"Dtlpnlepf 'Rlenctf'422: +0ETER'qxxgtr{ u'ctg'cnq"
cp'gzegngpv'ej qleg'ht' t'wcnrl tlpekr cnlctv'kcnj ki j y c{ u="'
wpdqpf gf 'ETER'qxxgtr{ u'ctg'wnkndgkpi 'f guli pgf'cpf "
eqpuxwvfg 'r tko ctkl' 'ap'v' gug'taqf u0

Vj g'ò clqt{kf 'qh'ETER'qxgtrc{ u'j cxg'dggp'cpf "
eqp'v'pwg'q'dg'wpdqpf gf 'qxgtrc{ u'qp'gz'kwkpi 'eqpetgvg'
r cxgo gpw'j kj 'fko kgf 'crr r'ec'v'qpu'qh'dqpf gf 'ETER'
qxgtrc{ u'qp'eqpetgvg'r cxgo gpw'qt 'ETER'qxgtrc{ u'qh'
cur j cn/wth'ecgf 'r cxgo gpw'0

HUV`Y'6 'b%r; `cVU`YI dYf]YbWV`k]H `7 F7 D`c] Yf`Umq

[illegible]

[illegible]

%\$%

@WUjcb	Cj Yf'Unimdy	Cj Yf'UmÁ Wtbgfij Wjcb'mUf	GhU g	7 i a i`Uij YÁ a j`jcbg'cZ9G5 @%Á fttUZZWmYUfgL	DUj Ya YbhÁ WtXJhcb%Á fB\$% L	F=XUHÁ fB\$% L
⇒ Z>UW_gcb'7 ci blm	FFÁ ẼÖÜÓÚ	FJì J	QÁU'icā^ÁGEGE	H È ÁFJì JÁ ÁGEGED	ì G	Jì
⇒ Z8ci [`Ug'7 ci blm	FFÁ ẼÖÜÓÚ	GÉFí	QÁU'icā^ÁGEGE	Ì È ÁGEFí Á ÁGEGED	FÉE	Î J
⇒ (Z6U_Yf'7 ci blm	FÉÁ ẼÖÜÓÚ	FJì í	QÁU'icā^ÁGEGE	I È ÁFJì í Á ÁGEGED	Ï J	FÉi
⇒ ZÁUfjcb'7 ci blm	ì Á ẼÖÜÓÚ	FJì Î	Uç^i āā^ÁJì	Jì ÁFJì î Á ÁFJì D	î î ^H	Jî ^H

FÁD`~āç^} cÁā *i^āç^i|ā çā•ÁÖÜCSÜDÁ i^i^Á•ā æāāÁ[{ ÁGEFí ÁU'icā^* } ÁiæāÁ[} ā iā *ÁU'icā^ ÁUVT ÜDāāā•ā *Á@Á[, cāā^Á Á@ÁGEFí
dāāāāāāā
9Á Úāç^ { ^ } cÁ [āāç^ } Á Áāā^Á } ÁÁÉÉÁ Á Á [ā cÁ &ç^ Á @i^ÁÉÉ. Jí Á Á^ Á [āāü. î î Á Á [āāü. î î Á Áāāü. d Á Á [iāā āā. É Á Á^ Á [iā
HÁ V@•^Áç^ Á Á Á^ Á^ āā i^i^Á Á i^i^Á Á @ç^ ç^i|āē Á ā Á iāā^Á Á Jì Á ç^i|ā@ÖÜÓÚÁ ç^i|āē É

Vcdng'D06'r tqxkf gu'c'Uwo o ct { "qh'r gthqto cpeg'f gcku"
hqt'hqwt'ETER'qxgtrc { u'eqputwv'gf "lp'Qtgi qp'dgvy ggp"
3; 98'cpf'4239.'y kj 'y gct'htqo 'uwf f gf "ktgu'cpf "
ej clpu.'pqv'r wpej qwu.'dglpi 'y g'o clp'f kmtgu0P qvg"
y c'v'y g'ETER'qxgtrc { "qp'K7'lp'O ctkqp'Eqpwp' 'y cu'
qxgtrc'f "y kj "cur j cn'lp'3; ; : "dgecwug'qh'uwf f gf "ktg"
y gct.'pqv'utwvwtcn'kmtgu0

Kp'y g'3; 92u.'y g'Vgzcu'F gr ctwo gpv'qh'Vtcur qt'v'kqp"
*VzF QV+eqputwv'gf "cp". "lp0ETER'qxgtrc { "qxgt'cp"
cur j cn'uwthcegf 'r cxgo gpv'qp'K62'lp'Rqwt'Eqpwp' "
*ETUK3; 95.'REC'3; 98+0Vj g'gzknkpi 'r cxgo gpv'
utwvwtg'eqpukngf "qh'34"q'38'lp0qh'hgzklng'dcug"
y kj "5'lp0qh'cur j cn'eqpetgvg'uwthceg'*ETUK3; 95+0'
Vj g'qxgtrc { ō'r gthqto cpeg'y cu'tgr qt'v'gf "cu'gze'gm'p'
chgt'c'hgy "{ gctu'lp'ugtxleg'*REC'3; 98+0Kp'cf f kkpq."
y kj "ETER'qxgtrc { u'qp'cur j cn'uwthcegf 'r cxgo gpw"
j cxg'dggp'r r'ceg'f "lp'Vgzcu'hqt'itcpukkp'ctgcu'dgvy ggp"
eqpetgvg'qp'cur j cn'0dpqf gf "EQC0D+qxgtrc { u'cpf "
qy gt'r cxgo gpv'f r gu'*Ej gp'g'v'cn04238+0

Kp'Hicpeg.'ETER'qxgtrc { u'qxgt'cur j cn'uwthcegf "
r cxgo gpw'ctg'v'f r kcm'f '80'lp0y lemi*Vc { cdlk'g'v'cn0'
3; ; : +0Uqwj "Chk'c'j cu'uggp'gze'gm'p'v'r gthqto cpeg'hqt"
ku'dwukuv'tqcf y c { 'y kj "c'8'lp0ETER'qxgtrc { "qh'cur j cn'
eqpetgvg'*Dtkpn'cpf "Rlen'ctf'422: +0

7 cbh'bi ci g'mfYJbZfW'X'7 cbWYH'Á DUj Ya YbhCj Yf'Ung'cb'7 cbWYH'Á DUj Ya Ybhg

ETER'qxgtrc { u'qp'eqpetgvg'r cxgo gpw'j cxg'c'j k j gt"
lpkkl'eqv'y cp'LRER'qxgtrc { u'dgecwug'qh'y g'c'f f gf "
t'gkphqtego gpv'cpf 'r'cdqt'equu'dw'q'ht'itpi 'ugtxleg'itxgu"
y kj "o lpko cn'0 clp'v'gpcpeg.'o lpko cn'itgh'v'kxg'et'c'cnkpi. "
cpf "eqp'v'p'w'wu'r cxgo gpv'uo qy'y p'gu'f'J g'engn'cpf "
Y kgptcpn'423: . "Tqgung'g'v'cn04238.'ETUK3; ; : . 'ETUK
3; 95.'Tgppgt'3; 99+0ETER'qxgtrc { u'ecp'dg'dqpf gf "qt"
wpdqpf gf "q'y g'gzknkpi "eqpetgvg'r cxgo gpv'uwdu'cvg."

cnj qwi j "y g'gzr gtlgpeg'y kj "ETER'qxgtrc { u'lp'y g"
WU'cpf 'lpv'gpcv'kpcmf' "j cu'qxgty j gm kpi n' "dggp'y kj "
wpdqpf gf "qxgtrc { u'ungo u0

Wj à[} āāÁÖÜÓÚÁç^i|āē•Á } ÁÖ[} &^c'Á
Úāç^ { ^ } o

Kp'c'3; 97'uwtxg { "qh'4; "ETER'qxgtrc { "ugev'kpu'lp'y g"
WU'49'y gtg'wpdqpf gf "qt'r ct'v'cm'f "dqpf gf "qxgtrc { u'qp"
eqpetgvg'r cxgo gpv'cpf "y gtg'8'lp0y lemi'qt'y lengt'*REC"
3; 98+0O qtgqxtg.'cm quv'cm'ETER'qxgtrc { u'eqputwv'gf "
lp'y g'r cu'v'y q'f gecf gu'j cxg'dggp'wpdqpf gf 0
Wpdqpf gf "ETER'qxgtrc { u'j cxg'tcpi gf "htqo '8"q'34"
lp0y lemi'cpf "ctg'eqo o qpn'f ". "q'34'lp0y lemi'y qwi j "
lp'Hicpeg'ETER'qxgtrc { u'qxgt'LRER'ctg'v'f r kcm'f '9'lp0'
y lemi*Vc { cdlk'g'v'cn03; ; : +0V { r kcm'wpdqpf gf "ETER"
qxgtrc { u'ctg'f guki p'gf "y kj "c'ugv'g'eqp'v'p'qh'208' "q"
20 ' 'wukpi 'P q07'q'P q09'dctu'cpf "ctg'r r'ceg'f "qxgt'c'4"
q'5'lp0f gpug/i tcf gf "cur j cn'eqpetgvg'ugr ct'v'kqp'ic { gt0'
Hqt'wpdqpf gf "qxgtrc { u'y g'gzknkpi "eqpetgvg'r cxgo gpv'
ku'cm quv'cny c { u'gh'v'p'v'v'y kj "y g'tgs wkt gf "r ct'v'cn'
cpf 'hwn'f gr yj "tgr cktu'o cf g'q'y g'gzknkpi "utwvwtg"
r tkt'q'y r'ceg' gpv'qh'y g'ugr ct'v'kqp'ic { gt00 clqt"
r t'k'p'k'cn'ct'v'g'k'cn'ct'g'gze'gm'p'v'ecp'f k'c'v'g'u'hqt'wpdqpf gf "
ETER'qxgtrc { u0

Vj g'h'utv'ETER'qxgtrc { "lp'y g'WU'y cu'eqputwv'gf "
lp'3; 7; "qp'K57'lp'Vgzcu0Vj g'r t'q'ge'v'lp'x'q'g'f "c'9"
lp0wpdqpf gf "ETER'qxgtrc { "qp'cp'gzknkpi '8'lp0'
eqpetgvg'r cxgo gpv'eqputwv'gf "lp'3; 56'cpf 'lp'v'f gf "
c'50'lp0cur j cn'ugr ct'v'kqp'ic { gt'*ETUK3; ; : . 'ETUK
3; 95.'REC'3; 98.'Utkco cp'cpf 'f' qn'kpi gt'3; ; : +0'
Vcdng'D06'r t'gug'p'w'ugxgt'cn'gzco r ngu'qh'y ku'v'f r g'qh'
qxgtrc { "y c'v'j cxg'v'k'peg'dggp'eqputwv'gf 0Cu'y g"
vcdng'uj qy u.'K'k'p'q'ku'j cu'y g'o quv'gzr gtlgpeg'y kj "
wpdqpf gf "ETER'qxgtrc { u'j cxkpi "eqputwv'gf 'ugxgt'cn'
qxgtrc { u'qh'y ku'v'f r g'v'k'peg'3; 89.'y kj "y g'o clqt'k'f "qh"
y g'v'v'g'u'qxgtrc { u'eqputwv'gf "lp'y g'r cu'v'47'f gctu"
*Tqgung'g'v'cn04238.'J g'engn'cpf "Y kgptcpn'423: +0

qxgtnc{u'qp'K: 'cu'r ctv'qh'h'6: 'o k'lgj cdkkcvkqp'r tqlgv'
 kp'K6 r gtlcnEqwv{ 'cpf'lp'4243'r rpu'vq'eqpwtwv'
 cpqvj gt' 'o clqt'ETER'qxgtnc{ 'qh'h'IRER'%c'9Q 'o k'
 r tqlgv'y kj 'hqw'rcpgu'qp'UT/36'lp'Mgtp'Eqwv{ 0Dqjy "
 qh'v' gug'r tqlgw'ctg'uj qv p'lp'Vcdng'D060

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GHUŲ	@WUjcb	9I]ghj[Ā dUj Ya Ybh	9I]ghj[Ā dUj Ya Ybh Wcbgfi WjcbĀ mYUf	Cj Yf`UnimY	Cj Yf`UmĀ Wcbgfi WjcbĀ mYUf	Dfc`VWĀ `Yb[Ĥ	BchYg
U/ʌ*[}	ǣ ǣŌā/Ā Ō[~ } ǣ	FF/ǣ ǣPT ǣ	FJĪ G	Fǣ/ǣ ǣŌŪŌŪ	FJĪ Ī	FFǣĪ Ā ā	ǣŌVĀMǣFǣǣĀ ǣŌĀ H Ā Ā~ & •
U/ʌ*[}	ǣ ǣǣ } Ā Ō[~ } ǣ	I /ǣ ǣPT ǣ	FJĪ I ǣJĪ Ī	I /ǣ ǣŌŪŌŪ	FJĪ Ī	FGǣĪ Ā ā	ǣŌVĀMǣĪ ǣǣĀ ǣŌĀ FĪ Ā Ā~ & •
Y ā & } •ā	WŪǣĪ ǣY ǣ\ ʌ• ǣ Ō[~ } ǣ	J/ǣ ǣRŪŌŪ	Ōǣ/ ǣJĪ ǣ	Ī /ǣ ǣŌŪŌŪ	FJĪ H	FǣĀ ā	ǣŌVĀMǣĪ ǣǣĀ ǣŌĀ Ī Ā Ā~ & •
Y ā & } •ā	ǣ ǣRǣ• { } ǣ ā Ā T [[ʌ/Ō[~ } ǣ•	Fǣ/ǣ ǣRŪŌŪ		I /ǣ ǣŌŪŌŪ	FJĪ ǣ		
T ā•ā•ā] ā	ǣǣǣǣ•ā~* Ō[~ } ǣ	J/ǣ ǣRŪŌŪ	FJĪ Ī	Ī /ǣ ǣŌŪŌŪ	FJĪ F	ǣǣĀ ā	
T ā•ā•ā] ā	ǣ Jǣǣ } ʌ• Ā Ō[~ } ǣ	I /ǣ ǣŌŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ F		
Ō^ [ʌ* ǣ	ǣ ǣ [] [ʌ Ā ǣ ā Ā ǣǣ } ǣ ā Ā Ō[~ } ǣ•	I /ǣ ā Ā /ǣ ǣ RŪŌŪ	FJĪ Ī	Ī /ǣ ā Ā /ǣ ǣ ŌŪŌŪ	FJĪ H	FHǣĪ Ā ā	ǣŌVĀMǣHǣ ǣǣĀ Ā Hǣǣǣ
Ō^ [ʌ* ǣ	ǣ ǣŌ, ā } ʌ Ā Ō[~ } ǣ	J/ǣ ǣRŪŌŪ		Hǣ ǣ ǣ ā Ā /ǣ ǣ ŌŪŌŪ	FJĪ Ī	FĀ ā	ǣŌVĀMǣĪ ǣǣĀ ǣŌĀ Hǣ Ā Ā~ & •
T ǣ^ ǣ ā	ǣ ǣǣ [, ǣ ā Ā Ō[~ } ǣ	J/ǣ ǣRŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ F	JǣĀ ā	
T ǣ^ ǣ ā	ǣ ǣǣ [, ǣ ā Ā Ō[~ } ǣ	J/ǣ ǣRŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ F	Ī ǣĀ ā	
T ǣ^ ǣ ā	ǣ ǣǣ [, ǣ ā Ā Ō[~ } ǣ	J/ǣ ǣRŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ G	FǣĀ ā	
T ǣ^ ǣ ā	ǣ HǣŌāǣ [ʌ Ā Ō[~ } ǣ	RŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ H	HǣĀ ā	ǣŌVĀMǣHǣ ǣǣ
Ō { } } ʌ & ǣ~ c	ǣ Ī	I /ǣ ǣRŪŌŪ		Ī /ǣ ǣŌŪŌŪ	FJĪ Ī ǣJĪ Ī		
Ǯ [: ǣŌǣ [ǣ	ǣǣ	I /ǣ ǣRŪŌŪ	FJĪ Ī	Ī /ǣ ǣŌŪŌŪ	FJĪ G	I ǣĀ ā	ǣŌVĀMǣǣǣĀ ǣŌĀ FĪ Ā Ā~ & •
Ǯ [: ǣŌǣ [ǣ	ǣǣ	I /ǣ ǣRŪŌŪ	FJĪ Ī	Ī /ǣ ǣŌŪŌŪ	FJĪ Ī ǣJĪ Ī	I ǣĀ ā	ǣŌVĀMǣǣĪ Ā ǣŌĀ FĪ Ā Ā~ & •

Vcdrg'D07'ũwo o ctk gu'j g'r gthqto cpeg'f cwc'hqt'j'g"
 ugxgp'wpdqpf gf'ETER'qxgtrc{ u'lp'Krkpqku'r tguqpvf'lp"
 Vcdrg'D06'*J gengri'cpf 'Y kgptcpni423: . 'KF QV'423; +0'
 Qh'j'g'ugxgp'ugevqpu'j cv'j cxg'dggp'eqputwv'g'f' hqwt"
 ctg'ũknlp'ugt'xleg'cu'qh'42420Vj'g'Krkpqku'F gr ctwo gpv'qh"
 Vtepur qtcv'qpu'*KF QV'+Eqpf k'kqp'Tcv'kpi 'Uwt'xg' "ETU+
 tguwũ'cpf 'K'Kf'cvc'lp'w'gf'lp'Vcdrg'D07'lp'f'lec'g'j'cv'
 yj'g'gz'k'kpi 'ETER'qxgtrc{ u'ctg'r'gthqto kpi 'y'gm'lp'v'gto u"
 qh'eqpf k'kqp'cpf 'h'f'g's w'ck'ŌVj'g'j' tgg'ETER'qxgtrc{ "
 uge'v'qpu'j'cv'j cxg'dggp't'g'j'cd'k'k'v'g'f'cm'gzr'gt'kg'p'g'f"
 ūki'p'k'k'c'p'v'f' i' tgc'v'g't'ch'le'j'cp'f'g'k'p'g'f'ŌHqt'j'g'g"
 yj' tgg'qxgtrc{ u'j'g'ewo w'c'x'g't'ch'le'x'q'w'g'g'u'cv'j'g'g"
 g'p'f'qh'ugt'xleg'y'gt'g'397' . '444' . 'cpf'396' 'j'q'g'qh"
 yj'g'42/{ gct'f'g'k'p'p't'ch'le'x'q'w'g'g'u'hqt'j'g'g'uge'v'qpu'j'p

K92'lp'Dqpf'E'qwpv'f' *3; 8963; : 9+ 'K77'lp'Ur' t'kpi' h'grf' "
 *3; 9264223+ 'cpf' 'K77'lp'Ur' t'kpi' h'grf' *3; 9863; ; 9+ "
 t'g'ur'ge'v'x'g'v'f' *J' gengri'cpf 'Y kgptcpni423: +0

Gz'v'c'r'q'w'v'kpi 'j'g'ewt'g'p'v'KF QV'ETU'f'cvc'lp'Vcdrg"
 D07'v'q'c'ŕ'q'q't'ŕ'eq'p'f'k'k'q'p't'cv'kpi 'qh'607' . 'j'g'r' t'g'f'lev'g'f' "
 c'j'g'c'p'f'ewo w'c'x'g't'ch'le'c'v'j'g'g'p'f'qh'ugt'xleg'hqt'j'g'g"
 hqwt'lp'ugt'xleg'uge'v'qpu'ctg'63' '{ gct'v'cpf'42: ' 'qh'f'g'k'p'p"
 v'ch'le'hqt'K96'lp'Mpqz'E'qwpv'f' . '62' '{ gct'v'cpf'457' 'qh'
 f'g'k'p'p't'ch'le'hqt'K: : 'lp'Y'j'kg'v'f'g'E'qwpv'f' . '58' '{ gct'v'cpf' "
 324' 'qh'f'g'k'p'p't'ch'le'hqt'K92'lp'E'rc't'm'E'qwpv'f' . 'cpf'4: "
 '{ gct'v'cpf'383' 'qh'f'g'k'p'p't'ch'le'hqt'K79'lp'O'v'X'g't'p'q'p"
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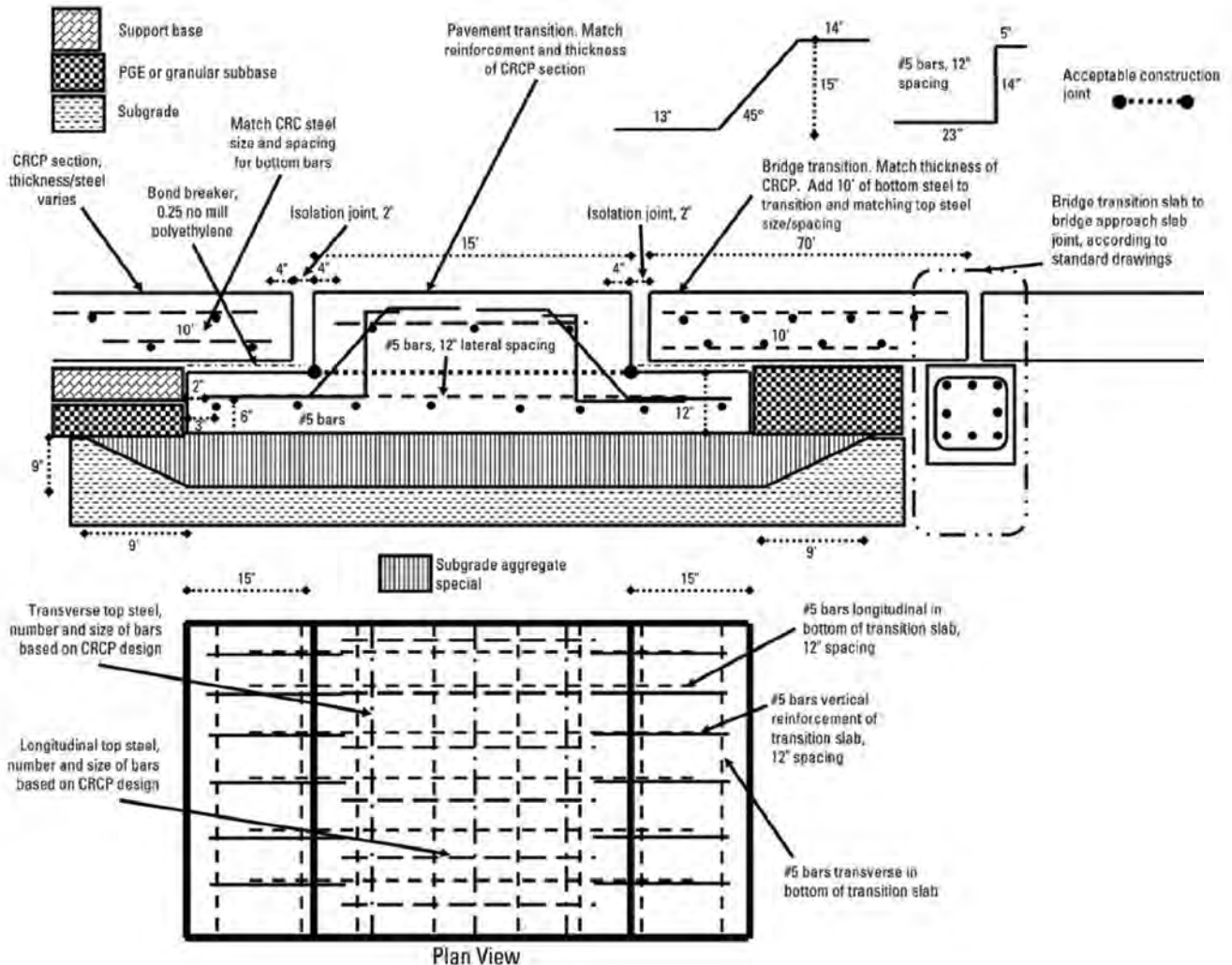
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Hqt'wpdqpf gf 'ETER'qxgtrc{ u'qp'eqpetgvg'r cxgo gpwu. " kh'j g'gzlunkpi "eqpetgvg'r cxgo gpv'ku'ugxgtgnf "f kmtguugf. " yj gp'twddrkf cwkqp'ecp'dg'eqpukf gtgf 'r tkqt "q' r ncego gpv' qh'j g'cur j cn/ugr ctcwkqp'rc{ gt'cpf "yj g'ETER'qxgtrc{ 0' Dghqtg'twddrkf cwkqp. 'yj g'gzlunkpi "r cxgo gpv'utwewtg" uj qwf "j cxg'c'uncdrg'lwidi tcf g'cpf "cf gswcvg'ugewkqp" f tlcpci g'"gfi 0'wpf gtf tclpu'o c{ 'pggf "q'dg'lpucmgf "r tkqt" vq'twddrkf cwkqp+0Vj g'KF QV'eqpuxwv'gf "cp'wpdqpf gf " ETER'qxgtrc{ 'ugewkqp'cr r tqzko cvgnf "7'o k'uppi "qp'c" twddrkf gf 'ETER'lp"4236'pgct'O 0Xgtpqp. "Krkpqku." y j gtg'K79'cpf "K86'o gti g0Cu'qh'4243. 'yj ku'qxgtrc{ 'j cu" c'xgt{ 'i qqf "eqpf ksqp'tcvpi "cpf "cp'Kt Kqh'92'lp0lo k0

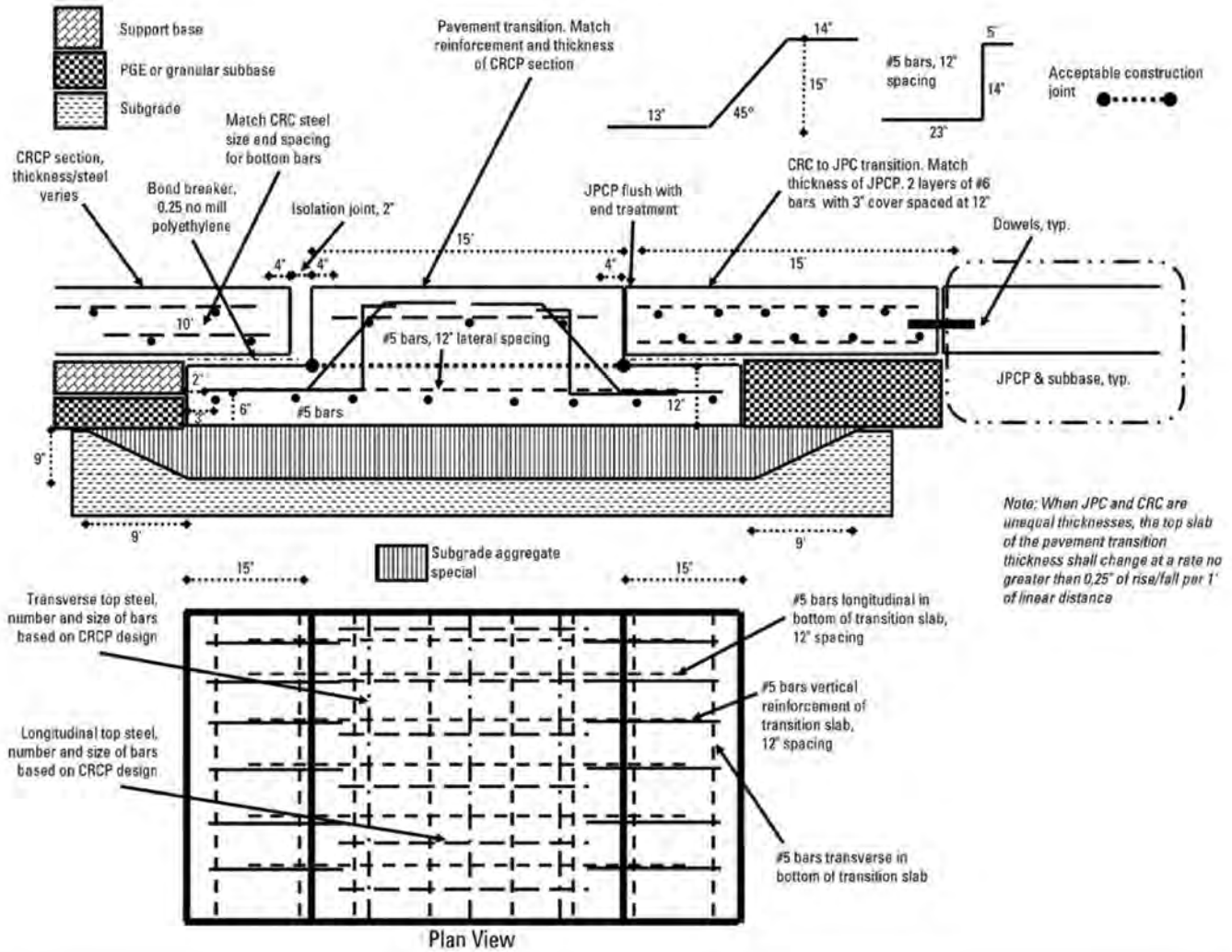
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Nkng'y kj "eqpxgpwqpcn'ETER' "j g'vgo kpcn'qt "gpf " vgevo gpv'lqkp'f gvcu'lp'ETER'qxgtrc{ u'lj qwf "dg" i kxgp'ur geken'cwgplqp'dgecwag'o ckwpgcpeg'r tqdngo u" ecp'ctkug'cv'j g'ug'lqkpw0Vtcupukqp'uncd'f guki pu'y kj " unggr gt'uncdu'ctg'pqy "r tghgtgf "qxgt'hw u'cpf "y kf g/" hrcpi g'dgeo u'hqt'vgo kpcn'qt "gpf "vgevo gpv'lqkpw" *Lwpi "gv'cn04229+0Hqt' "j ku'qxgtrc{ 'v' r g. "vcpukqp'uncd" u'f ugo u'ctg'uki phtkcpw' "gculgt' "q'eqpuxwv'cpf "qhtgt" nqy gt'o ckwpgcpeg'equu'hqt' "j g'lqkpw0F gvcu'qh'j g" vcpukqp'cpf "unggr gt'uncdu'ctg'lj qy p'lp'Hki wtgu'D04. " D05. "cpf "D060Vj g'Krkpqku'Ucvg'VqmJ ki j y c{ 'Cwjqtkf " tgegpw' "ko r ngo gpv'gf "j g'ug'v' r gu'qh'gpf "vgevo gpw'qp" Krkpqku'Tqwg"5; 20



Ü^&^æ^áÁ[{ Á@Áqá [áÁúæ^Á[]Á^á @ æÁÉ o@ :æ Ê^áÁ æ@^!{ á^á }

:] [i fY'6 "8" HfUbg]hc'b'g'UV'XYUJ'g Z'f'Ub'YbX'fYUfa YbhcZU7F7D'cj Yf`UmUhUVf]X[Y



U^&^æáÁy{ /@Áq[ãÁæÁV[||Áp @ æÁE c@!æÊÁáÁæÁ!{ ã•ã }

: || i fY'6 " " HfUbg||hcb'g'UV'XYHUJ'g'Zc'f'Ub'YbX'fYUfa YbhcZU7 F7 D'c'j Yf'UmUhiU>D7 D

@ZY!7 mWY'7 cgh5 bUmg]g'cZÁ
7 cbh]bi ci g`miF Y]bZcfWXÁ
7 cbWYH'DUj Ya YbhCj Yf'Ung

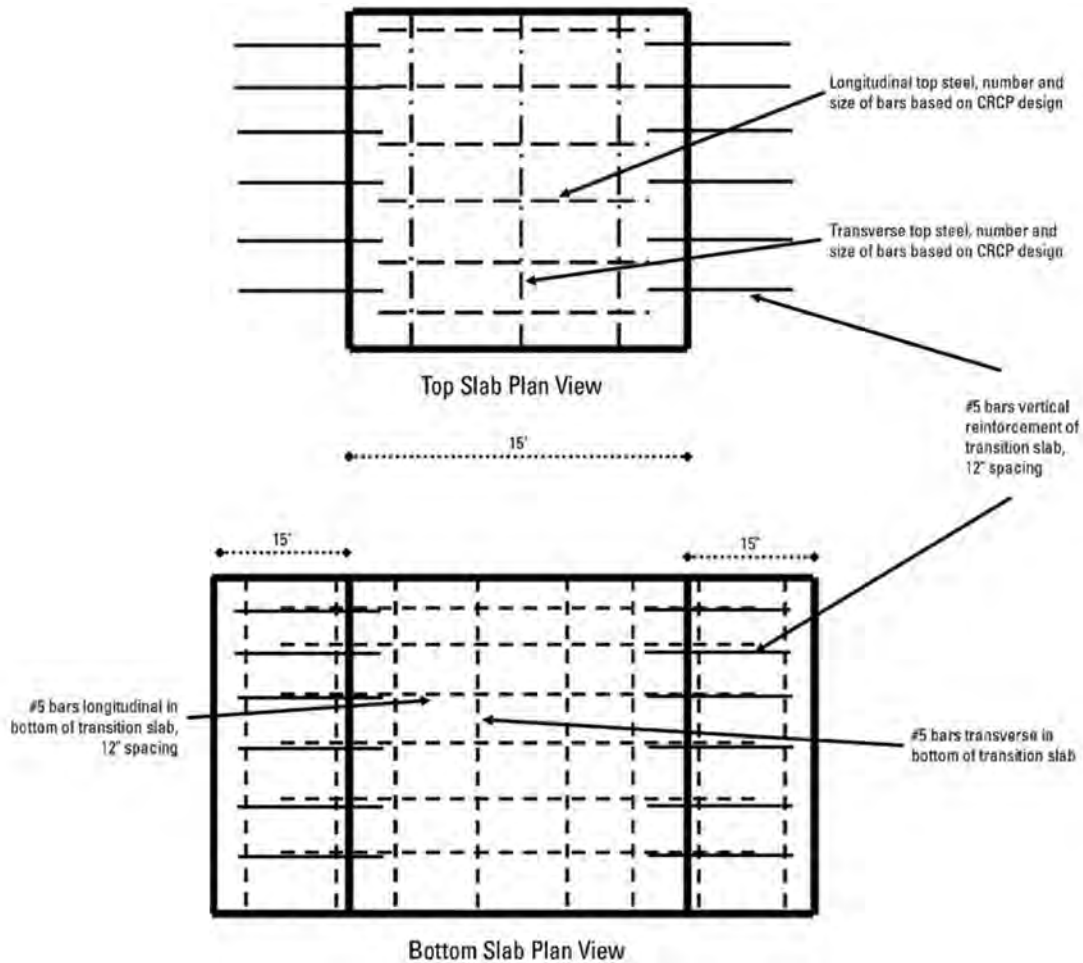
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Vq'kmw'v'g'y g'nhg/e{ eng'equu'qh'ETER'qxgtnc{ u. 'y ku" ugev'qp'f'guet'kgu'cp'NEEC'eqo r ctkpi 'cp'wpdqpf gf

ETER'qxgtnc{ 'cpf'cp'wpdqpf gf 'eqpxgp'kqpcn'LRER" qxgtnc{ 'qp'cp'gz'k'kpi 'eqpetvg'r cxgo gpv'0

GWbUf]c

Vq'eqo r c't'g'y g'nhg/e{ eng'equu'qh'cp'wpdqpf gf 'ETER" qxgtnc{ 'cpf'cp'wpdqpf gf 'eqpxgp'kqpcn'LRER'qxgtnc{ " qp'cp'gz'k'kpi 'eqpetvg'r cxgo gpv.'CCUJ VQY ctg" Rcxgo gpv'O G'F guki p'y cu'wugf 'v'f'gxgmr 'f'guki pu'htq" dqj 'qxgtnc{ 'v'f'gu'qp'c'r t'lp'ek'cn'ctv'g't'k'ny kj 'c'f'guki p" nhg'qh'42" g'ctu'v'j g'tqcf y c{ 'lp'y ku'uegpc't'k'y cu'c'hqwt/" rcp'g'lp'v'g'v'c'g'j k j y c{ 'y kj '34'h'v'p'g'u'lp'y g'egp't'cn' O k'f y guv'v'j g'gz'k'kpi ". 'lp'v'j k'ni'LRER'y cu'eqp'ut'w'v'g'f " 47" g'ctu'ci q'cpf 'cv'y g'v'ko g'qh'y g'uegpc't'k'y cu'lp'h'ck" v'q'r qqt'eqpf'k'k'qp'v'j g'gz'k'kpi 'LRER'y cu'lw'r'q't'v'g'f'd{ " c'32'lp'v'j t'cpw'r't'd'cug'r'c{ gt'y kj 'c't'g'uk'k'g'p'v'o qf w'w'u'qh" 3: .222'r'uk'cpf 'cp'C/9/8'u'k'k'y kj 'c't'g'uk'k'g'p'v'o qf w'w'u'qh" : .222'r'uk'0



Ü^&^æ^âÄ[{ Ä@Äqä[äÄüæ^Ä[||Äp@ @ æÄE cQ;æÄ^âÄ äQÄ^[{ ä^ä }

: [[i fY6 ("HfUbg]hcb'g'UVXYfU]g'Zf'H Y'YbX'fYUfa YbhUbX'fYfa]bU'c]b]g'cZU7F7D'c] Yf'Um

Vj g'ewtgpv'cxgtci g'fckl' 'tveni'tchle'*CF VV-'cv'yj g' vko g'qh'yj g'uegpetk'y cu', .222'cpf 'yj g'cxgtci g'fckl' 'tchle'*CF V+'y cu'52.222.'y kj 'tchle'i tqy yj 'cuuwo gf' vq'dg'6' "eqo r qwpf gf 0Vj g'xgj leng'encu'f kntldwkp" y cu'tgr tgugpv'gf 'lp'yj g'uqhy ctg'd{ "Vtveni'tchle" Encu'k'le'v'kp'3"*VVE3+'y j lej 'eqpuku'qh': 0' "Encu' 7.'908' "Encu': .cpf'96' "Encu': 'xgj lengu'0Hqt'42" {gctu' qh'tchle.'yj g'gs wxcrngpv'ukpi ng'czng'hqcf u'*GUCNu+'y gtg' guko cvgf "q'dg': 2'o kntkp0

Kp'yj g'pgy "qxgtnc{ 'f guli pu.'yj g'pgeguuct{ 'r tg/qxgtnc{ " v'gco gpvu'y gtg'cuuwo gf "q'dg'yj g'uco g'hqt'dqy 'yj g' IRER'cpf 'ETER'qxgtnc{ 'qr v'kp0Vj g'j qv'o k'cur j cn' *J O C+'ugr cte'v'kp'rc{ gt'y cu'3'lp0yj kenti kj 'c'RI " 86/44'dlpf gt0Dqy 'pgy "qxgtnc{ 'f guli pu'kpenw'gf 'cur j cn'

uj qwf gtu0Vj g'eqpetvg'wugf 'lp'dqy 'qxgtnc{ 'f guli pu'j cf " yj g'uco g'eqpukwgpv'cpf "o cvgtkcn'f guli p'xcn'ngu0

Dqy 'qxgtnc{ u'y gtg'f guli pgf "q'dg'32'lp0yj kentiHqt'yj g' IRER'qxgtnc{ 'f guli p.'yj g'lqkp'v'ur celpi 'y cu'ugr'vgf "q'dg' 37'hw'y kj '30'lp0'uggn'f qy gnu0Vj g'f guli p'h'knt'g'etkgtk' y gtg'ug'v'c'v'32' "urcd'etcentpi . "202'lp0lqkp'v'cwnkpi . " cpf 'c'v'gto kpcn'K'Kqh'394'lp0lo k'y kj 'c'tgrkcdk'k' "qh' ; 2' 0Hqt'yj g'ETER'qxgtnc{ 'f guli p.'yj g'f guli p'uggn' eqpv'v'y cu'20' 'y kj 'P q08'dctu'r'ncgf 'cv'50'lp0'f'qo " yj g'urcd'uw'h'ceg'v'q'yj g'v'qr 'qh'yj g'uggn'0Vj g'f guli p'h'knt'g' etkgtk'y gtg'ug'v'c'v'32'r v'pej qwu'r gt'o k'p'cpf 'c'v'gto kpcn' K'Kqh'394'lp0lo k'y kj 'c'tgrkcdk'k' "qh'; 2' 0Vj g'f guli pu' f g'xgn'gr f 'lp'CCUJ VQY ctg'Rcxgo gpv'0 G'F guli p'hqt' yj g'IRER'cpf 'ETER'qxgtnc{ u'ctg'uj qy p'lp'Vcdng'D080

HUVY6 " "7 F7D'UbX'>D7D'c] Yf'UmXYg][bg'XYj YcdYX]b'55 G<HCK UfYDUj Ya YbhA9'8 Yg][b

Cj Yf'Umimdy	8 Yg][b"]ZY'fntUf'gk	9 g]ja UHYX'fUZY'WÄ f8 G5 @jL	G'U'f'f JW bYggÄ f]bW Ygk	DfYX]WYX'-F=UHYXg][b"]ZYÄ f]bW Yg#b J'Yk
57D				
7F7D	OE	i ecFe	Fe	FeF

Df]bWjd`Yg`UbX`DUfUa YhYfg

Vj g'NEEC'cpncf uku'hqmgy gf 'y j g'r tlpkcr ngu'qh'y j g'
Hgf gtcnJ ki j y c{ 'Cf o kpkutcvkppau'*HJ Y Cœu+TgcEQu'
uqhy ctg%"xgtukqp"407+0Hqt'y j g'eqo r ctukqp'qh'y j g"
y q'eqpetgv'qxgtrc{ 'Vf r gu. 'y j g'equu'qh'eqputwvki "
eqpetgv'r cxgo gpw'y gtg'dcugf "qp"gunko cvgf 'r tlegu"
kp'y j g'O kf y gu0Vj g'r tguetxcvkqp'uej gf wgu'hqt'IRER"
cpf 'ETER'y gtg'dcugf "qp"cv'uej gf wr'tgeqo o gpf gf 'd{ "
y j g'Kkpqlu'Ucvg'VqmJ ki j y c{ 'Cwj qtkf{ 'cpf 'hqwpf "
kp'Hgtdgg'cpf 'Tqgurt"%423: 40Vj gug'r tguetxcvkqp"
uej gf wgu'ctg'dcugf "qp"gzr gtgpeg'y kj 'y j g'enko cvg'cpf "
eqputwvkvq"o cvgtkcu'qh'pqtj gtp'Kkpqlu'cpf "o c{ 'pqv"
dg'gzcew{ 'cr r ncedng'vq'qjy gt'hqecvkpu0Vcdngu'D0'cpf "
D0 "uwo o ctk g'y j g'cewcnr tguetxcvkqp'uej gf wgu'cuwo gf "
hqt'y j g'IRER'cpf 'ETER'qxgtrc{ 'cpncf ugu. 'tgu gvkxgn{ 0

Vj g'NEEC'y cu'eqpf we'gf "hqt'pcpn{uku'r gtlqf u'tcpi kpi "
Hqo "42"vq'77"l gctu"vq'r go qpuntcv'v'j g'ghge'v'qh'ugtxleg"
nkg'qp'v'j g'pgvr'tugp'v'xcnwg'p RX+qh'gcej "qxgtrc{"
qr vkp0Vj g'lpkknlequu'qh'v'j g'y'q'qxgtrc{"v'r gu"
y gtg'eqo r wgf "hqt'ppg'rcpg'o kg'qh'v'j g'TRER'cpf"
ETER'qxgtrc{u'y kj qw'eqpuf gtcvkp'qh'uj qwf gtu'qt"
o clpvgcpeg'qh'tchle0K'y cu'cuwo gf'v'j cv'v'j g'equu"

tgrvɣf 'q'ij qwɪf gtu'ɕpf 'o ɕlpvɛpɕepɛ'qh'tɕhɪɪ' y gɛg'
guɛpɕvɕm' 'gs wɕxɕɛpɕv'ht' 'dq'ij 'qr vɕpɕu. 'uq'ij g'o ɕlp'equɪ'
f'kɪhtɛpɛg'y cu'lp'ij g'lpkɕɕɪɪutwɛwɕɕɪɪf gukɪ p'f'gɕɕɕu'
ɕpf 'ij g'r tɛuɛtɕxɕvɕp'uej ɛf wɛu'lp'Vɕdɛu'D0'ɕpf 'D0 0'
Vj g'o ɕlp'equɪf'kɪhtɛpɛg'dɛwɛ gɛp'ij g'ETER'ɕpf 'LIER'
qɕgtɕɕ {u'tɛuɛwɛf'htqo 'ij g'f'kɪhtɛpɕv'ɕo qɕwɕ'qh'ɪuɛɛɪ'
tɛɕpɕhtɛgo ɛpɕv'wɛf'ɕpf 'ij g'f'kɪhtɛpɕv'ɕo ɛgo ɛpɕv'equɕw0'
Vj g'lpkɕɕɪɪequɕw'tɛ'ɕpɛg'o kɛ'ht'ij g'ETER'ɕpf 'LIER'
qɕgtɕɕ {u'y gɛg'858: .222'ɕpf '8539.222. 'tɛur ɛvɕɕɕɕɕ0

Cu'qh'4242. 'ɣj g'ewtgpv'52/ { gct'tgcnf'kueqwpv'tcvg"
tgr qtvgf'd{ 'ɣj g'WUQHieg'qh'O cpci go gpv'cpf'Dwf i gv"
*QO D+'ku'206' "QO D'4242+0Vj g'o gcp'f'kueqwpv'tcvg"
tgr qtvgf'd{ 'uvcg'F QVu'lp'423; 'y cu'40' "Hmgucf"
423; +0O cp{ 'ci gpekgu'ctg'o qxlpi "q'ɣj g'wrf c'vgf"
52/ { gct'tgcnf'kueqwpv'tcvg. 'y j krg'uqo g'uvcgu'ctg'ukn"
wulpi 'j ki j gt'xcngu'*dgw ggp'5' "cpf'7' +tghgcvpi "
j knqtlecnf'kueqwpv'tcgu'0Hqt'ɣj ku'NEEC. 'f'kueqwpv'tcvgu"
qh'206' "ewtgpv: '30' . '50' . 'cpf'70' 'y gtg'wugf"
vq'eqo r wq'ɣj g'P RX'hqt'gcej "qxtgr{ "qr vkp'hqt'gcej "
cpcn'uku'r gtlqf 0

HUV`Y'6 "+'"7 F7 D`c j Yf`U mdf YgYf j Uhjcb`gW YXi `Y

MYUF	5 WjJ]lm
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HUV`Y`6 ", " >D7 D`c j Yf`U midf Yg Yf j Uh jcb`gW YXi `Y

MYUF	5 Wjij]hm
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7 cbWYhY'cb'7 cbWYhYË6 cbXYX
Cj Yf`Ung

? Ymi: YUhi fYg'UbX'5 dd`jWUjcbg'	%/4
9 j Ui Ujcb'cZ9I jghjb['DUj Ya YbhiGfi Wi fYg'	%/4
8 Yg][b': YUhi fYg'	%/6
6 cbX'	%/6
A]I hi fY'8 Yg][b'	%/6
H jWbYgg'8 Yg][b'	%/4
>c]bhiGdUWjb['UbX'@Jnci hi	%/4
8 fUjbU[Y'	%/4
7 cbgffi Wjcb'	%/4
DfY!c j Yf`UmF YdUjfg'	%/4
Gi fZUW'DfYdUfUjcb'	%/9
Gi fZUW'7`YUb]b['	%/9
7 cbWYhY'D`UWYa Ybhi	%/9
7 i f]b['	%/6
>c]bhiGUk]b['	%/6
>c]bhiGYU]b['	%/6
CdYb]b['GhfYb[H '	%/6
7 UgY'Ghi XjYg'cZ7 cbWYhY'cb'7 cbWYhYË6 cbXYX'Cj Yf`Ung'	%8\$
7 UgY'Ghi Xmi%'H]b'fi]b'£6 cbXYX'Cj Yf`Umicb'æk U' '9 UglicZ< Ua dhcbž=ek U'	%8\$
7 UgY'Ghi Xmi&'H]b'fi]b'£6 cbXYX'Cj Yf`Umicb'%) H 'GhfYh]b'8 Y'7]mžC_`U ca U'	%8%

? Ym: YUhi fYg`UbX`5 dd`jWUhc bg

C"eqpetgvg"qp"eqpetgvgódpqpf gf "EQEóD+"qxgtr{"
ku'r'æegf"qp"cp"gzku¹lpi "r cxgo gpv¹lp"i qqf "utwewtcrn"
eqpf k¹kp"cpf "ku'f guki pgf "q'hqto "c"o qpqkij le"utwewtg"
y kj "j cv'r cxgo gpv"¹Hki wtg"EOóY j gp'r tqrgtr{"
f guki pgf "cpf"eqpurtwewg".'j ku'f r g"qh'qxgtr{"q¹hgtu'y" g"
hqmy lpi "dgpghku"¹Vc{cdlk'gv'cnfó422; <

É Gzvpf u'c'r cxgo gpw'utxleg'rhg'd{'42"q"47"{'gctu0k"
uqo g'ecugu. 'j g'rhg'qh'n'y'j kp'dqpf gf'qxgtr{'j cu'dggp"
npqy p"q"gzeggf"57"{'gctu0

É' Tgs wkt gu'kwrg'o clpwgpcpeg'qxgt'ku'ugtæg'rhg."
tguwnkpi 'k'o'tgf wegf 'rhg/é{ erg'equu0

É' Ecp"dg"wugf"y kj "ceegmgtcvf"eqputwekqp"rtcevegu0

É' Ecp"cee^{qo} o qf cvg"ur gekhe"tche"o cpci go gpv"
eqputckpwif wtkpi "eqputwewkp0

Cv'j g'uco g'ko g.'EQEóD"qxgtr{ u'j cxg'hqwt'ng{ "
nlo kvkqpu<

30' Gzr gtlgpegj' cu'ij qy p'ij cv'ut wewtcrif ghgeu'lp'ij g"
gzknpi 'r cxgo gpvly knr tqr ci cvg'lpq'ij g'qxgtr{ "
*Hi wtg'E04-0Vj g'tgo clpki 'f guki p'rhg'qh'ij g"
gzknpi 'r cxgo gpv'o wuv'ij gtghqt'g'dg'cv'rgcu'gs wcrvq"
ij cv'qh'ij g'r tqr qugf'qxgtr{ 0

40' Vj g'ucy ew'lqkpw'qh'ij g'qxgtrc{ 'o wu'ldg'o cxej gf "q"
 yj que'qh'ij g'gzkukpi 'r cxgo gpv'q'r t xg gpv'f khtg pvcn'
 o qxgo gpv'dgy ggp'yj g'gzkukpi 'r cxgo gpv'lqkpw'cpf "
 yj g'qxgtrc{ 'lqkpw'Vj g'f gr yj 'qh'gcej 'ucy ew'lqkp'
 o wu'ldg'yj g'hwntf gr yj 'qh'ij g'qxgtrc{ 'r nuu' 'kp0kpq"
 yj g'gzkukpi 'r cxgo gpv'lqkp0

50' Gcej 'tɕpuxgtuŋ'ɭqɰv'o wu'dg'cv'ŋcuv'cu'y kɣ'g'cu"
 ɣ'g'gzɰkɰpi 'etcem'dŋɣy 'ɣ'g'ucy ew'ɭp'ɣ'g'gzɰkɰpi "
 rɕxgo ɡp'v'q'ceeɡo o qf cɣ'cp{'uɳd'o qxgo ɡp'v'o

60' Cu'cp'ko r qtcvp'ngro gpv'qh'c"uweeguhwiEQEoD"
 qxgtrc{. 'y g'dqpf 'dgy ggp' 'y g'gzknkpi "eqpetgvg"
 r cxgo gpv'cpf 'y g'qxgtrc{ 'o wuv'qh'lwthekgpv'wtgpi y "
 vq'y kj uvepf 'T gtrc o kpcvqpOY j gp' 'y g'lwthceg'qh'y g"
 gzkknkpi 'r cxgo gpv'ku'r tqr gtr{ 'r tgr ctgf. 'y g'dqpf "
 dgy ggp' 'y g'gzknkpi 'urcd'cpf 'y g'qxgtrc{ 'gputw'gu'y cv'
 y g'hc{ gtu'cev'cu'c" o qpqrkj k'r cxgo gpv


$$\alpha\hat{O}\hat{U}\hat{O}\hat{H}\hat{A}\cdot^{\wedge}\hat{a}\hat{A}\hat{a}\hat{O}\hat{A}^{\wedge}\{\hat{a}\cdot\hat{a}\}$$

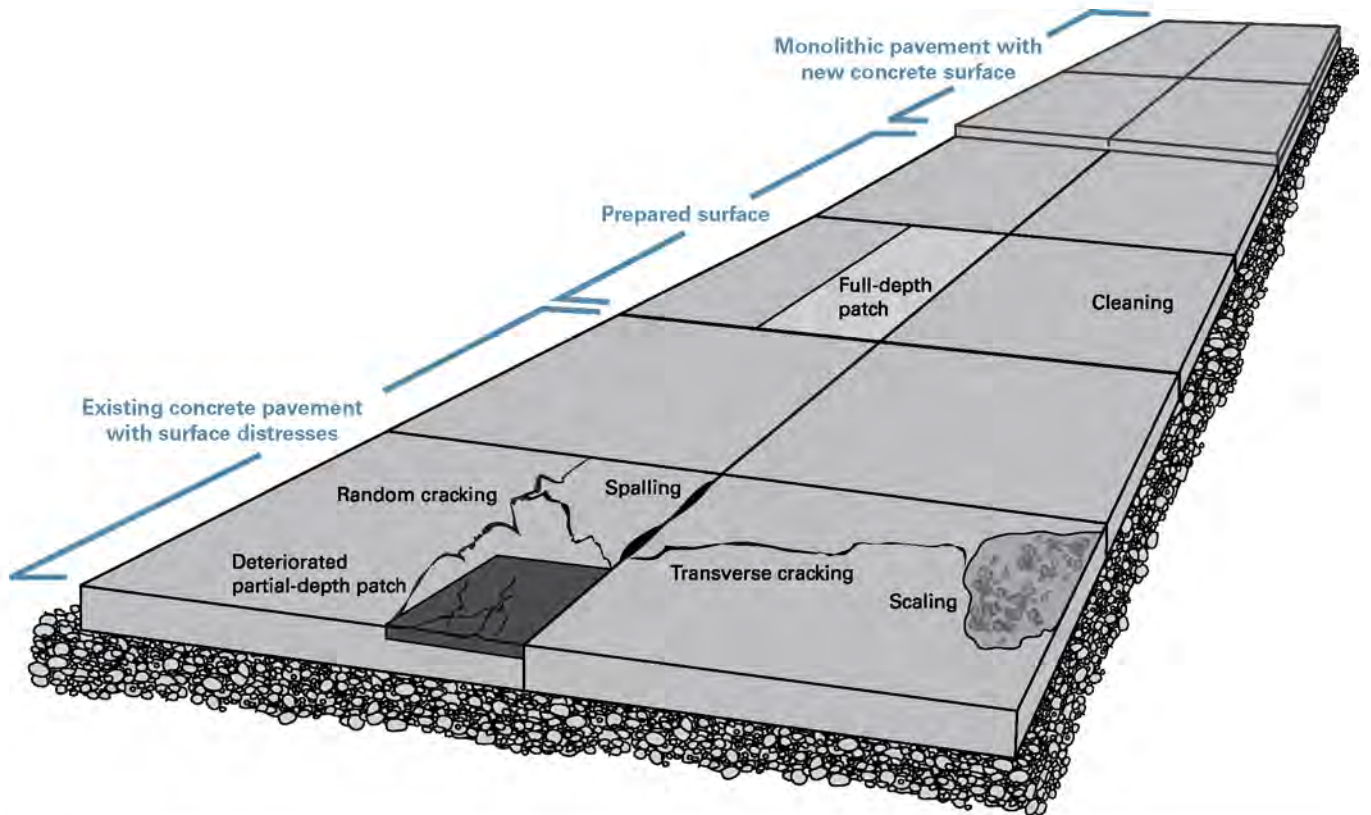
: [i fY7 '%rH]b`VcbXYX`c j Yf`UmicZglfi Wi fU`m'gc bXÁ
WcbWYh`dUj Ya Ybh



Ö!^* Á~|â^!ÉQ, aó| } &^c ÁJaā * ÁE•[&āā } Ē•^âÁ āQ^!{ ā•ā }

: J[i fY'7 "&"8 YhYf]cfUhYX`cb[]h X]bU`WUW_]b`U7 C7 E6 `c j Yf`Um

Dgecwug'j'g'q'xgtrc{'cpf'gzknkpi'r'cxgo'gpv'hto'c"
o'qpqrkj'le'utwewtg.'c'E QEóD'q'xgtrc{'o'wuv'dg'r'ncgef"
qp'cp'gzknkpi'r'cxgo'gpv'lp'i'qqf'utwewtcn'eqpf'kkqp'
Dgecwug'uwej'r'cxgo'gpw'ctg'tctgn'r'tqi'tco'o'gf'ht"
tgj'cdk'kc'v'qp'qt'r'tgugt'xc'v'qp.'j'ku'v'r'g'q'h'q'xgtrc{'j'cu"
dggp'wugf'uweeguuw'w'lp'j'g'Wp'kgf'Uc'v'u'ht'ur'gekn"
no'kgf'cr'r'nc'v'kp'u'uwej'cu'v'cf'f'tgu'o'clqt'lp'et'g'cug'
lp't'ch'ie'rqcf'u'd{'cf'f'lp'i'utwewtg'v'q'j'g'gzknkpi"
r'cxgo'gpv'qt'v'q'eqt'tge'v'utw'c'eg'ku'wgu'uwej'cu'p'kg'g"
uo'qqv'pguu'qt'o'lpqt'f'gh'ev'u'Hi'wtg'E(5-4)



CP Tech Center

: [[i fY7 " "9I]gh]b['W:bWYh'dUj Ya Ybhik]h 'a]bcf'gi fZJW'X]ghfYggYg'g\ ck b'k]h 'UdfcdcgYX7 C7 E6 'cj Yf'Um

EQE6D'qxgtr{ u'ctg'pqvtgeqo o gpf gf "uqnwkqu'lp'cp{ " qh'yj g'hqmy lpi "ukwcvkpu<

E' Vj g'lqkpw'qh'yj g'gzlkupi "eqpetgw'r cxgo gpv'gzj kdk' o cvgtlcnu/tgrcvf "f kmtguugu'uwej "cu'cmek'uklec" tgcevkxk{ "CUT+ 'F/etcentpi . "qt'htggj g/yj cy 'f co ci g0

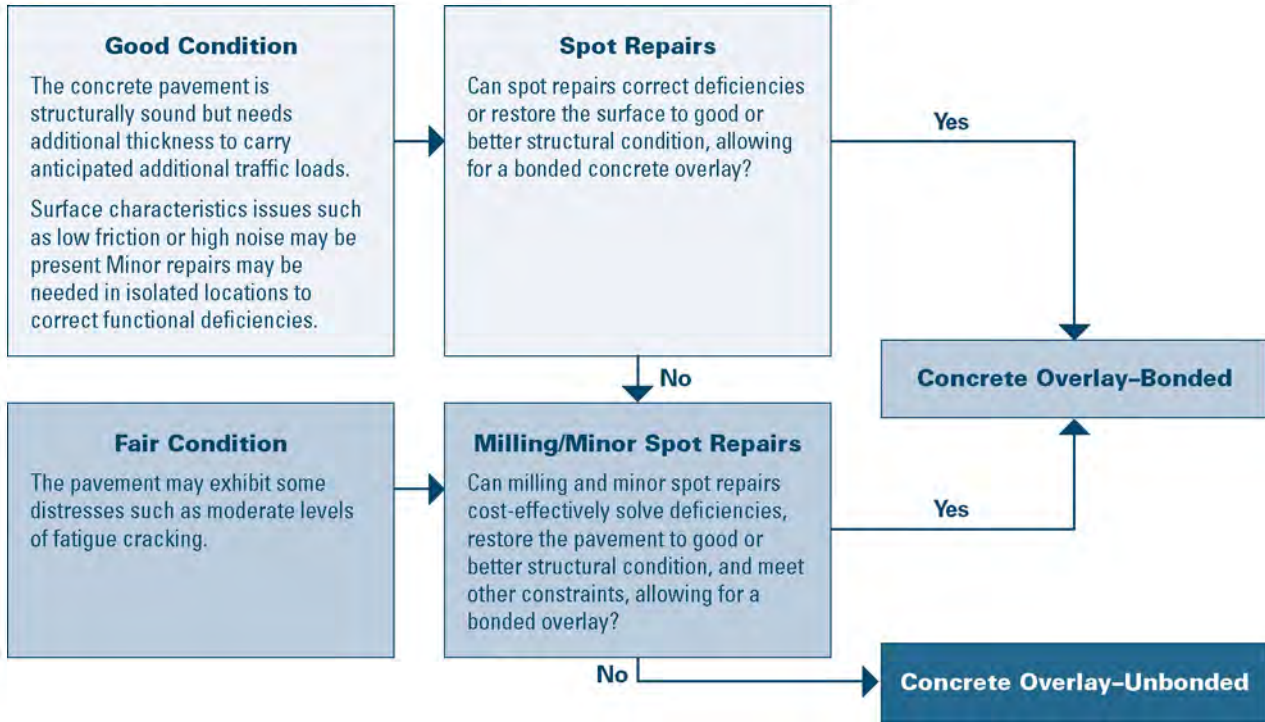
E' Vj gtg'ku'r qqt'uwdi tcf g'uwr r qtv'qt "ftclpci g0Rqqt" f tclpci g'ecp'rgcf "q'y gcnpgf "uwdi tcf g'uwr r qtv'cpf I" qt'lpetgcugf "uwuegr vdkrk\ "q'htggj g/yj cy 'f co ci g0

E' Vj gtg'ctg'xgtwecnltgustclpw'qp'tclupi "yj g'r tqhkg." y j lej "lp'uqo g'vtdcp'ukwcvkpu'ecp'tguwn'lp'yj g" tgo qxcn'cpf "tgr rcego gpv'qh'ewtd'cpf "i wwt'ugevkpu" cpf "ftkxy c{u. "lpvgtugevkp'tgeqpustwevkp. "hzwtg" cflwwo gpw. "cpf "qvj gt'o clqt'y qtn0

E' Vj gtg'ctg'pwo gtqwu'tcpf qo "etcemu'lp'yj g'gzlkupi " r cxgo gpv'yj cv'y km'dg'f khlwv'n'q'tggucdrkuj 'r tqr gtn\ " lp'yj g'qxgtr{ 0

9j Ui Uh'cb'cZ9I]gh]b['DUj Ya YbhA Ghfi Wi fYg

Qpg'qh'yj g'hkuv'vgr u'lp'f gvgto klpki "y j gyj gt "cp"gzlkupi " eqpetgw'r cxgo gpv'ku'c'i qqf "ecpf kf cvg'hqt "c'EQE6D" qxgtr{ "ku'q'gxcnvcg'yj g'r cxgo gpv'q'f gvgto lpg" y j gyj gt "k'ku'lp0 qt "ecp"equv'ghgevkxgn\ "dg'tgr clt gf "q'dg" kp0 i qqf "utwewt cn'eqpf kklp0C"r cxgo gpv'gxcnvcvkp" kf gpv'khu'cpf "ej ctcevgt k' gu'f kmtguu'v'f r gu. "utwewt cn' eqpf kklp "g0 0"etcentpi . "cdkxk\ "q'ectt { "tchle"mqf u." r tqdrgo u'yj cv'o c{ "tghgevk'lpv'q'yj g'qxgtr{ + "hwpvkqperi" r gthqto cpeg "g0 0"tqwi j pguu. "pqkug+ "cpf "o cvgtlcnu/" tgrcvf "kuwgu"gd 0'htggj g/yj cy 'f co ci g'cv'yj g'lqkpw. " CUT. 'F/etcentpi +0Ugg'Ej cr vgt "4'qh'yj ku'i wkf g'hqt "o qtg" kphqto cvkqp "cdqwgxcnvcvkpi "gzlkupi "r cxgo gpw0



ÖÜÄ^&@Ö^} ¢!

:][i fY7 " "DfcWggZfXYHfa]b]b['Ub'Uddfcdf]UH'cj Yf'Umigc'i Hjcb

Ugxgtcnlfcevtu'uj qwf "dg'eqpukf gtgf "y j gp"fgvto klpki " y j gj gt'c'EQEóD'qxgtnc{ 'ku'cr r tqr tlcvg'hqt'c'i kxgp" r tqlgev'y kj "y j g'eqpf kxqp'qh'y j g'gzknkpi 'r cxgo gpv' dgkpi 'r ctco qwp0Hki wtg'E6'kmwntcvgu'y j g'r tqegu'hqt" ugngevkpi "cp'cr r tqr tlcvg'qxgtnc{ 'uqnwkp0P qvg'y j cv'y j" tgeqo o gpf gf "qxgtnc{ 'uqnwkpqu'ctg'i gpgtcm{ 'hupi /veto " hkgu'y kj "42"qt'o qtg" { gctu'qh'gzr gvegf 'ugt xleg'hkg0

8 Yg][b': YUhi fYg

6 cbX

Vj g'f gi tgg'qh'y j g'dqpf "dgvy ggp'y j g'qxgtnc{ 'cpf "y j g" gzknkpi 'r cxgo gpv'qt'y j g'co qwpv'qh'o gej cplecn'lpvgtngeni r tguv'p'dgvy ggp'y j g'qxgtnc{ 'cpf "y j g'utwewtcrh{ gt" ko o gf kcvgn' 'dgnqy . 'rnc{ u'c'o clqt'tqng'lp'y j g'dgi cxkqt'qh' cpf 'utguu'f kwt'kwkqp'y j tqwi j "cmhrc{ gtu'lp'y j g'qxgtncf " r cxgo gpv'u{ ugo 0Y j gp'y j g'dqpf "dgvy ggp'y j g'rc{ gtu" ku'eqo r rvgv. "y j g'qxgtnc{ 'cpf "gzknkpi 'r cxgo gpv'cev" o qpqrkj kccm{ "y kj "cp'ghgevkxg'y j kempgu'y j cv'ku'i tgcvgt" y j cp'y j cv'qh'gkij gt "y j g'qxgtnc{ "qt'y j g'gzknkpi 'r cxgo gpv'0 Vj g'eqo dlpgf "u{ ugo "j cu'c'ukpi ng'pgwtcrh'czku'y kj " tguv'ge'v'q'dgpf kpi . "cpf "y j g'o czko wo "utguugu'cv'gkij gt" y j g'vqr "qt'dqwgo "qh'y j g'u{ ugo "ctg'i tgcvt{ 'tgf wegf 0

Vj g'dqpf "cv'y j g'lpvgtncg'dgvy ggp'y j g'EQEóD'cpf "y j g" gzknkpi 'eqpetgvg'ku'uwldge'v'q'eqpukf gtcdr'utguu'hqo " eqpetgvg'xqno g'ej cpi gu'cpf "hcf kpi 0Vq'o kki cvg'y j ku' utguu. 'c'i qcn'qh'r tgr ct kpi "y j g'utwecg'qh'y j g'gzknkpi "

r cxgo gpv'dghqtg'qxgtnc{ 'r rcego gpv'ku'v'q'r tqxkf g'c'tqwi j " utwecg'y j cv'gpj cpegu'y j g'dqpf kpi "qh'y j g'EQEóD'v'q" y j g'gzknkpi 'r cxgo gpv'0Qpeg'y j g'utwecg'qh'y j g'gzknkpi " r cxgo gpv'j cu'dggp'tqwi j gpgf "cpf "ergcpgf . "y j g'r tgr ctgf " utwecg'uj qwf "p'v'dg'qr gp'v'q'v'cthke0

A] i h fY8 Yg][b

Eqpxgp'kqpcn'eqpetgvg'o kzw'gu'ctg'v{ r kccm{ "wugf "hqt" EQEóD'qxgtnc{ u0J qy gxgt. "y j g'o cvgtkcu'o wu'dg" ugngevgf 'ectghwm{ "v'q'o kpi k g'utguugu'cv'y j g'lpvgtncg" dgvy ggp'y j g'qxgtnc{ "cpf "y j g'gzknkpi 'r cxgo gpv'y j cv" o ki j v'cthge'v'dqpf kpi 0F kthgt'p'p'p'lp'o qf w'k'dgvy ggp" y j g'qxgtnc{ 'cpf "gzknkpi 'r cxgo gpv'rc{ gtu'ecp't'guu'lp" y j gto cm{ 'lpf wegf 'utguugu'0Vj g'o clp'hcevt'cthgevkpi "y j g" o qf wwu'qh'eqpetgvg'ku'eqctug'ci i tgi cvg'v'q'g. "y kj "j ki j / o qf wwu'ci i tgi cvg'tguu'lp' "kp"j ki j / o qf wwu'eqpetgvg'0 Cff kxqpcm{ . 'rcti g'f kthgt'p'p'p'lp'y j gto cn'gzr cpukqp" eqghh'ekgpw'dgvy ggp'y j g'gzknkpi 'r cxgo gpv'cpf "qxgtnc{ " eqpetgvg'ecp't'guu'lp'lp'etgcugf 'utguugu0

Vq'o kpi k g'lpvgtncg'utguugu. 'tgi ctf rguu'qh'y gc'y gt" f wtkpi 'r rcego gpv'y j g'qxgtnc{ "eqpetgvg'cpf "gur gclcm{ " y j g'ci i tgi cvgu'wugf "o wu'dg'eqo r cvdng'y kj "y j qug'wugf " kp'y j g'gzknkpi 'r cxgo gpv'0Vj g'dcule'r tgo ku'ht' "o cvgtkcu' eqo r cvd'k'k'v' "lp'y ku'tgi ctf "ku'v'q'wug'ci i tgi cvgu'lp'y j g" qxgtnc{ "eqpetgvg'y j cv'r tqf wegf "o qf w'k'cpf "y j gto cni' eqghh'ekgpw'uko kct'v'q'v' qug'qh'y j g'gzknkpi "utcd0

HA JW_bYgg'8 Yg][b

Vy q'r tko ct{ 'uq'hy ctg'cr r nccvapu'ecp'j gr 'wugtu'
f gvgto kpg'j g'f guki p'y kempguu'qh'c'EQEóD'qxgtrc{0

CCUJ VQY ctg'Rcxgo gpv'O GF guki p'w u d l"
o g/f guki p t e q o IO GF guki p k'p'ko r ngo gpv'vqp'qh"
 yj g'ewt'gpv'o gej cplnke/go r k'lecln' cxgo gpv'f guki p"
 r tqegf wtgu'f gxgnr gf 'd{ 'y j C'o gtlecp'Cuuek'vqp"
 qh'Ucvg'J ki j y c{ 'cpf' 'Vtcur qt'v'vqp'Q'ht'lecln"
 *CCUJ VQ-0'k'eqo d'p'gu'c'o gej cplnke'cr r tqcej "q"
 r cxgo gpv'vnt'eww'cn'cp'cl'uk'w'v'p' "vugt' l'pr wu'ht"
 m'cf u.'en'ko c'v'.'cpf' 'r cxgo gpv'vnt'eww'cn'f c'v'q'eqo r w'g"
 et'k'lecln' cxgo gpv'vnt'gu'gu.'vnt'cl'pu.'cpf' 'f g'hr'ge'v'qp'u'y' k'j "
 go r k'lecln' g'ht'qto c'peg'o qf gni'f gxgnr gf 'h'qo 'c'ht'i g"
 f c'v'cd'ug'q'h'ht'f' go g'cu'wt'go gpw'i' c'yj g'tgf' 'h'qo 'r tq'g'ew'
 c'm'lx'gt' 'y j W'p'k'g'f' 'U'c'v'gu'O'ht' "eq'pet'g'v'q'x'gt' u.'y j g"
 f guki pu'r tqf w'eg'f 'd{ 'CCUJ VQY ctg'Rcxgo gpv'O G'
 F guki p't'g'hr'ge'v'y j k'p'v'gt'c'v'qp'u'd'g'w' ggp'r cxgo gpv'
 i g'qo g't{ '*g'f' O'r'cp'gn'uk' g'cp'f' 'y j k'emp'gu.'y k'f g'p'g'f' 'r'cp'gu:'"
 ut'v'eww'cn'eq'p'uk' g't'c'v'qp'u'*g'f' O'w'ug'q'h'f'q'y gni'cp'f' 'v'g'
 d'ct'u.'h'j q'w'f g't'v'f r g.'w'ug'q'h'v'g'gn't'g'p'h'q't'ego g'p'v'v'.'t'q'ec'n'
 en'ko c'v'k'f'c'v'q't'u.'cpf' "eq'pet'g'v'o c'v'gt'k'cl'cp'f' 'u'w'r r q't'v'v'c{ 'gt"
 r t'qr g't'v'gu'O'w'ug't'u'j q'w'f 'j cxg'c'v'j q't'q'w' j 'w'p'f g't'uc'p'f' l'p'i "
 q'h'y' g'r cxgo gpv'f guki p'r tqegf wt'g'cp'f' 'y j g'v'g'p'uk'k'k'f' 'q'h'
 f guki p' l'pr wu'O'v'j g' l'p'f w'ut{ 't'ge'q'i p'k' g'u'CCUJ VQY ctg"
 Rcxgo gpv'O GF guki p'cu'y'j g'd'gu'v'q'q'n'ht'j' ki j y c{ u'cp'f "
 q'yj g't' h'g'f g't'cl'cp'f' 'u'c'v'g'f'q'c'f y c{ u'o

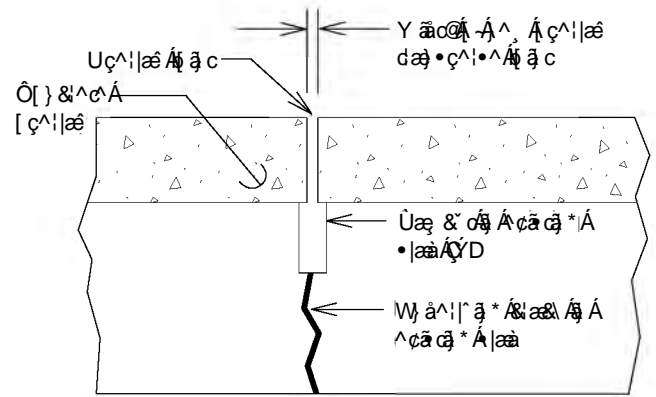
Vj g'Co gtkecp Eqpetgwg'Rcxgo gpv'Cuqekv'kpa'"
 *CERCauH'Rcxgo gpvF guki pgtQiti *ɟ wɹuɔɔɔɔ y y O'
rcxgo gpvF guki pgtQiti + 'tgrucuf 'kp'423: . 'ugtɣu'cu'j g'
 eqpetgwg'r cxgo gpv'kp wut { ɔt'tgeqo o gpf gf 'f guki p"
 o ɟy qf qmɹi { 'hqt'cni'fcek'ku'ɟy cv'tg'bpq'v'eqxgtgf 'd {"
 CCUJ VQY ctg'Rcxgo gpv'O G'F guki p0

>c]bhGdUWb['UbX' @Umc i h

Vj g'lqkpłpi 'r cwgtp'łqt'c'EQE6D'qxgtrc'{'0 wu'0 cvej "
 yj g'lqkpłpi 'r cwgtp'qh'yj g'gzknłpi 'r cxgo gp0Vj ku'ku"
 pgeguuct {'q'cxqlk'łghgevkx'etecnłpi 'cpf'vq'cmųy 'yj g'
 qxgtrc'{'cpf'gzknłpi 'r cxgo gpv'vq'cev'0 qpqrksj lecm'0

Vj g'f gr yj "qh'j g'tcpuxgtug'ucy ew'lqkpw'uj qwf "dg'j g"
 hwnf gr yj "qh'j g'r cxgo gp'u{uxgo 'r nnu" "kp'Vj ku'f gr yj "
 r tgxgpw'f gdpqf kpi "kh'j g'y kf yj "qh'j g'tcpuxgtug'lqkp'
 ku'gs wcn'q'qt'f tgcvgt' yj cp'j g'y kf yj "qh'j g'w'pf gtn' kpi "
 lqkp'qt'etecnlp'j g'gzknkpi "eqpetgvr cxgo gp'VHki wtg"
 E(V'uj qy u'c'v'f r kcnf gvckf)

Vj g'ucy ewf' gr vj 'qh'c' hupi kwf kpcrl' lqkv'lp' cp' qxgtrc (' 6' lp0'vj kem'qt' hgu' huj qwaf 'dg' V140Hqt' cp' qxgtrc ('i tgevgt' vj cp' 6' lp0'vj kem' vj g'ucy ewf' gr vj 'qh'v' g' hupi kwf kpcrl' lqkv' huj qwaf 'dg' V150



P[C^A U Ç ^ | / æ A q o j æ c Q @ B / S ^ A ~ æ A / A / ^ æ / A @ B A / æ I q A @ A
^ ç ã q * A / æ È

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: [i fY7 ") "7fcgg'gYWf]cb'cZUhfUbgj YfgY'gUk 'c[bi]b'U
7C7E6'cj Yf`Um

8 fU**lbU** Y

F wtkpi 'y j g'gxcnxcwqp'qh'y j g'gzknkpi 'r c xgo gpv'cpf 'y j g'
f guki p'qh'y j g'E QE 6D'qxgtrc { . 'y j g'gzknkpi 'uwdi tcf g'
f tclpci g'uj qwf "dg'gxcnxcwgf . 'cpf . 'kh'pgeguact { . 'wgr u"
uj qwf "dg'cnrg'v'g'gputg'cf gs wcv'f tclpci g'*g0 0"
tgtqhkwpki "gf i g'f tclpu . 'wulpi 'tgg/f tclpkpi 'uj qwf gt"
o cvgtkcu "cpf 'ugcnkpi 't cpuxgtug'cpf 'tupi kwf kpcrlqkpw+0

7 c b g h i W j c b

Ugr u'lp'ij g'eqpwtwekqp'qh'EQEóD'qxgtr{ u'lpwfg"
r t g/qxgtr{ 'tgrcku.'whtreg'r tgrctekqp'cpf'engcpkpi."
eqpetggr'ncgo gpv'ewt kpi.'cpf'lakpv'ucy kpi'cpf'ugcnkpi 0

Df Y!cj Yf`UmF YdUJfg

Rtg/qxgtrc{ 'tgr cktu'qh'ij g'gzknkpi "eqpetgvg'r cxgo gpv"
 uj qwrf "pqv'dg'zgvpuks=kt'ij g' 'ctg. 'ij g'r cxgo gpv'ku"
 r tqdcdrf "pqv'c'i qqf "ecpf kf cvg'ht'c'EQE6D'qxgtrc{ 0'
 Uwt'ceg'f ghgew'*g0 0"eqpetgvg'uecnkpi +'ctg'pqv'eqpukf gtgf "
 c'b clqt "eqpetgp'dw'uj qwrf "dg'cf f tguuf "dghqtg'ij g"
 qxgtrc{ 'ku'r nceg 0Qij gt 'kuwgu'q'cf f tguu'kpenf g"
 tcpf qo "qt'y qtnkpi "etcem. 'y j lej 'tgs vktg'hwmf gr ij "
 tgr cktu. 'cpf 'xqkf u'f gvgevf 'wpf gt'ij g'gzknkpi "eqpetgvg"
 urdu0Gzknkpi 'cur j cm'r cvej gu'ij qwrf 'cnuq'dg'tgo qxgf "
 cpf 'tgr nceg 'y kj "eqpetgvg'r cvej gu'q'r tqxkf g'b qtg"
 wpkhto "cpf "eqpuknpgv'dqpf kpi 0

Gi fZuW'DfYdUfUjcb

Uwthceg'r tgr ctcvkqp'qh'yj g'gzkukpi 'r cxgo gpv'lpqxqkngu" r tqf welpi "c'tqwi j gpgf'uwthceg'yj cv'y kn'gpi cpeg'dqpf lpi " dgwy ggp'yj g'gzkukpi 'r cxgo gpv'cpf'yj g'qxgtrc{0Uwthceg" r tgr ctcvkqp'r tqegf wtgu'lpemwf g'uj qvdrucupi . 'o knkpi . " cpf "j ki j /y cvgt'r tguuwtg'drucupi 0Vj g'o quv'eqo o qp'cpf" ghgexg'uwthceg'r tgr ctcvkqp'r tqegf wtg'ku'uj qvdrucupi " *Hki wtg'E(8+0Kk'o knkpi 'ku'wugf "q'hqy gt'yj g'r cxgo gpv" grgxcvkqp."cp{ 'tguuwnkpi 'o letqetcentkpi 'uj qwrf 'dg'tgo qxgf" d{ 'uj qvdrucupi "qt"j ki j /r tguuwtg'yj cvgt'drucupi 0

Gi fZuW'7`YUb]b[

Hqmqy lpi 'uwthceg'r tgr ctcvkqp.'yj g'uwthceg'qh'yj g'gzkukpi " r cxgo gpv'uj qwrf 'dg'engcpgf "q'gpuntg'cf gs wcvg'dqpf lpi " dgwy ggp'yj g'gzkukpi 'r cxgo gpv'cpf'yj g'qxgtrc{0Engcpkpi " o c{ 'lpqxqkng'uy ggr lpi 'yj g'eqpetgvg'uwthceg.'uwr r ngo gpgf" d{ 'yj g'wug'qh'eqo r tguugf 'ck'q'engcp'lp'itqp'v'qh'yj g" r cxgt*"Hki wtg'E(8+0Rcxkpi 'uj qwrf 'eqo o ppeg'buqp'chgt" engcpkpi 'q'o kpo k g'yj g'ej cpeg'qh'eqpwo kpcvkqp."cpf" eqputwvkqp'tchhe'uj qwrf 'dg'o kpo k gf "qp'yj g'engcpgf" uwthceg'hqt'uko kct'tgcuqpu0Kk'ku'pgeguuct{ 'q'cmqy " xgj kengu'qp'v'q'yj g'uwthceg.'ectg'uj qwrf 'dg'cngp'pqv'q" eqpwo kpcvg'yj g'uwthceg'cpf 'eqo r tqo kug'yj g'dqpf 0

7cbWYH'D`UWYa Ybh

I tcf g'cf lwuo gpw'o c{ 'pggf "q'dg'o cf g'q'gpuntg'yj cv" yj g'qxgtrc{ 'eqpetgvg'ku'qh'yj g'tgs wktgf 'yj kengpuu'cpf 'i tqw" eqcvkpi 'qh'yj g'gzkukpi 'r cxgo gpv'uwthceg'q'gpj cpeg" dqpf lpi 'ku'pqv'tgego o gpf gf "qt'tgs wktgf 0Qy gty kug." eqpxgpv'kpcn'eqpetgvg'r cxkpi 'r tcew'egu'cpf 'r tqegf wtgu'ctg" hqmqy gf 'hqt'yj g'r nengo gpv'qh'EQEoD'qxgtrc{ u0Hki wtg" E0 'uj qy u'yj g'r nengo gpv'qh'c'yj kp'EQEoD'qxgtrc{ 0



V[aa/pa •{ } 00, aa0UvE •^aA a00^!{ a•q }

:][i fY7 " "G cH'Ughb['cZUWcbWYH'gi fZuW



Rq 00[0^00, aa0UvE •^aA a00^!{ a•q }

:][i fY7 "+ "I gY'cZVta dfYggYX'Uj'fc'WYUb`YI]ghb['WcbWYH']bA ZcbhicZH YdUj Yf



aa0UvE •^aA a00^!{ a•q }

:][i fY7 ", "D`UWYa YbhicZUA]b'7C7 E6`cj Yf`Um

Ur gekn'cwgpvkqp"uj qwf "dg'i kxgp"vq"cf xgtug"
 gp xktqpo gpv'nf'eqpf kkp'u'f wtkpi 'r c xkpi 0J qv'f t { "
 y gcvj gt'r qugu'vj g'i tgcvgu'ej cmgpi g'hqt'E QEóD'qxgtrc { "
 r nrego gpv'dgecwug'vj gug'eqpf kkp'u'hcxqt"vj g'hqu'qh"
 o qluwtg'hqo 'h'guj 'eqpetgvg'cpf "gzegukxg'y cvgt"
 gxcr qtcvkqp'ecp'ecwug'xqno g'ej cpi gu'rti g'gpqwi j "vq"
 r tqo qvg'f gdqpf kpi 0K'vj g'uwthceg'vgo r gtcwtg'qh'vj g"
 gzknkpi 'r cxgo gpv'ku'rtvlewrti'f j ki j "g'0 0'lp'gzegu'qh"
 342ÅH: k'ku'tgeqo o gpf gf "vj cv'vj g'uwthceg'dg'eqqrgf "d { "
 ur tlpnkpi "y kj "y cvgt."y kj "cp { "u'ncp'kpi "y cvgt'tgo qxgf "
 wukpi "eqo r tguugf "c'k'lwu'ej gcf "qh'vj g'r cxgt0Vj g"
 eqo dlp'cvkp'qh'j ki j "y lpf "xgmek'f .j ki j "c'k'vgo r gtcwtg."
 nqy 'tgrv'xg'j wo kf k'f . "cpf "j ki j "eqpetgvg'vgo r gtcwtg'ku"
 yj g'o quv'f k'k'ewu'qh'r c xkpi "eqpf kkp'u'f w'vq"vj g'j ki j "
 r qvgp'vkn'ht"y cvgt'gxcr qtcvkqp0

7 i f]b[

Ewtkpi 'ku'etk'k'ecni'ht" 'c'E QEóD'qxgtrc { "dgecwug'vj g"
 uwthceg'ctgc/vq/xqno g'tcvk'qh'vj g'qxgtrc { 'ku'i tgcvtg"
 yj cp'k'ku'ht'eqpetgvg'r cxgo gpw'qh'pqt o cn'y kempgu0'
 O qluwtg'hqu'cpf "vj g'tguwnkpi "f t { kpi "uj tlpnei g'ctg"
 cr r tqzko cvgn' "r tqr qtcvkpcn'vq"vj g'uwthceg'ctgc/vq/"
 xqno g'tcvk'qh'vj g'eqpetgvg'r nregf 0Ewtkpi "eqo r qwpf "
 uj qwf "dg'cr r nkg' uwej "vj cv'vj g'uwthceg'cpf "xgtv'ecni"
 hcegu'qh'vj g'qxgtrc { "ctg'vj qtqwi j n' "eqcv'gf "cpf "cr r gct "
 wpl'k'ito n' "y j kg'h'ng'c'uj ggv'qh'r cr gt0

Y j gp'cp'qxgtrc { 'ku'r nregf "lp'eqqrgt"y gcvj gt."vj g"
 eqpetgvg'ecp'ugv'htqo "vj g'dqwo "wr .f gtrc { kpi "vj g"
 ucy kpi "y lpf qy 0Vgo r qtctk' "eqxgtkpi "vj g'qxgtrc { "
 y kj "r n'uke'uj ggvkpi "chgt'r c xkpi "j gr u'vj g'eqpetgvg"
 ug'v'rtqr gtn' . "cmjy kpi "vko g'vq"o ctn'vj g'pgy "qxgtrc { "
 lqkpw'cdqxg'vj g'gzknkpi "lqkpv'hkpgu'r tkqt"vq"lqkpv"
 ucy kpi 0J gcvkpi "vj g'eqpetgvg'o kzwg'o c { "cmjy dg'c"
 eqpukf gtcvkqp'lp'eqqny gcvj gt0E QEóD'qxgtrc { u'uj qwf "
 pqv'dg'r nregf "y j gp'vj g'o kzwg'vgo r gtcwtg'cpf "vj g"
 gzknkpi 'r cxgo gpv'vgo r gtcwtg'f k'htgt"d { "o qtg'vj cp'57ÅH

>c]bhGUK]b[

Vko gn' "lqkpv'ucy kpi 'ku'etk'k'ecni'vq'r t'gxgpv'tcpf qo "
 etcenkpi 'lp'E QEóD'qxgtrc { u0Ucy kpi "o wuv'dgi kp'dghgtg"
 f gdqpf kpi "u'guu'f qo lpcv'gu'lp"vj g'qxgtrc { "dw'chgt"vj g"
 eqpetgvg'ku'utkpi "gpqwi j "vj cv'vj g'lqkpw'ecp'dg'ew"
 y kj qw'v'cxgtrkpi 0Gzr gtl'ep'eg'j cu'uj qy p'vj cv'cp'cf gs wcvg"
 pwo dgt'qh'ucy u'o wuv'dg'cxck'cdng'qp/ukg'ht"vj g'lqkpv"
 ucy kpi "vq"hggr "r ceg'y kj "vj g'eqp'v'wv'kqp"qr gtcvkqp0

>c]bhGYU]b[

Vq'j gr "r t'gxgpv'o qluwtg'gpv'tcr o gpv'cm'lqkpw'lp"c"
 EQEóD'qxgtrc { "uj qwf "dg'h'ngf 0E qpxg'v'k'p'cni'lqkpv"
 h'ngt"o cvgt'knu'cpf "o gvj qf u'ecp'dg'wugf . "dw'vj g'wug'qh'c"
 dcengt'tqf "ku'p'qv'tgeqo o gpf gf 0

CdYb]b['GfYb[H

O c'lp'v'k'p'kpi "vj g'dqpf "dgvy ggp'c'E QEóD'qxgtrc { "
 cpf "vj g'gzknkpi 'r cxgo gpv'ku'gur gekm' "etk'k'ecni'f wtkpi "
 yj g'h'ku'v'hy "f c { u'chgt'r nrego gpv'y j gp'vj g'qxgtrc { 'ku"
 uw'egr v'k'ng'vq'ewtkpi "cpf "y ctr kpi "u'ngu'gu."gur gekm' "
 cv'vj g'r cxgo gpv'gf i gu0Vj g'tghgtg."vj g'dqpf "o wuv'dg"
 r tqg'ev'gf "d { "wukpi "r tqr gt'ewtkpi "r tce'v'egu'r c'tvlewrti'f "
 cv'vj g'r cxgo gpv'gf i gu+ "o k'p'ko k' kpi "tgrv'xg'j wo kf k'f "
 cpf "vgo r gtcwtg'f k'htgt'gpv'knu'dgvy ggp'vj g'gzknkpi "
 r cxgo gpv'cpf "vj g'qxgtrc { . "cpf "hggr kpi "gctn' "v'c'htle"
 cy c { "h'qo "vj g'r cxgo gpv'gf i gu'wp'v'k'cp'cf gs wcvg'dqpf "
 utgpi vj "j cu'dggp'cej k'x'gf "w'w'cm' "y j gp'qr gplkpi "
 utgpi vj "j cu'dggp'cej k'x'gf +0

0E] ^} åãÄ

GHU]b['GYei YbW'8]U[fUa g'Zcf
J Uf]ci g'HfUZW7 cbhfc`'GWbUf]cg

Hk c!@bYFcUXk Umik]H 'DUj YX'G ci `XYfg'f7 cbj YbhcbU'DUj YfL'	%&
Hk c!@bYFcUXk Umik]H ; fUbi `Uf'G ci `XYfg'f7 cbj YbhcbU'DUj YfL'	%&*
Hk c!@bYFcUXk Umik]H 'A]b]a i a ; fUbi `Uf'G ci `XYfg'fNYfc!7`YUfUbW'DUj YfL'	%&
Hk c!@bYFcUXk Umik]XYbYX'hc'H fYY'@bYg'k]H 'DUj YX'G ci `XYfg'f7 cbj YbhcbU'DUj YfL'	% \$
: ci f!@bYFcUXk Umik]H 'DUj YX'G ci `XYfg'f7 cbj YbhcbU'DUj YfL'	% &

Vj ku'cr r gpf kz'r tguqwu'xctkqu'nci kpi 'ugs wpeg'f lci tco u'yj cv'kwutcv'f khtgpv'tchle'eqpvtqnluegpctku'y j gp"
eqputwekpi "c"eqpetgv'qxgtnc{ 'y kj qw'emukpi "yj g'tqcf "vq'tchle0Vj g'f lci tco u'lj qy "yj g'hc{ qw'qh'yj g'eqputwekqp"
| qpg'cpf "yj g' qpg'qr gp"vq'tchle"cpf "f kweuu'yj g'etklecndlgr u'yj tqwi j "yj g'r tqi tguukp"qh'y qtn0

â bVcbXYX'Wc bWYhY'cj Yf`UmicZWca dcgIhY'dUj Ya Ybhp

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F YZyf YbWg

CCUJ VQ03; ; 50CCUJ VQ'I wlf g'hqt 'ij g'F guki p'qhi'
Rcxgo gpv'Ut newt gu0Co gtlecp'Cuuqekvqp'qh'Ucvg"
J ki j y c{'cpf "Vtcur qtvcvqp"QHhleknu."Y cuj lpi vqp."FE0

CCUJ VQ042420O gej cphake/Go rkt kecnRcxgo gpv'F guki p"
I wlf g<C'O cpwcn'qhRicevkg05tf "Gf klqp0Co gtlecp"
Cuuqekvqp'qh'Ucvg"J ki j y c{'cpf "Vtcur qtvcvqp"
QHhleknu."Y cuj lpi vqp."FE0

CEKEqo o kwgg"423042380I wlf g'iq'F wtcdrg'Eppetvgv0
CEK42304T/380Co gtlecp'Eppetvgv'kpwkwg."
Hcto lpi vqp"J kmu."O K0j [wr u<ly y y QppetvgvQti I](#)"
[r wdrcekvqpulkpvgtpcvkpcrqpctgvcgdcutceur qtvcnlo I](#)"
[f gcknuikf I738; : 7360](#)

CERC03; ; 40F guki p'cpf "Eqpntwekqp"qh'Lqkpui'hqt"
Eppetvgv'Ut ggu0KJ283Q3R0Co gtlecp'Eppetvgv"
Rcxgo gpv'Cuuqekvqp."Unqmg."KNOj [wr u<ly y y QppetvgvQti I](#)"
[y r /eqpvgpvwr mcf u423: I25 IF guki p/cpf /Eqpntwekqp/"](#)
[qh'Lqkpui/hqt/Eppetvgv/Ut ggu/KJ283Q3R0 f h0](#)

CERC042290Kpvtugevqp'Lqkp'Nc{ qw0KJ228Q4R0
Co gtlecp'Eppetvgv'Rcxgo gpv'Cuuqekvqp."Unqmg."KNO'
[j wr <ly y y ur f qv f0c0 qx kpkuf gaNcF QVF IF kxukqpuI](#)"
[Gpi kpggtkpi ITqcf aF guki pITqcf' 42F guki p' 42"](#)
[O cpwcnCr r gpf k ICERC' 42Kpvtugevqp' 42Lqkp' 42"](#)
[Nc{ qw0 f h0](#)

CERC042320Eppetvgv'Rcxgo gpv'Hkgrf "Tghgt ppeg<Rcxlpi 0'
GD45: 0Co gtlecp'Eppetvgv'Rcxgo gpv'Cuuqekvqp."
Tqugo qpv."KNOj [wr u<ly y y Qtpi gtrkgr cxgo gpvQeo I](#)"
[y r /eqpvgpvwr mcf u4239 I28 IGD45: R/Eppetvgv/"](#)
[Rcxgo gpv'Hkgrf /Tghgt ppeg/ Rcxlpi 0 f h0](#)

CERC0423: 0Eppetvgv'Rcxgo gpv'Lqkp'Ugcrkpi IHhknkpi 0'
Vgej plecnDwngvlp"VD232/423: 0Co gtlecp'Eppetvgv"
Rcxgo gpv'Cuuqekvqp."Tqugo qpv."KNOj [wr u<lr cxgv kug0](#)"
[eqo ly r /eqpvgpvwr mcf u4243 I23 Ilqkp'kpi /Ugcrkpi /"](#)
[Vgej /Dwngvlp/VD232/423: 0 f h0](#)

CERC042430P cvkpcnEppetvgv'Qxgtrc{ "Gzr mgt0'
Co gtlecp'Eppetvgv'Rcxgo gpv'Cuuqekvqp."Tqugo qpv."
KNOj [wr <lxgtrc{ u0er cQti ly gdcrr ukqgtrc{ gzr mgt0I](#)"
[kpf gz0 vo r0](#)

Cndgtqr."T03; ; 90C'EapvkwqwuTgkphqtegf "Eqpetvgv"
Rcxgo gpv*ETER+Qxgtrc{ 'hqt'yj g"Vqttglqp"D{r cuu08vj "
KpvtpcvqpccnRwtf wg'Eaphtgpeg'qp'Eppetvgv'Rcxgo gpv'
F guki p'cpf "O cvgtknu'hqt"J ki j "Rgthqto cpeg."P qxgo dgt"
3: 643."3; ; 9."Kpf kpcr qru."K0r r 047964970

Cncpf."MO'L0O 0Xcpf gpdquiej g."I0F gUcpvku."O 0D0'
Up{f gt."cpf "NOMj c| cpqxlej 0423: 0Ego r ctkpi "yj g"
DEQC/O G'F guki p'Rtqegf wtg'cpf "yj g"Uj qtvLqkpvgf "
Rrckp'Eppetvgv'Rcxgo gpv'O qf wg'lp'yj g'Rcxgo gpv'
O G'F guki p'Rtqegf wtg0; 9vj "CpwwcnO ggkpi "qh'yj g"
Vtcur qtvcvqp"Tugetej "Dqctf."Lcpwct{ '9633."423: ." "
Y cuj lpi vqp."FE0

Dcto cp."O 0'cpf "D0J cpugp0423: 0Ego r ctkuqp"qh'
Rgthqto cpegu'qh'Ut newt cnHldgtu'cpf "F gxgrro gpv'
qlhc "Ur gekkcvkqp'hqt "Wukpi "Vj go "lp'Vj lp'Eppetvgv"
Qxgtrc{u0O kppguvc'F gr ctvo gpv'qh'Vtcur qtvcvqp."
U0Rcwn"O P 0j [wr <ly y y f qv0ncv0 p0ultugcte j I](#)"
[tgr qtu423: 423: 4: 0 f h0](#)

Dcto cp."O 0'L0O 0Xcpf gpdquiej g."cpf "\ 0NK042370'
Ej ctcevtkl cvkqp'qh'Nqcf "Vtcurpht"Dgj cxkqt'hqt"Dqpf gf "
Eqpetvgv'Qxgtrc{ u'qp"Cur j cn0Vtcur qtvcvqp"Tugetej "
Tgeqtf <Lqtpcn'qh'ij g"Vtcur qtvcvqp"Tugetej "Dqctf."Xqrf "
4746."r r 036563730

Dgwtgvp."T0O 0'O 0L0Mpwuqp."cpf "X0L0
O ctmu03; ; 60C'Vgp/[gct "Rgthqto cpeg"Uwo o ct{"
qh'Hldt qwu'RE'Eppetvgv'Qxgtrc{ "Tugetej "lp'I tggpg"
Eqwvqf."Kqy c0Kqy c'F gr ctvo gpv'qh'Vtcur qtvcvqp."
Co gu."K0j [wr <lr wdrcekvqpukqy c0 qx B; 85: B I](#)"
[KCFQVaj t387a VgpaI gctaRgthqto cpegaUwo o ct{a "](#)
[HldtqwaREaEqpetvgv3: : 60 f h0](#)

Dj cwcej ct{c."D0'C0I qvkh"cpf "O 0F ctvgt042390'
K0 r ngo gpvcvqp'qh'yj g"Vj lp'Dqpf gf "Eqpetvgv'Qxgtrc{ "
qh'Gzknkpi "Cur j cn'Rcxgo gpv'F guki p'Rtqegf wtg'lp'yj g"
CCUJ VQY ctg'Rcxgo gpv'O G'F guki p"Uqhny ctg0; 8vj "
CpwwcnO ggkpi "qh'yj g"Vtcur qtvcvqp"Tugetej "Dqctf." "
Lcpwct{ ": 634."423: ."Y cuj lpi vqp."FE0

Hgttdgg."G0"C0I kgtmqy unk"cpf "I 0Xqli v0423: 0'
Etgcvkqp"cpf "F gxgnr o gpv'qhRcxgo gpvF guki pgt0'
qti <"C" Wpklkf "kpf wut{/y kf g'Rcxgo gpvF guki p"Vqqn'
hqt'Eqpetvg"cpf "Ego gpvdcugf "Uqnwkp035j "
kpgtpevkpcnU{o r qukw "qp'Eqpetvg" Tqcf u. "Lxpg"
3; 644."423: ."Dgtrp."I gto cp{0

Hgttdgg."G0"cpf "L0Tqgun0423: 0Tgi kpcrk gf "Nkg/
E{erg"Cuuguo gpv"Vqqn"ht "Gxcnwvki "Eqpetvg"Rcxgo gpv'
Cngtpevkgu035j "kpgtpevkpcnU{o r qukw "qp'Eqpetvg"
Tqcf u."Lxpg"3; 644."423: ."Dgtrp."I gto cp{0

HJ Y C03; ; 50Tgr qtv'qp'yj g'3; ; 4"WUVqwt "qhlGwt qrgcp"
Eqpetvg"J ki j y c/u0HJ Y C/UC/; 5/2340Hgf gtrn'
J ki j y c{ "Cfo kpkntcvkp."Y cuj kpi vqp."FE0

HJ Y C0422; 0Ocpwcn'qp"Wpklkf "Vtclhe"Eqpetvg"
Fgxlegu'ht "Ut ggu'cpf "J ki j y c/u0422; "Gf kkp0Hgf gtrn'
J ki j y c{ "Cfo kpkntcvkp."Y cuj kpi vqp."FE0

HJ Y C0423: 0Ceegntcvf "Eqputwevkp0Hgf gtrn'
J ki j y c{ "Cfo kpkntcvkp."Y cuj kpi vqp."FE0j [wr u<lkp u0'
hj y c/f qv qx ly | leqputwevkp keegntcvf lkp f gzf vo 0](#)

HJ Y C0423; 0Vgej pkecn'cf xkuqt { "V"7262052 <"Eqpetvg"
Rcxgo gpv'Lqkp0Hgf gtrn'J ki j y c{ "Cfo kpkntcvkp."
Y cuj kpi vqp."FE0j [wr u<ly y y 0j y c/f qv qx lr cxgo gpv' |
v7262520 f10](#)

Hlem'I 0'R0Vc{mt. "T0Ej tkwo cp."cpf "L00 0Tvk 042340'
Hkgf "Tghgpgpeg"Ocpwcn'ht "S wcnkf "Eqpetvg"Rcxgo gpv0'
Hgf gtrn'J ki j y c{ "Cfo kpkntcvkp."Y cuj kpi vqp."FE0'
[j wr u<ly y y 0j y c/f qv qx lr cxgo gpv'eqpetvg lr vdu' |
k3527; 0 f10](#)

Hlem'I 0"cpf "F0J cttkpi vqp042380I wkf g"Ur gekhcevkpu'
ht "Eqpetvg"Qxgtr{ "u0P cvkpcnEqpetvg"Rcxgo gpv'
Vgej pqm { "Egpgt."Co gu."K0j [wr u<lkpvcpu0cuncvgef wcr r
lr mcf u423: 12: lqxtre { ai wkf gaur gekhcevkpu0 f10](#)

Hqmgucf."C0423; 0Utxg{ "qhlUcvg" Fgrctwo gpv'qhl'
Vtcur qtwcvkp "F kugwv' Tcgu0Co gtecp"Eqpetvg"
Rcxgo gpv'Cuugelcvkp."EQIY ["Ej cr vgt."Egpgpkn"EQ0

Hggugo cp."M0'M0J qgi j."cpf "N0Mj c| cpqxlej 042380'
Eqpetvg"Ut gpi yj "Tgs wkt gf "iq"Qr gp "iq"Vtclhe0Wpkxgtuk{ "
qh'O lppguvc."O lppgr qru."O P0j [wr <ly y y f qv0ncvq'
o p0ukugctej IVU4238 4238230 f10](#)

I curctf."M0'O00 ctvkg|. "\ 0\ j cpi."cpf "\ 0Y w042290'
K0 rcev'qhl'J wtkcpvg"Mcw kpc "qp" Tqcf y c{ u'lp'yj g"Py "
Qtngepu" Ctg0Vgej plectiCuugcpeg" Tgr qtvP q029/4VC0'
Nqwkupc" Vtcur qtwcvkp "Tgugctej "Egpgt."Dcvp "Tqwi g." "
NC0j [wr u<ly y y 0nte0uw0f wlr f h4229 129a4vc0 f10](#)

I tggp."L0"cpf "K0F cxkgu."K042220C66; "Eqf tc/Wun'
Tgj cdkkscvkp0O wplek cnl'Gpi kpggt. "Xqr035; ."P q03."
rr0356420

I tgi qt { ."L0O 03; : 60Eqpvkpqun{ "tghphtegf "eqpetvg"
rcxgo gpv0Rt qeggf kpi u'qhl'yj g" kpinwkwqp "qhlEkkh'
Gpi kpggtu."Xqr098."P q04."rr066; 66940

I tquu."L0Hqty eqo kpi 0J knqt { "qhlEqpetvg"Qxgtr{ u'lp'yj g"
Wpklkf "Ucvgu04pf "Gf kkp0P cvkpcnEqpetvg"Rcxgo gpv'
Vgej pqm { "Egpgt."Co gu."K0

I tquu."L0"cpf "F0J cttkpi vqp0423: 0I wkf g'ht "yj g"
Fgxgnr o gpv'qhEqpetvg"Qxgtr{ "Eqputwevkp" Fqewo gpv0'
P cvkpcnEqpetvg"Rcxgo gpv'Vgej pqm { "Egpgt."Co gu."
K0j [wr u<lkpvcpu0cuncvgef wcr r lr mcf u423: 12; |
qxgtr { aeputwevkpaf qeaf gxai wkf gay aext0 f10](#)

I tquu."L0" F0Mpi ."J 0Eg{ncp."I 0C0Ej gp."cpf "R0'
Vc{mt0423; 0Qrwo k gf "Lqkp'Urcelki "ht "Eqpetvg"
Qxgtr{ u'y kj "cpf "y kj qw'Ut wewt cnl'Hkdg "Tghpht ekpi 0'
P cvkpcnEqpetvg"Rcxgo gpv'Vgej pqm { "Egpgt."Co gu."
K0j [wr u<lkpvcpu0cuncvgef wcr r lr mcf u423: 128 |
qrwo k gf alqkpaur celki ahqtaqxgtr { uay aext0 f10](#)

I tquu."L0" F0Mpi ."F0J cttkpi vqp."J 0Eg{ncp."I 0
C0Ej gp."U0Mko ."R0Vc{mt."cpf "Q0Mc{ c042390'
Eqpetvg"Qxgtr{ "Rghqto cpeg"qp "Kiy c'at" Tqcf y c{ u0'
Kiy c'J ki j y c{ "Tgugctej "Dqctf "cpf "Kiy c'F grctwo gpv'
qh'Vtcur qtwcvkp."Co gu."K0j [wr u<lkpvcpu0cuncvq'
gf wcr r lr mcf u4239 12; lky caeqpetvg aqxgtr { a "
rghqto cpegay aext0 f10](#)

J cttkpi vqp."F0'O0C {gtu."V0Ecemgt."I 0Hlem'F0'
Uej y ctv. "M0Uo kj ."O0D0Up {fgt."cpf "V0Xcp" Fco 0'
423: 0I wkf g'ht "Eqpetvg"Rcxgo gpv'F knt guu'Cuuguo gpv'
cpf "Uqnwkp u<lf gpv'Wkecvkp."Ecwgu "Rt gxgpvkp."cpf "
Tgrck0P cvkpcnEqpetvg"Rcxgo gpv'Vgej pqm { "
Egpgt."Co gu."K0j [wr u<lkpvcpu0cuncvgef wcr r "
wr mcf u423: 123 leqpetvgar xo vaf knt guu'cuuguo gpvua "
cpf augnwkpua i wkf gay aext0 f10](#)

J gengn "N0D042240Rghqto cpeg" qhl'cp "Wpdqpf gf"
Eqpetvg"Qxgtr{ "qp"K960Tgr qtvP q0KVRTT/3620'
Krkpqlr'F grctwo gpv'qh'Vtcur qtwcvkp."Ur tkpi hgnf. "
K0j [wr u<lk qv0kpkqlr qx lCuugulr mcf u1hkgul "
Vtcur qtwcvkp/Uj ugo .I f gugctej lRj {ulecn'Tgugctej / "
Tgr qtwB620 f10](#)

J gengn "N0D0"cpf "E0L0Y kptcpn0423: 0Rghqto cpeg"
qh'Eqpetvg"Qxgtr{ u'qp"Krkpqlr kpgtuncvgu "3; 89"
yj tqwi j "42380Vtcur qtwcvkp "Tgugctej "Tgeqtf <
Lqwt pch'qhl'yj g'Vtcur qtwcvkp "Tgugctej "Dqctf. "Xqr0
4894."P q0620j [wr u<llqwt pchn0ci gr w0eqo lf qkl "
hwm320399 125833; : 33; 9: 3368Alqwt pcrEqf g? ttc0](#)

Æ QV0423; 0E^{qpf} k^qp "T^cv^kpⁱ "U^mx^gl "U^wo o c t { "T^gr q^tv<
H/ 423; 0K^kp^qk^u"F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp."
Ur t^kpⁱ h^gr^f . "K^N0j [wr u<1lf qv0nkpqku0 qx lC uugulw^r m^cf u^l"](#)
[h^gu^lV^tc^pur q^tv^ck^qp/U^lu^go ^lT^gr q^tv^lU^QR\(RⁱV^tx^gn^l"](#)
[U^cw^lH/ 423; aETU 42U^wo o c t { ' 42T^gr q^tv^l f l0](#)

L^xpⁱ . l 0^f 0ⁱ 0\ q^mk^pi g^t."c^pf "U^WF 0^Vc { cdl042290
D^gw^rT^ce^vk^gu^lq^hE^qp^et g^vg^r"R^cx^go g^pv^lV^tc^pu^kq^qp "F g^ukⁱ p"
c^pf "E^qpⁱu^t w^ek^qp 0^H Y C I V Z / 29 l2 / 7542 / 30 V^gz^cu"
F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp. "C^wu^kp. "VZ 0j [wr u<1lucv^le^l](#)
[w^l0^co w^l0^f w^lw^l0^co w^l0^f w^lf q^ew^o g^pw^l2 / 7542 / 30 f l0](#)

M^cp^pg^o g { g^t."N⁰"D⁰R^gt^lg. "R⁰U^tc^wu^l."c^pf "N⁰f w^Rg^uu^l0
422: 0^Wu^tc / Vj l^p "E^TE^R"F g^xg^mr o g^pv^lp "U^qw^j "
C^ht^le^c0^P l^pvj "K^pv^gt^pc^vk^qp^cn^lE^qp^ht^gp^eg^l"q^p"E^qp^et g^vg^r"
R^cx^go g^pw^l. "C^wi w^uv39643."422: . "U^cp "Hⁱc^pe^ke^q. "E^C0^r
r r 0; ; 76323: 0

Mj c| c^pq^xl^ej . "N⁰"c^pf "J 0N^l0423; 0G^xc^mc^vk^qp "q^hN^qpⁱ /
V^gt^o "K^o r^ce^wl^qh^Gc^tr^l "Q^rg^pk^pi "q^hE^qp^et g^vg^r"R^cx^go g^pw^l<
V^cu^ml4 "G^xc^mc^vk^qp "q^hG^ct^rl "N^qc^f l^pi "F^co cⁱ g⁰V^RH"
7*563+00 l^pp^gu^qv^c "F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp."
U^l0^Rc^wn "O P 0j [wr u<1k^r r t l^gt 5873239: 93/0 {0](#)
[u^j c^tg^r q^kp^l0^qo k^y <1 l^r g^tu^qp^cn^l lⁱ g^mt^ae^r c^o p^ae^qo ^l"](#)
[G^g: TⁱT: I 6G^f J rⁱ P C y W9D9u^Dg^lGⁱ K^M5wⁱ 6g^j y y "](#)
[l I c^l8R^CA^tv^lo g²27G^O p^l i Y 4W^l 0](#)

Mj c| c^pq^xl^ej . "N⁰"l⁰0 0^Xc^pf g^pd^qu^ej g. "l⁰F g^Uc^pv^lu."
c^pf "U^l0^Uc^ej u042420F g^xg^ro g^pv^lq^hc^p"K^o r^tq^xg^f"
F g^ukⁱ p "R^tq^eg^f w^t g^lq^t "W^pd^qp^f g^f "E^qp^et g^vg^r"Q^xg^tr^c { u^l0
T^gr q^tv^P q00 P "4242/2: 00 l^pp^gu^qv^c "F gr ctvo gpv^qh
V^tc^pur q^tv^ck^qp 0U^l0^Rc^wn "O P 0j [wr <1y y y \(f q^l0ⁿc^vg^l](#)
[o p^l0^ul^tg^ug^ct^ej lⁱg^r q^tv^lu424242422: 0 f l0](#)

M^lo . "F 0" c^pf "O 0Y q^p0422: 0G^xc^mc^vk^qp "q^hD^qp^f g^f"
E^qp^et g^vg^r"Q^xg^tr^c { "q^p "K^l "832 "l^p "J q^uu^qp. "V^gz^cu 0^H Y C I"
VZ/2: l2/6: ; 5/50V^gz^cu "F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp."
C^wu^kp. "VZ 0j [wr u<1k^v0w^gz^cu^lg^f w^ly r / e^qp^gp^vl^w r^qc^f u^l"](#)
[r w^lu^l2a6: : 5a50 f l0](#)

M^lpⁱ . "F 0" c^pf "l⁰T q^ug^ut 042360U^t w^ew^t cⁿl^Rg^th^to c^pe^g"
q^hW^ut^c / Vj l^p "Y j l^gv^qr^r l^pi "q^p "K^kp^qk^u"T^qc^f y c { u^l c^pf"
R^ct^mk^pi "N^qu 0T g^ug^ct^ej "T^gr q^tv^P q0^H Y C / E^V / 36/23: 0
K^kp^qk^u"E^gp^gt "h^qt "V^tc^pur q^tv^ck^qp. "W^dc^pc. "K^N0j [wr u<1](#)
[y y y 0f g^cn^l0ⁿk^pq^ul^lg^f w^ld^ku^ut^gco l^j c^pf r^g4364172534](#)
[H^l Y C / E^V / 36/23: 0 f h^Ag^s w^pe^g? 4\(k^uC^mq^y g^f? {0](#)

N^g{ n^ew^h "l 0" c^pf "F 0D^lto c^pp042280E^qp^et g^vg^r"
R^cx^go g^pw^ly k^j "l g^qv^gz^wg^l "K^pv^gt^rc { g^t "l^p "l g^to c^p {<
O g^cu^tg^o g^pw^l c^pf "N^qpⁱ / v^gt^o "D^gj c^xk^qt 0R^tq^eg^f l^pi u"
q^hl^y g³2j "K^pv^gt^pc^vk^qp^cn^lU^l o r^qu^kw^o "q^p"E^qp^et g^vg^r"T^qc^f u."
D^tw^ug^u. "D^gnⁱ k^wo . "U^gr^vg^o d^gt "3: 644. "42280H^gf g^tc^vk^qp "q^h
y j "D^gnⁱ k^cp "E^go g^pv^l "K^pf w^ut { . "D^tw^ug^u. "D^gnⁱ k^wo 0

N^lr r g^tv^l "F 0N⁰"c^pf "l⁰D⁰F w^Dq^ug03; : : 0R^gt h^qt o c^pe^g"
G^xc^mc^vk^qp "q^hE^qp^et g^vg^r"Q^xg^tr^c { u^l0T^gr q^tv^H Y C I"
K^Nl^RT / 3230K^kp^qk^u"F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp."
Ur t^kpⁱ h^gr^f . "K^N0j [wr u<1lf qv0nkpqku0 qx lC uugulw^r m^cf u^l"](#)
[h^gu^lV^tc^pur q^tv^ck^qp/U^lu^go ^lT^gu^gc^te^j l^Rj { u^le^cn^lT^gu^gc^te^j / "](#)
[T^gr q^tv^luB230R^F H0](#)

N^qm^gp. "G⁰E03; : 30E^qp^et g^vg^r"q^xg^tr^c { u^lh^qt "e^qp^et g^vg^r"c^pf "
c^ur j cⁿ "r^cx^go g^pw^l4p^f "K^pv^gt^pc^vk^qp^cn^lE^qp^ht^gp^eg^l"q^p"
E^qp^et g^vg^r"R^cx^go g^pv^l "F g^ukⁱ p. "C^r t^ki3663: . "K^pf l^cp^cr q^ru^l."
K^P 0^r r 034763660

O^el j g^g. "M^l0 03; ; 60U^lp^vj g^uk^l "q^hl^j kⁱ j y c { "R^tc^ev^g"
426<R^qt^vu^pf "E^go g^pv^lE^qp^et g^vg^r"T^gu^ut h^ek^epⁱ 0^P c^vk^qp^cn^l"
E^qq^r g^tc^vk^g"J kⁱ j y c { "T^gu^gc^te^j "R^tqⁱ t^co . "Y c^uj l^pi v^qp."
F E0j [wr <1k^pr^kp^gr w^lu^l0^td^l0^qtⁱ l^l0^pr^kp^gr w^lu^lp^ej t^r l](#)
[p^ej t^r a^ul^f p^a4260 f l0](#)

O^eP g^cn "C⁰H03; ; 80R^rc^pp^lpⁱ . "F g^ukⁱ p "c^pf "E^qpⁱu^t w^ek^qp"
q^hl^cp "W^pd^qp^f g^f "E^qp^et g^vg^r"Q^xg^tr^c { 0T^gr q^tv^H Y C I"
K^Nl^RT / 3440K^kp^qk^u"F gr ctvo gpv^qh "V^tc^pur q^tv^ck^qp."
Ur t^kpⁱ h^gr^f . "K^N0j [wr u<1lf qv0nkpqku0 qx lC uugulw^r m^cf u^l"](#)
[h^gu^lV^tc^pur q^tv^ck^qp/U^lu^go ^lT^gu^gc^te^j l^Rj { u^le^cn^lT^gu^gc^te^j / "](#)
[T^gr q^tv^luB440R^F H0](#)

O^ge^cr^h "R⁰"c^pf "T⁰F w^li g^qp042260Vj g^lW^ug^lq^h"
E^qp^vk^pw^qw^ul "T^gk^lh^qt^eg^f "E^qp^et g^vg^r"Q^xg^tr^c { u^ll^p"
O^qq^ty c { "O^lc^kp^vg^cp^eg^l"C^lE^cu^g"U^wf { +0R^tq^eg^f l^pi u^lq^h"
y j g^l; y j "K^pv^gt^pc^vk^qp^cn^lU^l o r^qu^kw^o "q^p"E^qp^et g^vg^r"T^qc^f u."
C^r t^ki669. "4226. "K^uv^cp^dwⁿ "V^wu^gl { 0

O^lk^gt. "l⁰"c^pf "Y 0D^gn^kpⁱ g^t042360F k^ut g^ul^l "K^f g^pv^lh^ec^vk^qp"
O^cp^wu^lh^qi "y j g^lN^qpⁱ / V^gt^o "R^cx^go g^pv^lR^gt h^qt o c^pe^g"
R^tqⁱ t^co 06y j "T^gx^lu^gf "G^f k^kq^p0^Hg^f g^tcⁿl^j kⁱ j y c { "
C^f o l^pk^ut^cv^kq^p. "Y c^uj l^pi v^qp. "F E0j [wr u<1y y y 0j y c^l](#)
[f q^l0 q^x l^r w^ld^ke^cv^kq^pu^lt g^ug^ct^ej l^lp^lt c^ut w^ew^t g^lr^cx^go g^pw^l"](#)
[u^r r B52: 4 B52; 40 f l0](#)

O^qp^wc^pt^k "N⁰"R⁰U^tc^pg^pk "O 00 q^tc^f m^j. "E⁰Y k^uq^p."
C⁰C^o kⁿj c^pk^cp. "O 0E^j c^pi . "E⁰X^km^cp^k "U⁰T g^gu^g. "c^pf "
Y 0l⁰Y g^ku^l042430G^zc^o l^pk^pi "E^qw^lU^cx^lpⁱ "O g^cu^ut g^ul^p"
O^cv^gt^kcⁿU^gr^ge^vk^qp "h^qi "E^qp^vk^pw^qw^ul "T^gk^lh^qt^eg^f "E^qp^et g^vg^r"
R^cx^go g^pv^l"E^TE^R+<X^qw^o g^l60E^V / 43 / 2360K^kp^qk^u"
E^gp^gt "h^qt "V^tc^pur q^tv^ck^qp. "W^dc^pc. "K^N0j [wr u<1k^r r u^l0^el^l](#)
[k^kp^qk^ul^lg^f w^lr t^ql^ge^vu^li g^hk^g0^ur A^f ? : 8760](#)

QO D042420l w^lf g^rk^pg^u"c^pf "F k^ue^qw^pv^lT^cv^ul^hq^t "D^gp^gl^kv^l
E^qw^lC^pc^rl^l u^lu^lq^hh^gf g^tcⁿl^Rt^qi t^co u^l0QO D^lE^ke^wu^l "P q0
C/; 60Q^hh^eg^lq^h"O c^pcⁱ g^o g^pv^lc^pf "D^wf i g^v "Y c^uj l^pi v^qp."
F E0j [wr u<1k^dc^o c^y j k^gj q^wu^g0^te^j k^gu^l0 q^x l^uk^gu^l"](#)
[f g^hc^wu^lh^kg^ul^qo d l^cu^gw^lk^l; 6 l^e2; 60 f l0](#)

REC03; 980E^qp^vk^pw^qw^ul "T^gk^lh^qt^eg^f "E^qp^et g^vg^r"Q^xg^tr^c { u<
3; 97 "E^qp^f k^kq^p "U^mx^gl 0U^T3: 2023R⁰R^qt^vc^pf "E^go g^pv^l
C^uu^qe^kv^kq^p. "U^hq^uk^g. "K^N0

Rktg. 'N0Hqtj eqo kpi 0PEJ TR'Rtqlgev'3/83<
Gxcmwkqp'qhlDqpf gf 'Eqpetgvg'Qxgtr{u'qp'Curj cn'
Rcxgo gpw0P cvkpcnEqqr gtcwkg'J ki j y c{ 'Tgugetej "
Rtqi tco . 'Y cuj kpi vqp. 'FEOj [wr u4lerr u0td0ti "](#)
[eo uhggf IVTDP gRtqlgevF kur r{0ur ARtqlgevK ? 65730](#)

Tgppgt. 'MOJ 03; 990F guki p'Etkgtk'ht'Eqpvpwqwnf "
Tgkphqtegf 'Eqpetgvg'Qxgtr{ 'Dcugf "qp'Rgthto cpeg0'
Hktuv'kpgtpcvqpcnEqphgtpeg"qp'Eqpetgvg'Rcxgo gpw.
Hgdwtct{ '37/39.'3; 99.'Y guvNch{ gwg. 'R0

Tgpu. 'N042270Eqpvpwqwnf 'tghqhtegf "eqpetgvg<Ucvg"
qh'vj g'ctv'kp'Dgni kwo 0Cwutkcp'Eqphgtpeg"qp'Eqpetgvg"
Tqcf u. 'Cr tkl48. '4227. 'Xlgppc. 'Cwutk0r 0546570'
[j wr u4lkgtcw0 go gpv0vj go gp l6: /kplctumwnw/ "](#)
[utcuugpdcw7555/eqpvpwqwnf /tghqhtegf /eqpetgvg/ "](#)
[ucvg/ qh'vj g/ctv'kp/dgni kwo 0](#)

Tqgungt. 'L0'C0Dqtg grup. 'C0Dtcpf . 'cpf 'C0Co knj cplep0'
423; 0Hkdt/Tgkphqtegf 'Eqpetgvg'ht' 'Rcxgo gpv'Qxgtr{u<
Vgej pkecn'Qxgtxky 0P cvkpcnEqpetgvg'Rcxgo gpv'
Vgej pqmji { 'Egpgt. 'Co gu. 'K0j [wr u4lpxtcpu0cucvge0f w/ "](#)
[crr lr mcf u423; 12: 1HIEaqxgtr{uavgej aqxy ay aext0f f10](#)

Tqgungt. 'L0'J 0Ej excp. 'F0Mkpi . 'cpf 'C0Dtcpf 0'
42380Eqpetgvg'Ucd'Cpcn'ugu'y kj 'Hgrf /Cuuki pgf "
Pqpwpkqto 'Uwr r qtvEqpf kkpup0'kpgtpcvqpcnLqwtpcn'
qhl'Rcxgo gpv'Gpi kpggtkpi . 'Xqn039. 'P q09. 'rr 079: 67: ; 0

Tqgungt. 'L0'L0V0J ctxg{. 'L0Hctxgt. 'cpf 'H0Nqpi 042220'
kpxgunki cvkqp'qhl'F guki p'cpf 'Eqpiutwekqp'Kamgu'ht"
Napi /Nhg'Eqpetgvg'Rcxgo gpv'Utcvgi kgt0HI Y C IEC I'
QT/4222 1260Ecrkhtpk'F gr ctvo gpv'qh'Vtcur qtvcvqp. "
Ucetco gpvq. 'EC0

Tqgungt. 'L0'cpf 'L0J kngt042350Eqpvpwqwnf 'Tgkphqtegf "
Eqpetgvg'Rcxgo gpv<F guki p'Wukpi 'ij g'CCUJ VQY ctg"
Rcxgo gpv'OG'F guki p'Rtqegf wt g0Hgf gtcnJ ki j y c{ "
Cf o kplmtcvqp. 'Y cuj kpi vqp. 'FEOj [wr u4ly y y 0j y c0'](#)
[f qv0 qx lr cxgo gpvEqpetgvg lr wduj k352470 f10](#)

Tqgungt. 'L0'L0J kngt. 'cpf 'C0Dtcpf 042380Eqpvpwqwnf "
Tgkphqtegf 'Eqpetgvg'Rcxgo gpv'Opwcn0Hgf gtcnJ ki j y c{ "
Cf o kplmtcvqp. 'Y cuj kpi vqp. 'FEOj [wr u4ly y y 0j y c0'](#)
[f qv0 qx lr cxgo gpvEqpetgvg lr wduj k382480 f10](#)

T{w.'U'O 0Rctm'L0P co . '\ 0Cp. 'L0Deg. 'l 0Ej q. "
cpf 'U0Ngg0422; 0kpkcnDgj cxlqt'qh'Vj kp'Dqpf gf "
Eqpvpwqwnf 'Tgkphqtegf 'Eqpetgvg'Qxgtr{ '*ETE Q+ "
qp'Ci gf 'Lqkpgf 'Eqpetgvg'Rcxgo gpv'OPgy 'Vgej pqmji kgu'
kp'Eqpiutwekqp'cpf 'Tgj cdkkcvkqp'qhl'Rqtvrpf 'Ego gpv'
Eqpetgvg'Rcxgo gpv'cpf 'Dtkf i g'F geniRcxgo gpv'0Co gtlecp "
Uqelgv{ 'qh'EkklGpi kpggtu. 'Tguvqp. 'XC0r r 032363280

T{w.'U0Y 0'J 0Y qp. 'U0Ej qk'cpf 'O 0Y qp042350'
Eqpvpwqwnf 'tghqhtegf 'dqp gf 'eqpetgvg'qxgtr{ 'qh'
f kmtguugf 'Lqkpgf 'r rkp'eqpetgvg'r cxgo gpw0Eqpiutwekqp "
cpf 'Dmkf kpi 'O cvgtkcu. 'Xqn062. 'rr 03332633390

Uo kj . 'M0F 0'J 0V0l w'cpf 'F 0l 0Rguj nkp042240'
Rqtvrpf 'Ego gpv'Eqpetgvg'Qxgtr{u<'Ucvg'qhl'ij g"
Vgej pqmji { 'U'pvj guk0HI Y C /H/24/2670Hgf gtcn'
J ki j y c{ 'Cf o kplmtcvqp. 'Y cuj kpi vqp. 'FEOj [wr u4l'](#)
[tqucr 0v0l u0 qx kley If qv6: ; : 90](#)

Uo kj . 'M0'F 0J cttkpi vqp. 'N0Rktg. 'R0Tco . 'cpf 'M0Uo kj 0'
42360Eqpetgvg'Rcxgo gpv'Rt gugtxcvqp' l wlf g04pf 'Gf kkp0'
P cvkpcnEqpetgvg'Rcxgo gpv'Vgej pqmji { 'Egpgt. 'Co gu. "
K0j [wr u4lpxtcpu0cucvge0f wclrr lr mcf u423: 12: "](#)
[rtgugtxcvqpai wlf ga4pf agf a72: ahkpcr0 f10](#)

Up{f gt. 'O 0D042330l wlf g'iq'F qy gn'Nqcf 'Vtcurgt "
U'ungo u'ht' 'Lqkpgf 'Eqpetgvg'Tqcf y c{ 'Rcxgo gpw0'
P cvkpcnEqpetgvg'Eqpuqtkswo . 'kunkswg'ht "
Vtcur qtvcvqp. 'Co gu. 'K0j [wr u4lpxtcpu0cucvge0f w/ "](#)
[crr lr mcf u423: 12: 1F qy gn/mcf /i wlf g0 f10](#)

Up{f gt. 'O 0D0423; 0Uitkpi ngui'Rcxlpi 0HI Y C / "
J H/3: /2330Hgf gtcnJ ki j y c{ 'Cf o kplmtcvqp. "
Y cuj kpi vqp. 'FEOj [wr u4ly y y 0j y c0' qv0 qx lr cxgo gpv/ "](#)
[r wduj k3: 2330 f10](#)

Uqrcpnk' C0K0'F 0Y 0Hqy ngt. 'cpf 'D0H00 eEwntwi j 0'
3; : 90C'Uwf { 'qhl'ij g'Gtgev'qhl'Eqpiutwekqp'Xctk dngu'
qp'ij g'Dqpf 'Dgj cxlqt'qhl'ETER'Qxgtr{u0HI Y C I "
VZ/: - 679/60Vgzcu'F gr ctvo gpv'qh'Vtcur qtvcvqp. "
Cwukp. 'VZ0

Utkco cp. 'U0'cpf 'F 0l 0l qnkpi gt03; ; : 0Rgthto cpeg "
qhl'ETER'Rcxgo gpw<Xqmw g'KX= Tgwt hceki u'ht' 'ETE "
Rcxgo gpw0HI Y C /TF /; : /3220Hgf gtcnJ ki j y c{ "
Cf o kplmtcvqp. 'Y cuj kpi vqp. 'FEOj [wr u4ly y y 0j y c0'](#)
[f qv0 qx lr wdkccvqpuk gugetej kplctumewwtg lr cxgo gpw/ "](#)
[reer k : 322k : 3220 f10](#)

Utcwuu. 'R0L0'D0F 0Rgtlg. 'cpf 'F 0Tquuo cpp042270'
Rgthto cpeg'qh'c'Vj kp'ETER'kpc { 'F guki pgf 'ht'c' Hkxg/ "
[gct'Nhg<C'Ecug'Uwf { 0: y 'kpgtpcvqpcnEqphgtpeg "
qp'Eqpetgvg'Rcxgo gpw. 'Cwi wuv'3663: . '4227. 'Eqmtcf q "
Urtkpi u. 'EQ0

Uwp. 'T0'J 0Y qp. 'cpf 'O 0Y qp042330Vj g'Cr r rkecvqp "
cpf 'Gctn/ Ci g'Dgj cxlqtu'qh'Eqpvpwqwnf 'Tgkphqtegf "
Dqpf gf 'Eqpetgvg'Qxgtr{ 'qh'F kmtguugf 'Lqkpgf "
Eqpetgvg'Rcxgo gpw0Rcxgo gpw'cpf 'O cvgtkcu<Tgegpv "
Cf xcpegu'lp'F guki p. 'Vgukpi 'cpf 'Eqpiutwekqp0Co gtlecp "
Uqelgv{ 'qh'EkklGpi kpggtu. 'Tguvqp. 'XC0r r 042: 64370

Vc{cdlk'UOF0'F0I 0\ qnkp i gt.'I 0'VOMqtqxguku.'R0I0'
Ugr j cpqu.'cpf 'L0U0I ci pqp03; ; : 0'Rgthqto c'peg'qhi'
Eqpvkpwqum' 'Tgkphqtegf 'Eqpetgvg'Rcxgo gpw<Xqmw g'
K=Uwo o ct{ "qhiRtceveg'cpf 'Cpqqwvgf 'Ddnhqi tcrj {0'
HI Y C/TF/; 6/39: 0Hgf gtcnJ ki j y c{ "Cfo lpkutcvkqp."
Y cuj kpi vqp.'FEOj [wr u<lpvrtgr quksqt { QlmdQeqt g0](#)
[y kpf qy u0pgvirkd4322243722437; : IRD; : 34: 4960 f10](#)

Vc{cdlk'U0'C0I kuk'L0Dnqo dgti.'cpf 'F0F gl tcch0'
422; 0P gy 'Crr nccvkqp'ht'Vj kp'Eqpetgvg'Qxgtr{ u<
Vj tgg'Ecuq'Uwf lgu0Rtqeggf kpi u<'P cvkqpcnEqphgt gpeg"
qp'Rt gugt.xcvkqp.'Tgr ck.' 'cpf 'Tgj cdkkxcvkqp'qhiEqpet gvg"
Rcxgo gpw=U0Nqwk' 'O kuuqwt k 'Crt ki44646.'422; 0'
Eqpetgvg'Rcxgo gpvVgej pqmji { 'Rtqi tco.'Hgf gtcn'
J ki j y c{ "Cfo lpkutcvkqp.'Y cuj kpi vqp'FEOj [wr u<1](#)"
[tqucr Qv0lva0 qx kkgv lf qv47: 830](#)

Vc{mqt.'R042350Ewt kpi 'Eqpetgvg03u'Gf kkp0ETE"
Rtguu.'Dqec'Tcvqp.'HNOj [wr u<ly y y 0qwwgf i g0qo "](#)
[Ewtkpi /EqpetgvgIvc{mqt lr kdqamt: 9: 2589: 877880](#)

Vc{mqt.'R0'V0Xcp'Fco.'N0Uwgt.'cpf 'I 0Hlen0423; 0'
Kpvi tcvgf 'O cvgt kcu'cpf 'Eqpwt wvkqp'Rtceveg'ht'
Eqpetgvg'Rcxgo gpw<'C'Ucvg/qh'y g/Rtceveg'Ocpwcr0'
4pf 'Gf kkp0P cvkqpcnEqpetgvg'Rcxgo gpvVgej pqmji { "
Egpvt.'Co gu.'KOj [wr u<lpvrtcpu0cuvvg0f wcr r "](#)
[wr mcf u423: 127IKO ERao cpwcr0 f10](#)

Vgpluqp.'L0J 0'cpf 'F0K0J cpup0422; 0PEJ TR"
U'pyj guku'5: : <Rt g/qxgtr{ 'Vtgcwo gpv'qhiGzknkpi "
Rcxgo gpw0P cvkqpcnEqqr gtcvkg'J ki j y c{ "Tgugctej "
Rtqi tco.'Y cuj kpi vqp.'FEOj [wr <ly y y 0td0qti j "](#)
[RwdnkvkqpulDnwdul3829840eur z0](#)

Vqttgu.'J (P0'L0Tqgungt.'T0Q0Tcuo wuugp.'cpf 'F0'
J cttkpi vqp042340I wfg'g'iq'y g'F guki p'qhiEqpetgvg'Qxgtr{ u'
Wdkpi 'Gzknkpi 'O gyj qf qnqi kgu0P cvkqpcnEqpetgvg'Rcxgo gpv'
Vgej pqmji { 'Egpvt.'Co gu.'KOj [wr u<lpvrtcpu0cuvvg0f w' "](#)
[crr lr mcf u423: 12: 10Xgtr{ uaF guki paI wfg ga72: 0 f10](#)

Vj g'Vtcpuqe'I tqwr 042430J RRGTRCX0Vj g'Vtcpuqe"
I tqwr.'Cwukp.'VZ0j [wr u<ly y y 0j gvtcpuqe i tqwr 0qo "](#)
[j ktr gtr cx10](#)

V{pgt.'J 0N0'Y 0I wfg gp.'cpf 'F0Dtqy p03; : 30'
Tguwthekpi 'qh'Rrckp'Lqkpvf/Eqpetgvg'Rcxgo gp0'
Vtcpuqtvcvkqp'Tgugctej 'Tgeqtf <Lqwtpcnqhi'y g"
Vtcpuqtvcvkqp'Tgugctej 'Dqctf.'Xqit0: 36.'rr0636670

Xcp'Fco.'V0L0'L0V0J ctxg{.'U0V00 wgepj.'M0F0'
Uo kj.'O 0D0Up{ fgt.'K0N0Cn'S cf k'J 0Ql gt.'L0O gkggt."
R0X0Tco.'L0T0Tqgungt.'cpf 'C0M0pf cn042370Vqy ctf u'
Uuuc kpcdn'Rcxgo gpv'U'ungo u<'C'Tghgt gpeg'Fqewo gp0'
HI Y C/J KH/37/2240Hgf gtcnJ ki j y c{ "Cfo lpkutcvkqp."
Y cuj kpi vqp.'FEOj [wr u<ltqucr Qv0lva0 qx kkgv lf qv45: 7630](#)

Xcpf gpdquuej g.'L0'cpf 'O 0Dcto cp042320Dqpf gf "
Y j kxvqr r kpi 'Qxgtr{ 'F guki p'Eapukf gtcvkqp'ht'
Rtvgp vkqp'qhiTghgcvkqp'Etcenkpi.'Lqkpv/Ugcnkpi.'cpf "
y j g'Wug'qh'F qy gniDctu0Vtcpuqtvcvkqp'Tgugctej 'Tgeqtf <
Lqwtpcnqhi'y g'Vtcpuqtvcvkqp'Tgugctej 'Dqctf.'Xqit04377."
rr056330

Xgtj qxgp.'M03; : ; 0Vj kp'Qxgtr{ 'qh'UggniHkgt "
Tgkphqtegf 'Eqpetgvg'cpf 'Eqpvkpwqum' 'Tgkphqtegf "
Eqpetgvg<Ucvg'qh'y g'Ctvkp'Dgni kwo 0Hqwt yj "
KpvtcvkqpcnEqphgtgpeg'qp'Eqpetgvg'Rcxgo gpw.'Crt ki'
3: 642.'3; : ; 'Y guvNchc{ gwg.'RP 0r r0427643; 0

Xqli v'I 0H0'cpf 'G0Hgtgdgg042380F qy gniDcuugv"
Cpej qt kpi 'O gyj qf u<'Dguv'Rtceveg'ht' 'Lqkpvf 'Eqpet gvg"
Rcxgo gpw0HI Y C/J KH/38/2430Hgf gtcnJ ki j y c{ "
Cfo lpkutcvkqp.'Y cuj kpi vqp.'FEOj [wr u<ly y y 0j y c0'](#)
[f q0 qx lr cxgo gpvEqpetgvg lr wdujl k382430 f10](#)

Y gluu.'Y 0L0'L0Qrgm'P 0O 0Y j kkp i.'R0Rcpej o cvk.'"
E0S kq.'cpf 'R0Uwtcpgp0423: 0U'pyj guku<'Ceegrgt cvkpi "
Ko rrgo gpvcvkqp'qhiTgugctej 'Hkpf kpi u'vq'Tgf wvg'Rqvgpvkcn'
Eqpetgvg'Rcxgo gpv'Lqkpv'F gvgtkp cvkqp0HI Y C I R ILVTR'"
423: 1460Rwtf wg'Wpkxgtul{.'Y guvNchc{ gwg.'RP 0j [wr u<1](#)"
[f q0qti B207925 B4: : 4: 6538: 8; 0](#)

\ Qvqy unc.'O 0'T0P ci »tunk'R0Tcf| kul gy unk'O 0'
Uctpqy unk'cpf 'R0Vwne0423; 0Hgzkdng'r cxgo gpv'
tgj cdkkcvkqp'y kj 'eqpvkpwqum' 'tghqhtegf 'eqpetgvg'uncd"
y kj 'J HTR'dctu'0 gej cplnke'cpcn'uku0O CVGE'Y gd'qhi'
Eqphgt gpegu.'Xqit04840j [wr u<ly y y 0 cvge/eqphgt gpegu'](#)
[qti kcvengub cvgeeqphr f h423: B3 lo cvgeeqph](#)"
[mt {plec423: a2723; 0 f10](#)

\ qnkp i gt.'F0'O 0Y qp.'V0Ng{.'M0Tkf kpi.'C0Y ko ucw"
Y 0\ j qw'U0T{ w'cpf 'R0Ej qk042360K rrgo gpvcvkqp"
qhiEwt kpi.'Vgzwt kpi.'Uddcug.'cpf 'Eqo rcevkap"
O gcumt go gpv'Cntgpcvkgu'ht'Eqpvkpwqum' 'Tgkphqtegf "
Eqpetgvg'Rcxgo gpv'Ko rrgo gpvcvkqp'qhiEwt kpi.'Vgzwt kpi.'
Uddcug.'cpf 'Eqo rcevkap'O gcumt go gpv'Cntgpcvkgu'ht'"
Eqpvkpwqum' 'Tgkphqtegf 'Eqpetgvg0HI Y C IVZ/35I/"
8259/23/30Vgzcu'C(O 'Vtcpuqtvcvkqp'Kpukswg."
Eqmgi g'Ucvkqp.'VZ0j [wr u<lvkve0wk0co w0f wwk0co w'](#)
[gf wlf gewo gpw07/8259/23/30 f10](#)

National Concrete Pavement Technology Center

